Date of Advertisement:
November 4, 2009 in the Herald Newspapers

ADVERTISEMENT FOR BIDS
BOARD OF CHOSEN FREEHOLDERS
CAPE MAY COUNTY – NEW JERSEY

Notice is hereby given that sealed proposals addressed to Stephen O'Connor, County Administrator, will be received up to **2:00 P.M.** prevailing time, on **Tuesday, November 24, 2009,** at which time they will be publicly opened and read at the William E. Sturm, Jr. Administration Building, 4 Moore Road, Crest Haven Complex, Cape May Court House, New Jersey, for the following:

"2009 SUBSTRUCTURE AND SUPERSTRUCTURE CONCRETE REPAIRS AVALON BOULEVARD (CR 601) BRIDGE OVER INGRAMS THOROFARE"

Proposal forms, instructions to bidders, specifications and other bidding documents may be obtained upon payment of a **$100.00 Charge (non-refundable)** at the office of the County Engineer, Dale M. Foster, (609) 465-1035, during normal office hours at the above address.

The Board reserves the right to reject any or all proposals in whole or in part and to waive such informalities as may be permitted by law.

Bidders are required to comply with the requirements of N.J.S.A.10:5-31 Et.Seq. and N.J.A.C. 17:27: 27.

Bids must be made on standard proposal form in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes bearing the name and address of the bidder and marked **"**2009 SUBSTRUCTURE AND SUPERSTRUCTURE CONCRETE REPAIRS, AVALON BOULEVARD (CR 601) BRIDGE OVER INGRAMS THOROFARE**"** on the outside, addressed to Stephen O'Connor, County Administrator, Administration Building, 4 Moore Road, Crest Haven Complex, Cape May Court House, New Jersey 08210, and must be accompanied by a cashier's or certified check or a bid bond for not less than 10% of the amount bid, but not in excess of $20,000.00, drawn to the order of Cape May County Treasurer, and be delivered at the place on or before the hour named above.

Stephen O'Connor
County Administrator

Daniel Beyel
Director

PROPOSAL

2009 Substructure and Superstructure Concrete Repairs
Avalon Boulevard (CR 601) Bridge over Ingrams Thorofare
In the Township of Middle

To the Board of Chosen Freeholders of the County of Cape May, New Jersey:

The undersigned hereby declares that __he__ ha__ carefully examined the Advertisement, Specifications, Plans and site of the Project and form of Contract and Bond for the projects as specified and delineated at the price per unit of measure for each scheduled item of work stated in the Schedule of Prices following.

It is understood that the TOTAL PRICE stated by the undersigned in the Schedule of Prices is based on the estimated quantities and will control in the awarding of the Contract. It is further understood that the quantities stated in the Schedule of Prices for various items are estimates only and may be increased or decreased as provided in the Specifications.

SCHEDULE OF PRICES
BASE BID

Item No.	DESCRIPTION	Unit Measure	Quantity	Unit Price $	Amount $
1	Mobilization	LS	1		
2	Construction Signs	SF	327		
3	Drums	Unit	60		
4	Breakaway Barricades	Unit	10		
5	Traffic Control Truck with Mounted Crash Cushions	Unit	1		
6	Maintenance & Protection of Traffic	LS	1		
7	Repair Spalled Concrete, Piers	SF	917		
8	Repair Spalled Concrete, Beam	SF	268		
9	Repair Spalled Concrete, Beam End	SF	451		
10	Repair Spalled Concrete Diaphragms	SF	102		

TOTAL PRICE (Base Bid)_____ $_____

_____ Date_____

Firm Name of Bidder

PROPOSAL (Continued)

2009 Substructure and Superstructure Concrete Repairs
Avalon Boulevard (CR 601) Bridge over Ingrams Thorofare
In the Township of Middle

Alternate Pay Items

Item No.	DESCRIPTION	Unit Measure	Quantity	Unit Price $	Amount $
11	Temporary Traffic Signal	LS	1		
12	Conduit Installation	LF	2,480		

TOTAL PRICE of BASE BID + Alternate Pay Items_____

_____$_____

_____ Date_____

Firm Name of Bidder

PROPOSAL (Continued)

2009 Substructure and Superstructure Concrete Repairs
Avalon Boulevard (CR 601) Bridge over Ingrams Thorofare
In the Township of Middle

Accompanying this proposal is a certified or cashier's check or bid bond made payable to Cape May County Board of Chosen Freeholders for not less than ten (10) percent of the amount bid, but not more than $20,000, which the undersigned agree is to be forfeited as liquidated damages and not as a penalty if the Contract is awarded to the undersigned and the undersigned shall fail to execute the Contract for the Project and furnish the bond required within the stipulated time.

The undersigned is (an Individual) (a Corporation) (a Partnership) under the laws of the State of _____,_____

having principal offices at _____

Signed by _____ Date _____

Name _____

Firm _____

Address _____

_____

_____

Telephone No. _____

Fax No. _____

_____ Date_____

Firm Name of Bidder

CAPE MAY COUNTY
DEPARTMENT of PUBLIC WORKS
Office of the COUNTY ENGINEER
4 Moore Road
Cape May Court House, N.J. 08210-1601
(609) 465-1035 □ Fax: 465-1418

DANIEL BEYEL
Freeholder

DALE M. FOSTER
Engineer

November 13, 2009

Memo To: Prospective Bidders

From: Dale M. Foster, PE, County Engineer

Re: **2009 SUBSTRUCTURE AND SUPERSTRUCTURE CONCRETE REPAIRS**
AVALON BOULEVARD (CR601) BRIDGE OVER INGRAMS THOROFARE
TOWNSHIP OF MIDDLE
CAPE MAY COUNTY, NJ
ADDENDUM NO. 1

Addendum No. 1 has been issued to the Contract Documents for the referenced project. The revision listed shall be made to the Contract Documents issued for the receipt of bids. This addendum shall become part of the total contract.

Please note that Addendum No. 1 changes the receipt of bids from 2:00 P.M., Tuesday, November 24, 2009, to **2:00 P.M., Tuesday, December 1, 2009.**

The Bidder shall acknowledge receipt of this Addendum by signing and returning the attached acknowledgement sheet with the Bidder's Proposal.

The County regrets any inconvenience that this Addendum causes.

DMF/df
Enclosures

Cc: Stephen O'Connor, Clerk/Administrator
Purchasing Department

ADDENDUM NO. 1

The revisions listed below shall become part of the contract, due consideration to these revisions shall be made by the Contractor in preparing their bid for the project. The Contractor shall acknowledge receipt of this Addendum by signing and returning the attached sheet with the Contractor's Proposal. Proposals not including a signed copy of the attached sheet will not be considered.

THE FOLLOWING CHANGES SHALL BE MADE TO THE ADVERTISEMENT FOR PROPOSALS:

The first paragraph of the Advertisement for Proposals is revised to read as follows:

Notice is hereby given that sealed proposals addressed to Stephen O'Connor, County Administrator, will be received up to **2:00 P.M.** prevailing time, on **Tuesday, December 1, 2009,** at which time they will be publicly opened and read at the William E. Sturm, Jr. Administration Building, 4 Moore Road, Crest Haven Complex, Cape May Court House, New Jersey, for the following:

"2009 SUBSTRUCTURE AND SUPERSTRUCTURE CONCRETE REPAIRS AVALON BOULEVARD (CR 601) BRIDGE OVER INGRAMS THOROFARE"

THE FOLLOWING CHANGES SHALL BE MADE TO THE PROPOSALS:

Page P1 of 3 of the Proposal, the following Item Nos. are added after Item No. 10:

Item No.	Description	Unit	Contract Quantity	Unit Price	Amount
11	Milling, 2" Depth	Square Yard	150		
12	Dense Graded Aggregate Base Course, 6" Thick	Square Yard	40		
13	Superpave HMA 9.5H76 Surface Course, 2" Thick	Ton	25		
14	Superpave HMA 12.5H76 Intermediate Course, 2" Thick	Ton	5		
15	Superpave HMA 25M64 Base Course, 2" Thick	Ton	8		
16	Abutment Headblock Reconstruction	Linear Foot	56		
17	Roadway Excavation, Unclassified	Cubic Yard	12		

Page P2 of 3 of the Proposal, the following Item Nos. shall be revised to read as noted below:

Item No.	Description	Unit	Contract Quantity	Unit Price	Amount
A-1	Temporary Traffic Signal	Lump Sum	1		
A-2	Conduit Installation	Linear Foot	2,480		

New proposal pages, Page P-1R and Page P-2R are attached and shall be substituted for the original pages as found in the Contract Documents.

THE FOLLOWING CHANGES SHALL BE MADE TO THE SPECIFICATIONS:

Subsection 201.12 – Basis of Payment, Page 32: The following is added:

"SECTION 202 - ROADWAY EXCAVATION

202.15 Basis of Payment.

Payment will be made under:

Pay Item	*Pay Unit*
ROADWAY EXCAVATION, UNCLASSIFIED	*CUBIC YARD*
MILLING, VARIABLE DEPTH	*SQUARE YARD*

DIVISION 300 – BASE COURSES

SECTION 301 - SOIL AGGREGATE BASE COURSE AND DENSE-GRADED AGGREGATE BASE COURSE

301.10 Basis of Payment. *Add the following:*

Pay Item	*Pay Unit*
DENSE GRADED AGGREGATE BASE COURSE, 6" THICK	*SQUARE YARD*

DIVISION 400 – SURFACES COURSES

SECTION 404 – HOT MIX ASPHALT (HMA)

404.01 Description.

The entire subsection is changed to:

This work shall consist of the construction of base course, intermediate course, and/or surface course of HMA; the construction of HMA wedge strip; the treatment and/or sealing of joints and cracks in HMA surface course and portland cement concrete surface course before an overlay; the sealing of saw cuts in HMA overlays constructed over existing portland cement concrete pavement, previously overlaid portland cement concrete pavement and/or composite pavement; and the repair of existing pavement.

404.03 Equipment.

Add the following:

The plant and equipment shall consist of one or more HMA plants, HMA pavers and rollers, sufficient vehicles for transporting HMA mixtures, small tools, and all other equipment necessary for the construction of the HMA base, intermediate, and surface courses, wedge strips, and for conditioning or repairing the existing or previously constructed base or intermediate course.

404.06 Vehicles for Transporting HMA Mixtures.
THE ENTIRE SUBSECTION IS CHANGED TO:

The mixture shall be transported from the mixing plant to the Project in trucks equipped with tight, clean bodies, which may be lightly coated with soap or lime solution, or other such non-petroleum-based release agent. Under no circumstance shall a petroleum-based product be used as a release agent.

The trucks shall be permanently equipped with an airfoil that is capable at any speed or under any weather conditions to deflect air over the tarp and to prevent air from going under the tarp. The airfoil will be affixed no more than 2 feet in front of the tarp roll and be at least as high as the top of the tarp roll.

Each truckload shall be covered immediately after loading at the plant with a waterproof tarpaulin of such size to protect the mixture from the weather. The tarpaulin shall be able to withstand normal handling and placement temperatures of up to 400 ºF without endangering the structural integrity and serviceability of the fabric. The tarpaulin shall also comply with one of the following:

1. *A heavyweight tarpaulin to completely drape the load. The heavyweight tarpaulin shall have a minimum weight of 18 oz./yd^2 and shall be a minimum of 2 feet wider and 4 feet longer than the truck body. The heavyweight tarpaulin shall securely meet or overlap the top of the tailgate and be securely held in place so as to prevent air from lifting the tarp during transport.*
2. *A tarpaulin equipped with side and back flaps sufficient to lap down outside along the sides and rear of the truck bed a minimum of 12 inches. The tarpaulin shall be secured by tie downs at a maximum of 5 feet spacing along the sides and rear of the truck.*

The truck bodies shall be insulated or heated as necessary, to ensure delivery of the mixture at the specified temperature. Any truck that: causes excessive segregation of the mixture by its suspension or other contributing factors; leaks; causes delays; does not have an airfoil; or does not have an approved tarpaulin shall be removed from the work until such conditions are corrected and the truck is presented for inspection to the Engineer. The Engineer may require that all vehicles for transporting HMA mixture to be used by the contractor be made available for inspection at the plant laboratory prior to any shipments of materials.

404.16 Transportation and Delivery of Mixture. *Add the following:*

Before the truck leaves the plant, the driver shall obtain a weigh ticket from a fully automatic scale. Before unloading, the driver shall submit for each truckload a legible weigh ticket that includes the following:

1. *Name and location of the HMA plant.*
2. *Project title.*
3. *Load time and date.*
4. *Truck number.*
5. *Mix designation.*
6. *Plant lot number.*
7. *Tare, gross, and net weight.*

A certified weighmaster shall sign and affix a seal to the weigh tickets.

In the event of breakdown of an automatic printer system, the Engineer will accept weigh tickets showing the tare, gross, and net weight of each truck, as entered and certified by a

weighmaster for a period not exceeding the necessary repair time as certified by a licensed repairman.

404.17 Spreading and Finishing. *SUBPART 1. "LONGITUDINAL JOINTS" IS CHANGED TO:*

1. ***Longitudinal Joints.*** *All longitudinal joints shall be cleaned free from dust and coated with a uniform application of tack coat in a separate application before coating the surface upon which the HMA is to be placed. For echelon paving the longitudinal joints need not be tacked.*

   The paving shall be done with the spring loaded end plates of the paver in the "down" position. When constructing the first lane, care shall be exercised in rolling so as not to displace the line and grade of the edges of the HMA. The longitudinal joint in one layer shall offset that in the layer immediately below by approximately 6 inches. The joint in the surface course shall be offset from the lane lines by 6 inches except for the centerline of a roadway in which the joint shall fall between the double yellow traffic stripes.

   Paving, compaction and the supply of material shall proceed at a uniform rate with minimal or no stopping.

   If a single paver does not spread the HMA material the entire width of the roadway, two pavers shall be used provided that the rate of production of HMA material can be maintained. The second unit shall follow within 300 feet of the first unit in echelon, so as not to permit cooling of the longitudinal joint between the two lanes. If echelon paving is to be utilized, the distance that the screed and end gate of the trailing paver shall extend over the uncompacted HMA layer behind the first paver shall be 1 inch or less. The inside end gate of the second paver must be set at the same level as the bottom of the screed plate of the first paver. Raking of the joint is not needed.

   A wedge joint shall be constructed when traffic is to be maintained and lift thickness is greater than $2^1/_4$ inches. A vertical edge joint will be permitted for lift thickness $2^1/_4$ inches or less when traffic has to be maintained. For lift thickness greater than $2^1/_4$ inches and traffic is not required to be maintained, a vertical edge shall be utilized.

   Longitudinal joints shall be constructed utilizing one of the following methods:

   A. ***Vertical Edge Joint.*** *The HMA material being placed in the abutting lane shall be tightly crowded against the vertical face of the previously placed HMA layer. The paver shall be positioned so that in spreading, the material overlaps the edge of the lane previously placed by 1 to 2 inches and shall be left sufficiently high to allow for compaction. In general, the height of the uncompacted HMA above the compacted HMA shall be $^1/_4$ inch for each 1 inch of compacted mix. When compacted, the new mat at the joint shall be even or slightly higher (Maximum 1/8 inch) than the previously placed adjoining mat. If the newly compacted mat results in a depression at the joint of $^1/_8$ of an inch or more lower than the previously placed adjacent HMA layer, all paving operations shall cease until corrective action is taken by the Contractor to prevent re-occurrence. For all longitudinal joints that do not meet this requirement, the Contractor shall saw joints according to dimension guidelines of Subsection 404.19 and seal with an approved sealer.*

   B. ***Wedge Joint.*** *The sloped plate of the paver shall produce a wedge edge having a face slope of 3H:1V. The bottom of the sloped plate shall be mounted 1 inch above the existing surface. The plate shall be interchangeable on either*

side of the screed. The Contractor shall maintain the wedge configuration under traffic conditions.

All loose material shall be removed from the traveled way before opening to traffic. The rolling operation of the adjoining lane shall proceed as indicated in subpart A above.

To assure a true line, the paver shall closely follow lines or markings placed along the joint for alignment purposes. All longitudinal joints shall be constructed parallel to the centerlines within a tolerance of plus or minus 3 inches for every 100 linear feet. If this tolerance is not met, the mat shall be cut back to conform. The width and depth of overlapped material shall be kept uniform at all times. Overlapped material shall be luted back, pushing the material off of the cold HMA and onto the hot HMA mat directly over the joint. In no case shall excess material be broadcast across the new layer. All excess material shall be removed.

Add the following:

Paving Plan. *At least 20 days before beginning placing the HMA surface course, submit a detailed plan of operation to the Engineer for approval that includes the following:*

1. *Asphalt paving construction technologist (APCT), certified by the Society of Asphalt Technologists of New Jersey, Inc. The Department will accept the equivalent certification by the Mid-Atlantic Regional Technician Certification Program.*
2. *Size and description of crew.*
3. *Number, type, and model of equipment.*
4. *Manufacturer's recommendations for heating and applying joint sealant.*
5. *Paving procedures for maintaining continuous operation as specified in 404.16.*
6. *Manufacturer's recommended laydown temperature for modified binders.*
7. *Paving sequence. Ensure that the HMA surface course is constructed for the full width of the traveled way, shoulder, and auxiliary lanes as a single paving operation.*
8. *Schedule, hours of operation, and production rates for the Project.*
9. *Plant locations.*
10. *Method of maintaining HMA temperature during transportation.*
11. *Method of constructing and compacting joints as specified in 404.17.*
12. *Quality control plan outlining the use of the thin lift nuclear density gauge, quality control cores, and the control of the compaction process.*

Do not begin paving until the Engineer approves this plan. Submit an adjusted pavement plan before making adjustments to the paving operation.

404.18 Compaction. *The following is added after the fourth paragraph:*

Care shall be taken to prevent lateral displacement of the unconfined edge during the compaction operation. The edge of the drums of vibratory or static wheel rollers shall extend over the free edge of the mat by at least 6 inches. When compacting the joint, while paving the adjacent lane, the roller shall be placed on the newly placed HMA and overlap the joint by a

distance of approximately 6 inches; however this does not prohibit compaction from the previously placed HMA.

THE FIFTH PARAGRAPH IS CHANGED TO:

Alternate trips of the roller shall be terminated in stops approximately 2 feet from the preceding stop. During the compaction process rollers compacting the mat behind the lead paver shall maintain approximately 6 inches of uncompacted material adjacent to the second paver. After mix from the second paver is placed against the uncompacted edge of the mat from the first paver, the rollers shall compact the HMA on both sides of the joint.

The Contractor shall submit a plan, to ensure proper compaction of the wedge edge, for the Resident Engineer's approval prior to the commencement of paving operations.

THE FOLLOWING IS ADDED AFTER THE ELEVENTH PARAGRAPH:

After compaction has been completed, the pavement shall be free of all visible defects such as segregation, bleeding, ruts, ridges, roller marks, cracking, tearing, raveling, open or segregated transverse or longitudinal joints, depressed or raised areas around manholes or raised areas around inlets in the Traveled Way or any other defects, as determined by the Resident Engineer. All visible defects shall be repaired to the satisfaction of the Resident Engineer at no additional cost to the State.

At the discretion of the Resident Engineer where it is deemed to be impractical to repair such visible defects, a payment reduction due to nonconformance will be applied according to Subsection 404.26.

ADD THE FOLLOWING:

Any references to mandatory test strip are deleted and are not a requirement of this project.

The Contractor is required to submit for approval a quality control plan at least two (2) weeks to the start of paving operations.

The Contractor shall provide and maintain in good condition equipment and test apparatus to that listed in AASHTO T238 and T239 when the Pay Item "Nuclear Density Gauge" appears in the Proposal. When the Pay Item "Nuclear Density Gauge" is listed in the Proposal, the Contractor shall provide for the Department's exclusive use and for the duration of the Project a soil/moisture nuclear density gauge calibrated to the manufacturer's specifications, and with the following minimum features/capabilities:

(1) Conformance to AASHTO T 238,
(2) Backscatter and direct transmission modes,
(3) 8-inch minimum length of probe,
(4) Automatic warm-up and self test,
(5) Automatic data storage and data transfer features, including an RS232 interface cable, specifically configured to transfer data from the density gauge to the microcomputer system and with data communication software,
(6) Count times of 0.25, 1.0, and 4.0 minutes,
(7) 0.25 pounds per cubic foot dry density precision in direct transmission at 120 pounds per cubic foot and at 1.0 minute, with plus or minus 0.3 percent accuracy,
(8) 0.32 pounds per cubic foot moisture precision at 1.0 minute, with plus or minus 2.0 percent accuracy,
(9) Rechargeable batteries and recharger, and

(10) Type A certified package.

The gauge provided shall be either:

(1) Purchased by the Contractor under the Contractor's United States Nuclear Regulatory Commission (USNRC) License, or

(2) Leased from the gauge manufacturer on the Department's USNRC License. Gauges shall not be purchased by the Contractor on the Department's USNRC License. All calibration and servicing of the gauge, other than routine wipe tests, and all shipping costs shall be the Contractor's responsibility.

The Contractor shall provide a person that is currently certified by the manufacturer in the use and operation of the nuclear density gauge. The certification shall be provided to the Engineer at least two (2) weeks prior to the use of the nuclear density gauge on the project. The certified person shall be on the site whenever grading and paving operations on being conducted.

SECTION 406 – SUPERPAVE HOT MIX ASPHALT COURSES

406.04 Plant Laboratory.

THE ENTIRE SUBSECTION IS CHANGED TO:

The plant laboratory for Superpave HMA shall be in accordance with Subsection 404.05 of the NJDOT Standard Specifications. A Superpave gyratory compactor conforming to AASHTO T 312 shall be provided instead of the Marshall Method equipment required by AASHTO T 245. The material will be compacted to the number of design gyrations (N_{des}) as required below.

Gyratory Compaction Effort for Superpave HMA Mixtures

Compaction Level	ESAL's (millions)	$N_{initial}$	N_{design}	$N_{maximum}$
L	< 0.3	6	50	75
M	0.3 to < 3	7	75	115
H	3 to < 30	8	100	160
V	≥ 30	9	125	205

Note: Design ESAL's are anticipated project traffic level expected on the design lane over a 20-year period.

406.09 Spreading and Finishing.

THE ENTIRE SUBSECTION IS CHANGED TO:

The spreading and finishing shall be in accordance with Subsection 404.17 of the NJDOT Standard Specifications. The minimum and maximum lift thickness allowed shall be in accordance with the table below.

Limits on Permissible Lift Thickness

Nominal Maximum Size Aggregate (mm)	*Minimum Lift Thickness in. (mm)*	*Maximum Lift Thickness in. (mm)*
37.5	*4 (100)*	*6 (150)*
25	*3 (75)*	*6 (150)*
19	*2.25** (60)*	*4.5 (115)*
12.5	*1.5* (40)*	*3.0 (75)*
9.5	*1.5 (40)*	*2.0 (50)*

***Optimum lift thickness is 2.0"**
****Optimum lift thickness is 2.5"**

406.12 Air voids acceptance plan. *This subsection is replaced by the following:*

The in-place air voids of each mixture in a completed lot shall be a minimum of 2 percent and a maximum of 8 percent. Conformance will be determined on the basis of the average of five air voids measurements for each lot of approximately 10,000 square yards of pavement surface area. Air voids will be determined from 6-inch diameter drilled cores tested according to AASHTO T 166 and T 209. The pay quantity for each nonconforming lot will be reduced according to the following table:

REDUCTION PER LOT DUE TO NONCONFORMANCE TO AIR VOIDS REQUIREMENTS

LOT AVERAGE AIR VOIDS (FIVE SAMPLES)	***REDUCTION PER LOT (PERCENT OF EACH LOT)***
0.0 TO 1.4	*20*
1.5 TO 1.9	*10*
2.0 TO 8.0	*0*
8.1 TO 9.0	*5*
9.1 TO 10.0	*10*
OVER 10.0	*20*

406.13 Surface course rideability requirements. *This subsection is replaced by the following:*

The paving operation is acceptable if the surface course is in substantial conformity with 1/8 inch in 10 feet surface tolerance. Should the surface be found not in conformity, the resident engineer may direct that paving operations be discontinued until mutually acceptable paving methods or equipment is utilized. Additional compensation, extension of contract time, or other concession will not be permitted because of revised methods or equipment necessary to produce a Superpave HMA surface in substantial conformity with a 1/8 inch in 10 feet surface tolerance.

406.14 Thickness requirements. *This subsection is replaced by the following:*

Upon completion of the Superpave Hot Mix Asphalt paving, the Engineer will obtain cores from the finished pavement at random locations.

The thickness requirements contained herein shall apply only when each component Superpave hot mix asphalt mixture in the pavement structure is specified to be a uniform thickness, when such uniform thickness of Superpave Hot Mix Asphalt mixtures are specified.

The combined total thickness of the mixture or mixtures shall be measured to determine compliance with the governing acceptance limit shown in Table 406-1. In addition, the surface course shall be measured to determine compliance with a minimum thickness requirement using an acceptance limit of 1.25 inches. Results of this check on surface course minimum thickness will be used solely to determine whether a remove and replace or an overlay condition exists, not for payment reduction.

TABLE 406-1 THICKNESS ACCEPTANCE LIMITS

SPECIFIED OR TOTAL PLAN THICKNESS (INCHES)	***ACCEPTANCE LIMIT (INCHES)***
1.5	*1.25*
2.0	*1.70*
2.25	*1.90*
3.0	*2.60*
4.0	*3.50*
4.5	*3.95*
5.0	*4.40*
5.5	*4.85*
6.0	*5.30*
OVER 6.0	*SPECIFIED THICKNESS LESS 0.7*

Conformance to thickness requirements will be determined in lots consisting of approximately 10,000 square yards or less. Areas consisting of different combinations of Superpave Hot Mix Asphalt mixtures or thickness will not be included in the same lot.

A thickness lot shall have not more than 25 percent of the lot area, as determined from Table 406-2, less than the governing acceptance limit for total thickness shown in Table 406-1.

The acceptance of a thickness lot will be determined from thickness measurements of five drilled cores obtained by the engineer for each lot. Each core will be removed from a random location within each lot and shall be a minimum of 4 inches in diameter. The total core thickness and the thickness of each component Superpave Hot Mix Asphalt mixture contained therein will be determined in accordance with Section 990, NJDOT B-4.

When variations in total thickness cause more than 25 percent of the areas of a lot to be less than the governing acceptance limit shown in table 406-1, the lot is unacceptable and shall be removed and replaced or overlaid. However, should the percent of lot deviating from the thickness acceptance limit not exceed 45 percent, upon written request, the lot may be left in place without being overlaid provided that the lot payment will be reduced in accordance with table 406-2.

The percent of lot area less than the applicable acceptance limit shall be determined from the calculated value for the term QL.

The term QL is here defined as:

$$QL = \frac{\textbf{AVERAGE LOT THICKNESS - THICKNESS ACCEPTANCE LIMIT}}{\textbf{RANGE}}$$

Where average lot thickness is the average of the total thickness measurements obtained from the five lot cores and range is the absolute difference between the smallest and largest total thickness measurements obtained from the five lot cores.

TABLE 406-2 REDUCTION PER LOT DUE TO NONCONFORMANCE TO THICKNESS REQUIREMENTS

QL EQUAL TO OR GREATER THAN	*LESS THAN*	*PERCENT OF LOT AREA OUTSIDE THICKNESS ACCEPTANCE LIMIT*	*REDUCTION PER LOT, PERCENT (SEE NOTE 1)*
0.30	*--*	*0-25*	*NONE*
0.23	*0.30*	*26-30*	*5*
0.17	*0.23*	*31-35*	*10*
0.11	*0.17*	*36-40*	*20*
0.06	*0.11*	*41-45*	*50*
--	*0.06*	*GREATER THAN 45*	*(SEE NOTE 2)*

Note 1 - percent reductions are not applicable when the term QL is calculated to determine if the surface course complies with the minimum thicknesses.
Note 2 - remove and replace or overlay.

The term QL shall also be calculated for the Superpave HMA surface course of each lot independently using the core thickness values for that course and a minimum thickness acceptance limit of 1.25 inches. When the QL value, so calculated, is less than 0.23 indicating that more than 30 percent of the surface course is outside the minimum thickness acceptance limit of 1.25 inches, the surface course in that lot shall be removed and replaced or overlaid, and any reduction for that lot based on total thickness requirements shall not be applied.

When an unacceptable lot is overlaid, the overlay shall be of the surface course mixture specified for that lot and shall be a minimum of 3 times the nominal maximum size of the Superpave HMA surface course.

The overlaid or replaced lot is only that material placed up to the specified total thickness of the combined mixtures. For an overlaid or replaced lot, the quantity of material shall be determined using the computed average weight of the mixture, the area of the lot and the difference between the specified total thickness and the average thickness of the five lot cores.

406.18 Basis of Payment. *The second paragraph is changed to:*

Pay Adjustments for air voids, rideability, and thickness will be made according to Subsections 406.12, 406.13, and 406.14, respectively."

406.19 Basis of Payment.

"Payment will be made under:

Pay Item	*Pay Unit*
SUPERPAVE HOT MIX ASPHALT 9.5H76 SURFACE COURSE, 2" THICK	*TON*
SUPERPAVE HOT MIX ASPHALT 25M64 BASE COURSE, 3" THICK	*TON*
SUPERPAVE HOT MIX ASPHALT 12.5H76 INTERMEDIATE COURSE, 2"THICK	*TON*

Tack Coat and Prime Coat will not be measured for payment and the cost of furnishing and applying Tack Coat and/or Prime Coat shall be included in the cost of the various hot mix asphalt pay items found in the Proposal."

Subsection 523.02 – Materials, Page 33: The following is added:

"Reinforcement Steel Couplers 915.01
Elastomeric or Fabric Pad 919.02
Bonding Compound..... 912.06
Materials for concrete shall conform to Subsection 501.02.
Materials for Automatic End Welded Studs shall conform to Subsection 503.10.
Field anti-corrosion coating of exposed reinforcement bars or touch up of damaged epoxy coated reinforcement shall conform to Subsection 912.06."

Subsection 523.05 – Description, Page 35: The following Paragraph is added to this Subsection:

"*C. Abutment Headblock Reconstruction.*

This work shall consist of removing deteriorated concrete; removing existing reinforcement in headblock; retaining and cleaning existing reinforcement in deck slab; removing fiber joint filler and rubber asphalt joint sealer; addition of new reinforcement steel, joint armor, reinforcement bar couplers, hot poured joint sealer, membrane waterproofing; and all else depicted in the details in the Plans.

The concrete repair shall be a Class A concrete mix capable of obtaining a minimum compressive strength of 3,000 psi within 24 hours and which contains a water-reducing additive. The type of additive shall conform to the requirements of Subsection 905.02. The concrete shall be mixed, placed, finished and cured in accordance with Section 501. Vehicular traffic will not be permitted to travel over the newly placed concrete until the concrete has attained a minimum compressive strength of 3,000 pounds per square inch, unless otherwise authorized in writing by the Engineer.

After removal of concrete, the surfaces of the remaining concrete shall be cleaned of all loose concrete, dust, and other foreign materials, and the exposed reinforcement bars to remain shall be cleaned of adhering particles of concrete, rust and scale by sandblasting or using other suitable methods acceptable to the Engineer. New epoxy coated reinforcement steel bars shall be installed with reinforcement bar couplers. Immediately prior to placement of the new concrete in the headblock area, the surfaces of the concrete and reinforcement steel at the existing deck shall receive a complete, even coating of the bonding compound applied in accordance with the manufacturer's written instructions, and a 1/8" fabric or elastomeric pad shall be placed at the abutment construction joint.

Field anti-corrosion coating of exposed reinforcement bars or touch up of damaged epoxy coated reinforcement shall conform to Subsection 912.06.

The placed concrete shall be finished by troweling, screeding or by a suitable method approved by the Engineer. The finished concrete surfaces shall conform tot eh profile and cross slope of the adjacent roadway. Following installation of concrete and joint armoring, the Contractor shall place a membrane waterproofing sheet vertically at the rear face of the headblock spanning over the construction joint between the existing abutment and newly constructed headblock.

The Contractor is advised that the reconstruction of the abutment headblock will be performed in stages and requires splicing of reinforcement steel using reinforcement bar couplers, welding of joint armor, and overlapping of fabric pad and membrane waterproofing.

The joint armor shall be prepared to receive a full penetration weld in the field during the second stage. The Contractor is required to repair any damage to the galvanizing that may occur during the welding process."

Subsection 523.07 - Method of Measurement, Page 37: The following is added:

"Abutment Headblock Reconstruction will be measured by the linear foot. Removal and disposal of existing headblock and joint material; furnishing and installing steel joint armor with studs, fabric or elastomeric pad, reinforcement bar couplers, reinforcement steel, membrane waterproofing sheet, and epoxy bonding compound; and placing new concrete will not be measured separately for payment."

Subsection 523.08 - Basis of Payment, Page 37: The following is added:

"*Payment will be made under:*

Pay Item	*Pay Unit*
Abutment Headblock Reconstruction	*Linear Foot*

No separate payment will be made for removal and disposal of existing headblock and joint material; furnishing and installing steel joint armor with studs, fabric, reinforcement steel, reinforcement bar couplers or elastomeric pad, membrane waterproofing sheet, and epoxy bonding compound; or for placing new concrete, but the costs thereof will be included in the unit cost for the pay item "Abutment Headblock Reconstruction"."

Section 919 – MISCELLANEOUS, Page 54: The following is added:

"919.02 Bearing Pads. *THE FOLLOWING PARAGRAPH IS ADDED:*

C. Elastomeric Pad. *Elastomeric sheet shall be 1/8 inch with material and physical properties conforming to the requirements of ASTM D2000 for Grade 4, Type B, Class A. Hardness shall be 50 durometer A and tensile strength 2,000 psi."*

THE FOLLOWING CHANGES SHALL BE MADE TO THE PLANS:

On **Sheet 1**, in the INDEX OF DRAWINGS: Add the following after Sheet 21:

SHEET NO.	DESCRIPTION
22	ABUTMENT HEADBLOCK RECONSTRUCTION
23	CONSTRUCTION PLAN

On **Sheet 2**, in the SUMMARY OF QUANTITIES: Add the following after Item No. 10:

Item No.	Description	Unit	Contract Quantity	As-Built Quantity
11	Milling, 2" Depth	Square Yard	150	
12	Dense Graded Aggregate Base Course, 6" Thick	Square Yard	40	
13	Superpave HMA 9.5H76 Surface Course, 2" Thick	Ton	25	
14	Superpave HMA 12.5H76 Intermediate Course, 2" Thick	Ton	5	
15	Superpave HMA 25M64 Base Course, 2" Thick	Ton	8	
16	Abutment Headblock Reconstruction	Linear Foot	56	
17	Roadway Excavation, Unclassified	Cubic Yard	12	

On **Sheet 2**, in the SUMMARY OF QUANTITIES: The ALTERNATE PAY ITEMS are revised to read as follows:

Item No.	Description	Unit	Contract Quantity	As-Built Quantity
A-1	Temporary Traffic Signal	Lump Sum	Lump Sum	
A-2	Conduit Installation	Linear Foot	2,480	

Sheet 21: Add the following Sheets after Sheet 21:

- Sheet 22 – ABUTMENT HEADBLOCK RECONSTRUCTION
- Sheet 23 – CONSTRUCTION PLAN

On **Sheet 23**, in the SUMMARY OF QUANTITIES: Add the following:

Pay Item Description	Unit	Plan Totals	If and Where Directed	Total
Roadway Excavation, Unclassified	Cubic Yard	10	2	12

New Plan Sheets, Sheet 22 and Sheet 23 are attached and shall be included as part of the Contract Plans.

STEPHEN O'CONNOR,
CLERK/ADMINSTRATOR

DANIEL BEYEL,
FREEHOLDER DIRECTOR

ADDENDUM NO. 1 ACKNOWLEDGEMENT

Acknowledgement is hereby made of Addendum No. 1, issued November 13, 2009, received since the issuance of the Contract Documents for **2009 SUBSTRUCTURE AND SUPERSTRUCTURE CONCRETE REPAIRS, AVALON BOULEVARD (CR601) BRIDGE OVER INGRAMS THOROFARE** in the Township Of Middle, Cape May County, NJ. The Contractor shall include this signed sheet with his bid package.

Signature of Bidder: _____

Title: _____

Name of Firm: _____

Address: _____

_____

_____

Date: _____

CAPE MAY COUNTY
DEPARTMENT of PUBLIC WORKS
Office of the COUNTY ENGINEER
4 Moore Road
Cape May Court House, N.J. 08210-1601
(609) 465-1035 □ Fax: 465-1418

DANIEL BEYEL
Freeholder

DALE M. FOSTER
Engineer

December 14, 2009

Memo To: Prospective Bidders

From: Dale M. Foster, PE, County Engineer

Re: **2009 SUBSTRUCTURE AND SUPERSTRUCTURE CONCRETE REPAIRS**
AVALON BOULEVARD (CR601) BRIDGE OVER INGRAMS THOROFARE
TOWNSHIP OF MIDDLE
CAPE MAY COUNTY, NJ
ADDENDUM NO. 3

Addendum No. 3 has been issued to the Contract Documents for the referenced project. The revision listed shall be made to the Contract Documents issued for the receipt of bids. This addendum shall become part of the total contract.

Please note that Addendum No. 3 changes the receipt of bids from 2:00 P.M., Tuesday, December 15, 2009, to **2:00 P.M., Wednesday, January 6, 2010.**

The Bidder shall acknowledge receipt of this Addendum by signing and returning the attached acknowledgement sheet with the Bidder's Proposal.

The County regrets any inconvenience that this Addendum causes.

DMF/df
Enclosures

Cc: Stephen O'Connor, Clerk/Administrator
Purchasing Department

ADDENDUM NO. 3

The revisions listed below shall become part of the contract, due consideration to these revisions shall be made by the Contractor in preparing their bid for the project. The Contractor shall acknowledge receipt of this Addendum by signing and returning the attached sheet with the Contractor's Proposal. Proposals not including a signed copy of the attached sheet will not be considered.

THE FOLLOWING CHANGES SHALL BE MADE TO THE ADVERTISEMENT FOR PROPOSALS:

The first paragraph of the Advertisement for Proposals is revised to read as follows:

Notice is hereby given that sealed proposals addressed to Stephen O'Connor, County Administrator, will be received up to **2:00 P.M.** prevailing time, on **Wednesday, January 6, 2010,** at which time they will be publicly opened and read at the William E. Sturm, Jr. Administration Building, 4 Moore Road, Crest Haven Complex, Cape May Court House, New Jersey, for the following:

"2009 SUBSTRUCTURE AND SUPERSTRUCTURE CONCRETE REPAIRS AVALON BOULEVARD (CR 601) BRIDGE OVER INGRAMS THOROFARE"

STEPHEN O'CONNOR,
CLERK/ADMINSTRATOR

DANIEL BEYEL,
FREEHOLDER DIRECTOR

ADDENDUM NO. 3 ACKNOWLEDGEMENT

Acknowledgement is hereby made of Addendum No. 3, issued December 14, 2009, received since the issuance of the Contract Documents for **2009 SUBSTRUCTURE AND SUPERSTRUCTURE CONCRETE REPAIRS, AVALON BOULEVARD (CR601) BRIDGE OVER INGRAMS THOROFARE** in the Township Of Middle, Cape May County, NJ. The Contractor shall include this signed sheet with his bid package.

Signature of Bidder: _____

Title: _____

Name of Firm: _____

Address: _____

_____

_____

Date: _____