

**STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION**

**ADDENDUM NO. 3
FOR
KUHIO HIGHWAY
PAVEMENT RECONSTRUCTION
AND DRAINAGE IMPROVEMENTS
HAENA TO PRINCEVILLE
PROJECT NO. 560A-02-09M**

The following amendments shall be made to the Bid Documents:

A. SPECIAL PROVISIONS

- a. Replace Table of Contents dated 1/02/09 with the attached Table of Contents dated r7/16/09.
- b. The attached Section 203 – Roadway Excavation dated 7/16/09 shall be incorporated and made a part of the Special Provisions.
- c. The attached Section 305 – Aggregate Subbase Course dated 7/16/09 shall be incorporated and made a part of the Special Provisions.
- d. Replace Section 307 – Cement-Treated Base dated 4/24/09 with the attached Section 307 – Cement-Treated Base dated r7/16/09.
- e. The attached Section 416 – Paving Grid dated 7/16/09 shall be incorporated and made a part of the Special Provisions.

B. PROPOSAL SCHEDULE

- a. Replace Proposal Schedule pages P-13 and P-14 dated 5/17/09 with the attached Proposal Schedule pages P-13 and P-14 dated r7/16/09.

C. PLANS

- a. Replace Plan Sheet No. 3 with the attached Plan Sheet No. ADD.3.
- b. Replace Plan Sheet No. 6 with the attached Plan Sheet No. ADD.6.
- c. Replace Plan Sheet No. 8 with the attached Plan Sheet No. ADD.8.

- d. Replace Plan Sheet No. 9 with the attached Plan Sheet No. ADD.9.
- e. Replace Plan Sheet No. 9 with the attached Plan Sheet No. ADD.12.
- f. Replace Plan Sheet No. 9 with the attached Plan Sheet No. ADD.15.
- g. Replace Plan Sheet No. 9 with the attached Plan Sheet No. ADD.16.

D. PRE-BID MEETING

Attached are the "Minutes of the Pre-Bid Meeting" and Pre-Bid Meeting Attendance Sheet for your information.

Please acknowledge receipt of this Addendum No. 3 by recording the date of its receipt in the space provided on page P-4 of the Proposal.


BRENNON T. MORIOKA, Ph.D., P.E.
Director of Transportation

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1 **SECTION 203 – EXCAVATION AND EMBANKMENT**

2
3 Make the following amendments to said Section:

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

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

13
14 **(II) Amend 203.04 Measurement,** from line 347 to 366 to read as follows:

15
16 **“203.04 Measurement.** Roadway excavation will consist of excavation for
17 placing #57 Gradation Rock Subbase Course, and excavation for concrete
18 gutters. Roadway excavation will be paid on a lump sum basis. Measurement
19 for payment will not apply.”

20
21 **(III) Amend 203.05 Payment,** from line 368 to 457 to read as follows:

22
23 **“203.05 Payment.** The Engineer will pay for the accepted roadway
24 excavation on a contract lump sum basis. Payment will be full compensation
25 for the work prescribed in this section and the contract documents.”

26
27
28 **END OF SECTION 203**

1 **SECTION 305 - AGGREGATE SUBBASE COURSE**

2
3 Make the following amendments to said Section:

4
5 **(I) Amend Subsection 305.02 Materials**, from line 9 to 20 to read as
6 follows:

7
8 **"305.02 Materials.** Materials shall conform to the following:

9
10 #57 Gradation Rock Subbase Course ASTM C33

11
12 Water 712.01

13
14 Geotextiles for Stabilization Applications 716.06"

15
16 **(II) Amend Subsection 305.03 Construction**, from line 22 to 52 to read as
17 follows:

18
19 **"305.02 Construction.**

20
21 **(A) Geotextiles for Stabilization Applications.** Install geotextile
22 fabric at bottom of accepted excavation prior to placing #57
23 Gradation Rock Subbase Course.

24
25 **(B) Hauling and Placing.** Haul, deposit and spread #57
26 Gradation Rock Subbase on the prepared surface and over the
27 geotextile fabric. Where compacted thickness is greater than 12
28 inches, spread and compact the subbase material in two or more
29 lifts approximately equal in thickness. Maximum compacted
30 thickness of one lift shall be 12 inches.

31
32 **(C) Shaping and Compacting.** Immediately after spreading
33 aggregate base, shape and compact each lift across full width using
34 power roller. Roll in direction parallel to centerline of road. Roll the
35 subbase material with minimum of 6 passes with a 2-ton or heavier
36 roller.

37
38 Limit surface deviations of finished areas to not more than 1
39 inch above or below theoretical grade. Correct surface deviations of
40 more than 1 inch above or below theoretical grade by adding or
41 removing material and re-compacting affected areas. "

42
43 **(III) Amend Subsection 305.04 Measurement**, from line 54 to 55 to read as
44 follows:

46 **"305.04 Measurement.** #57 Gradation Rock Subbase Course will be
47 paid on a lump sum basis. Measurement for payment will not apply."
48

49 **(IV)** Amend **Subsection 305.05 Payment**, from line 57 to 66 to read as
50 follows:
51

52 **"305.05 Payment.** The Engineer will pay for the accepted #57 Gradation
53 Rock Subbase Course on a contract lump sum basis. Payment will be full
54 compensation for the work prescribed in this section and the contract
55 documents.
56

57 The Engineer will pay for the following pay item when included in
58 the proposal schedule:
59

60 Pay Item	Pay Unit
61	
62 #57 Gradation Rock Subbase Course	Lump Sum"
63	

64 **END OF SECTION 305**
65
66
67

1 Make this Section a part of the Standard Specifications:

2
3 **"SECTION 307 – CEMENT-TREATED BASE**

4
5 **307.01 Description.** This item shall consist of a treated granular subgrade,
6 composed of a compacted mixture of Portland cement, water, existing subgrade,
7 or untreated aggregate base and an emulsified asphalt tack coat.

8
9 **307.02 Materials.**

10
11 **(A) Cement.** Portland Cement, Type I or II, or Type IP, conforming to
12 Subsection 701.01.

13
14 **(B) Water.** Water shall be clean and free of oil, salt, or other
15 substances deleterious to hardening or performance of the cement-
16 treated granular mixture and conforms to Subsection 712.01.

17
18 **(C) Curing Material.** Emulsified Asphalt (tack coat) Type SS-1,
19 SS-1h, CSS-1 or CSS-1h conforming to Subsection 702.04 and
20 incorporated in the work in conformance with Section 407 –Tack Coat
21 except as modified in this Section.

22
23 **(D) On-Site Granular Subgrade.** Existing asphalt pavement and
24 granular subgrade, e.g., base course, mechanically ground up or
25 pulverized and mixed with an Asphalt Zipper® or acceptable equal or
26 better asphalt reclaimer type equipment to a depth of 8 inches below top
27 of existing asphalt pavement. Based on tests on untreated base course
28 from Kauai quarries and correlations with other materials as to the effect
29 of cement addition, it is estimated that the maximum dry density may be
30 145 pcf and the optimum moisture may be 9%. Assume these quantities
31 for bidding purposes.

32
33 **(E) Off-Site Granular Subbase.** Aggregate for untreated base
34 conforming to Section 304. Based on tests on untreated base course
35 from Kauai quarries it is estimated that the maximum dry density may be
36 145 pcf and the optimum moisture may be 9%. Assume these quantities
37 for bidding purposes.

38
39 **307.03 Construction Requirements.**

40 **(A) Cement Treated Base (CTB).** Cement content shall be 3 percent
41 by dry weight. Assume a maximum dry density of 145 pounds per cubic
42 foot for the pulverized material; 94 pounds of cement, i.e., one cement
43 sack shall be used for every 40 square feet of reconstruction area based
44 on the required 6.5-inch thick granular subgrade. This cement dosage
45 may change should the maximum dry density value vary significantly. The
46 actual initial cement content shall be determined during the construction
47 of the initial area of pavement reconstruction, and adjusted depending on

the strength of the in-situ material Determine compressive strength of CTB using ASTM D1633. Test compressive strength of CTB every two working days or when manufacturer of the cement changes and submit results to Engineer.

Do not use cement salvaged from used or discarded sacks. Cement placed in storage shall be suitably protected. Any loss of the quality of the cement will be cause for rejection. If the cement furnished shows erratic behavior under the field conditions incident to the mixing and placing of the mixture, or in the time of the initial or final set, the Contractor shall at once cease the use of that brand of cement and furnish material of such properties as to ensure quality work conforming to these specifications. Or, the Contractor shall modify its means and methods so that the work meets the contract document requirements. Notify the Engineer immediately of any problems.

Cement slurry shall be used and placed on moist pulverized recycled or off-site granular base material. The application method shall be uniform and acceptable to the Engineer. The alternative placement method of using dry cement shall consist of opening the cement bags and placing the cement in a transverse direction on top of the asphalt surface to be pulverized. Prevent the drifting of cement or dust when using the alternative method. Do not place cement during windy days, i.e., days when wind will be at a high enough speed to blow cement into the air and overcome the required cement dust controls. No extension will be granted for days lost due to Contractor's inability to control the cement dust. Spread the cement so that the thickness of the cement is uniform in thickness. The cement slurry/cement shall then be mixed thoroughly into the ground-up base course and asphalt by the Asphalt Zipper® during the pulverizing operation or in a method acceptable to the Engineer. Regardless of which method of incorporating the cement, the mixing shall be performed to a degree that all material is uniformly distributed throughout the mixture. Begin mixing as soon as possible but no later than 30 minutes from the opening of the cement bags or 15 minutes from the start of the application of the cement slurry on to the pulverized material. If the cement show signs of setting before incorporation into the pulverized material, remove, discard and replace cement and cement-treated granular subgrade. Revise work method so that setting of cement does not start before compaction is complete.

Following the mixing of the cement, the material shall be brought to optimum moisture content with a tolerance of up to 2 percent above or below its optimum moisture content. Water shall not be added before the pulverized material is thoroughly mixed. Water shall be uniformly added and incorporated in the mixture. The water supply and distribution equipment shall be capable of supplying the total required amount of water to the section being processed. Mixing shall continue after all water has been applied until a uniform mixture of pulverized asphalt pavement,

96 aggregate, cement, and water has been obtained for the full depth of the
97 course. If the moisture content exceeds that specified, or soft spots occur,
98 manipulate the mixture by re-mixing or blading as needed to reduce the
99 moisture content to be within the specified range. Mixtures that have not
100 been compacted and remain undisturbed for more than 30 minutes shall
101 be remixed. In the event of rain adding excessive moisture to the
102 uncompacted material, the entire section shall be reworked. Should the
103 Contractor be unable to finish compaction of the CTB section to the
104 required density within the same day after cement is added, for any
105 reason, the section shall be removed.

106
107 Perform Proctor test for the cement-treated granular subgrade
108 during construction of the initial area of pavement reconstruction to
109 determine an initial maximum dry density and optimum moisture. .
110 Provide results to the Engineer before further construction of CTB starts.
111 The Engineer may, based on the Contractor's supplied Proctor test
112 results, require adjustments to the cement quantity.

113
114 Prior to final compaction, shape the surface of the cement-treated
115 granular subgrade so that it shall meet, in the final compacted state,
116 required lines, grades, and cross-section. In all cases, where adding
117 material to the cement-treated granular subgrade is required, use the
118 Asphalt Zipper® or other accepted device to uniformly loosen the surface
119 prior to adding the material and prior to the initial set of the
120 cement-treated granular subgrade. If the cement-treated granular
121 subgrade has already initially set, remove and dispose of the material.
122 The material shall only be allowed to remain if the area is reconstructed,
123 i.e., let the cement take full set, pulverize again, and then remix the
124 material again with additional cement, to the full required depth of the
125 CTB. Determine the amount of cement to be added to the remedial
126 cement-treated granular subgrade material by doing new moisture,
127 Proctor and compression tests or add 141 pounds of cement for every 2
128 feet of a 10-foot wide lane. The redesigned remedial cement-treated
129 granular subgrade mix shall have a compressive strength that is within the
130 range required in this section. Additional cement added to the remedial
131 cement-treated granular subgrade material will be considered as part of
132 the Contractor's remedial repair plan to correct work not done in
133 accordance with the requirements of the contract documents and
134 therefore, no additional payment will be made and no additional time will
135 be granted for the work.

136
137 After compaction is attained, the grade shall be corrected such that
138 the thickness of the future overlying asphalt concrete pavement shall not
139 be less than 1.5 inches in any location, and there are no depressions
140 greater than 1 inch deep. Irregularities shall be fixed with the use of a
141 blade or other methods acceptable to the Engineer. If the surface is
142 depressed by 1 inch or less no adjustment to the CTB needs to be made
143 for the depression. For areas depressed by 1 inch or less, the asphalt

concrete pavement shall be thicker at such areas. However, the depression in the finished surface of the CTB may remain only if it conforms to the general surface smoothness required by the contract documents. The surface requirement of the CTB shall not vary more than ½-inch from a 10 foot straight edge applied to the surface of the CTB. Areas that cannot meet the depression and smoothness requirements shall be removed or recycled as described in this Section. Excess material shall be disposed of off the project site. No more than 30 minutes shall be allowed to elapse between the last pass of moisture-mixing and the start of the compaction at a particular location. Final compaction shall be completed no later than 2 hours after starting compaction work.

The surface of the cement-treated granular subgrade shall be kept moist by lightly sprinkling water until the surface is sealed with emulsified asphalt (tack coat). After the irregularities are repaired, moisten the surface. Seal with emulsified asphalt (tack coat) at a rate of 0.12 to 0.18 gallons of diluted mixture per square yard, only when paving grid will be installed with HMA overlay on the same day. Damage to the tack coat shall be repaired immediately to prevent the CTB from drying and to reduce the loss of bonding between the CTB and the asphalt concrete pavement.

Prior to joining any previously constructed section of a cement-treated granular subgrade, form a vertical construction joint by cutting back perpendicular to the centerline for transverse joints and parallel for longitudinal joints into the portion of the placed CTB that has met the requirements of the contract documents, i.e., form a true vertical face in the acceptable CTB subgrade. Place tightly against the vertical face of the newly constructed vertical construction joint a header equal to the height of the CTB and securely stake it in place. This header shall be left in place until all mixing operations on the adjoining section have been completed, after which the header shall be removed and the trench backfilled with processed material. This material shall be compacted so that a well-sealed joint is formed and a smooth riding surface is obtained. Straight edge joint to assure that surface meets contract document requirements. As an alternate to using a header, the subsequent day's operation may be started by cutting back into the previously placed course to the extent necessary to obtain uniform grade and compaction but the construction of the vertical joint shall not undermine or disturb the asphalt concrete pavement. Asphalt concrete pavement placement shall stop short of the limits of the placed CTB. Moisten the vertical face using a mister immediately prior to placing new CTB material against it.

(1) Cement-Treated Base Using Off-Site Granular Subbase.
Haul, deposit, and spread aggregate base on a prepared surface in a manner that minimizes rutting, uneven compaction, and segregation. Should segregation occur, remove segregated

material and replace with material conforming to the contract documents, at no increase in contract price or contract time.

Prior to shaping, add water uniformly to aggregate base, as necessary, to obtain moisture content within 2 percent above or below optimum moisture content for compaction.

Immediately after spreading aggregate base, start adding the cement using one of the methods specified.

(2) Cement-Treated Base (Recycled) Using Existing On-site Granular Subgrade. The existing AC and underlying base course shall be ground-up or pulverized in-place with an Asphalt Zipper® or accepted equal or better asphalt reclaimer type equipment to 8 inches below the existing pavement surface. Check the depth of the pulverization that the machine is adjusted to in the presence of the Engineer or its representative, at the beginning of every shift or when requested by the Engineer. Keep pulverizing the area until the required depth is obtained. Remove all organic and/or deleterious material found in the pulverized material. If the depth of the pulverizing exceeds the depth of the existing asphalt pavement and base course, if large rocks are encountered, or if excess water in the material is discovered, stop work and immediately report the situation to the Engineer to obtain the remedial method for the situation.

Continue pulverizing until no more than 30 percent of the material is larger than ¾-inch. Material retaining on a 2-inch sieve and other unsuitable material shall be removed and disposed of.

(B) Uniform Cement Content. When directed by the Engineer, test the penetration depth of the cement treatment in the presence of the Engineer. Use Phenolphthalein or diluted Hydrochloric acid to determine the presence of cement in the mix. Use Caltrans' California Test 338 "Determination of Cement or Lime Content in Treated Aggregate by the Titration Method". Use the field sampling methods specified in the document. If the material fails to meet requirements, remix treated material and adjust work methods.

(C) Compaction. The material shall be compacted to at least 95 percent relative compaction in accordance with AASHTO T134. Field density tests in accordance with Hawaii Test Methods, HDOT TM1, HDOT TM2, and HDOT TM3 will be taken by HDOT personnel using proctor supplied by Contractor. Additional compaction will be required where field density tests or visual observations reveal inadequate compaction or aggregate segregation or poor construction methods. Use of a nuclear gauge by the Contractor shall be on its own volition. All compaction tests

done by the Contractor shall be in the presence of the Engineer. Determination of whether the work is meeting the required density will be based on the test taken by HDOT personnel. The Engineer may, if it chooses, use the Contractor's results if it is done in accordance with the required testing methods, in the presence of the Engineer and by an AMRL certified technician.

Assist the Engineer in the taking of samples of the pulverized granular subgrade, cement and perform tests as requested by the Engineer. Perform additional Proctor tests when requested by the Engineer.

(D) Qualification of Testing Technician and Facility. All testing by the Contractor shall be done by an AASHTO Materials Reference Laboratory (AMRL) certified technician and at an AMRL certified testing laboratory.

307.04 Method of Measurement. The Engineer will measure the square yardage of CTB that is placed. The addition or reduction of the cement when directed by the Engineer shall be measured per sack (94 lbs). CTB material placed underneath new concrete gutter in accordance with the contract documents will not be measured for payment, and will be considered incidental to Item No. 638.0120.

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

The cement adjustment will be based on the amount of additional cement needed to be added or subtracted above the amount specified in Subsection 307.03 to meet the percentage of cement by using the actual unit weight of the aggregate (off-site or recycled).

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

Pay Item	Pay Unit
Cement-Treated Granular Subgrade (Recycled)	Square Yard
Cement Adjustment	Sack"

END OF SECTION 307

1 Make this Section a part of the Standard Specifications:
2

3 **"SECTION 416 - PAVING GRID**
4

5 **416.01 Description.** This work includes furnishing and placing paving grid
6 between the overlying asphalt and the underlying cement-treated base layers.
7

8 **416.02 Material.** The grid material shall meet the following:
9

10 The reinforcement mesh shall be a knitted glass fiber strand grid with the
11 following characteristics based on the minimum average roll values (MARV):
12

- 13 • Tensile Strength (in accordance with ASTM D6637)
14 560 lb/in x 560 lb/in component strand strengths
15
- 16 • Area Weight (in accordance with ASTM D5261)
17 11 ounces per square yard
18
- 19 • Modified Elastomeric Polymer Coating
20
- 21 • Elongation at break less than 5 percent (in accordance with ASTM D6637)
22
- 23 • Melt Point above 425 degrees Fahrenheit (in accordance with ASTM
24 D276)
25
- 26 • Pressure-sensitive self-adhesive, with sufficient bond to allow normal
27 construction traffic and paving machinery operations:
28
- 29 • Mesh opening of ½" by ½"
30

31 The material shall be stored in dry and covered conditions free from dust and
32 stocked vertically to avoid misshaped rolls.
33

34 **416.03 Construction Requirements.**
35

36 **(A) Weather Limitations.** Application of paving grid will not be
37 allowed under the following conditions:
38

- 39 (1) On wet surfaces, as determined by the Engineer.
40
- 41 (2) When surface temperature is below 40 degrees or above
42 140 degrees Fahrenheit.
43
- 44 (3) When weather conditions prevent proper method of
45 construction.

46
47 **(B) Surface Preparation.** Immediately before placing the paving
48 grid, vacuum-sweep and clean surface in accordance with Section 310 –
49 Brooming Off, and tack coat the surface in accordance with Section 407 –
50 Tack Coat.
51

52 **(C) Paving Grid Placement.** Place grid onto the cement-treated
53 base, with the self-adhesive side down, and with minimal wrinkling or
54 folding. The grid shall only be placed over the cracks, as directed by the
55 Engineer.
56

57 The grid material shall be laid out either by hand or by mechanical means
58 under sufficient tension to eliminate ripples, wrinkling, or folding. Should
59 ripples, wrinkling, or folding occur, these must be removed by pulling the
60 grid tight or in extreme cases (on tight radii) by cutting and laying flat.
61

62 The surface of the grid shall be rolled with a rubber-coated drum roller, or
63 pneumatic-tired roller, with enough passes to activate the adhesive. The
64 tires shall be cleaned regularly as needed with an asphalt cleaning agent.
65

66 Transverse joints must be lapped in the direction of the paver by 3 to 6
67 inches. Overlap longitudinal joints by 1 to 2 inches. Do not lap joints with
68 more than two layers of grid. Shingle transverse joints in the direction of
69 paving such that the grid is not pushed up from the construction traffic.
70

71 Slow construction equipment and emergency traffic may run on the grid
72 after being rolled, provided the equipment does not make turns or braking
73 movements. However, the grid must be kept clean of mud, soil, dust,
74 debris, and other deleterious materials. In addition, should the grid
75 become damaged, it shall be removed and replaced with a new grid patch
76 that shall be overlapped by the adjacent grid layers, at no additional cost
77 to the State.
78

79 The grid shall not be directly exposed to vehicular traffic. Therefore, the
80 travel lane shall not be opened to the general public without an AC
81 overlay or the travel lane should be opened after the CTB is placed and
82 prior to the placement of the grid.
83

84 Tests for proper adhesion shall be performed by the Contractor in the
85 presence of the Engineer, when requested by the Engineer, especially
86 when road conditions are wet or when the road does not appear to be
87 properly cleaned prior to the placement of the grid. The procedure for the
88 adhesion test is as follows.
89

- 90 1. Cut a square yard of grid
- 91 2. Place it on the area to be paved.

- 92 3. Activate the self-adhesive glue by rolling with a rubber-tired roller or
93 by walking on the sample.
94 4. Insert the hook of a fish weight scale on to the center of the grid.
95 5. Pull upwards until the grid starts to pull from the surface.
96 6. Record the force result.
97 7. The result shall be at least 20 pounds or more prior to paving.
98

99 **416.04 Method of Measurement.** The Engineer will measure paving grid
100 per square yard of grid finished surface, not including overlaps.
101

102 The Engineer will measure hot mix asphalt overlay under Section 401 –
103 Asphalt Concrete Pavement
104

105 **416.05 Basis of Payment.** The Engineer will pay for the accepted paving
106 grid at the contract unit price per square yard. Payment will be full compensation
107 for the work prescribed in this section and the contract documents
108

109 The Engineer will pay for the following pay item when included in the
110 proposal schedule::
111

112 Pay Item	Pay Unit
113	
114 Paving Grid	Square Yard"
115	

116 The Engineer will pay for:
117

118 (1) 20% of the contract bid price upon completion of preparing
119 the surface;
120

121 (2) 70% of the contract bid price upon completion of furnishing
122 and placing of the paving grid;
123

124 (3) 10% of the contract bid price upon completion of cleaning
125 up;
126

127 The Engineer will pay for the accepted hot mix asphalt overlay under
128 Section 401 – Asphalt Concrete Pavement."
129
130
131

132 **END OF SECTION 416**
133

PROPOSAL SCHEDULE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
203.0100	Roadway Excavation	L.S.	L.S.	L.S.	\$ _____
206.0100	Excavation for Grated Drop Inlet	L.S.	L.S.	L.S.	\$ _____
209.0100	Installation, Maintenance, Monitoring and Removal of BMP	L.S.	L.S.	L.S.	\$ _____
209.0200	Additional Water Pollution, Dust and Erosion Control	F.A.	F.A.	F.A.	\$30,000.00
305.0300	#57 Gradation Rock Subbase Course	L.S.	L.S.	L.S.	\$ _____
307.0100	Cement-Treated Granular Subgrade (Recycled)	4,600	Sq. Yd.	\$ _____	\$ _____
307.0200	Cement Adjustment	375	Sack	\$ _____	\$ _____
401.0400	Hot Mix Asphalt Pavement, Mix No. IV	400	Ton	\$ _____	\$ _____
416.0100	Paving Grid	4,600	Sq. Yd.	\$ _____	\$ _____
603.0100	Clean Existing Culverts and Drainage Structures	F.A.	F.A.	F.A.	\$15,000.00
604.0310	Type 61614P Grated Drop Inlet, 4.00 Feet to 4.99 Feet	1	Each	\$ _____	\$ _____
605.0100	4-Foot Wide Drainage System	L.S.	L.S.	L.S.	\$ _____
605.0200	6-Foot Wide Drainage System	L.S.	L.S.	L.S.	\$ _____
638.0120	Gutter, Type 2 (61614)	L.S.	L.S.	L.S.	\$ _____
641.0100	Hydro-Mulch Seeding	560	Sq. Ft.	\$ _____	\$ _____

560A-02-09M

r7/16/09

P-13

Addendum No. 3

MINUTES OF THE PRE-BID MEETING

PROJECT: Kuhio Highway
Pavement Reconstruction and Drainage Improvements
Haena to Princeville
District of Hanalei, Island of Kauai

PROJECT NO.: 560A-02-09M

LOCATION: 1720 Haleukana Street
Lihue, Kauai, Hawaii

DATE & TIME: June 15, 2009 at 9:00 A.M.

IN ATTENDANCE: Stanford Iwamoto	HDOT – HWY-K
Fred Reyes	HDOT – HWY-K
Jeanie Bernardo	Goodfellow Bros., Inc.
James Hasenyager	Cushnie Construction Co.
Ralph Cushnie	Cushnie Construction Co.
Demetrio Tolentino	Jas. W. Glover, Ltd.
Julie Wong	Jas. W. Glover, Ltd.
Skip Dunteman	Earthworks Pacific, Inc.

The meeting started at 9:05 A.M. HWY-K Project Manager, Stanford Iwamoto began the meeting with a brief overview of the background and scope of work.

The following questions and clarifications were raised at the meeting:

Question #1: Can overnight highway closure be done to construct the concrete pavement at Manoa Stream Ford Crossing?

Response: No. The concrete pavement has been deleted, and replaced with sub-excavating to 20" depth and backfilling with #57 gradation rock subbase, recycled CTB, paving grid, and HMA pavement. See Plan Sheets ADD. 6 and ADD. 8.

Question #2: Can vehicle traffic be allowed to run on compacted CTB (recycled)?

Response: Yes, at the discretion of the Engineer and prior to placement of SS-1 tack coat and paving grid. See plan sheet ADD.6 for temporary transition detail.

Question #3: How can the asphalt recycler machine grind up larger than 3" diameter rocks that may be found in an old macadam layer?

Response: We believe that the existing structural section consists of 4-5 inches of a.c. pavement on 4-6 inches of base course. Should large rocks be encountered within the 8" deep recycled material layer, stop work immediately and notify the Engineer, as stated in Subsection 307.03(A)(2).

Question #4: Can shuttle buggies (MTV's) be used in this project?

Response: Shuttle Buggies (MTV) and all other equipment used in the project must be able to cross the weight-posted bridges. See General Note No. 8 on Plan Sheet ADD. 3.

Question #5: Isn't there a waterline and water valve in the vicinity of Sta. 69+00 Rt. where the drainage system will be constructed?

Response: Yes, Contractor is reminded of General Notes Nos. 5 and 6 on Plan Sheet ADD. 3 and shall exercise care not to damage existing utilities.

Question #6: Are exploratory borings called for in this project?

Response: No. Contractor is required to bring up any unusual subsurface conditions that may be encountered to the attention of the Engineer.

Question #7: Shouldn't a layer of crushed rock be constructed below the leaching chambers (in the vicinity of Sta. 69+00 Rt.) in order to drain better?

Response: No, construct the drainage system in accordance with the project plans.

Question #8: Will the Contractor be paid for removing and disposing excess CTB (Recycled) that may be generated from the project?

Response: No. Contractor is required to deliver excess CTB (Recycled) material to a location designated by the Engineer at no additional cost to the State. See General Note No. 12 on Plan Sheet ADD. 3.

Project Engineer, Fred Reyes stated the following items will be in an Addendum:

1. Glasgrid or equivalent paving grid will be required to be placed over all compacted reconstruction areas.
2. A.C. pavement repair areas in the vicinity of Manoa Stream Ford Crossing will be called out for sub-excavation to 20" depth and partially filled with a 12" thick layer of No. 57 gradation rock.

With no further questions or comments, the pre-bid meeting was adjourned at 9:35 A.M.

The minutes of the meeting will be distributed in Addendum No. 2 to the Contract Plans. Contractors will be notified when addendum will be available for pick up.

REQUEST FOR INFORMATION (RFI) #1:

The following questions or requests for clarifications were received from GP Roadway Solutions, Inc. HWY-K responses are provided below each question.

Question #1: Plan Sheet No. 11 shows 6 ton weight limit signs at Wainiha Bridges. How can the asphalt zipper, trucks and equipment, and paving machines be able to access the reconstruction areas on the Haena side of these bridges?

Response: See our response to Question #4 on page 1 of these Minutes. Wainiha Bridges have been upgraded to 8 tons posted limit. We believe that lighter-weight zipper machine, loader, backhoe and paving machine can cross the posted bridges provided

Contractor submits application and data for overweight load/vehicle for loads slightly exceeding the posted loads, subject to HDOT evaluation.

Question #2: Will Contractor be allowed to use 24-hour road closures during the project, if necessary, to allow for curing of the CTB?

Response: See our response to Questions #1 and #2 on page 1 of these Minutes. Traffic will be allowed to run on the compacted CTB a few hours after placement of GlasGrid, at the discretion of the Engineer. HDOT prefers that HMA paving operations will commence within 1 week or less following pavement reconstruction operations.

Question #3: Will sawcutting, removal of weakened pavement areas, constructing asphalt concrete base course be allowed as a substitution in lieu of Cement-Treated Base (Recycled)?

Response: No. Cement-treat base (recycled) shall be installed as shown on the plans.

Question #4: Can overnight highway closure be done to construct the concrete pavement?

Response: No. The concrete pavement has been deleted. See our response to Question #1 of these Minutes.

Question #5: Will Asphalt Emulsion Full-Depth Reclamation be allowed as a substitution for Cement-Treated Base (Recycled)?

Response: No. Cement-treat base (recycled) shall be installed as shown on the plans.

Question #6: How will the excavation and removal of 1.5" thick excess recycled material be paid for?

Response: This work shall be considered incidental to contract Item No. 307.0100 Cement-Treated Base (Recycled). See our response to Question #8 of these Minutes.

REQUEST FOR INFORMATION (RFI) #2:

The following questions or requests for clarifications were received from Jas. W. Glover, Ltd. HWY-K responses are provided below each question.

Question #1: Will an NPDES permit be required for this project?

Response: No.

Question #2: Will Writgen cold planer and other heavy equipment be allowed to cross the weight-posted bridges?

Response: The Writgen cold planer will not be allowed for use if it is unable to pulverize and mix in accordance with the requirements of Section 307. Regarding equipment crossing weight-posted bridges, see our response to Question #4 of these Minutes, and our response to Question #1 of RFI #1.

Question #3: Will a Lee Boy 700 paving machine be allowed to cross the weight-posted bridges?

Response: See our response to Question #1 of RFI #1.

Question #4: Can all paving –related equipment be allowed to cross the weight-posted bridges?

Response: See our response to Question #4 of these Minutes, and our response to Question #1 of RFI #1.

PRE-BID CONFERENCE ATTENDANCE LIST

PROJECT NO.: 560A-02-09M PROJECT NAME: KUHIO HIGHWAY, PAVEMENT RECONSTRUCTION & DRAINAGE IMPROVEMENTS, HAENA TO PRINCEVILLE
 DATE: JUNE 15, 2009 TIME: 9:00 AM LOCATION: 1720 HALEUKANA STREET, LIHUE, KAUAI, HAWAII 96766

CALL BY: STANFORD IWAMOTO

PLEASE PRINT

PARTICIPANTS	COMPANY / ORGANIZATION	ADDRESS (Including City and Zip Code)	TELEPHONE NUMBER
1 Fred Reyes	HDO-kaui Hwy	1720 Haleukana St., Lihue 96766	241-3017
2 Stanford Iwamoto	"	"	241-3015
3 JENIE BERARDO	GOODFELLOW Bros., Inc.	P.O. Box 1090, Koloa, HI 96756	742-9565
4 James Hasenberger	Cosmic Construction Co., Inc.	P.O. Box 1810, Koloa, HI 96756	332-9000
5 Ralph Cushman	Cushman	"	"
6 DEMETRIO TOLENTINO	SAS. W. GLOVER, LTD.	PO Box 579 Hanalei, HI 96719	941-8977
7 Julie Wong	SAS. W. Glover, Ltd.	"	"
8 SKIP DUNTEPINS	EARTHWORKS Pacific Inc.	4180 Hanalei St Hanalei, HI 96766	246-8808
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