



Joseph H. Vicari, Director
Gary Quinn, Deputy Director
Barbara Jo Crea, Commissioner
Virginia E. Haines, Commissioner
John P. Kelly, Commissioner

Tristin J. Collins, Director, Management & Budget
Jennifer L. Bowens, Purchasing Agent

County of Ocean
Administration Building
101 Hooper Avenue
Toms River, NJ 08754

BID

TRAFFIC MARKING SUPPLIES AND GLASS BEADS

2023

ADVERTISEMENT DATE: June 7, 2023

OPENING: June 27, 2023, 11:00 am

Bid Category: 24- Safety and Protection Equipment and Related Services

NOTICE TO BIDDERS

NOTICE IS HEREBY GIVEN that sealed bids for the furnishing and delivery of **TRAFFIC MARKING SUPPLIES AND GLASS BEADS** for the County of Ocean, will be received by the Purchasing Agent of the County of Ocean on **Tuesday, June 27, 2023 at 11:00 am**, prevailing time.

Bids will be received electronically via the [County's OpenGov Electronic Bid Portal \(https://procurement.opengov.com/portal/oceancounty/\)](https://procurement.opengov.com/portal/oceancounty/)

Specifications and form of proposal are on the **Procurement Portal (Link Above)** or available for viewing in the Department of Purchase, Room #224, Administration Building, 101 Hooper Avenue, Toms River, New Jersey. Direct all inquiries to Jennifer L. Bowens, Purchasing Agent.

Bidders are required to comply with the requirements of N.J.S.A. 10:5-31 et seq. and P.L. 1975 C. 127 (N.J.A.C. 17:27-1 et seq.) regarding equal employment opportunities and with the requirements of P.L. 1977 C.33 regarding corporate and/or partnership ownership.

The right to reject any and all bids is reserved in accordance with applicable law.

By order of the Board of Commissioners of the County of Ocean.

Signed:

JOSEPH H. VICARI, Director

JENNIFER L. BOWENS, Purchasing Agent

CONTACT INFORMATION AND PROJECT TIMELINE

Summary

The purpose of this bid package is to provide the County of Ocean with a Contractor who will supply the goods or services described and specified herein.

Contact Information

For further information regarding these specifications, contact

Jessica Hannold

Buyer

101 Hooper Ave.

Room 224

Toms River, NJ 08753

Email: ocpurchasing@co.ocean.nj.us

Phone: [\(732\) 929-2103](tel:(732)929-2103)

Department:

Engineering

Timeline

Advertising Date	June 7, 2023
Bid Opening Date	June 27, 2023, 11:00am Administration Building, 101 Hooper Ave., Room 119, Toms River, NJ, 08753

IMPORTANT INSTRUCTIONS FOR ELECTRONIC SUBMITTAL

Instructions for Electronic Bid Submission

The County is accepting electronic bid submissions with Open Gov by following these instructions:

Sign up for a FREE account at <https://procurement.opengov.com/portal/oceancounty>

Once you have completed account registration, browse back to this page: [County's OpenGov Electronic Bid Portal \(https://procurement.opengov.com/portal/oceancounty/\)](https://procurement.opengov.com/portal/oceancounty/)

Click on the bid of interest, then click "Draft Response".

Follow the instructions to submit the electronic bid.

It is important to note that this process should be completed well in advance of the bid deadline / bid opening. DO NOT WAIT UNTIL THE LAST MINUTE. The County's electronic submission system will not allow electronic bids to be submitted once the deadline has passed, even if you've already started the process. The deadline is based on the countdown timer found on the ProcureNow bid submission page.

INSTRUCTIONS TO BIDDERS

Bid Opening

All bids will be opened publicly in the Administration Building, Room 119, 101 Hooper Avenue, Toms River, New Jersey, commencing at 11:00 am, prevailing time on Tuesday, June 27, 2023.

Electronic Bid Submissions

Bids must be submitted electronically through Ocean County's Procurement Portal by the date and time stipulated in the Notice to Bidders.

Deadline Instructions

The County will not be responsible for late bids, and no bids will be accepted if received after the time stipulated in the notice to bidders.

Completion of all Documents

Bidders shall complete all documents and acknowledge all terms included with the bid package. All documents should be from this bid package and must not be dated or executed prior to the date of advertising. Failure to follow these instructions is cause for rejection.

NOTE: In order to access any DocuSign forms in this solicitation, you must first click "Draft Response".

Instructions on how to access the forms through DocuSign are available in the Attachments. Please note that in order to view the forms as a .pdf document, you must access DocuSign first. Once you access DocuSign, the option to download, save, print and complete the forms becomes available

Right to Reject

The County reserves the right to reject all bids in accordance with N.J.S.A. 40A:11-13.2, to waive any informalities in the bid and to accept the lowest responsible bid in accordance with applicable law.

Bidder Default

In case of default by the bidder or contractor, the County of Ocean may procure the articles or services from other sources and hold the bidder or contractor responsible for any excess cost occasioned thereby.

Indemnity

The bidder, if awarded a contract, agrees to protect, defend and save harmless the County against any damage for payment for the use of any patented material process, article or device that may enter into the manufacture, construction or form a part of the work covered by either order or

contract, and he further agrees to indemnify and save harmless the County from suits or actions of every nature and description brought against it, for, or on account of injuries or damages received or sustained by any party or parties by, or from any of the negligent acts of the contractor, his servants or agents.

Specifications

It is to be understood by the bidder that this bid is submitted on the basis of specifications prepared by the County and the fact that any bidder is not familiar with these specifications or conditions will not be accepted as an excuse.

Bid Security

NO BID SECURITY

Performance Bond

NO PERFORMANCE BOND

Pricing Proposal

Bidders must use the pricing proposal provided in the bid specifications. Failure to use the pricing proposal in the bid specifications shall be cause for rejection of the bid.

Pricing

Insert prices for furnishing all of the material and/or labor described or required. Prices shall be net, including any charges for packing, crating, containers, etc. and all transportation charges fully prepaid by the contractor F.O.B. destination and placement at locations specified by the County. No additional charges will be allowed for any transportation costs resulting from partial shipments made at the vendor's convenience when a single shipment is ordered.

Payment

Payments will be made upon the approval of vouchers submitted by the successful bidders in accordance with the requirements of the Board of Commissioners and subject to the Board of Commissioners customary procedures. The County will not pay interest or late fees regardless of language provided.

Discrepancy in Pricing

In the event that there is a discrepancy between the unit prices and the extended totals, the unit prices shall prevail. In the event there is an error of the summation of the extended totals, the computation by the OWNER of the extended totals shall govern.

Award Timeframe

Award will be made by Ocean County Board of Commissioners within sixty (60) days after receipt of bids.

Equal or Tie Bids

The County of Ocean reserves the right to award at their discretion to any one of the tie bidders where it is most advantageous for the County to do so, pursuant to N.J.S.A. 40A:11-6.1.

Tax Exempt

The County of Ocean is exempt from any State sales tax or Federal excise tax.

Equivalent Product

For purpose of evaluation where an equivalent product is being furnished, bidder must indicate any variation to our specifications no matter how slight. If no variations are indicated, it will be construed that the bid fully complies with our specifications.

Quantities

Quantities shown are approximate and the County reserves the right to decrease or omit quantities. The County will not consider minimums placed on order quantities. The County also reserves the right to increase quantities to twenty (20) percent of the maximum quantities listed at the unit price bid, in accordance with N.J.A.C. 5:30-11.3.

Delivery of Goods and Services

Delivery shall be made upon receipt of a Purchase Order issued by the Ocean County Department of Purchase, upon which delivery locations and needed quantities shall be indicated.

American Goods and Products

All contractors must comply with the provisions of New Jersey Statute Title 40A:11-18, when applicable.

Market Conditions

Due to the fact that goods provided by this solicitation and the current economic conditions are in a volatile state, the County will allow the Contractor to request a price adjustment outside the normal contract renewal process **only if it can be demonstrated and documented that on a national basis the goods solicited and utilized have experienced a significant cost increase since the date of contract award.**

Such events shall be industry wide and cause all related product prices to be effected. **All price adjustment requests must be in writing and submitted to the Ocean County Purchasing Department for approval.** If approved, the Contractor will provide the County with revised pricing. The Contractor may not request an additional increase for a period of three (3) months from the prior request.

Note: A request for price increase does not guarantee approval.

Assignment

This agreement shall not be assigned without the written consent of the County of Ocean.

NJ One Call

By presenting a bid, contractor declares that he is aware of and, if required, will comply with the requirements of the "Underground Facility Protection Act (Public Law 1994, Chapter 118)" prior to commencing any intended excavation. The telephone number to call is 1-800-272-1000.

Public Works Contractor Registration Act, N.J.S.A. 34:11-56.48 et seq

The bidder must comply with the provisions of "The Public Works Contractor Registration Act", if applicable.

- All named contractors must be registered with the Department of Labor and Workforce Development pursuant to the Public Works Contractor Registration Act at the time the proposal is received, or the proposal will be determined to be non-responsive.
- Any non-listed contractor must be registered with the Department of Labor and Workforce Development prior to physically starting work. It is the responsibility of the General Contractor to insure that all non-listed sub-contractors comply.
- Contractors are encouraged to submit their and all named sub-contractors' Public Works Contractor Registration Certificates with the bid.

Prevailing Wage & Labor Laws

The New Jersey Prevailing Wage Act (P.L. 1963, Chapter 150) and provisions of the State Labor Laws must be complied with by the successful bidder, if applicable. The current Prevailing Wage Rates can be found online at <https://www.nj.gov/labor/wageandhour/prevailing-rates/public-works/currentprevailingwage.shtml>

New Jersey Business Registration Requirements

Pursuant to N.J.S.A. 52:32-44, Ocean County ("Contracting Agency") is prohibited from entering into a contract with an entity unless the bidder/proposer/contractor, and each subcontractor that is required by law to be named in a bid/proposal/contract has a valid Business Registration Certificate on file with the Division of Revenue and Enterprise Services within the Department of the Treasury.

Prior to contract award or authorization, the contractor shall provide the Contracting Agency with its proof of business registration and that of any named subcontractor(s).

Subcontractors named in a bid or other proposal shall provide proof of business registration to the bidder, who in turn, shall provide it to the Contracting Agency prior to the time a contract, purchase order, or other contracting document is awarded or authorized.

During the course of contract performance:

(1) the contractor shall not enter into a contract with a subcontractor unless the subcontractor first provides the contractor with a valid proof of business registration.

(2) the contractor shall maintain and submit to the Contracting Agency a list of subcontractors and their addresses that may be updated from time to time.

(3) the contractor and any subcontractor providing goods or performing services under the contract, and each of their affiliates, shall collect and remit to the Director of the Division of Taxation in the Department of the Treasury, the use tax due pursuant to the Sales and Use Tax Act, (N.J.S.A. 54:32B-1 et seq.) on all sales of tangible personal property delivered into the State. Any questions in this regard can be directed to the Division of Taxation at (609)292-6400. Form NJ-REG can be filed online at <http://www.state.nj.us/reasury/revenue/busregcert.shtml>.

Before final payment is made under the contract, the contractor shall submit to the Contracting Agency a complete and accurate list of all subcontractors used and their addresses.

Pursuant to N.J.S.A. 54:49-4.1, a business organization that fails to provide a copy of a business registration as required, or that provides false business registration information, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000, for each proof of business registration not properly provided under a contract with a contracting agency.

Pay to Play Requirements

Starting in January 2007, all business entities are advised of their responsibility to file an annual disclosure statement of political contributions with the New Jersey Election Law Enforcement Commission (ELEC) pursuant to N.J.S.A. 19:44A-20.27 if they receive contracts in excess of \$50,000 from public entities in a calendar year. Business entities are responsible for determining if filing is necessary. Additional information on this requirement is available from ELEC at 888-313-3532 or at www.elec.state.nj.us.

Statement of Ownership

The provisions of N.J.S.A. 52:25-24.2 applies to all forms of corporations and partnerships, including, but not limited to, limited partnerships, limited liability corporations, limited liability partnerships, and Subchapter S corporations.

Certification of Non-Involvement in Prohibited Activities in Iran

Certification of Non-Involvement in Prohibited Activities in Iran. Pursuant to N.J.S.A. 52:32-58, the proposer must certify that neither the proposer, nor one of its parents, subsidiaries, and/or affiliates (as defined in N.J.S.A. 52:32-56(e)(3)), is listed on the Department of the Treasury's List of Persons or Entities Engaging in Prohibited Investment Activities in Iran and that neither is involved in any of the investment activities set forth in N.J.S.A. 52:32-56(f). If the proposer is unable to so certify, the proposer shall provide a detailed and precise description of such activities. Prior to contract award or authorization, the contractor shall provide the Contracting Agency with a completed Certification on Non-Involvement in Prohibited Activities in Iran.

Certification of Non-Involvement In Prohibited Activities in Russia or Belarus

Pursuant to N.J.S.A. 52:32-60.1, the “person or entity” (as defined in N.J.S.A. 52:32-60.1, et seq) seeking to enter into or renew a contract for the provision of goods or services or the purchase of bonds or other obligations shall certify that it is not “engaging in prohibited activities in Russia or Belarus” (as such term is defined in as defined in N.J.S.A. 52:32-60.1, et seq. If the person or entity is unable to certify, the person or entity shall provide a detailed and precise description of such activities. The N.J.S.A. 52:32-60.1 certification form must be completed prior to contract award and is provided in the specification documents (DocuSign).

Vendors may view the Precluded Entities List Here:

<https://www.nj.gov/treasury/administration/pdf/RussiaBelarusEntityList.pdf>

Insurance Requirements

The contractor shall maintain primary insurance to protect against all claims under Workmen's Compensation, Comprehensive General Liability and Automobile. Except for Workmen's Compensation, all coverage shall apply as primary coverage with respect to any other insurance or self-insurance program afforded to the County. There shall be no endorsement or modification of this coverage to make it excess over other available insurance/coverage; alternatively, if the CGL and umbrella, excess of reinsurance states that it is pro rata, it shall be endorsed to be primary with respect to the County. Primary Coverage shall be subject to approval for adequacy of protection as per the following limits:

Worker's Compensation

1. Limits according to Worker's compensation Laws of the State of New Jersey.
2. Contractor's Liability not less than \$100,000.

Comprehensive General Liability

1. Bodily Injury - \$500,000 per person; \$1,000,000 per occurrence.
2. Property Damage - \$1,000,000 per occurrence.

Comprehensive General Liability Details

Comprehensive Automobile Liability shall include the following:

Business auto liability insurance or its equivalent with a minimum limit of \$1,000,000 per accident and including coverage for all of the following:

- A. Liability arising out of the ownership, maintenance or use of any auto;
- B. Auto non-ownership and hired car coverage.
- C. Contractor's Worker's Compensation, Comprehensive General Liability and
- D. Comprehensive Automobile Liability arising out of subcontractor's operations shall be identical as that listed above.

Proof of Insurance

Copies of each insurance certificate shall be furnished to the County when requested.

AWARD METHOD

Contract will be awarded on a line item basis.

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY

N.J.S.A. 10:5-31 et seq. (P.L. 1975, C. 127)

N.J.A.C. 17:27

GOODS, PROFESSIONAL SERVICE AND GENERAL SERVICE CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union of the contractor's commitments under this chapter and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to make good faith efforts to meet targeted county employment goals established in accordance with N.J.A.C. 17:27-5.2.

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, and labor unions, that it does not discriminate on the basis of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

In conforming with the targeted employment goals, the contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents:

- Letter of Federal Affirmative Action Plan Approval
- Certificate of Employee Information Report
- Employee Information Report Form AA302 (electronically provided by the Division and distributed to the public agency through the Division's website at www.state.nj.us/treasury/contract_compliance)

The contractor and its subcontractors shall furnish such reports or other documents to the Division of Purchase & Property, CCAU, EEO Monitoring Program as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Purchase & Property, CCAU, EEO Monitoring Program for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code at N.J.A.C. 17:27.**

AMERICANS WITH DISABILITIES ACT

Equal Opportunity For Individuals With Disabilities

The CONTRACTOR and the COUNTY do hereby agree that the provisions of title II of the Americans with Disabilities Act of 1990 (the "Act") (42 U.S.C. 12101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the COUNTY pursuant to this contract, the CONTRACTOR agrees that the performance shall be in strict compliance with the Act. In the event that the CONTRACTOR, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the CONTRACTOR shall defend the COUNTY in any action or administrative proceeding commenced pursuant to this Act. The CONTRACTOR shall indemnify, protect and save harmless the COUNTY, its agents, servants and employees from and against any and all suits, claims, losses, demands, or damages of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The CONTRACTOR shall, at its own expense, appear, defend and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the COUNTY'S grievance procedure, the CONTRACTOR agrees to abide by any decision of the COUNTY which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the COUNTY or if the COUNTY incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the CONTRACTOR shall satisfy and discharge the same at its own expense.

The COUNTY shall, as soon as practicable after a claim has been made against it, give written notice thereof to the CONTRACTOR along with full and complete particulars of the claim. If any action or administrative proceeding is brought against the COUNTY or any of its agents, servants and employees, the COUNTY shall expeditiously forward or have forwarded to the CONTRACTOR every demand, complaint, notice, summons, pleading, or other process received by the COUNTY or its representatives.

It is expressly agreed and understood that any approval by the COUNTY of the services provided by the CONTRACTOR pursuant to this contract will not relieve the CONTRACTOR of the obligation to comply with the Act and to defend, indemnify, protect and save harmless the COUNTY pursuant to this paragraph.

It is further agreed and understood that the COUNTY assumes no obligation to indemnify or save harmless the CONTRACTOR, its agents, servants, employees and subcontractors for any claim which may arise out of their performance of this Agreement. Furthermore, the CONTRACTOR expressly understands and agrees that the provision of this indemnification clause shall in no way limit the CONTRACTOR'S obligations assumed in this Agreement, nor shall they be construed to relieve the CONTRACTOR from any liability, nor preclude the COUNTY from taking any other actions available to it under any other provisions of this Agreement or otherwise at law.

INTENT

CONTRACT TERMS

The contract shall be for one (1) year from date of award, or until delivery is complete unless otherwise stated. The County reserves the right to extend the term of the contract pursuant to N.J.S.A. 40A:11-15.

INTENT

The purpose of this bid package is to provide the County of Ocean with a Contractor who will supply the materials described and specified herein.

NO ASSIGNMENT

This agreement shall not be assigned without the written consent of the County of Ocean which consent shall not be unreasonably withheld. Assignee shall promptly prepare and complete such documents as the County shall require.

OWNERSHIP DISCLOSURE

All contractors shall comply with all laws governing the disclosure of all stockholders or partners, as included in N.J.S.A. 52:25-24.2.

BID REVIEW

Bids may be reviewed at the bid opening and results will be made available online through the County's procurement portal once the bid meeting has concluded. Additionally, bid results are available in the Ocean County Purchasing Department on the day following the bid openings for any interested party that may wish to review them.

EVALUATION

The quality of the equipment supplied, their conformity with the specifications, their suitability to requirements, delivery terms, guaranty clauses, price of the materials shall all be taken into consideration. Where equivalent equipment is offered, the County will determine if the proposed item is equal or better than that specified.

AVAILABILITY OF FUNDS

The County's obligation hereunder is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the County for payment of any money shall arise unless, and until funds are made available each year to the Ocean County Purchasing Agent.

MODIFICATIONS AND WITHDRAWALS

Bids may be withdrawn from the bidder prior to the time fixed for opening. No right for withdrawal exists after the bid has been opened. Written request for withdrawal shall be signed by the bidder or proper corporate officers.

USE OF OTHER NAMES AND REFERENCES

Unless otherwise stated, the use of manufacturers' names and product numbers are for descriptive purposes, and establishing general quality levels only. They are not intended to be restrictive. Bidders are required to state exactly what they intend to furnish, otherwise it is fully understood that they shall furnish all items as stated.

QUALITY

The materials and supplies called for herein, shall be the best of their grade and types, prepared according to the best available standards or accepted formulas, and thoroughly tested and subjected to rigid examinations and standardization. Items not meeting these requirements shall be replaced at no cost to the County upon due notice of deficiency.

WARRANTY

Manufacturer's warranty shall apply.

MODEL INFORMATION REQUIRED

The manufacturer, make or exact models proposed as substitutes shall also be submitted on bidder's letterhead with any proposal contended to be "equivalent."

AVAILABILITY AND DELIVERY

The bidder should indicate the number of days required for the delivery After Receipt of Order (A.R.O.). If not submitted with the bid proposal, the County reserves the right to request this information prior to the award of contract.

TRANSITIONAL PERIOD

In the event services are terminated by contract expiration or by voluntary termination by either the Contractor or the County of Ocean, the Contractor shall continue all terms and conditions of said contract for a period not to exceed one (1) month at the County's request.

CURRENT BID RESULTS

If there is a current contract in place for this bid, those results may be obtained by accessing our legacy portal at the below link:

<http://webhost.co.ocean.nj.us/ocbidportal.nsf>

Once you have clicked the link, click "Formal Bids", "Awarded Formal Bids". There you will be able to see all active contracts.

SPECIFICATIONS AND SCOPE OF WORK

SCOPE OF WORK

See "Attachments", "Project Documents" for detailed specifications.

VENDOR QUESTIONNAIRE

BID DOCUMENTS TO BE EXECUTED*

Documents include:

- Signature Page
- Non Collusion Certification
- Affirmative Action Questionnaire
- **Statement of Ownership (N.J.S.A. 52:25-24.2) (Mandatory Document)**
- Prohibited Russia-Belarus Activities & Iran Investment Activities

FAILURE TO SUBMIT ANY OF THESE DOCUMENTS MAY BE CAUSE FOR REJECTION OF YOUR PROPOSAL.

All documents should be from this proposal package as forms change frequently and the most updated forms are provided in this specification. The forms must not be dated or executed prior to the date of advertising.

NOTE: For detailed instructions on how to complete the forms via DocuSign, please access the "Instructions for Completing Forms in DocuSign" document available in the Attachments.

Please note: The County's preferred method of submission is DocuSign.

[Click here to go to the form](#)

*Response required

Copy of Bidder's Certificate of Employee Information Report

Within seven (7) days after receipt of the notification of intent to award the contract or receipt of the contract, whichever is sooner, a Contractor should present one of the following to the County of Ocean:

- (a) An existing federally approved or sanctioned affirmative action program.
- (b) A New Jersey Certificate of Employee Information Report Approval.
- (c) If the Contractor cannot present "a" or "b", the Contractor is required to submit a completed Employee Information Report (Form AA302). This form will be made available to the Contractor by the County of Ocean.**

QUESTIONS BELOW MUST BE ANSWERED BY ALL CONTRACTORS ON THE AFFIRMATIVE ACTION DOCUMENT:

1. Do you have a Federally approved or sanctioned Affirmative Action Program?

If yes, please upload a photocopy of such approval.

2. Do you have a State of New Jersey "Certificate of Employee Information Report" approval?

If yes, please upload a photocopy of such certificate.

Please note, the only acceptable file forms are as follows:

Documents (doc, docx, rtf, txt, xls, xlsx, pdf)

Images (jpg, png, bmp, tif)

Copy of Bidder's New Jersey Business Registration Certificate

Please use this area to upload your company's BRC.

Use this link to verify your company's BRC:

https://www1.state.nj.us/TYTR_BRC/jsp/BRCLoginJsp.jsp

Please note that a BRC is not required at the time of bid submission but shall be required prior to the award of a contract.

Please note, the only acceptable file forms are as follows:

Documents (doc, docx, rtf, txt, xls, xlsx, pdf)

Images (jpg, png, bmp, tif)

Mandatory Equal Employment Opportunity Statement*

Does the BIDDER comply with the [#Mandatory Equal Employment Opportunity Statement?](#)

Yes

No

*Response required

Americans with Disabilities Act Provisions*

Does the BIDDER comply with the [#Americans with Disabilities Act Provisions?](#)

Yes

No

*Response required

ADDITIONAL VENDOR DOCUMENTATION

Please submit any additional information you wish to be considered as part of your bid package.

Please note, the only acceptable file forms are as follows:

Documents (doc, docx, rtf, txt, xls, xlsx, pdf)

Images (jpg, png, bmp, tif)

Acknowledgement of Submission of Forms from Current Bid Package*

Bidders shall complete all documents and acknowledge all terms included with the bid package. All documents should be from this bid package as forms change frequently and the most updated forms are provided in this specification. The forms must not be dated or executed prior to the date of advertising. Failure to follow these instructions is cause for rejection.

Please confirm

*Response required

Submission of Bid Package*

By submitting a response to this solicitation, the Vendor understands and acknowledges that all required documents to this solicitation must be submitted and that failure to do so may be cause for rejection.

Bidder also understands that only one (1) bid submission shall be considered. Please DO NOT Submit a manual bid response. Submitting a manual response in addition to the electronic response is cause for rejection of your bid.

Please confirm

*Response required

PRICING PROPOSAL

TRAFFIC MARKING SUPPLIES AND GLASS BEADS

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	Delivery, A.R.O.:	No Bid	Comments
1	Jet Dry Water Base White Traffic Marking Compound, 5 Gallon Can, Fast Dry	20	CAN					
2	Jet Dry Water Base Yellow Traffic Marking Compound, 5 Gallon Can, Fast Dry	20	CAN					
3	Jet Dry Water Base White Traffic Marking Compound, 250 Gallon Tote, Fast Dry	15	TOTE					
4	Jet Dry Water Base Yellow Traffic Marking Compound, 250 Gallon Tote, Fast Dry	15	TOTE					
5	White Granulated Thermoplastic Striping Material, Per Pound	50,000	LB					
6	Yellow Granulated Thermoplastic Striping Material, Per Pound	10,000	LB					
7	White Pelletized Thermoplastic Striping Material, Per Pound	100,000	LB					
8	Yellow Pelletized Thermoplastic Striping Material, Per Pound	20,000	LB					
9	Glass Beads, 2,000 pounds per sack	20	SACK					
10	Glass Beads, FP-96 Type III, 2,000 pounds per sack	20	SACK					
11	Glass Beads, VisiUltra, 2,000 pounds per sack	10	SACK					
12	Glass Beads, Utah Blend, 2,000 pounds per sack	50	SACK					
13	Jet Dry Water Base Blue Traffic Paint Traffic Marking Compound, 5 Gallon Can, Fast Dry	20	CAN					
14	Jet Dry Water Base Black Traffic Paint Traffic Marking Compound, 5 Gallon Can, Fast Dry	20	CAN					

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	Delivery, A.R.O.:	No Bid	Comments
15	TOM Yellow Reflectors 4" Y-2 WZ, 500 Per Box	20	BX					
16	TOM White Reflectors 4" W-1 WZ, 500 Per Box	10	BX					
17	Waterborne Acrylic Polymer High Build Paint, Yellow, 250 Gallon Tote	50	TOTE					
18	Waterborne Acrylic Polymer High Build Paint, White, 250 Gallon Tote	50	TOTE					
19	Waterborne Acrylic Polymer High Build Paint, Yellow, 5 Gallon Pail	50	PAIL					
20	Waterborne Acrylic Polymer High Build Paint, White, 5 Gallon Pail	50	PAIL					
21	Waterborne Paint Drying Agent, Visilok, Per Pound	44,000	LB					

TRAFFIC MARKING SUPPLIES AND GLASS BEADS**SUPPLEMENTARY SPECIFICATIONS****INSTRUCTIONS TO BIDDERS**

This Contract shall comply strictly with all the requirements of the New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction for 2007, except as amended, modified or supplemented herein and which Specifications are made part of these Supplementary Specifications. The New Jersey Department of Transportation Standard Construction Details shall govern except insofar as same are modified or changed in detail drawings prepared especially for this particular Project.

Whenever reference to page number is made, it is construed to refer to the 2007 Standard Specifications unless otherwise noted.

Henceforth in this supplementary specification whenever reference to the State, Commissioner, Department, Engineer, R.E. or Inspector is made, it is construed to mean the County executing this contract.

Whenever reference to Title 27 is made, it is construed to mean Title 40.

Materials or assemblies as specified will be accepted on the basis of certificates of compliance stating that such materials or assemblies fully comply with the requirements of the contract.

Materials or assemblies used on the basis of certificates of compliance may be sampled and tested at any time and if found not to be in conformity with the contract requirements, will be subject to rejection whether in place or not. The contractor shall require the manufacturer or supplier to furnish three copies of certificates of compliance with each delivery of materials, components and manufactured items that are acceptable by certification. One copy shall be furnished to the Engineer, one copy shall be furnished to the District Office Division of Local Government Services and Economic Development and one copy shall be retained by the contractor.

Certificates of compliance shall contain the following information:

1. Name of the contractor to which the material is supplied.
2. Kind of material supplied.
3. Quantity of material represented by the Certificate
4. Means of identifying the consignment, such as label marking, seal number, etc.
5. Date and method of shipment.
6. Statement that the material has been tested and found in conformity with the pertinent contract requirements stated in the certificate.
7. Signature of a person having legal authority to bind the supplier.
8. Signature attested to by a notary public or other properly authorized person.

Payments relative to materials supplied to be accepted on the basis of certificates of compliance shall not be made until the engineer has in his possession an acceptable certificate of compliance.

The attention of the contractor is directed to all existing federal and state statutes and regulations which prohibit on any public work the use by the contractor or subcontractor of materials produced or manufactured outside the United States of America. Exceptions to this prohibition, upon the findings of the engineer, are allowed only where its enforcement would be inconsistent with the public interest or where the material is not produced or manufactured in the United States in commercial quantities and of a sufficient quality.

If the engineer finds that in the performance of the contract there has been a failure to comply with the provisions relative to foreign materials, he shall make public his findings and no other contract for the construction of any public work by this contracting agent shall be awarded to such contractor, or to any partnership, association or corporation with which such contractor is associated or affiliated, within a period of three years after such finding is made public.

Where the use of foreign material is allowed, such material shall be furnished in accordance with the following requirements:

1. Materials manufactured or produced outside the United States shall be delivered to a location approved by the Engineer where they shall be retained until examination can be completed.
2. The contractor shall arrange, at his expense, any testing which the engineer feels necessary to ascertain the acceptability of the material.
3. Each lot of foreign material shall be accompanied by a certificate of compliance. In addition, certified mill test reports shall be attached to the certificate of compliance for those materials for which mill test reports are required and shall clearly identify the lot to which they apply. Certificates of compliance shall contain the following information:
 - a. Project to which the material is consigned.
 - b. Name of the contractor to which the material is supplied.
 - c. Kind of material supplied.
 - d. Quantity of material represented by the certificate
 - e. Means of identifying the consignment, such as label marking, seal number, etc.
 - f. Date and method of shipment.
 - g. Statement that the material has been tested and found in conformity with the pertinent contract requirements stated in the certificate.
 - h. Signature of a person having legal authority to bind the supplier.
 - i. Signature attested to by a notary public or other properly authorized person.

101.01 Introduction.

The following is added to this Subsection of the Standard Specifications:

Whenever any Section, Subsection, Subpart or Subheading is amended by such terms as changed to, deleted or added, it is construed to mean that it amends that Section, Subsection, Subpart or Subheading of the 2007 Standard Specifications

101.01 Introduction. (Cont'd)

Whenever any reference to page number is made, it is construed to refer to the 2007 Standard Specifications.

101.03 Terms.

All references to "Department" or "State" shall be interpreted to mean "County". All references to "Engineer" or R.E. shall be interpreted to mean "County Engineer".

The following terms and their meanings are hereby deleted from this subsection of the Standard Specifications: Claims Review Board, Department Claims Committee, Executed Director of Regional Operations, Regional Dispute Board.

The following terms and their meanings are added to this Subsection of the Standard Specifications:

County business day, a calendar day, exclusive of Saturdays, Sundays, State recognized legal holidays, and such other holidays or County office closings as declared by the Board of Chosen Freeholders.

101.04 Inquiries Regarding the Project.

Inquiries prior to bids in accordance with this Subsection shall be addressed to: Michael Piserchia, Ocean County Engineering Dept., 129 Hooper Ave., PO Box 2191, Toms River, NJ 08754, Telephone: 732-349-8165.

SECTION 102 – BIDDING REQUIREMENT AND CONDITIONS102.07 Preparation of The Bid.

The third paragraph is changed to read as follows:

When the proposal contains alternate items, the bidder shall only provide the unit price and amount for the lowest priced alternate item. The alternate item for which a price has been provided shall be provided. When the proposal contains alternate groups of items, the bidder shall only provide the unit price and amount for each item within the lowest priced alternate group.

The alternate group of items for which a price has been provided shall be provided.

Subsection 102.10 Submission of Bids.

The first paragraph of this Subsection of the Standard Specifications is hereby deleted.

The second paragraph of this Subsection of the Standard Specifications is amended to read as follows:

Enclosed in the sealed envelope with the Proposal shall be submitted the following documents:

- A Non-Collusion Affidavit on a form provided by the County properly filled out, signed and notarized.
- Plan and Equipment Questionnaire.
- An Ownership Certificate in accordance with the following paragraph.

Every corporation and/or partnership submitting a bid, shall accompanying said bid, submit a statement setting forth the names and addresses of all stockholders in the corporation, or partners in the partnership, who own 10% or more of its stock, of any class, or of all individual partners in the partnership who own a 10% or greater interest therein, as the case may be. If one or more such stockholder, or partner, is itself a corporation, or partnership, the stockholders holding 10% or more of that corporation's stock, or the individual partners owning 10% or greater interest in that partnership, as the case may be, shall also be listed. This disclosure shall be continued until the names and addresses of every non-corporate stockholder, and individual partner, exceeding the 10% ownership criteria established by this Notice, shall have been listed.

The third paragraph of this Subsection of the Standard Specifications is hereby deleted.

Subsection 102.15 Disqualification of Bidders.

The following is added to this Subsection of the Standard Specifications:

If the proposal does not contain a unit price for each pay item listed or a total contract price. In the case of alternate items or alternate groups of items, the bidder shall provide prices as stated in Subsection 102.07 and the proposal.

If the Proposal is not accompanied by an acceptable Ownership Certificate as specified in Subsection 102.10 of these Supplemental Specifications.

SECTION 103 - AWARD AND EXECUTION OF CONTRACT

Subsection 103.01 Award of Contract.

The first paragraph of this Subsection of the Standard Specifications is changed to read as follows:

The Award of Contract, if it be awarded, will be to the lowest responsible bidder whose Proposal conforms in all respects to the requirements set forth in the Contract Documents. The contract will be awarded on a line item basis. No restrictions (e.g. "all or none", "truckload quantities", etc.) will be allowed. The County will award the Contract or reject all bids within 60 days after the bids are received. When the County cannot make an unconditional award, this time limit may be extended by mutual agreement for one 30-day interval.

SECTION 104 – SCOPE OF WORK

Subsection 104.01 Intent.

The following is added to this Subsection of the Standard Specifications:

The work to be performed under this Contract consists of the furnishing and delivery of various paints, reflectors and tapes suitable for satisfactory application on bituminous and concrete roadways.

Service: Since proper application is deemed essential to the success of this process, the manufacturer shall have at least one technician available to instruct in the application of this type of paint. The technician shall be familiar with the application equipment and the materials and shall have successful experience in the placing of fast drying paint.

Please note that the supplier of totes shall be responsible for removal of empty totes from the facility at no charge to the County.

Subsection 105.04 Plans and Specifications.

All references to copies of the Standard Specifications within this Subsection of the Standard Specifications are hereby deleted.

Copies of the Standard Specifications may be obtained from the New Jersey Department of Transportation.

SECTION 108 – PROSECUTION AND COMPLETION

Subsection 108.01 Subcontracting.

The following is added to this Subsection of the Standard Specifications:

Subletting will not be permitted to firms and individuals listed in the Report of Suspensions, Debarments and Disqualifications of Firms and Individuals as maintained by the New Jersey Department of the Treasury, Division of Building and Construction, Bureau of Contractor's Prequalification (Telephone: 609-292-5022).

Subsection 108.10 Contract Time.

The following is added to this Subsection of the Standard Specifications:

This supply Contract shall terminate one (1) year from the date of award or until delivery is complete for any orders submitted prior to the expiration date.

Subsection 108.15 Termination of Contract.

The following is added after the first paragraph of this Subsection of the Standard Specifications:

The County also reserves the right to terminate the Contract or any portion thereof, at any time, upon a determination by the County Engineer, in his sole discretion, that such termination is in the best interests of the County.

SECTION 610 – TRAFFIC STRIPES, TRAFFIC MARKINGS AND RUMBLE STRIPSSubsection 610.04 Measurement

<u>Item</u>	<u>Unit of Measure</u>
1. Jet Dry Water Base White Traffic Marking Compound in Gallon Can, Fast Dry	Can
2. Jet Dry Water Base Yellow Traffic Marking Compound in 5 Gallon Can, Fast Dry	Can
3. Jet Dry Water Base White Traffic Marking Compound Fast Dry in 250 Gallon Tote	Tote
4. Jet Dry Water Base Yellow Traffic Marking Compound Fast Dry in 250 Gallon Tote	Tote
5. White Granulated Thermoplastic Striping Material	Lb.
6. Yellow Granulated Thermoplastic Striping Material	Lb.
7. White Pelletized Thermo-plastic Striping Material, Per Pound	Lb.
8. Yellow Pelletized Thermo-plastic Striping Material, Per Pound	Lb.
9. Glass Beads, 2,000 Lbs./Sack	Sack
10. Glass Beads, FP-96, Type III (to meet the Federal Highway Administrations FP-96 Type III large reflective glass beads specification), 2,000 Lbs./Sack	Sack
11. Glass Beads, VisiUltra, 2,000 Lbs./Sack	Sack
12. Glass Beads, Utah Blend, 2,000 Lbs./Sack	Sack
13. Jet Dry Water Base Blue Traffic Paint Traffic Marking Compound in 5 Gallon Can, Fast Dry	Can
14. Jet Dry Water Base Black Traffic Paint Traffic Marking Compound in 5 Gallon Can, Fast Dry	Can
15. TOM Yellow Reflectors 4" Y-2 WZ 500 Per Box	Box
16. TOM White Reflectors 4" W-1 WZ 500 Per Box	Box

This section has been added to the Standard Specifications.

SECTION 613 – ALL WEATHER PAINT COMPONENTS613.01 – Description

This work shall consist of furnishing a multiple component, retroreflective traffic marking system in accordance with this provision and in reasonably close conformance to the dimensions and lines shown on the plans or established by the engineer.

This specification describes the system which consists of an acrylic, high build, fast drying, white and yellow waterborne traffic marking paint; bonded core elements; and glass beads that can be used on bituminous and Portland cement concrete pavements.

613.02 – Materials

1. General

The markings shall be comprised of a durable, low VOC, fast drying, white and yellow waterborne traffic paint with an acrylic polymer emulsion and with reflective media adhered to the paint. The reflective media shall consist of glass beads as well as bonded core reflective elements.

2. Composition

2.1 Waterborne Traffic Marking Paint

The finished paint shall be formulated and manufactured from first-grade materials and shall be fast drying, water based, acrylic resin type paint capable of withstanding air and roadway temperatures without bleeding, staining, discoloring, or deforming.

2.1.1 Condition in the Container

The paint, as received, shall show no evidence of; biological growth, corrosion of the container, livering or hard settling. The paint shall be returned to a smooth and homogeneous consistency, which is free from; gel structures, persistent foam or air bubbles – using only hand mixing.

2.1.2 Shelf life

When stored in a three-quarters filled can for a period of thirty days, the paint shall be in a homogeneous state with no skinning, curdling, hard settling or caking that cannot be readily remixed.

	<u>White</u>	<u>Yellow</u>
2.1.3 Degree of Settling, minimum, ASTM D869	7	7

A 500 ml (1 pint) paint can is filled with a well-mixed sample. The can is capped and allowed to set undisturbed at ¹standard conditions for 14 days. The settling is then determined as specified in ASTM D869. The 1-quart laboratory samples of each batch, as received, shall also pass this test.

¹ Standard conditions are defined here as: 23±2°C and 50±5% relative humidity.

SECTION 613 – ALL WEATHER PAINT COMPONENTS (Cont'd)613.02 – Materials (Cont'd)

2.1.4	Nonvolatile Content, Weight %, ASTM D2369	<u>White</u> 77 ±2.0	<u>Yellow</u> 76 ±2.0
2.1.5	Pigment Content, Weight %, ASTM D3723	<u>White</u> 60 ±2.0	<u>Yellow</u> 58 ±2.0
2.1.6	% Nonvolatile in Vehicle (%NVV), Weight %, Minimum	<u>White</u> 42	<u>Yellow</u> 42

Calculated as; $\%NVV = \frac{\%Nonvolatile\ Content - \%Pigment}{100 - \%Pigment} \times 100$

2.1.7	Density, g/ml at 25°C, ASTM D1475	<u>White</u> 1.68 +/- 0.04 (14.0 lbs/gal)	<u>Yellow</u> 1.63 +/-0.04 (13.6lbs/gal)
2.1.8	Consistency, K.U. at 25±1°C ASTM D562A	<u>White</u> 80-95	<u>Yellow</u> 80-95
2.1.9	Fineness of Dispersion, Hegman, minimum, ASTM D1210	<u>White</u> 3.0	<u>Yellow</u> 3.0
2.1.10	Dry to No Pick-Up Time, without beads, minutes, maximum, ASTM D711	<u>White</u> 10	<u>Yellow</u> 10
2.1.11	Dry Through, at 90% Relative Humidity, minutes, maximum ASTM D1640	<u>White</u> 120	<u>Yellow</u> 120

A 15 mil wet film of the candidate paint placed immediately in a humidity chamber maintained at 72.5°F±2.5°F and 90%±3 relative humidity shall have a "dry-through" time less than, equal to, or up to 15 minutes longer than the specifier's laboratory reference paint when run at or close to the same time. Alternatively, 120 minutes maximum dry through can be used. The dry through time must be tested in accordance with ASTM D1640, except that the pressure exerted will be the minimum needed to maintain contact between the thumb and film.

2.1.12	Volatile Organic Compounds (VOC), grams per liter of paint, excluding water, maximum.	<u>White</u> 150	<u>Yellow</u> 150
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Use ASTM D3960 or other approved method in effect at the time of paint manufacture to determine the VOC level and water content of the paint.

SECTION 613 - ALL WEATHER PAINT COMPONENTS (Cont'd)

2.1.13	Flashpoint, °C, minimum, ASTM D93 Method A	<u>White</u> 60	<u>Yellow</u> 60
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2.1.14	Flexibility, ASTM D522 Method B	<u>White</u> Pass	<u>Yellow</u> Pass
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Use 100x150 mm tin-plated steel panels 250µm thick. Prepare the panel by lightly buffing one side with Grade 0 (medium-fine) steel wool, followed by cleaning with toluene and drying. Draw down the paint on the buffed side of the panel to a wet film thickness of 130µm. Air dry the panels for 24 hours at standard conditions, then bake for 5 hours at 105±2°C and finally condition the panel for 30 minutes at standard conditions. Bend the panel 180° over a 13 mm mandrel in 1 second, then examine under a magnification of 10 diameters. The paint film shall not: crack, chip or flake when the panel is bent around the mandrel.

2.1.15	Appearance	Pass	<u>White</u> Pass	<u>Yellow</u>
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Draw down a 330µm thick wet film of the paint on a glass plate and allow to dry for 24 hours at standard conditions. The paint shall produce a film which is smooth, uniform, and free from; grit, undispersed particles, craters, pinholes and cracking.

2.1.16	Dry Opacity, minimum	<u>White</u> 0.93	<u>Yellow</u> 0.87
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On a black-white Leneta chart, Form 2C-Opacity, draw a uniform 130µm (±5µm) thick wet film of paint covering both the black and white portions of the chart. Measure the wet film thickness with an appropriate gauge. Dry for 24 hours at standard conditions. Use a BYK-Gardner "Color-Guide" Spectrophotometer to measure the opacity according to the manufacturer's instructions. Calibrate the spectrophotometer according to the manufacturer's instructions using; 2° Observer/Illuminant "C" measurement conditions, and the (Y, x, y) color system.

2.1.17	Yellowness Index, maximum	<u>White</u> 8	<u>Yellow</u> -
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Draw down a 330µm thick wet film of the white paint on two 75x150 mm chromate treated aluminum panels (i.e.: Q Panel Co., type AL) Dry for 24 hours at standard conditions. Save one panel for the Accelerated Weathering test (section 2.2.1.19.). Using a BYK-Gardner "Color-Guide" Spectrophotometer, follow the manufacturer's instructions, and measure the Yellowness Index of the white paint film using the ASTM E313 mode.

2.1.18	Daylight Luminous Reflectance	<u>White</u> ≥87	<u>Yellow</u> 47-60
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Using the draw down panels prepared in sections 2.2.1.15, measure the reflectance of the white and yellow paint films using the BYK-Gardner "Color -Guide" Spectrophotometer. Follow the manufacturer's instructions to obtain the Reflectance or "Y" value.

SECTION 613 - ALL WEATHER PAINT COMPONENTS (Cont'd)

2.1.19 Yellow Color

Draw down the yellow paint on two chromate treated aluminum panels as described in section 2.2.1.16. One panel should be used for the Accelerated Weathering test (section 2.2.1.19). Retain the other yellow panel as a control and for the Reflectance test. The yellow color shall match Federal Standard 595b, color #33538.

2.1.20 Accelerated Weathering Test
Ultraviolet Light and Condensate Exposure, 300 hours total,
ASTM; G154 and G151.

Prepare samples of the white and yellow paints as described in sections 2.2.1.16 and 2.2.1.18. Alternately expose the samples to; eight hours of UV exposure at 60°C, followed by four hours condensate exposure at 50°C – in a QUV Accelerated Weathering Tester. Type UVA-340 bulbs are used at an irradiance level of 0.77 watts per square meter per nm. at 340nm., as measured at the sample surface during the UV cycle. After 300 hours total exposure the paint samples shall meet the requirements below.

White – Yellowness Index after weathering, maximum, 12
Yellow – Must pass Yellow Color test after weathering

2.1.21	Scrub Resistance, cycles, minimum	<u>White</u> 800	<u>Yellow</u> 800
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Follow the procedure in ASTM D2486. Prepare a panel using an appropriate bird doctor blade that will produce a uniform dry film thickness of paint between 80 and 100µm. Dry the panel for 7 days at standard conditions. The panel shall require more than 800 cycles to remove the paint film in one continuous line across the width of the shimmed area.

2.1.22	Lead, mg/kg in dried paint, maximum, ASTM D3335	<u>White</u> 20	<u>Yellow</u> 20
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The white & yellow paints shall be free of lead, mercury, cadmium, hexavalent chromium and other toxic heavy metals as defined by the United States Environmental Protection Agency.

2.1.23	Chromium, mg/kg in dried paint, maximum, ASTM D3718	<u>White</u> 5	<u>Yellow</u> 5
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2.1.24	Thick Application Cracking Resistance	<u>White</u> Pass	<u>Yellow</u> Pass
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On a black-white Leneta chart, Form 2C-Opacity, draw down a stripe of the paint 75mm wide and at least 150mm long and having a 1530±130µm wet film thickness. Allow the paint to dry for 48 hrs. at standard conditions on a horizontal surface. After 48 hrs. the paint film shall not contain any cracks.

2.1.25	pH minimum ASTM E70	<u>White</u> 9.9	<u>Yellow</u> 9.9
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2.2. Acrylic Polymer Emulsion

The paint shall consist of a commercial high-build acrylic polymer emulsions.

SECTION 613 - ALL WEATHER PAINT COMPONENTS (Cont'd)

2.3. Reflective Media

The reflective media shall be made up of reflective bonded core elements and glass beads for drop-on application and shall conform to the following requirements:

2.3.1 Bonded Core Reflective Elements

The bonded core reflective elements shall contain either clear or yellow tinted microcrystalline ceramic beads bonded to the outer surface.

Index of Refraction – All microcrystalline ceramic beads bonded to reflective elements shall have a minimum index of refraction of 1.8 when tested using the liquid oil immersion method.

Testing procedure for refractive index of beads by liquid immersion

Equipment Required:

- Microscope (minimum 100X magnification)
- Light Source – preferably sodium light or other monochromatic source, but not absolutely essential
- Refractive Index Liquids, (available from R.P. Cargille Laboratories, Inc., Cedar Grove, NJ)
- Microscope Slide and Slide Cover
- Mortar and Pestle

Procedure:

- Using the mortar and pestle, crush a few representative beads and place a few of these crushed particles on a microscope slide.
- Place a drop of a refractive index liquid, with an index as close to that of the crushed particles as can be estimated, on the particles.
- Cover the slide with a microscope slide cover and view the crushed particles by transmitted light normal to the slide surface (illuminated from the bottom).
- Adjust the microscope mirror to allow a minimum light intensity for viewing. This is particularly important if sodium light is not used.
- Bring a relatively flat and transparent particle into focus.
- By slightly raising and lowering the objective (microscope tube), look for one or both of the following:

Becke Line – This light line will appear to move either into the particle or away from it. In general, if the objective is raised, the line will move toward the material of higher refractive index; if the objective is lowered, the line will move toward the material of lower index.

Variation in Particle Brightness

When raising the objective from a sharp focus, the particle will appear to get brighter or darker than the surrounding field. If it becomes brighter, the particles have a higher refractive index than the liquid. If it becomes darker, the glass has a lower refractive index than the liquid. In both cases, the opposite will be true if the objective is lowered.

This test can be used to confirm that the beads are above or below a specified index. It can also be used to give an accurate determination of the index (+ or – 0.001). This is done by using several refractive index liquids until a match or near match of indices occurs. The index of the glass will equal that of the liquid when no Becke line and no variation in bead brightness observed.

SECTION 613 - ALL WEATHER PAINT COMPONENTS (Cont'd)Variation in Particle Brightness (Cont'd)

The size and quality of the beads shall be such that the performance requirements for the retroreflective material shall be met.

Acid Resistance

A sample of microcrystalline ceramic reflective elements supplied by the manufacturer, shall show resistance to corrosion of their surface after exposure to a 1% solution (by weight) of sulfuric acid. The 1% acid solution shall be made by adding 5.7cc of concentrated acid into 1000cc of distilled water. CAUTION: Always add the concentrated acid into the water, not the reverse.

Place 10g of the beads in a 100ml beaker and cover with 30-40 ml of the 1 weight percent sulfuric acid solution. Cover the beaker to prevent evaporation and allow the sample to be exposed for 24 hours under these conditions. Then decant the acid solution and rinse the sample with fresh DI water followed by drying the sample in a 150°F (66°C) oven for approximately 15 minutes or until the sample is dry. Microscopic examination (20X) shall show not more than 15% of the beads having the formation of a very distinct opaque white (corroded) layer on their entire surface to be classified as passing the acid resistance test.

2.3.2 Glass Beads

The required glass beads shall have an index of refraction of 1.5 when tested by the immersion method at 25°C (77°F). The glass beads shall be surface treated for optimal performance with waterborne traffic marking paint. The glass beads shall have a minimum of 70% Rounds as measured according to ASTM D1155. The surface of the glass beads shall be free of pits and scratches. The glass beads retained on the #40 U.S. Mesh Sieve (425 microns) shall have minimum crush strength of 30 pounds in accordance with ASTM D 1213. The glass beads shall conform to either of the following gradation specifications.

P40 or equivalent

U.S. Standard Sieve Number	Size in Microns	% Passing By Weight
20	850	90 – 97
30	600	50 – 75
40	425	15 – 45
50	300	0 – 15
80	180	0 - 5

AASHTO M247 Type 1 or equivalent

U.S. Standard Sieve Number	Size in Microns	% Passing By Weight
20	850	100
30	600	75 - 95
40	425	-
50	300	15-35
80	180	-
100	150	0-5

SECTION 613 - ALL WEATHER PAINT COMPONENTS (Cont'd)2.3.3 VisiUltra (All-Weather High Performance Beads):**GENERAL REQUIREMENTS**

The beads shall be clear, smooth and spherically shaped and shall conform to the following specific requirements.

Gradation – The glass beads shall meet the gradation requirements as given below and shall be tested in accordance to ASTM D1214 and AASHTO PP-74-13.

US Sieve No.	Microns	Mass % Retained
14	1400	0-10
16	1180	0-20
18	1000	30-55
20	850	35-60
PAN		0-15

Roundness – Safety spheres shall be at least 80% round by Computerized Optical Method (AASHTO PP-74-13) or approved equivalent in accordance with AASHTO T346-13 Section 6.

Refractive Index – The glass beads shall have a refractive index of 1.90 to 1.93 in accordance to AASHTO T 346-13 Section 7 when tested using the Becke Line Method or equal at a temperature of 25° ± 5°C (77° ± 9°F).

Specific Gravity – The density of the beads shall be in the range of 4.0 to 4.50 g/cm³.

Coating – The beads shall be coated to enhance adherence and moisture resistance.

Packaging

The VisiUltra All-Weather High Performance Beads shall be packaged in either 50 Lb bags, 2000 LB boxes or 2000 LB sacks upon request.

2.3.4 Glass Beads, Utah Blend:

Utah glass beads shall meet the gradation requirements as given below and shall be tested in accordance to ASTM D1214 and AASHTO PP-74-13.

US Sieve No.	Microns	Mass % Passing
16	1180	90-100
18	1000	65-80
30	600	30-50
50	300	0-5

Roundness – **Utah** safety spheres shall be at least 80% round by Computerized Optical Method (AASHTO PP-74-13) or approved equivalent in accordance with AASHTO T346-13 Section 6.

Refractive Index – Utah glass beads shall have a refractive index of 1.50 to 1.55.

SECTION 613 - ALL WEATHER PAINT COMPONENTS (Cont'd)3. ThermoDrop Pelletized Thermoplastic:

3.1 Composition:

The alkyd thermoplastic shall conform to AASHTO M249 requirements and consist of fully encapsulated, pre-melted thermoplastic.

3.2 Packaging

The fully encapsulated, pre-melted thermoplastic pellets shall be packaged in 50 lb (soluble) bags, on pallets of 40 bags (2000 lbs.) total.

4. VisiLok Waterborne Paint Drying Agent:

4.1 GENERAL REQUIREMENTS

The material shall be a mixture of: 1) glass beads, which are smooth and spherically shaped, free of milkiness, pits, or excessive air inclusions and that conform to the following specific requirements, and 2) drying aid material, which is smooth, and spherically shaped and amber in color.

4.2 Gradation – The material shall meet the gradation requirements as given in the table below and shall be tested in accordance to ASTM D1214 and AASHTO PP-74-13.

Sieve	% Passing
16	100
20	90-100
30	65-95
50	10-35
100	0-5

4.3 Roundness – The material shall be at least 70% round by Computerized Optical Method (AASHTO PP-74-13) or approved equivalent in accordance with AASHTO T346-13 Section 6.

4.4 APPLICATION SPECIFICATIONS

4.5 Drop rate – The material shall be applied according to manufacturer recommendations. However, 2 lbs. per gallon of waterborne latex paint is the maximum recommended amount.

The packages shall be marked with the name and address of the manufacturer and name and net weight of the material, the material name, the lot and/or batch number, and the date of manufacture (mm/yy) and be secured on disposable pallets, 40 bags to a pallet (2,000 lbs.). The pallets shall be constructed to allow use of forklifts.

Shipping shall be only by covered trailers in order to maintain product dryness.

The compound shall be packed in bags and the contractor shall be responsible for the proper delivery thereof. The containers shall not affect its contents, not contain foreign contaminants. Bags shall be either standard cemented center seam, plastic-lined burlap bags, or plastic-lined paper bags. A bag shall contain 50 lbs. net weight.

The ordering agency shall have sufficient justification to reject bags of compound that are covered with water, supplied in improper containers, contaminated with foreign materials, or supplied on broken skids or pallets. Rejected items shall be replaced within seven (7) calendar days of the date of rejection notice.”

SECTION 613 - ALL WEATHER PAINT COMPONENTS (Cont'd)

5. Characteristics of Finished Traffic Marking

Because of normal variances in road surfaces, application processes, and measurement, the properties of markings made from the materials specified herein will vary from one installation to the next. When the materials are applied according to the specification in Section 3, they shall be capable of forming markings with the following reproducibility of properties:

5.1 Skid Resistance

The average initial skid resistance shall be 45 BPN or greater when tested according to ASTM E303.

SECTION 613 - ALL WEATHER PAINT COMPONENTS (Cont'd)

5.2 Retro-Reflectance

The initial retro-reflectance averaged over many installations shall be at least the values in the following table:

Retroreflectivity	(mcd(fc ⁻²)(fc ⁻¹) {metric equivalent mcd(m ⁻²)(lux ⁻¹)}	
	White	Yellow
Dry	350	275
Wet recovery (ASTM 2177)	350	275
Wet continuous (ASTM 2176)	100	75

The initial retroreflectance of a single installation shall be the average value determined according to the measurement and sampling procedures outlined in ASTM D 6359, using a 30-meter (98.4 feet) retroreflectometer. The 30-meter retroreflectometer shall measure the coefficient of retroreflected luminance, R_{\perp} , at an observation angle of 1.05 degrees and an entrance angle of 88.76 degrees. R_{\perp} shall be expressed in units of millicandelas per square foot per foot-candle [(mcd(ft⁻²)(fc⁻¹)]. The metric equivalent shall be expressed in units of millicandelas per square meter per lux [mcd(m⁻²)(lux⁻¹)].

Initial performance of pavement markings shall be measured within 7 days after application.

On-the-road Track-Free Time:

When installed at 77°F and at a wet film thickness of 25±2 mils, the markings shall reach a no-track condition in less than 5 minutes. Track-free shall be considered as the condition where no visual deposition of the traffic paint marking to the pavement surface is observed when viewed from a distance of 50 feet, after a free-rolling traveling vehicle's tires have passed over the line. The track-free time shall not increase substantially with decreasing temperature.

Color after Application

The color of the applied white and yellow stripes and markings (with beads) shall conform to the daytime and nighttime color requirements in ASTM Designation: D 6628.

SECTION 613 - ALL WEATHER PAINT COMPONENTS (Cont'd)613.04 – Measurement and Payment

<u>Item #</u>		<u>Unit of Measure</u>
17.	Waterborne Acrylic Polymer Paint, Yellow 250 gallon tote	Tote
18.	Waterborne Acrylic Polymer Paint, White 250 gallon tote	Tote
19.	Waterborne Acrylic Polymer Paint, Yellow 5 gallon pail	Pail
20.	Waterborne Acrylic Polymer Paint, White 5 gallon pail	Pail
21.	Waterborne Paint Drying Agent, Visitok, Per Pound	Lb.