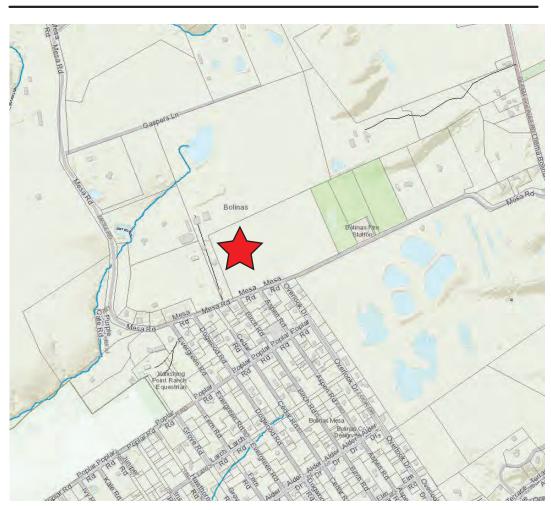
AGRICULTURE WORKFORCE HOUSING MOBILE / TRAILER UNITS MESA ROAD BOLINAS CA, 94924 APN: 193-020-38

ABBREVIATIONS

ABBREVIATIONS								
ADJ A/C AC ALT AB AFF AGG BSMT BRG BBLK BLW BLKG BD BW BOT Z COMP CONC CONT CONTR CONTR CONTR CONTR CONTR CONTR CONTR CS FOR DIM DIV DR DS DWR DRN DWG ELEC EL EMER EXH (E) EST FOOF FOR FIRE FP FLR	ADJACENT OR ADJUSTABLE AIR CONDITIONING ASPHALT CONCRETE ALTERNATE ANCHOR BOLT ABOVE FINISH FLOOR AGGREGATE BASEMENT BEARING BENCH MARK BETWEEN BLOCK BELOW BLOCKING BOARD BOTH WAYS BOTTOM BRONZE CENTERLINE COMBINATION OR COMBUSTION CLEANOUT COMPOSITION CONCRETE CONCRETE MASONRY UNIT CONSTRUCTION CONTINUOUS COUNTER COUNTERSINK CUBIC FOOT CUBIC DETAIL DIAGONAL DIAMETER DIMENSION DISHWASHER DIVISION DOOR DOWNSPOUT DRAWER DRAWING ELECTRICAL ELEVATION EMERGENCY EXHAUST EXISTING EXPANSION BOLT EXPOSED EXTERIOR FACE OF CONCRETE FACE OF FINISH FACE OF STUD FINISH FINISH FLOOR LINE FIRE EXTINGUISHER FIREPROOF FLOOR	FD FT G FAUN GAI GFI GL BHDR HTG GAIL HURCH HURC	FLOOR DRAIN FOOT OR FEET FOOTING FORCED AIR UNIT FOUNDATION GAUGE GALVANIZED IRON GALVANIZED GROUND FAULT CIRCUIT INTERRUPTER GLASS OR GLAZING GRAB BAR HARDWARE HEADER HEATING VENTING AIR CONDITIONING HEIGHT HOLLOW CORE HORIZONTAL HOSE BIB INSIDE DIAMETER INTERIOR JOINT KITCHEN KNOCK—OUT LAG BOLT LAMINATE LAVATORY LEFT HAND LENGTH LIGHT LIGHT LIGHTWEIGHT MACHINE BOLT MANUFACTURER MASONRY MAXIMUM MECHANICAL MEDICINE CABINET METAL MINIMUM MISCELLANEOUS MOUNT NATURAL NOT IN CONTRACT NOT TO SCALE OBSCURE ON CENTER OPENING OPPOSITE OVERHEAD PARKING PARTITION PAVEMENT PLASTIC OR PLASTER PLYWOOD POLYVINYL CHLORIDE	PSI TTDF PLAD FESIL REFINE TO CHART MARKED THE PERSON OF THE PROPERTY OF THE P	POUNDS PER SQUARE INCH PRESSURE TREATED PRESSURE TREATED DOUGLAS FIR PROPERTY LINE RADIUS REFERENCE OR REFRIGERATOR RESILIENT RETURN AIR REVISION RIGHT HAND ROOF DRAIN ROOFING ROOM ROUGH OPENING SOLID CORE SCHEDULE SCREEN SHEET SHELF OR SHELVING SIMILAR SHELF AND POLE SPEAKER SPECIFICATIONS SQUARE STANDARD STAINLESS STEEL STEEL STRUCTURAL SUPPLY AIR SUSPENDED SYSTEM TELEPHONE TELEVISION THICK OR THICKNESS THRESHOLD TONGUE AND GROOVE TOP OF CONCRETE TOP OF PAVING TOP OF WALL TOWEL BAR TOILET PAPER HOLDER TUBE STEEL TYPICAL UNLESS OTHERWISE NOTED VIN'YL COMPOSITION TILE VERTICAL VERTICAL VERTICAL VERTICAL WATER CLOSET WINDOW WEATHER OR WATER PROOF WATER HEATER WATER WEIGHT WITH WITHOUT			
		PSF	POUNDS PER SQUARE FOOT					

VICINITY MAP



PROJECT MAP



ZONING PARAMETERS

	EXISTING	PROPOSED	REQUIREMENT
ZONING	C-ARP-10	C-ARP-10	
LOT AREA	877,254 SF	877,254 SF	
TOTAL FLOOR AREA	N/A	N/A	
MAXIMUM HEIGHT	25' / 15'	11' 4"	
LOT COVERAGE	N/A		N/A
PARKING	N/A	14	N/A
FRONT SETBACK	N/A	445' / 680'	N/A
REAR SETBACK	N/A	170′/30′	N/A
LEFT SIDE YARD	N/A	30' / 405'	N/A
RIGHT SIDE YARD	N/A	830′ / 550′	N/A

OCCUPANCY GROUP:

CONSTRUCTION TYPE:

2019 CALIFORNIA BUILDING CODE

DRAWING INDEX

PROJECT TITLE SHEET

CM.	CONSTRAINTS MAP
E0.	EXISTING SITE PLAN
C1.	CIVIL COVER SHEET
C2.	OVERALL SITE PLAN
C3.	GRADING AND DRAINAGE PLAN
C4.	UTILIT PLAN
C5.	EROSION CONTROL PLAN
C6.	CONSTRUCTION MANAGEMENT PLAN
C7.	UTILIT DETAILS
E0.1.	ELECTRICAL COVER SHEET
E1.1.	ELECTRICAL SITE PLAN
E5.1.	SINGLE LINE DIAGRAM
T24.	TITLE 24
T1.	TURNING DETAILS
E0.	TYPICAL TRAILER ELEVATION / IMAGES
S1.	WASTEWATER SITE PLAN
S2.	WASTEWATER SITE PLAN

WASTEWATER CONSTRUCTION DETAILS

WASTEWATER CONSTRUCTION DETAILS

PROJECT DIRECTORY

BCLT 6 Wharf Road, #8 Bolinas, CA 94924	BIOLOGIST Julia King 14015 Murphy Avenu San Martin, CA 9504 408-591-6465
	406-591-6465

CIVIL ENGINEER

MUNSELLE ENGINEERING

513 C S

H , CA 544

0 3 5 0

SEPTIC ENGINEER
ECKMAN ENVIRONMENTAL
100 Shoreline Highway, Bldg B
Mill Valley, CA 94941
415-895-0364

PROJECT SCOPE

- TRAILER WORKFORCE HOUSING
- ONSITE WASTEWATER SYSTEM
- UTILIT IN RASTRUCTURE

BCLT

Revisions SEPT 14, 2023

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Issue

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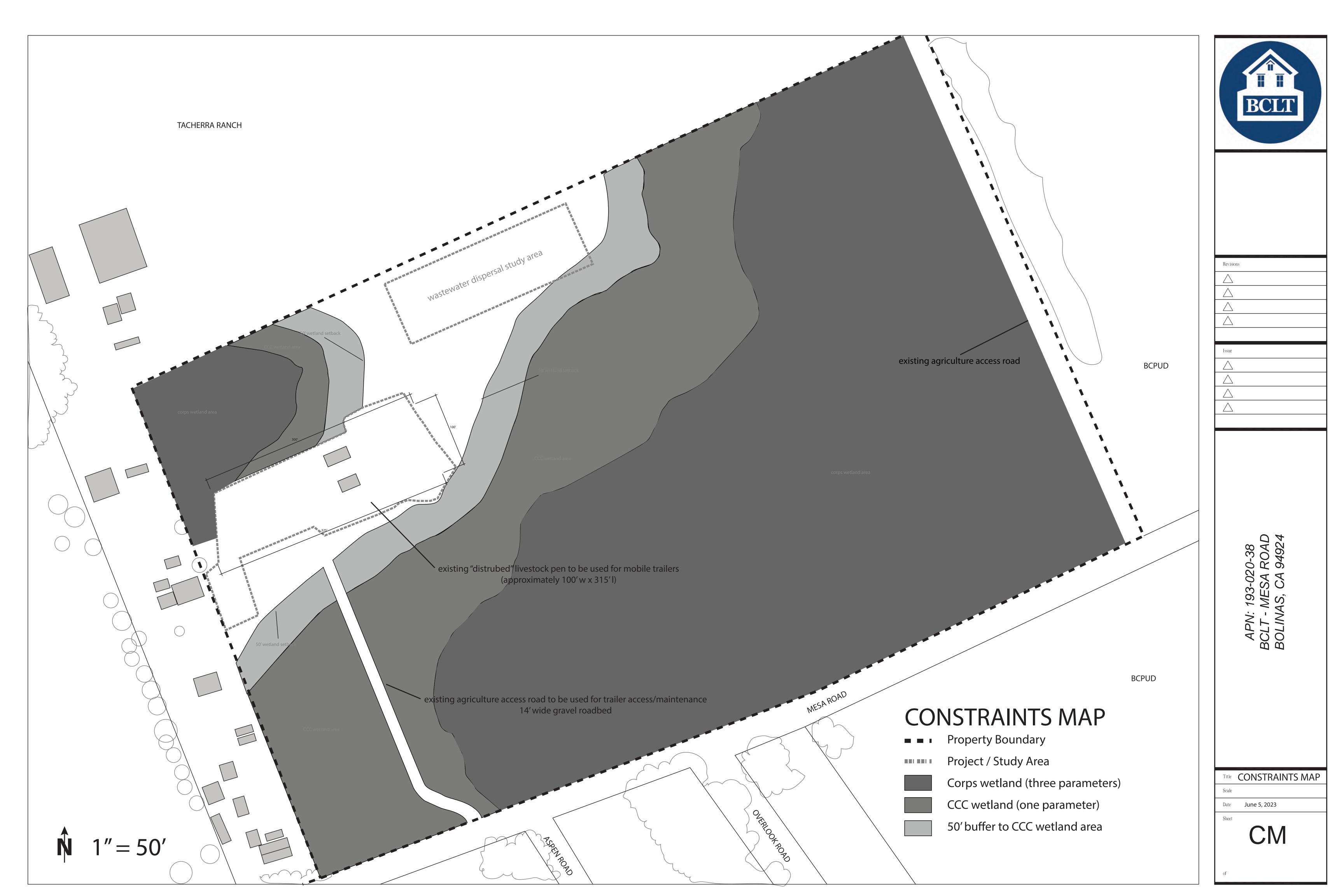
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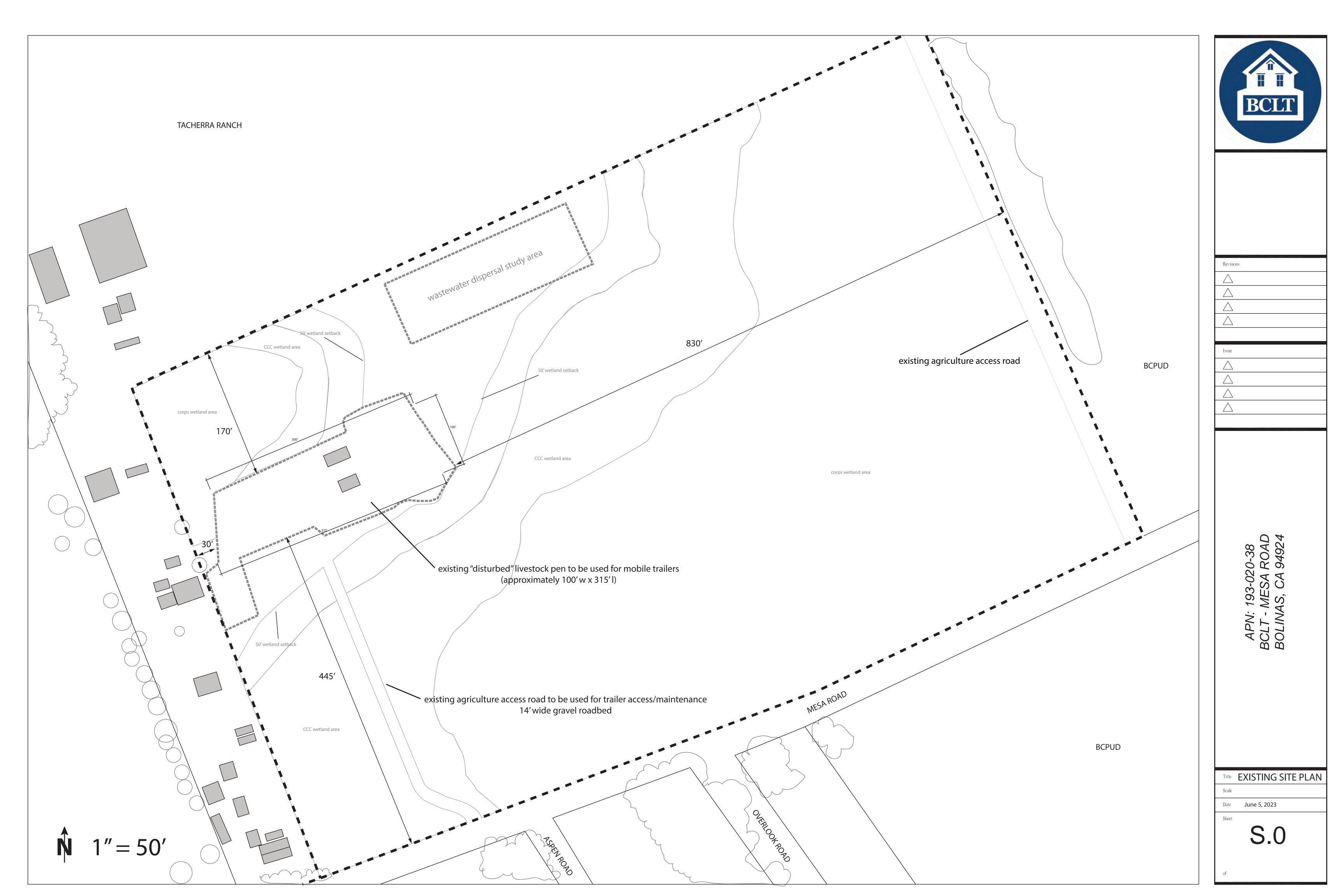
Title TITLE SHEET

Date **June 5, 2023**

T.0

of





GRADING AND DRAINAGE NOTES

- PERFORM GRADING AND DRAINAGE IMPROVEMENTS IN ACCORDANCE WITH CURRENT EDITION OF THE CALIFORNIA BUILDING CODE (CBC), APPENDIX J AND APPLICABLE COUNTY OF MARIN CODE AND REGULATIONS.
- 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 BUILDING 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 APPRO∨ED COPY OF THE GRADING/DRAINAGE PLANS SHALL BE MAINTAINED ON THE PROJECT SITE THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.
- 4. MARIN COUNTY BUILDING DEPARTMENT MAY ORDER THAT ANY WORK STOP IMMEDIATELY IF IT IS PERFORMED CONTRARY TO CBC APPENDIX J, MILL VALLEY CODE 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 COUNTY OF MARIN 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.
- 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 CITY RIGHT-OF-WAY AND NEED MAINTENANCE, CONTACT MARIN COUNTY DEPARTMENT OF PUBLIC WORKS AT (415) 473-6528 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 RESDURCES (I.E., HISTORICAL, ARCHAEDLOGICAL) 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) 664-0880. A QUALIFIED ARCHEOLOGIST SHALL BE CONSULTED FOR AN ON-SITE EVALUATION. ADDITIONAL MITIGATION MAY BE REQUIRED BY THE CITY OF MILL VALLEY PER THE ARCHEOLOGIST'S RECOMMENDATIONS. IF HUMAN BURIALS OR HUMAN REMAINS ARE ENCOUNTERED. THE CONTRACTOR SHALL ALSO NOTIFY THE COUNTY CORONER AT (415) 499-6043.
- 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
- 13. GRADING AND DRAINAGE IMPROVEMENTS SHALL BE SET BACK FROM STREAMS, LAKES, PONDS, AND WETLANDS IN COMPLIANCE WITH CITY 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 RECEI∨E FILL BY REMO∨ING 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 ANY FIELD CONDITIONS DISCOVERED BY CONTRACTOR THAT MAY DELAY OR DBSTRUCT THE PROPER COMPLETION OF THE WORK PER THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE CIVIL ENGINEER AND OWNER IMMEDIATELY UPON DISCOVERY, NOTIFICATION SHALL BE IN WRITING.

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

- 1. PERFORM EROSION PREVENTION AND SEDIMENT CONTROL IN ACCORDANCE WITH COUNTY OF MARIN REGULATIONS, WHICH FOLLOWS BEST MANAGEMENT PRACTICES (BMPs) AS SPECIFIED IN THE CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA) MANUAL.
- 2. EROSION/SEDIMENT CONTROL MEASURES MUST BE INSTALLED AS THE FIRST ORDER OF WORK.
- 3. THE APPROVED PLANS SHALL CONFORM WITH MARIN COUNTY EROSION CONTROL REQUIREMENTS.
- 4. 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.
- 5. IF DISCREPANCIES OCCUR BETWEEN THESE NOTES, MATERIAL REFERENCED HEREIN OR MANUFACTURER'S RECOMMENDATIONS, THEN THE MOST PROTECTIVE SHALL APPLY.

RAINY SEASON OPERATIONS

- 1. THE OWNER MUST IMPLEMENT AN EFFECTIVE COMBINATION OF EROSION PREVENTION AND SEDIMENT CONTROL ON ALL DISTURBED AREAS DURING THE RAINY SEASON (OCTOBER 15 - APRIL 15). CONSTRUCTION GRADING AND DRAINAGE IMPROVEMENT SHALL BE PERMITTED DURING THE RAINY SEASON ONLY WHEN ON-SITE SOIL CONDITIONS PERMIT THE WORK TO BE PERFORMED IN COMPLIANCE WITH MARIN COUNTY STANDARD SPECIFICATIONS. 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.

YEAR ROUND REQUIREMENTS

- DURING THE NON-RAINY SEASON, ON ANY DAY WHEN THE NATIONAL WEATHER SERVICE FORECAST IS A CHANCE OF RAIN OF 30% OR GREATER WITHIN THE NEXT 24 HOURS, STORM WATER BMPS REFERENCED OR DETAILED IN BASMAA MANUAL OR WITHIN PLANS BEST MANAGEMENT PRACTICES GUIDE SHALL BE IMPLEMENTED, INSTALLED, AND FUNCTIONAL ON THE SITE TO PREVENT SOIL AND OTHER POLLUTANT DISCHARGES. AT ALL OTHER TIMES, BMPS SHOULD BE STORED ON SITE IN PREPARATION FOR INSTALLATION PRIOR TO RAIN EVENTS.
- 2. 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.
- 3. 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.
- . CHANGES TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN MAY BE MADE TO RESPOND TO FIELD CONDITIONS AND SHALL BE NOTED ON THE PLAN.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. 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.
- 9. HYDROSEEDING SHALL BE CONDUCTED IN A THREE STEP PROCESS. FIRST, EVENLY APPLY SEED MIX AND FERTILIZER TO THE EXPOSED SLOPE. SECOND, EVENLY APPLY MULCH OVER THE SEED AND FERTILIZER. THIRD, STABILIZE THE MULCH IN PLACE. AN EQUIVALENT SINGLE STEP PROCESS, WITH SEED, FERTILIZER, WATER, AND BONDED FIBERS IS ACCEPTABLE.
- APPLICATIONS SHALL BE BROADCASTED MECHANICALLY OR MANUALLY AT THE RATES SPECIFIED BELOW. SEED MIX AND FERTILIZER SHALL BE WORKED INTO THE SOIL BY ROLLING OR TAMPING. IF STRAW IS USED AS MULCH, STRAW SHALL BE DERIVED FROM WHEAT, RICE, OR BARLEY AND BE APPROXIMATELY 6 TO 8 INCHES IN LENGTH. STABILIZATION OF MULCH SHALL BE DONE HYDRAULICALLY BY APPLYING AN EMULSION OR MECHANICALLY BY CRIMPING OR PUNCHING THE MULCH INTO THE SOIL. EQUIVALENT METHODS AND MATERIALS MAY BE USED ONLY IF THEY ADEQUATELY PROMOTE VEGETATION GROWTH AND PROTECT EXPOSED SLOPES.

APPLICATION RATE (POUNDS PER ACRE) SEED MIX

Bromus mollis (BLANDO BROME) Trifolium hirtum (HYKON ROSE CLOVER) 20 <u>FERTILIZER</u> 16-20-0 & 15% SULPHUR STRAW HYDRAULIC STABILIZING* M-BINDER OR SENTINEL EQUIVALENT MATERIAL PER MANUFACTURER

*NON-ASPHALTIC, DERIVED FROM PLANTS

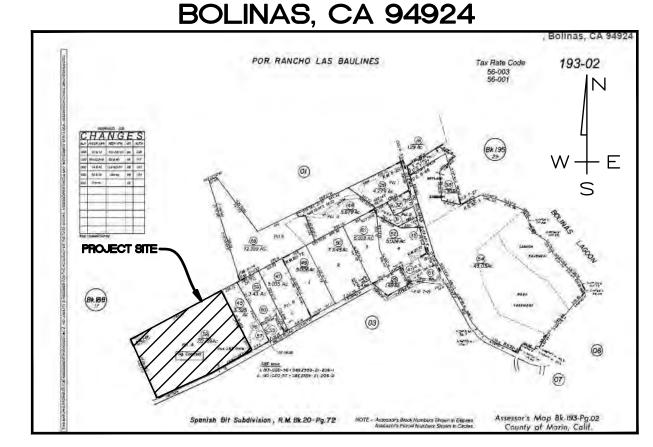
- 10. DUST CONTROL SHALL BE PROVIDED BY CONTRACTOR DURING ALL PHASES OF CONSTRUCTION.
- 11. STORM DRAIN INLETS SHALL BE PROTECTED FROM POTENTIAL POLLUTANTS UNTIL DRAINAGE CONVEYANCE SYSTEMS ARE FUNCTIONAL AND CONSTRUCTION HAS BEEN COMPLETED.
- 12.ENERGY DISSIPATERS SHALL BE INSTALLED AT STORM DRAIN DUTLETS WHICH MAY CONVEY EROSIVE STORM WATER FLOW.
- 13. SOIL, MATERIAL STOCKPILES, AND FERTILIZING MATERIAL SHALL BE PROPERLY PROTECTED TO MINIMIZE SEDIMENT AND POLLUTANT TRANSPORT FROM THE CONSTRUCTION SITE.
- 14. 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.
- 15.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.
- 16.PROPER APPLICATION, CLEANING, AND STORAGE OF POTENTIALLY HAZARDOUS MATERIALS, SUCH AS PAINTS AND CHEMICALS, SHALL BE CONDUCTED TO PREVENT THE DISCHARGE OF POLLUTANTS.
- 17. TEMPORARY RESTROOMS AND SANITARY FACILITIES SHALL BE LOCATED AND MAINTAINED DURING CONSTRUCTION ACTIVITIES TO PREVENT THE DISCHARGE OF POLLUTANTS.
- 18. APPROPRIATE VEHICLE STORAGE, FUELING, MAINTENANCE, AND CLEANING AREAS SHALL BE DESIGNATED AND MAINTAINED TO PREVENT DISCHARGE OF POLLUTANTS.

GRADING AND DRAINAGE PLAN

FOR

BOLINAS RV

APN 193-020-38 200 MESA ROAD



AP MAP

OWNER

(415) 868-9468

BOLINAS COMMUNITY LAND TRUST ARIANNE DAR, DIRECTOR 200 MESA ROAD BOLINAS, CA 94924

(707) 395-0968 PROJECT DESCRIPTION

CONTACT

HEALDSBURG, CA 95448

DVC GROUP, INC.

513 CENTER STREET

GRADING AND DRAINAGE PLANS FOR A NEW GRAVEL PARKING SPACES FOR 27 RV TRAILERS ALDNG WITH ASSOCIATES UTILITIES, ALL AS PART OF A CONDITIONAL USE PERMIT TO CONSTRUCT A TEMPORARY CAMPGROUND.

SURVEY NOTES

TOPOGRAPHIC INFORMATION SHOWN HEREON IS FROM A TOPOGRAPHICAL SURVEY BY CAPSTONE LAND SURVEYING, LLP DATED MAY 9, 2023.

- 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.
- THE CONTENT OF THIS MAP WAS DEFINED BY CONTRACT AT THE SPECIFIC REQUEST OF THE CLIENT(S) AND/OR THEIR CONSULTANT(S), THE SURVEYOR ACCEPTS NO LIABILITY FOR USE OF THIS MAP BY ANY ONE OTHER THAN THE CLIENT(S) AND/OR CONSULTANTS FOR WHOM IT WAS PREPARED.
- BOUNDARY INFORMATION SHOWN HEREON IS BASED ON A RECORD OF SURVEY (2021 RS 124) AND IS NOT PURPORTED TO BE A TRUE BOUNDARY SURVEY.
- THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERITCAL DATUM OF 1988 (NAVD88) VIA CRTN.
- BASIS OF BEARINGS: RECORD OF SURVEY (2021 RD 124)

PROJECT SITE -BAY STINSON SEADRIFT **BOLINAS BOLINAS** PACIFIC BAY **OCEAN**

LOCATION MAP

ND SCALE

PROJECT SPECIFIC NOTES

- ALL IMPROVEMENTS WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE UNIFORM CONSTRUCTION STANDARDS OF ALL CITIES AND COUNTY OF MARIN UNLESS NOTED DTHERWISE.
- 2. ALL CRACKED, BROKEN OR UPLIFTED SIDEWALK AND/OR CURB/GUTTER FRONTING THE PROPERTY SHALL BE REPLACED, APPLICANT SHALL COORDINATE WITH THE DEPARTMENT OF PUBLIC WORKS PRIOR TO START OF THE PROJECT IMPROVEMENTS TO IDENTIFY THE EXTENTS AND LIMITS OF SIDEWALK REPLACEMENT. CONTACT DPW AT (415) 388-4033 FOR FURTHER INFORMATION.
- 3. SHOULD CURB/GUTTER REQUIRE REPLACEMENT, CURB/GUTTER SHALL BE REPLACED WITH NEW CONCRETE CURB, GUTTER AND/OR DRIVEWAY APRON TO ENSURE PROPER DRAINAGE IS MAINTAINED. NEW CONCRETE GUTTER TO MATCH EXISTING CONCRETE GUTTER AND MAY REQUIRE ADDITIONAL ASPHALT TO MATCH EXISTING FLOW LINE, DRIVEWAY, CURB AND GUTTER ARE TO BE COORDINATED WITH DEPARTMENT OF PUBLIC WORKS PRIOR TO START OF CONSTRUCTION, CONTACT DPW AT (415)
- 4. AN ENCROACHMENT PERMIT (REVOCABLE) IS REQUIRED FROM THE PUBLIC WORKS DEPARTMENT FOR ALL WORK WITHIN THE RIGHT-OF-WAY. SHOULD A REVOCABLE ENCROACHMENT PERMIT BE REQUIRED, IT SHALL BE RECORDED AT THE MARIN COUNTY RECORDER'S OFFICE PRIOR TO ANY CONSTRUCTION IN THE RIGHT-OF-WAY.
- 5. AN ENCROACHMENT SECURITY IN THE FORM OF A CERTIFICATE OF DEPOSIT (CD) OR CASH IN THE AMOUNT OF WORK TO BE CONSTRUCTED IN THE RIGHT-OF-WAY SHALL BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT WITH THE ENCROACHMENT PERMIT.
- 6. APPLICANT IS RESPONSIBLE FOR USING BEST MANAGEMENT PRACTICES FOR THE CONSTRUCTION INDUSTRY ("GENERAL CONSTRUCTION AND SITE SUPERVISION" BROCHURE AVAILABLE AT THE DEPARTMENT OF PUBLIC WORKS) TO PREVENT STORM WATER POLLUTION, APPLICANT SHALL BE RESPONSIBLE FOR ALL ENVIRONMENTAL DAMAGE RESULTING FROM THE CONSTRUCTION OF THIS
- 7. ALL CONSTRUCTION MATERIAL, DEBRIS AND EQUIPMENT SHALL BE STORED ON SITE. IF THAT IS NOT PHYSICALLY POSSIBLE, AN ENCROACHMENT PERMIT SHALL BE OBTAINED FROM THE DEPARTMENT OF PUBLIC WORKS PRIOR TO PLACING ANY CONSTRUCTION MATERIALS, DEBRIS, DEBRIS BOXES OR UNLICENSED EQUIPMENT IN THE RIGHT-OF-WAY. THE FEE FOR USING THE RIGHT-OF-WAY FOR STORAGE OF CONSTRUCTION MATERIALS OR EQUIPMENT IS \$10.00 PER DAY IN RESIDENTIAL AREAS, AND \$20.00 PER DAY IN COMMERCIAL AREAS. A MINIMUM OF 12' PASSABLE AUTO TRAFFIC CLEARANCE (PAVED TRAVEL WAY) SHALL BE MAINTAINED AT ALL TIMES ALONG THE ROADWAY. THE PLACING OF PORTABLE REST ROOM FACILITIES IN THE CITY RIGHT-OF-WAY WILL NOT BE PERMITTED.
- 8. ALL SITE DRAINAGE SHALL BE DISSIPATED IN A MANNER THAT PREVENTS EROSION AND CONFORMS TO CURRENT STORM WATER PRACTICES IN MARIN COUNTY. THE APPLICANT IS RESPONSIBLE FOR ENSURING STORM WATER RUNDFF IS MAINTAINED IN ITS NATURAL PATH.
- 9. TREES AND VEGETATION SHALL BE TRIMMED ACCORDING TO SECTION 11.24.090 OF THE MILL VALLEY MUNICIPAL CODE. TREES AND SHRUBS SHALL BE KEPT TRIMMED SO THAT THE LOWEST BRANCHES PROJECTING OVER PUBLIC PROPERTIES PROVIDE A CLEARANCE OF NOT LESS THAN EIGHT (8) FEET, BUSHES AND OTHER VEGETATION SHALL BE TRIMMED SO NO PORTION HANGS OVER THE SIDEWALK, OR THE ROAD IF NO SIDEWALK IS PRESENT.
- 10. ALL VEHICLES MUST STAY OFF OF PROPOSED SEPTIC MOUND LOCATION.
- 11. DBTAIN ENCROACHMENT PERMIT PRIOR TO CONSTRUCTION WITHIN THE MESA ROAD COUNTY RIGHT OF
- 12. PROJECT PARCEL HAS NO MAIL DELIVERY SERVICE BECAUSE BOLINAS HAS NO MAIL DELIVERY SERVICE AND INSTEAD RECEIVES MAIL THROUGH THE POST OFFICE AT STINSON BEACH.
- 13. PROPOSED FIRE HYDRANT IS TO BE INSTALL PER MARIN COUNTY STANDARDS, TESTED AND OPERATION PRIOR TO COMPLETION.

EARTHWORK:

AREA	CUT	FILL	NET
TOTAL	1,000 CY	1,000 CY	0 CY <balanced></balanced>

ABBREVIATIONS/LEGEND

AGGREGATE BASE PIV POST INDICATOR VALVE ASPHALT CONCRETE POINT OF CONNECTION ANGLE PSE BEGIN CURVE PRIVATE SEWER EASEMENT POINT OF TANGENCY BLOW-OFF PUBLIC UTILITY EASEMENT BUILDING SETBACK LINE PUE BACK OF SIDEWALK PVC POLYVINYLCHLORIDE PIPE BEGIN VERTICAL CURVE PVT PRIVATE BVC BOTTOM OF RETAINING WALL R= RADIUS CATCH BASIN R/W RIGHT OF WAY REINFORCED CONCRETE PIPE CONC CONCRETE CORRUGATED PLASTIC PIPE RET RETAINING RETAINING WALL CURB RETURN RPBP REDUCED PRESSURE BACK FLOW DROP INLET PREVENTER DIP DUCTILE IRON PIPE SEE ARCHITECTURAL DESIGN DWY DRIVEWAY 2= SLOPE STORM DRAIN END CURVE SDCO STORM DRAIN CLEANOUT EXISTING GROUND ELEV ELEVATION STORM DRAIN DROP INLET EDGE OF PAVEMENT SDE PUBLIC STORM DRAIN EASEMENT ESMT EASEMENT SDMH STORM DRAIN MANHOLE EVC END VERTICAL CURVE S.L.D SEE LANDSCAPE DESIGN S.S.D. SEE STRUCTURAL DESIGN (E),EX. EXISTING FC FACE OF CURB SANITARY SEWER FG FINISH GRADE SSCO SANITARY SEWER CLEANOUT FS FINISH SURFACE SSMH SANITARY SEWER MANHOLE STA STATION GRADE BREAK STD STANDARD SIDEWALK SW

SWE

TW

VS

SIDEWALK EASEMENT

UND UNLESS NOTED OTHERWISE

TOP OF RETAINING WALL

TOP OF CURB

TOP OF GRATE

WATER METER

VC VERTICAL CURVE

WATER SERVICE

TYPICAL

WATER WL WATER LINE

HDPE HIGH DENSITY POLYETHYLENE HEIGHT MON MARIN CO. SEWER DISTRICT MMWD MARIN MUNICIPAL WATER DISTRICT PAE STANDARD CITY MONUMENT PRIVATE ACCESS.

MAINTENANCE, DRAINAGE, SIDEWALK, AND UTILITY EASEMENT PC PDINT DF CURVATURE PCC PORTLAND CEMENT CONCRETE PDE PRIVATE STORM DRAIN EASEMENT

95% RC

ND SCALE

95% RC

——— — RECORD BOUNDARY LINE NEIGHBORING PROPERTY

> STRAW WATTLE EXISTING FENCE LINE (TYPE VARIES) 6" CLASS II AB

12" CLASS II AB

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

EARTHWORK QUANTITIES.

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

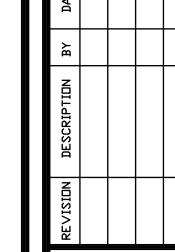
2. CONTRACTOR IS RESPONSIBLE FOR THEIR OWN

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

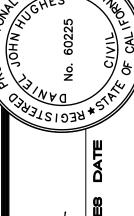
5. APPROX. DISTURBED AREA OF SITE 1.12 AC. (48,772 SF±)

INDEX OF DRAWINGS

- C1 COVER SHEET
- C2 OVERALL SITE PLAN C3 GRADING AND DRAINAGE PLAN
- C4 UTILITY PLAN C5 EROSION CONTROL PLAN AND DETAILS
- C6 CONSTRUCTION MANAGEMENT PLAN C7 DETAILS



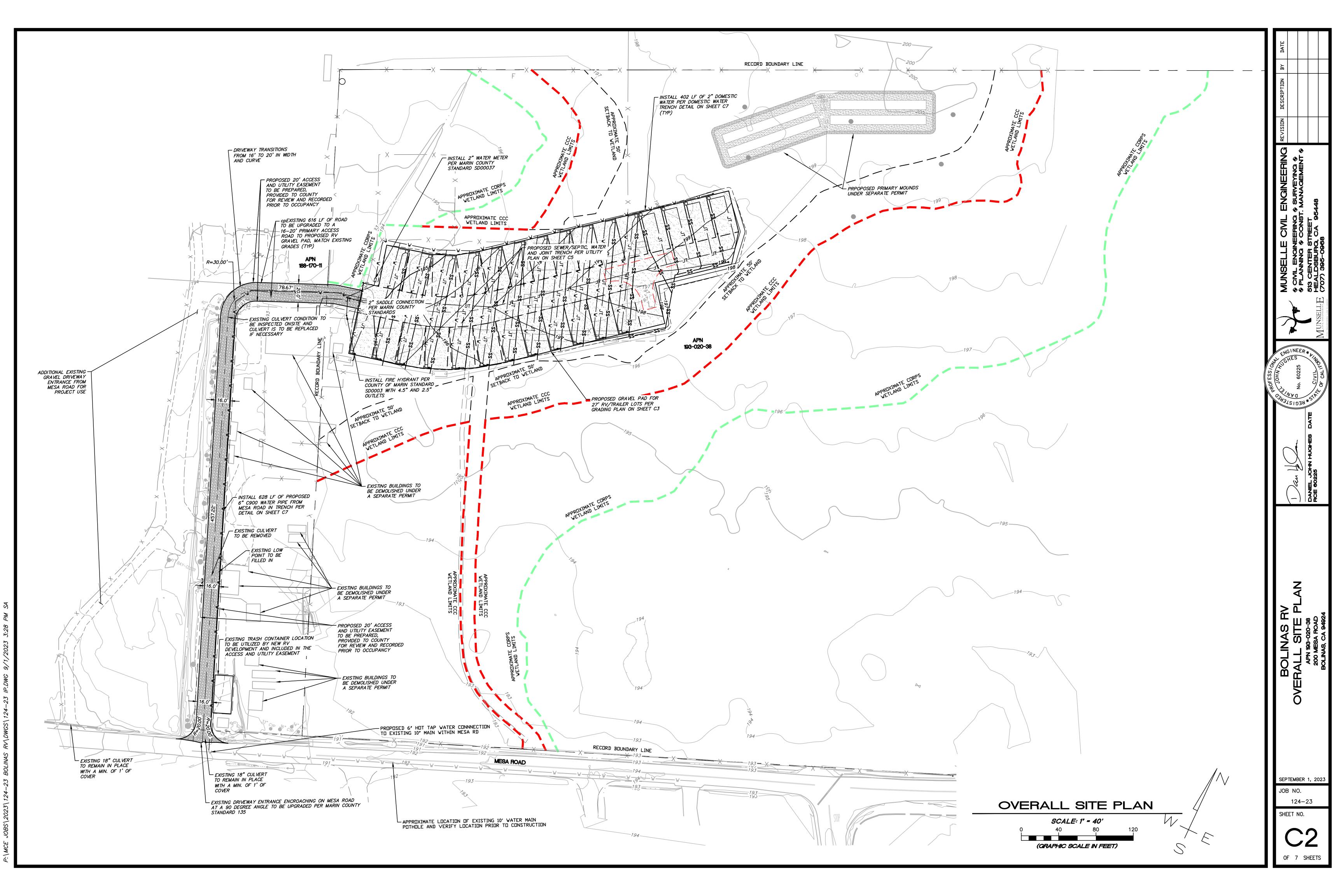


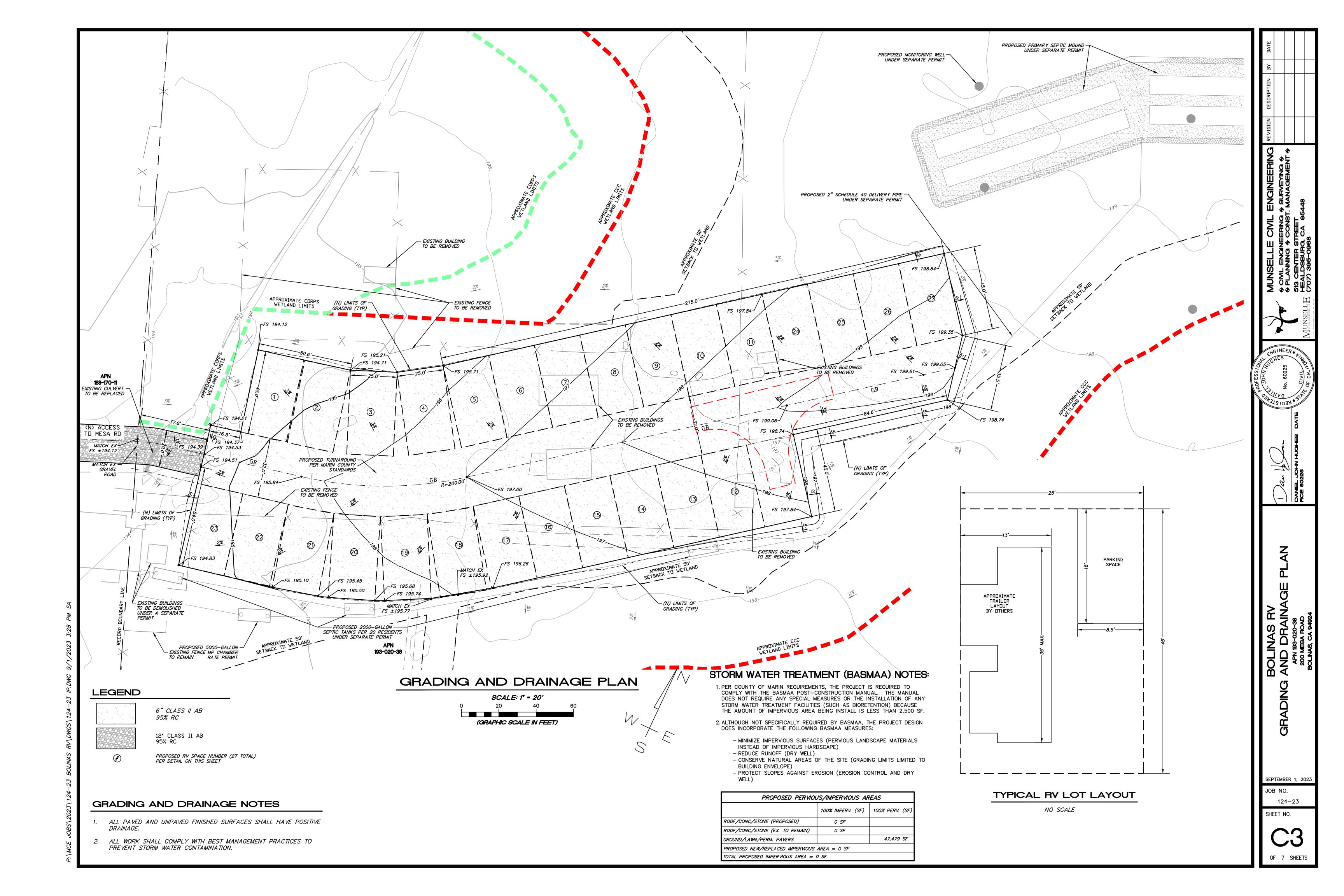


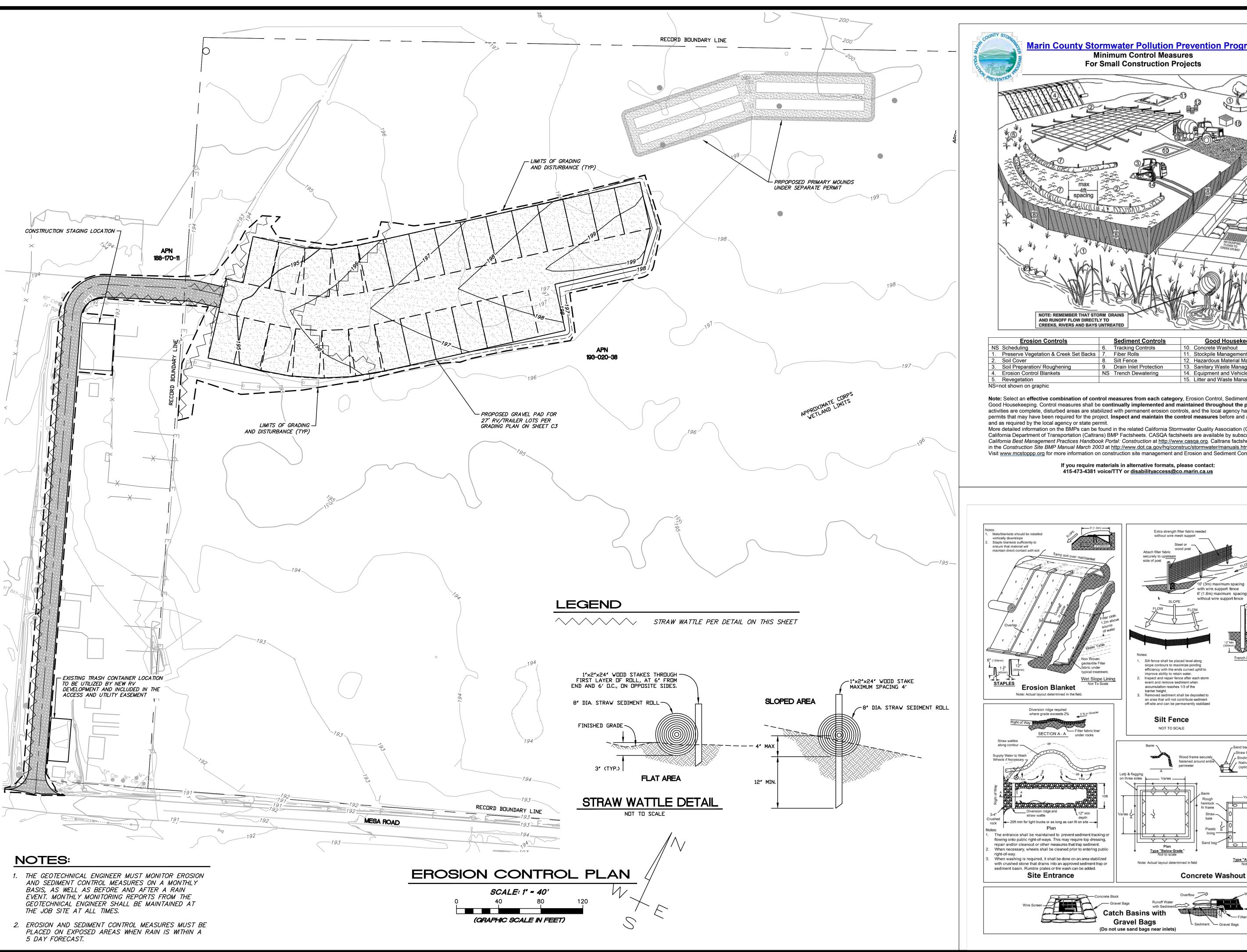
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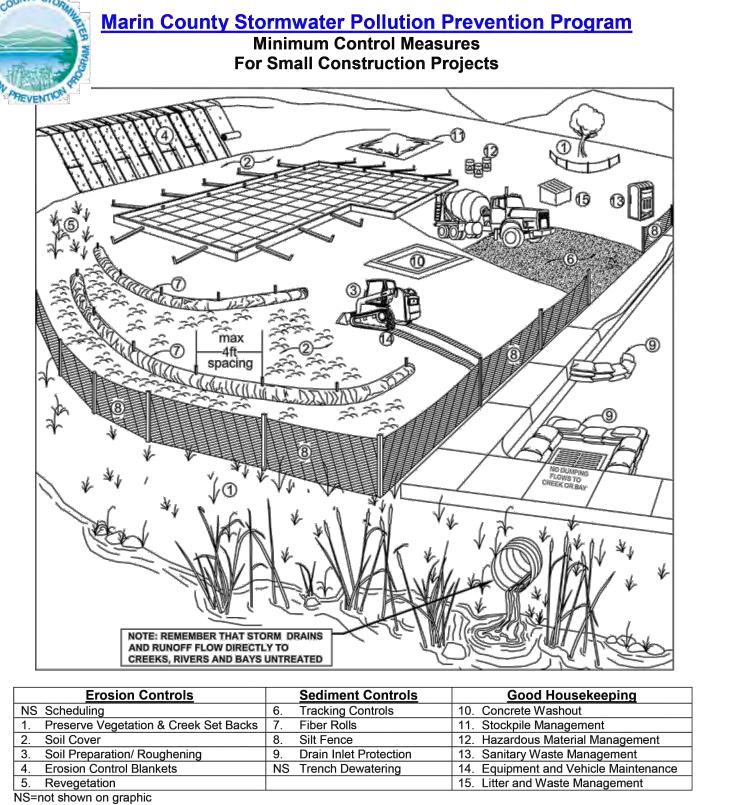
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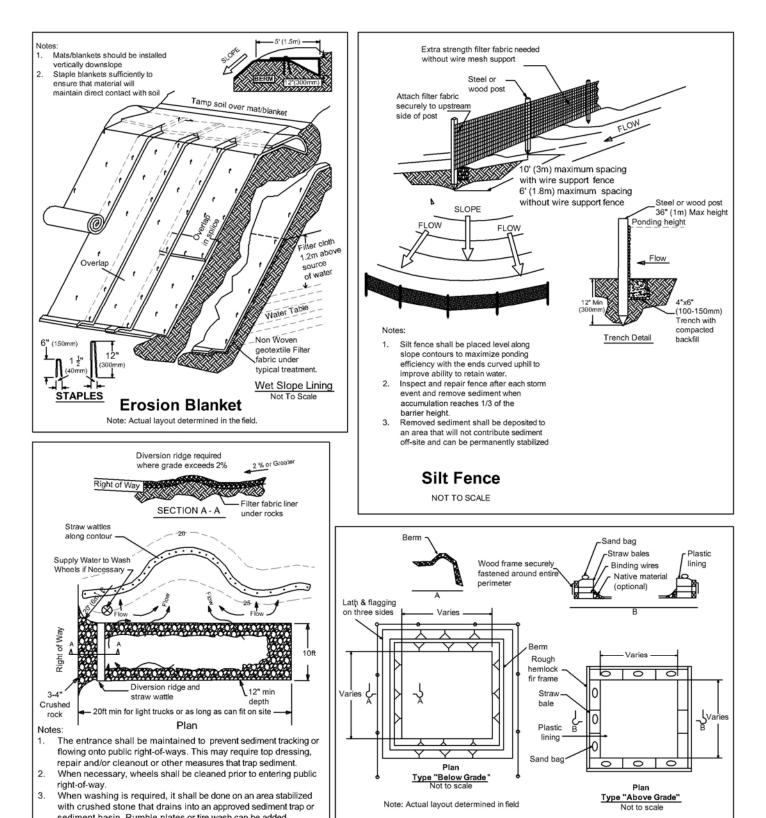




Erosion Controls		Sealment Controls	Good Housekeeping			
NS Scheduling	6.	Tracking Controls	10. Concrete Washout			
Preserve Vegetation & Creek Set Backs	7.	Fiber Rolls	11. Stockpile Management			
2. Soil Cover	8.	Silt Fence	12. Hazardous Material Management			
Soil Preparation/ Roughening	9.	Drain Inlet Protection	13. Sanitary Waste Management			
Erosion Control Blankets	NS	Trench Dewatering	14. Equipment and Vehicle Maintenance			
5. Revegetation			15. Litter and Waste Management			
NS=not shown on graphic						

Note: Select an effective combination of control measures from each category, Erosion Control, Sediment Control, and Good Housekeeping. Control measures shall be **continually implemented and maintained throughout the project** until activities are complete, disturbed areas are stabilized with permanent erosion controls, and the local agency has signed off on permits that may have been required for the project. Inspect and maintain the control measures before and after rain events,

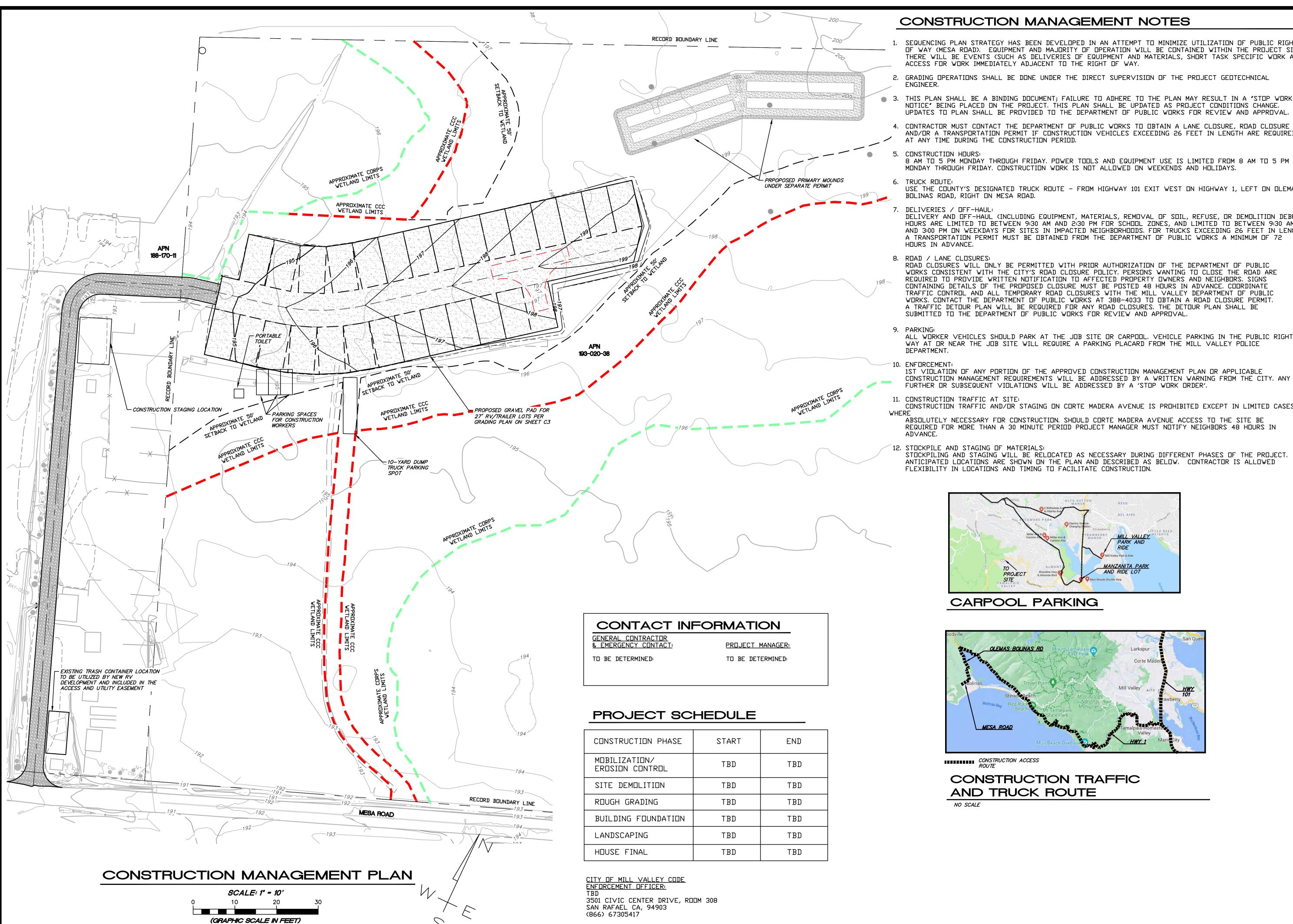
More detailed information on the BMPs can be found in the related California Stormwater Quality Association (CASQA) and California Department of Transportation (Caltrans) BMP Factsheets. CASQA factsheets are available by subscription in the California Best Management Practices Handbook Portal: Construction at http://www.casqa.org. Caltrans factsheets are available in the Construction Site BMP Manual March 2003 at http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm. Visit www.mcstoppp.org for more information on construction site management and Erosion and Sediment Control Plans.



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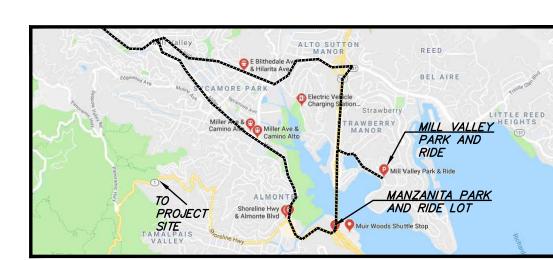
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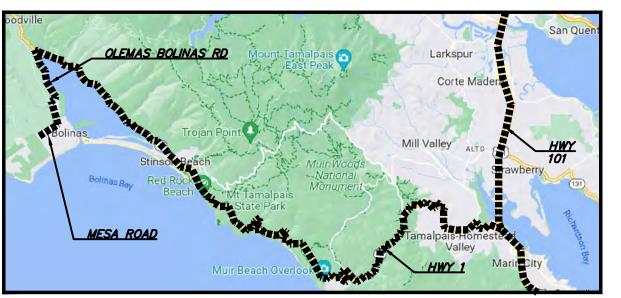


CONSTRUCTION MANAGEMENT NOTES

- SEQUENCING PLAN STRATEGY HAS BEEN DEVELOPED IN AN ATTEMPT TO MINIMIZE UTILIZATION OF PUBLIC RIGHT OF WAY (MESA ROAD). EQUIPMENT AND MAJORITY OF OPERATION WILL BE CONTAINED WITHIN THE PROJECT SITE. THERE WILL BE EVENTS (SUCH AS DELIVERIES OF EQUIPMENT AND MATERIALS, SHORT TASK SPECIFIC WORK AND ACCESS FOR WORK IMMEDIATELY ADJACENT TO THE RIGHT OF WAY.
- 2. GRADING OPERATIONS SHALL BE DONE UNDER THE DIRECT SUPERVISION OF THE PROJECT GEOTECHNICAL
- THIS PLAN SHALL BE A BINDING DOCUMENT; FAILURE TO ADHERE TO THE PLAN MAY RESULT IN A "STOP WORK NOTICE" BEING PLACED ON THE PROJECT. THIS PLAN SHALL BE UPDATED AS PROJECT CONDITIONS CHANGE. UPDATES TO PLAN SHALL BE PROVIDED TO THE DEPARTMENT OF PUBLIC WORKS FOR REVIEW AND APPROVAL.
- 4. CONTRACTOR MUST CONTACT THE DEPARTMENT OF PUBLIC WORKS TO OBTAIN A LANE CLOSURE, ROAD CLOSURE AND/OR A TRANSPORTATION PERMIT IF CONSTRUCTION VEHICLES EXCEEDING 26 FEET IN LENGTH ARE REQUIRED AT ANY TIME DURING THE CONSTRUCTION PERIOD
- 8 AM TO 5 PM MONDAY THROUGH FRIDAY. POWER TOOLS AND EQUIPMENT USE IS LIMITED FROM 8 AM TO 5 PM MONDAY THROUGH FRIDAY. CONSTRUCTION WORK IS NOT ALLOWED ON WEEKENDS AND HOLIDAYS.
- USE THE COUNTY'S DESIGNATED TRUCK ROUTE FROM HIGHWAY 101 EXIT WEST ON HIGHWAY 1, LEFT ON OLEMA BOLINAS ROAD, RIGHT ON MESA ROAD.
- DELIVERIES / OFF-HAUL: DELIVERY AND OFF-HAUL (INCLUDING EQUIPMENT, MATERIALS, REMOVAL OF SOIL, REFUSE, OR DEMOLITION DEBRIS) HOURS ARE LIMITED TO BETWEEN 9:30 AM AND 2:30 PM FOR SCHOOL ZONES, AND LIMITED TO BETWEEN 9:30 AM AND 3:00 PM ON WEEKDAYS FOR SITES IN IMPACTED NEIGHBORHOODS. FOR TRUCKS EXCEEDING 26 FEET IN LENGTH, A TRANSPORTATION PERMIT MUST BE OBTAINED FROM THE DEPARTMENT OF PUBLIC WORKS A MINIMUM OF 72
- 8. ROAD / LANE CLOSURES: ROAD CLOSURES WILL ONLY BE PERMITTED WITH PRIOR AUTHORIZATION OF THE DEPARTMENT OF PUBLIC WORKS CONSISTENT WITH THE CITY'S ROAD CLOSURE POLICY, PERSONS WANTING TO CLOSE THE ROAD ARE REQUIRED TO PROVIDE WRITTEN NOTIFICATION TO AFFECTED PROPERTY OWNERS AND NEIGHBORS. SIGNS CONTAINING DETAILS OF THE PROPOSED CLOSURE MUST BE POSTED 48 HOURS IN ADVANCE, COORDINATE TRAFFIC CONTROL AND ALL TEMPORARY ROAD CLOSURES WITH THE MILL VALLEY DEPARTMENT OF PUBLIC WORKS, CONTACT THE DEPARTMENT OF PUBLIC WORKS AT 388-4033 TO OBTAIN A ROAD CLOSURE PERMIT. A TRAFFIC DETOUR PLAN WILL BE REQUIRED FOR ANY ROAD CLOSURES. THE DETOUR PLAN SHALL BE SUBMITTED TO THE DEPARTMENT OF PUBLIC WORKS FOR REVIEW AND APPROVAL.
- ALL WORKER VEHICLES SHOULD PARK AT THE JOB SITE OR CARPOOL. VEHICLE PARKING IN THE PUBLIC RIGHT OF WAY AT OR NEAR THE JOB SITE WILL REQUIRE A PARKING PLACARD FROM THE MILL VALLEY POLICE DEPARTMENT.
- 1ST VIOLATION OF ANY PORTION OF THE APPROVED CONSTRUCTION MANAGEMENT PLAN OR APPLICABLE
- 11. CONSTRUCTION TRAFFIC AT SITE: CONSTRUCTION TRAFFIC AND/OR STAGING ON CORTE MADERA AVENUE IS PROHIBITED EXCEPT IN LIMITED CASES
- ABSOLUTELY NECESSARY FOR CONSTRUCTION, SHOULD CORTE MADERA AVENUE ACCESS TO THE SITE BE REQUIRED FOR MORE THAN A 30 MINUTE PERIOD PROJECT MANAGER MUST NOTIFY NEIGHBORS 48 HOURS IN ADVANCE.
- 12. STOCKPILE AND STAGING OF MATERIALS: STOCKPILING AND STAGING WILL BE RELOCATED AS NECESSARY DURING DIFFERENT PHASES OF THE PROJECT. ANTICIPATED LOCATIONS ARE SHOWN ON THE PLAN AND DESCRIBED AS BELOW. CONTRACTOR IS ALLOWED FLEXIBILITY IN LOCATIONS AND TIMING TO FACILITATE CONSTRUCTION.



CARPOOL PARKING



CONSTRUCTION ACCESS
ROUTE

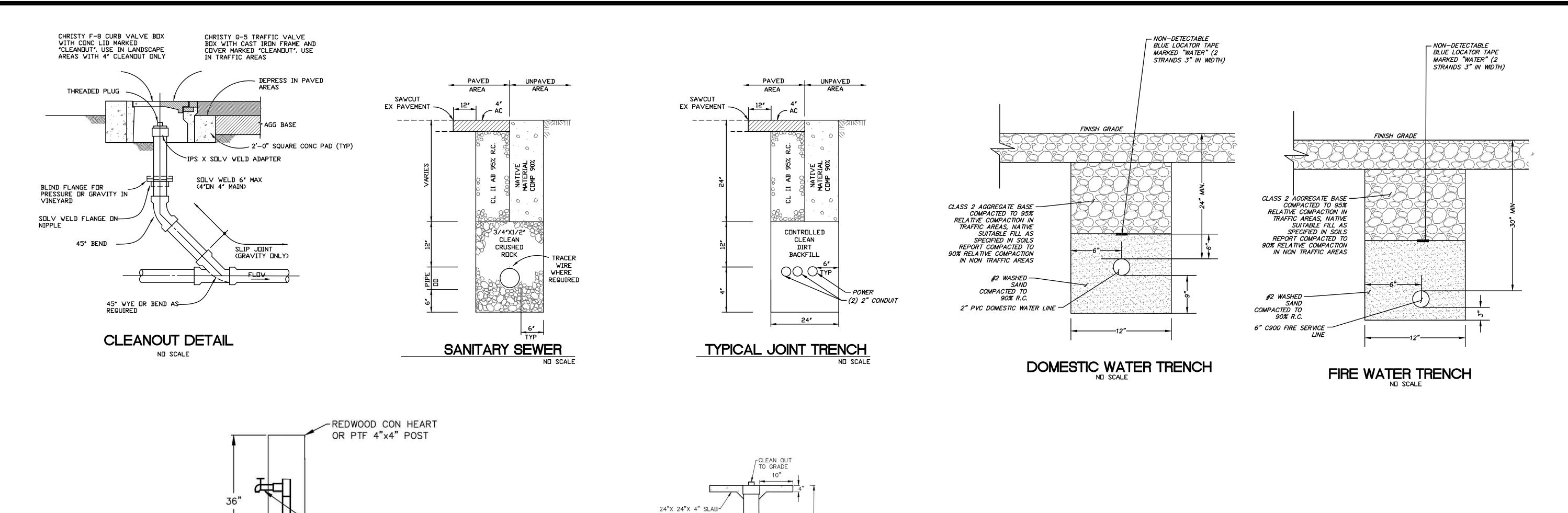
CONSTRUCTION TRAFFIC AND TRUCK ROUTE

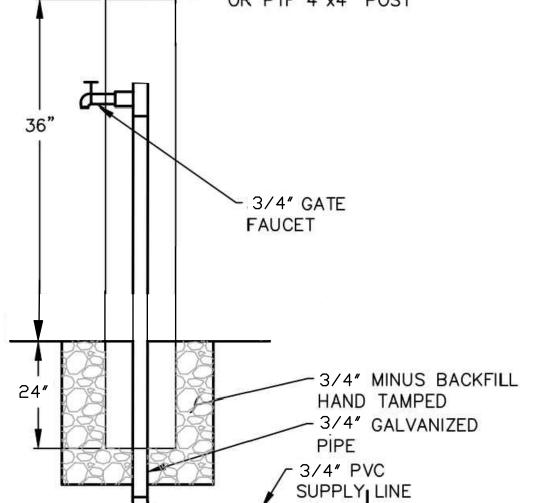
NO SCALE

NGINEER *REGISTER

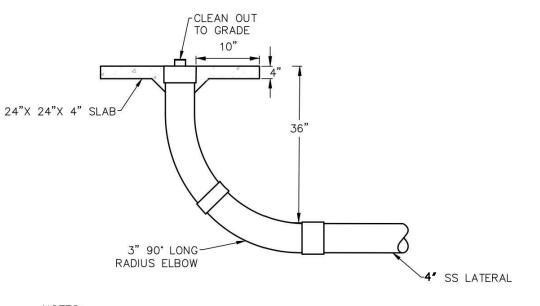
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RV WATER SERVICE CONNECTION



NOTES:

1. THE LOT DRAIN SHALL BE LOCATED WITHIN FOUR (4) FEET OF THE OUTSIDE OF THE UNIT OR UNDER THE UNIT WITHIN 18" OF THE EXTERIOR WALL OF THE UNIT.

2. WHEN A UNIT IS CONNECTED, INSTALLED, PROPOSED TO BE INSTALLED AND IT'S PLUMBING FIXTURES ARE NOT PROTECTED BY APPROVED TRAPS & VENTS, A LOT DRAIN INLET SHALL BE PROVIDED WITH AN APPROVED TRAP

RV SEPTIC DRAIN INLET CONNECTION

BOLINAS RV DETAILS

NGINEER *

SEPTEMBER 1, 2023

JOB NO.

124-23 SHEET NO.

C7
OF 7 SHEETS

\MCE JOBS\2023\124—23 BOLINAS RV\DWGS\124—23 IP.DWG 9/1/2023 3:29 PM SA

- 2. THE ELECTRICAL CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED FOR THE PROSECUTION OF ELECTRICAL WORK. ALL PERMITS AND CERTIFICATES OF INSPECTION AND APPROVAL SIGNED BY THE CONTROLLING BUILDING DEPARTMENT SHALL BECOME PROPERTY OF THE OWNER.
- 3. ALL WIRING SHALL BE IN COMPLIANCE WITH THE CURRENT EDITION OF THE NATIONAL ELECTRIC CODE, APPLICABLE STATE AND CITY REGULATIONS. AND OSHA. IN CASES OF CONFLICT BETWEEN CODE AND SPECIFICATIONS, THE MORE RESTRICTIVE REQUIREMENTS SHALL GOVERN.
- 4. THE ELECTRICAL CONTRACTOR SHALL GUARANTEE FOR A PERIOD OF ONE YEAR (FROM THE DATE OF OWNER ACCEPTANCE) THAT ALL WORK AND EQUIPMENT WILL REMAIN FREE FROM ALL DEFECTS IN WORKMANSHIP AND MATERIALS, AND THAT IT WILL COMPLY WITH ALL THE SPECIFIC REQUIREMENTS OF THE SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS GOVERNING THE WORK
- 5. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING ALL HOLES REQUIRED FOR INSTALLATION OF ELECTRICAL WORK. HOLES SHALL BE CUT IN A NEAT MANNER SATISFACTORY TO THE ENGINEER.
- 6. ALL HOLES OR DAMAGE CAUSED BY THE REMOVAL OF EXISTING WORK OR THE INSTALLATION OF NEW WORK SHALL BE PROPERLY PATCHED BY THIS CONTRACTOR. HOLES SHALL BE NEATLY PATCHED WITH SUITABLE MATERIAL TO MATCH EXISTING SURFACES. HOLES THROUGH FLOORS OR FIRE WALLS SHALL BE SEALED WITH THE APPROPRIATE INTUMESCENT CAULK, PUTTY, STRIP, BLOCK, SPONGE, OR SHEET TYPE FIRE BARRIER PRODUCT; HILTI "FS-ONE", NELSON "FLAMESEAL", SPECIFIED TECHNOLOGIES INC. "SPEC SEAL", INTERNATIONAL PROTECTIVE COATINGS "FLAMESAFE", CSD SEALING SYSTEMS, OR APPROVED EQUAL AS MANUFACTURED BY 3M.
- 7. ALL PAINTING REQUIRED BY ELECTRICAL DEMOLITION OR BY THE INSTALLATION OF NEW ELECTRICAL CONDUIT SHALL BE COMPLETED BY THE GENERAL CONTRACTOR.
- 8. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC, INDICATING GENERAL ARRANGEMENT APPROXIMATE SIZES, GENERAL LOCATIONS OF EQUIPMENT AND OUTLETS. VERIFY DIMENSIONS IN FIELD; ADJUST TO MANUFACTURER'S SHOP DRAWINGS. DO NOT SCALE DRAWINGS.
- 9. ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER BY FIRST-CLASS MECHANICS. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND COMPETENT SUPERVISION THROUGHOUT CONSTRUCTION.
- 10. REMOVE ALL EXISTING WIRING AND ELECTRICAL DEVICES THAT INTERFERE WITH NEW CONSTRUCTION AND ARE NOT NECESSARY TO MAINTAIN SERVICE TO LOADS THAT ARE TO REMAIN. RELOCATE, AND/OR EXTEND AS REQUIRED, WIRING THAT INTERFERES WITH NEW CONSTRUCTION AND IS ESSENTIAL TO MAINTAIN SERVICE TO LOADS THAT ARE TO REMAIN.
- 11. IN THOSE CASES WHERE DEVICES ARE REMOVED, THE ASSOCIATED WIRING THAT WILL NO LONGER BE ACTIVE SHALL BE REMOVED FULL LENGTH BACK TO THE SOURCE OR FIRST ACTIVE JUNCTION POINT.
- 12. THIS CONTRACTOR SHALL PROVIDE THE FOLLOWING SUBMITTALS (PDF FORMART) FOR ENGINEER REVIEW: POWER DISTRIBUTION EQUIPMENT SWITCHBOARDS, PANELBOARDS, TRANSFORMERS, WIRING DEVICES, ETC., LIGHT FIXTURES, LIGHTING CONTROLS, GENERATORS, AND AUTOMATIC TRANSFER SWITCHES.
- 13. AS WORK PROGRESSES, RECORD ON A SET OF RED-LINED "AS-BUILT" PRINTS ANY DEVIATIONS FROM DESIGN DRAWINGS. DELIVER TO THE OWNER BEFORE SUBMITTING THE REQUEST FOR FINAL PAYMENT.
- 14. FURNISH AND INSTALL CONDUIT, SUPPORTS, BOXES, WIRE, AND NECESSARY FITTINGS AND ACCESSORIES AS REQUIRED TO MAKE A COMPLETE INSTALLATION OF THE WIRING SYSTEM INDICATED ON THE DRAWINGS.
- 15. ALL WIRING SHALL BE INSTALLED IN CONDUIT, FLEXIBLE METALLIC CONDUIT, OR LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT AS INDICATED ON PLANS. CONDUITS SHALL BE ELECTRICAL METALLIC TUBING GALVANIZED INSIDE AND OUT WITH AN OVERALL COAT OF CLEAR LACQUER.
- a. CONDUITS SHALL BE OF THE SIZE INDICATED OR REQUIRED BY THE NATIONAL ELECTRIC CODE FOR THE NUMBER AND SIZE CONDUCTORS INVOLVED. JOINTS SHALL BE CUT SQUARE, REAMED SMOOTH AND PULLED UP TIGHT. CONDUIT FITTINGS SHALL BE SET SCREW TYPE GALVANIZED STEEL, CONCRETE TIGHT. DIE CAST TYPE INDENTOR FITTINGS ARE NOT ACCEPTABLE.
- b. RACEWAYS IN GENERAL SHALL BE INSTALLED CONCEALED ABOVE FINISHED CEILINGS, IN WALLS, AND EXPOSED ELSEWHERE AS SHOWN ON PLANS. ALL EXPOSED CONDUITS SHALL BE RUN IN A NEAT MANNER, PARALLEL WITH OR AT RIGHT ANGLES TO BUILDING LINES. EXPOSED CONDUITS SHALL BE ADEQUATELY SUPPORTED WITH BEAM CLAMPS, ONE HOLE STRAPS, ETC.
- 16. ALL ELECTRICAL SYSTEMS, RACEWAYS, JUNCTION BOXES, CABLES, AND ALL FLEXIBLE WIRING SYSTEMS SHALL BE SUPPORTED INDEPENDENT OF THE SUSPENDED TEE-BAR CEILING SYSTEM AND INDEPENDENT OF HANGER WIRES ASSOCIATED WITH THE CEILING SYSTEM, IN FULL COMPLIANCE WITH THE NEC AND LOCAL CODES.
- 17. BRANCH CIRCUIT CONDUCTORS SHALL BE STRANDED COPPER WITH NOT LESS THAN 98% CONDUCTIVITY AND 600 VOLT TYPE THWN OR XHHW INSULATION. CONDUCTORS SHALL BE #12 AWG UNLESS INDICATED OTHERWISE ON PLANS. BRANCH CIRCUIT CONDUCTORS SHALL BE COLOR CODED. COLOR CODING SHALL MATCH INDUSTRY STANDARDS.
- 18. SPLICES IN BRANCH CIRCUIT WIRES SHALL BE MADE ONLY IN READILY ACCESSIBLE JUNCTION BOXES.
- 19. WIRING DEVICES SHALL BE FURNISHED AS DESCRIBED IN THE SYMBOL SCHEDULE AND INSTALLED AT LOCATIONS SHOWN ON THE DRAWINGS. WIRING DEVICES TO BE COOPER "INDUSTRIAL SPEC GRADE", HUBBELL "HBL" SERIES, LEVITON "LEV-SPEC", PASS & SEYMOUR "INDUSTRIAL SPEC GRADE" OR EQUIVALENT.
- 20. FURNISH AND INSTALL LIGHTING FIXTURES AND CONTROLS AS INDICATED ON THE DRAWINGS. FURNISH AND INSTALL ALL REQUIRED HANGING ACCESSORIES AND FITTINGS TO ENSURE PROPER INSTALLATION AND CONFORMANCE WITH THE CODE.

ABBREVIATIONS

A / AMP ALTERNATING CURRENT AC AMPERE INTERRUPTING CURRENT AFCI ARC FAULT CIRCUIT INTERRUPTER AFF ABOVE FINISHED FLOOR **AUTHORITY HAVING JURISDICTION** ALUMINUM AUTOMATIC TRANSFER SWITCH ATS AUX AUXILLARY AUTO AUTOMATIC

AMERICAN WIRE GAUGE BUILDING

AWG BLDG BKR BREAKER CONDUIT CEC CALIFORNIA ELECTRIC CODE CO CONDUIT ONLY CKT CIRCUIT

CURRENT TRANSFORMER DC DIRECT CURRENT DIAMETER DISC DISCONNECT DISTRIBUTION DIVISION

DN DOWN DPDT DOUBLE POLE DOUBLE THROW DPST DOUBLE POLE SINGLE THROW DWG DRAWING EXISTING

ELECTRICAL CONTRACTOR ELEC ELECTRICAL **EMERGENCY** EQPT **EQUIPMENT** ELECTRIC VEHICLE

(F) FUTURE FIRE ALARM FΑ FIRE ALARM CONTROL PANEL FACP FLA FULL LOAD AMPS

FUSE/FUSIBLE G / GND GROUND **GENERATOR GROUND FAULT INTERRUPTING** HORSE POWER HIGH VOLTAGE

ISOLATED GROUND JUNCTION BOX **KILOVOLT-AMPERES** kVA kW KILOWATTS LIGHT-EMITTING DIODE LED MECH MECHANICAL MINIMUM SIZE OR RATING

MAIN LUGS ONLY MTS MANUAL TRANSFER SWITCH (N) NEW NEC NATIONAL ELECTRIC CODE NEMA NATIONAL ELEC. MANUFACT. ASSOC NIC NOT IN CONTRACT/SCOPE NTS NOT TO SCALE

PNI PANEL RECEP RECEPTACLE RECEPTACLE SMD SEE MECHANICAL DRAWINGS SPD SURGE PROTECTION DEVICE SWBD SWITCHBOARD

TYP TYPICAL UNDERWRITERS LABORATORIES UON UNLESS OTHERWISE NOTED UNINTERRUPTIBLE POWER SUPPLY UPS

VOLTS **VOLT-AMPERE** WATT WEATHER PROOF

TRANSFORMER

XFMR

GENERAL POWER & WIRING

WIDTH AS SHOWN ON PLANS (STANDARD IS 48"W)

SINGLE LINE DIAGRAM

*)100A3P CIRCUIT BREAKER

30A3P FUSIBLE SWITCH

₿ FUSE

→ SPLICE / TAP

/ □ NON-FUSIBLE SWITCH

→ CURRENT TRANSFORMER

GROUND FAULT

MODE SETTING

UNDERVOLTAGE TRIP

ST)— SHUNT TRIP

GROUND CONNECTION

SURGE PROTECTION DEVICE

NEUTRAL " N ", GROUND " G " BUS CONNECTIONS

PROVIDE WITH ARC FAULT REDUCTION / MAINTENANCE

CIRCUIT BREAKER WITH ADJUSTABLE LONG TIME, SHORT

INCLUDED PROVIDE WITH GROUND FAULT TRIP SETTINGS.

KIRK KEY INTERLOCK BETWEEN DEVICES, SOLID STRIP IN

TIME, AND INSTANTANEOUS TRIP SETTINGS. IF "G" IS

CIRCLE INDICATES KEY NORMALLY CAPTIVE.

KEYNOTE, REFER TO KEYNOTE LEGEND ON DRAWING EQUIPMENT TAG FOR EQUIPMENT SPECIFIED BY OTHERS (MECHANICAL, PLUMBING, KITCHEN, WINERY, ETC.)

DETAIL REFERENCE DETAIL " #1 " ON DRAWING " E6.1 " (AB) FEEDER TAG, SEE FEEDER SCHEDULE FOR ADDITIONAL ◆ SECTION OR ELEVATION REFERENCE

INFORMATION FIRE TREATED PLYWOOD BACKBOARD 3/4" X 96"H X TOTAL SWITCHBOARD, DISTRIBUTION PANEL, ETC.

☐ SURFACE MOUNTED PANELBOARD

FLUSH MOUNTED PANELBOARD

ELECTRICAL OR LOW VOLTAGE UTILITY POLE

POLE MOUNTED TRANSFORMER PAD OR FLOOR MOUNTED TRANSFORMER

UNDERGROUND PULLBOX OR HANDHOLE P = POWEREP = DEDICATED FOR EMERGENCY POWER SYSTEMS T = TELEPHONE / DATA / LOW VOLTAGE FA = DEDICATED FOR FIRE ALARM

AUTOMATIC DOOR OPERATOR. FURNISHED AND INSTALLED BY HARDWARE SUPPLIER. WIRED BY THE EC INCLUDING MISCELLANEOUS CONTROLS AND INTERLOCKS AS REQUIRED.

AUTOMATIC DOOR OPERATOR PADDLE. FURNISHED BY HARDWARE SUPPLIER, INSTALLED AND WIRED BY THE EC. MOUNT AT 48" AFF. (EXACT LOCATION SHALL BE COORDINATED WITH OWNER AND ARCHITECT).

LINE VOLTAGE THERMOSTAT FURNISHED BY THE MECHANICAL CONTRACTOR. SET AND WIRED BY THE ELECTRICAL CONTRACTOR. MOUNT OVER SURFACE BOX

MOTOR FURNISHED AND SET BY OTHERS, LINE CONNECTIONS BY THE EC.

HEAVY DUTY NON-FUSED DISCONNECT FURNISHED AND INSTALLED BY THE EC. NEMA TYPE 1 INDOORS, NEMA TYPE 3R OUTDOORS. AMPERAGE AND NUMBER OF POLES TO MATCH FEEDER BREAKER SIZE. ALL SWITCHES TO CONTAIN GROUND LUG. FURNISH AND INSTALL NAMEPLATE ON FRONT TRIM TO IDENTIFY LOAD.

SIMILAR TO " ☐ " EXCEPT FUSED

ENCLOSED CIRCUIT BREAKER, REFER TO SINGLE LINE DIAGRAM FOR ADDITIONAL INFORMATION

MOTOR RATED TOGGLE SWITCH WITH TOGGLE LOCK ATTACHMENT. AMPERAGE AND NUMBER OF POLES TO MATCH FEEDER BREAKER SIZE.

3/4" X 10'-0" COPPER CLAD GROUND ROD FURNISHED AND INSTALLED BY THE EC. LOCATE ROD TO MISS BUILDING FOOTERS, CONDUITS AND MECHANICAL PIPING. DRIVE TOP OF ROD TO 6" BELOW FINISHED GRADE. ALL CONNECTIONS TO ROD SHALL BE CADWELD.

TERMINAL CONNECTION ON EQUIPMENT FURNISHED AND SET BY OTHERS, LINE CONNECTIONS BY THE EC

EXISTING JUNCTION BOX TO REMAIN AND BE MAINTAINED

JUNCTION BOX WITH BLANK SCREW COVER CONCEALED ABOVE CEILING. SIZE AS REQUIRED BY CEC.

JUNCTION BOX INSTALLED IN CONJUNCTION WITH SURFACE CONDUIT. SIZE AS REQUIRED BY CEC.

CONDUIT INSTALLED CONCEALED ABOVE CEILINGS AND IN WALLS BY THE EC. QUANTITY OF #12 THWN CONDUCTORS INDICATED UNLESS NOTED OTHERWISE ON PLANS. SHORT HASH MARK INDICATES GREEN, INSULATED COPPER GROUND CONDUCTOR SIZED IN ACCORDANCE WITH CEC TABLE 250-122.

— # SIMILAR TO " / " EXCEPT INSTALLED EXPOSED AT CEILING STRUCTURE AND ON WALLS

———— UNDERGROUND / UNDER FLOOR CONDUIT

— - — EXISTING CONDUIT TO REMAIN

-X - X EXISTING CONDUIT TO BE REMOVED

ELECTRICAL FEEDER. REFER TO FEEDER SCHEDULE.

── CONDUIT HOMERUN TO PANEL OR EQUIPMENT AS NOTED

250 - 400 FT #10 AWG

#8 AWG

#6 AWG

400 - 700 FT

700 **-** 999 FT

RECEPTACLES & MISC.

RECEPTACLE TAG / PRESENTATION DESCRIPTIONS

GFI GFCI TYPE RECEPTACLE

GFB RECEPTACLE PROTECTED BY GFCI TYPE CIRCUIT BREAKER (WHERE APPLICABLE PROVIDE AFCI/GFCI BREAKER). DO NOT INSTALL GFCI TYPE RECEPTACLE

USB RECEPTACLE WITH USB CHARGING PORTS. COORDINATE WITH OWNER EXACT TYPE OF USB PORTS TO PROVIDE.

WEATHER RESISTANT TYPE RECEPTACLE WITH WEATHERPROOF IN-USE COVER

RECEPTACLE FOR WALL MOUNTED DISPLAY, COORDINATE EXACT LOCATION WITH DISPLAY MOUNTING BRACKET AND ARCHITECT

RECEPTACLE CIRCUITED TO EMERGENCY / STANDBY POWER

RECEPTACLE MOUNTED FLUSH IN CEILING (NOT ABOVE CEILING)

SOLID CENTER IDENTIFIES RECEPTACLE CONNECTED TO DEDICATED CIRCUIT

20A, 120V, HEAVY DUTY SPECIFICATION GRADE DUPLEX GROUNDING RECEPTACLE. MOUNT FLUSH IN WALL AT 18" AFF UNLESS NOTED OTHERWISE.

SIMILAR TO " # " EXCEPT TWO DEVICES MOUNTED IN COMMON BACKBOX.

20A, 120V, HEAVY DUTY SPECIFICATION GRADE DUPLEX GROUNDING RECEPTACLE. MOUNT FLUSH IN WALL ABOVE COUNTERTOP OR +42" AFF WHERE NO COUNTERTOP. UNLESS NOTED OTHERWISE.

SIMILAR TO " # " EXCEPT TWO DEVICES MOUNTED IN

20A, 120V, SINGLE SIMPLEX RECEPTACLE. MOUNT FLUSH IN WALL AT 18" AFF UNLESS NOTED OTHERWISE.

RECEPTACLE WITH NEMA CONFIGURATION AS NOTED ON PLANS. MOUNT FLUSH IN WALL AT 18" AFF UNLESS NOTED OTHERWISE.

RECREATION VEHICLE POWER PEDESTAL. SEE PLANS FOR ADDITIONAL INFORMATION AND SPECIFICATION.

DRAWING LIST

E0.1 COVER SHEET & SYMBOLS

E1.1 ELECTRICAL SITE PLAN

E5.1 SINGLE LINE DIAGRAM & SCHEDULES ET24 TITLE 24 COMPLIANCE FORMS

SoCo ENGINEERING CONTACT INFO

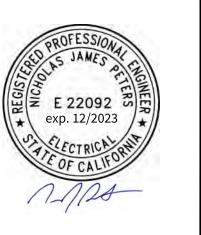
NICHOLAS PETERS, P.E. NICHOLAS@SOCOENGINEERING.COM 707-828-0571

CODE REQUIREMENTS

2022 CALIFORNIA BUILDING CODE VOL. #1 & #2 2022 CALIFORNIA ELECTRIC CODE

SPECIFICALLY - 2022 CEC ARTICLE 551 2022 CALIFORNIA ENERGY CODE 2022 CALIFORNIA FIRE CODE 2022 CAL GREEN BUILDING STANDARDS 2022 CALIFORNIA MECHANICAL CODE 2022 CALIFORNIA PLUMBING CODE **CURRENT APPLICABLE NFPA CODES** CURRENT ADA STANDARDS FOR ACCESSIBLE DESIGN 445 CENTER STREET, STE 219

HEALDSBURG, CA 95448 PHONE: 707-828-0571 WWW.SOCOENGINEERING.COM



09/01/23 PERMIT SET

REV DATE ISSUANCE **ISSUANCE LIST:**

CLIENT: BOLINAS COMMUNITY LAND TRUST

PROJECT: IBOLINAS RV

200 MESA ROAD BOLINAS, CA 94924

SOCO PROJECT # 23010 DRAWN BY: NJP CHECKED BY: NJP SCALE: AS NOTED

SHEET TITLE: COVER SHEET & SYMBOLS

E0.1

ELECTRICAL DEVICE MOUNTING HEIGHTS

1. ALL DIMENSIONS ARE CONSIDERED FROM FINISHED FLOOR AND. UON. SHALL NOT VARY. RAISED FLOORS ARE CONSIDERED FINISHED FLOOR. 2. ALL DIMENSIONS SHALL BE COORDINATED WITH ARCHITECTURAL DETAILS AND MAY BE ADJUSTED TO CONFORM WITH ARCHITECTURAL REQUIREMENTS AS

LONG AS NO CODE RESTRICTION IS VIOLATED. 3. OUTLETS INSTALLED LOWER THEN 15" AFF (FORWARD REACH) ARE IN VIOLATION OF ADA.

LIGHT SWITCHES	48" TO CENTERLINE OF BOX. EXCEPTION: 44" MAX TO TOP ABOVE COUNTERS WHICH ARE 20"-25" DEEP.
DISCONNECT SWITCHES, MOTOR STARTERS	60" TO CENTERLINE
WALL MOUNTED EXIT SIGNS	90" TO CENTERLINE OF SIGN WHERE MOUNTED ADJACENT TO EGRESS OPENING. WHEN MOUNTED ABOVE EGRESS OPENING, LOCATE SIGN CENTERED IN WALL AREA BETWEEN TOP OF DOOR AND CEILING WHERE TOP OF OPENING AND CEILING IS LESS THEN 48". WHEN GREATER THEN 48", LOCATE BOTTOM OF SIGN 12" ABOVE EGRESS OPENING. NFPA 101 SECTION 7.10.1.9 STATES MAX SIGN LOCATION ABOVE EGRESS OPENING IS 6'-8" ABOVE EGRESS OPENING.
RECEPTACLES OR SPECIAL OUTLETS	16" TO BOTTOM OF BOX, UON ON PLANS. ABOVE COUNTER TOPS: 44" MAXIMUM TO TOP ABOVE COUNTERS WHICH ARE 20" - 25"D.
TELE/DATA OUTLETS	16" TO BOTTOM OF BOX, UON ON PLANS. ABOVE COUNTER TOPS: 44" MAXIMUM TO TOP ABOVE COUNTERS WHICH ARE 20" - 25"D.

WIRE SIZING TABLE - BRANCH CIRCUITS TABLES BASED ON EVENLY DISTRIBUTED LOAD, YIELDING 3% V DROP AT LAST DEVICE

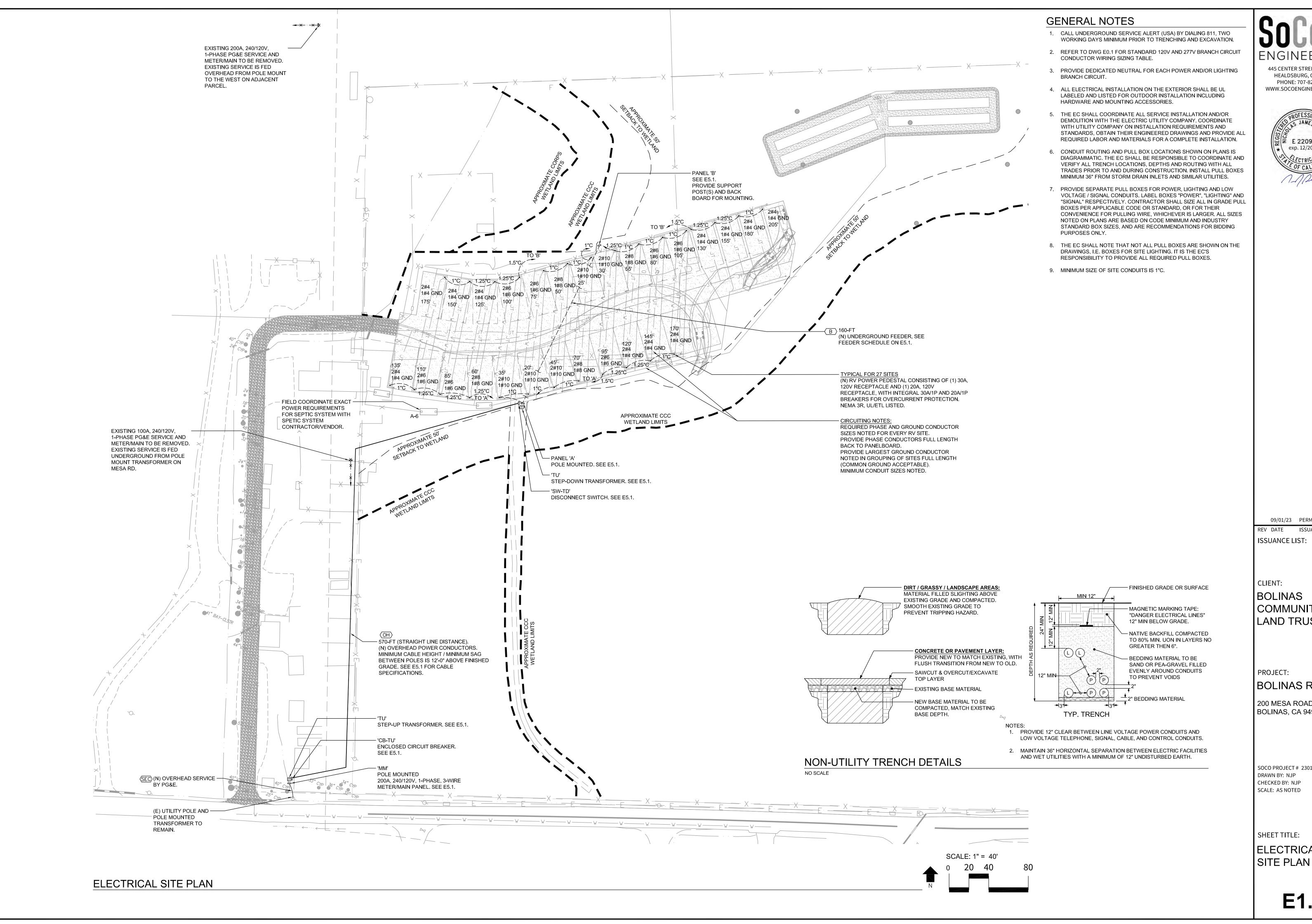
FOR 120V, 20A BRANCH CIRCUITS ONLY (UNO)

IF DISTANCE A+B IS:	BASED ON COPPER WIRE IN EMT, AWG SIZE AS FOLLOWS ON ENTIRE CIRCUIT "A" 120V PANEL "A"
0 - 100 FT 100 - 175 FT 175 - 300 FT 300 - 450 FT	#12 AWG (MIN) #10 AWG #8 AWG #6 AWG TO LAST DEVICE OR LIGHTING FIXTURE ON CIRCUIT.
F	OR 277V , 20A BRANCH CIRCUITS ONLY (UNO)
IF DISTANCE A+B IS:	BASED ON COPPER WIRE IN EMT, AWG SIZE AS FOLLOWS ON ENTIRE CIRCUIT BASED ON COPPER WIRE IN 277V PANEL "A"
0 - 250 FT	#12 AWG (MIN)

1/2 WIRE LENGTH FROM

FIRST TO LAST LIGHTING

FIXTURE ON CIRCUIT.



ENGINEERING 445 CENTER STREET, STE 219 HEALDSBURG, CA 95448

PHONE: 707-828-0571 WWW.SOCOENGINEERING.COM



09/01/23 PERMIT SET

ISSUANCE LIST:

CLIENT: BOLINAS

COMMUNITY LAND TRUST

PROJECT: **BOLINAS RV**

200 MESA ROAD BOLINAS, CA 94924

SOCO PROJECT # 23010 DRAWN BY: NJP CHECKED BY: NJP SCALE: AS NOTED

SHEET TITLE: ELECTRICAL

E1.1

GROUNDING ELECTRODE SYSTEM

250.50 GROUNDING ELECTRODE SYSTEM: ALL GROUNDING ELECTRODES AS DESCRIBED IN 250.52(A)(1) THROUGH (A)(7) THAT ARE PRESENT AT EACH BUILDING OR STRUCTURE SERVED SHALL BE BONDED TOGETHER TO FORM THE GROUNDING ELECTRODE SYSTEM. WHERE NONE OF THESE GROUNDING ELECTRODES EXIST, ONE OR MORE OF THE GROUNDING ELECTRODES SPECIFIED IN 250.52(A)(4) THROUGH (A)(8) SHALL BE INSTALLED AND USED.

(E1) 250.52(A)(1) METAL UNDERGROUND WATER PIPE: SIZED PER A METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE TABLE 250.66 EARTH FOR 10FT OR MORE AND ELECTRICALLY CONTINUOUS TO THE POINTS OF CONNECTION OF THE GROUNDING ELECTRODE CONDUCTOR AND THE BODING CONDUCTOR(S) OR JUMPER(S), IF INSTALLED.

SIZED PER

SIZED PER

SIZED PER

TABLE 250.66,

MAXIMUM #6 CU

TABLE 250.66,

(E2) 250.52(A)(2) METAL IN-GROUND SUPPORT STRUCTURE(S): ONE OR MORE METAL IN-GROUND SUPPORT STRUCTURE(S) IN DIRECT TABLE 250.66 CONTACT WITH THE EARTH VERTICALLY FOR 10FT OR MORE, WITH OR WITHOUT CONCRETE ENCASEMENT. IF MULTIPLE METAL IN-GROUND SUPPORT STRUCTURES ARE PRESENT AT A BUILDING OR STRUCTURE IT SHALL BE PERMISSIBLE TO BOND ONLY ONE INTO THE GROUNDING ELECTRODE SYSTEM. INFO NOTE: METAL IN-GROUND SUPPORT STRUCTURES INCLUDE, BUT ARE NOT LIMITED TO, PILINGS, CASTINGS, AND OTHER STRUCTURAL METAL.

(E3) 250.52(A)(3) CONCRETE-ENCASED ELECTRODE: A CONCRETE-ENCASED ELECTRODE SHALL CONSIST OF AT LEAST 20FT OF EITHER (1) BASE OR ZINC BARS/RODS PER 250.52(A)(3) OR (2) (MAXIMUM #4 CU BARE COPPER CONDUCTOR NOT SMALLER THEN 4 AWG. METALLIC COMPONENTS SHALL BE ENCASED BY AT LEAST 2" OF CONCRETE AND SHALL BE LOCATED HORIZONTALLY WITHIN THAT PORTION OF A CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH OR WITHIN VERTICAL FOUNDATIONS OR STRUCTURAL COMPONENTS OR MEMBERS THAT ARE DIRECT CONTACT WITH THE EARTH. IF MULTIPLE CONCRETE-ENCASED ELECTRODES ARE PRESENT AT A BUILDING OR STRUCTURE, IT SHALL BE PERMISSIBLE TO BOND ONLY ONE INTO THE GROUNDING ELECTRODE SYSTEM. INFO NOTE: CONCRETE INSTALLED WITHIN INSULATION, VAPOR BARRIERS, FILMS OR SIMILAR ITEMS SEPARATING THE CONCRETE FROM THE EARTH IS NOT CONSIDERED TO BE IN "DIRECT CONTACT" WITH THE EARTH.

E4) 250.52(A)(4) GROUND RING: SAME SIZE AS A GROUND RING ENCIRCLING THE BUILDING OR STRUCTURE, IN GROUND RING, DIRECT CONTACT WITH THE EARTH, CONSISTING OF AT LEAST 20FT OF NOT LESS BARE COPPER CONDUCTOR NOT SMALLER THEN #2 AWG. THEN #2 CU.

(E5) 250.52(A)(5) ROD AND PIPE ELECTRODES: SIZED PER ROD AND PIPE ELECTRODES SHALL NOT BE LESS THAN 8FT IN LENGTH TABLE 250.66, (IN CONTACT WITH EARTH) AND SHALL CONSIST OF THE FOLLOWING MAXIMUM #6 CU MATERIALS: (a) PIPE OR CONDUIT SEE CODE FOR DESCRIPTION, OR (b) OR ROD-TYPE GROUNDING ELECTRODES OF STAINLESS STEEL AND MAXIMUM #4 AL COPPER OR ZINC COATED STEEL SHALL BE AT LEAST 5/8" IN DIAMETER, UNLESS LISTED.

(E6) 250.52(A)(6) OTHER LISTED ELECTRODES: OTHER LISTED GROUNDING SIZED PER ELECTRODES SHALL BE PERMITTED. TABLE 250.66

(E7) 250.52(A)(7) PLATE ELECTRODES: EACH PLATE ELECTRODE SHALL EXPOSE NOT LESS THAN 2FT^2 OF SURFACE TO EXTERIOR SOIL. ELECTRODES OF BARE OR ELECTRICALLY CONDUCTIVE COATED IRON OR STEEL PLATES SHALL BE AT LEAST 1/4" IN THICKNESS. SOLID, UNCOATED ELECTRODES OF MAXIMUM #4 AL NONFERROUS METAL SHALL BE AT LEAST 0.06" IN THICKNESS.

(E8) 250.52(A)(8) OTHER LOCAL METAL UNDERGROUND SYSTEMS OR SIZED PER STRUCTURES: OTHER LOCAL METAL UNDERGROUND SYSTEMS OR TABLE 250.66 STRUCTURES SUCH AS PIPING SYSTEMS, UNDERGROUND TANKS, AND UNDERGROUND METAL WELL CASINGS THAT ARE NOT BONDED TO A METAL WATER PIPE.

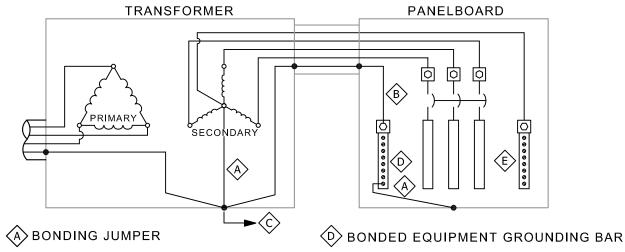
250.52(B) NOT PERMITTED FOR USE AS GROUNDING ELECTRODES: (1) METAL UNDERGROUND GAS PIPING SYSTEMS (2) ALUMINUM

(3) THE STRUCTURES AND STRUCTURAL REINFORCING STEEL DESCRIBED IN 680.26(B)(1) AND (B)(2).

CEC TABLE 250.66

GROUND ELECTRODE CONDUCTOR FOR AC SYSTEMS

	GROUND ELECTRODE CONDUCTOR FOR AC SYSTEMS							
	SIZE OF LARGEST UNGROUNDED CONDUCTOR OR EQUIVALENT AREA FOR PARALLEL CONDUCTORS			GROUNDING DE CONDUCTOR				
	COPPER	ALUMINUM OR COPPER-CLAD ALUMINUM	COPPER	ALUMINUM OR COPPER-CLAD ALUMINUM				
A	2 OR SMALLER	1/0 OR SMALLER	8	6				
B	1 OR 1/0	2/0 OR 3/0	6	4				
C	2/0 OR 3/0	4/0 OR 250	4	2				
D	OVER 3/0 THROUGH 350	OVER 250 THROUGH 500	2	1/0				
E	OVER 350 THROUGH 600	OVER 500 THROUGH 900	1/0	3/0				
F	OVER 600 THROUGH 1100	OVER 900 THROUGH 1750	2/0	4/0				
G	OVER 1100	OVER 1750	3/0	250				

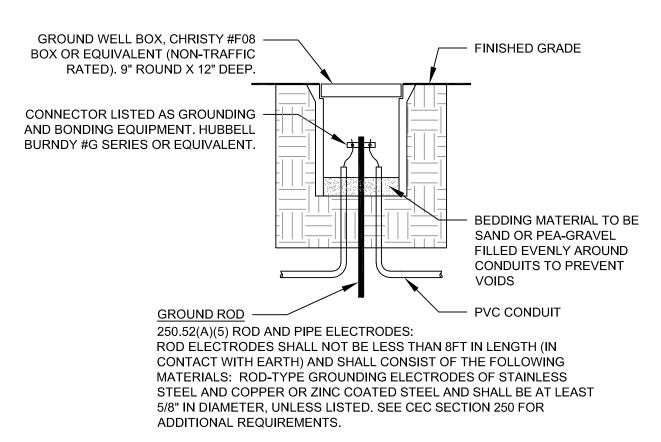


B EQUIPMENT GROUNDING CONDUCTOR E NEUTRAL BAR (NOT BONDED)

C TO BUILDING STEEL

TYPICAL STEPDOWN TRANSFORMER WIRING DETAIL

NO SCALE



GROUND ROD DETAIL

NO SCALE

ELECTRICS	SERVICE C Bolinas R	ALCULATION V	
MISCELLANEOUS LOADS - NONCOING	CIDENT LOADS		WATTS (VA)
30 amp RV site	27 at	3600 VA	97,200
CEC 551.73 DEMANI	D FACTOR: 42%	CONNECTED: DEMAND:	97,200 40,824
HVAC & PLUMBING LOADS CEC 220.60: DEMAND FACTOR AS SEPTIC PUMP (1/2 HP) DEMANI	S DETEREMINED 2 at D FACTOR: 100%	1100 VA	2,200 2,200 2,200
VOLTAGE: 240 / 120V, 1-PHAS	E, 3-WIRE	TOTAL CONNECTED: TOTAL CONNECTED: TOTAL DEMAND: TOTAL DEMAND:	

8/31/2023 13:29

SERVICE AVAILABLE FAULT CURRENT

200	AMPS
ARY:	
RMER SIZE:	
1.50	% Z
ARY CONDUCT	ORS:
50	FEET
SUTION:	_
NT AVAILABL	 .E:
	ARY: ORMER SIZE: 1.50 ARY CONDUCT 50 SUTION:

|9,310 AIVIPS (IVIAX 1PH L-L OK L-N)| DATE OF CALCULATION:

Sep 1, 2023					
THIS CALCULATION MUST BE REVIEWED IF THE SERVICE IS ALTERED					

PAN LOCAT	ΓΙΟΝ:	В					N	BUS (A): 1AIN (A):	125 125	20V, 1-PI	•						NTING: SURFACE DSURE: NEMA 3R
	LEC RM KAIC (MINIMUM):																
CKT		POLE	LOAD			DESCRI	PTION		A 3024		В			POLE		CODE	
$\frac{1}{2}$	30	_1_	1512			A PEDESTAL					2024	2	30	1	1512		RV 30A PEDESTAL
<u>3</u> 5	30 30	<u></u>	1512 1512			0A PEDESTAL					3024	4 6	30 30	1	1512 1512		RV 30A PEDESTAL RV 30A PEDESTAL
7	30		1512	N N	N RV 30A PEDESTAL N RV 30A PEDESTAL						1512	8	20	1	1512	IN	SPARE
9	30	1	1512	N		PEDESTAL			1512		1312	10	20	1			SPARE
11	30	1	1512	N		PEDESTAL			1012		1512	12	20	1			SPARE
13	30	1	1512 N RV 30A PEDESTAL						1512			14	20	1			SPARE
15	30	1	1512 N RV 30A PEDESTAL								1512	16	-	1			SPACE
17	30	1	1512 N RV 30A PEDESTAL						1512			18	-	1			SPACE
19	30	11	1 1512 N RV 30A PEDESTAL								1512	20	-	1			SPACE
21	30	1	1512 N RV 30A PEDESTAL						1512			22	-	1			SPACE
23	23 30 1 1512 N RV 30A PEDESTAL							10000		1512	24	-	1			SPACE	
								12096		10584							
	LOAD SUMMARY									88	ļ						
			LOAD 1	TYPF			D & LOAD (k	\/ \ \	CONN.	DEM.	PANEL NOTES:						
CODE						B -	D & LOAD (K	<u>-</u>	TOTAL			TANL	LINOI	<u> </u>			
	CONT			C 220.1		0.0			0.0	0.0							
			INUOL			22.7			22.7	22.7							
	RECEPTACLE (CEC 220.44)					0.0			0.0	0.0							
М	MOTORS (CEC 430.24)					0.0			0.0	0.0							
L	LARGEST MOTOR kVA					0.0			0.0								
1 h	KITCHEN (CEC 220.56)					0.0			0.0	0.0							
	# OF KITCHEN EQUIP. 0.0 0.0																
	TOTAL CONNECTED: 22.7 _{KVA}																
	TOTAL DEMAND: 22.7 kVA																
8/22/2	2023 1	.3:43					DEMAND:	95	AMPS								

FEEDER

ID

CONDUIT AND CONDUCTORS

3"C - 3#500 KCMIL AL, 1#2/0 GRD

SEE 1-LINE DIAGRAM FOR SPEC

OVERHEAD CONDUCTORS BY PG&E

2"C - 3#3/0, 1#2 GRD

1 1/4"C - 2#2, 1#8 GRD

2"C - 2#3/0, 1#6 GRD

TU 2"C - 3#3/0, 1#6 GRD

				PANE	L: A					/OLTAGE:	240 / 1	20V 1-PF	-1ΔSF 3-	WIRF						
	ľ	/OUN	ITING: SURFACE	[,	- A				`	VOLTAGE: 240 / 120V, 1-PHASE, 3-WIRE BUS (A): 200							МО	UNTING: SURFACE		
			SURE: NEMA 3R	LOCAT	LOCATION:						200 MAIN BREAKER					ENCLOSURE: NEMA 3R				
	_				ELEC RM					, ,				PROVIDE PANEL WITH INTEGRAL SURGE PROTECTION DEVICE						
	DAD C		DESCRIPTION	CKT T	TRIP POLE L	OAD COD	E	DESCRIP	TION		Α		В	CKT			<u>.OAD COD</u>	DE DESCRIPTION		
			RV 30A PEDESTAL			1512 N	RV 30A PEDE				13608			2	125		2096	PANEL "B"		
			RV 30A PEDESTAL			1512 N	RV 30A PEDE						12096	4	-	- 1	0584	li .		
1	512		RV 30A PEDESTAL			1512 N	RV 30A PEDE				1512			6	20	1		SEPTIC SYSTEM (NOTE #2)		
			SPARE			1512 N	RV 30A PEDE						1512	8	20	1		SPARE		
			SPARE			<u>1512 N</u>	RV 30A PEDE				1512			10	20	1		SPARE		
_			SPARE			1512 N	RV 30A PEDE						1512	12	20	1		SPARE		
			SPARE			1512 N	RV 30A PEDE				1512			14	20	1		SPARE		
_			SPACE			1512 N	RV 30A PEDE						1512	16	-	1		SPACE		
			SPACE			1512 N	RV 30A PEDE				1512			18	-	1		SPACE		
_			SPACE			1512 N	RV 30A PEDE						1512	20	-	1		SPACE		
_			SPACE			1512 N	RV 30A PEDE				1512		_	22	-	1		SPACE		
		!	SPACE	23	30 1 1	1512 N	RV 30A PEDE	<u>STAL</u>		1			1512	24	-	1		SPACE		
											21168		19656							
							LOAD SU	MANADY		AMPS:	1/6		164							
					1.4	OAD TYPE			0.1.0.1.0.1					. .		_				
				CODE				PANEL ID	& LOAD (DEM.			NOTE		TUINITECI	DAL CUDGE DDOTECTION DEVICE		
				CODE		DE REFEREN		B	-	-		TOTAL						RAL SURGE PROTECTION DEVICE		
					<u>CONTINUOU</u> ION-CONTIN			0.0 0			0.0	0.0						STEM CONTRACTOR/DESIGNER		
					RECEPTACLE			8.1 22			40.8	40.8		ON EX	ACTPC	VVERI	REQUIREN	IENTS FOR SEPTIC SYSTEM PUMPS.		
									.0		0.0	0.0								
					<u> 10TORS (CE</u> <u>ARGEST MC</u>				.0		0.0	0.0								
					ARGEST MC (ITCHEN (CE				.0		0.0	0.0								
					OF KITCHE				.0		0.0	0.0								
					OF MICHE	IN EQUIP.				. 40.0										
								AL CONI												
				8/22/2	023 13:43			L	DEMAND	: 170	AMPS									

VOLTAGE | CONDUIT | CIRCUIT

29%

21%

18%

(AMPS) VOLTAGE DROP % FILL %

200 | 200 | 240 | 0.1% | 28% | 710 A

480 0.1%

200 | 200 | 240 | 0.1% | 26% | 8880 A

2.3%

125 240 0.6%

480

240

200 | 480 | 0.0% |

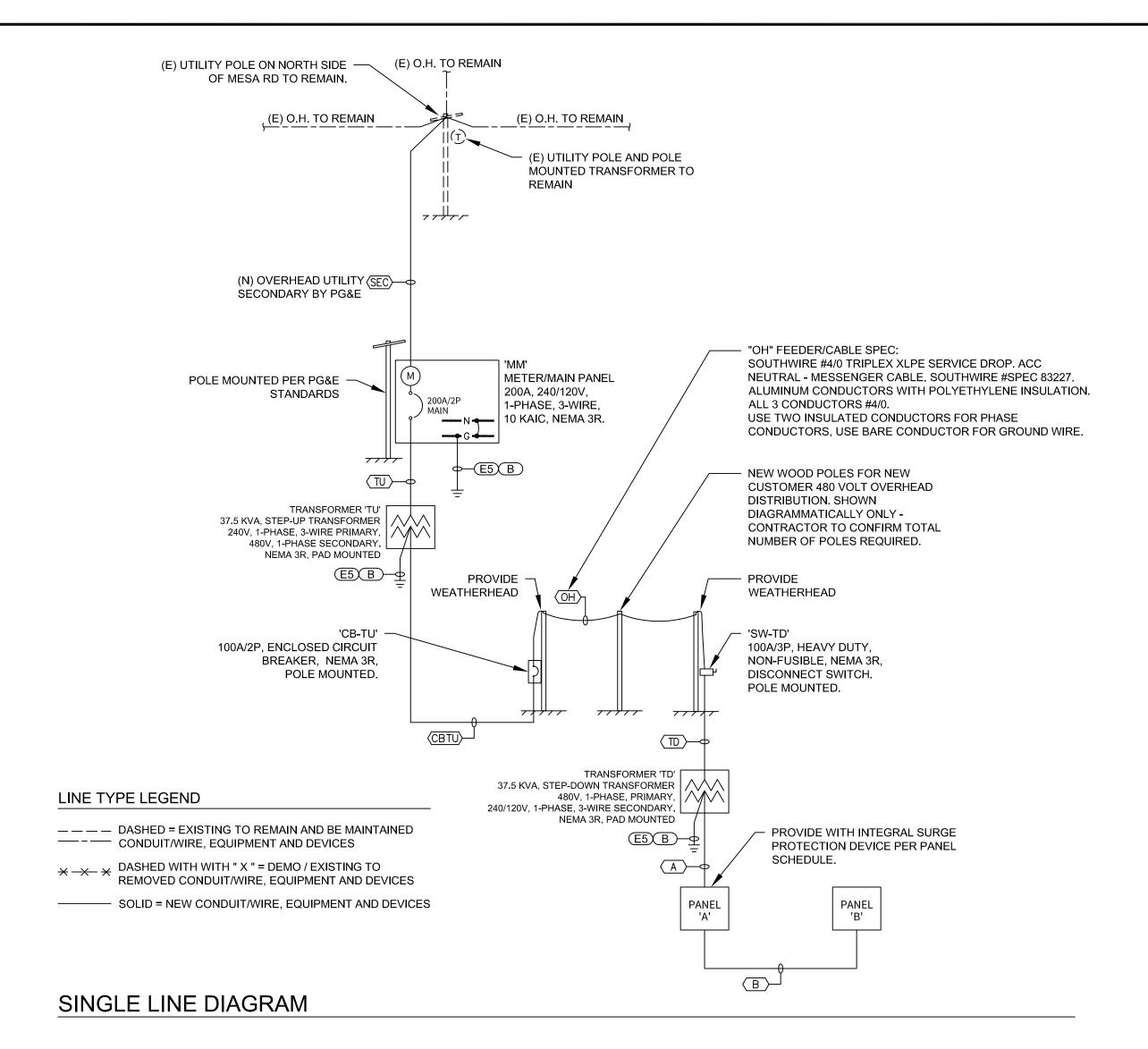
100

COMMENTS (IF REQUIRED)

UPSIZED FOR VOLTAGE DROP

SEE 1-LINE DIAGRAM FOR SPEC

NEW O.H. SERVICE DROP BY PG&E



DESIGN FEEDER OCPD

310

115

192

200

LENGTH LOAD AMPACITY SIZE

10 | 156 |

460

75

90

150

10 150

FEEDER SCHEDULE

PANEL 'A'

PANEL 'B'

BKR 'CB-TU'

'SW-TD' / XFMR 'TD'

METER/MAIN 'MM'

XFMR 'TD'

PANEL 'A'

XFMR 'TU'

XFMR 'TU' / 'CB-TU'

SEE SITE PLAN

DISC. 'SW-TD'

METER/MAIN 'MM'

09/01/23 PERMIT SET REV DATE ISSUANCE

445 CENTER STREET, STE 219

HEALDSBURG, CA 95448

PHONE: 707-828-0571

WWW.SOCOENGINEERING.COM

E 22092

exp. 12/2023

ISSUANCE LIST:

CLIENT: BOLINAS

COMMUNITY

LAND TRUST

PROJECT: **IBOLINAS RV**

200 MESA ROAD BOLINAS, CA 94924

SOCO PROJECT # 23010 DRAWN BY: NJP CHECKED BY: NJP SCALE: AS NOTED

SHEET TITLE: SINGLE LINE DIAGRAM &

SCHEDULES

E5.1

C. COMPLIANCE RE	SULTS							
		matically calculated fro itions for guidance or so					f any cell on this table says "	COMPLIES with Exceptional Conditions" refer
01		02		03		04	05	06
Service Electrical Metering 130.5(a)/ 160.6(a) (See Table F)	AND	Separation for Monitoring 130.5(b)/ 160.6(b) (See Table G)	AND	Voltage Drop 130.5(c)/ 160.6(c) (See Table H)	AND	Controlled Receptacles 130.5(d)/ 160.6(d) (See Table I)	Electric Ready 160.9 (See Table J)	Compliance Results
Yes	AND		AND	Yes	AND			COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. SERVICE ELECTRICAL METERING

This table includes new or replacement electrical service systems OR equipment to demonstrate compliance with 130.5(a) / 160.6(a). For multifamily occupancies, submetered systems that provide power to common use areas must meet the following metering requirements. Submetered systems providing power to dwelling units do not.

O1 O2 O3 O4 O5

Required Metering Capabilities per Table 130.5-A Field Inspector

Electrical Service Designation/
Description

Main

Field Inspector

Required Metering Capabilities per Table 130.5-A

Field Inspector

Tracking kWh for user-defined period

Demand (kW)

Main

Field Inspector

Location of Requirements in Construction Documents

Pass

Fail

Fail

Footnotes: If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.

H. VOLTAGE DROP

This table includes entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with 130.5(c)/160.6(c). For alterations, only the altered circuits must demonstrate compliance per 141.0(b)2Piii/180.2(b)4Bviic.

Generated Date/Time:

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: EnergyPro-50284-0823-0008 Benort Generated: 2023-08-22 14:38:55

Documentation Software: EnergyPro

Electrical Power Distribution

CERTIFICATE OF COMPLIANCE

Project Name: Bolinas RV

Report Page: (Page 4 of 4)

Project Address: 200 Mesa Road Date Prepared: 8/22/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT							
I certify that this Certificate of Compliance documentation is accurat	e and complete.						
Documentation Author Name: Nicholas Peters	Documentation Author Signature:						
Company: SoCo Engineering	Signature Date: 8-22-2023						
Address: 445 Center Street, Suite 219	CEA/ HERS Certification Identification (if applicable): Electrical E22092						
City/State/Zip: Healdsburg CA 95448	Phone: 707-828-0571						
 The energy features and performance specifications, materials, components, and more of Title 24, Part 1 and Part 6 of the California Code of Regulations. The building design features or system design features identified on this Certificate of plans and specifications submitted to the enforcement agency for approval with this. I will ensure that a completed signed copy of this Certificate of Compliance shall be added. 	isibility for the building design or system design identified on this Certificate of Compliance (responsible designer) anufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, is building permit application. made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable ance is required to be included with the documentation the builder provides to the building owner at occupancy.						
Responsible Designer Name:	Responsible Designer Signature:						
Company: SoCo Engineering, Inc.	Date Signed: 2023-08-22						
Address: 445 Center Street, Suite 219	License: E22092						
City/State/Zip: Healdsburg CA 95448	Phone: 707-828-0571						

Generated Date/Time:

Report Version: 2022.0.000 Schema Version: rev 20220101 Documentation Software: EnergyPro

Compliance ID: EnergyPro-50284-0823-0008 Report Generated: 2023-08-22 14:38:55 STATE OF CALIFORNIA

Electrical Power Distribution

CALIFORNIA ENERGY COMMISSION

This document is used to demonstrate compliance with mandatory requirements in 130.5, for electrical systems in newly constructed nonresidential and hotel/motel occupancies and 160.6 and 160.9 for electrical systems in newly constructed multifamily occupancies. Additions and alterations to electrical service systems in nonresidential and hotel/motel occupancies will also use this document to demonstrate compliance per 141.0(a) or 141.0(b)2P for alterations. For multifamily addition or alterations compliance will be documented per 180.1(a) or 180.2 (b)4Bvii

 Project Name:
 Bolinas RV
 Report Page:
 (Page 1 of 4)

 Project Address:
 200 Mesa Road
 Date Prepared:
 8/22/2023

A. GENERAL INFORMATION

O1 Project Location (city)

Bolinas

O2 Climate Zone

O3 Occupancy Types Within Project:

B. PROJECT SCOPE This table includes electrical systems that are within the scope of the permit application. 02 03 04 06 07 05 Utility Provided subject to CA Provides power to dwelling Electrical Service Metering System Elec Code units/common living areas Scope of Work¹ Rating² (kVA) Exception to Designation/ Article 517 Demand Response Controls only in multifamily 130.5(a)/ Description Exception to occupancy 130.5(a)and 160.6(a)3 Where required, demand response controls must be specified which are capable of receiving and automatically responding to at least one standards based messaging protocol which enables New electrical demand response after receiving a demand response signal. service equipment Sections 120.2/ 160.3, 130.1/ 160.5, and 130.3/ 160.5, and and meter mechanical, indoor lighting, and sign lighting Certificate of Compliance documents will indicate when demand response controls are required.

¹FOOTNOTES: Adding only new feeders and branch circuits triggers Voltage Drop 130.5(c)/160.6(c), no other requirements from 130.5/160.6 are required.
² If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.

³ Applicable if the utility company is providing a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.

if applicable. If calculations will be the responsibility of the installing contractor, select "Contractor Responsible".

Generated Date/Time:

Documentation Software: EnergyPro

8/22/2023

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000 Schema Version: rev 202201

Date Prepared:

Compliance ID: EnergyPro-50284-0823-0008 Report Generated: 2023-08-22 14:38:55

STATE OF CALIFORNIA

Electrical Power Distribution

CERTIFICATE OF COMPLIANCE

Project Name: Bolinas RV

CALIFORNIA ENERGY COMMISSION

Report Page: (Page 3 of 4)

H. VOLTAGE DROP 01 03 05 sheet Number for Voltage Drop Field Inspector Combined Voltage Drop on Installed Feeder/Branch Location of Voltage Drop Electrical Service Calculations in Construction Circuit Conductors Compliance Method Designation/Description Calculations¹ Fail Documents Permitted by CA Elec See Dwg E5.1 Feeder Voltage drop less than ☐ Code (Exception to Attached Schedule 130.5(c))* * NOTES: If "Permitted by CA Elec Code *" is selected under Compliance Method above, please indicate where the exception applies in the space provided below. FOOTNOTES: Voltage drop calculations may be attached to the permit application outside the construction documents if allowed by the Authority Having Jurisdiction. Select "attached"

J. ELECTRIC READY BUILDINGS

This section does not apply to this project.

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title

NRCI-ELC-E - Must be submitted for all buildings

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Generated Date/Time:

Report Version: 2022.0.000 Schema Version: rev 20220101

Compliance ID: EnergyPro-50284-0823-0008 Report Generated: 2023-08-22 14:38:55

Documentation Software: EnergyPro

SOC ENGINEERING 445 CENTER STREET, STE 219 HEALDSBURG, CA 95448 PHONE: 707-828-0571 WWW.SOCOENGINEERING.COM

09/01/23 PERMIT SET

ISSUANCE LIST:

CLIENT:
BOLINAS
COMMUNITY
LAND TRUST

PROJECT:
BOLINAS RV

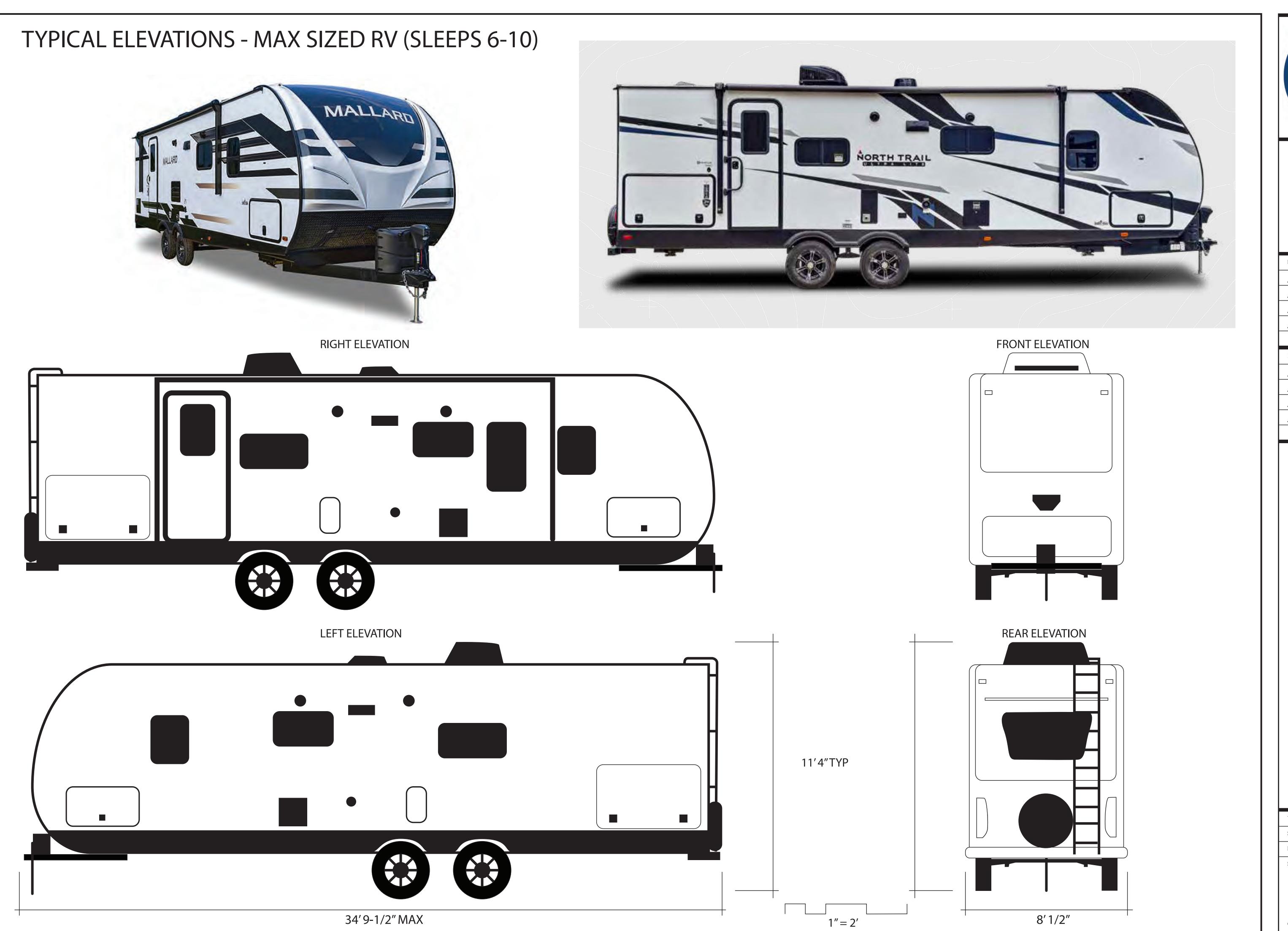
200 MESA ROAD BOLINAS, CA 94924

SOCO PROJECT # 23010 DRAWN BY: NJP CHECKED BY: NJP

SCALE: AS NOTED

SHEET TITLE:
TITLE 24
COMPLIANCE
FORMS

ET24





Revisions

A

A

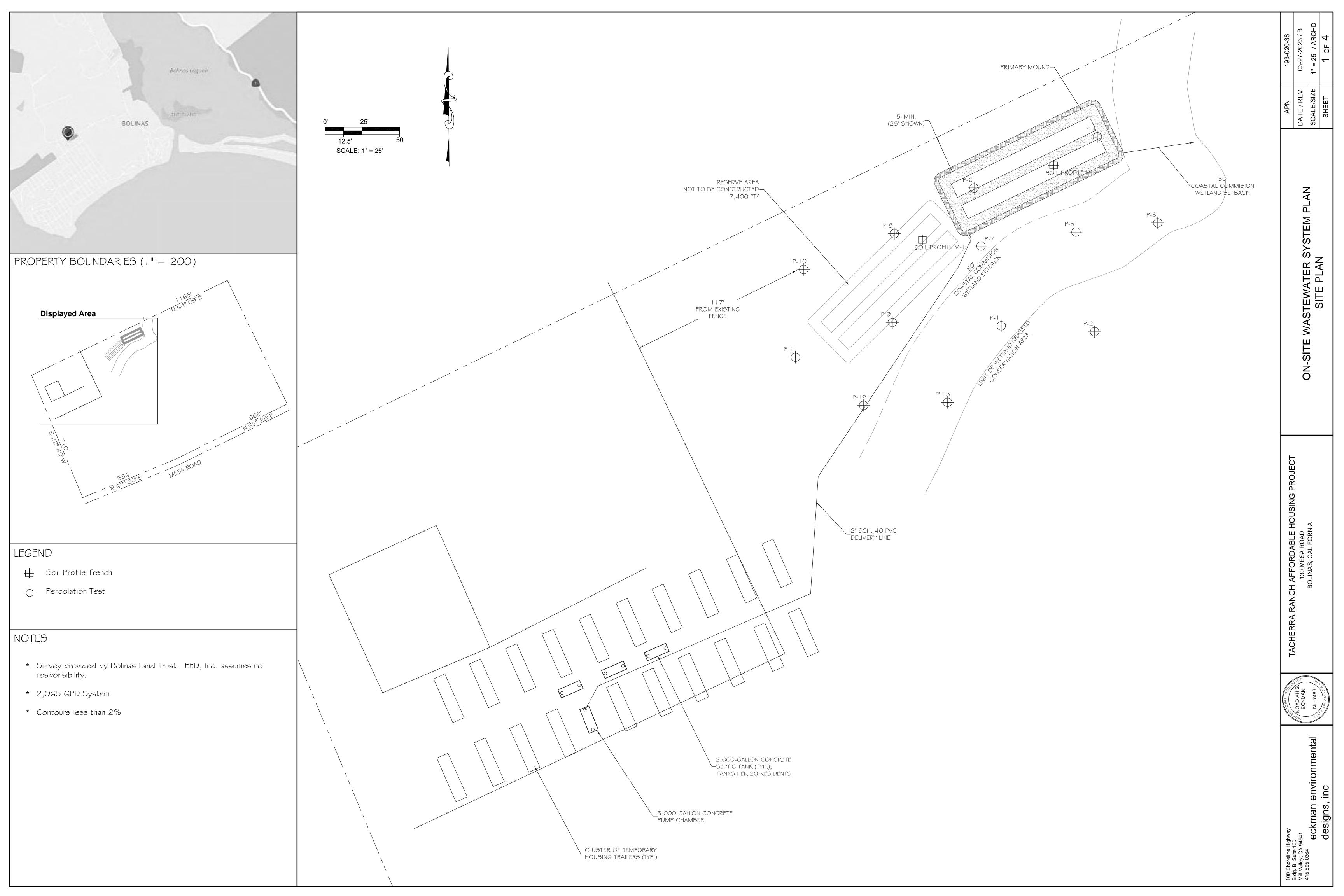
Issue

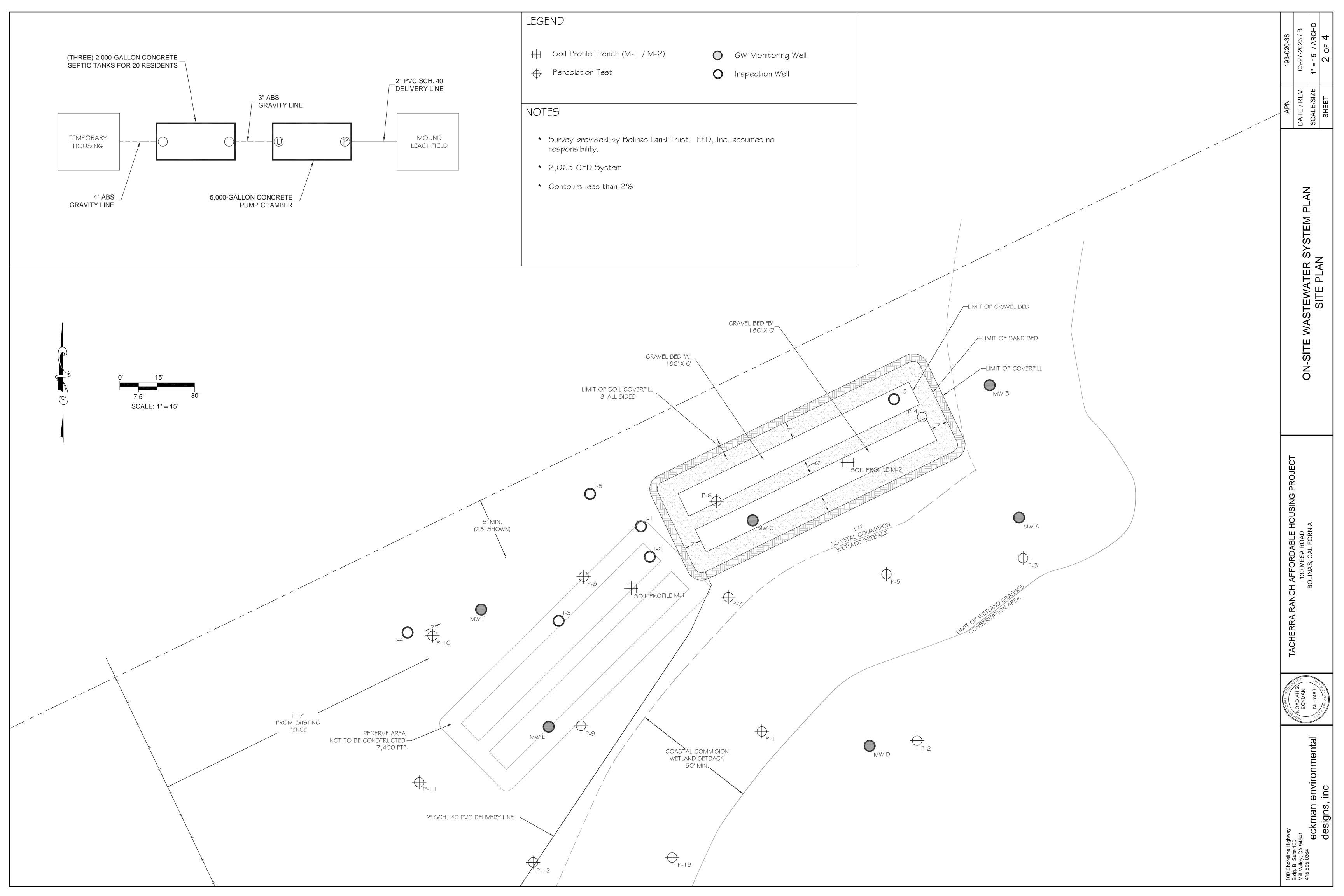
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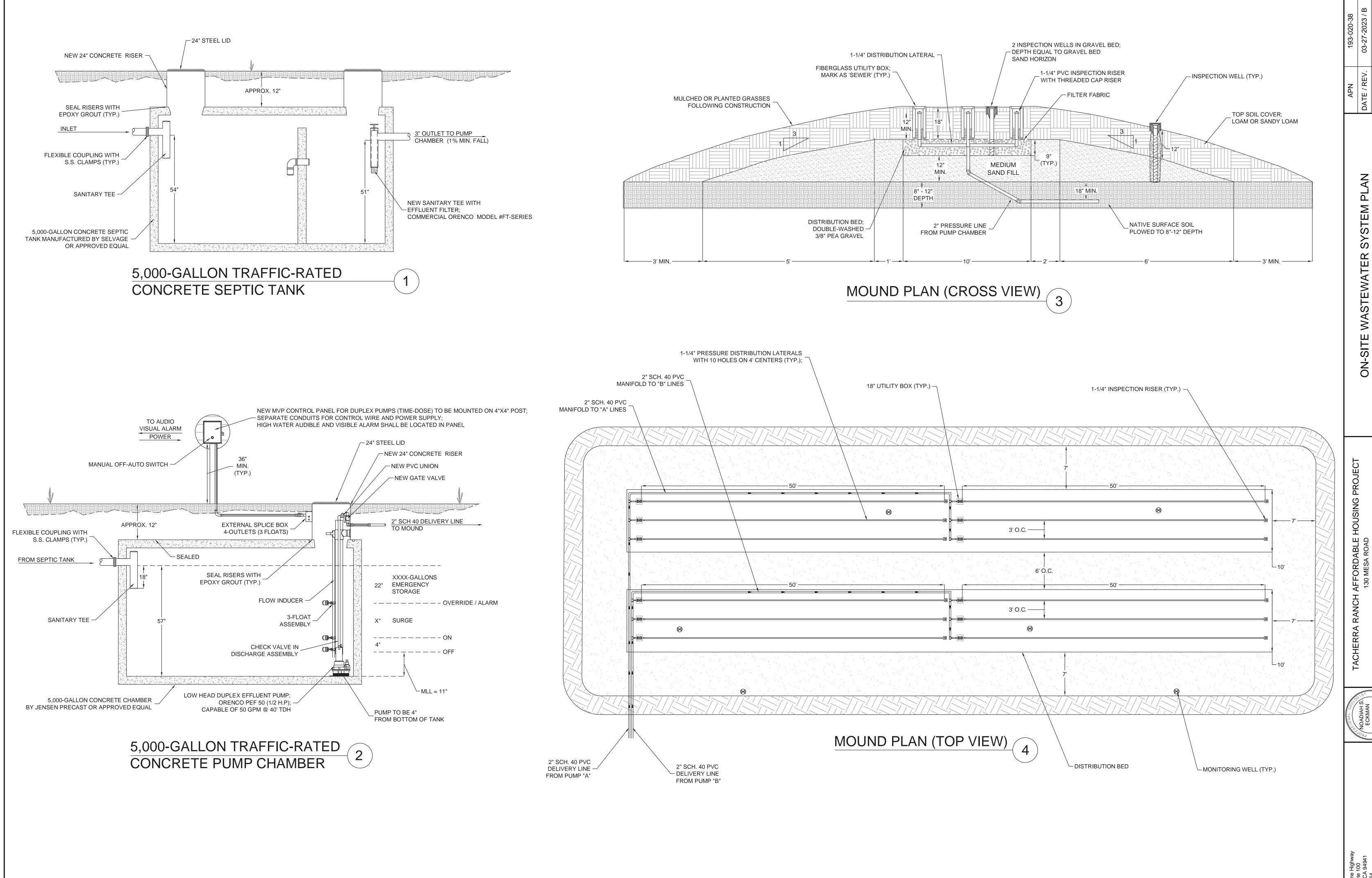
APN: 193-020-38 BCLT - MESA ROAL BOLINAS, CA 94924

Scale
Date June 5, 2023
Sheet

ELO







SYSTEM | DETAILS

ON-SITE WASTEWATER CONSTRUCTION

CONSTRUCTION SPECIFICATIONS

GENERAL

- 1. <u>Plan Changes</u>. Changes in plans or specifications shall be made only after consultation with and approval of the Designer.
- 2. <u>Property Lines</u>. Property lines shown on drawing are approximate. The owner has had the property boundaries marked by a licensed surveyor.
- 3. <u>Mound Construction</u>. Mound shall be created with a crawler tractor; no rubber-tired vehicles shall be permitted in mound area.
- 4. <u>Construction Inspection</u>. Construction inspection by the Designer shall be required at checkpoints as outlined in the attached Construction Inspection Schedule. It shall be the responsibility of the contractor to call for the required inspections, and to provide at least 48-hours advance notification of the Designer and Marin County Environmental Health Department.

MATERIALS

- 5. <u>General</u>. All construction materials shall be approved by the designer prior to their placement. Marin County electrical permit is required.
- 6. <u>Sand Fill</u>. Sand fill for the mound shall be a medium to coarse textured sand conforming to the following specifications:

Sieve Size	Percent Passing
3/8	100
#4	90 - 100
#10	62 - 100
#16	45 - 82
#30	25 - 55
#50	5 - 20
#60	0 - 10
#100	0 - 4

- 7. Pea Gravel. Shall be cleaned and nominally 3/8"-size.
- 8. <u>Distribution Piping</u>. All piping for the delivery and pressure distribution network shall be Schedule 40 PVC and have a minimum pressure rating of 150 psi unless otherwise specified. All joints shall be solvent-cement socket type conforming to ASTM D-2672.

Perforations for the pressure distribution network shall be drilled in a straight line along the invert of the pipe according to the hole diameter and spacing as shown on the plans or as modified by the designer. Clean all drilling burrs from the inside and outside of the pipe prior to installation.

- 9. <u>Filter Fabric</u>. Filter fabric shall be Mirafi 140N or approved equal. Filter fabric shall be handled and installed in accordance with manufacturer's recommendations. Borders of fabric shall be overlapped 12 to 18 inches. Any torn or damaged sections of fabric shall be covered with additional pieces of filter fabric sufficient to meet the above overlapping requirement.
- 10. Effluent Filter. Contractor shall use Orenco commercialized filter.
- 11. Septic Tank. (Three) 5,000-gallon concrete septic tank as manufactured by Jensen Precast Concrete Products, 478 Roseville Road, Roseville, CA 95678, (916) 783-0800, or equal, shall be used for septic tank shown on the plans. Septic tanks shall be water tight construction and certified as such. Field testing of septic tank integrity shall be required.
- 12. Pump Chamber. A 2,000-gallon concrete pump chamber as manufactured by Jensen Precast Concrete Products, 478 Roseville Road, Roseville, CA 95678, (916) 783-0800, or equal, shall be used for pump chamber shown on the plans. The pump chamber shall be of watertight construction and certified as such. Field-testing of the chamber shall be required.
- 13. Pumps. The pumps are to be Orenco Pump Company, #PEF 50, 1/2 HP or equal for the mound capable of 42 gpm and 26' TDH.
- 14. <u>Control Panel.</u> Contractor shall use Orenco control panel MVP, or equal, to control the mound pump. The 3-float configuration on the plans supports time-dose (Mound). Distributed by Pace Supply, Santa Rosa, CA, 707-545-7101.
- 15. Access Risers. Watertight and gas tight access risers shall be installed over the inlet and outlet openings of both the septic tank and the pump chamber. Access risers shall be installed from the top of the tanks to about ½-inch above ground surface at all tank openings. The riser must be watertight at all points and have a watertight seal at the top of the tank.

CONSTRUCTION

- 17. <u>Installation</u>. All installation work shall be in accordance with applicable Marin County Regulations.
- 18. <u>Mound Area Compaction</u>. Vehicle traffic shall not be permitted within an area of ten feet downslope of the mound and five feet of the sideslope.
- 19. <u>Location of Mound</u>. Location shown for the mound is approximate, subject to adjustment in the field by the Contractor according to building constraints and noted setback requirements.
- 20. <u>Septic Tank and Pump Chamber Location</u>. Location for the septic tank and pump chamber is approximate, subject to adjustment in the field by the contractor according to building constraints and noted setback requirements. They shall be located and installed to be free from vehicle traffic and protected against entry of surface runoff. Install clean-outs every 100 feet and on turns to septic tank.
- 21. <u>Septic Tank/Pump Chamber Leak Test</u>. The new septic tank and new pump chamber shall be required to be certified as watertight. Field testing of tanks shall be required and conducted as follows:

Designer to visually inspect tank prior to conducting leak test. Fill tank and pump chamber so water level is 2 inches \pm above tank/access riser joints. Note depth of water and re-measure not less than one hour later. A water level drop of 0.25 inches or greater shall be considered to be an indicator of a leaking tank; a tank shall be repaired or replaced to the satisfaction of the engineer. Note: The septic tank and pump chamber excavation are <u>not</u> to be backfilled until the leak test is completed.

22. Electrical.

High water audio and visual alarm shall be located within the house.
All electrical work shall conform to procedures and codes of Marin County Building Department.

Effluent Pump: The pump shall be of the size and type to accommodate the intended use and shall include the following:

a. A "Hand-off-auto" (HOA) switch.

- b. An audio and visible alarm and necessary sump water sensing device to indicate a"high water" condition.
- c. Float switches shall be anchored to a suitable float tree for controlling the starting and stopping of pump operation.
- d. The pump intake shall be set a minimum of 4 inches above the sump bottom.

Sump:

- a. Access shall be provided by a minimum 24-inch diameter opening;
- b. All pipes and/or electrical conduits through the sump shall be either precast into the sump or sealed with gas-tight compression connectors.

Electrical Features: The following electrical features shall be provided:

- a. An outdoor-type control box containing fused disconnect and motor protection switch.
- b. The control box may be mounted on the building served if located within 30 feet and within direct view of the sump, otherwise the control box shall be mounted on a pipe stand or wooden post.
- c. Electrical conduit shall be PVC. Separate conduits shall be provided for control wire and power supply. Separate circuits with individual breakers at the main panel shall be provided for the control panel/alarm and pump.

23. Pressure Pipe Network

- · All pressure pipe shall be Schedule 40 PVC or approved equal.
- · All joints shall be glued with solvent cement.
- Distribution pipe shall be laid level with a maximum permissible slope of three (3) inches in 100
- Hydraulic testing shall be conducted in the presence of the Designer to determine any leaks in the system and to check the discharge head and nump operation.
- system and to check the discharge head and pump operation.
 A concrete thrust block shall be installed at all pipe bends of 45° or greater in the 2-inch pressure
- line from the pump to the sand filter and mound.
- 24. <u>Erosion Protection</u>. Re-seed mound area for erosion protection following final cover placement. Divert existing garage roof drainage away from mound area.
- 25. <u>Clearing and Grubbing Limits</u>. All disposal sites will be cleared and grubbed. These areas will be cleared and grubbed only after the Designer has observed and approved the Contractors staking of the clearing limits, to ensure that no more clearing and grubbing is done than necessary.

Mound Construction

Mound construction shall be in accordance with the following guidelines, or as may be modified in consultation with the Design Engineer:

a) Pump Chambers and Pumps

All electrical, mechanical, and plumbing work, and the methods of construction shall meet Uniform Plumbing Code and National Electrical Code, and shall conform to all local, state, federal and other laws pertaining to this work.

b) Disposal Site Preparation

Rope off the site of the mound including the area extending five feet beyond the mound on all sides to prevent damage to the area during other construction activity on the lot. Vehicular traffic over the area shall be prohibited to avoid soil compaction.

Stake out the mound perimeter and beds in the proper orientation. Reference stakes set some distance from the mound perimeter are also required in case the corner stakes are disturbed.

Cut and remove vegetation.

Install the delivery pipe from the sump to the mound. Lay the pipe at a depth of 24 inches and slope it uniformly back to the pump chamber. Backfill and compact the soil around the pipe.

Plow the area within the mound perimeter. Use a two bottom or larger moldboard plow or chisel plow, plowing 8-12 inches deep, parallel to the slope contour. Plowing should be done when the soil is dry. The Designer shall be consulted to determine if proper soil moisture conditions exist.

c) Fill Placement

Place the fill materials on the edges of the plowed area, keeping trucks off the plowed area.

Move the medium sand fill material into place using a track type tractor with a blade. Maintain a minimum of 6 inches of material beneath the tracks of the tractor to minimize compaction of the natural soil. The fill material should be worked in this manner until the height of the fill reaches the elevation of the top of the absorption bed.

With the blade of the tractor or by hand, form the absorption bed. Hand level the bottom of the bed, checking for the proper elevation. Shape the sides to the desired slope.

d) Distribution Network Placement

Carefully place the pea gravel in the bed, taking care not to create ruts in the bottom of the bed. Level the pea gravel to a minimum depth of 6 inches.

Assemble the distribution network on the pea gravel, laying the lateral level. Perform hydraulic test of distribution system in the presence of the Design Engineer.

Place additional pea gravel to a depth of at least 2 inches over the crown of the pipe.

Place filter fabric over the pea gravel to form silt barrier; filter fabric shall be Mirafi 140N for approved equal.

e) Mound Covering

Place good quality topsoil over the entire mound surface. Topsoil depth should be roughly 18 inches over the center and 12 inches minimum over the side slopes. The soil cover of the mound should be compacted with a small track machine or by hand.

Plant grass over the entire mound using grasses adapted to the area that shall aid in protecting the mound from erosion. Shrubs can be planted around the base and up the side slopes. Shrubs should be somewhat moisture tolerant since the downslope perimeter may become moist during early spring and late fall. Plants placed on top of the mound should be drought tolerant.

Inspection of the system shall be performed by the Designer at various stages of construction to verify adherence to design specifications. Inspections are recommended as indicated in the attached schedule.

RECOMMENDED CONSTRUCTION INSPECTION SCHEDULE

In accordance with requirements of Marin County Environmental Health Department, the following construction activities will be inspected by the Designer.

INSPECTION #1

On-site preconstruction conference to discuss project with contractor;

Staking of septic tanks and pump chamber;

Staking and layout of mound disposal area; and

Review/approval of material.

INSPECTION #2/3

Placement of 4-inch tight line;

Septic tank and pump chamber installation;

Leak testing of septic tank and pump chamber;

Clearing of mound site;

Plowing of surface soils; and,

Placement of sand fill.

INSPECTION #4

Placement of mound pea gravel in distribution bed;

Assembly and layout of mound distribution pipe network;

Placement of 2-inch pressure line;

INSPECTION #5/6

Testing of pumps and distribution systems.

Installation of monitoring wells; and,

Final fastening of pipe connections.

INSPECTION #7

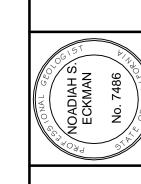
Placement of filter fabric;

Placement of topsoil cover;

Final shaping of mound;

Seeding of mound; and,

Pump alarm; Confirm low flow fixtures



SY DE

SITE C

eckman environment designs, inc