

GENERAL NOTES

1. THE SCOPE OF WORK FOR THIS PROJECT INCLUDES REMOVING AND DISPOSING OF EXISTING CURB, GUTTER, CONCRETE SIDEWALK, CURB RAMPS, PAVEMENT MARKINGS AND STRIPING; INSTALLING CONCRETE CURBS, CURB AND GUTTER, CURB RAMPS, AND CONCRETE AND ASPHALT CONCRETE SIDEWALKS AND ASPHALT CONCRETE PAVEMENT; ADJUSTING UTILITY BOXES, RELOCATING UTILITY BOXES AND POLES, INSTALLING PEDESTRIAN PUSH BUTTONS, AND INSTALLING PAVEMENT MARKING, STRIPING AND SIGNING.
2. THE CONTRACTOR IS REMINDED OF THE REQUIREMENTS OF SUBSECTION 108.01-SUBLETTING OF CONTRACT, WHICH REQUIRES HIM TO PERFORM WORK AMOUNTING TO NOT LESS THAN 30 PERCENT OF THE TOTAL CONTRACT COST LESS DEDUCTIBLE ITEMS. NON-COMPLIANCE WITH THIS SUBSECTION MAY BE GROUNDS FOR REJECTION OF BID.
3. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FOLLOWING SECTIONS OF THE SPECIAL PROVISIONS: SUBSECTION 107.13-PUBLIC CONVENIENCE AND SAFETY; SUBSECTION 107.21-CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES; AND SECTION 645-TRAFFIC CONTROL.
4. AT THE END OF EACH DAY'S WORK, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND OTHER OBSTRUCTIONS TO PERMIT FREE AND SAFE PASSAGE OF PUBLIC TRAFFIC.
5. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES, MANHOLES, MONUMENTS, BURIED RAILROAD TRACKS, AND CONCRETE PAVEMENTS, AND OTHER STRUCTURES AS SHOWN ON THE PLANS ARE FROM THE LATEST AVAILABLE DATA BUT THE ACCURACY IS NOT GUARANTEED. THE CONTRACTOR SHALL MAKE AN INDEPENDENT CHECK ON THE GROUND BY PROBING AND/OR WITH THE VARIOUS UTILITY COMPANIES AND GOVERNMENTAL AGENCIES TO VERIFY THE EXACT LOCATIONS AND DEPTHS OF THE EXISTING UTILITIES AND OBSTRUCTIONS. THE CONTRACTOR SHALL EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. WHENEVER CONNECTIONS OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTION TO VERIFY THEIR LOCATION AND DEPTH PRIOR TO EXCAVATING FOR THE NEW LINES. THE CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGES INCURRED TO THE EXISTING FACILITIES AND/OR IMPROVEMENTS AS A RESULT OF HIS OPERATIONS.
6. A MINIMUM OF 36 INCHES CLEAR WIDTH AND 96-INCHES HEADROOM CLEARANCE HEIGHT SHALL BE PROVIDED ALONG WALKWAYS.
7. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING, TWO (2) WEEKS PRIOR TO STARTING PAVING OPERATIONS.
8. EXISTING DRAINAGE SYSTEM WILL BE FUNCTIONAL AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS TO FURNISH MATERIAL, EQUIPMENT, LABOR, TOOLS AND INCIDENTALS NECESSARY TO MAINTAIN FLOW. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS CONTRACT ITEMS.
9. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN FOR ACCESS TO AND FROM ALL EXISTING DRIVEWAYS, SIDEWALKS AND ADA ACCESS ROUTES, AND SIDE STREETS AND CROSS STREETS AT ALL TIMES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS CONTRACT ITEMS AND WILL NOT BE PAID FOR SEPARATELY.
10. ALL SAW CUTTING WORK SHALL BE CONSIDERED INCIDENTAL TO SECTION 650-CURB RAMPS.
11. TEMPORARY BENCH MARKS INDICATED ON THE PLANS MAY FALL WITHIN THE NEW CURB RAMPS. THE CONTRACTOR SHALL ESTABLISH NEW TEMPORARY BENCHMARKS, UNDER THE SUPERVISION OF A LICENSED SURVEYOR, OUTSIDE THE LIMITS OF THE NEW WORK. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO SECTION 650-CURB RAMPS.
12. SMOOTH RIDING CONNECTIONS SHALL BE CONSTRUCTED AT ALL TIMES ON THE PROJECT, INCLUDING THE BEGINNING AND END OF THE PROJECT, CONNECTING APPROACHES, SIDE STREETS, WALKWAYS AND DRIVEWAYS AS SHOWN ON THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.
13. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROTECTION OF ADJACENT PROPERTIES, UTILITIES AND EXISTING STRUCTURES FROM THE DAMAGES DUE TO CONSTRUCTION. REPAIRING OF ANY DAMAGE SHALL BE AT THE CONTRACTOR'S OWN EXPENSE, TO THE SATISFACTION OF THE OWNER.
14. THE CONTRACTOR SHALL CLEAN AND REMOVE ALL ACCUMULATION OF AGGREGATES ALONG THE ROADSIDE WITHIN 10 FEET OF THE EDGE OF PAVEMENT. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS CONTRACT ITEMS AND WILL NOT BE PAID FOR SEPARATELY.
15. REMOVAL AND DISPOSAL OF EXISTING CURB AND GUTTER, CURB, SIDEWALK AND ASPHALT CONCRETE PAVEMENT, CURB, SIDEWALK AND ANY DEBRIS SHALL BE CONSIDERED INCIDENTAL TO SECTION 650-CURB RAMPS AND WILL NOT BE PAID FOR SEPARATELY.

16. CONCRETE SIDEWALK SHALL BE REINFORCED WITH 6X6 W1.4XW1.4 WELDED WIRE FABRIC.
17. DRESSING OF SIDEWALK SHALL CONSIST OF CLEARING AND GRUBBING, GRADING, RESHAPING AND COMPACTING WITH SUITABLE MATERIAL THE AREA ADJACENT TO THE IMPROVEMENT AS SHOWN ON THE PLANS AND/OR AS DIRECTED BY THE ENGINEER AND SHALL BE CONSIDERED INCIDENTAL TO SIDEWALK.
18. PROVIDE SMOOTH TRANSITION WHERE NEW SIDEWALK CONSTRUCTION MEETS THE EXISTING GRADE OR SIDEWALK.
19. ALL CURB ANGLE POINTS WITHIN THE CURB RAMPS SHALL BE ROUNDED WITH R=6".
20. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A TEMPORARY PEDESTRIAN-SAFE AND EASILY ACCESSIBLE ROUTE OR DETOUR WITH BARRICADES IN OR NEAR THE WORK ZONE. THIS TEMPORARY ROUTE OR DETOUR SHALL BE STABLE, FIRM AND SLIP-RESISTANT AND SHALL BE AMERICAN WITH DISABILITIES ACT COMPLIANT (THIS ONLY APPLIES IF EXISTING SURFACE IN NON-ADA COMPLIANT). THIS WORK SHALL BE INCIDENTAL TO ALL CONTRACT ITEMS AND WILL NOT BE PAID FOR SEPARATELY.
21. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING RAISED PAVEMENT MARKER, THERMO LINE MARKINGS, TRAFFIC TAPES, AND EPOXY ADHESIVES PRIOR TO THE OVERLAYING OF ASPHALT CONCRETE PAVEMENT, MIX NO. IV AND WILL NOT BE PAID FOR SEPARATELY. THESE WORK ITEMS SHALL BE CONSIDERED INCIDENTAL TO SECTION 650-CURB RAMPS.
22. REMOVAL OF EXISTING CROSSWALK MARKING SHALL BE INCIDENTAL TO CONTRACT ITEM 629.1030-CROSSWALK MARKINGS.
23. NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN THE HIGHWAY OR COUNTY RIGHT-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY THE ENGINEER. IF USE OF A LOCATION IS APPROVED BY THE ENGINEER, THE CONTRACTOR SHALL OBTAIN A PERMIT TO USE THE PROPERTY WITHIN THE HIGHWAY RIGHT-OF-WAY FROM THE STATE HIGHWAYS RIGHT-OF-WAY BRANCH AT TELEPHONE NO. (808)692-7332.
24. THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION ALL IMPROVEMENTS DAMAGED AND GRADES AND GROUND COVER DISTURBED AS A RESULT OF THE PROJECT, INCLUDING PAVEMENTS, PAVEMENT MARKINGS AND STRIPING, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, PROPERTY PINS, ETC. AT NO COST TO THE OWNER.
25. EXISTING UTILITIES SHALL REMAIN IN SERVICE AND IN PLACE AT ALL TIMES. IF RELOCATION OF THE EXISTING UTILITIES IS REQUIRED BY THE CONTRACT DOCUMENTS OR FOR THE CONTRACTOR'S CONVENIENCE, INTERRUPTION OF SERVICE SHALL BE KEPT TO A MINIMUM AND SHALL BE DONE AT THE CONTRACTOR'S EXPENSE WITH THE APPROVAL OF THE AFFECTED UTILITY COMPANY.
26. THE CONTRACTOR SHALL VERIFY 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.
27. CONSTRUCTION OUTSIDE THE HAWAII DEPARTMENT OF TRANSPORTATION (HDOT) RIGHT-OF-WAY AND STATE ACQUIRED PARCELS ARE SUBJECT TO APPROVAL BY HDOT AND THE AFFECTED OWNER.
28. ALL CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE HDOT AS AMENDED, UNLESS OTHERWISE SPECIFIED BY THE CONTRACT PLANS AND SPECIFICATIONS.
29. 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 COUNTY 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.
30. BENCH MARK AND ELEV. ARE INDICATED ON EACH SHEET.
31. TACK COAT SHALL BE INCIDENTAL TO THE VARIOUS ASPHALT CONCRETE PAVEMENT ITEMS.
32. THE CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGES INCURRED TO THE EXISTING LANDSCAPING AS A RESULT OF HIS OPERATIONS.
33. OVERHEAD AND UNDERGROUND LINES AND FACILITIES SHALL BE PROTECTED AT ALL TIMES BY THE CONTRACTOR DURING CONSTRUCTION. COSTS FOR ANY DAMAGE REPAIRS TO LINES AND FACILITIES SHALL BE BORNE BY THE CONTRACTOR.

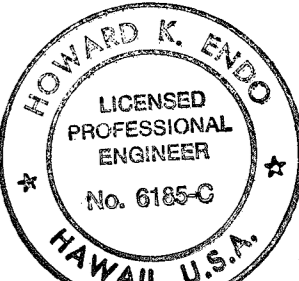
34. THE CONTRACTOR SHALL HIRE A PROFESSIONAL SURVEYOR WITH A CURRENT LICENSE TO PRACTICE IN THE STATE OF HAWAII TO ESTABLISH AND VERIFY BOUNDARY LINES.
35. CONTRACTOR SHALL NOTIFY THE STATE CONSTRUCTION INSPECTOR BEFORE COMMENCEMENT OF WORK ON ANY SITE WITH TREES IN CLOSE PROXIMITY (20'±).
36. CONTRACTOR SHALL COMPLY WITH CONDITIONS AS STATED IN THE PROJECT NPDES NOTICE OF GENERAL PERMIT COVERAGE (NGPC).
37. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO SANDWICH ISLE COMMUNICATION FIBER OPTIC CABLE SYSTEM. ANY AND ALL DAMAGES TO THESE FACILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS COST IN ACCORDANCE WITH THE REQUIREMENTS OF SANDWICH ISLE COMMUNICATIONS.
38. THE CONTRACTOR MUST NOTIFY THE CADASTRAL SECTION PRIOR TO REMOVAL OF ANY STATE SURVEY MONUMENT (BRASS DISK) SO THAT CADASTRAL CAN REFERENCE THE MONUMENT PRIOR TO DEMOLITION OF THE EXISTING MONUMENT. THE CONTRACTOR SHALL BE BEAR ALL COSTS INVOLVED IN RESTORING THE STATE SURVEY MONUMENTS WHICH ARE AFFECTED BY THEIR WORK.

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 3060 IWA STREET, ROOM 205, 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., MONDAY THROUGH FRIDAY, EXCEPT HOLIDAYS, UNLESS OTHERWISE PERMITTED 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:
- A. RESIDENTIAL DRIVEWAYS
1. 2" ASPHALT CONCRETE MIX (MIX IV) AND 6" AGGREGATE BASE COURSE, OR 2" ASPHALT CONCRETE AND 2 1/2" ASPHALT CONCRETE BASE COURSE OR ASPHALT CONCRETE.
2. 4" CLASS "A" CONCRETE REINFORCED WITH 6"x6"-W2.9xW2.9 WIRE MESH ON 12" AGGREGATE SUBBASE, IF DEEMED NECESSARY BY THE ENGINEER.
- B. COMMERCIAL DRIVEWAYS, SIDEROADS, AND UTILITY INSTALLATIONS ON MINOR HIGHWAYS
1. 2 1/2" ASPHALT CONCRETE (MIX IV), 8" AGGREGATE BASE COURSE AND 12" SUBBASE, OR 2 1/2" ASPHALT CONCRETE AND 8" ASPHALT CONCRETE BASE COURSE OR ASPHALT CONCRETE.
- 6" OF CLASS "A" CONCRETE REINFORCED WITH 6"x6"-W2.9xW2.9 WIRE MESH ON 12" AGGREGATE SUBBASE, IF DEEMED NECESSARY BY THE ENGINEER.
- C. CHANNELIZED INTERSECTIONS AND UTILITY INSTALLATIONS ON MAJOR HIGHWAYS
- 4" ASPHALT CONCRETE (MIX IV), 8" AGGREGATE BASE COURSE AND 12" AGGREGATE SUBBASE, OR 4" ASPHALT CONCRETE AND 8" ASPHALT CONCRETE BASE COURSE OR ASPHALT CONCRETE, OR MATCH EXISTING PAVEMENT STRUCTURE, WHICHEVER IS GREATER.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0700(50)R	2004	4	100

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 (1) COMPACTION TEST PER LIFT PER 200 LINEAL FEET OF ROADWAY.
- B. BASE COURSE: ONE (1) COMPACTION TEST PER LIFT PER LINEAL FEET OF ROADWAY.
- C. ONE (1) 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. 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.
9. THE CONTRACTOR SHALL PROVIDE AN ADEQUATE AND SAFE NON-SKID BRIDGING MATERIAL, INCLUDING SHORING, OVER TRENCHES IN PAVEMENT AREAS. THE BRIDGING SHALL BE ABLE TO SUPPORT ALL TYPES OF VEHICULAR TRAFFIC.
10. UNLESS OTHERWISE NOTED, NO TRENCH SHALL BE OPENED MORE THAN 300 FEET IN ADVANCE OF INSTALLED AND TESTED PIPELINE AND/OR DUCTLINE.
11. EXISTING DRAINAGE SYSTEMS SHALL BE FUNCTIONAL AT ALL TIMES.
12. 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.
- APPROVAL OF PERMIT CONSTRUCTION PLANS SHALL BE VALID FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF NOTIFICATION OF APPROVAL TO THE APPLICANT. IN THE EVENT CONSTRUCTION DOES NOT COMMENCE WITHIN HIS ONE-YEAR PERIOD, THE APPLICANT WILL BE REQUIRED TO RESUBMIT THE CONSTRUCTION PLANS FOR THE DIVISION'S REVIEW AND REAPPROVAL.



EXPIRATION DATE: 4/30/06

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

Howard K. Endo 9/24/04

SIGNATURE DATE

"OBSERVATION OF CONSTRUCTION" IS DEFINED IN CHAPTER 16-115, HAWAII ADMINISTRATIVE RULES ENTITLED "PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS".

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

NOTES - 1

Pedestrian Facilities & ADA Compliance
at Various Locations on Kaua'i
Fed. Aid Proj. No. CMAQ-0700(50)R

Scale: AS NOTED Date: AUG. 13, 2004

SHEET No. 1 OF 4 SHEETS

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

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NOTES FOR CONSTRUCTION WITHIN STATE
RIGHT-OF-WAY – CONT.

14. ALL REGULATORY, GUIDE, AND CONSTRUCTION SIGNS AND BARRICADES SHALL HAVE A HIGH-INTENSITY REFLECTIVE BACKGROUND.
15. THE CONTRACTOR SHALL INFORM THE STATE HIGHWAYS' (274-3111) AT LEAST TWO (2) DAYS PRIOR TO CLOSING ANY LANES.
16. DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTIES USING THESE RIGHT-OF-WAY ARE OTHERWISE PROVIDED FOR SATISFACTORILY.
17. WHERE PEDESTRIAN WALKWAYS EXIST, THEY SHALL BE MAINTAINED IN A SAFE AND PASSABLE CONDITION, OR OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. PASSAGES BETWEEN WALKWAYS AT INTERSECTIONS SHALL LIKEWISE BE PROVIDED.
18. 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 DISTRIBUTED BY HIS ACTIVITIES, AT HIS EXPENSE, UNLESS DIRECTED OTHERWISE BY THE DISTRICT ENGINEER OR HIS REPRESENTATIVE.
19. 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 CONTRACTORS EXPENSE.
20. THE CONTRACTOR SHALL NOTIFY THE STATE HIGHWAYS' AREA ENGINEER (274-3111), THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK.
21. 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.

NOTES FOR CONSTRUCTION
WITHIN COUNTY RIGHT-OF-WAY

1. ALL PAVEMENT SHALL BE RESTORED TO IT'S ORIGINAL CONDITION IN ACCORDANCE WITH COUNTY OF KAUAI', HAWAI'I STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE AND PUBLIC WORKS CONSTRUCTION (1994) WITH 2" MINIMUM A.C. AND 8" BASE COURSE.
2. THE CONTRACTOR SHALL PROVIDE, INSTALL, MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION AND FOR THE CONVENIENCE AND SAFETY OF THE PUBLIC TRAFFIC. ALL SUCH PROTECTIVE FACILITIES, AND PRECAUTIONS TO BE TAKEN SHALL CONFORM WITH RULES AND REGULATIONS GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS ADOPTED BY THE HIGHWAY SAFETY COORDINATOR AND U.S. FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS DATED 2000 AND ITS AMENDMENTS.
3. THE CONTRACTOR SHALL, WHENEVER NECESSARY, PROPERLY SHEET AND BRACE ALL EXCAVATIONS TO RENDER IT SECURE AND SHALL REMOVE ALL SUCH SHEETING AND BRACING BEFORE COMPLETION OF THE BACKFILL FOR WATER MAINS. THE MINIMUM COVER REQUIREMENTS (FROM TOP OF PIPE TO FINISHED GRADE OVER PIPE) IS THREE (3) FEET.
4. A. A PERMIT SHALL BE OBTAINED BY THE CONTRACTOR FROM THE DEPARTMENT OF PUBLIC WORKS, AT THE CONTRACTOR'S EXPENSE.
- B. DRIVEWAYS SHALL BE KEPT OPEN UNLESS OWNERS OF THE ABUTTING LOTS USING THESE RIGHT-OF-WAY ARE OTHERWISE PROVIDED FOR SATISFACTORILY.

- C. ALL WORK INCLUDING REPAIR OF DAMAGED PAVEMENT AND SHOULDERS SHALL BE INSPECTED AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS. ALL UNAPPROVED WORK SHALL BE CONSIDERED UNACCEPTABLE AND SHALL BE REWORKED AND CORRECTED AS DIRECTED BY THE DEPARTMENT OF PUBLIC WORKS, AT THE CONTRACTOR'S EXPENSE.
- D. DAMAGED SHOULDERS SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITION.
- E. WORK ON A PUBLIC STREET AREA MAY BE PERFORMED ONLY BETWEEN THE HOURS OF 8:00 A.M. TO 3:30 P.M. MONDAY THROUGH FRIDAY, EXCEPT ON HOLIDAYS RECOGNIZED BY THE COUNTY OF KAUAI, UNLESS OTHERWISE PERMITTED BY THE DEPARTMENT OF PUBLIC WORKS, COUNTY OF KAUAI .
- F. DURING NON-WORKING HOURS, ALL TRENCHES SHALL BE COVERED WITH A SAFE NON-SKID BRIDGING MATERIAL AND ALL LANES SHALL BE OPENED TO TRAFFIC.
- G. NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN COUNTY RIGHT-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY THE COUNTY ENGINEER.
- H. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO OFFER THE LEAST POSSIBLE OBSTRUCTIONS AND INCONVENIENCE TO THE PUBLIC AND HE SHALL HAVE UNDER CONSTRUCTION NO GREATER LENGTH OR AMOUNT OF WORK THAT HE CAN PROSECUTE PROPERLY WITH DUE REGARD TO THE RIGHTS OF THE PUBLIC.
- I. ALL EXISTING DRAINAGE FLOW CONDITIONS SHALL BE MAINTAINED.

KAUAI' ELECTRIC NOTES

UNDERGROUND CONSTRUCTION NOTES AND REQUIREMENTS

1. CONTRACTOR SHALL CONTACT KAUAI' ELECTRIC'S ("KE") QUALITY ASSURANCE COORDINATOR PRIOR TO START OF WORK ON KE FACILITIES AND FOR SCHEDULING SITE INSPECTIONS. [WESTSIDE: DAVE TAYLOR @ 335-6223; EASTSIDE: BERNARD NAEA JR. @ 822-9204]
2. CONTRACTOR SHALL CONTACT KE'S DISTRIBUTION ENGINEER @ 335-6273 FOR DESIGN APPROVALS, STANDARD, DETAILED DRAWINGS, AND ANY ITEMS NOT ADDRESSED IN THESE NOTES OR DRAWINGS.
3. ALL CONTRACTORS ENTERING KE FACILITIES CONTAINING HIGH VOLTAGE LINES MUST BE APPROVED BY KE AND MUST HAVE PROPER LICENSING AND INSURANCE COVERAGE. CONTACT KE ENGINEERING SERVICE COORDINATOR @ 246-4369 FOR DETAILS.
4. ALL TRENCHES AND PULLBOXES MUST BE INSPECTED BY KE'S INSPECTOR PRIOR TO BACKFILLING AND CONCRETE-ENCASING OPERATIONS.
5. THE CONTRACTOR SHALL PROVIDE A POLY-LINE 200 LB. TEST LINE OR EQUIVALENT AS A PULLING WIRE IN ALL CONDUITS.
6. ALL CONDUITS, PULLBOXES, HANDHOLES & MANHOLES SHALL BE CLEANED AND FREE FROM OBJECTIONABLE MATERIALS. CONDUIT ENDS SHALL BE ADEQUATELY COVERED UNTIL THE CONDUCTOR IS INSTALLED BY THE ELECTRIC COMPANY. (COVERS SHALL BE CARLON PLUG WITH PULL TAB SERIES P258 EQUIVALENT OR BETTER.)
7. FOR DETAILED TRENCHING AND BACKFILLING REQUIREMENTS REFER TO KE'S SERVICE INSTALLATION MANUAL.
8. FOR ALL CONDUIT OTHER THAN SERVICES, REFER TO CONDUIT SCHEDULE ON DRAWINGS.
9. FOR ALL SERVICES WHERE THE CONDUCTOR IS 3/0 OR LESS, THE DISTANCE FROM KE'S HANDHOLE AND CUSTOMER'S METER IS LESS THAN 125 FEET AND NOT CROSSING ANY DRIVEWAYS OR ROADS. THE CONDUIT SHALL BE 2-INCH SCHEDULE 40 PVC. WRITTEN APPROVAL FROM KE'S SERVICE ASSURANCE DEPARTMENT IS REQUIRED FOR ANY DEVIATIONS.
10. ALL PRIMARY AND SECONDARY CONDUITS CROSSING STATE OR COUNTY ROADWAYS SHALL BE SCHEDULE 40 PVC ENCASED IN A MINIMUM 3-INCH CONCRETE JACKET WHICH SHALL EXTEND A MINIMUM OF 12 INCHES OUTSIDE OF THE EDGE OF PAVEMENT.
11. ELECTRICAL SUPPLY DUCTS, WHEN INSTALLED NEAR COMMUNICATION CABLES, SHALL BE SEPARATED FROM COMMUNICATION DUCT SYSTEMS AND BURIED COMMUNICATIONS CABLES OR CONDUCTORS BY NOT LESS THAN 3 INCHES OF CONCRETE OR 12 INCHES OF EARTH WHEN PARALLELING OR CROSSING.
12. ALL CONDUITS SHALL ENTER BOXES AT 90-DEGREE ANGLE, PERPENDICULAR AND FLUSH TO THE WALL WITH BELL ENDS TO PREVENT CABLE DAMAGE.
13. 90-DEGREE CONDUIT BENDS SHALL BE FACTORY MADE WITH A MINIMUM RADIUS OF 3 FEET IN TRENCH RUNS.
14. CONDUIT BENDS EXCEEDING 90 DEGREES WILL NOT BE ACCEPTED.

15. A 36-INCH MINIMUM HORIZONTAL CLEARANCE SHALL BE MAINTAINED WHEN RUNNING KE CONDUITS PARALLEL TO WATER AND SEWER LINES. IF CLEARANCE IS LESS THAN 36 INCHES, KE CONDUIT SHALL BE CONCRETE ENCASED.
16. NO FOREIGN PULLBOXES, HANDHOLES, MANHOLES, CONCRETE SLABS/BOXES, STRUCTURES, ETC., ARE TO BE INSTALLED OVER KE FACILITIES WITH THE EXCEPTION OF HTCO, CATV OR WATERLINE CONDUIT CROSSINGS. SUCH CROSSING MUST BE APPROVED BY KE'S SERVICE ASSURANCE DEPARTMENT AND KE CONDUIT TO BE CONCRETE ENCASED. CONCRETE ENCASEMENT MUST BE MINIMUM 3-INCH ENCASEMENT AND EXTEND A MINIMUM OF 1 FOOT BEYOND CROSSING CONDUIT OR PIPE.
17. YELLOW MARKER TAPE TO BE PLACED 1 FOOT ABOVE ELECTRICAL CONDUITS IN THE TRENCH DURING BACKFILLING. (E-Z CODE WBT 6-INCH WIDE, 4 MILL POLYETHYLENE PROTECT-A-LINE TAPE NA-0708 "ELECTRIC LINE" IN YELLOW, EQUIVALENT OR BETTER.)
18. UNLESS OTHERWISE NOTED, THE TOP OF ALL CONDUITS SHALL BE AT A DEPTH OF 24 INCHES.
19. ALL HANDHOLES, PULLBOXES, AND MANHOLES SHALL MEET KE'S SPECIFICATIONS AND MANUFACTURED BY A KE APPROVED SUPPLIER.
20. AT NO TIME SHALL CEMENT MORTAR, WOOD OR ANY OTHER MATERIAL BE USED BETWEEN PRECAST SECTIONS OF KE PULLBOXES, HANDHOLES, OR MANHOLES. THE PERMANENT INSTALLATION OF WOODEN WEDGES TO LEVEL OR RAISE THE PRECAST SECTIONS SHALL NOT BE PERMITTED.
21. A MINIMUM OF 6 INCHES OF #3 CRUSHED ROCK BACKFILL SHALL BE PLACED LOOSELY BENEATH THE BOTTOM SECTION OF HANDHOLES AND PULLBOXES. CRUSHED ROCK OR OTHER FOREIGN MATERIALS ARE NOT TO BE PLACED INSIDE HANDHOLES AND PULLBOXES.

PAVEMENT MARKING NOTES

1. LAYOUT OF PAVEMENT MARKINGS AND STRIPING SHALL BE DONE BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO ANY INSTALLATION WORK.
2. EXISTING PAVEMENT MARKINGS NOT INCORPORATED IN THE FINAL TRAFFIC PATTERN SHALL BE REMOVED AS DIRECTED BY THE ENGINEER. COSTS SHALL BE INCIDENTAL TO THE VARIOUS PAVEMENT MARKING ITEMS.
3. RAISED PAVEMENT MARKERS SHALL NOT BE INSTALLED WITHIN CROSSWALKS.
4. FINAL LOCATIONS OF ALL SIGNS SHALL BE APPROVED BY THE ENGINEER PRIOR TO ANY INSTALLATION WORK.
5. EXISTING SIGNS NOT SHOWN ON THESE PLANS SHALL REMAIN AS POSTED UNLESS OTHERWISE DIRECTED BY THE ENGINEER. REMOVAL AND DISPOSAL OF EXISTING SIGNS AND/OR POSTS AS DESIGNATED ON THESE PLANS SHALL BE INCIDENTAL TO THE VARIOUS SIGNING ITEMS.
6. FINAL LOCATIONS OF ALL STOP LINES SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
7. ALL PAVEMENT STRIPING SHALL BE AS NOTED ON THE LEGEND OR PLANS.
8. ALL PREFORMED PAVEMENT MARKING TAPES OVER EXISTING PAVEMENT SHALL BE APPLIED WITH AN APPROVED PRIMER AS RECOMMENDED BY THE TAPE MANUFACTURER AND AS APPROVED BY THE ENGINEER. THE PRIMER SHALL BE ALLOWED TO DRY TO THE TACKY STAGE PRIOR TO TAPE APPLICATION.
9. EXISTING SIGNS THAT ARE TO BE REPLACED, SHALL NOT BE REMOVED UNTIL NEW SIGNS ARE INSTALLED AS REPLACEMENTS, OR THE MESSAGES ARE NO LONGER NECESSARY.
10. BACKING FOR ALL NEW REGULATORY AND WARNING SIGNS SHALL NOT BE SPLICED.
11. ALL SIGN PANELS SHALL CONFORM TO THE LATEST EDITIONS AND AMENDMENTS OF THE FOLLOWING FHWA PUBLICATIONS:
- A. "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (MUTCD)
- B. "STANDARD HIGHWAY SIGNS."
- C. "STANDARD ALPHABETS FOR HIGHWAY SIGNS."
12. BORDERS, MESSAGES, ARROWS, SYMBOLS AND SHIELDS SHALL CONFORM TO DETAILS AS SHOWN ON THE PLANS AND AS SPECIFIED IN THE MUTCD.
13. THE CONTRACTOR SHALL REFERENCE TO THE SATISFACTION OF THE 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 ENGINEER OR HIS REPRESENTATIVE.

APPROVED:

Howard K. Endo
MANAGER AND CHIEF ENGINEER
DEPARTMENT OF WATER

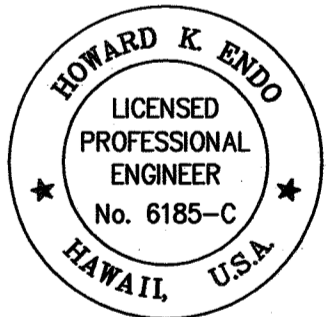
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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAI'I	HAW.	CMAQ-0700(50)R	2004	5	100

14. THE CONTRACTOR SHALL SUBMIT MATERIAL BROCHURES FOR ALL SIGNS AND PAINT MATERIALS TO THE ENGINEER.
15. THE CONTRACTOR SHALL KEEP ONE (1) SET OF APPROVED SIGNING AND/OR STRIPING PLANS AT THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION WORK.
16. THE CONTRACTOR SHALL PAINT TEMPORARY GUIDELINES AND OUTLINE OF ARROWS, LEGENDS, AND CROSSWALKS WITH FOUR INCHES (4") WIDE BRUSHED TAPED LINE ON THE DAY THE ROADWAY IS OPENED TO TRAFFIC. THESE MARKINGS MUST BE APPROVED BY THE ENGINEER.
17. SIGNS SHALL BE INSTALLED WITH AT LEAST ONE (1) FEET OF CLEARANCE FROM SIGN EDGE TO CURB FACE.

WATER NOTES

1. PRIOR TO COMMENCING HIS OPERATIONS, THE CONTRACTOR SHALL CONTACT THE COUNTY OF KAUAI', DEPARTMENT OF WATER OPERATIONS DIVISION (PHONE NO. 245-5444) AND MAKE ARRANGEMENTS FOR THE DEPARTMENT OF WATER PERSONNEL TO "TONE" FOR AND MARK THE LOCATIONS OF EXISTING VALVE BOXES AND MANHOLE FRAME/COVERS, INCLUDING ONES THAT MAY HAVE BEEN INADVERTENTLY PAVED OVER ON PREVIOUS RESURFACING PROJECTS. APPROXIMATE LOCATIONS OF VALVE BOXES AND MANHOLE FRAME/COVERS THAT ARE TO BE RAISED TO THE NEW FINISHED GRADE ARE NOTED ON THE PLANS.
2. UNLESS OTHERWISE SPECIFIED, ALL MATERIALS AND CONSTRUCTION OF WATER FACILITIES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE "WATER SYSTEM STANDARDS", 2002 AS ADOPTED BY THE DEPARTMENT OF WATER, COUNTY OF KAUAI, INCLUDING ALL SUBSEQUENT AMENDMENTS AND ADDITIONS.
3. THE CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION CONFERENCE AT LEAST 10 DAYS BEFORE CONSTRUCTION AND SHALL NOTIFY THE DEPARTMENT OF WATER AT LEAST 3 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
4. THE CONTRACTOR SHALL SUBMIT THE NAME OF ITS AUTHORIZED SUPERINTENDENT ON THE JOB. THE CONTRACTOR SHALL ALSO SUBMIT THE NAMES AND TELEPHONE NUMBERS OF AT LEAST THREE (3) PERSONS TO CONTACT IN CASE OF EMERGENCY DURING NON-WORKING HOURS.
5. THE CONTRACTOR SHALL NOTIFY DEPARTMENT OF WATER AT LEAST 24 HOURS PRIOR TO ANY TRENCHING, PIPE LAYING, BACKFILLING, TESTING OR CHLORINATION TO INSURE THAT INSPECTIONAL SERVICES WILL BE AVAILABLE.



EXPIRATION DATE: 4/30/06

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

Howard K. Endo 8/13/04
SIGNATURE DATE

"OBSERVATION OF CONSTRUCTION" IS DEFINED IN CHAPTER 16-115, HAWAII ADMINISTRATIVE RULES ENTITLED "PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS".

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

NOTES - 2

*Pedestrian Facilities & ADA Compliance
at Various Locations on Kauai'
Fed. Aid Proj. No. CMAQ-0700(50)R*

Scale: AS NOTED

Date: AUG. 13, 2004

SHEET No. 2 OF 4 SHEETS

WATER NOTES (CONTINUED)

6. ALL MATERIALS (PIPE, PIPE LUBRICANTS, PAINTS, SEALANTS, FORM OIL, CONCRETE ADMIXTURES, ETC.) IN DIRECT CONTACT WITH THE POTABLE WATER SHALL HAVE NATIONAL SANITATION FOUNDATION (NSF) APPROVALS. THE CONTRACTOR SHALL SUBMIT THESE APPROVALS TO THE DEPARTMENT OF WATER FOR REVIEW AND APPROVAL PRIOR TO ITS APPLICATION.
7. THE CONTRACTOR SHALL VERIFY IN THE FIELD THE LOCATION OF THE EXISTING WATER MAINS AND APPURTENANCES. THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN PRIOR TO TRENCHING. EXCAVATION AROUND EXISTING WATER MAIN SHALL BE DONE BY HAND.
7. WHERE A UTILITY IS FOUND TO BE IN CONFLICT WITH THE WATERLINE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO MAKING ANY ADJUSTMENT. ANY DAMAGE TO ANY EXISTING UTILITY NOT IN CONFLICT WITH THE INSTALLATION OF THE WATERLINE SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
8. ACCESS TO EXISTING FIRE HYDRANTS, VALVES AND WATER METERS SHALL NOT BE HINDERED BY THE CONTRACTOR AT ANYTIME.
9. THE CONTRACTOR SHALL WHENEVER NECESSARY, PROPERLY SHEET AND BRACE ALL EXCAVATIONS TO RENDER IT SECURE AND SHALL REMOVE ALL SUCH SHEETING AND BRACING BEFORE COMPLETION OF THE BACKFILL.
10. THERE SHALL BE NO PHYSICAL CONNECTION BETWEEN A PUBLIC OR PRIVATE POTABLE WATER SYSTEM AND A NON-POTABLE WATER SYSTEM, SEWER, OR APPURTENANCE THERETO WHICH COULD PERMIT THE PASSAGE OF ANY SEWAGE OR POLLUTED WATER INTO THE POTABLE WATER SYSTEM.
11. TRENCH EXCAVATION AND BACKFILLING IN LIFTS, AND REPAVING SHALL CONFORM TO THE "HAWAII STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND PUBLIC WORKS CONSTRUCTION, 1994".
12. METALLIZED TAPE SHALL BE PLACED ABOVE ALL INSTALLED WATER MAINS. METALLIZED TAPE SHALL BE INSTALLED A MAXIMUM OF 24" AND A MINIMUM OF 12" BELOW FINISHED GRADE. IN NO INSTANCE WILL THE TAPE BE INSTALLED IN THE ROADWAY STRUCTURE INCLUDING SELECT BORROW, SUBBASE, BASE COURSE OR WEARING SURFACE. THE TAPE SHALL BE INSTALLED ON TOP OF A COMPACTED LAYER OF TRENCH BACKFILL MATERIAL AND PLACED AS CLOSE AS PRACTICAL TO A POSITION DIRECTLY ABOVE THE INSTALLED PIPELINE.
13. METALLIZED TAPE SHALL BE BLUE AND IMPRINTED WITH THE FOLLOWING: "CAUTION WATER LINE BELOW". TAPE SHALL BE TWO INCHES IN WIDTH AND SHALL BE READILY DETECTABLE WITH ANY STANDARD PIPE OR CABLE LOCATOR.
14. ALL FIRE HYDRANTS SHALL BE CLEANED AFTER INSTALLATION AND PAINTED WITH TWO COATS OF PAINT. PAINT SHALL BE DUPONT DOLOX HIGH VISIBILITY YELLOW, KEM LUSTRE ENAMEL LIGHT YELLOW #F65Y12 OR EQUAL.
15. UNLESS OTHERWISE DIRECTED, PRIOR TO THE CONNECTION OF ANY PIPELINE TO THE EXISTING MAIN, THE PIPELINE INSTALLED SHALL BE PRESSURE TESTED, CLEANED, CHLORINATED, FLUSHED, AND SAMPLED IN ACCORDANCE WITH THE "WATER SYSTEM STANDARDS" AND/OR IN ACCORDANCE WITH THE PROCEDURES OUTLINED BELOW IN NOTES 17 THROUGH 22.
16. ALL WATER MAINS AND APPURTENANCES INCLUDING SERVICE LATERALS, FIRE HYDRANTS AND SERVICE CONNECTIONS SHALL BE SUBJECTED TO A 150 PSI HYDROSTATIC PRESSURE TEST FOR EITHER:
- A. ONE (1) HOUR WITH A DROP IN PRESSURE OF NO MORE THAN THREE (3) PSI. PIPE AND JOINTS MAY BE BACKFILLED.
- B. THIRTY (30) MINUTES WITH A DROP IN PRESSURE OF NO MORE THAN TEN (10) PSI. ALL JOINTS OF THE PIPE MUST BE EXPOSED DURING THE TEST.
17. CLEANING SHALL BE BY THE USE OF "PIGS" INTRODUCED INTO THE PIPELINE AND RUN COMPLETELY THROUGH ALL INSTALLED PIPELINES EXCLUDING BRANCH LINES FOR FIRE HYDRANTS AND SERVICE LATERALS. "PIGS" SHALL CONSIST OF A CYLINDRICAL PIECE OF POLYURETHANE FOAM WITHA DENSITY RANGE OF 1.25 TO 1.45 POUNDS PER CUBIC FOOT. FOR WATERLINES UP TO 8" IN DIAMETER, THE DIAMETER OF THE PIG SHALL BE 2" LARGER THAN THE PIPE TO BE CLEANED AND 18" LONG. FOR 12" DIAMETER WATERLINES, THE PIG SHALL BE 16" IN DIAMETER AND 30" LONG. FOR 16" DIAMETER WATERLINES, THE SHALL BE 20" IN DIAMETER AND 30" LONG.

18. CHLORINATION OF THE INSTALLED PIPELINE SHALL BE IN ACCORDANCE WITH PART III SECTION 1.2.17 OF THE "WATER SYSTEM STANDARDS". THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF CHLORINTED WATER TO SAFE GAURD PUBLIC HEALTH AND ENVIRONMENT IN ACCORDANCE WITH APPLICABLE STATE DEPARTMENT OF HEALTH REQUIREMENTS.
- A. THE CONTRACTOR SHALL CONTACT THE DEPARTMENT OF HEALTH TO DETERMINE IF A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT IS REQUIRED FOR THE DISPOSAL OF WATER USED FOR HYDROTESTING AND CHLORINATION.
- B. IF A NPDES PERMIT IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE PERMIT FROM THE DEPARTMENT OF HEALTH.
19. THE INSTALLED PIPELINE SHALL BE FLUSHED AFTER CHLORINATION. WATER SAMPLES SHALL BE TESTED WITH A LOW RANGE CHLORINE TEST KIT TO EVIDENCE FLUSHING.
20. MICROBIOLOGICAL SAMPLES SHALL BE TAKEN IN ALL CASES AFTER ALL CHLORINE HAS BEEN FLUSHED. SAMPLING SHALL BE DONE BY THE CONTRACTOR IN COORDINATION WITH THE DEPARTMENT'S INSPECTOR WITH SAMPLING BOTTLES FURNISHED BY A CERTIFIED LABORATORY. THE DEPARTMENT SHALL DETERMINE THE LOCATIONS OF THE SAMPLING POINT(S) ALONG THE NEW WATER MAIN. UNDER NO CIRCUMSTANCES SHALL THE SAMPLE BOTTLES BE RINSED OUT.
21. TESTING OF THE WATER SAMPLES SHALL BE MADE BY AN APPROVED LABORATORY CERTIFIED BY THE STATE DEPARTMENT OF HEALTH. THE CONTRACTOR SHALL COLLECT TWO (2) WATER SAMPLES, 24 HOURS APART, AT EACH SAMPLE POINT. THE DISINFECTION PROCEDURE SHALL BE CONSIDERED ACCEPTABLE AFTER THE LABORATORY TEST RESULTS SHOW THE ABSENCE OF COLIFORM AND THE NON-COLIFORM BACTERIAL COUNT IS LESS THAN 200 COLONIES PER 100 MIL FOR EACH SAMPLE COLLECTED.
22. ALL CONNECTIONS SHALL BE SCHEDULED IN COORDINATION WITH THE DEPARTMENT OF WATER.
- A. AN ADVANCE DEPOSIT IS REQUIRED FOR OPERATING VALVES, FLUSHING LINES AND NOTIFYING CONSUMERS AFFECTED BY A WATER SHUTDOWN DURING CONNECTIONS. THE CONTRACTOR WILL BE CHARGED THE ACTUAL COST.
- B. THE CONTRACTOR SHALL PLACE THE DEPOSIT A MINIMUM OF 48-HOURS PRIOR TO THE SCHEDULED CONNECTION DATES.
- C. CONNECTIONS SHALL BE SCHEDULED ON TUESDAYS THROUGH THURSDAYS. NO CONNECTION SHALL BE SCHEDULED ON MONDAYS, FRIDAYS AND WEEKENDS.
- D. ALL MATERIALS SHALL BE ON HAND AND APPROVED BY THE ENGINEER PRIOR TO SCHEDULING THE CONNECTION DATE.
- E. PUMPS USED TO DE-WATER THE CONNECTION AREA SHALL BE OPERATED IN THE PRESENCE OF THE ENGINEER PRIOR TO SCHEDULING THE CONNECTION DATE.
- F. ALL CONNECTIONS SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER.
23. IN ORDER TO PREVENT DAMAGE TO THE POLYETHYLENE ENCASEMENT FROM EXCESSIVE HANDLING, THE POLYWRAP SHALL BE INSTALLED AROUND THE BARREL OF THE DUCTILE IRON PIPE AT ITS FINAL LOCATION ALONG THE TRENCHLINE. THE POLYETHYLENE ENCASED PIPE SHALL BE LIFTED USING A FABRIC TYPE SLING OR A SUITABLE PADDED CABLE OR CHAIN TO PREVENT DAMAGE TO THE POLYETHYLENE.
24. THE CONTRACTOR SHALL CONNECT ALL EXISTING CONSUMER PIPING TO THE NEW SERVICE LATERALS. THE DEPARTMENT OF WATER WILL TRANSFER THE EXISTING WATER METERS ONLY.
25. THE CONTRACTOR SHALL EXERCISE CARE AND SHALL USE HAND EXCAVATION WHEN WORKING AROUND EXISTING WATER METERS AND SERVICE LATERALS.
26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO EXISTING WATER FACILITIES DURING CONSTRUCTION.
27. THE CONTRACTOR SHALL TAKE ALL NECESSARY COMPACTION TESTS WHILE THE WATERLINE TRENCH IS BEING BACKFILLED AND WHILE THE SUBBASE/BASE COURSE IS BEING PLACED. IF THE TEST RESULTS INDICATE THAT ADDITIONAL COMPACTION IS REQUIRED, THE CORRECTIVE WORK SHALL BE COMPLETED BEFORE ANY ADDITIONAL TRENCH EXCAVATION OR PLACING OF SUBBASE/BASE COURSE IS ALLOWED.

THE CONTRACTOR SHALL RETAIN THE SERVICES OF A REGISTERED GEOTECHNICAL ENGINEER FOR QUALITY CONTROL. THE COMPACTION TEST RESULTS SHALL BE CERTIFIED BY THE GEOTECHNICAL ENGINEER AND SUBMITTED TO THE DEPARTMENT OF WATER, STATE HIGHWAYS DIVISION

(FOR WORK DONE WITHIN STATE R/W) AND THE DEPARTMENT OF PUBLIC WORKS (FOR WORK DONE WITHIN CITY R/W). THE GEOTECHNICAL ENGINEER SHALL CERTIFY THAT THE COMPACTION RESULTS MEET THE REQUIREMENTS OF THE CURRENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

28. ALL MODIFICATIONS TO THE WATER FACILITIES SHALL BE INSPECTED BY THE DEPARTMENT OF WATER. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF WATER AT LEAST 24 HOURS IN ADVANCE TO INSURE THAT INSPECTIONAL SERVICES WILL BE AVAILABLE.
29. IN NEW SIDEWALK AREAS, REPLACE THE TYPE "B" METER BOX AND COVER WITH TYPE "X" METER BOX AND COVER. THE TOP OF ALL WATER METER BOXES SHALL BE FLUSH WITH THE NEW SIDEWALK SURFACE. IF NECESSARY, ADJUST THE WATER METER PIPING IN THE METER BOX SO THAT THE DISTANCE FROM THE CENTERLINE OF THE PIPING TO THE TOP OF THE METER BOX IS 8-INCHES.
31. EXISTING VALVE BOXES, MANHOLE FRAME/COVERS AND WATER METER BOXES (INCL. LATERAL PIPING, IF NECESSARY) SHALL BE ADJUSTED TO THE NEW FINISH GRADE.
32. THE WATER NOTES SHALL ALSO APPLY TO THE CONSTRUCTION SKETCHES AND PICTURES INCLUDED IN THE WORK PLAN BINDER.
33. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OFFSET AND RECORD LOCATIONS OF THE VALVE BOXES AND MANHOLE FRAME/COVERS AS MARKED BY THE DEPARTMENT OF WATER FOR THE PURPOSES OF ADJUSTING TO THE NEW FINISH GRADE. THE CONTRACTOR SHALL PRESERVE ALL OFFSET STAKES MARKING LOCATION OF THE VALVE BOXES AND MANHOLE FRAME/COVERS. IF OFFSET STAKES ARE DAMAGED OR LOST, IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO SURVEY AND RE-STAKE THE LOCATION OF THE VALVE BOXES AND MANHOLE FRAME/COVER.

VERIZON HAWAII NOTES

1. THE CONTRACTOR SHALL PROCURE AND PAY FOR ALL LICENSES AND PERMITS AND SHALL GIVE ALL NOTICES NECESSARY AND INCIDENT TO THE DUE AND LAWFUL PROSECUTION OF THE WORK.
2. PRIOR TO THE EXCAVATION OF THE DUCTLINE, THE CONTRACTOR SHALL REQUEST VERIZON HAWAII' AT 246-3206 TO LOCATE EXISTING DUCTLINES WHEREVER REQUIRED. FOR UNDERGROUND CABLE LOCATING AND MARKING, FIVE (5) WORKING DAYS ADVANCE NOTICE IS REQUIRED.
3. THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION AND SHALL MAINTAIN PROPER CLEARANCES WHENEVER CONSTRUCTION CROSSES OR IS IN CLOSE PROXIMITY OF VERIZON HAWAII FACILITIES. THE CONTRACTOR SHALL VERIFY THEIR LOCATIONS AND SHALL BE LIABLE FOR ANY DAMAGES TO VERIZON HAWAII FACILITIES. ANY DAMAGES SHALL BE REPORTED IMMEDIATELY TO VERIZON HAWAII'S REPAIR SECTION AT #611 (24 HOURS) OR TO VERIZON HAWAII'S CABLE MAINTENANCE DEPARTMENT AT 246-3206 (NORMAL WORKING HOURS, MONDAY THROUGH FRIDAY, EXCEPT HOLIDAYS). AS A RESULT OF HIS OPERATIONS, ADJUSTMENTS TO THE NEW DUCTLINE ALIGNMENT, IF REQUIRED, SHALL BE MADE TO PROVIDE THE REQUIRED CLEARANCES.
4. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTION NOT TO DAMAGE EXISTING CABLES OR DUCTS. A VERIZON HAWAII INSPECTOR OR DESIGNATED REPRESENTATIVE IS REQUIRED TO BE AT ANY JOB SITE WHENEVER THERE WILL BE A BREAKAGE INTO OR ENTRY INTO ANY STRUCTURE THAT CONTAIN VERIZON HAWAII FACILITIES. TEMPORARY CABLE AND DUCT SUPPORTS SHALL BE PROVIDED WHEREVER NECESSARY.
5. THE CONTRACTOR SHALL NOTIFY VERIZON HAWAII'S INSPECTOR OR DESIGNATED REPRESENTATIVE A MINIMUM OF 3 DAYS PRIOR TO EXCAVATION, BRACING, OR BACKFILLING OF VERIZON HAWAII'S STRUCTURES OR FACILITIES. THE VERIZON HAWAII INSPECTOR'S ARE:
- KAPA'A -NORTH DISTRICT: LEHO RD. (LYDGATE) TO HA'ENA INSPECTOR: ERNEST KOERTE
TELEPHONE: 246-3205
PAGER: 877-649-4256
 - LIHU'E -WEST DISTRICT: WAILUA GOLF COURSE TO POLIHALE (INCLUDES KOKE'E)
INSPECTOR: STEVE RAPOZO
TELEPHONE: 246-3208
PAGER: 877-649-5199

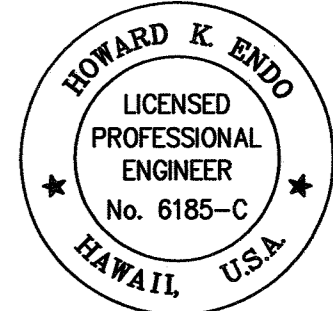
APPROVED:

Wayne Heinig
MANAGER AND CHIEF ENGINEER
DEPARTMENT OF WATER

9/16/04
DATE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0700(50)R	2004	6	100

6. ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE "VERIZON HAWAII STANDARD SPECIFICATIONS FOR PLACING UNDERGROUND TELEPHONE SYSTEMS" DATED MARCH 1999. ALL SUBSEQUENT AMENDMENTS AND ADDITIONS, AND ALL OTHER PERTINENT STANDARDS FOR TELEPHONE CONSTRUCTION. CONTRACTOR SHALL FAMILIARIZE HIS PERSONNEL BY OBTAINING APPLICABLE SPECIFICATIONS.
7. WHEN EXCAVATION IS ADJACENT TO OR BENEATH VERIZON HAWAII'S EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR SHALL:
- A. SHEET AND/OR BRACE THE EXCAVATION TO PREVENT SLIDES, CAVE-INS, OR SETTLEMENTS TO ENSURE NO MOVEMENT TO VERIZON HAWAII'S STRUCTURES OR FACILITIES.
- B. PROTECT EXISTING STRUCTURES AND/OR FACILITIES WITH BEAMS, STRUTS, OR UNDERPINNING WHILE EXCAVATING BENEATH THEM TO ENSURE NO MOVEMENT TO VERIZON HAWAII'S STRUCTURES OR FACILITIES.
8. THE CONTRACTOR SHALL BRACE ALL POLES OR LIGHT STANDARDS NEAR THE NEW DUCTLINE, MANHOLE, OR HANDHOLE DURING HIS OPERATIONS.
9. THE CONTRACTOR SHALL SAW-CUT A.C. PAVEMENT AND CONCRETE GUTTER WHEREVER NEW MANHOLES, HANDHOLES, OR DUCTLINES ARE TO BE PLACED AND SHALL RESTORE TO EXISTING CONDITION OR BETTER.
10. THE CONTRACTOR SHALL COMPLY WITH THE POLICY ADOPTED BY THE DEPARTMENT OF PUBLIC WORKS, COUNTY OF KAUAI, CONCERNING THE REPLACEMENT OF CONCRETE SIDEWALKS AFTER EXCAVATION WORK.
11. THE UNDERGROUND PIPES, CABLES, OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. 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.
12. WHEREVER CONNECTIONS TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES PRIOR TO EXCAVATION OF THE MAIN TRENCHES TO VERIFY THEIR LOCATIONS AND DEPTHS.
13. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE COST FOR SUPPLEMENTARY MEASURES, WHICH WILL BE REQUIRED BY THE COUNTY, SHALL BE BORNE BY THE CONTRACTOR.
14. THE CONTRACTOR SHALL PUMP ALL MANHOLES DRY DURING FINAL INSPECTION.
15. THE CONTRACTOR SHALL NOTIFY THE VERIZON HAWAII INSPECTOR 24 HOURS PRIOR TO THE POURING OF CONCRETE OR BACKFILLING.
16. WHEN CONNECTING TO MANHOLE WALLS, ALL EXISTING REINFORCING BARS SHALL BE LEFT INTACT. DUCTS SHALL BE ADJUSTED IN THE FIELD IN ORDER TO CLEAR REINFORCING



EXPIRATION DATE: 4/30/06

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

Signature: Howard K. Endo
DATE: 8/13/04

"OBSERVATION OF CONSTRUCTION" IS DEFINED IN CHAPTER 16-115, HAWAII ADMINISTRATIVE RULES ENTITLED "PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS".

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

NOTES - 3

Pedestrian Facilities & ADA Compliance
at Various Locations on Kaua'i
Fed. Aid Proj. No. CMAQ-0700(50)R

Scale: AS NOTED Date: AUG. 13, 2004

SHEET No. 3 OF 4 SHEETS

VERIZON HAWAII NOTES – CONT.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT ALL REQUIRED LINES AND GRADES AND SHALL PRESERVE ALL BENCH MARKS AND WORKING POINTS NECESSARY TO LAY OUT THE WORK CORRECTLY. THE NEW DUCTLINE SHALL BE ADJUSTED BY THE CONTRACTOR TO SUIT THE EXISTING CONDITIONS AND THE DETAILS AS DESCRIBED IN THE PLANS.
18. MINIMUM CONCRETE STRENGTH SHALL BE:
- FOR DUCTLINE 2500 PSI AT 28 DAYS
FOR MANHOLE 3000 PSI AT 28 DAYS OR AS SPECIFIED IN DESIGN NOTES
19. BENDS IN THE DUCT ALIGNMENT, DUE TO CHANGES IN GRADE SHALL HAVE A MINIMUM RADIUS OF 25 FEET. ALL 90 DEGREE C-BENDS AT A POLE OR AT THE BUILDING FLOOR SLAB PENETRATION, SHALL HAVE A BEND RADIUS OF TEN TIMES THE DIAMETER OF THE DUCT OR GREATER.
20. AFTER THE DUCTLINE HAS BEEN COMPLETED, A MANDREL WITH A SQUARE FRONT NOT LESS THAN 12" LONG AND HAVING A DIAMETER OF 1/4" LESS THAN THE INSIDE DIAMETER OF THE DUCT, SHALL BE PULLED THROUGH EACH DUCT AFTER WHICH A BRUSH WITH STIFF BRISTLES SHALL BE PULLED THROUGH TO MAKE CERTAIN THAT NO PARTICLES OF EARTH, SAND, OR GRAVEL HAVE BEEN LEFT INSIDE. DUCTS SHALL BE COMPLETELY DRY AND CLEAN.
21. ALL DUCTS AND CONDUITS SHALL HAVE AN 1800# POLYESTER MULE-TAPE (NEPTCO, WP1800P, VERIZON HAWAII MATERIAL CODE NO. 571154) INSTALLED THROUGHOUT ITS ENTIRE LENGTH. ALL DUCTS SHALL BE CAPPED TO PREVENT ENTRY OF FOREIGN MATERIAL DURING CONSTRUCTION AND AT THE COMPLETION OF INSTALLATION. USING THE NEPTCO MULETAPE, THE CONTRACTOR SHALL MEASURE AT LEAST ONE DUCT OF COMMON DUCT RUN. THE DISTANCE SHALL BE MARKED ON THE RECORDS PRINTS AND SUBMITTED TO THE VERIZON HAWAII INSPECTOR FOR RECORD KEEPING.

WATER POLLUTION AND EROSION CONTROL NOTES:

1. GENERAL:

THE CONTRACTOR IS REMINDED OF THE REQUIREMENTS OF SECTION 209 – WATER POLLUTION AND EROSION CONTROL, IN THE "HAWAII STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND PUBLIC WORKS CONSTRUCTION," AS AMENDED. SECTION 209 DESCRIBES BUT IS NOT LIMITED TO: SUBMITTAL REQUIREMENTS; SCHEDULING OF A WATER POLLUTION AND EROSION CONTROL CONFERENCE WITH THE ENGINEER; CONSTRUCTION REQUIREMENTS; METHOD OF MEASUREMENT; AND BASIS OF PAYMENT. NO WORK SHALL COMMENCE WITHOUT A BMP PLAN APPROVED BY THE DEPARTMENT OF HEALTH.

THE CONTRACTOR SHALL FOLLOW THE GUIDELINES IN THE "BEST MANAGEMENT PRACTICES MANUAL FOR CONSTRUCTION SITES IN HONOLULU," DATED MAY 1999 IN DEVELOPING, INSTALLING AND MAINTAINING THE BEST MANAGEMENT PRACTICES (BMPS) FOR THE PROJECT. THE CONTRACTOR MAY SUBMIT ALTERNATE METHODS TO THE ENGINEER FOR ACCEPTANCE.

THE CONTRACTOR SHALL KEEP A COPY OF THE APPROVED BMP, NOI, ETC. ON THE PROJECT SITE. THE BMP SHALL BE UPDATED TO REFLECT ANY CHANGES MADE DURING THE COURSE OF CONSTRUCTION FOR THE DURATION OF THE PROJECT.

THE ENGINEER MAY ASSESS LIQUIDATED DAMAGES OF UP TO \$27,500 FOR NON-COMPLIANCE OF EACH BMP REQUIREMENT AND EACH REQUIREMENT STATED IN SECTION 209, FOR EVERY DAY OF NON-COMPLIANCE. THERE IS NO MAXIMUM LIMIT ON THE AMOUNT ASSESSED PER DAY.

THE ENGINEER WILL DEDUCT THE COST FROM THE PROGRESS PAYMENT FOR ALL CITATIONS RECEIVED BY THE DEPARTMENT FOR NON-COMPLIANCE, OR THE CONTRACTOR SHALL REIMBURSE THE STATE FOR THE FULL AMOUNT OF THE OUTSTANDING COST INCURRED BY THE STATE, WHICHEVER IS GREATER.

2. WASTE DISPOSAL:

A. WASTE MATERIALS: ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER THAT DOES NOT LEAK. THE DUMPSTER SHALL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER SHALL BE EMPTIED A MINIMUM OF TWICE PER WEEK OR AS OFTEN AS IS DEEMED NECESSARY. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ONSITE. THE CONTRACTOR'S SUPERVISORY PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES SHALL BE POSTED IN THE OFFICE TRAILER AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

B. HAZARDOUS WASTE: ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. THE CONTRACTOR'S SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES AND SHALL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

C. SANITARY WASTE: ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK, OR AS REQUIRED.

3. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:

A. ALL CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EACH WEEK AND WITHIN 24 HOURS FOLLOWING ANY RAINFALL EVENT OF 0.5 INCHES OR GREATER.

B. ALL MEASURES SHALL BE MAINTAINED IN GOOD WORKING ORDER. IF REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS AFTER THE INSPECTION.

C. BUILT-UP SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.

D. SILT SCREEN OR FENCE SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO VERIFY THAT THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS OR CONCRETE SLAB AND TO VERIFY THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.E.TEMPORARY AND PERMANENT SEEDING AND PLANTING SHALL BE INSPECTED FOR BARE SPOTS, WASHOUTS AND HEALTHY GROWTH.

E. TEMPORARY AND PERMANENT SEEDING AND PLANTING SHALL BE INSPECTED FOR BARE SPOTS, WASHOUTS AND HEALTHY GROWTH.

F. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A MAINTENANCE INSPECTION REPORT PROMPTLY AFTER EACH WEEKLY INSPECTION.

G. THE CONTRACTOR SHALL SELECT A MINIMUM OF THREE PERSONNEL WHO SHALL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.

H. PERSONNEL SELECTED FOR THE INSPECTION AND MAINTENANCE RESPONSIBILITIES SHALL RECEIVE TRAINING FROM THE CONTRACTOR. THEY SHALL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

I. ALL SLOPES AND EXPOSED AREAS SHALL BE GRASSED AS SOON AS FINAL GRADES HAVE BEEN ESTABLISHED. GRADING TO FINAL GRADE SHALL BE CONTINUOUS, AND ANY AREA IN WHICH WORK HAS BEEN INTERRUPTED OR DELAYED OR EXPOSED FOR MORE THAN 15 DAYS SHALL BE GRASSED IN ORDER TO PREVENT DUST, EROSION AND SILT RUNOFF. AREAS WITH IMPORTED SOILS SHALL BE GRASSED NOT MORE THAN 5 WORKING DAYS AFTER FINAL GRADES HAVE BEEN ESTABLISHED.

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

4. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES:

A. MATERIALS POLLUTION PREVENTION PLAN:

1. APPLICABLE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION. OTHER MATERIALS AND SUBSTANCES NOT LISTED BELOW SHALL BE ADDED TO THE INVENTORY OF THE CONSTRUCTION CONTRACTOR'S SITE-SPECIFIC BMP PLAN.

CONCRETE FERTILIZERS
DETERGENTS PETROLEUM BASED PRODUCTS
PAINTS (ENAMEL AND LATEX) CLEANING SOLVENTS
METAL STUDS WOOD
TAR MASONRY BLOCK

2. QMATERIAL MANAGEMENT PRACTICES SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF. AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCT AS IS REQUIRED TO DO THE JOB.

3. ALL MATERIALS STORED ONSITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND IF POSSIBLE UNDER A ROOF OR OTHER ENCLOSURE.5.SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

4. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.

5. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

6. A PRODUCT SHALL BE USED UP COMPLETELY BEFORE DISPOSING OF THE CONTAINER.

7. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.

8. THE CONTRACTOR SHALL CONDUCT A DAILY INSPECTION TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.

B. HAZARDOUS MATERIAL POLLUTION PREVENTION PLAN

1. PRODUCTS SHALL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.

2. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS (MSDS) SHALL BE RETAINED AND MADE AVAILABLE TO THE ENGINEER UPON REQUEST.

3. SURPLUS PRODUCTS SHALL BE DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR LOCAL AND STATE RECOMMENDED METHODS.

C. ONSITE AND OFFSITE PRODUCTS SPECIFIC PLAN

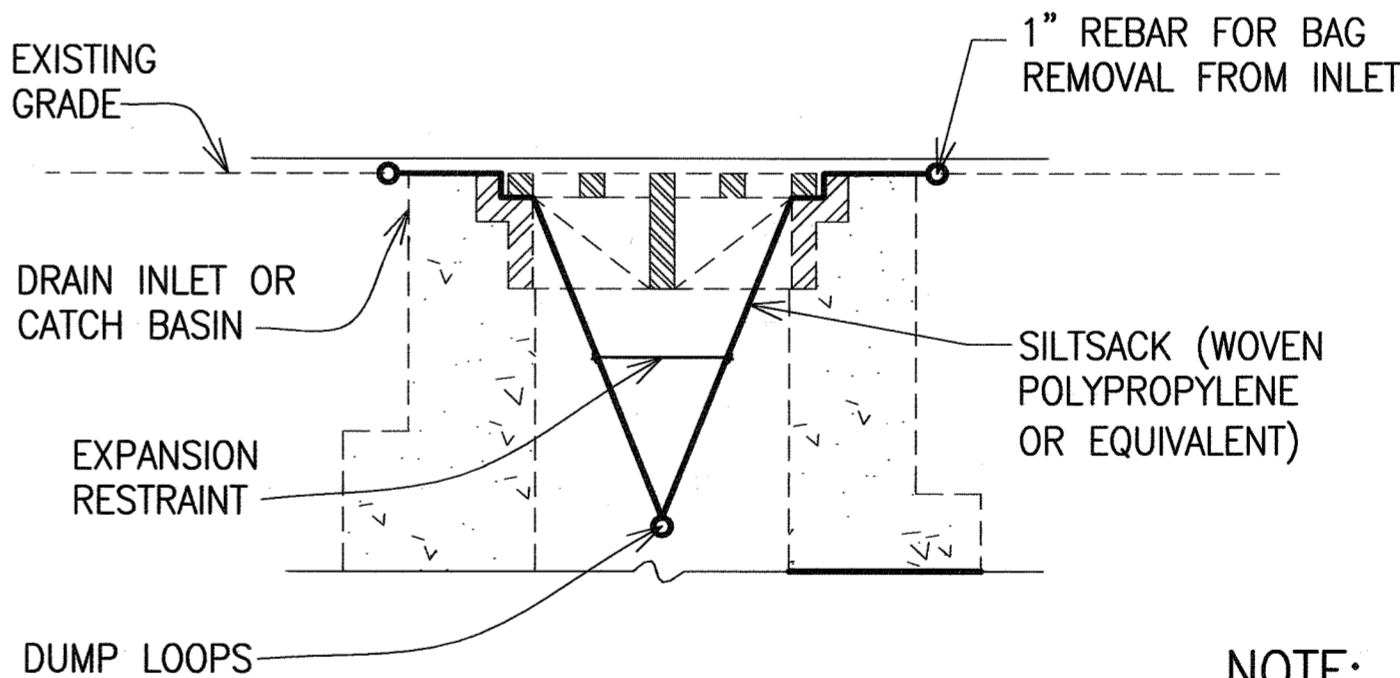
1. THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ONSITE:

A. PETROLEUM BASED PRODUCTS: ALL ONSITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS

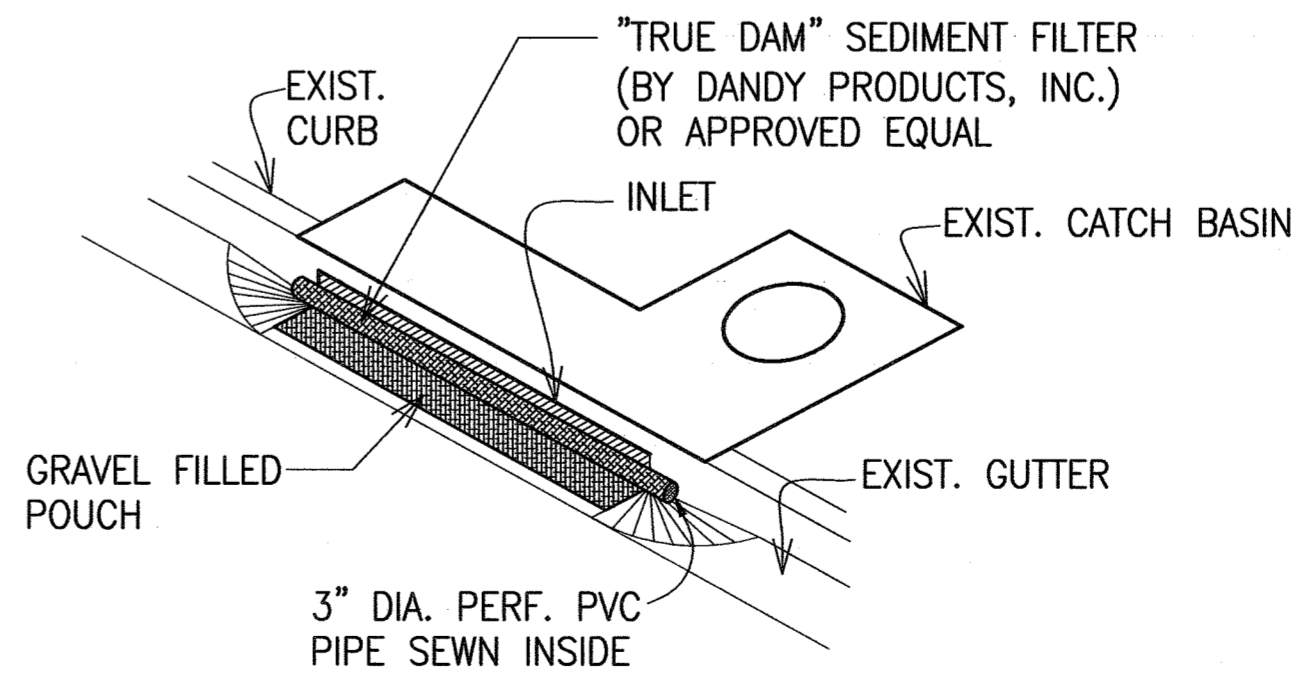
1. THE CONTRACTOR SHALL OBTAIN AND COMPLY WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS FOR KAUAI DISTRICT PERMIT PROJECTS. THIS IS AVAILABLE AT THE OAHU DISTRICT OFFICE AT 3060 EIWA STREET, SUITE 205. DUE TO POTENTIAL COST IMPACTS, THE CONTRACTOR NEEDS TO BE AWARE OF THESE REQUIREMENTS.

2. THE CONTRACTOR SHALL COMPLETE AND SUBMIT A CONTRACTOR'S CERTIFICATION OF NPDES COMPLIANCE, INCLUDING COMPLETION OF THE BEST MANAGEMENT PRACTICE (BMP) CHECKLIST AND SUBMITTAL OF A WRITTEN BMP PLAN AND DRAWINGS, PRIOR TO ISSUANCE OF THE PERMIT TO PERFORM WORK UPON STATE HIGHWAYS.



GRATED INLET PROTECTION

NOT TO SCALE

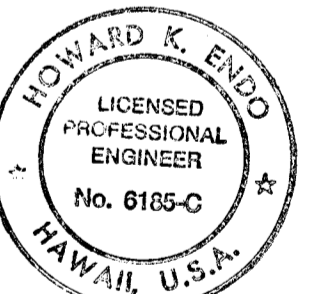


INLET PROTECTION (SEDIMENT CONTROL FILTER)

AT CATCH BASIN

NOT TO SCALE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0700(50)R	2004	7	100



EXPIRATION DATE: 4/30/06

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

Signature: Howard K. Endo, Date: 9/22/04

"OBSERVATION OF CONSTRUCTION" IS DEFINED IN CHAPTER 16-115, HAWAII ADMINISTRATIVE RULES ENTITLED "PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS".

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

NOTES - 4

Pedestrian Facilities & ADA Compliance
at Various Locations on Kaua'i
Fed. Aid Proj. No. CMAQ-0700(50)R

Scale: AS NOTED

Date: AUG. 13, 2004

SHEET No. 4 OF 4 SHEETS