



**STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS
HONOLULU, HAWAII**

**SPECIAL PROVISIONS
PROPOSAL
CONTRACT, AND BOND**

FOR

**KUHIO HIGHWAY INTERSECTION IMPROVEMENTS
VICINITY OF PINEAPPLE STORE**

PROJECT NO. 56A-03-25

DISTRICT OF LIHUE

ISLAND OF KAUAI

FY 2026

NOTICE TO BIDDERS
Hawaii Revised Statutes (HRS),
Chapter 103D

The receiving of bids for **KUHIO HIGHWAY INTERSECTION IMPROVEMENTS, VICINITY OF PINEAPPLE STORE, DISTRICT OF LIHUE, ISLAND OF KAUAI, PROJECT NO. 56A-03-25**, will begin as of the HiePRO Release Date. Bidders shall register and submit complete bids through HiePRO only. Refer to the following HiePRO link for important information on Vendor Registration: <https://hiepro.ehawaii.gov/welcome.html>.

The solicitation plans, specifications, proposal, and additional documents designated or incorporated by reference shall be available in HiePRO.

HiePRO OFFER DUE DATE & TIME is May 15, 2026 , at 2:00 p.m., Hawaii Standard Time (HST). **Bidders shall submit and upload the complete proposal to HiePRO prior to the offer due date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HiePRO. Bidders shall not include confidential and/or proprietary documents as part of their proposal. The record of each bidder and their respective proposal shall be open to public inspection. FAILURE TO UPLOAD THE PROPOSAL TO HiePRO SHALL BE GROUNDS FOR REJECTION.**

The scope of work consists of widening the existing roadway pavement to extend the left turn lane, constructing a new storage lane, cold planing and resurfacing, removing and installing pavement markings, reconstructing grated drop inlets to storm drain manholes, installing new traffic signs, and hydro-mulch seeding of graded shoulders. The estimated cost of construction is between \$2,000,000.00 and \$4,000,000.00.

To be eligible for award, bidders shall possess a valid State of Hawaii General Engineering "A", license **at the time of bidding**.

A virtual pre-bid conference is scheduled for April 22, 2026, 10:00 a.m., HST. Interested bidders shall contact Joel Bautista, Project Manager, by email at joel.o.bautista@hawaii.gov, no later than five working days prior to the scheduled pre-bid conference to receive the meeting invitation. All prospective bidders and/or their respective representatives are encouraged to attend, however, attendance is not mandatory. All information presented at the pre-bid conference shall be provided for clarification and information only. Any amendments to the solicitation shall be made by formal addendum and posted in HiePRO.

All Request for Information (RFI) questions and Substitution Requests shall be submitted in HiePRO **no later than May 1, 2026, at 2:00 p.m., HST**. RFI questions received after the stated deadline shall not be addressed. Substitution Requests received after the stated deadline shall not be considered. Verbal RFI(s) shall not receive a response. All responses to RFI questions shall be provided for clarification and information only and issued by formal addendum. Any amendments to the solicitation shall be made by formal addendum and posted in HiePRO.

If there is a conflict between the solicitation and information stated in the pre-bid conference, the meeting minutes, and/or the responses to RFI questions, the solicitation shall govern and control, unless as amended by formal addendum.

Apprenticeship Preference. A five percent bid adjustment for bidders that are party to apprenticeship agreements pursuant to HRS § 103-55.6 is applicable to this project.

Employment of State Residents on Construction Procurement Contracts. Compliance with HRS § 103B-3 is a requirement for this project whereby a minimum of 80 percent of the bidder's work force on this project shall consist of Hawaii residents.

Campaign contributions by State and County Contractors. Contractors are hereby notified of the applicability of HRS § 11-355 which states that campaign contributions are prohibited from specified State or county government contractors during the term of the contract if the contractors are paid with funds appropriated by a legislative body. For more information, contact the Campaign Spending Commission at (808) 586-0285.

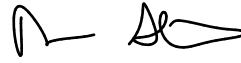
Protests. Any protest of this solicitation shall be submitted in writing to the Director of Transportation, in accordance with HRS § 103D-701 and Hawaii Administrative Rules § 3-126.

The Equal Employment Opportunity Regulations of the Secretary of Labor implementing Executive Order 11246, as amended, shall be complied with on this project.

The U.S. Department of Transportation Regulation entitled "Nondiscrimination in Federally Assisted Programs of the U.S. Department of Transportation," Title 49, Code of Federal Regulations (CFR), Part 21, is applicable to this project. Bidders are hereby notified that the Department of Transportation shall affirmatively ensure that the contract entered into pursuant to this advertisement shall be awarded to the lowest responsible bidder without discrimination on the grounds of race, color, national origin, or sex (as directed by 23 CFR Part 200).

Driving While Impaired (DWI) Education. The Hawaii Department of Transportation (HDOT) encourages all organizations contracted with HDOT to have an employee education program preventing DWI. DWI is defined as operating a motor vehicle while impaired by alcohol or other legal or illegal substances. HDOT promotes this type of program to accomplish our mission to provide a safe environment for motorists, bicyclists, and pedestrians utilizing our State highways, and expects its contractors to do so as well. For additional information, contact Joel Bautista, Project Manager, by phone at (808) 241-3015, or by email at joel.o.bautista@hawaii.gov.

The State reserves the right to reject any or all proposals and to waive any defects in said proposals in the best interest of the public.



ROBIN K. SHISHIDO
Deputy Director of Transportation for Highways

HIePRO RELEASE DATE: April 14, 2026

TABLE OF CONTENTS

Instructions for Contractor's Licensing

Special Provisions Title Page

Special Provisions

| DIVISION 100 - GENERAL PROVISIONS | | |
|--|--|------------------|
| Section | Description | Pages |
| 101 | Terms, Abbreviations, and Definitions | 101-1a – 101-13a |
| 102 | Bidding Requirements and Conditions | 102-1a – 102-13a |
| 103 | Award and Execution of Contract | 103-1a – 103-4a |
| 104 | Scope of Work | 104-1a – 104-2a |
| 105 | Control of Work | 105-1a – 105-4a |
| 106 | Material Restrictions and Requirements | 106-1a |
| 107 | Legal Relations and Responsibility to the Public | 107-1a – 107-5a |
| 108 | Prosecution and Progress | 108-1a – 108-25a |
| 109 | Measurement and Payment | 109-1a – 109-2a |

| DIVISION 200 - EARTHWORK | | |
|---------------------------------|--|------------------|
| Section | Description | Pages |
| 201 | Clearing and Grubbing | 201-1a |
| 203 | Excavation and Embankment | 203-1a – 203-3a |
| 209 | Temporary Water Pollution, Dust, and Erosion Control | 209-1a – 209-28a |

| DIVISION 300 - BASES | | |
|-----------------------------|--------------------------|--------------|
| Section | Description | Pages |
| 304 | Aggregate Base Course | 304-1a |
| 305 | Aggregate Subbase Course | 305-1a |

| DIVISION 400 - PAVEMENTS | | |
|---------------------------------|-----------------------------------|------------------|
| Section | Description | Pages |
| 401 | Hot Mix Asphalt (HMA) Pavement | 401-1a – 401-36a |
| 407 | Tack Coat | 407-1a |
| 415 | Cold Planing of Existing Pavement | 415-1a |

| DIVISION 600 - INCIDENTAL CONSTRUCTION | | |
|---|---|-----------------|
| Section | Description | Pages |
| 604 | Manholes, Inlets, and Catch Basins | 604-1a |
| 606 | Guardrail | 606-1a – 606-3a |
| 629 | Pavement Markings | 629-1a – 629-4a |
| 630 | Traffic Control Guide Signs | 630-1a |
| 631 | Traffic Control, Regulatory, Warning, and Miscellaneous Signs | 631-1a |
| 632 | Markers | 632-1a |
| 636 | E-Construction | 636-1a – 636-3a |
| 638 | Portland Cement Concrete Curb and Gutter | 638-1a |
| 639 | Asphalt Concrete Curb and Gutter | 639-1a |
| 641 | Hydro-Mulch Seeding | 641-1a |
| 645 | Work Zone Traffic Control | 645-1a – 645-3a |
| 663 | Erosion Control Matting | 663-1a – 663-3a |
| 671 | Protection of Threatened and Endangered Species | 671-1a – 671-9a |
| 699 | Mobilization | 699-1a |

| DIVISION 700 - MATERIALS | | |
|---------------------------------|--|-----------------|
| Section | Description | Pages |
| 702 | Bituminous Materials | 702-1a – 702-2a |
| 703 | Aggregates | 703-1a – 703-2a |
| 717 | Cullet and Cullet-Made Materials | 717-1a – 717-2a |
| 750 | Traffic Control Sign and Marker Material | 750-1a – 750-2a |
| 755 | Pavement Marking Materials | 755-1a |

Requirements of Chapter 104, HRS
Wages and Hours of Employees on Public Works Law

Proposal Title Page

Proposal P-1 – P-6
Proposal Schedule P-7 – P-11

Surety Bid Bond

Sample Form Title Page

Contract

Performance Bond (Surety)

Performance Bond

Labor and Material Payment Bond (Surety)

Labor and Material Payment Bond

Chapter 104, HRS Compliance Certificate

Certification of Compliance for Employment of State Residents

END OF TABLE OF CONTENTS

INSTRUCTIONS FOR CONTRACTOR'S LICENSING

"A" general engineering contractors and "B" general building contractors are reminded that due to the Hawaii Supreme Court's January 28, 2002 decision in Okada Trucking Co., Ltd. v. Board of Water Supply, et al., 97 Haw. 450 (2002), they are prohibited from undertaking any work, solely or as part of a larger project, which would require the general contractor to act as a specialty contractor in any area where the general contractor has no license. Although the "A" and "B" contractor may still bid on and act as the "prime" contractor on an "A" or "B" project (*See, HRS § 444-7 for the definitions of an "A" and "B" project.*), respectively, the "A" and "B" contractor may only perform work in the areas in which they have the appropriate contractor's license (*An "A" or "B" contractor obtains "C" specialty contractor's licenses either on its own, or automatically under HAR § 16-77-32.*). The remaining work must be performed by appropriately licensed entities. It is the sole responsibility of the contractor to review the requirements of this project and determine the appropriate licenses that are required to complete the project.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HONOLULU, HAWAII

SPECIAL PROVISIONS

These Special Provisions shall supplement and/or amend the applicable provisions of the Hawaii Standard Specifications for Road and Bridge Construction, 2005, hereinafter referred to as the "Standard Specifications".

1 Amend **Section 101 - TERMS, ABBREVIATIONS, AND DEFINITIONS** to read as
 2 follows:

3
 4 **“DIVISION 100 - GENERAL PROVISIONS**

5
 6
 7 **SECTION 101 - TERMS, ABBREVIATIONS, AND DEFINITIONS**

8
 9 **101.01 Meaning of Terms.** The specifications are generally written in the
 10 imperative mood. In sentences using the imperative mood, the subject, “the
 11 Contractor shall”, is implied. In the material specifications, the subject may also
 12 be the supplier, fabricator, or manufacturer supplying material, products, or
 13 equipment for use on the project. The word “will” generally pertains to decisions
 14 or actions of the State.

15
 16 When a publication is specified, it refers to the most recent date of issue,
 17 including interim publications, before the bid opening date for the project, unless a
 18 specific date or year of issue is provided.

19
 20 **101.02 Abbreviations.** Meanings of abbreviations used in the specifications,
 21 on the plans, or in other contract documents are as follows:

22

| | | |
|----|--------|---|
| 23 | AAN | American Association of Nurserymen |
| 24 | | |
| 25 | AASHTO | American Association of State Highway and Transportation Officials |
| 26 | | |
| 27 | | |
| 28 | ACI | American Concrete Institute |
| 29 | | |
| 30 | ADA | Americans with Disabilities Act |
| 31 | | |
| 32 | ADAAG | Americans with Disabilities Act Accessibility Guidelines |
| 33 | | |
| 34 | AGC | Associated General Contractors of America |
| 35 | | |
| 36 | AIA | American Institute of Architects |
| 37 | | |
| 38 | AISC | American Institute of Steel Construction |
| 39 | | |
| 40 | AISI | American Iron and Steel Institute |
| 41 | | |
| 42 | ANSI | American National Standards Institute |
| 43 | | |
| 44 | APA | American Plywood Association |
| 45 | | |

| | | |
|----|-------|--|
| 46 | ARA | American Railway Association |
| 47 | | |
| 48 | AREA | American Railway Engineering Association |
| 49 | | |
| 50 | ASA | American Standards Association |
| 51 | | |
| 52 | ASCE | American Society of Civil Engineers |
| 53 | | |
| 54 | ASLA | American Society of Landscape Architects |
| 55 | | |
| 56 | ASTM | American Society for Testing and Materials |
| 57 | | |
| 58 | AWG | American Wire Gauge |
| 59 | | |
| 60 | AWPA | American Wood Preserver's Association |
| 61 | | |
| 62 | AWS | American Welding Society |
| 63 | | |
| 64 | AWWA | American Water Works Association |
| 65 | | |
| 66 | BMP | Best Management Practice |
| 67 | | |
| 68 | CCO | Contract Change Order |
| 69 | | |
| 70 | CFR | Code of Federal Regulations |
| 71 | | |
| 72 | CRSI | Concrete Reinforcing Steel Institute |
| 73 | | |
| 74 | DCAB | Disability and Communication Access Board, Department of Health, State of Hawaii |
| 75 | | |
| 76 | | |
| 77 | DOTAX | Department of Taxation, State of Hawaii |
| 78 | | |
| 79 | EPA | U.S. Environmental Protection Agency |
| 80 | | |
| 81 | FHWA | Federal Highway Administration, U.S. Department of Transportation |
| 82 | | |
| 83 | | |
| 84 | FSS | Federal Specifications and Standards, General Services Administration, U.S. Department of Defense |
| 85 | | |
| 86 | | |
| 87 | HAR | Hawaii Administrative Rules |
| 88 | | |
| 89 | HDOT | Department of Transportation, State of Hawaii |
| 90 | | |

| | | |
|-----|-------|---|
| 91 | HIOSH | Occupational Safety and Health, Department of Labor and Industrial Relations, State of Hawaii |
| 92 | | |
| 93 | | |
| 94 | HMA | Hot Mix Asphalt |
| 95 | | |
| 96 | HRS | Hawaii Revised Statutes |
| 97 | | |
| 98 | ICEA | Insulated Cable Engineers Association (formerly IPCEA) |
| 99 | | |
| 100 | IMSA | International Municipal Signal Association |
| 101 | | |
| 102 | IRS | Internal Revenue Service |
| 103 | | |
| 104 | ITE | Institute of Transportation Engineers |
| 105 | | |
| 106 | MUTCD | Manual on Uniform Traffic Control Devices for Streets and Highways, FHWA, U.S. Department of Transportation |
| 107 | | |
| 108 | | |
| 109 | NCHRP | National Cooperative Highway Research Program |
| 110 | | |
| 111 | NEC | National Electric Code |
| 112 | | |
| 113 | NEMA | National Electrical Manufacturers Association |
| 114 | | |
| 115 | NFPA | National Forest Products Association |
| 116 | | |
| 117 | NPDES | National Pollutant Discharge Elimination System |
| 118 | | |
| 119 | OSHA | Occupational Safety and Health Administration/Act, U.S. Department of Labor |
| 120 | | |
| 121 | | |
| 122 | SAE | Society of Automotive Engineers |
| 123 | | |
| 124 | SI | International Systems of Units |
| 125 | | |
| 126 | UFAS | Uniform Federal Accessibility Standards |
| 127 | | |
| 128 | UL | Underwriter's Laboratory |
| 129 | | |
| 130 | USGS | U.S. Geological Survey |
| 131 | | |
| 132 | VECP | Value Engineering Cost Proposal |
| 133 | | |

134 **101.03 Definitions.** Whenever the following words, terms, or pronouns are
135 used in the contract documents, unless otherwise prescribed therein and without
136 regards to the use or omission of uppercase letters, the intent and meaning shall
137 be interpreted as follows:

138
139 **Addendum (plural - Addenda)** - A written or graphic document, including
140 drawings and specifications, issued by the Director during the bidding period. This
141 document modifies or interprets the bidding documents by additions, deletions,
142 clarifications or corrections.

143
144 **Addition** (to the contract sum) - Amount added to the contract sum by change
145 order.

146
147 **Advertisement** - A public announcement inviting bids for work to be performed or
148 materials to be furnished.

149
150 **Amendment** - A written document issued to amend the existing contract between
151 the State and Contractor and properly executed by the Contractor and Director.

152
153 **Award** - Written notification to the bidder that the bidder has been awarded a
154 contract.

155
156 **Bad Weather Day (or Unworkable Day)** - A day when weather or other conditions
157 prevent a minimum of four hours of work with the Contractor's normal work force
158 on critical path activities at the site.

159
160 **Bag** - 94 pounds of cement.

161
162 **Barrel** - 376 pounds of cement.

163
164 **Base Course** - The layer or layers of specified material or selected material of a
165 designed thickness placed on a subbase or subgrade to support a surface course.

166
167 **Basement Material** - The material in excavation or embankments underlying the
168 lowest layer of subbase, base, pavement, surfacing or other specified layer.

169
170 **Bid** - See Proposal.

171
172 **Bidder** - An individual, partnership, corporation, joint venture or other legal entity
173 submitting, directly or through a duly authorized representative or agent, a
174 proposal for the work or construction contemplated.

175
176 **Bidding Documents (or Solicitation Documents)** - The published solicitation
177 notice, bid requirements, bid forms and the proposed contract documents including
178 all addenda and clarifications issued prior to receipt of the bid.

179

180 **Bid Security** - The security furnished by the bidder from which the State may
181 recover its damages in the event the bidder breaches its promise to enter into a
182 contract with the State, or fails to execute the required bonds covering the work
183 contemplated, if its proposal is accepted.

184

185 **Blue Book** - EquipmentWatch Cost Recovery (formerly known as
186 EquipmentWatch Rental Rate Blue Book), available from EquipmentWatch, a
187 division of Penton, Inc.

188

189 **Calendar Day** - See Day.

190

191 **Change Order (or Contract Change Order)** - A written order signed by the
192 Engineer issued with or without the consent of the Contractor directing changes in
193 the work, contract time or contract price. The purposes of a change order include,
194 but are not limited to (1) establishing a price or time adjustment for changes in the
195 work; (2) establishing full payment for direct, indirect, and consequential costs,
196 including costs of delay; (3) establishing price adjustment or time adjustment for
197 work covered and affected by one or more field orders; or (4) settling Contractor's
198 claims for direct, indirect, and consequential costs, or for additional contract time,
199 in whole or in part.

200

201 **Completion** - See Substantial Completion and Final Completion.

202

203 **Completion Date** - The date specified by the contract for the completion of all
204 work on the project or of a designated portion of the project.

205

206 **Comptroller** - the Comptroller of the State of Hawaii, Department of Accounting
207 and General Services.

208

209 **Contract** - The written agreement between the Contractor and the State, by which
210 the Contractor shall provide all labor, equipment, and materials and perform the
211 specified work within the contract time stipulated, and by which the State of Hawaii
212 is obligated to compensate the Contractor at the prices set forth in the contract
213 documents.

214

215 **Contract Certification Date** - The Date on which the Deputy Comptroller for the
216 State of Hawaii (or authorized representative) signs the Contract Certification.

217

218 **Contract Completion Date** - The calendar day on which all work on the project,
219 required by the contract, must be completed. See CONTRACT TIME.

220

221 **Contract Documents** - The contract, solicitation, addenda, notice to bidders,
222 Contractor's bid proposal (including wage schedule, list of subcontractors and
223 other documentations accompanying the bid), notice to proceed, bonds, general
224 provisions, special provisions, specifications, drawings, all modifications, all written
225 amendments, change orders, field orders, orders for minor changes in the work,
226 the Engineer's written interpretations and clarifications issued on or after the
227 effective date of the contract.

228

229 **Contract Item (Pay Item)** - A specific unit of work for which there is a price in the
230 contract.

231

232 **Contract Modification (Modification)** - A change order that is mutually agreed to
233 and signed by the parties to the contract.

234

235 **Contract Price** - The amount designated on the face of the contract for the
236 performance of work.

237

238 **Contract Time (or Contract Duration)** - The number of calendar or working days
239 provided for completion of the contract, inclusive of authorized time extensions.
240 Contract time shall commence on the Start Work Date and end on the Substantial
241 Completion Date. If in lieu of providing a number of calendar or working days, the
242 contract requires completion by a certain date, the work shall be completed by that
243 date.

244

245 **Contracting Officer** - See Engineer.

246

247 **Contractor** - Any individual, partnership, firm, corporation, joint venture, or other
248 legal entity undertaking the execution of the work under the terms of the contract
249 with the State.

250

251 **Critical Path** - Longest logical sequence of activities that must be completed on
252 schedule for the entire project to be completed on schedule.

253

254 **Day** - Any day shown on the calendar, beginning at midnight and proceeding up
255 to, but not including, midnight the following day. If no designation of calendar or
256 working day is made, "day" shall mean calendar day.

257

258 **Department** - The Department of Transportation of the State of Hawaii
259 (abbreviated HDOT).

260

261 **Director** - The Director of the HDOT acting directly or through duly authorized
262 representatives.

263

264 **Plans (or Drawings)** - The contract drawings in graphic or pictorial form including
265 the notes, tables and other notations thereon indicating the design, location,
266 character, dimensions, and details of the work.

267

268 **Engineer** - The Highway Administrator, Highways Division, HDOT, or the
269 authorized person delegated to act on the Administrator's behalf.

270

271 **Equipment** - All machinery, tools, and apparatus needed to complete the contract.

272

273 **Field Order** - A written order issued by the Engineer or the Engineer's authorized
274 representative to the Contractor requiring a change or changes to the contract
275 work. A field order may (1) establish a price adjustment or time adjustment; or (2)
276 may declare that no adjustment will be made to contract price or contract time; or
277 (3) may request the Contractor to submit a proposal for an adjustment to the
278 contract price or contract time.

279

280 **Final Acceptance** - The Status of the project when the Engineer finds that the
281 Contractor has satisfactorily completed all contract work in compliance with the
282 contract including all plant establishment requirements, and all the materials have
283 been accepted by the State.

284

285 **Final Completion** - The date set by the Director that all work required by the
286 contract has been completed in full compliance with the contract documents.

287

288 **Final Inspection** - Inspection where all contract items (with the exception of
289 Planting Period and Plant Establishment Period) are accepted by the Engineer.
290 Substantial Completion will be issued by the Engineer based on the satisfactory
291 results of the Final Inspection.

292

293 **Float** - The amount of time between when an activity can start and when an activity
294 must start, i.e., the time available to complete non-critical activities required for the
295 performance of the work without affecting the critical path.

296

297 **Guarantee** - Legally enforceable assurance of the duration of satisfactory
298 performance of quality of a product or work.

299

300 **Hawaii Administrative Rules** - Rules adopted by the State in accordance with
301 Chapter 91 of the Hawaii Revised Statutes, as amended.

302

303 **Highway (Street, Road, or Roadway)** - A public way within a right-of-way
304 designed, intended, and set aside for use by vehicles, bicyclists, or pedestrians.

305

306 **HAWAII ePROCUREMENT SYSTEM (HiePRO)** - The State of Hawaii
307 eProcurement System for issuing solicitations, receiving proposals and responses,
308 and issuing notices of award.

309

310 **Highways Division** - The Highways Division of the Hawaii Department of
311 Transportation constituted under the laws of Hawaii for the administration of
312 highway work.

313

314 **Holidays** - The days of each year which are set apart and established as State
315 holidays pursuant to Chapter 8 of the Hawaii Revised Statutes, as amended.

316
317 **Inspector** - The Engineer's authorized representative assigned to make detailed
318 inspections of contract performance, prescribed work, and materials supplied.

319
320 **Laboratory** - The testing laboratory of the Highways Division or other testing
321 laboratories that may be designated by the Engineer.

322
323 **Laws** - All Federal, State, and local laws, executive orders and regulations having
324 the force of law.

325
326 **Leveling Course** - An aggregate mixture course of variable thickness used to
327 restore horizontal and vertical uniformity to existing pavements or shoulders.

328
329 **Liquidated Damages** - The amount prescribed in Subsection 108.08 - Liquidated
330 Damages for Failure to Complete the Work or Portions of the Work on Time, to be
331 paid to the State or to be deducted from any payments payable to or, which may
332 become payable to the Contractor.

333
334 **Lump Sum (LS)** - When used as a payment method means complete payment
335 for the item of work described in the contract documents.

336
337 **Material** - Any natural or manmade substance or item specified in the contract to
338 be incorporated in the work.

339
340 **Notice to Bidders** - The advertisement for proposals for all work or materials on
341 which bids are required. Such advertisement will indicate the location of the work
342 to be done or the character of the material to be furnished and the time and place
343 for the opening of proposals.

344
345 **Notice to Proceed** - Written notice from the Engineer to the Contractor identifying
346 the date on which the Contractor is to begin procuring materials and required
347 permits and adjusting work forces, equipment, schedules, etc. prior to beginning
348 physical work.

349
350 **Pavement** - The uppermost layer of material placed on the traveled way or
351 shoulders or both. Pavement and surfacing may be interchangeable.

352
353 **Pavement Structure** - The combination of subbase, base, pavement, surfacing or
354 other specified layer of a roadway constructed on a subgrade to support the traffic
355 load.

356
357 **Payment Bond** - The security executed by the Contractor and surety or sureties
358 furnished to the Department to guarantee payment by the Contractor to laborers,
359 material suppliers and subcontractors in accordance with the terms of the contract.

360

361 **Physical Work** - Physical construction activities on the project site or at
362 appurtenant facilities including staging areas. It includes; (i) building or installing
363 any structures or facilities including, but not limited to sign erection; BMP
364 installation; field office site grading and building; (ii) removal, adjustment, or
365 demolition of physical obstructions on site; (iii) any ground breaking activities; and
366 (iv) any utility work. It does not include pre-construction environmental testing
367 (such as water quality baseline measurements) that may be required as part of
368 contract.

369

370 **Pre-Final Inspection** - Inspection scheduled when Contractor notifies Engineer
371 that all physical work on the project, with the exception of planting period and plant
372 establishment period, has been completed. Notice from Contractor of substantial
373 completion will suspend contract time until Contractor receives punchlist from
374 Engineer.

375

376 **Profile Grade** - The elevation or gradient of a vertical plane intersecting the top
377 surface of the proposed pavement.

378

379 **Project Acceptance Date** - The calendar day on which the Engineer accepts the
380 project as completed. See Final Completion.

381

382 **Proposal (Bid)** - The offer of a Bidder, on the prescribed HDOT form, to perform
383 the work and to furnish the labor and materials at the prices quoted.

384

385 **Public Traffic** - Vehicular or pedestrian movement on a public way.

386

387 **Punchlist** - A list compiled by the Engineer specifying work yet to be completed or
388 corrected by the Contractor in order to substantially complete the contract.

389

390 **Questionnaire** - The specified forms on which the bidder shall furnish required
391 information as to its ability to perform and finance the work.

392

393 **Request for Change Proposal** - A written notice from the Engineer to the
394 Contractor requesting that the Contractor provide a price and/or time proposal for
395 contemplated changes preparatory to the issuance of a field order or change order.

396

397 **Right-of-Way** - Land, property, or property interests acquired by a government
398 agency for, or devoted to transportation purposes.

399

400 **Roadbed** - The graded portion of a highway within top and side slopes, prepared
401 as a foundation for the pavement structure and shoulders.

402

403 **Roadside** - The area between the outside edges of the shoulders and the right-of-
404 way boundaries. Unpaved median areas between inside shoulders of divided
405 highways and infield areas of interchanges are included.

406

407 **Section and Subsection** - Section or subsection shall be understood to refer to
408 these specifications unless otherwise specified.

409
410 **Shop Drawings** - All drawings, diagrams, illustrations, schedules and other data
411 or information which are specifically prepared or assembled by or for the
412 Contractor and submitted by the Contractor to illustrate some portion of the work.

413
414 **Shoulder** - The portion of the roadway next to the traveled way for:
415 accommodation of stopped vehicles, placement of underground facilities,
416 emergency use, and lateral support of base and surface courses.

417
418 **Sidewalk** - That portion of the roadway primarily constructed for use by
419 pedestrians.

420
421 **Solicitation** - An invitation to bid or request for proposals or any other document
422 issued by the Department to solicit bids or offers to perform a contract. The
423 solicitation may indicate the time and place to receive the bids or offers and the
424 location, nature and character of the work, construction or materials to be provided.

425
426 **Specifications** - Compilation of provisions and requirements to perform
427 prescribed work.

428
429 **(A) Standard Specifications.** Specifications by the State intended for
430 general application and repetitive use.

431
432 **(B) Special Provisions.** Revisions and additions to the standard
433 specifications applicable to an individual project.

434
435 **Standard Plans** - Drawings provided by the State for specific items of work
436 approved for repetitive use.

437
438 **State** - The State of Hawaii, its Departments and agencies, acting through its
439 authorized representative(s).

440
441 **State Waters** – All waters, fresh, brackish, or salt, around and within the State,
442 including, but not limited to, coastal waters, streams, rivers, drainage ditches,
443 ponds, reservoirs, canals, ground waters, and lakes; provided that drainage
444 ditches, ponds, and reservoirs required as a part of a water pollution control system
445 are excluded.

446
447 **Start Work Date** - Date on which Contractor begins physical work on the contract.
448 This date shall also be the beginning of Contract Time.

449
450 **Structures** - Bridges, culverts, catch basins, drop inlets, retaining walls, cribbing,
451 manholes, endwalls, buildings, sewers, service pipes, underdrains, foundation
452 drains, and other such features that may be encountered in the work.

453

454 **Subbase** - A layer of specified material of specified thickness between the
455 subgrade and a base.

456

457 **Subcontract** - Any written agreement between the Contractor and its
458 subcontractors which contains the conditions under which the subcontractor is to
459 perform a portion of the work for the Contractor.

460

461 **Subcontractor** - An individual, partnership, firm, corporation, joint venture or other
462 legal entity, as licensed or required to be licensed under Chapter 444, Hawaii
463 Revised Statutes, as amended, which enters into an agreement with the
464 Contractor to perform a portion of the work.

465

466 **Subgrade** - The top surface of completed earthwork on which subbase, base,
467 surfacing, pavement, or a course of other material is to be placed.

468

469 **Substantial Completion** - The Status of the project when the Contractor has
470 completed the work, except for the planting period and plant establishment period,
471 and each of the following requirements are met:

472

473 (1) All traffic lanes (including shoulders, ramps, sidewalks and bike
474 paths) are in their final configuration as designed and the final
475 wearing surface has been installed;

476

477 (2) All operational and safety devices have been installed in accordance
478 with the contract documents including guardrails, end treatments,
479 traffic barriers, required signs and pavement markings, drainage,
480 parapet, and bridge and pavement structures;

481

482 (3) All required illumination and lighting for normal and safe use and
483 operation is installed and functional in accordance with the contract
484 documents;

485

486 (4) All utilities and services are connected and working;

487

488 (5) The need for temporary traffic controls or lane closures at any time
489 has ceased, except for lane closures required for routine
490 maintenance;

491

492 (6) The building, structure, improvement or facility can be used for its
493 intended purpose.

494

495 **Substantial Completion Date** - The date the Substantial Completion is granted
496 by the Engineer in Writing and Contract Time stops.

497

498 **Superintendent** - The employee of the Contractor who is responsible for all the
499 work and is a Contractor's agent for communications to and from the State.

500

501 **Surety** - The qualified individual, firm or corporation other than the Contractor,
502 which executes a bond with and for the Contractor to insure its acceptable
503 performance of the contract.

504
505 **Surfacing** - The uppermost layer of material placed on the traveled way or
506 shoulders. This term is used interchangeably with pavement.

507
508 **Traveled Way** - The portion of the roadway for the movement of vehicles,
509 exclusive of shoulders.

510
511 **Unsuitable Material** - Materials that contain organic matter, muck, humus, peat,
512 sticks, debris, chemicals, toxic matter, or other deleterious materials not suitable
513 for use in earthwork.

514
515 **Utility** - A line, facility, or system for producing, transmitting, or distributing
516 communications, power, electricity, heat, gas, oil, water, steam, waste, or storm
517 water.

518
519 **Utility Owner** - The entity, whether private or owned by a State, Federal, or County
520 governmental body, that has the power and responsibility to grant approval for, or
521 undertake construction work involving a particular utility.

522
523 **Water Pollutant** - Dredged spoil, solid refuse, incinerator residue, sewage,
524 garbage, sewage sludge, munitions, chemical waste, biological materials,
525 radioactive materials, heat, wrecked or discarded equipment, rock, sand, soil,
526 sediment, cellar dirt and industrial, municipal, and agricultural waste.

527
528 **Water Pollution** - (1) Such contamination or other alteration of the physical,
529 chemical, or biological properties of any state waters, including change in
530 temperature, taste, color, turbidity, or odor of the waters, or (2) Such discharge of
531 any liquid, gaseous, solid, radioactive, or other substances into any state waters,
532 as will or is likely to create a nuisance or render such waters unreasonably harmful,
533 detrimental, or injurious to public health, safety, or welfare, including harm,
534 detriment, or injury to public water supplies, fish and aquatic life and wildlife,
535 recreational purposes and agricultural and industrial research and scientific uses
536 of such waters or as will or is likely to violate any water quality standards, effluent
537 standards, treatment and pretreatment standards, or standards of performance for
538 new sources adopted by the Department of Health.

539
540 **Work** - The furnishing of all labor, material, equipment, and other incidentals
541 necessary or convenient for the successful execution of all the duties and
542 obligations imposed by the contract.

543
544 **Working Day** - A calendar day in which a Contractor is capable of working four or
545 more hours with its normal work force, exclusive of:

546

547 (1) Saturdays, Sundays, and recognized legal State holidays and such
548 other days specified by the contract documents as non-working days,
549

550 (2) Day in which the Engineer suspends work for four or more hours
551 through no fault of the Contractor.”
552

553

554

555

556

END OF SECTION 101

Make this section a part of the Standard Specifications:

“SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS

102.01 Prequalification of Bidders. Prospective bidders shall be capable of performing the work for which they are bidding.

In accordance with HRS Chapter 103D-310, the Department may require any prospective bidder to submit answers to questions contained in the 'Standard Qualification Questionnaire For Prospective Bidders On Public Works Contracts' furnished by the Department, properly executed and notarized, setting forth a complete statement of the experience of such prospective bidder and its organization in performing similar work and a statement of the equipment proposed to be used, together with adequate proof of the availability of such equipment. Whenever it appears to the Department, from answers to the questionnaire or otherwise, that the prospective bidder is not fully qualified and able to perform the intended work, the Department will, after affording the prospective bidder an opportunity to be heard and if still of the opinion that the bidder is not fully qualified to perform the work, refuse to receive or consider any bid offered by the prospective bidder. All information contained in the answers to the questionnaire shall be kept confidential. Questionnaire so submitted shall be returned to the bidders after serving their purpose.

No person, firm or corporation may bid where (1) the person, firm, or corporation, or (2) a corporation owned substantially by the person, firm, or corporation, or (3) a substantial stockholder or an officer of the corporation, or (4) a partner or substantial investor in the firm is in arrears in payments owed to the State or its political subdivisions or is in default as a surety or failure to do faithfully and diligently previous contracts with the State.

102.02 Contents of Proposal Forms. The Department will furnish prospective bidders with proposal forms posted in HlePRO stating:

- (1) The location,
- (2) Description of the proposed work,
- (3) The approximate quantities,
- (4) Items of work to be done or materials to be furnished,
- (5) A schedule of items, and
- (6) The time in which the work shall be completed.

Papers bound with or attached to the proposal form are part of the proposal. The bidder shall not detach or alter the papers bound with or attached to the proposal when the bidder submits its proposal through HlePRO.

Also, the bidder shall consider other documents including the plans and specifications a part of the proposal form whether attached or not.

102.03 (Unassigned)

102.04 Estimated Quantities. The quantities shown in the contract are approximate and are for the comparison of bids only. The actual quantity of work may not correspond with the quantities shown in the contract. The Department will make payment to the Contractor for unit price items in accordance with the contract for only the following:

- (1) Actual quantities of work done and accepted, not the estimated quantities; or
- (2) Actual quantities of materials furnished, not the estimated quantities.

The Department may increase, decrease, or omit each scheduled quantities of work to be done and materials to be furnished. When the Department increases or decreases the estimated quantity of a contract item by more than 15% the Department will make payment for such items in accordance with Subsection 104.06 - Methods of Price Adjustment.

102.05 Examination of Contract and Site of Work. The bidder shall examine carefully the site of the proposed work and contract before submitting a proposal.

By the act of submitting a bid for the proposed contract, the bidder warrants that:

- (1) The bidder and its Subcontractors have reviewed the contract documents and found them free from ambiguities and sufficient for the purpose intended;
- (2) The bidder and its workers, employees and subcontractors have the skills and experience in the type of work required by the contract documents bid upon;
- (3) Neither the bidder nor its employees, agents, suppliers or subcontractors have relied upon verbal representations from the Department, its employees or agents, including architects, engineers or consultants, in assembling the bid figure; and

(4) The basis for the bid figure is solely on the construction contract documents.

Also, the bidder warrants that the bidder has examined the site of the work. From its investigations, the bidder acknowledges satisfaction on:

- (1) The nature and location of the work;
- (2) The character, quality, and quantity of materials;
- (3) The difficulties to be encountered; and
- (4) The kind and amount of equipment and other facilities needed.

Subsurface information or hydrographic survey data furnished are for the bidders' convenience only. The data and information furnished are the product of the Department's interpretation gathered in investigations made at the specific locations. These conditions may not be typical of conditions at other locations within the project area or that such conditions remain unchanged. Also, conditions found at the time of the subsurface explorations may not be the same conditions when work starts. The bidder shall be solely responsible for assumptions, deductions, or conclusions the bidder may derive from the subsurface information or data furnished.

If the Engineer determines that the natural conditions differ from that originally anticipated or contemplated by the Contractor in the items of excavation, the State may treat the difference in natural conditions, as falling within the meaning of Subsection 104.02 – Changes.

102.06 Preparation of Proposal. The submittal of its proposal shall be on forms furnished by the Department. The bidder shall specify in words or figures:

- (1) A unit price for each pay item with a quantity given;
- (2) The products of the respective unit prices and quantities;
- (3) The lump sum amount; and
- (4) The total amount of the proposal obtained by adding the amounts of the several items.

The words and figures shall be in ink or typed. If a discrepancy occurs between the prices written in words and those written in figures, the prices written in words shall govern.

When an item in the proposal contains an option to be made, the bidder shall choose in accordance with the contract for that particular item. Determination of an option will not permit the Contractor to choose again.

The bidder shall sign the proposal properly in ink. A duly authorized representative of the bidder or by an agent of the bidder legally qualified and acceptable to the Department shall sign, including one or more partners of the bidder and one or more representatives of each entity comprising a joint venture.

When an agent, other than the officer(s) of a corporation authorized to sign contracts for the corporation or a partner of a partnership, signs the proposals, a 'Power of Attorney' shall be on file with the Department or submitted with the proposal. Otherwise, the Department will reject the proposal as irregular and unauthorized.

The bidder shall submit acceptable evidence of the authority of the partner, member(s) or officer(s) to sign for the partnership, joint venture, or corporation respectively with the proposal. Otherwise, the Department will reject the proposal as irregular and unauthorized.

102.07 Irregular Proposals. The Department may consider proposals irregular and may reject the proposals for the following reasons:

- (1) The proposal is a form not furnished by the Department, altered, or detached;
- (2) The proposal contains unauthorized additions, conditions, or alternates. Also, the proposal contains irregularities that may tend to make the proposal incomplete, indefinite, or ambiguous to its meaning;
- (3) The bidder adds provisions reserving the right to accept or reject an award. Also, the bidder adds provisions into a contract before an award;
- (4) The proposal does not contain a unit price for each pay item listed except authorized optional pay items; and
- (5) Prices for some items are out of proportion to the prices for other items.
- (6) If in the opinion of the Director, the bidder and its listed subcontractors do not have the Contractor's licenses or combination of Contractor's licenses necessary to complete the work.

Where the prospective bidder is bidding on multiple projects simultaneously and the proposal limits the maximum gross amount of awards that the bidder can accept at one bid letting, the proposal is not irregular if the limit on the gross amount of awards is clear, and the Department selects the awards that can be given.

102.08 Proposal Guaranty. The Department will not consider a proposal of \$25,000 or more unless accompanied by:

- (1) A deposit of legal tender; or
- (2) A valid surety bid bond, underwritten by a company licensed to issue bonds in the State of Hawaii, in the form and composed, substantially, with the same language as provided herewith and signed by both parties; or
- (3) A certificate of deposit, share certificate, cashier's check, treasurer's check, teller's check, or official check drawn by, or a certified check accepted by and payable on demand to the State by a bank, savings institution, or credit union insured by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration (NCUA).

(a) The bidder may use these instruments only to a maximum of \$100,000.

(b) If the required security or bond amount totals over \$100,000 more than one instrument not exceeding \$100,000 each and issued by different financial institutions shall be acceptable.

(c) The instrument shall be made payable at sight to the Department.

(d) **If bidder elects options (1) or (3) above for its bid security, said bid security shall be in its original form and shall be submitted before the bid deadline to the Contract Office, Department of Transportation, Aliiaimoku Hale, 869 Punchbowl Street, Room 103, Honolulu, Hawaii 96813. Original surety bid bonds do not need to be submitted to the Contracts Office. Bidders are reminded that a copy of its surety bid bond shall be included with its bid submitted and uploaded to HlePRO.**

In accordance with HRS Chapter 103D-323, the above shall be in a sum not less than 5% of the amount bid.

102.09 Delivery of Proposal. Bidders shall submit and upload the complete proposal to HlePRO prior to the bid opening date and time. Proposals received after said due date and time shall not be considered.

Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HlePRO. Bidders shall not include confidential and/or proprietary documents with the proposal. The record of each bidder and respective bid shall be open to public inspection. Original (wet ink, hard copy) proposal documents are not required to be submitted. **Contract award shall be based on evaluation of proposals submitted and uploaded to HlePRO.**

FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HlePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.

If there is a conflict between the specification document and the HlePRO solicitation, the specifications shall govern and control, unless otherwise specified.”

102.10 Withdrawal or Revision of Proposals. Bids may be modified or withdrawn prior to the bid opening date and time. Withdrawal or revision of proposal shall be completed, and submitted and uploaded to HlePRO prior to the bid opening date and time.”

102.11 Public Opening of Proposals. Not applicable.

102.12 Disqualification of Bidders. The Department may disqualify a bidder and reject its proposal for the following reasons:

- (1) Submittal of more than one proposal whether under the same or different name.
- (2) Evidence of collusion among bidders. The Department will not recognize participants in collusion as bidders for any future work of the Department until such participants are reinstated as qualified bidders.
- (3) Lack of proposal guaranty.
- (4) Submittal of an unsigned or improperly signed proposal.
- (5) Submittal of a proposal without a listing of subcontractors or containing only a partial or incomplete listing of subcontractors.
- (6) Submittal of an irregular proposal in accordance with Subsection 102.07 - Irregular Proposals.
- (7) Evidence of assistance from a person who has been an employee of the agency within the preceding two years and who participated while in State office or employment in the matter with which the contract is directly concerned, pursuant to HRS Chapter 84-15.

- (8) Suspended or debarred in accordance with HRS Chapter 104-25.
- (9) Failure to complete the prequalification questionnaire, if applicable.
- (10) Failure to attend the mandatory pre-bid meeting, if applicable.

102.13 Material Guaranty. The successful bidder may be required to furnish a statement of the composition, origin, manufacture of materials, and samples.

102.14 Substitution of Materials and Equipment Before Bid Opening. See Subsection 106.13 for Substitution Of Materials and Equipment After Bid Opening

(A) General. When brand names of materials or equipment are specified in the contract documents, they are to indicate a quality, style, appearance, or performance and not to limit competition. The bidder shall base its bid on one of the specified brand names unless alternate brands are qualified as equal or better in an addendum. As specified in the Notice to Bidders, all requests shall be posted as a question in HlePRO under the "Question and Answer" tab. Supporting documents for specific request shall be emailed to the Project Manager specified in the Notice to Bidders. Request must be posted in HlePRO and supporting documents received by the Project Manager no later than fourteen (14) calendar days before the bid opening date.

An addendum will be issued to inform all prospective bidders of any accepted substitution in accordance with Subsection 102.17 – Addenda .

(B) Statement of Variances. The statement of variances must list all features of the proposed substitution that differ from the contract documents and must further certify that the substitution has no other variant features. The brochure and information submitted shall be clearly marked showing make, model, size, options, and any other features requested by the Engineer and must include sufficient evidence to evaluate each feature listed as a variance. A request will be denied if submitted without sufficient evidence. If after installing the substituted product, an unlisted variance is discovered, the Contractor shall immediately replace the product with a specified product at no increase in contract price and contract time.

(C) Substitution Denial. Any substitution request not complying with the above requirements will be denied.

102.15 Preferences.

(A) Preference for Hawaii Products. In accordance with ACT 174, SLH 2022, effective June 27, 2022, Hawaii Products Preference shall not

apply to solicitations for public works construction. Therefore, the Hawaii Products Preference shall not apply to this project.

(B) Preferences for Apprenticeship Programs. In accordance with ACT 17, SLH 2009 – Apprenticeship Program, a 5% bid adjustment for bidders that are parties to apprenticeship agreements pursuant to Hawaii Revised Statutes (HRS) Section 103-55.6 may be applied to the bidder's price for evaluation purposes. These procedures apply to public works projects with estimated cost of \$250,000 or more and entered into under the provisions of HRS Chapter 103.

The following provisions apply to this Apprenticeship Program.

(1) Definitions

(a) “Apprenticeable trade”, HRS Section 103-55.6 (c), shall have the same meaning as ‘apprenticeable occupation’ pursuant to Hawaii Administrative Rules (HAR) Section 30-1-5.

(b) “Department” means the department of labor and industrial relations.

(c) “Director” means the director of labor and industrial relations.

(d) “Employ” means the employment of a person in an employer-employee relations.

(e) “Governmental body” means as defined in HRS Section 103D-104.

(f) “Party to an apprenticeship agreement” means party to a registered apprenticeship program with the department of labor and industrial relations.

(g) “Preference” means the 5% by which the qualified bidder's offer amount would be decreased for evaluation purposes.

(h) “Public work” shall be as defined in HRS Section 104-2 and HAR Section 12-22-1.

(i) “Registered apprenticeship program” means a construction trade program approved by the department pursuant to HAR Section 12-30-1 and Section 12-30-4.

(j) “Sponsor” means an operator of an apprenticeship program and in whose name the program is approved and registered with the department of labor and industrial relations pursuant to HAR Section 12-30-1.

(k) Offeror – Entity/bidder submitting a proposal to undertake a project.

(l) Procurement Officer – Director of Transportation or his authorized representative.

(2) Qualification Procedures

(a) Any bidder seeking the preference must be a party to an apprenticeship agreement registered with the department at the time the offer is made for each apprenticeable trade the bidder will employ to construct the public works projects for which the offer is being made.

1. The apprenticeship agreement shall be registered and conform to the requirements of HRS Chapter 372.

2. Subcontractors do not have to be a party to an apprenticeship agreement for the bidder to obtain the preference.

3. The bidder is not required to have apprentices in its employ at the time of submittal of an offer to qualify for the preference.

(b) The department shall:

1. Develop and maintain a list of construction trades in registered apprenticeship programs which conform to HRS Chapter 372; and

2. Electronically post the list, including any amendments, on the department website (<http://labor.hawaii.gov>).

(c) Bidder is responsible to comply with all submission requirements for registration of its apprenticeship program before requesting a preference.

(d) Bidder shall provide a certification by the sponsor of the respective registered apprenticeship programs covering the

relevant trade(s) for the public works project.

(e) *Certification Form 1* issued by the department shall include:

1. Contractor information;
2. Solicitation reference;
3. Trade(s);
4. Date and name of apprenticeship program;
5. Signature of authorized training coordinator or training trust fund administrator certifying that the contractor is a participant in the program, and that the program is registered with the department;
6. Contract information for sponsor's authorized representative signing the form;
7. Number of apprentices enrolled in the program, number who successfully completed the apprenticeship program in the past 12 months, including whether the contractor is signatory to a collective bargaining agreement for that trade, or if not, provide for attachment of a copy of the agreement between the contractor and the program.

(3) Solicitation Procedures.

(a) If the NTB indicates that this project is covered by this preference, and the offer is less than \$250,000 this preference will still be applicable in determining the lowest bidder.

(b) A claim for this preference must include the following:

1. Allow bidder seeking to claim the preference to state the trades the bidder will employ to perform the work;
2. For each trade to be employed to perform the work, the bidder shall submit a completed signed original *Certification Form 1* verifying participation in an apprenticeship program registered with the department;

3. The *Certification Form 1* shall be authorized by an apprenticeship sponsor of the department's list of registered apprenticeship programs. The authorization shall be an original signature by an authorized official of the apprenticeship sponsor; and

4. The completed *Certification Form 1* for each trade must be submitted by the bidder with the offer. Previous certifications shall not apply unless allowed by the solicitation.

(c) Upon receiving *Certification Form 1*, the procurement officer will verify with the department that the apprenticeship program is on the list of apprenticeship programs registered with the department. If the programs are not confirmed by the department, the bidder will not qualify for the preference.

(4) Evaluation and Contract Award

(a) If the bidder certifies participation in an apprenticeship program for each trade which will be employed by the bidder for the project, the procurement officer shall apply the preference and decrease the bidder's total bid amount by five percent (5%) for evaluation purposes.

(b) Should the bidder qualify for other statutory preferences (for example, Hawaii products), all applicable preferences shall be applied to the bidder's price.

(c) The contract amount shall be the original offer amount, exclusive of any preference; the preference is only for evaluation purposes.

(d) Any claims challenging a bidder's representation that the bidder is a participant in an apprenticeship program(s) as claimed, shall be submitted to the procurement officer. The procurement officer will refer the challenge to the department of labor and industrial relations who shall investigate any such claims and shall make a determination.

(5) Contract Administration

(a) For the duration of a contract awarded utilizing the apprenticeship preference, the contractor shall certify each month that work is being conducted on the project, that it

continues to be a participant in the relevant apprenticeship program for each trade it employs.

(b) Monthly certification shall be made on *Monthly Certification Form 2* prepared and made available by the department, be a signed original by the respective apprenticeship program sponsors authorized official, and submitted by the contractor with its monthly payment requests.

(c) Should the contractor fail or refuse to submit its monthly certification forms, or at any time during the construction of the project, cease to be a part to a registered apprenticeship agreement for each apprenticeable trades the contractor employs, or will employ, the contractor will be subject to the following sanctions:

1. Withholding of the requested payment until the required form(s) are submitted;
2. Temporary or permanent cessation of work on the project , without recourse to breach of contract claims by the contractor; provided the agency shall be entitled to restitution for nonperformance or liquidated damages claims; or
3. Proceed to debar or suspend pursuant to HRS Section 103D-702.

(d) If events such as “acts of God,” acts of a public enemy, acts of the State or any other governmental body in its sovereign or contractual capacity, fires, floods, epidemics, freight embargoes, unusually severe weather, or strikes or other labor disputes prevent the contractor from submitting the certification forms, the contractor shall not be penalized as provided herein, provided the contractor completely and expeditiously complies with the certification process when the event is over.

This subsection shall not apply when its application will disqualify the State from receiving federal funds or aid.

(C) Preference for Recycled Products. Recycled Products shall not apply to this project.

(D) Evaluation Procedures and Contract Award. For bid evaluation, the Engineer will evaluate the bids by applying the applicable preferences selected by the bidders according to the contract. The Engineer will base the calculations for adjustments upon the original bid prices offered. If more than one preference applies, the evaluated bid price shall be the sum of the original bid price plus applicable preference adjustments.

The Engineer will award the contract to the responsible bidder submitting the responsive bid with the lowest evaluated bid price. The contract amount of the contract awarded shall be the original bid price offered exclusive of any preference.

102.16 Certification for Safety and Health Program for Bids in excess of \$100,000. In accordance with HRS Chapter 396-18, the bidder or offeror, by signing and submitting this proposal, certifies that a written safety and health plan for this project will be available and implemented by the notice to proceed date for this project. Details of the requirements of this plan may be obtained from the State Department of Labor and Industrial Relations, Occupational Safety and Health Division (HIOSH).

102.17 Addenda. Addenda issued shall become part of the contract documents. Addenda to the bid documents will be provided to all prospective bidders via HlePRO. Each addendum shall be an addition to the contract documents. The terms and requirements of the bid documents (i.e., drawings, specifications and other bid and contract documents) cannot be changed prior to the bid opening except by a duly issued addendum.”

END OF SECTION 102

1 Make this section a part of the Standard Specifications:

2
3 **“SECTION 103 - AWARD AND EXECUTION OF CONTRACT**

4
5
6 **103.01 Consideration of Proposals.** The Department will compare the
7 proposals in terms of the summation of the products of the approximate quantities
8 and the unit bid prices after the submittal date and time established in HlePRO. If
9 a discrepancy occurs between the unit bid price and the bid price, the unit bid price
10 shall govern.

11
12 The Department reserves the right to reject proposals, waive technicalities
13 or advertise for new proposals, if the rejection, waiver, or new advertisement favors
14 the Department.

15
16 **103.02 Award of Contract.** The award of contract, if it be awarded, will be
17 made within 60 calendar days after the opening of bids, to the lowest responsible
18 and responsive bidder whose proposal complies with all the prescribed
19 requirements. The Department may request the bidders to allow the Department
20 to consider the bids for the issuance of an award beyond the 60 calendar day
21 period. Agreement to such an extension must be made by a bidder in writing. Only
22 bidders who have agreed to such an extension will be eligible for the award. No
23 response to request shall mean the bidder shall no longer be eligible for award.

24
25 **(1) Requirement for Award.** The Bidder, as proof of compliance
26 with the requirements of section 103D-310(c), HRS, upon award of a
27 contract made pursuant to section 103D-302, HRS, shall provide the
28 documents listed below. The documents shall be submitted promptly
29 to the Department. If a valid certificate/clearance is not submitted on
30 a timely basis upon award, the Bidder may be deemed non-
31 responsible. See also Subsection 108.03 – Preconstruction Data
32 Submittal.

33
34 **(A) Tax Clearance.** Pursuant to §103D-310(c), 103-53 and 103D-328,
35 HRS, the bidder shall submit a tax clearance certificate from the State of
36 Hawaii Department of Taxation (DOTAX) and the Internal Revenue Service
37 (IRS), subject to section 103D-328, HRS, current within six months of
38 issuance date.

39
40 FORM A6, TAX CLEARANCE CERTIFICATE, is available at
41 the following website:

42
43 <https://tax.hawaii.gov/>

44
45 To receive DOTAX Forms by fax or mail, phone
46 (808)587-4242 or 1-800-222-3229.

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The application for the Tax Clearance Certificate is the responsibility of the bidder. Bidder shall submit directly to the DOTAX or IRS. The approved certificate may then be submitted to the Department.

(B) DLIR Certificate of Compliance. Pursuant to §103D-310(c), HRS, the bidder shall submit a certificate of compliance for Hawaii Employment Security Law (Chapter 383, HRS), Workers' Compensation Law (Chapter 386, HRS), Temporary Disability Insurance (Chapter 392, HRS), and Prepaid Health Care Act (Chapter 393, HRS), from the State of Hawaii Department of Labor and Industrial Relations (DLIR), current within six months of issuance date.

FORM LIR#27, APPLICATION FOR CERTIFICATE OF COMPLIANCE WITH SECTION 3-122-112, HAR, is available at the following website:

<http://labor.hawaii.gov/>

Contact the DLIR Unemployment Insurance Division at (808) 586-8926 for additional information.

Inquiries regarding the status of a LIR#27 Form may be made by calling the DLIR Disability Compensation Division at (808) 586-9200.

The application for the Certificate of Compliance is the responsibility of the bidder. Bidder shall submit directly to the DLIR. The approved certificate may then be submitted to the Department.

(C) DCCA Certificate of Good Standing. Pursuant to §103D-310(c), HRS, the bidder shall submit a certificate of good standing from the business registration division (BREG) of the State of Hawaii Department of Commerce and Consumer Affairs (DCCA), current within six months of issuance date, to demonstrate it is either:

- (1) Incorporated or organized under the laws of the State; or
- (2) Registered to do business in the State as a separate branch or division that is capable of fully performing under the contract.

A Hawaii business that is a sole proprietorship, is not required to register with the BREG, and therefore not required to submit a certificate of good standing. Bidders are advised of costs associated with registering and obtaining a Certificate of Good Standing from the DCCA.

92 To purchase a CERTIFICATE OF GOOD STANDING, go to On-Line
93 Services at the following website:

94 <http://cca.hawaii.gov/>
95

96 The application for the Certificate of Good Standing is the responsibility of
97 the bidder. Bidder shall submit directly to the DCCA. The approved
98 certificate may then be submitted to the Department.
99

100 **(D) Hawaii Compliance Express (HCE).** In lieu of the certificates
101 referenced in subsection A, B, and C, the bidder may make available proof
102 of compliance through a state procurement office designated certification
103 process.
104

105 **103.03 Cancellation of Award.** The Department reserves the right to cancel
106 the award of contracts before the execution of said contract by the parties. There
107 will be no liability to the awardee and to other bidders.
108

109 **103.04 Return of Proposal Guaranty.** The Department will return the proposal
110 guaranties, except those of the three lowest bidders, after the Department checks
111 the proposals. The Department will return the proposal guaranties of the remaining
112 two lowest bidders, not awarded the contract, within five working days following
113 the execution of the contract. The Department will return the successful bidder's
114 proposal guaranty after the successful bidder furnishes a bond and executes the
115 contract.
116

117 **103.05 Requirement of Contract Bond.** At the time of execution of the
118 contract, the successful bidder shall file a good and sufficient performance bond
119 and a payment bond on the forms furnished by the Department conditioned for
120 the full and faithful performance of the contract in accordance with the terms and
121 intent thereof and for the prompt payment to all others for all labor and material
122 furnished by them to the bidder and used in the prosecution of the work provided
123 for in the contract. The bonds shall be of an amount equal to 100 percent of the
124 amount of the contract price and include 5 percent of the contract amount
125 estimated to be required for extra work. The bidder shall limit the acceptable
126 performance and payment bonds to the following:
127

128 **(a)** Legal tender;
129

130 **(b)** Surety bond underwritten by a company licensed to issue bonds in
131 the State of Hawaii; or
132

133 **(c)** A certificate of deposit; share certificate; cashier's check; treasurer's
134 check, teller's check drawn by or a certified check accepted by and payable
135 on demand to the State by a bank savings institution or credit union insured
136 by the Federal Deposit Insurance Corporation (FDIC) or the National Credit
137 Union Administration (NCUA).

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1. The bidder may use these instruments only to a maximum of \$100,000.
2. If the required security or bond amount totals over \$100,000 more than one instrument not exceeding \$100,000 each and issued by different financial institutions shall be acceptable.

Such bonds shall also by the terms inure to the benefit of any and all persons entitled to file claims for labor done or material furnished in the work so as to give them a right of action as contemplated by HRS Section 103D-324.

103.06 Execution of the Contract. The contract bond and HRS Chapter 104 - Compliance Certificate, similar to a copy of the same annexed hereto, shall be executed by the successful bidder and returned within ten days after the award of the contract or within such further time as the Director may allow after the bidder has received the contract for execution.

The contract shall not bind the Department unless said parties execute the contract and the Director of Finance endorses the bidder's certificate in accordance with HRS Section 103-39.

103.07 Failure to Execute Contract. Failure to execute the contract and file acceptable bonds shall be cause for the cancellation of the award in accordance with Subsection 103.06 - Execution of the Contract. Also, the Contractor forfeits the proposal guaranty which becomes the property of the Department. This is not a penalty, but liquidated damages sustained by the State. The Department may then make award to the next lowest responsible and responsive bidder or the Department may readvertise and construct the work under contract.”

END OF SECTION 103

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submission by the contractor of proper documentation of completed force account work, whether periodic (conforming to the applicable billing cycle) or final. The Engineer shall return any documentation that is defective, to the contractor within fifteen days after receipt, with a statement identifying the defect; or

(B) For change orders with value exceeding \$50,000 by a unilateral determination by the Engineer of the costs attributable to the events or situations with adjustment of profit and fee, all as computed by the Engineer in accordance with applicable sections of HAR Chapters 3-123 and 3-126, and Section 109.05 - Allowances for Overhead and Profit. When a unilateral determination has been made, a unilateral change order shall be issued within ten days. Upon receipt of the unilateral change order, if the contractor does not agree with any of the terms or conditions, or the adjustment or nonadjustment of the contract time or contract price, the contractor shall file a notice of intent to claim within thirty days after the receipt of the written unilateral change order. Failure to file a protest within the time specified shall constitute agreement on the part of the contractor with the terms, conditions, amounts, and adjustment or nonadjustment of the contract time or the contract price set forth in the unilateral change order.

A contractor shall be required to submit cost or pricing data if any adjustment in contract price is subject to the provisions of HAR Chapter 3-122, Subchapter 15. A fully executed change order or other document permitting billing for the adjustment in price under any method listed in Subsections 104.06(1) through 104.06(7) shall be issued within ten days after agreement on the method of adjustment."

END OF SECTION 104

47 **(C) Authority of the Consultant and Construction Management.**
48 The State may engage consultants and construction managements to
49 perform duties in connection with the work. Unless otherwise specified in
50 writing to the Contractor, such retained consultants and construction
51 managements shall have no greater authority than an Inspector.”
52

53 **(II) Amend Subsection 105.02 - Submittals** by revising the first paragraph
54 from lines 52 to 61 to read as follows:
55

56 **“105.02 Submittals.** The contract contains the description of various items
57 that the Contractor must submit to the Engineer for review and acceptance. The
58 Contractor shall review all submittals for correctness, conformance with the
59 requirements of the contract documents and completeness before submitting
60 them to the Engineer. The submittal shall indicate the contract items and
61 specifications subsections for which the submittal is provided. The submittal
62 shall be legible and clearly indicate what portion of the submittal is being
63 submitted for review. The Contractor shall provide six copies of the required
64 submissions at the earliest possible date.”
65

66 **(III) Amend Subsection 105.08 (A) - Furnishing Drawings and Special**
67 **Provisions** to read as follows:
68

69 **“(A) Furnishing Drawings and Special Provisions.** The State will
70 furnish the Contractor an electronic set of the special provisions and
71 plans.” The Contractor shall have and maintain at least one set of plans
72 and specifications on the work site, at all times.
73

74 **(IV) Amend Subsection 105.14(D) – No Designated Storage Area** from lines
75 421 to 432 to read as follows:
76

77 **“(D) No Designated Storage Area.** If no storage area is designated
78 within the contract documents, materials and equipment may be stored
79 anywhere within the State highway right-of-way, provided such storage
80 and access to and from such site, within the sole discretion of the
81 Engineer, does not create a public or traffic hazard or an impediment to
82 the movement of traffic.”
83

84 **(V) Amend 105.16(A) – Subcontract Requirements** by adding the following
85 paragraph after line 483:
86

87 The 'Specialty Items' of work for this project are as follows:
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| Section No. | Description |
|--------------------|---|
| 201 | Contract Item No. 201.0100 under Section 201 – Clearing and Grubbing |
| 203 | All Contract Item under Section 203 – Excavation and Embankment |
| 304 | Contract Item No. 304.0100 under Section 304 – Aggregate Base Course |
| 305 | Contract Item No. 305.0100 under Section 305 – Aggregate Subbase |
| 401 | All Contract Item under Section 401 – Hot Mix Asphalt (HMA) Pavement |
| 604 | Contract Item No. 604.0400 under Section 604 – Manhole, Inlets and Catch Basins |
| 606 | All Contract Item under Section 606 – Guardrail |
| 629 | All Contract Items under Section 629 - Pavement Markings |
| 630 | Contract Item No. 630.1100 under Section 630 - Traffic Control Guide Signs |
| 631 | All Contract Items under Section 631 - Traffic Control Regulatory, Warning, and Miscellaneous Signs |
| 632 | All Contract Items under Section 632 – Markers |
| 641 | Contract Item No. 641.0100 under Section 641 – Hydro-Mulch Seeding |
| 645 | Contract Item No. 645.1000 under Section 645 – Work Zone Traffic Control” |

(VI) Amend **Subsection 105.16(B) – Substituting Subcontractors** from line 487 to line 494 to read:

(B) Substituting Subcontractors. Under HRS Chapter 103D-302, the Contractor is required to list the names of persons or firms to be engaged by the Contractor as a subcontractor or joint contractor in the performance

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of the contract. No subcontractor may be added or deleted, unless authorized by the Engineer. Substitutions will be allowed only if the subcontractor:

END OF SECTION 105

1 **SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC**

2
3 Make the following amendments to said Section:

4
5
6 **(I)** Amend **Section 107.01 Insurance Requirements** from lines to 81 to
7 read as follows:

8
9 **“(A) Obligation of Contractor.** Contractor shall not commence any
10 work until it obtains, at its own expense, all required insurance described
11 herein. Such insurance shall be provided by an insurance company
12 authorized by the laws of the State to issue such insurance in the State of
13 Hawaii. Coverage by a “Non-Admitted” carrier is permissible provided the
14 carrier has a Best’s Rating of “A-VII” or better. The Contractor shall
15 maintain and ensure all insurance policies are current for the full period of
16 the contract until final acceptance of the work by the State.

17
18 The Certificate of Insurance shall contain: a clause that it is agreed
19 that any insurance maintained by the State of Hawaii will apply in excess
20 of, and not contribute with, insurance provided by this policy; and shall be
21 accompanied by endorsement form CG2010 or equivalent naming the
22 State as an additional insured to the policy which status shall be
23 maintained for the full period of the contract until final acceptance of the
24 work by State.

25
26 The Contractor shall obtain all required insurance as part of the
27 contract price. Where there is a requirement for the State of Hawaii and
28 its officers and employees to be named as additional insureds under any
29 Contractor’s insurance policy, before the State of Hawaii issues the Notice
30 to Proceed, the Contractor shall obtain and submit to the Engineer a
31 Certificate of Insurance and a written policy endorsement that confirms the
32 State of Hawaii and its officers and employees are additional insureds for
33 the specific State project number and project title under such insurance
34 policies. The written policy endorsement must be issued by the insurance
35 company insuring the Contractor for the specified policy type or by an
36 agent of such insurance company who is vested with the authority to issue
37 a written policy endorsement. The insurer’s agent shall also submit
38 written confirmation of such authority to bind the insurer. Any delays in
39 the issuance of the Notice to Proceed attributed to the failure to obtain the
40 proof of the State of Hawaii and its officers and employees’ additional
41 insured status shall be charged to the Contractor.
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A mere Certificate of Insurance issued by a broker who represents the Contractor (but not the Contractor’s insurer), or by any other party who is not authorized to contractually name the State as an additional insured under the Contractor’s insurance policy, is not sufficient to meet the Contractor’s insurance obligations.

Certificates shall contain a provision that coverages being certified will not be cancelled or materially changed without giving the Engineer at least thirty (30) days prior written notice. Contractor will immediately provide written notice to the Director should any of the insurance policies evidenced on its Certificate of Insurance form be cancelled, reduced in scope or coverage, or not renewed upon expiration. Should any policy be canceled before final acceptance of the work by the State, and the Contractor fails to immediately procure replacement insurance as specified, the State, in addition to all other remedies it may have for such breach, reserves the right to procure such insurance and deduct the cost thereof from any money due or to become due to the Contractor.

Nothing contained in these insurance requirements is to be construed as limiting the extent of Contractor’s responsibility for payment of damages resulting from its operations under this contract, including the Contractor’s obligation to pay liquidated damages, nor shall it affect the Contractor’s separate and independent duty to defend, indemnify and hold the State harmless pursuant to other provisions of this contract. In no instance will the State’s exercise of an option to occupy and use completed portions of the work relieve the Contractor of its obligation to maintain the required insurance until the date of final acceptance of the work.

All insurance described herein shall be primary and cover the insured for all work to be performed under the contract, all work performed incidental thereto or directly or indirectly connected therewith, including but not limited to traffic detour work, barricades, warnings, diversions, lane closures, and other work performed outside the work area and all change order work.

The Contractor shall, from time to time, furnish the Engineer, when requested, satisfactory proof of coverage of each type of insurance required covering the work. Failure to comply with the Engineer’s request may result in suspension of the work, and shall be sufficient grounds to withhold future payments due the Contractor and to terminate the contract for Contractor’s default.

(B) Types of Insurance. Contractor shall purchase and maintain insurance described below which shall provide coverage against claims arising out of the Contractor’s operations under the

90 contract, whether such operations be by the Contractor itself or by any
91 subcontractor or by anyone directly or indirectly employed by any of
92 them or by anyone for whose acts any of them may be liable.
93

94 **(1) Workers' Compensation.** The Contractor shall obtain
95 worker's compensation insurance for all persons whom they
96 employ in carrying out the work under this contract. This insurance
97 shall be in strict conformity with the requirements of the most
98 current and applicable State of Hawaii Worker's Compensation
99 Insurance laws in effect on the date of the execution of this contract
100 and as modified during the duration of the contract.
101

102 **(2) Auto Liability.** The Contractor shall obtain Auto Liability
103 Insurance covering all owned, non-owned and hired autos with a
104 Combined single Limit of not less than \$1,000,000 per occurrence
105 for bodily injury and property damage with the State of Hawaii
106 named as additional insured. Refer to SPECIAL CONDITIONS for
107 any additional requirements.
108

109 **(3) General Liability.** The Contractor shall obtain General
110 Liability insurance with a limit of not less than \$2,000,000 per
111 occurrence and in the Aggregates for each of the following:
112

- 113 (a) Products - Completed/Operations Aggregate,
- 114
- 115 (b) Personal & Advertising Injury, and
- 116
- 117 (c) Bodily Injury & Property Damage
118

119 The General Liability insurance shall include the State as an
120 Additional Insured. The required limit of insurance may be provided
121 by a single policy or with a combination of primary and excess
122 policies. Refer to SPECIAL CONDITIONS for any additional
123 requirements.
124

125 **(4) Builders Risk For All Work.** The Contractor shall take out
126 a policy of builder's risk insurance for the full replacement value of
127 the project work; from a company licensed or otherwise authorized
128 to do business in the State of Hawaii; naming the State as an
129 additional insured under each policy; and covering all work, labor,
130 and materials furnished by such Contractor and all its
131 subcontractors against loss by fire, windstorm, tsunamis,
132 earthquakes, lightning, explosion, other perils covered by the
133 standard Extended Coverage Endorsement, vandalism, and
134 malicious mischief. Refer to SPECIAL CONDITIONS for any
135 additional requirements."

136 (II) Add **Section 107.18 Citizen and Residential Labor Force** after line 745
137 to read as follows:

138
139 **“107.18 Citizen and Residential Labor Force.**

140
141 (A) **Citizen Labor.** No person shall be employed as a laborer or
142 mechanic unless such person is a citizen of the United States or eligible to
143 become one; provided that persons without such qualifications may be
144 employed with the approval of the Governor until persons who are citizens
145 and are competent for such services are available for hire.

146
147 (B) **Residential Labor Force.** In accordance with Act 192; SLH 2011,
148 no less than eighty (80) percent of the bidder's labor force working on the
149 contract shall be provided by Hawaii residents. This act applies to all
150 construction procurements under HRS Chapter 103D; however this act
151 does not apply to procurements for professional services under Section
152 103D-304 and small purchases under Section 103D-305. This act is also
153 applicable to any subcontract of \$50,000.00 or more in connection with
154 this contract.

155
156 Resident means a person who is physically present in the State of
157 Hawaii at the time the person claims to have established the person's
158 domicile in the State of Hawaii and shows the person's intent is to make
159 Hawaii the person's primary residence.

160
161 (C) Percentage of workforce shall be determined by dividing the labor
162 hours (including subcontractors) provided by residents working on the
163 project divided by the total number of hours worked by all employees of
164 the contractor in the performance of the contract. Hours worked by
165 employees within shortage trades as determined by the Department of
166 Labor and Industrial Relations shall not be included in the calculation of
167 this percentage.

168
169 (D) Certification of compliance with the forgoing provisions shall be
170 made by the contractor in the form of a written oath submitted to the
171 Procurement Officer on a monthly basis for the duration of the contract.

172
173 (E) Sanctions for non compliance with these provisions are as follows:

174
175 (1) With respect to the General Contractor, withholding of
176 payment on the contract until the Contractor or its Subcontractor
177 complies with HRS Chapter 103B as amended by Act 192, SLH
178 2011.

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(2) Proceedings for debarment or suspension of the Contractor or Subcontractor under Hawaii Revised Statutes § 103D-702.

This Section shall not apply when its application will disqualify the State from receiving federal funds or aid.”

END OF SECTION 107

1 Amend **Section 108 – PROSECUTION AND PROGRESS** to read as follows:
2

3 **“SECTION 108 – PROSECUTION AND PROGRESS**
4

5
6 **108.01 Notice to Proceed (NTP).** A Notice To Proceed will be issued to the
7 Contractor not more than thirty (30) calendar days after the contract certification
8 date. The Engineer may suspend the contract before issuing the Notice To
9 Proceed, in which case the Contractor’s remedies are exclusively those set forth in
10 Subsection 108.10 – Suspension of Work.
11

12 The Contractor shall be allowed up to fourteen (14) calendar days after the
13 Notice to Proceed to begin physical work. The Start Work Date will be established
14 when this period ends or on the actual day that physical work begins, whichever is
15 first. Charging of Contract Time will begin on the Start Work Date. The Contractor
16 shall notify the Engineer, in writing, at least five (5) working days before beginning
17 physical work.
18

19 In the event that the Contractor fails to start physical work within the time
20 specified, the Engineer may terminate the contract in accordance with Subsection
21 108.11 – Termination of Contract for Cause.
22

23 During the period between the Notice to Proceed and the Start Work Date
24 the Contractor should adjust work forces, equipment, schedules, and procure
25 materials and required permits, prior to beginning physical work.
26

27 Any physical work done prior to the Start Work Date will be considered
28 unauthorized work. If the Engineer does not direct that the unauthorized work be
29 removed, it shall be paid for after the Start Work Date and only if it is acceptable.
30

31 In the event that the Engineer establishes, in writing, a Start Work Date that
32 is beyond fourteen (14) calendar days from the Notice to Proceed date, the
33 Contractor may submit a claim in accordance with, Subsection 107.15 – Disputes
34 and Claims for increased labor and material costs which are directly attributable to
35 the delay beyond the first fourteen (14) calendar days after the Notice to Proceed
36 date.
37

38 The Contractor shall notify the Engineer at least twenty four (24) hours
39 before restarting physical work after a suspension of work pursuant to Subsection
40 108.10 – Suspension of Work.
41

42 Once physical work has begun, the Contractor shall work expeditiously and
43 pursue the work diligently to completion with the contract time. If a portion of the
44 work is to be done in stages, the Contractor shall leave the area safe and usable
45 for the user agency and the public at the end of each stage.
46

47 **108.02 Prosecution of Work.** Unless otherwise permitted by the Engineer, in
48 writing, the Contractor shall not commence with physical construction unless
49 sufficient materials and equipment are available for either continuous construction
50 or completion of a specified portion of the work.

51
52 **108.03 Preconstruction Submittals.** The awardee shall submit to the
53 Engineer for information and review the pre-construction submittals within twenty
54 one (21) calendar days from award. Until the items listed below are received and
55 found acceptable by the Engineer, the Contractor shall not start physical work
56 unless otherwise authorized to do so in writing and subject to such conditions set
57 by the Engineer. Charging of Contract Time will not be delayed, and additional
58 contract time will not be granted due to Contractor delay in submitting acceptable
59 preconstruction submittals. No progress payment will be made to the Contractor
60 until the Engineer acknowledges, in writing, receipt of the following
61 preconstruction submittals acceptable to the Engineer:

- 62
- 63 (1) List of the Superintendent and other Supervisory Personnel, and
64 their contact information.
 - 65
 - 66 (2) Name of person(s) authorized to sign for the Contractor.
 - 67
 - 68 (3) Work Schedule including hours of operation.
 - 69
 - 70 (4) Initial Progress Schedule (See Subsection 108.06 – Progress
71 Schedule).
 - 72
 - 73 (5) Water Pollution and Siltation Control Submittals, including Site-
74 Specific Best Management Practice Plan.
 - 75
 - 76 (6) Solid Waste Disposal form.
 - 77
 - 78 (7) Tax Rates.
 - 79
 - 80 (8) Insurance Rates.
 - 81
 - 82 (9) Certificate of Insurance, satisfactory to the Engineer, indicating that
83 the Contractor has in place all insurance coverage required by the contract
84 documents.
 - 85
 - 86 (10) Schedule of agreed prices.
 - 87
 - 88 (11) List of suppliers.
 - 89
 - 90 (12) Traffic Control Plan, if applicable.

91 **108.04 Character and Proficiency of Workers.** The Contractor shall at all
92 times provide adequate supervision and sufficient labor and equipment for
93 prosecuting the work to full completion in the manner and within the time required
94 by the contract. The superintendent and all other representatives of the
95 Contractor shall act in a civil and honest manner in all dealings with the Engineer,
96 all other State officials and representatives, and the public, in connection with the
97 work.

98
99 All workers shall possess the proper license, certification, job classification,
100 skill, training, and experience necessary to properly perform the work assigned to
101 them.

102
103 The Engineer may direct the removal of any worker(s) who does not carry
104 out the assigned work in a proper and skillful manner or who is disrespectful,
105 intemperate, violent, or disorderly. The worker shall be removed forthwith by the
106 Contractor and will not work again without the written permission of the Engineer.

107
108 **108.05 Contract Time.**

109
110 **(A) Calculation of Contract Time.** When the contract time is on a
111 working day basis, the total contract time allowed for the performance of
112 the work will be the number of working days shown in the contract plus any
113 additional working days authorized in writing as provided hereinafter. The
114 count of elapsed working days to be charged against contract time, will
115 begin from the Start Work Date and will continue consecutively to the date
116 of Substantial Completion. When multiple shifts are used to perform the
117 work, the State will not consider the hours worked over the normal eight (8)
118 working hours per day or night as an additional working day.

119
120 When the contract is on a calendar day basis, the total contract time
121 allowed for the performance of the work will be the number of days shown
122 in the contract plus any additional days authorized in writing as provided
123 hereinafter. The count of elapsed days to be charged against contract time
124 will begin from the Start Work Date and will continue consecutively to the
125 date of Substantial Completion. The Engineer will exclude days elapsing
126 between the orders of the Engineer to suspend work and resume work for
127 suspensions not the fault of the Contractor.

128
129 **(B) Modifications of Contract Time.** Whenever the Contractor
130 believes that an extension of contract time is justified, the Contractor shall
131 serve written notice on the Engineer not more than five (5) working days
132 after the occurrence of the event that causes a delay or justifies a contract
133 time extension. Contract time may be adjusted for the following reasons or
134 events, but only if and to the extent the critical path has been affected:
135

136 **(1) Changes in the Work, Additional Work, and Delays**
 137 **Caused by the State.** If the Contractor believes that an extension of
 138 time is justified on account of any act or omission by the State, and is
 139 not adequately provided for in a field order or change order, it must
 140 request the additional time as provided above. At the request of the
 141 Engineer, the Contractor must show how the critical path will be
 142 affected and must also support the time extension request with
 143 schedules, as well as statements from its subcontractors, suppliers,
 144 or manufacturers, as necessary. Claims for compensation for any
 145 altered or additional work will be determined pursuant to Subsection
 146 104.02 – Changes.

147
 148 Additional time to perform the extra work will be added to the
 149 time allowed in the contract without regard to the date the change
 150 directive was issued, even if the contract completion date has
 151 passed. A change requiring time issued after contract time has
 152 expired will not constitute an excusal or waiver of pre-existing
 153 Contractor delay.

154
 155 **(2) Delay for Permits.** For delays in the routine application and
 156 processing time required to obtain necessary permits, including
 157 permits to be obtained from State agencies, the Engineer may grant
 158 an extension provided that the permit takes longer than thirty (30)
 159 days to acquire and the delay is not caused by the Contractor, and
 160 provided that as soon as the delay occurs, the Contractor notifies the
 161 Engineer in writing that the permits are not available. Permits
 162 required by the contract that take less than thirty (30) days to acquire
 163 from the time which the appropriate documents are granted shall be
 164 acquired between Notice to Proceed and Start Work Date or
 165 accounted for in the contractor's progress schedule. Time
 166 extensions will be the exclusive relief granted on account of such
 167 delays.

168
 169 **(3) Delays Beyond Contractor's Control.** For delays caused by
 170 acts of God, a public enemy, fire, inclement weather days or
 171 adverse conditions resulting therefrom, earthquakes, floods,
 172 epidemics, quarantine restrictions, labor disputes impacting the
 173 Contractor or the State, freight embargoes and other reasons
 174 beyond the Contractor's control, the Contractor may be granted an
 175 extension of time provided that:

176
 177 **(a)** In the written notice of delay to the Engineer, the
 178 Contractor describes possible effects on the completion date
 179 of the contract. The description of delays shall:
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225
1. State specifically the reason or reasons for the delay and fully explain in a detailed chronology how the delay affects the critical path.
 2. Include copies of pertinent documentation to support the time extension request.
 3. Cite the anticipated period of delay and the time extension requested.
 4. State either that the above circumstances have been cleared and normal working conditions restored as of a certain day or that the above circumstances will continue to prevent completion of the project.
- (b) The Contractor shall notify the Engineer in writing when the delay ends. Time extensions will be the exclusive relief granted and no additional compensation will be paid the Contractor for such delays.
- (4) Delays in Delivery of Materials or Equipment.** For delays in delivery of materials or equipment, which occur as a result of unforeseeable causes beyond the control and without fault of the Contractor, its subcontractor(s) or supplier(s), time extensions shall be the exclusive relief granted and no additional compensation will be paid the Contractor on account of such delay. The delay shall not exceed the difference between the originally scheduled delivery date and the actual delivery date. The Contractor may be granted an extension of time provided that it complies with the following procedures:
- (a) The Contractor's written notice to the Engineer must describe the delays and state the effect such delays may have on the critical path.
 - (b) The Contractor, if requested, must submit to the Engineer within five (5) days after a firm delivery date for the material and equipment is established, a written statement regarding the delay. The Contractor must justify the delay as follows:
 1. State specifically all reasons for the delay. Explain in a detailed chronology the effect of the delay on the critical path.

226 2. Submit copies of purchase order(s), factory
227 invoice(s), bill(s) of lading, shipping manifest(s),
228 delivery tag(s), and any other documents to support the
229 time extension request.

230
231 3. Cite the start and end date of the delay and the
232 time extension requested.

233
234 **(5) Delays for Suspension of Work.** When the performance of
235 the work is totally suspended for one (1) or more days (calendar or
236 working days, as appropriate) by order of the Engineer in
237 accordance with Subsections 108.10(A)(1), 108.10(A)(2), or
238 108.10(A)(5) the number of days from the effective date of the
239 Engineer's order to suspend operations to the effective date of the
240 Engineer's order to resume operations shall not be counted as
241 contract time and the contract completion date will be adjusted.
242 During periods of partial suspensions of the work, the Contractor will
243 be granted a time extension only if the partial suspension affects the
244 critical path. If the Contractor believes that an extension of time is
245 justified for a partial suspension of work, it must request the
246 extension in writing at least five (5) working days before the partial
247 suspension will affect the critical operation(s) in progress. The
248 Contractor must show how the critical path was increased based on
249 the status of the work and must also support its claim if requested,
250 with statements from its subcontractors. A suspension of work will
251 not constitute a waiver of pre-existing Contractor delay.

252
253 **(6) Contractor Caused Delays.** No time extension will be
254 granted under the following circumstances:

255
256 **(a)** Delays within the Contractor's control in performing the
257 work caused by the Contractor, subcontractor, supplier, or any
258 combination thereof.

259
260 **(b)** Delays within the Contractor's control in arrival of
261 materials and equipment caused by the Contractor,
262 subcontractor, supplier, or any combination thereof, in
263 ordering, fabricating, and delivery.

264
265 **(c)** Delays requested for changes which do not affect the
266 critical path.

267 (d) Delays caused by the failure of the Contractor to make
 268 submittals in a timely manner for review and acceptance by
 269 the Engineer, such as but not limited to shop drawings,
 270 descriptive sheets, material samples, and color samples
 271 except as covered in Subsection 108.05(B)(3) – Delays
 272 Beyond Contractor’s Control and 108.05(B)(4) – Delays in
 273 Delivery of Materials or Equipment.

274
 275 (e) Delays caused by the failure to submit sufficient
 276 information and data in a timely manner in the proper form in
 277 order to obtain necessary permits related to the work.

278
 279 (f) Failure to follow the procedure within the time allowed
 280 by contract to request a time extension.

281
 282 (g) Failure of the Contractor to provide evidence sufficient
 283 to support the time extension request.

284
 285 (7) **Reduction in Time.** If the State deletes or modifies any
 286 portion of the work, an appropriate reduction of contract time may be
 287 made in accordance with Subsection 104.02 - Changes.

288

289 **108.06 Progress Schedules.**

290

291 (A) **Forms of Schedule.** All schedules shall be submitted using the
 292 specific computer program designated in the bid documents. If no such
 293 scheduling software program is designated, then all schedules shall be
 294 submitted using the latest version of Microsoft Project by Microsoft or
 295 approved equivalent software program.

296

297 Schedule submittals shall be as follows:

298

299 (1) **For Contracts \$2,000,000 or less or For Contract Time**
 300 **One Hundred (100) Working Days or One Hundred Forty (140)**
 301 **Calendar Days or Less.** For contracts of \$2,000,000 or less or for
 302 contract time of one hundred (100) working days or one hundred
 303 forty (140) calendar days or less, the progress schedule will be a
 304 Time Scaled Logic Diagram (TSLD). The Contractor shall submit a
 305 TSLD submittal package meeting the following requirements and
 306 having these essential and distinctive elements:

307

308 (a) The major features of work, such as but not limited to
 309 BMP installation, grubbing, roadway excavation, structure
 310 excavation, structure construction, shown in the chronological
 311 order in which the Contractor proposes to work that feature or
 312 work and its location on the project. The schedule shall

- 313 account for normal inclement weather, unusual soil or other
314 conditions that may influence the progress of the work,
315 schedules, and coordination required by any utility, off or on
316 site fabrications, and other pertinent factors that relate to
317 progress;
- 318
- 319 **(b)** All features listed or not listed in the contract
320 documents that the Contractor considers a controlling factor
321 for the timely completion of the contract work.
- 322
- 323 **(c)** The time span and sequence of the activities or events
324 for each feature, and its interrelationship and
325 interdependencies in time and logic to other features in order
326 to complete the project.
- 327
- 328 **(d)** The total anticipated time necessary to complete work
329 required by the contract.
- 330
- 331 **(e)** A chronological listing of critical intermediate dates or
332 time periods for features or milestones or phases that can
333 affect timely completion of the project.
- 334
- 335 **(f)** Major activities related to the location on the project.
- 336
- 337 **(g)** Non-construction activities, such as submittal and
338 acceptance periods for shop drawings and material,
339 procurement, testing, fabrication, mobilization, and
340 demobilization or order dates of long lead material.
- 341
- 342 **(h)** Set schedule logic for out of sequence activities to
343 retain logic. In addition, open ends shall be non-critical.
- 344
- 345 **(i)** Show target bars for all activities.
- 346
- 347 **(j)** Vertical and horizontal sight lines both major and minor
348 shall be used as well as a separator line between groups.
349 The Engineer will determine frequency and style.
- 350
- 351 **(k)** The file name, print date, revision number, data and
352 project title and number shall be included in the title block.
- 353
- 354 **(l)** Have columns with the appropriate data in them for
355 activity ID, description, original duration, remaining duration,
356 early start, early finish, total float, percent complete,
357 resources. The resource column shall list who is responsible

358 for the work to be done in the activity. These columns shall
359 be to the left of the bar chart.

360
361 **(2) For Contracts Which Have A Contract Amount**
362 **More Than \$2,000,000 Or Having A Contract Time Of More**
363 **Than One Hundred (100) Working Days Or One Hundred**
364 **Forty (140) Calendar Days.** For contracts which have a
365 contract amount more than \$2,000,000 or contract time of
366 more than one hundred (100) working days or one hundred
367 forty (140) calendar days, the Contractor shall submit a
368 Timed-Scaled Logic Diagram (TSLD) meeting the following
369 requirements and having these essential and distinctive
370 elements:

371
372 **(a)** The information and requirements listed in Subsection
373 108.06(A)(1) – For Contracts \$2,000,000 or Less or For
374 Contract Time One Hundred (100) Working Days or One
375 Hundred Forty (140) Calendar Days or Less.

376
377 **(b)** Additional reports and graphics available from the
378 software as requested by the Engineer.

379
380 **(c)** Sufficient detail to allow at least weekly monitoring of
381 the Contractor and subcontractor's operations.

382
383 **(d)** The time scaled schematic shall be on a calendar or
384 working days basis. What will be used shall be determined by
385 how the contract keeps track of time. It will be the same. Plot
386 the critical calendar dates anticipated.

387
388 **(e)** Breakdown of activity, such as forming, placing
389 reinforcing steel, concrete pouring and curing, and stripping
390 in concrete construction. Indicate location of work to be done
391 in such detail that it would be easily determined where work
392 would be occurring within approximately 200 feet.

393
394 **(f)** Latest start and finish dates for critical path activities.

395
396 **(g)** Identify responsible subcontractor, supplier, and others
397 for their respective activity.

398
399 **(h)** No individual activity shall have duration of more than
400 twenty (20) calendar days unless requested and approved by
401 the Engineer.
402

403 (i) All activities shall have work breakdown structure
404 codes and activity codes. The activity codes shall have
405 coding that incorporates information for phase, location, who
406 is responsible for doing work and type of operation and
407 activity description.

408
409 (j) Incorporate all physical access and availability
410 restraints.

411
412 **(B) Inspection and Testing.** All schedules shall provide reasonable
413 time and opportunity for the Engineer to inspect and test each work activity.
414

415 **(C) Engineer's Acceptance of Progress Schedule.** The submittal of,
416 and the Engineer's receipt of any progress schedule, shall not be deemed
417 an agreement to modify any terms or conditions of the contract. Any
418 modifications to the contract terms and conditions that appear in or may be
419 inferred from an acceptable schedule will not be valid or enforceable unless
420 and until the Engineer exercises discretion to issue an appropriate change
421 order. Nor shall any submittal or receipt imply the Engineer's approval of
422 the schedule's breakdown, its individual elements, any critical path that may
423 be shown, nor shall it obligate the State to make its personnel available
424 outside normal working hours or the working hours established by the
425 Contract in order to accommodate such schedule. The Contractor has the
426 risk of all elements (whether or not shown) of the schedule and its
427 execution. No claim for additional compensation, time, or both, shall be
428 made by the Contractor or recognized by the Engineer for delays during
429 any period for which an acceptable progress schedule or an updated
430 progress schedule as required by Subsection 108.06(E) – Contractor's
431 Continuing Schedule Submittal Requirements had not been submitted. Any
432 acceptance or approval of the schedule shall be for general format only and
433 shall not be deemed an agreement by the State that the construction
434 means, methods, and resources shown on the schedule will result in work
435 that conforms to the contract requirements or that the sequences or
436 durations indicated are feasible.

437
438 **(D) Initial Progress Schedule.** The Contractor shall submit an initial
439 progress schedule. The initial progress schedule shall consist of the
440 following:

441
442 (1) Four sets of the TSLD schedule.

443
444 (2) All the software files and data to re-create the TSLD in a
445 computerized software format as specified by the Engineer.

446
447 (3) A listing of equipment that is anticipated to be used on the
448 project. Including the type, size, make, year of manufacture, and all

449 information necessary to identify the equipment in the Rental Rate
450 Blue Book for Construction Equipment.

451
452 **(4)** An anticipated manpower requirement graph plotting contract
453 time and total manpower requirement. This may be superimposed
454 over the payment graph.

455
456 **(5)** A Method Statement that is a detailed narrative describing the
457 work to be done and the method by which the work shall be
458 accomplished for each major activity. A major activity is an activity
459 that:

460
461 **(a)** Has a duration longer than five (5) days.

462
463 **(b)** Is a milestone activity.

464
465 **(c)** Is a contract item that exceeds \$10,000 on the contract
466 cost proposal.

467
468 **(d)** Is a critical path activity.

469
470 **(e)** Is an activity designated as such by the Engineer.

471
472 Each Method Statement shall include the following items
473 needed to fulfill the schedule:

474
475 **(a)** Quantity, type, make, and model of equipment.

476
477 **(b)** The manpower to do the work, specifying worker
478 classification.

479
480 **(c)** The production rate per eight (8) hour day, or the
481 working hours established by the contract documents needed
482 to meet the time indicated on the schedule. If the production
483 rate is not for eight (8) hours, the number of working hours
484 shall be indicated.

485
486 **(6)** Two sets of color time-scaled project evaluation and review
487 technique charts ("PERT") using the activity box template of Logic –
488 Early Start or such other template designated by the Engineer.

489
490 If the contract documents establish a sequence or order for the work,
491 the initial progress schedule shall conform to such sequence or order.

492
493 **(E) Contractor's Continuing Schedule Submittal Requirements.**
494 After the acceptance of the initial TSLD and when construction starts, the

495 Contractor shall submit four plotted progress schedules, two PERT charts,
496 and reports on all construction activities every two (2) weeks (bi-weekly).
497 This scheduled bi-weekly submittal shall also include an updated version of
498 the project schedule in a computerized software format as specified by the
499 Engineer. The submittal shall have all the information needed to re-create
500 that time period's TSLD plot and reports. The bi-weekly submittal shall
501 include, but not limited to, an update of activities based on actual durations,
502 all new activities and any changes in duration or start or finish dates of any
503 activity.

504
505 The Contractor shall submit with every update, in report form
506 acceptable to the Engineer, a list of changes to the progress schedule since
507 the previous schedule submittal. The Engineer may change the frequency
508 of the submittal requirements but may not require a submittal of the
509 schedule to be more than once a week. The Engineer may decrease the
510 frequency of the submittal of the bi-weekly schedule.

511
512 The Contractor shall submit updates of the anticipated work
513 completion graph, equipment listing, manpower requirement graph or
514 method statement when requested by the Engineer. The Contractor shall
515 submit such updates within four (4) calendar days from the date of the
516 request by the Engineer.

517
518 The Engineer may withhold progress payment until the Contractor is
519 in compliance with all schedule update requirements

520
521 **(F) Float.** All float appearing on a schedule is a shared commodity.
522 Float does not belong to or exist for the exclusive use or benefit of either
523 the State or the Contractor. The State or the Contractor has the opportunity
524 to use available float until it is depleted. Float has no monetary value.

525
526 **(G) Scheduled Meetings.** The Contractor shall meet on a bi-weekly
527 basis with the Engineer to review the progress schedule. The Contractor
528 shall have someone attending the meeting that can answer all questions on
529 the TSLD and other schedule related submittals.

530
531 **(H) Accelerated Schedule; Early Completion.** If the Contractor
532 submits an accelerated schedule (shorter than the contract time), the
533 Engineer's review and acceptance of an accelerated schedule does not
534 constitute an agreement or obligation by the State to modify the contract
535 time or completion date. The Contractor is solely responsible for and shall
536 accept all risks and any delays, other than those that can be directly and
537 solely attributable to the State, that may occur during the work, until the
538 contract completion date. The contract time or completion date is
539 established for the benefit of the State and cannot be changed without an
540 appropriate change order or Substantial Completion granted by the State.

541 The State may accept the work before the completion date is established,
542 but is not obligated to do so.

543
544 If the TSLD indicates an early completion of the project, the
545 Contractor shall, upon submittal of the schedule, cooperate with the
546 Engineer in explaining how it will be achieved. In addition, the Contractor
547 shall submit the above explanation in writing which shall include the State's
548 part, if any, in achieving the early completion date. Early completion of the
549 project shall not rely on changes to the Contract Documents unless
550 approved by the Engineer.

551
552 **(l) Contractor Responsibilities.** The Contractor shall promptly
553 respond to any inquiries from the Engineer regarding any schedule
554 submission. The Contractor shall adjust the schedule to address directives
555 from the Engineer and shall resubmit the TSLD package to the Engineer
556 until the Engineer finds it acceptable.

557
558 The Contractor shall perform the work in accordance with the
559 submitted TSLD. The Engineer may require the Contractor to provide
560 additional work forces and equipment to bring the progress of the work into
561 conformance with the TSLD at no increase in contract price or contract time
562 whenever the Engineer determines that the progress of the work does not
563 insure completion within the specified contract time.

564
565 **108.07 Weekly Meeting.** In addition to the bi-weekly schedule meetings, the
566 Contractor shall be available to meet once a week with the Engineer at the time
567 and place as determined by the Engineer to discuss the work and its progress
568 including but not limited to, the progress of the project, potential problems,
569 coordination of work, submittals, erosion control reports, etc. The Contractor's
570 personnel attending shall have the authority to make decisions and answer
571 questions.

572
573 The Contractor shall bring to weekly meetings a detailed work schedule
574 showing the next three (3) weeks' work. Number of copies of the detailed work
575 schedule to be submitted will be determined by the Engineer. The three (3) week
576 schedule is in addition to the TSLD and shall in no way be considered as a
577 substitute for the TSLD or vice versa. The three (3) week schedule shall show:

578
579 **(a)** All construction events, traffic control and BMP related activities in
580 such detail that the Engineer will be able to determine at what location and
581 type of work will be done for any day for the next three (3) weeks. This is
582 for the State to use to plan its manpower requirements for that time period.

583
584 **(b)** The duration of all events and delays.
585

586 (c) The critical path clearly marked in red or marked in a manner that
 587 makes it clearly distinguishable from other paths and is acceptable to the
 588 Engineer.

589
 590 (d) Critical submittals and requests for information (RFI's).

591
 592 (e) The project title, project number, date created, period the schedule
 593 covers, Contractor's name and creator of the schedule on each page.

594
 595 Two (2) days prior to each weekly meeting, the Contractor shall
 596 submit a list of outstanding submittals, RFIs and issues that require
 597 discussion.

598
 599 **108.08 Liquidated Damages for Failure to Complete the Work or Portions**
 600 **of the Work on Time.** The actual amount of damages resulting from the
 601 Contractor's failure to complete the contract in a timely manner is difficult to
 602 accurately determine. Therefore, the amount of such damages shall be liquidated
 603 damages as set forth herein and in the special provisions. The State may, at its
 604 discretion, deduct the amount from monies due or that may become due under the
 605 contract.

606
 607 When the Contractor fails to reach substantial completion of the work for
 608 which liquidated damages are specified, within the time or times fixed in the
 609 contract or any extension thereof, in addition to all other remedies for breach that
 610 may be available to the State, the Contractor shall pay liquidated damages to the
 611 State, in the amount of \$ 5,000.00 per working day.

612
 613 (A) **Liquidated Damages Upon Termination.** If the State terminates
 614 on account of Contractor's default, liquidated damages may be charged
 615 against the defaulting Contractor and its surety until final completion of
 616 work.

617
 618 (B) **Liquidated Damages for Failure to Complete the Punchlist.** The
 619 Contractor shall complete the work on any punchlist created after the pre-
 620 final inspection, within the contract time or any extension thereof.

621
 622 When the Contractor fails to complete the work on such punchlist
 623 within the contract time or any extension thereof, the Contractor shall pay
 624 liquidated damages to the State of 20 percent of the amount of liquidated
 625 damages established for failure to substantially complete the work within
 626 contract time. Liquidated damages shall not be assessed for the period
 627 between:

628
 629 (1) Notice from the Contractor that the project is substantially
 630 complete and the time the punchlist is delivered to the Contractor.

631

632 (2) The date of the completion of punchlist as determined by the
633 Engineer and the date of the successful final inspection, and

634
635 (3) The date of the Final Inspection that results in Substantial
636 Completion and the receipt by the Contractor of the written notice of
637 Substantial Completion.

638
639 **(C) Actual Damages Recoverable If Liquidated Damages Deemed**
640 **Unenforceable.** In the event a court of competent jurisdiction holds that
641 any liquidated damages assessed pursuant to this contract are
642 unenforceable, the State will be entitled to recover its actual damages for
643 Contractor's failure to complete the work, or any designated portion of the
644 work within the time set by the contract.

645
646 **108.09 Rental Fees for Unauthorized Lane Closure or Occupancy.** In
647 addition to all other remedies available to the State for Contractor's breach of the
648 terms of the contract, the Engineer will assess the rental fees in the amount of
649 \$2,500 for every one-to fifteen-minute increment for each roadway lane closed to
650 public use or occupied beyond the time periods authorized in the contract or by the
651 Engineer. The State may, at its discretion, deduct the amount from monies due or
652 that may become due under the contract. The rental fee may be waived in whole
653 or part if the Engineer determines that the unauthorized period of lane closure or
654 occupancy was due to factors beyond the control of the Contractor. Equipment
655 breakdown is not a cause to waive liquidated damages.

656
657 **108.10 Suspension of Work.**

658
659 **(A) Suspension of Work.** The Engineer may, by written order, suspend
660 the performance of the work, either in whole or in part, for such periods as
661 the Engineer may deem necessary, for any cause, including but not limited
662 to:

663
664 (1) Weather or soil conditions considered unsuitable for
665 prosecution of the work.

666
667 (2) Whenever a redesign that may affect the work is deemed
668 necessary by the Engineer.

669
670 (3) Unacceptable noise or dust arising from the construction even
671 if it does not violate any law or regulation.

672
673 (4) Failure on the part of the Contractor to:

674
675 (a) Correct conditions unsafe for the general public or for
676 the workers.

677

- 678 (b) Carry out orders given by the Engineer.
 679
 680 (c) Perform the work in strict compliance with the
 681 provisions of the contract.
 682
 683 (d) Provide adequate supervision on the jobsite.
 684 (5) The convenience of the State.
 685

686 **(B) Partial and Total Suspension.** Suspension of work on some but
 687 not all items of work shall be considered a “partial suspension”.
 688 Suspension of work on all items shall be considered “total suspension”.
 689 The period of suspension shall be computed from the date set out in the
 690 written order for work to cease until the date of the order for work to
 691 resume.
 692

693 **(C) Reimbursement to Contractor.** In the event that the Contractor is
 694 ordered by the Engineer in writing as provided herein to suspend all work
 695 under the contract for the reasons specified in Subsections 108.10(A)(2),
 696 108.10(A)(3), or 108.10(A)(5) of the “Suspension of Work” paragraph, the
 697 Contractor may be reimbursed for actual direct costs incurred on work at
 698 the jobsite, as authorized in writing by the Engineer, including costs
 699 expended for the protection of the work. An allowance of 5 percent for
 700 indirect categories of delay costs will be paid on any reimbursed direct
 701 costs, including extended branch and home-office overhead and delay
 702 impact costs. No allowance will be made for anticipated profits. Payment
 703 for equipment which is ordered to standby during such suspension of work
 704 shall be made as described in Subsection 109.06(H) - Idle and Standby
 705 Equipment.
 706

707 **(D) Cost Adjustment.** If the performance of all or part of the work is
 708 suspended for reasons beyond the control of the Contractor except an
 709 adjustment shall be made for any increase in cost of performance of this
 710 contract (excluding profit) necessarily caused by such suspension, and the
 711 contract modified in writing accordingly.
 712

713 However, no adjustment to the contract price shall be made for any
 714 suspension, delay, or interruption:
 715

- 716 (1) For weather related conditions.
 717
 718 (2) To the extent that performance would have been so
 719 suspended, delayed, or interrupted by any other cause, including the
 720 fault or negligence of the Contractor.
 721
 722 (3) Or, for which an adjustment is provided for or excluded under
 723 any other provision of this Contract.

724
725 **(E) Claims for Adjustment.** Any adjustment in contract price made
726 shall be determined in accordance with Subsections 104.02 – Changes and
727 104.06 – Methods of Price Adjustment.
728

729 Any claims for such compensation shall be filed in writing with the
730 Engineer within thirty (30) days after the date of the order to resume work or
731 the claim will not be considered. The claim shall conform to the
732 requirements of Subsection 107.15(D) – Making of a Claim. The Engineer
733 will take the claim under consideration, may make such investigations as
734 are deemed necessary and will be the sole judge as to the equitability of the
735 claim. The Engineer’s decision will be final.
736

737 **(F) No Adjustment.** No provision of this clause shall entitle the
738 Contractor to any adjustments for delays due to failure of its surety, the
739 cancellation or expiration of any insurance coverage required by the
740 contract documents, for suspensions made at the request of the Contractor,
741 for any delay required under the contract, for suspensions, either partial or
742 whole, made by the Engineer under Subsection 108.10(A)(4) of the
743 “Suspension of work” paragraph.
744

745 **108.11 Termination of Contract for Cause.**
746

747 **(A) Default.** If the Contractor refuses or fails to perform the work, or any
748 separable part thereof, with such diligence as will assure its completion
749 within the time specified in this contract, or any extension thereof, or
750 commits any other material breach of this contract, and further fails within
751 seven (7) days after receipt of written notice from the Engineer to
752 commence and continue correction of the refusal or failure with diligence
753 and promptness, the Engineer may, by written notice to the Contractor,
754 declare the Contractor in breach and terminate the Contractor’s right to
755 proceed with the work or the part of the work as to which there has been
756 delay or other breach of contract. In such event, the State may take over
757 the work, perform the same to completion, by contract or otherwise, and
758 may take possession of, and utilize in completing the work, the materials,
759 appliances, and plants as may be on the site of the work and necessary
760 therefore. Whether or not the Contractor’s right to proceed with the work is
761 terminated, the Contractor and the Contractor’s sureties shall be liable for
762 any damage to the State resulting from the Contractor’s refusal or failure to
763 complete the work within the specified time.
764

765 **(B) Additional Rights and Remedies.** The rights and remedies of the
766 State provided in this contract are in addition to any other rights and
767 remedies provided by law.
768

769 **(C) Costs and Charges.** All costs and charges incurred by the State,
 770 together with the cost of completing the work under contract, will be
 771 deducted from any monies due or which would or might have become due
 772 to the Contractor had it been allowed to complete the work under the
 773 contract. If such expense exceeds the sum which would have been
 774 payable under the contract, then the Contractor and the surety shall be
 775 liable and shall pay the State the amount of the excess.
 776

777 In case of termination, the Engineer will limit any payment to the
 778 Contractor to the part of the contract satisfactorily completed at the time of
 779 termination. Payment will not be made until the work has satisfactorily been
 780 completed and all required documents, including the tax clearance required
 781 by Subsection 109.11 – Final Payment are submitted by the Contractor.
 782 Termination shall not relieve the Contractor or Surety from liability for
 783 liquidated damages.
 784

785 **(D) Erroneous Termination for Cause.** If, after notice of termination of
 786 the Contractor's right to proceed under this section, it is determined for any
 787 reason that good cause did not exist to allow the State to terminate as
 788 provided herein, the rights and obligations of the parties shall be the same
 789 as, and the relief afforded the Contractor shall be limited to, the provisions
 790 contained in Subsection 108.12 – Termination for Convenience.
 791

792 **108.12 Termination For Convenience.**

793
 794 **(A) Terminations.** The Director may, when the interests of the State so
 795 require, terminate this contract in whole or in part, for the convenience of
 796 the State. The Director will give written notice of the termination to the
 797 Contractor specifying the part of the contract terminated and when
 798 termination becomes effective.
 799

800 **(B) Contractor's Obligations.** The Contractor shall incur no further
 801 obligations in connection with the terminated work and on the date set in
 802 the notice of termination the Contractor shall stop work to the extent
 803 specified. The Contractor shall also terminate outstanding orders and
 804 subcontracts as they relate to the terminated work. The Contractor shall
 805 settle the liabilities and claims arising out of the termination of subcontracts
 806 and orders connected with the terminated work subject to the State's
 807 approval. The Engineer may direct the Contractor to assign the
 808 Contractor's right, title, and interest under terminated orders or subcontracts
 809 to the State. The Contractor must still complete the work not terminated by
 810 the notice of termination and may incur obligations as necessary to do so.
 811

812 **(C) Right to Construction and Goods.** The Engineer may require the
 813 Contractor to transfer title and to deliver to the State in the manner and to
 814 the extent directed by the Engineer, the following:

- 815 (1) Any completed work.
816
- 817 (2) Any partially completed construction, goods, materials, parts,
818 tools, dies, jigs, fixtures, drawings, information, and contract rights
819 (hereinafter called "construction material") that the Contractor has
820 specifically produced or specially acquired for the performance of the
821 terminated part of this contract.
822
- 823 (3) The Contractor shall protect and preserve all property in the
824 possession of the Contractor in which the State has an interest. If
825 the Engineer does not elect to retain any such property, the
826 Contractor shall use its best efforts to sell such property and
827 construction materials for the State's account in accordance with the
828 standards of HRS Chapter 490:2-706.
829
- 830 **(D) Compensation.**
831
- 832 (1) The Contractor shall submit a termination claim specifying the
833 amounts due because of the termination for convenience together
834 with cost or pricing data, submitted to the extent required by HAR
835 Subchapter 15, Chapter 3-122. If the Contractor fails to file a
836 termination claim within one (1) year from the effective date of
837 termination, the Engineer may pay the Contractor, if at all, an amount
838 set in accordance with Subsection 108.12(D)(3).
839
- 840 (2) The Engineer and the Contractor may agree to a settlement
841 provided the Contractor has filed a termination claim supported by
842 cost or pricing data submitted as required and that the settlement
843 does not exceed the total contract price plus settlement costs
844 reduced by payments previously made by the State, the proceeds of
845 any sales of construction, supplies, and construction materials under
846 Subsection 108.12(C)(3), and the proportionate contract price of the
847 work not terminated.
848
- 849 (3) Absent complete agreement, the Engineer will pay the
850 Contractor the following amounts less any payments previously
851 made under the contract:
852
- 853 (a) The cost of all contract work performed prior to the
854 effective date of the notice of termination work plus a 5
855 percent markup on the actual direct costs, including amounts
856 paid to subcontractor, less amounts paid or to be paid for
857 completed portions of such work; provided, however, that if it
858 appears that the Contractor would have sustained a loss if the
859 entire contract would have been completed, no markup shall
860 be allowed or included and the amount of compensation shall

861 be reduced to reflect the anticipated rate of loss. No
 862 anticipated profit or consequential damage will be due or paid.

863
 864 **(b)** Subcontractors shall be paid a markup of 10 percent on
 865 their direct job costs incurred to the date of termination. No
 866 anticipated profit or consequential damage will be due or paid
 867 to any subcontractor. These costs must not include payments
 868 made to the Contractor for subcontract work during the
 869 contract period.

870
 871 **(c)** The total sum to be paid the Contractor shall not
 872 exceed the total contract price reduced by the amount of any
 873 sales of construction supplies, and construction materials.

874
 875 **(4)** Cost claimed, agreed to, or established by the State shall be
 876 in accordance with HAR Chapter 3-123.

877
 878 **108.13 Pre-Final and Final Inspections.**

879
 880 **(A) Inspection Requirements.** Before the Engineer undertakes a final
 881 inspection of any work, a pre-final inspection must first be conducted. The
 882 Contractor shall notify the Engineer that the work has reached substantial
 883 completion and is ready for pre-final inspection.

884
 885 **(B) Pre-Final Inspection.** Before notifying the Engineer that the work
 886 has reached substantial completion, the Contractor shall inspect the project
 887 and test all installed items with all of its subcontractors as appropriate. The
 888 Contractor shall also submit the following documents as applicable to the
 889 work:

- 890
 891 **(1)** All written guarantees required by the contract.
 892
 893 **(2)** Two accepted final field-posted drawings as specified in
 894 Section 648 – Field-Posted Drawings;
 895
 896 **(3)** Complete weekly certified payroll records for the Contractor
 897 and Subcontractors.
 898
 899 **(4)** Certificate of Plumbing and Electrical Inspection.
 900
 901 **(5)** Certificate of building occupancy as required.
 902
 903 **(6)** Certificate of Soil and Wood Treatments.
 904
 905 **(7)** Certificate of Water System Chlorination.
 906

907 (8) Certificate of Elevator Inspection, Boiler and Pressure Pipe
908 Inspection.

909
910 (9) Maintenance Service Contract and two copies of a list of all
911 equipment installed.

912
913 (10) Current Tax clearance. The contractor will be required to
914 submit an additional tax clearance certificate when the final payment
915 is made.

916
917 (11) And any other final items and submittals required by the
918 contract documents.

919
920 **(C) Procedure.** When in compliance with the above requirements, the
921 Contractor shall notify the Engineer in writing that the project has reached
922 substantial completion and is ready for pre-final inspection.

923
924 The Engineer will then make a preliminary determination as to
925 whether or not the project is substantially complete and ready for pre-final
926 inspection. The Engineer may, in writing, postpone until after the pre-final
927 inspection the Contractor's submittal of any of the items listed in Subsection
928 108.13(B) – Pre-Final Inspection, herein, if in the Engineer's discretion it is
929 in the interest of the State to do so.

930
931 If, in the opinion of the Engineer, the project is not substantially
932 complete, the Engineer will provide the Contractor a punchlist of specific
933 deficiencies in writing which must be corrected or finished before the work
934 will be ready for a pre-final inspection. The Engineer may add to or
935 otherwise modify this punchlist from time to time. The Contractor shall take
936 immediate action to correct the deficiencies and must repeat all steps
937 described above including written notification that the work is ready for pre-
938 final inspection.

939
940 After the Engineer is satisfied that the project appears substantially
941 complete a final inspection shall be scheduled within ten (10) working days
942 after receipt of the Contractor's latest letter of notification that the project is
943 ready for final inspection.

944
945 If, as a result of the pre-final inspection, the Engineer determines the
946 work is not substantially complete, the Engineer will inform the Contractor in
947 writing as to specific deficiencies which must be corrected before the work
948 will be ready for another pre-final inspection. If the Engineer finds the work
949 is substantially complete but finds deficiencies that must be corrected
950 before the work is ready for final inspection, the Engineer will prepare in
951 writing and deliver to the Contractor a punchlist describing such
952 deficiencies.

953 At any time before final acceptance, the Engineer may revoke the
 954 determination of substantial completion if the Engineer finds that it was not
 955 warranted and will notify the Contractor in writing the reasons therefore
 956 together with a description of the deficiencies negating the declaration.
 957

958 When the date of substantial completion has been determined by the
 959 State, liquidated damages for the failure to complete the punchlist, if due to
 960 the State will be assessed in pursuant to Subsection 108.08(B) - Liquidated
 961 Damages for Failure to Complete the Punchlist.
 962

963 **(D) Punchlist; Clean Up and Final Inspection.** Upon receiving a
 964 punchlist after pre-final inspection, the Contractor shall promptly devote all
 965 required time, labor, equipment, materials and incidentals to correct and
 966 remedy all punchlist deficiencies. The Engineer may add to or otherwise
 967 modify this punchlist until substantial completion of the project.
 968

969 Before final inspection of the work, the Contractor shall clean all
 970 ground occupied by the Contractor in connection with the work of all
 971 rubbish, excess materials temporary structures and equipment, shall
 972 remove all graffiti and defacement of the work and all parts of the work and
 973 the worksite must be left in a neat and presentable condition to the
 974 satisfaction of the Engineer.
 975

976 Final inspection will occur within ten (10) working days after the
 977 Contractor notifies the Engineer in writing that all punchlist deficiencies
 978 remaining after the pre-final inspection have been completed and the
 979 Engineer concurs. If the Engineer determines that deficiencies still remain
 980 at the final inspection, the work will not be accepted and the Engineer will
 981 notify the Contractor, in writing, of the deficiencies which shall be corrected
 982 and the steps above repeated.
 983

984 If the Contractor fails to correct the deficiencies and complete the
 985 work by the established or agreed date, the State may correct the
 986 deficiencies by whatever method it deems appropriate and deduct the cost
 987 from any payments due the Contractor.
 988

989 **108.14 Substantial Completion and Final Acceptance.**

990
 991 **(A) Substantial Completion.** When the Engineer finds that the
 992 Contractor has satisfactorily completed all work for the project in
 993 compliance with the contract, with the exception of the planting period and
 994 the plant establishment period, the Engineer will notify the Contractor, in
 995 writing, of the project's substantial completion, effective as of the date of the
 996 final inspection. The substantial completion date shall determine end of
 997 contract time and relieve contractor of any additional accumulation of
 998 liquidated damages for failure to complete the punchlist.

999

1000 **(B) Final Acceptance.** When the Engineer finds that the Contractor has
 1001 satisfactorily completed all contract work in compliance with the contract
 1002 including all plant establishment requirements, and all the materials have
 1003 been accepted by the State, the Engineer will issue a Final Acceptance
 1004 Letter. The Final Acceptance date shall determine the commencement of
 1005 all guaranty periods subject to Subsection 108.16 – Contractor’s
 1006 Responsibility for Work; Risk of Loss or Damage.

1007

1008 **108.15 Use of Structure or Improvement.** The State has the right to use the
 1009 structure, equipment, improvement, or any part thereof, at any time after it is
 1010 considered by the Engineer as available. In the event that the structure,
 1011 equipment or any part thereof is used by the State before final acceptance, the
 1012 Contractor is not relieved of its responsibility to protect and preserve all the work
 1013 until final acceptance.

1014

1015 **108.16 Contractor’s Responsibility for Work; Risk of Loss or Damage.**
 1016 Until the written notice of final acceptance has been received, the Contractor shall
 1017 take every precaution against loss or damage to any part of the work by the action
 1018 of the elements or from any other cause whatsoever, whether arising from the
 1019 performance or from the non-performance of the work. The Contractor shall
 1020 rebuild, repair, restore and make good all loss or damage to any portion of the
 1021 work resulting from any cause before its receipt of the written notice of final
 1022 acceptance and shall bear the risk and expense thereof.

1023

1024 The risk of loss or damage to the work from any hazard or occurrence that
 1025 may or may not be covered by a builder’s risk policy is that of the Contractor and
 1026 Surety, unless such risk of loss is placed elsewhere by express language in the
 1027 contract documents.

1028

1029 **108.17 Guarantee of Work.**

1030

1031 **(1)** Regardless of, and in addition to, any manufacturers’ warranties, all
 1032 work and equipment shall be guaranteed by the Contractor against defects
 1033 in materials, equipment or workmanship for one (1) year from the date of
 1034 final acceptance or as otherwise specified in the contract documents.

1035

1036 **(2)** When the Engineer determines that repairs or replacements of any
 1037 guaranteed work and equipment is necessary due to materials, equipment,
 1038 or workmanship which are inferior, defective, or not in accordance with the
 1039 terms of the contract, the Contractor shall, at no increase in contract price
 1040 or contract time, and within five (5) working days of receipt of written notice
 1041 from the State, commence to all of the following:

1042

1043 **(a)** Correct all noted defects and make replacements, as directed
 1044 by the Engineer, in the equipment and work.

1045
 1046 **(b)** Repair or replace to new or pre-existing condition any
 1047 damages resulting from such defective materials, equipment or
 1048 installation thereof.

1049
 1050 **(3)** The State will be entitled to the benefit of all manufacturers and
 1051 installers warranties that extend beyond the terms of the Contractor's
 1052 guaranty regardless of whether or not such extended warranty is required
 1053 by the contract documents. The Contractor shall prepare and submit all
 1054 documents required by the providers of such warranties to make them
 1055 effective, and submit copies of such documents to the Engineer. If an
 1056 available extended warranty cannot be transferred or assigned to the State
 1057 as the ultimate user, the Contractor shall notify the Engineer who may direct
 1058 that the warranted items be acquired in the name of the State as purchaser.

1059
 1060 **(4)** If a defect is discovered during a guarantee period, all repairs and
 1061 corrections to the defective items when corrected shall be guaranteed for a
 1062 new duration equal to the original full guarantee period. The running of the
 1063 guarantee period shall be suspended for all other work affected by any
 1064 defect. The guarantee period for all other work affected by any such defect
 1065 shall restart for its remaining duration upon confirmation by the Engineer
 1066 that the deficiencies have been repaired or remedied.

1067
 1068 **(5)** Nothing in this section is intended to limit or affect the State's rights
 1069 and remedies arising from the discovery of latent defects in the work after
 1070 the expiration of any guarantee period.

1071
 1072 **108.18 No Waiver of Legal Rights.** The following will not operate or be
 1073 considered as a waiver of any portion of the contract, or any power herein
 1074 reserved, or any right to damages provided herein or by law:

- 1075
 1076 **(1)** Any payment for, or acceptance of, the whole or any part of the work.
 1077
 1078 **(2)** Any extension of time.
 1079
 1080 **(3)** Any possession taken by the Engineer.

1081
 1082 A waiver of any notice requirement or of any noncompliance with the
 1083 contract will not be held to be a waiver of any other notice requirement or any
 1084 other noncompliance with the contract.

1085
 1086 **108.19 Final Settlement of Contract.**
 1087
 1088 **(A) Closing Requirements.** The contract will be considered settled
 1089 after the project acceptance date and when the following items have been
 1090 satisfactorily submitted, where applicable:

- 1091 (1) All written guarantees required by the contract.
1092
1093 (2) Complete and certified weekly payrolls for the Contractor and
1094 its subcontractor's.
1095
1096 (3) Certificate of plumbing and electrical inspection.
1097
1098 (4) Certificate of building occupancy.
1099
1100 (5) Certificate for soil treatment and wood treatment.
1101
1102 (6) Certificate of water system chlorination.
1103
1104 (7) Certificate of elevator inspection, boiler and pressure pipe
1105 installation.
1106
1107 (8) Tax clearance.
1108
1109 (9) All other documents required by the Contract or by law.
1110

1111 **(B) Failure to Meet Closing Requirements.** The Contractor shall meet
1112 the applicable closing requirements within sixty (60) days from the date of
1113 Project Acceptance or the agreed to Punchlist complete date. Should the
1114 Contractor fail to comply with these requirements, the Engineer may
1115 terminate the contract for cause.”
1116
1117
1118
1119
1120

END OF SECTION 108

47 **(IV)** Amend **Subsection 109.11 Final Payment** by revising lines 568 to 576
48 to read as follows:

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73

(3) A current “Certificate of Vendor Compliance” issued by the Hawaii Compliance Express (HCE). The Certificate of Vendor Compliance is used to certify the Contractor’s compliance with

(a) Section 103D-328, HRS (for all contracts \$25,000 or more) which requires a current tax clearance certificate issued by the Hawaii State Department of Taxation and the Internal Revenue Service;

(b) Chapters 383, 386, 392, and 393, HRS; and

(c) Subsection 103D-310(c), HRS. The State reserves the right to verify that compliance is current prior to the issuance of final payment. Contractors are advised that non-compliance status will result in final payment being withheld until compliance is attained.

Sums necessary to meet the claims of any governmental agencies may be withheld from the sums due the Contractor until said claims have been fully and completely discharged or otherwise satisfied.”

END OF SECTION 109

1 **SECTION 203 – EXCAVATION AND EMBANKMENT**

2
3 Make the following amendments to said Section:

4
5 **(I)** Amend **203.03(C)(2)(a) – Maximum Dry Unit Weight** from line 245 to line
6 255 to read as follows:

7
8 **“(a) Maximum Dry Unit Weight.** Test for maximum dry
9 unit weight according to AASHTO T 180, and apply the
10 correction for fraction larger than 3/4 inch. Use Hawaii
11 Test Method HDOT TM 5 for sample preparation of sensitive
12 soils when so designated by the Engineer.”

13
14 **(II)** Amend **203.04 – Measurement** by revising lines 345 to 366 to read as
15 follows:

16
17 **“203.04 Measurement.**

18
19 **(A)** The Engineer will measure roadway excavation per cubic yard.
20 The Engineer will compute quantities of roadway excavation by average
21 end area method and centerline distances. Curvature correction will not
22 be applied to quantities within roadway prism, as indicated in the contract
23 documents. In computing excavation quantities from outside the roadway
24 prism, where roadway centerline is used as a base, curvature correction
25 will be applied when centerline radius is 1,000 feet or less.

26
27 When roadway excavation quantities by average end area method
28 cannot be computed due to the nature of a particular operation or changed
29 conditions, the Engineer will determine and use computation method that
30 will produce an accurate quantity estimate.

31
32 **(B)** The Engineer will measure borrow excavated material per cubic
33 yard. The Engineer will compute quantities of borrow material
34 incorporated into the work on a volume basis, using average end area
35 method in place at work site.”

36
37 **(III)** Amend **203.05 – Payment** by revising lines 368 to 457 to read as follows:

38
39 **“203.05 Payment.** The Engineer will pay for the accepted pay items listed
40 below at the contract price per pay unit, as shown in the proposal schedule.
41 Payment will be full compensation for the work prescribed in this section and the
42 contract documents.

43
44 The Engineer will pay for each of the following pay items when included in
45 the proposal schedule:

| | | |
|----|--|-----------------|
| 47 | Pay Item | Pay Unit |
| 48 | | |
| 49 | (A) Roadway Excavation | Cubic Yard |
| 50 | | |
| 51 | The Engineer will pay for: | |
| 52 | | |
| 53 | (1) 15 percent of the contract bid price upon completion of | |
| 54 | obliterating old roadways and hauling. | |
| 55 | | |
| 56 | (2) 30 percent of the contract bid price upon completion of | |
| 57 | preparing subgrade. | |
| 58 | | |
| 59 | (3) 40 percent of the contract bid price upon completion of placing | |
| 60 | selected material in final position, rounding of slopes, and using water | |
| 61 | for compaction. | |
| 62 | | |
| 63 | (4) 15 percent of the contract bid price upon completion of | |
| 64 | disposing of surplus excavation material. | |
| 65 | | |
| 66 | (B) Borrow Excavated Material | Cubic Yard |
| 67 | | |
| 68 | The Engineer will pay for: | |
| 69 | | |
| 70 | (1) 10 percent of the contract bid price upon completion of staking | |
| 71 | out and cross sectioning existing condition at borrow excavated and in- | |
| 72 | place sites and establishing borrow area. | |
| 73 | | |
| 74 | (2) 5 percent of the contract bid price upon completion of providing, | |
| 75 | replacing, and maintaining temporary and permanent fencing, and | |
| 76 | confining livestock. | |
| 77 | | |
| 78 | (3) 15 percent of the contract bid price upon completion of all | |
| 79 | necessary storing and processing of borrow material. | |
| 80 | | |
| 81 | (4) 15 percent of the contract bid price upon completion of watering | |
| 82 | and hauling material to work site. | |
| 83 | | |
| 84 | (5) 20 percent of the contract bid price upon completion of placing, | |
| 85 | grading, and compacting material in accordance with contract | |
| 86 | requirements at work site. | |
| 87 | | |
| 88 | (6) 15 percent of the contract bid price upon completion of restoring | |
| 89 | and regrading borrow area. | |
| 90 | | |

91 (7) 10 percent of the contract bid price upon completion of staking
92 out and cross sectioning final condition at borrow excavated and in-
93 place sites.

94
95 (8) 10 percent of the contract bid price upon completion of
96 removing and disposing of excess and unsuitable material from work
97 site.

98
99 The Engineer will pay for accepted quantities of subexcavation, as
100 roadway excavation at the contract unit price per cubic yard, when ordered by
101 the Engineer, for work prescribed in Subsection 203.03(A)(4) – Subexcavation.
102 Payment will be full compensation for the work prescribed therein and in the
103 contract documents.

104
105 The Engineer will pay for accepted quantities of unlined gutter excavation
106 as roadway excavation at the contract unit price per cubic yard, when gutter is
107 located as follows: within median area of a divided highway; and between
108 roadbed shoulder and adjacent cut slope. Payment will be full compensation for
109 removing and disposing of excavated material; backfilling and compacting; and
110 for the work prescribed in the contract documents.

111
112 The Engineer will not pay for stockpiling selected material, placing
113 selected material in final position, or placing selected material in windrows along
114 tops of roadway slopes for erosion control work, separately and will consider the
115 cost as included in the unit prices for the various excavation contract pay items.
116 The cost is for work prescribed in this section and the contract documents.

117
118 The Engineer will not pay for overhaul separately and will consider the
119 cost as included in the unit prices for the various excavation contract pay items.
120 The cost is for work prescribed in this section and the contract documents.

121
122 The Engineer will not pay for embankment separately and will consider the
123 cost as included in the unit price for roadway excavation. The cost is for work
124 prescribed in this section and the contract documents.”

125
126
127
128 **END OF SECTION 203**

1 Amend **Section 209 - TEMPORARY WATER POLLUTION, DUST, AND EROSION**
2 **CONTROL** to read as follows:

3
4
5 **“SECTION 209 - TEMPORARY WATER POLLUTION, DUST, AND EROSION**
6 **CONTROL**

7
8
9 **209.01 Description.** This section describes the following:

10
11 **(A)** Including detailed plans, diagrams, and written Site-Specific Best
12 Management Practices (BMP); constructing, maintaining, and repairing
13 temporary water pollution, dust, and erosion control measures at the project
14 site, including local material sources, work areas and haul roads; removing
15 and disposing hazardous wastes; control of fugitive dust (defined as
16 uncontrolled emission of solid airborne particulate matter from any source
17 other than combustion); and complying with applicable State and Federal
18 permit conditions.

19
20 **(B)** Work associated with construction stormwater, dewatering, and
21 hydrotesting activities and complying with conditions of the National Pollutant
22 Discharge Elimination System (NPDES) permit(s) authorizing discharges
23 associated with construction stormwater, dewatering, and hydrotesting
24 activities.

25
26 **(C)** Potential pollutant identification and mitigation measures are listed in
27 Appendix A for use in the development of the Contractor’s Site-Specific BMP.

28
29 Requirements of this section also apply to construction support
30 activities including concrete or asphalt batch plants, rock crushing plants,
31 equipment staging yards/areas, material storage areas, excavated material
32 disposal areas, and borrow areas located outside the State Right-of-Way.
33 For areas serving multiple construction projects, or operating beyond the
34 completion of the construction project in which it supports, the Contractor
35 shall be responsible for securing the necessary permits, clearances, and
36 documents, and following the conditions of the permits and clearances, at no
37 cost to the State.

38
39 **209.02 Materials.** Comply with applicable materials described in Chapters 2 and
40 3 of the current HDOT “Construction Best Management Practices Field Manual”. In
41 addition, the materials shall comply with the following:

42
43 **(A) Grass.** Grass shall be a quick growing species such as rye grass,
44 Italian rye grass, or cereal grasses. Grass shall be suitable to the area and
45 provide a temporary cover that will not compete later with permanent cover.
46 Alternative grasses are allowable if acceptable to the Engineer.

47 **(B) Fertilizer and Soil Conditioners.** Fertilizer and soil conditioners shall
48 be a standard commercial grade acceptable to the Engineer. Fertilizer shall
49 conform to Subsection 619.02(H)(1) - Commercial Fertilizer.
50

51 **(C) Hydro-mulching.** Hydro-mulching used as a temporary vegetative
52 stabilization measure shall consist of materials in Subsections 209.02(A) -
53 Grass, and 209.02(B) – Fertilizer and Soil Conditioners. Mulches shall be
54 recycled materials including bagasse, hay, straw, wood cellulose bark, wood
55 chips, or other material acceptable to the Engineer. Mulches shall be clean
56 and free of noxious weeds and deleterious materials. Potable water shall
57 meet the requirements of Subsection 712.01 - Water. Submit alternate
58 sources of irrigation water for the Engineer’s acceptance if deviating from
59 712.01 - Water. Installation and other requirements shall be in accordance
60 with portions of Section 641- Hydro-Mulch Seeding including 641.02(D) - Soil
61 and Mulch Tackifier, 641.03(A) – Seeding, and 641.03(B) - Planting Period.
62 Install non-vegetative controls including mulch or rolled erosion control
63 products while the vegetation is being established. Water and fertilize grass.
64 Apply fertilizer as recommended by the manufacturer. Replace grass the
65 Engineer considers unsuitable or sick. Remove and dispose of trash and
66 debris. Remove invasive species. Mow as needed to prevent site or signage
67 obstructions, fire hazard, or nuisance to the public. Do not remove down
68 stream sediment control measures until the vegetation is uniformly
69 established, including no large bare areas, and provides 70 percent of the
70 density of pre-disturbance vegetation. Temporary vegetative stabilization
71 shall not be used longer than one year.
72

73 **(D) Silt Fences.** Comply with ASTM D6462, Standard Practice for Silt
74 Fence Installation.
75

76 Alternative materials or methods to control, prevent, remove and dispose
77 pollution are allowable if acceptable to the Engineer.
78

79 **209.03 Construction.**
80

81 **(A) Preconstruction Requirements.**
82

83 **(1) Water Pollution, Dust, and Erosion Control Meeting.**
84 Schedule a water pollution, dust, and erosion control meeting with the
85 Engineer after Site-Specific BMP is accepted in writing by the
86 Engineer. Meeting shall be scheduled a minimum of 7 calendar days
87 prior to the Start Work Date. Discuss sequence of work, plans and
88 proposals for water pollution, dust, and erosion control.
89

90 **(2) Water Pollution, Dust, and Erosion Control Submittals.**

91 Submit a Site-Specific BMP Plan within 21 calendar days of date of
92 award. Submission of complete and acceptable Site-Specific BMP
93 Plan is the sole responsibility of the Contractor and additional contract
94 time will not be issued for delays due to incompleteness. Include the
95 following:

96
97 **(a)** Written description of activities to minimize water
98 pollution and soil erosion into State waters, drainage or sewer
99 systems. BMP shall include the following:

100
101 **1.** An identification of potential pollutants and their
102 sources.

103
104 **2.** A list of all materials and heavy equipment to be
105 used during construction.

106
107 **3.** Descriptions of the methods and devices used to
108 minimize the discharge of pollutants into State waters,
109 drainage or sewer systems.

110
111 **4.** Details of the procedures used for the
112 maintenance and subsequent removal of any erosion or
113 siltation control devices.

114
115 **5.** Methods of removing and disposing hazardous
116 wastes encountered or generated during construction.

117
118 **6.** Methods of removing and disposing concrete and
119 asphalt pavement cutting slurry, concrete curing water,
120 and hydrodemolition water.

121
122 **7.** Spill Control and Prevention and Emergency Spill
123 Response Plan.

124
125 **8.** Fugitive dust control, including dust from grinding,
126 sweeping, or brooming off operations or combination
127 thereof.

128
129 **9.** Methods of storing and handling of oils, paints
130 and other products used for the project.

131
132 **10.** Material storage and handling areas, and other
133 staging areas.

134
135 **11.** Concrete truck washouts.

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- 12.** Concrete waste control.
- 13.** Fueling and maintenance of vehicles and other equipment.
- 14.** Tracking of sediment offsite from project entries and exits.
- 15.** Litter management.
- 16.** Toilet facilities.
- 17.** Other factors that may cause water pollution, dust and erosion control.

(b) Provide plans indicating location of water pollution, dust and erosion control devices; provide plans and details of BMPs to be installed or utilized; show areas of soil disturbance in cut and fill, indicate areas used for construction staging and storage including items (1) through (17) above, storage of aggregate (indicate type of aggregate), asphalt cold mix, soil or solid waste, equipment and vehicle parking, and show areas where vegetative practices are to be implemented. Indicate intended drainage pattern on plans. Include flow arrows. Include separate drawing for each phase of construction that alters drainage patterns. Indicate approximate date when device will be installed and removed.

(c) Construction schedule.

(d) Name(s) of specific individual(s) designated responsible for water pollution, dust, and erosion controls on the project site. Include home, cellular, and business telephone numbers, fax numbers, and e-mail addresses.

(e) Description of fill material to be used.

(f) For projects with an NPDES Permit for Construction Activities, submit information to address all sections in the Storm Water Pollution Prevention Plan (SWPPP).

(g) For projects with an NPDES Permit, information required for compliance with the conditions of the Notice of General Permit Coverage (NGPC)/NPDES Permit.

181 (h) Site-Specific BMP Review Checklist. The checklist may
182 be downloaded from HDOT's Stormwater Management
183 website at <http://stormwaterhawaii.com>.
184

185 Date and sign Site-Specific BMP Plan. Keep accepted
186 copy on site or at an accessible location so that it can be made
187 available at the time of an on-site inspection or upon request by
188 the Engineer, HDOT Third-Party Inspector, and/or DOH/EPA
189 Representative. Amendments to the Site-Specific BMP Plan
190 shall be included with original Site-Specific BMP Plan. Modify
191 SWPPP if necessary to conform to revisions. Include date of
192 installation and removal of Site-Specific BMP measures.
193 Obtain written acceptance by the Engineer before
194 implementing revised Site-Specific BMPs in the field.
195

196 Follow the guidelines in the current HDOT "Construction
197 Best Management Practices Field Manual", in developing,
198 installing, and maintaining Site-Specific BMPs for all projects.
199 For any conflicting requirements between the Manual and
200 applicable bid documents, the applicable bid documents will
201 govern. Should a requirement not be clearly described within
202 the applicable bid documents, notify the Engineer immediately
203 for interpretation. For the purposes of clarification "applicable
204 bid documents" include the construction plans, standard
205 specifications, special provisions, Permits, and the SWPPP
206 when applicable.
207

208 Follow Honolulu's City and County "Rules for Soil
209 Erosion Standards and Guidelines" for all projects on Oahu.
210 Use respective Soil Erosion Guidelines for Maui, Kauai and
211 Hawaii projects.
212

213 **(B) Construction Requirements.** Do not begin work until submittals
214 detailed in Subsection 209.03(A)(2) - Water Pollution, Dust, and Erosion
215 Control Submittals are completed and accepted in writing by the Engineer.
216

217 Install, maintain, monitor, repair and replace site-specific BMP
218 measures, such as for water pollution, dust and erosion control; installation,
219 monitoring, and operation of hydrotesting activities; removal and disposal of
220 hazardous waste indicated on plans, concrete cutting slurry, concrete curing
221 water; or hydrodemolition water. Site-Specific BMP measures shall be in
222 place, functional and accepted by HDOT personnel prior to initiating any
223 ground disturbing activities.
224

225 If necessary, furnish and install rain gage in a secure location prior to
226 field work including installation of site-specific BMP. Provide rain gage with
227 a tolerance of at least 0.05 inches of rainfall. Install rain gage on project site
228 in an area that will not deter rainfall from entering the gate opening. Do not
229 install in a location where rain water may splash into rain gage. The rain
230 gage installation shall be stable and plumbed. Maintain rain gage and
231 replace rain gage that is stolen, does not function properly or accurately, is
232 worn out, or needs to be relocated. Do not begin field work until rain gage is
233 installed and Site-Specific BMPs are in place. Rain gage data logs shall be
234 readily available. Submit rain gage data logs weekly to the Engineer.

235
236 Address all comments received from the Engineer.

237
238 Modify and resubmit plans and construction schedules to correct
239 conditions that develop during construction which were unforeseen during
240 the design and pre-construction stages.

241
242 Coordinate temporary control provisions with permanent control
243 features throughout the construction and post-construction period.

244
245 Limit maximum surface area of earth material exposed at any time to
246 300,000 square feet. Do not expose or disturb surface area of earth material
247 (including clearing and grubbing) until BMP measures are installed and
248 accepted in writing by the Engineer. Protect temporarily or permanently
249 disturbed soil surface from rainfall impact, runoff and wind before end of the
250 work day.

251
252 Immediately initiate stabilizing exposed soil areas upon completion of
253 earth disturbing activities for areas permanently or temporarily ceased on any
254 portion of the site. Earth-disturbing activities have permanently ceased when
255 clearing and excavation within any area of the construction site that will not
256 include permanent structures has been completed. Earth-disturbing
257 activities have temporarily ceased when clearing, grading, and excavation
258 within any area of the site that will not include permanent structures will not
259 resume for a period of 14 or more calendar days, but such activities will
260 resume in the future. The term "immediately" is used in this section to define
261 the deadline for initiating stabilization measures. "Immediately" means as
262 soon as practicable, but no later than the end of the next work day, following
263 the day when the earth-disturbing activities have temporarily or permanently
264 ceased.

265
266 For projects with an NPDES Permit for Construction activities:
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(1) For construction areas discharging into waters not impaired for nutrients or sediments, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities.

(2) 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.

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.

Any of the following types of activities constitutes initiation of stabilization:

- (1)** Prepping the soil for vegetative or non-vegetative stabilization;
- (2)** Applying mulch or other non-vegetative product to the exposed area;
- (3)** Seeding or planting the exposed area;
- (4)** Starting any of the activities in items (1) – (3) above on a portion of the area to be stabilized, but not on the entire area; and
- (5)** Finalizing arrangements to have stabilization product fully installed in compliance with the deadline for completing initial stabilization activities.

Any of the following types of activities constitutes completion of initial stabilization activities:

- (1)** For vegetative stabilization, all activities necessary to initially seed or plant the area to be stabilized; and/or
- (2)** For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

If the Contractor is unable to meet the deadlines above due to circumstances beyond the Contractor's control, and the Contractor is using vegetative cover for temporary or permanent stabilization, the Contractor may comply with the following stabilization deadlines instead as agreed to by the Engineer:

314 (1) Immediately initiate, and complete within the timeframe shown
315 above, the installation of temporary non-vegetative stabilization
316 measures to prevent erosion;

317
318 (2) Complete all soil conditioning, seeding, watering or irrigation
319 installation, mulching, and other required activities related to the
320 planting and initial establishment of vegetation as soon as conditions
321 or circumstances allow it on the site; and

322
323 (3) Notify and provide documentation to the Engineer the
324 circumstances that prevent the Contractor from meeting the deadlines
325 above for stabilization and the schedule the Contractor will follow for
326 initiating and completing initial stabilization and as agreed to by the
327 Engineer.

328
329 Follow the applicable requirements of the specifications and special
330 provisions including Section 619 - Planting and Section 641 - Hydro-Mulch
331 Seeding.

332
333 Immediately after seeding or planting the area to be vegetatively
334 stabilized, to the extent necessary to prevent erosion on the seeded or
335 planted area, select, design, and install non-vegetative erosion controls that
336 provide cover (e.g., mulch, rolled erosion control products) to the area while
337 vegetation is becoming established.

338
339 Protect exposed or disturbed surface area with mulches, grass seeds
340 or hydro-mulch. Spray mulches at a rate of 2,000 pounds per acre. Add
341 tackifier to mix at a rate of 85 pounds per acre. Apply grass seeds at a rate
342 of 125 pounds per acre. For hydromulch, use the ingredients and rates
343 required for mulches and grass seeds. Submit recommendations from a
344 licensed Landscape Architect when deviating from the application rates
345 above.

346
347 Apply fertilizer to mulches, grass seed or hydromulch per
348 manufacturer's recommendations. Submit recommendations from a licensed
349 Landscape Architect when deviating from the manufacturer's
350 recommendations.

351
352 Install velocity dissipation measures when exposing erodible surfaces
353 greater than 15 feet in height.

354
355 BMP measures shall be in place and operational at the end of work
356 day or as required by Section 209.03(B) - Construction Requirements.

357

358 Install and maintain either or both stabilized construction entrances
359 and wheel washes to minimize tracking of dirt and mud onto roadways.
360 Restrict traffic to stabilized construction areas only. Clean dirt, mud, or other
361 material tracked onto the road, sidewalk, or other paved area by the end of
362 the same day in which the track-out occurs. Modify stabilized construction
363 entrances to prevent mud from being tracked onto road. Stabilize entire
364 access roads if necessary.

365
366 Chemicals may be used as soil stabilizers for either or both erosion
367 and dust control if acceptable to the Engineer.

368
369 Provide temporary slope drains of rigid or flexible conduits to carry
370 runoff from cuts and embankments. Provide portable flume at the entrance.
371 Shorten or extend temporary slope drains to ensure proper function.

372
373 Protect ditches, channels, and other drainageways leading away from
374 cuts and fills at all times by either:

- 375
376 (1) Hydro-mulching the lower region of embankments in the
377 immediate area.
378
379 (2) Installing check dams and siltation control devices.
380
381 (3) Other methods acceptable to the Engineer.

382
383 Provide for controlled discharge of waters impounded, directed, or
384 controlled by project activities or erosion control measures.

385
386 Cover exposed surface of materials completely with tarpaulin or
387 similar device when transporting aggregate, soil, excavated material or
388 material that may be source of fugitive dust.

389
390 Cleanup and remove any pollutant that can be attributed to the
391 Contractor.

392
393 Install or modify Site-Specific BMP measures due to change in the
394 Contractor's means and methods, or for omitted condition that should have
395 been allowed for in the accepted Site-Specific BMP or a Site-Specific BMP
396 that replaces an accepted Site-Specific BMP that is not satisfactorily
397 performing. Modifications to Site-Specific BMP measures shall be accepted
398 in writing by the Engineer prior to implementation.

399
400 Properly maintain all Site-Specific BMP measures.

401
402 For projects with an NPDES Permit for Construction Activities:
403

404 (1) For construction areas discharging into nutrient or sediment
405 impaired waters, inspect, prepare a written report, and make repairs
406 to BMP measures at the following intervals:

- 407
- 408 (a) Weekly.
 - 409
 - 410 (b) Within 24 hours of any rainfall of 0.25 inch or greater
411 which occurs in a 24-hour period.
 - 412
 - 413 (c) When existing erosion control measures are damaged
414 or not operating properly as required by Site-Specific BMP.
 - 415

416 (2) For construction areas discharging to waters not impaired for
417 nutrients or sediments, inspect, prepare a written report, and make
418 repairs to BMP measures at the following intervals:

- 419
- 420 (a) Weekly.
 - 421
 - 422 (b) When existing erosion control measures are damaged
423 or not operating properly as required by Site-Specific BMP.
 - 424

425 For projects without an NPDES Permit for Construction activities,
426 inspect, prepare a written report, and make repairs to BMP measures at the
427 following intervals:

- 428
- 429 (a) Weekly.
 - 430
 - 431 (b) When existing erosion control measures are damaged
432 or not operating properly as required by Site-Specific BMP.
 - 433

434 Temporarily remove, replace or relocate any Site-Specific BMP that
435 must be removed, replaced or relocated due to potential or actual flooding,
436 or potential danger or damage to project or public.

437

438 Maintain records of inspections of Site-Specific BMP work. Keep
439 continuous records for duration of the project. Submit copy of Inspection
440 Report to the Engineer within 24 hours after each inspection.

441

442 The Contractor's designated representative specified in Subsection
443 209.03(A)(2)(d) shall address any Site-Specific BMP deficiencies brought up
444 by the Engineer immediately, including weekends and holidays, and
445 complete work to fix the deficiencies by the close of the next work day if the
446 problem does not require significant repair or replacement, or if the problem
447 can be corrected through routine maintenance. Address any Site-Specific
448 BMP deficiencies brought up by the State's Third-Party Inspector in the
449 timeframe above or as specified in the Consent Decree or MS4 NPDES

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Permit, whichever is more stringent. The Consent Decree timeframe requirement applies statewide. The MS4 NPDES Permit only applies to Oahu. In this section, “immediately” means the Contractor shall take all reasonable measures to minimize or prevent discharge of pollutants until a permanent solution is installed and made operational. If a problem is identified at a time in the day in which it is too late to initiate repair, initiation of repair shall begin on the following work day. When installation of a new pollution prevention control or a significant repair is needed, complete installation or repair no later than 7 calendar days from the time of notification/Contractor discovery. Notify the Engineer and document why it is infeasible to complete the installation or repair within 7 calendar days and complete the work as soon as practicable and as agreed to by the Engineer. Address Site-Specific BMP deficiencies discovered by the Contractor within the timeframe above. The Contractor’s failure to satisfactorily address these Site-Specific BMP deficiencies, the Engineer reserves the right to employ outside assistance or use the Engineer’s own labor forces to provide necessary corrective measures. The Engineer will charge the Contractor such incurred costs plus any associated project engineering costs. The Engineer will make appropriate deductions from the Contractor’s monthly progress estimate. Failure to apply Site-Specific BMP measures may result in one or more of the following: assessment of liquidated damages, suspension, or cancellation of Contract with the Contractor being fully responsible for all additional costs incurred by the State.

(C) Discharges of Storm Water Associated with Construction Activities. If work includes disturbance of one acre or more, an NPDES Permit authorizing Discharges of Storm Water Associated with Construction Activity (CWB-NOI Form C) or Individual Permit authorizing storm water discharges associated with construction activity is required from the Department of Health Clean Water Branch (DOH-CWB).

Do not begin construction activities until all required conditions of the permit are met and submittals detailed in Subsection 209.03(A)(2) – Water Pollution, Dust, and Erosion Control Submittals are completed and accepted in writing by the Engineer.

(D) Discharges Associated with Hydrotesting Activities. If hydrotesting activities require effluent discharge into State waters or drainage systems, an NPDES Hydrotesting Waters Permit (CWB-NOI Form F) or Individual Permit authorizing discharges associated with hydrotesting from DOH-CWB is required from the DOH-CWB.

Do not begin hydrotesting activities until the DOH-CWB has issued an Individual NPDES Permit or Notice of General Permit Coverage (NGPC). Conduct Hydrotesting operations in accordance with the conditions of the permit or NGPC.

496 **(E) Discharges Associated with Dewatering Activities.** If dewatering
497 activities require effluent discharge into State waters or drainage systems, an
498 NPDES Dewatering Permit (CWB-NOI Form G) or Individual Permit
499 authorizing discharges associated with dewatering from DOH-CWB is
500 required from the DOH-CWB.
501

502 Do not begin dewatering activities until the DOH-CWB has issued an
503 Individual NPDES Permit or Notice of General Permit Coverage (NGPC).
504 Conduct dewatering operations in accordance with the conditions of the
505 permit or NGPC.
506

507 **(F) Solid Waste.** Submit the Solid Waste Disclosure Form for
508 Construction Sites to the Engineer within 21 calendar days of date of award.
509 Provide a copy of all the disposal receipts from the facility permitted by the
510 Department of Health to receive solid waste to the Engineer monthly. This
511 should also include documentation from any intermediary facility where solid
512 waste is handled or processed, or as directed by the Engineer.
513

514 **(G) Construction BMP Training.** The Contractor's representative
515 responsible for development of the Site-Specific BMP Plan and
516 implementation of Site-Specific BMPs in the field shall attend the State's
517 Construction Best Management Practices Training. The Contractor shall
518 keep training logs updated and readily available.
519

520 **209.04 Measurement.**
521

522 **(A)** Installation, maintenance, monitoring, and removal of BMP will be paid
523 on a lump sum basis. Measurement for payment will not apply.
524

525 **(B)** The Engineer will only measure additional water pollution, dust and
526 erosion control required and requested by the Engineer on a force account
527 basis in accordance with Subsection 109.06 – Force Account Provisions and
528 Compensation.
529

530 **209.05 Payment.** The Engineer will pay for accepted pay items listed below at
531 contract price per pay unit, as shown in the proposal schedule. Payment will be full
532 compensation for work prescribed in this section and contract documents.
533

534 The Engineer will pay for each of the following pay items when included in
535 proposal schedule:
536

| 537 Pay Item | 538 Pay Unit |
|---|---------------------|
| 539 Installation, Maintenance, Monitoring, and Removal of BMP | Lump Sum |
| 540 Additional Water Pollution, Dust, and Erosion Control | Force Account |

541
542

543 An estimated amount for force account is allocated in proposal schedule
544 under 'Additional Water Pollution, Dust, and Erosion Control', but actual amount to
545 be paid will be the sum shown on accepted force account records, whether this sum
546 be more or less than estimated amount allocated in proposal schedule. The
547 Engineer will pay for BMP measures requested by the Engineer that are beyond
548 scope of accepted Site-Specific BMP on a force account basis.

549
550 No progress payment will be authorized until the Engineer accepts in writing
551 Site-Specific BMP or when the Contractor fails to maintain project site in accordance
552 with accepted BMP.

553
554 For all citations or fines received by the Department for non-compliance,
555 including compliance with NPDES Permit conditions, the Contractor shall reimburse
556 State within 30 calendar days for full amount of outstanding cost State has incurred,
557 or the Engineer will deduct cost from progress payment.

558
559 The Engineer will assess liquidated damages up to \$27,500 per day for non-
560 compliance of each BMP requirement and all other requirements in this section.
561

562 **Appendix A**

563

564 The following list identifies potential pollutant sources and corresponding
565 BMPs used to mitigate the pollutants. Each BMP is referenced to the corresponding
566 section of the current HDOT Construction Best Management Practices Field Manual
567 or appropriate Supplemental Sheets. The Manual may be obtained from the HDOT
568 Statewide Stormwater Management Program Website at
569 <http://www.stormwaterhawaii.com/resources/contractors-and-consultants/> under
570 Construction Best Management Practices Field Manual. Supplemental BMP sheets
571 are located at <http://www.stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swppp/> under Concrete Curing
572 and Irrigation Water.
573
574

| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements |
|--|--|---|
| <p><i>Construction debris, green waste, general litter</i></p> | <ul style="list-style-type: none"> • <i>Separate contaminated clean up materials from construction and demolition (C&D) wastes.</i> • <i>Provide waste containers (e.g., dumpster or trash receptacle) of sufficient size and number to contain construction and domestic wastes.</i> • <i>Inspect construction waste and recycling areas regularly.</i> • <i>Schedule solid waste collection regularly.</i> • <i>Schedule recycling activities based on construction/demolition phases.</i> • <i>Empty waste containers weekly or when they are two-thirds full, whichever is sooner.</i> • <i>Do not allow containers to overflow. Clean up immediately if they do.</i> • <i>On work days, clean up and dispose of waste in designated waste containers.</i> • <i>See Solid Waste Management Section SM-6 for additional requirements.</i> • <i>Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</i> • <i>Collect and dispose of all waste materials in trash dumpsters. Place dumpsters, with secure watertight lids, away from storm water conveyances and drains, in a covered materials storage area.</i> • <i>Dispose of construction and non- construction solid waste in accordance with State DOH regs.</i> • <i>Load removed non- recyclable vegetation directly onto trucks; cover and transport to a licensed facility</i> | <p><i>See Solid Waste Management Section SM-6. Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.</i></p> |

| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements |
|--|--|--|
| <p><i>Materials associated with the operation and maintenance of equipment, such as oil, fuel, and hydraulic fluid leakage</i></p> | <ul style="list-style-type: none"> • <i>Use off-site wash racks, repair and maintenance facilities, and fueling sites when practical.</i> • <i>Designate bermed wash area if cleaning on site is necessary.</i> • <i>Place drip pans or drop cloths under vehicles and equipment to absorb spills or leaks.</i> • <i>Provide an ample supply of readily available spill cleanup materials.</i> • <i>Clean up spills immediately, using dry cleanup methods where possible, and dispose of used materials properly.</i> • <i>Do not clean surfaces or spills by hosing the area down.</i> • <i>Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.</i> • <i>Inspect on-site vehicles and equipment regularly and immediately repair leaks.</i> • <i>Regularly inspect fueling areas and storage tanks.</i> • <i>Train employees on proper maintenance and spill practices and procedures and fueling and cleanup procedures.</i> • <i>Store diesel fuel, oil, hydraulic fluid, or other petroleum products or other chemicals in water-tight containers and provide cover or secondary containment.</i> • <i>Do not remove original product labels and comply with manufacturer's labels for proper disposal.</i> • <i>Dispose of containers only after all the product has been used.</i> • <i>Dispose of or recycle oil or oily wastes according to Federal, State, and Local requirements.</i> • <i>Store soaps, detergents, or solvents under cover or other means to prevent contact with rainwater.</i> • <i>See Vehicle and Equipment Cleaning, Maintenance, and Refueling, Sections SM-11, SM-12, and SM-13 and Material Storage and Handling Section SM-2 for additional requirements.</i> | <p><i>See Vehicle and Equipment Cleaning, Maintenance, and Refueling, Sections SM-11, SM-12, and SM-13, and Material Storage and Handling, Section SM-2, and Spill Prevention and Control SM-10.</i></p> |

| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements |
|--|--|--|
| <p>Soil erosion from the disturbed areas</p> | <ul style="list-style-type: none"> • Provide Soil Stabilization, Slope Protection, Storm Drain Inlet Protection SC-1, Perimeter Controls and Sediment Barriers, Sediment Basins and Detention Ponds, Check Dams SC-3 ,Level Spreader EC-6, Paving Operations SM-20, Construction Roads and Parking Area Stabilization SC-10, Controlling Storm Water Flowing Onto and Through the Project, Post-Construction BMPs, and Non-Structural BMPs (Construction BMP Training SM-1, Scheduling SM-14, Location of Potential Sources of Sediment SM-15, Preservation of Existing Vegetation SM-17). • Delineate, and clearly mark off, with flags, tape, or other similar marking device all natural buffer areas defined in the SWPPP. • Preserve native topsoil where practicable. • In areas where vegetative stabilization will occur, restrict vehicle/equipment use in areas to avoid soil compaction or condition soil to promote vegetative growth. • For Storm Drain Inlet Protection, clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. • Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same day in which it is found or by the end of the following work day if removal by the same day is not feasible. • Sediment basins shall be designed and maintained in accordance with HAR Chapter 11-55. • Minimize disturbance on steep slopes (Greater than 15% in grade). • If disturbance of steep slopes are unavoidable, phase disturbances and use stabilization techniques designed for steep grades. • For temporary drains and swales use velocity dissipation devices within and at the outlet to minimize erosive flow velocities. | <p>Soil Stabilization</p> <ol style="list-style-type: none"> 1. SM-22 Topsoil Management 2. EC-12 Seeding and Planting 3. EC-14 Mulching 4. EC-11 Geotextiles and Mats <p>Slope Protection</p> <ol style="list-style-type: none"> 1. EC-12 Seeding and Planting 2. EC-14 Mulching 3. EC-11 Geotextiles and Mats 4. EC-4 Slope Roughening, Terracing, and Rounding 5. EC-7 Slope Drains and Subsurface Drains 6. EC-9 Slope Interceptor or Diversion Ditches/Berms <p>SC-1 Storm Drain Inlet Protection</p> |

| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements |
|-------------------------|--|--|
| | | <p><i>Perimeter Controls and Sediment Barriers</i></p> <ol style="list-style-type: none"> 1. SC-7 Silt Fence or Filter Fabric Fence 2. SC-2 Vegetated Filter Strips and Buffers 3. SC-6 Compost Filter Berm/Sock 4. SC-8 Sandbag Barrier 5. SC-9 Brush or Rock Filter <p><i>Sediment Basins and Detention Ponds</i></p> <ol style="list-style-type: none"> 1. SC-4 Sediment Trap 2. SC-5 Sediment Basin <p><i>SC-3 Check Dams</i></p> <p><i>EC-6 Level Spreader</i> <i>SM-20 Paving Operations</i> <i>SC-10 Construction Roads and Parking Area Stabilization</i></p> |

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| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements |
|-------------------------|--|---|
| | | <p><i>Controlling Storm Water Flowing onto and Through the Project</i></p> <ol style="list-style-type: none"> 1. <i>EC-3 Run-On Diversion</i> 2. <i>EC-5 Earth Dike, Swales and Ditches</i> <p><i>Post Construction BMPs</i></p> <ol style="list-style-type: none"> 1. <i>EC-2 Flared Culvert End Sections</i> 2. <i>EC-10 Rip-Rap and Gabion Inflow Protection</i> 3. <i>EC-8 Outlet Protection and Velocity Dissipation Devices</i> 4. <i>SM-22 Topsoil Management</i> <p><i>Non-Structural BMPs</i></p> <ol style="list-style-type: none"> 1. <i>SM-1 Construction BMP Training</i> 2. <i>SM-14 Scheduling</i> 3. <i>SM-15 Location of Potential Sources of Sediment</i> 4. <i>SM-17 Preservation of Existing Vegetation</i> |

| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements |
|---------------------------------------|---|--|
| Sediment from soil stockpiles | <ul style="list-style-type: none"> • Locate stockpiles a minimum of 50 feet or as far as practicable from concentrated runoff or outside of any natural buffers identified on the SWPPP. • Place bagged materials on pallets and under cover. • Provide physical diversion to protect stockpiles from concentrated runoff. • Cover stockpiles with plastic or comparable material when practicable. • Place silt fence, fiber filtration tubes, or straw wattles around stockpiles. • Do not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any storm water conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or state water. • Unless infeasible, contain and securely protect stockpiles from the wind. • Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable. See Stockpile Management Section SM-3 for additional requirements. | See Stockpile Management Section SM-3. Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable. |
| Emulsified asphalt or prime/tack coat | <ul style="list-style-type: none"> • Provide training for employees and contractors on proper material delivery and storage practices and procedures. • Restrict paving operations during wet weather to prevent paving materials from being discharged. • Use asphalt emulsions such as prime coat when possible. • Protect drain inlet structures and manholes during application of tack coat, seal coat, slurry seal, and fog seal. • Keep ample supplies of drip pans and absorbent materials on site. • Inspect inlet protection devices. • See Material Storage and Handling Section SM-2 and Paving Operations Section SM-20 for additional requirements. • Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable. | See Material Storage and Handling Section SM-2, and Stockpile Management Section SM-3, Paving Operations Section SM-20, Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable. |

| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements |
|--|---|---|
| <p><i>Materials associated with painting, such as paint and paint wash solvent</i></p> | <ul style="list-style-type: none"> • <i>Hazardous chemicals shall be well-labeled and stored in original containers.</i> • <i>Keep ample supply of cleanup materials on site.</i> • <i>Dispose container only after all of the product has been used.</i> • <i>Remove as much paint from brushes on painted surface.</i> • <i>Rinse from water-based paints shall be discharged into the sanitary sewer system where possible. If not, direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation.</i> • <i>Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies.</i> • <i>Do not dump liquid wastes into the storm drainage system.</i> • <i>Filter and re-use solvents and thinners.</i> • <i>Dispose of oil-based paints and residue as a hazardous waste.</i> • <i>Ensure collection, removal, and disposal of hazardous waste complies with regulations.</i> • <i>Immediately clean up spills and leaks.</i> • <i>Properly store paints, solvents, and epoxy compounds.</i> • <i>Properly store and dispose waste materials generated from painting and structure repair and construction activities.</i> • <i>Mix paints in a covered and contained area, when possible, to minimize adverse impacts from spills.</i> • <i>Do not apply traffic paint or thermoplastic if rain is forecasted.</i> • <i>See Material Storage and Handling Use SM-2, Hazardous Materials and Waste Management Section SM-9, Spill Prevention and Control Section SM-10, and Structure Construction and Painting Section SM-21 for additional requirements.</i> <p><i>Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</i></p> | <p><i>See Material Storage and Handling Use Section SM-2, Stockpile Management Section SM-3, Hazardous Materials and Waste Management Section SM-9, Waste Management, Spill Prevention and Control Section SM-10, and Structure Construction and Painting Section SM-21, Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.</i></p> |

| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements |
|--|---|--|
| <p><i>Industrial chemicals, fertilizers, and/or pesticides</i></p> | <ul style="list-style-type: none"> • <i>Hazardous chemicals shall be well-labeled and stored in original containers.</i> • <i>Keep ample supply of cleanup materials on site.</i> • <i>Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.</i> • <i>Do not clean surfaces or spills by hosing the area down.</i> • <i>Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.</i> • <i>Dispose container only after all of the product has been used.</i> • <i>Retain a complete set of safety data sheets (formerly MSDS) on site.</i> • <i>Store industrial chemicals in water-tight containers and provide either cover or secondary containment.</i> • <i>Provide cover when storing fertilizers or pesticides to prevent these chemicals from coming into contact with rainwater.</i> • <i>Restrict amount of pesticide prepared to quantity necessary for the current application.</i> • <i>Do not apply fertilizers or pesticides during or just before a rain event.</i> • <i>Do not apply to stormwater conveyance channels with flowing water.</i> • <i>Comply with fertilizer and pesticide manufacturer's recommended usage and disposal instructions. Document departures from manufacturer's specifications in Attachment J.</i> • <i>Apply fertilizers 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.</i> • <i>Follow federal, state, and local laws regarding fertilizer application.</i> • <i>Do not dispose of toxic liquid wastes (solvents, used oils, and paints) or chemicals (additives, acids, and curing compounds) in dumpsters allocated for construction debris.</i> | <p><i>See Material Storage and Handling Use Section SM-2, Stockpile Management Section SM-3, and Hazardous Materials and Waste Management Section SM-9, and Spill Prevention and Control SM-10</i></p> |

| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements |
|---|---|---|
| | <ul style="list-style-type: none"> • <i>Ensure collection, removal, and disposal of hazardous waste complies with regulations. Hazardous waste that cannot be reused or recycled shall be disposed of by a licensed hazardous waste hauler.</i> • <i>See Material Storage and Handling Use SM-2, and Hazardous Materials and Waste Management Section SM-9 for additional requirements.</i> | |
| <p><i>Hazardous waste (Batteries, Solvents, Treated Lumber, etc.)</i></p> | <ul style="list-style-type: none"> • <i>Do not dispose of toxic materials in dumpsters allocated for construction debris.</i> • <i>Ensure collection, removal, and disposal of hazardous waste complies with regulations.</i> • <i>Hazardous waste that cannot be reused or recycled shall be disposed of by a licensed hazardous waste hauler.</i> • <i>Segregate and recycle wastes from vehicle/equipment maintenance activities such as used oil or oil filters, greases, cleaning solutions, antifreeze, automotive batteries, and hydraulic and transmission fluids.</i> • <i>Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, and local requirements.</i> • <i>All containers stored outside shall be kept away from surface waters and within appropriately sized secondary containment (e.g., spill berms, decks, spill containment pallets). Provide cover if possible.</i> • <i>Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.</i> • <i>Do not clean surfaces or spills by hosing the area down.</i> • <i>Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.</i> | <p><i>See Hazardous Materials and Waste Management Section SM-9 and Vehicle and Equipment Maintenance SM-12</i></p> |

| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements |
|--------------------------------------|---|---|
| | <ul style="list-style-type: none"> • <i>Ensure collection, removal, and disposal of hazardous waste complies with manufacturer's recommendations and is in compliance with federal, state, and local requirements.</i> • <i>See Hazardous Materials and Waste Management Section SM-9 and Vehicle and Equipment Management, Vehicle and Equipment Maintenance SM-12 for additional requirements.</i> | |
| <i>Metals and Building Materials</i> | <ul style="list-style-type: none"> • <i>Inspect construction waste and recycling areas regularly.</i> • <i>Schedule solid waste collection regularly.</i> • <i>If building materials or metals are stored on site (such as rebar or galvanized poles) store under cover under tarps or in containers.</i> • <i>Minimize the amount of material stored on site.</i> • <i>Do not stockpile uncovered metals or other building materials in close proximity to discharge points.</i> • <i>See Solid Waste Management Section SM-6 for additional requirements.</i> | <i>See Solid Waste Management Section SM-6</i> |
| <i>Contaminated Soil</i> | <ul style="list-style-type: none"> • <i>See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Materials and Waste Management Section SM-9 for additional requirements.</i> • <i>At minimum contain contaminated material soil by surrounding with impermeable lined berms or cover exposed contaminated material with plastic sheets.</i> | <i>See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Materials and Waste Management Section SM-9</i> |

| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements |
|---|---|--|
| <i>Fugitive Dust Control and Dust Control Water</i> | <ul style="list-style-type: none"> • <i>Do not over spray water for dust control purposes which will result in runoff from the area.</i> • <i>Apply water as conditions require.</i> • <i>Washing down of debris or dirt into drainage, sewage systems, or State waters is not allowed.</i> • <i>Minimize exposed areas through the schedule of construction activities.</i> • <i>Utilize vegetation, mulching, sprinkling, and stone/gravel layering to quickly stabilize exposed soil.</i> • <i>Direct construction vehicle traffic to stabilized roadways.</i> • <i>Cover dump trucks hauling material from the site with a tarpaulin.</i> <p><i>See Dust Control Section SM-19 for additional requirements.</i></p> | <i>See Dust Control Section SM-19</i> |
| <i>Concrete Truck Wash Water</i> | <ul style="list-style-type: none"> • <i>Disposal of concrete truck wash water via percolation is prohibited.</i> • <i>Wash concrete-coated vehicles or equipment off-site or in the designated wash area.</i> • <i>Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies.</i> • <i>Runoff from the on-site concrete wash area shall be contained in a temporary pit or level bermed area where the concrete can set.</i> • <i>Design the area so that no overflow can occur due to inadequate wash area sizing or precipitation.</i> • <i>The temporary pit shall be lined with plastic to prevent seepage of wash water into the ground.</i> • <i>Allow wash water to evaporate or collect wash water and all concrete debris in a concrete washout system bin.</i> • <i>Do not dump liquid wastes into storm drainage system.</i> • <i>Dispose of liquid and solid concrete wastes in compliance with federal, state, and local standards.</i> • <i>See Waste Management, Concrete Wash and Waste Management Section SM-4 for additional requirements.</i> | <i>See Waste Management, Concrete Wash and Waste Management Section SM-4</i> |

| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements |
|------------------------------|---|---|
| <i>Sediment Track-Out</i> | <ul style="list-style-type: none"> • <i>Include Stabilized Construction Entrance at all points that exit onto paved roads.</i> • <i>A sediment trapping device is required if a wash rack is used in conjunction with the stabilized construction entrance/exit.</i> • <i>The pavement shall not be cleaned by washing down the street.</i> • <i>If sweeping is ineffective or it is necessary to wash the streets, wash water must be contained either by construction of a sump, diverting the water to an acceptable disposal area, or vacuuming the wash water.</i> • <i>Use BMPs for adjacent drainage structures.</i> • <i>Remove sediment tracked onto the street by the end of the day in which the track-out occurs.</i> • <i>Restrict vehicle use to properly designated exit points.</i> • <i>Include additional BMPs that remove sediment prior to exit when minimum dimensions cannot be met.</i> <p><i>See Stabilized Construction Entrance/Exit Section SC-11 for additional requirements.</i></p> | <i>See Stabilized Construction Entrance/Exit Section SC-11</i> |
| <i>Irrigation Water</i> | <ul style="list-style-type: none"> • <i>Consider irrigation requirements.</i> • <i>Where possible, avoid species which require irrigation.</i> • <i>Design, timing and application methods of irrigation water to eliminate the runoff of excess irrigation water into the storm water drainage system.</i> <p><i>See Seeding and Planting Section EC-12 and California Stormwater BMP Handbook SD-12 Efficient Irrigation included in SWPPP Attachment A for additional requirements.</i></p> | <i>See Seeding and Planting Section EC-12 and California Stormwater BMP Handbook SD-12 Efficient Irrigation</i> |
| <i>Hydrotesting Effluent</i> | <ul style="list-style-type: none"> • <i>If work includes removing, relocation or installing waterlines, and Contractor elects to flush waterline or discharge hydrotesting effluent into State waters or drainage systems, the Contractor shall prepare and obtain HDOT acceptance of a NOI/NPDES Permit Form F application for HDOT submittal to DOH CWB at least 30 calendar days prior to the start of Hydrotesting Activities if necessary. Site specific BMPs will be included in the NOI/NPDES Permit Form F submittal.</i> | <i>Site specific BMPs will be included in the NOI/NPDES Permit Form F submittal.</i> |

| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements |
|------------------------------|--|---|
| <i>Dewatering Effluent</i> | <i>If excavation or backfilling operations require dewatering, and Contractor elects to discharge dewatering effluent into State waters or existing drainage systems, Contractor shall prepare and obtain HDOT acceptance of a NOI/NPDES Permit Form G application for HDOT submittal to DOH CWB at least 30 calendar days prior to the start of Dewatering Activities if necessary. See Site Planning and General Practices, Dewatering Operations Section SM-18 for additional requirements.</i> | <i>See Dewatering Operations SM-18. Site specific BMPs will be included in the NOI/NPDES Permit Form G submittal.</i> |
| <i>Saw-cutting Slurry</i> | <ul style="list-style-type: none"> • <i>Saw cut slurry shall be removed from the site by vacuuming.</i> • <i>Provide storm drain protection during saw cutting. See Paving Operations Section SM-20 for additional requirements.</i> <i>Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</i> | <i>See Paving Operations Section SM-20, Storm Drain Inlet Protection SC-1, Perimeter sediment controls where applicable</i> |
| <i>Concrete Curing Water</i> | <ul style="list-style-type: none"> • <i>Avoid overspraying of curing compounds.</i> • <i>Apply an amount of compound that covers the surface, but does not allow any runoff of the compound.</i> <i>See California Stormwater BMP Handbook NS-12 Concrete Curing included in SWPPP Attachment A for additional requirements.</i> | <i>See California Stormwater BMP Handbook NS-12 Concrete Curing</i> |

| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements |
|------------------------------|--|--|
| <i>Plaster Waste Water</i> | <ul style="list-style-type: none"> • <i>Direct all wastewater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation.</i> • <i>Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies.</i> • <i>Any significant residual materials remaining on the ground after the completion of construction shall be removed and properly disposed. If the residual materials contaminate the soil, then the contaminated soil shall also be removed and properly disposed of.</i> • <i>Plaster waste water shall not be allowed to flow into drainage structures or State waters. See Material, Storage and Handling Use SM-2, Stockpile Management Use Section SM-3, and Hazardous Materials and Waste Management Section SM-9 for additional requirements.</i> | <i>See Material, Storage and Handling Use Section SM-2, Stockpile Management Use Section SM-3, and Hazardous Materials and Waste Management Section SM-9</i> |
| <i>Water-Jet Wash Water</i> | <ul style="list-style-type: none"> • <i>For Water-Jet Wash Water used to clean vehicles, use off site wash racks or commercial washing facilities when practical.</i> • <i>See Vehicle and Equipment Cleaning Section SM-11 for additional information.</i> • <i>For Water-Jet Wash Water used to clean impervious surfaces, the runoff shall not be allowed to flow into drainage structures or State Waters.</i> | <i>See Vehicle and Equipment Cleaning Section SM-11</i> |
| <i>Sanitary/Septic Waste</i> | <ul style="list-style-type: none"> • <i>Locate Sanitary facilities in a convenient place away from drainage facilities.</i> • <i>Position sanitary facilities so they are secure and will not be tipped over or knocked down.</i> • <i>Wastewater shall not be discharged to the ground or buried.</i> • <i>A licensed service provider shall maintain sanitary/septic facilities in good working order.</i> • <i>Schedule regular waste collection by a licensed transporter.</i> • <i>See Sanitary Waste Section SM-7 for additional requirements.</i> | <i>See Sanitary Waste Section SM-7.</i> |

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END OF SECTION 209

1 **SECTION 305 – AGGREGATE SUBBASE COURSE**
2

3 Make the following amendments to said Sections:
4

5 **(I)** Amend **Section 305.04 Measurement**, from line 54 to 55 to read as
6 follows:
7

8 **“305.04 Measurement.** The Engineer will measure aggregate subbase
9 course per cubic yard in accordance with the contract documents.”
10

11 **(II)** Amend **Section 305.05 Payment**, from line 57 to 66 to read as follows:
12

13 **“305.05 Payment.** The Engineer will pay for the accepted aggregate
14 subbase course at the contract price per cubic yard. Payment will be full
15 compensation for the work prescribed in this section and the contract documents.
16

17 The Engineer will pay for the following pay item when included in the
18 proposal schedule:
19

| Pay Item | Pay Unit |
|--------------------------|-----------------|
| Aggregate Subbase Course | Cubic Yard” |

20
21
22
23
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28 **END OF SECTION 305**

1 **Amend Section 401- HOT MIX ASPHALT (HMA) PAVEMENT to read as follows:**

2
3 **“SECTION 401 – HOT MIX ASPHALT (HMA) PAVEMENT**

4
5 **401.01 Description.** This section describes furnishing and placing dense graded
6 HMA pavement (herein referred to as HMA) on a prepared surface.

7
8 **401.02 Materials.**

9
10 Asphalt Cement (PG 64-16) 702.01(A)

11
12 Use for non-surface mixes, unless otherwise specified in the project documents.

13
14 Asphalt Cement (PG 64E-22) 702.01(B)

15
16 Use for all surface mixes, except for on Lanai and Molokai, and unless otherwise
17 specified in the project documents. Polymer modified asphalt (PMA) pavement
18 refers to asphalt mix using PG 64E-22, unless otherwise indicated.

19
20 Emulsified Asphalt 702.04

21
22 Warm Mix Asphalt Additive 702.06

23
24 Aggregate for Hot Mix Asphalt Pavement 703.09

25
26 Filler 703.15

27
28 Hydrated Lime or a liquid anti-strip approved by the engineer 712.03

29
30 **(A) General.** HMA pavement shall be plant mixed and shall include
31 mixture of aggregate and asphalt binder and may include reclaimed asphalt
32 pavement (RAP) or filler, or both.

33
34 The manufacture of HMA may include warm mix asphalt (WMA)
35 processes in accordance with these specifications. WMA processes include
36 combinations of organic additives, chemical additives, and foaming.

37
38 HMA pavement shall include surface course and may include one or
39 more binder courses, depending on HMA pavement thickness indicated in
40 the contract documents.

41
42 RAP is defined as removed or reprocessed pavement materials
43 containing asphalt and aggregates. Process RAP by crushing until 100
44 percent of RAP passes 3/4-inch sieve. Size, grade uniformly, and combine
45 materials such that blend of RAP and aggregate material conforms to grading
46 requirements of Subsection 703.09 - Aggregate for Hot Mix Asphalt

47 Pavement.

48

49

In surface and binder courses, aggregate for HMA may include RAP quantities up to 20 percent of total mix weight.

50

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52

Quantity of filler material to correct deficiencies in aggregate gradation passing the No. 200 sieve shall not exceed 3 percent by weight of fine aggregates.

53

54

55

56

(B) Job-Mix Formula and Tests. Design job-mix formula in accordance with procedures contained in current edition of Asphalt Institute's *Mix Design Methods for Asphalt Concrete and Other Hot Mix Types*, Manual Series No. 2 (MS-2) for either Marshall Method or Hveem Method of Mix Design.

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61

Limit compacted lift thickness and asphalt content of job-mix formula as specified in Table 401.02-1 - Limits of Compacted Lift Thickness and Asphalt Content.

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| TABLE 401.02-1 - LIMITS OF COMPACTED LIFT THICKNESS AND ASPHALT CONTENT | | | | |
|--|------------------|------------------|------------------|------------------|
| MIX NO. | II | III | IV | V |
| Minimum to Maximum Compacted Thickness for Individual Lifts (Inches) | 2-1/4 to 3 | 2 to 3 | 1-1/2 to 3 | 1-1/4 to 3 |
| Asphalt Content Limits (Percent of Total Weight of Mix) | 3.8 to 6.1 | 4.3 to 6.1 | 4.3 to 6.5 | 4.8 to 7.0 |

65

66

Asphalt content limits for porous aggregate may be exceeded only if it is requested ahead of placement and is reviewed then accepted in writing by the Engineer.

67

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69

70

Meet job-mix formula design criteria specified in Table 401.02-2 - Job-Mix Formula Design Criteria.

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| TABLE 401.02-2 - JOB-MIX FORMULA DESIGN CRITERIA | |
|---|--------|
| Hveem Method Mix Criteria (AASHTO T 246 and AASHTO T 247) | |
| Stability, minimum | 37 |
| Air Voids (percent) ¹ | 3 - 5 |
| Marshall Method Mix Criteria (AASHTO T 245) | |
| Compaction (number of blows each end of specimen) | 75 |
| Stability, minimum (pounds) | 1,800 |
| Flow (x 0.01 inch) | 8 - 16 |
| Air Voids (percent) ¹ | 3 - 5 |
| Notes: | |
| 1. Air Voids: AASHTO T 166 or AASHTO T 275; AASHTO T 209, AASHTO T 269. | |

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79

Minimum percent voids in mineral aggregates (VMA) of job-mix formula shall be as specified in Table 401.02-3 - Minimum Percent Voids in Mineral Aggregates (VMA).

| TABLE 401.02-3 - MINIMUM PERCENT VOIDS IN MINERAL AGGREGATES (VMA) | | | | | |
|---|-------|------|------|------|------|
| Nominal Maximum Particle Size, (Inches) | 1-1/2 | 1 | 3/4 | 1/2 | 3/8 |
| VMA, (percent) ¹ | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 |
| Notes: | | | | | |
| 1. VMA: See Asphalt Institute Manual MS-2 | | | | | |

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(C) Submittals. Establish and submit job-mix formula for each type of HMA pavement mix indicated in the contract documents a minimum of 30 days before paving production. Job mix shall include the following applicable information:

- (1) Design percent of aggregate passing each required sieve size.
- (2) Design percent of asphalt binder material (type determined by type of mix) added to the aggregate (expressed as % by weight of total mix),
- (3) Design proportion of processed RAP.
- (4) Design temperature of mixture at point of discharge at paver.

- 96 (5) Source of aggregate.
 97
 98 (6) Grade of asphalt binder.
 99
 100 (7) Test data used to develop job-mix formula.
 101

102 Except for item (4) in this subsection, if design requirements are
 103 modified after the Engineer accepts job-mix formula, submit new job-mix
 104 formula before using HMA produced from modified mix design. Submit any
 105 changes to the design temperature of mixture at point of discharge for
 106 acceptance by the Engineer.
 107

108 Submit a certificate of compliance for the asphalt binder, accompanied
 109 by substantiating test data from a certified testing laboratory.
 110

111 **(D) Range of Tolerances for HMA.** Provide HMA within allowable
 112 tolerances of accepted job mix formula as specified in Table 401.02-4 -
 113 Range of Tolerances HMA. These tolerances are not to be used for the
 114 design of the job mix, they are solely to be used during the testing of the
 115 production field sample of the HMA mix.
 116

| | |
|---|-------|
| Passing No. 4 and larger sieves (percent) | ± 7.0 |
| Passing No. 8 to No. 100 sieves (inclusive) (percent) | ± 4.0 |
| Passing No. 200 sieve (percent) | ± 3.0 |
| Asphalt Content (percent) | ± 0.4 |
| Mixture Temperature (degrees F) | ± 20 |

117
 118 The tolerances shown are the allowable variance between the physical
 119 characteristics of laboratory job mix submitted mix design and the production
 120 or operational mix, i.e., field samples.
 121

122 **401.03 Construction.**

123
 124 **(A) Weather Limitations.** Placement of HMA shall not be allowed under
 125 the following conditions:
 126

- 127 (1) On wet surfaces, e.g., surface with ponding or running water,
 128 surface that has aggregate or surface that appears beyond surface
 129 saturated dry, as determined by the Engineer.
 130

131 (2) When air temperature is below 50 degrees F and falling. HMA
132 may be applied when air temperature is above 40 degrees F and
133 rising. Air temperature will be measured in shade and away from
134 artificial heat.

135
136 (3) When weather conditions prevent proper method of
137 construction.

138
139 **(B) Equipment.**

140
141 (1) **Mixing Plant.** Use mixing plants that conform to AASHTO M
142 156, supplemented as follows:

143
144 (a) **All Plants.**

145
146 1. **Automated Controls.** Control proportioning,
147 mixing, and mix discharging automatically. When RAP
148 is incorporated into mixture, provide positive controls for
149 proportioning processed RAP.

150
151 2. **Dust Collector.** AASHTO M 156, Requirements
152 for All Plants, Emission Controls is amended as follows:

153
154 Equip plant with dust collector. Dispose of
155 collected material. In the case of baghouse dust
156 collectors, dispose of collected material or return
157 collected material uniformly.

158
159 3. **Modifications for Processing RAP.** When RAP
160 is incorporated into mixture, modify mixing plant in
161 accordance with plant manufacturer's recommendations
162 to process RAP.

163
164 (b) **Drum Dryer-Mixer Plants.**

165
166 1. **Bins.** Provide separate bin in cold aggregate
167 feeder for each individual aggregate stockpile in mix.
168 Use bins of sufficient size to keep plant in continuous
169 operation and of proper design to prevent overflow of
170 material from one bin to another.

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2. Stockpiling Procedures. Separate aggregate for Mix II, Mix III and Mix IV into at least three stockpiles with different gradations as follows: coarse, intermediate, and fine. Separate aggregates for Mix V into at least two stockpiles. Stockpile RAP separately from virgin aggregates.

3. Checking Aggregate Stockpile. Check condition of the aggregate stockpile often enough to ensure that the aggregate is in optimal condition.

(c) Batch and Continuous Mix Plants.

1. Hot Aggregate Bin. Provide bin with three or more separate compartments for storage of screened aggregate fractions to be combined for mix. Make partitions between compartments tight and of sufficient height to prevent spillage of aggregate from one compartment into another.

2. Load Cells. Calibrated load cells may be used in batch plants instead of scales.

(2) Hauling Equipment. Use trucks that have tight, clean, smooth metal beds for hauling HMA.

Thinly coat truck beds with a minimum quantity of non-stripping release agent to prevent mixture from adhering to beds. Diesel or petroleum-based liquid release agents, except for paraffin oil, shall not be used. Drain excess release agent from truck bed before loading with HMA.

Provide a designated clean up area for the haul trucks.

Equip each truck with a tarpaulin conforming to the following:

(a) In good condition, without tears and holes.

(b) Large enough to be stretched tightly over truck bed, completely covering mix. The tarpaulin shall be secured in such a manner that it remains stretched tightly over truck bed and HMA mix until the bed is about to be raised up in preparation for discharge.

(3) Asphalt Pavers. Use asphalt pavers that are:

- 218 (a) Self-contained, power-propelled units.
 219
 220 (b) Equipped with activated screed or strike-off assembly,
 221 heated if necessary.
 222
 223 (c) Capable of spreading and finishing courses of HMA
 224 mixtures in lane widths applicable to typical section and
 225 thicknesses indicated in the contract documents.
 226
 227 (d) Equipped with receiving hopper having sufficient
 228 capacity for uniform spreading operation.
 229
 230 (e) Equipped with automatic feed controls to maintain
 231 uniform depth of material ahead of screed.
 232
 233 (f) Equipped with automatic screed controls with sensors
 234 capable of sensing grade from outside reference line, sensing
 235 transverse slope of screed, and providing automatic signals to
 236 control screed grade and transverse slope.
 237
 238 (g) Capable of operating at constant forward speeds
 239 consistent with satisfactory laying of mixture.
 240
 241 (h) Equipped with a means of preventing the segregation of
 242 the coarse aggregate particles from the remainder of the
 243 bituminous plant mix when that mix is carried from the paver
 244 hopper back to the paver augers. The means and methods
 245 used shall be approved by the paver manufacturer and may
 246 consist of chain curtains, deflector plates, or other such devices
 247 and any combination of these.
 248

249 The following specific requirements shall apply to the
 250 identified bituminous pavers:
 251

- 252 1. **Blaw-Knox Bituminous Pavers.** Blaw-Knox
 253 bituminous pavers shall be equipped with the
 254 Blaw-Knox Materials Management Kit (MMK).
 255
- 256 2. **Cedarapids Bituminous Pavers.** Cedarapids
 257 bituminous pavers shall be those that were
 258 manufactured in 1989 or later.
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- 3. Barber-Green/Caterpillar Bituminous Pavers.** Barber-Green/Caterpillar bituminous pavers shall be equipped with deflector plates as identified in the December 2000 Service Magazine entitled "New Asphalt Deflector Kit {6630, 6631, 6640}".

Bituminous pavers not listed above shall have similar attachments or designs that shall make them equivalent to the bituminous pavers listed above. The Engineer will solely decide if it is equal to or better than the setups described for the equipment listed above.

Submit for review and acceptance, prior to the start of using the paver for the placing of plant mix, a full description in writing of the means and methods that will be used to prevent the bituminous paver from having both aggregate and temperature segregation. Use of any paver that has not been accepted is prohibited until acceptance of the paver is received from the Engineer. Any pavement placed with an unaccepted paver will be regarded as not compliant work and may not be paid for and may require removal.

Supply a Certificate of Compliance that verifies that the manufacturer's approved means and methods used to prevent bituminous paver from having both aggregate and temperature segregation have been implemented on all pavers used on the project and are working in accordance with the manufacturer's requirements and Contract Documents.

- (4) Rollers.** Rollers shall be self-propelled, steel-tired tandem, pneumatic-tired, or vibratory-type rollers capable of reversing without shoving or tearing the just placed HMA mixture. Provide sufficient number, sequencing, type, and rollers of sufficient weight to compact the mixture to required density while mixture is still in workable condition. Equipment shall not excessively crush aggregate. Operate rollers in accordance with manufacturer's recommendations and Contract Documents. The use of intelligent compaction is encouraged and may be required elsewhere in the Contract Documents.

- (a) Steel-Tired Tandem Rollers.** Steel-tired tandem rollers used for initial breakdown or intermediate roller passes shall have minimum gross weight of 12 tons and shall provide minimum 250-pound weight per linear inch of width on drive wheel.

Steel-tired tandem rollers used for finish roller passes

306 shall have minimum total gross weight of 3 tons.

307

308 Do not use roller with grooved or pitted rolling drum or
309 worn scrapers or wetting pads. Replace excessively worn
310 scrapers and wetting pads before use.

311

312 **(b) Pneumatic-Tired Rollers.** Pneumatic-tired rollers shall
313 be oscillating-type, equipped with smooth-tread pneumatic tires
314 of equal size and diameter. Maintain tire pressure within 5
315 pounds per square inch of designated operational pressure
316 when hot. Space tires so that gaps between adjacent tires are
317 covered by following set of tires.

318

319 Pneumatic-tired rollers used for breakdown or
320 intermediate roller passes shall have a ballast capable of
321 establishing an operating weight per tire of not less than 3,000
322 pounds. Equip rollers with tires having minimum 20-inch wheel
323 diameter with tires inflated to 70 to 75 pounds per square inch
324 pressure when cold and 90 pounds per square inch when hot.
325 Equip rollers with skirt-type devices to maintain temperature of
326 tires during rolling operations.

327

328 Pneumatic-tired rollers used for kneading finished
329 asphalt surfaces shall have a ballast capable of establishing an
330 operating weight per tire of not less than 1,500 pounds. Equip
331 rollers with tires having minimum 15-inch wheel diameter with
332 tires inflated to 50 to 60 pounds per square inch pressure. If
333 required, equip rollers with skirt-type devices to maintain
334 temperature of tires during rolling operations.

335

336 **(c) Vibratory Rollers.** Vibratory rollers shall be steel-tired
337 tandem rollers having minimum total weight of 3 tons. Equip
338 vibratory rollers with amplitude and frequency controls and
339 speedometer. Operate vibratory roller in accordance with
340 manufacturer's recommendations. For very thin lifts, 1 inch or
341 less in thickness, vibratory rollers shall not be used in the
342 vibratory mode. Instead, operate the unit in the static mode.

343

344 **(5) Hand Tools.** Keep hand tools used in production, hauling, and
345 placement of HMA clean and free of contaminants. Diesel or mineral
346 spirits or other cleaning material that is potentially deleterious to HMA
347 may be used to clean hand tools providing:

348

349 **(a)** It does not contaminate HMA with cleaning material.

350

351 **(b)** Clean hand tools over catch pan with capacity to hold all

352 the cleaning material.

353

354 **(c)** Remove all diesel or mineral spirits or other cleaning
355 material that is potentially deleterious to HMA from hand tools
356 before using with HMA.

357

358 **(d)** Hand tools used shall be in a condition such that it meets
359 the requirements that it was manufactured for, e.g., a
360 straightedge shall meet the straightness requirement of the
361 manufacturer.

362

363

(6) Material Transfer Vehicle (MTV).

364

365 **(a) Usage.** MTV usage applies to surface courses of paving
366 projects on all Islands except Lanai, unless otherwise indicated.
367 When placing HMA surface course use MTV to independently
368 deliver mixtures from hauling equipment to paving equipment.
369 MTV usage will not be required for the following:

370

1. Projects with less than 1,000 tons of HMA.

371

372

2. Temporary pavements.

373

374

3. Bridge deck approaches.

375

376

4. Shoulders.

377

378

5. Tapers.

379

380

6. Turning lanes.

381

382

7. Driveways.

383

384

8. Areas with low overhead clearances.

385

386

387 **(b) Equipment.** When using MTV, install minimum 10-ton-
388 capacity hopper insert in conventional paver hopper. Provide
389 the following equipment:

390

1. High-capacity truck unloading system in MTV
capable of receiving HMA from hauling equipment.

391

392

2. MTV storage bin with minimum 15-ton capacity.

393

394

3. An auger mixing system in one of the following:
the MTV storage bin, or paver hopper insert, or paver

395

396

397

398 hopper to continuously mix HMA prior to discharging to
399 the paver's conveyor system.

400
401 Avoid stop-and-go operations by coordinating plant
402 production rate, number of haul units, and MTV and paver
403 speeds to provide a continuous, uniform, segregation-free
404 material flow and smooth HMA pavement. Maintain uniform
405 paver speed to produce smooth pavements.

406
407 **(c) Performance Evaluation.** Evaluate the performance
408 of MTV and mixing equipment by measuring mat temperature
409 profile immediately behind paver screed on first day of paving
410 and when it feels the need to do so due to perceived changes
411 in performance or as directed by the Engineer.

412
413 Use a hand-held temperature device that has been
414 calibrated within the past 12 months. It shall be an infrared
415 temperature gun is capable of measuring in one degree or finer
416 increments between the temperatures of 80 degrees to 400
417 degrees F with a laser to indicate where the temperature
418 reading is being taken. Six temperature profile measurements
419 shall be taken of mat surface using infrared temperature gun at
420 50-foot intervals behind paver. Each temperature profile shall
421 consist of three surface temperature measurements taken
422 transversely across the mat in approximately a straight line
423 from screed while paver is operating. For each profile,
424 temperatures shall be measured approximately 1 foot from
425 each edge and in middle of mat. The difference between
426 maximum and minimum temperature measurements for each
427 temperature profile shall not exceed 10 degrees F. If any two
428 or more temperature profiles exceeds the allowable 10-degree
429 F temperature differential, halt paving operation and adjust
430 MTV or mixing equipment to ensure that material placed by
431 paver meets specified temperature requirements. Redo the
432 measuring of mat temperature profile until adjustment of the
433 MTV or mixing equipment is adequate. Submit all temperature
434 profiles to the Engineer by next business day. Information on
435 the report shall show location and temperature readings and
436 time test was performed. Enough information shall be given,
437 so the Engineer will be able to easily locate the test site of the
438 individual measurement.

439
440 When requested temperature profile measurements
441 shall be done in the presence of the Engineer.

442 Once adjustments are made, repeat measurement
443 procedure for the next two placements to verify that material

444 placed by paver meets specified temperature requirements.
445 Terminate paving if temperature profile requirements are not
446 met during repeated measurement procedure. If equipment
447 fails to meet requirements after measurement procedure is
448 repeated once, replace equipment before conducting any
449 further temperature profile measurements

450
451 The Engineer may perform surface temperature profile
452 measurements at any time during project. The Engineer may
453 in lieu of a hand-held infrared temperature device use an
454 infrared camera or device that is capable of measuring
455 temperatures to locate cold spots. If such cold spots exist, the
456 Engineer may require adjustments to the MTV.

457
458 If bleeding or fat spots occur in the pavement adjust
459 means and methods to eliminate such pavement defects and
460 perform remedial repair to pavement acceptable to the
461 Engineer. Bleeding is defined as excess binder occurring on
462 the surface of the pavement. It may create a shiny, glass-like,
463 reflective appearance and may be tacky to the touch. Fat spots
464 are localized bleeding.

465
466 **(d) Transport.**

467
468 **1. Trailered MTV.** Transport MTV by means of
469 truck-tractor/trailer combination in accordance with
470 Chapter 104 of Title 19, Department of Transportation,
471 entitled "The Movement by Permit of Oversize and
472 Overweight Vehicles on State Highways".

473
474 **2. Crossing Bridges for Self-Powered MTV.**
475 When self-powered MTV exceeds legal axle or total
476 weight limits for vehicles under the HRS, Chapter 291,
477 conform to the following when crossing bridges within
478 project limits unless otherwise indicated in the Contract
479 Documents:

480
481 **a.** Completely remove mix from MTV.
482
483 **b.** Move MTV at relatively constant speed not
484 exceeding 5 miles per hour. MTV will not be
485 allowed to stop on bridge.
486

487 c. No other vehicle or equipment will be
488 allowed on bridge.

489
490 d. The MTV shall not attempt to cross a
491 bridge where the posted load limit is less than or
492 equal to the weight of the MTV empty.
493 Permission to cross the bridge shall be obtained
494 from the Engineer and HWY-DB in writing.
495

496 **(C) Preparation of Surface.** Clean existing pavement in accordance with
497 Section 310 - Brooming Off. Apply tack coat in accordance with Section 407
498 - Tack Coat. Tack coat shall not be applied to surfaces to receive an
499 application of joint adhesive.
500

501 Where indicated in the Contract Documents, bring irregular surfaces
502 to uniform grade and cross section by furnishing and placing one or more
503 leveling courses of HMA Mix V. Spread leveling course in variable
504 thicknesses to eliminate irregularities in existing surface. Place leveling
505 course such that maximum depth of each course, when thoroughly
506 compacted, does not exceed 3 inches.
507

508 In multiple-lift leveling course construction, spread subsequent lifts
509 beyond edges of previously spread lifts in accordance with procedures
510 contained in current edition of the Asphalt Institute's *Construction of Hot Mix*
511 *Asphalt Pavements*, Manual Series No. 22 (MS-22) for leveling wedges.
512

513 Notify the Engineer of existing surfaces that may not be in a condition
514 that will have enough strength to be a good bonding surface or foundation
515 and should be removed or have remedial repairs done before new pavement
516 placement.
517

518 **(D) Plant Operation.**
519

520 **(1) Preparation of Asphalt Binder.** Uniformly heat asphalt binder
521 and provide continuous supply of heated asphalt cement from storage
522 to mixer. Do not heat asphalt binder above the recommendation of
523 the supplier for modified binders or above 350 degrees F for neat
524 binders.
525

526 **(2) Preparation of Aggregate.** Dry and heat aggregate material
527 at temperature sufficient to produce design temperature of job-mix
528 formula. Do not exceed 350 degrees F. Adjust heat source used for
529 drying and heating to avoid damage to and contamination of
530 aggregate. When dry, aggregate shall not contain more than 1
531 percent moisture by weight.

532 For batch plants, screen aggregates immediately after heating

533 and drying into three or more fractions. Convey aggregates into
534 separate compartments ready for batching and mixing with asphalt
535 binder.

536
537 **(3) Mixing.** Measure aggregate and asphalt; or aggregate, RAP,
538 and asphalt into mixer in accordance with an accepted job-mix
539 formula. Mix until components are completely mixed and adequately
540 coated with asphalt binder in accordance with AASHTO M 156.
541 Percent of coated particles shall be 95 percent when tested in
542 accordance with AASHTO T 195.

543
544 **(4) Plant Inspection.** For control and acceptance testing during
545 periods of production, provide a testing laboratory that meets the
546 requirements of AASHTO M 156. Provide space, utilities, and
547 equipment required for performing specified tests.

548
549 **(E) Spreading and Finishing.** Prior to each day's paving operation,
550 check screed or strike-off assembly surface with straight edge to ensure
551 straight alignment and there is no damage or wear to the machine that will
552 affect performance. Provide screed or strike-off assembly that produces
553 finished surface without tearing, shoving, and gouging HMA. Discontinue
554 using spreading equipment that leaves ridges, indentations, or other marks,
555 or combination thereof in surface that cannot be eliminated by rolling or
556 affects the final smoothness of the pavement or be prevented by adjustment
557 in operation.

558
559 Maintain HMA at minimum 250 degrees F temperature at discharge to
560 paver. The Engineer shall observe the contractor measuring the temperature
561 of mix in hauling vehicle just before depositing into spreader or paver or MTV.

562
563 Deposit HMA in a manner that minimizes segregation. Raise truck
564 beds with tailgates closed before discharging HMA.

565
566 Lay, spread, and strike off HMA upon prepared surface. Where
567 practical, use asphalt pavers to distribute mixture.

568
569 Where practical, control horizontal alignment using automatic grade
570 and slope controls from reference line, slope control device. Existing
571 pavements or features shall not be used for grade control alone.

572
573 Obtain sensor grade reference, horizontal alignment by using
574 established grade and slope controls. For subsequent passes, substitution
575 of one ski with joint-matching shoe riding on finished adjacent pavement is
576 acceptable. Use of a comparable non-contact mobile reference system and
577 joint matching shoe is acceptable.

578 Avoid stop-and-go operation. Maintain a constant forward speed of

579 paver during paving operation and minimize other methods that impact
580 smoothness.

581
582 Offset longitudinal joint in successive lifts by approximately 6 inches.
583 Incorporate into paving method an overlap of material of 1-inch +/- 0.5 inches
584 at the longitudinal joint. The HMA overlap material shall be left alone when
585 initially placed and shall not be bumped back or pushed back with a lute or
586 any other hand-held device. If the overlap exceeds the maximum amount,
587 remove the excess with a flat shovel, allowing recommended amount of
588 overlap HMA material to remain in place to be compacted. Do not throw the
589 removed excess HMA material on to the paving mat. The longitudinal joint
590 in a surface course when total roadway width is comprised of two lanes shall
591 be near the centerline of pavement or near lane lines when roadway is more
592 than two lanes in width. The longitudinal joint shall not be constructed in the
593 wheel path or under the longitudinal lane lines. Make a paving plan drawing
594 showing how the longitudinal joint will not be located in these areas.

595
596 Control the horizontal alignment of the longitudinal edge of the HMA
597 mat being installed so that the edge is parallel to the centerline or has a
598 uniform alignment, e.g., the edge of the mat is straight line or uniform curve,
599 no wavy edge, etc. to have a consistent amount of HMA material at the joint.

600
601 Check the compaction of the longitudinal joint during paving often
602 enough to ensure that it will meet the compaction requirements.

603
604 If nuclear gauges and ground penetrating radar are used as the
605 contractor's quality control method, they shall be properly calibrated and
606 periodically checked by comparison to cores taken from the pavement. The
607 use of sand as an aid in properly seating the gauge may also be considered
608 for improving the accuracy of the gauge.

609
610 In areas where irregularities or unavoidable obstacles make use of
611 mechanical spreading and finishing equipment impracticable, spread, rake,
612 and lute mixture by hand tools. For such areas, deposit, spread evenly, and
613 screed mixture to required compacted thickness.

614
615 Demonstrate competence of personnel operating grade and crown
616 control device before placing surface courses. If automatic control system
617 becomes inoperative during the day's work, the Engineer will permit the
618 Contractor to finish day's work using manual controls. The Engineer may
619 also allow additional HMA to be ordered and placed using manual controls if
620 it will provide a safer work site for the public to travel through. Do not resume
621 work until automatic control system is made operative. The Engineer may
622 waive requirement for electronic screed control device when paving gores,
623 shoulders, transitions, and miscellaneous reconstruction areas where the
624 use of the devices is not practical.

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When production of HMA can be maintained and when practicable, use pavers in echelon shall be used to place surface course in adjacent lanes.

At the end of each workday, HMA pavement that is open to traffic shall not extend beyond the panel of the adjacent new lane pavement by more than the distance normally placed in one workday. At end of each day's production, construct tapered transitions along all longitudinal and transverse pavement drop-offs; this shall apply to areas where existing pavement is to meet newly placed pavement. Use slopes of 6:1 for longitudinal taper transitions and 48:1 for transverse tapered transitions. Maximum drop-off height along the joints shall be 2 inches. Also, using a 48:1 slope provides a taper around any protruding object, e.g., manholes, drain boxes, survey monuments, inlets, etc., that may be above pavement surface when opened to the public. If the object is below the surface of the pavement then fill the depression until it is level with the surrounding pavement or raise depressed objects to the finish grade of the placed pavement. Remove and dispose of all transition tapers before placing adjoining panel or next layer of HMA. Notify traveling public of pavement drop-offs or raised objects with signs placed in every direction of traffic that may use and encounter pavement drop-offs or protruding objects or holes.

Use the same taper rates for areas where there is a difference in elevation due to construction work.

At end of each workweek, complete full width of the roadway's pavement, including shoulders, to same elevation with no drop-offs.

(F) Compaction. Immediately after spreading and striking off HMA and adjusting surface irregularities, uniformly compact mixture by rolling.

Initiate compaction at highest mix temperature allowing compaction without excessive horizontal movement. Temperature shall not be less than 220 degrees F.

Finish rolling using tandem roller while HMA temperature is at or above 175 degrees F.

On superelevated curves, begin rolling at lower edge and progress to higher edge by overlapping of longitudinal trips parallel to centerline.

If necessary, repair damage immediately using rakes and fresh mix. Do not displace line and grade of HMA edges during rolling.

Keep roller wheels properly moistened with water or water mixed with

671 small quantities of detergent. Use of excess liquid, diesel, and petroleum-
672 based liquids will not be allowed on rollers.

673
674 Along forms, curbs, headers, walls and other places not accessible to
675 rollers, compact mixture with hot hand tampers, smoothing irons, or
676 mechanical tampers. On depressed areas, trench roller or cleated
677 compression strips under roller may be used to transmit compression.

678
679 Before the start of compaction or during compaction or both remove
680 pavement that is loose, broken, or contaminated, or combination thereof;
681 pavement that shows an excess or deficiency in asphalt binder content; and
682 pavement that is defective in any way. Replace with fresh HMA pavement of
683 same type, and compact. Remove and replace defective pavement and
684 compact at no increase in contract price or contract time.

685
686 Operate rollers at slow and uniform speed with no sudden stops. The
687 drive wheels shall be nearest to the paver. Continue rolling to attain specified
688 density and until roller marks are eliminated.

689
690 Rollers shall not be parked on the pavement placed that day or shift.

691
692 **(1) HMA Pavement Courses One and a Half Inches Thick or**
693 **Greater.** Where HMA pavement compacted thickness indicated in the
694 Contract Documents is 1-1/2 inches or greater, compact to not less
695 than 93.0 percent nor greater than 97.0 percent of the maximum
696 specific gravity determined in accordance with AASHTO T 209,
697 modified by deletion of Supplemental Procedure for Mixtures
698 Containing Porous Aggregate.

699
700 Place HMA pavement in individual lifts that are within minimum
701 and maximum allowable compacted thickness for various types of
702 mixture as specified in Table 401.02-1 - Limits of Compacted Lift
703 Thickness and Asphalt Content.

704
705 **(2) HMA Pavement Courses Less Than One and a Half Inches**
706 **Thick.** Where HMA pavement compacted thickness indicated in the
707 contract documents is less than 1-1/2 inches, compaction to a
708 specified density will not be required.

709
710 Use only non-vibratory, steel-tired, tandem roller. Roll entire
711 surface with minimum of two roller passes. A roller pass is defined as
712 one trip of the roller in one direction over any one spot.

713
714 For intermediate rolling, roll entire surface with minimum of four
715 passes of roller.

716

717 Finish rolling using steel-tired, tandem roller. Continue rolling
718 until entire surface has been compacted with minimum of three passes
719 of roller, and roller marks have been eliminated.

720
721 Do not use rollers that will excessively crush aggregate.

722
723 **(3) HMA Pavement Courses One and a Half Inches Thick or**
724 **Greater In Special Areas Not Designated For Vehicular Traffic.**

725 For areas such as bikeways that are not part of roadway and other
726 areas not subjected to vehicular traffic, compact to not less than 90.0
727 percent of maximum specific gravity determined in accordance with
728 AASHTO T 209, modified by deletion of Supplemental Procedure for
729 Mixtures Containing Porous Aggregate. Increase asphalt content by
730 at least 0.5 percent above that used for HMA pavements designed for
731 vehicular traffic. Paved shoulders shall be compacted in the same
732 manner as pavements designed for vehicular traffic.

733
734 **(G) Joints, Trimming Edges and Utility Marking.** At HMA pavement
735 connections to existing pavements, make joints vertical to depth of new
736 pavement. Saw cut existing pavement and cold plane in accordance with
737 Section 415 - Cold Planing of Existing Pavement to depth equal to thickness
738 of surface course or as indicated in the Contract Documents.

739
740 At HMA connections to previously placed lifts, form transverse joints
741 by cutting back on previous run to expose full depth of course. Dispose of
742 material trimmed from edges. Protect end of freshly laid mixture from rollers.

743
744 Before and after paving, identify and mark location of existing utility
745 manholes, valves, and handholes on finished surface. Adjust existing frames
746 and covers and valve boxes to final pavement finish grade in accordance with
747 Section 604 - Manholes, Inlets and Catch Basins and Section 626 - Manholes
748 and Valve Boxes for Water and Sewer Systems.

749
750 **(1) Longitudinal joints.** Submit for review the means and methods
751 that will be used to install longitudinal joints at the required compaction
752 and density. Compact longitudinal joints to be not less than 91.0
753 percent of the maximum specific gravity determined in accordance
754 with AASHTO T 209, modified by deletion of Supplemental Procedure
755 for Mixtures Containing Porous Aggregate. Verify the compaction of
756 the longitudinal joints meets requirements by using non-destructive
757 testing methods during paving and submit the results on the daily
758 quality control test reports.

759
760 Test for compaction and density regardless of layer thickness.
761 Compaction and density of the longitudinal joint shall be determined by using
762 six-inch diameter cores. For longitudinal joints made using butt joints cores

763 shall be taken over the joint with half of the core being on each side of the
 764 joint. For longitudinal joints using notched wedge joints, center core over the
 765 center of the wedge so that 50 percent of the material is from the most
 766 recently paved material and the remaining 50 percent of the core is from the
 767 material used to pave the previous layer. One core shall be taken at a
 768 maximum of every 1,500 lineal feet (LF) of the second side of the longitudinal
 769 joint and any fraction of that length for each day of paving with a minimum of
 770 one core taken for each longitudinal joint per day. Cores taken for the testing
 771 of the longitudinal joint may be used to determine pavement thickness.

772
 773 When the longitudinal joints are found to have less than 91.0 percent
 774 of the maximum specific gravity, overband all longitudinal joints within the
 775 entire lot represented by the non-compliant core, PG binder seal coat, or
 776 other type of joint enrichment accepted by the Engineer. The overband shall
 777 not decrease the skid resistance of the pavement under any ambient weather
 778 condition. Submit overband material's catalog cuts, test results and
 779 application procedure for review and acceptance by the Engineer before use.
 780 Center the overband over the longitudinal joint. The overband shall be placed
 781 in a uniform width and horizontal alignment. The overband shall have no
 782 holidays or streaking in its placement. The width of the overband shall be
 783 based on how the longitudinal joint was constructed or as directed by the
 784 Engineer. If a butt joint is used, the overband width shall be a minimum of
 785 12-inches. For butt wedge or wedge joints the overband width shall be the
 786 width of the wedge plus an additional six-inches minimum. Replace any
 787 pavement markings damaged or soiled by the overband remedial repair
 788 process.

789
 790 For longitudinal joints that have a compaction of less than 89 percent
 791 of the maximum specific gravity; removal may be required by the Engineer
 792 instead of overbanding the non-compliant joint.

793
 794 Persistent low compaction results may be cause to suspend work and
 795 remove non-conforming work. During the suspension of paving, revise
 796 means and methods used in constructing longitudinal joints and submit to the
 797 Engineer for review and acceptance. Suspension may occur when:

- 798
 799 **(1)** Two or more longitudinal joints tests fail to meet the minimum
 800 compaction
 801 **(2)** One sample reveals that the joint compaction is 89 percent or
 802 less.
 803

804 **(H) HMA Pavement Samples.** Obtain test samples from compacted
 805 HMA pavement within 72 hours of lay down. Provide minimum 4-inch
 806 diameter cores consisting of undisturbed, full-depth portion of compacted
 807 mixture taken at locations designated by the Engineer in accordance with the
 808 “Sampling and Testing Guide for Acceptance and Verification” in Hawaii DOT
 809 Highways Division, *Quality Assurance Manual for Materials*, Appendix 3.
 810 Cores shall be taken in the presence of the Engineer. Turn cores over to
 811 Engineer immediately after cores have been taken.

812
 813 For pavement samples for longitudinal joints provide 6-inch diameter
 814 cores minimum. For pavement samples for other than longitudinal joints
 815 4-inch diameter cores minimum shall be taken. All cores shall consist of
 816 undisturbed, full-depth of the lift of the compacted mixture taken at locations
 817 designated by the Engineer in accordance with the “Sampling and Testing
 818 Guide for Acceptance and Verification” in Hawaii DOT Highways Division,
 819 *Quality Assurance Manual for Materials*, appendix 3.

820
 821 Cores that separate shall indicate to the Engineer that there is
 822 insufficient bonding of layers. Modify the previously used paving means and
 823 methods to prevent future debonding of layers. Debonding of a core sample
 824 after adjustment of the Contractor’s methods will be an indication of
 825 continued non-conforming work and the Engineer may direct removal of the
 826 layer at no additional cost or contract time.

827
 828 Restore HMA pavement immediately after obtaining samples. Clean
 829 core hole and walls of all deleterious material that will prevent the complete
 830 filling of the core hole and the bonding of the new HMA to the existing. Apply
 831 tack coat to vertical faces of sample holes. Fill sampled area with new HMA
 832 pavement of same type as that removed. If hand compaction is used; fill in
 833 layers not exceeding the minimum thickness stated in Table 401.02-1 - Limits
 834 of Compacted Lift Thickness And Asphalt Content. Compact each layer to
 835 compaction requirements. If Mechanical Compaction methods are used, then
 836 layers may be the maximum layer thickness stated in Table 401.02-1 - Limits
 837 of Compacted Lift Thickness And Asphalt Content. Using tires or hand
 838 tamping to compact the HMA material to restore the pavement shall not be
 839 considered as mechanical compaction.

840
 841 Only sample and test leveling course if 1-1/2 inches or greater. No
 842 compaction requirements for less than 1-1/2 inches.

843
 844 **(I) HMA Pavement Thickness Tolerances.**

845
 846 Thickness of finished HMA pavement shall be within 0.25 inch of
 847 thickness indicated in the Contract Documents. Pavement not meeting the
 848 thickness requirements of the Contract Documents may be required by the
 849 Engineer to be removed and replaced.

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Corrective methods taken on pavement exceeding specified tolerances, e.g., insufficient thickness by methods accepted by the Engineer, including removal and replacement, shall be at no increase in contract price or contract time.

The checking of pavement thickness shall be done after all remedial repairs, e.g., smoothness compliance repairs, compaction, have been completed, reviewed, and accepted by the Engineer.

(J) Quality Control Using New Technology. The Engineer and MTRB reserves the right to utilize new technology and methods to improve the detection of noncompliant work on the project. The technology or method may be used to locate defects in the work, e.g., ground penetrating radar to locate delaminations, moisture damage, thin sections, voids, non-compliant compaction, other non-destructive testing to locate flaws. The defect will be verified by the methods stated in the Contract Documents or by other established conventional means. If the technology or method has already been accepted elsewhere or has standardized testing procedures the results may be judged acceptable by the Engineer and no further testing will be required. These new technologies and methods may be used for the selection of sampling locations.

(K) Protection of HMA Pavement. Except for construction equipment directly connected with paving operations, keep traffic off HMA pavement.

Protect HMA pavement from damage until it has cooled and set.

Do not refuel equipment or clean equipment or hand tools over paved surfaces unless catch pan or device that will contain spilled fuel and other products is provided. After completion of refueling or cleaning, remove catch pan or device without spilling any of the collected content.

Do not park roller or other paving equipment on HMA pavement paved within 24 hours of laydown.

(L) Pavement Joint Adhesive

(1) Pavement Joint Adhesive on Joints. Use on all asphalt pavement construction where joints are formed at such locations but not limited to the following:

(a) Adjacent asphalt pavements, e.g., trafficked lanes, shoulders, etc.

(b) Asphalt pavement and adjacent concrete pavement or

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curb and gutter or any other surface where the bonding of the asphalt pavement and concrete surface is desired,

(c) Transverse joints between asphalt pavements not placed at the same time or if the pavement’s temperature on one side of the joint is below the minimum temperature the mix can be at, during asphalt pavement compaction or installation.

(d) Cut face of an existing pavement where it will have new HMA pavement placed against it, e.g., utility trenches, partial or full depth repairs, etc.

Pavement joint adhesive is not required on a longitudinal construction joint between adjacent hot mix asphalt pavements formed by echelon paving. Echelon paving is defined as paving multiple lanes side-by-side with adjacent pavers slightly offset at the same time.

A longitudinal construction joint between one shift’s work and another shall have pavement joint adhesive applied at the joint. Any longitudinal construction joint formed, with the temperature on one side of the joint that is below the minimum temperature the mix can be when compacted to contract requirements during asphalt pavement installation, shall have pavement joint adhesive applied at the joint.

(2) **Material requirements.** Asphalt joint adhesive shall meet requirements as specified in Table 401.03-1 - Asphalt Joint Adhesive Specifications.

| TABLE 401.03-1 – ASPHALT JOINT ADHESIVE SPECIFICATIONS | | |
|--|-------------|---------------------|
| TEST | | SPECIFICATION |
| Brookfield Viscosity, 204 °C [400 °F] | ASTM D 3236 | 4,000-10,000 cp |
| Cone Penetration, 25 °C [77 °F] | ASTM D 5329 | 60-100 dmm |
| Resilience, 25 °C [77 °F] | ASTM D 5329 | 30% minimum |
| Ductility, 25 °C [77 °F] | ASTM D 113 | 30 cm minimum |
| Ductility, 4 °C [39.2 °F] | ASTM D 113 | 30 cm minimum |
| Tensile Adhesion, 25 °C [77 °F] | ASTM D 5329 | 500% minimum |
| Softening Point | ASTM D 36 | 77 °C [170 °F] min. |
| Asphalt Compatibility | ASTM D 5329 | Pass |

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(3) **Construction Requirements for Asphalt Joint Adhesive**

(a) **Equipment Requirements.** Use a jacketed double

929 boiler type melting unit, with both agitation and recirculation
 930 systems. Provide a pressure feed wand application system.

931
 932 **(b) Material Handling.** Submit a copy of the manufacturer's
 933 recommendations for heating, re-heating, and applying the joint
 934 adhesive material. Follow manufacturer's recommendations.
 935 Do not remove the joint adhesive from the package until
 936 immediately before it is placed in the melter. Joint adhesive
 937 boxes must be clearly marked with the name of the
 938 manufacturer, the trade name of the adhesive, the
 939 manufacturer's batch and lot number, the application/pour
 940 temperature, and the safe heating temperature. Feed
 941 additional material into the melter at a rate equal to the rate of
 942 material used.

943
 944 Verify the pouring temperature of the joint adhesive at least
 945 once per hour at the point of discharge. Stop production if the
 946 adhesive falls below the recommended application/pour
 947 temperature. When the temperature of the adhesive exceeds
 948 the maximum safe heating temperature, stop production, empty
 949 the melter, and dispose of that adhesive in an environmentally
 950 safe method. No payment will be made for this material or its
 951 disposal.

952
 953 Do not blend or mix different manufacturer's brands or different
 954 types of adhesives.

955
 956 **(c) Joint Adhesive Application:** The face of the joint that
 957 the new asphalt pavement will bind to shall be clean and dry
 958 before the joint adhesive is applied. Apply the pavement joint
 959 adhesive material to the entire face of the surface where HMA
 960 pavement shall be installed. The thickness of the asphalt
 961 adhesive application shall be approximately 1/8 inch. Use an
 962 application shoe attached to the end of application wand. Do
 963 not overlap the joint by greater than 1/2-inch at the top of the
 964 joint or two-inches at the bottom of the joint. Apply the joint
 965 adhesive immediately in front of the paving operation. If the
 966 adhesive is tracked by construction vehicles, repair the
 967 damaged area, and restrict traffic from driving on the adhesive.

968
 969 **(d) Field Sampling.** Take a sample from the application
 970 wand during the first 20 minutes of placing sealant. One
 971 sample should be taken per manufacturer's batch or minimum
 972 of every 6 months on the Project in the presence of the
 973 Engineer.

974

975 Each sample shall consist of one quart in an aluminum or steel
 976 sample container. The sampling container shall be labeled with
 977 Contractor's name; project name and number; date and time
 978 sample taken; location of where material was used at, e.g., from
 979 where to where it was used at in stations; manufacturer and lot
 980 number of the sealant. Turn over samples to Engineer without
 981 Engineer losing sight of the sample. The Engineer reserves the
 982 right to conduct supplementary sampling and testing of the
 983 sealant material.

984
 985 **(M) Pavement Smoothness Rideability Test.** Perform surface profile
 986 tests frequently to ensure that the means and methods being used produces
 987 pavement that is compliant with the surface profile smoothness requirement.
 988 Test the pavement surface for smoothness with High-Speed Inertial Profiler
 989 to determine the International Roughness Index (IRI) of the pavement. For
 990 the locations determined by the Engineer, a 10-foot straightedge shall be
 991 used to measure smoothness.

992
 993 All smoothness testing must be performed with the presence of the
 994 Engineer. The High-Speed Inertial Profiler operator shall be a certified
 995 operator by MTRB or the manufacturer.

996
 997 The High-Speed Inertial Profiler operator's certification shall be no
 998 older than five years old at the date of the Notice to Proceed and at the day
 999 of the pavement profile measurement.

1000
 1001 The finished pavement shall comply to all the following requirements:

1002
 1003 **(a) Smoothness Test using 10-Foot Straightedge (Manual or**
 1004 **rolling)** The 10-foot straightedge is used to identify the locations that
 1005 vary more than 3/16 inch from the lower edge when the 10-foot
 1006 straightedge is laid on finished pavement on the direction parallel with
 1007 the centerline or perpendicular to centerline. Remove the high points
 1008 that cause the surface to exceed that 3/16 inch tolerance by grinding.

1009
 1010 The Contractor shall use a 10-foot straightedge for the following
 1011 locations:

1012
 1013 **1.** Longitudinal profiling parallel to centerline, when within
 1014 15 feet of a bridge approach or existing pavement which is
 1015 being joined.

1016
 1017 **2.** Transverse profiling of cross slopes, approaches, and as
 1018 otherwise directed. Lay the straightedge in a direction
 1019 perpendicular to the centerline.

1020

- 1021 3. When pavement abuts bridge approaches or pavement
 1022 not under this Contract, ensure that the longitudinal slope
 1023 deviations of the finished pavement comply with Contract
 1024 Document's requirements.
 1025
- 1026 4. Short pavement sections up to 600 feet long, including
 1027 both mainline and non-mainline sections on tangent sections
 1028 and on horizontal curves with a centerline radius of curve less
 1029 than 1,000 feet.
 1030
- 1031 5. Within a superelevation transition on horizontal curves
 1032 having centerline curve radius less than 1,000 feet, e.g.,
 1033 curves, turn lanes, ramps, tapers, and other non-mainline
 1034 pavements.
 1035
- 1036 6. Within 15 feet of transverse joint that separates
 1037 pavement from existing pavement not constructed under the
 1038 contract, or from bridge deck or approach slab for longitudinal
 1039 profiling.
 1040
- 1041 7. At miscellaneous areas of improvement where width is
 1042 less than 11 feet, such as medians, gore areas, and shoulders.
 1043
- 1044 8. As otherwise directed by the Engineer. The Engineer
 1045 may confine the checking of through traffic lanes with the
 1046 straightedge to joints and obvious irregularities or choose to
 1047 use it at locations not specifically stated in this Section.
 1048

1049 **(b) High-Speed Inertial Profiler**
 1050

1051 There shall be a minimum 3 profile runs per lane, for each wheel path
 1052 (left and right) which is approximately three feet from edge lane line. The
 1053 segment length shall be 0.1 mi. The final segments in a lane that are less
 1054 than 0.1 mi shall be evaluated as an independent segment and pay
 1055 adjustments will be prorated for length. The profiles shall be taken in the
 1056 direction of traffic only.
 1057

1058 The latest version of FHWA ProVAL software shall be used to conduct
 1059 profile analysis to determine IRI and areas of localized roughness. The IRI
 1060 values shall be reported in units of in/mi.
 1061

1062 Areas of localized roughness will be identified by using ProVAL's
 1063 "Smoothness Assurance" analysis, calculating IRI with a continuous short
 1064 interval of 25 feet and the 250-mm filter applied.
 1065

1066 Additional runs may be required by the Engineer if the data indicate a
 1067 lack of repeatability of results. A 92% agreement is required for repeatability
 1068 and IRI values shall have at minimum a 95% confidence level.

1069
 1070 **(N) Required Pavement Smoothness**

1071
 1072 The IRI for the left and right wheel paths in an individual lane will be
 1073 computed and then averaged to determine the Mean Roughness Index (MRI)
 1074 values. The MRI will be used to determine acceptance and pay adjustment.
 1075 Each lane shall be tested and evaluated separately.

1076
 1077 There are three (3) categories of target MRI values:
 1078

| TABLE 401.03-2 – PAVEMENT SMOOTHNESS CATEGORIES | | |
|--|--|---------------------------|
| Category | Description | MRI |
| Type A | Three or more opportunities for improving ride | Shall not exceed 60 in/mi |
| Type B | Two opportunities for improving ride | Shall not exceed 70 in/mi |
| Type C | One opportunity for improving ride | Shall not exceed 75 in/mi |

1079
 1080 An opportunity for improving ride is considered as one (1) lift of asphalt
 1081 pavement, including but not limited to HMAB, HMA, PMA, and SMA.

1082
 1083 For the location where a 10-foot manual straightedge is required, the
 1084 surface shall not vary more than 3/16 inch from the lower edge of a
 1085 straightedge.

1086
 1087 No pre-final inspection, final inspection, and substantial completion
 1088 granted will be made until the pavement meets smoothness requirement and
 1089 all required profile reports are submitted to the Engineer and MTRB and are
 1090 accepted.

1091
 1092 **(O) Request for Profile Testing by the Department.**

1093
 1094 For Type C, prior to pavement activities, the Engineer will measure the
 1095 smoothness of the existing pavement.

1096
 1097 The Contractor shall submit a written request to the Engineer to
 1098 perform all required profile tests.

1099
 1100 The request shall be made at least 30 days before desired testing date
 1101 and shall include an approximate acceptance profile testing date, a plan view
 1102 drawing of the area to be tested with the limits of the test area highlighted.

1103 The Contractor shall reimburse HDOT for any incurred cost related to
 1104 any Contractor-caused cancellation or a deduction to the monthly payment
 1105 will be made.
 1106

1107 **(P) Department Requirements for Profile Testing.** When a request for
 1108 testing is made, the requested area to be tested shall be 100% of the total
 1109 area indicated to be paved in the Contract Documents unless the requirement
 1110 is waived by the Engineer and MTRB.
 1111

1112 Department acceptance surface tests will not be performed earlier
 1113 than 14 days after HMA placement.
 1114

1115 Clean debris and clear obstructions from area to be tested, as well as
 1116 a minimum of 100 feet before and beyond the area to be tested before testing
 1117 starts for use as staging areas. Provide traffic control for all profile testing.
 1118

1119 The Engineer or MTRB or both may cancel the profile testing if the test
 1120 area is not sufficiently clean, traffic control is unsatisfactory, or the area is not
 1121 a safe work environment or test area does not meet Contract Document
 1122 requirements. This canceled profile test will count as one profile test.
 1123
 1124

1125 **(Q) Cost of Acceptance Profile Testing by The Department.** The
 1126 Engineer, MTRB, or State's Third-Party Consultant will perform one initial
 1127 profile test, at no cost to the Contractor for each area to be tested.
 1128

1129 The Department's High-Speed Inertial Profiler pavement profile will be
 1130 used to determine if the pavement's profile, i.e., smoothness is acceptable.
 1131

1132 If the profile of the pavement does not meet the requirements of the
 1133 Contract Documents, the Contractor shall perform remedial work, i.e.
 1134 corrective work then retest the area to ensure that the area has the required
 1135 MRI, i.e., smoothness, before requesting another profile test by the Engineer.
 1136

1137 **(1) Additional testing.** Additional testing, by the Department
 1138 beyond the initial test will be performed at cost to the Contractor as
 1139 follows:
 1140

1141 **(a)** \$2,500 per test will be required when Department
 1142 personnel or State's Third-Party Consultant is used.
 1143

1144 **(R) Remedial Work for Pavements.**
 1145

1146 **(1)** Corrective work shall be required for any 25 ft interval with a
 1147 localized roughness in excess of 160 in/ mi. The Engineer may waive
 1148 localized roughness requirements for deficiencies resulting from

1149 manholes or other similar appurtenances. Adjust manholes or other
 1150 similar appurtenances so that using a 10-ft. straightedge the area
 1151 around that manhole or other similar appurtenance shall not have
 1152 more than 3/16-in. variation between any 2 contacts on the
 1153 straightedge.

1154
 1155 If corrective action is not successful, the Engineer may require
 1156 continued corrective action, or apply a payment adjustment of \$250
 1157 per occurrence.

1158
 1159 **(2)** Corrective work shall also be required for any 0.1 mile interval
 1160 with an average MRI above 95.0 in/mi for Types A and B. For Type A,
 1161 correct the deficient section to an MRI of 60 in/mi or less. For Type B,
 1162 correct the deficient section to an MRI of 70 in/mi or less. For Type C,
 1163 corrective work may be required by the Engineer for 0.1 mile intervals
 1164 that have an average MRI above the threshold shown in Tables
 1165 401.03-4 – Smoothness Pay Disincentives with MRI and 401.03-5 –
 1166 Smoothness Pay Disincentives for Percent Improvement as
 1167 applicable.

1168
 1169 **(3)** If corrective action does not produce the required improvement, the
 1170 Engineer may require continued corrective action, or apply payment
 1171 adjustment as shown in Tables 401.03-4 – Smoothness Pay
 1172 Disincentives with MRI and 401.03-5 – Smoothness Pay Disincentives
 1173 for Percent Improvement as applicable.

1174
 1175 **(4)** The Contractor shall notify the Engineer at least 24 hours prior
 1176 to commencement of the corrective work. The Contractor shall not
 1177 commence corrective work until the methods and procedure have
 1178 been approved in writing by the Engineer.

1179
 1180 **(5)** All smoothness corrective work for areas of localized
 1181 roughness shall be for the entire lane width. Pavement cross slope
 1182 shall be maintained through corrective areas.

1183
 1184 **(6)** The remedial repair areas shall be neat, rectangular areas
 1185 having a uniform surface appearance.

1186
 1187 **(7)** If grinding is used on HMA pavement, the surface shall have
 1188 nearly invisible grinding marks to passing motorist.

1189
 1190 **(8)** Other methods may include milling and overlaying HMA
 1191 pavement. The length, depth of the milling and the replacement
 1192 material will be solely decided by the Engineer.

1193

- 1194 (9) The finished repaired pavement surface shall leave no ridges
1195 or valleys or fins of pavement other than those allowed below.
1196
- 1197 (10) Remedial repairs shall not leave any drainage structures' inlets
1198 higher than the surrounding pavement or alter the Contract
1199 Document's drainage pattern.
1200
- 1201 (11) For items in the pavement other than drainage structures, e.g.,
1202 manhole frame and covers, survey monuments, expansion joints etc.,
1203 the finish pavement, ground or not, shall not be more than 1/4 inch in
1204 elevation difference. Submit to the Engineer remedial repair method
1205 to correct these conditions for acceptance.
1206
- 1207 (11) Pick up immediately grinding operation residue by using a
1208 vacuum attached to grinding machine or other method acceptable to
1209 the Engineer.
1210
- 1211 (a) Any remaining residue shall be picked up before the end
1212 of shift or before the area is open to traffic, whichever is earlier.
1213
- 1214 (b) Prevent residue from flowing across pavement or from
1215 being left on pavement surface or both.
1216
- 1217 (c) Residue shall not be allowed to enter the drainage
1218 system.
1219
- 1220 (d) The residue shall not be allowed to dry or remain on the
1221 pavement.
1222
- 1223 (e) Dispose of all material that is the result of the remedial
1224 repair operation, e.g., HMA residue, wastewater, and dust at a
1225 legal facility.
1226
- 1227 (12) Complete corrective work before determining pavement
1228 thickness for HMA pavements in accordance with Subsection
1229 401.03(I) – HMA Pavement Thickness Tolerances.
1230
- 1231 (13) All HMA wearing surface areas that have been ground shall
1232 receive a coating, e.g., a coating material that will restore any lost
1233 impermeability of the HMA due to the grinding of the surface. The
1234 coating used shall not be picked up or tracked by passing vehicles or
1235 be degraded after a short period of time has passed, i.e., it shall have
1236 a service life equal to or greater than the HMA pavement. The coating
1237 shall not decrease the pavement's friction value. The coating's limits
1238 shall be the full width of the lane regardless how small. If the remedial
1239 repair area extends into the next lane, then the repair area will be full

1240 lane width also. Extend the length of coating areas in order for the
 1241 coating area to look like the rest of the road and does not have patches
 1242 on it, i.e., make the road look uniform in color. The coating shall be of
 1243 a color that matches the surrounding pavement. The areas receiving
 1244 the coating shall not be open to traffic until it has cured enough so that
 1245 it cannot be picked up or tracked by passing vehicles or degrade.
 1246 Submit means and methods of the coating and type of coating to the
 1247 Engineer or MTRB for review and acceptance. Do not proceed with
 1248 the coating without acceptance from the Engineer.

1249
 1250 **(14)** Recompacting cold HMA, i.e., HMA that has reached ambient
 1251 temperature is not an acceptable remedial repair method.

1252
 1253 **(15)** Replace all pavement markings damaged or discolored by
 1254 remedial repairs.

1255
 1256 **(16)** Reprofile the corrected area and provide the Engineer the
 1257 results that show the corrective action, i.e., remedial repairs were
 1258 successful.

1259
 1260 **(S) Pavement Smoothness and Acceptance.**

1261
 1262 **(1)** Price and payment in various paving sections, e.g., 401 (Hot
 1263 Mix Asphalt Pavement), shall be full compensation for all work and
 1264 materials specified in the various paving sections and this section,
 1265 including but not limited to furnishing all labor, materials, tools,
 1266 equipment, testing, incidentals and for doing all work involved in micro
 1267 milling, milling (cold planing), grinding existing or new pavement,
 1268 removing residue, cleaning the pavement, necessary disposal of
 1269 residue, furnishing of any water or air used in cleaning the pavement
 1270 and any other related ancillary work or material or services. Also, it
 1271 includes any remedial work, e.g., re-paving, surface grinding,
 1272 application of a coating, curing compound, and replacement of
 1273 damaged pavement markings.

1274
 1275 **(2)** The contract price in those sections may be adjusted for
 1276 pavement smoothness by the Engineer. The pavement smoothness
 1277 contract unit price adjustments and work acceptance will be made in
 1278 accordance with the following schedules.

1279

| TABLE 401.03-3 –SMOOTHNESS PAY INCENTIVES | | |
|--|----------------------|---|
| Category | MRI (in/mi) | Pay Adjustment \$ per 0.1 mi |
| Type A | <30.0 | \$580 |
| | 30.0- less than 35.0 | \$480 |
| | 35.0- less than 40.0 | \$380 |
| | 40.0- less than 45.0 | \$280 |
| | 45.0- less than 50.0 | \$180 |
| | 50.0- less than 55.0 | \$80 |
| | 55.0- less than 60.0 | \$0 |
| Type B | <35.0 | \$420 |
| | 35.0- less than 40.0 | \$360 |
| | 40.0- less than 45.0 | \$300 |
| | 45.0- less than 50.0 | \$240 |
| | 50.0- less than 55.0 | \$180 |
| | 55.0- less than 60.0 | \$120 |
| | 60.0- less than 65.0 | \$60 |
| | 65.0- less than 70.0 | \$0 |
| Type C | <40.0 | \$280 |
| | 40.0- less than 45.0 | \$240 |
| | 45.0- less than 50.0 | \$200 |
| | 50.0- less than 55.0 | \$160 |
| | 55.0- less than 60.0 | \$120 |
| | 60.0- less than 65.0 | \$80 |
| | 65.0- less than 70.0 | \$40 |
| | 70.0- less than 75.0 | \$0 |

1280
1281

1282 (3) Pay Pavement Smoothness Adjustment will be based on the
 1283 initial measured MRI for both left and right wheel path, prior to any
 1284 corrective work for the 0.10-mile section, except for sections that the
 1285 Contractor has chosen to remove and replace. For sections that are
 1286 replaced, assessments will be based on the MRI determined after
 1287 replacement.

1288
 1289 (a) The Pavement Smoothness Adjustment will be
 1290 computed using the plan surface area of pavement shown in
 1291 the Contract Documents. This Pavement Smoothness
 1292 Adjustment will apply to the total area of the 0.10-mile section
 1293 for the lane width represented by MRI for the same lane. It
 1294 does not include any other price adjustments specified in the
 1295 Contract Documents. Those price adjustments will be, for each
 1296 adjustment, calculated separately using the original contract
 1297 price to determine the amount of adjustment to be made to the
 1298 contract price. Sections shorter than 0.1 mile and longer than
 1299 50 feet shall be prorated.

1300
 1301 (b) For 0.1 mile intervals with an average MRI above the
 1302 threshold shown in Table 401.03-3 – Smoothness Pay
 1303 Incentives, the Engineer shall apply a disincentive payment
 1304 adjustment up to the limit shown.

1305
 1306 i. For Types A and B, payment adjustments shall be
 1307 applied up to an MRI of 95.0 per Table 401.03-4 -
 1308 Smoothness Pay Disincentives with MRI.

1309
 1310 ii. For Type C, the payment adjustment shall be
 1311 dependent on the average MRI of the pavement prior
 1312 to paving activities

1313 1. If the MRI of the pavement prior to paving
 1314 activities is 125.0 in/mi or less, the payment
 1315 adjustment shall be per Table 401.03-4 -
 1316 Smoothness Pay Disincentives with MRI.

1317 2. If the MRI of the pavement prior to paving
 1318 activities is more than 125.0 in/mi, the
 1319 disincentive payment adjustment shall be per
 1320 Table 401.03-5 - Smoothness Pay
 1321 Disincentives for Percent Improvement, and
 1322 based on the percent improvement using the
 1323 following formula:

1324
 1325 % Improvement = (Initial segment MRI – Final segment
 1326 MRI) x 100 / (Initial Segment MRI)

1327

1328

| TABLE 401.03-4 –SMOOTHNESS PAY DISINCENTIVES WITH MRI | | |
|--|-----------------------|---|
| Category | MRI (in/mi) | Pay Adjustment \$ per 0.1 mi |
| Type A | 60.0- less than 70.0 | -\$100 |
| | 70.0- less than 75.0 | -\$250 |
| | 75.0- less than 80.0 | -\$350 |
| | 80.0- less than 85.0 | -\$450 |
| | 85.0- less than 95.0 | -\$550 |
| | > 95.0 | Corrective Work |
| Type B | 70.0- less than 75.0 | -\$100 |
| | 75.0- less than 80.0 | -\$200 |
| | 80.0- less than 85.0 | -\$300 |
| | 85.0- less than 95.0 | -\$400 |
| | > 95.0 | Corrective Work |
| Type C (pre-paving MRI < 125) | 75.0- less than 80.0 | -\$50 |
| | 80.0- less than 85.0 | -\$100 |
| | 85.0- less than 90.0 | -\$150 |
| | 90.0- less than 100.0 | -\$200 |
| | >100.0 | -\$250 |

1329

| TABLE 401.03-5 –SMOOTHNESS PAY DISINCENTIVES FOR PERCENT IMPROVEMENT | | |
|---|------------------------------|---|
| Category | Percent Improvement % | Pay Adjustment \$ per 0.1 mi |
| Type C | ≥ 40 | \$0 |
| (pre-paving MRI > 125) | 20.0- less than 40.0 | -\$100 |
| | < 20 | -\$200 |

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1337

(c) Incentives will not apply to areas where payment deductions or remedial repairs has been made for non-compliant work, e.g., low compaction, thin pavement, thermal segregation, low compressive or flexural strength, non-compliant alignment. Incentives will also not apply to areas where corrective work was required to meet contract smoothness requirements, unless the pavement section was

1338 replaced. All areas where corrective work was performed shall
 1339 be tested again to ensure the smoothness requirements are
 1340 met.

1341
 1342 (d) There will be no incentive price adjustments to the
 1343 contract prices regardless of the pavement meeting the
 1344 Contract Documents' requirements for incentive contract price
 1345 adjustment, when 25% of the total area paved of that particular
 1346 type of pavement on the project has failed to meet any of the
 1347 Contract document requirements, e.g., smoothness, thickness,
 1348 unit weight, asphalt content, pavement defects, compaction,
 1349 flexural or compressive strength. Areas exempt from the
 1350 smoothness requirements may not be included in the total area
 1351 calculation unless it is non-compliant.

1352
 1353 (e) For contracts using lump sum the method described in
 1354 Subsection 104.06 Methods of Price Adjustment paragraph (3),
 1355 will be used to calculate proportionate unit price, i.e., the
 1356 Engineer's calculated theoretical unit price. This calculated
 1357 proportionate unit price will be used to calculate the unit price
 1358 adjustment.

1359

1360 **401.04 Measurement.**

1361

1362 (A) The Engineer will measure PMA pavement per ton in accordance with
 1363 the Contract Documents.

1364

1365 (B) Engineer will measure additional State pavement profiling work when
 1366 applicable on a cost-plus basis as specified in this section and as ordered by
 1367 Engineer. The Engineer will issue a billing for the pavement profile work done
 1368 for the time period with the invoices and receipts that the billing was based
 1369 on attached to the Contractor for each contract item. The Contractor's
 1370 pavement profile work required in this section will not be measured and will
 1371 be considered incidental to the various paving items unless stated otherwise.

1372

1373 **401.05 Payment.** The Engineer will pay for the accepted PMA pavement at the
 1374 contract price per pay unit, as shown in the proposal schedule. Payment will be full
 1375 compensation for the work prescribed in this section and the contract documents.

1376

1377 (A) Price and payment in Section 401 – HMA Pavement will be full
 1378 compensation for all work and materials specified in this Section including
 1379 furnishing all labor, materials, tools, equipment, testing, pavement profiles
 1380 and incidentals and for doing all work involved in grinding existing or new
 1381 pavement, removing residue, and cleaning the pavement, including
 1382 necessary disposal of residue and furnishing any water or air used in
 1383 cleaning the pavement and remedial work needed to conform to the

1384 requirements of the Contract Documents.

1385

1386 **(B)** No payment for the Contractor's pavement profile work required in this
 1387 section will be made. The Contractor's pavement profile work shall be
 1388 considered incidental to the various paving items unless stated otherwise.

1389

1390 **(C)** Engineer will pay or deduct for the following pay items when included
 1391 in proposal schedule:

1392

| 1393 Pay Item | 1393 Pay Unit |
|----------------------|----------------------|
|----------------------|----------------------|

1394

| | |
|------------------------------------|----------------|
| 1395 Pavement Smoothness Incentive | 1395 Allowance |
|------------------------------------|----------------|

1396

| | |
|--|----------|
| 1397 _____ PMA Pavement, Mix No. _____ | 1397 Ton |
|--|----------|

1398

1399 **(1)** 70% of the contract unit price or the theoretical calculated unit
 1400 price upon completion of submitting a job-mix formula acceptable to
 1401 the Engineer; preparing the surface, spreading, and finishing the
 1402 mixture; and compacting the mixture.

1403

1404 **(2)** 20% of the contract unit price or the theoretical calculated unit
 1405 price upon completion of cutting samples from the compacted
 1406 pavement for testing; placing and compacting the sampled area with
 1407 new material conforming to the surrounding area; protecting the
 1408 pavement; and compaction acceptance. Maintain temporary
 1409 pavement markings and other temporary work zone items, maintain a
 1410 clean work site.

1411

1412 **(3)** 10% of the contract unit price or calculate the unit price when
 1413 the final configuration of the pavement markings is in place.

1414

1415 The Engineer will pay for adjusting existing frames and covers and valve
 1416 boxes in accordance with and under Section 604 – Manholes, Inlets and Catch
 1417 Basins. Adjustments for existing street survey monument frames and covers will be
 1418 paid for as if each were a valve box frame and cover.

1419

1420 The Engineer may, at his sole discretion, use the sliding scale factor as
 1421 specified in Table 401.05-1 – Sliding Scale Pay Factor for Compaction to accept
 1422 PMA pavements compacted between 90.0 percent and 98.0 percent. If the sliding
 1423 scale factor is used, the Engineer will make payment for the material in that
 1424 production day at a reduced price by multiplying the contract unit price by the pay
 1425 factor. The Engineer is not obligated to allow non-compliant work to remain in place
 1426 and may choose to require removal of the pavement that is less than 93.0 percent
 1427 or greater than 97.0 percent.

1428

1429 Removal of non-compliant pavement shall be in accordance with Subsection
 1430 105.12 Removal of Non-Conforming and Unauthorized Work.
 1431
 1432

| Table 401.05-1 – Sliding Scale Pay Factor for Compaction | |
|---|---------------------------------|
| Percent Compaction | Percent of Quantity Paid |
| > 98.0 | Removal |
| >97.0 - 98.0 | 95 |
| 93.0- 97.0 | 100 |
| 90.0 - <93.0 | 80 |
| <90.0 | Removal |

1433
 1434
 1435
 1436
 1437

END OF SECTION 401”

1 **SECTION 415 – COLD PLANING OF EXISTING PAVEMENT**

2
3 Make the following amendments to said Sections:

4
5 **(I)** Amend **Section 415.04 Measurement**, from line 67 to 68 to read as
6 follows:

7
8 **“415.04 Measurement.** The Engineer will measure cold planing per square
9 yard in accordance with the contract documents.”

10
11 **(II)** Amend **Section 415.05 Payment**, from line 70 to 79 to read as follows:

12
13 **“415.05 Payment.** The Engineer will pay for the accepted pay items
14 listed below at the contract price per pay unit, as shown in the proposal schedule.
15 Payment will be full compensation for the work prescribed in this section and the
16 contract documents.

17
18 The Engineer will pay for one of the following pay items when included in
19 the proposal schedule:

| 20 | 21 Pay Item | 22 | 23 Pay Unit |
|----|----------------------------|----|---------------------------|
| 24 | 25 Cold Planing | | 26 Square Yard |

27 **(1)** 80 percent of the contract bid price upon completion of
28 removing the indicated thickness and clean and sweep before
29 opening to public traffic;

30 **(2)** 20 percent of the contract bid price upon completion of
31 removing the material and disposing of the removed material.”

32
33
34
35
36 **END OF SECTION 415**

47 Top Coat: Valspar VyGuard V41 Series, DFT 4 mil
48 (minimum), WFT 7 mil (minimum)
49
50 Option 3:
51
52 Preparation: Solvent Clean per SSPC-SP1, and as
53 recommended by the manufacturer.
54
55 1st Coat: Sherwin Williams, Tile Clad High Solids B62
56 Series, DFT 4 mil (minimum), WFT 7 mil
57 (minimum)
58
59 Recoating Time: 8 Hours (minimum)
60 10 Days (maximum)
61
62 Top Coat: Sherwin Williams, Cororthone II B65 W200
63 Series/B60V2, DFT 4 mil (minimum), WFT 7
64 mil (minimum)
65
66 Option 4:
67
68 Preparation: Solvent Clean per SSPC-SP1. Apply
69 Galvaprep Zinc Treatment.
70
71 1st Coat: PPG Amerlock 600 epoxy, DFT 5 mil
72 (minimum), WFT 8 mil (minimum)
73
74 Recoating Time: 8 Hours (minimum)
75 4 Days (maximum)
76
77 Top Coat: PPG Pitthane Ultra LS Polyurethane, DFT 4
78 mil (minimum), WFT 7 mil (minimum)"
79
80

81 (II) Amend **606.04 - Measurement** by replacing lines 116 to 118 to read:

82
83 **“606.04 Measurement.** The Engineer will measure guardrail and strong
84 post rubrail (w-beam) guardrail per linear foot in accordance with the contract
85 documents.
86

87 The Engineer will measure from center to center of end posts. If the
88 Contractor makes end connections to masonry or steel structures, the Engineer
89 will measure to the face of such structures.
90

91 The Engineer may measure end anchorage, terminal section and
92 transition section:
93

- 94 (1) as units of each kind when specified in the proposal or
 95
 96 (2) include in the quantities of guardrail of the respective type and not
 97 measured separately.”
 98

99 **(III) Amend 606.05 – Payment** by revising lines 120 to 138 to read as follows:
 100
 101 **“606.05 Payment.** The Engineer will pay for the accepted pay items
 102 listed below at contract price per pay unit, as shown in the proposal schedule.
 103 Payment will be full compensation for the work prescribed in this section and the
 104 contract documents.
 105

106 The Engineer will pay for the following pay items when included in the
 107 proposal schedule:
 108

| 109 Pay Item | 109 Pay Unit |
|--|--------------|
| 110 | |
| 111 31-Inch W-Beam Midwest Guardrail system with | |
| 112 Standard 8-Inch Offset Block, 8-Ft Steel Posts | Linear Foot |
| 113 | |
| 114 Strong Post Rubrail (W-Beam) Guardrail | Linear Foot |
| 115 | |
| 116 Terminal Section, MSKT-SP-MGS, Softstop, Max Tension | |
| 117 Or Approved Equal | Each |
| 118 | |
| 119 Terminal Section, Modified Type A-1 Flare | Each” |
| 120 | |
| 121 | |
| 122 | |
| 123 | |
| 124 | |

END OF SECTION 606

SECTION 629 - PAVEMENT MARKINGS

Make the following amendments to said Section:

(I) Amend **Subsection 629.03(B) – Temporary Pavement Markings** by revising the third paragraph from lines 62 to 63 to read:

“Maintain and replace temporary pavement markings, flexible delineators, and barricades.”

(II) Amend **Table 629.03-1 – Temporary Pavement Markings** to read as follows:

| “TABLE 629.03-1 TEMPORARY PAVEMENT MARKINGS | |
|---|--|
| TYPE | PAVEMENT MARKINGS |
| Passing Permitted - Both Sides | Single 4-inch yellow stripe 5 feet in length spaced 20 feet on center with Type D markers spaced 40 feet on center and located on center of 5-foot length of stripe. |
| Passing Prohibited - Both Sides | Double solid 4-inch yellow stripes with Type D markers placed 20 feet on center on one of 4-inch yellow stripes selected by the Engineer. |
| Passing Permitted - One Side Only | Single continuous 4-inch yellow stripe with Type D markers placed on stripe 20 feet on center on no-passing side and single 4-inch yellow stripes 5 feet in length spaced 20 feet on center on passing side. |
| Lane Lines - Lane Changing Permitted | Single 4-inch yellow or white stripe 5 feet in length spaced 20 feet on center with Type C or Type D markers spaced 40 feet on center. |
| Lane Lines - Lane Changing Prohibited | Double solid 4-inch white stripes with Type C markers placed 20 feet on center on one of the 4-inch white stripes selected by the Engineer. |
| Crosswalk | Two 12-inch white transverse lines spaced 8 feet on center or as ordered by the Engineer. |
| Stop Line | Single 12-inch white transverse line. |
| Note: Paint may be used for temporary markings in areas where final paving is not complete.” | |

18 (III) Amend **Subsection 629.03(C) – Permanent Pavement Markings** by
19 adding the following after line 267:

20
21 **“(5) Thermoplastic Hot Spray Pavement Marking.**

22
23 **(a) Equipment.** Use equipment constructed for preparation
24 and application of thermoplastic hot spray pavement marking.

25
26 Equipment shall provide continuous mixing and agitation of
27 material. Conveying parts of equipment shall be constructed to
28 prevent accumulation and clogging.

29
30 Use applicator capable of containing minimum of 125
31 pounds of molten material.

32
33 Provide kettle for melting and heating composition. Equip
34 kettle with automatic thermostat control device so that heating can
35 be done by controlled heat transfer liquid rather than direct flame.

36
37 Equip and arrange applicator and kettle in accordance with
38 National Fire Underwriters requirements.

39
40 Mixing and conveying parts, including the spray gun, shall
41 maintain material at molten temperature.

42
43 Apply beads to entire surface of completed stripe by
44 automatic bead dispenser attached to hot spray applicator.

45
46 Equip bead dispenser with automatic cutoff control
47 synchronized with cutoff of thermoplastic material.

48
49 Use equipment that provides for varying spray widths to
50 produce varying widths of traffic markings.

51
52 Use mobile and maneuverable applicator that is capable of
53 following straight lines and making curves in true arcs.

54
55 **(b) Application.** Clean off dirt, debris, blaze, paint, tape, and
56 grease. Apply thermoplastic hot spray pavement marking only
57 when pavement surface is dry.

58
59 Use equipment that can apply material in variable widths
60 from 2 inches to 12 inches. Apply material for full width of stripe
61 in one application or pass.

62
63 On concrete pavements, on HMA pavements more than
64 seven days old, and on HMA pavements paved within seven days

65 containing less than 6 percent bituminous asphalt, pre-stripe
66 application area with binder material, primer, or prime seal coat
67 recommended by pavement marker manufacturer.
68

69 Line thickness, as viewed from lateral cross section, shall
70 measure not less than 3/32 inch at edges, and not less than 1/8
71 inch in center.
72

73 Where required by the contract documents to apply new
74 markings over existing markings, bond new line over old line so that
75 no splitting or separation takes place during its useful life.
76

77 Provide finished lines with well-defined edges, free of
78 waviness.”
79

80 **(IV)** Amend **Subsection 629.04 – Measurement** from lines 292 to 294 to read
81 as follows:
82

83 **“629.04 Measurement.**

84
85 **(A)** The Engineer will measure pavement striping per linear foot in
86 accordance with the contract documents.
87

88 Longitudinal gaps for skip striping will not be included in the
89 measurement
90

91 The Engineer will measure the painted stripes that are twelve (12)
92 inches wide or less as a single stripe. The Engineer will measure the
93 painted stripes over twelve (12) inches wide as two (2) stripes. The
94 Engineer will measure the double stripes that are twelve (12) inches or
95 less in total width including the transverse space between the stripes as a
96 single stripe.
97

98 **(B)** The Engineer will measure pavement marker per each in accordance
99 with the contract documents.
100

101 **(C)** The Engineer will measure pavement arrow per each in accordance
102 with the contract documents.
103

104 **(V)** Amend **Subsection 629.05 – Payment** from lines 296 to 324 to read as
105 follows:
106

107 **“629.05 Payment.** The Engineer will pay for the accepted pay item listed
108 below at contract price per pay unit, as shown in the proposal schedule. Payment
109 will be full compensation for the work prescribed in this section and the contract
110 documents.
111

112 The Engineer will pay for the following pay items when included in the
113 proposal schedule:

| 114 | | |
|-----|--|-----------------|
| 115 | Pay Item | Pay Unit |
| 116 | | |
| 117 | | |
| 118 | _____-Inch Pavement Striping _____ | Linear Foot |
| 119 | | |
| 120 | Type _____ Pavement Marker | Each |
| 121 | | |
| 122 | Pavement Arrow (Thermoplastic Extrusion) | Each” |
| 123 | | |
| 124 | | |
| 125 | | |
| 126 | | |

127 **END OF SECTION 629**

1 Make the following Section a part of the Standard Specifications:
2

3 **“SECTION 636 – E-CONSTRUCTION**
4

5
6 **636.01 Description.** This section specifies requirements for performing the Project in
7 a “paperless” manner, using electronic tools for all submittals, communications, quantity
8 tracking, testing, and sampling, scheduling, quality control, and performance monitoring.
9

10 **636.02 General Requirements.** The Contractor shall implement the use of the E-
11 Construction platform, as provided by the HDOT and directed by the Engineer, for use
12 throughout the project. Paper-based or hard copy submittals will not be accepted.
13

14 This Special Provision shall take precedence over all other Specification sections
15 with respect to providing and receiving paper copy communications, submittals, and any
16 project records. Where conflicts exist, and a decision between a hard-copy item and a
17 corresponding electronic version is needed, the electronic version shall be selected,
18 unless otherwise directed by the Engineer.
19

20 **636.03 Construction**
21

22 **(A) Plans and Specifications.** Project drawings will not be provided to the
23 Contractor in hard copy format. An electronic version will be provided in the E-
24 Construction platform for use during the project.
25

26 The Contractor shall note all changes to the work, including all
27 subcontractor’s work, in electronic format using the E-Construction platform Red
28 annotations shall be used to note changes. Blue annotations shall be used for any
29 additional notes that will be helpful for the State in interpreting the field posted
30 drawings. Other drafting standards may be implemented by the Engineer and shall
31 be adhered to by the Contractor. Changes shall be input by the Contractor and
32 reviewed by the Engineer monthly. The Contractor shall make any changes that
33 the Engineer requires.
34

35 **(B) Submittals.** The Contractor shall provide all required submittals, as listed
36 within the contract documents, via the E-Construction platform.—All review,
37 approval, and resubmittal regarding submittals shall also be documented within
38 the E-Construction platform.
39

40 **(C) Correspondence.** Electronic mail (email) shall be the preferred method of
41 electronic communication. All communications that affect project scope, schedule,
42 cost, or quality, including changes and requests for information, shall be submitted
43 as directed by the Engineer.
44

45 **(D) Prosecution and Progress.** The Contractor shall provide all
46 administrative, management, and project support documents required by various

47 specification sections, using the E-Construction platform. These elements include,
48 but are not limited to:

- 49 (1) Preconstruction Submittals (Section 108.03)
- 50 (2) Correspondence regarding Contract Time and Delays (Section
51 108.05)
- 52 (3) Progress Schedules (Section 108.06)
- 53 (4) Weekly Meeting preparatory materials (Section 108.07)
- 54 (5) Samples, certifications, material data, installation instructions, and
55 shop drawings (Sections 105 and 106)
- 56 (6) Field-posted Drawings (Section 648)
- 57 (7) Pre-Final Inspection submittals (Section 108.13)
- 58 (8) Warranty documentation (Section 108.17)
- 59 (9) Project Closing Documents (Section 108.19)

60
61
62 In addition to the foregoing, the Contractor shall provide any other
63 materials, correspondence, and submittals using the E-Construction
64 platform as directed by the Engineer.

65
66 **(E) Resources.** The Contractor shall provide a comprehensive list of
67 Contractor labor and equipment, including all subcontractor labor and equipment,
68 that will be deployed on the project, using spreadsheet-based templates provided
69 in the E-Construction platform. All template fields shall be completed. The
70 submitted information shall comply with the requirements of Specification Section
71 108 – Prosecution and Progress (identification of labor and equipment resources)
72 and Specification Section 109 - Measurement and Payment (cost data) and
73 represent all individual personnel with labor categories and rates, and all
74 equipment owned or rented, with associated rates, on this project. Updates for
75 additional personnel or equipment shall be accomplished by the Contractor at will
76 and shall be completed when directed by the Engineer.

77
78 **636.04 Measurement.** The Engineer will measure additional E-Construction
79 programs, additional licenses, or additional equipment, if ordered by the Engineer, on a
80 force account basis in accordance with Subsection 109.06 – Force Account Provisions
81 and Compensation.

82
83 **636.05 Payment.** The Engineer will pay for the additional E-Construction programs,
84 additional licenses, or additional equipment, on a force account basis in accordance with
85 Subsection 109.06 – Force Account Provisions and Compensation.

86 The Engineer may withhold progress payment until the Contractor is in compliance
87 with all E-Construction requirements.

| 88 | 89 | 90 |
|----|---|-----------------|
| | Pay Item | Pay Unit |
| 91 | Additional E-Construction Programs, Additional Licenses | |
| 92 | or Additional Equipment | Force Account |

93 An estimated amount for force account may be allocated in the proposal schedule
94 under "Additional E-Construction Programs, Additional Licenses or Additional
95 Equipment." The actual amount to be paid will be the sum shown on accepted force
96 account records."

97

98

99

100

101

END SECTION 636

1 **SECTION 638 – PORTLAND CEMENT CONCRETE CURB AND GUTTER**

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29

Make the following amendments to said Sections:

(I) Amend **Section 638.04 Measurement**, from line 130 to 131 to read as follows:

“503.04 Measurement. The Engineer will measure gutter per linear foot in accordance with the contract documents.”

(II) Amend **Section 503.05 Payment**, from line 133 to 148 to read as follows:

“503.05 Payment. The Engineer will pay for the accepted gutter at the contract price per linear foot. Payment will be full compensation for the work prescribed in this section and the contract documents.

The Engineer will pay for the following pay item when included in the proposal schedule:

| Pay Item | Pay Unit |
|------------------------|-----------------|
| Gutter, Type 2 (41414) | Linear Foot” |

END OF SECTION 638

1 **SECTION 639 – ASPHALT CONCRETE CURB AND GUTTER**

2
3 Make the following amendments to said Section:

4
5 **(I)** Amend **639.04 – Measurement** by revising lines 88 to 89 to read as
6 follows:

7
8 **“639.04 Measurement.** The Engineer will measure accepted asphalt
9 concrete curb per linear foot in accordance with the contract documents. The
10 Engineer will measure along the front face of the curb at the finished grade
11 elevation.”

12
13 **(II)** Amend **639.05 – Payment** by revising lines 91 to 101 to read as follows:

14
15 **“639.05 Payment.** The Engineer will pay for accepted asphalt concrete
16 curb at contract unit price per linear foot. Payment will be full compensation for
17 the work prescribed in this section and the contract documents.

18
19 The Engineer will pay for the following pay item when included in the
20 proposal schedule:

21

| Pay Item | Pay Unit |
|--------------|--------------|
| Curb, Type 6 | Linear Foot” |

22
23
24
25
26
27
28

29 **END OF SECTION 639**

48 (VI) Amend **Subsection 645.03 (H) Advertisement** from Line 391 to Line 392 to
49 read as follows:

50
51 “Place advertisement for three (3) consecutive days and within one (1) week
52 before traffic pattern changes, in publication as ordered by the Engineer. In lieu of
53 the advertisement(s), the Engineer may substitute the use of two portable
54 changeable message boards and accessories at no additional cost for three (3)
55 days for each required advertisement.”

56
57 (VII) Amend **Subsection 645.04 - Measurement** from line 394 to line 403 to read
58 as follows:

59
60 **“645.04 Measurement.**

61
62 (A) Traffic control as specified in Subsection 645.03 – Construction
63 including sign covers and the initial advertisement(s) will be measured on contract
64 lump sum basis. Measurement for payment will not apply.

65
66 (B) The Engineer will measure additional police officers, additional traffic
67 control devices, and additional advertisements, if ordered by the Engineer, on a
68 force account basis, in accordance with Subsection 109.06 – Force Account
69 Provisions and Compensation.’

70
71 (VIII) Amend **Subsection 645.05 - Payment** from lines 405 to 428 to read:

72
73 **“645.05 Payment.** The Engineer will pay for the accepted traffic control,
74 additional police officers, and additional traffic control devices, and additional
75 advertisements at the contract price per pay unit, as shown in the proposal
76 schedule. Payment will be full compensation for the work prescribed in this section
77 and the contract documents.

78
79 The Engineer will pay for the following pay items when included in the
80 proposal schedule:

81

| Pay Item | Pay Unit |
|--|---------------|
| Traffic Control | Lump Sum |
| Additional Police Officers, Additional Traffic Control Devices, and Additional Advertisements | Force Account |

82
83
84
85
86
87
88

89 An estimated amount for the force account may be allocated in the proposal
90 schedule under “Additional Police Officers, Additional Traffic Control Devices, and
91 Additional Advertisements”, but the actual amount to be paid will be the sum shown
92 on the accepted force account records, whether this sum be more or less than the
93 estimated amount allocated in the proposal schedule.

94
95

96 The Engineer will not pay for request submittals. The Engineer will not
97 consider claims for additional compensation of late submittals or requests by
98 Contractor.”

99

100

101

102

END OF SECTION 645

1 Make this section a part of the Standard Specifications:
2

3 **"SECTION 663 - EROSION CONTROL MATTING**
4

5 **663.01 Description.** This section describes furnishing and installing an erosion
6 control matting on cut and fill slope faces, including drainage swales, as shown
7 on the contract documents.
8

9 **663.02 Materials.**
10

11 **(A) General.** The erosion control matting shall be a multi-layered
12 geosynthetic netting specifically designed for erosion control as a long-
13 term installation. The erosion control matting shall provide erosion
14 protection for at least 36 months during vegetation establishment. The
15 matting shall allow grass or other natural ground cover to grow and take
16 root through the matting. The internal matrix material color shall be green
17 or brown and the outer net material shall be black.
18

19 **(B) Physical Properties.** The erosion control matting shall have the
20 following minimum physical properties;
21

22 **(1)** Materials shall be manufactured from polyethylene,
23 polypropylene, polyolefin or nylon.
24

25 **(2)** Thickness of the erosion control matting shall be 0.30 inches
26 minimum according to ASTM D 5199.
27

28 **(3) Ultraviolet stability** . – ASTM D 4355 (tensile strength
29 retained after 1000 hours) 80%.
30

31 **(4) Porosity** (calculation based upon weight, thickness and
32 specific gravity) minimum 95%.
33

34 **(5) Resiliency** (thickness retained after 3 cycles of a 100 psi
35 load for 60 seconds followed by 60 seconds without load-thickness
36 measured 30 minutes after load removed by ASTM D 1777) 75%
37 minimum.
38

39 **(6) Tensile strength** – ASTM D 5305, 2-inch Strip Test, 95 x 95
40 lbs/foot minimum.
41

42 **(7) Elongation** – ASTM D 5305, 2-inch Strip Test, 70% x 70%
43 maximum,
44

45 **(C) Brochures and Manufacturer's Certification.** The manufacturer
46 of the erosion control matting shall submit brochures and certifications

47 stating the quality of the material meet the intended use on the project.
48 The certification shall clearly show the product number or other similar
49 control number, which match the markings on the product delivered to the
50 site. The manufacturer shall furnish certified test reports with each
51 shipment attesting that the erosion control matting meets the requirements
52 of the specification for material physical properties. Samples of the erosion
53 control matting shall also be submitted to the Engineer.
54

55 **663.03 Construction.**

56
57 **(A) General.** Place erosion control matting on cut and fill slope
58 faces, including drainage swales, as shown on contract documents.
59

60 **(B) Installation.**

61
62 **(1) Installation Plan.** Submit an installation plan prior to any
63 work on the slope.
64

65 **(2) Site Preparation.** Grade and compact the slope face
66 properly. Remove all materials such as rocks and vegetation that
67 would interfere with the soil and the erosion control matting.
68

69 **(3) Anchor Trenches.** Anchor trenches shall be as
70 recommended by the manufacturer. The trenches shall be a
71 minimum of eight inches deep and eight inches wide before placing
72 the erosion control matting, Backfill and compact trenches properly
73 to the original requirements of the slope.
74

75 **(4) Planting.** Install the erosion control matting prior to
76 hydro-mulching to retain good seed distribution and avoid
77 disturbance of the hydro-mulching by work crews. Hydro-mulching
78 may be done before mat placement; however, the disturbed areas
79 must be corrected by re-hydro-mulching at no cost to the State.
80

81 **(5) Placement.** Place the erosion control matting according to
82 the manufacturer's recommendations. The matting roll ends shall
83 be overlapped a minimum of 18 inches. The adjacent edges of the
84 matting shall be overlapped a minimum of 3 inches.
85

86 **(6) Anchoring.** Anchor the erosion control matting at overlaps
87 with 12-inch x 2-inch x 12-inch 8G metal staples. The distribution of
88 the staples shall be a minimum of two per square yard and spaced
89 as recommended by the matting manufacturer. The Engineer will
90 not allow wood anchors, such as pegs or stakes of any kind.
91 Alternate anchoring methods may be allowed if approved by the
92 matting manufacturer and accepted by the Engineer:

93
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120

For installation in rock area, anchor matting according to the manufacturer's recommendations.

(7) Repairs. Correct tears and holes in the erosion control matting with a minimum of 3-foot overlap in each direction of the damage. Re-hydromulch the repaired area if ordered by the Engineer. Repair and/or replace the damaged or defective erosion control matting at no additional cost to the State.

663.04 Measurement. The Engineer will measure erosion control matting per square yard in accordance with the contract documents.

663.05 Payment. The Engineer will pay for the accepted erosion control matting at the contract price per square yard. Payment will be full compensation for the work prescribed in this section and the contract documents.

The Engineer will pay for the following pay Item when included in the proposal schedule:

| Pay Item | Pay Unit |
|-------------------------|-----------------|
| Erosion Control Matting | Square Yard" |

END OF SECTION 663

1 Make the following Section a part of the Standard Specifications:
2

3 **“SECTION 671 – PROTECTION OF THREATENED AND ENDANGERED**
4 **SPECIES**
5

6 **671.01 Description.** The endangered Hawaiian hoary bat or ‘ōpe‘ape‘a
7 (*Lasiurus cinereus semotus*) may roost, forage, and rear young in the general
8 vicinity of the proposed project. The project site is located in a known flight corridor
9 for the endangered Hawaiian petrel or ‘ua‘u (*Pterodroma sandwichensis*), the
10 endangered Hawai‘i distinct population segment (DPS) of the band-rumped storm-
11 petrel or ‘ake‘ake (*Oceanodroma castro*), and the threatened Newell’s shearwater
12 or ‘a‘o (*Puffinus auricularis newelli*), hereinafter referred to as Hawaiian seabirds.
13 Endangered Hawaiian waterbirds, including the Hawaiian stilt or ae‘o (*Himantopus*
14 *mexicanus knudseni*), the Hawaiian coot or ‘alae ke‘oke‘o (*Fulica americana alai*),
15 the Hawaiian gallinule or ‘alae ‘ula (*Gallinula galeata sandvicensis*), and the
16 Hawaiian duck or koloa (*Anas wyvilliana*) are known to be in the general vicinity of
17 the project and may be attracted to the project staging areas even in sub-optimal
18 locations if water is present. Also to be considered is the threatened Hawaiian
19 goose or nēnē (*Branta [=Nesochen] sandvicensis*) which may use the construction
20 staging areas or areas adjacent to the roadway. The endangered Hawaiian monk
21 seal or ‘īlio holo i ka uaua (*Neomonachus schauinslandi*) and sea turtles, including
22 the endangered Hawksbill Sea Turtle or 'ea (*Eretmochelys imbricate*), and the
23 threatened Central North Pacific DPS of the Green Sea Turtle or honu (*Chelonia*
24 *mydas*) are in the general vicinity of the proposed project and may transit or visit
25 the proposed project area.
26

27 The Contractor shall protect these threatened and endangered species
28 throughout the construction duration.
29

30 **671.02 Materials.** None
31

32 **671.03 Construction.**
33

34 **(A) Pre-Construction and Construction Requirements.** Comply with
35 the following conditions and the notes in the Contract Plans:
36

37 **(1) Hawaiian Hoary Bat.** Hawaiian hoary bats nest in both
38 native and non-native woody vegetation.
39

40 The Contractor shall incorporate these measures to avoid and
41 minimize project-related adverse effects to the Hawaiian hoary bat:
42

43 **(a)** There shall be no disturbance, removal, or trimming of
44 woody plants greater than 15 feet (4.6 meters) tall
45 during the bat birthing and pup rearing season (June 1
46 through September 15).
47

48 **(b)** Barbed wire shall not be used for fencing.
49

50 **(2) Hawaiian Seabirds.** Hawaiian seabirds may traverse the
51 project area at night during breeding, nesting and fledgling season,

52 which extends from March 1 through December 15. Permanent
53 lighting poses a very high risk of seabird attraction so new highway
54 lighting should not be installed to protect seabird flyways and
55 preserve the night sky. Additional or increased lighting exacerbates
56 the problem of Newell's shearwater fallout.
57

58 Fallout shall be defined as the occurrence of seabirds being
59 harmed, injured or killed and falling to the ground due to: 1) collision
60 with structures such as wires, poles, or other objects; 2) light
61 attraction and the resulting collision with structure associated with or
62 near the light sources; or, 3) the exhaustion from circling the light
63 source.
64

65 If nighttime work will be required in conjunction with the
66 development of the project, the Contractor shall incorporate these
67 measures to avoid and minimize project-related adverse effects to
68 Hawaiian seabirds:
69

70 **(a)** Before beginning any work at the project site, the
71 Contractor shall:
72

73 **i.** Collect information regarding the protection of
74 seabirds and seabird fallout.
75

76 **ii.** Submit to the Engineer for acceptance a protection
77 of seabirds training plan including a detailed
78 description of information and materials the
79 Contractor intends to use in the training classes.
80 The training plan shall be submitted to the Engineer
81 for acceptance at least 15 days in advance of the
82 class. If the Engineer rejects the training plan, the
83 Contractor shall revise and promptly propose
84 another training plan.
85

86 **iii.** Disseminate information regarding the protection of
87 seabirds and seabird fallout by conducting training
88 classes for all employees, subcontractors, suppliers
89 and other personnel working on the project,
90 including HDOT personnel, on such topics as the
91 Save Our Shearwater (SOS) program, proper use
92 of temporary lighting, procedures to store and
93 report downed seabirds, and the consequences of
94 non-compliance with the laws regarding threatened
95 and endangered seabirds. The Engineer may
96 request for additional topics related to seabirds to
97 be included in the training classes.
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99 Training classes shall be taught by
100 authorized representatives of the USFWS, the

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Department of Land and Natural Resources, the SOS program or other qualified personnel accepted by the Engineer.

- iv. Furnish the Engineer with evidence that the Contractor has held training classes, including the dates of the classes, identify who conducted the training, and the content and nature of the training.

(b) The Contractor shall comply to the following construction requirements:

- i. As directed by the Engineer, the Contractor shall conduct additional training classes during the project to update all employees, subcontractors, suppliers, HDOT personnel and other personnel on new and/or updated information regarding the protection of seabirds and seabird fallout.
- ii. No permanent streetlights shall be installed as part of the project.
- iii. All temporary lights used for night work (between sunset and sunrise) shall contain less than 2% wavelengths less than 550 nm, and shall be downward-facing and shielded so the bulb can only be seen from below. Temporary lights shall include but are not limited to flood lights, light towers, lights for construction equipment and other lights as determined by the Engineer. All traffic control devices, including warning lights, arrow boards, portable changeable message signs and other lighting device as determined by the Engineer shall be shielded.
- iv. Nighttime construction and the use of all temporary lights shall cease during the peak seabird fledgling period (September 15 through December 15).
- v. The Contractor shall furnish and maintain a small (approximately 10" x 12" x 19"), portable cat kennel on site to temporarily hold a downed seabird. The Contractor shall obtain acceptance of the cat kennel from the Engineer prior to use.

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- vi. If a downed dead seabird is found, the Contractor shall contact the USFWS (Ms. Megan Laut at 808-792-9400) within 24 hours.
- vii. If the downed seabird is alive, the Contractor shall:
 - I. Pick up the seabird from behind as soon as possible using a clean towel, t-shirt or cloth by gently wrapping it around its back and wings.
 - II. Place the seabird in the cat kennel and immediately contact the SOS Program Coordinator at 808-635-5117 for further instructions on where to deliver the seabird.
 - III. Deliver the seabird to the location determined by the coordinator of the SOS program and as directed by the Engineer.
 - IV. Keep the seabird in a cool, quiet location and out of direct sunlight with adequate ventilation.
 - V. The Contractor and any personnel on-site shall not feed, provide water, handle or release the seabird.
- viii. The Contractor shall maintain records of all downed seabirds for the duration of the project. The records shall include the date, time, location and condition (dead or alive) the seabird was found and delivered. Submit a copy of the records to the Engineer after finding each and every downed seabird.

(3) Hawaiian Waterbirds. Hawaiian waterbirds occupy fresh and brackish water marshes, coastal estuaries and natural or manmade ponds. Hawaiian stilts also occupy areas with ephemeral or persistent standing water, conditions of which can be found in culverts and drainage structures. Because this project occurs near water, threats to these species from this project may include predation, reduced reproductive success, disturbance from human activity and injury or mortality from vehicle strikes.

The Contractor shall incorporate these measures to avoid and minimize project-related adverse effects to Hawaiian waterbirds:

- (a) In areas where known presence of Hawaiian waterbirds occurs, post, implement and enforce reduced

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speed limits, and inform project personnel and Contractors of the presence of these endangered species on-site.

(b) Because water resources occur in the project site, employ U.S. Fish and Wildlife Service (USFWS) Best Management Practices for Work in Aquatic Environments.

(c) Where appropriate habitat occurs within the vicinity of the project area, survey for Hawaiian waterbirds and nests prior to initiation of project work using survey biologists familiar with the species' biology. Survey biologists should be trained and capable of identifying adults and juveniles of each species, nesting behaviors, and nests. Repeat surveys again within 3 days of project initiation and after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest).

i. Surveys for species and nests should be repeated when a delay of work occurs that is three days or more (during which the birds may attempt to nest).

ii. If a nest or active brood is found, contact USFWS within 24 hours for further guidance.

iii. Establish and maintain a 100-ft buffer around all active nests and/or broods until the chicks/ducklings have fledged. Do not conduct potentially disruptive activities or habitat alteration within this buffer.

iv. A biological monitor that is familiar with the species' biology shall be present on the project site during all construction or earth moving activities until the chicks/ducklings fledge to ensure that Hawaiian waterbirds and nests are not adversely affected.

(d) A biological monitor is required during Hawaiian stilt nesting season from February 15 through August 31.

i. A biological monitor that is familiar with the species biology and approved by the Federal Highways Administration will conduct Hawaiian stilt nest surveys where appropriate habitat occurs within the proposed maintenance site prior to cleaning culverts and drainage structures.

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- ii. Surveys will take place within three days of project initiation and after any subsequent delay of work of three or more days (during which the birds may attempt to nest).

(4) Hawaiian Goose. Hawaiian goose or nēnē uses various habitat types. Threats to the species from this project include disturbance from human presence, and injury and mortality from vehicle strikes. An increased human presence at the project site could disturb nēnē nesting, foraging, or loafing in the area.

The Contractor shall incorporate these measures to avoid and minimize project-related adverse effects to the nēnē:

- (a) Nēnē in or near the project area shall not be approached, fed, or disturbed in any way.
- (b) All food and or beverage waste shall be disposed of in appropriate, covered trash receptacles.
- (c) If nēnē are observed loafing, foraging, or otherwise present within the project area during the breeding season (September 1 through April 30), a trained biologist familiar with nēnē nesting behavior will survey the area in and around the project area for nests prior to work each day. Surveys will be repeated after any subsequent delay of work of three or more days (during which the birds may attempt to nest).
- (d) If a nest is identified within a radius of 150 feet of the project area, or a previously undiscovered nest is found within the 150-foot radius after work begins, all work shall cease and the USFWS will be contacted immediately for further guidance.
- (e) Reduced speed limits shall be posted and implemented in areas where nēnē are known to be present, and project personnel and Contractors will be informed of the presence of endangered species on-site.
- (f) There shall be no feeding of birds or dogs on the project site.

(5) Hawaiian Monk Seal. The Contractor shall incorporate these measures to avoid and minimize project-related adverse effects to the Hawaiian monk seal:

- (a) All regular on-site staff shall be trained to identify the Hawaiian monk seal and trained on appropriate steps to take if this species is present on-site.

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- (b) Construction activities shall not take place if a Hawaiian monk seal is in the construction area or within 150 feet of the construction area. Construction can only begin after the animal voluntarily leaves the area. If a monk seal/pup pair is present a minimum 300-foot buffer shall be observed. If a Hawaiian Monk Seal is noticed after work has already begun, that work may continue only if, in the best judgment of the Biological Monitor, that there is no way for the activity to adversely affect the animal(s).
- (c) Any construction-related debris that may pose an entanglement threat to Hawaiian monk seals shall be removed from the construction area at the end of each day and at the conclusion of the construction project.
- (d) Workers shall not attempt to feed, touch, ride, or otherwise intentionally interact with any listed species.

(6) Sea Turtles. Sea turtles may nest on any sandy beach in the Pacific Islands. Nesting occurs on beaches from May through September, peaking in June and July, with hatchlings emerging through November and December. Construction can compact and erode sand and sediments, destroy sea turtle nests, erode beaches, create runoff of contaminants, and create light that disorients hatchlings and deters nesting. Off-road vehicle traffic on beaches, including construction equipment, directly affecting sea turtles and their nests by crushing individuals and degrading habitat with erosion and compacting sand and sediment.

To avoid and minimize project-related adverse effects to sea turtles and their nests, incorporate these conservation measures:

- (a) No vehicle use or modifying the beach/dune environment during the sea turtle nesting or hatching season, which extends from May through December.
- (b) Employ U.S. Fish and Wildlife Service Recommended Standard Best Management Practices when working in aquatic environments.
- (c) Remove any project-related debris, trash, and equipment from the beach or dune if not actively in use.
- (d) Do not stockpile project-related materials in the intertidal zone, reef flats, stream channels, or river channels.

Optimal turtle nesting habitat is a dark beach, free of barriers that could restrict sea turtle movement. Lighting and human

341 presence deters nesting turtles from approaching, laying eggs, and
342 successfully nesting. Artificial light disorients sea turtles and they
343 become exhausted, causing them to nest in inappropriate locations,
344 such as at or below the high tide line. Artificial lighting also disorients
345 hatchlings as they emerge from nests. Sea turtles need darkness on
346 beaches so they can successfully navigate back to the ocean. In-
347 water work at night shall be avoided, unless emergency maintenance
348 and repair of erosion and sediment controls are necessary to meet
349 permit conditions.

350
351 The Contractor shall incorporate these measures to avoid and
352 minimize project-related adverse effects to sea turtles and their
353 young from lighting:
354

355 (a) Avoid nighttime work during the nesting and hatching
356 season, which extends from May through December.

357
358 (b) Minimize the use of lighting and shield all project-
359 related lights to ensure this light is not visible from any beach.

360
361 (c) If full shielding of light is not possible, or if you require
362 the use of headlights, fully enclose the light source using light
363 filtering tape or filters.

364
365 **(7) Essential Fish Habitat.** The Contractor shall incorporate
366 these measures to avoid and minimize project-related adverse
367 effects to essential fish habitat:
368

369 (a) Contractor shall conduct a pre-construction biological
370 survey to determine whether infrastructure materials (e.g,
371 riprap, piles, boulders) are colonized with benthic
372 communities. If infrastructure materials (e.g, riprap, piles,
373 boulders) that are colonized with benthic communities will be
374 removed or destroyed as part of permitted activities,
375 Contractor shall prepare relocation plan for HDOT approval,
376 and relocate these materials to an appropriate receiving site.

377
378 (b) The Contractor shall prevent debris from falling into the
379 water.

380
381 **(B) Compliance Requirements.** The Contractor shall protect all
382 species noted above for the duration of construction. Failure to
383 comply with the construction requirements, harm or a taking of an
384 individual during the construction duration shall be enforceable by
385 the USFWS as set forth by the Endangered Species Act. Resultant
386 penalties and/or fines shall be at the Contractor's expense without
387 cost or liability to the State.

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671.04 Measurement. The Engineer will measure the work required for the protection of threatened and endangered species on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation and as ordered by the Engineer.

671.05 Payment. The Engineer will pay for the accepted protection of threatened and endangered species on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation. Payment will be full compensation for the work prescribed in this section, by the Engineer, and in the contract documents.

The Engineer will pay for the following pay item when included in the proposal schedule:

| Pay Item | Pay Unit |
|---|-----------------|
| Protection of Threatened and Endangered Species | Force Account |

An estimated amount may be allocated in the proposal schedule under “Protection of Threatened and Endangered Species”, but the actual amount to be paid will be the sum shown on the accepted force account records, whether this sum be more or less than the estimated amount allocated in the proposal schedule.”

END OF SECTION 671

SECTION 702 – BITUMINOUS MATERIALS

Make the following amendments to said Section:

(I) Amend **Subsection 702.01** by replacing lines 4 to 5 to read:

“702.01 Asphalt Cement.

(A) **PG 64-16.** Performance graded (PG) asphalt binder (neat or unmodified) shall conform to AASHTO M 320.

(B) **PG 64E-22.** Performance graded binder (polymer modified) shall conform to AASHTO M 332 and meet the following additional requirement:

AASHTO T 315 Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR). Phase angle on original binder shall be less than 77 degrees.

(C) **Submittals.** Submit, before usage, a Certificate of Compliance, accompanied by substantiating test data, showing conformance with Performance Graded Asphalt Binder Specification. The Engineer will not accept the PG binder without adequate documentation.”

(II) Amend **Subsection 702.04** to add under line 32:

Polymer modified asphalt shall conform to AASHTO M 316, except cationic type CQS-1P or CQS-1hP used for micro surfacing shall meet the requirements in Table 702.04-1.

| TABLE 702.04-1 – Polymer Modified Emulsion for Micro Surfacing Requirements | | | |
|---|-------------------------|--------------------------|------|
| Property | Test Procedure (AASHTO) | Specification | |
| | | Min | Max |
| Emulsion Properties | | | |
| Viscosity, Saybolt-Furol, @ 122°F, SFS | T59 | 15 | 150 |
| Sieve Test, % | T59 | | 0.1 |
| Residue by Evaporation, % | T59 | 62 | |
| Residue Properties From Low Temperature Evaporation | | AASHTO R-78 ^b | |
| MSCR @ 70° C, Recovery @ 3.2 kPa, % | T350 | 80 | |
| MSCR @ 70°C, J _{nr} @3.2, 1/kPa | T350 | | 0.50 |
| <u>Notes:</u> | | | |
| (a) Maintain the test temperature at 350°F (177°C) for 20 minutes. (b) After recovering the residue from AASHTO R-78, the sample may be annealed prior to testing to remove any excess moisture and provide for a consistent sample. The annealing can be accomplished by placing 20 grams of residue in a 6 oz. metal container (approx. 3-inch diameter) and heating to 163°C for no more than 15 minutes. The sample should be stirred with a spatula every 5 minutes. The sample can then be poured directly into a 25mm DSR silicone mold for evaluation. | | | |

30 (III) Amend **Subsection 702.06 (Unassigned)** by replacing line 23 to read:
31
32 **“702.06 Warm Mix Asphalt (WMA) Additive.** Additives for WMA shall be
33 approved by the Engineer.”
34

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END OF SECTION 702

| TABLE 703.11-1 – SLURRY SYSTEM TEST REQUIREMENTS | | | |
|---|---------------------|--------------------|------------------------|
| Test | Method | Slurry Seal | Micro Surfacing |
| Sand Equivalent, min | AASHTO T 176 | 45 | 65 |
| Magnesium Sulfate Soundness, max loss, %, 4 cycles ^c | AASHTO T 104 | 25 | 25 |
| Los Angeles Abrasion, %, max ^c | AASHTO T 96 | 35 | 30 (a) |
| Notes: | | | |
| (a) Perform tests on aggregate before crushing. | | | |
| (b) Do not use predominantly limestone or dolomite aggregate. | | | |
| (c) The abrasion and soundness test is to be run on the parent aggregate. | | | |

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| TABLE 703.11-2 - SLURRY SYSTEM GRADING REQUIREMENTS | | | | |
|---|--------------------------------------|---------------|---------------|--------------------------------------|
| Sieve Size | Percent Passing by Weight.325 | | | Stockpile Tolerance (Percent) |
| | Type 1 | Type 2 | Type 3 | |
| 3/8 Inch | - | 100 | 100 | - |
| No. 4 | 100 | 90 - 100 | 70 - 90 | ± 5 |
| No. 8 | 90 - 100 | 65 - 90 | 45 - 70 | ± 5 |
| No. 16 | 65 - 90 | 45 - 70 | 28 - 50 | ± 5 |
| No. 30 | 40 - 65 | 30 - 50 | 19 - 34 | ± 5 |
| No. 50 | 25 - 42 | 18 - 30 | 12 - 25 | ± 4 |
| No. 100 | 15 - 30 | 10 - 21 | 7 - 18 | ± 3 |
| No. 200 | 10 - 20 | 5 - 15 | 5 - 15 | ± 2 |
| Type 1 - Crack filling and fine seal. Type 2 - Medium seal. Type 3 - 1 st and/or 2 nd application, two-course seal. | | | | |

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END OF SECTION 703

1 **SECTION 717 – CULLET AND CULLET-MADE MATERIALS**

2
3 Make the following amendments to said Section:

4
5 **(I) Amend Subsection 717.01 – Cullet and Cullet-Aggregate Mixtures as**
6 **Construction Materials** by revising the third paragraph from line 16 to 20 to
7 read:

8
9 “Debris shall not exceed values specified in Tables 717.02-1 - Cullet in
10 Roadway Applications, 717.03-1 - Cullet in Utility Applications, and 717.04-1 -
11 Cullet in Drainage Applications. Debris is defined as deleterious material that
12 includes plastics, papers, and non-ceramic constituents of cullet. Hazardous
13 material will not be allowed in cullet such as but not limited to, TV or other
14 cathode ray tubes, fluorescent light bulbs, and any toxic or hazardous materials.
15 Test cullet stockpile for toxic or hazardous materials every 90 days and submit
16 the results to the Engineer.”

17
18 **(II) Amend Subsection 717.01 – Cullet and Cullet-Aggregate Mixtures as**
19 **Construction Materials** by adding the following paragraph after line 21:

20
21 “Cullet shall not be used in concrete.”

22
23 **(III) Amend Table 717.03-1 – Cullet in Utility Applications** from line 37 to
24 line 39 to read:

25

| TABLE 717.03-1 - CULLET IN UTILITY APPLICATIONS | | |
|---|---|---|
| Utility Trench Bedding and Backfill Applications | Maximum Cullet Content (Percent By Weight) | Maximum Debris Level (Percent By Weight Of Cullet) |
| Sewer Pipes | 25 | 0.3 |
| Electrical Conduits | 25 | 0.3 |
| Fiber Optic Lines | 25 | 0.3 |

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(IV) Amend **Table 717.04-1 – Cullet in Drainage Applications** from line 47 to line 49 to read:

| TABLE 717.04-1 - CULLET IN DRAINAGE APPLICATIONS | | |
|---|---|---|
| Drainage Fill Applications | Maximum Cullet Content (Percent By Weight) | Maximum Debris Level (Percent By Weight Of Cullet) |
| Retaining Walls | 25 | 0.2 |
| Foundation Drains | 25 | 0.2 |
| Drainage Blankets | 25 | 0.2 |
| French Drains | 25 | 0.2 |

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END OF SECTION 717

1 **SECTION 750 – TRAFFIC CONTROL SIGN AND MARKER MATERIALS**

2
3 Make the following amendments to said Section:

4
5 **(I)** Amend **Subsection 750.01(A)(1) Retroreflectorization** by replacing lines
6 8 through 31 to read:

7
8 **“(1) Retroreflectorization.** The following shall be retroreflectorized:

9
10 **(a)** Background for illuminated guide signs and exit number panels (“E”
11 designation) with ASTM D 4956 Type XI retroreflective sheeting.

12
13 **(b)** Background for non-illuminated guide signs and exit number panels
14 (“D” designation) with ASTM D 4956 Type XI retroreflective sheeting.

15
16 **(c)** Messages, arrows, and borders of guide signs and exit number
17 panels (“D” and “E” designations) with ASTM D 4956 Type XI
18 retroreflective sheeting.

19
20 **(d)** Regulatory and warning signs, directional signs (“DIR” designation),
21 route and auxiliary markers, shield symbols, yellow “EXIT ONLY” panels,
22 construction warning signs, and barricade rails, completely, with Type XI
23 retroreflective sheeting.

24
25 **(e)** Pedestrian, school, bicycle crossing series, completely with Type XI
26 fluorescent yellow green retroreflective sheeting.”

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28
29 **(II)** Amend **Subsection 750.01(B) Backing** by replacing lines 72 through 73
30 to read:

31
32 “Aluminum sheet shall conform to ASTM B 209, alloy 5052-H38 or 6061-
33 T6 flat sheet.”

34
35 **(III)** Amend **Subsection 750.01(E) Retroreflective Sheeting Materials** by
36 replacing lines 1126 through 1137 to read:

37
38 **“(E) Retroreflective Sheeting Materials.** Retroreflective sheeting
39 includes white or colored sheeting having smooth outer surface.

40
41 Retroreflective sheeting shall be classified in accordance with ASTM D
42 4956.

43
44 The coefficient of retroreflection shall meet the minimum requirements of
45 ASTM D 4956 for the type of reflective sheeting specified.

47 The color shall conform to the latest appropriate standard color tolerance
48 chart issued by the U.S. Department of Transportation, Federal Highway
49 Administration and to the daytime and nighttime color requirements of ASTM D
50 4956.

51
52 Test methods and procedures shall be in accordance with ASTM.

53
54 **(IV)** Amend **Subsection 750.02 Sign Posts** by replacing lines 1168 through
55 1172 to read:

56
57 **“(C) Square Tube Posts.** Square and other tube posts shall conform to ASTM
58 A 653 for cold-rolled, carbon steel sheet, commercial quality; or ASTM A 787 for
59 electric-resistance-welded, metallic-coated carbon steel mechanical tubing.”

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END OF SECTION 750

1 **SECTION 755 – PAVEMENT MARKING MATERIALS**

2
3 Make the following amendments to said Section:

4
5 **(I)** Amend **Subsection 755.02 (C) Retroreflective Pavement Markers** by
6 revising lines 223 to 236 to read:

7
8 “Exterior surface of shell shall be smooth and contain one or two
9 retroreflective faces of specified color.”

10
11 **(II)** Amend **Subsection 755.05 (C)(1) Glass Beads** by adding the following
12 after line 869:

13
14 **(f)** The glass spheres shall not contain more than 200 ppm (total)
15 arsenic, 200 ppm (total) antimony nor more than 200 ppm (total)
16 lead, when tested according to EPA Methods 3052 and 6010C.
17 Other suitable x-ray fluorescence spectrometry analysis methods
18 may be used to screen samples of glass spheres for arsenic and
19 lead content.”

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27 **END OF SECTION 755**

Requirements of Chapter 104, HRS Wages and Hours of Employees on Public Works Law

Chapter 104, HRS, applies to every public works construction project over \$2,000, regardless of the method of procurement or financing (purchase order, voucher, bid, contract, lease arrangement, warranty, SPRB).

Rate of Wages for Laborers and Mechanics

- Minimum prevailing wages (basic hourly rate plus fringe benefits), as determined by the Director of Labor and Industrial Relations and published in wage rate schedules, shall be paid to the various classes of laborers and mechanics working on the job site. [§104-2(a), (b), Hawaii Revised Statutes (HRS)]
- If the Director of Labor determines that prevailing wages have increased during the performance of a public works contract, the rate of pay of laborers and mechanics shall be raised accordingly. [§104-2(a) and (b), HRS; §12-22-3(d) Hawaii Administrative Rules (HAR)]

Overtime

- Laborers and mechanics working on a Saturday, Sunday, or a legal holiday of the State or more than eight hours a day on any other day shall be paid overtime compensation at not less than one and one-half times the basic hourly rate plus the cost of fringe benefits for all hours worked. If the Director of Labor determines that a prevailing wage is defined by a collective bargaining agreement, the overtime compensation shall be at the rates set by the applicable collective bargaining agreement [§§104-1, 104-2(c), HRS; §12-22-4.1, HAR]

Weekly Pay

- Laborers and mechanics employed on the job site shall be paid their full wages at least once a week, without deduction or rebate, except for legal deductions, within five working days after the cutoff date. [§104-2(d), HRS]

Posting of Wage Rate Schedules

- Wage rate schedules with the notes for prevailing wages and special overtime rates, shall be posted by the contractor in a prominent and easily accessible place at the job site. A copy of the entire wage rate schedule shall be given to each laborer and mechanic employed under the contract, except when the employee is covered by a collective bargaining agreement. [§104-2(d), HRS]

Withholding of Accrued Payments

- If necessary, the contracting agency may withhold accrued payments to the contractor to pay to laborers and mechanics employed by the contractor or subcontractor on the job site any difference between the wages required by the public works contract or specifications and the wages received. [§104-2(e), HRS]

Certified Weekly Payrolls and Payroll Records

- A certified copy of all payrolls shall be submitted weekly to the contracting agency. [§104-3(a), HRS; §12-22-10, HAR]
- The contractor is responsible for the submission of certified copies of the payrolls of all subcontractors. The certification shall affirm that the payrolls are correct and complete, that the wage rates listed are not less than the applicable rates contained in the applicable wage rate schedule, and that the classifications for each laborer or mechanic conform with the work the laborer or mechanic performed. [§104-3(a), HRS; §12-22-10, HAR]
- Payroll records shall be maintained by the contractor and subcontractors for three years after completion of construction. The records shall contain: [§104-3(b), HRS; §12-22-10, HAR]
 - the name and home address of each employee
 - the last four digits of social security number
 - a copy of the apprentice's registration with DLIR
 - the employee's correct classification
 - rate of pay (basic hourly rate + fringe benefits)
 - itemized list of fringe benefits paid
 - daily and weekly hours worked
 - weekly straight time and overtime earnings
 - amount and type of deductions
 - total net wages paid
 - date of payment
- Records shall be made available for examination by the contracting agency, the Department of Labor and Industrial Relations (DLIR), or any of its authorized representatives, who may also interview employees during working hours on the job. [§§104-3(c), 104-22(a), HRS; §12-22-10, HAR]

Termination of Work on Failure to Pay Wages

- If the contracting agency finds that any laborer or mechanic employed on the job site by the contractor or any subcontractor has not been paid prevailing wages or overtime, the contracting agency may, by written notice to the contractor, terminate the contractor's or subcontractor's right to proceed with the work or with the part of the work in which the required wages or overtime compensation have not been paid. The contracting agency may complete this work by contract or otherwise, and the contractor or contractor's sureties shall be liable to the contracting agency for any excess costs incurred. [§104-4, HRS]

Apprentices

- Apprentice wage rates apply to contractors who are a party to a bona fide apprenticeship program which has been registered with the DLIR. In order to be paid apprentice rates, apprentices must be parties to an agreement either registered with or recognized as a USDOL nationally approved apprenticeship program by the DLIR, Workforce Development Division, (808) 586-8877, and the apprentice must be individually registered by name with the DLIR. [§12-22-6(1) and (2), HAR]
- The number of apprentices on any public work in relation to the number of journeyworkers in the same craft classification as the apprentices employed by the same employer on the same public work may not exceed the ratio allowed under the apprenticeship standards registered with or recognized by the DLIR. A registered or recognized apprentice receiving the journeyworker rate will not be considered a journeyworker for the purpose of meeting the ratio requirement. [§12-22-6(3), HAR]

Enforcement

- To ensure compliance with the law, DLIR and the contracting agency will conduct investigations of contractors and subcontractors. If a contractor or subcontractor violates the law, the penalties are: [§104-24, HRS]
 - First Violation Equal to 25% of back wages found due or \$250 per offense up to \$2,500, whichever is greater.
 - Second Violation Equal to amount of back wages found due or \$500 for each offense up to \$5,000, whichever is greater.
 - Third Violation Equal to two times the amount of back wages found due or \$1,000 for each offense up to \$10,000, whichever is greater; and
Suspension from doing any new work on any public work of a governmental contracting agency for three years.
- A violation would be deemed a second violation if it occurs within two years of the **first notification of violation**, and a third violation if it occurs within three years of **the second notification of violation**. [§104-24, HRS; §12-22-25(b), HAR]
- **Suspension:** For a first or second violation, the department shall immediately suspend a contractor who fails to pay wages or penalties until all wages and penalties are paid in full. For a third violation, the department shall penalize and suspend the contractor as described above, **except that if the contractor continues to violate the law, then the department shall immediately suspend the contractor for a mandatory three years. The contractor shall remain suspended until all wages and penalties are paid in full.** [§§104-24, 104-25, HRS]
- **Suspension:** Any contractor who fails to make payroll records accessible or provide requested information within 10 days, or fails to keep or falsifies any required record, shall be assessed a penalty including suspension as provided in Section 104-22(b) and 104-25(a)(3), HRS. [§104-3(c), HRS; §12-22-26, HAR]
- If any contractor interferes with or delays any investigation, the contracting agency shall withhold further payments until the delay has ceased. Interference or delay includes failure to provide requested records or information within ten days, failure to allow employees to be interviewed during working hours on the job, and falsification of payroll records. The department shall assess a penalty of \$10,000 per project, and \$1,000 per day thereafter, for interference or delay. [§104-22(b), HRS; §12-22-26, HAR]
- Failure by the contracting agency to include in the provisions of the contract or specifications the requirements of Chapter 104, HRS, relating to coverage and the payment of prevailing wages and overtime, is not a defense of the contractor or subcontractor for noncompliance with the requirements of this chapter. [§104-2(f), HRS]



For additional information, visit the department's website at <http://labor.hawaii.gov/wsd> or contact any of the following DLIR offices:

Oahu (Wage Standards Division)(808) 586-8777
Hawaii Island.....(808) 974-6464
Maui and Kauai(808) 243-5322

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HONOLULU, HAWAII

P R O P O S A L

6/02/98

**PROPOSAL TO THE
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION**

PROJECT: KUHIO HIGHWAY INTERSECTION IMPROVEMENTS
VICINITY OF PINEAPPLE STORE
DISTRICT OF LIHUE
ISLAND OF KAUAI

PROJECT NO.: 56A-03-25

COMPLETION TIME: ONE HUNDRED TWENTY (120) Working days
from the Start Work Date from the Department.

LIQUIDATED DAMAGES: FIVE THOUSAND DOLLARS (\$5,000.00) for each
and every working day which the Contractor
has delayed the completion of this project.

DESIGN PROJECT MANAGER:

NAME: Joel Bautista
ADDRESS: 1720 Haleukana St. Lihue, Kauai, Hawaii 96766
PHONE NO.: (808) 241-3015
EMAIL: joel.o.bautista@hawaii.gov
FAX NO.: (808) 241-3011

ELECTRONIC SUBMITTAL: Bidders shall submit and upload the complete proposal to HlePRO prior to the bid opening date and time. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HlePRO. See SPECIAL PROVISIONS 102.09 DELIVERY OF PROPOSALS for complete details. FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HlePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.

Director of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Sir:

The undersigned bidder declares the following:

1. It has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal.
2. It has not been assisted or represented on this matter by any individual who has, in a State capacity, been involved in the subject matter of this contract within the past two years.
3. It has not and will not, either directly or indirectly offered or given a gratuity (i.e. an entertainment or gift) to any State or County employee to obtain a contract or favorable treatment under a contract.

The undersigned bidder further agrees to the following:

1. If this proposal is accepted, it shall execute a contract with the Department to provide all necessary labor, machinery, tools, equipment, apparatus and any other means of construction, to do all the work and to furnish all the materials specified in the contract in the manner and within the time therein prescribed in the contract, and that it shall accept in full payment therefore the sum of the unit and/or lump sum prices as set forth in the attached proposal schedule for the actual quantities of work performed and materials furnished and furnish satisfactory security in accordance with Section 103D-324, Hawaii Revised Statutes, within 10 days after the award of the contract or within such time as the Director of Transportation may allow after the undersigned has received the contract documents for execution, and is fully aware that non-compliance with the aforementioned terms will result in the forfeiture of the full amount of the bid guarantee required under Section 103D-323, Hawaii Revised Statutes.
2. That the quantities given in the attached proposal schedule are approximate only and are intended principally to serve as a guide in determining and comparing the bids.
3. That the Department does not either expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, or to omit portions of the work, as may be deemed necessary or advisable by the Director of Transportation, and that all increased or decreased quantities of work shall be performed at the unit prices set forth in the attached proposal schedule except as provided for in the specifications.

4. In case of a discrepancy between unit prices and the totals in said Proposal Schedule, the unit prices shall prevail.
5. Agrees to begin work within 10 working days after the date of notification to commence with the work, which date is in the notice to proceed, and shall finish the entire project within the time prescribed.
6. The Director of Transportation reserves the right to reject any or all bids and to waive any defects when in the Director's opinion such rejections or waiver will be for the best interest of the public.

The bidder acknowledges receipt of and certifies that it has completely examined the following listed items: the Hawaii Standard Specifications for Road and Bridge Construction dated 2005, the Notice to Bidders, the Special Provisions, if any, the Technical Provisions, the Proposal, the Contract and Bond Forms, and the Project Plans.

In accordance with Section 103D-323, Hawaii Revised Statutes, this proposal is accompanied with a bid security in the amount of 5% of the total amount bid, in the form checked below. (Check applicable bid security submitted with bid.)

Surety Bid Bond (Use standard form),

Cash,

Cashier's Check,

Certified Check, or

(Fill in other acceptable security.)

The undersigned bidder acknowledges receipt of any addendum issued by the Department by recording in the space below the date of receipt.

Addendum No. 1 _____

Addendum No. 3 _____

Addendum No. 2 _____

Addendum No. 4 _____

In accordance with Section 103D-302, Hawaii Revised Statutes, the undersigned as bidder has listed the name of each person or firm, who will be engaged by the bidder on the project as Joint Contractor or Subcontractor and the nature of work to be done by each. **The Bidder must adequately and unambiguously disclose the unique nature and scope of the work to be performed by each Subcontractor or Joint Contractor.** For each listed firm, the Bidder declares the respective firm is a Sub- or Joint Contractor and subject to evaluation as a Sub- or Joint Contractor. It is understood that failure to comply with the aforementioned requirements may be cause for rejection of the bid submitted.

| <u>Name of Subcontractor</u> | <u>Nature and Scope of Work</u> |
|------------------------------|---------------------------------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |
| 4. _____ | _____ |
| 5. _____ | _____ |
| 6. _____ | _____ |
| 7. _____ | _____ |
| 8. _____ | _____ |

| <u>Name of Joint Contractor</u> | <u>Nature and Scope of Work</u> |
|---------------------------------|---------------------------------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |

NOTES:

"None" or if left blank indicates no Subcontractor or Joint Contractor.

If more space is needed, attach additional sheets.

The undersigned hereby certifies that the bid prices contained in the attached proposal schedule have been carefully checked and are submitted as correct and final.

This declaration is made with the understanding that the undersigned is subject to the penalty of perjury under the laws of the United States and is in violation of the Hawaii Penal Code, Section 710-1063, unsworn falsification to authorities, of the Hawaii Revised Statutes, for knowingly rendering a false declaration.

Bidder (Company Name)

By _____
Authorized Signature

Print Name and Title

Business Address

Business Telephone Email

Date

Contact Person (If different from above)

Phone: _____ Email: _____

NOTE:

If bidder is a CORPORATION, the legal name of the corporation shall be set forth above, the corporate seal affixed, together with the signature(s) of the officer(s) authorized to sign contracts for the corporation. Please attach to this page current (not more than six months old) evidence of the authority of the officer(s) to sign for the corporation.

If bidder is a PARTNERSHIP, the true name of the partnership shall be set forth above, with the signature(s) of the general partner(s). Please attach to this page current (not more than six months old) evidence of the authority of the partner authorized to sign for the partnership.

If bidder is an INDIVIDUAL, the bidder's signature shall be placed above.

If signature is by an agent, other than an officer of a corporation or a partner of a partnership, a POWER OF ATTORNEY must be on file with the Department before opening bids or submitted with the bid. Otherwise, the Department may reject the bid as irregular and unauthorized.

PREFERENCES

Bidders agree that preferences shall be taken into consideration to determine the low bidder in accordance with said Sections and the rules promulgated, however, the award of contract will be in the amount of the bid offered exclusive of any preferences.

A. HAWAII PRODUCTS PREFERENCE

In accordance with ACT 174, SLH 2022, effective June 27, 2022, Hawaii Products Preference shall not apply to solicitations for public works construction. Therefore, the Hawaii Products Preference shall not apply to this project.

B. APPRENTICESHIP PROGRAMS PREFERENCE

In accordance with ACT 17, SLH 2009 – Apprenticeship Program, a 5% bid adjustment for bidders that are parties to apprenticeship agreements pursuant to Hawaii Revised Statutes (HRS) Section 103-55.6 may be applied to the bidder's price for evaluation purposes.

Any bidder seeking this preference must be a party to an apprenticeship agreement registered with the Department of Labor and Industrial Relations at the time the offer is made for each apprenticeable trade the bidder will employ to construct the public works projects for which the offer is being made.

The bidder is responsible for complying with all submission requirements for registration of its apprenticeship program before requesting the preference.

Yes, I wish to be considered for the Apprenticeship Programs Preference. I have included Certification Form(s) 1 with my bid.

C. RECYCLED PRODUCT PREFERENCE

Recycled product preference shall not apply to this proposal.

PROPOSAL SCHEDULE

| ITEM NO. | ITEM | APPROX. QUANTITY | UNIT | UNIT PRICE | AMOUNT |
|----------|---|------------------|-------|------------|----------------------|
| 201.0100 | Clearing and Grubbing | 3,340 | SY | \$ _____ | \$ _____ |
| 203.0100 | Roadway Excavation | 3,750 | CY | \$ _____ | \$ _____ |
| 203.0200 | Borrow Excavated Material | 150 | CY | \$ _____ | \$ _____ |
| 209.0100 | Installation, Maintenance, Monitoring, and Removal of BMP | LS | LS | LS | \$ _____ |
| 209.0200 | Additional Water Pollution, Dust, and Erosion Control | FA | FA | FA | \$ <u>150,000.00</u> |
| 304.0100 | Aggregate Base Course | 420 | CY | \$ _____ | \$ _____ |
| 305.0100 | Aggregate Subbase Course | 620 | CY | \$ _____ | \$ _____ |
| 401.0410 | PMA Pavement Mix No. IV, (PG 64E-22) | 1,100 | TN | \$ _____ | \$ _____ |
| 401.0900 | Pavement Smoothness Incentive | Allow | Allow | Allow | \$ <u>1,000.00</u> |
| 415.0110 | Cold Planing | 4,800 | SY | \$ _____ | \$ _____ |
| 604.0400 | Type A Manhole | 3 | EA | \$ _____ | \$ _____ |
| 606.0110 | 31-Inch W-Beam Midwest Guardrail System with Standard 8-Inch Offset Block, 8-Ft Posts | 575 | LF | \$ _____ | \$ _____ |
| 606.2300 | Strong Post Rubrail (W-Beam) Guardrail | 50 | LF | \$ _____ | \$ _____ |
| 606.5000 | Terminal Section, MSKT-SP-MGS, Softstop, Max Tension or Approved Equal | 1 | EA | \$ _____ | \$ _____ |
| 606.5012 | Terminal Section, Modified Type A-1 Flare | 1 | EA | \$ _____ | \$ _____ |
| 629.1000 | 4-Inch Pavement Striping (Thermoplastic Extrusion) | 420 | LF | \$ _____ | \$ _____ |

PROPOSAL SCHEDULE

| ITEM NO. | ITEM | APPROX. QUANTITY | UNIT | UNIT PRICE | AMOUNT |
|----------|--|------------------|------|------------|---------------------|
| 629.1008 | 4-Inch Pavement Striping (Profiled Thermoplastic) | 400 | LF | \$ _____ | \$ _____ |
| 629.1010 | Double 4-Inch Pavement Striping (Thermoplastic Extrusion) | 2,000 | LF | \$ _____ | \$ _____ |
| 629.1020 | 6-Inch Pavement Striping (Thermoplastic Extrusion) | 1,300 | LF | \$ _____ | \$ _____ |
| 629.1030 | 8-Inch Pavement Striping (Thermoplastic Extrusion) | 140 | LF | \$ _____ | \$ _____ |
| 629.1050 | 12-Inch Pavement Striping (Thermoplastic Extrusion) | 160 | LF | \$ _____ | \$ _____ |
| 629.1110 | Pavement Arrow (Thermoplastic Extrusion) | 10 | EA | \$ _____ | \$ _____ |
| 629.2020 | Type C Pavement Marker | 75 | EA | \$ _____ | \$ _____ |
| 629.2030 | Type D Pavement Marker | 20 | EA | \$ _____ | \$ _____ |
| 629.2050 | Type H Pavement Marker | 310 | EA | \$ _____ | \$ _____ |
| 630.1100 | Panel for Destination Sign (Flat Panel) | 20 | SF | \$ _____ | \$ _____ |
| 630.1610 | 4.00 lbs./ft/ Flanged Channel for Destination Sign | 2 | EA | \$ _____ | \$ _____ |
| 631.0120 | Regulatory Sign (10 Square Feet or Less) with Post | 2 | EA | \$ _____ | \$ _____ |
| 632.0122 | Reflector Marker (RM-3) with Flexible Post | 7 | EA | \$ _____ | \$ _____ |
| 632.1020 | Type II Object Marker (OM2-2V) | 2 | EA | \$ _____ | \$ _____ |
| 632.1050 | Type V Object Marker (OM-5) | 4 | EA | \$ _____ | \$ _____ |
| 636.1000 | Additional E-Construction Programs, Additional Licenses, or Additional Equipment | FA | FA | FA | \$ <u>10,000.00</u> |

PROPOSAL SCHEDULE

| ITEM NO. | ITEM | APPROX. QUANTITY | UNIT | UNIT PRICE | AMOUNT |
|----------|---|------------------|------|------------|----------------------|
| 638.1010 | Gutter, Type 2, 41414 | 13 | LF | \$ _____ | \$ _____ |
| 639.0100 | Curb, Type 6 | 313 | LF | \$ _____ | \$ _____ |
| 641.0100 | Hydro-Mulch Seeding | 2,850 | SY | \$ _____ | \$ _____ |
| 645.1000 | Traffic Control | LS | LS | LS | \$ _____ |
| 645.2000 | Additional Police Officers, Additional Traffic Control Devices, and Additional Advertisements | FA | FA | FA | \$ <u>220,000.00</u> |
| 648.1000 | Field-Posted Drawings | LS | LS | LS | \$ _____ |
| 663.0100 | Erosion Control Matting | 2,800 | SY | \$ _____ | \$ _____ |
| 671.1000 | Protection of Threatened and Endangered Species | FA | FA | FA | \$ <u>50,000.00</u> |
| 699.1000 | Mobilization (Not to Exceed 6 Percent of the Sum of All Items Excluding the Bid Price of this Item) | LS | LS | LS | \$ _____ |

PROPOSAL SCHEDULE

| ITEM NO. | ITEM | APPROX. QUANTITY | UNIT | UNIT PRICE | AMOUNT |
|----------|--|------------------|------|------------|----------|
| | Total Amount for Comparison of Bids | | | | \$ _____ |
| 1.0 | Bids shall include all Federal, State, County and other applicable taxes and fees. | | | | |
| 2.0 | The Total Amount for Comparison of Bids shall be used to determine the lowest responsible bidder. | | | | |
| 3.0 | Bidders shall complete all unit prices and amounts. Failure to do so shall be grounds for rejection of bids | | | | |
| 4.0 | If a discrepancy occurs between unit bid price and the bid price, the unit bid price shall govern. | | | | |
| 5.0 | <p>Bidders shall submit and <u>upload the complete proposal to HlePRO</u> prior to the bid opening date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as <u>confidential and/or proprietary</u> shall be uploaded as a <u>separate file</u> to HlePRO. Do not include confidential and/or proprietary documents with the proposal. The record of each bidder and respective bid shall be open to public inspection. Original (wet ink, hard copy) proposal documents are not required to be submitted. Contract award shall be based on evaluation of proposals submitted and uploaded to HlePRO.</p> <p><u>FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HlePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.</u></p> <p>If there is a conflict between the specification document and the HlePRO solicitation, the specifications shall govern and control, unless otherwise specified.</p> | | | | |

1 **PROPOSAL SCHEDULE**

2
3 The bidder is directed to Subsection 105.16 – Subcontracts.

4
5 The bidder's attention is directed to Section 699 - Mobilization for the
6 limitation of the amount bidders are allowed to bid.

7
8 If the bid price for any proposal item having a maximum allowable bid
9 indicated therefore in any of the contract documents is in excess of such a
10 maximum amount, the bid price for such proposal item shall be adjusted to reflect
11 the limitation thereon. The comparison of bids to determine the successful
12 bidder and the amount of contract to be awarded shall be determined after such
13 adjustments are made, and such adjustments shall be binding upon the bidder.

14
15 The bidder is directed to Section 717 – Cullet and Cullet-Made Materials
16 regarding recycling of waste glass.

17
18

SURETY BID BOND

Bond No. _____

KNOW ALL BY THESE PRESENTS:

That we, _____
(Full name or legal title of offeror)

as Offeror, hereinafter called the Principal, and

(Name of bonding company)

as Surety, hereinafter called Surety, a corporation authorized to transact business as a
Surety in the State of Hawaii, are held and firmly bound unto

(State/county entity)

as Owner, hereinafter called Owner, in the penal sum of

(Required amount of bid security)

Dollars (\$ _____), lawful money of the United States of
America, for the payment of which sum well and truly to be made, the said Principal and
the said Surety bind ourselves, our heirs, executors, administrators, successors and
assigns, jointly and severally, firmly by these presents.

WHEREAS:

The Principal has submitted an offer for _____

(Project by number and brief description)

NOW, THEREFORE:

The condition of this obligation is such that if the Owner shall reject said offer, or
in the alternate, accept the offer of the Principal and the Principal shall enter into a
contract with the Owner in accordance with the terms of such offer, and give such bond
or bonds as may be specified in the solicitation or Contract Documents with good and
sufficient surety for the faithful performance of such Contract and for the prompt
payment of labor and material furnished in the prosecution thereof as specified in the
solicitation then this obligation shall be null and void, otherwise to remain in full force
and effect.

Signed this _____ day of _____, _____

(Seal) _____
Name of Principal (Offeror)

Signature

Title

(Seal) _____
Name of Surety

Signature

Title

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HONOLULU, HAWAII

FORMS

Contents

Contract

Performance Bond (Surety)

Performance Bond

Labor and Material Payment Bond (Surety)

Labor and Material Payment Bond

Chapter 104 Compliance Certificate

Certification of Compliance for Employment of State Residents

CONTRACT

THIS AGREEMENT, made this day of _____, by and between the STATE OF HAWAII, by its Director of Transportation, hereinafter referred to as "STATE", and «CONTRACTOR», «STATE_OF_INCORPORATON», whose business/post office address is «ADDRESS», hereinafter referred to as CONTRACTOR";

WITNESSETH: That for and in consideration of the payments hereinafter mentioned, the CONTRACTOR hereby covenants and agrees with the STATE to complete in place, furnish and pay for all labor and materials necessary for "«PROJECT_NAME_AND_NO»", or such a part thereof as shall be required by the STATE, the total amount of which labor, material and construction shall be computed at the unit and/or lump sum prices set forth in the attached proposal schedule and shall be the sum of «BASIC»----DOLLARS (\$«BASIC_NUMERIC») as follows:

TOTAL AMOUNT FOR COMPARISON OF BIDS.....\$«BASIC_NUMERIC»

which sum shall be provided from State funds, all in accordance with the specifications, the special provisions, if any, the notice to bidders, the instructions to bidders, the proposal and plans for «PROJECT_NO_ONLY», and any supplements thereto, on file in the office of the Director of Transportation. These documents, together with all alterations, amendments, and additions thereto and deductions therefrom, are attached hereto or incorporated herein by reference and made a part of this contract.

The CONTRACTOR hereby covenants and agrees to complete such construction within «WORKING_DAYS» from the date indicated in the Notice to Proceed from the State subject, however, to such extensions as may be provided for in writing under the specifications.

For and in consideration of the covenants, undertakings and agreements of the CONTRACTOR herein set forth and upon the full and faithful performance thereof by the CONTRACTOR, the STATE hereby agrees to pay the CONTRACTOR the sum of «BASIC»---DOLLARS (\$«BASIC_NUMERIC») in lawful money, but not more than such part of the same as is actually earned according to the STATE's determination of the actual quantities of work performed and materials furnished by the CONTRACTOR at the unit or lump sum prices set forth in the attached proposal schedule. Such payment, including any extras, shall be made, subject to such additions or deductions hereto or hereafter made in the manner and at the time prescribed in the specifications and this contract.

An additional sum of «EXTRAS»-----DOLLARS (\$«EXTRA_NUMERIC») is hereby provided for extra work.

All words used herein in the singular shall extend to and include the plural. All words used in the plural shall extend to and include the singular. The use of any gender shall extend to and include all genders.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be duly executed the day and year first above written.

STATE OF HAWAII

Director of Transportation

«CONTRACTOR»

(Seal)

Signature

Print name

Print Title

Date

PERFORMANCE BOND (SURETY)
(6/21/07)

KNOW TO ALL BY THESE PRESENTS:

That _____,
(Full Legal Name and Street Address of Contractor)

as Contractor, hereinafter called Principal, and _____

(Name and Street Address of Bonding Company)

as Surety, hereinafter called Surety, a corporation(s) authorized to transact business as a
surety in the State of Hawaii, are held and firmly bound unto the _____,
(State/County Entity)

its successors and assigns, hereinafter called Obligee, in the amount of _____

_____ DOLLARS (\$ _____), to which payment Principal and Surety bind themselves,
their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by
these presents.

WHEREAS, the above-bound Principal has signed a Contract with Obligee on
_____, for the following project: _____

hereinafter called Contract, which Contract is incorporated herein by reference and made a part
hereof.

NOW THEREFORE, the condition of this obligation is such that:

If the Principal shall promptly and faithfully perform, and fully complete the Contract in
strict accordance with the terms of the Contract as said Contract may be modified or amended
from time to time; then this obligation shall be void; otherwise to remain in full force and effect.

Surety to this Bond hereby stipulates and agrees that no changes, extensions of time, alterations, or additions to the terms of the Contract, including the work to be performed thereunder, and the specifications or drawings accompanying same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, or additions, and agrees that they shall become part of the Contract.

In the event of Default by the Principal, of the obligations under the Contract, then after written Notice of Default from the Oblige to the Surety and the Principal and subject to the limitation of the penal sum of this bond, Surety shall remedy the Default, or take over the work to be performed under the Contract and complete such work, or pay moneys to the Oblige in satisfaction of the surety's performance obligation on this bond.

Signed this _____ day of _____, _____.

(Seal)

Name of Principal (Contractor)

*

Signature

Title

(Seal)

Name of Surety

*

Signature

Title

***ALL SIGNATURES MUST BE ACKNOWLEDGED
BY A NOTARY PUBLIC**

PERFORMANCE BOND

KNOW ALL BY THESE PRESENTS:

That we, _____
(full legal name and street address of Contractor)

as Contractor, hereinafter called Contractor, is held and firmly bound unto the

(State/County entity)

its successors and assigns, as Obligee, hereinafter called Obligee, in the amount

_____ DOLLARS (\$ _____),
(Dollar amount of Contract)

lawful money of the United States of America, for the payment of which to the said Obligee, well and truly to be made, Contractor binds itself, its heir, executors, administrators, successors and assigns, firmly by these presents. Said amount is evidenced by:

- Legal Tender;**
- Share Certificate** unconditionally assigned to or made payable at sight to _____
Description: _____;
- Certificate of Deposit, No.** _____, dated _____
issued by _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Cashier's Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Teller's Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Treasurer's Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Official Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Certified Check No.** _____, dated _____
accepted by a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

WHEREAS:

The Contractor has by written agreement dated _____ entered into a contract with Oblige for the following Project: _____

_____ hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE,

The Condition of this obligation is such that, if Contractor shall promptly and faithfully perform the Contract in accordance with, in all respects, the stipulations, agreements, covenants and conditions of the Contract as it now exists or may be modified according to its terms, and shall deliver the Project to the Oblige, or to its successors or assigns, fully completed as in the Contract specified and free from all liens and claims and without further cost, expense or charge to the Oblige, its officers, agents, successors or assigns, free and harmless from all suits or actions of every nature and kind which may be brought for or on account of any injury or damage, direct or indirect, arising or growing out of the doing of said work or the repair or maintenance thereof or the manner of doing the same or the neglect of the Contractor or its agents or servants or the improper performance of the Contract by the Contractor or its agents or servants or from any other cause, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

AND IT IS HEREBY STIPULATED AND AGREED that suit on this bond may be brought before a court of competent jurisdiction without a jury, and that the sum or sums specified in the said Contract as liquidated damages, if any, shall be forfeited to the Oblige, its successors or assigns, in the event of a breach of any, or all, or any part of, covenants, agreements, conditions, or stipulations contained in the Contract or in this bond in accordance with the terms thereof.

The amount of this bond may be reduced by and to the extent of any payment or payments made in good faith hereunder.

Signed and sealed this _____ day of _____, _____.

(Seal) _____
Name of Contractor

* _____
Signature

Title

*ALL SIGNATURES MUST BE
ACKNOWLEDGED BY A NOTARY PUBLIC

LABOR AND MATERIAL PAYMENT BOND (SURETY)
(6/21/07)

KNOW TO ALL BY THESE PRESENTS:

That _____,
(Full Legal Name and Street Address of Contractor)

as Contractor, hereinafter called Principal, and _____

(Name and Street Address of Bonding Company)

as Surety, hereinafter called Surety, a corporation(s) authorized to transact business as a surety in the State of Hawaii, are held and firmly bound unto the _____,
(State/County Entity)

its successors and assigns, hereinafter called Oblige, in the amount of _____

_____ Dollars (\$_____), to which payment Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the above-bound Principal has signed Contract with the Oblige on _____ for the following project: _____

hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE, the condition of this obligation is such that if the Principal shall promptly make payment to any Claimant, as hereinafter defined, for all labor and materials supplied to the Principal for use in the performance of the Contract, then this obligation shall be void; otherwise to remain in full force and effect.

1. Surety to this Bond hereby stipulates and agrees that no changes, extensions of time, alterations, or additions to the terms of the Contract, including the work to be performed thereunder, and the specifications or drawings accompanying same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, or additions, and agrees that they shall become part of the Contract.

2. A "Claimant" shall be defined herein as any person who has furnished labor or materials to the Principal for the work provided in the Contract.

Every Claimant who has not been paid amounts due for labor and materials furnished for work provided in the Contract may institute an action against the Principal and its Surety on this bond at the time and in the manner prescribed in Section 103D-324, Hawaii Revised Statutes, and have the rights and claims adjudicated in the action, and judgment rendered thereon; subject to the Obligee's priority on this bond. If the full amount of the liability of the Surety on this bond is insufficient to pay the full amount of the claims, then after paying the full amount due the Obligee, the remainder shall be distributed pro rata among the claimants.

Signed this _____ day of _____, _____.

(Seal)

Name of Principal (Contractor)

*

Signature

Title

(Seal)

Name of Surety

*

Signature

Title

***ALL SIGNATURES MUST BE ACKNOWLEDGED
BY A NOTARY PUBLIC**

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL BY THESE PRESENTS:

That we, _____
(full legal name and street address of Contractor)

as Contractor, hereinafter called Contractor, is held and firmly bound unto _____
(State/County entity)

its successors and assigns, as Obligee, hereinafter called Obligee, in the amount
_____ DOLLARS (\$ _____),
(Dollar amount of Contract)

lawful money of the United States of America, for the payment of which to the said Obligee, well and truly to be made, Contractor binds itself, its heir, executors, administrators, successors and assigns, firmly by these presents. Said amount is evidenced by:

- Legal Tender;**
- Share Certificate** unconditionally assigned to or made payable at sight to _____
Description: _____
- Certificate of Deposit, No.** _____, dated _____
issued by _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Cashier's Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Teller's Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Treasurer's Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Official Check No.** _____, dated _____
drawn on _____
a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Certified Check No.** _____, dated _____
accepted by a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

WHEREAS:

The Contractor has by written agreement dated _____ entered into a contract with Obligee for the following Project: _____

hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE,

The condition of this obligation is such that, if Contractor shall promptly and faithfully perform the Contract in accordance with, in all respects, the stipulations, agreements, covenants and conditions of the Contract as it now exists or may be modified according to its terms, free from all liens and claims and without further cost, expense or charge to the Obligee, its officers, agents, successors or assigns, free and harmless from all suits or actions of every nature and kind which may be brought for or on account of any injury or damage, direct or indirect, arising or growing out of the doing of said work or the repair or maintenance thereof or the manner of doing the same or the neglect of the Contractor or its agents or servants or the improper performance of the Contract by the Contractor or its agents or servants or from any other cause, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

AND IT IS HEREBY STIPULATED AND AGREED that suit on this bond may be brought before a court of competent jurisdiction without a jury, and that the sum or sums specified in the said Contract as liquidated damages, if any, shall be forfeited to the Obligee, its successors or assigns, in the event of a breach of any, or all, or any part of, covenants, agreements, conditions, or stipulations contained in the Contract or in this bond in accordance with the terms thereof.

AND IT IS HEREBY STIPULATED AND AGREED that this bond shall inure to the benefit of any and all persons entitled to file claims for labor performed or materials furnished in said work so as to give any and all such persons a right of action as contemplated by Sections 103D-324(d) and 103D-324(e), Hawaii Revised Statutes.

The amount of this bond may be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payments of mechanics' liens which may be filed of record against the Project, whether or not claim for the amount of such lien be presented under and against this bond.

Signed this _____ day of _____, _____.

(Seal) _____
Name of Contractor

* _____
Signature

Title

*ALL SIGNATURES MUST BE
ACKNOWLEDGED BY A NOTARY PUBLIC

CHAPTER 104, HRS COMPLIANCE CERTIFICATE

The undersigned bidder does hereby certify to the following:

1. Individuals engaged in the performance of the contract on the job site shall be paid:
 - A. Not less than the wages that the director of labor and industrial relations shall have determined to be prevailing for corresponding classes of laborers and mechanics employed on public works projects; and
 - B. Overtime compensation at one and one-half times the basic hourly rate plus fringe benefits for hours worked on Saturday, Sunday, or a legal holiday of the State or in excess of eight hours on any other day.
2. All applicable laws of the federal and state governments relating to workers' compensation, unemployment compensation, payment of wages, and safety shall be fully complied with.

DATED at Honolulu, Hawaii, this _____ day of _____, 20__.

«CONTRACTOR»
Name of Corporation, Partnership, or Individual

Signature and Title of Signer

Notary Seal
NOTARY ACKNOWLEDGEMENT

Subscribed and sworn before me this _____ day of _____
Notary signature _____
Notary public, State of _____
My Commission Expires: _____

Notary Seal
NOTARY CERTIFICATION

Doc. Date: _____ #Pages: _____
Notary Name: _____ Circuit _____
Doc. Description: _____

Notary signature _____
Date _____

PROVISIONS TO BE INCLUDED IN CONSTRUCTION PROCUREMENT SOLICITATIONS

1. Definitions for terms used in HRS Chapter 103B as amended by Act 192, SLH 2011:
 - a. "Contract" means contracts for construction under 103D, HRS.
 - b. "Contractor" has the same meaning as in Section 103D-104, HRS, provided that "contractor" includes a subcontractor where applicable.
 - c. "Construction" has the same meaning as in Section 103D-104, HRS.
 - d. "General Contractor" means any person having a construction contract with a governmental body.
 - e. "Procurement Officer" has the same meaning as in Section 103D-104, HRS.
 - f. "Resident" means a person who is physically present in the State of Hawai'i at the time the person claims to have established the person's domicile in the State of Hawai'i and shows the person's intent is to make Hawai'i the person's primary residence.
 - g. "Shortage trade" means a construction trade in which there is a shortage of Hawai'i residents qualified to work in the trade as determined by the Department of Labor and Industrial Relations.

2. HRS Chapter 103B as amended by Act 192, SLH 2011--Employment of State Residents Requirements:
 - a. A Contractor awarded a contract shall ensure that Hawai'i residents comprise not less than 80% of the workforce employed to perform the contract work on the project. The 80% requirement shall be determined by dividing the total number of hours worked on the contract by Hawai'i residents, by the total number of hours worked on the contract by all employees of the Contractor in the performance of the contract. The hours worked by any Subcontractor of the Contractor shall count towards the calculation for this section. The hours worked by employees within shortage trades, as determined by the Department of Labor and Industrial Relations (DLIR), shall not be included in the calculation for this section.

- b. Prior to award of a contract, an Offeror/Bidder may withdraw an offer/bid without penalty if the Offeror/Bidder finds that it is unable to comply with HRS Chapter 103B as amended by Act 192, SLH 2011.
- c. Prior to starting any construction work, the Contractor shall submit the subcontract dollar amount for each of its Subcontractors.
- d. The requirements of this section shall apply to any subcontract of \$50,000 or more in connection with the Contractor; that is, such Subcontractors must also ensure that Hawai'i residents comprise not less than 80% of the Subcontractor's workforce used to perform the subcontract.
- e. The Contractor and any Subcontractor whose subcontract is \$50,000 or more shall comply with the requirements of HRS Chapter 103B as amended by Act 192, SLH 2011.
 - 1) Certification of compliance shall be made in writing under oath by an officer of the General Contractor and applicable Subcontractors and submitted with the final payment request.
 - 2) The certification of compliance shall be made under oath by an officer of the company by completing a "Certification of Compliance for Employment of State Residents" form and executing the Certificate before a licensed notary public.
 - 3) In addition to the certification of compliance as indicated above, the Contractor and Subcontractors shall maintain records such as certified payrolls for laborers and mechanics who performed work at the site and time sheets for all other employees who performed work on the project. These records shall include the names, addresses and number of hours worked on the project by all employees of the Contractor and Subcontractor who performed work on the project to validate compliance with HRS Chapter 103B as amended by Act 192, SLH 2011. The Contractor and Subcontractors shall retain these records and provide access to the State for a minimum period of four (4) years after the final payment, except that if any litigation, claim, negotiation, investigation, audit or other action involving the records has been started before the expiration of the four-year period, the Contractor and Subcontractors shall retain the records until completion of the action and resolution of all issues that arise from it, or until the end of the four-year period, whichever occurs later. Furthermore, it shall be the Contractor's responsibility to enforce compliance with this provision by any Subcontractor.

- f. A General Contractor or applicable Subcontractor who fails to comply with this section shall be subject to any of the following sanctions:
- 1) With respect to the General Contractor, withholding of payment on the contract until the Contractor or its Subcontractor complies with HRS Chapter 103B as amended by Act 192, SLH 2011.
 - 2) Proceedings for debarment or suspension of the Contractor or Subcontractor under Hawai'i Revised Statutes §103D-702.
3. Conflict with Federal Law: This section shall not apply if the application of this section is in conflict with any federal law, or if the application of this section will disqualify the State from receiving Federal funds or aid.

**CERTIFICATION OF COMPLIANCE
FOR
EMPLOYMENT OF STATE RESIDENTS
HRS CHAPTER 103B, AS AMENDED BY ACT 192, SLH 2011**

Project Title: _____

Agency Project No: _____

Contract No.: _____

As required by Hawai'i Revised Statutes Chapter 103B, as amended by Act 192, Session Laws of Hawaii 2011--Employment of State Residents on Construction Procurement Contracts, I hereby certify under oath, that I am an officer of _____ and
(Name of Contractor or Subcontractor Company)
for the Project Contract indicated above, _____ was in
(Name of Contractor or Subcontractor Company)
compliance with HRS Chapter 103B, as amended by Act 192, SLH 2011, by employing a workforce of which not less than eighty percent are Hawai'i residents, as calculated according to the formula in the solicitation, to perform this Contract.

I am an officer of the **Contractor** for this contract.

I am an officer of a **Subcontractor** for this contract.

CORPORATE SEAL

(Name of Company)

(Signature)

(Print Name)

(Print Title)

Subscribed and sworn to me before this
____ day of _____, 2011.

Doc. Date: _____ # of Pages _____ 1st Circuit

Notary Name: _____

Doc. Description: _____

Notary Public, 1st Circuit, State of Hawai'i
My commission expires: _____

Notary Signature

Date

NOTARY CERTIFICATION