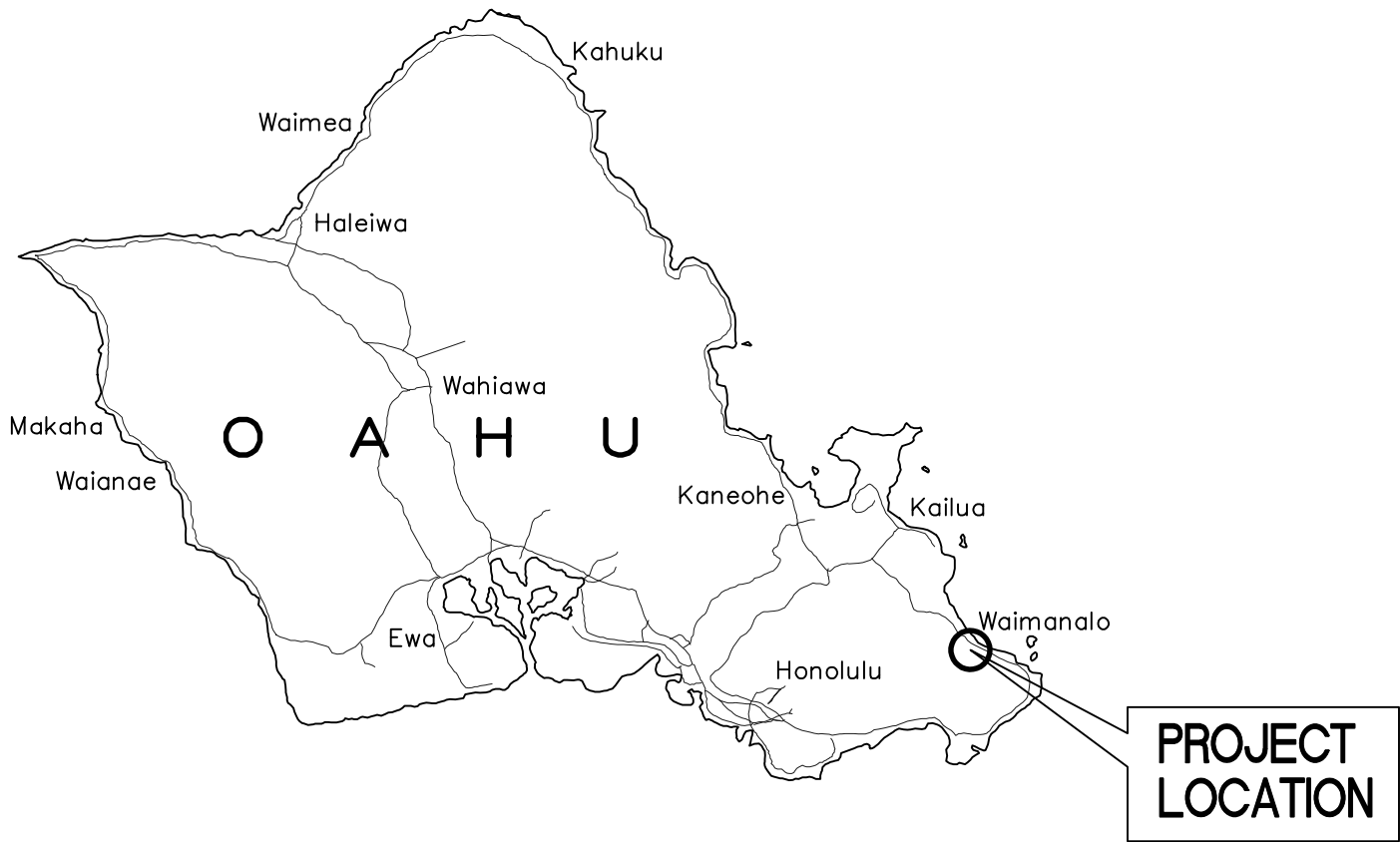


NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS

JOB No. IFB-22-HHL-025
WAIMANALO, OAHU, HAWAII

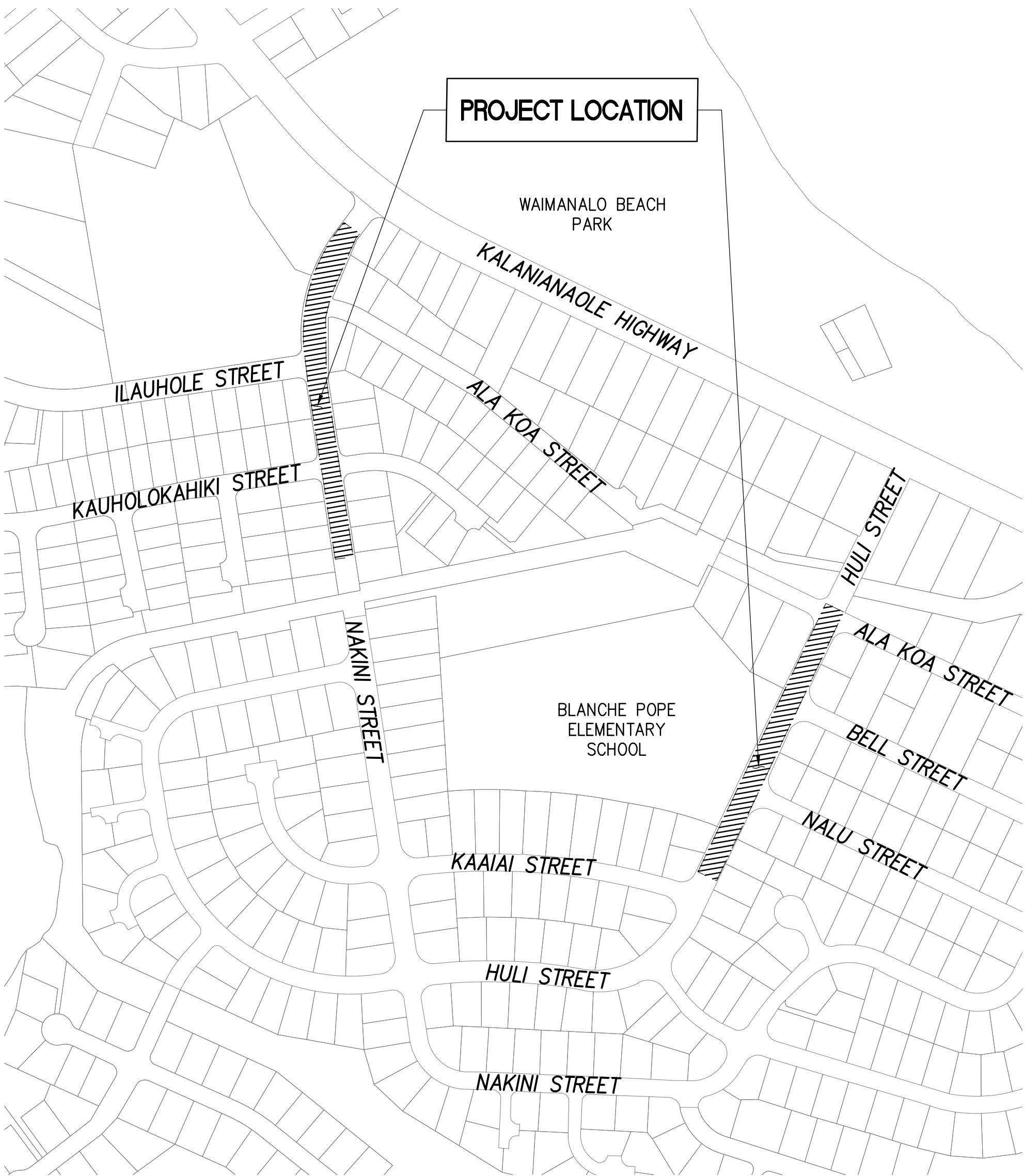



 **VICINITY MAP**
NOT TO SCALE

PREPARED FOR:

DEPARTMENT OF HAWAIIAN HOME LANDS
STATE OF HAWAII

LOCATION MAP



 **PROJECT LOCATION MAP**
SCALE: 1" = 400'

DRAWING INDEX

SHEET NO.	DRAWING NO.	DESCRIPTION
1	T-001	TITLE SHEET
2	C-001	GENERAL CIVIL NOTES - 1
3	C-002	GENERAL CIVIL NOTES - 2
4	C-003	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
5	C-101	EROSION AND SEDIMENT CONTROL PLAN
6	C-102	GENERAL SITE PLAN
7	C-103	NAKINI STREET SITE PLAN
8	C-104	HULI STREET SITE PLAN
9	C-501	DETAILS - 1
10	C-502	DETAILS - 2
11	C-503	DETAILS - 3
12	C-504	DETAILS - 4
13	C-505	DETAILS - 5
14	C-701	TRAFFIC CONTROL PLAN - 1
15	C-702	TRAFFIC CONTROL PLAN - 2
16	C-703	TRAFFIC CONTROL PLAN - 3
17	C-704	TRAFFIC CONTROL PLAN - 4
18	C-705	TRAFFIC CONTROL PLAN - 5

APPROVED

CHAIRMAN, HAWAIIAN HOMES COMMISSION
DEPARTMENT OF HAWAIIAN HOME LANDS
STATE OF HAWAII

DATE

DIRECTOR, DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

DATE

i:\1. projects\38 - dhhl\13803 - nakini street improvements\DRAWINGS\GENERAL NOTES.dwg - 4/16/2022 12:09 PM

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 & COUNTY OF HONOLULU AND THE COUNTIES OF KAUAI, MAUI, 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 UTILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. WHEREVER CONNECTIONS TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTION TO VERIFY THE LOCATIONS AND DEPTHS PRIOR TO EXCAVATION.
- 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/DEVELOPER/OWNER 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 14 OF THE REVISED ORDINANCES OF HONOLULU, AS AMENDED. BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING CONSTRUCTION.

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

- STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES THAT DISTURB ONE (1) ACRE OR MORE, AND
- 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 STANDARD (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. THE OWNER/DEVELOPER/CONTRACTOR IS RESPONSIBLE FOR OBTAINING OTHER FEDERAL, STATE, OR LOCAL AUTHORIZATIONS AS REQUIRED BY LAW.

- FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEERING BRANCH, D.P.P. AT 768-8084 TO ARRANGE FOR INSPECTIONAL 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.
- CONFINED SPACE

FOR ENTRY BY CITY 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:

- 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:
 - FULL BODY HARNESSSES FOR UP TO TWO PERSONNEL.
 - LIFELINE AND ASSOCIATED CLIPS.
 - INGRESS/EGRESS AND FALL PROTECTION EQUIPMENT.
 - TWO-WAY RADIOS (WALKIE-TALKIES) IF OUT OF LINE OF SIGHT.
 - EMERGENCY (ESCAPE) RESPIRATOR (10 MINUTES DURATION).
 - CELLULAR TELEPHONE TO CALL FOR EMERGENCY ASSISTANCE.
 - CONTINUOUS GAS DETECTOR (CALIBRATED) TO MEASURE OXYGEN, HYDROGEN SULFIDE CARBON MONOXIDE, AND FLAMMABLES (CAPABLE OF MONITORING AT A DISTANCE AT LEAST 20- FEET AWAY).
 - PERSONAL MULTI-GAS DETECTOR TO BE CARRIED BY INSPECTOR.

II. CONTINUOUS FORCED AIR VENTILATION ADEQUATE TO PROVIDE SAFE ENTRY CONDITIONS.

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

- 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 (692-8015). IN ADDITION, FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL INFORM THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING (768-8084).
- VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. ALL CONFLICTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
- ALL EXISTING UTILITIES TO REMAIN IN USE, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE PROTECTED AT ALL TIMES BY THE CONTRACTOR DURING CONSTRUCTION UNLESS SPECIFIED ON THE PLANS TO BE ABANDONED. ANY DAMAGES TO EXISTING UTILITIES SHALL BE REPAIRED AND PAID FOR BY THE CONTRACTOR.
- THE CONTRACTOR SHALL NOTIFY ALL AGENCIES TO VERIFY THE ACTUAL LOCATION OF ALL UTILITIES IN THE PROJECT AREA PRIOR TO EXCAVATION. THE CONTRACTOR SHALL COORDINATE ALL WORK.
- THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION OR BETTER CONDITION ALL IMPROVEMENTS AND VEGETATION DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. UNLESS PROVIDED FOR SPECIFICALLY IN THE PROPOSAL, DEMOLITION AND RESTORATION OF EXISTING ITEMS SHALL BE INCIDENTAL.
- FOR PROJECTS ABUTTING STATE HIGHWAYS' RIGHTS-OF-WAY, THE OWNER OR HIS AUTHORIZED REPRESENTATIVE SHALL NOTIFY THE STATE DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION, OAHU DISTRICT, DRAINAGE DISCHARGE UNIT AT 831-6793 FOR AN ASSESSMENT OF STATE HIGHWAYS PERMIT REQUIREMENTS.

CONSTRUCTION NOTES (CONT.)

- EXISTING TOPOGRAPHIC DATA WAS TAKEN FROM A TOPOGRAPHIC SURVEY PREPARED BY CONTROL POINT SURVEYING, INC. ENTITLED "TOPOGRAPHIC SURVEY MAP DEPARTMENT OF HAWAIIAN HOME LANDS HULI STREET" AND "TOPOGRAPHIC SURVEY MAP DEPARTMENT OF HAWAIIAN HOME LANDS NAKINI STREET", DATED NOVEMBER 8, 2021 AND NOVEMBER 12, 2021. THE CONTRACTOR SHALL VERIFY FIELD DATA FOR ACCURACY. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER. THE ENGINEER SHALL NOT BE HELD LIABLE FOR ANY ERRORS OR OMISSIONS ORIGINATING FROM THE PROVIDED TOPOGRAPHIC DATA.
- 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.
- THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR UTILITIES SUCH AS ELECTRICITY, WATER, ETC. REQUIRED FOR HIS OPERATIONS AND ALL COSTS SHALL BE BORNE BY THE CONTRACTOR.
- THE CONTRACTOR AGREES THAT HE 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 WORK HOURS.
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS FROM APPROPRIATE GOVERNMENT AGENCIES.
- THE JOB SITE MUST BE LEFT IN A SAFE, SECURE CONDITION AT THE END OF EACH CONSTRUCTION WORK DAY. CLEAN UP AND REMOVE FROM THE JOB SITE ALL RUBBISH AND MAINTAIN THE PREMISES IN A CLEAN ORDERLY CONDITION AT ALL TIMES.
- UPON COMPLETION OF CONSTRUCTION THE ENTIRE JOB SITE SHALL BE CLEANED OF ALL RUBBISH AND DEBRIS.
- THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.
- ALL REQUIRED UTILITY ADJUSTMENTS SUCH AS MANHOLE AND/OR VALVE BOX FRAMES AND COVERS SHALL BE DONE BY THE CONTRACTOR.
- FOR BENCHMARK, SEE SHEETS C-103 AND C-104.

SIGNS AND MARKING NOTES

- ALL TRAFFIC AND PAVEMENT MARKING INSTALLATIONS SHALL BE DONE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL, DEVICES FOR STREETS AND HIGHWAYS," 2009 EDITION, AS AMENDED, THE LATEST SPECIFICATIONS FROM THE TRAFFIC REVIEW BRANCH, DEPARTMENT OF PLANNING AND PERMITTING, AND AS SHOWN ON THE PLANS.
- CONTRACTOR SHALL NOTIFY AND COORDINATE WORK WITH THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING, ONE (1) WEEK IN ADVANCE OF COMMENCING WORK AT 768-8084.
- CONTRACTOR SHALL SUBMIT MATERIAL BROCHURES FOR ALL SIGNS AND PAINT MATERIALS TO THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING.
- THE SIGNING AND/OR STRIPING CONTRACTOR SHALL KEEP ONE (1) SET OF APPROVED PLANS AT THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION WORK.
- CONTRACTOR SHALL PAINT TEMPORARY GUIDELINES AND OUTLINES OF ARROWS, LEGENDS, AND CROSSWALK WITH A TWO INCH (2") WIDE BRUSHED LINE ON THE DAY THE ROADWAY IS OPENED TO TRAFFIC. THESE MARKINGS MUST BE APPROVED BY THE INSPECTOR FROM THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING.
- CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING AT 768-8084, THREE (3) DAYS IN ADVANCE OF FINAL INSPECTION.
- CONTRACTOR SHALL MEET WITH THE INSPECTOR FROM THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING DURING THE FINAL INSPECTIONS.
- WITHIN TEN (10) DAYS FOLLOWING NOTIFICATION OF AWARD OF CONTRACT, THE CONTRACTOR SHALL SUBMIT TO THE DEPARTMENT OF PLANNING AND PERMITTING (PHONE:768-8084) FOR APPROVAL A LIST OF ANY SIGNING AND PAVEMENT MARKING MATERIAL WHICH HE PROPOSES TO INSTALL. THE LIST SHALL BE COMPLETE AS TO THE NAME OF MANUFACTURER, CATALOG NUMBER, AND SHALL BE SUPPLEMENTED WITH MATERIAL BROCHURES.
- UPON FINAL INSPECTION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT A LETTER OF CERTIFICATION FOR ALL TRAFFIC SIGNING AND PAVEMENT MARKING MATERIALS INSTALLED.
- SIGNS SHALL BE ATTACHED TO BRACKET WITH 5/16" ZINC PLATED STEEL BOLTS, NUTS AND WASHERS. SIGNS 48" WIDE OR LARGE THAN 10 SQ. FT. IN AREA SHALL BE MOUNTED ON TWO (2) GALVANIZED PIPE POST. THE SIGN SHALL BE INSTALLED WITH AT LEAST ONE (1) FOOT CLEARANCE FROM THE SIGN EDGE TO THE CURB FACE.
- ALL SIGNS SHALL BE REFLECTORIZED.
- PAVEMENT WORD AND SYMBOL MARKING SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF PLANNING AND PERMITTING STANDARDS.
- THE CONTRACTOR SHALL USE THERMOPLASTIC MATERIAL, APPROVED BY THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING, FOR ALL CROSSWALK, STOP BARS, PAVEMENT ARROWS, CENTER LANES, LANE LINES, ARC LINES, CHANNELIZED TRAFFIC ISLANDS AND LEGENDS.

ARCHEOLOGICAL NOTES

- SHOULD ARCHAEOLOGICAL ARTIFACTS BE ENCOUNTERED, CONFORMANCE WITH ALL REQUIREMENTS AS STATED IN THE ARCHAEOLOGICAL PLAN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, ALL COSTS ASSOCIATED WITH COMPLYING WITH THE ARCHAEOLOGICAL PLAN SHALL BE BORNE BY THE CONTRACTOR.
- 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 AND THE STATE DEPARTMENT OF LAND AND NATURAL RESOURCES, HISTORIC PRESERVATION DIVISION (692-8015). IN ADDITION, THE CONTRACTOR SHALL INFORM THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING (768-8084).

TRAFFIC NOTES FOR WORK ON CITY AND COUNTY STREETS

- THE PERMITTEE SHALL MAKE MINOR ADJUSTMENTS AT INTERSECTIONS, DRIVEWAYS, BRIDGES, STRUCTURES, ETC., TO FIT FIELD CONDITIONS.
- CONES OR DELINEATORS SHALL BE EXTENDED TO POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
- TRAFFIC CONTROL DEVICES SHALL BE INSTALLED SUCH THAT THE SIGN OR DEVICE FARTEST FROM THE WORK AREA IS PLACED FIRST. THE OTHERS SHALL THEN BE PLACED PROGRESSIVELY TOWARD THE WORK AREA.
- REGULATORY AND WARNING SIGNS WITHIN THE CONSTRUCTION ZONE THAT ARE IN CONFLICT WITH THE TRAFFIC CONTROL PLANS SHALL BE REMOVED OR COVERED.
- FLAGGERS AND / OR POLICE OFFICERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
- WHEN REQUIRED BY THE ISSUING OFFICE, THE PERMITTEE SHALL INSTALL A FLASHING ARROW SIGNAL AS SHOWN ON THE TRAFFIC CONTRL PLANS.
- ALL TRAFFIC LANES SHALL BE A MINIMUM OF 10 FEET WIDE.
- ALL CONSTRUCTION WARNING SIGNS SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE MESSAGE IS NOT APPLICABLE OR NOT IN USE.
- THE BACKS OF ALL SIGNS USED FOR TRAFFIC CONTROL SHALL BE APPROPRIATELY COVERED TO PRECLUDE THE DISPLAY OF INAPPLICABLE SIGN MESSAGES (I.E., WHEN SIGNS HAVE MESSAGES ON BOTH FACES).
- LANE CLOSURE SHALL BE LIMITED ONLY TO THE EXTENT OF ACCOMPLISHING EACH DAYS WORK. AS SOON AS EACH DAYS WORK IS COMPLETED, THE PERMITTEE SHALL REMOVE ALL TRAFFIC CONTROL DEVICES NO LONGER NEEDED TO PERMIT FREE AND SAFE PASSAGE OF PUBLIC TRAFFIC. REMOVAL SHALL BE IN THE REVERSE ORDER OF INSTALLATION. EXISTING FADED OR OBLITERATED PAVEMENT MARKINGS THAT ARE NECESSARY FOR SAFE TRAFFIC FLOW IN THE CONSTRUCTION AREA SHALL BE REPLACED WITH TEMPORARY OR PERMANENT MARKINGS BEFORE OPENING THE ROADWAY TO PUBLIC TRAFFIC EACH DAY.
- PERMANENT PAVEMENT MARKINGS AND TRAFFIC SIGNS SHALL BE REPLACED UPON COMPLETION OF EACH PHASE OF WORK.
- CONES AND DELINEATORS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 20 FEET APART. A MINIMUM OF SIX CHANNELIZING DEVICES SHALL BE USED FOR EACH TAPER LENGTH.
- DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTY USING THE DRIVEWAY ARE OTHERWISE PROVIDED FOR SATISFACTORILY. FURTHER, THE PERMITTEE SHALL CONTROL TRAFFIC GOING INTO AND OUT OF DRIVEWAYS.
- BUFFER AND TAPER AREA ON APPROACH TO ANY WORK AREA SHALL BE KEPT CLEAR OF VEHICLES AND EQUIPMENT.
- A HIGH LEVEL WARNING DEVICE (FLAG TREE) SHALL BE INSTALLED ON APPROACH TO ALL WORK AREAS.
- "NO PARKING" SIGNS SHALL BE POSTED WITHIN ANY WORK AREA AND FOR THE BUFFER AND TAPER AREAS APPROACHING THE WORK AREA.
- WHERE AN ACCESSIBLE PEDESTRIAN ROUTE IS CLOSED OR BLOCKED DURING CONSTRUCTION, CONTRACTOR TO PROVIDE TEMPORARY, ACCESSIBLE PEDESTRIAN ROUTE.
- TRAFFIC CONTROL PLANS ARE APPROVED FOR WORK ON ANY CITY STREET AREA ONLY BETWEEN THE HOURS OF 08:30 A.M. AND 03:30 P.M. (MONDAY-FRIDAY).

PUBLIC HEALTH, SAFETY, AND CONVENIENCE NOTES

- CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.
- THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AND ITS SURROUNDING AREAS FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH. THE COUNTY AND STATE SHALL REQUIRE SUPPLEMENTARY MEASURES IF REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND REMOVAL OF ALL SILT AND DEBRIS GENERATED BY HIS WORK AND DEPOSITED AND ACCUMULATED WITHIN DOWNSTREAM WATERWAYS, DITCHES AND DRAIN PIPES, AND PUBLIC AND PRIVATE ROADWAYS. THE CONTRACTOR AGREES TO REIMBURSE THE STATE OF HAWAII FOR ALL COSTS EXPENDED IN PERFORMANCE OF ABOVE WORK IF REQUIRED FOR PUBLIC HEALTH AND SAFETY OR MADE NECESSARY BY NON-PERFORMANCE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL NOT PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE, OR FLOW INTO EXISTING CITY OR STATE 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 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'S ATTENTION IS DIRECTED TO CHAPTER 46, PUBLIC HEALTH REGULATIONS, STATE DEPARTMENT OF HEALTH, STATE OF HAWAII, "COMMUNITY NOISE CONTROL," IN WHICH MAXIMUM PERMISSIBLE NOISE LEVELS HAVE BEEN SET. IF THE CONSTRUCTION WORK REQUIRES A PERMIT FROM THE STATE DIRECTOR OF HEALTH, THE CONTRACTOR SHALL OBTAIN A COPY OF CHAPTER 46 AND BECOME FAMILIAR WITH THE NOISE LEVEL RESTRICTIONS AND THE PROCEDURES FOR OBTAINING A PERMIT FOR THE CONSTRUCTION ACTIVITIES. APPLICATION AND INFORMATION ON VARIANCES ARE AVAILABLE FROM THE ENVIRONMENTAL HEALTH SERVICES DIVISION, INDOOR AND RADIOLOGICAL HEALTH BRANCH, NOISE SECTION, 99-945 HALAWA VALLEY STREET, AIEA, HI 96701.

APPROVAL:

CHIEF, TRAFFIC REVIEW BRANCH, DPP

DATE

CHIEF, CIVIL ENGINEERING BRANCH, DPP

DATE

DEPARTMENT OF TRANSPORTATION SERVICES (DTS) AND TRANSPORTATION MOBILITY DIVISION (TMD) CONSTRUCTION NOTE

CONSTRUCTION OF THIS PROJECT SHALL NOT AFFECT TRANSIT OPERATIONS. BUS ROUTES AND BUS STOPS SHALL REMAIN OPEN AND ACCESSIBLE AT ALL TIMES. ANY WORK AFFECTING BUS OPERATIONS, ROUTES, OR STOPS MUST BE SUBMITTED TO DTS-TMD FOR REVIEW NO LESS THAN 30 DAYS PRIOR TO THE START DATE.

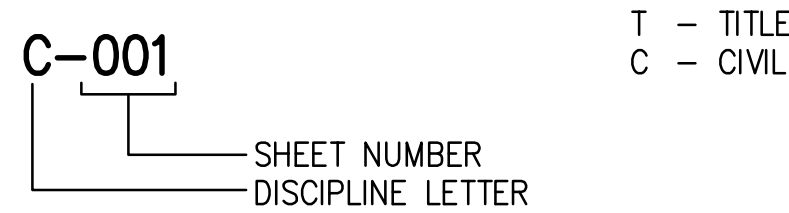
DTS-TMD
(808) 768-8371
THEBUSSTOP@HONOLULU.GOV
HANDIVAN@HONOLULU.GOV

OAHU TRANSIT SERVICES – BUS OPERATIONS
(808) 768-9520
(808) 768-9534
SEAN-BENNETT.PAIO@THEBUS.ORG
JOSHUA.VAOALI@THEBUS.ORG
WALTER.OBA@THEBUS.ORG

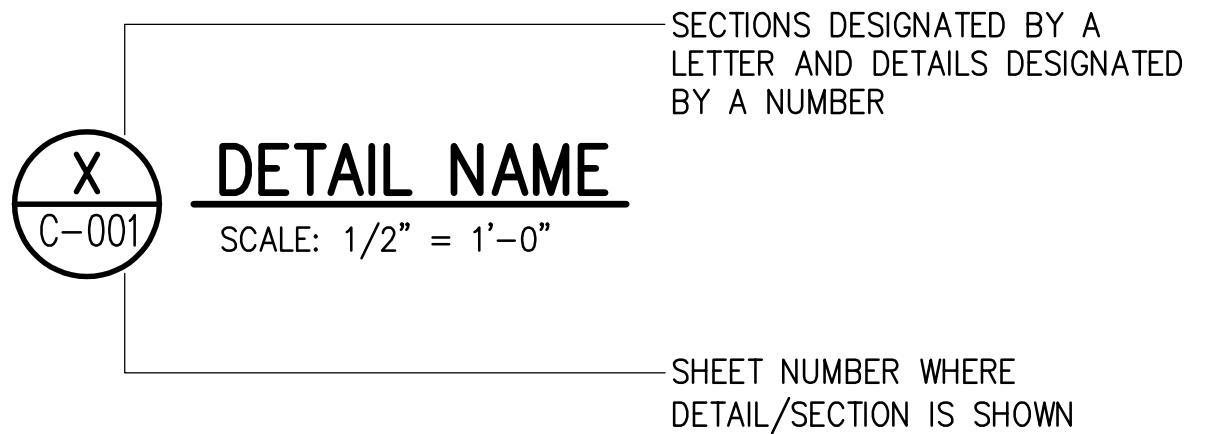
OAHU TRANSIT SERVICES – PARATRANSIT OPERATIONS
(808) 768-9802
(808) 768-9851
(808) 454-5021
TRACIE.COELHO@THEBUS.ORG
RICHARD.MOLE@THEBUS.ORG

ALL SHEETS WILL BE NUMBERED BEGINNING WITH A LETTER FOLLOWED BY DASH "-" AND THREE NUMBERS AS FOLLOWS:

SHEET NUMBERING NOMENCLATURE



DETAIL/SECTION TITLE



ABBREVIATIONS

AC	ASPHALT CONCRETE	INV	INVERT
ARV	AIR RELEASE VALVE	IRR	IRRIGATION
BW	BOTTOM WALL	MAX	MAXIMUM
BWS	BOARD OF WATER SUPPLY	MH	MANHOLE
CL	CENTER LINE	MIN	MINIMUM
C&C	CITY & COUNTY OF HONOLULU	NO	NUMBER
CLF	CHAIN LINK FENCE	OC	ON CENTER
CO	CLEAN OUT	OD	OUTER DIAMETER
CONC	CONCRETE	OH	OVERHEAD
CONN	CONNECT	PB	PANEL BOX / PULL BOX
CRM	CONCRETE RUBBLE MASONRY (ROCK) WALL	PVMT	PAVEMENT
D	DIAMETER / DRAIN	S	SEWER
DET	DETAIL	SL	STREET LIGHT
ELEV	ELEVATION	SMH	SEWER MANHOLE
ELEC	ELECTRICAL LINE	TP	TOP PIPE
EQ	EQUAL	TW	TOP WALL
EXIST	EXISTING	TYP	TYPICAL
FH	FIRE HYDRANT	UP	UTILITY POLE
GW	GUY WIRE	UP/SL	UTILITY POLE / STREET LIGHT
H	HEIGHT	W	WATER
HB	HOSE BIB	WM	WATER METER
ICV	IRRIGATION CONTROL VALVE	WMH	WATER MANHOLE
		WV	WATER VALVE

REVISION NO.	SYM.	DESCRIPTION	SHT/OF	DATE	APPROVED
<div><div><div><div><div><div>TREYOR R. YAGY</div><div>LICENSED PROFESSIONAL ENGINEER</div><div>No. 14993-C</div></div></div><div><div>HAWAII</div><div>U.S.A.</div></div></div></div><div>4/30/24 EXP. DATE</div><div>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</div></div>		STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS O'AHU, HAWAII			
		GENERAL CIVIL NOTES - 1			
		DESIGNED: KA	CHECKED: TV	DRAWING NO.	
		DRAWN: KA	SCALE: N/A	C-001	
		DATE: APRIL 2022			

\\n1. projects\38 - dhhl\13803 - nakini street improvements\DRAWINGS\GENERAL NOTES.dwg - 4/16/2022 12:09 PM

HECO NOTES

1.

THE LOCATION OF HECO’S OVERHEAD AND UNDERGROUND FACILITIES SHOWN ON THE PLANS ARE FROM EXISTING RECORDS WITH VARYING DEGREES OF ACCURACY AND ARE NOT GUARANTEED AS SHOWN. THE CONTRACTOR SHALL VERIFY IN THE FIELD THE LOCATIONS OF THE FACILITIES AND SHALL EXERCISE PROPER CARE IN EXCAVATING AND WORKING IN THE AREA. WHEREVER CONNECTIONS OF NEW UTILITIES TO EXISTING UTILITIES AND UTILITY CROSSINGS ARE SHOWN, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS AND CROSSINGS TO VERIFY THE DEPTHS PRIOR TO EXCAVATION FOR THE NEW LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO HECO’S FACILITIES WHETHER SHOWN OR NOT SHOWN ON THE PLANS.
2.

THE CONTRACTOR SHALL COMPLY WITH THE STATE OF HAWAII’S OCCUPATIONAL SAFETY AND HEALTH LAWS AND REGULATIONS, INCLUDING WITHOUT LIMITATION, THOSE RELATED TO WORKING ON OR NEAR EXPOSED OR ENERGIZED ELECTRICAL LINES AND EQUIPMENT.
3.

THE CONTRACTOR SHALL OBTAIN AN EXCAVATION CLEARANCE FROM HECO’S PLANNING AND DESIGN SECTION OF THE CUSTOMER INSTALLATIONS DEPARTMENT (543–5654) LOCATED AT 820 WARD AVENUE, 4TH FLOOR, A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO STARTING CONSTRUCTION.
4.

EXISTING HECO OVERHEAD AND UNDERGROUND LINES ARE ENERGIZED AND WILL REMAIN ENERGIZED DURING CONSTRUCTION UNLESS PRIOR SPECIAL ARRANGEMENTS HAVE BEEN MADE WITH HECO. ONLY HECO PERSONNEL ARE TO HANDLE THESE ENERGIZED LINES AND ERECT TEMPORARY GUARDS TO PROTECT THESE LINES FROM DAMAGE. THE CONTRACTOR SHALL WORK CAUTIOUSLY AT ALL TIMES TO AVOID ACCIDENTS AND DAMAGE TO EXISTING HECO FACILITIES, WHICH CAN RESULT IN ELECTROCUTION.
5.

STATE LAW (OSHA 1910.269(k)(2B)) REQUIRES THAT A WORKER AND THE LONGEST OBJECT HE OR SHE MAY CONTACT CANNOT COME CLOSER THAN A SPECIFIED MINIMUM RADIAL CLEARANCE WHEN WORKING CLOSE TO OR UNDER ANY OVERHEAD LINES. IT IS THE CONTRACTOR’S RESPONSIBILITY TO BE INFORMED OF AND COMPLY WITH THE LAW.
- AT ANY TIME SHOULD THE CONTRACTOR ANTICIPATE THAT HIS WORK WILL RESULT IN THE NEED TO ENCR OACH WITHIN THE MINIMUM REQUIRED CLEARANCE AS STATED IN THE LAW, THE CONTRACTOR SHALL NOTIFY HECO AT LEAST THREE (3) MONTHS PRIOR TO THE PLANNED ENCR OACHMENT SO THAT, IF FEASIBLE, THE NECESSARY PROTECTIONS (E.G. RELOCATE OR DE–ENERGIZE HECO LINES) CAN BE INVESTIGATED. HECO MAY ALSO BE ABLE TO BLANKET ITS DISTRIBUTION (12KV AND BELOW) LINES TO PROVIDE A VISUAL AND IN PREVENTING ACCIDENTAL CONTACT. HECO’S COST OF SAFEGUARDING OR IDENTIFYING ITS LINES WILL BE CHARGED TO THE CONTRACTOR.
- CONTACT HECO’S CUSTOMER INSTALLATIONS DEPARTMENT AT 543–7070 FOR ASSISTANCE IN IDENTIFYING AND SAFEGUARDING OVERHEAD POWER LINES.
6.

CONTRACTOR SHALL NOT EXCAVATE WITHIN 10 FEET FROM HECO’S UTILITY POLES OR ANY ANCHOR SYSTEM SUPPORTING THE UTILITY POLE. IF CONTRACTOR MUST EXCAVATE CLOSER THAN 10 FEET FROM A UTILITY POLE OR ITS ANCHOR SYSTEM, CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING, SUPPORTING, SECURING AND TAKING ALL PRECAUTIONS TO PREVENT DAMAGE TO OR LEANING OF EXISTING POLES. BEFORE COMMENCING SUCH EXCAVATION, CONTRACTOR MUST SUBMIT ITS BRACING CALCULATIONS AND DRAWINGS, PREPARED AND STAMPED BY A LICENSED STRUCTURAL ENGINEER, TO HECO’S CUSTOMER INSTALLATIONS DEPARTMENT (543–7070) FOR REVIEW. HECO REQUIRES A MINIMUM OF TEN (10) WORKING DAYS TO CONDUCT THE REVIEW OF CONTRACTOR’S SUBMITTAL. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION, AND REMOVAL OF THE TEMPORARY POLE BRACING SYSTEM, AS WELL AS ALL COSTS INCURRED BY HECO TO REVIEW CONTRACTOR’S DRAWINGS AND TO REPAIR OR STRAIGHTEN POLES IMPACTED BY CONTRACTOR’S ACTIVITIES, INCLUDING RESPONSE AND RESTORATION COSTS INCURRED BY HECO ARISING OUT OF OR RELATED TO OUTAGES CAUSED BY CONTRACTOR’S FAILURE TO MEET THE FOREGOING REQUIREMENTS. HECO’S REVIEW AND APPROVAL OF ANY CONTRACTOR SUBMITTALS INCLUDING ITS WORK PROCEDURE SHALL NOT RELIEVE CONTRACTOR FROM ANY LIABILITY RESULTING FROM CONTRACTOR’S EXCAVATION NEAR OR AROUND HECO’S UTILITY POLES.

7.

THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHENEVER CONSTRUCTION CROSSES OR IS IN CLOSE PROXIMITY OF UNDERGROUND LINES. HECO’S EXISTING ELECTRICAL CABLES ARE ENERGIZED AND WILL REMAIN ENERGIZED DURING CONSTRUCTION. ONLY HECO PERSONNEL ARE TO BREAK INTO EXISTING HECO FACILITIES, HANDLE THESE CABLES AND ERECT TEMPORARY GUARDS TO PROTECT THESE CABLES FROM DAMAGE. THE COST OF HECO’S ASSISTANCE IN PROVIDING PROPER SUPPORT AND PROTECTION OF ITS UNDERGROUND LINES WILL BE CHARGED TO THE CONTRACTOR. FOR ASSISTANCE/COORDINATION IN PROVIDING PROPER SUPPORT AND PROTECTION OF THESE LINES, THE CONTRACTOR SHALL CALL HECO’S CUSTOMER INSTALLATIONS DEPARTMENT AT 543–7070 A MINIMUM OF TEN (10) WORKING DAYS IN ADVANCE.

SPECIAL PRECAUTIONS ARE REQUIRED WHEN EXCAVATING NEAR HECO’S 138KV OR 46KV UNDERGROUND LINES (SEE HECO INSTRUCTIONS TO CONSULTANTS/CONTRACTORS ON “EXCAVATION NEAR HECO’S UNDERGROUND 138KV AND/OR 46KV LINES” FOR DETAILED REQUIREMENTS).

FOR VERIFICATION OF UNDERGROUND LINES, THE CONTRACTOR SHALL CALL THE HAWAII ONE CALL CENTER AT 866–423–7287 MINIMUM OF FIVE (5) WORKING DAYS IN ADVANCE.

8.

THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHENEVER CONSTRUCTION CROSSES OR IS IN CLOSE PROXIMITY OF HECO’S UNDERGROUND FUEL OIL PIPELINES. SPECIAL PRECAUTIONS ARE REQUIRED WHEN EXCAVATING NEAR HECO’S UNDERGROUND FUEL OIL PIPELINES (SEE HECO’S SPECIFIC FUEL PIPELINE “GUIDELINES” TO CONSULTANTS/CONTRACTORS ON EXCAVATION NEAR HECO’S UNDERGROUND FUEL PIPELINES FOR DETAILED REQUIREMENTS).
9.

WHEN TRENCH EXCAVATION IS ADJACENT TO OR BENEATH HECO’S EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR IS RESPONSIBLE FOR:

A.

ARRANGING FOR HECO STANDBY PERSONNEL TO OBSERVE WORK AT CONTRACTOR’S COST.

B.

SHEETING, BRACING, OR OTHERWISE SUPPORTING THE EXCAVATION AND STABILIZING THE EXISTING GROUND TO RENDER IT SAFE AND SECURE AND TO PREVENT POSSIBLE SLIDES, CAVE–INS, AND SETTLEMENTS.

C.

PROPERLY SUPPORTING EXISTING STRUCTURES OR FACILITIES WITH BEAMS, STRUTS, UNDER–PINNINGS, OR OTHER NECESSARY METHODS TO FULLY PROTECT IT FROM DAMAGE.

D.

BACKFILLING WITH PROPER BACKFILL MATERIAL INCLUDING SPECIAL THERMAL BACKFILL WHERE EXISTING (REFER TO ENGINEERING DEPARTMENT FOR THERMAL BACKFILL SPECIFICATIONS).

HECO NOTES (CONT.)

10.

ANY WORK REQUIRED TO RELOCATE OR MODIFY HECO FACILITIES SHALL BE DONE BY HECO, OR BY THE CONTRACTOR UNDER HECO’S SUPERVISION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION, AND SHALL PROVIDE NECESSARY SUPPORT FOR HECO’S WORK, WHICH MAY INCLUDE, BUT NOT BE LIMITED TO, STAKING OF POLE/ANCHOR LOCATIONS, IDENTIFYING RIGHT OF WAY AND PROPERTY LINES, EXCAVATION AND BACKFILL, PERMITS AND TRAFFIC CONTROL, BARRICADING, AND RESTORATION OF PAVEMENT, SIDEWALKS, AND OTHER FACILITIES.
- ALL COSTS ASSOCIATED WITH ANY RELOCATION OR MODIFICATION (EITHER TEMPORARY OR PERMANENT) FOR THE CONVENIENCE OF THE CONTRACTOR, OR TO ENABLE THE CONTRACTOR TO PERFORM HIS WORK IN A SAFE AND EXPEDITIOUS MANNER IN FULFILLING HIS CONTRACT OBLIGATIONS SHALL BE BORNE BY THE CONTRACTOR.
11.

ANY REDESIGN OR RELOCATION OF HECO’S FACILITIES NOT SHOWN ON THE PLANS MAY BE CAUSE FOR LENGTHY DELAYS. THE CONTRACTOR ACKNOWLEDGES THAT HECO IS NOT RESPONSIBLE FOR ANY DELAY OR DAMAGE THAT MAY ARISE AS A RESULT OF ANY CONFLICTS DISCOVERED OR IDENTIFIED WITH RESPECT TO THE LOCATION OR CONSTRUCTION OF HECO’S ELECTRICAL FACILITIES IN THE FIELD, REGARDLESS OF WHETHER THE CONTRACTOR HAS MET THE REQUESTED MINIMUM ADVANCE NOTICES. IN ORDER TO MINIMIZE ANY DELAY OR IMPACT ARISING FROM SUCH CONFLICTS, HECO SHOULD BE NOTIFIED IMMEDIATELY UPON DISCOVERY OR IDENTIFICATION OF SUCH CONFLICT.
12.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL HECO SURFACE AND SUBSURFACE UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGES TO HECO’S FACILITIES AS A RESULT OF HIS OPERATIONS. THE CONTRACTOR SHALL IMMEDIATELY REPORT SUCH DAMAGES OR ANY HAZARDOUS CONDITIONS RELATED TO HECO’S LINES TO HECO’S TROUBLE DISPATCHER AT 548–7961. REPAIR WORK SHALL BE DONE BY HECO OR BY THE CONTRACTOR UNDER HECO’S SUPERVISION. COSTS FOR DAMAGES TO HECO’S FACILITIES SHALL BE BORNE BY THE CONTRACTOR.

IN CASE OF DAMAGE OR SUSPECTED DAMAGE TO HECO’S FUEL PIPELINE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY HECO’S SECURITY COMMAND CENTER AT 543–7685 (A 24–HOUR NUMBER) SO HECO PERSONNEL CAN SECURE THE DAMAGED SECTION AND REPORT ANY OIL SPILLS TO THE PROPER AUTHORITIES. ALL COSTS ASSOCIATED WITH THE DAMAGE, REPAIR, AND OIL SPILL CLEANUP SHALL BE BORNE BY THE CONTRACTOR.

13.

THE CONTRACTOR MAY REQUEST HECO TO PROVIDE AN INSPECTOR TO STAND–BY DURING CONSTRUCTION NEAR HECO’S FACILITIES. THE COST OF SUCH INSPECTION WILL BE CHARGED TO THE CONTRACTOR.
- THE CONTRACTOR SHALL CALL THE HECO’S CUSTOMER INSTALLATIONS DEPARTMENT AT 543–7070 A MINIMUM OF TWO (2) MONTHS IN ADVANCE TO ARRANGE FOR HECO STAND–BY PERSONNEL.
14.

THE FOLLOWING CLEARANCES SHALL BE MAINTAINED BETWEEN HECO’S DUCTLINE AND ALL ADJACENT STRUCTURES (CHARTED AND UNCHARTED) IN THE TRENCH:

GUIDELINES FOR MINIMUM HORIZONTAL (PARALLEL) CLEARANCES BETWEEN HECO AND OTHER UNDERGROUND UTILITIES				
UNDERGROUND UTILITY	HECO DIRECT BURIED CABLE	HECO DIRECT BURIED IN CONDUIT (NO CONCRETE ENCASEMENT)	HECO 3" (MINIMUM) CONCRETE ENCASEMENT	APPLICABLE NOTES:
HECO DB CONDUITS	12"	3"	0"	
HECO 3" ENCASEMENT	0"	0"	0"	
TELEPHONE/CATV DB	12"	12"	6"	
TELEPHONE/CATV DB DUCTS	12"	12"	6"	
TELEPHONE/CATV 3" ENCASEMENT	0"	0"	0"	E
TRAFFIC SIGNAL	12"	12"	12"	
WATER DB (BWS OWNED)	36"	36"	36"	A, D
CUSTOMER OWNED WATER SERVICE LATERALS	12"	12"	12"	
WATER (CONCRETE JACKETED) (BWS OWNED)	36"	36"	36"	A, D
GAS DB	12"	12"	12"	A
GAS (CONCRETE JACKETED)	12"	12"	12"	A
SEWER DB	36"	36"	36"	A, B
SEWER (CONCRETE JACKETED)	36"	36"	36"	A, B
DRAIN	12"	12"	12"	A
FUEL PIPELINES				C

- A.

WHERE SPACE IS AVAILABLE, PARALLEL CLEARANCE TO OTHER UTILITIES, OR FOREIGN STRUCTURES OTHER THAN COMMUNICATION OR TRAFFIC SIGNAL SHALL BE 36".
- B.

IF 36" CLEARANCE CANNOT BE MET:

–IF CLEARANCE IS LESS THAN 12", JACKET SEWER LINE WITH REINFORCED CONCRETE (PER HECO’S STD. 30–1030) FOR A DISTANCE OF 5’ PLUS PIPE DIAMETER.

–IF CLEARANCE IS BETWEEN 12" AND 36", JACKET SEWER LINE WITH PLAIN CONCRETE.
- C.

ALL FUEL PIPELINE CROSSINGS SHALL BE REVIEWED AND APPROVED BY THE COMPANY THAT OWNS AND MAINTAINS IT.
- D.

5 FEET CLEAR TO WATER MAINS 16" AND LARGER.
- E.

FOR SITUATIONS WITH 0" MINIMUM SEPARATION, A 6" SEPARATION IS RECOMMENDED.
- F.

CLEARANCES MEASURED FROM OUTER EDGES OR DIAMETERS OF UTILITIES. WHENEVER CONCRETE JACKETS ARE INVOLVED, CLEARANCES SHALL BE TOTAL CLEAR DISTANCE BETWEEN THE CONCRETE JACKET AND UTILITY CONCERNED.

HECO NOTES (CONT.)

GUIDELINES FOR MINIMUM VERTICAL (CROSSING) CLEARANCES BETWEEN HECO AND OTHER UNDERGROUND UTILITIES				
UNDERGROUND UTILITY	HECO DIRECT BURIED CABLE	HECO DIRECT BURIED IN CONDUIT (NO CONCRETE ENCASEMENT)	HECO 3" (MINIMUM) CONCRETE ENCASEMENT	APPLICABLE NOTES:
HECO DB CONDUITS	6"	3"	0"	
HECO 3" ENCASEMENT	0"	0"	0"	
TELEPHONE/CATV DB	12"	12"	6"	
TELEPHONE/CATV DB DUCTS	12"	12"	6"	
TELEPHONE/CATV 3" ENCASEMENT	0"	0"	0"	C
TRAFFIC SIGNAL	12"	12"	6"	
WATER DB (BWS OWNED)	12"	12"	12"	E
CUSTOMER OWNED WATER SERVICE LATERALS	12"	12"	12"	
WATER (CONCRETE JACKETED) (BWS OWNED)	12"	12"	12"	E
GAS DB	12"	12"	12"	
GAS (CONCRETE JACKETED)	12"	12"	12"	
SEWER DB	24"	24"	24"	A
SEWER (CONCRETE JACKETED)	24"	24"	24"	A
DRAIN	12"	12"	6"	
FUEL PIPELINES				B

- G.

IF CLEARANCE CANNOT BE MET:

–IF CLEARANCE IS LESS THAN 12", JACKET SEWER LINE WITH REINFORCED CONCRETE (PER HECO’S STD. 30–1030) FOR A DISTANCE OF 5’ PLUS PIPE DIAMETER.

–IF CLEARANCE IS BETWEEN 12" AND 24", JACKET SEWER LINE WITH PLAIN CONCRETE.
- H.

ALL FUEL PIPELINE CROSSINGS SHALL BE REVIEWED AND APPROVED BY THE COMPANY THAT OWNS AND MAINTAINS IT.
- I.

FOR SITUATIONS WITH 0" MINIMUM SEPARATION, A 6" SEPARATION IS RECOMMENDED.
- J.

CLEARANCES MEASURED FROM OUTER EDGES OR DIAMETERS OF UTILITIES. WHENEVER CONCRETE JACKETS ARE INVOLVED, CLEARANCES SHALL BE TOTAL CLEAR DISTANCE BETWEEN THE CONCRETE JACKET AND UTILITY CONCERNED.
- K.

36" CLEARANCE IS REQUIRED FOR TRENCHLESS INSTALLATION WORK.
15.

THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER & HECO OF ANY HEAT SOURCES (POWER CABLE DUCT BANK, STREAMLINE, ETC.) ENCOUNTERED THAT ARE NOT PROPERLY IDENTIFIED ON THE DRAWING.
16.

THE CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS HECO FROM AND AGAINST ALL LOSSES, DAMAGES, CLAIMS, AND ACTIONS, INCLUDING BUT NOT LIMITED TO REASONABLE ATTORNEY’S FEES AND COSTS BASED UPON OR ARISING OUT OF DAMAGE TO PROPERTY OR INJURIES TO PERSONS, OR OTHER TORTIOUS ACTS CAUSED OR CONTRIBUTED TO BY CONTRACTOR OR ANYONE ACTING UNDER ITS DIRECTION OR CONTROL OR ON ITS BEHALF; PROVIDED CONTRACTOR’S INDEMNITY SHALL NOT BE APPLICABLE TO ANY LIABILITY BASED UPON THE SOLE NEGLIGENCE OF HECO.

WATER NOTES

1.

UNLESS OTHERWISE SPECIFIED, ALL MATERIALS AND CONSTRUCTION OF WATER SYSTEM FACILITIES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE CITY AND COUNTY OF HONOLULU BOARD OF WATER SUPPLY’S “WATER SYSTEM STANDARDS”, DATED 2002, THE “WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS”, VOLUME 3, DATED 2021, AND ALL SUBSEQUENT AMENDMENTS AND ADDITIONS.
2.

NO DEVIATION TO BOARD OF WATER SUPPLY 2002 WATER SYSTEM STANDARDS AS AMENDED, SHALL BE ALLOWED WITHOUT THE MANAGER AND CHIEF ENGINEER’S APPROVAL.
3.

ALL PLANS APPROVED BY THE BOARD OF WATER SUPPLY ARE BASED SOLELY ON THE ADEQUACY OF THE WATER SUPPLY AND/OR IF WORK IS TO BE DONE ON/OR NEAR THE WATER SYSTEM.
4.

THE CONTRACTOR SHALL NOTIFY BOARD OF WATER SUPPLY CAPITAL PROJECTS DIVISION, CONSTRUCTION SECTION IN WRITING ONE WEEK PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.
5.

THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES AS SHOWN ON THE PLANS ARE FROM THE LATEST AVAILABLE DATA, BUT ARE NOT GUARANTEED AS TO THEIR ACCURACY OR THE ENCOUNTERING OF OTHER OBSTACLES DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE AND PAY FOR ALL THE DAMAGES TO EXISTING UTILITIES. THE CONTRACTOR SHALL NOT ASSUME THAT WHERE NO UTILITIES ARE SHOWN, THAT NONE EXIST.
6.

WHEN A UTILITY (GAS, SEWER, ELECTRICAL DUCT LINE, FIBER OPTIC, DRAINAGE, ETC.) CROSSES BELOW A BOARD OF WATER SUPPLY WATER MAIN, THE DESIGNER OF RECORD AND THEIR CONSTRUCTION ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING THE ADEQUATE WATER MAIN STRUCTURAL SUPPORT AND SUBMIT THE CONSTRUCTION METHOD AND SHOP DRAWING, STAMPED BY A LICENSED ENGINEER AND REVIEWED AND ACCEPTED BY THE DESIGNER OF RECORD, TO THE BOARD OF WATER SUPPLY FOR REVIEW AND APPROVAL. ALL WORK SHALL BE AT NO COST TO THE BOARD OF WATER SUPPLY.
7.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL WATER LINES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE ESPECIALLY CAREFUL WHEN EXCAVATING BEHIND WATERLINES, TEES, AND BENDS WHEREVER THERE IS A POSSIBILITY OF WATER LINE MOVEMENT DUE TO THE REMOVAL OF THE SUPPORTING EARTH BEYOND THE EXISTING REACTION BLOCKS. THE CONTRACTOR SHALL TAKE WHATEVER MEASURES NECESSARY TO PROTECT THE WATER LINES, SUCH AS CONSTRUCTING SPECIAL REACTION BLOCKS (WITH BOARD OF WATER SUPPLY APPROVAL) AND/OR MODIFYING HIS CONSTRUCTION METHOD.
8.

RE–APPROVAL SHALL BE REQUIRED IF THIS PROJECT IS NOT UNDER CONSTRUCTION WITHIN A PERIOD OF TWO (2) YEARS.
9.

PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL VERIFY IN THE FIELD, THE LOCATION OF EXISTING WATER LINES AND APPURTENANCES.
10.

ANY ADJUSTMENTS TO EXISTING WATER SYSTEM REQUIRED DURING CONSTRUCTION, TO MEET THE REQUIREMENTS OF THE BOARD OF WATER SUPPLY STANDARDS, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE DONE BY THE CONTRACTOR AT NO COST TO THE BOARD OF WATER SUPPLY.

REVISION NO.	SYM.	DESCRIPTION	SHT/OF	DATE	APPROVED
<div><div><div>TREYOR R. YAGY</div><div>LICENSED PROFESSIONAL ENGINEER</div><div>No. 14993–C</div><div>HAWAII U.S.A.</div></div><div>4/30/24</div><div>EXP. DATE</div></div> <div><div>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</div></div>		STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS O’AHU, HAWAII			
		GENERAL CIVIL NOTES – 2			
		DESIGNED: KA	CHECKED: TV	DRAWING NO. C-002	
DRAWN: KA	SCALE: N/A	DATE: APRIL 2022			

i:\1. projects\38 - dhnl\13803 - nakini street improvements\DRAWINGS\ESCP NOTES & DETAILS.dwg - 4/13/2022 8:38 AM

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.
- 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.
- PRESERVED 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.
- PERIMETER CONTROLS. PERIMETER CONTROLS ARE REQUIRED DOWNSLOPE OF EQUIPMENT/VEHICLE STAGING AREAS AT THE END OF EACH BUSINESS DAY AND AROUND MATERIAL STOCKPILES THAT ARE NOT ACTIVELY BEING USED. STOCKPILES ARE NOT ALLOWED IN THE CITY RIGHT-OF-WAY.
- SEDIMENT BARRIERS AND FENCES. SEDIMENT BARRIERS SHALL BE USED TO PROTECT DISTURBED OR DENUDED AREAS THAT ARE NOT SCHEDULE FOR ACTIVE GRADING WORK WITHIN 24 HOURS. THE SEDIMENT BARRIERS SHALL BE INSTALLED AT THE TOE OF THE SLOPE AND ON CONTOURS AT THE FOLLOWING SPACING:

SLOPE < 5%

--> 50 FEET SPACING

SLOPE ≥ 5% AND ≤ 15%

--> 30 FEET SPACING

SLOPE > 15%

--> 20 FEET SPACING
- 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 MOVEMENT 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 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 "STORM WATER BEST MANAGEMENT PRACTICE MANUAL – CONSTRUCTION", FOR MORE INFORMATION ON BMPS AND FOR BMP MAINTENANCE REQUIREMENTS.
- THE FOLLOWING BMPS WERE DETERMINED TO NOT BE APPLICABLE BASED ON THE SPECIFIC SITE CONDITIONS. AS CONSTRUCTION PROGRESSES, REVISIONS MAY BE NECESSARY AND WILL BE PROVIDED TO INSPECTORS.

– Dewatering operations – NO GROUND WATER IS ANTICIPATED
- 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.
- CONTRACTOR SHALL COMPLY WITH PROJECT SCHEDULING REQUIREMENTS AS DELINEATED IN "RULES RELATING TO WATER QUALITY" §20–3–28 AND SHALL SUBMIT THE SCHEDULED START DATE TO DPP DIRECTOR TWO WEEKS PRIOR TO START OF CONSTRUCTION.
- COPIES OF THE APPROVED ESCP AND PROJECT SCHEDULE MUST BE KEPT ON THE PROJECT SITE AT ALL TIMES AND IMMEDIATELY MADE AVAILABLE UPON REQUEST.

PROJECT SEQUENCE

- INSTALL PERIMETER CONTROLS AND INLET PROTECTION FOR PROTECTED AREAS AS NECESSARY FOR THE INSTALLATION OF THESE BMPS.
- PROCEED WITH CONSTRUCTION WITH THE LEAST POSSIBLE DISTURBANCE OF VEGETATED AREAS AND TEMPORARY STRUCTURES.

PROJECT SEQUENCE (CONT.)

- RELOCATE, RECONSTRUCT, AND MAINTAIN BMPS AS NEEDED TO KEEP THEM EFFECTIVE AT ALL TIMES. INITIATE TEMPORARY STABILIZATION IMMEDIATELY ONCE CONSTRUCTION WORK HAS BEGUN.
- INSTALL FINISH PAVEMENT AND GROUND COVER AS SOON AS POSSIBLE.
- REMOVE OR DISMANTLE TEMPORARY EROSION CONTROL STRUCTURES AFTER FULL ESTABLISHMENT OF PERMANENT VEGETATIVE COVER AND INSTALLATION OF PAVEMENTS.
- UPON COMPLETION OF THE PROJECT, INSPECT AND CLEAN ALL EXISTING DRAIN INLETS, CATCH BASINS, AND DRAINAGE SYSTEMS OF ACCUMULATED SEDIMENT AND DEBRIS. FLUSHING INTO THE DRAINAGE SYSTEM IS PROHIBITED
- PRACTICE GOOD HOUSEKEEPING MEASURES THROUGHOUT THE DURATION OF CONSTRUCTION.
- INSPECTIONS WILL BE PERFORMED WEEKLY.

RAIN RESPONSE PLAN

- THE FOLLOWING WILL BE PERFORMED WHEN HEAVY RAINS, TROPICAL STORM OR HURRICANE IS IMMINENT OR IS FORECASTED IN THE NEXT 48 HOURS:
 - TEMPORARY SUSPENSION OF ACTIVE 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 APPROACHING HEAVY RAINS, TROPICAL STORM OR HURRICANE AND REPLACE OR MAINTAIN BMPS AS NEEDED.

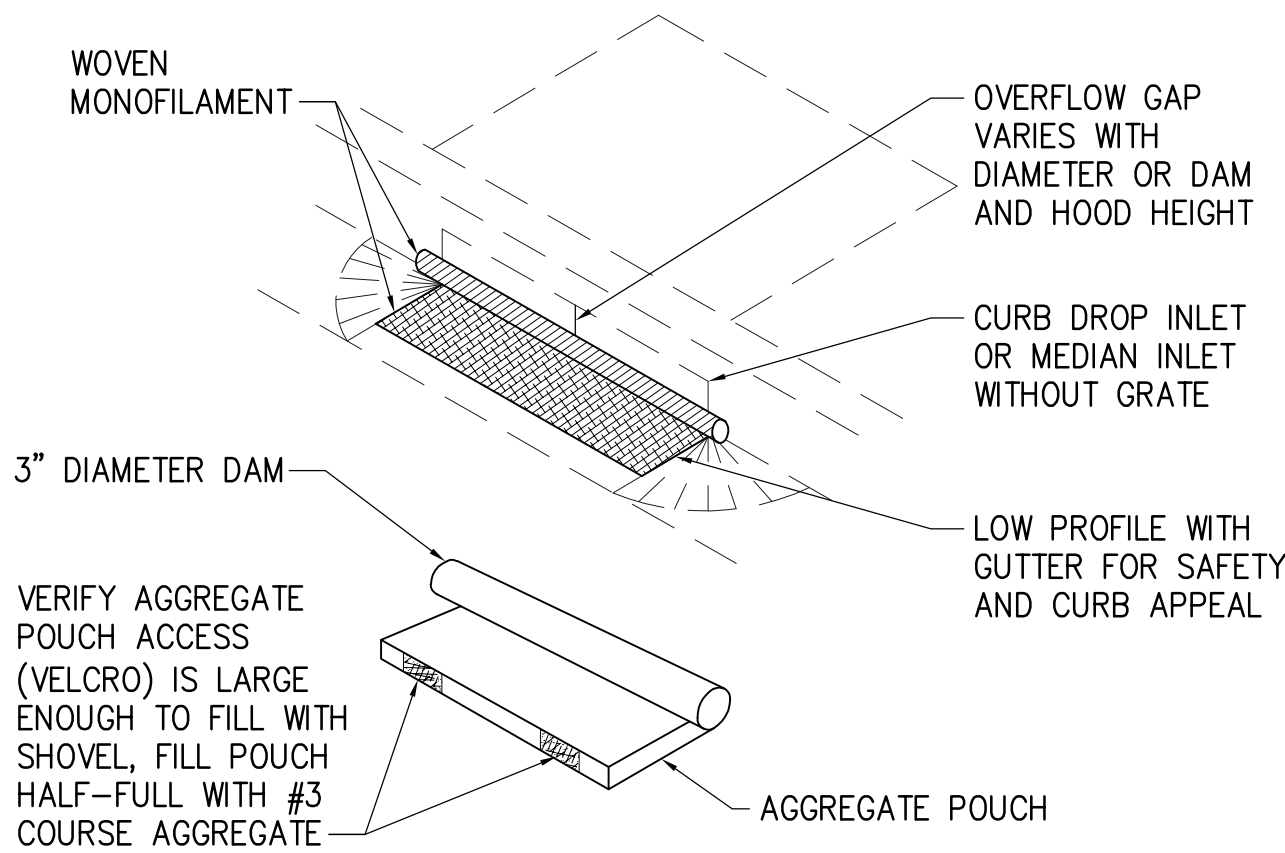
GOOD HOUSEKEEPING BMPS

- STREET SWEEPING AND VACUUMING. ALL POLLUTANTS DISCHARGED FROM CONSTRUCTION SITE TO OFF-SITE AREAS MUST BE SWEPT 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 MS4, RECEIVING WATERS, OR DRAINAGE IMPROVEMENTS THAT DISCHARGE OFF-SITE. PRIMARY AND SECONDARY CONTAINMENT CONTROLS AND COVERS SHALL BE IMPLEMENTED TO THE MAXIMUM EXTENT POSSIBLE (MEP).
- 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 BY 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 SPILLS IMMEDIATELY.
- HAZARDOUS MATERIAL. 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 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.
- NON-HAZARDOUS MATERIALS. IN THE EVENT THAT NON-HAZARDOUS MATERIALS ARE DISCHARGED TO THE STATE MS4, THE PROPERTY OWNER OR ESCP COORDINATOR SHALL NOTIFY THE DEPARTMENT OF FACILITIES 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 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 MAINTENANCE 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.
- 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.

GOOD HOUSEKEEPING BMPS (CONT.)

- 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 SORTED NEAR THE MS4 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 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
- 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 SHOULD BE A MINIMUM OF 10 MILLIMETER POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR 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.
- 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.
- 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 VEHICLES PRIOR TO EXITING THE SITE. ALL POLLUTANTS DISCHARGED FROM CONSTRUCTION SITE TO OFF-SITE AREAS MUST BE CLEANED IMMEDIATELY USING DRY METHODS SUCH AS SWEEPING OR VACUUMING. WASHING POLLUTANTS TO THE MS4 THROUGH DRAIN INLETS OR CATCH BASINS IS PROHIBITED.
- BMP AND SITE MAINTENANCE. INSPECT THE SITE ON A REGULAR BASIS, DURING AND AFTER ANY STORM GENERATING RUNOFF TO DETERMINE MAINTENANCE REQUIREMENTS AND GENERAL CONDITION OF BMPS. ALL MAINTENANCE RELATED TO A STORM EVENT SHOULD BE COMPLETED WITHIN 48 HOURS OF THE STORM EVENT. THE FOLLOWING MAINTENANCE TASKS SHOULD BE PERFORMED ON A REGULAR BASIS:

– REMOVAL OF SEDIMENT FROM BARRIERS AND SEDIMENTATION DEVICES, AND
– REPAIR OF DAMAGED SOIL STABILIZATION MEASURES.
– ALL POLLUTANTS DISCHARGED FROM THE CONSTRUCTION SITE TO OFF-SITE AREAS MUST BE SWEPT OR VACUUMED EACH DAY BEFORE LEAVING THE JOB SITE.
- DUST CONTROL. DUST FROM 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." SPRINKLE EXPOSED AREAS WITH WATER TO MAINTAIN MOISTNESS AT A DEPTH OF 2 TO 3 INCHES DURING WORKING HOURS AND NOT TO GENERATE ANY RUNOFF.

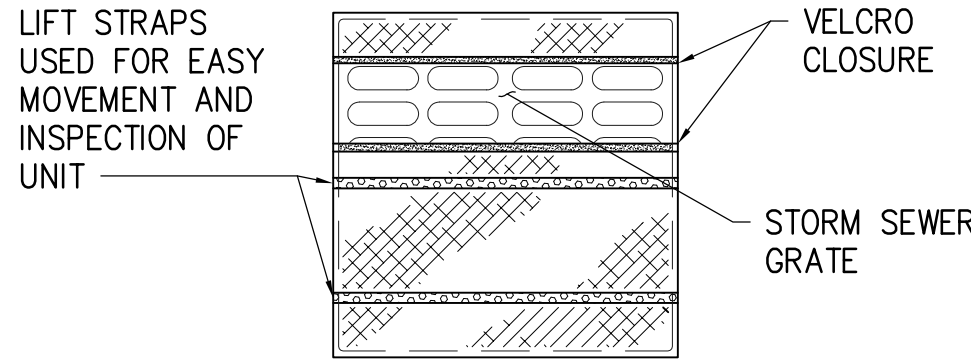


SEDIMENT FILTER FOR CATCH BASIN

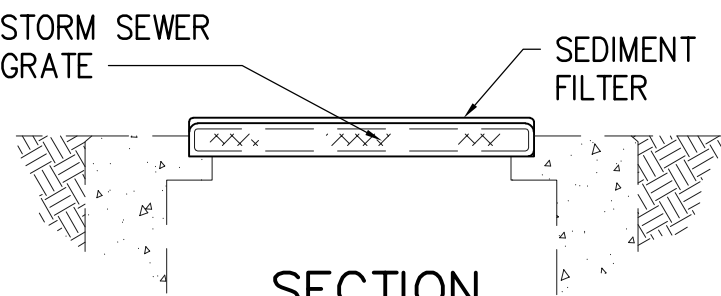
APPROVAL:

CHIEF, CIVIL ENGINEERING BRANCH, DPP

DATE

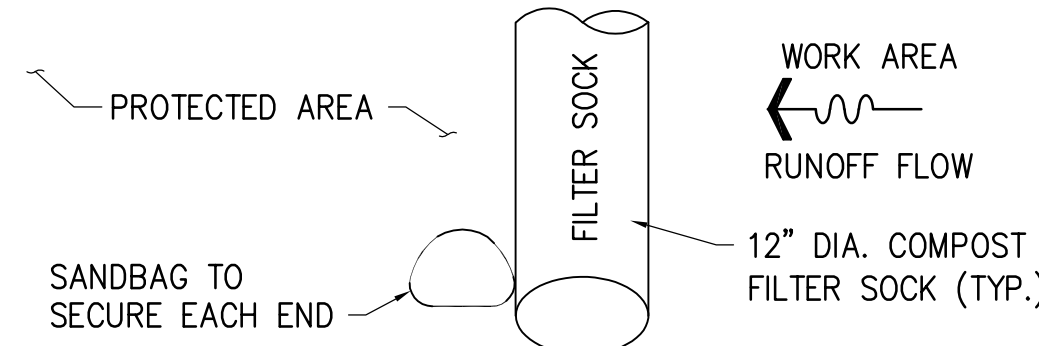


PLAN



SECTION

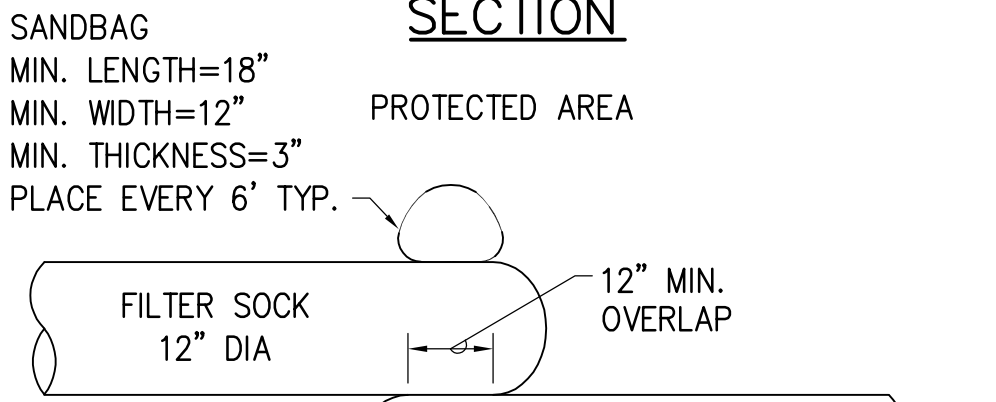
SEDIMENT FILTER FOR DRAIN INLETS



PLAN



SECTION



OVERLAP

FILTER SOCK DETAIL

NOTES:

- REMOVE ACCUMULATED SEDIMENT WHEN DEPTH REACHES 1/3 THE BARRIER HEIGHT.
- AT COMPLETION OF PROJECT, FILTER SOCKS MATERIAL INCLUDING THE COMPOST SHALL BE REMOVED FROM SITE & DISPOSED OF PROPERLY.
- FILTER SOCK SHALL MEET THE REQUIREMENTS OF THE CITY CONSTRUCTION BMP MANUAL, SE-16 COMPOST SOCKS AND BERMS.
- COMPOST SHALL NOT CONTAIN BIOSOLIDS AND SHOULD BE CONSISTENT WITH EPA GUIDELINES.
- CONTRACTOR IS NOT REQUIRED TO STAKE COMPOST FILTER SOCKS BUT SHALL ENSURE FILTER SOCKS REMAIN IN PLACE TO PROVIDE ADEQUATE PROTECTION.

REVISION NO.	SYMBOL	DESCRIPTION	SHT/OF	DATE	APPROVED
		STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS			
		NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS O'AHU, HAWAII			
		EROSION AND SEDIMENT CONTROL NOTES AND DETAILS			
		DESIGNED: KA	CHECKED: TV	DRAWING NO.	
		DRAWN: KA	SCALE: AS SHOWN	C-003	
		DATE: APRIL 2022			
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.					

I:\1. projects\38 - dhhl\13803 - nakini street improvements\DRAWINGS\ESCP.dwg - 4/13/2022 8:36 AM



PROJECT CLASSIFICATION
CATEGORY = TRENCHING

- NOTES:
1. SEDIMENT AND EROSION CONTROL BMP MEASURES SHOWN ON THE PLANS ARE MINIMUM BMP REQUIREMENTS. THE CONTRACTOR SHALL INCORPORATE ADDITIONAL BMPs BASED UPON THEIR MEANS AND METHODS CONSIDERING SITE CONDITIONS, EXPECTED RUNOFF FLOWS, AND CONSTRUCTION SEQUENCE.
 2. AN ESCP COORDINATOR MUST BE DESIGNATED USING THE FORM IN APPENDIX A TO THE RULES RELATING TO WATER QUALITY PRIOR TO PERMITTING.
 3. CONTRACTOR SHALL RESTORE ALL EXISTING LANDSCAPE AREAS DISTURBED DURING CONSTRUCTION. NECESSARY TEMPORARY FILTER SOCKS, DRAIN INLET PROTECTION, AND CATCH BASIN PROTECTION SHALL REMAIN IN PLACE UNTIL RESTORATION IS COMPLETE.
 4. CONTRACTOR SHALL RECONSTRUCT EXISTING SIDEWALK, PAVEMENTS, CURBS, AND GUTTERS DAMAGED DURING CONSTRUCTION.
 5. AT THE END OF CONSTRUCTION, EXISTING DRAIN INLETS, CATCH BASINS, AND DRAINAGE SYSTEMS SURROUNDING THE PROJECT SITE SHALL BE INSPECTED AND ANY ACCUMULATED SEDIMENT AND DEBRIS FOUND IN THE DRAINAGE SYSTEM SHALL BE REMOVED. FLUSHING INTO THE DRAINAGE SYSTEM IS PROHIBITED.
 6. SEE DRAWING C-003 FOR ADDITIONAL NOTES AND BMP DETAILS.

LEGEND:

- PROPERTY LINE
- PROJECT LIMITS
- TEMPORARY FILTER SOCK
- TEMPORARY DRAIN INLET PROTECTION
- TEMPORARY CATCH BASIN PROTECTION

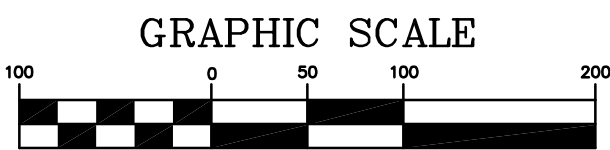
APPROVED:

CHIEF, CIVIL ENGINEERING BRANCH, DPP

DATE

EROSION AND SEDIMENT CONTROL PLAN
(TRENCHING)

SCALE: 1"=100'

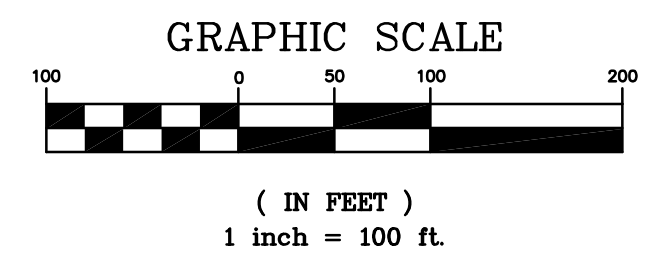


REVISION NO.	SYM.	DESCRIPTION	SHT/OF	DATE	APPROVED
		STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS			
		NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS O'AHU, HAWAII			
		EROSION AND SEDIMENT CONTROL PLAN			
		DESIGNED: KA	CHECKED: TV	DRAWING NO.	
		DRAWN: KA	SCALE: 1" = 100'	C-101	
		DATE: APRIL 2022			

\\1. projects\38 - dhhl\13803 - nakini street improvements\DRAWINGS\SITE PLANDwg - 4/16/2022 11:15 AM



GENERAL SITE PLAN
SCALE: 1"=100'

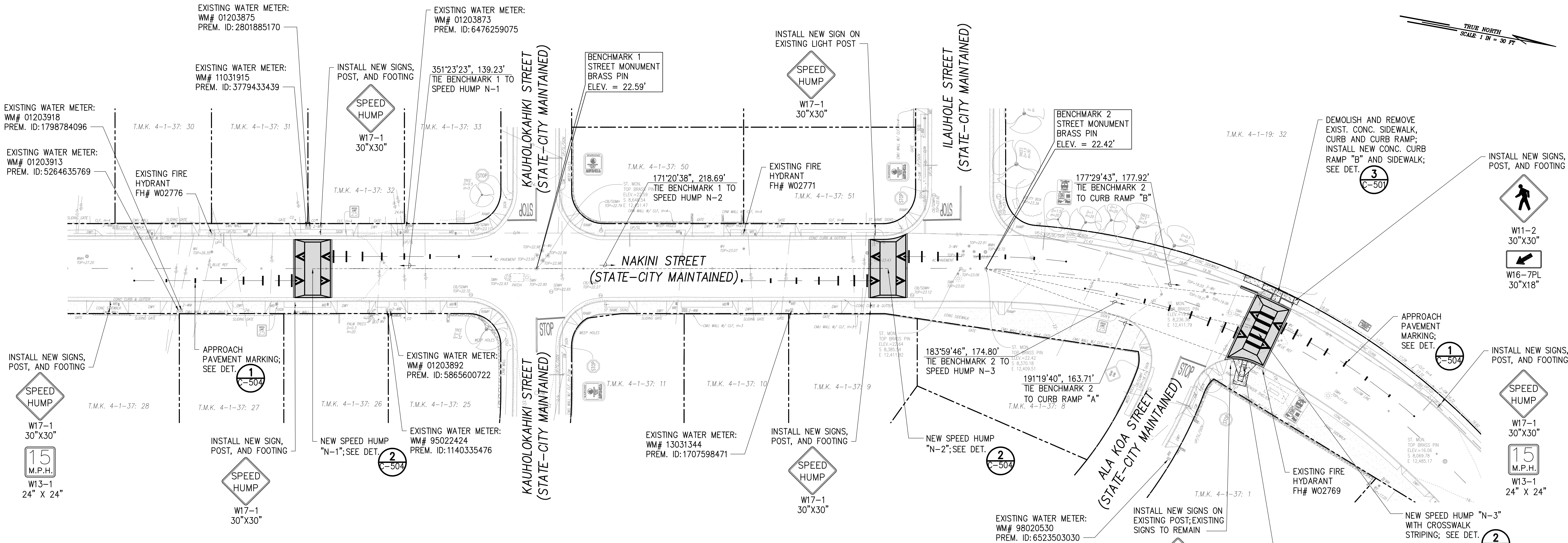


APPROVED:

CHIEF, CIVIL ENGINEERING BRANCH, DPP _____ DATE _____

REVISION NO.	SYM.	DESCRIPTION	SHT/OF	DATE	APPROVED
<div><div><p>4/30/24 EXP. DATE</p></div><div><p>STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS O'AHU, HAWAII</p></div><div><p>GENERAL SITE PLAN</p></div></div>					
DESIGNED: KA		CHECKED: TV		DRAWING NO.	
DRAWN: KA		SCALE: 1" = 100'		C-102	
DATE: APRIL 2022					

\\n1_projects\38 - dph\13803 - nakini street improvements\DRAWINGS\SITE PLANDwg - 4/16/2022 11:15 AM



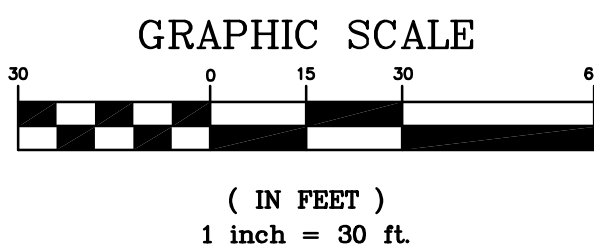
NAKINI STREET SITE PLAN
SCALE: 1"=30'

NOTES:

1. FOR NEW SIGN AND POST DETAIL, SEE DET. **6**

LEGEND:

- PROPERTY LINE
[Shaded Box] NEW ASPHALT SPEED HUMP
[Patterned Box] NEW CONCRETE
[Symbol] NEW SIGN

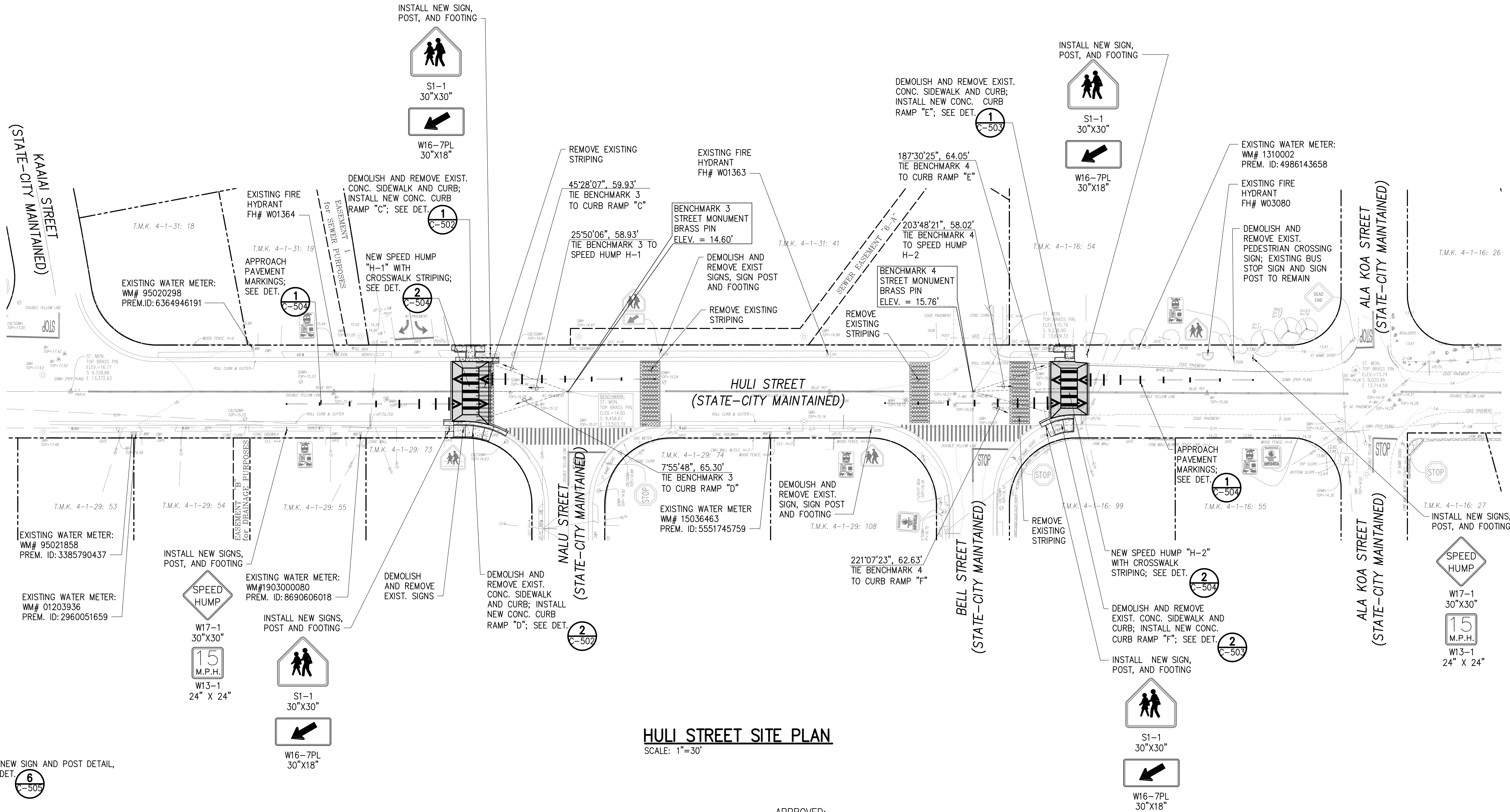
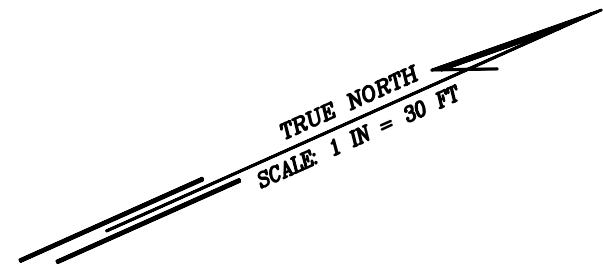


APPROVED:

CHIEF, TRAFFIC REVIEW BRANCH, DPP (FOR WORK WITHIN CITY R/W ONLY)	DATE
MANAGER AND CHIEF ENGINEER, BWS (FOR WORK AFFECTING BWS FACILITIES IN CITY R/W AND BWS EASEMENTS)	DATE
CHIEF, CIVIL ENGINEERING BRANCH, DPP	DATE

REVISION NO.	SYM.	DESCRIPTION	SHT/OF	DATE	APPROVED
<div><div><div>TREYOR R. YAGY LICENSED PROFESSIONAL ENGINEER No. 14993-C HAWAII U.S.A.</div><div>4/30/24 EXP. DATE</div></div><div>STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS O'AHU, HAWAII</div><div>NAKINI STREET SITE PLAN</div></div>					
DESIGNED: KA		CHECKED: TV		DRAWING NO. C-103	
DRAWN: KA		SCALE: 1" = 30'		DATE: APRIL 2022	

\\n1.projects\38 - dhhl\13803 - nakini street improvements\DRAWINGS\SITE PLANDwg - 4/16/2022 11:15 AM

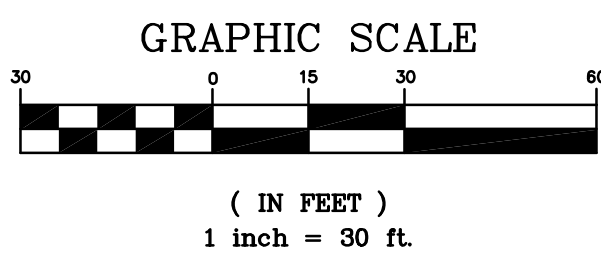


NOTES:

- FOR NEW SIGN AND POST DETAIL, SEE DET.

LEGEND:

- PROPERTY LINE
- EASEMENT
- NEW ASPHALT SPEED HUMP
- NEW SIGN
- REMOVAL OF EXIST. STRIPING



HULI STREET SITE PLAN

SCALE: 1"=30'

APPROVED:

CHIEF, TRAFFIC REVIEW BRANCH, DPP
(FOR WORK WITHIN CITY R/W ONLY)

DATE

MANAGER AND CHIEF ENGINEER, BWS
(FOR WORK AFFECTING BWS FACILITIES IN CITY R/W AND BWS EASEMENTS)

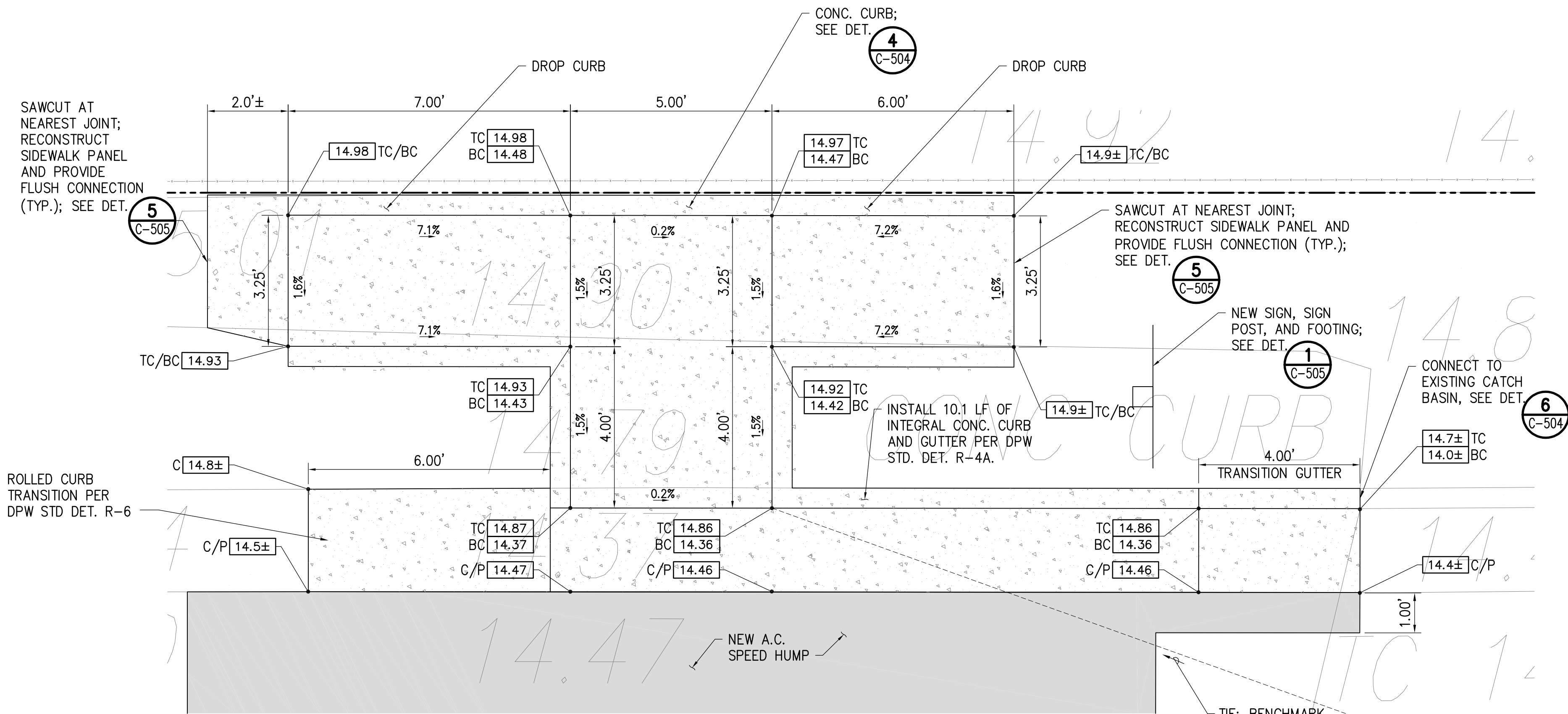
DATE

CHIEF, CIVIL ENGINEERING BRANCH, DPP

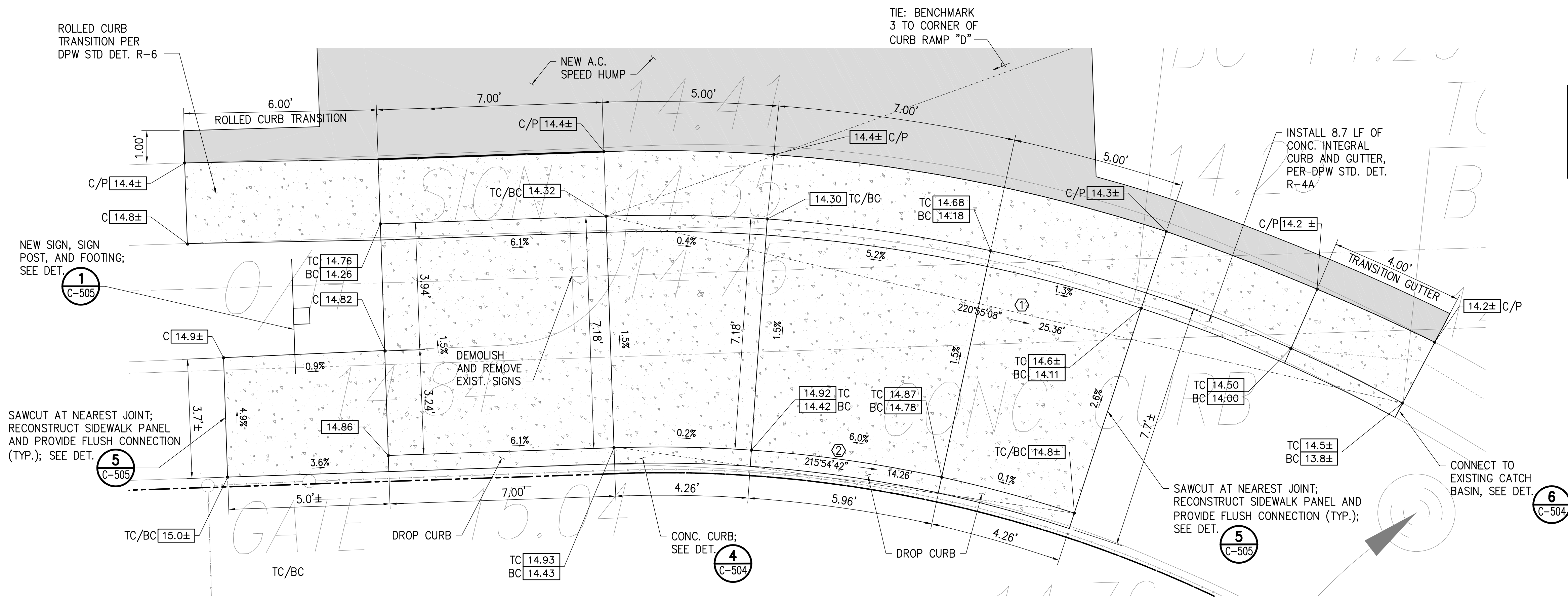
DATE

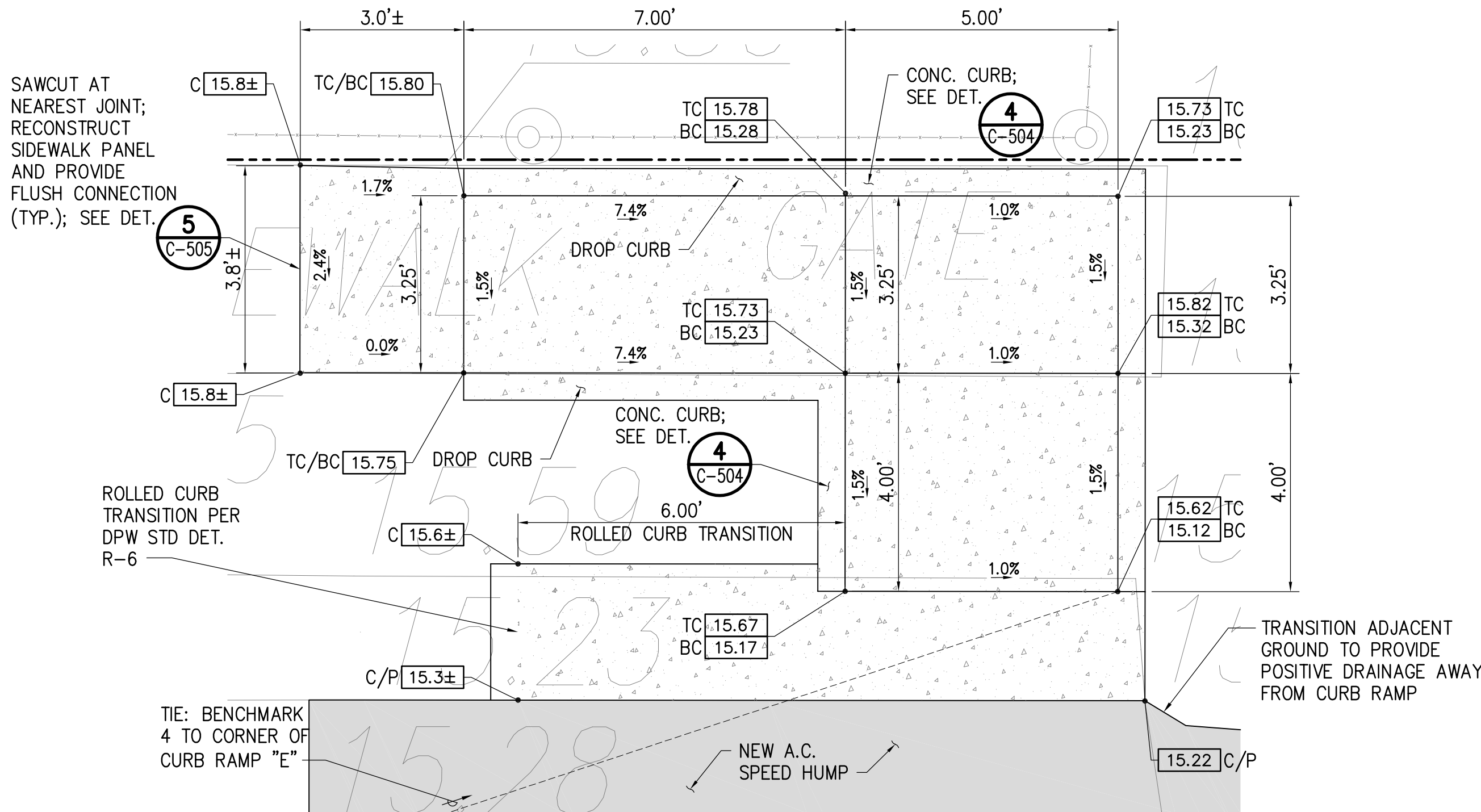
REVISION NO.		SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
<div><div><div>TREYOR R. YAGY</div><div>LICENSED PROFESSIONAL ENGINEER</div><div>No. 14993-C</div><div>HAWAII U.S.A.</div></div><div>4/30/24</div><div>EXP. DATE</div></div>			STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS			
			NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS O'AHU, HAWAII			
			HULI STREET SITE PLAN			
			THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.		DESIGNED: KA	
		DRAWN: KA		SCALE: 1" = 30'		C-104
		DATE: APRIL 2022				

I:\1. projects\38 - dhhl\13803 - nakini street improvements\DRAWINGS\DETAILS.dwg - 4/16/2022 12:10 PM

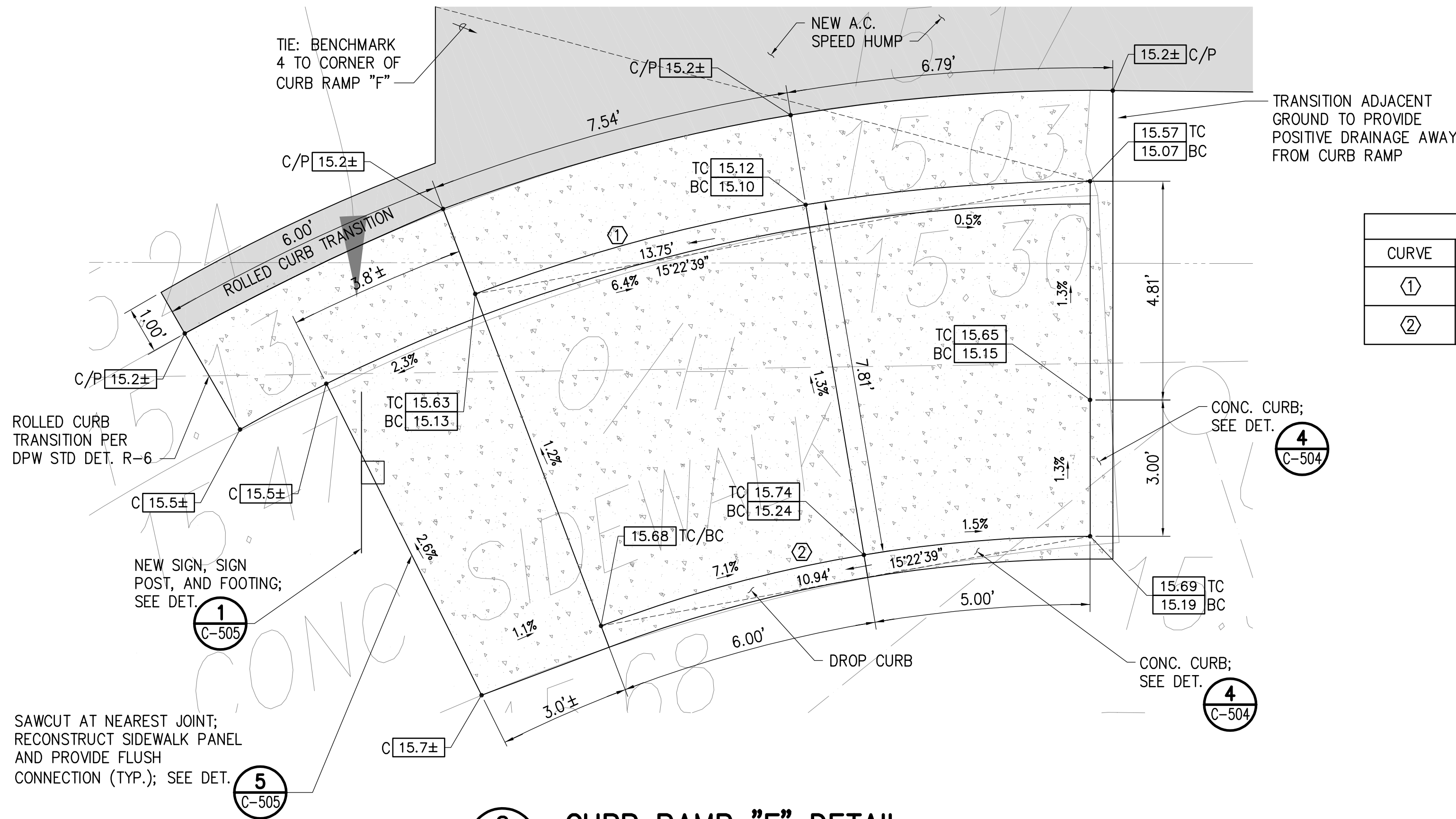


1 CURB RAMP "C" DETAIL
C-502 1/2" = 1'





1 CURB RAMP "E" DETAIL
C-503 1/2" = 1'



2 CURB RAMP "F" DETAIL
C-503 1/2" = 1'

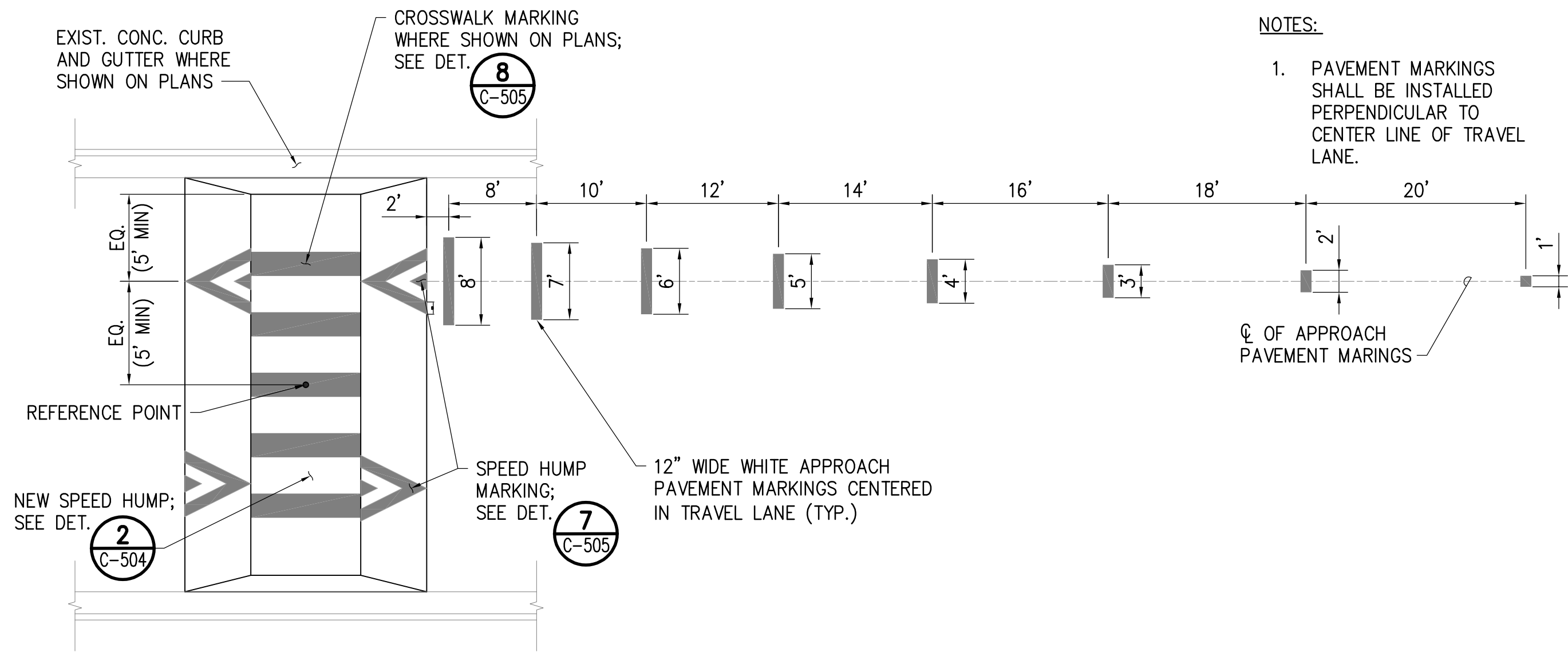
CURB RAMP GENERAL NOTES:

1. DIMENSIONS ARE MEASURED ALONG CURB FACE.
2. THE MAXIMUM SLOPES OF ADJOINING GUTTER OR ROAD SURFACES IMMEDIATELY FRONTING CURB RAMPS SHALL NOT EXCEED 5%.
3. BED COURSE MATERIAL IS REQUIRED FOR CURB RAMPS, SIDEWALKS, AND GUTTERS.
4. ALL CONCRETE SURFACES SHALL HAVE A BROOM FINISH PERPENDICULAR TO THE FLOW OF PEDESTRIAN TRAFFIC.
5. SURFACE OF CURB RAMPS SHALL BE FIRM, STABLE, AND SLIP RESISTANT.
6. TRANSITIONS FROM RAMPS TO GUTTERS AND ROADWAYS SHALL BE FLUSH.
7. CURB RAMPS AND SIDEWALKS SHALL BE CONSTRUCTED TO ELIMINATE PONDING TO THE MAXIMUM EXTENT FEASIBLE.
8. CONSTRUCTION JOINTS ARE REQUIRED TO JOIN CURB RAMPS WITH SIDEWALKS.
9. IF A CURB RAMP IS NOT CONSTRUCTED ACCORDING TO THE PLANS, THE CONTRACTOR SHALL RECONSTRUCT THE CURB RAMP AT NO COST TO THE STATE. REMEDIAL MEASURES WILL NOT BE ACCEPTED.

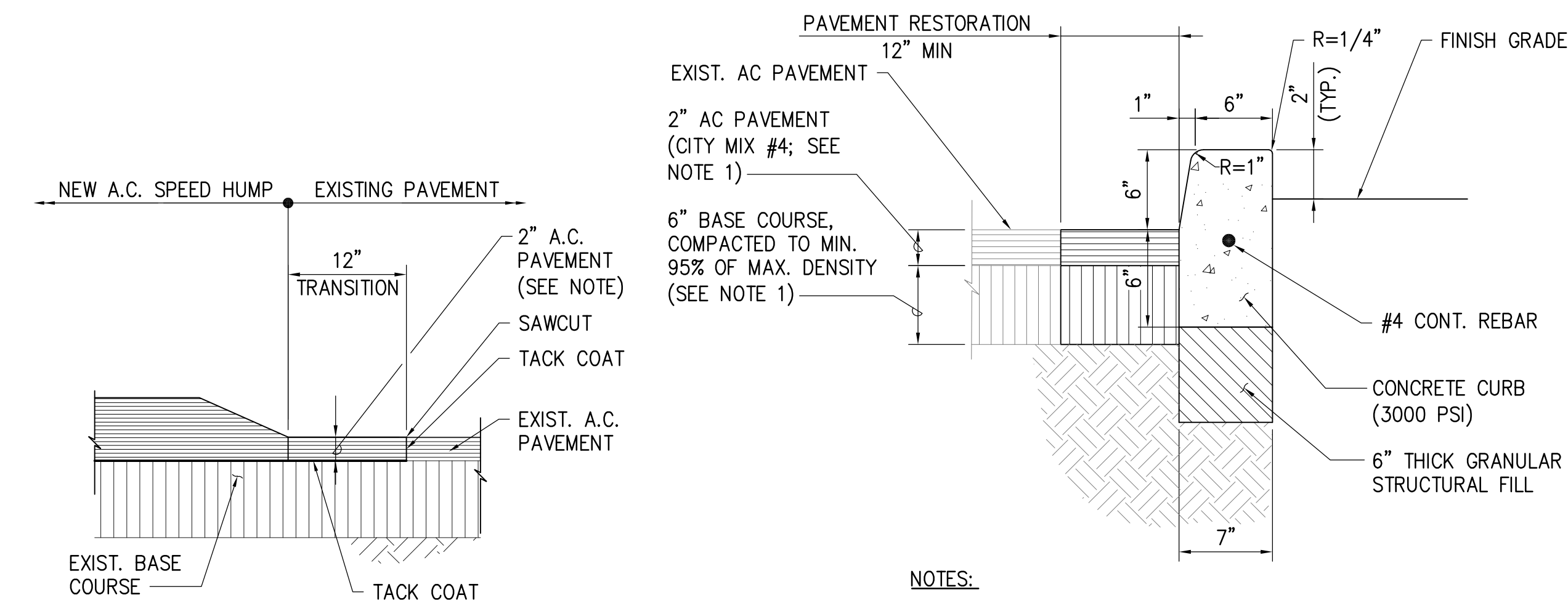
CURVE TABLE						
CURVE	Δ	Δ/2	RADIUS	T	CH	Lc
①	20°45'48"	10°22'54"	38.16'	6.99'	13.75'	13.85'
②	20°45'48"	10°22'54"	30.35'	5.56'	10.94'	11.00'

REVISION NO.	SYM.	DESCRIPTION	SHT/OF	DATE	APPROVED
		STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS O'AHU, HAWAII			
		DETAILS - 3			
		DESIGNED: KA DRAWN: KA DATE: APRIL 2022	CHECKED: TV SCALE: AS SHOWN	DRAWING NO. C-503	

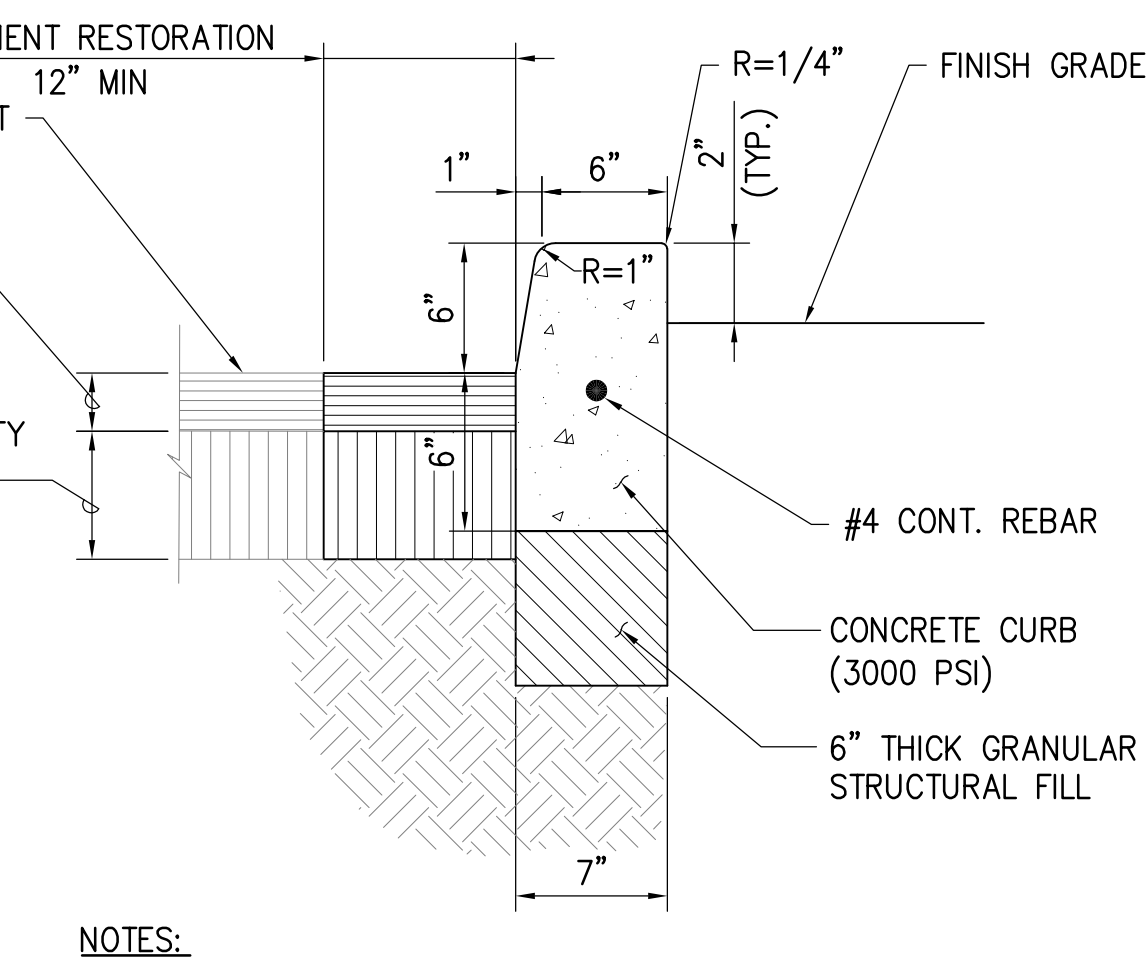
I:\1. projects\38 - dhhl\13803 - nakini street improvements\DRAWINGS\DETAILS.dwg - 4/16/2022 12:10 PM



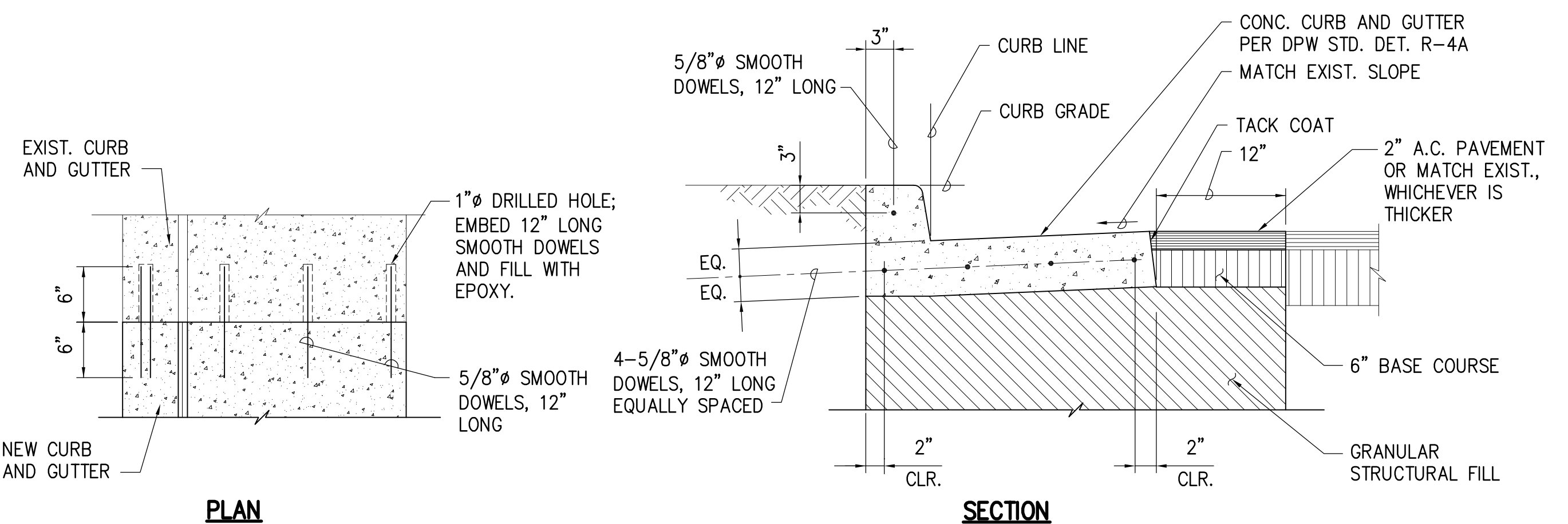
1 TYPICAL SPEED HUMP LAYOUT
C-504 NOT TO SCALE



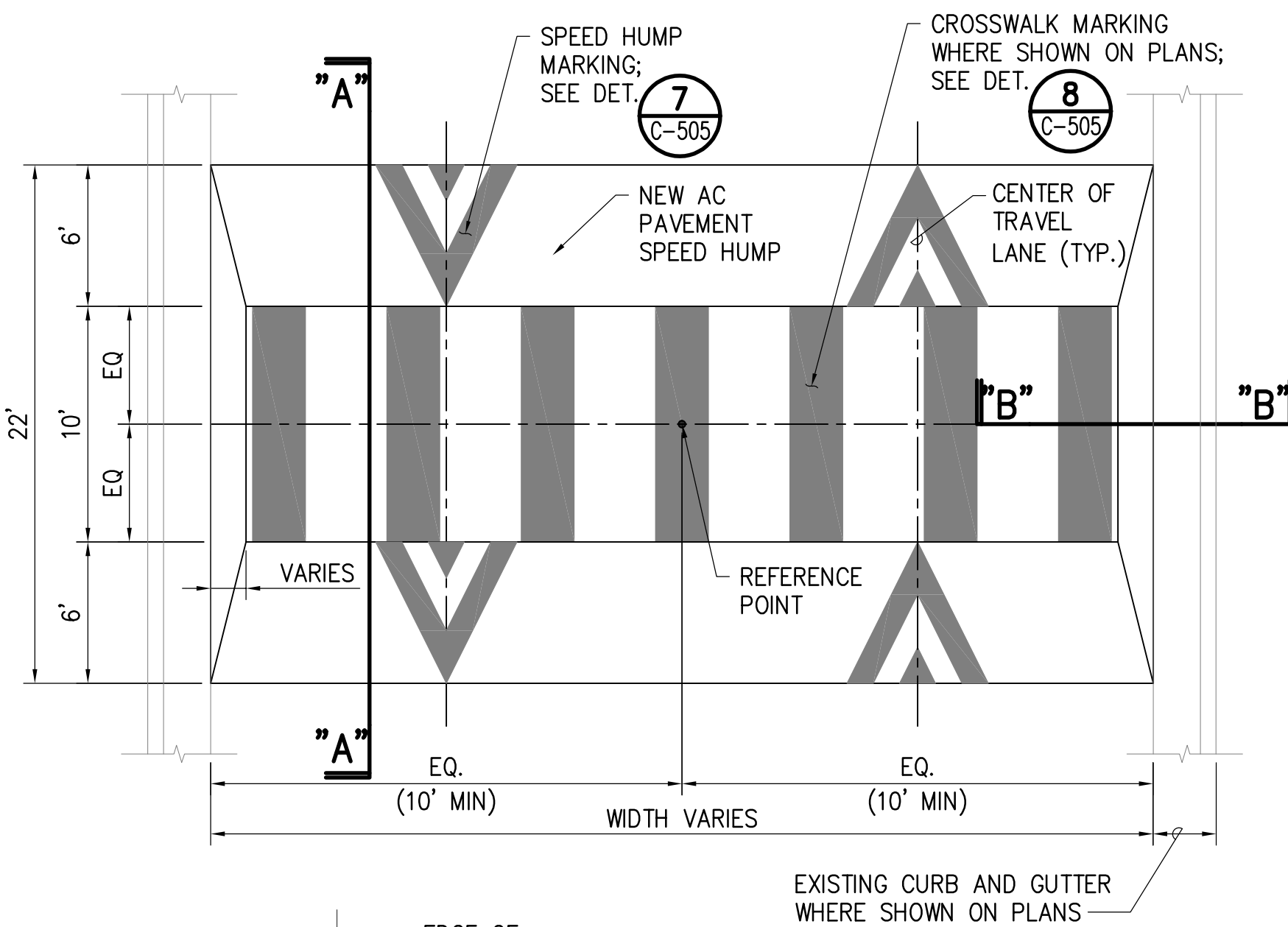
3 SMOOTH RIDING CONNECTION DETAIL
C-504 NOT TO SCALE



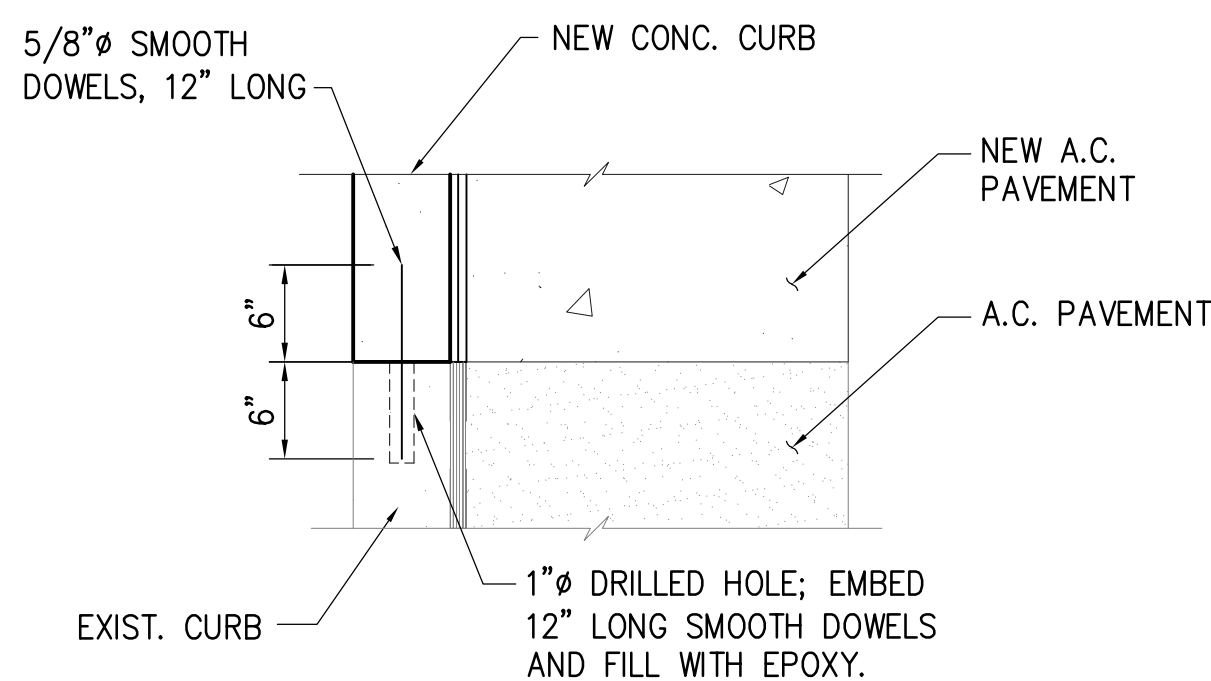
4 CONCRETE CURB DETAIL
C-504 NOT TO SCALE



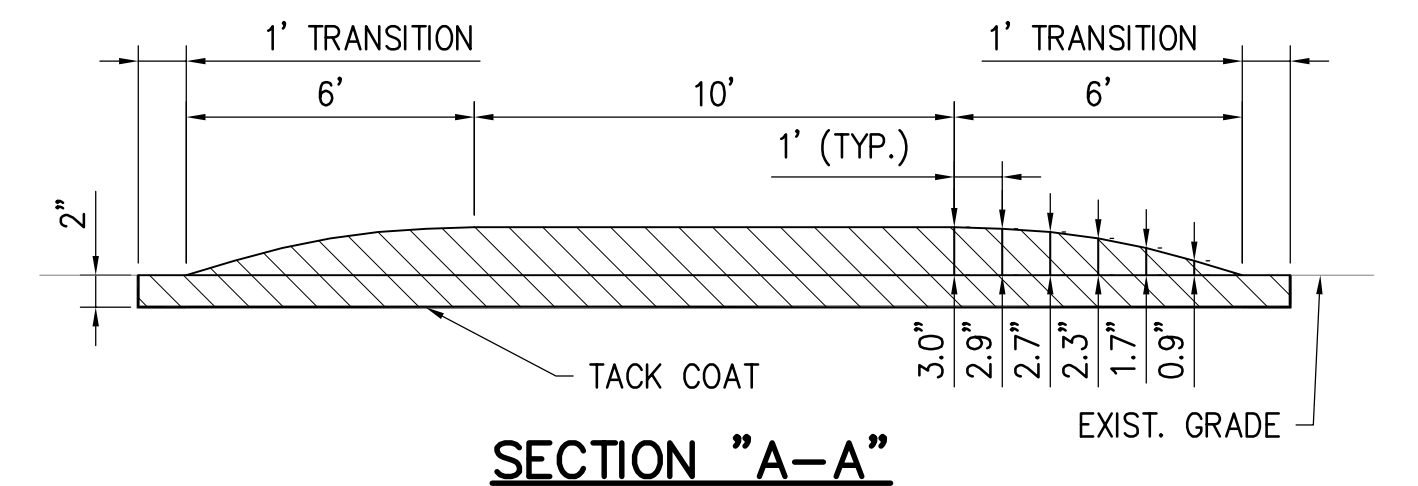
6 CONCRETE CURB & GUTTER CONNECTION DETAIL
C-504 NOT TO SCALE



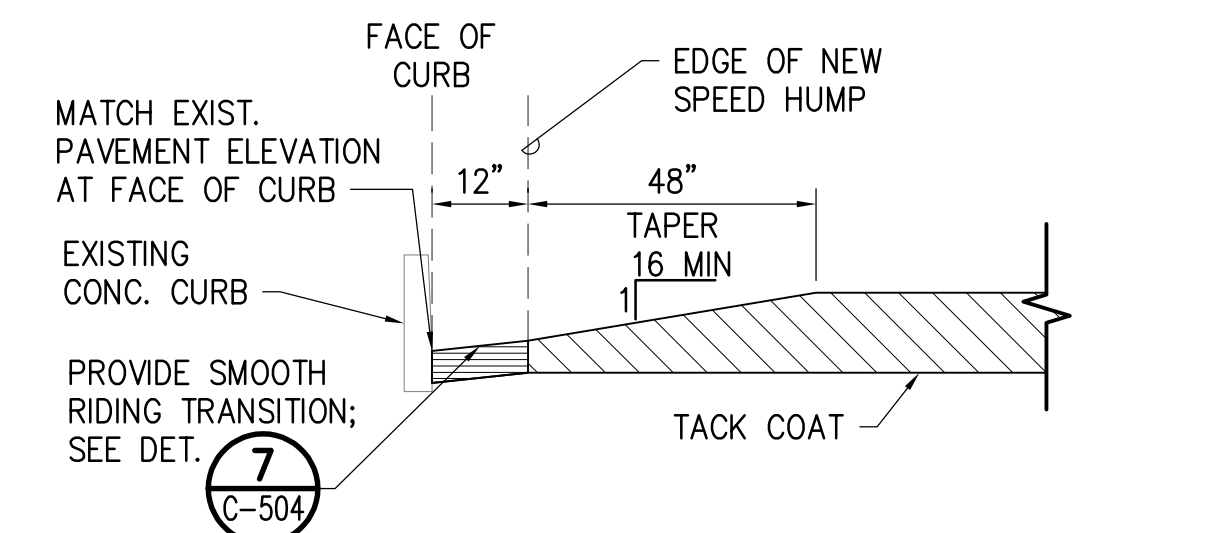
SECTION "B-B"
(AT EXISTING CURB & GUTTER)
FOR SPEED HUMP H-1 & H-2



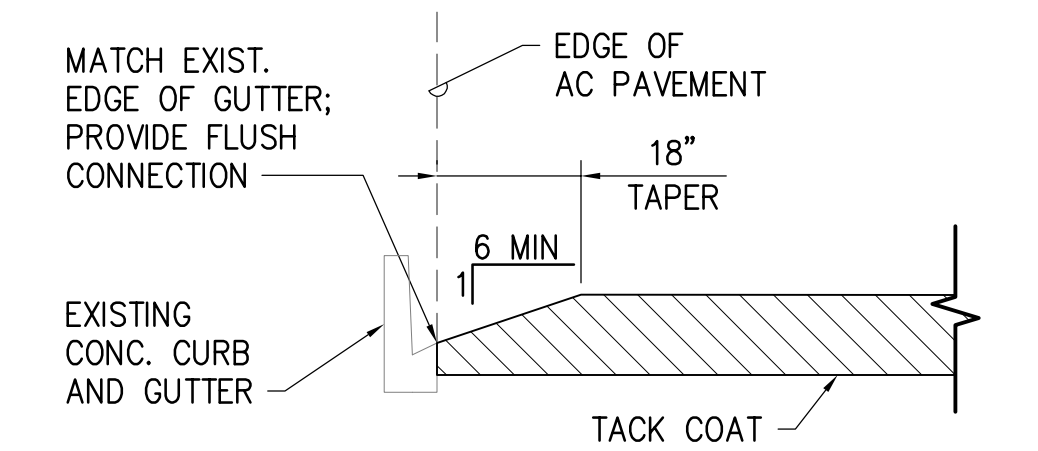
5 CONCRETE CURB CONNECTION DETAIL
C-504 NOT TO SCALE



SECTION "A-A"

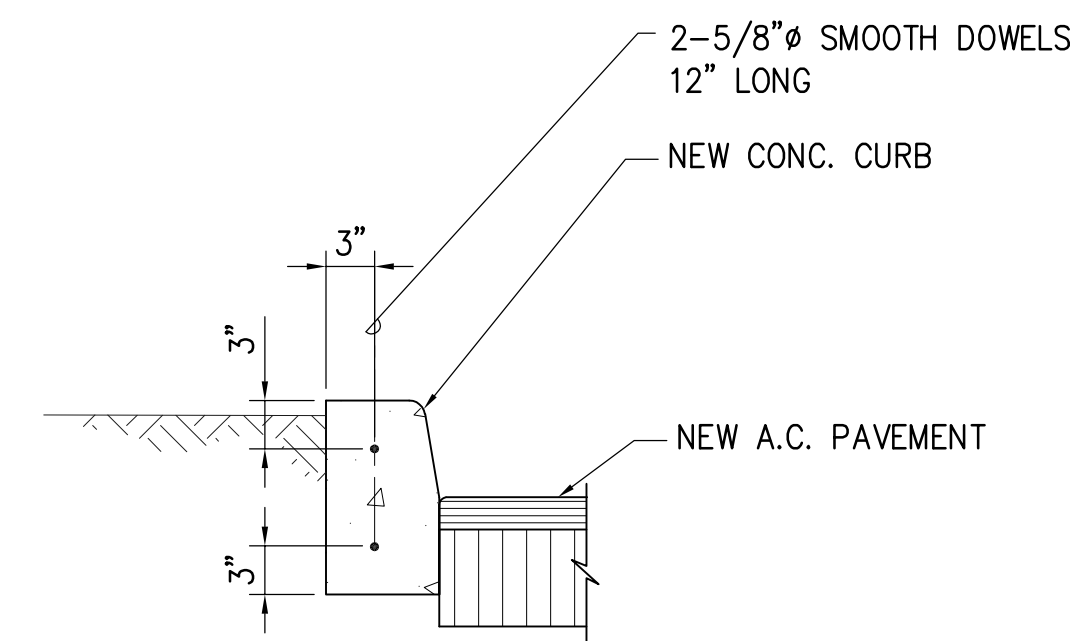


SECTION "B-B" (AT EXISTING CURB)
FOR SPEED TABLE N-3



SECTION "B-B"
(AT EXISTING CURB & GUTTER)

2 SPEED HUMP DETAIL
C-504 NOT TO SCALE



SECTION

APPROVED:

CHIEF, TRAFFIC REVIEW BRANCH, DPP

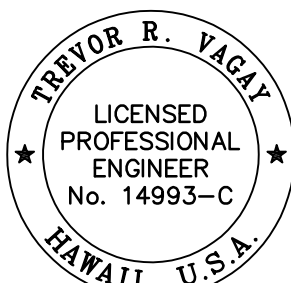
DATE

REVISION NO.	SYM.	DESCRIPTION	SHT/OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS O'AHU, HAWAII					
DETAILS - 4					
DESIGNED: KA DRAWN: KA DATE: APRIL 2022			CHECKED: TV SCALE: N/A		
DRAWING NO. C-504					

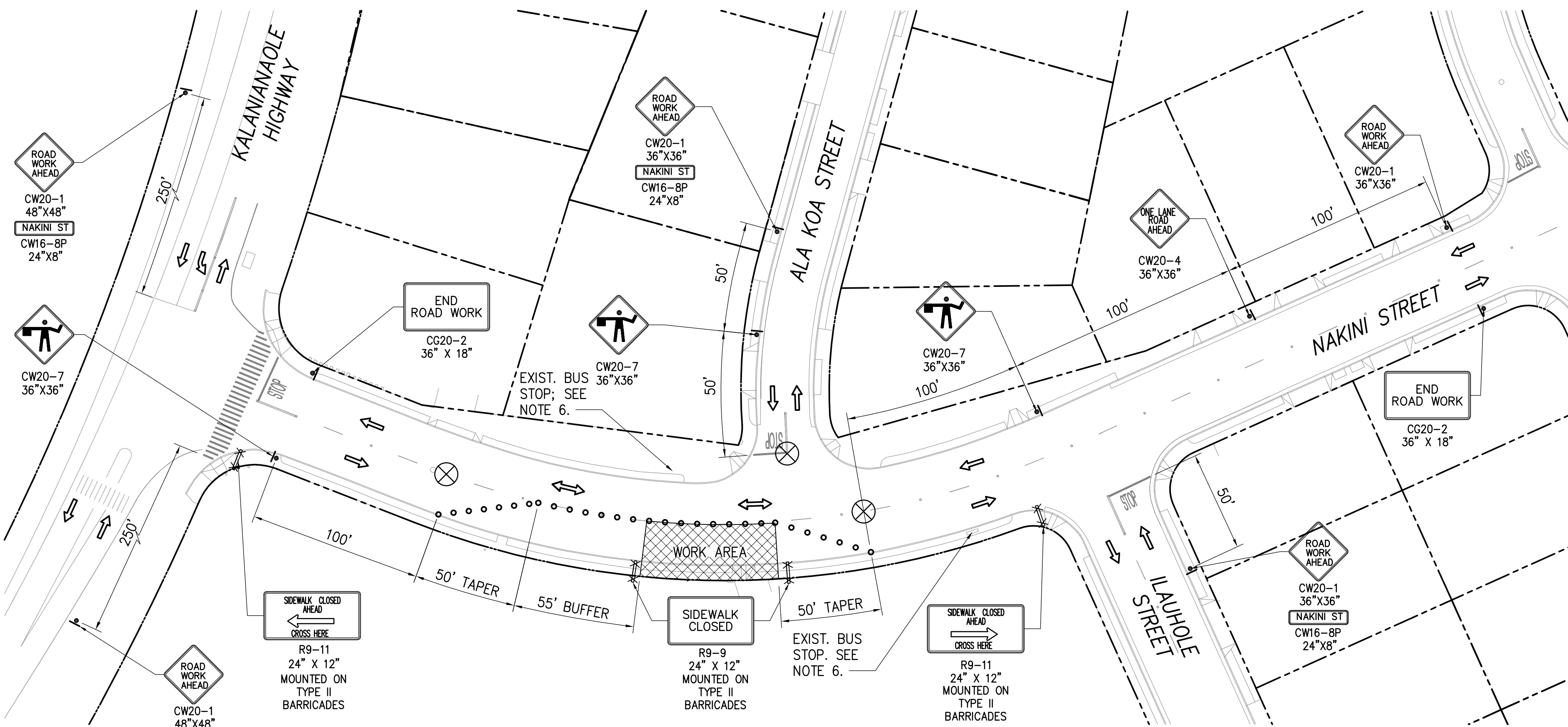


- 6 SIGN AND POST DETAIL
C-505 NOT TO SCALE



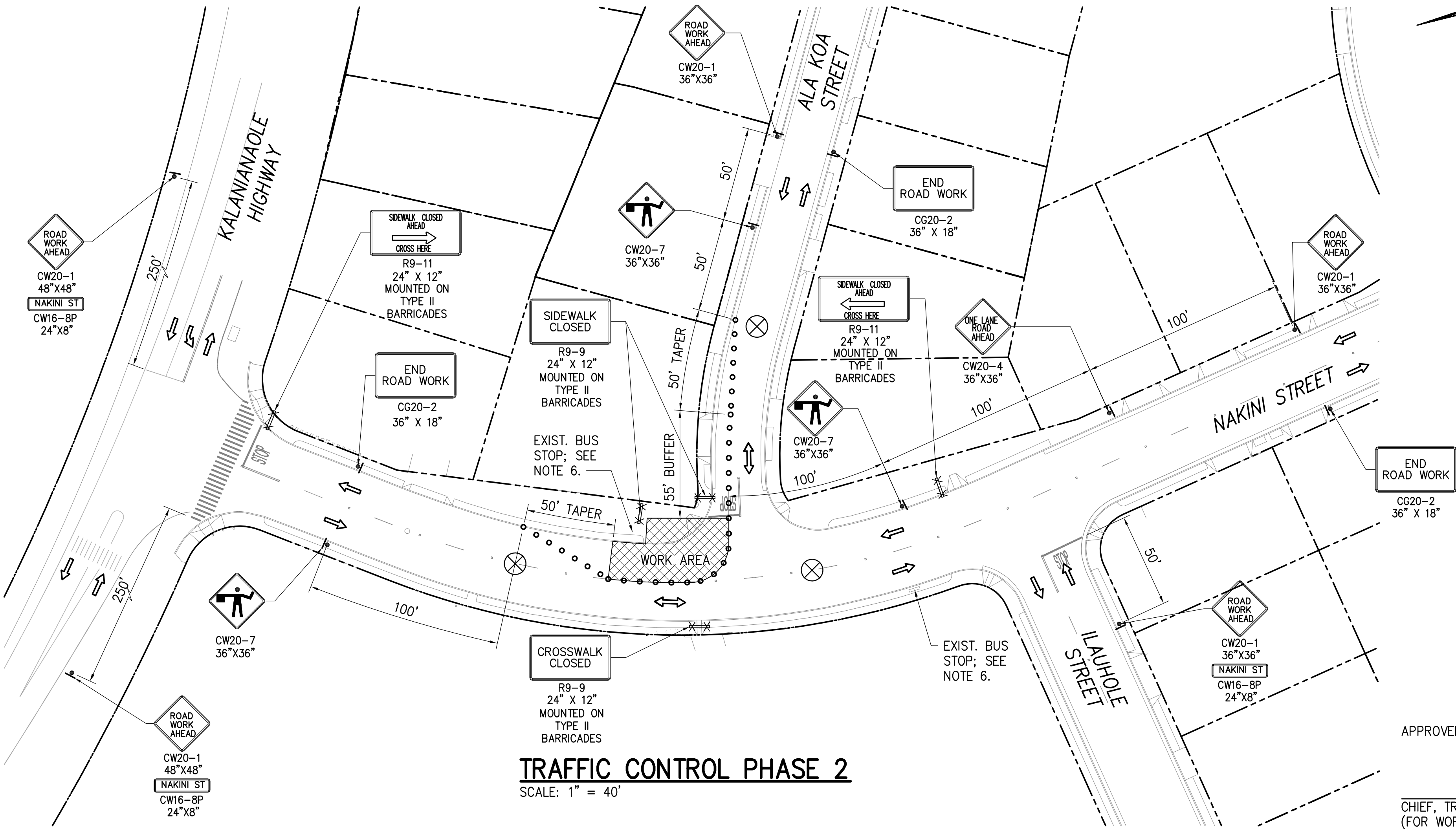
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
		<p align="center">STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS</p> <p align="center">NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS O'AHU, HAWAII</p>			
<p align="center">4/30/24 <hr/> EXP. DATE</p>		<p align="center">DETAILS - 5</p>			
<p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</p>		DESIGNED: KA DRAWN: KA DATE: APRIL 2022	CHECKED: TV SCALE: AS SHOWN	DRAWING NO. C-505	

\\n1_projects\38 - dhhl\13803 - nakini street improvements\DRAWINGS\TCF.dwg - 4/16/2022 11:08 AM



TRAFFIC CONTROL PHASE 1

SCALE: 1" = 40'



TRAFFIC CONTROL PHASE 2

SCALE: 1" = 40'

GENERAL NOTES FOR TRAFFIC CONTROL PLAN:

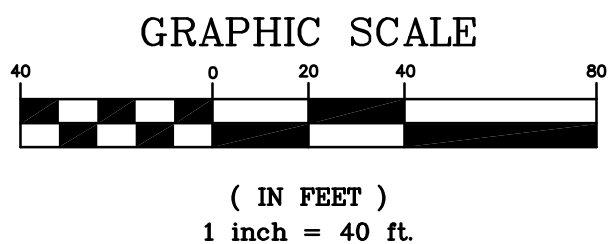
1. THE PERMITTEE SHALL MAKE MINOR ADJUSTMENTS AT INTERSECTIONS, DRIVEWAYS, BRIDGES, STRUCTURES, ETC., TO FIT FIELD CONDITIONS.
2. CONES OR DELINEATORS SHALL BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
3. TRAFFIC CONTROL DEVICES SHALL BE INSTALLED SUCH THAT THE SIGN OR DEVICE FARTEST FROM THE WORK AREA IS PLACED FIRST. THE OTHERS SHALL THEN BE PLACED PROGRESSIVELY TOWARD THE WORK AREA.
4. REGULATORY AND WARNING SIGNS WITHIN THE CONSTRUCTION ZONE THAT ARE IN CONFLICT WITH THE TRAFFIC CONTROL PLANS SHALL BE REMOVED OR COVERED.
5. FLAGGERS AND/OR POLICE OFFICERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
6. WHEN REQUIRED BY THE ISSUING OFFICE, THE PERMITTEE SHALL INSTALL A FLASHING ARROW SIGNAL AS SHOWN ON THE TRAFFIC CONTROL PLANS.
7. ALL TRAFFIC LANES SHALL BE A MINIMUM OF 10 FEET WIDE.
8. ALL CONSTRUCTION WARNING SIGNS SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE MESSAGE IS NOT APPLICABLE OR NOT IN USE.
9. THE BACKS OF ALL SIGNS USED FOR TRAFFIC CONTROL SHALL BE APPROPRIATELY COVERED TO PRECLUDE THE DISPLAY OF INAPPLICABLE SIGN MESSAGES (I.E., WHEN SIGNS HAVE MESSAGES ON BOTH FACES).
10. LANE CLOSURE SHALL BE LIMITED ONLY TO THE EXTENT OF ACCOMPLISHING EACH DAY'S WORK. AS SOON AS EACH DAY'S WORK IS COMPLETED, THE PERMITTEE SHALL REMOVE ALL TRAFFIC CONTROL DEVICES NO LONGER NEEDED TO PERMIT FREE AND SAFE PASSAGE OF PUBLIC TRAFFIC. REMOVAL SHALL BE IN THE REVERSE ORDER OF INSTALLATION. EXISTING FADED OR OBLITERATED PAVEMENT MARKINGS THAT ARE NECESSARY FOR SAFE TRAFFIC FLOW IN THE CONSTRUCTION AREA SHALL BE REPLACED WITH TEMPORARY OR PERMANENT MARKINGS BEFORE OPENING THE ROADWAY TO PUBLIC TRAFFIC EACH DAY.
11. PERMANENT PAVEMENT MARKINGS AND TRAFFIC SIGNS SHALL BE REPLACED UPON COMPLETION OF EACH PHASE OF WORK.
12. CONES AND DELINEATORS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 20 FEET APART. A MINIMUM OF SIX CHANNELIZING DEVICES SHALL BE USED FOR EACH TAPER LENGTH.
13. DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTY USING THE RIGHT-OF-WAY ARE OTHERWISE PROVIDED FOR SATISFACTORILY. FURTHER, THE PERMITTEE SHALL CONTROL TRAFFIC GOING IN AND OUT OF DRIVEWAYS.
14. BUFFER AND TAPER AREAS ON APPROACH TO ANY WORK AREA SHALL BE KEPT CLEAR OF VEHICLES AND EQUIPMENT.
15. A HIGH LEVEL WARNING DEVICE (FLAG TREE) SHALL BE INSTALLED ON APPROACH TO ALL WORK AREAS.
16. "NO PARKING" SIGNS SHALL BE POSTED WITHIN ANY WORK AREA AND FOR THE BUTTER AND TAPER AREAS APPROACHING THE WORK AREA.
17. TRAFFIC CONTROL PLANS ARE APPROVED FOR WORK ON ANY CITY STREET AREA ONLY BETWEEN THE HOURS OF 8:30 A.M. AND 3:30 P.M. (MONDAY-FRIDAY).

NOTES

1. POSTED SPEED LIMIT IN PROJECT AREA IS 25 MPH.
2. MINIMUM TRAVEL LANE WIDTH IN THE AREA IS 10'-0"
3. MAXIMUM SPACING OF CONES OR DELINEATORS ARE:
WORK AREA = 10 FT. O.C.
TANGENT = 20 FT. O.C.
TAPER = 20 FT. O.C.
4. CONTRACTOR SHALL INSTALL IN ADVANCE "NO PARKING" SIGNS WITHIN THE PROJECT AREA.
5. CONTRACTOR SHALL PROVIDE ACCESS TO DRIVEWAYS DURING CONSTRUCTION.
6. EXISTING BUS STOP SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. IF THE EXISTING BUS STOP LOCATION CANNOT REMAIN OPEN DURING CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH OAHU TRANSIT SERVICES FOR BUS STOP RELOCATION.

LEGEND

- 28"H CONE WITH REFLECTIVE COLLAR (DOUBLE UP TO INCREASE STABILITY)
- SIGN
- DIRECTION OF TRAFFIC
- WORK AREA
- POLICE OFFICER
- TYPE II BARRICADE



APPROVED:

CHIEF, TRAFFIC REVIEW BRANCH, DPP
(FOR WORK WITHIN CITY R/W ONLY)

DATE

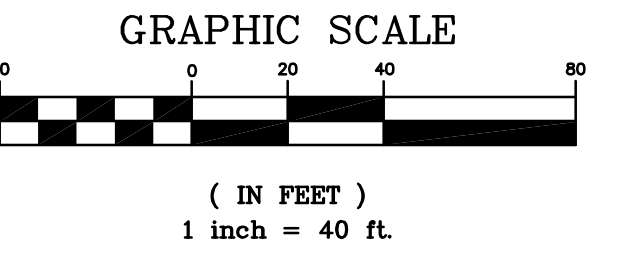
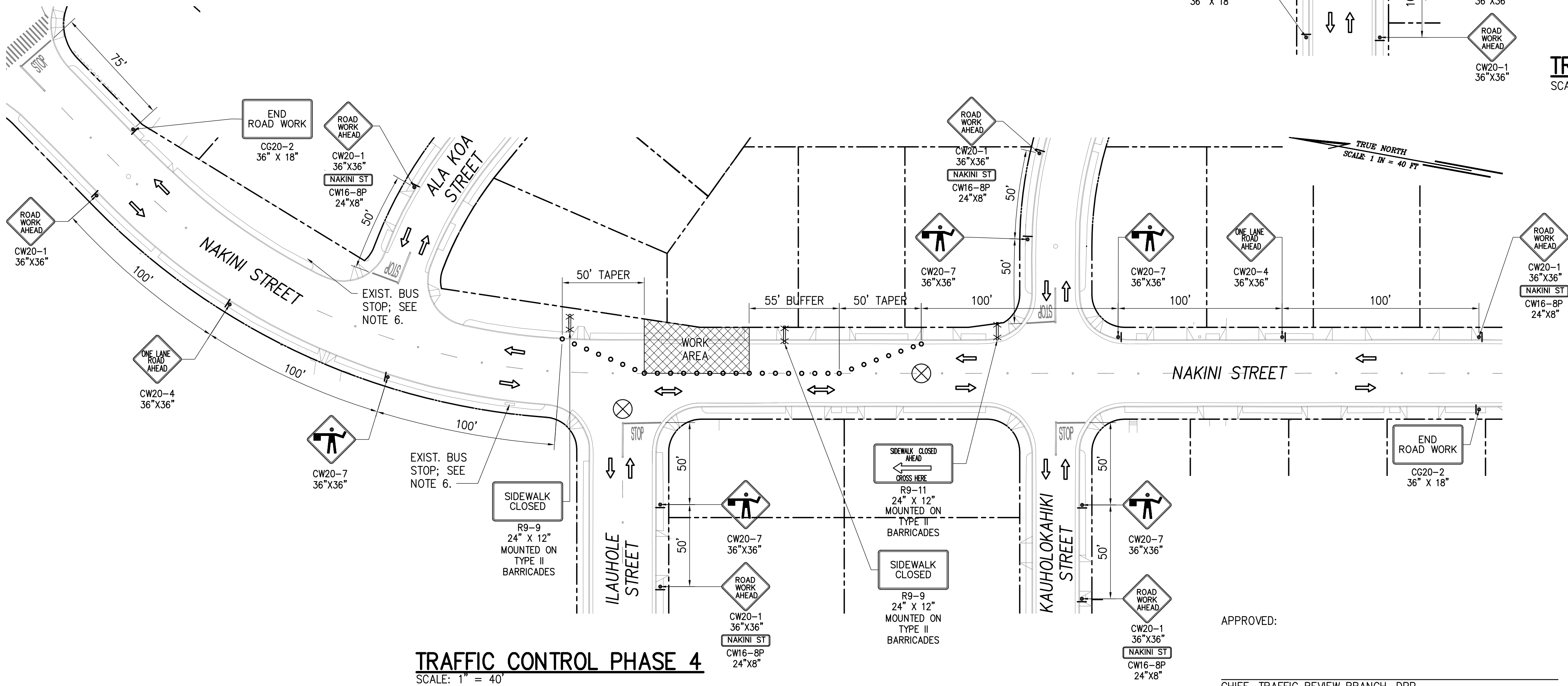
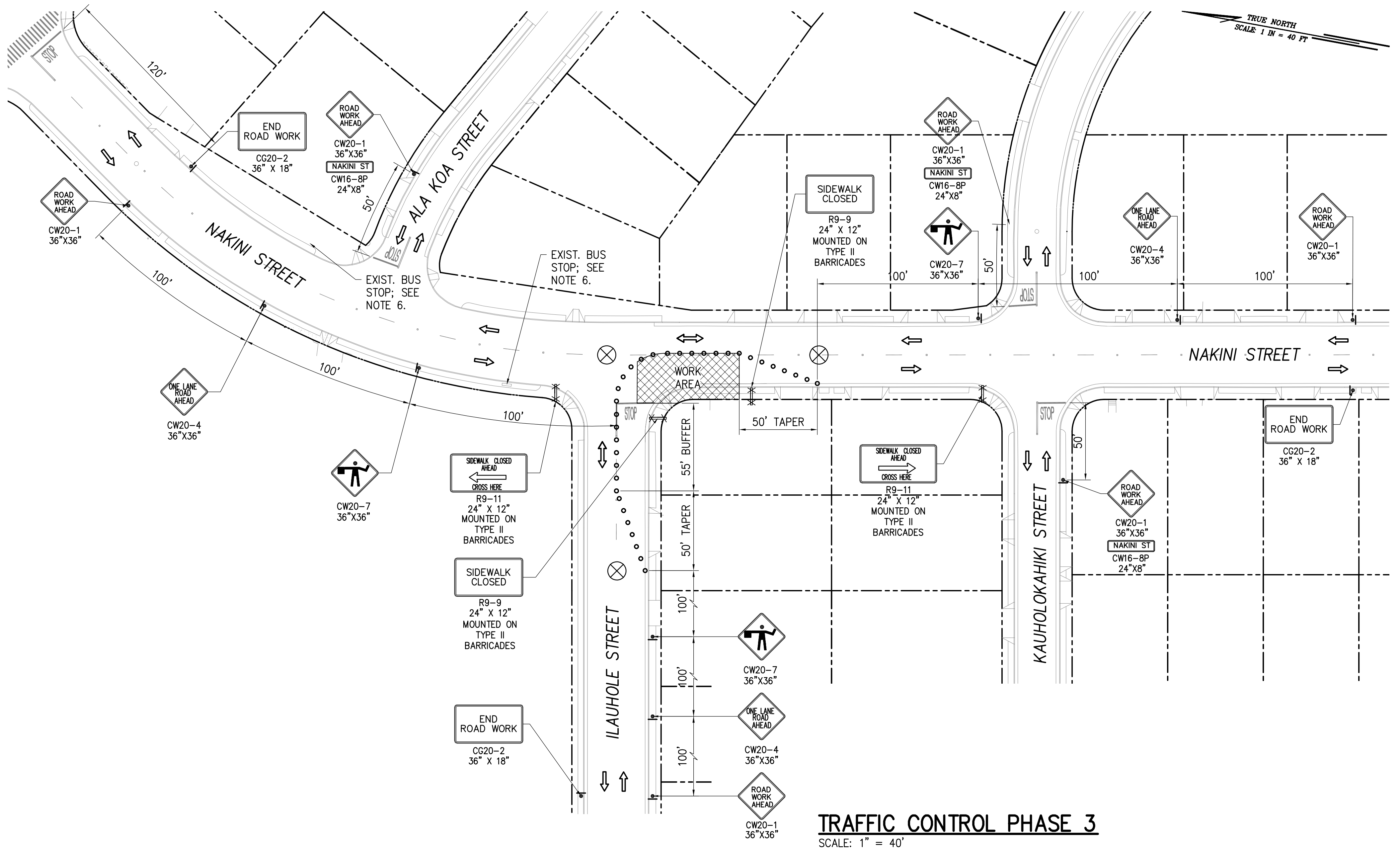
REVISION NO.	SYM.	DESCRIPTION	SHT/OF	DATE	APPROVED
<div><div><div>TRAYOR R. YAGY LICENSED PROFESSIONAL ENGINEER No. 14993-C HAWAII U.S.A.</div><div>4/30/24 EXP. DATE</div></div><div><div>STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS O'AHU, HAWAII</div><div>TRAFFIC CONTROL PLAN - 1</div></div></div>					
DESIGNED: KA		CHECKED: TV		DRAWING NO.	
DRAWN: KA		SCALE: 1" = 40'		C-701	
DATE: APRIL 2022					

NOTES

1. POSTED SPEED LIMIT IN PROJECT AREA IS 25 MPH.
2. MINIMUM TRAVEL LANE WIDTH IN THE AREA IS 10'-0"
3. MAXIMUM SPACING OF CONES OR DELINEATORS ARE:
WORK AREA = 10 FT. O.C.
TANGENT = 20 FT. O.C.
TAPER = 20 FT. O.C.
4. CONTRACTOR SHALL INSTALL IN ADVANCE "NO PARKING" SIGNS WITHIN THE PROJECT AREA.
5. CONTRACTOR SHALL PROVIDE ACCESS TO DRIVEWAYS DURING CONSTRUCTION.
6. EXISTING BUS STOP SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. IF THE EXISTING BUS STOP LOCATION CANNOT REMAIN OPEN DURING CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH OAHU TRANSIT SERVICES FOR BUS STOP RELOCATION.

LEGEND

- 28"H CONE WITH REFLECTIVE COLLAR (DOUBLE UP TO INCREASE STABILITY)
- SIGN
- DIRECTION OF TRAFFIC
- WORK AREA
- POLICE OFFICER
- TYPE II BARRICADE

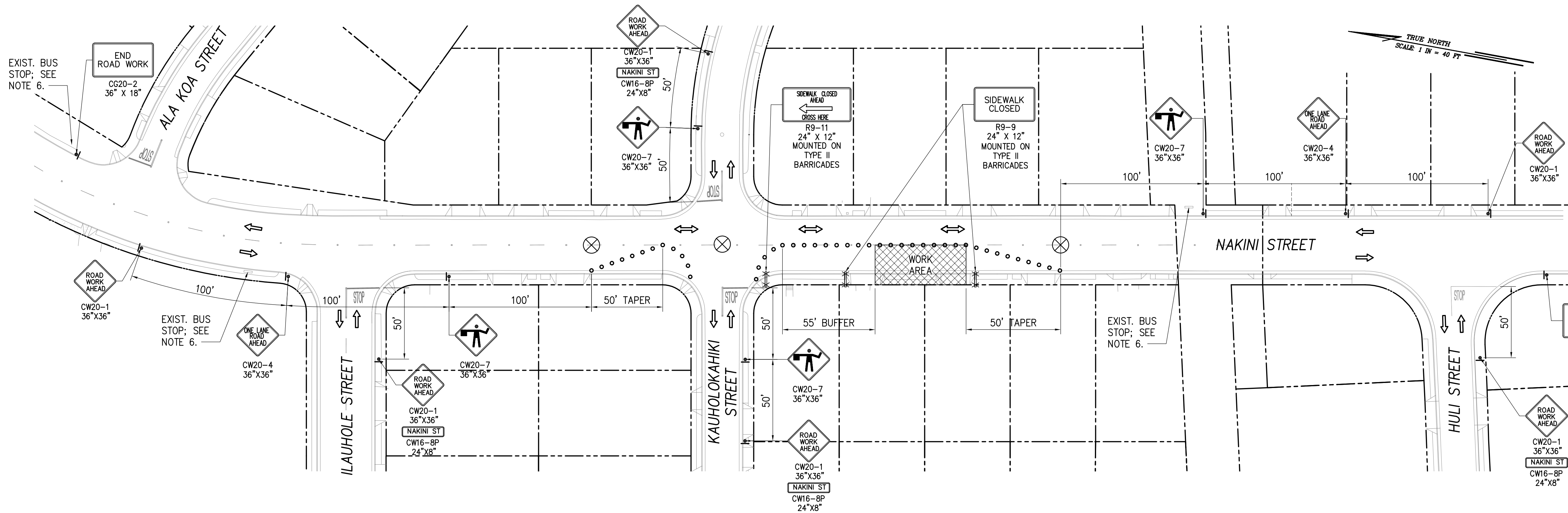


REVISION NO.	SYM.	DESCRIPTION	SHT/OF	DATE	APPROVED
STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS O'AHU, HAWAII					
TRAFFIC CONTROL PLAN - 2					
DESIGNED: KA		CHECKED: TV		DRAWING NO. C-702	
DRAWN: KA		SCALE: 1" = 40'		DATE: APRIL 2022	

APPROVED: _____ DATE _____

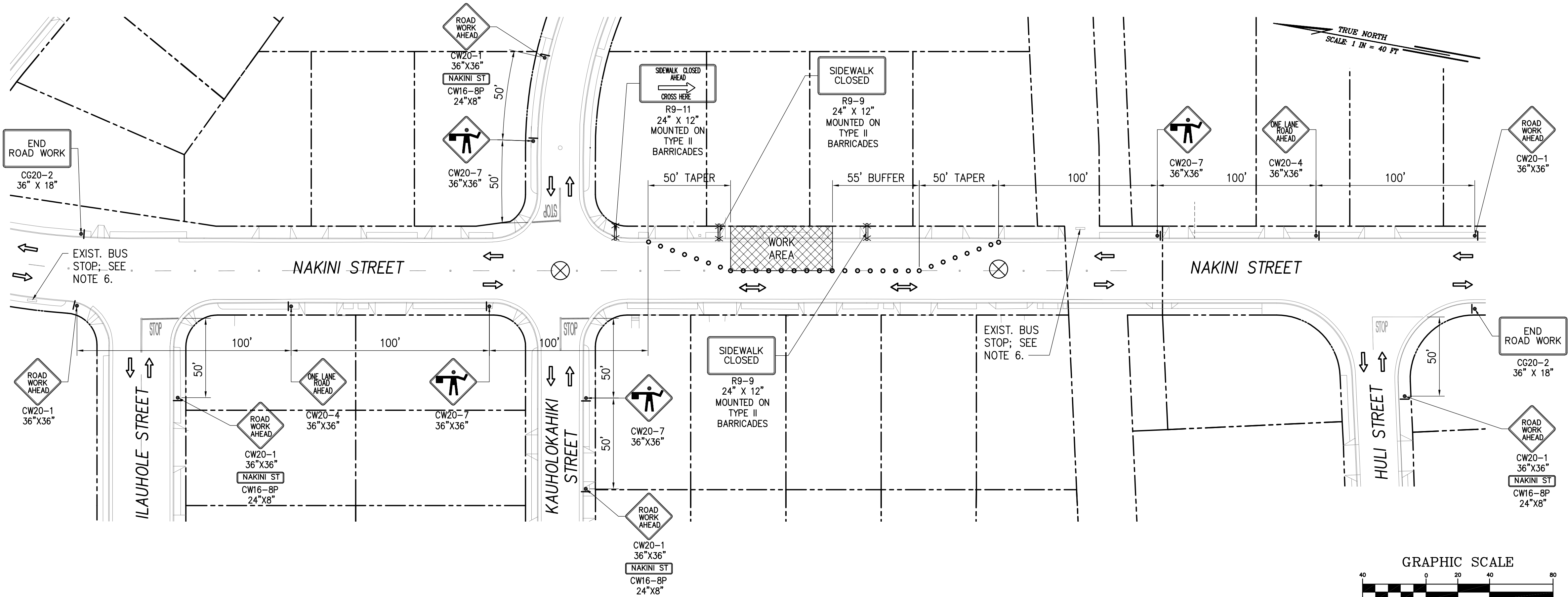
CHIEF, TRAFFIC REVIEW BRANCH, DPP
(FOR WORK WITHIN CITY R/W ONLY)

\\n1_projects\38 - dhhl\13803 - nakini street improvements\DRAWINGS\TCF.dwg - 4/16/2022 11:08 AM



TRAFFIC CONTROL PHASE 5

SCALE: 1" = 40'



TRAFFIC CONTROL PHASE 6

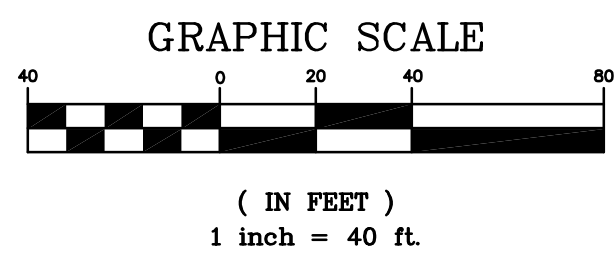
SCALE: 1" = 40'

NOTES

1. POSTED SPEED LIMIT IN PROJECT AREA IS 25 MPH.
2. MINIMUM TRAVEL LANE WIDTH IN THE AREA IS 10'-0"
3. MAXIMUM SPACING OF CONES OR DELINEATORS ARE:
WORK AREA = 10 FT. O.C.
TANGENT = 20 FT. O.C.
TAPER = 20 FT. O.C.
4. CONTRACTOR SHALL INSTALL IN ADVANCE "NO PARKING" SIGNS WITHIN THE PROJECT AREA.
5. CONTRACTOR SHALL PROVIDE ACCESS TO DRIVEWAYS DURING CONSTRUCTION.
6. EXISTING BUS STOP SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. IF THE EXISTING BUS STOP LOCATION CANNOT REMAIN OPEN DURING CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH OAHU TRANSIT SERVICES FOR BUS STOP RELOCATION.

LEGEND

- 28"H CONE WITH REFLECTIVE COLLAR (DOUBLE UP TO INCREASE STABILITY)
- ≡ SIGN
- ⇄ DIRECTION OF TRAFFIC
- ▨ WORK AREA
- ⊗ POLICE OFFICER
- ≡≡ TYPE II BARRICADE



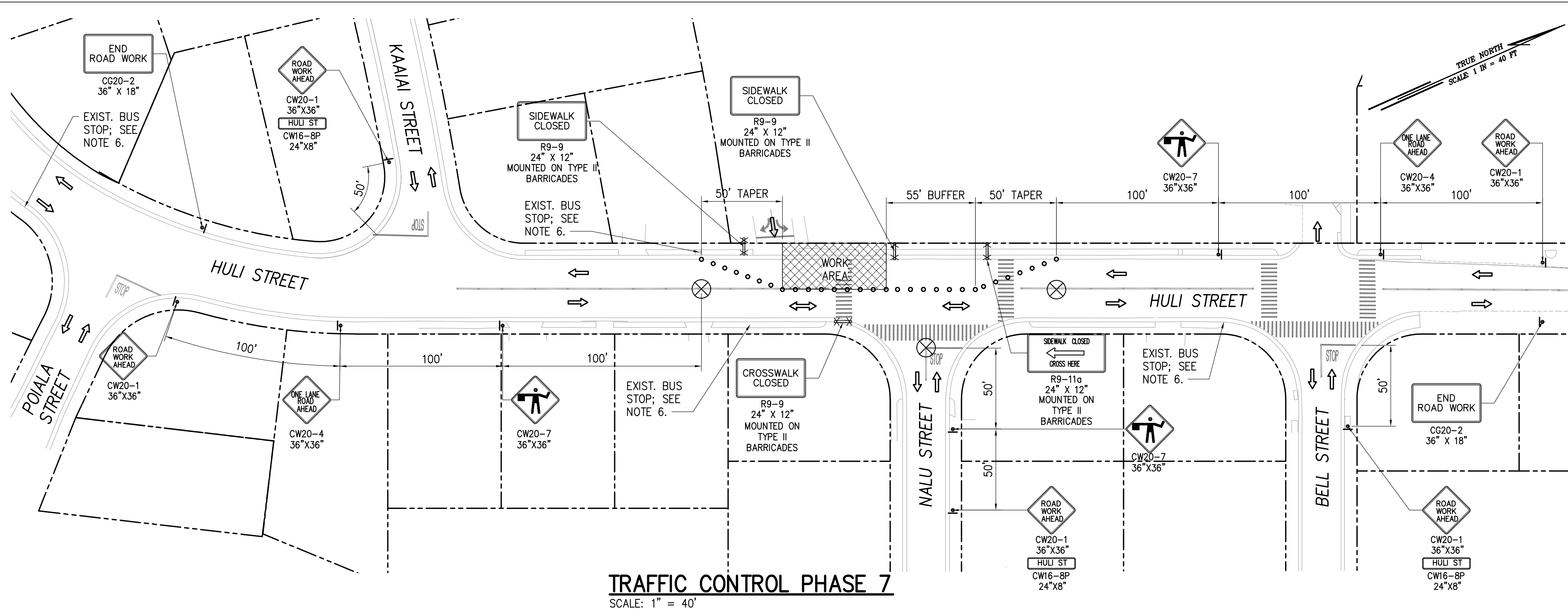
APPROVED:

CHIEF, TRAFFIC REVIEW BRANCH, DPP
(FOR WORK WITHIN CITY R/W ONLY)

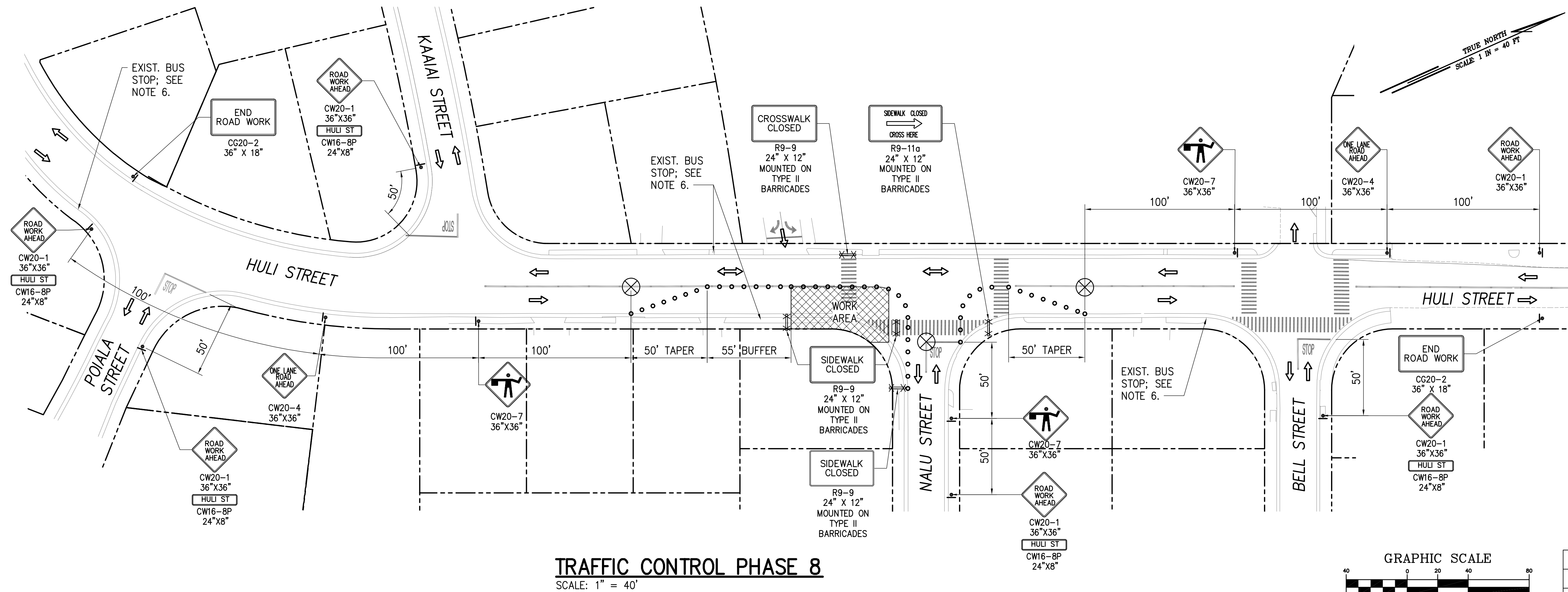
DATE

REVISION NO.	SYM.	DESCRIPTION	SHT/OF	DATE	APPROVED
<div><div><div>TREYOR R. YAGLY LICENSED PROFESSIONAL ENGINEER No. 14993-C HAWAII U.S.A.</div><div>4/30/24 EXP. DATE</div></div><div>STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS O'AHU, HAWAII</div><div>TRAFFIC CONTROL PLAN - 3</div></div>					
DESIGNED: KA		CHECKED: TV		DRAWING NO. C-703	
DRAWN: KA		SCALE: 1" = 40'		DATE: APRIL 2022	

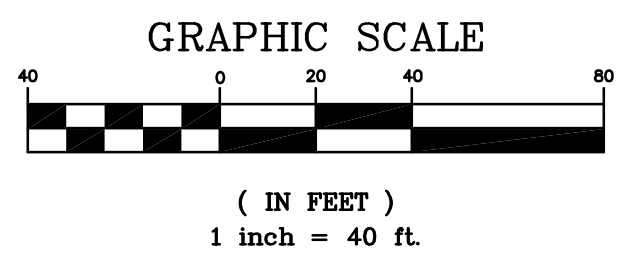
\\n1_projects\38 - dhhl\13803 - nakini street improvements\DRAWINGS\TCF.dwg - 4/16/2022 11:08 AM



TRAFFIC CONTROL PHASE 7
SCALE: 1" = 40'



TRAFFIC CONTROL PHASE 8
SCALE: 1" = 40'



APPROVED:

CHIEF, TRAFFIC REVIEW BRANCH, DPP
(FOR WORK WITHIN CITY R/W ONLY)

DATE

NOTES

1. POSTED SPEED LIMIT IN PROJECT AREA IS 25 MPH.
2. MINIMUM TRAVEL LANE WIDTH IN THE AREA IS 10'-0"
3. MAXIMUM SPACING OF CONES OR DELINEATORS ARE:
WORK AREA = 10 FT. O.C.
TANGENT = 20 FT. O.C.
TAPER = 20 FT. O.C.
4. CONTRACTOR SHALL INSTALL IN ADVANCE "NO PARKING" SIGNS WITHIN THE PROJECT AREA.
5. CONTRACTOR SHALL PROVIDE ACCESS TO DRIVEWAYS DURING CONSTRUCTION.
6. EXISTING BUS STOP SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. IF THE EXISTING BUS STOP LOCATION CANNOT REMAIN OPEN DURING CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH OAHU TRANSIT SERVICES FOR BUS STOP RELOCATION.

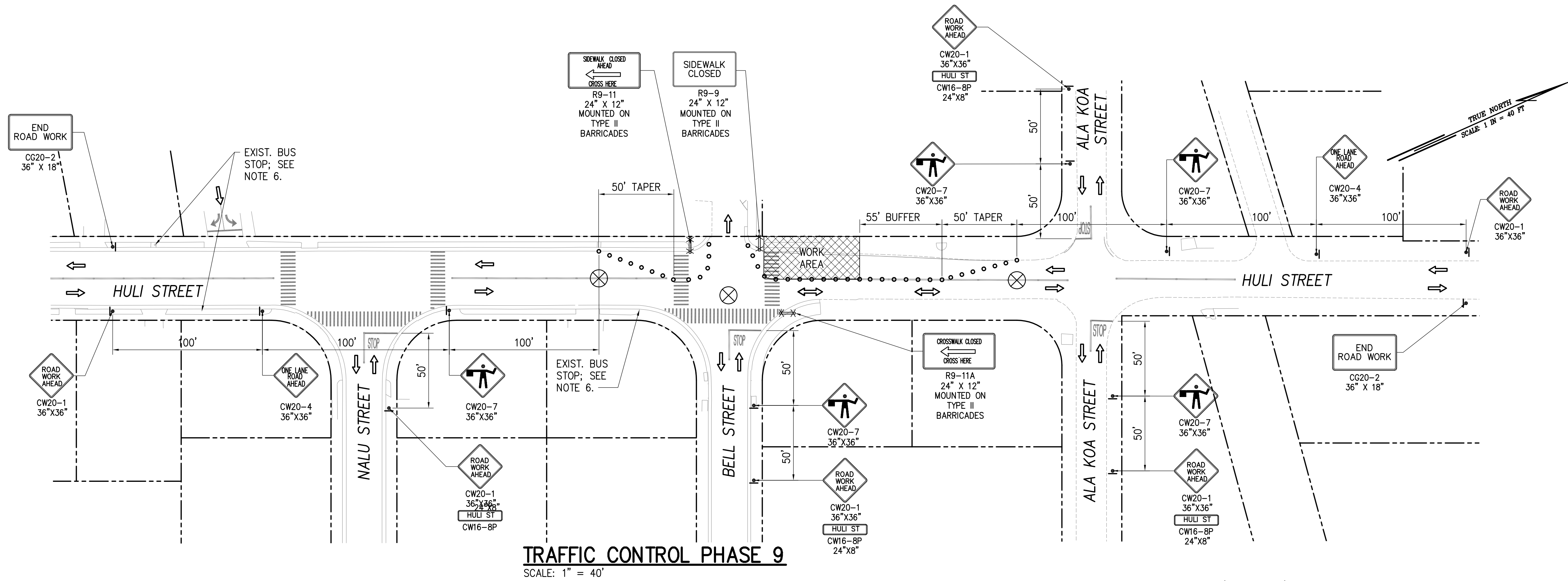
LEGEND

- 28"H CONE WITH REFLECTIVE COLLAR (DOUBLE UP TO INCREASE STABILITY)
- ≡ SIGN
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA
- ⊗ POLICE OFFICER
- ≡≡ TYPE II BARRICADE

REVISION NO.	SYM.	DESCRIPTION	SHT/OF	DATE	APPROVED
<div><div><p>4/30/24 EXP. DATE</p></div><div><p>STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS O'AHU, HAWAII</p><p>TRAFFIC CONTROL PLAN - 4</p></div></div>					
DESIGNED: KA		CHECKED: TV	DRAWING NO. C-704		
DRAWN: KA		SCALE: 1" = 40'			
DATE: APRIL 2022					

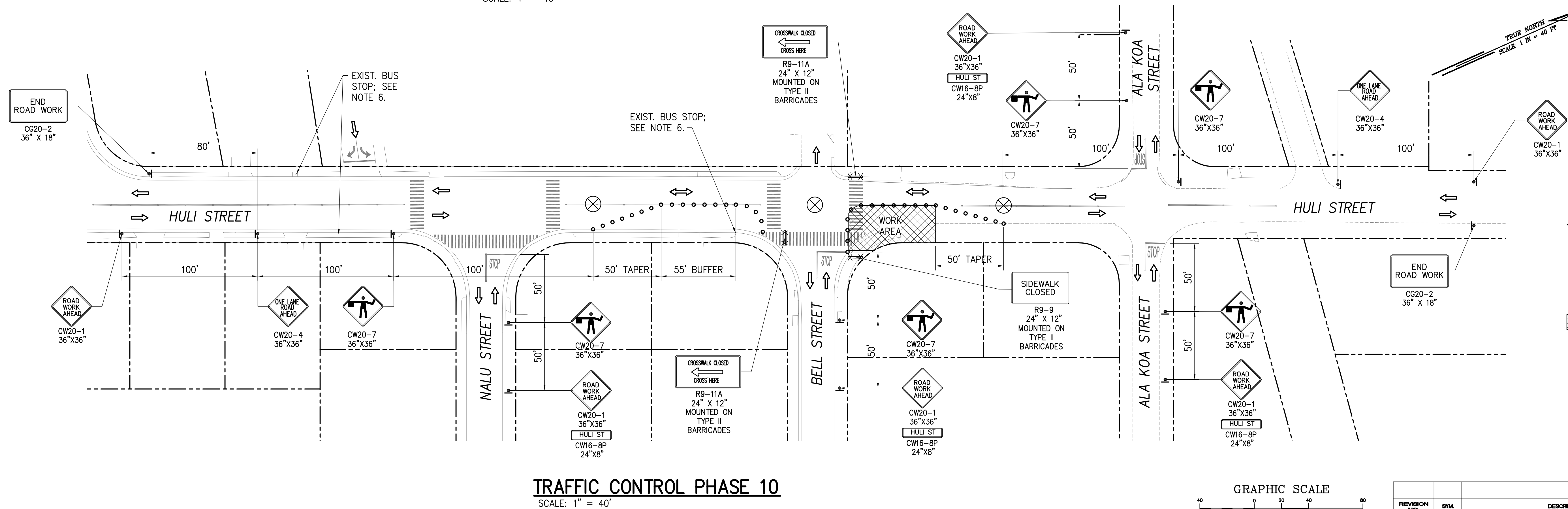
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

\\n1_projects\38 - dhhl\13803 - nakini street improvements\DRAWINGS\TCF.dwg - 4/16/2022 11:08 AM



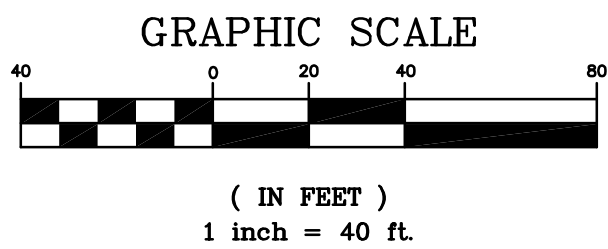
NOTES

1. POSTED SPEED LIMIT IN PROJECT AREA IS 25 MPH.
2. MINIMUM TRAVEL LANE WIDTH IN THE AREA IS 10'-0"
3. MAXIMUM SPACING OF CONES OR DELINEATORS ARE:
WORK AREA = 10 FT. O.C.
TANGENT = 20 FT. O.C.
TAPER = 20 FT. O.C.
4. CONTRACTOR SHALL INSTALL IN ADVANCE "NO PARKING" SIGNS WITHIN THE PROJECT AREA.
5. CONTRACTOR SHALL PROVIDE ACCESS TO DRIVEWAYS DURING CONSTRUCTION.
6. EXISTING BUS STOP SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. IF THE EXISTING BUS STOP LOCATION CANNOT REMAIN OPEN DURING CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH OAHU TRANSIT SERVICES FOR BUS STOP RELOCATION.



LEGEND

- 28"H CONE WITH REFLECTIVE COLLAR (DOUBLE UP TO INCREASE STABILITY)
- SIGN
- DIRECTION OF TRAFFIC
- ▨ WORK AREA
- ⊗ POLICE OFFICER
- TYPE II BARRICADE



APPROVED:

CHIEF, TRAFFIC REVIEW BRANCH, DPP
(FOR WORK WITHIN CITY R/W ONLY)

DATE

REVISION NO.	SYM.	DESCRIPTION	SHT/OF	DATE	APPROVED
<div><div><p>4/30/24 EXP. DATE</p></div><div><p>STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS NAKINI STREET AND HULI STREET TRAFFIC CALMING IMPROVEMENTS O'AHU, HAWAII</p><p>TRAFFIC CONTROL PLAN - 5</p></div></div>					
DESIGNED: KA		CHECKED: TV	DRAWING NO. C-705		
DRAWN: KA		SCALE: 1" = 40'	DRAWING NO. C-705		
DATE: APRIL 2022		DRAWING NO. C-705			