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 pull box, relocating traffic signal 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. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
- 7. 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 various contract items.
- 8. 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.
- All saw cutting work shall be considered incidental to Section 650 Curb Ramps.
- 10. 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.

- 11. Smooth riding connections shall be constructed at all times of 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.
- 12. 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.
- 13. 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 too the various contract items and will not be paid for separately.
- 14. 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.
- Concrete sidewalk shall be reinforced with 6x6 W1.4xW1.4 welded wire fabric.
- 16. 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.
- 17. Provide smooth transition where new sidewalk construction meets the existing grade or sidewalk.
- 18. All curb angle points within the curb ramps shall be rounded with R=6".
- 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.
- 20. 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.
- 21. Removal of existing crosswalk marking shall be incidental to contract item 629.1030 Crosswalk Markings.
- 22. All curb ramp transitions (walkways, curbs, gutter) shall be considered incidental to Section 650 — Curb Ramps.
- 23. 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 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. LICENSED PROFESSIONAL

FEDERAL — AID PROJ. NO. FISCAL YEAR FED. ROAD DIST. NO. SHEET NO. TOTAL SHEETS HAW. CMAQ-0900(67) \$\mathbb{R}\$ 2004 109

> STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

<u> NOTES — 1</u>

PEDESTRIAN FACILITIES & ADA COMPLIANCE AT VARIOUS

LOCATIONS ON MAUI

Federal - Aid Project No. CMAQ-0900(67)R Scale: As Shown Date: August 2004 SHEET No. CA-2 OF 9 SHEETS

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION 04/30/06

EXPIRATION DATE OF THE LICENSE

ENGINEER ★\ No. 3443-C /**★**/

SURVEY PLOTTE DRAWN BY TRACED BY DESIGNED BY OUANTTIES BY CHECKED BY

GENERAL NOTES (CONT'D)

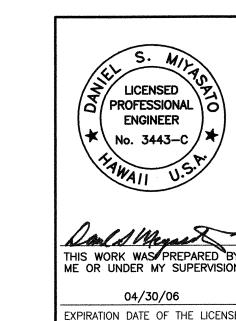
- 24. After the project is completed, the Contractor shall restore grades and ground cover disturbed as a result of the project to a condition equal or better than existing before such damage or injury was done.
- 25. Existing utilities shall remain in service and in place at all times. If relocation 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. Contractor to remove and salvage existing lava rock curbs within construction areas. Clean and deliver salvaged lava rock curbs to State's Maintenance Baseyard at 650 Palapala Drive, Kahului. Contact Glenn Garcia (ph. 873—3535) 1—week prior to delivery.
- 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' \pm).
- 36. Contractor shall comply with conditions as stated in the project NPDES Notice of General Permit Coverage (NGPC).
- 37. 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 bear all costs involved in restoring the State Survey Monuments which are affected by their work.

PAVING AROUND MANHOLES

- 1. The Contractor shall place hot asphalt concrete around manholes and compact properly with a vibrating plate compactor.
- 2. If a plate compactor is not used, the Contractor shall use a pneumatic roller to roll the area around the manhole which is not rolled by the steel roller.
- 3. The Contractor shall fog seal or brush emulsion seal on the material placed as backfill on the area around the manhole that was not compacted by the roller. Black sand shall be used to blot out the area if the fog is too heavy.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS

- 1. The Contractor shall obtain and comply with the National Pollutant Discharge Elimination System (NPDES) requirements for Maui District permit projects. This is available at the Maui District office at 650 Palapala Drive (ph.873—3535). 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.



STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

NOTES - 2

PEDESTRIAN FACILITIES & ADA
COMPLIANCE AT VARIOUS

LOCATIONS ON MAUI

<u>Federal — Aid Project No. CMAQ—0900(67)</u>**R** Scale: As Shown Date: August 2004

SHEET No. CA-3 OF 9

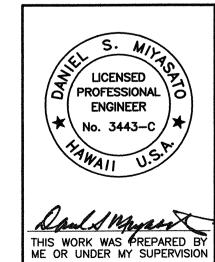
IGINAL SURVEY PLOTTED BY DATE
LAN DRAWN BY "
TRACED BY "
TRACED BY "
DESIGNED BY "
OUANTITIES BY "
CHECKED BY "

SHEETS

CURB RAMP AND SIDEWALK NOTES:

- 1. These typical details are intended as curb ramp guidelines for design and construction.
- 2. A 2% maximum cross slope shall be maintained in the direction of pedestrian traffic.
- 3. Subject to field conditions, the Engineer shall determine the final location of curb ramps.
- 4. All pullboxes shall be installed away from the curb ramp and within the sidewalk/unpaved area to the maximum extent feasible.
- 5. Where necessary, existing pullboxes, handholes, manholes, etc. shall be adjusted to match curb ramp grade. Adjustments shall not be paid for separately but shall be considered incidental to the various curb ramp items unless indicated otherwise.
- 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. The pedestrian push button shall meet operational and reach requirements of the American with Disabilities Act Accessibility Guidelines (ADAAG):
- a) Forward Reach. The maximum height for forward reach shall be 48".
- b) Side Reach. The maximum height for side reach shall be 54".
- c) Operation. Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbf.
- 9. The maximum slopes of adjoining gutters or road surface immediately fronting the curb ramp shall not exceed 5% for Type A, D, and Combination ramps and 8.33% for Type B, C, and E ramps.
- 10. There shall be a 30"x48" level ground surface (2% max. cross slope, both directions) for a forward or side approach, as appropriate, to a pedestrian push button.
- 11. Construction joints are required to join curb ramps with sidewalks.
- 12. Unless otherwise noted, new gutters are required as shown.
- 13. All curb ramps shall be reinforced with 6x6 W1.4/W1.4 welded wire fabric.
- 14. Surface of sidewalks and curb ramps shall be firm, stable, and slip resistant. This includes the surfaces of pullboxes, valve covers, manhole covers, etc.
- 15. Bed course material is required for curb ramps, sidewalks, and gutters.
- 16. All sidewalks shall provide a minimum clear width of 3'-0" (excluding curb) for pedestrian circulation. If this cannot be met, a minimum 32—inch clear width is allowed for a distance of 24—inches.
- 17. Passing spaces along new sidewalks with 5' clear width or less shall be provided at maximum 200' intervals as required by ADA guidelines. The passing area shall be a minimum 5' wide by 5' long as feasible.
- 18. If possible, install utility poles, fire hydrants, light poles, sign posts, pullboxes, etc. off of sidewalk but within the right—of—way.
- 19. Objects protruding from utility poles and walls adjacent to the sidewalks (i.e. wall mounted fire hydrants, telephones, meters on poles, etc.) shall be mounted to meet the current American with Disabilities Act Accessibility Guidelines (ADAAG) and will be subject to Engineer's approval.

- 20. If a curb ramp is not constructed according to the plans, the Contractor shall reconstruct the curb ramp at no cost to the State. Construction tolerance for Portland Cement Concrete shall be based on 1/4 inch per 10 ft. ($\pm 0.2\%$). Remedial measures will not be accepted.
- 21. Additional information is available from:
 - a) American with Disabilities Act Accessibility Guidelines (ADAAG), Jan. 1998, The Access Board.
 - b) Accessible Rights-of-Way: A Design Guide, Nov. 1999, The Access Board.
 - c) Designing Sidewalks and Trails for Access, Part 1, July 1999, FHWA.
 - d) Designing Sidewalks and Trails for Access, Part 2, Sept. 2001, FHWA.
- 22. Pay limits for the various types of curb ramps are as shown on these typical
- 23. For curb ramps at curb returns, install Construction Joints per Standard Detail D-05 (Detail C) full width sidewalk at curb return.
- 24. When directed by the Engineer, Sidewalk Transition Area shall be extended beyond shown plan limits to match the nearest scoreline.



DEPARTMENT OF TRANSPORTATION NOTES - 3

STATE OF HAWAII

PEDESTRIAN FACILITIES & ADA

COMPLIANCE AT VARIOUS

LOCATIONS ON MAUI Federal - Aid Project No. CMAQ-0900(67)R

Scale: As Shown

04/30/06 EXPIRATION DATE OF THE LICENSE

SHEET No. CA-4 OF 9

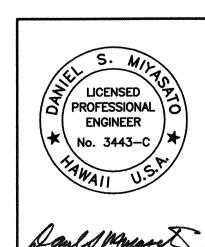
SHEETS

Date: August 2004

CONSTRUCTION NOTES WITHIN COUNTY RIGHT-OF-WAY

- 1. Contractor shall obtain permit to perform work on County highways from the Development Services Administration two weeks prior to the commencement of work.
- 2. Standard Detail Drawings and Standard Specifications of the Department of Public Works shall be included as part of the construction plans.
- 3. All construction work shall strictly conform to the applicable sections of the 1994 Hawaii Standard Specifications for Road, Bridge, and Public Works Construction, and the September 1984 "Standard Details" for Public Works Construction of the Department of Public Works.
- 4. If existing utilities, whether or not shown on plans, are damaged during repair such utilities.
- 5. Contractor shall provide, install and maintain all necessary signs, lights, flares, barricades, and other protective devices for the protection, safety and convenience of the public, according to the "Manual on Uniform Traffic Control Devices for Streets and Highways", 2000, and to the 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 the U.S. Federal Highway Administration "Manual on Uniform Traffic Control Devices for Highway Construction and Maintenance Operations" dated 2001.
- 6. The Director of Public Works and/or the Director of the Department of Water Supply has the right to stop construction should any work be found contrary to the approved construction plan or detrimental to the public's interest.
- 7. The contractor shall schedule a pre—construction meeting with the Development Services Administration five (5) days prior to commencement of construction.
- 8. The contractor shall, at his own expense, keep the project area 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 and County Grading Ordinance.
- 9. The contractor shall remove all silt and debris resulting from his work and deposited in drainage facilities, roadways and other areas. The cost incurred for any necessary remedial action ordered by the Director of Public Works shall be paid by the contractor.
- 10. Construction debris and wastes shall be deposited at an appropriate work site. The contractor shall inform the Director of Public Works of the location of the disposal sites. The disposal site must fulfill the requirements of the Grading Ordinance.

- 11. The contractor shall submit a TIFF and five (5) copies of the "As-Builts" drawings prior to the final approval of the improvements.
- 12. If the clearance between a wastewater line and a new or existing waterline is eighteen inches (18") or less, the wastewater line shall be concrete—jacketed in accordance with the Standard Details of Public Works Construction dated September 1984.
- 13. Should historic sites such as walls, platforms, pavements, or mounds, or remains such as artifacts burials, concentration of shell or charcoal be encountered during construction activities, work shall cease immediately in the immediate vicinity of the find and the find shall be protected from further damage. The contractor and/or landowner shall immediately contact the State Historic Preservation Division @ (243–5169), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary.
- 14. Pursuant of Maui County Code Section 3.44.015(C), the County of Maui is not responsible for any park, roadway, easement (including but not limited to drainage, sewer, access, reclaimed water, or irrigation easement), or any other interest in real property shown on this map or shown on these plans, unless the Maui County Council has accepted its dedication by a resolution approved by a majority of Council's Members at a regular or special meeting of the Maui County Council.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

NOTES - 4

PEDESTRIAN FACILITIES & ADA
COMPLIANCE AT VARIOUS
LOCATIONS ON MAUI

04/30/06

EXPIRATION DATE OF THE LICENSE

<u>Federal — Aid Project No. CMAQ—0900(67)</u>R Scale: As Shown Date: August 2004

SHEET No. CA-5 OF 9 SHEETS

IGINAL DRAWN BY TRACED BY DATE TRACED BY TRACED BY CHECKED BY CHECKED BY CHECKED BY TRACED BY CHECKED BY TRACED BY T

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:

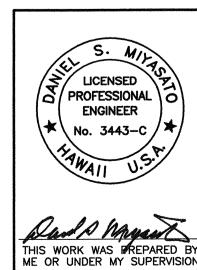
- A. Waste Materials: All waste materials shall be collected and stored in a securely lidded metal dumpster that does not leak. The dumpster shall meet all local and State solid waste management regulations. All trash and construction debris from the site shall be deposited in the dumpster. The dumpster 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.
- 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.
- All slopes and exposed areas shall be hydromulch 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 hydromulch in order to prevent dust, erosion and silt runoff. Areas with imported soils shall be hydromulch 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:
- 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 Detergents Paints (enamel and latex) Metal Studs

Fertilizers Petroleum Based Products Cleaning Solvents Wood Masonry Block

- 2. Material 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.
- 4. Products shall be kept in their original containers with the original manufacturer's label.
- 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.



DEPARTMENT OF TRANSPORTATION WATER POLLUTION NOTES —

FEDERAL — AID PROJ. NO.

CMAQ-0900(67)R 2004

FED. ROAD DIST. NO.

FISCAL YEAR

SHEET NO.

SHEETS

109

PEDESTRIAN FACILITIES & ADA COMPLIANCE AT VARIOUS

LOCATIONS ON MAUI

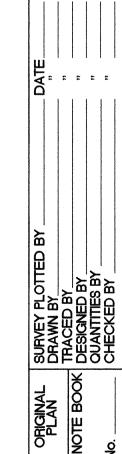
Federal - Aid Project No. CMAQ-0900(67)R Scale: As Shown Date: August 2004

04/30/06 EXPIRATION DATE OF THE LICENSE

SHEET No. CA-6 OF 9

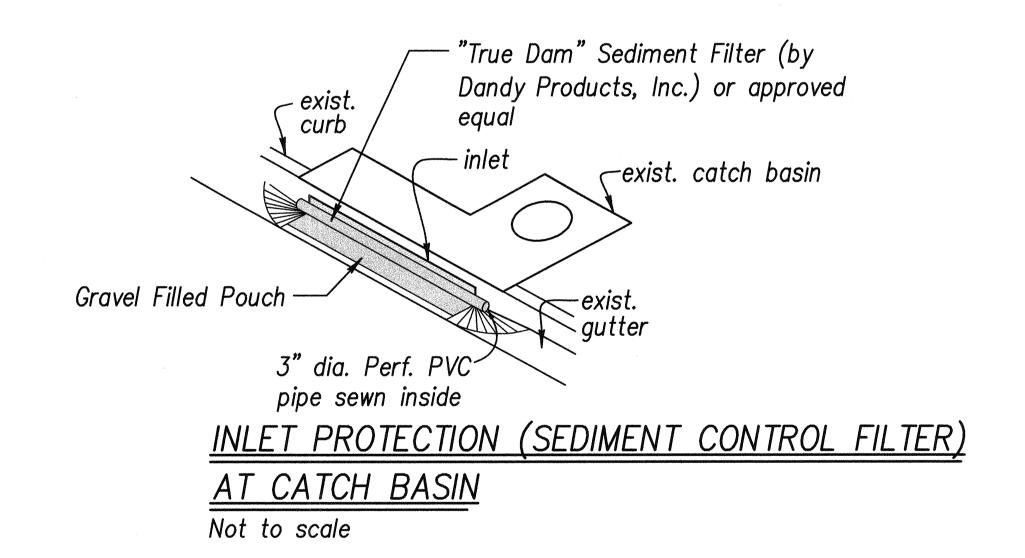
8

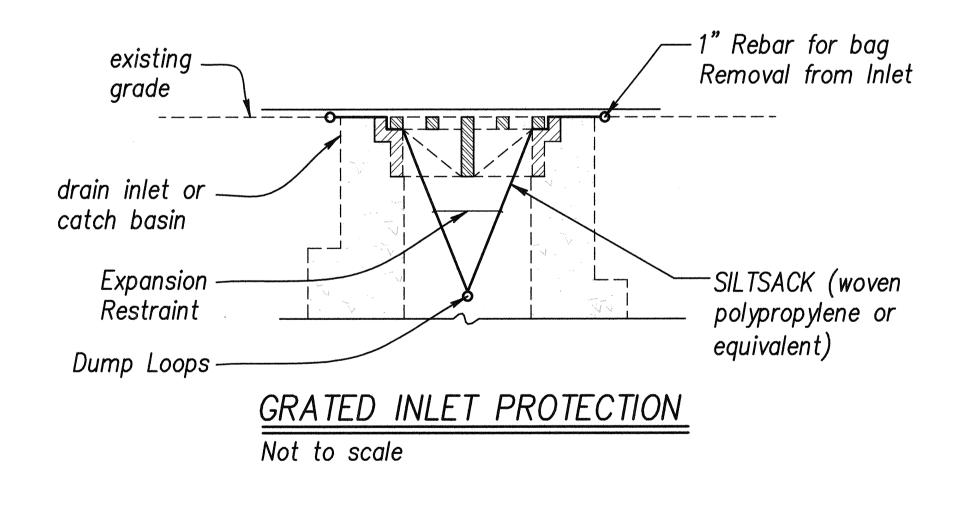
SHEETS



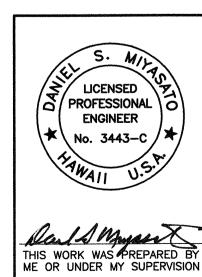
WATER POLLUTION AND EROSION CONTROL NOTES (Cont.)

- 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.









DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WATER POLLUTION NOTES - 2

AND DETAILS

PEDESTRIAN FACILITIES & ADA
COMPLIANCE AT VARIOUS

LOCATIONS ON MAUI

ME OR UNDER MY SUPERVISION

04/30/06

EXPIRATION DATE OF THE LICENSE

Federal - Aid Project No. CMAQ-0900(67) R
Scale: As Shown Date: August 2004

SHEET No. CA-7 OF 9 SHEETS

9