

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION KAUAI DISTRICT

SPECIAL PROVISIONS, PROPOSAL, AND BOND

FOR

KUHIO HIGHWAY (ROUTE 560) DRAINAGE IMPROVEMENTS

VICINITY OF LIMAHULI GARDEN

PROJECT NO. 560A-02-23M

DISTRICT OF HANALEI

ISLAND OF KAUAI

FY 2023

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SMALL PURCHASE

NOTICE TO BIDDERS

(Chapter 103D, HRS)

The small purchase receiving of BIDS for Kuhio Highway (Route 560) Drainage Improvements, Vicinity of Limahuli Garden will begin as advertised on <u>March 23, 2023</u> in HIePRO. Bidders are to register and submit bids through HIePRO only. See the following HIePRO link for important information on registering: https://hiepro.ehawaii.gov/welcome.html. Deadline to submit bids is – <u>April 20, 2023, at 2:00 P.M.</u> Hawaii Standard Time (HST). Bids received after said due date and time shall not be considered.

The scope of work consists of excavation and installing concrete swale. The estimated cost of construction is between \$100,000 and \$250,000.

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

A pre-bid conference is scheduled for <u>March 30, 2023, at 10:00 A.M. HST on Microsoft</u> <u>Teams.</u> All prospective bidders or their representatives (employees) are encouraged to attend, but attendance is not mandatory. **Due to the impacts of COVID 19, the pre-bid meeting will be conducted virtually.**

Contact Eric Fujikawa, Project Manager, by phone, at (808) 241-3015, by facsimile at (808) 241-3011 or email at eric.i.fujikawa@hawaii.gov to obtain the venue for the pre-bid meeting. You may also call Microsoft Teams to join the pre-bid meeting at (808) 829-4853, Phone Conference ID: 650 190 327#

ALL requests for information (RFI) shall be received in writing via HIePRO no less than 14 calendar days before bid opening. Questions received after the deadline will not be addressed. Verbal requests for information will not receive a response. Anything said at the conference is for clarification purposes and any changes to the bid documents will be made by addendum and posted in HIePRO.

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

<u>Campaign contributions by State and County Contractors</u>. Contractors are hereby notified of the applicability of Section 11-355, HRS, 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.

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

Driving While Impaired (DWI) Education. HDOT encourages all organizations contracted with the DOT 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.

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 will affirmatively ensure that the contract entered into pursuant to this advertisement will 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).

SMALL PURCHASE

For additional information, contact Eric Fujikawa, Project Manager, by phone at (808) 241-3015, by fax at (808)241-3011 or email at eric.i.fujikawa@hawaii.gov.

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

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 <u>Okada</u> <u>Trucking Co., Ltd. v. Board of Water Supply, et al.</u>, 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 <u>sole responsibility of the contractor</u> 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 follows: 2 3 4 **"DIVISION 100 - GENERAL PROVISIONS** 5 6 7 SECTION 101 - TERMS, ABBREVIATIONS, AND DEFINITIONS 8 9 Meaning of Terms. The specifications are generally written in the 101.01 imperative mood. In sentences using the imperative mood, the subject, "the 10 Contractor shall", is implied. In the material specifications, the subject may also 11 be the supplier, fabricator, or manufacturer supplying material, products, or 12 equipment for use on the project. The word "will" generally pertains to decisions 13 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, on the plans, or in other contract documents are as follows: 21 22 23 AAN American Association of Nurserymen 24 AASHTO 25 American Association of State Highway and 26 Transportation Officials 27 ACI 28 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 AIA 36 American Institute of Architects 37 38 AISC American Institute of Steel Construction 39 AISI 40 American Iron and Steel Institute 41 42 ANSI American National Standards Institute 43 APA 44 American Plywood Association 45

46 47	ARA	American Railway Association
47 48 49	AREA	American Railway Engineering Association
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	ССО	Contract Change Order
69 70	CFR	Code of Federal Regulations
71 72	CRSI	Concrete Reinforcing Steel Institute
73 74 75	DCAB	Disability and Communication Access Board, Department of Health, State of Hawaii
76 77	DOTAX	Department of Taxation, State of Hawaii
78 79	EPA	U.S. Environmental Protection Agency
80 81 82	FHWA	Federal Highway Administration, U.S. Department of Transportation
83 84 85	FSS	Federal Specifications and Standards, General Services Administration, U.S. Department of Defense
86 87	HAR	Hawaii Administrative Rules
88 89 90	HDOT	Department of Transportation, State of Hawaii

91 92 92	HIOSH	Occupational Safety and Health, Department of Labor and Industrial Relations, State of Hawaii
93 94	HMA	Hot Mix Asphalt
95 96 97	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
105 106 107 108	MUTCD	Manual on Uniform Traffic Control Devices for Streets and Highways, FHWA, U.S. Department of Transportation
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
118 119 120	OSHA	Occupational Safety and Health Administration/Act, U.S. Department of Labor
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
131 132 133 134	VECP	Value Engineering Cost Proposal

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

139

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

- 144
- Addition (to the contract sum) Amount added to the contract sum by changeorder.
- 147

Advertisement - A public announcement inviting bids for work to be performed ormaterials to be furnished.

150

- Amendment A written document issued to amend the existing contract between
 the State and Contractor and properly executed by the Contractor and Director.
- 154 **Award -** Written notification to the bidder that the bidder has been awarded a 155 contract.
- Bad Weather Day (or Unworkable Day) A day when weather or other conditions
 prevent a minimum of four hours of work with the Contractor's normal work force
 on critical path activities at the site.
- 160
- 161 **Bag -** 94 pounds of cement.
- 162
- 163 **Barrel 376** pounds of cement.
- 164
- 165 **Base Course -** The layer or layers of specified material or selected material of a 166 designed thickness placed on a subbase or subgrade to support a surface course.

- 168 **Basement Material -** The material in excavation or embankments underlying the 169 lowest layer of subbase, base, pavement, surfacing or other specified layer.
- 170
- 171 **Bid -** See Proposal.
- 172
- Bidder An individual, partnership, corporation, joint venture or other legal entity
 submitting, directly or through a duly authorized representative or agent, a
 proposal for the work or construction contemplated.
- 176
- Bidding Documents (or Solicitation Documents) The published solicitation
 notice, bid requirements, bid forms and the proposed contract documents including
 all addenda and clarifications issued prior to receipt of the bid.
- 180

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

185

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

189

190 Calendar Day - See Day.

191

192 Change Order (or Contract Change Order) - A written order signed by the 193 Engineer issued with or without the consent of the Contractor directing changes in 194 the work, contract time or contract price. The purposes of a change order include, 195 but are not limited to (1) establishing a price or time adjustment for changes in the 196 work; (2) establishing full payment for direct, indirect, and consequential costs, 197 including costs of delay; (3) establishing price adjustment or time adjustment for 198 work covered and affected by one or more field orders; or (4) settling Contractor's 199 claims for direct, indirect, and consequential costs, or for additional contract time, 200 in whole or in part.

201

202 Completion - See Substantial Completion and Final Completion.203

204 Completion Date - The date specified by the contract for the completion of all
 205 work on the project or of a designated portion of the project.
 206

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

209

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

215

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

218

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

222 **Contract Documents -** The contract, solicitation, addenda, notice to bidders, 223 Contractor's bid proposal (including wage schedule, list of subcontractors and 224 other documentations accompanying the bid), notice to proceed, bonds, general 225 provisions, special provisions, specifications, drawings, all modifications, all written 226 amendments, change orders, field orders, orders for minor changes in the work, 227 the Engineer's written interpretations and clarifications issued on or after the 228 effective date of the contract.

229

230 **Contract Item (Pay Item) -** A specific unit of work for which there is a price in the 231 contract.

232

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

236 **Contract Price -** The amount designated on the face of the contract for the 237 performance of work.

238

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

- 245
- 246 Contracting Officer See Engineer.247

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

251

254

- 252 Critical Path Longest logical sequence of activities that must be completed on
 253 schedule for the entire project to be completed on schedule.
- Day Any day shown on the calendar, beginning at midnight and proceeding up
 to, but not including, midnight the following day. If no designation of calendar or
 working day is made, "day" shall mean calendar day.
- 258
- 259 **Department -** The Department of Transportation of the State of Hawaii260 (abbreviated HDOT).
- 261
- Director The Director of the HDOT acting directly or through duly authorized
 representatives.
- 264 265 **Plan**e

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

268

- **Engineer -** The Highway Administrator, Highways Division, HDOT, or the authorized person delegated to act on the Administrator's behalf.
- 271

273

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

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

280

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

285

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

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

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

297

293

Guarantee - Legally enforceable assurance of the duration of satisfactory
 performance of quality of a product or work.
 300

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

303

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

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

310

311 **Holidays -** The days of each year which are set apart and established as State 312 holidays pursuant to Chapter 8 of the Hawaii Revised Statutes, as amended.

- 314 Inspector The Engineer's authorized representative assigned to make detailed 315 inspections of contract performance, prescribed work, and materials supplied.
- 316
- Laboratory The testing laboratory of the Highways Division or other testing
 laboratories that may be designated by the Engineer.
- Laws All Federal, State, and local laws, executive orders and regulations having
 the force of law.
- 322
- Leveling Course An aggregate mixture course of variable thickness used to
 restore horizontal and vertical uniformity to existing pavements or shoulders.
- Liquidated Damages The amount prescribed in Subsection 108.08 Liquidated Damages for Failure to Complete the Work or Portions of the Work on Time, to be paid to the State or to be deducted from any payments payable to or, which may become payable to the Contractor.
- 330
- Lump Sum (LS) When used as a payment method means complete payment
 for the item of work described in the contract documents.
- **Material -** Any natural or manmade substance or item specified in the contract to be incorporated in the work.
- 336
- Notice to Bidders The advertisement for proposals for all work or materials on
 which bids are required. Such advertisement will indicate the location of the work
 to be done or the character of the material to be furnished and the time and place
 for the opening of proposals.
- 341
- 342 Notice to Proceed Written notice from the Engineer to the Contractor identifying 343 the date on which the Contractor is to begin procuring materials and required 344 permits and adjusting work forces, equipment, schedules, etc. prior to beginning 345 physical work.
- 346
- 347 **Pavement -** The uppermost layer of material placed on the traveled way or
 348 shoulders or both. Pavement and surfacing may be interchangeable.
 349
- Pavement Structure The combination of subbase, base, pavement, surfacing or
 other specified layer of a roadway constructed on a subgrade to support the traffic
 load.
- 353
- Payment Bond The security executed by the Contractor and surety or sureties
 furnished to the Department to guarantee payment by the Contractor to laborers,
 material suppliers and subcontractors in accordance with the terms of the contract.
- 357

358 **Physical Work -** Physical construction activities on the project site or at 359 appurtenant facilities including staging areas. It includes; (i) building or installing any structures or facilities including, but not limited to sign erection; BMP 360 361 installation; field office site grading and building; (ii) removal, adjustment, or demolition of physical obstructions on site; (iii) any ground breaking activities; and 362 363 (iv) any utility work. It does not include pre-construction environmental testing 364 (such as water quality baseline measurements) that may be required as part of 365 contract.

366

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

372

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

- 375
 376 Project Acceptance Date The calendar day on which the Engineer accepts the
 377 project as completed. See Final Completion.
- 378
 379 **Proposal (Bid)** The executed document submitted by a Bidder in response to a
 380 solicitation request, to perform the work required by the proposed contract
 381 documents, for the price quoted and within the time allotted.
- 383 **Public Traffic -** Vehicular or pedestrian movement on a public way.
- 384
 385 **Punchlist -** A list compiled by the Engineer specifying work yet to be completed or
 386 corrected by the Contractor in order to substantially complete the contract.
- 387

- 388 **Questionnaire -** The specified forms on which the bidder shall furnish required 389 information as to its ability to perform and finance the work.
- 390
- 391 Request for Change Proposal A written notice from the Engineer to the 392 Contractor requesting that the Contractor provide a price and/or time proposal for 393 contemplated changes preparatory to the issuance of a field order or change order.
- 394
- Right-of-Way Land, property, or property interests acquired by a government
 agency for, or devoted to transportation purposes.
- 397
- Roadbed The graded portion of a highway within top and side slopes, prepared
 as a foundation for the pavement structure and shoulders.
- 400
- 401 **Roadside -** The area between the outside edges of the shoulders and the right-of 402 way boundaries. Unpaved median areas between inside shoulders of divided
 403 highways and infield areas of interchanges are included.

404
 405
 406
 406
 406
 406

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

- 411 Shoulder The portion of the roadway next to the traveled way for:
 412 accommodation of stopped vehicles, placement of underground facilities,
 413 emergency use, and lateral support of base and surface courses.
- 414
- 415 Sidewalk That portion of the roadway primarily constructed for use by
 416 pedestrians.
 417
- **Solicitation -** An invitation to bid or request for proposals or any other document issued by the Department to solicit bids or offers to perform a contract. The solicitation may indicate the time and place to receive the bids or offers and the location, nature and character of the work, construction or materials to be provided.
- 423 **Specifications -** Compilation of provisions and requirements to perform 424 prescribed work.
- 425 426

427

428 429

430

431

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

- **(B) Special Provisions.** Revisions and additions to the standard specifications applicable to an individual project.
- 432 **Standard Plans -** Drawings provided by the State for specific items of work 433 approved for repetitive use.
- 434
- 435 State The State of Hawaii, its Departments and agencies, acting through its
 436 authorized representative(s).
 437
- 438 State Waters All waters, fresh, brackish, or salt, around and within the State,
 439 including, but not limited to, coastal waters, streams, rivers, drainage ditches,
 440 ponds, reservoirs, canals, ground waters, and lakes; provided that drainage
 441 ditches, ponds, and reservoirs required as a part of a water pollution control system
 442 are excluded.
- 443
- 444 Start Work Date Date on which Contractor begins physical work on the contract.
 445 This date shall also be the beginning of Contract Time.
- 446
- 447 Structures Bridges, culverts, catch basins, drop inlets, retaining walls, cribbing,
 448 manholes, endwalls, buildings, sewers, service pipes, underdrains, foundation
 449 drains, and other such features that may be encountered in the work.
- 450

451 **Subbase -** A layer of specified material of specified thickness between the 452 subgrade and a base.

453

457

454 **Subcontract** - Any written agreement between the Contractor and its 455 subcontractors which contains the conditions under which the subcontractor is to 456 perform a portion of the work for the Contractor.

458 **Subcontractor -** An individual, partnership, firm, corporation, joint venture or other 459 legal entity, as licensed or required to be licensed under Chapter 444, Hawaii 460 Revised Statutes, as amended, which enters into an agreement with the 461 Contractor to perform a portion of the work.

462

473

478

484

488

491

463 Subgrade - The top surface of completed earthwork on which subbase, base,
464 surfacing, pavement, or a course of other material is to be placed.
465

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

- 470 **(1)** All traffic lanes (including shoulders, ramps, sidewalks and bike 471 paths) are in their final configuration as designed and the final 472 wearing surface has been installed;
- 474 (2) All operational and safety devices have been installed in accordance
 475 with the contract documents including guardrails, end treatments,
 476 traffic barriers, required signs and pavement markings, drainage,
 477 parapet, and bridge and pavement structures;
- 479 (3) All required illumination and lighting for normal and safe use and operation is installed and functional in accordance with the contract documents;
 482
- 483 (4) All utilities and services are connected and working;
- 485(5)The need for temporary traffic controls or lane closures at any time486has ceased, except for lane closures required for routine487maintenance;
- 489 **(6)** The building, structure, improvement or facility can be used for its intended purpose.
- 492 Substantial Completion Date The date the Substantial Completion is granted
 493 by the Engineer in Writing and Contract Time stops.
 494
- 495 **Superintendent -** The employee of the Contractor who is responsible for all the 496 work and is a Contractor's agent for communications to and from the State.
- 497

498 **Surety -** The qualified individual, firm or corporation other than the Contractor, 499 which executes a bond with and for the Contractor to insure its acceptable 500 performance of the contract.

501

504

502 **Surfacing** - The uppermost layer of material placed on the traveled way or 503 shoulders. This term is used interchangeably with pavement.

505 **Traveled Way** - The portion of the roadway for the movement of vehicles, 506 exclusive of shoulders.

507

508 **Unsuitable Material** - Materials that contain organic matter, muck, humus, peat, 509 sticks, debris, chemicals, toxic matter, or other deleterious materials not suitable 510 for use in earthwork.

511

512 **Utility** - A line, facility, or system for producing, transmitting, or distributing 513 communications, power, electricity, heat, gas, oil, water, steam, waste, or storm 514 water. 515

516 **Utility Owner -** The entity, whether private or owned by a State, Federal, or County 517 governmental body, that has the power and responsibility to grant approval for, or 518 undertake construction work involving a particular utility.

519

520 **Water Pollutant -** Dredged spoil, solid refuse, incinerator residue, sewage, 521 garbage, sewage sludge, munitions, chemical waste, biological materials, 522 radioactive materials, heat, wrecked or discarded equipment, rock, sand, soil, 523 sediment, cellar dirt and industrial, municipal, and agricultural waste.

524

525 **Water Pollution - (1)** Such contamination or other alteration of the physical, 526 chemical, or biological properties of any state waters, including change in 527 temperature, taste, color, turbidity, or odor of the waters, or (2) Such discharge of any liquid, gaseous, solid, radioactive, or other substances into any state waters, 528 529 as will or is likely to create a nuisance or render such waters unreasonably harmful, 530 detrimental, or injurious to public health, safety, or welfare, including harm, 531 detriment, or injury to public water supplies, fish and aquatic life and wildlife, 532 recreational purposes and agricultural and industrial research and scientific uses 533 of such waters or as will or is likely to violate any water quality standards, effluent 534 standards, treatment and pretreatment standards, or standards of performance for 535 new sources adopted by the Department of Health.

536

537 **Work -** The furnishing of all labor, material, equipment, and other incidentals 538 necessary or convenient for the successful execution of all the duties and 539 obligations imposed by the contract.

540

541 **Working Day -** A calendar day in which a Contractor is capable of working four or 542 more hours with its normal work force, exclusive of:

544	(1) Saturdays, Sundays, and recognized legal State holidays and such
545	other days specified by the contract documents as non-working days,
546	
547	(2) Day in which the Engineer suspends work for four or more hours
548	through no fault of the Contractor."
549	
550	
551	
552	
553	END OF SECTION 101

- 1 Make this section a part of the Standard Specifications:
- 2

3 4 **"SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS**

5 6

7

8

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

9 In accordance with HRS Chapter 103D-310, the Department may require 10 any prospective bidder to submit answers to questions contained in the 'Standard' Qualification Questionnaire For Prospective Bidders On Public Works Contracts' 11 furnished by the Department, properly executed and notarized, setting forth a 12 13 complete statement of the experience of such prospective bidder and its 14 organization in performing similar work and a statement of the equipment 15 proposed to be used, together with adequate proof of the availability of such equipment. Whenever it appears to the Department, from answers to the 16 17 questionnaire or otherwise, that the prospective bidder is not fully qualified and able to perform the intended work, the Department will, after affording the 18 prospective bidder an opportunity to be heard and if still of the opinion that the 19 20 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 21 22 the questionnaire shall be kept confidential. Questionnaire so submitted shall be 23 returned to the bidders after serving their purpose.

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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.

32 **102.02 Contents of Proposal Forms.** The Department will furnish
 33 prospective bidders with proposal forms posted in HIePRO stating:

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- (1) The location,
- 37 (2) Description of the proposed work,38
- 39 (3) The approximate quantities,
- 41 (4) Items of work to be done or materials to be furnished,
- 43 (5) A schedule of items, and
- 45 (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.

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51 Also, the bidder shall consider other documents including the plans and 52 specifications a part of the proposal form whether attached or not.

- 53 54 **102.03 (L**
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02.03 (Unassigned)

56 **102.04 Estimated Quantities.** The quantities shown in the contract are 57 approximate and are for the comparison of bids only. The actual quantity of work 58 may not correspond with the quantities shown in the contract. The Department 59 will make payment to the Contractor for unit price items in accordance with the 60 contract for only the following:

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(1) Actual quantities of work done and accepted, not the estimated quantities; or

(2) Actual quantities of materials furnished, not the estimated quantities.

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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.

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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;

- 85 **(2)** The bidder and its workers, employees and subcontractors have 86 the skills and experience in the type of work required by the contract 87 documents bid upon;
- 89 (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

93 The basis for the bid figure is solely on the construction contract (4) 94 documents. 95 96 Also, the bidder warrants that the bidder has examined the site of the 97 work. From its investigations, the bidder acknowledges satisfaction on: 98 99 The nature and location of the work: (1) 100 101 (2) The character, quality, and quantity of materials; 102 103 (3) The difficulties to be encountered; and 104 105 (4) The kind and amount of equipment and other facilities needed; 106 107 Subsurface information or hydrographic survey data furnished are for the 108 bidders' convenience only. The data and information furnished are the product of 109 the Department's interpretation gathered in investigations made at the specific locations. These conditions may not be typical of conditions at other locations 110 within the project area or that such conditions remain unchanged. 111 Also. 112 conditions found at the time of the subsurface explorations may not be the same The bidder shall be solely responsible for 113 conditions when work starts. assumptions, deductions, or conclusions the bidder may derive from the 114 115 subsurface information or data furnished. 116 If the Engineer determines that the natural conditions differ from that 117 118 originally anticipated or contemplated by the Contractor in the items of 119 excavation, the State may treat the difference in natural conditions, as falling 120 within the meaning of Subsection 104.02 - Changes. 121 122 **Preparation of Proposal.** The submittal of its proposal shall be on 102.06 forms furnished by the Department. The bidder shall specify in words or figures: 123 124 125 (1) A unit price for each pay item with a quantity given; 126 127 (2) The products of the respective unit prices and quantities 128 129 (3) The lump sum amount; and 130 131 (4) The total amount of the proposal obtained by adding the amounts of the several items. 132 133 134 The words and figures shall be in ink or typed. If a discrepancy occurs 135 between the prices written in words and those written in figures, the prices written in words shall govern. 136 137

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.

142 The bidder shall sign the proposal properly in ink. A duly authorized 143 representatives of the bidder or by an agent of the bidder legally qualified and 144 acceptable to the Department shall sign, including one or more partners of the 145 bidder and one or more representatives of each entity comprising a joint venture. 146

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.

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153 The bidder shall submit acceptable evidence of the authority of the 154 partner, member(s) or officer(s) to sign for the partnership, joint venture, or 155 corporation respectively with the proposal. Otherwise, the Department will reject 156 the proposal as irregular and unauthorized.

- 158 **102.07** Irregular Proposals. The Department may consider proposals 159 irregular and may reject the proposals for the following reasons:
- 161 **(1)** The proposal is a form not furnished by the Department, altered, 162 or detached;
- 164 **(2)** The proposal contains unauthorized additions, conditions, or 165 alternates. Also, the proposal contains irregularities that may tend to 166 make the proposal incomplete, indefinite, or ambiguous to its meaning; 167
- 168(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;
- 170
 171 (4) The proposal does not contain a unit price for each pay item listed
 172 except authorized optional pay items; and
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- 174 **(5)** Prices for some items are out of proportion to the prices for other 175 items.
- 177 (6) If in the opinion of the Director, the bidder and its listed
 178 subcontractors do not have the Contactor's licenses or combination of
 179 Contractor's licenses necessary to complete the work.

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181 Where the prospective bidder is bidding on multiple projects 182 simultaneously and the proposal limits the maximum gross amount of awards 183 that the bidder can accept at one bid letting, the proposal is not irregular if the 184 limit on the gross amount of awards is clear and the Department selects the 185 awards that can be given. 186

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102.08 Proposal Guaranty. A Proposal Guaranty is not required. 188

189 102.09 Delivery of Proposal. The bidder shall submit the proposal in 190 HIePRO. Bids received after said due date and time shall not be considered. 191 Original bid documents do not have to be submitted. Award will be made based 192 on proposals submitted in HIePRO. 193

194 102.10 Withdrawal or Revision of Proposals. A bidder may withdraw or 195 revise a proposal after the bidder submits the proposal in HIePRO. Withdrawal 196 or revision of proposal must be completed before the time set for the receiving of 197 bids.

199 102.11 Public Opening of Proposals. Not applicable.

201 102.12 **Disgualification of Bidders.** The Department may disgualify a bidder 202 and reject its proposal for the following reasons:

204 Submittal of more than one proposal whether under the same or (1) 205 different name.

207 (2) Evidence of collusion among bidders. The Department will not recognize participants in collusion as bidders for any future work of the 208 209 Department until such participants are reinstated as qualified bidders.

211 (4) Submittal of an unsigned or improperly signed proposal.

213 (5) Submittal of a proposal without a listing of subcontractors or containing only a partial or incomplete listing of subcontractors. 214

- 216 (6) Submittal of an irregular proposal in accordance with Subsection 102.07 - Irregular Proposals. 217
- 219 (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 220 221 State office or employment in the matter with which the contract is directly concerned, pursuant to HRS Chapter 84-15. 222
- 224 (8) Suspended or debarred in accordance with HRS Chapter 104-25.
- 226 (9) Failure to complete the pregualification 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.

237 (A) General. When brand names of materials or equipment are 238 specified in the contract documents, they are to indicate a quality, style, 239 appearance, or performance and not to limit competition. The bidder shall 240 base its bid on one of the specified brand names unless alternate brands are qualified as equal or better in an addendum. Qualification of such 241 242 proposed alternate brands shall be submitted via email to the Contact 243 person listed in HIePRO for the solicitation and also post a question in 244 HIePRO under the guestion/answer tab referencing the email with the 245 request. The request must be posted in HIePRO no later than 14 246 calendar days before the bid opening date, not including the bid opening 247 date 248

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

252 Statement of Variances. The statement of variances must list all **(B)** 253 features of the proposed substitution that differ from the contract 254 documents and must further certify that the substitution has no other 255 variant features. The brochure and information submitted shall be clearly 256 marked showing make, model, size, options, and any other features requested by the Engineer and must include sufficient evidence to 257 258 evaluate each feature listed as a variance. A request will be denied if 259 submitted without sufficient evidence. If after installing the substituted product, an unlisted variance is discovered, the Contractor shall 260 immediately replace the product with a specified product at no increase in 261 contract price and contract time. 262

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

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- 267 **102.15 Preferences.** Preferences do not apply.

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269 102.16 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
271 signing and submitting this proposal, certifies that a written safety and health plan
272 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 HIePRO. 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."

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END OF SECTION 102

- 1 Make this section a part of the Standard Specifications:
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"SECTION 103 - AWARD AND EXECUTION OF CONTRACT

- 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 HIePRO. If 9 a discrepancy occurs between the unit bid price and the bid price, the unit bid price 10 shall govern.
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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.

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103.02 Award of Contract. The award of contract, if it be awarded, will be made within 60 calendar days after the opening of bids, to the lowest responsible and responsive bidder whose bid meets all the requirements and criteria set forth in the invitation for bids. (Through HlePRO). The successful bidder will be notified by letter mailed to the address shown in its proposal, that its proposal has been accepted, and that it has been awarded the contract.

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(1) Requirement for Award. To be eligible for award, the apparent low bidder will be contacted to submit copies of the documents listed below to demonstrate compliance with HRS Section 103D-310(c). The documents shall be submitted to the Department within 14 days after bid opening unless otherwise specified in the invitation for bids or an extension is granted in writing by the Department. If a valid certificate/clearance is not submitted on a timely basis for award of a contract, a bidder otherwise responsive and responsible may not receive the award. See also Subsection 108.03 – Preconstruction Data Submittal.

- The Department may request the bidders to allow the Department to consider the bids for the issuance of an award beyond the 60 calendar day period. Agreement to such an extension must be made by a bidder in writing. Only bidders who have agreed to such an extension will be eligible for the award.
- 40

Tax Clearance. Pursuant to HRS Sections 103D-310(c), 103-53 41 (A) and 103D-328, the successful bidder shall be required to submit a certified 42 copy of its tax clearance issued by the Hawaii State Department of Taxation 43 (DOTAX) and the Internal Revenue Service (IRS) to demonstrate its 44 compliance with HRS Chapter 237. A tax clearance is valid for six (6) 45 months from the most recent approval stamp date on the tax clearance and 46 must be valid on the bid's first legal advertisement date or any date 47 thereafter up to the bid opening date. 48 49 FORM A6, TAX CLEARANCE CERTIFICATE, is available at 50 51 the following website: 52 53 https://tax.hawaii.gov/ 54 To receive DOTAX Forms by fax or mail, phone 55 (808) 587-7572 or 1-800-222-7572. 56 57 The application for the Tax Clearance Certificate is the responsibility 58 of the bidder and must be submitted directly to the DOTAX or IRS. The 59 60 approved certificate may then be submitted to the Department. 61 DLIR Certificate of Compliance. Pursuant to HRS Section 103D-**(B)** 62 310(c), the successful bidder shall be required to submit a copy (faxed 63 copies are acceptable) of its approved certificate of compliance issued by 64 the Hawaii State Department of Labor and Industrial Relations (DLIR) to 65 demonstrate its compliance with unemployment insurance (HRS Chapter 66 383), workers' compensation (HRS Chapter 386), temporary disability 67 insurance (HRS Chapter 392), and prepaid health care (HRS Chapter 393). 68 The certificate is valid for six (6) months from the most recent approval 69 stamp date on the certificate and must be valid on the bid's first legal 70 advertisement date or any date thereafter up to the bid opening date. For 71 certificates which receive a "pending" approval stamp, a DLIR approval 72 73 stamp is required prior to the issuance of the Notice to Proceed. 74 75 APPLICATION FOR CERTIFICATE OF FORM LIR#27, COMPLIANCE WITH SECTION 3-122-112. HAR, is available at the 76 77 following website: 78 79 http://labor.hawaii.gov/ 80 81 More information is available by calling the DLIR Unemployment Insurance 82 Division at (808) 586-8926. 83 Inquiries regarding the status of a LIR#27 Form may be made by 84 85 calling the DLIR Disability Compensation Division at (808) 586-9200. 86

- The application for the Certificate of Compliance is the responsibility 87 of the bidder and must be submitted directly to the DLIR. The approved 88 certificate may then be submitted to the Department. 89 90
- 91 (C) **DCCA Certificate of Good Standing.** Pursuant to HRS Section 103D-310(c), the successful bidder shall be required to submit a copy 92 (faxed copies are acceptable) of its approved Certificate of Good Standing 93 issued by the Hawaii State Department of Commerce and Consumer Affairs 94 (DCCA), Business Registration Division (BREG) to demonstrate that it is 95 either: 96
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(1) Incorporated or organized under the laws of the State; or

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

- The Certificate of Good Standing is valid for six (6) months from the 103 approval date on the certificate and must be valid on the bid's first legal 104 advertisement date or any date thereafter up to the bid opening date. A 105 106 Hawaii business that is a sole proprietorship, however, is not required to register with the BREG, and therefore not required to submit a Certificate of 107 Good Standing. Bidders are advised that there are costs associated with 108 registering and obtaining a Certificate of Good Standing from the DCCA. 109
- To purchase a CERTIFICATE OF GOOD STANDING, go to On-Line 111 Services at the following website: 112
- 113 114

http://cca.hawaii.gov/

The application for the Certificate of Good Standing is the 116 responsibility of the bidder and must be submitted directly to the DCCA. 117 The approved certificate may then be submitted to the Department. 118

- Hawaii Compliance Express (HCE). In lieu of the certificates (D) referenced above, the bidder may make available proof of compliance through the Hawaii Compliance Express or any other designated 122 Bidders may apply and register at the "Hawaii certification process. Compliance Express" website: 124
- 125 126
- https://vendors.ehawaii.gov/hce/
- 127

128 103.03 **Cancellation of Award.** The Department reserves the right to cancel 129 the award of contracts before the execution of said contract by the parties. There will be no liability to the awardee and to other bidders. 130

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- 132 103.04 (Unassigned)

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134 103.05 Requirement of Contract Bond. At the time of execution of the contract, the successful bidder shall file a good and sufficient performance bond 135 136 and a payment bond on the forms furnished by the Department conditioned for the full and faithful performance of the contract in accordance with the terms and 137 intent thereof and for the prompt payment to all others for all labor and material 138 furnished by them to the bidder and used in the prosecution of the work provided 139 for in the contract. The bonds shall be of an amount equal to 100 percent of the 140 amount of the contract price and include 5 percent of the contract amount 141 142 estimated to be required for extra work. The bidder shall limit the acceptable performance and payment bonds to the following: 143

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(a) Legal tender;

147 (b) Surety bond underwritten by a company licensed to issue bonds in
 148 the State of Hawaii; or

(c) A certificate of deposit; share certificate; cashier's check; treasurer's check, teller's 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).

- 156**1.** The bidder may use these instruments only to a maximum of157\$100,000.
- 1592. If the required security or bond amount totals over \$100,000160more than one instrument not exceeding \$100,000 each and issued161by different financial institutions shall be acceptable.

163 Such bonds shall also by the terms inure to the benefit of any and all 164 persons entitled to file claims for labor done or material furnished in the work so as 165 to give them a right of action as contemplated by HRS Section 103D-324.

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167 103.06 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

179	the proposal guaranty which becomes the property of the Department. This is not
180	a penalty, but liquidated damages sustained by the State. The Department may
181	then make award to the next lowest responsible and responsive bidder or the
182	Department may readvertise and construct the work under contract."
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187	END OF SECTION 103

1		SECTION 104 – SCOPE OF WORK	
2 3 4	Make	the following amendment to said Section:	
5	(I)	Amend Section 104.06 Methods of Price Adjustment as follows:	
6 7 8 9 10		D6 Methods of Price Adjustment. Any adjustment in the contract price ant to a change or claim shall be made in one or more of the following	
11 12		(1) By written agreement on a fixed price adjustment before commencement of the pertinent performance.	
13 14 15 16 17		(2) By unit prices or other price adjustments specified in the contract or subsequently agreed upon before commencement of the pertinent performance.	
17 18 19 20 21 22 23		(3) The Engineer may base the adjustment for a lump sum item on a calculated proportionate unit price. The Engineer will calculate the proportionate unit price by dividing the original contract lump sum price by the actual or original estimated quantity established by the contract documents.	
23 24 25 26		(4) In any other lawful manner as the parties may mutually agree upon before commencement of the pertinent performance.	
27 28 29		(5) At the sole option of the Engineer, work may be paid for on a force account basis in accordance with Subsection 109.06 - Force Account Provisions and Compensation.	
30 31 32 33 34 35		(6) By the cost variations attributable to the events or situations with adjustment of profit and fee, all as specified in the contract or subsequently agreed upon before commencement of the pertinent performance.	
36 37		(7) In the absence of agreement by the parties:	
37 38 39 40 41 42 43 44 45 46 47		(A) For change orders with value not exceeding \$50,000 by documented actual costs of the work, allowing for overhead and profit as set forth in Section 109.05 - Allowances for Overhead and Profit. A change order shall be issued within fifteen days of 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	

48 **(B)** For change orders with value exceeding \$50,000 by a 49 unilateral determination by the Engineer of the costs attributable to the events or situations with adjustment of profit and fee, all as 50 51 computed by the Engineer in accordance with applicable sections of HAR Chapters 3-123 and 3-126, and Section 109.05 -52 53 Allowances for Overhead and Profit. When a unilateral 54 determination has been made, a unilateral change order shall be 55 issued within ten days. Upon receipt of the unilateral change order, if the contractor does not agree with any of the terms or 56 57 conditions, or the adjustment or nonadjustment of the contract time or contract price, the contractor shall file a notice of intent to claim 58 within thirty days after the receipt of the written unilateral change 59 order. Failure to file a protest within the time specified shall 60 constitute agreement on the part of the contractor with the terms, 61 conditions, amounts, and adjustment or nonadjustment of the 62 contract time or the contract price set forth in the unilateral change 63 64 order. 65

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."

73 (II) Amend Section 104.11(B) Contractor's Duty to Locate and Protect
 74 Utility by adding the following after line 291:

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- "(4) The Contractor shall contact the Hawaii One Call Center at 811 prior to any execution in a public right of way or on private property."
 - END OF SECTION 104

1		SECTION 105 – CONTROL OF WORK	
2 3 4 5	Make the following amendments to said Section:		
5 6 7	(I) Amend 105.01 – Authority to read as follows:		
8 9	"105.	01 Authority.	
10 11 12 13		(A) Authority of the Engineer. The Engineer is the representative of the Director and has all the authority of the Director with respect to the contract. The Engineer will make decisions on all questions that may arise regarding the contract, such as, but not limited to:	
14 15 16		(1) Interpretation of the contract documents.	
10 17 18		(2) Acceptability of the materials furnished and work performed.	
18 19 20		(3) Manner of performance and rate of progress of the work.	
20 21 22 23		(4) Acceptable fulfillment of the contract on the part of the Contractor.	
23 24 25		(5) Compensation under the contract.	
25 26 27 28		The Engineer's decisions on questions, claims, and disputes will be final and conclusive subject to Subsection 107.15 – Disputes and Claims.	
28 29 30 31 32 33		The Engineer may delegate specific authority to act for the Engineer to a specific person or persons. Such delegation of authority shall be established in writing and shall become effective upon delivery to the Contractor.	
 33 34 35 36 37 38 39 40 41 42 		(B) Authority of the Inspectors. Inspectors, as a representative of the Engineer or other agencies, will inspect the work done and materials furnished. Such inspection may extend to the preparation, fabrication or manufacture of the materials to be used. The Inspector does not have authority vested in the Engineer unless specifically delegated in writing. The Inspector may not alter or waive the provisions of the contract, issue instructions contrary to the contract, or act as agent or representative of the Contractor.	
43 44 45 46		Failure of an Inspector at any time to reject non-conforming work shall not be considered a waiver of the State's right to require work in strict conformity with the contract documents as a condition of final acceptance.	

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."

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

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

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

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"(A) Furnishing Drawings and Special Provisions. The State will furnish the Contractor an electronic set of the special provisions and plans." The Contractor shall have and maintain at least one set of plans and specifications on the work site, at all times.

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

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

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(V) Amend Subsection 105.16(A) – Subcontract Requirements from lines
 468 to 470 to read as follows:

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87 "The Contractor may subcontract a portion of the work but the Contractor shall88 remain responsible for the work so subcontracted."

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92	(VI) Amend Subsection 105.16(B) – Substituting Subcontractors from lines
93	487 to 494 to read as follows:
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95	"Substitutions of subcontractors will be allowed only if the subcontractor:"
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100	END OF SECTION 105

1	SECTION 106 – MATERIAL RESTRICTIONS AND REQUIREMENTS
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3 4	Make the following amendment to said Section:
4 5	(I) Amend 106.05(B) – Deviation by revising the third sentence from line 106
6	to 108 to read as follows:
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8	"Any deviations will be subject to Subsection 102.14 – Substitution of Materials
9	and Equipment Before Bid Opening.
10	(II) Amond 400 44 Ctool and Iron Construction Motorial from line 220
11 12	(II) Amend 106.11 Steel and Iron Construction Material from line 238 to line 277 to read as follows
12	to line 217 to read as follows
14	"106.11 Steel and Iron Construction Material. (Not Applicable)"
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19 20	END OF SECTION 106
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- SECTION 107 LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC
- Make the following amendments to said Section:
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(I) Amend Section 107.01 Insurance Requirements from lines to 81 to read as follows:

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

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.

26 The Contractor shall obtain all required insurance as part of the contract price. Where there is a requirement for the State of Hawaii and 27 its officers and employees to be named as additional insureds under any 28 Contractor's insurance policy, before the State of Hawaii issues the Notice 29 to Proceed, the Contractor shall obtain and submit to the Engineer a 30 Certificate of Insurance and a written policy endorsement that confirms the 31 State of Hawaii and its officers and employees are additional insureds for 32 the specific State project number and project title under such insurance 33 policies. The written policy endorsement must be issued by the insurance 34 company insuring the Contractor for the specified policy type or by an 35 agent of such insurance company who is vested with the authority to issue 36 a written policy endorsement. The insurer's agent shall also submit 37 written confirmation of such authority to bind the insurer. Any delays in 38 the issuance of the Notice to Proceed attributed to the failure to obtain the 39 proof of the State of Hawaii and its officers and employees' additional 40 insured status shall be charged to the Contractor. 41

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.

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Certificates shall contain a provision that coverages being certified 49 will not be cancelled or materially changed without giving the Engineer at 50 least thirty (30) days prior written notice. Contractor will immediately 51 provide written notice to the Director should any of the insurance policies 52 53 evidenced on its Certificate of Insurance form be cancelled, reduced in scope or coverage, or not renewed upon expiration. Should any policy be 54 canceled before final acceptance of the work by the State, and the 55 Contractor fails to immediately procure replacement insurance as 56 specified, the State, in addition to all other remedies it may have for such 57 breach, reserves the right to procure such insurance and deduct the cost 58 thereof from any money due or to become due to the Contractor. 59

Nothing contained in these insurance requirements is to be 61 62 construed as limiting the extent of Contractor's responsibility for payment of damages resulting from its operations under this contract, including the 63 Contractor's obligation to pay liquidated damages, nor shall it affect the 64 Contractor's separate and independent duty to defend, indemnify and hold 65 the State harmless pursuant to other provisions of this contract. In no 66 instance will the State's exercise of an option to occupy and use 67 completed portions of the work relieve the Contractor of its obligation to 68 maintain the required insurance until the date of final acceptance of the 69 work. 70

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

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

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- (1) Workers' Compensation. The Contractor shall obtain worker's compensation insurance for all persons whom they employ in carrying out the work under this contract. This insurance shall be in strict conformity with the requirements of the most current and applicable State of Hawaii Worker's Compensation Insurance laws in effect on the date of the execution of this contract and as modified during the duration of the contract.
- 101(2) Auto Liability. The Contractor shall obtain Auto Liability102Insurance covering all owned, non-owned and hired autos with a103Combined single Limit of not less than \$1,000,000 per occurrence104for bodily injury and property damage with the State of Hawaii105named as additional insured. Refer to SPECIAL CONDITIONS for106any additional requirements.
 - (3) General Liability. The Contractor shall obtain General Liability insurance with a limit of not less than \$2,000,000 per occurrence and in the Aggregates for each of the following:
 - (a) Products Completed/Operations Aggregate,
 - (b) Personal & Advertising Injury, and
 - (c) Bodily Injury & Property Damage

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

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

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

- (A) Citizen Labor. No person shall be employed as a laborer or mechanic unless such person is a citizen of the United States or eligible to become one; provided that persons without such qualifications may be employed with the approval of the Governor until persons who are citizens and are competent for such services are available for hire.
- Residential Labor Force. In accordance with Act 192; SLH 2011, 148 **(B)** 149 no less than eighty (80) percent of the bidder's labor force working on the 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 153 154 applicable to any subcontract of \$50,000.00 or more in connection with this contract. 155
- 157 Resident means a person who is physically present in the State of 158 Hawaii at the time the person claims to have established the person's 159 domicile in the State of Hawaii and shows the person's intent is to make 160 Hawaii the person's primary residence.
- 162 **(C)** Percentage of workforce shall be determined by dividing the labor 163 hours (including subcontractors) provided by residents working on the 164 project divided by the total number of hours worked by all employees of 165 the contractor in the performance of the contract. Hours worked by 166 employees within shortage trades as determined by the Department of 167 Labor and Industrial Relations shall not be included in the calculation of 168 this percentage.
- (D) Certification of compliance with the forgoing provisions shall be
 made by the contractor in the form of a written oath submitted to the
 Procurement Officer on a monthly basis for the duration of the contract.
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- (E) Sanctions for non compliance with these provisions are as follows:
- 176(1) With respect to the General Contractor, withholding of177payment on the contract until the Contractor or its Subcontractor178complies with HRS Chapter 103B as amended by Act 192, SLH1792011.180
 - 560A-02-23M 107-4a

181	(2) Proceedings for debarment or suspension of the Contractor
182	or Subcontractor under Hawaii Revised Statutes § 103D-702.
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184	This Section shall not apply when its application will disqualify the State
185	from receiving federal funds or aid."
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190	END OF SECTION 107

1	Amend Section 108 – PROSECUTION AND PROGRESS to read as follows:
2 3	"SECTION 108 – PROSECUTION AND PROGRESS
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6	108.01 Notice to Proceed (NTP). A Notice To Proceed will be issued to the
7	Contractor not more 30 calendar days after the contract certification date. The
8 9	Engineer may suspend the contract before issuing the Notice To Proceed, in which case the Contractor's remedies are exclusively those set forth in Subsection
10	108.10 – Suspension of Work.
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12	The Contractor shall be allowed up to 14 calendar days after the Notice to
13	Proceed to begin physical work. The Start Work Date will be established when
14	this period ends or on the actual day that physical work begins, whichever is first.
15	Charging of Contract Time will begin on the Start Work Date. The Contractor shall
16 17	notify the Engineer, in writing, at least five working days before beginning physical
17 18	work.
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.
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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 26	materials and required permits, prior to beginning physical work.
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.
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31	In the event that the Engineer establishes, in writing, a Start Work Date that
32 33	is beyond 60 calendar days from the Notice to Proceed date, the Contractor may submit a claim in accordance with, Subsection 107.15 – Disputes and Claims for
33 34	increased labor and material costs which are directly attributable to the delay
35	beyond the first 60 calendar days after the Notice to Proceed date.
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37	The Contractor shall notify the Engineer at least 24 hours before restarting
38	physical work after a suspension of work pursuant to Subsection 108.10 -
39	Suspension of Work.
40	Once physical work has begun the Contractor shall work expeditionally and
41 42	Once physical work has begun, the Contractor shall work expeditiously and pursue the work diligently to completion with the contract time. If a portion of the
42	work is to be done in stages, the Contractor shall leave the area safe and usable
44	for the user agency and the public at the end of each stage.
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108.02 Prosecution of Work. Unless otherwise permitted by the Engineer, in
 writing, the Contractor shall not commence with physical construction unless
 sufficient materials and equipment are available for either continuous construction
 or completion of a specified portion of the work.

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

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

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

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.

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108.05 Contract Time.

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 the work will be the number of working days shown in the contract plus any 112 113 additional working days authorized in writing as provided hereinafter. The count of elapsed working days to be charged against contract time, will 114 begin from the Start Work Date and will continue consecutively to the date 115 116 of Substantial Completion. When multiple shifts are used to perform the work, the State will not consider the hours worked over the normal eight 117 working hours per day or night as an additional working day. 118

120 When the contract is on a calendar day basis, the total contract time allowed for the performance of the work will be the number of days shown 121 122 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 will begin from the Start Work Date and will continue consecutively to the 124 date of Substantial Completion. The Engineer will exclude days elapsing 125 between the orders of the Engineer to suspend work and resume work for 126 suspensions not the fault of the Contractor. 127

- 128 129 **(B)** Modifications of Contract Time. Whenever the Contractor believes that an extension of contract time is justified, the Contractor shall 130 131 serve written notice on the Engineer not more than five working days after 132 the occurrence of the event that causes a delay or justifies a contract time extension. Contract time may be adjusted for the following reasons or 133 events, but only if and to the extent the critical path has been affected: 134 135
 - 560A-02-23M 108-3a

136 Changes in the Work, Additional Work, and Delays (1) 137 Caused by the State. If the Contractor believes that an extension of time is justified on account of any act or omission by the State, and is 138 139 not adequately provided for in a field order or change order, it must request the additional time as provided above. At the request of the 140 Engineer, the Contractor must show how the critical path will be 141 142 affected and must also support the time extension request with schedules, as well as statements from its subcontractors, suppliers, 143 144 or manufacturers, as necessary. Claims for compensation for any 145 altered or additional work will be determined pursuant to Subsection 104.02 - Changes. 146 147

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

- 155 (2) Delay for Permits. For delays in the routine application and processing time required to obtain necessary permits, including 156 permits to be obtained from State agencies, the Engineer may grant 157 an extension provided that the permit takes longer than 30 days to 158 acquire and the delay is not caused by the Contractor, and provided 159 that as soon as the delay occurs, the Contractor notifies the 160 Engineer in writing that the permits are not available. 161 Permits required by the contract that take less than 30 days to acquire from 162 the time which the appropriate documents are granted shall be 163 164 acquired between Notice to Proceed and Start Work Date or 165 accounted for in the contractor's progress schedule. Time extensions will be the exclusive relief granted on account of such 166 delays. 167
- Delays Beyond Contractor's Control. For delays caused by 169 (3) 170 acts of God, a public enemy, fire, inclement weather days or adverse conditions resulting therefrom, earthquakes, floods, 171 epidemics, quarantine restrictions, labor disputes impacting the 172 173 Contractor or the State, freight embargoes and other reasons beyond the Contractor's control, the Contractor may be granted an 174 extension of time provided that: 175 176
 - (a) In the written notice of delay to the Engineer, the Contractor describes possible effects on the completion date of the contract. The description of delays shall:

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181 182 183	 State specifically the reason or reasons for the delay and fully explain in a detailed chronology how the delay affects the critical path.
184 185 186 187	2. Include copies of pertinent documentation to support the time extension request.
187 188 189 190	3. Cite the anticipated period of delay and the time extension requested.
191 192 193	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
194 195 196 197	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
198 199 200	granted and no additional compensation will be paid the Contractor for such delays.
201 202 203 204 205	(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 evaluative relief granted and no additional componentian will
205 206 207 208 209 210 211	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:
212 213 214 215	(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.
213 216 217 218 219 220 221	(b) The Contractor, if requested, must submit to the Engineer within five 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:
221 222 223 224 225	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 invoice(s), bill(s) of lading, shipping manifest(s), 227 delivery tag(s), and any other documents to support the 228 229 time extension request. 230 3. 231 Cite the start and end date of the delay and the time extension requested. 232 233 Delays for Suspension of Work. When the performance of 234 (5) the work is totally suspended for one or more days (calendar or 235 working days, as appropriate) by order of the Engineer in 236 accordance with Subsections 108.10(A)(1), 108.10(A)(2), or 237 108.10(A)(5) the number of days from the effective date of the 238 239 Engineer's order to suspend operations to the effective date of the Engineer's order to resume operations shall not be counted as 240 contract time and the contract completion date will be adjusted. 241 During periods of partial suspensions of the work, the Contractor will 242 be granted a time extension only if the partial suspension affects the 243 critical path. If the Contractor believes that an extension of time is 244 245 justified for a partial suspension of work, it must request the extension in writing at least five working days before the partial 246 suspension will affect the critical operation(s) in progress. 247 The Contractor must show how the critical path was increased based on 248 the status of the work and must also support its claim if requested, 249 with statements from its subcontractors. A suspension of work will 250 251 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 (a) Delays within the Contractor's control in performing the 256 257 work caused by the Contractor, subcontractor, supplier, or any 258 combination thereof. 259 Delays within the Contractor's control in arrival of 260 (b) 261 materials and equipment caused by the Contractor, subcontractor, supplier, or any combination thereof, in 262 263 ordering, fabricating, and delivery. 264 Delays requested for changes which do not affect the 265 (C) critical path. 266 267 268 (d) Delays caused by the failure of the Contractor to make submittals in a timely manner for review and acceptance by 269 270 the Engineer, such as but not limited to shop drawings, descriptive sheets, material samples, and color samples 271

- 272except as covered in Subsection 108.05(B)(3) Delays273Beyond Contractor's Control and 108.05(B)(4) Delays in274Delivery of Materials or Equipment.
 - (e) Delays caused by the failure to submit sufficient information and data in a timely manner in the proper form in order to obtain necessary permits related to the work.
 - (f) Failure to follow the procedure within the time allowed by contract to request a time extension.
 - (g) Failure of the Contractor to provide evidence sufficient to support the time extension request.
 - (7) Reduction in Time. If the State deletes or modifies any portion of the work, an appropriate reduction of contract time may be made in accordance with Subsection 104.02 Changes.
- 290 **108.06 Progress Schedules.**

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- 292 **(A) Forms of Schedule.** All schedules shall be submitted using the 293 specific computer program designated in the bid documents. If no such 294 scheduling software program is designated, then all schedules shall be 295 submitted using the latest version of Microsoft Project by Microsoft or 296 approved equivalent software program.
- 298 Schedule submittals shall be as follows:
 - (1) For Contracts \$2,000,000 or less or For Contract Time 100 Working Days or 140 Calendar Days or Less. For contracts of \$2,000,000 or less or for contract time of 100 working days or 140 calendar days or less, the progress schedule will be a Time Scaled Logic Diagram (TSLD). The Contractor shall submit a TSLD submittal package meeting the following requirements and having these essential and distinctive elements:
- 308 (a) The major features of work, such as but not limited to BMP installation, grubbing, roadway excavation, structure 309 excavation, structure construction, shown in the chronological 310 order in which the Contractor proposes to work that feature or 311 work and its location on the project. The schedule shall 312 313 account for normal inclement weather, unusual soil or other 314 conditions that may influence the progress of the work, schedules, and coordination required by any utility, off or on 315 316 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 and interrelationship for each feature. its and 325 interdependencies in time and logic to other features in order to complete the project. 326 327 328 (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 time periods for features or milestones or phases that can 332 333 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 Set schedule logic for out of sequence activities to (h) 343 retain logic. In addition, open ends shall be non-critical. 344 345 (i) Show target bars for all activities. 346 347 Vertical and horizontal sight lines both major and minor (i) shall be used as well as a separator line between groups. 348 349 The Engineer will determine frequency and style. 350 The file name, print date, revision number, data and 351 (k) project title and number shall be included in the title block. 352 353 354 **(I)** Have columns with the appropriate data in them for activity ID, description, original duration, remaining duration, 355 early start, early finish, total float, percent complete, 356 resources. The resource column shall list who is responsible 357 for the work to be done in the activity. These columns shall 358 359 be to the left of the bar chart. 360 For Contracts Which Have A Contract Amount More Than 361 (2) \$2,000,000 Or Having A Contract Time Of More Than 100 362 Working Days Or 140 Calendar Days. For contracts which have a 363

364 365 366 367	contract amount more than \$2,000,000 or contract time of more than 100 working days or 140 calendar days, the Contractor shall submit a Timed-Scaled Logic Diagram (TSLD) meeting the following requirements and having these essential and distinctive elements:
368 369 370 371 372	(a) The information and requirements listed in Subsection 108.06(A)(1) – For Contracts \$2,000,000 or Less or For Contract Time 100 Working Days or 140 Calendar Days or Less.
373 374 375 376	(b) Additional reports and graphics available from the software as requested by the Engineer.
377 378 379	(c) Sufficient detail to allow at least weekly monitoring of the Contractor and subcontractor's operations.
380 381 382 383 384	(d) The time scaled schematic shall be on a calendar or working days basis. What will be used shall be determined by how the contract keeps track of time. It will be the same. Plot the critical calendar dates anticipated.
385 386 387 388 389	(e) Breakdown of activity, such as forming, placing reinforcing steel, concrete pouring and curing, and stripping in concrete construction. Indicate location of work to be done in such detail that it would be easily determined where work would be occurring within approximately 200 feet.
390 391 202	(f) Latest start and finish dates for critical path activities.
392 393 394 305	(g) Identify responsible subcontractor, supplier, and others for their respective activity.
395 396 397 398 399	(h) No individual activity shall have duration of more than 20 calendar days unless requested and approved by the Engineer.
400 401 402 403 404 405 406 407	 (i) All activities shall have work breakdown structure codes and activity codes. The activity codes shall have coding that incorporates information for phase, location, who is responsible for doing work and type of operation and activity description. (j) Incorporate all physical access and availability restraints.
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(B) Inspection and Testing. All schedules shall provide reasonable time and opportunity for the Engineer to inspect and test each work activity.

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412 (C) Engineer's Acceptance of Progress Schedule. The submittal of, and the Engineer's receipt of any progress schedule, shall not be deemed 413 an agreement to modify any terms or conditions of the contract. Any 414 415 modifications to the contract terms and conditions that appear in or may be inferred from an acceptable schedule will not be valid or enforceable unless 416 417 and until the Engineer exercises discretion to issue an appropriate change 418 order. Nor shall any submittal or receipt imply the Engineer's approval of 419 the schedule's breakdown, its individual elements, any critical path that may 420 be shown, nor shall it obligate the State to make its personnel available outside normal working hours or the working hours established by the 421 422 Contract in order to accommodate such schedule. The Contractor has the 423 risk of all elements (whether or not shown) of the schedule and its 424 execution. No claim for additional compensation, time, or both, shall be 425 made by the Contractor or recognized by the Engineer for delays during any period for which an acceptable progress schedule or an updated 426 progress schedule as required by Subsection 108.06(E) - Contractor's 427 428 Continuing Schedule Submittal Requirements had not been submitted. Any 429 acceptance or approval of the schedule shall be for general format only and shall not be deemed an agreement by the State that the construction 430 means, methods, and resources shown on the schedule will result in work 431 432 that conforms to the contract requirements or that the sequences or 433 durations indicated are feasible.

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

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(1) Four sets of the TSLD schedule.

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

(3) A listing of equipment that is anticipated to be used on the project. Including the type, size, make, year of manufacture, and all information necessary to identify the equipment in the Rental Rate Blue Book for Construction Equipment.

- 449(4) An anticipated manpower requirement graph plotting contract450time and total manpower requirement. This may be superimposed451over the payment graph.
- 452 **(5)** A Method Statement that is a detailed narrative describing the 453 work to be done and the method by which the work shall be

455 that: 456 (a) Has a duration longer than five days. 457 (a) Has a duration longer than five days. 458 (b) Is a milestone activity. 460 (c) Is a contract item that exceeds \$10,000 on the contract cost proposal. 461 (c) Is a contract item that exceeds \$10,000 on the contract cost proposal. 463 (d) Is a critical path activity. 464 (e) Is an activity designated as such by the Engineer. 467 Each Method Statement shall include the following items needed to fulfill the schedule: 470 (a) Quantity, type, make, and model of equipment. 471 (b) The manpower to do the work, specifying worker classification. 475 (c) The production rate per eight hour day, or the working hours established by the contract documents needed to meet the time indicated on the schedule. If the production rate is not for eight hours, the number of working hours shall be indicated. 481 (6) Two sets of color time-scaled project evaluation and review technique charts ("PERT") using the activity box template of Logic – Early Start or such other template designated by the Engineer. 483 (E) Contractor's Continuing Schedule Submittal Requirements. 484 (E) Contractor's Continuing Schedule Submittal Requirements. 489 After the acceptance of the initial TSLD and when construction starts, t	4 5 4	
 (a) Has a duration longer than five days. (b) Is a milestone activity. (c) Is a contract item that exceeds \$10,000 on the contract cost proposal. (d) Is a critical path activity. (e) Is an activity designated as such by the Engineer. (f) Each Method Statement shall include the following items needed to fulfill the schedule: (a) Quantity, type, make, and model of equipment. (b) The manpower to do the work, specifying worker classification. (c) The production rate per eight hour day, or the working hours established by the contract documents needed to meet the time indicated on the schedule. If the production rate is not for eight hours, the number of working hours shall be indicated. (f) Two sets of color time-scaled project evaluation and review technique charts ("PERT") using the activity box template of Logic – Early Start or such other template designated by the Engineer. (f) Two sets of color time-scaled project evaluation starts, the Contract or shall submit four plotted progress schedules, two PERT charts, and reports on all construction activities every two weeks (bi-weekly). This schedule bi-weekly submittal shall also include an updated version of the project schedule in a computerized software format as specified by the Engineer. The submittal shall have all the information needed to re-create that time period's TSLD plot and reports. The bi-weekly submittal shall have all the information extual durations, all new activities and any changes in duration or start or finish dates of any 	454	accomplished for each major activity. A major activity is an activity
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498 all new activities and any changes in duration or start or finish dates of any		
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501 The Contractor shall submit with every update, in report form 502 acceptable to the Engineer, a list of changes to the progress schedule since 503 the previous schedule submittal. The Engineer may change the frequency 504 of the submittal requirements but may not require a submittal of the 505 schedule to be more than once a week. The Engineer may decrease the 506 frequency of the submittal of the bi-weekly schedule. 507

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The Contractor shall submit updates of the anticipated work completion graph, equipment listing, manpower requirement graph or method statement when requested by the Engineer. The Contractor shall submit such updates within 4 calendar days from the date of the request by the Engineer.

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

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

522 **(G)** Scheduled Meetings. The Contractor shall meet on a bi-weekly 523 basis with the Engineer to review the progress schedule. The Contractor 524 shall have someone attending the meeting that can answer all questions on 525 the TSLD and other schedule related submittals.

527 **(H)** Accelerated Schedule; Early Completion. If the Contractor submits an accelerated schedule (shorter than the contract time), the 528 529 Engineer's review and acceptance of an accelerated schedule does not constitute an agreement or obligation by the State to modify the contract 530 time or completion date. The Contractor is solely responsible for and shall 531 532 accept all risks and any delays, other than those that can be directly and 533 solely attributable to the State, that may occur during the work, until the The contract time or completion date is 534 contract completion date. established for the benefit of the State and cannot be changed without an 535 536 appropriate change order or Substantial Completion granted by the State. The State may accept the work before the completion date is established, 537 538 but is not obligated to do so.

539 If the TSLD indicates an early completion of the project, the 540 Contractor shall, upon submittal of the schedule, cooperate with the 541 Engineer in explaining how it will be achieved. In addition, the Contractor 542 shall submit the above explanation in writing which shall include the State's 543 part, if any, in achieving the early completion date. Early completion of the 544 project shall not rely on changes to the Contract Documents unless 545 approved by the Engineer. 547 **(I) Contractor Responsibilities.** The Contractor shall promptly 548 respond to any inquiries from the Engineer regarding any schedule 549 submission. The Contractor shall adjust the schedule to address directives 550 from the Engineer and shall resubmit the TSLD package to the Engineer 551 until the Engineer finds it acceptable.

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553 The Contractor shall perform the work in accordance with the 554 submitted TSLD. The Engineer may require the Contractor to provide 555 additional work forces and equipment to bring the progress of the work into 556 conformance with the TSLD at no increase in contract price or contract time 557 whenever the Engineer determines that the progress of the work does not 558 insure completion within the specified contract time.

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560 108.07 Weekly Meeting. In addition to the bi-weekly schedule meetings, the Contractor shall be available to meet once a week with the Engineer at the time 561 562 and place as determined by the Engineer to discuss the work and its progress including but not limited to, the progress of the project, potential problems, 563 coordination of work, submittals, erosion control reports, etc. The Contractor's 564 565 personnel attending shall have the authority to make decisions and answer 566 questions. 567

568 The Contractor shall bring to weekly meetings a detailed work schedule 569 showing the next three weeks' work. Number of copies of the detailed work 570 schedule to be submitted will be determined by the Engineer. The three-week 571 schedule is in addition to the TSLD and shall in no way be considered as a 572 substitute for the TSLD or vice versa. The three-week schedule shall show:

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

579 **(b)** The duration of all events and delays.

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

- 585 (d) Critical submittals and requests for information (RFI's).
- 587 **(e)** The project title, project number, date created, period the schedule 588 covers, Contractor's name and creator of the schedule on each page. 589
- 590 Two days prior to each weekly meeting, the Contractor shall submit 591 a list of outstanding submittals, RFIs and issues that require discussion.

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593 108.08 Liquidated Damages for Failure to Complete the Work or Portions 594 The actual amount of damages resulting from the of the Work on Time. 595 Contractor's failure to complete the contract in a timely manner is difficult to 596 accurately determine. Therefore, the amount of such damages shall be liquidated 597 damages as set forth herein and in the special provisions. The State may, at its 598 discretion, deduct the amount from monies due or that may become due under the 599 contract.

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When the Contractor fails to reach substantial completion of the work for which liquidated damages are specified, within the time or times fixed in the contract or any extension thereof, in addition to all other remedies for breach that may be available to the State, the Contractor shall pay liquidated damages to the State, in the amount of \$ 5,000 per working day.

- (A) Liquidated Damages Upon Termination. If the State terminates
 on account of Contractor's default, liquidated damages may be charged
 against the defaulting Contractor and its surety until final completion of
 work.
- 612 **(B)** Liquidated Damages for Failure to Complete the Punchlist. The 613 Contractor shall complete the work on any punchlist created after the pre-614 final inspection, within the contract time or any extension thereof. 615
- 616 When the Contractor fails to complete the work on such punchlist 617 within the contract time or any extension thereof, the Contractor shall pay 618 liquidated damages to the State of 20 percent of the amount of liquidated 619 damages established for failure to substantially complete the work within 620 contract time. Liquidated damages shall not be assessed for the period 621 between: 622
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631 632 (1) Notice from the Contractor that the project is substantially complete and the time the punchlist is delivered to the Contractor.

- (2) The date of the completion of punchlist as determined by the Engineer and the date of the successful final inspection, and
- (3) The date of the Final Inspection that results in Substantial Completion and the receipt by the Contractor of the written notice of Substantial Completion.
- 633 **(C) Actual Damages Recoverable If Liquidated Damages Deemed** 634 **Unenforceable.** In the event a court of competent jurisdiction holds that 635 any liquidated damages assessed pursuant to this contract are 636 unenforceable, the State will be entitled to recover its actual damages for

- 637 Contractor's failure to complete the work, or any designated portion of the 638 work within the time set by the contract.
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640 108.09 Rental Fees for Unauthorized Lane Closure or Occupancy. In addition to all other remedies available to the State for Contractor's breach of the 641 terms of the contract, the Engineer will assess the rental fees in the amount of 642 643 \$2,500 for every one-to fifteen-minute increment for each roadway lane closed to 644 public use or occupied beyond the time periods authorized in the contract or by the 645 Engineer. The State may, at its discretion, deduct the amount from monies due or 646 that may become due under the contract. The rental fee may be waived in whole or part if the Engineer determines that the unauthorized period of lane closure or 647 648 occupancy was due to factors beyond the control of the Contractor. Equipment breakdown is not a cause to waive liquidated damages. 649

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108.10 Suspension of Work.

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

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

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

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

- (4) Failure on the part of the Contractor to:
- 669(a) Correct conditions unsafe for the general public or for
the workers.
 - (b) Carry out orders given by the Engineer.

(c) Perform the work in strict compliance with the provisions of the contract.

Provide adequate supervision on the jobsite.

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(5) The convenience of the State.

(d)

(B) Partial and Total Suspension. Suspension of work on some but not all items of work shall be considered a "partial suspension". Suspension of work on all items shall be considered "total suspension". The period of suspension shall be computed from the date set out in the written order for work to cease until the date of the order for work to resume.

Reimbursement to Contractor. In the event that the Contractor is 687 (C) ordered by the Engineer in writing as provided herein to suspend all work 688 689 under the contract for the reasons specified in Subsections 108.10(A)(2). 108.10(A)(3), or 108.10(A)(5) of the "Suspension of Work" paragraph, the 690 Contractor may be reimbursed for actual direct costs incurred on work at 691 692 the jobsite, as authorized in writing by the Engineer, including costs expended for the protection of the work. An allowance of 5 percent for 693 indirect categories of delay costs will be paid on any reimbursed direct 694 695 costs, including extended branch and home-office overhead and delay impact costs. No allowance will be made for anticipated profits. Payment 696 for equipment which is ordered to standby during such suspension of work 697 698 shall be made as described in Subsection 109.06(H) - Idle and Standby 699 Equipment.

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

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

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- (1) For weather related conditions.
- (2) To the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor.
- (3) Or, for which an adjustment is provided for or excluded under any other provision of this Contract.
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(E) Claims for Adjustment. Any adjustment in contract price made
 shall be determined in accordance with Subsections 104.02 – Changes and
 104.06 – Methods of Price Adjustment.

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

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

739 **108.11** Termination of Contract for Cause.

740 741 **Default.** If the Contractor refuses or fails to perform the work, or any (A) separable part thereof, with such diligence as will assure its completion 742 743 within the time specified in this contract, or any extension thereof, or 744 commits any other material breach of this contract, and further fails within 745 seven days after receipt of written notice from the Engineer to commence and continue correction of the refusal or failure with diligence and 746 747 promptness, the Engineer may, by written notice to the Contractor, declare the Contractor in breach and terminate the Contractor's right to proceed 748 with the work or the part of the work as to which there has been delay or 749 750 other breach of contract. In such event, the State may take over the work, 751 perform the same to completion, by contract or otherwise, and may take possession of, and utilize in completing the work, the materials, appliances, 752 753 and plants as may be on the site of the work and necessary therefore. Whether or not the Contractor's right to proceed with the work is terminated, 754 the Contractor and the Contractor's sureties shall be liable for any damage 755 to the State resulting from the Contractor's refusal or failure to complete the 756 757 work within the specified time.

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

763 **(C) Costs and Charges.** All costs and charges incurred by the State, 764 together with the cost of completing the work under contract, will be deducted from any monies due or which would or might have become due
to the Contractor had it been allowed to complete the work under the
contract. If such expense exceeds the sum which would have been
payable under the contract, then the Contractor and the surety shall be
liable and shall pay the State the amount of the excess.

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

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

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108.12 Termination For Convenience.

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

- 794 Contractor's Obligations. The Contractor shall incur no further **(B)** obligations in connection with the terminated work and on the date set in 795 the notice of termination the Contractor shall stop work to the extent 796 797 specified. The Contractor shall also terminate outstanding orders and subcontracts as they relate to the terminated work. The Contractor shall 798 799 settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated work subject to the State's 800 approval. The Engineer may direct the Contractor to assign the 801 Contractor's right, title, and interest under terminated orders or subcontracts 802 to the State. The Contractor must still complete the work not terminated by 803 the notice of termination and may incur obligations as necessary to do so. 804 805
- 806 (C) Right to Construction and Goods. The Engineer may require the
 807 Contractor to transfer title and to deliver to the State in the manner and to
 808 the extent directed by the Engineer, the following:
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(1) Any completed work.

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(2) Any partially completed construction, goods, materials, parts,
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(any partially completed construction, goods, materials, parts,
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(bereinafter called "construction material") that the Contractor has
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(bereinafter called or specially acquired for the performance of the
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(3) The Contractor shall protect and preserve all property in the possession of the Contractor in which the State has an interest. If the Engineer does not elect to retain any such property, the Contractor shall use its best efforts to sell such property and construction materials for the State's account in accordance with the standards of HRS Chapter 490:2-706.

(D) Compensation.

(1) The Contractor shall submit a termination claim specifying the amounts due because of the termination for convenience together with cost or pricing data, submitted to the extent required by HAR Subchapter 15, Chapter 3-122. If the Contractor fails to file a termination claim within one year from the effective date of termination, the Engineer may pay the Contractor, if at all, an amount set in accordance with Subsection 108.12(D)(3).

(2) The Engineer and the Contractor may agree to a settlement provided the Contractor has filed a termination claim supported by cost or pricing data submitted as required and that the settlement does not exceed the total contract price plus settlement costs reduced by payments previously made by the State, the proceeds of any sales of construction, supplies, and construction materials under Subsection 108.12(C)(3), and the proportionate contract price of the work not terminated.

(3) Absent complete agreement, the Engineer will pay the Contractor the following amounts less any payments previously made under the contract:

(a) The cost of all contract work performed prior to the effective date of the notice of termination work plus a 5 percent markup on the actual direct costs, including amounts paid to subcontractor, less amounts paid or to be paid for completed portions of such work; provided, however, that if it appears that the Contractor would have sustained a loss if the entire contract would have been completed, no markup shall be allowed or included and the amount of compensation shall

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830		anticipated profit of consequential damage will be due of paid.
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858		(b) Subcontractors shall be paid a markup of 10 percent on
859		their direct job costs incurred to the date of termination. No
860		anticipated profit or consequential damage will be due or paid
861		to any subcontractor. These costs must not include payments
862		made to the Contractor for subcontract work during the
863		contract period.
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865		(c) The total sum to be paid the Contractor shall not
866		exceed the total contract price reduced by the amount of any
867		sales of construction supplies, and construction materials.
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869	(4)	Cost claimed, agreed to, or established by the State shall be
870		cordance with HAR Chapter 3-123.
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872	108.13 Pre-Fina	I and Final Inspections.
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874	(A) Inspe	ection Requirements. Before the Engineer undertakes a final
875	, <i>,</i> , ,	f any work, a pre-final inspection must first be conducted. The
876	•	hall notify the Engineer that the work has reached substantial
877		and is ready for pre-final inspection.
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879	(B) Pre-F	inal Inspection. Before notifying the Engineer that the work
880		substantial completion, the Contractor shall inspect the project
881		nstalled items with all of its subcontractors as appropriate. The
882		shall also submit the following documents as applicable to the
883	work:	5
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885	(1)	All written guarantees required by the contract.
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887	(2)	Two accepted final field-posted drawings as specified in
888	``	on 648 – Field-Posted Drawings;
889		3 /
890	(3)	Complete weekly certified payroll records for the Contractor
891		Subcontractors.
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893	(4)	Certificate of Plumbing and Electrical Inspection.
894		<u> </u>
895	(5)	Certificate of building occupancy as required.
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897	(6)	Certificate of Soil and Wood Treatments.
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899	(7)	Certificate of Water System Chlorination.
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be reduced to reflect the anticipated rate of loss.

anticipated profit or consequential damage will be due or paid.

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901 (8) Certificate of Elevator Inspection, Boiler and Pressure Pipe
 902 Inspection.
 903

- (9) Maintenance Service Contract and two copies of a list of all equipment installed.
 - (10) Current Tax clearance. The contractor will be required to submit an additional tax clearance certificate when the final payment is made.
 - (11) And any other final items and submittals required by the contract documents.
- 914 (C) Procedure. When in compliance with the above requirements, the
 915 Contractor shall notify the Engineer in writing that the project has reached
 916 substantial completion and is ready for pre-final inspection.
 917
- 918The Engineer will then make a preliminary determination as to919whether or not the project is substantially complete and ready for pre-final920inspection. The Engineer may, in writing, postpone until after the pre-final921inspection the Contractor's submittal of any of the items listed in Subsection922108.13(B) Pre-Final Inspection, herein, if in the Engineer's discretion it is923in the interest of the State to do so.924
- 925 If, in the opinion of the Engineer, the project is not substantially 926 complete, the Engineer will provide the Contractor a punchlist of specific deficiencies in writing which must be corrected or finished before the work 927 928 will be ready for a pre-final inspection. The Engineer may add to or 929 otherwise modify this punchlist from time to time. The Contractor shall take 930 immediate action to correct the deficiencies and must repeat all steps 931 described above including written notification that the work is ready for pre-932 final inspection.
- 934After the Engineer is satisfied that the project appears substantially935complete a final inspection shall be scheduled within ten working days after936receipt of the Contractor's latest letter of notification that the project is ready937for final inspection.
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939 If, as a result of the pre-final inspection, the Engineer determines the 940 work is not substantially complete, the Engineer will inform the Contractor in 941 writing as to specific deficiencies which must be corrected before the work 942 will be ready for another pre-final inspection. If the Engineer finds the work 943 is substantially complete but finds deficiencies that must be corrected 944 before the work is ready for final inspection, the Engineer will prepare in 945 writing and deliver to the Contractor a punchlist describing such deficiencies. 946

947At any time before final acceptance, the Engineer may revoke the948determination of substantial completion if the Engineer finds that it was not949warranted and will notify the Contractor in writing the reasons therefore950together with a description of the deficiencies negating the declaration.

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

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

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

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

978 If the Contractor fails to correct the deficiencies and complete the
979 work by the established or agreed date, the State may correct the
980 deficiencies by whatever method it deems appropriate and deduct the cost
981 from any payments due the Contractor.
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983 **108.14** Substantial Completion and Final Acceptance.

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(A) Substantial Completion When the Engineer

(A) 985 Substantial Completion. When the Engineer finds that the Contractor has satisfactorily completed all work for the project in 986 987 compliance with the contract, with the exception of the planting period and 988 the plant establishment period, the Engineer will notify the Contractor, in writing, of the project's substantial completion, effective as of the date of the 989 990 final inspection. The substantial completion date shall determine end of 991 contract time and relieve contractor of any additional accumulation of 992 liquidated damages for failure to complete the punchlist.

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

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1002 **108.15 Use of Structure or Improvement.** The State has the right to use the 1003 structure, equipment, improvement, or any part thereof, at any time after it is 1004 considered by the Engineer as available. In the event that the structure, 1005 equipment or any part thereof is used by the State before final acceptance, the 1006 Contractor is not relieved of its responsibility to protect and preserve all the work 1007 until final acceptance.

1009 108.16 Contractor's Responsibility for Work; Risk of Loss or Damage. 1010 Until the written notice of final acceptance has been received, the Contractor shall 1011 take every precaution against loss or damage to any part of the work by the action 1012 of the elements or from any other cause whatsoever, whether arising from the 1013 performance or from the non-performance of the work. The Contractor shall 1014 rebuild, repair, restore and make good all loss or damage to any portion of the 1015 work resulting from any cause before its receipt of the written notice of final 1016 acceptance and shall bear the risk and expense thereof.

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1018 The risk of loss or damage to the work from any hazard or occurrence that 1019 may or may not be covered by a builder's risk policy is that of the Contractor and 1020 Surety, unless such risk of loss is placed elsewhere by express language in the 1021 contract documents.

1023 **108.17** Guarantee of Work.

1025(1) Regardless of, and in addition to, any manufacturers' warranties, all1026work and equipment shall be guaranteed by the Contractor against defects1027in materials, equipment or workmanship for one year from the date of final1028acceptance or as otherwise specified in the contract documents.

- When the Engineer determines that repairs or replacements of any guaranteed work and equipment is necessary due to materials, equipment, or workmanship which are inferior, defective, or not in accordance with the terms of the contract, the Contractor shall, at no increase in contract price or contract time, and within five working days of receipt of written notice from the State, commence to all of the following:
 - (a) Correct all noted defects and make replacements, as directed by the Engineer, in the equipment and work.

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

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The State will be entitled to the benefit of all manufacturers and (3) 1045 installers warranties that extend beyond the terms of the Contractor's guaranty regardless of whether or not such extended warranty is required 1046 by the contract documents. The Contractor shall prepare and submit all 1047 1048 documents required by the providers of such warranties to make them effective, and submit copies of such documents to the Engineer. If an 1049 available extended warranty cannot be transferred or assigned to the State 1050 as the ultimate user, the Contractor shall notify the Engineer who may direct 1051 that the warranted items be acquired in the name of the State as purchaser. 1052

1054 (4) If a defect is discovered during a guarantee period, all repairs and 1055 corrections to the defective items when corrected shall be guaranteed for a new duration equal to the original full guarantee period. The running of the 1056 1057 guarantee period shall be suspended for all other work affected by any 1058 defect. The guarantee period for all other work affected by any such defect shall restart for its remaining duration upon confirmation by the Engineer 1059 that the deficiencies have been repaired or remedied. 1060

1062 Nothing in this section is intended to limit or affect the State's rights (5) and remedies arising from the discovery of latent defects in the work after 1063 1064 the expiration of any guarantee period.

No Waiver of Legal Rights. The following will not operate or be 1066 108.18 considered as a waiver of any portion of the contract, or any power herein 1067 1068 reserved, or any right to damages provided herein or by law:

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(1) Any payment for, or acceptance of, the whole or any part of the work.

- (2) Any extension of time.
- 1073 1074 (3) Any possession taken by the Engineer.
- 1075 A waiver of any notice requirement or of any noncompliance with the 1076 1077 contract will not be held to be a waiver of any other notice requirement or any
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- 1079 1080

108.19 **Final Settlement of Contract.**

other noncompliance with the contract.

1081 Closing Requirements. The contract will be considered settled 1082 (A) 1083 after the project acceptance date and when the following items have been satisfactorily submitted, where applicable: 1084

1005		
1085	(1) A	All written guarantees required by the contract.
1086	(2)	Complete and cortified weakly newrolls for the Contractor and
1087 1088	``	Complete and certified weekly payrolls for the Contractor and contractor's.
1088		
1089	(3)	Certificate of plumbing and electrical inspection.
1090	(3)	Serundate of plumbing and electrical inspection.
1091	(4)	Certificate of building occupancy.
1092	(+)	bertineate of building becapancy.
1094	(5)	Certificate for soil treatment and wood treatment.
1095		
1096	(6)	Certificate of water system chlorination.
1097		
1098	(7)	Certificate of elevator inspection, boiler and pressure pipe
1099	installat	tion.
1100		
1101	(8) 7	Fax clearance.
1102		
1103	(9) A	All other documents required by the Contract or by law.
1104		
1105		to Meet Closing Requirements. The Contractor shall meet
1106		closing requirements within 60 days from the date of Project
1107		or the agreed to Punchlist complete date. Should the
1108		il to comply with these requirements, the Engineer may
1109	terminate the c	contract for cause."
1110		
1111		
1112 1113		
1115		END OF SECTION 108
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1	SECTION 109 - MEASUREMENT AND PAYMENT
2 3 4	Make the following amendment to said Section:
4 5 6 7	(I) Amend Subsection 109.05 Allowances for Overhead and Profit by revising lines 101 to 110 to read as follows:
8 9 10	"(1) 20 percent of the direct cost for any work performed by the Contractor's own labor force.
11 12	(2) 20 percent of the direct cost for any work performed by each subcontractor's own labor force.
13 14 15 16 17 18	(3) For the Contractor or any subcontractor for work performed by their respective subcontractor or tier subcontractor, 10 percent of the amount due to the performing subcontractor or tier subcontractor."
19 20	(II) Amend 109.08(A) Monthly Payment by adding the following after line 411:
21 22 23 24	"(1) Retainage. If the Engineer finds that the Contractor is progressing satisfactorily in completing the project work and:
24 25 26 27 28	a. Less than 50% of the whole contract cost is complete, the Engineer shall retain 5% of the value of the work done until the Engineer makes final payment;
28 29 30 31 32	b. More than 50% of the whole contract cost is complete, the Engineer may make the remaining progress payments in full.
33 34 35 36 37	c. After satisfactory completion of work other than landscaping items, the Engineer may adjust the amount of retainage to 15% of the landscaping items or 2½% of the total contract amount whichever is less. Do not use this subsection if the contract is only landscaping."
38 39 40 41	(III) Amend Subsection 109.08(B) Payment for Material On Hand by revising lines 421 to 423 to read as follows:
41 42 43 44 45 46	"(2) The materials shall be stored and handled in accordance with Subsection 105.14 – Storage and Handling of Materials and Equipment."

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

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50	"(3) A current "Certificate of Vendor Compliance" issued by the
51	Hawaii Compliance Express (HCE). The Certificate of Vendor
52	Compliance is used to certify the Contractor's compliance with
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54	(a) Section 103D-328, HRS (for all contracts \$25,000 or
55	more) which requires a current tax clearance certificate
56	issued by the Hawaii State Department of Taxation and the
57	Internal Revenue Service;
58	
59	(b) Chapters 383, 386, 392, and 393, HRS; and
60	
61	(c) Subsection 103D-310(c), HRS. The State reserves
62	the right to verify that compliance is current prior to the
63	issuance of final payment. Contractors are advised that non-
64	compliance status will result in final payment being withheld
65	until compliance is attained.
66	
67	Sums necessary to meet the claims of any governmental agencies
68	may be withheld from the sums due the Contractor until said
69	claims have been fully and completely discharged or otherwise
70	satisfied."
71	
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73	END OF SECTION 109
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Amend Section 209 - TEMPORARY WATER POLLUTION, DUST, AND EROSION
 CONTROL to read as follows:
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"SECTION 209 - TEMPORARY WATER POLLUTION, DUST, AND EROSION CONTROL

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209.01 Description. This section describes the following:

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

- (B) Work associated with construction stormwater, dewatering, and
 hydrotesting activities and complying with conditions of the National Pollutant
 Discharge Elimination System (NPDES) permit(s) authorizing discharges
 associated with construction stormwater, dewatering, and hydrotesting
 activities.
- 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.

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

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Hydro-mulching. Hydro-mulching used as a temporary vegetative 51 (C) 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 with portions of Section 641- Hydro-Mulch Seeding including 641.02(D) - Soil 60 and Mulch Tackifier, 641.03(A) – Seeding, and 641.03(B) - Planting Period. 61 Install non-vegetative controls including mulch or rolled erosion control 62 63 products while the vegetation is being established. Water and fertilize grass. Apply fertilizer as recommended by the manufacturer. Replace grass the 64 Engineer considers unsuitable or sick. Remove and dispose of trash and 65 66 debris. Remove invasive species. Mow as needed to prevent site or signage obstructions, fire hazard, or nuisance to the public. Do not remove down 67 stream sediment control measures until the vegetation is uniformly 68 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.

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

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

78 79 **209.03 Construction.**

(A) **Preconstruction Requirements.**

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

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	ronowing.
97	(a) Written description of activities to minimize water
98	pollution and soil erosion into State waters, drainage or sewer
99 99	systems. BMP shall include the following:
100	systems. Dim shan neidde the following.
101	1. An identification of potential pollutants and their
101	I I
102	sources.
103	2. A list of all materials and heavy equipment to be
104	5 11
	used during construction.
106	2 Descriptions of the methods and devises used to
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	A Details of the presedures used for the
111	4. Details of the procedures used for the
112	maintenance and subsequent removal of any erosion or
113	siltation control devices.
114	F Mathematical structure and discovery because
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.
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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.

136 137		12.	Concrete waste control.
138		13.	Fueling and maintenance of vehicles and other
139		equipr	•
140		cquipi	nont.
140		14.	Tracking of sediment offsite from project entries
141		and ex	
142			AIIS.
143		15.	Litter management.
145		15.	Enter management.
146		16.	Toilet facilities.
140		10.	
147		17.	Other factors that may cause water pollution, dust
140			Other factors that may cause water pollution, dust rosion control.
150			
150	(b)	Drovio	le plans indicating location of water pollution, dust
151	• •		control devices; provide plans and details of BMPs
152			d or utilized; show areas of soil disturbance in cut
155			icate areas used for construction staging and
154			uding items (1) through (17) above, storage of
155	-		ndicate type of aggregate), asphalt cold mix, soil or
150			equipment and vehicle parking, and show areas
157			ative practices are to be implemented. Indicate
158		•	ainage pattern on plans. Include flow arrows.
160			arate drawing for each phase of construction that
161		-	age patterns. Indicate approximate date when
162			e installed and removed.
162	uevice		e installed and removed.
165	(c)	Const	ruction schedule.
165	(0)	001130	
165	(d)	Name	(s) of specific individual(s) designated responsible
167			llution, dust, and erosion controls on the project
168			home, cellular, and business telephone numbers,
169			, and e-mail addresses.
170			
171	(e)	Descr	iption of fill material to be used.
172	(0)	Doool	
172	(f)	For p	rojects with an NPDES Permit for Construction
174			ibmit information to address all sections in the
175			Pollution Prevention Plan (SWPPP).
176	••••		
177	(g)	For pr	ojects with an NPDES Permit, information required
178			ce with the conditions of the Notice of General
179		•	rage (NGPC)/NPDES Permit.
180		• •	

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

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

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

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

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

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

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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 a tolerance of at least 0.05 inches of rainfall. Install rain gage on project site 227 228 in an area that will not deter rainfall from entering the gate opening. Do not install in a location where rain water may splash into rain gage. The rain 229 230 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.

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Address all comments received from the Engineer.

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

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

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

252 Immediately initiate stabilizing exposed soil areas upon completion of 253 earth disturbing activities for areas permanently or temporarily ceased on any portion of the site. Earth-disturbing activities have permanently ceased when 254 clearing and excavation within any area of the construction site that will not 255 256 include permanent structures has been completed. Earth-disturbing 257 activities have temporarily ceased when clearing, grading, and excavation within any area of the site that will not include permanent structures will not 258 259 resume for a period of 14 or more calendar days, but such activities will resume in the future. The term "immediately" is used in this section to define 260 the deadline for initiating stabilization measures. "Immediately" means as 261 soon as practicable, but no later than the end of the next work day, following 262 263 the day when the earth-disturbing activities have temporarily or permanently 264 ceased. 265

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For projects with an NPDES Permit for Construction activities:

268 For construction areas discharging into waters not impaired for (1) 269 nutrients or sediments, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing 270 271 activities. 272 273 (2) For construction areas discharging into nutrient or sediment 274 impaired waters, complete initial stabilization within 7 calendar days 275 after the temporary or permanent cessation of earth-disturbing 276 activities. 277 278 For projects without an NPDES Permit for Construction activities, complete initial stabilization within 14 calendar days after the temporary or 279 permanent cessation of earth-disturbing activities. 280 281 Any of the following types of activities constitutes initiation of 2.82 283 stabilization: 284 285 (1) Prepping the soil for vegetative or non-vegetative stabilization; 286 287 (2) Applying mulch or other non-vegetative product to the exposed 288 area: 289 290 (3) Seeding or planting the exposed area; 291 292 Starting any of the activities in items (1) - (3) above on a portion (4) of the area to be stabilized, but not on the entire area; and 293 294 295 Finalizing arrangements to have stabilization product fully (5) 296 installed in compliance with the deadline for completing initial stabilization activities. 297 298 299 Any of the following types of activities constitutes completion of initial stabilization activities: 300 301 302 For vegetative stabilization, all activities necessary to initially (1) 303 seed or plant the area to be stabilized; and/or 304 305 For non-vegetative stabilization, the installation or application (2) 306 of all such non-vegetative measures. 307 308 If the Contractor is unable to meet the deadlines above due to 309 circumstances beyond the Contractor's control, and the Contractor is using vegetative cover for temporary or permanent stabilization, the Contractor 310 may comply with the following stabilization deadlines instead as agreed to by 311 312 the Engineer: 313

314 Immediately initiate, and complete within the timeframe shown (1) 315 above, the installation of temporary non-vegetative stabilization measures to prevent erosion; 316 317 Complete all soil conditioning, seeding, watering or irrigation 318 (2) 319 installation, mulching, and other required activities related to the 320 planting and initial establishment of vegetation as soon as conditions or circumstances allow it on the site; and 321 322 323 Notify and provide documentation to the Engineer the (3) circumstances that prevent the Contractor from meeting the deadlines 324 above for stabilization and the schedule the Contractor will follow for 325 326 initiating and completing initial stabilization and as agreed to by the 327 Engineer. 328 329 Follow the applicable requirements of the specifications and special provisions including Section 619 - Planting and Section 641 - Hydro-Mulch 330 Seeding. 331 332 333 Immediately after seeding or planting the area to be vegetatively stabilized, to the extent necessary to prevent erosion on the seeded or 334 planted area, select, design, and install non-vegetative erosion controls that 335 336 provide cover (e.g., mulch, rolled erosion control products) to the area while vegetation is becoming established. 337 338 339 Protect exposed or disturbed surface area with mulches, grass seeds or hydromulch. Spray mulches at a rate of 2,000 pounds per acre. Add 340 tackifier to mix at a rate of 85 pounds per acre. Apply grass seeds at a rate 341 342 of 125 pounds per acre. For hydromulch, use the ingredients and rates required for mulches and grass seeds. Submit recommendations from a 343 licensed Landscape Architect when deviating from the application rates 344 345 above. 346 Apply fertilizer to mulches, grass seed or hydromulch per 347 348 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 greater than 15 feet in height. 353 354 355 BMP measures shall be in place and operational at the end of work day or as required by Section 209.03(B) - Construction Requirements. 356 357

358 359 360 361 362 363 364 365	Install and maintain either or both stabilized construction entrances and wheel washes to minimize tracking of dirt and mud onto roadways. Restrict traffic to stabilized construction areas only. Clean dirt, mud, or other material tracked onto the road, sidewalk, or other paved area by the end of the same day in which the track-out occurs. Modify stabilized construction entrances to prevent mud from being tracked onto road. Stabilize entire access roads if necessary.
366 367	Chemicals may be used as soil stabilizers for either or both erosion and dust control if acceptable to the Engineer.
368 369 370 371 372	Provide temporary slope drains of rigid or flexible conduits to carry runoff from cuts and embankments. Provide portable flume at the entrance. Shorten or extend temporary slope drains to ensure proper function.
372 373 374 375	Protect ditches, channels, and other drainageways leading away from cuts and fills at all times by either:
376 377 378	(1) Hydro-mulching the lower region of embankments in the immediate area.
379 380	(2) Installing check dams and siltation control devices.
381 382	(3) Other methods acceptable to the Engineer.
383 384 385	Provide for controlled discharge of waters impounded, directed, or controlled by project activities or erosion control measures.
386 387 388 389	Cover exposed surface of materials completely with tarpaulin or similar device when transporting aggregate, soil, excavated material or material that may be source of fugitive dust.
390 391 392	Cleanup and remove any pollutant that can be attributed to the Contractor.
393 394 395 396 397 398 399	Install or modify Site-Specific BMP measures due to change in the Contractor's means and methods, or for omitted condition that should have been allowed for in the accepted Site-Specific BMP or a Site-Specific BMP that replaces an accepted Site-Specific BMP that is not satisfactorily performing. Modifications to Site-Specific BMP measures shall be accepted in writing by the Engineer prior to implementation.
400 401 402 403	Properly maintain all Site-Specific BMP measures. For projects with an NPDES Permit for Construction Activities:

404 405 406	impaired w	construction areas discharging into nutrient or sediment aters, inspect, prepare a written report, and make repairs asures at the following intervals:
407 408	(a)	Weekly.
409 410 411	(b) whic	Within 24 hours of any rainfall of 0.25 inch or greater the occurs in a 24-hour period.
412 413 414	(c) or ne	When existing erosion control measures are damaged of operating properly as required by Site-Specific BMP.
415 416 417 418	nutrients o	construction areas discharging to waters not impaired for r sediments, inspect, prepare a written report, and make BMP measures at the following intervals:
419 420	(a)	Weekly.
421 422 423 424	(b) or ne	When existing erosion control measures are damaged of operating properly as required by Site-Specific BMP.
424 425 426 427		ts without an NPDES Permit for Construction activities, a written report, and make repairs to BMP measures at the :
428 429 430	(a)	Weekly.
431 432 433	(b) or no	When existing erosion control measures are damaged of operating properly as required by Site-Specific BMP.
434 435 436 437	must be removed	y remove, replace or relocate any Site-Specific BMP that , replaced or relocated due to potential or actual flooding, er or damage to project or public.
438 439 440	continuous record	ecords of inspections of Site-Specific BMP work. Keep Is for duration of the project. Submit copy of Inspection ineer within 24 hours after each inspection.
441 442 443 444	209.03(A)(2)(d) sh by the Engineer	actor's designated representative specified in Subsection nall address any Site-Specific BMP deficiencies brought up immediately, including weekends and holidays, and
445 446 447 448 449	problem does not can be corrected BMP deficiencies	fix the deficiencies by the close of the next work day if the require significant repair or replacement, or if the problem through routine maintenance. Address any Site-Specific brought up by the State's Third-Party Inspector in the or as specified in the Consent Decree or MS4 NPDES

450 Permit, whichever is more stringent. The Consent Decree timeframe 451 requirement applies statewide. The MS4 NPDES Permit only applies to Oahu. In this section, "immediately" means the Contractor shall take all 452 453 reasonable measures to minimize or prevent discharge of pollutants until a 454 permanent solution is installed and made operational. If a problem is 455 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 456 457 pollution prevention control or a significant repair is needed, complete installation or repair no later than 7 calendar days from the time of 458 459 notification/Contractor discovery. Notify the Engineer and document why it is infeasible to complete the installation or repair within 7 calendar days and 460 complete the work as soon as practicable and as agreed to by the Engineer. 461 Address Site-Specific BMP deficiencies discovered by the Contractor within 462 463 the timeframe above. The Contractor's failure to satisfactorily address these Site-Specific BMP deficiencies, the Engineer reserves the right to employ 464 465 outside assistance or use the Engineer's own labor forces to provide 466 necessary corrective measures. The Engineer will charge the Contractor 467 such incurred costs plus any associated project engineering costs. The 468 Engineer will make appropriate deductions from the Contractor's monthly 469 progress estimate. Failure to apply Site-Specific BMP measures may result in one or more of the following: assessment of liquidated damages, 470 suspension, or cancellation of Contract with the Contractor being fully 471 472 responsible for all additional costs incurred by the State.

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- 481Do not begin construction activities until all required conditions of the482permit are met and submittals detailed in Subsection 209.03(A)(2) Water483Pollution, Dust, and Erosion Control Submittals are completed and accepted484in 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.
- 492Do not begin hydrotesting activities until the DOH-CWB has issued an493Individual NPDES Permit or Notice of General Permit Coverage (NGPC).494Conduct Hydrotesting operations in accordance with the conditions of the495permit 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.
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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

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

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

520 **209.04** Measurement.

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

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

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

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

530 537	Pay Item	Pay Unit
538 539	Installation, Maintenance, Monitoring, and Removal of BMP	Lump Sum
540 541 542	Additional Water Pollution, Dust, and Erosion Control	Force Account

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.

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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.

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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.

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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.

562 Appendix A

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564 The following list identifies potential pollutant sources and corresponding 565 BMPs used to mitigate the pollutants. Each BMP is referenced to the corresponding section of the current HDOT Construction Best Management Practices Field Manual 566 567 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 Construction Best Management Practices Field Manual. Supplemental BMP sheets 570 571 located at http://www.stormwaterhawaii.com/resources/contractors-andare consultants/storm-water-pollution-prevention-plan-swppp/ under Concrete Curing 572 573 and Irrigation Water.

Pollutant	Appropriate Site-Specific BMP to be	BMP
Source	Implemented	Requirements
Construction debris, green waste, general litter	 Separate contaminated clean up materials from construction and demolition (C&D) wastes. Provide waste containers (e.g., dumpster or trash receptacle) of sufficient size and number to contain construction and domestic wastes. Inspect construction waste and recycling areas regularly. Schedule solid waste collection regularly. Schedule recycling activities based on construction/demolition phases. Empty waste containers weekly or when they are two-thirds full, whichever is sooner. Do not allow containers to overflow. Clean up immediately if they do. On work days, clean up and dispose of waste in designated waste containers. See Solid Waste Management Section SM-6 for additional requirements. Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable. 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. Dispose of construction and non- construction solid waste in accordance with State DOH regs. Load removed non- recyclable vegetation directly onto trucks; cover and transport to a licensed facility 	See Solid Waste Management Section SM-6. Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.

Pollutant	Appropriate Site-Specific BMP to be	BMP
Source	Implemented	Requirements
Materials associated with the operation and maintenance of equipment, such as oil, fuel, and hydraulic fluid leakage	 Use off-site wash racks, repair and maintenance facilities, and fueling sites when practical. Designate bermed wash area if cleaning on site is necessary. Place drip pans or drop cloths under vehicles and equipment to absorb spills or leaks. Provide an ample supply of readily available spill cleanup materials. Clean up spills immediately, using dry cleanup methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge. Inspect on-site vehicles and equipment regularly and immediately repair leaks. Regularly inspect fueling areas and storage tanks. Train employees on proper maintenance and spill practices and provide cover or secondary containment. Do not remove original product labels and comply with manufacturer's labels for proper disposal. Dispose of containers only after all the product has been used. Dispose of or recycle oil or oily wastes according to Federal, State, and Local requirements. Store soaps, detergents, or solvents under cover or other means to prevent contact with rainwater. 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. 	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.

Pollutant	Appropriate Site-Specific BMP to be	BMP De suire monto
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Pollutant Source	 Implemented 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 	BMP Requirements Soil Stabilization 1. SM-22 Topsoil Management 2. EC-12 Seeding and Planting 3. EC-14 Mulching 4. EC-11 Geotextiles and Mats Slope Protection 1. EC-12 Seeding and Planting 2. EC-14 Mulching 3. EC-11 Geotextiles and Mats 4. EC-4 Slope Roughening, Terracing,
	 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 	and Rounding 5. EC-7 Slope Drains and
	 maintained in accordance with HAR Chapter 11- 55. Minimize disturbance on steep slopes (Greater than 15% in grade). 	Subsurface Drains 6. EC-9 Slope
	 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 several for the stabilization. 	Interceptor or Diversion Ditches/Berms SC-1 Storm Drain Inlet
	minimize erosive flow velocities.	Protection

Pollutant Source	Appropriate Site-Specific BMP to be	BMP Requirements
Source	Implemented	Perimeter Controls
		and Sediment
		Barriers
		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
		5. SC-9 Brush or
		Rock Filter
		Sediment Basins
		and Detention
		Ponds
		1. SC-4 Sediment Trap
		2. SC-5
		Sediment Basin
		SC-3 Check Dams
		EC-6 Level
		Spreader SM-20 Paving
		Operations
		SC-10
		Construction
		Roads and
		Parking Area
		Stabilization

Pollutant	Appropriate Site-Specific BMP to be	BMP
Source	Implemented	Requirements
		Controlling Storm
		Water Flowing
		onto and Through
		the Project 1. EC-3 Run-Or
		Diversion
		2. EC-5 Earth
		Dike, Swales and
		Ditches
		Post Constructior
		BMPs
		1. EC-2 Flared
		Culvert End
		Sections
		2. EC-10 Rip-
		Rap and Gabion
		Inflow Protection
		3. EC-8 Outlet
		Protection and
		Velocity
		Dissipation
		Devices
		4. SM-22
		Topsoil
		Management
		Non-Structural
		BMPs
		1. SM-1
		Construction BM
		Training
		2. SM-14 Seboduling
		Scheduling 3. SM-15
		Location of
		Potential Sources
		of Sediment
		4. SM-17
		Preservation of
		Existing
		Vegetation

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Sediment from soil stockpiles	 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	 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	BMP Requirements
Source Materials associated with painting, such as paint and paint wash solvent	 Implemented Hazardous chemicals shall be well-labeled and stored in original containers. Keep ample supply of cleanup materials on site. Dispose container only after all of the product has been used. Remove as much paint from brushes on painted surface. 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. 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. Do not dump liquid wastes into the storm drainage system. Filter and re-use solvents and thinners. Dispose of oil-based paints and residue as a hazardous waste. Ensure collection, removal, and disposal of hazardous waste. Properly store paints, solvents, and epoxy compounds. Properly store and dispose waste materials generated from painting and structure repair and construction activities. Mix paints in a covered and contained area, when possible, to minimize adverse impacts from spills. Do not apply traffic paint or thermoplastic if rain is forecasted. 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. 	Requirements 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.

Pollutant	Appropriate Site-Specific BMP to be	BMP
Source	Implemented	Requirements
Industrial chemicals, fertilizers, and/or pesticides	 Hazardous chemicals shall be well-labeled and stored in original containers. Keep ample supply of cleanup materials on site. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge. Dispose container only after all of the product has been used. Retain a complete set of safety data sheets (formerly MSDS) on site. Store industrial chemicals in water-tight containers and provide either cover or secondary containment. Provide cover when storing fertilizers or pesticides to prevent these chemicals from coming into contact with rainwater. Restrict amount of pesticide prepared to quantity necessary for the current application. Do not apply to stormwater conveyance channels with flowing water. Comply with fertilizer and pesticide manufacturer's recommended usage and disposal instructions. Document departures from manufacturer's specifications in Attachment J. 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. Follow federal, state, and local laws regarding fertilizer application. Do not dispose of toxic liquid wastes (solvents, used oils, and paints) or chemicals (additives, acids, and paints) or chemicals (additives, acids, and curing compounds) in dumpsters allocated for construction debris. 	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

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
	 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. See Material Storage and Handling Use SM-2, and Hazardous Materials and Waste Management Section SM-9 for additional requirements. 	
Hazardous waste (Batteries, Solvents, Treated Lumber, etc.)	 Do not dispose of toxic materials in dumpsters allocated for construction debris. 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. 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. 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. 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. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge. 	See Hazardous Materials and Waste Management Section SM-9 and Vehicle and Equipment Maintenance SM-12

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
	 Ensure collection, removal, and disposal of hazardous waste complies with manufacturer's recommendations and is in compliance with federal, state, and local requirements. See Hazardous Materials and Waste Management Section SM-9 and Vehicle and Equipment Management, Vehicle and Equipment Maintenance SM-12 for additional requirements. 	
Metals and Building Materials	 Inspect construction waste and recycling areas regularly. Schedule solid waste collection regularly. If building materials or metals are stored on site (such as rebar or galvanized poles) store under cover under tarps or in containers. Minimize the amount of material stored on site. Do not stockpile uncovered metals or other building materials in close proximity to discharge points. See Solid Waste Management Section SM-6 for additional requirements. 	See Solid Waste Management Section SM-6
Contaminated Soil	 See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Materials and Waste Management Section SM-9 for additional requirements. At minimum contain contaminated material soil by surrounding with impermeable lined berms or cover exposed contaminated material with plastic sheets. 	See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Materials and Waste Management Section SM-9

Pollutant Source				
Fugitive Dust Control and Dust Control Water	 Do not over spray water for dust control purposes which will result in runoff from the area. Apply water as conditions require. Washing down of debris or dirt into drainage, sewage systems, or State waters is not allowed. Minimize exposed areas through the schedule of construction activities. Utilize vegetation, mulching, sprinkling, and stone/gravel layering to quickly stabilize exposed soil. Direct construction vehicle traffic to stabilized roadways. Cover dump trucks hauling material from the site with a tarpaulin. See Dust Control Section SM-19 for additional requirements. 	See Dust Control Section SM-19		
Concrete Truck Wash Water	 Disposal of concrete truck wash water via percolation is prohibited. Wash concrete-coated vehicles or equipment off-site or in the designated wash area. 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. Runoff from the on-site concrete wash area shall be contained in a temporary pit or level bermed area where the concrete can set. Design the area so that no overflow can occur due to inadequate wash area sizing or precipitation. The temporary pit shall be lined with plastic to prevent seepage of wash water into the ground. Allow wash water to evaporate or collect wash water and all concrete debris in a concrete washout system bin. Do not dump liquid wastes into storm drainage system. Dispose of liquid and solid concrete wastes in compliance with federal, state, and local standards. See Waste Management, Concrete Wash and Waste Management Section SM-4 for additional requirements. 	See Waste Management, Concrete Wash and Waste Management Section SM-4		

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Sediment Track-Out	 Include Stabilized Construction Entrance at all points that exit onto paved roads. A sediment trapping device is required if a wash rack is used in conjunction with the stabilized construction entrance/exit. The pavement shall not be cleaned by washing down the street. 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. Use BMPs for adjacent drainage structures. Remove sediment tracked onto the street by the end of the day in which the track-out occurs. Restrict vehicle use to properly designated exit points. Include additional BMPs that remove sediment prior to exit when minimum dimensions cannot be met. See Stabilized Construction Entrance/Exit Section SC-11 for additional requirements. 	See Stabilized Construction Entrance/Exit Section SC-11
Irrigation Water	 Consider irrigation requirements. Where possible, avoid species which require irrigation. Design, timing and application methods of irrigation water to eliminate the runoff of excess irrigation water into the storm water drainage system. See Seeding and Planting Section EC-12 and California Stormwater BMP Handbook SD-12 Efficient Irrigation included in SWPPP Attachment A for additional requirements. 	See Seeding and Planting Section EC-12 and California Stormwater BMP Handbook SD- 12 Efficient Irrigation
Hydrotesting Effluent	• 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.	Site specific BMPs will be included in the NOI/NPDES Permit Form F submittal.

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Dewatering Effluent	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.	See Dewatering Operations SM-18. Site specific BMPs will be included in the NOI/NPDES Permit Form G submittal.
Saw-cutting Slurry	 Saw cut slurry shall be removed from the site by vacuuming. Provide storm drain protection during saw cutting. See Paving Operations Section SM-20 for additional requirements. Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable. 	See Paving Operations Section SM-20, Storm Drain Inlet Protection SC-1, Perimeter sediment controls where applicable
Concrete Curing Water	 Avoid overspraying of curing compounds. Apply an amount of compound that covers the surface, but does not allow any runoff of the compound. See California Stormwater BMP Handbook NS-12 Concrete Curing included in SWPPP Attachment A for additional requirements. 	See California Stormwater BMP Handbook NS- 12 Concrete Curing

Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements	
Plaster Waste Water	 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. 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. 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. 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 	See Material, Storage and Handling Use Section SM-2, Stockpile Management Use Section SM-3, and Hazardous Materials and Waste Management Section SM-9	
Water-Jet Wash Water	 Hazardous Materials and Waste Management Section SM-9 for additional requirements. For Water-Jet Wash Water used to clean vehicles, use off site wash racks or commercial washing facilities when practical. See Vehicle and Equipment Cleaning Section SM-11 for additional information. For Water-Jet Wash Water used to clean impervious surfaces, the runoff shall not be allowed to flow into drainage structures or State Waters. 	See Vehicle and Equipment Cleaning Section SM-11	
Sanitary/Septic Waste	 Locate Sanitary facilities in a convenient place away from drainage facilities. Position sanitary facilities so they are secure and will not be tipped over or knocked down. Wastewater shall not be discharged to the ground or buried. A licensed service provider shall maintain sanitary/septic facilities in good working order. Schedule regular waste collection by a licensed transporter. See Sanitary Waste Section SM-7 for additional requirements. 	See Sanitary Waste Section SM-7.	

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END OF SECTION 209

1 2	SECTION 503 – CONCRETE STRUCTURES
2 3 4	Make the following amendments to said Sections:
5 6 7	(I) Amend Section 503.04 Measurement, from line 1201 to 1204 to read as follows:
, 8 9 10	"503.04 Measurement. The Engineer will measure concrete swale per linear foot in accordance with the contract documents."
11 12 13	(II) Amend Section 503.05 Payment, from line 1206 to 1215 to read as follows:
14 15 16 17	"503.05 Payment. The Engineer will pay for the accepted concrete swale at the contract price per linear foot. Payment will be full compensation for the work prescribed in this section and the contract documents.
17 18 19 20	The Engineer will pay for the following pay item when included in the proposal schedule:
21 22	Pay Item Pay Unit
23 24 25 26 27	Concrete Swale Linear Foot"
28 29	END OF SECTION 503

DIVISION 600 - MISCELLANEOUS CONSTRUCTION

SECTION 601 - STRUCTURAL CONCRETE

5 601.01 **Description.** This section describes structural concrete, which consists of 6 Portland Cement, fine aggregate, coarse aggregate, and water. It may also include 7 adding admixtures for the purpose of entraining air, retarding or accelerating set, tinting, 8 and other purposes as required or permitted. All concrete designs for structural concrete 9 to be placed on HDOT Highway projects must use technology to reduce the embodied 10 carbon footprint of concrete used in the highway infrastructure. e.g., carbon dioxide mineralization or equivalent technology such as C-S-H nanoparticle-based strength-11 enhancing admixture (CSH-SEA), or technology or material that allows the reduction in 12 13 the size of the carbon footprint of the mix, e.g., strength improving admixtures, 14 supplementary cementitious materials (SCMs), or other Engineer accepted methods that can reduce the embodied carbon footprint of the concrete. 15

17 **601.02 Materials.**

10		
19	Portland Cement	701.01
20		
21	Fine Aggregate for Concrete	703.01
22		
23	Coarse Aggregate for Portland Cement Concrete	703.02
24		
25	Admixtures	711.03
26		
27	Water	712.01
28		
29	Macro-Synthetic Fibers for Concrete Reinforcement	719
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Use coarse aggregate for lightweight concrete conforming to ASTM C330 except for Sections 5, 7, and 9.

- 3334 601.03 Construction.
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(A) Quality Control. Portland Cement concrete production requires the Contractor's responsibility for quality control of materials during handling, blending, mixing, placement, and curing operations.

Sample, test, and inspect concrete to ensure the quality of the components,
 materials, and concrete using quality control methods and testing. Sampling and
 testing for quality control must be performed by certified ACI Concrete Field
 Technician Grade I following the requirements of the standard test methods.
 Perform quality control tests for the slump, air content, temperature, unit weight, a
 Box Test for slip form concrete, or other required properties during the production
 of structural concrete other than concrete for incidental construction. Submit

47 quality control test results.48

(B) Design and Designation of Concrete. Design concrete mixture for concrete work specified. Submit mix design using State Highways Division form DOT 4-151 or an equivalent form accepted by the Engineer. Do not start work until the Engineer accepts the mix design. The Engineer will accept a concrete mix design complying with the information given in Table 601.03-1 - Design of Concrete, and other pertinent requirements.

Whenever the concrete's 28-day compressive strength, f'c, is 4,000 psi or greater, designate concrete by the required minimum 28-day compressive strength.

The concrete's 28-day compressive strength, f'c, which is less than 4,000 psi listed in Table 601.03-1 – Design of Concrete, is for design information and designation of a class.

Proportion concrete that is designated by a compressive strength so that the concrete conforms to the required strength.

Design concrete placed in bridge decks and pavements exposed to traffic wear, with air content of 3 percent, unless otherwise specified, including entrapped and entrained air. Maintain air content for plastic concrete within a tolerance of 1 percent, plus or minus, during the work.

Use Class BD concrete in the bridge deck unless the concrete is designated by compressive strength. Incorporate into the bridge deck concrete: waterreducing, shrinkage-reducing, and migrating corrosion-inhibiting admixtures. Allow also, set-retarding admixtures in the concrete with the capability to vary the degree of retardation without adversely affecting other characteristics of concrete. Submit all the design admixture dosages.

Class A concrete must be used when the type of concrete is not indicated in the contract documents.

Design concrete as specified in Table 601.03-1 – Design of Concrete.

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TABLE 601.03-1 - DESIGN OF CONCRETE							
(800 Maximum Cement Content Ibs. /c.y.)							
Class of Concrete	28-Day Strength f'c, psi.	Minimum Cement Content Ibs. /c.y.	Maximum Water- Cement Ratio, Ib./Ib.	Minimum Cement Content with Mineralized CO ₂ lbs./c.y.	Maximum Water- Cement Ratio with Mineralized CO ₂ lb./lb.	Minimum Cement Content with SCM Ibs. /c.y.	Maximum Water- Cement Ratio with SCM Ib./Ib.
А	3000	532	0.59	504	0.62		
В	2500	475	0.66	450	0.70		
С	2000	418	0.75	396	0.79	NA	NA
D	1500	380	0.85	360	0.87	INA	INA
BD	3750	610	0.49	NA	NA		
SEAL	3000	610	0.55	NA	NA		
Designated by Strength f'c or *f'r	As Specified	610	0.49	NA	NA	NA	NA
[*] f'r = Speci	fied Modulu	s of Rupture					

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Structural Concrete Design - The Carbon Dioxide mineralization process is 96 97 our preferred method for CO₂ footprint reduction for structural concrete. Other Carbon Dioxide reduction options, materials, or technologies may be considered 98 99 for structural concrete mix designs if a Carbon Dioxide mineralization system on the island is unavailable, or Carbon Dioxide is in short supply. Other options to 100 reduce concrete's Carbon Dioxide footprint includes but are not limited to adding 101 102 Supplementary Cementitious Materials, admixtures, blended hydraulic cements, Additional means and methods of CO₂ footprint 103 or a combination thereof. 104 reduction not listed herein may be used if their use can be justified and accepted 105 by the Engineer.

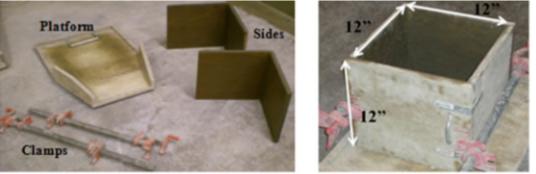
- 106 The reduced carbon footprint concrete mix design for all islands must have a 107 reduction of Portland Cement content and still comply with the concrete design strength and other durability requirements as specified. See Table 601.03-1 108 Design of Concrete's specified limits for cement content, water cement ratio, and 109 110 other properties when using CO₂ mineralization.
- 111 It should be noted that in some cases the use of SCMs in mixes may not result in 112 it having the same strength curve as their cement counterpart and more curing time will be needed to meet and exceed the design strength. In such cases, the 113 114
 - Contractor may request a waiver from the 28-day limit. Submit laboratory test data

with the request to the Engineer. The waiver may be granted on a case-by-case
basis, e.g., mass concrete. The Engineer reserves the right to limit the amount of
SCMs in the mix or reject the mix design.

118 Slipform Concrete Design – The Box Test method measures the response of a 119 slip form concrete mixture to vibration and the ability of the concrete to hold a 120 vertical edge, thus determining the workability and suitability of the concrete 121 mixture for slip-formed paving applications

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3 **Dimensions of the Box Test**



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 125 The Figure above shows the components and the constructed inside dimensions.
 126 The Box Test used:
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1284 pcs - ½" nominal thickness or greater HDO Plyform with a hard, semi-opaque129surface of thermosetting phenolic resin-impregnated material for the Test Box130form, with a length, width, and height such that when the Test Box is constructed131must have internal dimensions of 12" X12" X 12".

1321 pc - ½" nominal thickness or greater HDO Plyform with a hard, semi-opaque133surface of thermosetting phenolic resin-impregnated material approximately 24" X13424" or greater for the platform. It is optional that the platform is constructed as135shown in the photos.

- 1364 pcs- 2" X 2" L-brackets to be attached at two opposite external corners to hold137the two Plyform pieces in an L-shape. (More brackets may be used if determined138it is needed to keep the Test Box forms square, ridged, and in an L-shape.)139Screws, glue, etc. if used must not cause bulges or protrude into the interior of the140form.
- 141 Two each 1.5ft pipe clamps
- 142 I each hand scoop
- 143 1 each 1" square head pencil vibrator that must be able to vibrate at a minimum
 144 of 12,500 vibrations per minute. Provide a power source for the vibrator. Round145 headed or larger vibrators must not be used.
- 146 **1 each ruler**
- 147 1 each 16-inch by 24-inch L-shaped steel framing square.
- 148 1 each 18 or 24-inch I-Beam Level Spirit Level Tool

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149The Box Test Steps

150 Sample concrete according to AASHTO R 60 Standard Practice for Sampling151 Freshly Mixed Concrete.

152 Dampen the forms and platform with form oil and assemble the Box Test 153 components (forms, platform, and clamps) on a flat and level surface. The 154 assembled 1 ft³ Test Box is held together by the pipe clamps and L-brackets on the platform. Scoop into the box the fresh concrete, each scoop must be uniformly 155 156 distributed in the box, so each layer is approximately uniformly level. Stop the 157 concrete placement when it reaches a height of approximately 9.5". Do not do any 158 compaction during the placement of the concrete except for the dropping of 159 concrete in the Test Box. With the vibrator at 12,500 vibrations per minute and 160 keeping the head of the vibrator perpendicular to the platform and centered in the box, consolidate the concrete by inserting the 1" square head pencil vibrator. Take 161 162 three seconds to lower the vibrator into the concrete until it almost reaches the bottom of the box. Do not touch the platform with the vibrator. Upon reaching the 163 proximity of the bottom of the box immediately start raising the vibrator upward 164 taking three seconds to remove the vibrator from the concrete. Do not do any 165 further compaction or finishing of the concrete. Immediately, and carefully remove 166 167 the pipe clamps from the side of the box, and then carefully with minimal 168 disturbance of the concrete, remove the Box Test forms in an ascending vertical 169 direction. Care must be taken to ensure the concrete will not stick to the L-shaped 170 side wall forms. Immediately do a surface void evaluation and edge slump 171 measurement of the concrete sample.

Platform Sides Clamps	Step 1	Gather the different components of the Box Test.
	Step 2	Construct box and place clamps tightly around box. Hand scoop mixture into box until the concrete height is 9.5" (241.3 mm).
	Step 3	Insert vibrator downward for 3 seconds and upward for 3 seconds. Remove vibrator.
	Step 4	After removing clamps and the forms, inspect the sides for surface voids and edge slumping.

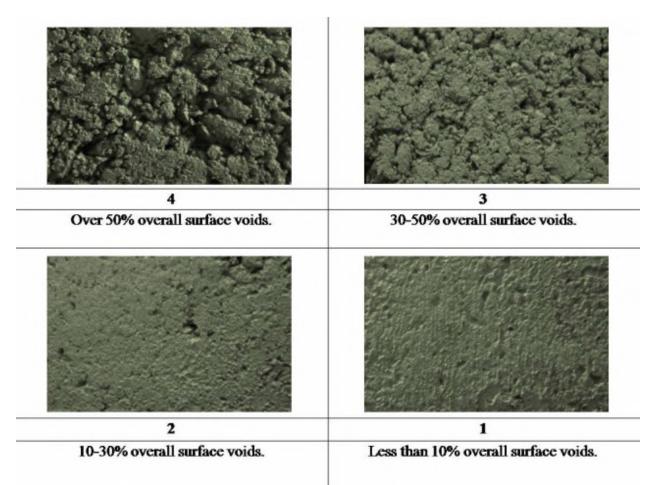
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174 Surface Void Evaluations

175 The grading of the response of a mixture to vibration must be assessed by 176 comparing the surface voids observed on the sides of the box using Figure 3.

The void area for any of the four sides must not exceed what is shown in photo 2
of Figure 3, i.e., the void area must not be similar to the void areas shown in photos
3 and 4 or exceed them, to be considered an acceptable mix design for slip form
pavement concrete.

181 If a mixture responded well to vibration, the overall surface voids should be 182 minimal because the mortar was able to flow and fill these voids, hence the surface 183 would have a small total void area. However, if the sides of the concrete formed 184 by the box test had large amounts of surface voids, the mixture did not acceptably 185 respond to the vibration. If the concrete did not respond acceptably to the vibration 186 the mix design must be adjusted until the voids do not exceed the voids shown in 187 photo 2 of Figure 3.



189 Figure 3 shows the estimated surface voids.

190Top or Bottom Edge Slumping

- 191 The top or bottom edge slumping must be measured by placing an L-shaped steel framing square straightedge at the point the concrete sample protrudes at each 192 face the most. Use the I-Beam Spirit Level and a tape measure or ruler with the 193 194 L-shaped steel framing square to measure the distance between the I-Beam Level Spirit Level and the upper surface of the concrete sample along its edge. that is 195 196 not protruding and is vertical to find the length of the longest extruding point for 197 each face. Do a measurement on each of the four sides, measuring the top and 198 bottom slump of the test sample.
- 199 If no vertical face can be found on a side the concrete mix design is not suitable
 200 for use in slip forming. If the top or bottom edge slumping exceeds ¼" for any side,
 201 the concrete mix design is not suitable for use in slip forming.
- 202 Videos of Box Test
- 203 https://youtu.be/XnKbxs3bAoQ
- 204 <u>https://youtu.be/P6MKXItCiU8</u>
- 205

- Verify that the concrete is an acceptable concrete mix design by performing a minimum of two more acceptable consecutive Box Tests that did not exceed the maximum void area and edge slump requirements. If the two acceptable consecutive Box Tests cannot be accomplished, then adjust the concrete mix design and start the testing process over again.
- In addition to the Box Test performed during the testing of the mix design in the
 Contractor's material testing laboratory perform additional Box Tests on production
 concrete in the field during the test strip or first production pour whichever is
 earliest. Adjust the mix if the results indicate the concrete does not meet the above
 requirements. Perform Box Test in the field once a month if pouring is continuous
 or when the Engineer requests it to be performed.
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Use the absolute volume method to proportion concrete materials in accordance with requirements of concrete designated by class, cement content in pounds per cubic yards, or specified 28-day compressive strength. Use absolute volumetric proportioning methods as outlined in the American Concrete Institute (ACI) Standard 211.1, "Recommended Practices for Selecting Proportions for Normal and Heavyweight Concrete".

Use coarse aggregate size No. 57 (one inch to No. 4) or No. 67 (3/4 inch to No. 4) for concrete. For concrete placed in bottom slabs and stems of box girders, use No. 67 size aggregate. Smaller size aggregates may be permitted when encountering limited space between forms and reinforcement or between reinforcement when accepted by the Engineer in writing. Maximum aggregate size must not be greater than 1/3 of the space between reinforcing steel bars or reinforcing steel and the form.

Use the following standard methods in Table 601.03-2 – Standard Methods for determining compliance with requirements indicated in this subsection:

TABLE 601.03-2 – STANDARD METHODS				
Sampling Fresh Mixed Concrete	AASHTO T 141			
Mass Per Cubic Meter (Cubic Foot) Yield and Air Content (Gravimetric) of Concrete	AASHTO T 121			
Slump of Hydraulic Cement Concrete	AASHTO T 119			
Air Content of Freshly Mixed Concrete by the Pressure Method	AASHTO T 152			
Specific Gravity and Absorption of Fine Aggregate	AASHTO T 84			
Specific Gravity and Absorption of Coarse	AASHTO T 85			

Aggregate	
Temperature of Freshly Mixed Portland Cement Concrete	ASTM C1064
Making and Curing Concrete Test Specimens in the Field	AASHTO T 23
Compressive Strength of Molded Concrete Cylindrical Specimens	AASHTO T 22 (4-inch by 8-inch or 6-inch by 12-inch cylinders)
Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)	AASHTO T 97

When concrete is designated by compressive strength, f'c, or flexural strength, f'r, or includes CO₂ Mineralization technology, CSH-SEA, or SCMs, prequalification of materials and mix proportions proposed for use before placing such concrete is mandatory. The Engineer will prequalify concrete based when data is available based on past performance records using statistical computations of population sizes and (n-1) weighting, or trial batch test reports in compliance with computed minimum average strength for material and mix proportions. The Engineer will determine the minimum average strength on the probability of not more than one in 20 tests falling below the specified strength for the following conditions:

(1) When past performance records are available, furnish the following documented performance records:

(a) Minimum of 15 consecutive 28-day strength tests from projects having the same materials and mix proportions.

(b) Two groups totaling 30 or more test results representing similar materials in which mix proportion strengths are within 20 percent of specified strength, from data obtained within one year of the proposed use.

The Engineer will analyze performance records to establish the standard deviation.

(2) When sufficient past performance records are not provided, the Engineer will assume the current standard deviation to be 500 psi for compressive strength, f'c, and 50 psi for flexural strength, f'r.

265 Unless sufficient performance records are available from other projects at 266 DOT Materials Testing and Research Branch (MTRB), submit test performance 267 records or trial test reports for prequalifications, based on data of the most recent

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tests made on the concrete of the proposed mix design. The data must be from
tests that have been performed within one year of the proposed use and done at
an accredited material testing laboratory by certified material testing personnel.

Include the following information in test data and trial batch test reports: date of mixing; mixing equipment and procedures used; the size of batch in cubic yards and weight, type, and source of ingredients used; slump of concrete; air content of concrete when using an air-entraining agent; the age of the sample at the time of testing; and strength of concrete cylinders or beams tested.

Show that concrete strength tests equal or exceed minimum average strength in trial test reports. The test is an average of 28-day test results of five consecutive concrete cylinders or concrete beams taken from a single batch. No cylinder or beam must have a strength less than 85 percent of the minimum average strength.

Submit test data and trial test reports signed by an official of an accredited laboratory that performed tests.

The Engineer reserves the right to stop work when a series of low-strength tests occur. Do not continue concrete work until the cause is established and the Engineer is informed of and accepts, the necessary corrective action to be taken.

(C) Batching. Measure and batch materials in accordance with the following provisions:

- (1) **Portland Cement.** Either sacked or bulk cement may be used. Do not use a fraction of the sack of cement in the concrete batch unless cement is weighed.
- Weigh bulk cement on weighing device accepted by the Engineer. Seal and vent bulk cement-weighing hopper properly to preclude dusting during operation. Do not suspend the discharge chute from the weighing hopper. Arrange the discharge chute so that cement will not lodge in the hopper or leak from the hopper.
- Batching accuracy must be within 1 percent, plus or minus, of the
 required weight.
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 (2) Water. Measure water by volume or by weight. Use a readily
 adjustable device for measurement of water, with accuracy within 1 percent,
 plus or minus, of the quantity of water required for a batch. Arrange the
 device so that variable pressure in the water supply line does not affect
 measurements. Equip measuring tanks with outside taps and valves or
 other accepted means to allow for checking calibration.
- 313 (3) Aggregates. When storing and stockpiling aggregates, avoid

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separation of coarse and fine particles within each size, and do not intermix
various sizes before proportioning. Protect stored or stockpiled aggregates
from dust or other foreign matter. Do not stockpile together, aggregates
from different sources and of different gradations.

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319 When transporting aggregates from stockpiles or other sources to 320 batching plant, ensure uniform grading of material is maintained. Do not 321 use aggregates that have become segregated or mixed with earth or foreign matter. Stockpile or bin aggregates at least 12 hours before batching. 322 323 Produce or handle aggregates by hydraulic methods and wash and drain aggregates. If aggregates exhibit high or non-uniform moisture content, the 324 Engineer may order storage or stockpiling for more than 12 hours or 325 remixing of the stockpile, or other remedial methods. Keep using remedial 326 327 methods until moisture content problems are resolved. When there is clay 328 or dirt on the aggregate wash the aggregate until they are in a quantity that 329 no longer affects the concrete mix and is accepted by the Engineer.

Proportion aggregates by weight, with an exception being that aggregates in concrete for minor structures, curbs, and sidewalks may be proportioned by either volume or weight. For volumetric proportioning, use measuring boxes of known capacity to measure the quantity of each aggregate size.

Use batch weight based on dry materials plus the total weight of moisture (both absorbed and surface) contained in aggregate. Measure individual aggregates to within 2 percent, plus or minus, of required weight, and the total weight of aggregates to within 1 percent, plus or minus, of the required weight.

(4) Admixtures. Ensure that all admixtures used are compatible with all the other admixtures used in the concrete mix. Store, proportion, and dispense admixtures in accordance with the following provisions:

(a) Liquid Admixtures. Dispense chemical admixtures, in liquid form, e.g., air-entraining admixtures, and corrosion inhibiting admixtures. Use mechanical dispensers for liquid admixtures with sufficient capacity to measure the prescribed quantity for each batch of concrete. Include a graduated measuring unit in each dispenser to measure liquid admixtures to within 5 percent, plus or minus, of the prescribed quantity for each batch. Read graduations accurately from point of measuring unit, and control proportioning operations to permit a visual check of batch accuracy before discharging. Mark each measuring unit clearly for type and quantity of admixture.

Arrange with the supplier to provide a sampling device consisting of a valve located in a safe and accessible location for

560A-02-23M 601-11a sampling admixtures. Sampling is not required if not otherwise provided.

When using more than one liquid admixture for concrete mix, use a separate measuring unit for each liquid admixture and dispense separately to avoid interaction that may interfere with admixture efficiency and adversely affect concrete. Dispense liquid admixture by injecting so as not to mix admixture at high concentrations.

When using liquid admixtures in concrete that are completely mixed in paving or continuous mixers, operate dispensers automatically with batching control equipment. Equip such dispensers with an automatic warning system that will provide visible or audible signals at the point where proportioning operations are controlled, when the following occurs: quantity of admixture measured for each batch of concrete varies from pre-selected dosage by more than 5 percent, or the entire contents of measuring unit from the dispenser are not emptied into each batch of concrete.

Unless liquid admixtures are added to the batch with premeasured water, discharge liquid admixtures into the stream of water that disperses admixtures uniformly throughout the batch. An exception is that air-entraining admixtures may be dispensed directly into moist sand in batching bins, provided adequate control of concrete air content can be maintained.

Measure and disperse special admixtures, as recommended by the admixture manufacturer, and as accepted by the Engineer. Special admixtures include high-range water reducers requiring dosages greater than the capacity of conventional dispensing equipment. For site added, high-range water reducers, use calibrated, portable dispenser supplied by the manufacturer.

(b) Mineral Admixtures. Protect mineral admixtures from exposure to moisture or other deleterious conditions until used. Pile sacked material of each shipment to permit access for tally, inspection, and identification.

Provide adequate facilities to ensure that mineral admixtures meeting specified requirements are kept separate from other mineral admixtures and that only specified mineral admixtures can enter the work's concrete mix. Provide safe and suitable facilities for sampling mineral admixtures at weigh hopper or in the feed line immediately in advance of the hopper.

Incorporate mineral admixtures into the concrete using

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406 equipment complying with the requirements for Portland Cement 407 weigh hoppers and charging and discharging mechanisms specified in ASTM C94 and Subsection 601.03(C) - Batching. 408 409 410 When concrete is completely mixed in stationary paving or continuous mixers, weigh mineral admixture in a separate weigh 411 412 hopper. Introduce mineral admixture and cement simultaneously 413 into the mixer, proportionately with aggregate. 414 415 When interlocks are required for cement-charging mechanisms, and cement and mineral admixtures are weighed 416 cumulatively, interlock their charging mechanisms to prevent the 417 introduction of mineral admixture until the mass of cement in the 418 419 weighing hopper is within tolerances specified in Subsection 420 601.03(C)(1) - Portland Cement. 421 422 In determining the maximum quantity of free water that may 423 be used in concrete, consider mineral admixture to be cement. 424 425 (5) Bins and Scales. At the batching plant, use individual bins, 426 hoppers, and scales for each aggregate size. Include a separate bin, hopper, and scale for bulk cement and fly ash. 427 428 429 Except when proportioning bulk cement for pavement or structures, 430 the cement weigh hopper may be attached to a separate scale for individual 431 weighing or to an aggregate scale for cumulative weighing. If cement is 432 weighed cumulatively, weigh cement before other ingredients. 433 434 When proportioning for pavement or structures, keep bulk cement scale and weigh hopper separate and distinct from aggregate weighing 435 436 equipment. 437 438 Use a springless-dial or beam-type batching scales. When using 439 beam-type scales, make provisions to show the operator that the required 440 load in the weighing hopper is approaching. Use devices that show conditions within the last 200 pounds of load and within 50 pounds of 441 overload. 442 443 Maintain scale accuracy to 0.5 percent throughout the range of use. 444 Design poises to lock to prevent an unauthorized change of position. Use scales inspected by the State Measurement Standards Branch of the 445 Department of Agriculture to ensure their continued accuracy. Provide not 446 447 less than ten 50-pound weights for testing scales. 448 449 Batching plants may be equipped to proportion aggregates and bulk 450 cement by automatic weighing devices. 451

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(6) Batching and Hauling. When mixing is to be performed at the work site, transport aggregates from batching plant to the mixer in batch boxes, vehicle bodies, or other containers of adequate capacity and construction. Use partitions to separate batches and prevent spilling from one compartment to another while in transit or during dumping.

Transport bulk cement to the mixer in tight compartments carrying the full quantity of cement required for the batch. Once the cement is placed in contact with aggregates, batches must be mixed and placed within 1-1/2 hours of contact. Cement in original shipping packages may be transported on top of aggregates. Ensure that each batch contains the number of sacks required by the job mix.

Deliver batches to mixer intact. Charge each batch into the mixer without loss of cement. When carrying more than one batch on a truck, charge the batch into the mixer without spilling material from one batch compartment into another.

(D) Mixing. Mix concrete in mechanically operated mixers. When accepted by the Engineer, batches that do not exceed 1/3 cubic yard may be hand-mixed in accordance with methods described at end of this subsection.

Use stationary or truck mixers that distribute materials thoroughly and produce concrete uniform in color and appearance. When there is variation in mixed concrete attributable to worn pickup or throw-over blades, the Engineer will inspect the mixer. If the inspection reveals that blades are worn more than one inch below the original height of the manufacturer's design, or are damaged repair or replace blades. Upon request, make a copy of the manufacturer's design, showing the dimensions and arrangement of blades.

482 Charge batches into central or truck mixers so that portion of mixing water enters ahead of cement and aggregates. Deliver a uniform flow of water. Place 483 the entire amount of batch water in the mixer by end of the first guarter of the 484 mixing period. When mixers with multiple compartment drums are used, the time 485 486 required to transfer material between compartments will be included as mixing time. Use drum rotation speed as designated by the manufacturer. If mixing does 487 not produce concrete of uniform and smooth texture, provide additional revolutions 488 489 at the same speed until thorough mixing of each concrete batch is attained. Begin measuring mixing time from the time cement, aggregates, and 60 percent of water 490 are in the drum. Do not exceed the manufacturer's rated capacity for the volume 491 of concrete mixed in each batch. 492

494 Equip central or truck mixers with an attachment for automatically timing the 495 mixing of each concrete batch. The timing device must include an automatic 496 feature for locking the discharge chute and a device for warning the operator when 497 the required mixing duration has been met. If the timing or locking device fails to 498operate, immediately furnish a clock or watch that indicates seconds, to the mixer499operator. If the timing device is not repaired within three days after becoming500inoperative, shut down batching operation until the timing device is repaired.

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For stationary mixers, use mixing time between 50 seconds and 5 minutes. 502 503 Select mixing time, as necessary, to produce concrete that meets uniformity 504 criteria when tested in accordance with Section 11.3.3 of ASTM C94. The 505 Contractor may designate mixing time for which uniformity tests are to be 506 performed, provided mixing time is not less than 50 seconds or more than 5 507 minutes. Before using concrete for pavements or structures, mix concrete to meet specified uniformity requirements. The Contractor must furnish labor, sampling 508 509 equipment, and materials required for conducting uniformity tests, including the Box Test, and the Contractor's quality control for the concrete mixture. The 510 Engineer will not furnish for the Contractor's quality control, testing equipment, 511 e.g., scales, cubic measure, and air meter; and will not perform the Contractor's 512 513 quality control tests. The Engineer will not pay separately for the Contractor's quality control, e.g., labor, equipment, materials, or testing, but will consider the 514 515 costs incidental to concrete. After batching and mixing operational procedures are established, the Engineer will not allow changes in procedures without the 516 Contractor re-establishing procedures by conducting uniformity tests. Repeat 517 mixer performance tests whenever the appearance of concrete or coarse 518 519 aggregate content of samples is not complying with the requirements of ASTM 520 C94. For truck mixers, add four seconds to the specified mixing time if timing starts as soon as the skip reaches its maximum raised position. 521

Unless otherwise indicated in the Contract Documents or accepted by the Engineer, concrete must be mixed at proportioning plant. Operate mixer at agitating speed while in transit. Concrete may be truck-mixed only when cement or cement and mixing water are added at the point of delivery. Begin mixing truck-mixed concrete immediately after the introduction of mixing water to cement and aggregates, or introduction of cement to aggregates.

Inclined-axis, revolving drum truck mixers must comply with Truck Mixer,
 Agitator and Front Discharge Concrete Carrier Standards TMMB 100-01, 15th
 Revision, or later published by Truck Mixer Manufacturers Bureau. Truck mixers
 must produce a thoroughly mixed and uniform mass of concrete and must
 discharge concrete without segregation.

536 The manufacturer's standard metal rating plate must be attached to each 537 truck mixer, stating maximum rating capacity in terms of volume of mixed concrete 538 for various uses, and maximum and minimum mixing speeds. When using truck 539 mixers for mixing, adhere to the maximum capacity shown on the metal rating plate 540 for the volume of concrete in each batch.

542 Operate truck mixers at the mixing speed designated by the manufacturer, 543 but at not less than 6 or more than 18 revolutions per minute. Mix truck-mixed

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544 concrete initially between 70 and 100 revolutions at manufacturer-designated 545 mixing speed, after ingredients, including water, are in the mixer. Water may be added to the mixture not more than two times after the initial mixing is completed. 546 547 The addition of water at the project site must comply with the requirements of Subsection 503.03. Each time that water is added, turn the drum an additional 30 548 549 revolutions or more at mixing speed until the concrete is mixed uniformly.

When furnishing shrink-mixed concrete, transfer partially mixed concrete at 552 the central plant to a truck mixer. Apply requirements for truck-mixed concrete. 553 The Engineer will not credit the number of revolutions at mixing speed for partial mixing in the central plant. 554

> When accepted by the Engineer, concrete batches not exceeding 1/3 cubic yard may be hand-mixed on a watertight, level platform. Measure the proper amount of coarse aggregate in measuring boxes and spread it on the platform. Spread fine aggregate on that coarse aggregate layer. Limit coarse and fine aggregate layers to a total depth of one foot. Spread dry cement on this mixture. Turn whole mass not less than two times dry. Add sufficient clean water, and distributed it evenly. Turn whole mass again, not less than three times, not including placing in carriers or forms. Mortar mixers of appropriate size may be used when accepted by the Engineer.

(E) Transporting Mixed Concrete. Transport central-mixed concrete to the delivery point in truck agitators or truck mixers operating at speed designated by the equipment manufacturer as agitating speed; or in non-agitating hauling equipment, provided consistency and workability of mixed concrete upon discharge at the delivery point suitable for placement and consolidation in place. The mixed concrete after hauling to the delivery point must comply with the uniformity criteria when tested as specified in Section 12.5 of ASTM C94.

574 For revolving drum truck mixers transporting central-mixed concrete, limit 575 concrete volume to the manufacturer's rated capacity for agitator operation. 576 Maintain agitating speed for both revolving drum mixers and revolving blade type agitators as designated on the manufacturer's metal data plate. Equip truck mixers 577 578 or truck agitators with electrically or mechanically actuated counters. Activate 579 counters after introducing cement to aggregates.

Bodies of non-agitating hauling equipment must be smooth, watertight, 581 metal containers equipped with gates to permit control of concrete discharge. 582 Protect open-topped haul vehicle against the weather and wind with cover 583 584 accepted by the Engineer.

- 586 When hauling concrete in non-agitating trucks, complete discharge within 30 minutes after introducing mixing water to cement and aggregates. 587
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When a truck mixer or agitator is used for transporting central-mixed

590 concrete to the delivery point, complete discharge within 1-1/2 hours, after the 591 introduction of mixing water to cement and aggregates, or cement to aggregates. 592 For truck-mixed concrete, complete concrete discharge within 1-1/2 hours. This time limitation is permitted to be waived by the Engineer if after the 1-1/2-hour time 593 limit has been reached, the concrete has a slump that it can be placed, without the 594 595 addition of water to the batch and hydration of the concrete has not started, i.e., 596 the temperature of the concrete is less than 90 degrees F or the required maximum 597 temperature of the concrete. Also, the set time is increased by the use of a retarder 598 in the mix design and acceptance of the increased set time is obtained before use 599 from the Engineer. 600

Submit delivery tickets from manufacturers of truck-mixed concrete and central-mixed concrete with each truckload of concrete before unloading at the jobsite. Printed, stamped, or written delivery ticket must include the following information:

606 **(1)** Name of concrete plants.

601

602 603

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- (2) Serial number of the ticket.
- 610 (3) Date and truck number.
 - (4) Name of Contractor.
 - (5) Specific project, route, or designation of job (name and location).
- 615
 616 (6) Specific class or designation of concrete in accordance with Contract
 617 Documents.
 - (7) Quantity of concrete in cubic yards.
 - (8) Time of loading batch or mixing of cement and aggregates.
 - (9) Water added by the receiver of concrete and receiver's initials.
 - (10) Information that is necessary to calculate the total mixing water added by the producer. Total mixing water includes free water on aggregates, water, and water added by the truck operator from the mixer tank at the project site.
 - (11) The amount of water held back from the batched concrete mix that can be added to the concrete mix at the project and still not cause the mix to exceed the accepted mix design water to cement ratio.
- 634(12)Readings of non-resettable revolution counters of truck mixers after635the introduction of cement to aggregates, or introduction of mixing water to
 - 560A-02-23M 601-17a

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653 654 655

656 657

636 cement aggregates
637
638 (13) Supplier's mix number or code and include the mix design name.

Furnish additional information designated by the Engineer and required by job specifications upon request.

(F) Consistency. Regulate the quantity of water and admixtures used in concrete mixes so that concrete consistency, as determined by the AASHTO T 119 test method, is within the nominal slump range specified in Table 601.03-3 - Slump for Concrete. If the concrete slump exceeds the nominal slump, adjust subsequent batches of the mixture. If slump exceeds maximum slump, the Engineer will reject concrete unless it is solely deemed by the Engineer as satisfactory for use.

The Engineer will also reject harsh or unworkable concrete that cannot be properly placed. Remove rejected concrete at no increase in the contract price or contract time.

Slump for concrete must be as specified in "Table 601.03-3 – Slump for Concrete".

TABLE 601.03-3 - SLUMP FOR CONCRETE			
Type of Work	Nominal Slump Inches	*Maximum Slump Inches	
Concrete Pavements	0-3	3-1/2	
Reinforced Concrete Structures: Sections Over 12 Inches Sections 12 Inches Thick or Less	0 - 4 2 - 5	5 6	
Non-Reinforced Concrete Facilities	1 – 3	4	
Concrete Placed Underwater	6 - 8	9	
Bridge Decks	0-3	3-1/2	

*A waiver to the maximum slump requirement may be requested from the Engineer.
 Submit justification for the granting of the waiver request along with how the mix design's
 components ensure that the mix will not segregate.

661

In adverse or difficult conditions that may affect the placement of concrete, the above slump limitations may be exceeded for placement workability, with the addition of admixture conforming to Subsection "711.03 – Admixtures", if the design mix redesign is accepted by the Engineer in writing and the water-cement ratio is complies with Contract Documents requirements. Provide additional cement and water, or admixture at no increase in the contract price or contract time.

668

560A-02-23M 601-18a

(G) Forms. Construct forms in accordance with applicable sections.

- **(H) Placing Concrete.** Place concrete in accordance with applicable sections.
- 673 (I) Finishing Concrete Surfaces. Finish concrete surfaces in accordance
 674 with applicable sections.

- (J) **Curing Concrete.** Cure concrete in accordance with applicable sections.
- **601.04 Measurement.** The Engineer will measure concrete in accordance with the 679 applicable sections.
- **601.05 Payment.** The Engineer will pay for the accepted concrete under the 682 applicable sections.

END OF SECTION 601

1	SECTION 602 – REINFORCING STEEL
2	
3	Make the following amendment to said Section:
4	
5	(I) Amend Section 602.03(D) – Placing and Fastening by adding following
6	paragraph after line 114 to read:
7	
8	"Welded-wire fabric must not be laid on the ground and "pulled up" after
9	the concrete is placed or "walked in" after placing the concrete or using
10	small piles of fresh concrete. Use supports tied to the WWF, e.g. precast
11	concrete spacer blocks to maintain the proper elevation of the WWF.
12	Plastic spacers must not be used. The number of precast concrete spacer
13	blocks must be used in a quantity that will prevent sagging, bending, or
14	when walked upon, and still, maintain the required clearances."
15	
16	
17	
18	END OF SECTION 602

- 1 Make the following Section a part of the Standard Specifications:
 - **SECTION 636 E-CONSTRUCTION**

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2

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.

636.02 General Requirements. The Contractor shall implement the use of the E Construction platform, as provided by the HDOT and directed by the Engineer, for use
 throughout the project. Paper-based or hard copy submittals will not be accepted.

This Special Provision shall take precedence over all other Specification sections with respect to providing and receiving paper copy communications, submittals, and any project records. Where conflicts exist, and a decision between a hard-copy item and a corresponding electronic version is needed, the electronic version shall be selected, unless otherwise directed by the Engineer.

- 20 636.03 Construction
 - (A) Plans and Specifications. Project drawings will not be provided to the Contractor in hard copy format. An electronic version will be provided in the E-Construction platform for use during the project.
- The Contractor shall note all changes to the work, including all 26 subcontractor's work, in electronic format using the E-Construction platform Red 27 annotations shall be used to note changes. Blue annotations shall be used for any 28 additional notes that will be helpful for the State in interpreting the field posted 29 drawings. Other drafting standards may be implemented by the Engineer and shall 30 be adhered to by the Contractor. Changes shall be input by the Contractor and 31 reviewed by the Engineer monthly. The Contractor shall make any changes that 32 33 the Engineer requires.
- (B) Submittals. The Contractor shall provide all required submittals, as listed
 within the contract documents, via the E-Construction platform.—All review,
 approval, and resubmittal regarding submittals shall also be documented within
 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.
 - **(D) Prosecution and Progress.** The Contractor shall provide all administrative, management, and project support documents required by various specification sections, using the E-Construction platform. These elements include, but are not limited to:
 - (1) Preconstruction Submittals (Section 108.03)
 - (2) Correspondence regarding Contract Time and Delays (Section 108.05)
 - (3) Progress Schedules (Section 108.06)
 - (4) Weekly Meeting preparatory materials (Section 108.07)
 - (5) Samples, certifications, material data, installation instructions, and shop drawings (Sections 105 and 106)
 - (6) Field-posted Drawings (Section 648)
 - (7) Pre-Final Inspection submittals (Section 108.13)
 - (8) Warranty documentation (Section 108.17)
 - (9) Project Closing Documents (Section 108.19)
 - In addition to the foregoing, the Contractor shall provide any other materials, correspondence, and submittals using the E-Construction platform as directed by the Engineer.
- 66 **(E)** Resources. The Contractor shall provide a comprehensive list of Contractor labor and equipment, including all subcontractor labor and equipment, 67 that will be deployed on the project, using spreadsheet-based templates provided 68 in the E-Construction platform. All template fields shall be completed. 69 The submitted information shall comply with the requirements of Specification Section 70 108 – Prosecution and Progress (identification of labor and equipment resources) 71 and Specification Section 109 - Measurement and Payment (cost data) and 72 represent all individual personnel with labor categories and rates, and all 73 equipment owned or rented, with associated rates, on this project. Updates for 74 additional personnel or equipment shall be accomplished by the Contractor at will 75 and shall be completed when directed by the Engineer. 76
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636.04 The Engineer will measure additional E-Construction 78 Measurement. 79 programs, additional licenses, or additional equipment, if ordered by the Engineer, on a force account basis in accordance with Subsection 109.06 - Force Account Provisions 80 and Compensation. 81 82 **Payment.** The Engineer will pay for the additional E-Construction programs, 83 636.05 additional licenses, or additional equipment, on a force account basis in accordance with 84 Subsection 109.06 – Force Account Provisions and Compensation. 85 86 The Engineer may withhold progress payment until the Contractor is in compliance 87 with all E-Construction requirements. 88 89 90 Pay Unit 91 Pay Item 92 Additional E-Construction Programs, Additional Licenses 93

94 or Additional Equipment

Force Account

An estimated amount for force account may be allocated in the proposal schedule under "Additional E-Construction Programs, Additional Licenses or Additional Equipment." The actual amount to be paid will be the sum shown on accepted force account records.

END SECTION 636

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- 103 104

SECTION 645 - WORK ZONE TRAFFIC CONTROL

- 3 Make the following amendments to said Section:
- 4 5

6

7

(I) Amend **Subsection 645.03 Construction** by adding this paragraph after line 170 to read as follows:

8 "(1) **Covers.** Use sign covers when existing signs confuse the public or 9 are in conflict with TCP signs installed. Sign covers shall be commercially 10 manufactured and accepted by the Engineer before use. Sign covers shall at all times and under all conditions not allow any portion of the sign being 11 12 covered to be visible. If more than one side of the sign has words or symbols 13 cover all sides of the sign until needed. "Homemade" or "field made" covers 14 shall not be used. Covering of sign identification markings are not required if that is the only markings on that side of the sign. Sign covers shall be 15 16 maintained.

17 18 Removal of the existing sign in lieu of the use of sign covers may be 19 acceptable to the Engineer provided the previously removed existing sign is 20 immediately reinstalled when directed. Removal of existing post(s) and 21 mounting hardware is required if not used to mount the new TCP sign. New 22 mounting hardware shall be used to mount the TCP signs if the existing hardware is in an unacceptable condition in the opinion of the Engineer. In 23 addition, should the sign or post during storage, in the opinion of the 24 Engineer, become unacceptable or lost or stolen the Contractor shall replace 25 the sign or post with a new sign or post. Use new hardware to reinstall the 26 27 sign regardless whether it is an existing sign or new."

28 29

30

(II) Amend Subsection 645.03 (F) Lane Closures Line 253 by changing "Oahu" to Kauai".

(III) Amend Subsection 645.03 (G) Advisory Signs from Line 314 to Line 324 to
 read as follows:

34

"Advisory signs are not required for this project."

35 36 37

37 **(IV)** Amend **Subsection 645.03 (H)** Advertisement from Line 391 to Line 392 to 38 read as follows:

39

40 "Place advertisement for three consecutive days and within one week before
41 traffic pattern changes, in publication as ordered by the Engineer. In lieu of the
42 advertisement(s), the Engineer may substitute the use of two portable changeable
43 message boards and accessories at no additional cost for three days for each
44 required advertisement."

45

46 **(V)** Amend **Subsection 645.04 - Measurement** from line 394 to line 403 to read 47 as follows:

50

"645.04 Measurement.

51 **(A)** Traffic control as specified in Subsection 645.03 – Construction 52 including sign covers and the initial advertisement(s) will be measured on contract 53 lump sum basis. Measurement for payment will not apply.

54 55

55 **(B)** The Engineer will measure additional police officers, additional traffic 56 control devices, and additional advertisements, if ordered by the Engineer, on a 57 force account basis, in accordance with Subsection 109.06 – Force Account 58 Provisions and Compensation.'

59 60

61

(VI) Amend Subsection 645.05 - Payment from lines 405 to 428 to read:

62 **"645.05 Payment.** The Engineer will pay for the accepted traffic control, 63 additional police officers, and additional traffic control devices, and additional 64 advertisements at the contract price per pay unit, as shown in the proposal 65 schedule. Payment will be full compensation for the work prescribed in this section 66 and the contract documents.

67

70

68 The Engineer will pay for the following pay items when included in the 69 proposal schedule:

71 Pay Unit Pay Item 72 73 Traffic Control Lump Sum 74 75 Additional Police Officers, Additional Traffic Control Devices, 76 and Additional Advertisements Force Account 77 78 An estimated amount for the force account may be allocated in the proposal 79 schedule under "Additional Police Officers, Additional Traffic Control Devices, and 80 Additional Advertisements", but the actual amount to be paid will be the sum shown

Additional Advertisements", 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.

The Engineer will not pay for request submittals. The Engineer will not consider claims for additional compensation of late submittals or requests by Contractor."

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- 88 89
- 90

END OF SECTION 645

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35

Make the following Section a part of the Standard Specifications:

"SECTION 671 – PROTECTION OF THREATENED AND ENDANGERED SPECIES

5 6 Description. 671.01 The endangered Hawaiian hoary bat or 'ope'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 endangered Hawai'i distinct population segment (DPS) of the band-rumped storm-10 11 petrel or 'ake'ake (Oceanodroma castro), and the threatened Newell's shearwater or 'a'o (Puffinus auricularis newelli), hereinafter referred to as Hawaiian seabirds. 12 13 Endangered Hawaiian waterbirds, including the Hawaiian stilt or ae'o (*Himantopus* mexicanus knudseni), the Hawaiian coot or 'alae ke'oke'o (Fulica americana alai), 14 15 the Hawaiian gallinule or 'alae 'ula (Gallinula galeata sandvicensis), and the Hawaiian duck or koloa (Anas wyvilliana) are known to be in the general vicinity of 16 17 the project and may be attracted to the project staging areas even in sub-optimal locations if water is present. Also to be considered is the threatened Hawaiian 18 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 seal or 'Thio holo i ka uaua (Neomonachus schauinslandi) and sea turtles, including 21 22 the endangered Hawksbill Sea Turtle or 'ea (Eretmochelys imbricate), and the threatened Central North Pacific DPS of the Green Sea Turtle or honu (Chelonia 23 24 mydas) are in the general vicinity of the proposed project and may transit or visit 25 the proposed project area. 26

- The Contractor shall protect these threatened and endangered species
 throughout the construction duration.
- 30 671.02 Materials. None
- 31
 32 671.03 Construction.
 33

(A) **Pre-Construction and Construction Requirements.** Comply with 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 53 54 55 56 57 58	which extends from March 1 through December 15. Permanent lighting poses a very high risk of seabird attraction so new highway lighting should not be installed to protect seabird flyways and preserve the night sky. Additional or increased lighting exacerbates the problem of Newell's shearwater fallout.
59 60 61 62 63 64	harmed, injured or killed and falling to the ground due to: 1) collision with structures such as wires, poles, or other objects; 2) light attraction and the resulting collision with structure associated with or near the light sources; or, 3) the exhaustion from circling the light source.
65 66 67 68 69	If nighttime work will be required in conjunction with the development of the project, the Contractor shall incorporate these measures to avoid and minimize project-related adverse effects to Hawaiian seabirds:
70 71 72	(a) Before beginning any work at the project site, the Contractor shall:
72 73 74 75	 Collect information regarding the protection of seabirds and seabird fallout.
76 77 78 79 80 81 82 83 84 85	ii. Submit to the Engineer for acceptance a protection of seabirds training plan including a detailed description of information and materials the Contractor intends to use in the training classes. The training plan shall be submitted to the Engineer for acceptance at least 15 days in advance of the class. If the Engineer rejects the training plan, the Contractor shall revise and promptly propose another training plan.
86 87 88 89 90 91 92 93 94 95 96 97 98	iii. Disseminate information regarding the protection of seabirds and seabird fallout by conducting training classes for all employees, subcontractors, suppliers and other personnel working on the project, including HDOT personnel, on such topics as the Save Our Shearwater (SOS) program, proper use of temporary lighting, procedures to store and report downed seabirds, and the consequences of non-compliance with the laws regarding threatened and endangered seabirds. The Engineer may request for additional topics related to seabirds to be included in the training classes.
99 100	Training classes shall be taught by authorized representatives of the USFWS, the

101 102 103 104		Department of Land and Natural Resources, the SOS program or other qualified personnel accepted by the Engineer.
105	iv.	Furnish the Engineer with evidence that the
105		Contractor has held training classes, including the
107		dates of the classes, identify who conducted the
108		training, and the content and nature of the training.
109		
110	(b) Th	e Contractor shall comply to the following
111	• •	ion requirements:
112		
113	i.	As directed by the Engineer, the Contractor shall
114		conduct additional training classes during the
115		project to update all employees, subcontractors,
116		suppliers, HDOT personnel and other personnel on
117		new and/or updated information regarding the
118		protection of seabirds and seabird fallout.
119		
120	ii.	No permanent streetlights shall be installed as part
121		of the project.
122		
123	iii.	All temporary lights used for night work (between
124		sunset and sunrise) shall contain less than 2%
125		wavelengths less than 550 nm, and shall be
126		downward-facing and shielded so the bulb can only
127		be seen from below. Temporary lights shall include
128		but are not limited to flood lights, light towers, lights
129		for construction equipment and other lights as
130		determined by the Engineer. All traffic control
131		devices, including warning lights, arrow boards,
132		portable changeable message signs and other
133		lighting device as determined by the Engineer shall
134		be shielded.
135		
136	iv.	Nighttime construction and the use of all temporary
137		lights shall cease during the peak seabird fledgling
138		period (September 15 through December 15).
139		The Contractor shall furnish and resistain a start
140	۷.	The Contractor shall furnish and maintain a small
141		(approximately 10" x 12" x 19"), portable cat kennel
142		on site to temporarily hold a downed seabird. The
143		Contractor shall obtain acceptance of the cat
144		kennel from the Engineer prior to use.
145		

146	vi.	If a downed dead seabird is found, the Contractor
147		shall contact the USFWS (Ms. Megan Laut at 808-
148		792-9400) within 24 hours.
149		
150	vii.	If the downed seabird is alive, the Contractor shall:
151		
152		I. Pick up the seabird from behind as soon
153		as possible using a clean towel, t-shirt or cloth
154		by gently wrapping it around its back and wings.
155		by goning whapping it around no baok and wingo.
156		II. Place the seabird in the cat kennel and
157		immediately contact the SOS Program
158		
159		instructions on where to deliver the seabird.
160		
161		III. Deliver the seabird to the location
162		determined by the coordinator of the SOS
163		program and as directed by the Engineer.
164		
165		IV. Keep the seabird in a cool, quiet location
166		and out of direct sunlight with adequate
167		ventilation.
168		
169		V. The Contractor and any personnel on-
170		site shall not feed, provide water, handle or
171		release the seabird.
172		
173	viii.	The Contractor shall maintain records of all downed
174		seabirds for the duration of the project. The records
175		shall include the date, time, location and condition
176		(dead or alive) the seabird was found and delivered.
177		Submit a copy of the records to the Engineer after
178		finding each and every downed seabird.
179		inding each and every downed seablid.
180	(3) Hawaiian	Waterbirds. Hawaiian waterbirds occupy fresh
181		vater marshes, coastal estuaries and natural or
182		s. Hawaiian stilts also occupy areas with ephemeral
183	or persistent sta	anding water, conditions of which can be found in
184		inage structures. Because this project occurs near
185		to these species from this project may include
186		ced reproductive success, disturbance from human
187		y or mortality from vehicle strikes.
188		
189		ractor shall incorporate these measures to avoid and
190	minimize project	-related adverse effects to Hawaiian waterbirds:
191		
192	(a) In	areas where known presence of Hawaiian
193	waterbird	s occurs, post, implement and enforce reduced

194	speed limits, and inform project personnel and Contractors of		
195	the presence of these endangered species on-site.		
196			
197	• •	ecause water resources occur in the project site,	
198		U.S. Fish and Wildlife Service (USFWS) Best	
199	Manager	ment Practices for Work in Aquatic Environments.	
200			
201		here appropriate habitat occurs within the vicinity of	
202		ect area, survey for Hawaiian waterbirds and nests	
203		initiation of project work using survey biologists	
204		vith the species' biology. Survey biologists should be	
205		nd capable of identifying adults and juveniles of each	
206		nesting behaviors, and nests. Repeat surveys again	
207		days of project initiation and after any subsequent	
208	delay of	work of 3 or more days (during which the birds may	
209	attempt t	o nest).	
210			
211	i.	Surveys for species and nests should be repeated	
212		when a delay of work occurs that is three days or	
213		more (during which the birds may attempt to nest).	
214			
215	ii.	If a nest or active brood is found, contact USFWS	
216		within 24 hours for further guidance.	
217			
218	iii.	Establish and maintain a 100-ft buffer around all	
219		active nests and/or broods until the	
220		chicks/ducklings have fledged. Do not conduct	
221		potentially disruptive activities or habitat alteration	
222		within this buffer.	
223			
224	iv.	A biological monitor that is familiar with the species'	
225		biology shall be present on the project site during	
226		all construction or earth moving activities until the	
227		chicks/ducklings fledge to ensure that Hawaiian	
228		waterbirds and nests are not adversely affected.	
229			
230	(d) A	biological monitor is required during Hawaiian stilt	
231	nesting s	season from February 15 through August 31.	
232	C C	, , ,	
233	i.	A biological monitor that is familiar with the species	
234		biology and approved by the Federal Highways	
235		Administration will conduct Hawaiian stilt nest	
236		surveys where appropriate habitat occurs within the	
237		proposed maintenance site prior to cleaning	
238		culverts and drainage structures.	
239		Ŭ	

240 ii. Surveys will take place within three days of project 241 initiation and after any subsequent delay of work of three or more days (during which the birds may 242 243 attempt to nest). 244 245 (4) Hawaiian Goose. Hawaiian goose or nēnē uses various Threats to the species from this project include 246 habitat types. disturbance from human presence, and injury and mortality from 247 248 vehicle strikes. An increased human presence at the project site 249 could disturb nene nesting, foraging, or loafing in the area. 250 251 The Contractor shall incorporate these measures to avoid and 252 minimize project-related adverse effects to the nene: 253 254 (a) Nēnē in or near the project area shall not be 255 approached, fed, or disturbed in any way. 256 257 (b) All food and or beverage waste shall be disposed of in 258 appropriate, covered trash receptacles. 259 (C) If nene are observed loafing, foraging, or otherwise 260 present within the project area during the breeding 261 season (September 1 through April 30), a trained 262 biologist familiar with nene nesting behavior will survey 263 264 the area in and around the project area for nests prior to work each day. Surveys will be repeated after any 265 subsequent delay of work of three or more days (during 266 which the birds may attempt to nest). 267 268 269 (d) If a nest is identified within a radius of 150 feet of the 270 project area, or a previously undiscovered nest is found 271 within the 150-foot radius after work begins, all work 272 shall cease and the USFWS will be contacted immediately for further guidance. 273 274 275 (e) Reduced speed limits shall be posted and implemented in areas where nene are known to be 276 277 present, and project personnel and Contractors will be informed of the presence of endangered species on-278 279 site. 280 281 (f) There shall be no feeding of birds or dogs on the 282 project site. 283 284 Hawaiian Monk Seal. The Contractor shall incorporate these (5) 285 measures to avoid and minimize project-related adverse effects to 286 the Hawaiian monk seal: 287 288 (a) All regular on-site staff shall be trained to identify the Hawaiian monk seal and trained on appropriate steps to 289 290 take if this species is present on-site.

291		
292	(b)	Construction activities shall not take place if a Hawaiian
293		monk seal is in the construction area or within 150 feet
294		of the construction area. Construction can only begin
295		after the animal voluntarily leaves the area. If a monk
296		seal/pup pair is present a minimum 300-foot buffer
297		shall be observed. If a Hawaiian Monk Seal is noticed
298		after work has already begun, that work may continue
299		only if, in the best judgment of the Biological Monitor,
300		that there is no way for the activity to adversely affect
301		the animal(s).
302		
303	(c)	Any construction-related debris that may pose an
304	(0)	entanglement threat to Hawaiian monk seals shall be
305		removed from the construction area at the end of each
306		day and at the conclusion of the construction project.
307		day and at the conclusion of the construction project.
308	(d)	Workers shall not attempt to feed, touch, ride, or
309	(u)	otherwise intentionally interact with any listed species.
310		otherwise internionally interact with any listed species.
311	(6) Sea T	furtles. Sea turtles may nest on any sandy beach in the
312		ids. Nesting occurs on beaches from May through
313		peaking in June and July, with hatchlings emerging
314		
		ember and December. Construction can compact and
315	eroute sanu a	and sediments, destroy sea turtle nests, erode beaches,
316		ff of contaminants, and create light that disorients
317		nd deters nesting. Off-road vehicle traffic on beaches,
318		nstruction equipment, directly affecting sea turtles and
319		/ crushing individuals and degrading habitat with erosion
320	and compact	ting sand and sediment.
321	Talay	aid and minimize preject related adverse offects to acc
322		oid and minimize project-related adverse effects to sea
323	turties and th	neir nests, incorporate these conservation measures:
324	(-)	No vahiolo use or modificing the basch/dure
325	(a)	No vehicle use or modifying the beach/dune
326		onment during the sea turtle nesting or hatching season,
327	wnich	extends from May through December.
328	(6)	Employ II.C. Fish and Wildlife Comise Deservation
329	(b)	Employ U.S. Fish and Wildlife Service Recommended
330		ard Best Management Practices when working in aquatic
331	enviro	onments.
332		
333	(c)	Remove any project-related debris, trash, and
334	equipi	ment from the beach or dune if not actively in use.
335		
336	(d)	Do not stockpile project-related materials in the
337	· · ·	dal zone, reef flats, stream channels, or river channels.
338		
339	Ontim	al turtle nesting habitat is a dark beach, free of barriers
340		restrict sea turtle movement. Lighting and human
		restrict sea turtie movement. Lighting and number

341 presence deters nesting turtles from approaching, laying eggs, and 342 successfully nesting. Artificial light disorients sea turtles and they become exhausted, causing them to nest in inappropriate locations, 343 344 such as at or below the high tide line. Artificial lighting also disorients hatchlings as they emerge from nests. Sea turtles need darkness on 345 beaches so they can successfully navigate back to the ocean. In-346 347 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 minimize project-related adverse effects to sea turtles and their 352 young from lighting: 353 354 355 Avoid nighttime work during the nesting and hatching (a) 356 season, which extends from May through December. 357 358 (b) Minimize the use of lighting and shield all projectrelated lights to ensure this light is not visible from any beach. 359 360 If full shielding of light is not possible, or if you require 361 (c) 362 the use of headlights, fully enclose the light source using light filtering tape or filters. 363 364 365 **Essential Fish Habitat.** The Contractor shall incorporate (7) 366 these measures to avoid and minimize project-related adverse effects to essential fish habitat: 367 368 Contractor shall conduct a pre-construction biological 369 (a) 370 survey to determine whether infrastructure materials (e.g. 371 boulders) are colonized with benthic riprap, piles. communities. If infrastructure materials (e.g, riprap, piles, 372 373 boulders) that are colonized with benthic communities will be removed or destroyed as part of permitted activities, 374 Contractor shall prepare relocation plan for HDOT approval, 375 376 and relocate these materials to an appropriate receiving site. 377 378 (b) The Contractor shall prevent debris from falling into the 379 water. 380 **(B)** Compliance Requirements. The Contractor shall protect all 381 species noted above for the duration of construction. Failure to 382 383 comply with the construction requirements, harm or a taking of an individual during the construction duration shall be enforceable by 384 the USFWS as set forth by the Endangered Species Act. Resultant 385 penalties and/or fines shall be at the Contractor's expense without 386 cost or liability to the State. 387

393

671.03 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.

671.04 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.

400 The Engineer will pay for the following pay item when included in the 401 proposal schedule:

402 403

404

Pay Item

Pay Unit

405 Protection of Threatened and Endangered Species406

Force Account

407 An estimated amount may be allocated in the proposal schedule under 408 "Protection of Threatened and Endangered Species", but the actual amount to be 409 paid will be the sum shown on the accepted force account records, whether this 410 sum be more or less than the estimated amount allocated in the proposal 411 schedule."

- 412
- 413
- 414

END OF SECTION 671

1	SECTION 699 – MOBILIZATION
2 3 4	Make the following amendments to said Section:
4 5 6	(I) Amend 699.03 Applicability by revising from lines 21 to 24 to read as follows:
7 8 9	"699.03 Applicability. Maximum bid allowed for this item is an amount not to exceed 6 percent of the sum of all items excluding the bid price of this item."
10 11	(II) Amend 699.05 Payment by revising from lines 44 to 47 to read as follows:
12 13	"Mobilization (Not to exceed 6 percent of the sum of all items
14 15	excluding the bid price of this item) Lump Sum"
16 17	
18 19	
20	END OF SECTION 699

1
2
3
4
~

SECTION 703 – AGGREGATES

FINE

AGGREGATE

GRADING

703.01-3

REQUIREMENTS, HAWAII AND KAUAI to read as follows:

Make the following amendments to said Section:

TABLE

Amend

5 6

0 7 8 **(I)**

"

TABLE 703.01-3 - FINE AGGREGATE GRADING REQUIREMENTS,HAWAII AND KAUAI

	Percent Pass	Percent Passing by Weight	
Sieve Sizes	Calcareous Sand	Crusher Screenings	
3/8 Inch	100	100	
No. 4	95 – 100	95 - 100	
No. 8	-	50 - 85	
No. 16	-	32 - 60	
No. 30	-	-	
No. 50	-	15 - 30	
No. 100	0 – 5	5 - 20	

9 10

11

12

- 13 14
- 15
- 16
- 17
- 18

END OF SECTION 703

"

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]

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.
- 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]
- Payroll records shall be maintained by the contractor and subcontractors for three years after completion of construction. The records shall contain: [HAR §12-22-10]
 - the name and home address of each employee
 - 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
- actual wages paid
- date of payment
- Records shall be made available for inspection by the contracting agency, the Department of Labor and Industrial Relations, and any of its authorized representatives, who may also interview employees during working hours on the job. [§104-3(b), HRS]

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 and Trainees

- In order to be paid apprentice or trainee rates, apprentices and trainees must be parties to an agreement either registered with or recognized as a USDOL nationally approved apprenticeship program by the Department of Labor and Industrial Relations, Workforce Development Division, (808) 586-8877. [§12-22-6(1), HAR]
- The number of apprentices or trainees on any public work in relation to the number of journeyworkers in the same craft classification as the apprentices or trainees employed by the same employer on the same public work may not exceed the ratio allowed under the apprenticeship or trainee standards registered with or recognized by the Department of Labor and Industrial Relations. 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(2), 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:
 - 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**.

• 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]

- **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)]
- 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)]
- 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)]

For additional information, visit the department's website at <u>http://labor.hawaii.gov/wsd</u> or contact any of the following DLIR offices:

	Oahu (Wage Standards Division)	
-61	Hawaii Island	
ilana Ilana Ilakahi	Kauai	(808) 274-3351
ier Lókali:	Maui	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

HONOLULU, HAWAII

<u>PROPOSAL</u>

PROPOSAL TO THE

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

PROJECT: KUHIO HIGHWAY (ROUTE 560) DRAINAGE IMPROVEMENTS VICINITY OF LIMAHULI GARDEN

PROJECT NO.: 560A-02-23M

COMPLETION TIME: Thirty (30) Working days from the Start Work Date from the Department.

DESIGN PROJECT MANAGER:

NAME:	Eric I. Fujikawa
ADDRESS:	1720 Haleukana Street, Lihue, HI 96766
PHONE NO.:	(808) 241-3015
EMAIL:	eric.i.fujikawa@hawaii.gov
FAX NO.:	(808) 241-3011

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.
- 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: Hawaii Standard Specifications for Road and Bridge Construction, 2005, the Notice to Bidders, the Special Provisions, the Technical Provisions, the Proposal, the Contract and Bond Forms, and the Project Plans.

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

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		
Authori	zed Signature	
Title		
Busine	ss Address	
Email A	ddress	
Date		
Contac	Person (If different from above.)	

Phone Number and Email Address

NOTE:

If bidder is a <u>CORPORATION</u>, 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 <u>PARTNERSHIP</u>, 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 <u>INDIVIDUAL</u>, 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.

	PROPOSAL SCHEDULE								
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT				
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>5,000.00</u>				
503.1010	Concrete Swale	200	LF	\$	\$				
636.1000	Additional E-Construction Programs, Additional Licenses, or Additional Equipment	FA	FA	FA	\$ <u>5,000.00</u>				
645.1000	Traffic Control	LS	LS	LS	\$				
645.2000	Additional Police Officers, Additional Traffic Control Devices, and Additional Advertisements	FA	FA	FA	\$ <u>10,000.00</u>				
648.1000	Field-Posted Drawings	LS	LS	LS	\$				
671.1000	Protection of Threatened and Endangered Species	FA	FA	FA	\$ <u>2,000.00</u>				

	PROPOSAL SCHEDULE									
ITEM NO	ITEM APPROX. UNIT UNIT PRICE AMOUNT QUANTITY									
699.100	0 Mobilization (Not to Exceed 6% Percent of the Sum of All Items Excluding the Bid Price of this Item)	\$								
	Sum of All Items 1.0 Bids shall include all Federal, State, County and other ap 2.0 The Sum of All Items will be used to determine the lowes 3.0 If a discrepancy occurs between unit bid price and the bid	plicable taxes a t responsible bi	and fees. dder.	shall govern.	\$					
NOTE:	Bidders must complete all unit prices and amounts. Failure to c	lo so may be gr	ounds foi	rejection of bid.						

PROPOSAL SCHEDULE

The bidder is directed to Subsection 105.16 – Subcontracts.

The bidder's attention is directed to Sections 696 - Field Office and Project Site Laboratory and 699 - Mobilization for the limitation of the amount bidders are allowed to bid.

If the bid price for any proposal item having a maximum allowable bid indicated therefore in any of the contract documents is in excess of such a maximum amount, the bid price for such proposal item shall be adjusted to reflect the limitation thereon. The comparison of bids to determine the successful bidder and the amount of contract to be awarded shall be determined after such adjustments are made, and such adjustments shall be binding upon the bidder.

The bidder is directed to Section 717–Cullet and Cullet-Made Materials regarding recycling of waste glass.

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HONOLULU, HAWAII

FORMS

Contents

Performance Bond (Surety) Performance Bond Labor and Material Payment Bond (Surety) Labor and Material Payment Bond Chapter 104 Compliance Certificate

PERFORMANCE BOND (SURETY) (6/21/07)

KNOW TO ALL BY THESE PRESENTS:

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 Obligee 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 Obligee in satisfaction of the surety's performance obligation on this bond.

Signed this	day of	
	(Seal)	Name of Principal (Contractor)
		* Signature
	(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

(Dollar amount of Contract)

DOLLARS (\$

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, and shall deliver the Project to the Obligee, 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 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.

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 PUBLI	с

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 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 Contract with the Obligee on _____ for the following project:_____

hereinafter	called (Contract,	which	Contract is	s incorporate	d herein	by	reference	and mad	de 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.

A "Claimant" shall be defined herein as any person who has furnished labor or materials 2. 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 Contrac	tor, is hel	ld 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:	

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 _____, dated _____, dated _____, 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:

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	da	ay of,
	(Seal)	
		Name of Contractor
	*	
		Signature
		Title
SIGNATURES MI	JST 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	