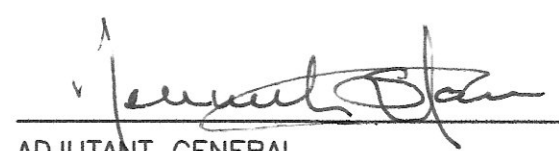

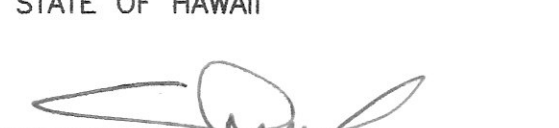


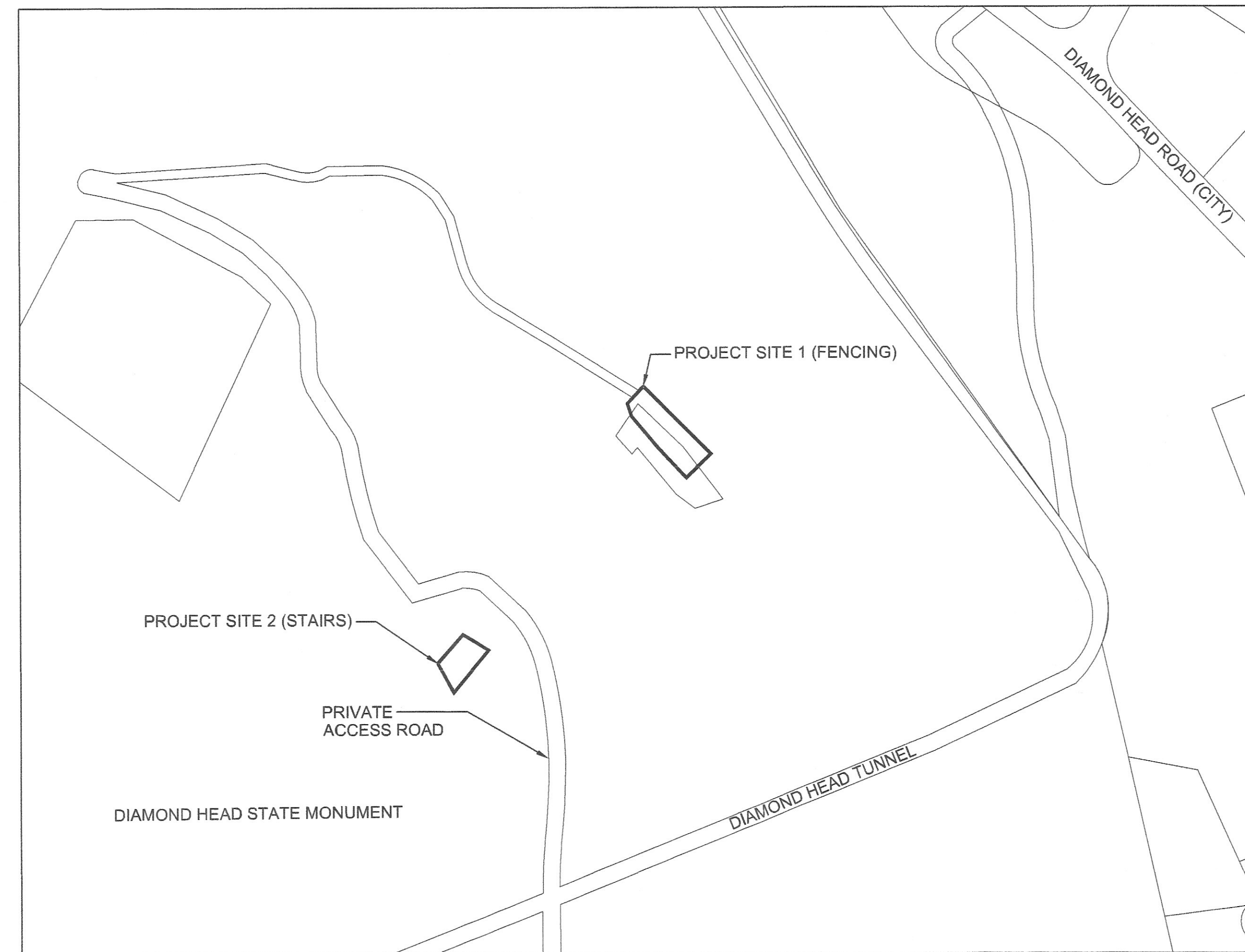
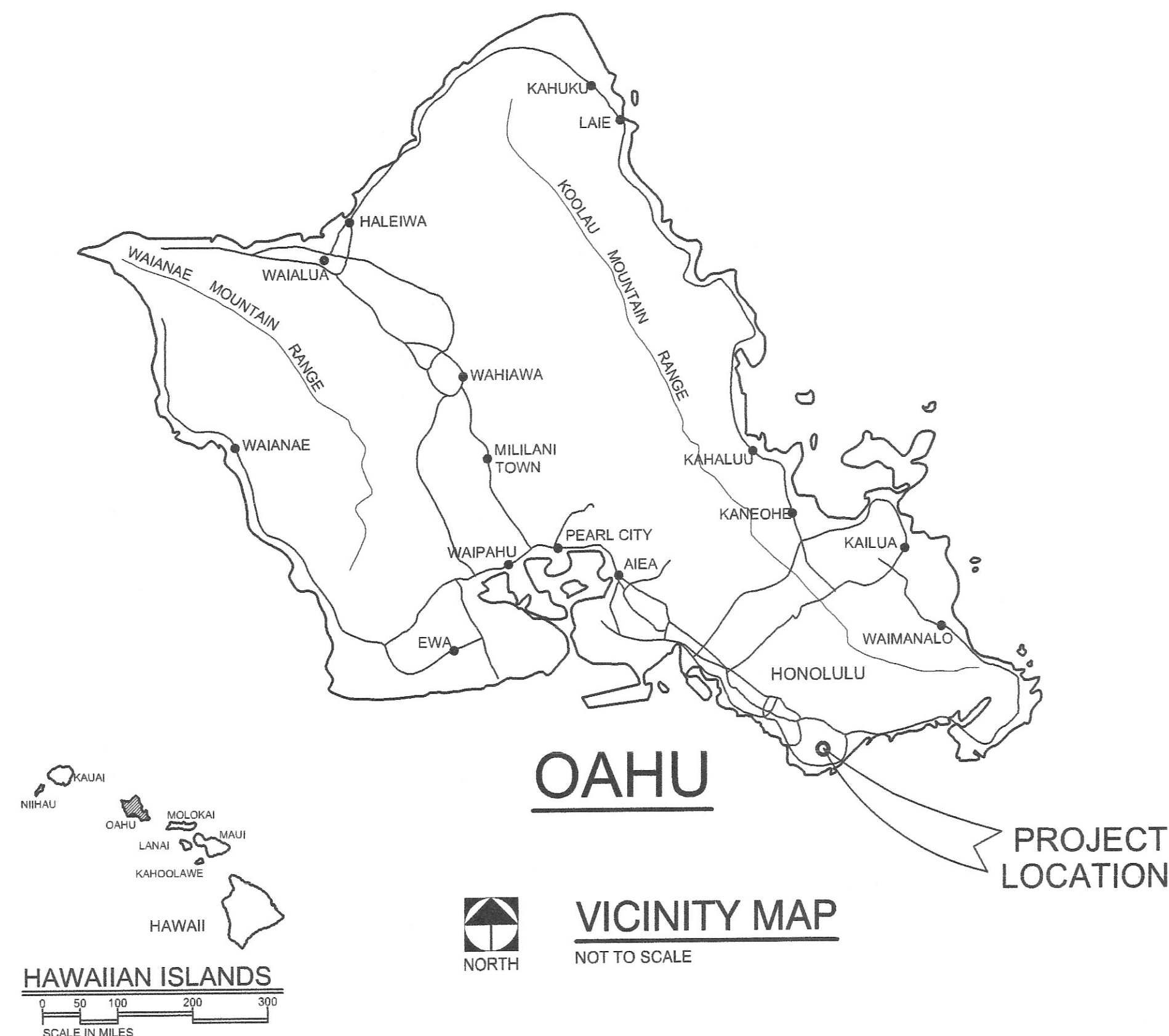
INDEX TO DRAWINGS

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4	C-1	FENCING SITE, EROSION AND SEDIMENT CONTROL PLAN
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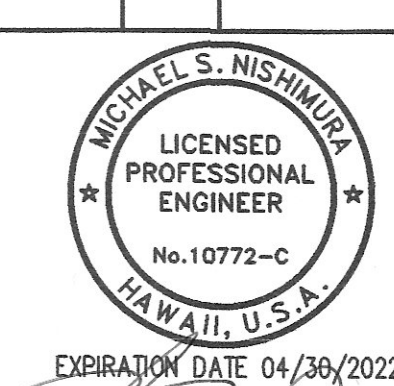
PUBLIC SERVICE BUILDING FENCING AND STAIRWAY TO BIRKHIMER EMERGENCY OPERATION CENTER BIRKHIMER EOC, HONOLULU, O'AHU, HAWAI'I JOB No. CA-202107-C TMK: (1)3-1-042:006 AND 016 (PORTION OF EACH) FOR THE STATE OF HAWAI'I, DEPARTMENT OF DEFENSE (DOD) HAWAII EMERGENCY MANAGEMENT AGENCY

APPROVED BY:

 ADJUTANT GENERAL DEPARTMENT OF DEFENSE STATE OF HAWAII	3/28/22 DATE
 ADMINISTRATOR HAWAII EMERGENCY MANAGEMENT AGENCY DEPARTMENT OF DEFENSE STATE OF HAWAII	DATE
 CHIEF ENGINEERING OFFICER DEPARTMENT OF DEFENSE STATE OF HAWAII	3/23/2022 DATE



SITE MAP

REVISION NO.	SYM	DESCRIPTION	SHT. OF	DATE	APPROVED
					
DEPARTMENT OF DEFENSE STATE OF HAWAII					
PUBLIC SERVICE BUILDING FENCING AND STAIRWAY TO BIRKHIMER EMERGENCY OPERATION CENTER BIRKHIMER EOC O'AHU HAWAII					
TITLE SHEET					
BOWERS + KUBOTA CONSULTING		JOB NO.		DRAWING NO.	
DESIGN BY: MT/AT		CHECKED BY: JC/MSN		CA-202107-C	
DRAWN BY: MT/AT		APPROVED BY: JC/MSN		DATE	
SCALE: AS NOTED		DECEMBER 2021		SHEET 1 OF 13 SHTS.	

\\Bartlett\share\civil\DD\2021\700900 Diamond Head EOC\03 Graphics\CAD\Sheets\G-1 General Notes.dwg
Fri, 26 Feb 2022 - 9:16am

CONSTRUCTION NOTES:

1.

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.
2.

THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE CONTRACTING OFFICER FROM HIS/HER 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. WHEREVER CONNECTIONS OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR THE NEW LINES.
3.

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.
4.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 54, "WATER QUALITY STANDARDS", AND TITLE 11, CHAPTER 55, "WATER POLLUTION CONTROL", AS WELL AS CHAPTER 14 OF THE REVISED ORDINANCES OF HONOLULU, AS AMENDED. BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING CONSTRUCTION.
5.

CONFINED SPACE:

FOR ENTRY BY PERSONNEL, INCLUDING INSPECTORS, INTO A PERMIT REQUIRED CONFINED SPACE AS DEFINED IN 29 CFR PART 1910.146(B), THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING:

- I. ALL SAFETY EQUIPMENT REQUIRED BY THE CONFINED SPACE REGULATIONS APPLICABLE TO ALL PARTIES OTHER THAN THE CONSTRUCTION INDUSTRY, TO INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING:
- a.

FULL BODY HARNESSES FOR UP TO TWO PERSONNEL.
- b.

LIFELINE AND ASSOCIATED CLIPS.
- c.

INGRESS/EGRESS AND FALL PROTECTION EQUIPMENT.
- d.

TWO-WAY RADIOS (WALKIE-TALKIES) IF OUT OF LINE-OF-SIGHT.
- e.

EMERGENCY (ESCAPE) RESPIRATOR (10 MINUTE DURATION).
- f.

CELLULAR TELEPHONE TO CALL FOR EMERGENCY ASSISTANCE.
- g.

CONTINUOUS GAS DETECTOR (CALIBRATED) TO MEASURE OXYGEN, HYDROGEN SULFIDE, CARBON MONOXIDE AND FLAMMABLES (CAPABLE OF MONITORING AT A DISTANCE AT LEAST 20 FEET AWAY).
- h.

PERSONAL MULTI-GAS DETECTOR TO BE CARRIED BY INSPECTOR.
- II. CONTINUOUS FORCED AIR VENTILATION ADEQUATE TO PROVIDE SAFE ENTRY CONDITIONS.

ONE ATTENDANT/RESCUE PERSONNEL TOPSIDE (TWO, IF CONDITIONS WARRANT IT).

6.

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).
7.

FOR BENCHMARK, REFER TO DRAWINGS C-1 AND C-2.

GRADING NOTES:

1.

ALL GRADING WORK SHALL BE DONE IN ACCORDANCE WITH CHAPTER 14, ARTICLES 13, 14, 15 AND 16, AS RELATED TO GRADING, SOIL EROSION AND SEDIMENT CONTROL OF THE REVISED ORDINANCES OF HONOLULU, 1990, AS AMENDED.
2.

NO CONTRACTOR SHALL PERFORM ANY GRADING OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO 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.

GRADING NOTES (CONT):

3.

THE CONTRACTOR, AT HIS/HER 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."
4.

THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE CONTRACTING OFFICER FROM HIS/HER 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. WHEREVER CONNECTIONS OF NEW UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR THE NEW LINES.
5.

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.
6.

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.
7.

FILLS ON SLOPES STEEPER THAN 5:1 SHALL BE KEYED.
8.

THE CITY HALL BE INFORMED OF THE LOCATION OF THE BORROW/DISPOSAL SITE FOR THE PROJECT WHEN THE APPLICATION FOR A GRADING PERMIT IS MADE. THE BORROW/DISPOSAL SITE MUST ALSO FULFILL THE REQUIREMENTS OF THE GRADING ORDINANCE.
9.

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."
10.

THE LIMITS OF THE AREA TO BE GRADED SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF THE GRADING WORK.
11.

ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 54, "WATER QUALITY STANDARDS", AND TITLE 11, CHAPTER 55, "WATER POLLUTION CONTROL", AND IF APPLICABLE, THE NPDES PERMIT FOR THE PROJECT.
12.

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.
13.

TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.
14.

TEMPORARY EROSION CONTROL PROCEDURES SHALL BE SUBMITTED FOR APPROVAL PRIOR TO APPLICATION FOR GRADING PERMIT.
15.

IF THE GRADING WORK INVOLVES CONTAMINATED SOIL, THEN ALL GRADING WORK SHALL BE DONE IN CONFORMANCE WITH APPLICABLE STATE AND FEDERAL REQUIREMENTS.
16.

BUILDING PERMIT FOR RETAINING WALLS SHALL BE OBTAINED PRIOR TO COMMENCEMENT OF GRADING WORK ON SITE.
17.

FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEERING BRANCH, DPP AT 808.768.8084 TO ARRANGE FOR INSPECTION SERVICES AND SUBMIT TWO (2) SETS OF APPROVED CONSTRUCTION PLANS SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORK. FOR CITY PROJECTS, THE CONTRACTOR SHALL COORDINATE INSPECTIONAL SERVICES WITH THE RESPONSIBLE CITY AGENCY.
18.

PURSUANT TO THE 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 SATE DEPARTMENT OF LAND ND NATURAL RECOURSES-HISTORIC PRESERVATION DIVISION (808.692.8015). IN ADDITION, FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL INFORM THE CIVIL ENGINEERING BRANCH, DPP (808.768.8084); AND FOR CITY PROJECTS, NOTIFY THE RESPONSIBLE CITY AGENCY.
19.

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 (NGCP) 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 PROJECTS AND OTHER NON-GOVERNMENTAL AGENCY PROJECTS, THE CONTRACTOR SHALL PROVIDE A WRITTEN COPY OF THE NGCP TO THE PERMITTING AND INSPECTION SECTION, CIVIL ENGINEERING BRANCH, DPP, 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 NGCP TO THE APPROPRIATE CITY DEPARTMENT OR GOVERNMENTAL AGENCY PER THEIR REQUIREMENTS.

GRADING NOTES (CONT):

20.

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.
21.

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.
22.

FOR BENCHMARK, REFER TO DRAWINGS C-1 AND C-2.

GENERAL NOTES:

1.

VERIFY AND CHECK ALL DIMENSIONS AND DETAILS ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER.
2.

WORK INCIDENTAL TO THE CONTRACT AND NECESSARY TO COMPLETE THE PROJECT, ALTHOUGH NOT SPECIFICALLY REFERRED TO ON THE CONTRACT DOCUMENTS, SHALL BE FURNISHED AND PERFORMED BY THE CONTRACTOR.
3.

IN PERFORMING ALL WORK, THE CONTRACTOR SHALL EXERCISE DUE CARE AND CAUTION NECESSARY TO AVOID ANY DAMAGE TO AND IMPAIRMENT IN THE USE OF ANY EXISTING UTILITY LINE. ANY DAMAGE INFLECTED ON EXISTING UTILITY LINES RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE IMMEDIATELY REPAIRED OR RESTORED AS DIRECTED BY THE CONTRACTING OFFICER AT THE CONTRACTOR'S EXPENSE.
4.

THE CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY; AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND CONTRACTING OFFICER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR CONTRACTING OFFICER.
5.

THE CONTRACTOR, AT HIS/HER OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM RUBBISH, DUST, NOISE, EROSION, ETC. THE WORK SHALL BE DONE IN CONFORMANCE WITH THE AIR AND WATER POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.
6.

THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FROM APPROPRIATE GOVERNMENT AGENCIES.
7.

ALL CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG). THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS AND OTHER PROTECTIVE FACILITIES WHICH SHALL CONFORM WITH THE ADAAG.

PUBLIC HEALTH, SAFETY AND CONVENIENCE NOTES:

1.

THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF THE PUBLIC HEALTH AND SAFETY AND ENVIRONMENTAL QUALITY.
2.

THE CONTRACTOR, AT HIS/HER OWN EXPENSE SHALL KEEP THE PROJECT AND ITS SURROUNDING AREAS FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH. THE CITY MAY REQUIRE SUPPLEMENTARY MEASURES AS NECESSARY.
3.

NO CONTRACTOR SHALL PERFORM ANY GRADING OPERATIONS SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR ADJOINING WATERCOURSES. IF SUCH VIOLATIONS OCCUR, THE COSTS INCURRED FOR ANY REMEDIAL ACTION BY THE DIRECTOR, DPP, SHALL BE PAYABLE BY THE CONTRACTOR.
4.

THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC. THE CONTRACTOR SHALL APPLY FOR A CONSTRUCTION PERMIT WITH A NOISE POLLUTION CONTROL PLAN.

SUMMARY OF ESTIMATED EARTHWORK CALCULATIONS			
ESTIMATED EXCAVATION	=	64	CY
ESTIMATED EMBANKMENT	=	24	CY
AREA TO BE GRADED	=	0.13	ACRES
DISTURBED AREA	=	0.22	ACRES

TOPOGRAPHIC SURVEY NOTES:

1.

AZIMUTHS AND ARE COORDINATES REFERRED TO GOVERNMENT SURVEY TRIANGULATION STATION "DIAMOND HEAD (LEAHI)" Δ (PID: TU1336).
2.

LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY AND ARE BASED ON RECORD INFORMATION.
3.

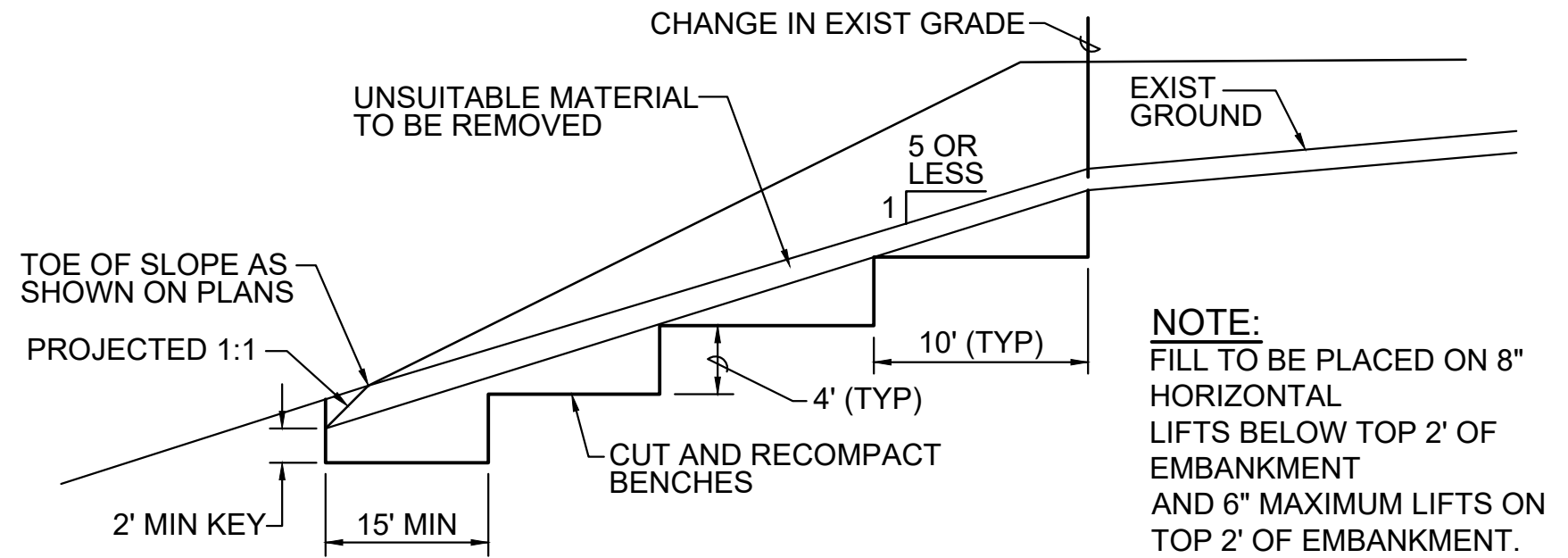
ALL ELEVATIONS AND DISTANCES SHOWN ARE IN FEET.
4.

ELEVATIONS ARE REFERENCED TO PI STREET MONUMENT LOCATED AT THE INTERSECTION OF 22ND AVENUE AND MAKALIKE PLACE. ELEVATION = 99.18 FT (LMSL).
5.

TOPOGRAPHIC SURVEY INFORMATION FROM GROUND SURVEYS BY TOWILL SHIGEOKA & ASSOCIATES, INC. TOPOGRAPHIC SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PORTION OF DIAMOND HEAD RESERVATION EXECUTIVE ORDER 1997 AT DIAMOND HEAD CRATER, HONOLULU OAHU, HAWAII", DATED JUNE 28, 2021.

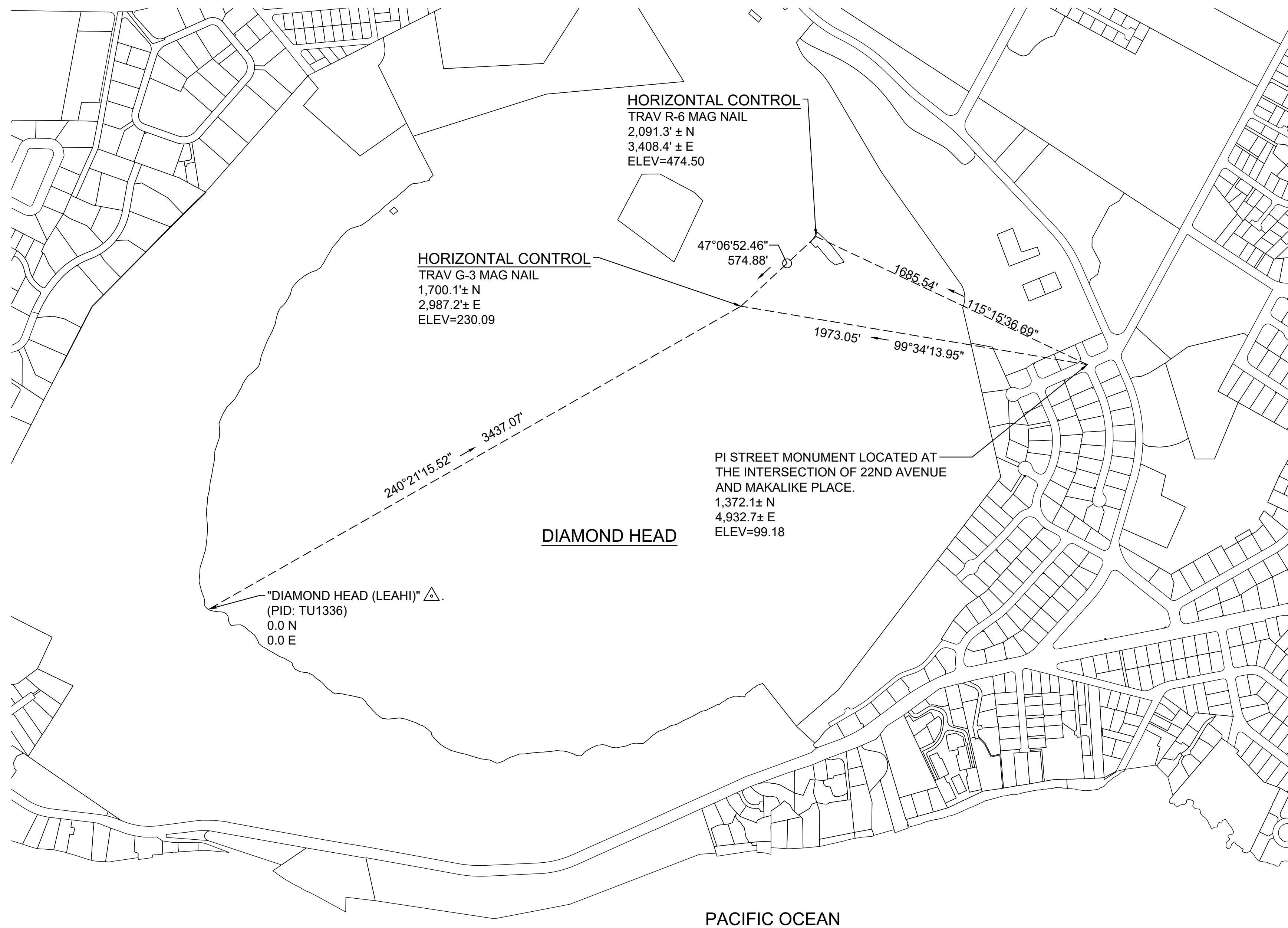
ABBREVIATIONS

AC	ASPHALT CONCRETE	H	HEIGHT, HORIZONTAL
ACU	AIR CONDITIONING UNIT	HRS	HAWAII REVISED STATUTES
ADAAG	AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES	ID	INSIDE DIAMETER
		LF	LINEAR FEET
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	LMSL	LOCAL MEAN SEA LEVEL
		LP	LIGHT POLE
AWG	AMERICAN WIRE GAGE	MC	METAL COVER
BB	BOTTOM BANK	MEP	MECHANICAL, ELECTRICAL, PLUMBING
BMP	BEST MANAGEMENT PRACTICES	MIN	MINIMUM
BR	BRACKET	MP	METAL POST
CFR	CODE OF FEDERAL REGULATIONS	MPH	MILES PER HOUR
CLR	CLEAR	MS4	MUNICIPAL SEPARATE STORM SEWER SYSTEM
CMU	CONCRETE MASONRY UNIT		
COMM	COMMUNICATIONS	NO., #	NUMBER
CONC	CONCRETE	NOM	NOMINAL
CONT	CONTINUED	NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
D, DIA	DIAMETER		
DET	DETAIL	OC	ON CENTER
DOD	DEPARTMENT OF DEFENSE	OD	OUTSIDE DIAMETER
DPP	DEPARTMENT OF PLANNING AND PERMITTING	R	RADIUS
		REF	REFER
DWG	DRAWING	ROH	REVISED ORDINANCES OF HAWAII
EB	ELECTRICAL BOX	S	SLOPE, SPREAD
ELEV	ELEVATION	SMH	SEWER MANHOLE
EMH	ELECTRICAL MANHOLE	SQ	SQUARE
EOC	EMERGENCY OPERATIONS CENTER	SHT	SHEET
ESCP	EROSION AND SEDIMENT CONTROL PLAN	STA	STATION
EXP.	EXPOSED	TB	TOP BANK
EX/	EXIST	TMK	TAX MAP KEY
FIN	FINISH	TRAV	TRAVERSE
FT	FEET	TYP	TYPICAL
FTG	FOOTING	V	VERTICAL
GW	GUY WIRE	W/	WITH



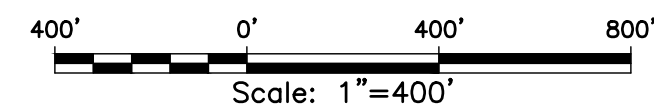
TYPICAL BENCHING DETAIL

REVISION NO.	SYM.	DESCRIPTION	SHT. ____ OF ____	DATE	APPROVED:
<div><div><div>MICHAEL S. NISHIMURA</div><div>LICENSED PROFESSIONAL ENGINEER</div><div>No.10772-C</div><div>HAWAII, U.S.A.</div></div><div>EXPIRATION DATE 04/30/2022</div></div>			DEPARTMENT OF DEFENSE STATE OF HAWAII		
			PUBLIC SERVICE BUILDING FENCING AND STAIRWAY BIRKHIMER EOC		
			HONOLULU OAHU HAWAII		
			GENERAL NOTES		
BOWERS + KUBOTA CONSULTING		JOB NO.	DRAWING NO.		
DESIGN BY: MT/AT	CHECKED BY: JC/MSN	CA-202107-C	G-1		
DRAWN BY: MT/AT	APPROVED BY: JC/MSN	DATE			
SCALE: AS NOTED		DECEMBER 2021	OF	13	SHTS.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. ("OBSERVATION OF CONSTRUCTION" SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 16-115-2 DEFINITIONS, EFFECTIVE 8/29/94.)					
FILE _____ DRAWER _____ FOLDER _____					

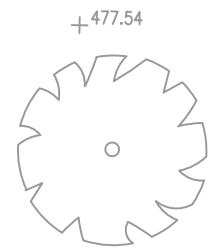


GEOMETRIC CONTROL PLAN

SCALE: 1"=400'

[illegible]

LEGEND



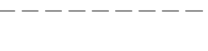
EXIST SPOT ELEVATION



EXIST TREE



EXIST BUILDING



EXIST TOP OF BANK



EXIST BOTTOM OF BANK



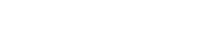
CORNER OR PULL POST



LINE POST



APPROXIMATE DIRECTION OF SURFACE RUNOFF FLOW



TEMPORARY FILTER SOCK



CONTRACTOR'S OPERATION AND STAGING AREA



LIMITS OF WORK



GROUND RING



AC PAVEMENT RESTORATION



GROUND ROD

NOTES:

- SEE DWG C-6 FOR FENCE PROFILE.
- SEE DWGS C-8 AND C-9 FOR FENCE DETAILS.
- SEE DWG G-1 FOR EARTHWORK ESTIMATES.
- INSTALL GROUND RODS ON GROUND RING AT APPROXIMATELY EVERY THIRD FENCE POST OR AS REQUIRED TO OBTAIN 5 OHMS MAX RESISTANCE.
- THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER IF ANY UTILITIES WILL BE INTERRUPTED AND THE DURATION. IF ELECTRICITY OR WATER MUST BE SHUT OFF, THE CONTRACTOR MUST COORDINATE WITH THE PROJECT MANAGER TWO (2) WEEKS IN ADVANCE.

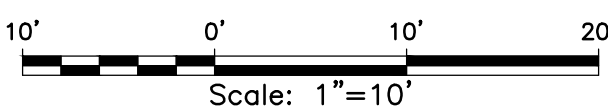
FENCE BASELINE			
NUMBER	LENGTH	AZIMUTH	START/END STATIONS
L1	15.50'	120°00'00"	0+00.00 0+15.50
L2	19.00'	168°00'00"	0+15.50 0+34.50
L3	16.00'	120°00'00"	0+34.50 0+50.50
L4	4.00'	190°00'00"	0+50.50 0+54.50
L5	43.00'	220°00'00"	0+54.50 0+97.50
L6	18.00'	244°00'00"	0+97.50 1+15.50
L7	75.00'	310°00'00"	1+15.50 1+90.50
L8	60.00'	320°00'00"	1+90.50 2+50.50
L9	10.00'	4°00'00"	2+50.50 2+60.50
L10	30.00'	340°00'00"	2+60.50 2+90.50
L11	54.00'	50°00'00"	2+90.50 3+44.50
L12	30.00'	130°00'00"	3+44.50 3+74.50
L13	30.00'	149°00'00"	3+74.50 4+04.50
L14	10.00'	138°00'00"	4+04.50 4+14.50
L15	10.00'	123°00'00"	4+14.50 4+24.50
L16	38.46'	141°24'56"	4+24.50 4+62.96

FENCING SITE, EROSION AND SEDIMENT CONTROL PLAN

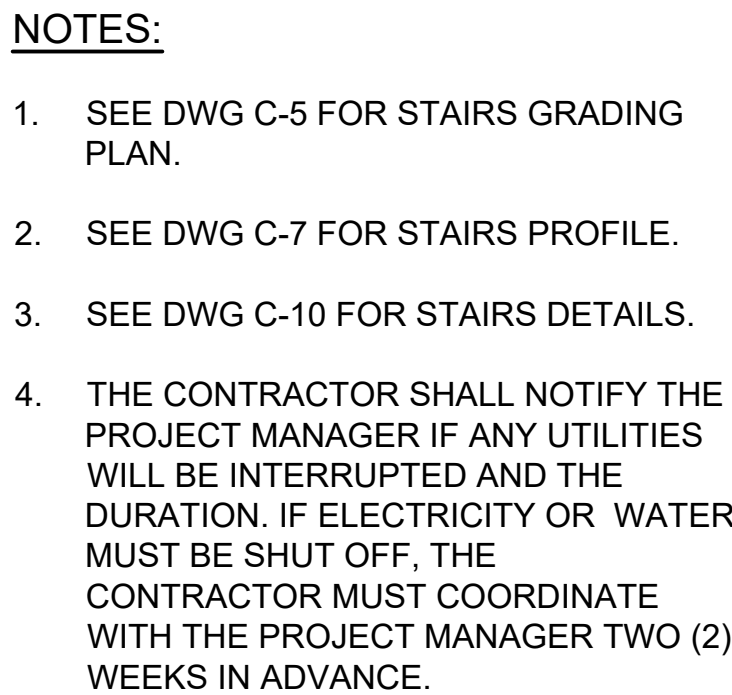
SCALE: 1"=10'

INSET

SCALE: 1"=10'



REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED:		
MICHAEL S. NISHIMURA LICENSED PROFESSIONAL ENGINEER No. 10772-C HAWAII, U.S.A. EXPIRATION DATE 04/30/2022		DEPARTMENT OF DEFENSE STATE OF HAWAII PUBLIC SERVICE BUILDING FENCING AND STAIRWAY BIRKHIRER EOC HONOLULU OAHU HAWAII FENCING SITE, EROSION AND SEDIMENT CONTROL PLAN BOWERS + KUBOTA CONSULTING DESIGN BY: MT/AT CHECKED BY: JC/MSN DRAWN BY: MT/AT APPROVED BY: JC/MSN AS NOTED				JOB NO. CA-202107-C DATE DECEMBER 2021	DRAWING NO. C-1 SHEET 4 OF 13 SHTS.

FILE DRAWER FOLDER

Fri, 26 Feb 2022, 10:01:17 AM
 \\Bentley\share\civil\dd\2021\700900 Diamond Head EOC\03 Graphics\CAD\Sheets\C-3 Erosion and Sediment Control Notes.dwg

EROSION AND 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 EARTHWORK IS INITIATED.
- REGULARLY INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROLS TO ENSURE CONTINUED PERFORMANCE.
- 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 5 ACRES MAY BE DISTURBED AT ANYTIME 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 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 DOWNSTREAM VEGETATED BUFFER AREA. STOCKPILES ARE NOT ALLOWED IN THE CITY RIGHT-OF-WAY.
- INLET PROTECTION
 - ALL STORM DRAIN INLETS ONSITE AND THOSE OFFSITE WHICH MAY RECEIVE RUNOFF FROM THE SITE SHALL USE AN INLET PROTECTION DEVICE UNLESS THEY ARE DIRECTED TO A SEDIMENT BASIN.
 - SEDIMENT LEVELS MAY NOT EXCEED ONE THIRD OF THE HEIGHT OF A SEDIMENT BARRIER OR INLET PROTECTION DEVICE AT ANY POINT ALONG THE LENGTH OF THE SEDIMENT BARRIER OR THE INLET PROTECTION DEVICE.
 - SEDIMENT BARRIERS AND INLET PROTECTION DEVICES MUST BE UNCLOGGED AND CLEANED WHEN PERFORMANCE IS COMPROMISED.
 - TORN, WEATHERED OR SAGGING SEDIMENT BARRIERS OR INLET PROTECTION DEVICES MUST BE REPAIRED OR REPLACED IMMEDIATELY.
- 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 (MS4) MUST BE CLEANED USING DRY METHODS SUCH AS SWEEPING OR VACUUMING.
 - WASHING POLLUTANTS AND MATERIALS THAT ARE DISCHARGED FROM THE PROJECT SITE TO THE MS4 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.
- THE FOLLOWING BMPS WERE DETERMINED TO BE NOT APPLICABLE BASED ON THE SPECIFIC SITE CONDITIONS. AS CONSTRUCTION PROGRESSES, REVISIONS MAY BE NECESSARY AND WILL BE PROVIDED TO DPP INSPECTORS. A BRIEF EXPLANATION OF WHY EACH OMITTED BMP IS UNNECESSARY OR IMPRACTICAL FOR THE PROJECT HAS BEEN PROVIDED UNDER SEPARATE DOCUMENTATION TO DPP.
 - SEDIMENT TRAPS/BASINS
 - DIVERSEION BMPS TO DIVERT RUNOFF FROM UPSTREAM AREAS
 - DEWATERING OPERATIONS BMPS
 - VELOCITY DISSIPATION DEVICES
 - SEDIMENT BARRIERS
 - BUFFERZONES

EROSION AND 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.
- NOTIFY DPP IN WRITING OF PROJECT START DATE TWO WEEKS PRIOR TO STARTING WORK.
- PRACTICE GOOD HOUSEKEEPING MEASURES THROUGHOUT THE DURATION OF CONSTRUCTION.
- INSPECTIONS WILL BE PERFORMED MONTHLY BY THE ESCP COORDINATOR.

GOOD HOUSEKEEPING BMPS:

MANDATORY GOOD HOUSEKEEPING PRACTICES INCLUDE, BUT ARE NOT LIMITED TO:

- BMP AND SITE MAINTENANCE**
GOOD HOUSEKEEPING PRACTICES MUST BE IMPLEMENTED AND MAINTAINED THROUGHOUT THE PROJECT DURATION TO ELIMINATE AND MINIMIZE POLLUTANT DISCHARGES TO THE MEP.
- DUST CONTROL**
WATER SPRAY (BY TRUCK OR TEMPORARY SPRINKLERS) SHALL BE APPLIED AS NEEDED TO MINIMIZE DUST. DO NOT OVERWATER.
- 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, OR 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 MS4, RECEIVING WATERS, OR DRAINAGE IMPROVEMENTS THAT DISCHARGE OFF-SITE. PRIMARY AND SECONDARY CONTAINMENT CONTROLS AND COVERS SHALL BE IMPLEMENTED TO THE MEP.
- 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 FENCES 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 14, ARTICLE 15. STOCKPILES MUST BE COVERED WITH PLASTIC SHEETING OR A COMPARABLE MATERIAL IF THEY WILL NOT BE ACTIVELY USED WITHIN 7 DAYS.
- SPILL PREVENTION AND CONTROL**
CREATE AND IMPLEMENT SPILL PREVENTION AND RESPONSE PLANS TO ELIMINATE AND MINIMIZE THE DISCHARGE OF POLLUTANTS TO THE MS4 AND RECEIVING WATERS FROM LEAKS AND SPILLS BE REDUCING THE CHANCE FOR SPILLS, ABSORBING, CONTAINING, AND CLEANING UP SPILLS AND PROPERLY DISPOSING OF SPILL MATERIALS. AT A MINIMUM, ALL PROJECTS SHALL CLEANUP ALL LEAKS AND SPILL IMMEDIATELY.
- SOLID WASTE MANAGEMENT**
PREVENT OR REDUCE DISCHARGE OF POLLUTANTS TO THE LAND, GROUNDWATER, AND IN STORM WATER FROM SOLID WASTE OF 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.
- 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 MS4, THE PROPERTY OWNER OR ESCP COORDINATOR SHALL IMMEDIATELY NOTIFY THE DEPARTMENT OF FACILITIES 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 TO THE DIRECTOR NO LESS THAN 3 DAYS AFTER NOTIFICATION BY PHONE.
- NON-HAZARDOUS MATERIALS**
IN THE EVENT THAT NON-HAZARDOUS MATERIALS ARE DISCHARGED TO THE MS4, THE PROPERTY OWNER OR ESCP COORDINATOR SHALL NOTIFY THE CITY DEPARTMENT OF FACILITIES MAINTENANCE BY TELEPHONE NO LATER THEN 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 3 DAYS AFTER NOTIFICATION BY PHONE.

GOOD HOUSEKEEPING BMPS (CONT):

- 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.
- 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 SHOULD BE A MINIMUM OF 10 MILLIMETER POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, AND OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE 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.
- 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 MS4 OR RECEIVING WATERS.
- 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 TO CONTAIN THE LIQUID WASTES GENERATED. CONTAINMENT AREAS OF 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.
- 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 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.
- TRACKING CONTROL**
POLLUTANTS FROM THE PROJECT SITE SHALL NOT BE TRANSPORTED OR DISCHARGED TO OFF-SITE AREAS. ALL POLLUTANTS DISCHARGED FROM CONSTRUCTION SITE TO OFF-SITE AREAS MUST BE SWEPT OR VACUUMED EACH DAY BEFORE LEAVING THE JOB SITE.
- DEWATERING OPERATIONS**
NON-STORM WATER FROM DEWATERING CANNOT BE DISCHARGED FROM THE SITE WITHOUT PRIOR NOTICE AND APPROVAL FROM THE DPP AND DEPARTMENT OF HEALTH. DEWATERING DISCHARGES SHALL BE KEPT ONSITE USING A SEDIMENT BASIN, SEDIMENT TRAP, WEIR TANK, DEWATERING TANK, FILTRATION SYSTEM, OR OTHER MANUFACTURED SYSTEM.

RAIN RESPONSE PLAN:

THE FOLLOWING WILL BE PERFORMED WHEN RAIN IS IMMINENT OR IS FORECASTED IN THE NEXT 48 HOURS:

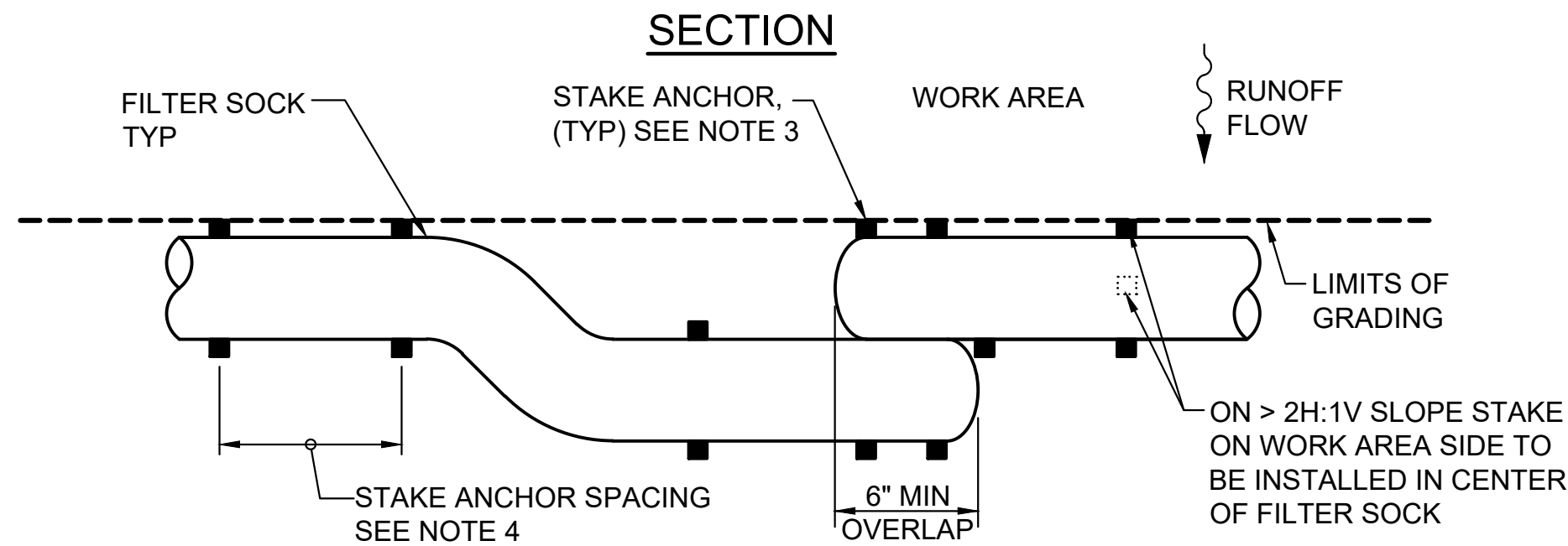
- TEMPORARY SUSPENSION OF GRADING/TRENCHING.
- INSPECT ALL PERIMETER CONTROLS AND INLET PROTECTION DEVICES AND MAINTAIN AS NEEDED. REINSTALL ANY PERIMETER CONTROLS THAT WERE REMOVED DUE TO ACTIVE WORK IN THE AREA. IF A SEVERE STORM IS EXPECTED, REMOVE INLET PROTECTION DEVICES TO PREVENT FLOODING ON SURROUNDING STREETS.
- COVER OR RELOCATE MATERIAL STOCKPILES AND LIQUID MATERIAL CONTAINERS TO AVOID CONTACT WITH RAINWATER.
- PLACE SPILL PANS OR OIL-ONLY SPILL PADS UNDER CONSTRUCTION VEHICLES TO PREVENT RUNOFF FROM CONTACTING ANY SPILLED PETROLEUM PRODUCTS. PROPERLY DISPOSE OF ANY ACCUMULATED OILY WATER AFTER THE RAIN EVENT.
- RE-INSPECT AFTER THE RAIN EVENT AND REPLACE OR MAINTAIN BMPS AS NEEDED.

PROJECT SEQUENCE:

- INSTALL DRAIN INLET PROTECTION, PERIMETER CONTROLS, AND TEMPORARY FENCING FOR PROTECTED AREAS, CLEARING AND GRUBBING AS NECESSARY FOR THE INSTALLATION OF THESE BMPS.
- PROCEED WITH CONSTRUCTION WITH LEAST POSSIBLE DISTURBANCE OF VEGETATIVE AREAS AND TEMPORARY STRUCTURES.
- STABILIZE EXPOSED SOIL USING VEGETATION AS SOON AS POSSIBLE.
- REMOVE OR DISMANTLE TEMPORARY EROSION CONTROL STRUCTURES AFTER PERMANENT STABILIZATION.

REVISION NO.	SYM.	DESCRIPTION	SHT. ____ OF ____	DATE	APPROVED:	
<div> </div>			<div>DEPARTMENT OF DEFENSE</div> <div>STATE OF HAWAII</div> <div>PUBLIC SERVICE BUILDING FENCING AND STAIRWAY</div> <div>BIRKHIRMER EOC</div> <div>HONOLULU OAHU HAWAII</div>			
			<div>EROSION AND SEDIMENT CONTROL NOTES</div>			
			<div>BOWERS + KUBOTA CONSULTING</div> <div>DESIGN BY: MT/AT</div> <div>DRAWN BY: MT/AT</div> <div>SCALE: AS NOTED</div>		<div>JOB NO. CA-202107-C</div> <div>DATE DECEMBER 2021</div>	
			<div>CHECKED BY: JC/MSN</div> <div>APPROVED BY: JC/MSN</div>		<div>DRAWING NO. C-3</div> <div>SHEET 6 OF 13 SHTS.</div>	
<small>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. ("OBSERVATION OF CONSTRUCTION") SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 16-115-2 DEFINITIONS, EFFECTIVE 8/29/94.)</small>						

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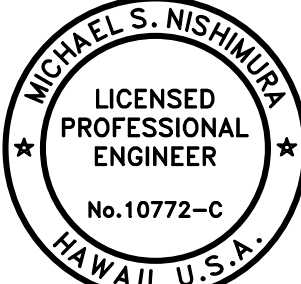


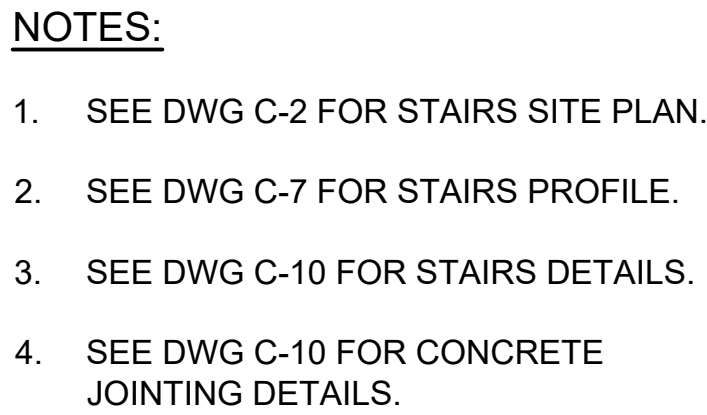
OVERLAP PLAN

FILTER SOCK DETAIL

NOT TO SCALE

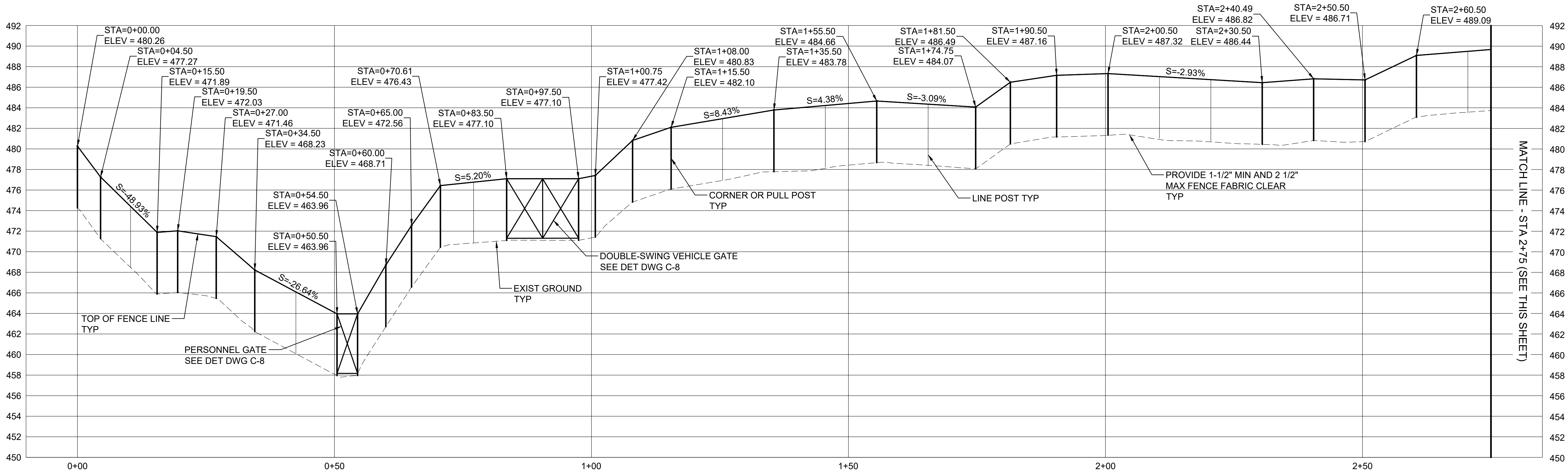
1. FILTER SOCK SHALL NOT CONTAIN BIOSOLIDS, SHALL BE BIO-DEGRADABLE AND SHALL COMPLY WITH EPA GUIDELINES AND BE CONSISTENT WITH THE CITY & COUNTY OF HONOLULU STORM WATER BEST MANAGEMENT PRACTICE MANUAL CONSTRUCTION, NOV. 2011.
2. REMOVE ACCUMULATED SEDIMENT FROM THE UPSLOPE SIDE OF THE FILTER SOCK REGULARLY TO ENSURE PROPER FUNCTIONALITY.
3. 3/4"x3/4"x16" MINIMUM WOODEN STAKE ANCHOR.
4. ON < 4H:1V SLOPE, NO STAKE ANCHOR REQUIRED.
ON 4H:1V TO 3H:1V SLOPE, STAKE AT 10 FT ON CENTER.
ON > 3H:1V TO 2H:1V SLOPE, STAKE AT 5 FT TO 10 FT ON CENTER.
ON > 2H:1V SLOPE, STAKE AT 5 FT ON CENTER, STAKES ON WORK AREA SIDE SHALL BE INSTALLED IN CENTER OF FILTER SOCK.

REVISION NO.	SYM.	DESCRIPTION	SHT ____ OF ____	DATE	APPROVED:
			DEPARTMENT OF DEFENSE STATE OF HAWAII		
			PUBLIC SERVICE BUILDING FENCING AND STAIRWAY BIRKHIMER EOC		
			HONOLULU	OAHU	HAWAII
EXPIRATION DATE 04/30/2022			EROSION AND SEDIMENT CONTROL DETAILS		
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY SUPERVISION. "OBSERVATION OF CONSTRUCTION" SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 16-115-2 DEFINITIONS, EFFECTIVE 8/29/84.)			BOWERS + KUBOTA CONSULTING		JOB NO.
			DESIGN BY: MT/AT	CHECKED BY: JC/MSN	CA-201207-C
			DRAWN BY: MT/AT	APPROVED BY: JC/MSN	
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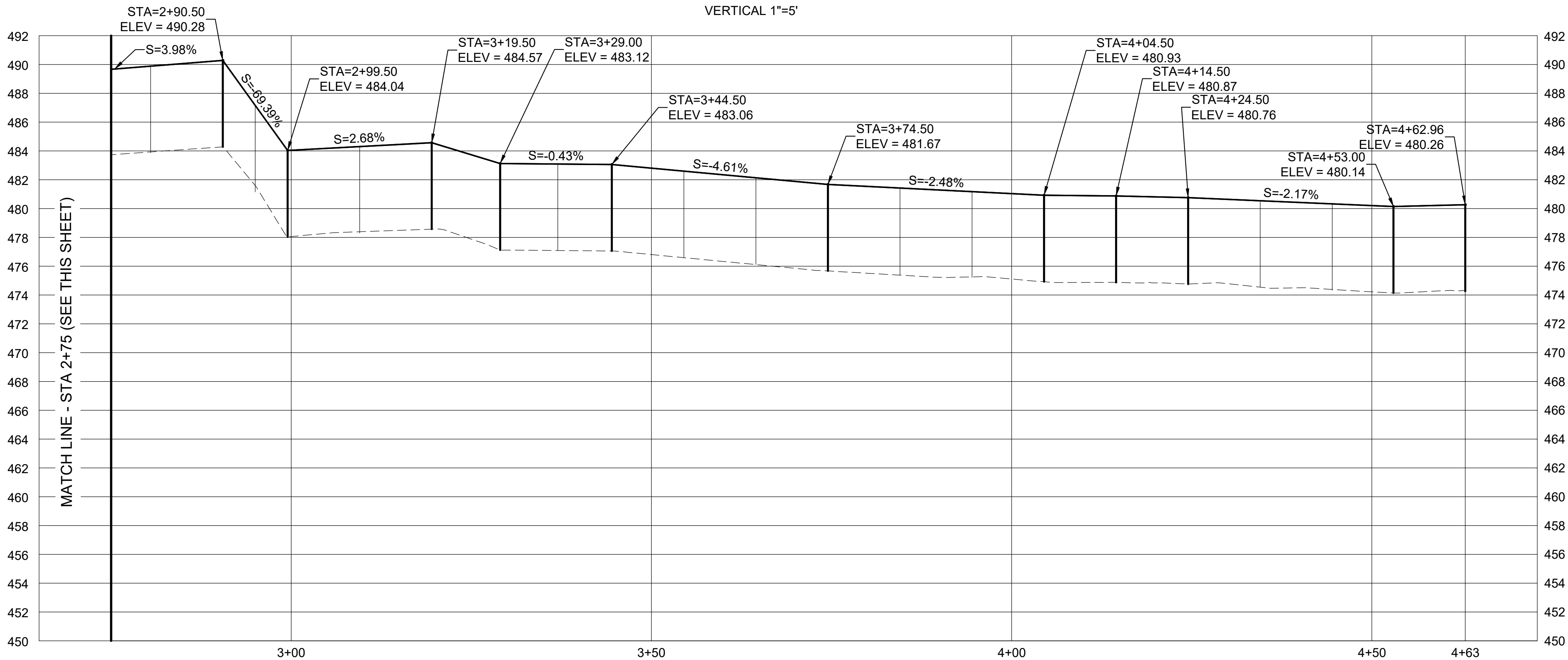
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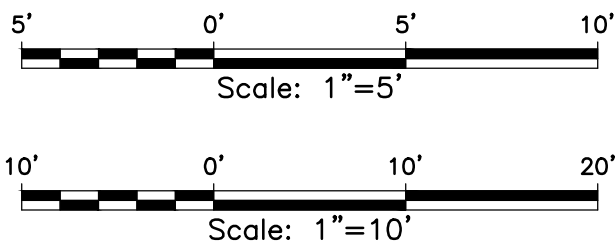
FENCE PROFILE

SCALE: HORIZONTAL 1"=10'
VERTICAL 1"=5'



FENCE PROFILE

SCALE: HORIZONTAL 1"=10'
VERTICAL 1"=5'



NOTE:

- FENCE FABRIC AND BOTTOM TENSION WIRE NOT SHOWN FOR CLARITY

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED:
MICHAEL S. NISHIMURA LICENSED PROFESSIONAL ENGINEER No. 10772-C HAWAII, U.S.A. EXPIRATION DATE 04/30/2022		DEPARTMENT OF DEFENSE STATE OF HAWAII PUBLIC SERVICE BUILDING FENCING AND STAIRWAY BIRKHIRMER EOC HONOLULU OAHU HAWAII			
BOWERS + KUBOTA CONSULTING		JOB NO.	DRAWING NO.		
DESIGN BY: MT/AT	CHECKED BY: JC/MSN	CA-202107-C	C-6		
DRAWN BY: MT/AT	APPROVED BY: JC/MSN	DATE	SHEET		
SCALE: AS NOTED		DECEMBER 2021	OF	13	SHTS.

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FILE: _____ DRAWER: _____ FOLDER: _____

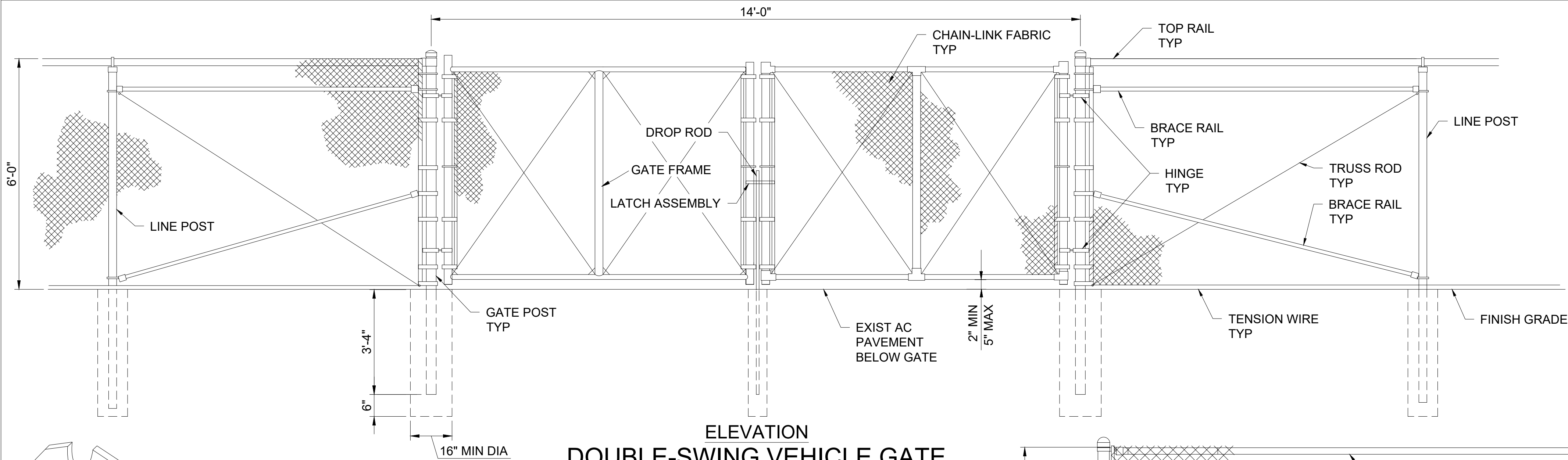
100% SUBMITTAL

1. SEE DWG C-2 FOR STAIRS SITE PLAN.
2. SEE DWG C-5 FOR STAIRS GRADING PLAN.
3. HANDRAIL NOT SHOWN FOR CLARITY; SEE DWG C-10 FOR DETAILS.

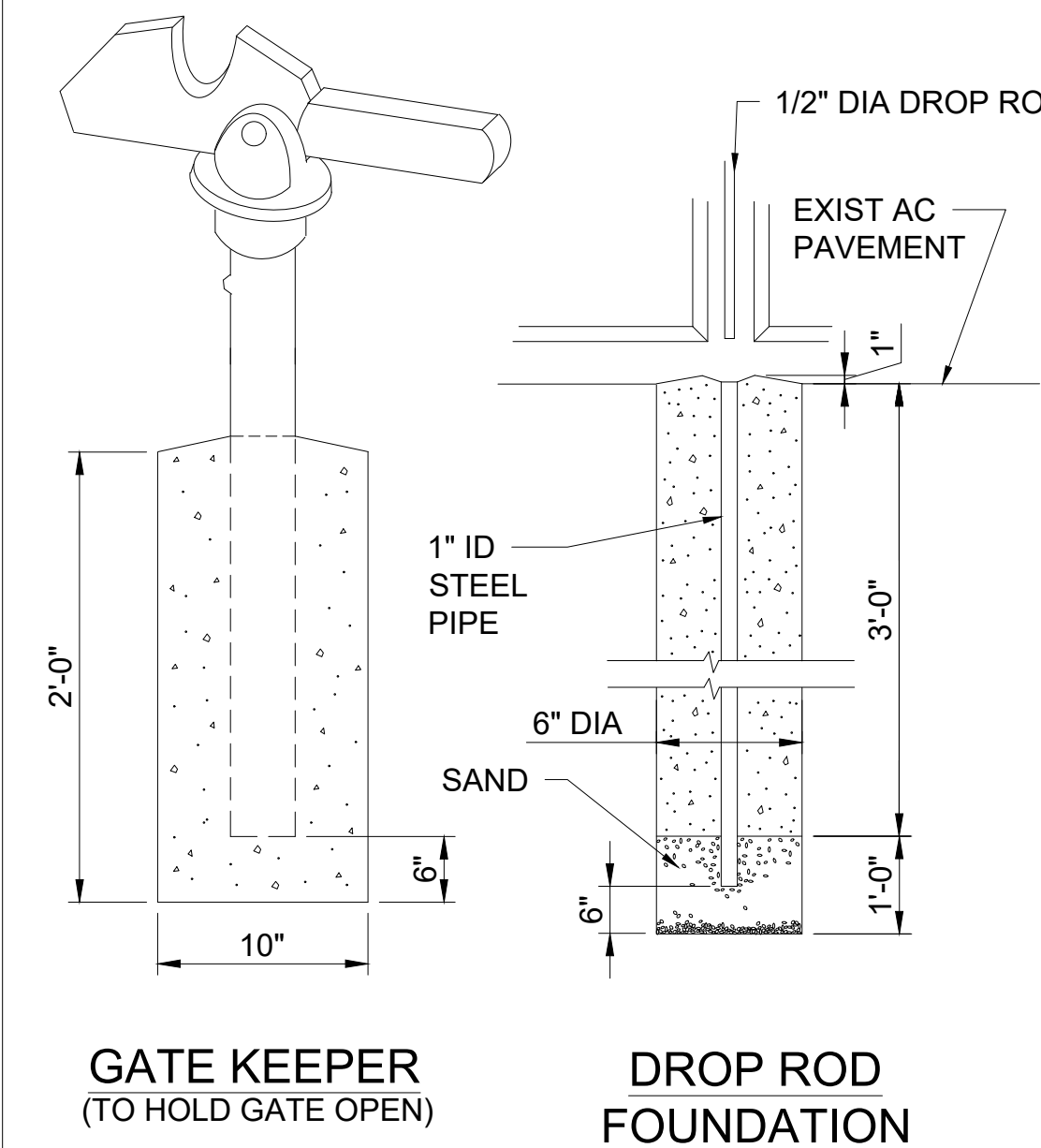


FILE	DRAWER	FOLDER
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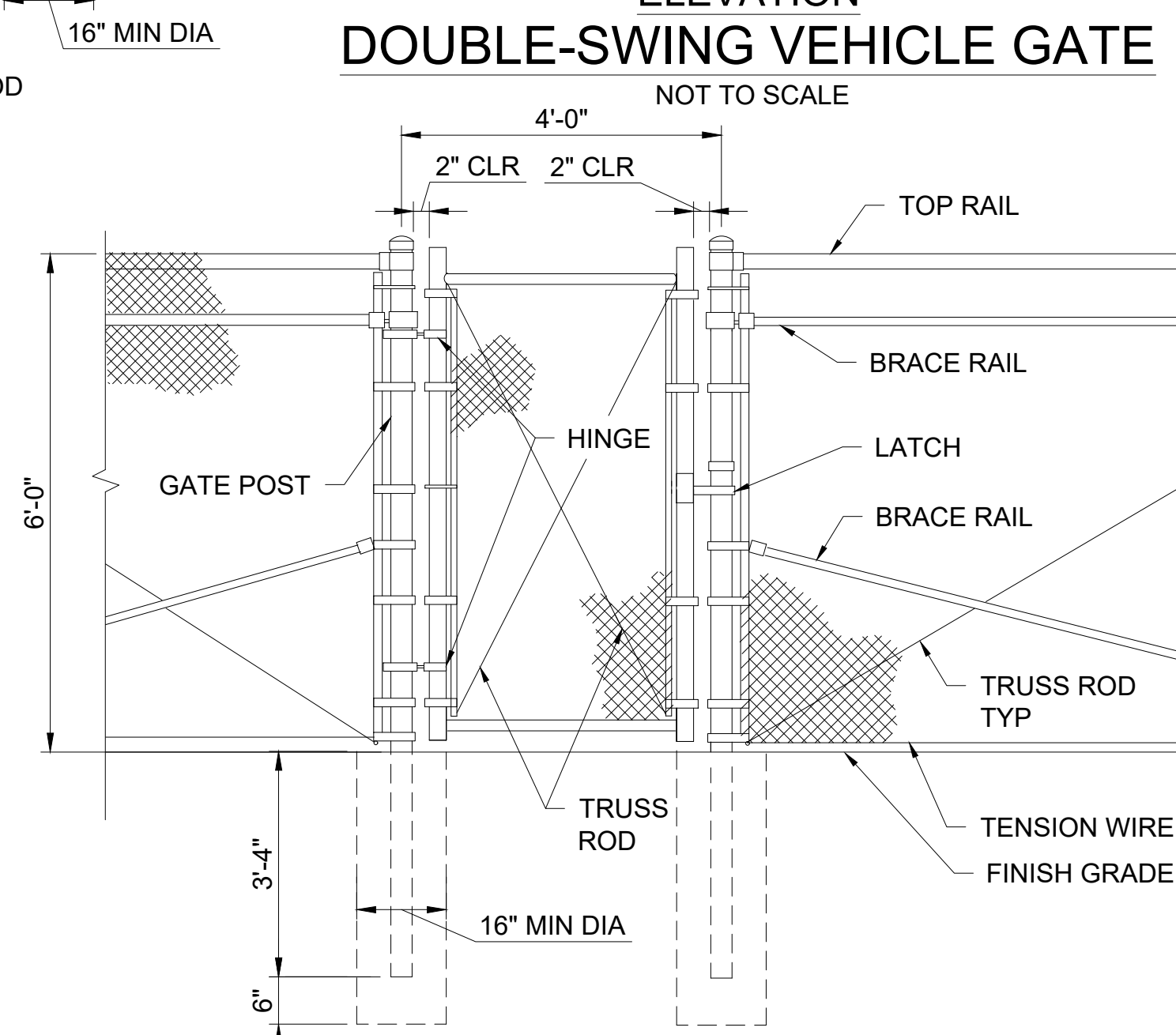
Fri, 25 Feb 2022 10:01:18 AM
 \\Bentley\share\civil\DD\2021700800 Diamond Head EOC\03 Graphics\CAU\Sheets\C-8 Fence Details 1.dwg



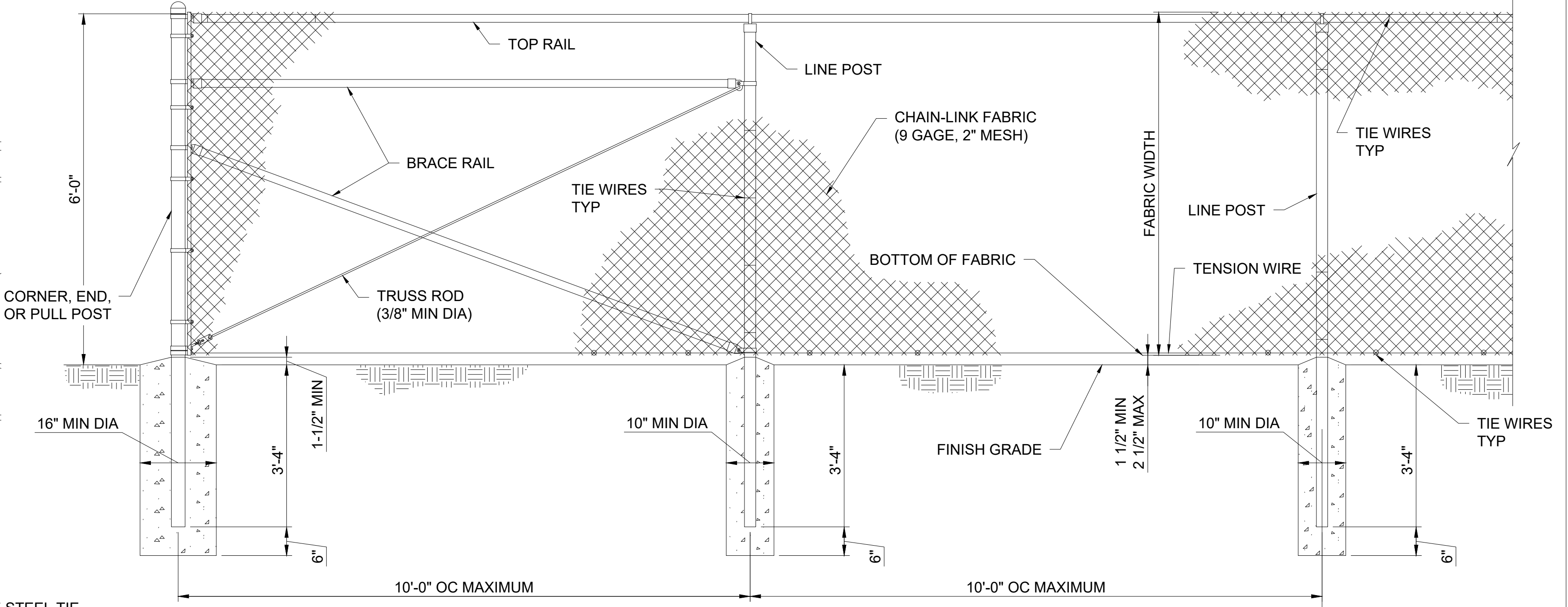
ELEVATION
DOUBLE-SWING VEHICLE GATE



SWING GATE DETAILS



MAINTENANCE PERSONNEL GATE



FENCING NOTES:

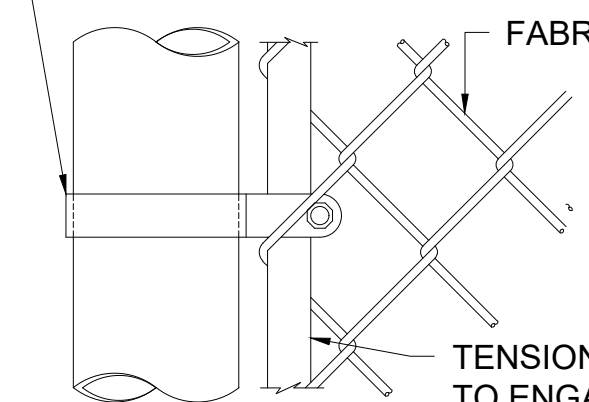
- SOME FOOTINGS MAY REQUIRE EXCAVATION OF ROCK OR VERY FIRM SOILS. PROVIDE NECESSARY EQUIPMENT AND TOOLS REQUIRED TO BORE AS PART OF WORK.
- PRIOR TO INSTALLING FENCE, REMOVE ACCUMULATION OF DEBRIS OR GREEN WASTE ALONG AND ADJACENT TO THE PROPOSED FENCE LINE. PROVIDE MINOR (6 INCHES OR LESS IN HEIGHT OR DEPTH) LOCALIZED GRADING TO CUT HIGH SPOTS AND FILL LOW SPOTS ALONG FENCE ALIGNMENT TO MAINTAIN CLEARANCES TO FINISH GRADE INDICATED IN THESE PLANS.
- FOR FENCING ON SLOPED GRADE, POSTS SHALL BE INSTALLED PLUMB WITH THE FENCING.
- ATTACH AND SECURE MESH TO POSTS AND HORIZONTAL RAILS AND POSTS WITH FASTENERS AS IN MANNER SPECIFIED BY MANUFACTURER. PROVIDE SPECIAL SIZED POSTS, END TENSIONER ASSEMBLIES AT CORNERS AND TERMINATION (GATE) POSTS AS RECOMMENDED BY MANUFACTURER.
- MESH CONNECTION HARDWARE INDICATED IN DETAILS IS FOR GENERAL CONCEPT/REQUIREMENTS ONLY. THE ACTUAL TYPE, NUMBER CONFIGURATION AND/OR LOCATION WILL VARY DEPENDING ON MANUFACTURER.
- WIRE TIES, RAILS, POSTS, AND BRACES SHALL BE CONSTRUCTED ON THE SECURE SIDE OF THE FENCE ALIGNMENT. CHAIN-LINK FABRIC SHALL BE PLACED ON THE SIDE OPPOSITE THE SECURE AREA.

CHAIN-LINK PERIMETER FENCE

NOT TO SCALE

TENSION BAND DETAIL

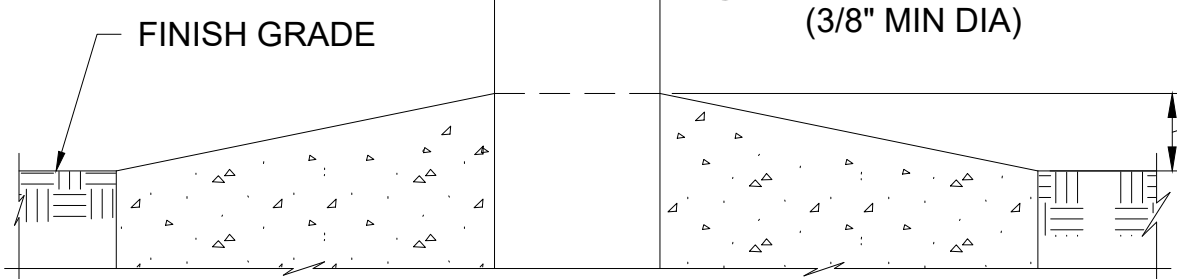
TENSION BAND (15" OC MAX AND WITHIN 4" FROM TOP AND BOTTOM OF FRABRIC)



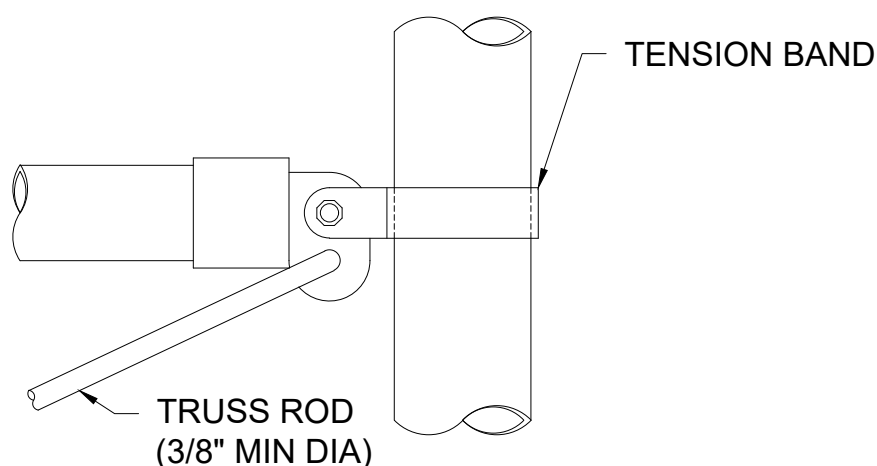
END OR GATE POST DETAIL

FASTENING DETAILS

NOT TO SCALE



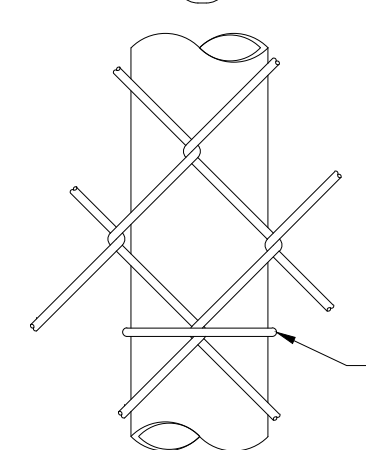
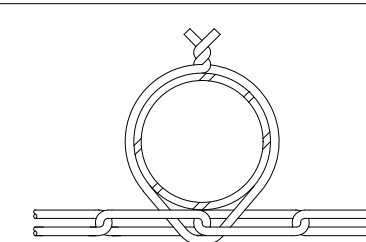
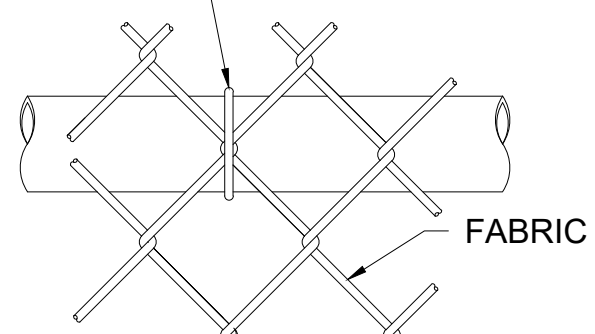
TRUSS ROD AND BAND



ROUND POST

TOP OR BRACE RAIL ATTACHMENT

9-GAGE STEEL TIE WIRES (2'-0" OC MAX)



ROUND POST
LINE POST ATTACHMENTS

NOT TO SCALE

NOTES:

- DETAILS SHOWN ARE TO CLARIFY REQUIREMENTS AND ARE NOT INTENDED TO LIMIT OTHER TYPE OF FENCE SECTIONS AND METHODS OF INSTALLATION THAT COMPLY WITH THE SPECIFICATIONS.
- SWING GATES SHALL BE CONSTRUCTED WITH DROP RODS, PADLOCKS, LATCH ASSEMBLY AND GATE KEEPERS EXCEPT AS NOTED.
- PROVIDE TWO PADLOCKS AND FOUR KEYS ALL KEYED ALIKE.

REVISION NO.		SYM.	DESCRIPTION	SHT. ____ OF ____	DATE	APPROVED:
<div><div><div>MICHAEL S. NISHIMURA</div><div>LICENSED PROFESSIONAL ENGINEER</div><div>No. 10772-C</div><div>HAWAII, U.S.A.</div></div><div>EXPIRATION DATE 04/30/2022</div></div>				DEPARTMENT OF DEFENSE		
				STATE OF HAWAII		
PUBLIC SERVICE BUILDING FENCING AND STAIRWAY				BIRKIMIR EOC		
HONOLULU				OAHU		HAWAII
FENCE DETAILS 1						
BOWERS + KUBOTA CONSULTING				JOB NO.		DRAWING NO.
DESIGN BY:		MT/AT		CHECKED BY:		JC/MSN
DRAWN BY:				APPROVED BY:		JC/MSN
SCALE:		AS NOTED		DATE		SHEET
				DECEMBER 2021		11
				OF		13 SHTS.

GROUND ROD AND GROUNDING CONDUCTOR

T-CONNECTION TO FENCE

T-CONNECTION TO GROUND ROD

GENERAL ELECTRICAL NOTES:

1. THE SUBCONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELF WITH ALL EXISTING CONDITIONS PRIOR TO BIDDING. BID SUBMISSION SHALL BE CONSIDERED AS CONFIRMATION THAT THE SUBCONTRACTOR HAS VISITED THE SITE AND HAS RESOLVED ALL DISCREPANCIES AND QUESTIONS REGARDING THE WORK. NO EXTRA PAYMENT WILL BE GIVEN FOR WORK MADE NECESSARY BY THE SUBCONTRACTORS FAILURE TO VISIT THE SITE.
2. THE SUBCONTRACTOR SHALL PROVIDE AND INSTALL ALL JUNCTION AND PULL BOXES REQUIRED FOR THE INSTALLATION OF ELECTRICAL DEVICES AND EQUIPMENT, WHETHER OR NOT SPECIFICALLY INDICATED ON THE PLANS. SIZING OF THESE BOXES SHALL BE PER THE NATIONAL ELECTRICAL CODE.
3. ALL ABOVE GRADE GROUNDING CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL. ALL GROUND CONDUCTORS SHALL BE # 2 AWG. SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
4. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
5. MAXIMUM RESISTANCE OF THE COMPLETED GROUND SYSTEM SHALL NOT EXCEED 5 OHMS. TESTING SHALL BE PERFORMED IN ACCORDANCE WITH PROJECT SPECIFICATION FOR GROUNDING SYSTEMS. USING ALL OF POTENTIAL METHOD.

GROUND RING

GROUND TO GATE POST CONNECTION

GROUND TO FENCE POST CONNECTION

FENCE/GATE POST GROUNDING

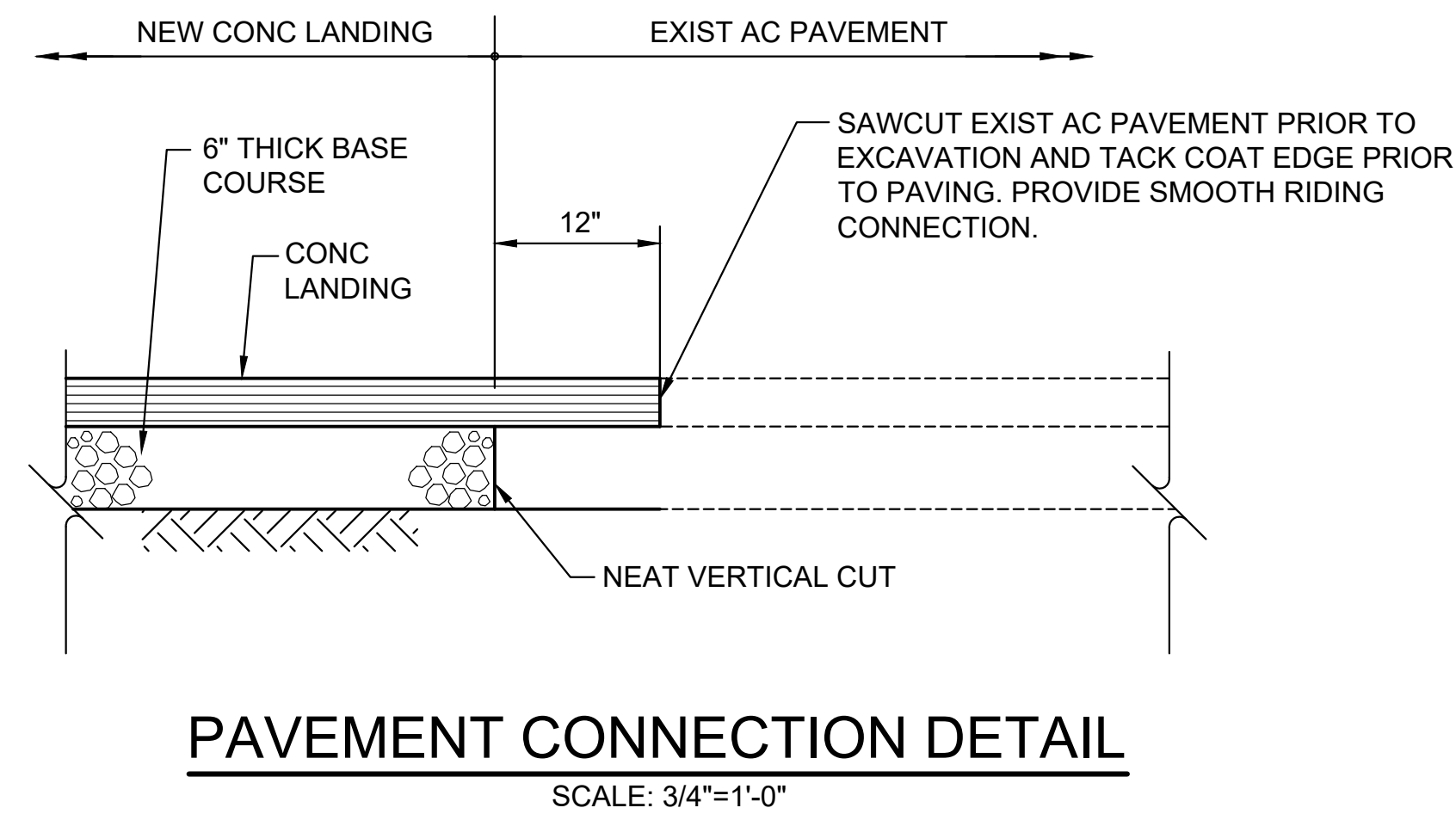
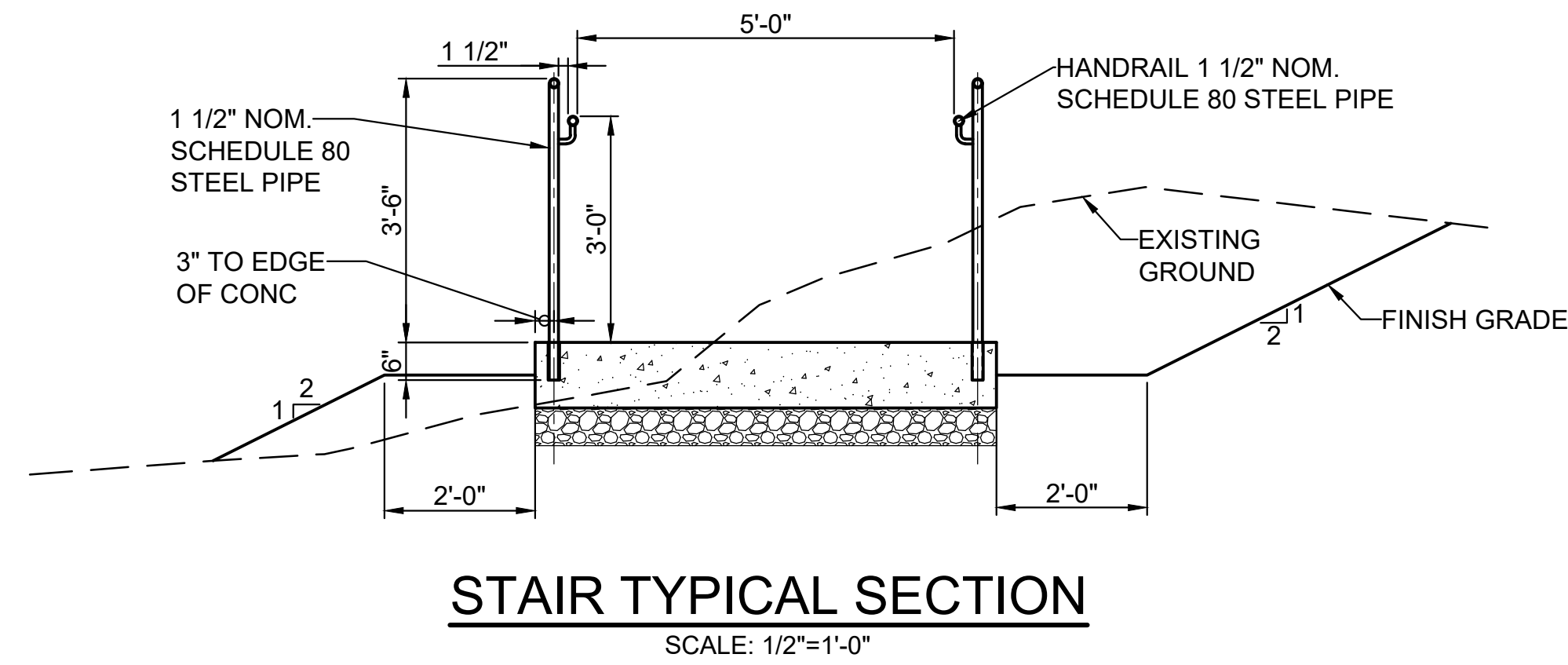
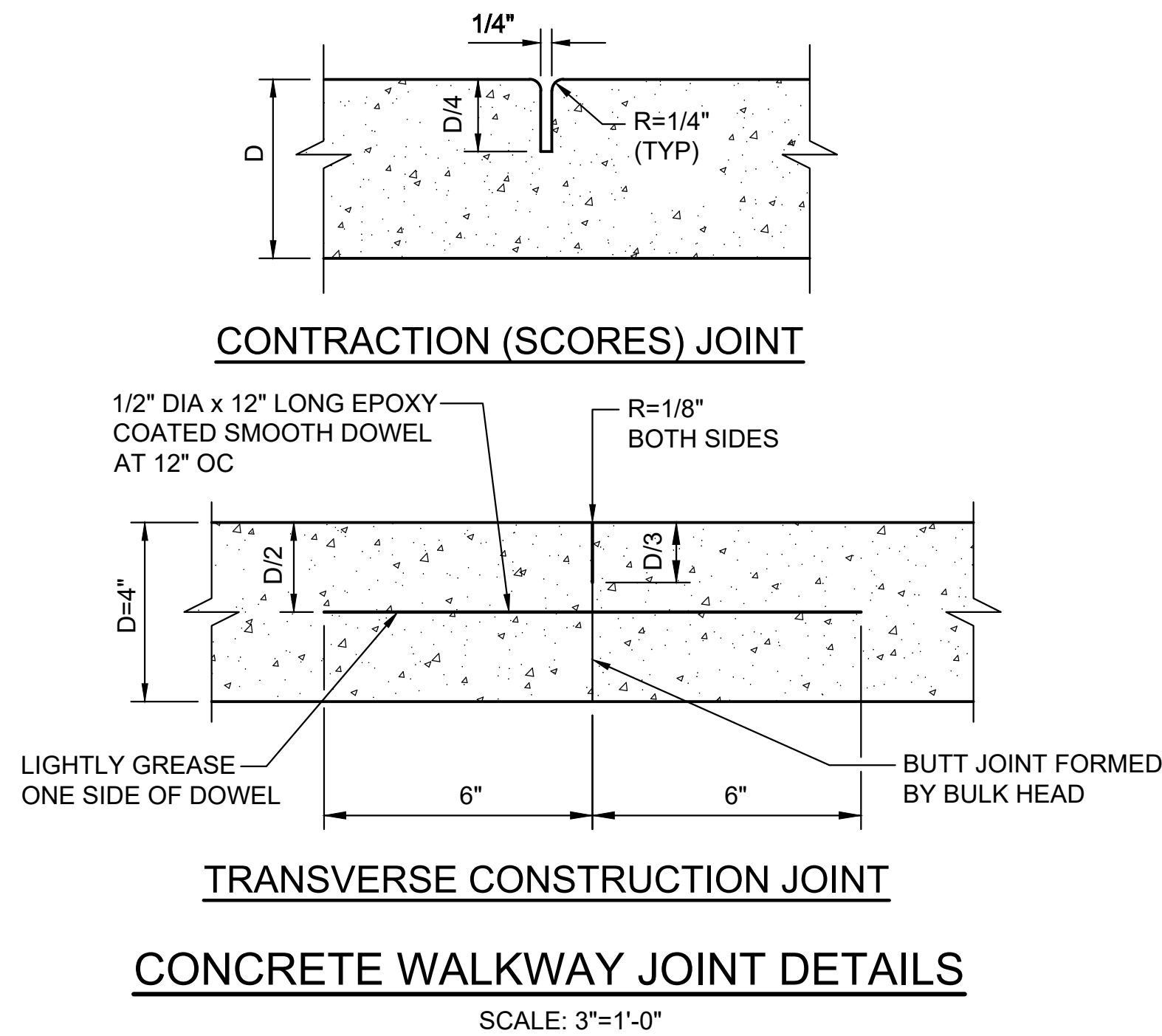
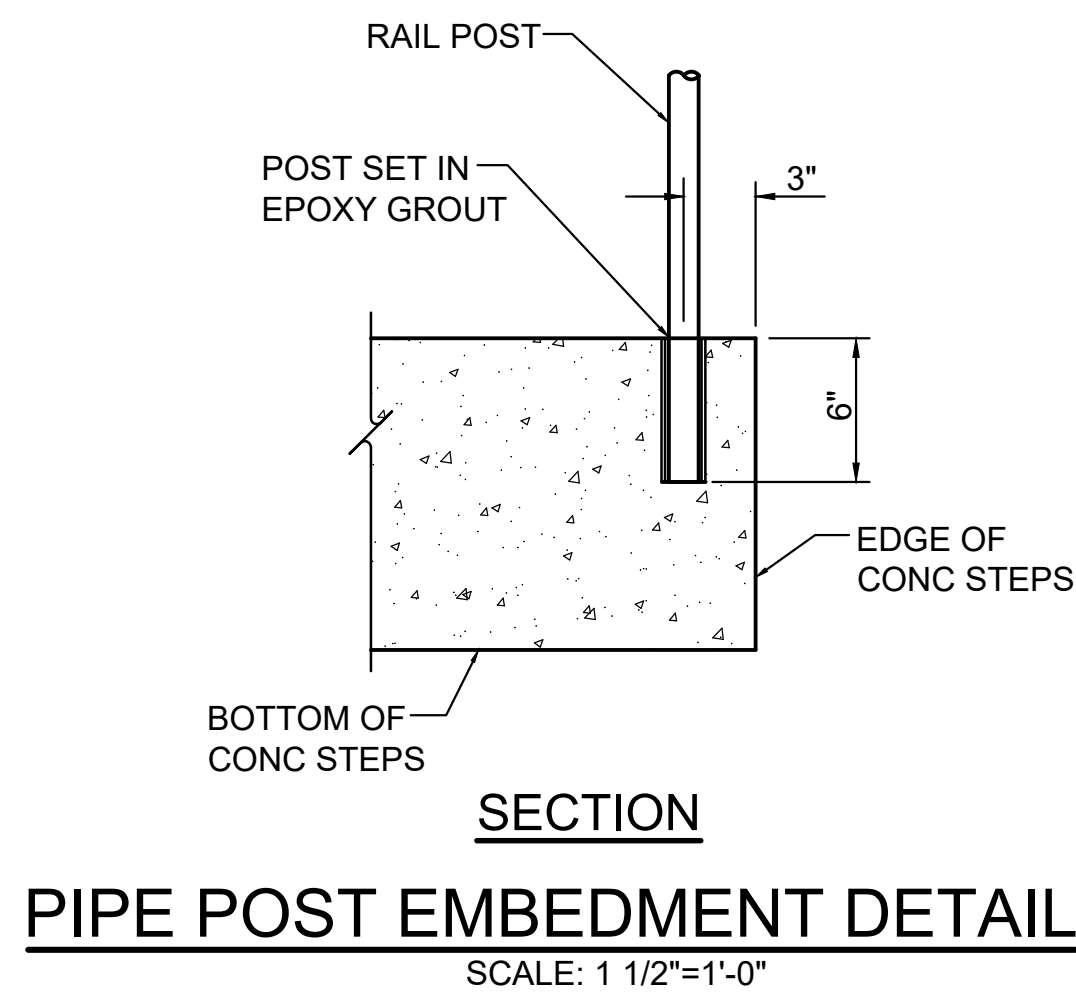
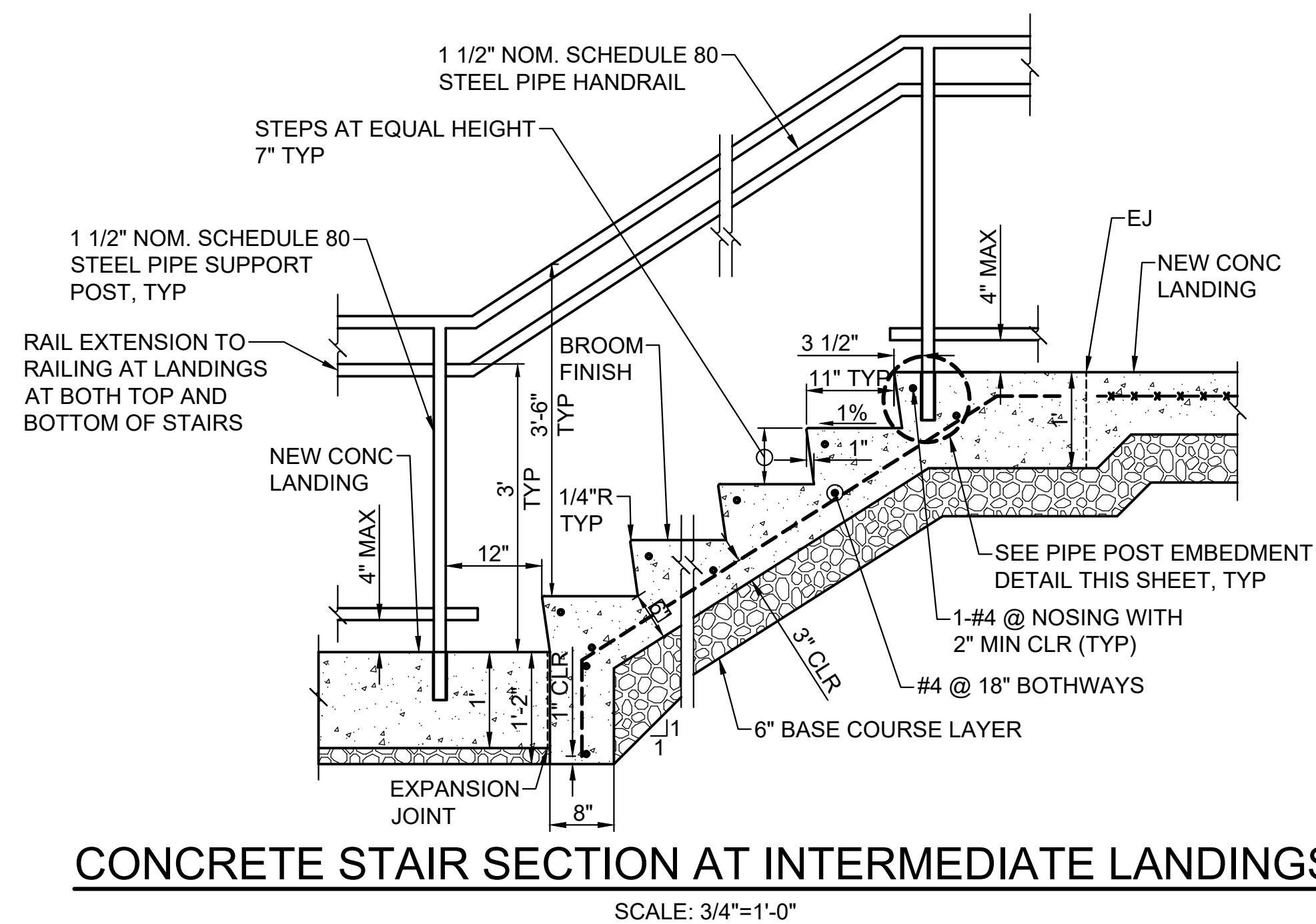
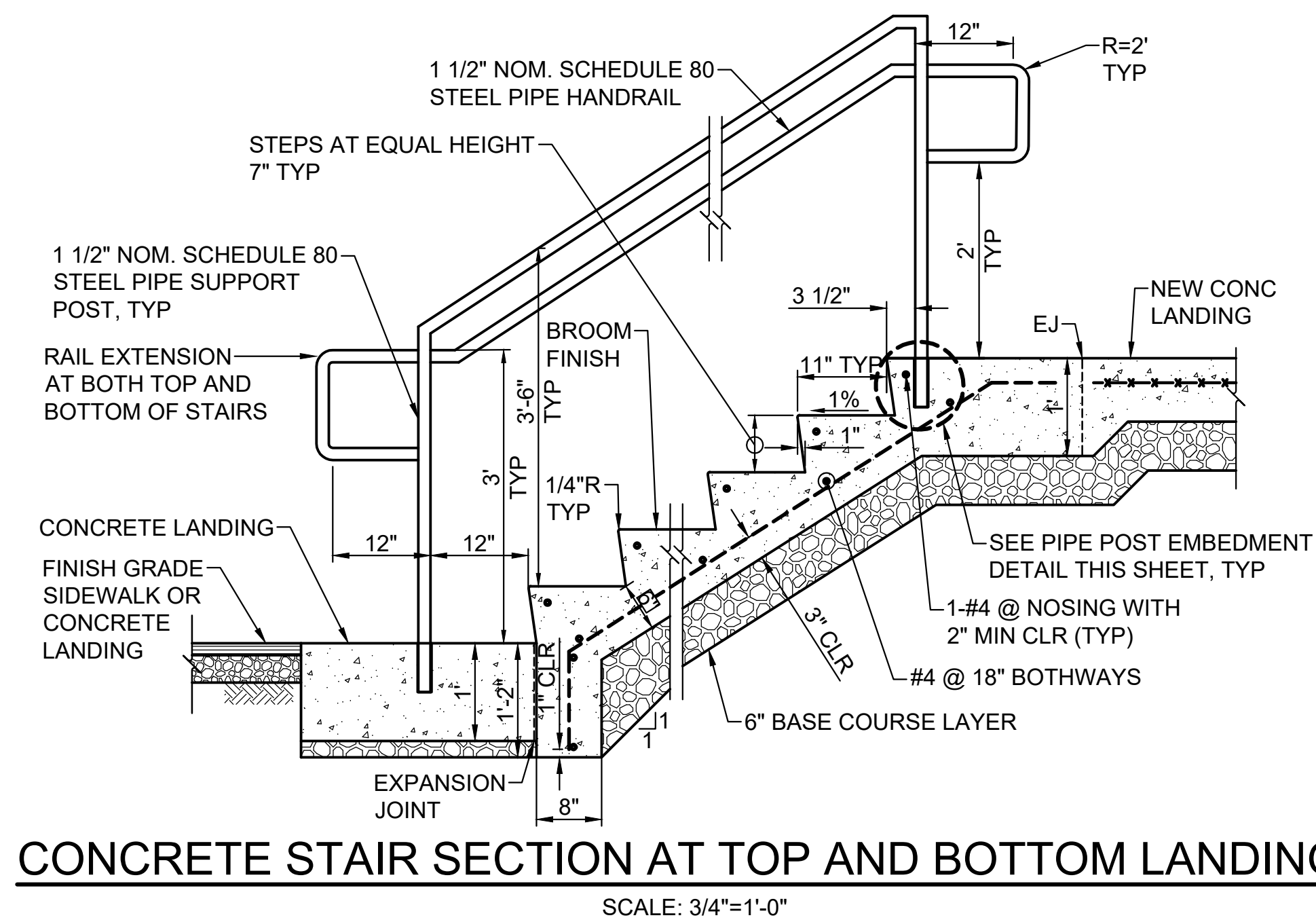
GROUND INSPECTION PORT

SECTION

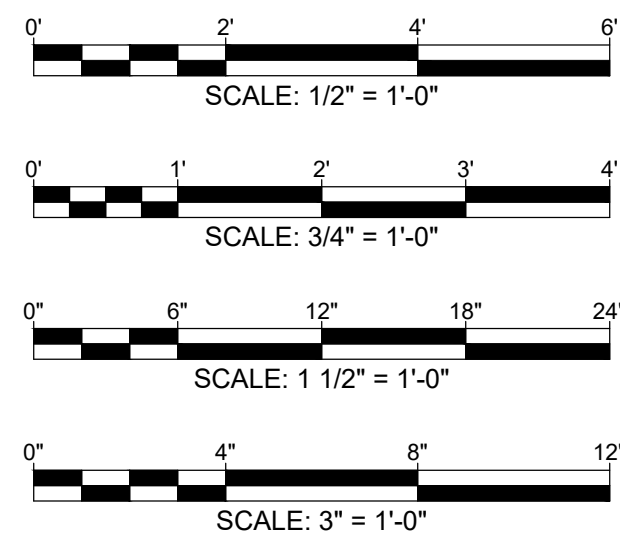
GROUND RING TRENCH

NOT TO SCALE

[illegible]



- NOTES:**
1. PLACE CONSTRUCTION JOINTS AT INTERVALS NOT TO EXCEED 20 FEET O.C. MAXIMUM.
 2. SPACE CONTRACTION JOINTS AT A DISTANCE EQUAL TO THE WALK WIDTH OR EQUAL SQUARES ON CENTER, WHICHEVER IS LESS.
 3. PLACE ISOLATION JOINTS WHERE WALK BUTTS AGAINST EXISTING OR NEW WALK, STRUCTURES, PADS AND TRANSVERSE WALKS.
 4. CONCRETE WALKWAY MUST BE BROOM FINISHED IN A DIRECTION TRANSVERSE TO THAT OF THE MAIN TRAFFIC.
 5. CONCRETE MUST HAVE A MINIMUM COMPREHENSIVE STRENGTH OF 2500 PSI AT 28 DAYS AND SHALL CONFORM TO ASTM C94.



REVISION NO.	SYM.	DESCRIPTION	SHT. ____ OF ____	DATE	APPROVED:		
<div><p>Michael S. NISHIMURA LICENSED PROFESSIONAL ENGINEER No. 10772-C HAWAII, U.S.A.</p></div> <p>EXPIRATION DATE 04/30/2022</p> <p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. ("OBSERVATION OF CONSTRUCTION") SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER I, SECTION 16-115-2 DEFINITIONS, EFFECTIVE 8/29/94.)</p>			DEPARTMENT OF DEFENSE STATE OF HAWAII				
			PUBLIC SERVICE BUILDING FENCING AND STAIRWAY BIRKHIMER EOC				
			HONOLULU	OAHU	HAWAII		
			STAIRS DETAILS				
			BOWERS + KUBOTA CONSULTING		JOB NO.	DRAWING NO.	
			DESIGNED BY: MT/AT	CHECKED BY: JC/MSN	CA-20107-C	<div>C-10</div> <div>SHEET 13</div>	
DRAWN BY: MT/AT	APPROVED BY: JC/MSN	DATE					
SCALE: AS NOTED		DECEMBER 2021		OF 13	SHEETS		