





WATER POLLUTION AND EROSION CONTROL NOTES (Cont.):

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-16(003)	2020	6	48

12. Contain, remove, and dispose slurry generated from saw cutting of pavement in accordance with approved BMP practices. Do not allow discharge into the drainage system or State waters.

13. For projects with an NPDES Permit for Construction Activities, immediately initiate stabilizing exposed soil areas upon completion of earth-disturbing activities for areas where earth-disturbing activities have permanently or temporarily ceased. Earth-disturbing activities have permanently ceased when clearing and excavation within any area of the construction site that will not include permanent structures has been completed. Earth-disturbing activities have temporarily ceased when clearing, grading, and excavation within any area of the site that will not include permanent structures will not resume (i.e., the land will be idle) for a period of 14 or more calendar days, but such activities will resume in the future. For construction areas discharging into waters not impaired for nutrients sediments, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities. For construction areas discharging into nutrient or sediment impaired waters, complete initial stabilization within 7 calendar days after the temporary or permanent cessation of earth-disturbing activities. Classification of water at the discharge point may be found in the SWPPP.

14. For projects without an NPDES Permit for Construction Activities, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities.

D. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES:

1. Materials Pollution Prevention Plan

a. 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.

Concrete	Cleaning Solvents
Detergents	Wood
Paints (enamel and latex)	Masonry Block
Metal Studs	Herbicides and Pesticides
Tar	Curing Compounds
Fertilizers	Adhesives
Petroleum Based Products	

b. Use Material Management Practices to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff. Make an effort to store only enough product as is required to do the job.

c. Store all materials stored onsite in a neat, orderly manner in their appropriate containers and if possible under a roof or other enclosure.

d. Keep products in their original containers with the original manufacturer's label.

e. Do not mix substances with one another unless recommended by the manufacturer.

f. Whenever possible, use a product up completely before disposing of the container.

g. Follow manufacturer's recommendations for proper use and disposal.

h. Conduct a daily inspection to ensure proper use and disposal of materials onsite.

2. Hazardous Material Pollution Prevention Plan

a. Keep products in original containers unless they are not resealable.

b. Retain original labels and Safety Data Sheets (SDS), formerly Material Safety Data Sheets (MSDS).

c. Dispose of surplus products according to manufacturers' instructions and local and State regulations.

3. Onsite and Offsite Product Specific Plan

The following product specific practices shall be followed onsite:

a. Petroleum Based Products:

Monitor all onsite vehicles for leaks and perform regular preventive maintenance to reduce the chance of leakage. Store petroleum products in tightly sealed containers which are clearly labeled. Apply asphalt substances used onsite according to the manufacturer's recommendation.

b. Fertilizers:

Apply fertilizers used only in the minimum amounts recommended by the manufacturer and federal, state, and local requirements. Avoid applying just before a heavy rain event. Apply at the appropriate time of year for the location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth. Once applied, work fertilizer into the soil to limit exposure to storm water. Do not apply to storm conveyance channels with flowing water. Storage shall be in a covered shed or in an area where fertilizer will not come into contact with precipitation or stormwater. Transfer the contents of any partially used bags of fertilizer to a sealable plastic bin to avoid spills.

c. Paints:

Seal and store all containers when not required for use. Do not discharge excess paint to the drainage system, sanitary sewer system, or State waters. Dispose properly according to manufacturers' instructions and State and local regulations.

d. Concrete Trucks:

Washout or discharge concrete truck drum wash water only at a designated site as far as practicable from storm drain inlets or State waters. Do not discharge water in the drainage system or State waters. Disposal by percolation is prohibited. Clean disposal site as required or as requested by the Engineer.

4. Spill Control Plan

a. Post a spill prevention plan to include measures to prevent and clean up each spill.

b. The Contractor shall be the spill prevention and cleanup coordinator. Designate at least three site personnel who shall receive spill prevention and cleanup training. These individuals shall each become responsible for a particular phase of prevention and cleanup. Post the names of responsible spill personnel in the material storage area on a weatherproof bulletin board or other accessible location acceptable to the Engineer and in the office trailer onsite.

c. Clearly post manufacturers' recommended methods for spill cleanup. Make site personnel aware of the procedures and the location of the information and cleanup supplies.

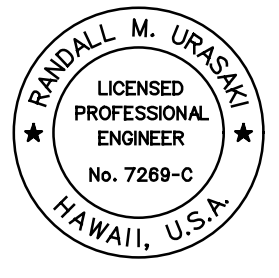
d. Keep ample materials and equipment necessary for spill cleanup in the material storage area onsite.

e. Clean up all spills immediately after discovery.

f. Keep the spill area well ventilated. Personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

g. Report spills of toxic hazardous material to the appropriate State or local government agency, regardless of the size. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, the Contractor shall notify the Engineer as soon as the Contractor has knowledge of the discharge. The Engineer will notify the National Response Center (NRC) at (800) 424-8802, the Clean Water Branch during regular business hours at 586-4309, and the Hawaii State Hospital Operator at 247-2191 and the Clean Water Branch (DOH-CWB) via email at [cleanwaterbranch@doh.hawaii.gov](mailto:cleanwaterbranch@doh.hawaii.gov) during non-business hours immediately. The Contractor shall also provide to the Engineer, within 7 calendar days of knowledge of the release, a description of the release, the circumstances leading to the release, and the date of the release. The Engineer will provide this information to the DOH-CWB. The Engineer will provide information to the NRC if requested.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	2/10/14
	DESIGNED BY	
	CHECKED BY	
NOTE BOOK	NOTED BY	
	QUANTITIES BY	
N	DATE	2/10/14
	BY	

 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. <i>R. Urasaki</i> SIGNATURE 04/30/20 EXPIRATION DATE OF THE LICENSE	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION <b>WATER POLLUTION AND EROSION CONTROL NOTES-2</b> <b>KUHIO HIGHWAY</b> <b>Emergency Slope Stabilization</b> <b>in the Vicinity of Kalihiwai Bridge</b> <b>Federal-Aid Project No. ER-16(003)</b> Scale: None Date: July 2019

WATER POLLUTION AND EROSION CONTROL NOTES (Cont.):

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E. PERMIT REQUIREMENTS:

1. The calculated land disturbance area for this project based on the construction plans is 0.5 acres not including Contractor Staging and Storage areas. If the total of the disturbed area and the Contractor Staging and Storage area is one acre or greater, the Contractor shall obtain the NPDES Construction Activities Permit using HDOT's latest SWPPP template. See Hawaii Administrative Rules Chapter 11-55, Appendix C for the definition of land disturbance. The Contractor shall be responsible for obtaining the required NPDES Construction Activities Permit and complying with the requirements of HAR 11-55 including, but not limited to:

- a. Deadlines for initiating and completing initial stabilization
- b. Increased inspection frequency and installation of rain gage if applicable
- c. Deadlines to initiate and complete repairs to BMPs
- d. Reporting requirements and corrective action reports

2. Comply with all applicable State and Federal Permit conditions. Permits may include, but not limited to the following:

- a. NPDES Permit for Construction Activities

F. SITE-SPECIFIC BMP REQUIREMENTS:

Each BMP below is referenced to the corresponding section of the current HDOT Construction Best Management Practices Field Manual and appropriate Supplemental Sheets. The Manual may be obtained from the HDOT Statewide Stormwater Management Program Website at <http://www.stormwaterhawaii.com/resources> under Construction Best Management Practices Field Manual. Supplemental BMP sheets are located at [http://stormwaterhawaii.com/contractors/contractors\\_BMPmanual.aspx](http://stormwaterhawaii.com/contractors/contractors_BMPmanual.aspx) under Concrete Curing and Irrigation Water.

The requirements for Water Pollution, Dust, and Erosion Control submittals are included in Section 209 of the Hawaii Standard Specifications for Road and Bridge Construction dated 2005 and applicable Special Provisions. A list of pollutant sources and corresponding BMP used to mitigate the pollutants are included in Section 209 of the Special Provisions under Appendix A.

Follow the requirements below:

1. Protect all Drainage Inlets receiving runoff from disturbed areas (SC-2).
2. Contain on-site runoff using Perimeter Sediment Controls
  - a. SC-1 Silt Fence
  - b. SC-5 Vegetated Filter Strips and Buffers
  - c. SC-8 Compost Filter Berm
  - d. SC-13 Sandbag Barrier
  - e. SC-14 Brush or Rock Filter
3. Control offsite runoff from entering construction area
  - a. EC-8 Run-On Diversion
  - b. SC-6 Earth Dike
  - c. SC-7 Temporary Drains and Swales
4. Incorporate applicable Site Management BMP
  - a. SM-1 Employee Training
  - b. SM-2 Material Delivery and Storage
  - c. SM-3 Material Use
  - d. SM-4 Protection of Stockpiles
  - e. SM-6 Solid Waste Management
  - f. SM-7 Sanitary/Septic Waste Management
  - g. SM-9 Hazardous Waste Management
  - h. SM-10 Spill Prevention and Control
  - i. SM-11 Vehicle and Equipment Cleaning
  - j. SM-12 Vehicle and Equipment Maintenance
  - k. SM-13 Vehicle and Equipment Refueling
  - l. SM-14 Scheduling
  - m. SM-15 Location of Potential Sources of Sediment
  - n. SM-16 Preservation of Existing Vegetation
  - o. SM-18 Dust Control
5. Contain pollutants within the Construction Staging/Storage Area BMP with applicable Perimeter Sediment Controls and Site Management BMP. Include a Stabilized Construction Entrance/Exit (EC-2) for all areas which exit onto a paved street. Restrict vehicle access to these points.
6. Manage Concrete Waste including installing a Concrete Washout Area (SM-5) and properly disposing of Concrete Curing Water (California Stormwater BMP Handbook NS-12 Concrete Curing).
7. Remove saw cut slurry and hydrodemolition water from the site by vacuuming. Provide storm drain protection and/or perimeter sediment controls during saw cutting and hydrodemolition work.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	2/10/14
1.000	DESIGNED BY	
N	QUANTITIES BY	
	CHECKED BY	

RANDALL M. URASAKI

LICENSED PROFESSIONAL ENGINEER

No. 7289-C

HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature

04/30/20

EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

**WATER POLLUTION AND EROSION CONTROL NOTES-3**

KUHIO HIGHWAY

Emergency Slope Stabilization

in the Vicinity of Kalihiwai Bridge

Federal-Aid Project No. ER-16(003)

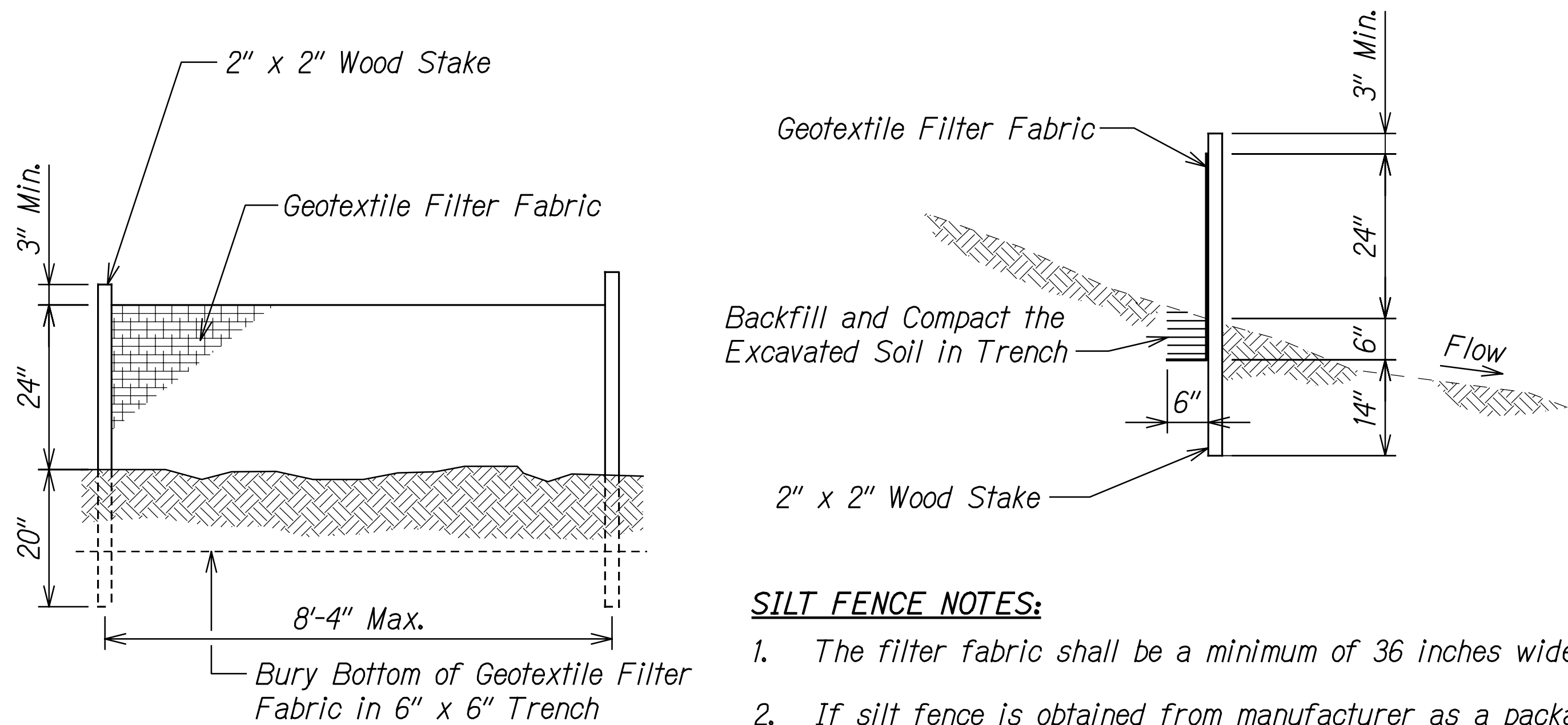
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SHEET No. N-6 OF 7 SHEETS

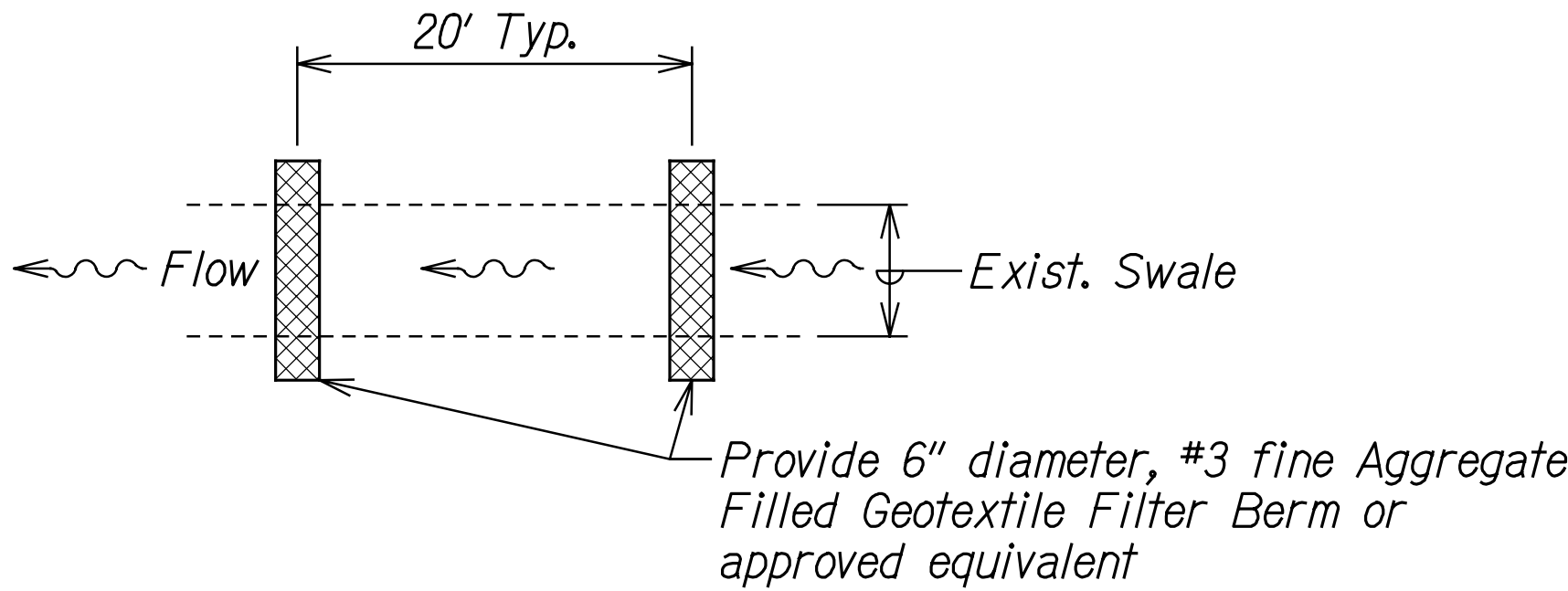
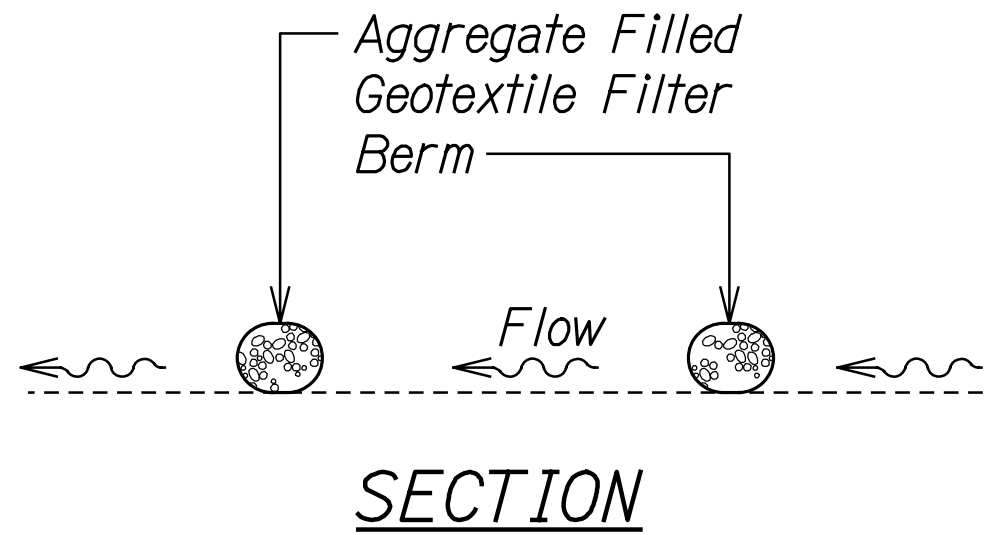
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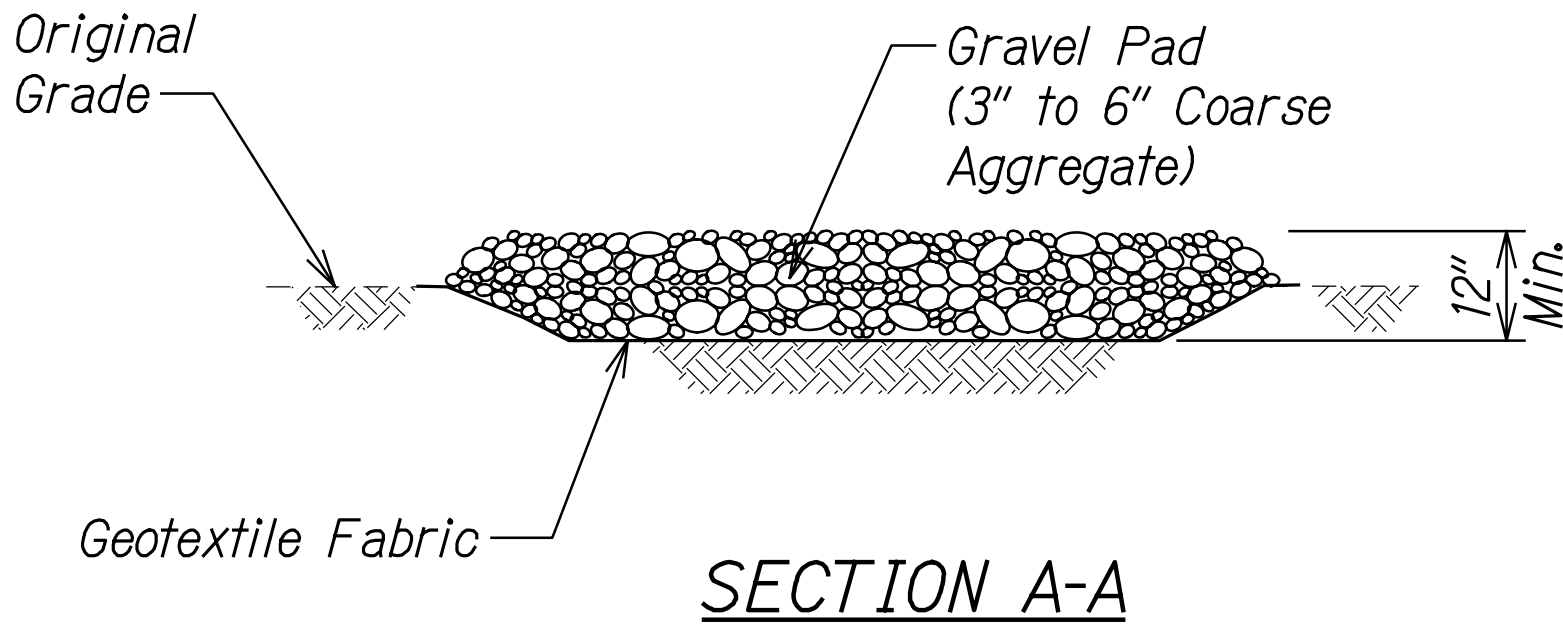
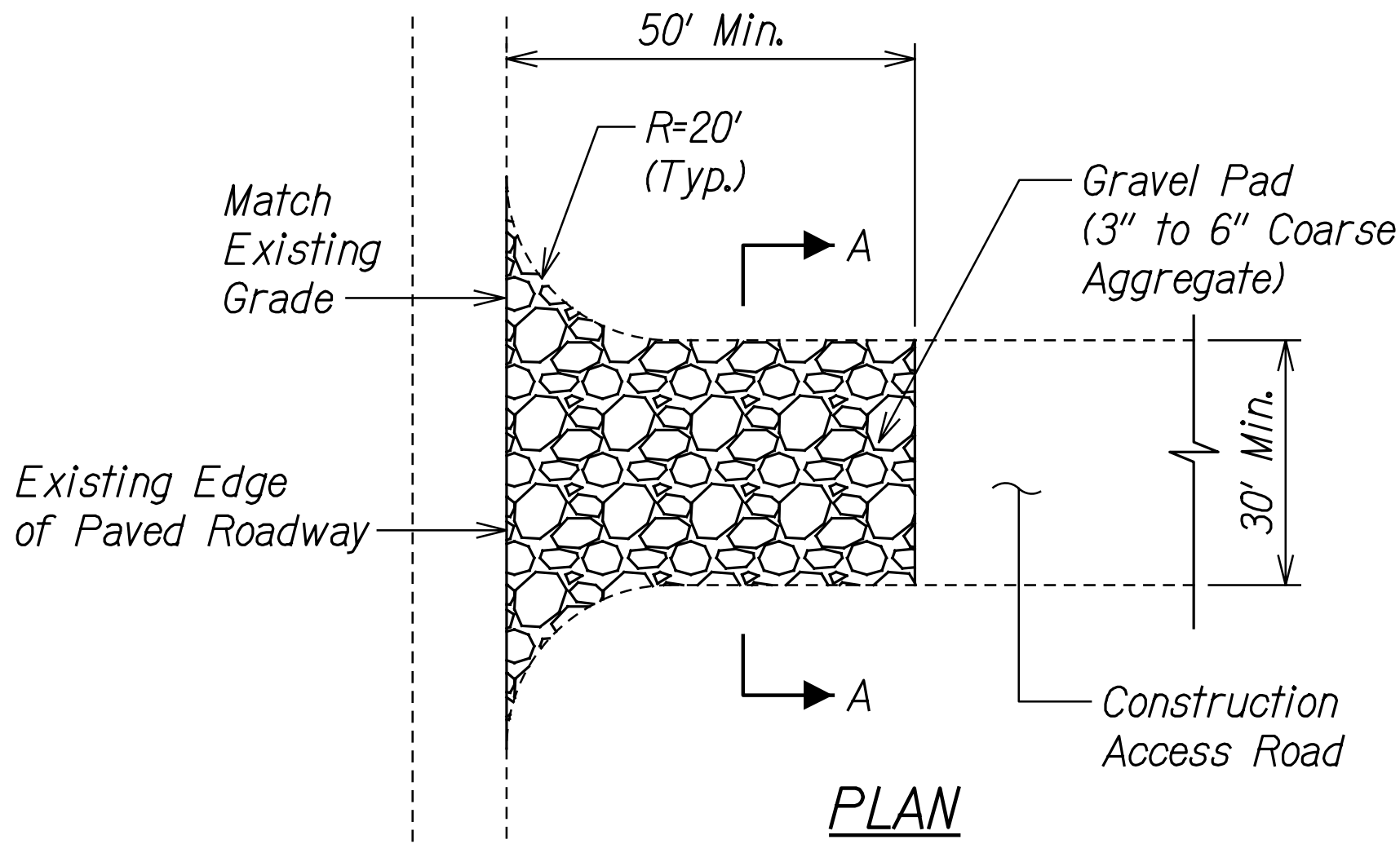


- SILT FENCE NOTES:**
1. The filter fabric shall be a minimum of 36 inches wide.
  2. If silt fence is obtained from manufacturer as a package (i.e. fabric attached to post) the manufacturer's installation instructions shall be adhered to.

**SILT FENCE DETAIL**  
Not to Scale



**PLAN**  
**FILTER BERM (SOCK)**  
**ALONG EXISTING SWALE**  
Not to Scale



**TEMPORARY CONSTRUCTION**  
**ENTRANCE STABILIZATION**  
Not to Scale

SURVEY PLOTTED BY	DATE
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THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

*R. M. Urasaki* 04/30/20  
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**WATER POLLUTION & EROSION CONTROL DETAILS**

**KUHIO HIGHWAY**  
**Emergency Slope Stabilization**  
**in the Vicinity of Kalihiwai Bridge**  
**Federal-Aid Project No. ER-16(003)**

Scale: Not to Scale Date: July 2019