

STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 ENGINEERING DIVISION

FOR

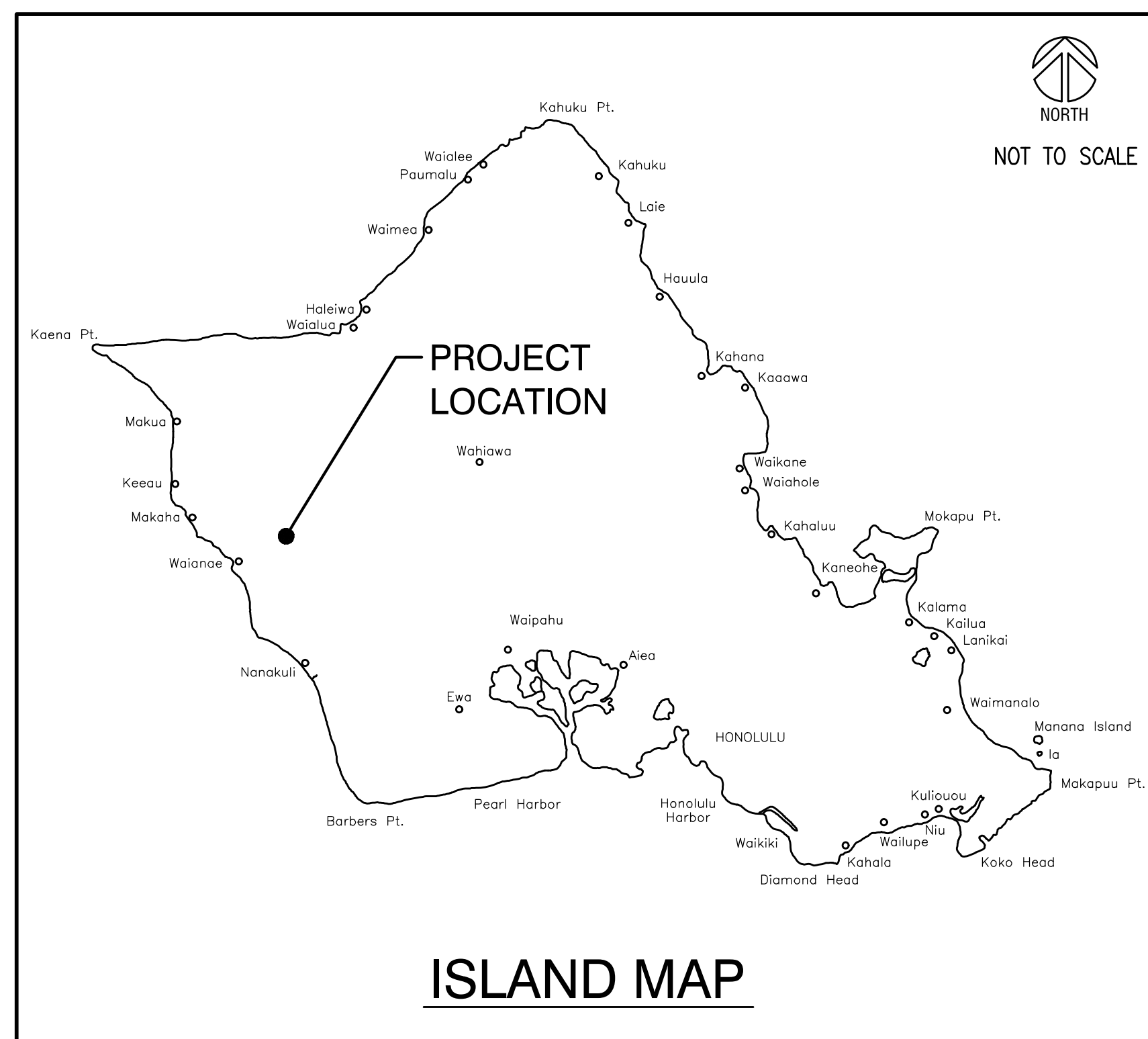
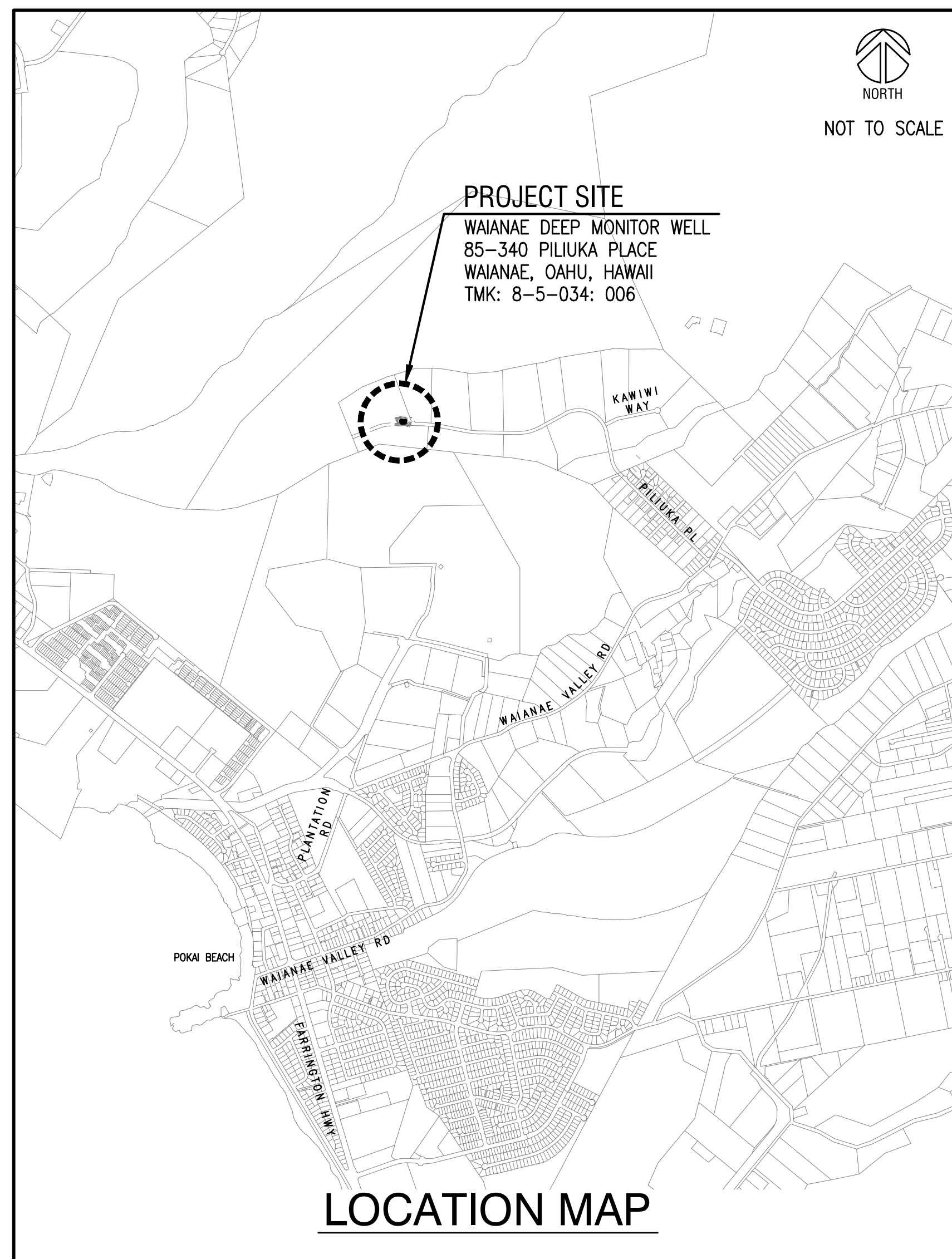
COMMISSION ON WATER RESOURCE MANAGEMENT

JOB NO. G75CS18A

WAIANAE DEEP MONITOR WELL

WAIANAE, OAHU, HAWAII

TMK: 8-5-034: 006



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APPROVED: _____ DATE: 05/13/2026

CIARA W.K. KAHAHANE
 DEPUTY DIRECTOR
 COMMISSION ON WATER RESOURCE MANAGEMENT
 DEPARTMENT OF LAND AND NATURAL RESOURCES

APPROVED: _____ DATE: 05/13/2026

DINA U. LAU, P.E.
 ACTING CHIEF ENGINEER
 ENGINEERING DIVISION
 DEPARTMENT OF LAND AND NATURAL RESOURCES

CONSTRUCTION NOTES:

- ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986 AND STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1984, AS AMENDED, OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU AND THE COUNTIES OF KAUAI, MAUI, AND HAWAII.
- THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA.
- NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW INTO EXISTING CITY DRAINAGE SYSTEMS, OR ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.
- THE GENERAL CONTRACTOR OF THE PROJECT SHALL BE RESPONSIBLE FOR CONFORMANCE WITH APPLICABLE PROVISIONS OF THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 54, "WATER QUALITY STANDARDS," AND TITLE 11, CHAPTER 55, "WATER POLLUTION CONTROL", AS WELL AS CHAPTER 18A OF THE REVISED ORDINANCES OF HONOLULU, AS AMENDED. BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING CONSTRUCTION.

THE GENERAL CONTRACTOR OF THE PROJECT SHALL OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE(S) FOR THE FOLLOWING:

I. STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES THAT DISTURB ONE (1) ACRE OR MORE, AND

II. DISCHARGES OF HYDROTESTING EFFLUENT, DEWATERING EFFLUENT, AND WELL DRILLING EFFLUENT TO STATE WATERS.

IN ACCORDANCE WITH STATE LAW, ALL DISCHARGES RELATED TO PROJECT CONSTRUCTION OR OPERATIONS ARE REQUIRED TO COMPLY WITH STATE WATER QUALITY STANDARDS (HAWAII ADMINISTRATIVE RULES, CHAPTER 11-54). BEST MANAGEMENT PRACTICES SHALL BE USED TO MINIMIZE OR PREVENT THE DISCHARGE OF SEDIMENT, DEBRIS, AND OTHER POLLUTANTS TO STATE WATERS. PERMIT COVERAGE IS AVAILABLE FROM THE DEPARTMENT OF HEALTH, CLEAN WATER BRANCH AT [HTTP://HEALTH.HAWAII.GOV/CWB](http://health.hawaii.gov/cwb). THE OWNER/DEVELOPER/CONTRACTOR IS RESPONSIBLE FOR OBTAINING OTHER FEDERAL, STATE, OR LOCAL AUTHORIZATIONS AS REQUIRED BY LAW.
- PURSUANT TO CHAPTER 6E, HRS, IN THE EVENT ANY ARTIFACTS OR HUMAN REMAINS ARE UNCOVERED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL IMMEDIATELY SUSPEND WORK AND NOTIFY THE HONOLULU POLICE DEPARTMENT, THE STATE DEPARTMENT OF LAND AND NATURAL RESOURCES-HISTORIC PRESERVATION DIVISION 808-(692-8015). IN ADDITION, FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL INFORM THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING 808-(768-8084).
- FOR BENCH MARK, SEE SHEET C-4 AND C-5.
- PRIOR TO MOBILIZATION ON SITE AND DRILLING THE WELL, THE CONTRACTOR, AT NO COST TO THE STATE, SHALL VERIFY THE LOCATION AND ELEVATION OF THE WELL. UPON WELL COMPLETION, A BRASS SURVEY PLATE/MARKER SHALL BE EMBEDDED IN THE RELATIVELY LEVEL CONCRETE SLAB. THE LOCATION AND ELEVATION OF THE BRASS PLATE AND TOP CASING SHALL BE SURVEYED.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF AL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, AND SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF SAME IN THE EVENT OF DAMAGES DUE TO HIS CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL COORDINATE HIS/HER WORK WITH RESPECTIVE UTILITY COMPANIES.
- THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES TO ITS ORIGINAL CONDITIONS OR BETTER AT NO COST TO THE STATE.
- NO WORK SHALL BE DONE ON SATURDAYS, SUNDAYS, LEGAL STATE HOLIDAYS AND/OR IN EXCESS OF EIGHT HOURS EACH DAY WITHOUT THE WRITTEN CONSENT OF THE ENGINEER.
- THE CONTRACTOR SHALL PERFORM PLUMBNESS TEST(S) AND VIDEO LOG THE WELL. DEVIATION FROM VERTICAL FOR THE CASED AND UNCASD PORTION OF THE WELL SHALL BE NO MORE THAN 6 INCHES PER ANY 100 FEET OF DEPTH. ONLY AN INSTRUMENT THAT CAN MEASURE BOTH AZIMUTH AND INCLINATION TO 0.5° AND 0.25°, RESPECTIVELY, SHALL BE ACCEPTED. A CAGE WILL NOT BE ACCEPTED.
- THE LOCATION OF THE WELL IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER. THE ENGINEER RESERVES THE RIGHTS TO CHANGE WELL LOCATION TO SUIT FIELD CONDITIONS, AT NO COST TO THE STATE.
- THE COMPRESSIVE STRENGTH OF CONCRETE f'c SHALL BE 3,500 PSI.

GRADING NOTES:

- ALL GRADING WORK SHALL BE DONE IN ACCORDANCE WITH CHAPTER 18A, ARTICLES 1, 2, 3 AND 4, AS RELATED TO GRADING, SOIL EROSION AND SEDIMENT CONTROL OF THE REVISED ORDINANCES OF HONOLULU, 2021, AS AMENDED.
- THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS CONTAINED IN THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 60.1, "AIR POLLUTION CONTROL".
- ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATERS FROM DAMAGING THE CUT FACE OF AN EXCAVATION OR THE SLOPED SURFACES OF A FILL. FURTHERMORE, ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE SITE.
- ALL SLOPES AND EXPOSED AREAS SHALL BE SODDED OR PLANTED AS SOON AS FINAL GRADES HAVE BEEN ESTABLISHED. PLANTING SHALL NOT BE DELAYED UNTIL ALL GRADING WORK HAS BEEN COMPLETED. GRADING TO FINAL GRADE SHALL BE CONTINUOUS, AND ANY AREA WITHIN WHICH WORK HAS BEEN INTERRUPTED OR DELAYED SHALL BE PLANTED.
- FILLS ON SLOPES STEEPER THAN 5:1 SHALL BE KEYED.
- NO GRADING WORK SHALL BE DONE ON SATURDAYS, SUNDAYS AND HOLIDAYS AT ANY TIME WITHOUT PRIOR NOTICE TO THE DIRECTOR, D.P.P., PROVIDED SUCH GRADING WORK IS ALSO IN CONFORMANCE WITH THE COMMUNITY NOISE CONTROL STANDARDS CONTAINED IN THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 46, "COMMUNITY NOISE CONTROL".
- THE LIMITS OF THE AREA TO BE GRADED SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF THE GRADING WORK.
- WHERE APPLICABLE AND FEASIBLE THE MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY EARTH MOVING PHASE OF THE GRADING IS INITIATED.
- TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.
- IF THE GRADING WORK INVOLVES CONTAMINATED SOIL, THEN ALL GRADING WORK SHALL BE DONE IN CONFORMANCE WITH APPLICABLE STATE AND FEDERAL REQUIREMENTS.
- FOR ALL PROJECTS, WHICH WILL DISTURB ONE (1) ACRE OR MORE OF LAND, THE CONTRACTOR SHALL NOT START CONSTRUCTION UNTIL A NOTICE OF GENERAL PERMIT COVERAGE (NGPC) IS RECEIVED FROM THE DEPARTMENT OF HEALTH, STATE OF HAWAII, AND HAS SATISFIED ANY OTHER APPLICABLE REQUIREMENTS OF THE NPDES PERMIT PROGRAM. ALSO, FOR NON-CITY AND OTHER NON-GOVERNMENTAL AGENCY PROJECTS, THE CONTRACTOR SHALL PROVIDE A WRITTEN COPY OF THE NGPC TO THE PERMITTING AND INSPECTION SECTION, CIVIL ENGINEERING BRANCH, D.P.P., AT LEAST SEVEN (7) CALENDAR DAYS BEFORE THE START OF THE CONSTRUCTION. FOR CITY OR OTHER GOVERNMENTAL PROJECTS, THE CONTRACTOR SHOULD PROVIDE A WRITTEN COPY OF THE NGPC TO THE APPROPRIATE CITY DEPARTMENT OR GOVERNMENTAL AGENCY PER THEIR REQUIREMENTS.
- ALL GRADING AND CONSTRUCTION WORK SHALL IMPLEMENT MEASURES TO ENSURE THAT THE DISCHARGE OF POLLUTANTS FROM THE CONSTRUCTION SITE WILL BE REDUCED TO THE MAXIMUM EXTENT PRACTICABLE AND WILL NOT CAUSE OR CONTRIBUTE TO AN EXCEEDANCE OF WATER QUALITY STANDARDS.
- NON-COMPLIANCE TO ANY OF THE ABOVE REQUIREMENTS SHALL MEAN IMMEDIATE SUSPENSION OF ALL WORK, AND REMEDIAL WORK SHALL COMMENCE IMMEDIATELY. ALL COSTS INCURRED SHALL BE BILLED TO THE VIOLATOR. FURTHERMORE, VIOLATORS SHALL BE SUBJECTED TO ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES.

STATE HISTORIC PRESERVATION DIVISION:

- IN THE EVENT THAT SUBSURFACE HISTORIC RESOURCES, INCLUDING HUMAN SKELETAL REMAINS, STRUCTURAL REMAINS, CULTURAL DEPOSITS, ARTIFACTS, SAND DEPOSITS, OR SINKHOLES ARE IDENTIFIED DURING THE DEMOLITION AND/OR CONSTRUCTION WORK, CEASE WORK IN THE IMMEDIATE VICINITY OF THE FIND, PROTECT THE FIND FROM ADDITIONAL DISTURBANCE, AND CONTACT THE STATE HISTORIC PRESERVATION DIVISION, AT (808) 692-8015. SEE GENERAL CONSTRUCTION NOTE FOR ADDITIONAL AGENCIES TO NOTIFY IF ARTIFACTS AND/OR HUMAN SKELETAL REMAINS ARE UNCOVERED.

TOPOGRAPHIC SURVEY NOTES:

BENCHMARK:

ALL ELEVATIONS ARE REFERRED TO NGS BENCHMARK, SOH-9, BRASS DISK, ELEV.=5.87 FT. MSL.

- AZIMUTHS AND COORDINATES REFERRED TO GOVERNMENT SURVEY TRIANGULATION STATION "KUWALE".
- UNDERGROUND UTILITY LINES AND/OR STRUCTURES, IF SHOWN, ARE PROVIDED BASED ON INFORMATION FROM PLANS/MAPS PREPARED BY OTHERS.
- UNLESS OTHERWISE NOTED, ALL LOCATIONS OF UNDERGROUND UTILITY LINES AND/OR STRUCTURES ARE APPROXIMATE. NO GUARANTEE IS MADE ON THE ACCURACY OF COMPLETENESS OF THE INFORMATION SHOWN. THE USER(S) OF THIS TOPOGRAPHIC SURVEY MAP SHALL VERIFY THE INFORMATION, AS NEEDED, DURING DESIGN AND CONSTRUCTION.
- TONING LOCATION OF BURIED UTILITIES IS NOT A GUARANTEE. THE RESULTS ARE BASED ON THE ELECTRONIC EQUIPMENT'S SIGNAL INTERPRETATION AND MAY BE SUBJECT TO AND/OR AFFECTED BY SOIL, WATER, GROUND OR OTHER CONDITIONS. THEREFORE, THE CONTRACTOR MUST EXERCISE CAUTION IN EXCAVATION OF THE PROJECT FOR ANY SPECIFIED LOCATION.

ABBREVIATIONS

APPROX.	APPROXIMATE
BW	BOTTOM WALL
CL	CENTERLINE
CL	CHAIN LINK
CONC	CONCRETE
CRM	CONCRETE RUBBLE MASONRY
D	DIAMETER
ELEV	ELEVATION
EXIST.	EXISTING
FIN.	FINISH
FT	FOOT
FTG	FOOTING
GA.	GAUGE
GRD	GROUND
G.W.	GUY WIRE
H	HEIGHT
H.B.	HOSE BIB
INV.	INVERT
LB	POUND
MAX.	MAXIMUM
MIN.	MINIMUM
MSL	MEAN SEA LEVEL
N.D.	NOMINAL DIAMETER
NO.	NUMBER
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
O/H	OVERHEAD
O/S	OFFSET
OHWM	ORDINARY HIGH WATER MARK
PC	POINT OF CURVATURE
P	PROPERTY LINE
PVC	POLYVINYL CHLORIDE
STA.	STATION
TC	TOP CURB
TW	TOP WALL
TYP	TYPICAL
U.P.	UTILITY POLE
W/	WITH

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
WAIANAЕ DEEP MONITOR WELL WAIANAЕ, OAHU, HAWAII					
CONSTRUCTION NOTES					
FUKUNAGA AND ASSOCIATES, INC					
DESIGNED: LF	SUBMITTED: <i>GL</i>				
DRAWN: JT	DATE: MAY 2026				
CHECKED: JTM	SCALE: AS SHOWN				
APPROVED: <i>Gayson Ching</i>	E-signed 2026-05-13 11:33AM HST gayson.y.ching@hawaii.gov		DRAWING NO.		
CHIEF ENGINEER	State of Hawaii		C-1		

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EROSION PREVENTION / SEDIMENT CONTROL NOTES:

- THE CONTRACTOR SHALL FOLLOW THE GUIDELINES IN THE CITY AND COUNTY OF HONOLULU'S "RULES RELATING TO WATER QUALITY".
- MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY CONSTRUCTION IS INITIATED.
- SLOPE PROTECTION**
SLOPE PROTECTION IS REQUIRED ON AREAS WITH SLOPES GREATER THAN 15% AND ON AREAS OF MODERATE SLOPE THAT ARE PRONE TO EROSION UNLESS THEY ARE BEING ACTIVELY WORKED. USE DIVERSION UPSTREAM OF SLOPE (DIKES, SWALES, SLOPE DRAINS) TO DIVERT WATER AROUND THE SLOPE. PROVIDE A 10-FT BUFFER ZONE AT THE TOE OF SLOPE. ONLY FIVE (5) ACRES MAY BE DISTURBED AT ANY TIME ON SLOPES GREATER THAN 15%.
- TEMPORARY STABILIZATION**
TEMPORARY STABILIZATION IS REQUIRED ON DISTURBED AREAS WHICH ARE AT FINAL GRADE OR WHEN THE DISTURBED AREA WILL NOT BE WORKED FOR 14 CONSECUTIVE DAYS OR MORE.
- PERMANENT STABILIZATION**
ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED USING VEGETATIVE COVERING, PAVEMENT, OR EQUIVALENT, PRIOR TO REMOVING EROSION AND SEDIMENT MEASURES. TRAPPED SEDIMENT AND AREAS OF DISTURBED SOIL WHICH RESULT FROM THE REMOVAL OF THE TEMPORARY MEASURES SHALL BE IMMEDIATELY AND PERMANENTLY STABILIZED.
- PRESERVE EXISTING VEGETATION**
CLEARLY MARK THE AREAS TO BE PRESERVED WITH FLAGS OR TEMPORARY FENCING. WHERE TEMPORARY FENCING IS USED, FENCING MUST BE ADEQUATELY SUPPORTED BY POSTS AND MAINTAINED IN AN UPRIGHT POSITION.
- MINIMIZE SOIL COMPACTION**
MINIMIZE SOIL COMPACTION AREAS WHERE FINAL STABILIZATION OR INFILTRATION PRACTICES WILL BE INSTALLED SHALL BE PROTECTED FROM EXCESSIVE COMPACTION DURING CONSTRUCTION. VEHICLE AND EQUIPMENT USE SHALL BE RESTRICTED OR TECHNIQUES TO CONDITION THE SOILS TO SUPPORT VEGETATION SHALL BE IMPLEMENTED IN THE AREAS THAT HAVE BEEN COMPACTED AND ARE DESIGNATED TO REMAIN VEGETATIVE OR POST-CONSTRUCTION INFILTRATION AREAS. CLEARLY MARK THE AREAS TO BE AVOIDED WITH FLAGS OR TEMPORARY FENCING. WHERE TEMPORARY FENCING IS USED, FENCING MUST BE ADEQUATELY SUPPORTED BY POSTS AND MAINTAINED IN AN UPRIGHT POSITION.
- PERIMETER CONTROLS**
PERIMETER CONTROLS ARE REQUIRED DOWNSLOPE OF ALL DISTURBED AREAS. MAINTAIN DOWNSLOPE VEGETATED BUFFER AREA.
- TRACKING CONTROL**
 - TRACKING CONTROL MINIMIZE SEDIMENT TRACK-OUT ONTO OFF-SITE STREETS, OTHER PAVED AREAS, AND SIDEWALKS FROM VEHICLES EXITING THE CONSTRUCTION SITE BY RESTRICTING VEHICLE TRAFFIC TO PROPERLY DESIGNATED AREAS AND USING ADDITIONAL CONTROLS TO REMOVE SEDIMENT FROM VEHICLE TIRES PRIOR TO EXITING THE SITE.
 - VEHICULAR PARKING AND MOVEMENTS ON PROJECT SITES MUST BE CONFINED TO PAVED SURFACES OR PREDEFINED PARKING AREAS AND VEHICLE PATHS, WHICH SHALL BE MARKED WITH FLAGS OR BOUNDARY FENCING.
 - ALL POLLUTANTS AND MATERIALS THAT ARE DROPPED, WASHED, TRACKED, SPILLED, OR OTHERWISE DISCHARGED FROM A PROJECT SITE TO OFF-SITE STREETS, OTHER PAVED AREAS, SIDEWALKS OR THE MUNICIPAL SEPARATE STORM SEWER SYSTEM MUST BE CLEANED USING DRY METHODS SUCH AS SWEEPING OR VACUUMING.
 - WASHING POLLUTANTS AND MATERIALS THAT ARE DISCHARGED FROM THE PROJECT SITE TO THE MUNICIPAL SEPARATE STORM SEWER SYSTEM INTO DRAIN INLETS OR CATCH BASINS IS PROHIBITED UNLESS THE MATERIAL IS SEDIMENT AND THE INLETS ARE DIRECTED TO A SEDIMENT BASIN OR SEDIMENT TRAP.
- BEST MANAGEMENT PRACTICES (BMPs) SHALL NOT BE REMOVED UNTIL FINAL STABILIZATION IS COMPLETE FOR THAT PHASE.
- REFER TO CITY AND COUNTY OF HONOLULU BEST MANAGEMENT PRACTICES MANUAL-CONSTRUCTION, FOR MORE INFORMATION ON BMPs. REFER TO CITY AND COUNTY OF HONOLULU BEST MANAGEMENT PRACTICES MANUAL - CONSTRUCTION, FOR MORE INFORMATION ON BMPs.
- THE FOLLOWING BMPs WERE DETERMINED TO BE NOT APPLICABLE BASED ON THE SPECIFIC SITE CONDITIONS. A BRIEF EXPLANATION OF WHY EACH OMITTED BMP IS UNNECESSARY OR IMPRACTICABLE FOR THE PROJECT HAS BEEN PROVIDED UNDER SEPARATE DOCUMENTATION TO DPP. AS CONSTRUCTION PROGRESSES, REVISIONS MAY BE NECESSARY AND WILL BE PROVIDED TO DPP INSPECTORS.
 - VELOCITY DISSIPATION DEVICES
 - DIVERSION BMPs TO DIVERT RUNOFF FROM UPSTREAM AREAS
 - SEDIMENT BARRIERS
 - INLET PROTECTION
 - SEDIMENT BASINS
 - DEWATERING PRACTICES
 - SEDIMENT TRAPS
- THE CONTRACTOR SHALL COMPLY WITH THE PROJECT SCHEDULING REQUIREMENTS OF THE CITY'S RULES RELATING TO WATER QUALITY. THE CONTRACTOR SHALL COMPLY WITH THE PROJECT SCHEDULING REQUIREMENTS OF THE CITY'S RULES RELATING TO WATER QUALITY.

EROSION PREVENTION / SEDIMENT CONTROL NOTES (cont):

- THE OWNER OF THE PROPERTY OR THEIR AUTHORIZED AGENT MUST DESIGNATE A PERSON RESPONSIBLE FOR IMPLEMENTING THE ESCP AT THE PROJECT SITE ("ESCP COORDINATOR") PRIOR TO PERMIT ISSUANCE USING THE FORM PROVIDED AS APPENDIX A TO THE RULES RELATING TO WATER QUALITY.

EROSION AND SEDIMENT CONTROL PLAN SCHEDULE AND RAIN RESPONSE PLAN:

PROJECT SEQUENCE:

- INSTALL STABILIZED CONSTRUCTION ENTRANCES, PERIMETER CONTROL, AND TEMPORARY FENCING FOR PROTECTED AREAS, CLEARING AND GRUBBING AS NECESSARY FOR THE INSTALLATION OF THESE BMPs.
- CLEAR, GRUB AND GRADE THE SITE AS SHOWN ON THE PLAN, REFER TO SITE PLAN. RELOCATE, RECONSTRUCT AND MAINTAIN BMPs AS NEEDED TO KEEP THEM EFFECTIVE AT ALL TIMES. INITIATE TEMPORARY STABILIZATION IMMEDIATELY ONCE GRADING IS COMPLETED.
- INITIATE STABILIZATION OF STEEP SLOPES (>15% WITH HYDROSEEDING AS SOON AS GRADING IS COMPLETED ON THOSE AREAS.
- PROCEED WITH CONSTRUCTION WITH LEAST POSSIBLE DISTURBANCE OF VEGETATIVE AREAS.
- PLANT PERMANENT GROUND COVER ACCORDING TO THE LANDSCAPING AS SOON AS POSSIBLE.
- PRACTICE GOOD HOUSEKEEPING MEASURE THROUGHOUT THE DURATION OF CONSTRUCTION.
- INSPECTIONS WILL BE PERFORMED WEEKLY.

RAIN RESPONSE PLAN:

- THE FOLLOWING WILL BE PERFORMED WHEN HEAVY RAINS, TROPICAL STORMS OR HURRICANE IS IMMINENT OR IS FORECASTED IN THE NEXT 48 HOURS.
- TEMPORARY SUSPENSION OF ACTIVE CLEARING, GRADING, GRUBBING AND TRENCHING
- INSPECT ALL PERIMETER CONTROLS AND MAINTAIN AS NEEDED. REINSTALL ANY PERIMETER CONTROLS THAT WERE REMOVED DUE TO ACTIVE WORK IN THE AREA.
- COVER OR RELOCATE MATERIAL STOCKPILE AND LIQUID MATERIAL CONTAINERS TO AVOID CONTACT WITH RAINWATER.
- PLACE SPILL PANS OR OIL-ONLY SPILL PADS UNDER CONSTRUCTION VEHICLES TO PREVENT RUNOFF FROM CONTRACTING ANY SPILLED PETROLEUM PRODUCTS. PROPERLY DISPOSE OF ANY ACCUMULATED ONLY WATER AFTER THE RAIN EVENT.
- RE-INSPECT AFTER THE APPROACHING HEAVY RAINS, TROPICAL STORM OR HURRICANE AND REPLACE OR MAINTAINED BMPs AS NEEDED.

GOOD HOUSEKEEPING BMPs:

- STREET SWEEPING AND VACUUMING**
ALL POLLUTANTS DISCHARGED FROM CONSTRUCTION SITE TO OFF-SITE AREAS MUST BE SWEEPED OR VACUUMED EACH DAY BEFORE LEAVING THE JOB SITE.
- MATERIALS DELIVERY, STORAGE AND USE MANAGEMENT**
PREVENT, REDUCE, OR ELIMINATE THE DISCHARGE OF POLLUTANTS FROM MATERIAL DELIVERY, STORAGE, AND USE TO THE STORM WATER SYSTEM OR WATERCOURSES BY MINIMIZING THE STORAGE OF HAZARDOUS MATERIALS ONSITE, STORING MATERIALS IN A DESIGNATED AREA, INSTALLING SECONDARY CONTAINMENT. CONSTRUCTION MATERIALS, WASTE, TOXIC AND HAZARDOUS SUBSTANCES, STOCKPILES AND OTHER SOURCES OF POLLUTION SHALL NOT BE STORED IN BUFFER AREAS, NEAR AREAS OF CONCENTRATED FLOW, OR AREAS ABUTTING THE MUNICIPAL SEPARATE STORM SEWER SYSTEM, RECEIVING WATERS, OR DRAINAGE IMPROVEMENTS THAT DISCHARGE OFF-SITE. PRIMARY AND SECONDARY CONTAINMENT CONTROLS AND COVERS SHALL BE IMPLEMENTED TO THE MEP.
- SPILL PREVENTION AND CONTROL**
CREATE AND IMPLEMENT SPILL PREVENTION AND RESPONSE PLANS TO ELIMINATE AND MINIMIZE THE DISCHARGE OF POLLUTANTS TO THE MUNICIPAL SEPARATE STORM SEWER SYSTEM AND RECEIVING WATERS FROM LEAKS AND SPILLS BY REDUCING THE CHANCE FOR SPILLS, ABSORBING, CONTAINING, AND CLEANING UP SPILLS AND PROPERLY DISPOSING OF SPILL MATERIALS. AT MINIMUM, ALL PROJECTS SHALL CLEANUP ALL LEAKS AND SPILLS IMMEDIATELY.
- HAZARDOUS MATERIALS**
PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM HAZARDOUS WASTE THROUGH PROPER MATERIAL USE AND WASTE DISPOSAL. IN THE EVENT THAT HAZARDOUS MATERIALS ARE DISCHARGED TO THE MUNICIPAL SEPARATE STORM SEWER SYSTEM, THE PROPERTY OWNER OR ESCP COORDINATOR SHALL IMMEDIATELY NOTIFY THE DEPARTMENT OF FACILITY MAINTENANCE, HONOLULU FIRE DEPARTMENT, AND HONOLULU POLICE DEPARTMENT OF THE DISCHARGE BY TELEPHONE. A WRITTEN REPORT DESCRIBING THE POLLUTANTS THAT WERE DISCHARGED, THE REASONS FOR THE DISCHARGE, AND THE MEASURES THAT HAVE BEEN TAKEN OR WILL BE TAKEN TO PREVENT A REOCCURRENCE OF THE DISCHARGE SHALL BE SUBMITTED TO THE DIRECTOR NO LESS THAN THREE (3) DAYS AFTER NOTIFICATION BY PHONE.

GOOD HOUSEKEEPING BMPs (cont):

- NONHAZARDOUS MATERIALS**
IN THE EVENT THAT NONHAZARDOUS MATERIALS ARE DISCHARGED TO THE MUNICIPAL SEPARATE STORM SEWER SYSTEM, THE PROPERTY OWNER OR ESCP COORDINATOR SHALL NOTIFY THE CITY DEPARTMENT OF FACILITY MAINTENANCE BY TELEPHONE NO LATER THAN THE NEXT BUSINESS DAY. A WRITTEN REPORT DESCRIBING THE POLLUTANTS THAT WERE DISCHARGED, THE REASONS FOR THE DISCHARGE, AND THE MEASURES THAT HAVE BEEN TAKEN OR WILL BE TAKEN TO PREVENT A REOCCURRENCE OF THE DISCHARGE SHALL BE SUBMITTED TO THE DIRECTOR NO LESS THAN THREE (3) DAYS AFTER NOTIFICATION BY PHONE.
- VEHICLE AND EQUIPMENT CLEANING**
ELIMINATE AND MINIMIZE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM VEHICLE AND EQUIPMENT CLEANING OPERATIONS BY USING OFF-SITE FACILITIES WHEN FEASIBLE, WASHING IN DESIGNATED, CONTAINED AREAS ONLY, AND ELIMINATING DISCHARGES TO THE STORM DRAIN SYSTEM BY EVAPORATING AND/ OR TREATING WASH WATER, AS APPROPRIATE OR INFILTRATING WASH WATER FOR EXTERIOR CLEANING ACTIVITIES THAT USE WATER ONLY.
- VEHICLE AND EQUIPMENT FUELING**
PREVENT FUEL SPILLS AND LEAKS BY USING OFF-SITE FACILITIES, FUELING ONLY IN DESIGNATED AREAS, ENCLOSING OR COVERING STORED FUEL, AND IMPLEMENTING SPILL CONTROLS SUCH AS SECONDARY CONTAINMENT AND ACTIVE MEASURES USING SPILL RESPONSE KITS.
- VEHICLE AND EQUIPMENT MAINTENANCE**
ELIMINATE AND MINIMIZE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM VEHICLE AND EQUIPMENT OPERATIONS BY USING OFF-SITE MAINTENANCE FACILITIES WHEN FEASIBLE, PERFORMING WORK IN DESIGNATED AREAS ONLY, USING SPILL PADS UNDER VEHICLES AND EQUIPMENT, CHECKING FOR LEAKS AND SPILLS, AND CONTAINING AND CLEANING UP SPILLS IMMEDIATELY.
- SOLID WASTE MANAGEMENT**
PREVENT OR REDUCE DISCHARGE OF POLLUTANTS TO THE LAND, GROUNDWATER, AND IN STORM WATER FROM SOLID WASTE OR CONSTRUCTION AND DEMOLITION WASTE BY PROVIDING DESIGNATED WASTE COLLECTION AREAS, COLLECT SITE TRASH DAILY, AND ENSURING THAT CONSTRUCTION WASTE IS COLLECTED, REMOVED, AND DISPOSED OF ONLY AT AUTHORIZED DISPOSAL AREAS.
- SANITARY/SEPTIC WASTE MANAGEMENT**
TEMPORARY AND PORTABLE SANITARY AND SEPTIC WASTE SYSTEMS SHALL BE MOUNTED OR STAKED IN, WELL-MAINTAINED AND SCHEDULED FOR REGULAR WASTE DISPOSAL AND SERVICING. SOURCES OF SANITARY AND/OR SEPTIC WASTE SHALL NOT BE STORED NEAR THE MUNICIPAL SEPARATE STORM SEWER SYSTEM OR RECEIVING WATERS.
- STOCKPILE MANAGEMENT**
STOCKPILES SHALL NOT BE LOCATED IN DRAINAGE WAYS, WITHIN 50 FEET FROM AREAS OF CONCENTRATED FLOWS, AND ARE NOT ALLOWED IN THE CITY RIGHT-OF-WAY. SEDIMENT BARRIERS OR SILT FENCE SHALL BE USED AROUND THE BASE OF ALL STOCKPILES. STOCKPILES SHALL NOT EXCEED 15 FEET IN HEIGHT. STOCKPILES GREATER THAN 15 FEET IN HEIGHT SHALL REQUIRE 8-FOOT-WIDE BENCHING IN ACCORDANCE WITH ROH CHAPTER 18A, ARTICLE 3. STOCKPILES MUST BE COVERED WITH PLASTIC SHEETING OR A COMPARABLE MATERIAL IF THEY WILL NOT BE ACTIVELY USED WITHIN SEVEN (7) DAYS.
- LIQUID WASTE MANAGEMENT**
LIQUID WASTE SHALL BE CONTAINED IN A CONTROLLED AREA SUCH AS A HOLDING PIT, SEDIMENT BASIN, ROLL-OFF BIN, OR PORTABLE TANK OF SUFFICIENT VOLUME AND TO CONTAIN THE LIQUID WASTES GENERATED. CONTAINMENT AREAS OR DEVICES MUST BE IMPERMEABLE AND LEAK FREE AND SHOULD NOT BE LOCATED WHERE ACCIDENTAL RELEASE OF THE CONTAINED LIQUID CAN DISCHARGE TO WATER BODIES, CHANNELS, OR STORM DRAINS.
- CONCRETE WASTE MANAGEMENT**
PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM CONCRETE WASTE BY CONDUCTING WASHOUT OFFSITE OR PERFORMING ONSITE WASHOUT IN A DESIGNATED AREA CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS. PLASTIC LINING MATERIAL CONTAINMENT AREAS OR DEVICES SHOULD NOT BE LOCATED WHERE ACCIDENTAL RELEASE OF THE CONTAINED LIQUID CAN DISCHARGE TO WATER BODIES, CHANNELS, OR STORM DRAINS. WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75 PERCENT FULL. ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF AS SOLID WASTES.
- CONTAMINATED SOIL MANAGEMENT**
AT MINIMUM CONTAIN CONTAMINATED MATERIAL SOIL BY SURROUNDING WITH IMPERMEABLE LINED BERMS OR COVER EXPOSED CONTAMINATED MATERIAL WITH PLASTIC SHEETING. CONTAMINATED SOIL SHOULD BE DISPOSED OF PROPERLY IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
- DUST CONTROL**
DUST FROM A PROJECT SITE SHALL NOT BE TRANSPORTED OR DISCHARGED TO OFF-SITE AREAS. THE WORK MUST BE IN CONFORMANCE WITH AIR POLLUTION CONTROL STANDARDS CONTAINED IN THE HAWAII ADMINISTRATIVE RULES: TITLE 11 CHAPTER 60.1 "AIR POLLUTION CONTROL." ALL ESCPs SHALL PROVIDE FOR THE CONTROL OF DUST BY ONE OR MORE OF THE FOLLOWING:
 - MULCHING TO A DEPTH OF NO LESS THAN 1 INCH.
 - SPRINKLING EXPOSED SOILS WITH WATER TO MAINTAIN MOISTNESS AT A DEPTH OF 2-3 INCHES DURING WORKING HOURS AND NOT TO GENERATE ANY RUNOFF.
 - VERTICAL DUST BARRIERS NO LESS THAN 6 FEET IN HEIGHT, CONSTRUCTED OF MATERIALS CAPABLE OF EFFECTIVELY PREVENTING THE SPREAD OF DUST PARTICLES.

GOOD HOUSEKEEPING BMPs (cont):

- BMP AND SITE MAINTENANCE**
ALL ESCP BMPs SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. ADDITIONAL BMPs SHALL BE IMPLEMENTED AS NECESSARY TO ADDRESS EROSION AND SEDIMENT CONTROL AT THE PROJECT SITE.

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION WAIANAЕ DEEP MONITOR WELL WAIANAЕ, OAHU, HAWAII EROSION AND SEDIMENT CONTROL PLAN NOTES FUKUNAGA AND ASSOCIATES, INC.					
DESIGNED:	LF	SUBMITTED:	GC	DATE:	MAY 2026
DRAWN:	JT	SCALE:	AS SHOWN		
CHECKED:	JTM				
APPROVED:	Gayson Ching E-signed 2026-05-13 11:33AM HST gayson.y.ching@hawaii.gov State of Hawaii Engineer			DRAWING NO. C-2	
CHIEF ENGINEER					

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TRUE NORTH
SCALE: 1" = 200' PL

TMK: 8-5-006: 004

TMK: 8-5-034: 007

TMK: 8-5-034: 006
(LOT 6)

PROJECT SITE
SEE DRAWINGS C-4 AND C-5

ACCESS EASEMENT FOR ENTIRE LOT R-1
(BY OTHERS)

TMK: 8-5-034: 005

ACCESS EASEMENT WITHIN LOT 6
(BY OTHERS)

EXISTING LOT R-1
(FOR PILIUKA PL ROADWAY)

EXISTING 44' WIDE EASEMENT 15 WITHIN LOT 6
(FOR ROADWAY AND UTILITY PURPOSES)

ACCESS GATE

NOTE:

CONTRACTOR TO COORDINATE ACCESS TO WAIANA AGRICULTURAL PARK WITH DEPARTMENT OF AGRICULTURE. ACCESS THROUGH NORMALLY LOCKED ACCESS GATE ALONG PILIUKA PLACE AT PROPERTY LINE.

LEGEND:

- ACCESS EASEMENT
- - - - - WAIANA AGRICULTURAL PARK PROPERTY LINE



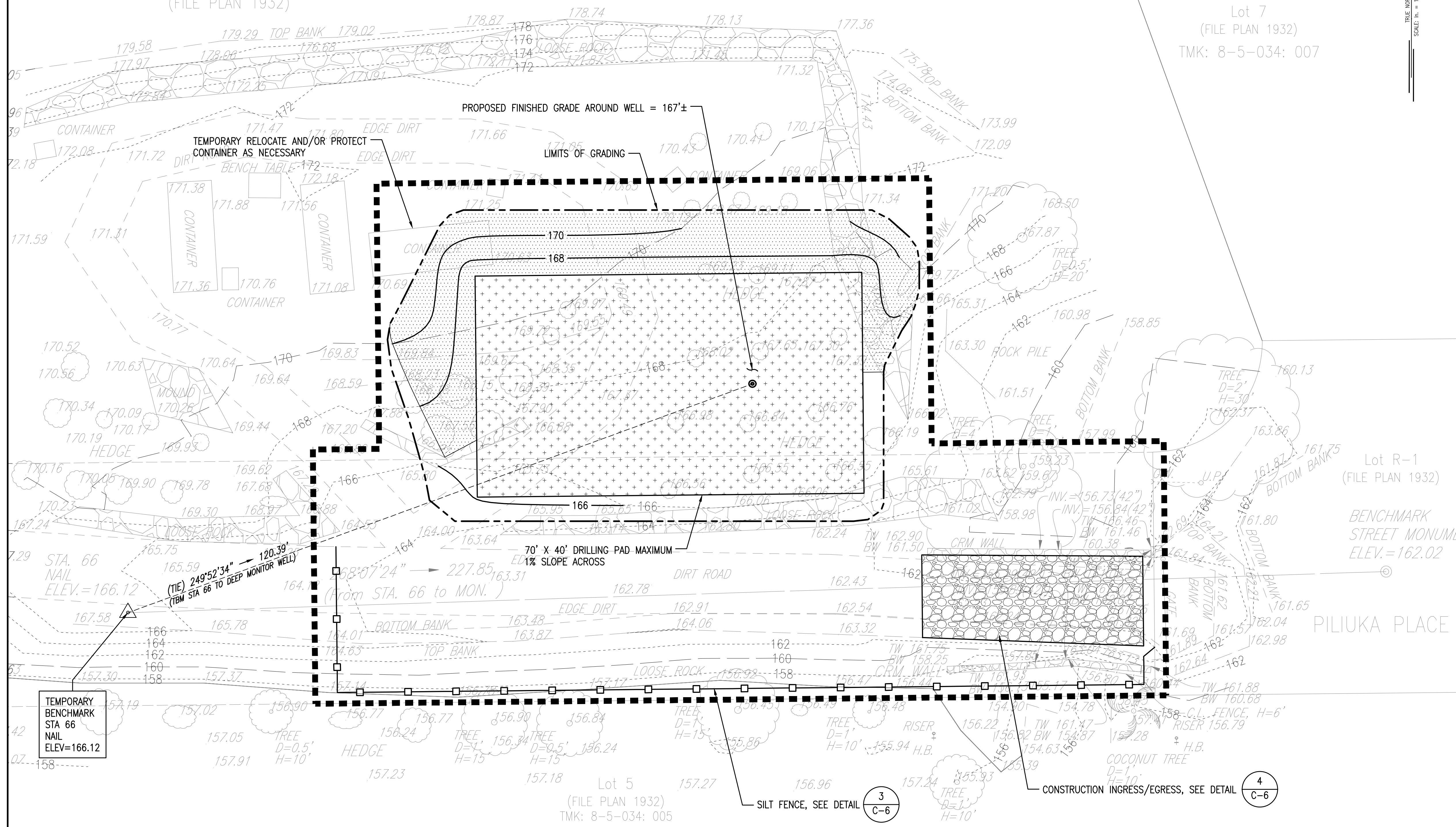
GENERAL PLAN
SCALE: 1"=200'

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
WAIANA AGRICULTURAL PARK DEEP MONITOR WELL					
WAIANA AGRICULTURAL PARK OAHU, HAWAII					
GENERAL PLAN					
FUKUNAGA AND ASSOCIATES, INC.					
DESIGNED: LF		SUBMITTED: GC			
DRAWN: JT		DATE: MAY 2026			
CHECKED: JTM		SCALE: AS SHOWN			
APPROVED:	Gayson Ching E-signed 2026-05-13 11:33AM HST gayson.y.ching@hawaii.gov State of Hawaii Engineer		DRAWING NO. C-3		
CHIEF ENGINEER					

Lot 6
(FILE PLAN 1932)

TMK: 8-5-034: 006

Lot 7
(FILE PLAN 1932)
TMK: 8-5-034: 007



- LEGEND:**
- ■ ■ ■ ■ LIMITS OF DISTURBANCE
 - - - - - EXISTING CONTOUR
 - 162 — TEMPORARY CONTOUR
 - + + + + + DRILLING PAD
 - ▨ TEMPORARY SLOPE PROTECTION AREA (HYDRAULIC MULCH)
 - ⊙ WELL DRILLING LOCATION
 - - - - - LIMITS OF GRADING
 - SILT FENCE, SEE DETAIL

- PRE-CONSTRUCTION STRUCTURAL CONTROL BMPs:**
- INGRESS/EGRESS
 - PERIMETER CONTROL
- DURING CONSTRUCTION STRUCTURAL CONTROL BMPs:**
- TEMPORARY SLOPE PROTECTION
 - BMPs FOR STOCKPILES, STAGING AREA, PROJECT TRAILERS, MATERIAL STORAGE, ETC.
- POST CONSTRUCTION BMPs:**
- PERMANENT STABILIZATION (GRASS AND GRAVEL)
- GOOD HOUSEKEEPING BMPs:**
- SEE ESCP NOTES ON SHEET C-2

TEMPORARY BENCHMARK STA 66 NAIL ELEV.=166.12

(TIE) 249°52'34" → 120.39'
(TBM STA 66 TO DEEP MONITOR WELL)

70' X 40' DRILLING PAD MAXIMUM
ELEV. 1% SLOPE ACROSS

227.85'
(From STA. 66 to MON.)

Lot R-1
(FILE PLAN 1932)

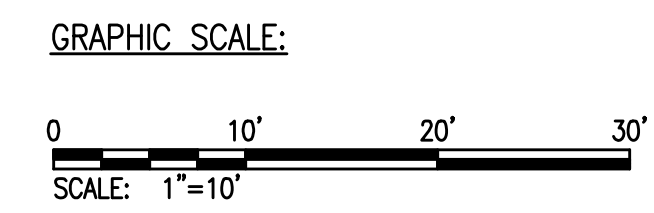
BENCHMARK STREET MONUMENT
ELEV.=162.02

PILIUKA PLACE

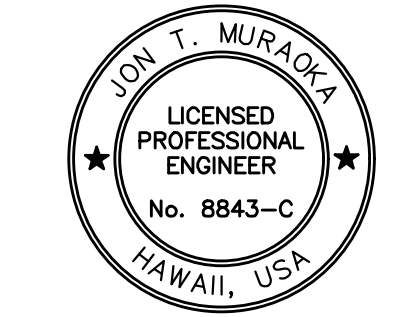
Lot 5
(FILE PLAN 1932)
TMK: 8-5-034: 005

**EROSION AND SEDIMENT CONTROL PLAN (CATEGORY 3)
AND TEMPORARY GRADING PLAN**

SCALE: 1"=10'



REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
WAIANAЕ DEEP MONITOR WELL					
WAIANAЕ, OAHU, HAWAII					
EROSION AND SEDIMENT CONTROL PLAN (CATEGORY 3) AND TEMPORARY GRADING PLAN					
FUKUNAGA AND ASSOCIATES, INC					
DESIGNED: LF	SUBMITTED: <i>GC</i>				
DRAWN: JT	DATE: MAY 2026				
CHECKED: JTM	SCALE: AS SHOWN				
APPROVED: <i>Gayson Ching</i>	E-signed 2026-05-13 11:33AM HST gayson.y.ching@hawaii.gov		DRAWING NO.		
CHIEF ENGINEER	State of Hawaii		C-4		

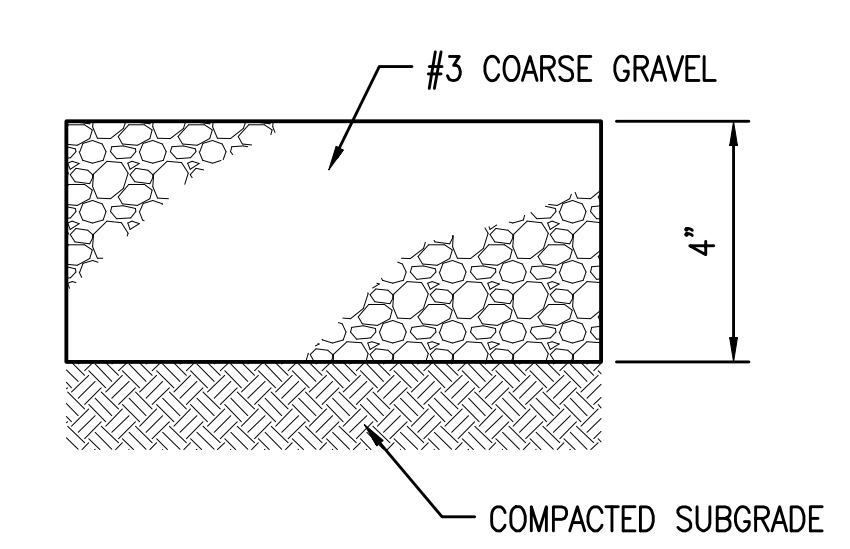
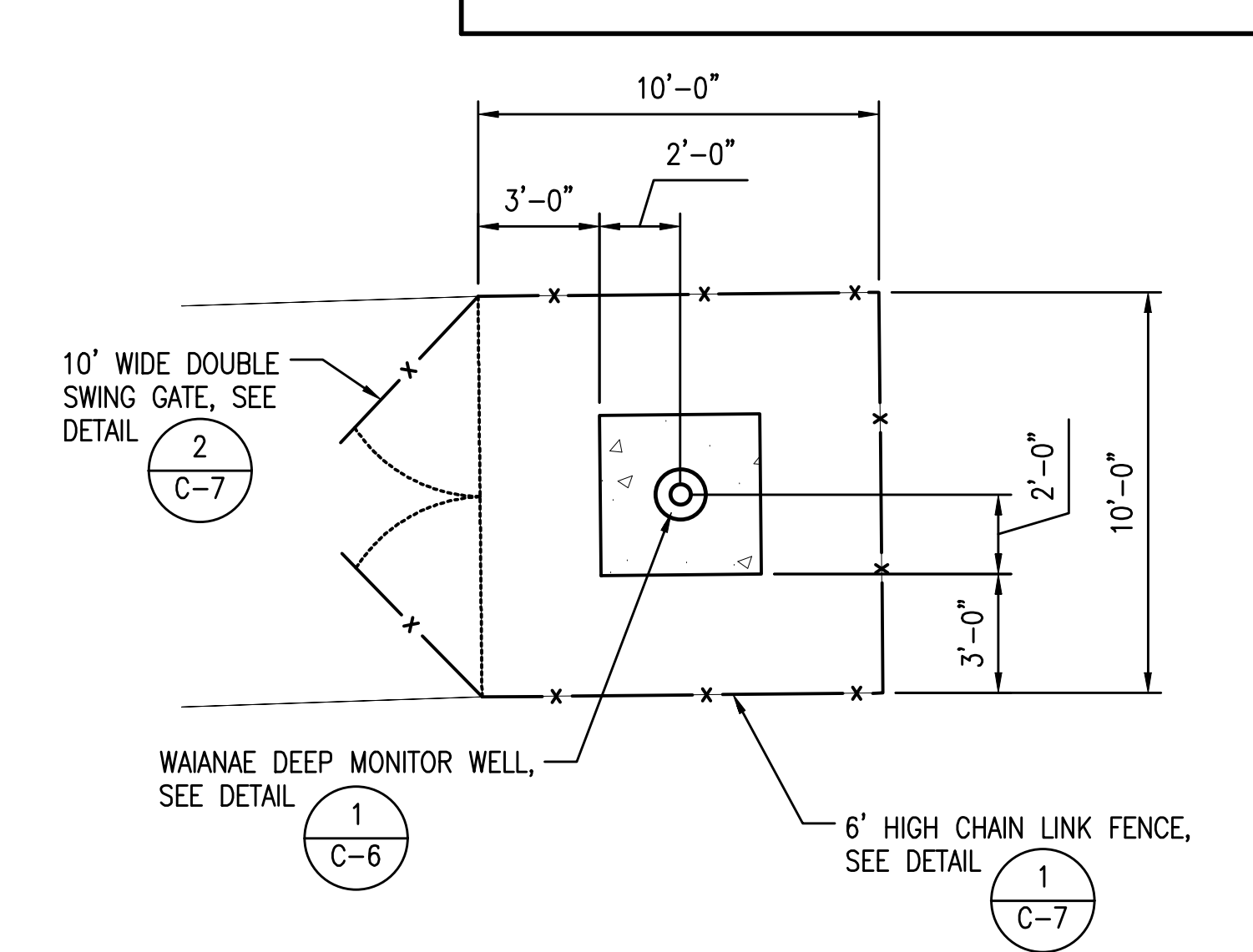
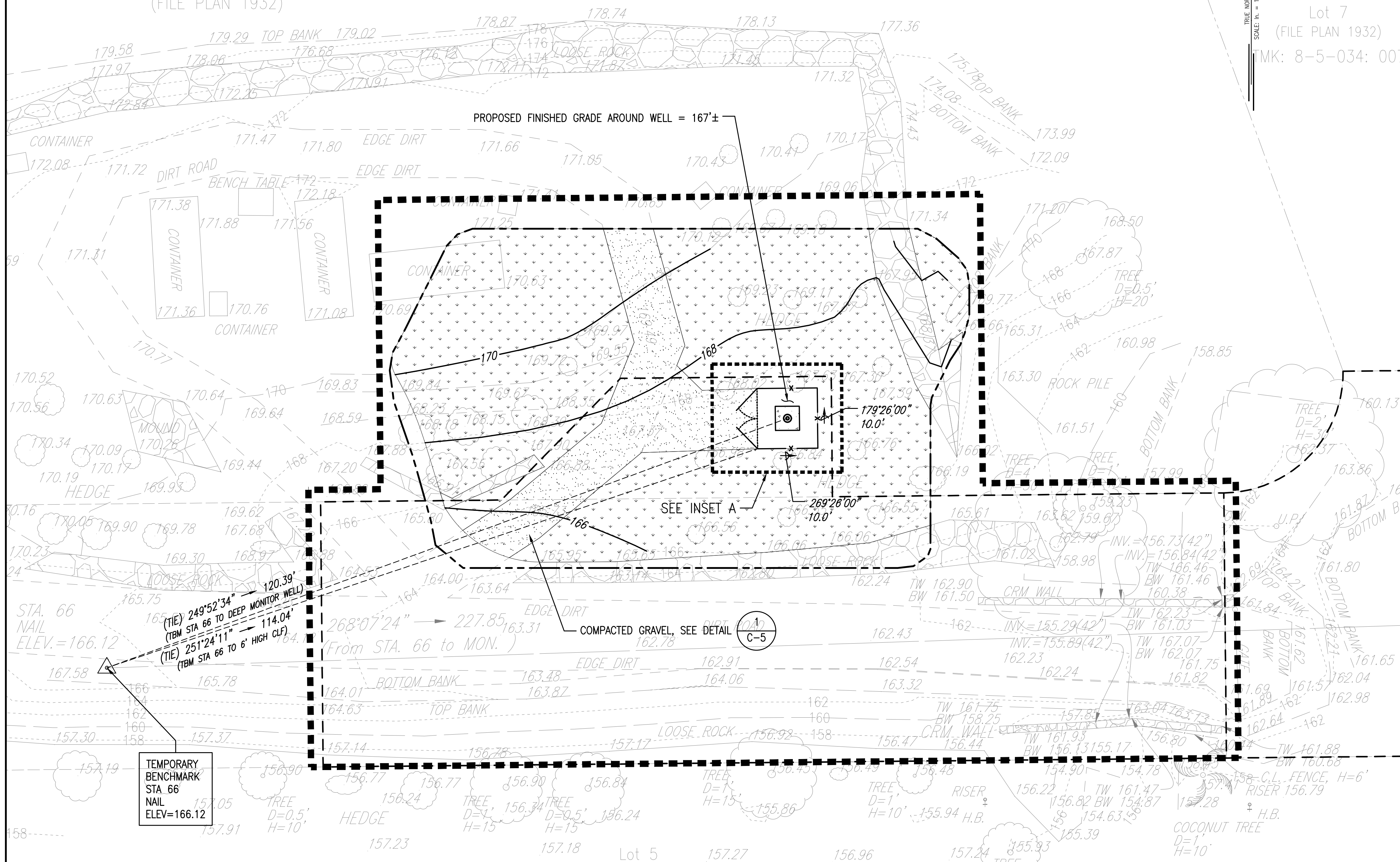


This work was prepared by me or under my supervision and construction of this project will be under my observation. Observation of construction as defined by Hawaii Administrative Rules, Title 16, Dept. of Commerce & Consumer Affairs, Chapter 115, Professional Engineers, Architects, Surveyors and Landscapers Architects.

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Lot 6
(FILE PLAN 1932) TMK: 8-5-034: 006

Lot 7
(FILE PLAN 1932)
TMK: 8-5-034: 007



NOTES:
1. GRAVEL TO BE COMPACTED WITH A ROLLER.

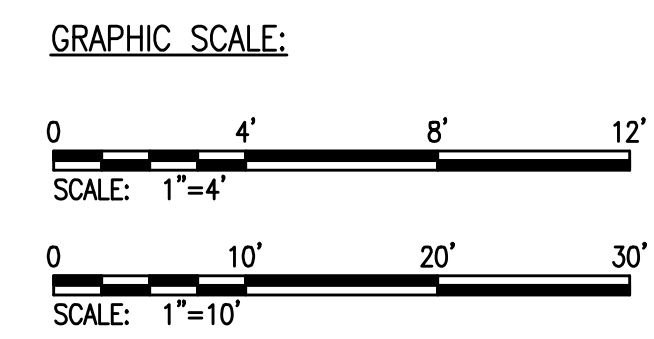


LEGEND:

- LIMITS OF DISTURBANCE
- 162--- EXISTING CONTOUR
- PROPOSED ACCESS EASEMENT
- 162--- FINISHED CONTOUR
- PERMANENT STABILIZATION (GRASS)
- WELL DRILLING LOCATION
- PERMANENT STABILIZATION (GRAVEL)
- LIMITS OF GRADING

Lot 5
(FILE PLAN 1932)
TMK: 8-5-034: 005

SITE PLAN
SCALE: 1"=10'



REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
WAIANAЕ DEEP MONITOR WELL WAIANAЕ, OAHU, HAWAII					
SITE PLAN					
FUKUNAGA AND ASSOCIATES, INC.					
DESIGNED: LF			SUBMITTED: GC		
DRAWN: JT			DATE: MAY 2026		
CHECKED: JTM			SCALE: AS SHOWN		
APPROVED:	Gayson Ching E-signed 2026-05-13 11:33AM HST gayson.y.ching@hawaii.gov		DRAWING NO.		C-5
CHIEF ENGINEER	State of Hawaii Engineer				

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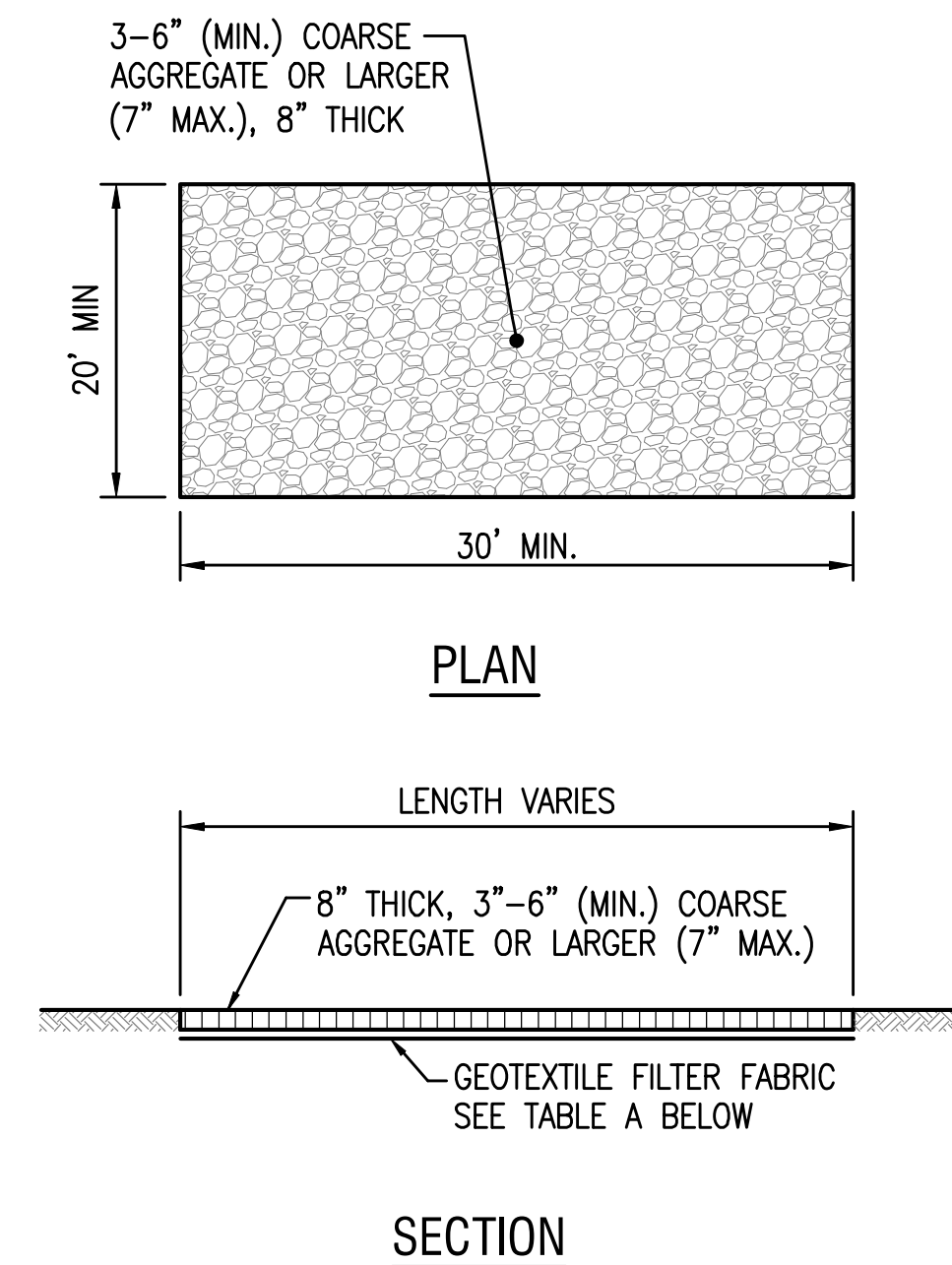
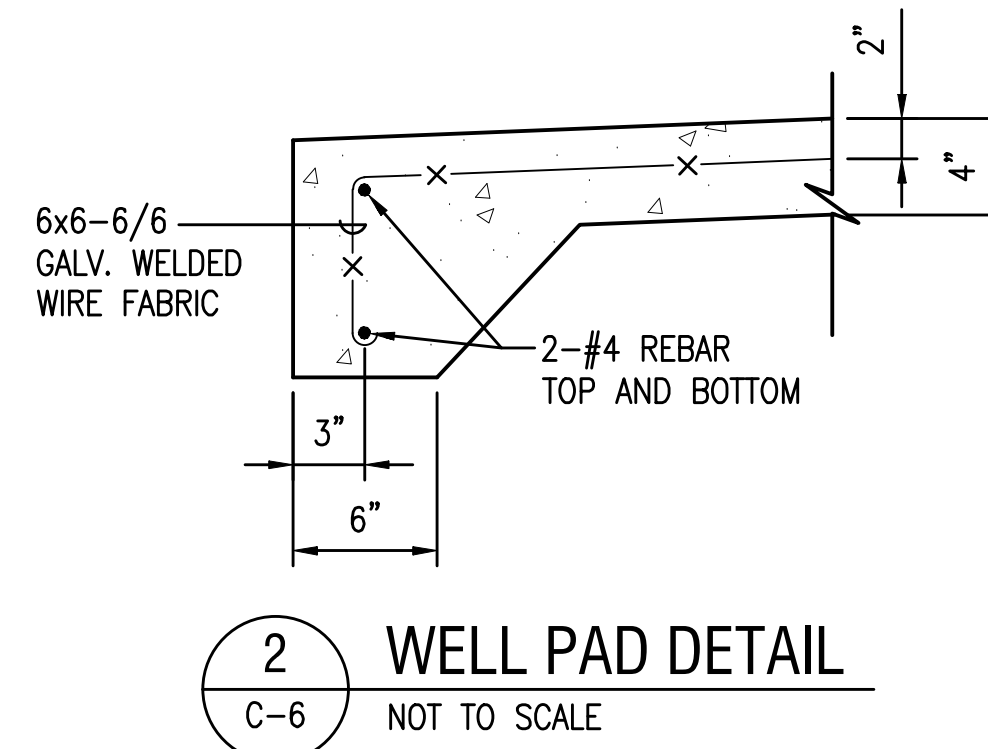
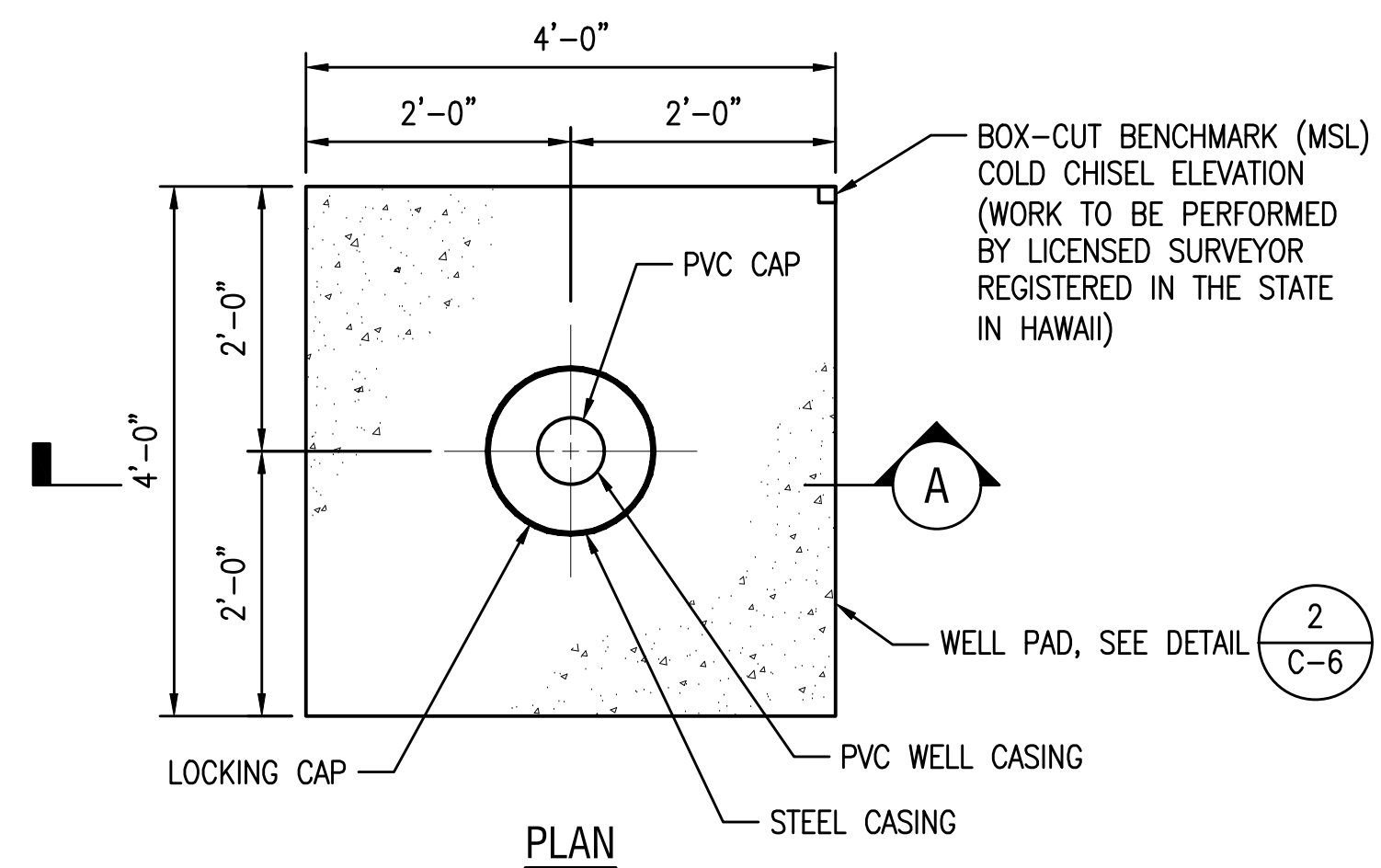
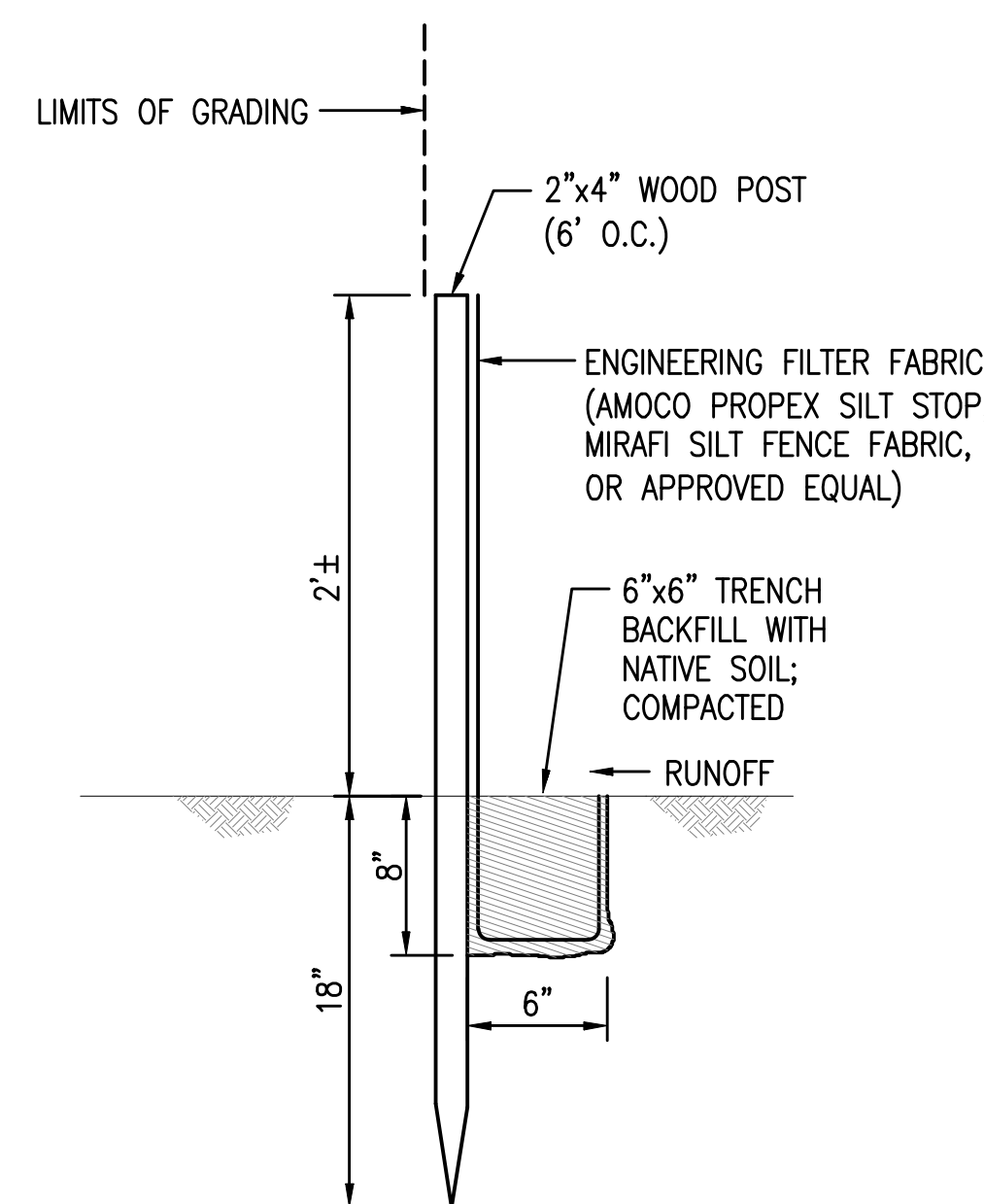
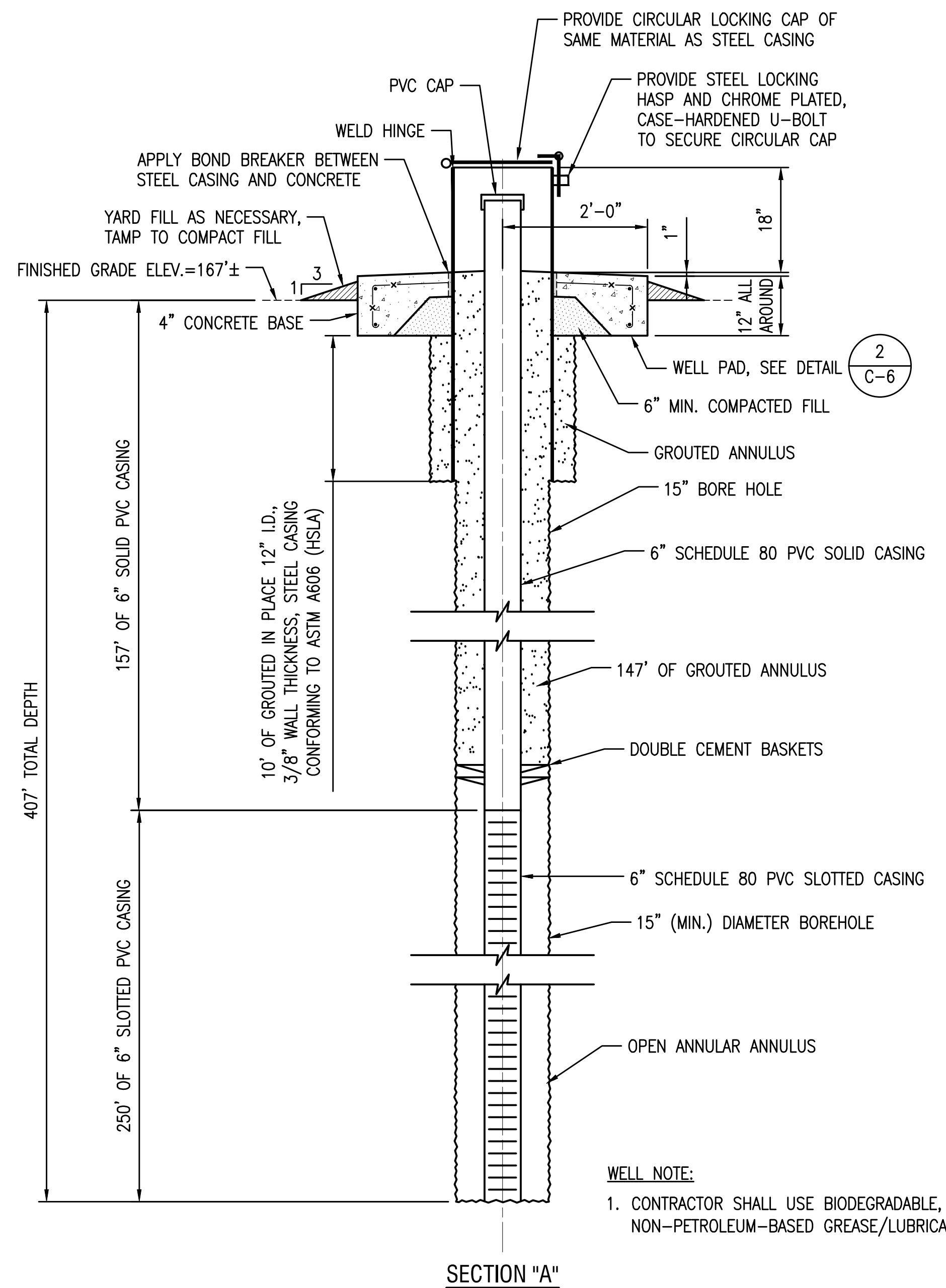


TABLE A GEOTEXTILE REQUIREMENTS	
PHYSICAL PROPERTY	REQUIREMENTS
GRAB TENSILE STRENGTH	220 LB (ASTM D1682)
ELONGATION FAILURE	60% (ASTM D1682)
MULLEN BURST STRENGTH	430 LB (ASTM D3768)
PUNCTURE STRENGTH	125 LB (ASTM D751, MODIFIED)
EQUIVALENT OPENING	SIZE 40-80 (U.S. STD SIEVE, CW-02215)

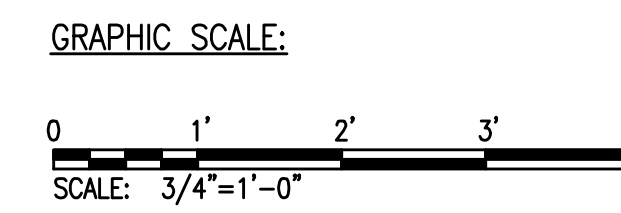


- SILT FENCE NOTES:**
- CONTRACTOR SHALL OBSERVE AND COMPLY WITH THE STATE DEPARTMENT OF HEALTH REGULATIONS REGARDING STORM WATER DISCHARGE.
 - CONTRACT SHALL INSTALL SILT FENCES OR OTHER APPROVE EQUAL TO PREVENT ANY SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE.
 - NO SEDIMENT LADEN RUNOFF SHALL LEAVE THE SITE.
 - CONTRACTOR SHALL INSTALL PERMANENT GROUND COVER IMMEDIATELY FOLLOWING THE COMPLETION OF TRENCH BACKFILL.

4 CONSTRUCTION INGRESS / EGRESS DETAILS
C-6 NOT TO SCALE

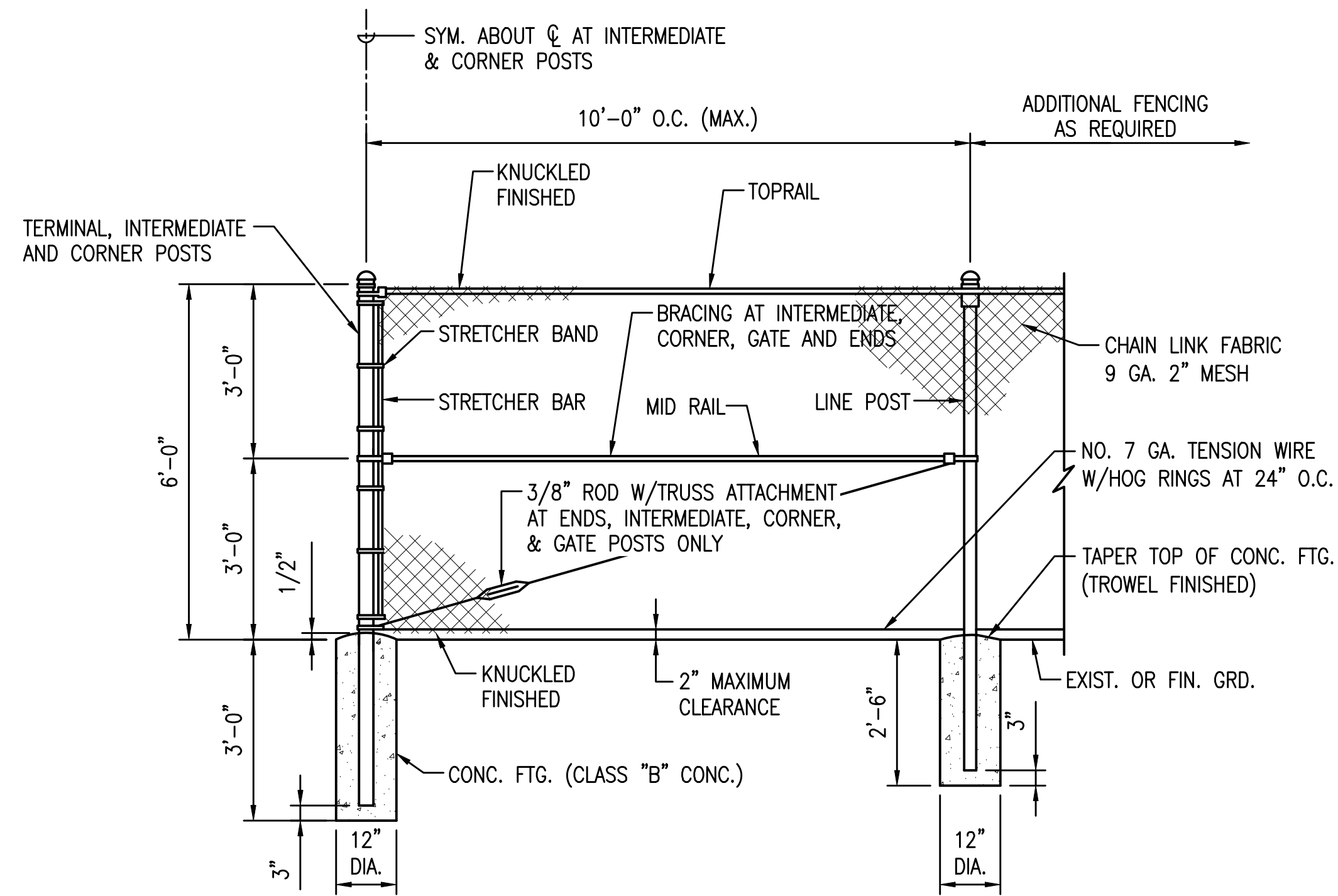
1 WELL DETAIL
C-6 SCALE: 3/4"=1'-0"

3 SILT FENCE DETAIL
C-6 NOT TO SCALE



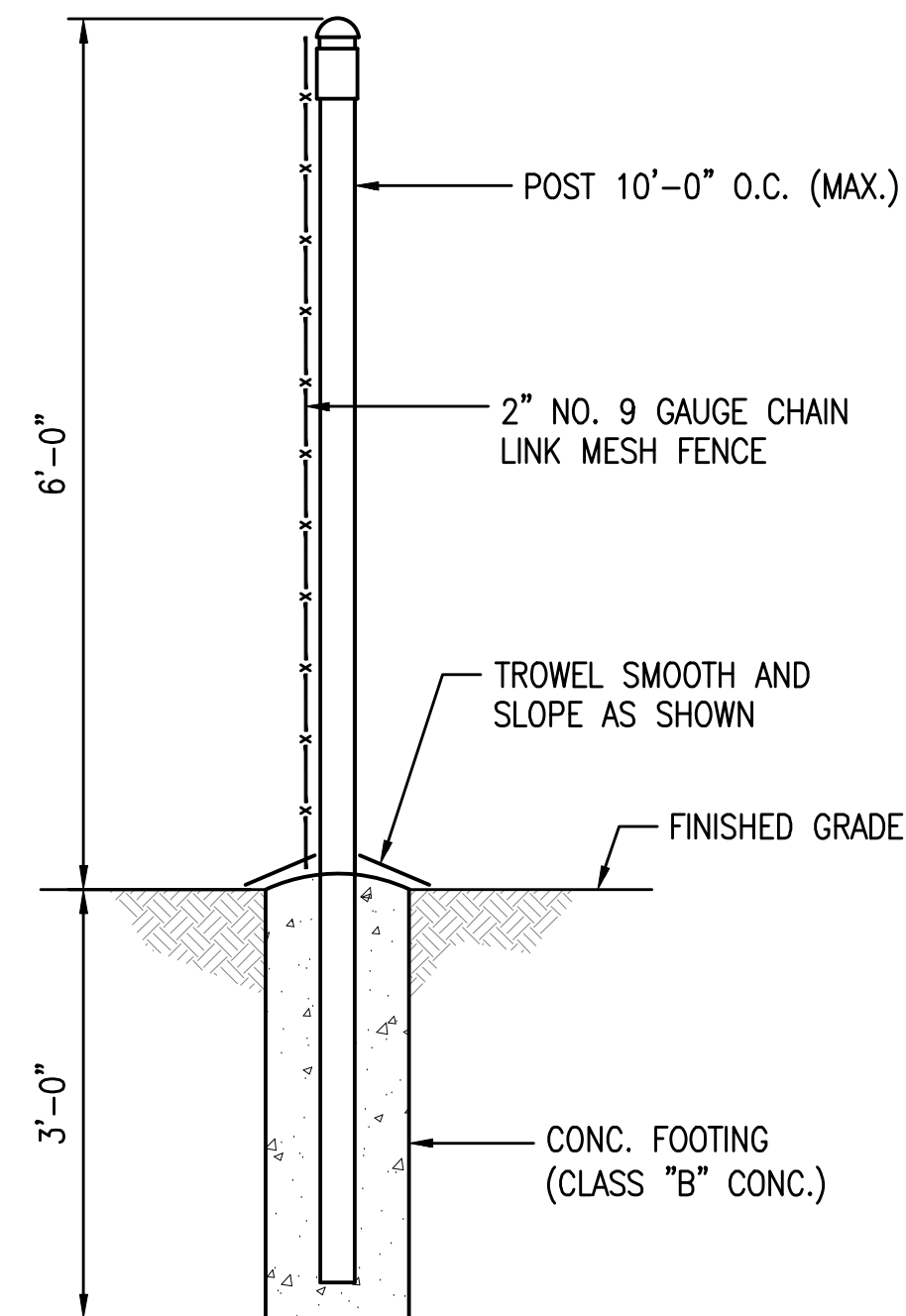
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION					
WAIANAЕ DEEP MONITOR WELL WAIANAЕ, OAHU, HAWAII					
WELL DETAILS					
FUKUNAGA AND ASSOCIATES, INC.					
DESIGNED: LF	SUBMITTED: <i>GC</i>				
DRAWN: JT	DATE: MAY 2026				
CHECKED: JTM	SCALE: AS SHOWN				
APPROVED: <i>Gayson Ching</i>	E-signed 2026-05-13 11:33AM HST gayson.y.ching@hawaii.gov		DRAWING NO. C-6		
CHIEF ENGINEER	State of Hawaii Engineer				

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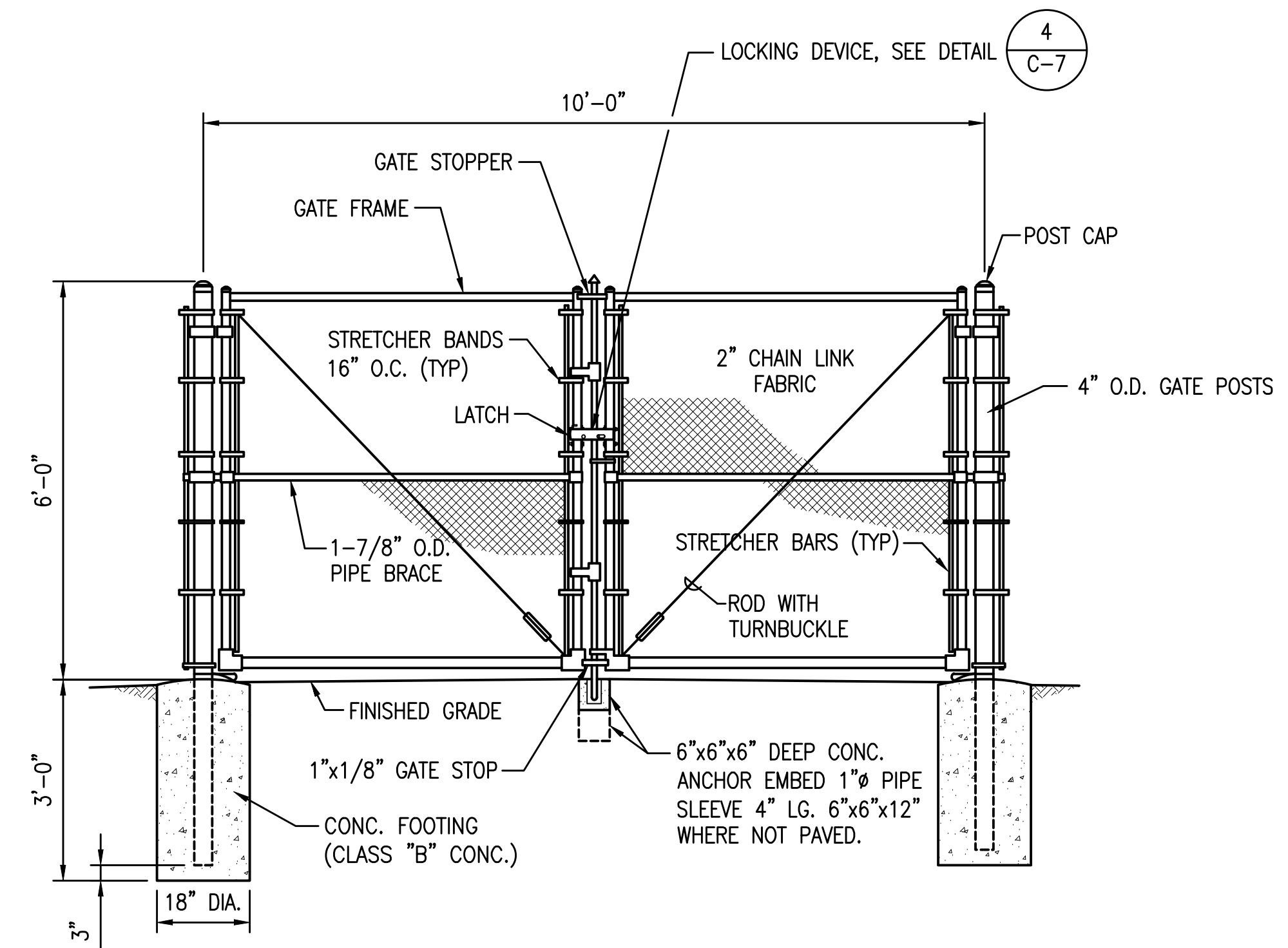


1 6'-0" HIGH CHAIN LINK FENCE DETAIL
C-7 NOT TO SCALE

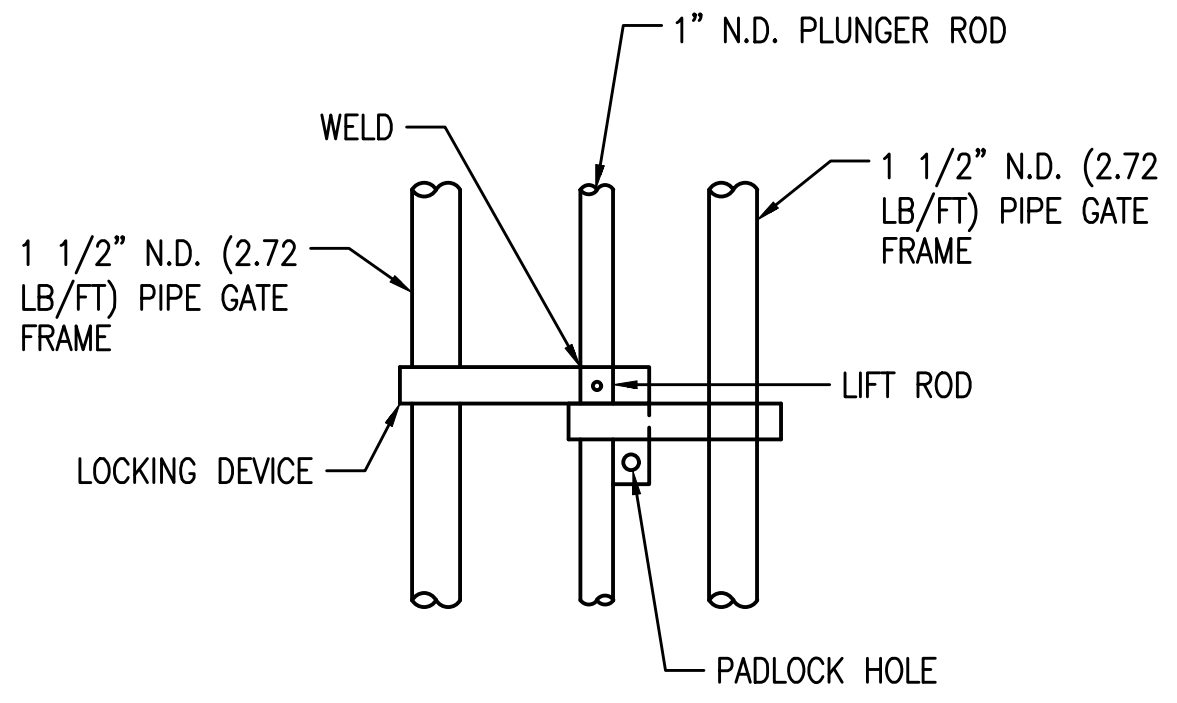
- NOTES:**
1. ALL PIPE AND POST SIZES ARE NOMINAL DIAMETER (N.D.).
 2. PIPES, FITTINGS, AND POSTS SHALL BE HOT-DIP GALVANIZED.
 3. FABRIC SHALL BE CONTINUOUS AND FASTENED TO END POSTS BY STRETCHER TENSION BARS AND TENSION BANDS SPACED APPROXIMATELY 15" APART.
 4. WIRE FASTENINGS SHALL BE NO. 12 GAUGE GALVANIZED TIE WIRE.
 5. LINE POSTS WIRE FASTENINGS SHALL BE SPACED 14" APART.
 6. HORIZONTAL RAIL AND BRACE WIRE FASTENINGS SHALL BE SPACED 18" APART.
 7. NO SPLICING SHALL BE ALLOWED ON ALL STRAIGHT-RUN PIPES.
 8. TOP AND BOTTOM SELVAGES SHALL BE KNUCKLED FINISH.



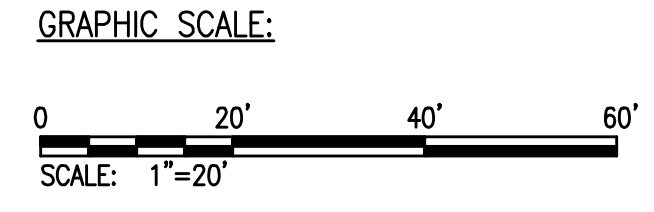
3 SIDE DETAIL
C-7 NOT TO SCALE



2 DOUBLE SWING GATE DETAIL (6'-0" HIGH)
C-7 NOT TO SCALE



4 LOCKING DEVICE DETAIL
C-7 NOT TO SCALE



REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
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WAIANAЕ DEEP MONITOR WELL WAIANAЕ, OAHU, HAWAII					
FENCE DETAILS					
FUKUNAGA AND ASSOCIATES, INC					
DESIGNED: LF			SUBMITTED: GC		
DRAWN: JT			DATE: MAY 2026		
CHECKED: JTM			SCALE: AS SHOWN		
APPROVED: <i>Gayson Ching</i>	Gayson Ching E-signed 2026-05-13 11:33AM HST gayson.y.ching@hawaii.gov State of Hawaii Engineer		DRAWING NO. C-7		
CHIEF ENGINEER					

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