

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FMT-HIC-01-97			

GENERAL NOTES

- THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.
- UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH ORDINANCE NOS. 2875 AND 3357 (UNDERGROUND UTILITIES).
- NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATER-COURSES. SHOULD SUCH VIOLATIONS OCCUR, THE COSTS INCURRED FOR ANY REMEDIAL ACTION BY THE CHIEF ENGINEER SHALL BE PAYABLE BY THE CONTRACTOR.
- THE CONTRACTOR, AT HIS EXPENSE, SHALL KEEP THE PROJECT AND SURROUNDING AREA 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 UNDERGROUND PIPES, CABLES OR DUCT LINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. 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.
- THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 54, WATER QUALITY STANDARDS, AND CHAPTER 55, WATER POLLUTION CONTROL, OF TITLE 11, ADMINISTRATIVE RULES OF THE STATE DEPARTMENT OF HEALTH, DURING ALL PHASES OF WORK. ADEQUATE MEASURES SHALL BE TAKEN TO COMPLY WITH THESE REGULATIONS.
- ALL EXISTING UTILITIES, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE PROTECTED AT ALL TIMES UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES AND OTHER PROTECTIVE FACILITIES, AND SHALL TAKE ALL NECESSARY PRECAUTION FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.
- THE CONTRACTOR'S ATTENTION IS DIRECTED TO CHAPTER 43, TITLE 11, ADMINISTRATIVE RULES, DEPARTMENT OF HEALTH, STATE OF HAWAII, "COMMUNITY NOISE CONTROL FOR OAHU," IN WHICH MAXIMUM ALLOWABLE NOISE LEVELS HAVE BEEN SET. IF THE CONSTRUCTION ACTIVITIES FOR THIS PROJECT WILL EXCEED THE ALLOWABLE NOISE LEVELS, THE CONTRACTOR WILL BE REQUIRED TO OBTAIN A PERMIT FROM THE DIRECTOR OF THE DEPARTMENT OF PUBLIC HEALTH. THE CONTRACTOR SHALL OBTAIN A COPY OF CHAPTER 43 AND BECOME FAMILIAR WITH THE NOISE LEVEL RESTRICTIONS AND THE PROCEDURES FOR OBTAINING A PERMIT FOR CONSTRUCTION ACTIVITIES.
- STOP WORK AND CONTACT THE STATE HISTORIC SITE OFFICE IMMEDIATELY SHOULD ANY UNIDENTIFIED ARCHAEOLOGICAL SITE OR REMAINS (SUCH AS ARTIFACTS, SHELLS, BONES, CHARCOAL DEPOSITS, ROCK OR CORAL ALIGNMENTS, PAVING OR WALLS) BE ENCOUNTERED.
- 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.
- DURING NON-WORKING HOURS, THE TRENCHES ON CITY STREETS SHALL BE COVERED WITH NON-SKID STEEL PLATES AND ALL LANES MAINTAINED OPEN FOR TRAFFIC.
- CONTRACTOR TO PROVIDE AS-BUILT DRAWINGS.

STREET LIGHT NOTE

STREET LIGHTS SHALL BE INSTALLED IN ACCORDANCE WITH ORDINANCE NO. 1638, AS AMENDED BY ORDINANCE NOS. 1770, 2875, 3035 AND 3357.

CONSTRUCTION NOTES

- THE CONTRACTOR SHALL PERFORM APPLICABLE CONSTRUCTION WORK ALL IN ACCORDANCE WITH THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, DATED SEPTEMBER 1984, AS AMENDED; THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, DATED SEPTEMBER 1986, OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU; AND THE REVISED ORDINANCES OF HONOLULU, 1990, AS AMENDED.
- THE CONTRACTOR SHALL PROVIDE ACCESS TO AND FROM DRIVEWAYS AND PUBLIC STREETS AT ALL TIMES EXCEPT AS NOTED ON THE PLANS.
- WHEN TRENCH EXCAVATION IS ADJACENT TO OR UNDER EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SHEETING AND BRACING THE EXCAVATION AND STABILIZING THE EXISTING GROUND TO RENDER IT SAFE AND SECURE FROM POSSIBLE SLIDES, CAVE-INS AND SETTLEMENT, AND FOR PROPERLY SUPPORTING EXISTING STRUCTURES AND FACILITIES WITH BEAMS, STRUTS OR UNDERPINNING TO FULLY PROTECT IT FROM DAMAGE.
- BACKFILL UNDER EXISTING STRUCTURES OR FACILITIES SHALL BE SANDY OR GRANULAR MATERIAL COMPLETELY PLACED AS SOON AS THE PIPE IS LAIN AND TESTED. THE BACKFILL MATERIAL SHALL BE RAMMED WITH PROPER TOOLS UNTIL COMPACTED FROM 90% TO 95% OF ITS MAXIMUM DENSITY.
- ALL WORK CALLED FOR ON THE PLANS AND NOT ITEMIZED IN THE PROPOSAL AND ALL WORK NOT CALLED FOR BUT REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO UNCLASSIFIED TRENCH EXCAVATION.
- VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
- THE LOCATION AND DEPTH OF EXISTING UTILITIES, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE VERIFIED BY THE CONTRACTOR. EXERCISE PROPER CARE WHEN EXCAVATING IN THE AREA AND PROTECT EXISTING UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO THEM SHALL BE REPAIRED AND PAID FOR BY THE CONTRACTOR.
- PRIOR TO START ON ANY EXCAVATION, THE CONTRACTOR SHALL NOTIFY ALL AGENCIES AND HAVE THEM LOCATE THEIR RESPECTIVE LINES AFFECTED. THE CONTRACTOR SHALL BE HELD RESPONSIBLE AND SHALL PAY FOR ALL DAMAGES TO AND MAINTENANCE AND PROTECTION OF EXISTING UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL COORDINATE ALL WORK.
- THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION, ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING PAVEMENTS, EMBANKMENT, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION SECTION, DIVISION OF ENGINEERING, DEPARTMENT OF PUBLIC WORKS, AT 523-4883, TO ARRANGE FOR INSPECTIONAL SERVICES, AND SUBMIT THREE (3) SETS OF APPROVED CONSTRUCTION PLANS SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORK.
- FINAL LOCATION OF ALL SIGN POST, STREET LIGHT STANDARD, AND OTHER ABOVE FINISH GRADE FACILITIES INSTALLED WITHIN THE SIDEWALK AREAS SHALL MAINTAIN A MINIMUM CLEAR WIDTH OF 36 INCHES FROM SIDEWALK EDGE TO PROVIDE FOR WHEELCHAIR ACCESSIBILITY.
- ALL EXISTING ABOVE FINISH GRADE FACILITIES TO REMAIN WITHIN THE SIDEWALK AREA SHALL MEET THE MINIMUM CLEAR WIDTH OF 36 INCHES FROM THE SIDEWALK EDGE. WHERE NECESSARY, THE EXISTING FACILITIES SHALL BE ADJUSTED AND/OR RELOCATED TO MEET THE MINIMUM CLEAR WIDTH. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS BID ITEMS UNLESS A SPECIFIC ITEM IS PROVIDED IN THE BID PROPOSAL.

NOTES FOR CONSTRUCTION

WITHIN CITY RIGHT-OF-WAY

- ALL CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1984, AS AMENDED; THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986, OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU; AND THE BUILDING AND PLUMBING CODES OF THE BUILDING DEPARTMENT, CITY AND COUNTY OF HONOLULU.
- UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH ORDINANCE NOS. 2875 AND 3357 (UNDERGROUND UTILITIES).

TRAFFIC NOTES

- A PERMIT SHALL BE OBTAINED FROM THE DEPARTMENT OF TRANSPORTATION SERVICES BEFORE WORK ON ANY PORTION OF A PUBLIC STREET OR HIGHWAY MAY BEGIN. CONSTRUCTION TRAFFIC CONTROL PLANS APPROVED BY THE DEPARTMENT OF TRANSPORTATION SERVICES MUST BE PROVIDED WHEN APPLYING FOR THE PERMIT.
- THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS AND OTHER PROTECTIVE FACILITIES, WHICH SHALL CONFORM WITH THE "HAWAII ADMINISTRATION RULES GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS" ADOPTED BY THE DIRECTOR OF TRANSPORTATION, AND THE CURRENT U. S. FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, PART VI - TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS."
- WORK ON ANY CITY STREET AREA MAY BE PERFORMED ONLY BETWEEN THE HOURS OF 8:30 A. M. TO 3:30 P. M., MONDAY THROUGH FRIDAY, UNLESS OTHERWISE PERMITTED BY THE DEPARTMENT OF TRANSPORTATION SERVICES.
- DURING WORKING HOURS, THE CONTRACTOR SHALL PROVIDE TWO LANES FOR THROUGH TRAFFIC. ON STREETS TOO NARROW TO MAKE THIS PRACTICABLE, THE CONTRACTOR MAY WORK ON ONE-HALF OF THE ROADWAY, KEEPING THE OTHER HALF OPEN TO TRAFFIC AND ALTERNATING THE FLOW OF TRAFFIC. DURING NON-WORKING HOURS, ALL TRENCHES SHALL BE COVERED WITH A SAFE NON-SKID BRIDGING MATERIAL AND ALL LANES OPEN TO TRAFFIC.
- AS REQUIRED BY THE DEPARTMENT OF TRANSPORTATION SERVICES, THE CONTRACTOR SHALL PROVIDE OFF-DUTY POLICE OFFICERS TO CONTROL THE FLOW OF TRAFFIC.
- WHERE PEDESTRIAN WALKWAYS EXIST, THEY SHALL BE MAINTAINED IN PASSABLE CONDITION OR OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. PASSAGE BETWEEN WALKWAYS AT INTERSECTIONS SHALL LIKEWISE BE PROVIDED.
- THE CONTRACTOR SHALL REFERENCE, TO THE APPROVAL OF THE DEPARTMENT OF TRANSPORTATION SERVICES, ALL EXISTING TRAFFIC SIGNS, POSTS AND PAVEMENT MARKINGS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNS, POSTS, AND PAVEMENT MARKINGS DISTURBED BY HIS ACTIVITIES. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF TRANSPORTATION SERVICES AT 523-4029 ONE (1) WEEK PRIOR TO ANY WORK TO BE DONE ON SIGNS, POSTS AND PAVEMENT MARKINGS.
- DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTY USING THESE RIGHTS-OF-WAY ARE OTHERWISE PROVIDED FOR SATISFACTORILY.
- STATE DEPT. OF TRANSPORTATION SHALL ENSURE THAT THE CONTRACTOR INSTALLS THE CONSTRUCTION TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE MUTCD AND HAWAII ADMINISTRATION RULES AS SPECIFIED IN TRAFFIC NOTE #2.
- NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN STREET RIGHTS-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY THE DEPARTMENT OF TRANSPORTATION SERVICES.

ELECTRICAL & MAINTENANCE SERVICES DIVISION NOTES

- THE CONTRACTOR SHALL NOTIFY THE JOINT POLE COMMITTEE TWO (2) WEEKS IN ADVANCE OF ANY RELOCATION OF UTILITY POLE(S) THAT MAY BE NECESSARY.
- THE CONTRACTOR SHALL NOTIFY THE ELECTRICAL AND MAINTENANCE SERVICES DIVISION, DEPARTMENT OF TRANSPORTATION SERVICES, THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK ON THE STREET LIGHTING SYSTEM (PHONE 527-5002).
- THE CONTRACTOR SHALL NOTIFY THE ELECTRICAL AND MAINTENANCE SERVICES DIVISION, DEPARTMENT OF TRANSPORTATION SERVICES, THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK ON THE TRAFFIC SIGNAL SYSTEM (PHONE 527-5007).
- THE STREET LIGHTING AND TRAFFIC SIGNALS SHALL BE KEPT OPERATIONAL DURING CONSTRUCTION. ANY RELOCATION REQUIRED SHALL BE APPROVED BY THE ELECTRICAL AND MAINTENANCE SERVICES DIVISION, DEPARTMENT OF TRANSPORTATION SERVICES, AND PERFORMED AND PAID FOR BY THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO EXISTING STREET LIGHTING AND TRAFFIC SIGNAL FACILITIES, INCLUDING THE TRAFFIC SIGNAL INTERCONNECT SYSTEM, AND ANY AND ALL DAMAGES TO THESE FACILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS COST IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY AND COUNTY OF HONOLULU.

REAPPROVED DUE TO TIME LAPSE: DATE

1/24/97
DIRECTOR & CHIEF ENGINEER, DPW
C & C OF HONOLULU

1/24/97
CHIEF, DIVISION OF ENGINEERING, DPW
(FOR CONST. WITHIN CITY R/W ONLY)

5/1/98
CHIEF, TRANSPORTATION MANAGEMENT DIV, DTS
(FOR CONST. WITHIN CITY R/W ONLY)

APPROVED: DATE

12/1/97
DIRECTOR & CHIEF ENGINEER, DPW
CITY & COUNTY OF HONOLULU

12/1/97
CHIEF, DIVISION OF ENGINEERING, DPW
(FOR CONSTRUCTION WITHIN CITY R/W ONLY)

4/10/98
CHIEF, TRAFFIC ENGINEERING DIVISION, DTS
(FOR CONSTRUCTION WITHIN CITY R/W ONLY)

6-5-98
DIRECTOR, DEPARTMENT OF LAND UTILIZATION

1-15-97	Added Const. Notes 11 & 12	CPI	—
12-27-96	Rev. Traffic Notes & Elec. & Maint. Notes Added Reapproval Block	CPI	—
REVISION DATE	DESCRIPTION	MADE BY	APPROVED

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

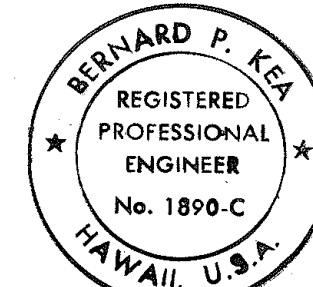
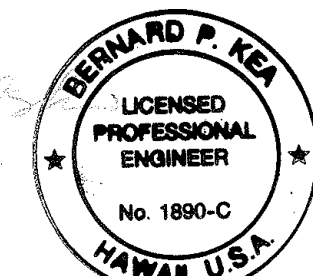
NOTES

MANAGER'S DRIVE BRIDGE WIDENING
INTERSTATE ROUTE H-1

DATE:

SHEET No. 1 OF 3 SHEETS

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NOTE BOOK	
NO.	



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Signature: Bernard P. Kea

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	PMT-H10-01-97			

GRADING NOTES

- 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, AND SOILS REPORTS BY PSC ASSOCIATES, INC., TITLED "SUBSURFACE EXPLORATION REPORT, MANAGER'S DRIVE EXTENSION - PHASE I, WAIKELE DEVELOPMENT, WAIPIO, OAHU, HAWAII," DATED JANUARY 10, 1992; AND "GEOTECHNICAL ENGINEERING INVESTIGATION, MANAGER'S DRIVE EXTENSION - PHASE II, WAIKELE DEVELOPMENT, WAIPIO, OAHU, HAWAII," DATED JULY 10, 1992.
- 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 COSTS INCURRED FOR ANY REMEDIAL ACTION BY THE CHIEF ENGINEER SHALL BE PAYABLE BY THE CONTRACTOR.
- THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS CONTAINED IN CHAPTER 11-60, "AIR POLLUTION CONTROL."
- THE UNDERGROUND PIPES, CABLES OR DUCT LINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. 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.
- ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATERS FROM DAMAGING THE CUT FACE OF AN EXCAVATION OR THE SLOPED SURFACES OF A FILL. FURTHERMORE, ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE SITE.
- ALL SLOPES AND EXPOSED AREAS SHALL BE SODDED OR PLANTED AS SOON AS FINAL GRADES HAVE BEEN ESTABLISHED. PLANTING SHALL NOT BE DELAYED UNTIL ALL GRADING WORK HAS BEEN COMPLETED. GRADING TO FINAL GRADE SHALL BE CONTINUOUS, AND ANY AREA WITHIN WHICH WORK HAS BEEN INTERRUPTED OR DELAYED, SHALL BE PLANTED.
- FILLS ON SLOPES STEEPER THAN 5:1 SHALL BE KEYED.
- THE CITY SHALL 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.
- NO GRADING WORK SHALL BE DONE ON SATURDAYS, SUNDAYS AND HOLIDAYS AT ANY TIME WITHOUT PRIOR NOTICE TO THE CHIEF ENGINEER, PROVIDED SUCH GRADING WORK IS ALSO IN CONFORMANCE WITH HAWAII ADMINISTRATIVE RULES, CHAPTER 11-43, "COMMUNITY NOISE CONTROL FOR OAHU."
- THE LIMITS OF THE AREA TO BE GRADED SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF THE GRADING WORK.
- ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER POLLUTION CONTROL AND WATER QUALITY STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES, CHAPTER 11-55, "WATER POLLUTION CONTROL" AND CHAPTER 11-54, "WATER QUALITY STANDARDS," AND IF APPLICABLE, THE NPDES PERMIT FOR THE PROJECT.
- WHERE APPLICABLE AND FEASIBLE, THE MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY EARTH MOVING PHASE OF THE GRADING IS INITIATED.
- TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.
- IF THE GRADING WORK INVOLVES CONTAMINATED SOIL, THEN ALL GRADING WORK SHALL BE DONE IN CONFORMANCE WITH APPLICABLE STATE AND FEDERAL REQUIREMENTS.

- NON-COMPLIANCE TO ANY OF THE ABOVE REQUIREMENTS SHALL MEAN IMMEDIATE SUSPENSION OF ALL WORK, AND REMEDIAL WORK SHOULD COMMENCE IMMEDIATELY. ALL COSTS INCURRED SHALL BE BILLED TO THE PERMITTEE. FURTHERMORE, VIOLATORS SHALL BE SUBJECTED TO ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES.
- FOR BENCH MARK, SEE SHEET 6.

DRAINAGE NOTES

- CRUSHED ROCK BLANKETS WILL BE REQUIRED FOR REINFORCED PIPES AND BOX DRAINS WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED AND AS DETERMINED BY THE ENGINEER. THE WIDTH OF THE BLANKET SHALL BE THE TRENCH WIDTH, AND THE DEPTH WILL BE DETERMINED BY THE ENGINEER.
- ALL PIPE CULVERTS SHALL HAVE GROOVED ENDS AT THE ENTRANCE OF ALL STRUCTURES OR ENTRANCE WILL BE ROUNDED TO FACILITATE A SMOOTHER FLOW.

HYDROLOGIC DESIGN DATA:

Q = CIA

Q = DISCHARGE QUANTITY (CFS)
C = RUNOFF COEFFICIENT
I = RAINFALL INTENSITY

CF = CORRECTION FACTOR
A = CONTRIBUTING AREA (ACS.)

RESIDENTIAL AREA:

CF = 2.3
C = 0.65
CI = 2.8 (10) 3.6 (50)

APARTMENT AREA:

CF = 2.7
C = 0.70
CI = 3.6 (10) 4.5 (50)
Tm10 = 1.9

GOLF COURSE AND PARK:

CF = 1.7
C = 0.25
CI = 0.8 (10) 1.0 (50)

BUSINESS:

CF = 2.6
C = 0.80
CI = 4.0 (10) 5.0 (50)

NOTES PER SOILS REPORT

- PRIOR TO THE START OF GRADING OPERATIONS, AREAS DESIGNATED FOR NEW CONSTRUCTION SHALL BE CLEARED OF ABOVE GROUND VEGETATION, RUBBISH AND OTHER DELETERIOUS MATERIALS INCLUDING LARGE BOULDERS. BOULDERS AND ALL OTHER DELETERIOUS MATERIALS SHALL BE WASTED OFF-SITE IN ACCORDANCE WITH CITY & COUNTY AND STATE REGULATIONS.
- STRIPPING OPERATIONS SHALL INCLUDE THE REMOVAL OF A MAJORITY OF ROOT SYSTEMS THROUGHOUT THE SITE. SOFT OR LOOSE SPOTS ENCOUNTERED DURING STRIPPING OPERATIONS IN AREAS TO RECEIVE ENGINEERED FILL SHALL BE THOROUGHLY CLEANED OF THE LOOSE OR SOFT MATERIAL, AND THE RESULTING DEPRESSIONS SHALL BE BACKFILLED IN ACCORDANCE WITH THE GRADING RECOMMENDATIONS OF THIS REPORT.
- DUST CONTROL MEASURES SHALL BE STRICTLY FOLLOWED DURING CLEARING, STRIPPING AND EARTHWORK OPERATIONS SINCE RESIDENTIAL SUBDIVISIONS EXIST NEAR THE PROJECT SITE.
- AREAS DESIGNATED TO RECEIVE ENGINEERED FILL SHALL BE SCARIFIED TO A DEPTH OF SIX INCHES, MOISTURE-CONDITIONED TO WITHIN 3% OF OPTIMUM MOISTURE CONTENT, AND UNIFORMLY COMPACTED TO AT LEAST 90% OF THE MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH ASTM D 1557. ENGINEERED FILL MAY THEN BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS, AND MOISTURE-CONDITIONED AND COMPACTED IN THE SAME MANNER TO AT LEAST 90% OF THE MAXIMUM DRY DENSITY BY THE SAME TEST METHOD. ENGINEERED FILL OR BACKFILL WITHIN 2 FEET OF FINISHED SUBGRADE FOR PAVEMENT AREAS SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY.
- THE ON-SITE RESIDUAL SOILS AND HIGHLY WEATHERED BASALT MAY BE USED FOR ENGINEERED FILL PROVIDED THEY ARE COMPACTED IN ACCORDANCE WITH THIS REPORT. THESE SOILS MAY BE BELOW OPTIMUM MOISTURE CONTENT IN THEIR NATURAL STATE, AND THE USE OF WATER TRUCKS FOR MOISTURE-CONDITIONING DURING FILL OPERATIONS SHOULD BE ANTICIPATED. THE HIGHLY WEATHERED ROCK MAY GENERALLY BREAK DOWN READILY INTO SOIL-SIZED PARTICLES DURING EARTHWORK OPERATIONS WITHOUT EXTRAORDINARY EFFORT, AND THE COMPACTION MAY BE ACHIEVED RELATIVELY EASY IF PROPERLY MOISTURE-CONDITIONED.
- IF IMPORTED FILL IS REQUIRED, IT SHALL CONSIST OF NON-EXPANSIVE SOIL FREE OF ORGANICS, ROCKS AND CLODS GREATER THAN 6 INCHES IN DIMENSION, AND SHALL HAVE A PLASTICITY INDEX OF LESS THAN 20 AND MINIMUM CBR VALUE OF 15. REPRESENTATIVE SAMPLES OF ANY PROPOSED IMPORT MATERIAL SHALL BE SUBMITTED TO THE SOILS ENGINEER AT LEAST 7 WORKING DAYS PRIOR TO ITS INTENDED JOBSITE DELIVERY TO ALLOW ADEQUATE TIME FOR TESTING AND EVALUATION.
- FILL TO BE PLACED ON EXISTING SLOPING GROUND STEEPER THAN 5 HORIZONTAL TO 1 VERTICAL (5H:1V) SHALL BE BENCHED INTO THE SLOPE, SO THAT THE FILL IS PLACED IN RELATIVELY LEVEL LIFTS AND EFFECTIVELY BOUNDED INTO THE NATIVE GROUND.
- TRENCH BACKFILLS SHALL CONSIST OF APPROVED ON-SITE MATERIALS PLACED IN LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS, MOISTURE-CONDITIONED TO WITHIN 3% OF THE OPTIMUM AND UNIFORMLY COMPACTED TO AT LEAST 90% OF ASTM D 1557 MAXIMUM DRY DENSITY. ALTERNATIVELY, CLEAN GRANULAR MATERIAL SUCH AS #38 FINE GRAVEL MAY BE USED FOR BEDDING AND UP TO ABOUT ONE FOOT ABOVE THE TOP OF THE PIPE. BACKFILL WITHIN THE TOP 2 FEET OF FINISHED SUBGRADE IN PAVEMENT AREAS SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY. HAND OPERATED MECHANICAL COMPACTORS SHOULD BE USED FOR COMPACTION OF TRENCH BACKFILL, INCLUDING UNDER AND AROUND UTILITY PIPES. JETTING OR FLOODING OF BACKFILL MATERIALS SHALL NOT BE ALLOWED UNDER ANY CIRCUMSTANCES.

REAPPROVED DUE TO TIME LAPSE:



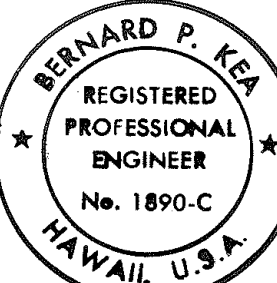
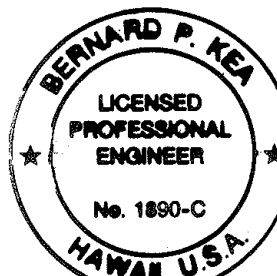
DATE

APPROVED:

DATE

CHIEF, DIV. OF ENGINEERING, DPW (FOR GRADING ONLY)

CHIEF, DIVISION OF ENGINEERING, DPW (FOR GRADING ONLY)



THIS WORK WAS PREPARED BY ME, OR UNDER MY SUPERVISION.
Signature: Bernard P. Kea

REVISION DATE	DESCRIPTION	MADE BY	APPROVED
12-27-96	Added Reapproval Block	CPI	—

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
NOTES	
MANAGER'S DRIVE BRIDGE WIDENING INTERSTATE ROUTE H-1	
DATE:	
SHEET No. 2 OF 3 SHEETS	

NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY

1.

THE CONTRACTOR SHALL OBTAIN A PERMIT TO PERFORM WORK UPON STATE HIGHWAYS FROM THE STATE HIGHWAYS' DISTRICT ENGINEER, AT 727 KAKOI STREET, PRIOR TO COMMENCEMENT OF WORK WITHIN THE STATE'S HIGHWAY RIGHT-OF-WAY.
2.

CONSTRUCTION AND RESTORATION OF ALL EXISTING HIGHWAY FACILITIES WITHIN THE STATE'S RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE CURRENT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND PUBLIC WORKS CONSTRUCTION AND THE SPECIFICATIONS FOR INSTALLATION OF MISCELLANEOUS IMPROVEMENTS WITHIN STATE HIGHWAYS, OF THE STATE HIGHWAYS DIVISION.
3.

WORK MAY BE PERFORMED ONLY BETWEEN THE HOURS OF 8:30 A. M. AND 3:30 P. M. ON THE INBOUND LANES AND BETWEEN THE HOURS OF 8:00 A. M. AND 3:00 P. M. ON THE OUTBOUND LANES, MONDAY THROUGH FRIDAY, EXCEPT HOLIDAYS, UNLESS OTHERWISE PERMITTED BY THE DISTRICT ENGINEER. DURING WORK HOURS, ONLY ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE CLOSED, UNLESS OTHERWISE APPROVED IN WRITING BY THE DISTRICT ENGINEER.
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 PUBLIC TRAFFIC. ALL SUCH PROTECTIVE FACILITIES AND PRECAUTIONS TO BE TAKEN SHALL CONFORM WITH THE "ADMINISTRATIVE RULES OF HAWAII GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS," ADOPTED BY THE DIRECTOR OF TRANSPORTATION, AND THE CURRENT U. S. FEDERAL HIGHWAYS ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, PART VI - STANDARDS AND GUIDES FOR TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY AND INCIDENT MANAGEMENT OPERATIONS." IF LANE CLOSURES ARE REQUIRED DURING CONSTRUCTION, A TRAFFIC CONTROL PLAN SHALL BE INCORPORATED INTO THE CONSTRUCTION PLANS AND MUST BE APPROVED BY THE DIVISION PRIOR TO THE ISSUANCE OF THE PERMIT.
5.

THE MINIMUM PAVEMENT STRUCTURE SHALL CONSIST OF 4-INCH ASPHALT CONCRETE (MIX IV), 8-INCH AGGREGATE BASE COURSE AND 12-INCH AGGREGATE SUBBASE, OR 4-INCH ASPHALT CONCRETE AND 8-INCH ASPHALT CONCRETE BASE COURSE OR ASPHALT CONCRETE, OR MATCH EXISTING PAVEMENT STRUCTURE, WHICHEVER IS GREATER.
6.

NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN THE HIGHWAY RIGHT-OF-WAY, EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY THE DISTRICT ENGINEER.
7.

COMPACTION TESTS SHALL BE TAKEN IN ACCORDANCE WITH THE SPECIFICATIONS FOR INSTALLATION OF MISCELLANEOUS IMPROVEMENTS WITHIN STATE HIGHWAYS, AS FOLLOWS:

A.

SUBBASE: ONE COMPACTION TEST PER LIFT PER 200 LINEAL FEET OF ROADWAY.

B.

BASE COURSE: ONE COMPACTION TEST PER LIFT PER 200 LINEAL FEET OF ROADWAY.

C.

ONE COMPACTION TEST PER LIFT PER 300 LINEAL FEET OF TRENCH.

D.

A COPY OF THE TEST RESULTS SHALL BE SUBMITTED TO THE DISTRICT ENGINEER.
8.

EXISTING DRAINAGE SYSTEMS SHALL BE FUNCTIONAL AT ALL TIMES.
9.

THE CONTRACTOR SHALL EXERCISE CARE TO MINIMIZE DAMAGES TO EXISTING HIGHWAY IMPROVEMENTS. ALL DAMAGES SHALL BE REPAIRED BY THE CONTRACTOR, AT HIS EXPENSE, TO THE SATISFACTION OF THE DISTRICT ENGINEER.
10.

APPROVAL OF PERMIT CONSTRUCTION PLANS SHALL BE VALID FOR A PERIOD OF ONE YEAR FROM THE DATE OF NOTIFICATION OF APPROVAL TO THE APPLICANT. IN THE EVENT CONSTRUCTION DOES NOT COMMENCE WITHIN THIS ONE-YEAR PERIOD, THE APPLICANT WILL BE REQUIRED TO RESUBMIT THE CONSTRUCTION PLANS FOR THE DIVISION'S REVIEW AND REAPPROVAL.
11.

ALL REGULATORY, GUIDE AND CONSTRUCTION SIGNS AND BARRICADES SHALL HAVE A HIGH-INTENSITY REFLECTIVE BACKGROUND.
12.

THE CONTRACTOR SHALL INFORM THE STATE HIGHWAYS' PERMIT OFFICE (831-6712) AT LEAST TWO DAYS PRIOR TO CLOSING ANY LANE.
13.

THE CONTRACTOR SHALL REFERENCE TO THE SATISFACTION OF THE DISTRICT ENGINEER, ALL EXISTING TRAFFIC SIGNS, POSTS AND PAVEMENT MARKINGS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNS, POSTS AND PAVEMENT MARKINGS DISTURBED BY HIS ACTIVITIES, AT HIS EXPENSE, UNLESS DIRECTED OTHERWISE BY THE DISTRICT ENGINEER OR HIS REPRESENTATIVE.
14.

THE CONTRACTOR SHALL EXERCISE CARE WHEN PERFORMING WORK IN OR ADJACENT TO THE STATE HIGHWAY RIGHT-OF-WAY. DAMAGES TO EXISTING FACILITIES SHALL BE IMMEDIATELY REPORTED TO THE RESPECTIVE UTILITY COMPANIES AND/OR CITY OR STATE AGENCIES. THE REPAIR WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
15.

THE CONTRACTOR SHALL NOTIFY THE STATE HIGHWAYS' HIGHWAY LIGHTING AND TRAFFIC SIGNAL SUPERVISOR (834-4581) THREE WORKING DAYS PRIOR TO COMMENCING WORK.
16.

THE CONTRACTOR SHALL NOTIFY OAHU TRANSIT SERVICES, INC. (OTS), ED SNIFFEN AT 848-4571 OR LOWELL TOM AT 848-4578, TWO WEEKS PRIOR TO COMMENCING ANY WORK. THE CONTRACTOR SHALL INFORM OTS OF THE LOCATION AND SCOPE OF WORK, PROPOSED CLOSURE OF ANY STREET OR TRAFFIC LANE, AND THE NEED TO RELOCATE ANY BUS STOP.
17.

THE PERMIT TO PERFORM WORK UPON STATE HIGHWAYS MAY BE REVOKED BECAUSE OF DEFAULT IN ANY OF THE FOLLOWING, BUT NOT LIMITED TO, CONDITIONS:

A.

WORK PERFORMED BEFORE OR AFTER PERMITTED HOURS.

B.

FAILURE TO MAINTAIN ROADWAY SURFACES IN A SMOOTH AND SAFE CONDITION.

C.

FAILURE TO CLEAN UP CONSTRUCTION DEBRIS GENERATED FROM PROJECT WORK.

D.

FAILURE TO PROVIDE PROPER TRAFFIC CONTROL.

E.

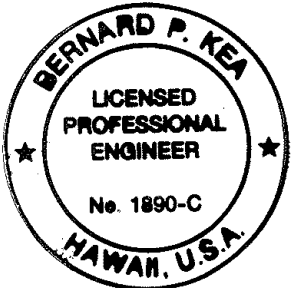
FAILURE TO REPLACE DAMAGED PAVEMENT MARKINGS AND SIGNS.
18.

PRIOR TO COMMENCING TRENCH EXCAVATION WORK, THE CONTRACTOR SHALL TAKE A PROFILE ALONG THE CENTERLINE OF THE PROPOSED UTILITY TRENCH. THIS INFORMATION SHALL BE USED IN THE VERIFICATION OF RESTORING THE ROADWAY TO ITS ORIGINAL CONDITION. A COPY OF THE PROFILE SHALL BE SUBMITTED TO THE DISTRICT ENGINEER.
19.

STATE DOT SHALL HAVE FINAL APPROVAL AUTHORITY OVER THE CONSTRUCTION SEQUENCE.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	PMT-H1C-01-97			

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
No.	DESIGNED BY	
	CHECKED BY	



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Bernard P. Kea

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

NOTES

MANAGER'S DRIVE BRIDGE WIDENING
INTERSTATE ROUTE H-1