STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ADDENDUM NO. 1

FOR

TEMPORARY KAPAA BYPASS ROAD RESURFACING

MILE POST 0.07 TO MILE POST 2.26

PROJECT NO. 5600-02-10M

DISTRICT OF KAWAIHAU

ISLAND OF KAUAI

2010

Amend the Bid Documents as follows:

A. SPECIAL PROVISIONS

a. Replace Section 107 – Legal Relations and Responsibility to the Public dated 7/01/08 with the attached Section 107 - Legal Relations and Responsibility to the Public dated r6/14/10.

b. Replace Section 402 – Superpave Asphalt Concrete Pavement dated 5/04/10 with the attached Section 402 - Superpave Asphalt Concrete Pavement dated r6/14/10.

B. PROPOSAL SCHEDULE

a. Replace the Proposal Schedule pages P-10 to P-12 dated 12/06/09 with the attached Proposal Schedule pages P-10 to P-12 dated r6/14/10.

C. PLANS

a. Replace Plan Sheet No. 3 with attached Plan Sheet No. ADD.3.

b. Replace Plan Sheet No. 6 with attached Plan Sheet No. ADD.6.

c. Replace Plan Sheet No. 8 with attached Plan Sheet No. ADD.8.

d. Supplemental Plan Sheet No ADD.14S1 & ADD.14S2 – Extra work @ Temporary Kapaa Bypass Road Extension. This work includes installation of guardrail and end treatment constructing dust fence, removal and disposal of concrete blocks, and hydro-mulching of dressed shoulder.

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. 1 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

SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

Make the following amendments to said Section:

(I) Amend **107.01(B)(1) – Commercial General Liability (Occurrence form)** from lines 61 to 62 to read as follows:

"**(c)** Bodily Injury & Property Damage Insurance."

(II) Amend **107.03(B)(1) – Working Hours; Night Work,** from line 140 to line 142 to read as follows:

"**107.03 Working Hours, Night Work**. All paving works including cold planing, pavement reconstruction, and resurfacing shall be done at night.

Perform night work only as follows:

Sunday	10:00 P.M. – Midnight
Monday thru Thursday	Midnight – 6:00 A.M
	10:00 P.M. – Midnight
Friday	Midnight – 6:00 A.M.

Night time work shall not be allowed between the months of September to December.

Do not work on Friday nights and Saturdays or as specified by the Engineer. Sunday's work will be part of Monday's working day.

The Engineer will permit the Contractor to close one lane of the traffic during night time working hours.

Pavement marking, traffic signing, utility adjustment, rumble strips, grading, dressing and hydro-mulching of shoulder may be done during daytime working hours.

Daytime work shall be conducted between the hours of 8:30 A.M to 3:30 P.M

END OF SECTION 107

Make the following Section a part of the Standard Specifications:

"SECTION 402 - SUPERPAVE ASPHALT CONCRETE PAVEMENT

402.01 Description. This section is for constructing one or more courses of superpave plant mixed asphalt concrete pavement on a prepared surface according to the contract. General requirements for all asphalt concrete pavements as specified in Section 401 are applicable to this section, subject to any exceptions contained herein.

402.02 Materials. Materials shall conform to the following:

(A) Performance Graded (PG) Binder. Performance graded binder shall conform to Performance Graded Asphalt Binder Specifications, AASHTO M320. Submit, before usage, a Certificate of Compliance, accompanied by substantiating test data, showing conformance with Performance Graded Asphalt Binder Specification. The Engineer will not accept the PG binder without adequate documentation.

PERFORMANCE GRADED BINDERS FOR SPECIFIC MIXES	
MIX	**BINDER***
Superpave Hot Mix Asphalt for Surface Course (SHMA)	PG 64-16 or PG 70-16
* When necessary, neat asphalt with polymer modification shall be used to achieve the specified performance grading.	

(B) Aggregates. Make mineral aggregate by crushing and screening hard, tough, durable stone of uniform quality. Crushed aggregate shall be free from soft or disintegrated pieces, clay, dirt, or other deleterious substances.

Coarse aggregate shall be that portion of the mineral aggregate retained on the No. 4 sieve. Fine aggregate shall be that portion of the mineral aggregate passing the No. 4 sieve.

When tested according to the designated methods, the combined mineral aggregate shall meet the following requirements:

Test	Test Method	Requirement
Soundness	AASHTO T 104 (5 cycles using sodium sulfate)	9% Maximum
Clay Lumps & Friable Particles	AASHTO T 112	0.25% Maximum coarse aggregate 1.0% Maximum fine aggregate
Flat and Elongated Particles (Length to thickness ratio of 3:1)	ASTM D 4791 (by Weight)	20% Maximum
Los Angeles Abrasion	AASHTO T 96	40% Maximum
Sand Equivalent	AASHTO T 176	45% Minimum
Fine Aggregate Angularity	AASHTO T 304, Method A	45% Minimum
Stripping	AASHTO T 182	Above 95%
Gradation	AASHTO T 27 AASHTO T 11	See Table 402-1
Absorption	AASHTO T84 & T85	5% Maximum

At least 90% by weight of the material retained on the No. 4 sieve shall consist of crushed particles. At least 70% of the material passing the No. 4 sieve and retained on the No. 8 sieve shall consist of crushed particles. A crushed particle is one having at least one mechanically fractured face. A face is considered fractured if it has a projected area that is at least 0.25 of the maximum projected area of the particle.

(C) Aggregate Blend. Size, uniformly grade, and combine coarse and fine aggregate fractions to produce a job-mix formula that meets the gradation requirements of Table 402-1. Blended aggregate gradation curves shall not pass outside of the maximum and minimum control points.

Table 402-1 - Aggregate Gradation Control Points 1/2 inch Nominal Maximum Size Mix		
SIEVE SIZE	Control Points Percent Passing	
	LOWER	UPPER
3/4 inch	100.0	100.0
1/2 inch	90.0	100.0
3/8 inch	-	90.0
No. 8	28.0	58.0
No. 200	2.0	10.0

(D) Job-Mix Formula. Design the job-mix formula according to AASHTO R 35 which meet the requirements of AASHTO M 323.

Table 402-2 - Design Criteria	
$N_{initial}$, N_{design}, N_{max}	7, 75, 115
Air Voids at N_{design}	4%
Voids in Mineral Aggregate (VMA) at N_{design} (for 1/2 inch Nominal Maximum Particle Size)	14.0% Minimum
Voids Filled with Asphalt (VFA)	65 – 78 %
Density at $N_{initial}$ (% of Theoretical Maximum Specific Gravity)	Not more than 90.5 %
Density at N_{design} (% of Theoretical Maximum Specific Gravity)	96.0 %
Density at N_{max} (% of Theoretical Maximum Specific Gravity)	Not more than 98.0%
Dust to Binder Ratio	0.8 to 1.6

Submit the job-mix formula at least 15 working days before production. The job-mix formula shall include:

(1) Design percent of aggregate passing each required sieve size,

(2) Design percent of PG binder material added to the aggregate (expressed as % by weight of total mix), and

(3) Temperature at which the mixture is delivered to the point of discharge,

(4) Source of aggregate,

(5) Grade of PG binder,

(6) Test data used to develop job-mix formula.

Mixtures shall meet the requirements of Table 402-1 and Table 402-2 without exceeding allowable tolerances in Table 402-3

Table 402-3 – Range of Tolerances for Job-Mix Formula	
Passing No. 4 and larger sieves	± 6%
Passing No. 8 to No. 100 sieves (inclusive)	± 4%
Passing No. 200 sieve	± 2%
Binder Content (expressed as % by weight of total mix)	± 0.4%
Temperature of Mixture	± 20° F
Voids, total mix	± 1.0%

402.03 Construction. Requirements shall be as specified in Subsection 401.03, except as follows:

(D) Plant Operation.

(1) Preparation of Aggregate. Dry and heat the aggregate for the mixture to the required temperature. Do not exceed 340 degrees F. Properly adjust the flames used for drying and heating to avoid damage to and contamination of the aggregate. When dried, the aggregate shall not contain more than 1 percent moisture by weight.

Immediately after heating and drying, screen the aggregates for batch plants into three or more fractions as specified. Convey the aggregates into separate compartments ready for batching and mixing with asphalt binder.

(2) Mixing. Combine the dried aggregates in the mixer in the quantity of each fraction of aggregates required to meet the job-mix

formula. Measure or gage and introduce the asphalt binder into the mixer in the quantity specified by the job-mix formula.

After introducing the required quantities of aggregate and asphalt binder into the mixer, mix the materials until a complete and uniform coating of the particles and a thorough distribution of the asphalt binder throughout the aggregate is secured. The Engineer will determine wet mixing time for each plant and for each type of aggregate used.

For superpave hot mix asphalt pavement, produce the mixture within the temperature range determined from the Viscosity-Temperature graph. Introduce the asphalt binder and aggregate into the mixer within 25 F. degrees of each other's temperature.

(3) Requirements for Drier-Drum Mixing Plant Utilizing Cold-Feed Control. Drier-drum plants equipped with cold-feed control shall separate the virgin aggregate for Superpave mixes into three or more sizes.

After the aggregate is separated, store each size separately. Each of the storages, except storages for filler material, shall contribute a minimum of 10% to the total weight of the aggregate.

(E) Spreading and Finishing. Lay, spread, and strike off the mixture upon an acceptable surface to the grade and elevation established. Use the bituminous pavers to distribute the mixture either over the entire width or over such partial width as may be practicable.

The longitudinal joint in one layer shall offset that in the layer immediately below by approximately six inches; however, the joint in the top layer shall be at the centerline of the pavement when the roadway comprises two lanes of width, or at lane lines when the roadway is more than two lanes in width.

The minimum temperature of the bituminous mixture as discharged to the paver shall be established during the mix design procedure.

On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impracticable, spread, rake, and lute the mixture by hand tools. For such areas, dump, spread, and screed the mixture to give the required compacted thickness.

When the production of the mixture can be maintained and when practicable, use the pavers in echelon to place the wearing course in adjacent lanes.

When the lanes are required to be opened to public traffic, pave the full travelway or total width of roadway each day. However, at the discretion of the Engineer, the Contractor may construct a transition taper at the longitudinal pavement drop so as not to leave a vertical face. The transition taper shall be along the lane line and formed by a one-foot slope shoe attached on the paving machine, that would produce a wedge with a maximum height of three inches down to zero inches. Remove the transition taper before placing adjacent lifts.

The minimum and maximum allowable laying thicknesses for the superpave mixture shall be one and one half inch minimum thickness and three inch maximum thickness.

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

Initiate compaction of the mixture within the temperature range determined from the Temperature-Viscosity graph that does not produce excessive horizontal movement.

Use pneumatic or steel-tired tandem rollers for initial or breakdown rolling.

Finish rolling using a tandem roller weighing at least eight tons.

Rolling shall begin at the sides and proceed longitudinally parallel to the road centerline, each trip overlapping half the roller width, gradually progressing to the crown of the road. When using a vibratory roller, the overlap shall be less than six inches. When paving in echelon or abutting a previously placed lane, roll the longitudinal joint first; follow with the regular rolling procedures. On superelevated curves, the rolling shall begin at the low side and progress to the high side by overlapping longitudinal trips parallel to the centerline.

Correct displacements resulting from the reversing direction of a roller, or from other causes by use of rakes and addition of fresh mixture when required. Roll so as not to displace the line and grade of the edges of the bituminous mixture.

To prevent adhesion of the mixture to the rollers, keep the wheels properly moistened with water, water mixed with very small quantities of

detergent. The Engineer will not permit excess liquid. Do not use diesel or petroleum-based liquids on the rollers.

Along forms, curbs, headers, walls and other places not accessible to the rollers, thoroughly compact the mixture with hot hand tampers, smoothing irons or with mechanical tampers. On depressed areas, use a trench roller or cleated compression strips under the roller to transmit compression to the depressed areas.

When the bituminous mixture becomes loose and broken, contaminated, or defective as determined by the Engineer, remove, replace and compact with fresh, hot mixture. Remove and replace areas showing an excess or deficiency of bituminous material.

Rollers shall move at a slow but uniform speed with the drive wheels nearest the paver. Continue the rolling to attain the desired density and eliminate roller marks.

The relative compaction requirement for superpave courses that have a nominal compacted thickness of one and one half inches or greater shall not be less than 92.0 percent nor greater than 97.0 percent based on AASHTO T 209 modified by deletion of Supplemental Procedure for Mixtures Containing Porous Aggregate. The type of rollers and their relative position in the compaction sequence shall be the Contractor's option.

402.04 Method of Measurement. Requirements shall be as specified in Subsection 401.04, except as follows:

Superpave asphalt concrete pavement will be paid per ton in accordance with the contract documents.

402.05 Basis of Payment. Requirements shall be as specified in Subsection 401.05, except as follows:

The Engineer will pay for the accepted superpave asphalt concrete pavement at the contract unit price per ton.

The price includes full compensation for preparing the surface; removing and disposing of all existing raised pavement markers and traffic tapes; furnishing the asphalt concrete pavement; spreading, furnishing, applying, and protecting the tack coat; compacting, and finishing the asphalt concrete pavement; sampling; protecting the pavement; and furnishing labor, material, tools, equipment, and incidentals necessary to complete the work.

The Engineer will make payment under:

Pay Item	Pay Unit
Superpave Asphalt Concrete Pavement	Ton

(1) 80% of the contract unit price upon completion of submitting a job-mix formula acceptable to the Engineer; preparing the surface, spreading, and finishing the mixture; and compacting the mixture;

(2) 20% of the contract unit price upon completion of cutting samples from the compacted pavement for testing; placing and compacting the sampled area with new material conforming to the surrounding area; protecting the pavement; and final analysis.

The Engineer will pay for cold planing in accordance with and under Section 415 – Cold Planing of Existing Pavement.

The Engineer will pay for adjusting existing frames and covers and valve boxes in accordance with and under Section 604 – Manholes, Inlets and Catch Basins and Section 626 – Manholes and Valve Boxes for Water and Sewer Systems."

END OF SECTION 402

PROPOSAL SCHEDULE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
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
312.0100	Hot Mix Glassphalt Base Course	1650	Ton	$_____	$_____
402.0400	Superpave Asphalt Concrete Pavement	5000	Ton	$_____	$_____
414.0110	Excavation of Weakened Pavement Areas	750	Cu. Yd.	$_____	$_____
415.0110	Cold Planing of Existing Pavement	L.S.	L.S.	L.S.	$_____
603.0100	Clean Existing Culverts and Drainage Structures	F.A.	F.A.	F.A.	$ 10,000.00
606.3131	Guardrail, Type 3 W-Beam with Strong Post (6-Ft. Post)	L.S.	L.S.	L.S.	$_____
606.7100	Terminal Section, Modified Type G	L.S.	L.S.	L.S.	$_____
606.7300	Terminal Section, Type Fleat-350	L.S.	L.S.	L.S.	$_____
612.0100	Grouted Rubble Paving	L.S.	L.S.	L.S.	$_____
615.0100	16-Inch Milled Rumble Strip, Centerline	L.S.	L.S.	L.S.	$_____
629.1011	4-Inch Pavement Striping (Tape, Type II or Thermoplastic Hot Spray)	L.S.	L.S.	L.S.	$_____

PROPOSAL SCHEDULE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
629.1012	Double 4-Inch Pavement Striping (Tape, Type I or Thermoplastic Hot Spray)	L.S.	L.S.	L.S.	$_____
629.1013	8-Inch Pavement Striping (Tape, Type I or Thermoplastic Hot Spray)	L.S.	L.S.	L.S.	$_____
629.2030	Type C Pavement Marker	L.S.	L.S.	L.S.	$_____
629.2040	Type D Pavement Marker	L.S.	L.S.	L.S.	$_____
630.0110	Panel for Destination Sign	38	Sq. Ft.	$_____	$_____
630.0120	4.00 lbs./ft. Flanged Channel Post for Destination Sign (2 Each)	L.S.	L.S.	L.S.	$_____
631.0110	Regulatory and Warning Signs (10 Sq.Ft. or Less) with Post	L.S.	L.S.	L.S.	$_____
631.0111	Regulatory and Warning Signs (10 Sq.Ft. or Less) without Post	L.S.	L.S.	L.S.	$_____
631.0120	Regulatory and Warning Signs (Greater than 10 Sq.Ft.) with Posts	L.S.	L.S.	L.S.	$_____
632.0110	Reflector Marker (RM-3)	L.S.	L.S.	L.S.	$_____
632.0120	Milepost Marker with Post (Bi-Directional)	L.S.	L.S.	L.S.	$_____
632.0130	Type II Object Marker	L.S.	L.S.	L.S.	$_____
643.0110	Maintenance of Existing Landscape Areas	F.A.	F.A.	F.A.	$ 10,000.00

PROPOSAL SCHEDULE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
645.0100	Traffic Control	L.S.	L.S.	L.S.	$_____
645.2000	Additional Police Officers, Additional Traffic Control Devices, and Additional Advertisements	F.A.	F.A.	F.A.	$ 75,000.00
648.0100	Field-Posted Drawings	L.S.	L.S.	L.S.	$_____
699.1000	Mobilization (Not to Exceed 10 Percent of the Sum of All Items Excluding the Bid Price of this Item and Force Account Items)	L.S.	L.S.	L.S.	$_____

Sum of All Items ..... $ _____

NOTE: Bidders must complete all unit prices and amounts. Failure to do so may be grounds for rejection of bid.

MINUTES OF THE PRE-BID MEETING

PROJECT: Temporary Kapaa Bypass Road Resurfacing
Mile Post 0.07 to Mile Post 2.26
District of Kawaihau, Kauai

PROJECT NO. 5600-02-10M

LOCATION: 1720 Haleukana Street
Lihue, Kauai, Hawaii

DATE & TIME: June 14, 2010 at 9:00 A.M.

IN ATTENDANCE:

Stanford Iwamoto	HDOT – HWY-K
Vicente Vargas	HDOT – HWY-K
Angelo Barcelo	Grace Pacific

The meeting started at 9:00 A.M. Project Manager Stanford Iwamoto began the meeting with introducing the participants from HDOT and a brief overview of the background and scope of work.

The following questions were raised at the meeting:

Question # 1: Will all shoulder areas that are dressed by the contractor need to be hydro-mulched?
Response: Yes, hydro-mulch all shoulder areas to be dressed. This work shall be considered incidental to various contract items. HWY-K will amend General Note No. 11 of Plan Sheet No. 3.

Question # 2: General Note No. 13 of Plan Sheet no. 3, states that existing drainage system will be functional at all times during construction. Will the contractor be required to make existing drainage system functional even though locations are not called out on the plans?

Response: No. Unless called out on the plans, the contractor is not required to make drainage systems functional. The contractor is required to keep working drainage systems functional.

Question # 3: General Note No. 8 of Plan Sheet No. 3, states that all lanes shall be open to traffic during the hours of 6:30 A.M to 6:00 P.M. Since lane closures will only be allowed at night, what are the hours allowed for night work?

Response: HWY-K will amend General Note No. 8 of Plan Sheet No. 3 and Section 107 of the Special Provisions to call out night work requirements.

Question # 4: Reference to General Note No. 17 of Plan Sheet No. 3, will the contractor be required to correct ponding areas?

Response: Yes, Contractor needs to correct water ponding areas as directed by the Engineer. HWY-K reiterated subsection 401.03(I) – HMA Pavement Surface and Thickness Tolerances.

Question # 5: Are there any existing reference survey monuments on this project? If there's any, please provide information/location.

Response: No existing survey monuments found on this project.

Question # 6: Contractor asked about the need to round the tops of fill slopes for dressed areas.

Response: If the dressed area contains a break point, then the area at the break point should be rounded. The typical sections for dressed shulders do not include a break point.

Question # 7: Why no line item for adjustment of utilities to grade?

Response: There are no known adjustments that will be required.

Question # 8: The special provisions include Section 401, Hot Mix Asphalt (HMA) Pavement, why is there no pay item included in the specification?

Response: The project calls for the installation of Superpave Asphalt Concrete Pavement not HMA.

Question # 9: Past experience on the Big Island has shown that 50 gyrations of the Superpave Mix will lead to more bleeding. We recommend using 75 to 100 gyrations.

Response: Noted. HWT-K will amend Section 402 – Superpave Asphalt Concrete Pavement of the special Provisions.

With no further questions or comments, the pre-bid meeting was adjourned at 9:45 A.M.

The minutes of the meeting will be distributed in Addendum No. 1 to the Contract Plans. Contractors will be notified when addendum will be available for pick up.

PRE-BID CONFERENCE ATTENDANCE LIST

PROJECT NO.: PROJECT NAME: TEMPORARY KAPAA BYPASS ROAD RESURFACING Mile Post 0.07 to Mile Post 2.26

DATE: JUNE 14, 2010 TIME: 9:00 AM LOCATION: 1720 HALEUKANA STREET, LIHUE, KAUAI, HAWAII 96766

CALLED BY: STANFORD IWAMOTO

PLEASE PRINT

PARTICIPANT	COMPANY / ORGANIZATION	ADDRESS (Including City and Zip Code)	EMAIL (Print legibly)	PHONE/FAX NUMBERS
1 VICENTE VARGAS	DOT - HWY K	1720 - HALEUKANA ST LIHUE	VICENTE.P.VARGAS@HAWAII.GOV	241-3018
2 Angelou Barcelo	GRACE PACIFIC CORP.	P.O.Box 1525	abarcelo@gracepacificcorp.com	842-3268
3 Stanford Iwamoto	DOT - HWY - K	1720 - HALEUKANA ST. LIHUE	Stanford.m.Iwamoto@hawaii.gov	241-3015
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