

Amend **Section 639 - Water Pollution Control** to read as follows:

**"SECTION 209 - WATER POLLUTION AND EROSION CONTROL**

**209.01 Description.** This section is for submitting detailed plans, diagrams, and written site-specific best management practices (BMP); constructing, maintaining, and repairing temporary and permanent water pollution and erosion control measures at the project site, including local material sources, work areas and haul roads; removing and disposing potential hazardous wastes; and complying with applicable State and Federal Permit conditions.

The requirements of this section also apply to borrow pit operations, haul roads and/or Contractor's storage sites located outside the State right-of-way.

The requirements of this section do not apply to dewatering activities. Dewatering activities shall be according to Section 206 - Excavation and Backfill for Conduits and Structures.

**209.02 Materials.** Materials shall conform to the following:

**(A) Slope Drains.** The Contractor may construct slope drains of pipe, fiber, mats, erosion control fabric, geotextiles, rubble, portland cement concrete, bituminous concrete, plastic sheets, or other materials accepted by the Engineer.

**(B) Mulches.** Mulches may be bagasse, hay, straw, fiber mats, netting, wood cellulose, bark, wood chips, or other materials accepted by the Engineer. Mulches shall be clean and free of noxious weeds and deleterious materials. Spray mulches at a rate of 2000 pounds per acre. Add tackifier to the mix at a rate of 85 pounds per acre.

**(C) Grass.** Grass shall be a quick growing species such as rye grass, Italian rye grass, or cereal grasses. The grass shall be suitable to the area and provide a temporary cover that will not later compete with the permanent cover. Alternate grasses are allowable if accepted by the Engineer. Apply seeds at a rate of 125 pounds per acre.

**(D) Fertilizer and Soil Conditioners.** Fertilizer and soil conditioners shall be a standard commercial grade accepted by the Engineer. Fertilizer shall conform to Subsection 712.18(A) - Commercial Fertilizer. Apply fertilizer at a rate of 450 pounds an acre. Apply an additional 250 pounds per acre every 90 calendar days.

**(E) Hydromulch.** Hydromulch used as a BMP shall use the ingredients and at the rates required in Subsections 209.02(B), 209.02(C), and 209.02(D).

47 (F) **Silt Fences.** Silt fences shall be constructed with a synthetic  
48 filter fabric mounted on posts and embedded in the ground.

49  
50 (G) **Berms.** Berms shall consist of gravel or sand wrapped with  
51 geotextile material. Alternate materials are allowable if accepted by the  
52 Engineer.

53  
54 **209.03 Water Pollution and Erosion Control Conference.** Schedule a  
55 water pollution and erosion control conference with the Engineer at least 14  
56 calendar days before the start of construction work to discuss the sequence of  
57 work, plans and proposals for water pollution and erosion control. Submit a  
58 water pollution and erosion control plan, as detailed in Subsection 209.04 a  
59 minimum of 10 calendar days before the scheduled conference.

60  
61 **209.04 Water Pollution and Erosion Control Submittals.** Submit the  
62 following:

63  
64 (A) A written site-specific BMP describing activities to minimize water  
65 pollution and soil erosion into State waters, drainage or sewer systems.  
66 The BMP shall include: an identification of potential pollutants and their  
67 sources, a list of all materials and heavy equipment to be used during  
68 construction; descriptions of the methods and devices used to minimize  
69 the discharge of pollutants into State waters, drainage or sewer systems;  
70 details of the procedures used for the maintenance and subsequent  
71 removal of any erosion or siltation control devices; methods of removing  
72 and disposing hazardous wastes encountered or created during  
73 construction; concrete and asphalt concrete pavement cutting slurry,  
74 concrete curing water, hydrodemolition water, and methods of storing  
75 and handling of oils, paints and other products used for the project.

76  
77 At minimum, show or address the following to the Engineer:  
78 material storage and handling areas, and other staging areas; concrete  
79 truck washouts; fueling and maintenance vehicles and other equipment;  
80 use of form oils, paints and other products on the job site; tracking of  
81 sediment offsite from project entries and exits; litter management; dust  
82 control; concrete and asphalt concrete pavement cutting slurry, concrete  
83 curing water, hydrodemolition water, and spill control.

84  
85 The BMP must be signed and a copy kept on site throughout the  
86 duration of the project. Any revisions to the BMP shall be included with  
87 the original BMP, and all drawings, documentations modified to reflect  
88 the revisions. This shall include the date of installation of the BMP as  
89 well as its removal.

(B) Plans indicating location of water pollution and erosion control devices; plans and details of BMPs to be installed or utilized; areas of soil disturbance in cut and fill, areas used for the storage of soil or waste, and areas where vegetative practices are to be implemented. The plans shall indicate the intended drainage pattern. Submit a separate drawing for each phase of construction which alters the drainage patterns;

(C) Construction schedule;

(D) The name(s) of the specific individual(s) designated to be responsible for the water pollution and erosion controls on the project site along with the home and business telephone, fax numbers and e-mail address..

(E) Description of the nature of fill material to be used on the project.

Follow the guidelines in the "Best Management Practices Manual for Construction Sites in Honolulu", dated May 1999 in developing, installing, and maintaining the BMPs for the project.

**209.05 Construction Requirements.** Do not begin work on the project until the submittals detailed in Subsection 209.04 - Water Pollution and Erosion Control Submittals are completed and accepted by the Engineer.

For projects that require an NPDES Permit from the Department of Health, install a rain gage prior to any field work including the installation of any site-specific best management practices. The rain gage shall have a tolerance of at least 0.05 inches of rainfall, and have an opening of at least one inch in diameter. Install the rain gage on the project site in an area that will not deter rainfall from entering the gage opening. The rain gage installation shall be secure, stable, and plumbed. The Contractor shall maintain and if needed replace any rain gauge that is stolen or does not function properly or accurately or is worn out.

Do not begin field work until the rain gage is installed and site-specific best management practices are in-place.

Address all comments subsequently received from the Engineer.

Modify and resubmit the plans and construction schedules to correct conditions that develop during construction which were unforeseen during the design and pre-construction stages.

Coordinate any temporary control provisions with the permanent control features throughout the construction and post-construction period.

139 The maximum surface area of earth material exposed at any time is  
140 300,000 square feet. Do not expose earth material until the BMP are installed  
141 and accepted by the Engineer. Temporarily or permanently protect the disturbed  
142 soil surface from rainfall impact and runoff.

143  
144 Install and maintain stabilized construction entrances and/or wheel  
145 washes to minimize tracking of dirt, and mud onto the roadways. Install and  
146 maintain stabilized construction entrances and/or wheel washes at all locations  
147 where vehicular traffic is entering and leaving the work area. Restrict traffic to  
148 these areas only. Clean road immediately of all dirt, mud, or other material  
149 track onto the road.

150  
151 Do not expose erodible surfaces greater than 15 feet in height.

152  
153 Apply accepted BMP measures to all exposed erodible material within 15  
154 calendar days of exposure. If after 15 days, a directed additional BMP  
155 measures have not been applied, apply an accepted BMP measure on the  
156 sixteenth day at no cost to the State.

157  
158 At the end of each workday, the BMP shall be in place and operational,  
159 e.g., shape the earthwork to control and direct the runoff. If accepted by the  
160 Engineer, shaping the earthwork may include constructing earth berms along  
161 the top edges of embankments.

162  
163 If accepted by the Engineer, chemicals may be used as soil stabilizers or  
164 erosion and/or dust control.

165  
166 Use the materials listed in Subsection 209.02 - Materials and other  
167 material the Engineer has reviewed and accepted.

168  
169 Provide temporary slope drains of rigid or flexible conduits to carry runoff  
170 from cuts and embankments. Provide a portable flume at the entrance and  
171 shorten (or extend) the temporary slope drains as necessary to ensure proper  
172 function.

173  
174 Protect ditches, channels, and other drainage ways leading away from  
175 cuts and fills at all times by either:

176  
177 (1) Hydro-mulching the lower region of embankments in the immediate  
178 area, or;

179  
180 (2) Placing an 8 to 15 inch layer of excavated rock (if available on-site)  
181 without reducing the cross section of the drainage way. The rocks shall  
182 be less than 4 inches in diameter.

184 Provide for controlled discharge of waters impounded, directed, or  
185 controlled by project activities or erosion control measures.  
186

187 Properly maintain all BMP features. Inspect and make necessary repairs  
188 to all BMP measures at the following intervals:  
189

- 190 (1) Weekly during dry periods;
- 191
- 192 (2) Within 24 hours of any rainfall of 0.5 inch or greater which occurs  
193 in a 24-hour period;
- 194
- 195 (3) Daily during periods of prolonged rainfall and;
- 196
- 197 (4) When existing erosion control measures are damaged or not  
198 operating properly as specified by the Engineer.  
199

200 Maintain records of the inspections and repairs made. These records  
201 shall be continuous for the entire duration of the project. Submit a copy of the  
202 records to the Engineer weekly.  
203

204 In addition to the weekly reports, submit to the Engineer all amounts  
205 spent initializing and maintaining the BMP during the previous week. The  
206 amount spent includes but not limited to: purchases of erosion control material,  
207 construction of storage areas, and installation of water pollution, erosion and  
208 dust control measures. Record the amount on the same form as the force  
209 account item of work. Submit the report weekly along with the site inspection  
210 report.  
211

212 Protect finished and previously seeded areas from damage and from  
213 spillover materials placed in the upper lifts of the embankment.  
214

215 The Contractor's designated representative specified in Section  
216 209.04(D) shall address any BMP concerns brought up by the Engineer within  
217 24 hours of notification. If the Contractor fails to satisfactorily address these  
218 concerns, the Engineer reserves the right to employ outside assistance or use  
219 the Engineer's own labor forces to provide the necessary corrective measures.  
220 The Engineer will charge the Contractor such incurred costs plus any associated  
221 project engineering costs. The Engineer will make appropriate deductions from  
222 the Contractor's monthly progress estimate. Failure to apply BMP measures will  
223 result in the establishment or increase in the amount of retainage due to  
224 unsatisfactory progress and/or the withholding of the monthly progress payment.  
225 Continued failure to apply BMP measures may result in the suspension or  
226 cancellation of the contract with the Contractor being fully responsible for all  
227 additional cost incurred by the State.  
228

229 When there are conflicts between these requirements and laws, rules, or  
230 regulations of other Federal or State local agencies, the more restrictive laws,  
231 rules, or regulations shall apply.  
232

233 Failure to conform with the above requirements and regulations of the  
234 Federal or State local agencies will be cause for temporary or permanent  
235 suspension of operations. If operations are suspended due to the Contractor's  
236 failure to conform, the Contractor shall maintain the project during the period of  
237 suspension at no cost to the State.  
238

239 **209.06 Hydrotesting Activities.** If the work includes removing, relocating  
240 or installing waterlines, and the Contractor elects to discharge hydrotesting  
241 effluent into Waters of the United States or drainage systems, the Contractor  
242 shall obtain a National Pollutant Discharge Elimination System (NPDES)  
243 Hydrotesting Waters Permit from the Department of Health, Clean Water  
244 Branch (DOH-CWB).  
245

246 Do not begin hydrotesting activities until the DOH-CWB has issued a  
247 Notice of General Permit Coverage (NGPC). Hydrotesting operations shall  
248 according to the conditions in the NGPC. Submit a copy of the NPDES  
249 Hydrotesting Waters Application and Permit to the Engineer.  
250

251 **209.07 Method of Measurement.** The Engineer will only measure water  
252 pollution and erosion control required and requested by the Engineer on a force  
253 account basis according to Subsection 109.04 - Extra and Force Account Work.  
254

255 The Engineer will not measure for the installation, maintenance, repair,  
256 and replacement of site-specific BMP measures, e.g., water pollution, dust and  
257 erosion control; installation, monitoring, and the operation of hydrotesting  
258 activities; removal and disposal of hazardous waste, concrete and asphalt  
259 concrete cutting slurry, concrete curing water; or hydrodemolition water for  
260 payment.  
261

262 **209.08 Basis of Payment.** The Engineer will only pay for the accepted water  
263 pollution and erosion control required and requested by the Engineer on a force  
264 account basis in accordance with Subsection 109.04- Payment for Additional  
265 and Force Account Work. An estimated amount for the force account is  
266 allocated in the proposal schedule under 'Water Pollution and Erosion Control,  
267 but the actual amount to be paid will be the sum shown on the accepted force  
268 account records, whether this sum be more or less than the estimated amount  
269 allocated in the proposal schedule.  
270

271 The Engineer will pay for litter management due to rubbish created by the  
272 public but not for any liter created by the Contractor.  
273

274 Payment will be full compensation for the work prescribed in this section,  
275 by the Engineer, and the contract documents.

276  
277 The Engineer will make payment under:

278	Pay Item	Pay Unit
279		
280		
281	Water Pollution and Erosion Control	Force Account
282		

283 The Engineer will not pay for the installation, maintenance, repair, and  
284 replacement of site-specific BMP measures, e.g., water pollution, dust and  
285 erosion control; installation, monitoring, and the operation of hydrotesting  
286 activities; removal and disposal of hazardous waste, concrete and asphalt  
287 concrete cutting slurry, concrete curing water; or hydrodemolition water  
288 separately. The Engineer will consider the cost for them as included in the  
289 contract price for the various contract items. The cost is for the work prescribed  
290 in this section, by the Engineer, and the contract documents.

291  
292 The Engineer will not pay for work required that is due to the Contractor's  
293 convenience, negligence, carelessness or failure to install permanent controls.

294  
295 The Engineer will not pay for the removal, replacement, cleanup,  
296 disposal, material for any BMP that is required to be removed or destroyed or  
297 relocated due to potential or actual flooding or danger, damage to the project or  
298 public it may cause.

299  
300 The Engineer will not pay for erosion control work that is not implemented  
301 within 15 days of exposure.

302  
303 The Engineer will not pay for the development, submittals, or any  
304 additional modification of the Contractor's Water Pollution and Erosion Control  
305 Plan, BMP, sequence of operations, and methods of operations plan.

306  
307 The Engineer will not pay for preparing the NPDES Hydrotesting Waters  
308 Permit Application, and obtaining the NPDES Hydrotesting Waters Permit from  
309 DOH-CWB.

310  
311 No progress payment will be authorized until the Engineer accepts the  
312 site-specific BMP or when the Contractor fails to maintain the project site  
313 according to the accepted BMP.

314  
315 For all citations or fines received by the Department for non-compliance  
316 with the Notice of General Permit Coverage (NGPC), the Contractor shall  
317 reimburse the State within 30 calendar days for the full amount of the  
318 outstanding cost the State has incurred, or the Engineer will deduct the cost  
319 from the progress payment.

320       The Engineer will assess liquidated damages up to \$27,500 for non-  
321 compliance of each BMP requirement and all other requirements in this section.  
322 There is no maximum limit on the amount assessed per day."  
323  
324

325                               **END OF SECTION**  
326