



Barbara Jo Crea, Director
Gary Quinn, Deputy Director
Virginia E. Haines, Commissioner
John P. Kelly, Commissioner
Frank Sadeghi, 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

***STORM DRAIN CLEANING AND TELEVISION INSPECTION AT VARIOUS
LOCATIONS***

2024

ADVERTISEMENT DATE: March 27, 2024
OPENING: April 16, 2024, 11:00 am

Bid Category: 18- Miscellaneous Commodities and Services
22- Public Works, Park Equipment and Construction Services

Notice to Bidders

NOTICE IS HEREBY GIVEN that sealed bids for the furnishing and delivery of **STORM DRAIN CLEANING AND TELEVISION INSPECTION AT VARIOUS LOCATIONS** for the County of Ocean, will be received by the Purchasing Agent of the County of Ocean on **Tuesday, April 16, 2024 at 11:00 am**, prevailing time.

Bids will be received electronically via the County's Online Procurement Portal. Specifications are available on the Procurement Portal or for viewing only, 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:

BARBARA JO CREA, 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	March 27, 2024
Bid Opening Date	April 16, 2024, 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 OpenGov 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, April 16, 2024.

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

The quantities shown on the pricing proposal are **estimates only**, and Ocean County will not guarantee any minimum purchase. The County reserves the right to decrease or omit quantities as needed over the course of the contract. The county will not consider any minimum requirements imposed 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. *Note: Actual orders are placed upon receipt of a Purchase Order, on an as needed basis. The County will not be responsible to pay for any product that was not ordered through a Purchase Order.*

Delivery of Goods and Services

Delivery of items shall only 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.

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/treasury/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.

Disclosure of Investment Activities in Iran

Pursuant to Public Law 2012, c. 25, any person or entity that is a successful bidder or proposer, or otherwise proposes to enter into or renew a contract, must complete the certification below to attest, under penalty of perjury, that neither the person or entity, nor any parent entity, subsidiary, or affiliate is identified on the State Department of Treasury's Chapter 25 list as a person or entity engaging in investment activities in Iran. The list is found on Treasury's website at www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf.

The Chapter 25 list must be reviewed prior to completing the certification. If a vendor or contractor is found to be in violation of law, action may be taken as appropriate and as may provided by law, rule or contract, including but not limited to imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party. Prior to contract award or authorization, the contractor shall provide the Contracting Agency with a completed Certification on Disclosure of Investment Activities in Iran.

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

Pursuant to N.J.S.A. 52:32-60.1, et seq. ([L. 2022, c. 3](#)) any person or entity (hereinafter "Vendor") that seeks to enter into or renew a contract with a State agency for the provision of goods or services, or the purchase of bonds or other obligations, must complete the certification below indicating whether or not the Vendor is identified on the Office of Foreign Assets Control (OFAC) Specially Designated Nationals and Blocked Persons list, available here: <https://sanctionssearch.ofac.treas.gov/>. If the Department of the Treasury finds that a Vendor has made a certification in violation of the law, it shall take any action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

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.

Open Public Records Act (OPRA)

**** ATTENTION****

Responses received pursuant to this solicitation are subject to complete disclosure pursuant to the Open Public Records Act. Please note that disclosure includes any and all attachments and addenda supplementing the solicitation response. Accordingly, please do not include personal identifying information in any supplementary documents submitted with the solicitation response.

County Cooperative Contract Purchasing System

The County has established a "COUNTY COOPERATIVE CONTRACT PURCHASING SYSTEM" pursuant to N.J.S.A. 40a:11-1 et seq...

The IDENTIFIER for this system is:

CK-02-OC

This system allows local government contracting entities located within the geographical boundaries of the County to purchase goods and services awarded as a result of this bid proposal if it is extended by the low bidder.

Goods and services must be made available without substitution or deviation from specifications, size, features, quality, price or availability as herein set forth. It is understood that orders, if any, will be placed directly by contracting units, subject to the overall terms of the contract to be awarded by the County of Ocean.

The estimated quantities listed in this specification reflect only the needs of the agencies under the direct control of the Ocean County Board of Commissioners. If the vendor chooses to extend the resulting contract to all other contracting units, the quantities could be higher.

Please check (✓) the YES or NO box in the Vendor Questionnaire to indicate whether or not you will extend contract prices to all contracting units.

Award Method

Contract will be awarded on a lump sum 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. The County reserves the right to extend the contract for one (1) additional year by mutual agreement between the County and the Contractor with no increase in base price.

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.

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 procurement portal at the below link:

<https://procurement.opengov.com/portal/oceancounty>

Once you have clicked the link, click "Advanced Search" to begin searching for the current opportunity.

Specifications and Scope of Work

SCOPE OF WORK

Please see "Attachments", "Project Documents" for detailed specifications.

Vendor Questionnaire

County Cooperative Contract Purchasing System*

Vendor will extend contract prices to "County Cooperative Contract Purchasing System" Participants as described in [Instruction to Bidders](#) .

Yes

No

*Response required

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)**
- Disclosure of Investment Activities in Iran
- Certification of Non-Involvement in Prohibited Activities in Russia or Belarus

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 for Goods and Services; Form AA201 for Construction). This form is available [here](#).

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

STORM DRAIN CLEANING AND TELEVISION INSPECTION AT VARIOUS COUNTY LOCATIONS

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Comments
1	Cleaning, Storm Drain - Half Day	20	UNIT				
2	Cleaning, Storm Drain - Whole Day	40	UNIT				
3	Cleaning and Television Inspection, Storm Drain - Half Day	20	UNIT				
4	Cleaning and Television Inspection, Storm Drain - Whole Day	40	UNIT				
5	Television Inspection, Storm Drain - Half Day	50	UNIT				
6	Television Inspection, Storm Drain - Whole Day	150	UNIT				
7	Traffic Directors, Flaggers - Hour	300	HR				
8	Traffic Directors, Uniformed - Hour	300	HR				
9	Maintaining and Protecting Traffic - Half Day	20	UNIT				
10	Maintaining and Protecting Traffic - Whole Day	40	UNIT				
TOTAL							

GENERAL INFORMATION

Terms:

BOARD - The Board of Commissioners of the County of Ocean.

ENGINEER - Ocean County Engineer

RE – Resident Engineer designated by the Ocean County Engineer as his representative.

CLERK - The Clerk of the Board.

SOLICITOR - The Legal representative of the Board.

UNBALANCED BID - The term “Unbalanced Bid” means a materially unbalanced bid where there is a reasonable doubt that award to the bidder submitting a mathematically unbalanced bid, which is structured on the basis of nominal prices for some work and inflated prices for other work, will result in the lowest ultimate cost to the County.

TRAFFIC CONTROL

Description:

This Section describes the requirements for implementing controls to protect vehicular and pedestrian traffic. Traffic control includes providing, installing, placing, relocating, maintaining, and removing traffic control devices.

Equipment:

The following equipment as specified in the listed sections of the NJDOT Standard Specifications for Road and Bridge Construction.

Provide equipment as specified:

Flashing Arrow Board	<u>1001.01</u>
Portable Variable Message Sign	<u>1001.02</u>
Traffic Control Truck with Mounted Impact Attenuators	<u>1001.03</u>
Vibratory Drum Compactor	<u>1003.06</u>

Traffic Control Coordinator:

Before starting Work, submit to the RE the name, training, work experience, and contact information of an employee assigned as the on-site Traffic Control Coordinator (TCC). The TCC must be certified as having successfully completed the Rutgers CAIT Traffic Control Coordinator Program, or an equivalent course as approved by the NJDOT Office of Capital Project Safety. The TCC must also successfully complete an approved Traffic Coordinator refresher course every 2 years. The TCC is a full-time position and the employee designated as TCC must be available on a 24-hour a day, 7-days a week basis. The TCC shall have the responsibility for and authority to implement and maintain all traffic operations for the Project on behalf of the Contractor.

TRAFFIC CONTROL (CONT'D)

The TCC's responsibilities and duties shall include the following:

1. Overseeing traffic control operations, including those performed by subcontractors.
2. Coordinating traffic control with subcontractors, other contractors, and Utilities.
3. Ensuring that set-up and removal is performed according to the Contract.
4. Performing daily traffic control inspections and providing written reports documenting the inspections, including detailed findings and corrections made.
5. Performing inspections at night and on weekends to ensure compliance with the TCP.
6. Ensuring that traffic control devices are correctly positioned and spaced.
7. Ensuring that signs are properly covered or uncovered.
8. Maintaining or replacing traffic control devices to ensure traffic control devices are in an acceptable condition and good working order. Maintenance also includes replacing lights bulbs and electrical components and refueling, recharging, or replacing batteries.
9. Ensuring that excavations and lateral drop-offs greater than 2 inches in depth are eliminated or protected by barrier or emergency escape ramps during non-working periods.
10. Ensuring that routine road maintenance is performed, including debris removal and road cleaning.
11. Ensuring that construction operations do not create flooding or icing conditions for lanes open to traffic.
12. Identify and correcting traffic control deficiencies immediately. Correct traffic control deficiencies directed by the RE within 2 hours of notification.
13. Ensuring that vehicles, equipment, and material stored adjacent to the road are behind barriers or stored at least 30 feet from the traveled way.
14. Ensuring that Contractor vehicles for material delivery enter or exit the traveled way in a safe manner.

Provide additional employees to assist the TCC as approved by the RE. The RE may request the TCC or additional employees to demonstrate their competency at any time. Notify the RE before performing daily inspections to provide the RE with the opportunity to observe the inspections.

Traffic Control Devices

Ensure that FHWA category 1, 2, 3, and 4 traffic control devices conform to the requirements of NCHRP 350. Ensure that traffic control devices meet or exceed an acceptable condition as described in the ATSSA guide Quality Standards for Work Zone Traffic Control Devices. Traffic control devices need not be new but must be in good condition. Provide traffic control devices according to MUTCD.

Erect traffic control devices before beginning construction operations. Trim vegetation that obscures the sight distance of traffic control devices. Keep the traffic control devices clean, and maintain in acceptable condition until no longer required. Relocate traffic devices as directed by the RE. Place traffic control devices as directed to provide traffic control for Department personnel doing inspections, sampling, testing, and taking measurements required for the Project.

1. Construction Signs.

Install anchor posts with soil anchor plates, except when installing in rock or in concrete.

If construction signs are required for less than 3 days, the Contractor may place construction signs on portable sign stands instead of sign posts with the approval of the RE.

TRAFFIC CONTROL (CONT'D)**1. Construction Signs: (Cont'd)**

When construction signs or existing signs do not reflect work zone traffic conditions, cover the signs with black polyethylene sheeting. Ensure that the cover is opaque under all lighting conditions and completely conceals the entire front of the sign panel. Securely attach the cover to the back side of the sign without damaging the reflective sheeting. Do not tape the cover to the face of the sign. Ensure that the cover remains secure in all weather conditions. Overhead signs and large guide signs with areas greater than 200 square feet do not need a cover over the entire sign, but require a cover over the conflicting information. Do not alter the face of a sign with revised messages. Remove construction signs when no longer required, and restore the post hole to match the surrounding conditions.

2. Construction Barrier Curb:

The Contractor may use Type 4, Alternate Design A or B construction barrier curb interchangeably in any location where Type 4 has been specified. Only use Alternate Design B, Joint Class D as bridge parapets. The Contractor may use construction barrier curb Type 4, Alternate B in any location where Type 1 has been specified. The Contractor may use construction barrier curb that is constructed using gray or white concrete. Do not place different types or colors of construction barrier curb in a continuous run. Do not use construction barrier curb having any of the following deficiencies:

1. Exposed steel at the connector flangeway.
2. Exposed reinforcement steel.
3. Cracking through the cross section.
4. An area of concrete missing larger than a 3-inch by 3-inch right triangle.
5. Debris in the keyway.
6. Non-functioning anchor bolt holes.
7. Non-functioning anchor rod hole.
8. Paint applied to the surface.
9. Objects protruding from the surface.
10. Previous repairs.

At least 30 days before delivering construction barrier curb to the Project Limit, provide the RE notice that the barrier curb is available for inspection. The RE will inspect the barrier curb and approve individual pieces for delivery to the Project Limits.

When installing construction barrier curb, ensure that the barrier curb is pulled taut. Remove slack from the connection key. Anchor the barrier curb, and grout the joints as required for the joint class. If required, ensure that anchor pins and anchor bolts do not project above the plane of the barrier curb. Before bolting barrier curb to a bridge deck, provide the proposed method of layout and drilling to the RE for approval.

Replace construction barrier curb that does not meet the specified requirements. Do not patch or repair construction barrier curb.

Provide top and side mounted flexible delineators on the construction barrier curb. For delineators located on the right side when facing in the direction of traffic, ensure that the retroreflective sheeting is white. For delineators located on the left side when facing in the direction of traffic, ensure that the retroreflective sheeting is yellow. Attach flexible delineators according to the manufacturer's recommendations.

TRAFFIC CONTROL (CONT'D)**2. Construction Barrier Curb: (Cont'd)**

Starting at the beginning of the construction barrier curb section mount top delineators at 100-foot intervals on tangent sections, curves of radii greater than 1,910 feet, and at 50-foot intervals on curves of radii of 1,910 feet or less.

Mount side delineators at the lead end of each barrier segment with the top of the delineator 3 inches from the top of the barrier.

3. Flashing Arrow Board:

Provide a flashing arrow board as specified in section 1001.01 of the NJDOT Standard Specifications for Road and Bridge Construction.

4. Portable Variable Message Sign (PVMS):

Place the PVMS at the locations directed by the RE. Ensure that a designated representative familiar with the operation and programming of the unit is available on the Project. Only display messages authorized by the Department for the Project. Repair or replace malfunctioning PVMS within 12 hours of notification by the RE.

5. Temporary Crash Cushion:

Install inertial barrier systems as specified in section 611.03.01 of the NJDOT Standard Specifications for Road and Bridge Construction. Install crash cushions as specified in section 611.03.02 of the NJDOT Standard Specifications for Road and Bridge Construction. Immediately repair or replace crash cushions that become damaged or become inoperable. Maintain an adequate number of replacement parts to repair damaged units at all times. Keep the areas in front, atop, and around the crash cushions clear of snow accumulation of more than 4 inches in depth.

6. Traffic Control Truck with Mounted Crash Cushions:

Provide the RE with a copy of the crash cushion manufacturer's recommendations. Position the traffic control truck to ensure that there is adequate stopping distance after impact and to prevent errant vehicles from traveling around the truck and endangering workers. When used in a fixed position, place manual transmission vehicles in second gear and place automatic transmission vehicles in park. Ensure that the parking brake is set, and the wheels are turned to avoid rolling into active traffic lanes. Do not use traffic control trucks in place of other temporary impact attenuators for more than 24 hours. Relocate the traffic control truck as specified by the TCP, or as directed by the RE. Do not use the truck to carry additional equipment, materials, or debris. When using ballast, ensure that it is secured to the truck. Submit drawings to the RE detailing the manner of securing the ballast, signed and sealed by a Professional Engineer, certifying that it is capable of withstanding the impact forces for which the impact attenuator is rated.

7. Channelizing Guide Posts:

Prepare the pavement surface to provide a clean, sound area to affix the post. Apply an epoxy or butyl adhesive according to the manufacturer's recommendations and bond the base of the post to the pavement surface. Provide only 4-inch diameter tubular channelizing markers. Remove when no longer required.

TRAFFIC CONTROL (CONT'D)**HMA Patch**

The RE may direct the Contractor to sawcut existing HMA pavement to the depth of the area to be repaired. Sawcut lines parallel and perpendicular to the roadway baseline and 3 inches away, at the closest point, from the damaged area to be repaired. Remove loose material within the boundary of the repair, and clean the area. Reuse removed material as specified in section 202.03.07.A of the NJDOT Standard Specifications for Road and Bridge Construction. Ensure that the remaining pavement is not damaged.

Apply polymerized joint adhesive or tack coat to the vertical surfaces of the openings. Ensure that the temperature of the HMA when placed is at least 250 °F. Place HMA in 4-inch maximum lifts, and compact with a vibratory drum. For small areas, the RE may approve hand compacting methods. Compact until the top of the patch is flush with the adjacent pavement surface.

Traffic Direction**A. Flagger:**

Provide a flagger that has received formal training in flagging operations and the proper use of the STOP/SLOW paddle. The flagger must meet MUTCD qualifications and, when requested, demonstrate competency to the RE. Immediately replace flaggers who fail to demonstrate competency with a competent flagger. Ensure that flaggers wear a 360° high-visibility retroreflective orange safety garment meeting ANSI/ISEA Class 3, Level 2 standards. Ensure that the flagger is equipped with a STOP/SLOW paddle and follows MUTCD flagging procedures.

B. Uniformed Traffic Directors (Police):

If required by State Statute and/or Local Ordinances, Uniformed Traffic Directors shall be provided at the approval of the Engineer. The contractor shall be responsible for establishing an escrow account with the Municipalities for payment of Uniformed Traffic Directors. The County shall reimburse the Contractor for man-hours used shown on payment records paid to the local Police Department, plus 5% for Administrative handling. The County shall not reimburse for vehicle charges separate from the hourly rate for the officer.

STORM DRAIN CLEANING AND TELEVISION INSPECTION**Description:**

For the respective unit prices bid per half day and whole day of work under the various subdivisions of this item, the Contractor shall clean, or clean and inspect, by closed circuit television existing storm drains stated in the proposal designated by the Engineer.

The work shall include all labor, tools, equipment and related items as may be required for the complete cleaning or cleaning and internal inspection and television monitoring (including bypass plumbing, drain dewatering and associated work) of the storm drain and removing and disposing of all deposits cleaned from the drains.

All storm drains shall be thoroughly cleaned and permit an unrestricted inspection by closed circuit television. All storm drains will be cleared prior to television inspection. If the television inspection shows drains were improperly cleaned, the Engineer will direct the appropriate cleaning and re-cleaning. Re-cleaning shall be done at no additional cost.

The purpose of the television inspection work is to determine the structural condition of the storm drains and identify areas of the storm drains with vertical misalignments, collapsed or broken pipe.

STORM DRAIN CLEANING AND TELEVISION INSPECTION (CONT'D)**Cleaning Procedures and Equipment:**

The Contractor shall clean storm drains prior to internal inspection, utilizing cleaning equipment approved for use by the Engineer. The Contractor shall ensure that the unit price bid for the cleaning item shall be sufficient payment for removing all shapes, sizes and quantities of debris.

Cleaning equipment may consist of hydraulic high pressure jet machines, heavy duty power rodding machines capable of cleaning distances covered under the Contract in one step and heavy duty bucket machines that can be used to drag line work with buckets, brushes, scrapers, swabs or other similar devices. The heavy duty equipment may be necessary for the removal of roots or heavy debris.

Power rodding equipment shall have the capability of spinning the rod either clockwise or counter-clockwise. The equipment shall also be capable of pushing or pulling the rod without rotating the machine.

All cleaning equipment, including machines, devices, tools, etc., required for the entire cleaning operations shall be owned or leased and operated by the Contractor. The Contractor will certify that backup cleaning equipment is available and can be delivered to the site within twenty-four (24) hours. The Contractor shall also submit his equipment list to the Engineer before commencement of the work.

The equipment utilized shall be capable of removing all sand, dirt, rocks and other debris, including roots (where ordered by the Engineer), from the drain line to allow adequate internal inspection (in the opinion of the Engineer) of all internal surfaces. The equipment used shall suit the conditions and size of the sewer to be cleaned.

Contractor shall arrange for the use of hydrants or provide alternate source of water, as necessary, to execute the work. It is the Contractor's responsibility to contact, make arrangements for, and pay for all water to be used on the project. The cost of the water supply shall be the Contractor's responsibility. The local water company may require the Contractor to provide a police officer at the location where water is to be obtained; the cost for this is solely the responsibility of the Contractor. No non-potable water will be permitted for any reason during this project. The local water company may have restrictions on the volumetric rate at which water can be taken from the water distribution system. This effort and any result in productivity on the Contractor's effort is solely the responsibility of the Contractor.

Cleaning shall be performed in the seventy-two (72) hour period immediately before closed circuit television inspection.

All safety precautions outlined in the General Requirements, or required by agencies having jurisdiction, shall be followed by the Contractor during cleaning operations. The cost of such precautions shall be included in the price bid for this item.

All precautions shall be taken by the Contractor to protect the storm drain from damage that might result from the use of unsuitable equipment or improper use of approved cleaning equipment. Any drains damaged during the cleaning operations as a result of the Contractor's operations shall be promptly repaired to an acceptable condition (as determined by the Engineer) by and at the expense of the Contractor. If the Contractor's cleaning equipment becomes immobilized within a storm drain, exits the line through broken pipe or portions break off within a storm drain, said equipment shall be retrieved at the Contractor's expense. The Contractor shall act immediately to remedy problems created by the cleaning procedure, which represent a hazard to the general public, such as the collapse of the ground surface above a storm drain. If equipment retrieval necessitates excavation, the Contractor shall be responsible for accomplishing the work at his own expense. Following removal of the equipment, the Contractor shall restore the line and the site in accordance with the construction specifications of the governing body having jurisdiction.

STORM DRAIN CLEANING AND TELEVISION INSPECTION (CONT'D)**Debris Disposal:**

The Contractor shall dispose of debris generated by storm drain cleaning activities under this contract at one of the four (4) dewatering pad locations listed on page 29 of this bid specification. Dumping of the debris at these sites shall be witnessed by the assigned County inspector. The contractor shall request which disposal site to use at the beginning of each work assignment issued to the Contractor.

The inspection will be done one (1) reach (distance between two consecutive manholes) at a time. The reach being inspected will be suitably isolated from the remainder of the sewer system by restricting all upstream flows to allow maximum exposure of the pipe being inspected.

Closed Circuit Television Inspection Procedure and Equipment:

In some instances, more than one (1) sewer reach may have to be inspected per set-up (buried manholes). In these instances, the Contractor shall have adequate cable to deploy the television camera.

Television equipment used for the inspection shall be specifically designed and constructed for storm drain inspection. Lighting for the camera shall be suitable to allow a clear picture for the entire periphery of the pipe. The camera shall be operative in 100 percent humidity conditions and shall be capable of showing the entire inside periphery of the pipe. The camera shall develop and transmit a sharp picture on video bandwidths only. Picture transmission systems that require the use of R.F. suppressors and are subject to local transmitters' interference shall not be used. The camera shall be equipped with an automatic light compensating iris, adjustable optical focus and automatic white balancing circuitry. The camera adjustments shall be set to produce a clear, sharp picture of the internal conditions within the storm drain. The camera lens shall be cleaned prior to each deployment in the storm drain. A television picture with interferences, lines, blurry vision or distortions will not be acceptable. Television equipment, if determined to be unsatisfactory by the Engineer, shall be removed from the job site and replaced with acceptable equipment at no additional cost. The Contractor shall certify that backup equipment is available and can be delivered to the site within twenty-four (24) hours. He shall also submit an equipment list to the Engineer for approval before commencement of the work.

The camera shall be moved through the storm drain in either direction (dependent upon the site's condition) at a uniform, slow rate (no greater than thirty [30] feet per minute) that will allow a clear visual picture to be obtained. The camera shall pause for a minimum of three (3) seconds at every joint or defect observed with the storm drain to allow proper observation. Camera movement through the storm drain shall be accomplished by means of a winch and cables or by a motorized transporter (self propelled camera). The movement of the camera shall be remotely controlled by the television inspection operator from the inspection vehicle.

The Contractor shall provide a mobile vehicle large enough to accommodate at least four (4) people at any one time for the purpose of viewing the monitor while the inspection is in progress. The owner's representative shall have access to view the television screen and observe all operations at all times.

STORM DRAIN CLEANING AND TELEVISION INSPECTION (CONT'D)**Record of Inspection:**

The Contractor will log the results of all observations and prepare whatever data may be required for record purposes. Measurement for location of features along the pipe alignment shall be at ground level by means of a counting meter to be provided and operated by the Contractor. The counting meter shall be mounted on the television reel power winding assembly. The meter shall be equipped with a local mechanical readout for use at the rear of the television vehicle and an electronic counter which is connected to the data view system for display on the video tape. Marking on cable, or the like, which would require interpolation for depth of manhole will not be allowed. The counting meter shall accurately record the distance in feet, which the video cable has traveled. The measurement will be accurate to three-tenths (0.3) of a foot per ten (10) feet of inspected sewer reach length.

The Contractor shall furnish all equipment for video DVD recording. All storm drain inspections shall be recorded on DVD and provided to the County for future reference. The video DVD recording shall begin at the center of the manhole of camera entry. The Contractor shall describe all features encountered while moving the camera from the center of the entry manhole to the distance in the pipe where he sets his footage meter. An audio recording of estimated footages shall be made for all features described prior to setting the footage meter.

On the DVD, the Contractor shall provide during the actual television inspection an audio description of all defects, service connections, joints, discharges or other features considered important by the Engineer.

The date of the television inspection and the distance that the camera has traveled through a particular storm drain reach shall be continuously displayed on the recorded DVD. All DVDs obtained during the work shall be turned over to the Engineer and shall become the property of the owner. All costs for DVD recordings shall be included in the prices bid. If the DVD recording is not complete or the quality is not satisfactory, the storm drain shall be re-inspected at the Contractor's expense.

The Contractor shall make a recording, audio and video, of any defects encountered in manholes designated as ingress and egress locations for internal inspection.

Deliverables:

The contractor shall provide to the County within five (5) working days of the cleaning/televising assignment the following items:

- Written log of cleaning/inspection of the system
- DVD of television inspection
- Map of system cleaned/televised referencing structures and obstructions noted in the video and/or written log
- Bill of lading/disposal tickets for debris removal

STORM DRAIN CLEANING AND TELEVISION INSPECTION (CONT'D)**Obstructions:**

Obstructions may be encountered during the course of the internal inspection that prevent the travel of the camera. Each occurrence shall be considered separately. Generally, however, the Contractor shall first attempt to pass the obstruction, and if failing in his attempt or if equipment damage may occur, withdraw the equipment and attempt internal inspections from the opposite end of the storm drain under inspection. Should additional obstructions be encountered after the first re-employment and no means are available for passing the obstructions without damage to the equipment, then the remaining sections of the storm drain not inspected shall be excluded from the work requirements of the Contract. No additional payment shall be made due to difficulties encountered during internal inspection. In addition, the Contractor shall have no claim for payment for internal inspection not completed due to obstructions.

Television inspection of blockages shall be performed at the direction of the RE and only in pipes where obstructions are found. Television inspection shall be performed from both sides of the obstruction. Television inspection will either be performed by the County or intermittently by the Contractor as directed by the Engineer on a full or half day basis.

Some obstructions may be encountered which prevent the Contractor from stringing the cables used to move a television camera deployed by winches. An alternate method of moving the camera shall be employed. The internal inspection shall be attempted to determine the condition of as much of the storm drain as possible. The Contractor shall select the method of performing the internal inspection, i.e., pushing the camera with rods or a jet cleaning machine, or use of a self-propelled camera approved by the Engineer.

The extent of the internal inspection accomplishment shall be at the discretion of the Engineer.

Should the Contractor's internal inspection equipment become immobilized within a storm drain, said equipment shall be removed from the line. If excavation is required to retrieve the Contractor's equipment, the excavation shall

be accomplished by the Contractor at his expense. Following removal of the equipment, the Contractor shall restore the storm drain and the site in accordance with the construction specifications of the governing body having jurisdiction.

Storm Drain Dewatering:

For Systems with submerged or partially submerged outfall(s) the Contractor shall plug the system, where and as needed, to allow the cleaning or cleaning and Television Inspection to proceed.

During the television inspection process, every effort shall be exerted to obtain a full view of the pipe interior. For instances where the camera lens becomes submerged or where a large portion of the pipe shall contain water, and these conditions persist for significant portions of the sewer being inspected, the Contractor shall attempt to dewater the pipe. The Engineer shall determine when dewatering procedures are necessary.

STORM DRAIN CLEANING AND TELEVISION INSPECTION (CONT'D)

Dewatering can be accomplished with a pump and discharge hose or by the nozzle of a hydraulic high-pressure jet machine. If the jet machine is used, it shall precede the television camera through the sewer pipe. The nozzle of the jet machine shall work in conjunction with the television camera's motion and be positioned so that several feet of pipe length can be viewed by the camera. The dewatering procedure shall move standing or ponded water through the storm drain to a point within the storm drain downstream of the reach being inspected.

Measurement and Payment:

Measurement of payment for the cleaning, combined cleaning and television inspection, or television inspection only activities shall be made on a whole day or half day basis regardless of the size of the pipes. A work period of 0 to 4 hours shall constitute a half day of work and a work period of 4 to 8 hours shall constitute a whole day of work. Travel time to and from the site will not be considered as part of the work day and shall be included in the various items bid. The Contractor is expected to work the full duration of the work period until or unless the work is complete.

Storm Drain Dewatering or cleaning will not be measured separately and payment will be included in the unit price bid for Half and Whole Day Cleaning and Television Inspection, Storm Drain. In the event the Contractor's equipment breaks down for any reason, no payment will be made if less than four (4) hours was worked or payment will be limited to a half day if more than four (4) hours but less than eight (8) hours was worked.

The basis for non-acceptance by the Engineer shall be any evidence of poor cleaning observed on the video tape recording that prevents the proper internal inspection of the drain reach. No additional payment shall be made for the re-cleaning of drain reaches to an acceptable condition regardless of the number of times re-cleaning may be required. All measurements for payment shall be based upon the actual number of half or whole days of pipe cleaning and television inspection.

No separate payment shall be made for debris disposal. Costs to deliver and dump storm drain cleaning debris at designated County dewatering pad sites listed below shall be included in the half day and full day cleaning and cleaning and televising line item rates.

No payment for services shall be made by the County until all deliverables for the work assignment have been received, reviewed, and accepted by the County.

No separate payment shall be made for police vehicles to accompany the officer that are included in the base hourly rate of the officer.

No separate payment shall be made for the various traffic control devices necessary for "Maintaining and Protecting Traffic, _____ (Half/Whole) Day".

SCOPE OF WORK:

STORM DRAIN CLEANING AND TELEVISION INSPECTION AT VARIOUS LOCATIONS

STORM DRAIN CLEANING AND TELEVISION INSPECTION (CONT'D)

Measurement and payment shall be made under the following items:

<u>Pay Item</u>	<u>Pay Unit</u>
Cleaning, Storm Drain, Half Day	Unit
Cleaning, Storm Drain, Whole Day	Unit
Cleaning & Television Inspection, Storm Drain - Half Day	Unit
Cleaning & Television Inspection, Storm Drain - Whole Day	Unit
Television Inspection, Storm Drain – Half Day	Unit
Television Inspection, Storm Drain – Whole Day	Unit
Traffic Directors, Flaggers – Hour	Hour
Traffic Directors, Uniformed – Hour	Hour
Maintaining and Protecting Traffic, Half Day	Unit
Maintaining and Protecting Traffic, Whole Day	Unit

The County reserves the right to provide traffic control for this contract.


















The County reserves the right to provide Television Inspection for this contract.

Dewatering Pad Locations

The availability of locations is subject to change.

- OCUA North Plant, Mantoloking Rd., Brick
- OCUA Central Plant, Hickory Ln., Berkeley
- OCUA South Plant, Stafford
- Ocean County Garage, Lakewood

LEGEND


-  BREAKAWAY BARRICADES
-  BREAKAWAY BARRICADES WITH SIGN
-  CONSTRUCTION SIGNS
-  DRUMS
-  CONE
-  PRECAST CONCRETE CURB CONSTRUCTION BARRIER (TYPE SPECIFIED)
-  DIRECTION OF TRAFFIC FLOW
-  TRAFFIC DIRECTOR, FLAGGER
-  TRAILER MOUNTED MOUNTED ARROW BOARD SHOWING CAUTION MODE
-  ILLUMINATED FLASHING ARROW MOUNTED ON TOWING VEHICLE SHOWING ARROW PATTERN (Left, Right, Both)
-  TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING CAUTION MODE
-  TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING ARROW PATTERN (Left, Right, Both)
-  TEMPORARY CRASH CUSHION, INERTIAL BARRIER SYSTEM
-  TEMPORARY CRASH CUSHION, (all other approved)
-  BUFFER ZONE
-  WORK AREA
-  PAINT STRIPING TRUCK OR OTHER OPERATING VEHICLE

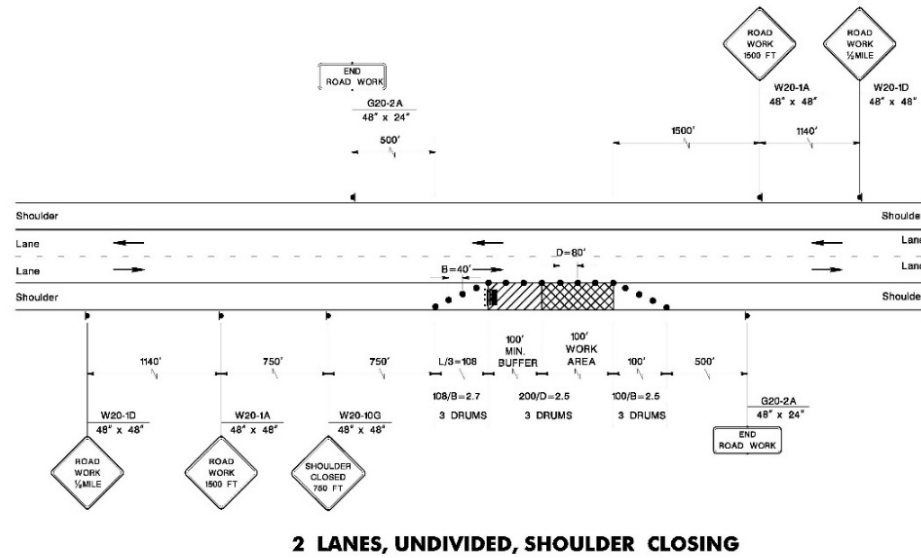
GENERAL NOTES:

1. ADVANCE WARNING SIGNS DISTANCES, AND TAPER LENGTHS MAY BE EXTENDED, AT DIRECTION OF THE DEPARTMENT, TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY.
2. THE APPROXIMATE LOCATIONS OF THE ILLUMINATED FLASHING ARROW BOARDS ARE SHOWN ON THE TRAFFIC CONTROL PLANS. THESE LOCATIONS MAY BE MODIFIED AS APPROVED BY RE TO ADJUST FOR VISIBILITY DUE TO HORIZONTAL OR VERTICAL CURVATURE OF THE ROADWAY OR TO POSITION AT A SAFER LOCATION. ILLUMINATED FLASHING ARROW BOARDS ARE TO BE USED FOR TEMPORARY LANE CLOSINGS AND AT LOCATIONS SHOWN ON THE TRAFFIC CONTROL PLANS.
3. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.
4. RAMPS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE PROVIDED WITH AT LEAST ONE W20-F SIGN (ROAD WORK AHEAD) AS A MINIMUM.
5. ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS AND/OR FLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED OR RELOCATED AS DIRECTED BY THE RE.
6. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON EITHER THE EXISTING, TEMPORARY, OR PROPOSED TRAFFIC SIGNAL SYSTEMS SHALL BE BAGGED OR COVERED.
7. MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - PART VI STANDARDS AND GUIDES FOR TRAFFIC CONTROL FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY, AND INCIDENT MANAGEMENT OPERATIONS, UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS.
8. CONSTRUCTION SIGN W9-2 (GIVE US A BRAKE) SHALL BE LOCATED 200 FEET IN ADVANCE OF PROJECT LIMITS.
9. A W4 (ARROW) SIGN MOUNTED ON A BREAKAWAY BARRICADE AND CENTERED ON THE CLOSED WIDTH SHALL BE LOCATED 100 FEET BEYOND EACH INTERSECTION ON MAIN ACCESS POINT WITHIN THE AREA OF A LANE OR SHOULDER CLOSURE.
10. CONSTRUCTION SIGNS R14 (ROAD CLOSED TO THRU TRAFFIC) SHALL BE PLACED AT THE INTERSECTING STREETS WHICH ARE CLOSED TO TRAFFIC BECAUSE OF CONSTRUCTION.
11. CONSTRUCTION SIGNS W8-6A (SYMBOL FOR UNEVEN PAVEMENT) AND W8-1A (GROOVED PAVEMENT) SHALL BE USED WHEN SUCH PAVEMENT CONDITIONS EXIST. THE PLACEMENT OF THESE SIGNS SHALL BE AS DIRECTED BY THE RE.
12. MOVING WORK AREAS IN A LANE CLOSURE REQUIRE A TRAILER MOUNTED ILLUMINATED FLASHING ARROW TO REMAIN AT THE END OF THE TAPER. THE TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION THAT SHALL MOVE WITH THE WORK AREAS TO KEEP A 70 FEET MIN. AND 80 FEET MAX. BUFFER IN ADVANCE OF EACH WORK AREA.
13. THE CONTRACTOR SHALL SUBMIT A PLAN FOR THE SAFE ACCESS OF CONSTRUCTION VEHICLES THROUGHOUT THE WORK SITE WHERE SPACE CONSTRAINTS PREVENT THE USE OF LANE CLOSURES. THE PLAN SHALL BE SUBMITTED TO THE RE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
14. ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON AT LEAST 8:1 V. SLOPE BEFORE THE END OF EACH WORK DAY. OTHER EXCAVATED AREA WITHIN THE CLEAR ZONE SHALL BE BACKFILLED.
15. WHERE REQUIRED, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN CROSSING LOCATIONS AND TYPE AS DIRECTED BY THE RE.
16. BITUMINOUS CONCRETE PLACED DURING THE VARIOUS CONSTRUCTION STAGES SHALL BE TRANSITIONED ON A MINIMUM 2:1 V. SLOPE TO MEET THE ADJACENT EXISTING GRADE AT THE LONGITUDINAL AND TRANSVERSE LIMITS OF THE STAGE CONSTRUCTION AREAS UNLESS OTHERWISE NOTED ON THE STAGE CONSTRUCTION PLANS.
17. CONSTRUCTION ZONE SPEED LIMIT WILL BE DETERMINED BY THE TRAFFIC SIGNAL & SAFETY ENGINEERING REGIONAL TRAFFIC ENGINEER - WORK ZONE, AT THE TIME OF OR DURING CONSTRUCTION AS REQUESTED BY THE R.E..
18. THE SPEED LIMIT, R9-1 (BLACK ON WHITE) WITH ADDED WORK ZONE PLATE (BLACK ON ORANGE) SIGNS SHALL BE LOCATED THROUGH WORK AREAS AS DIRECTED BY THE TRAFFIC SIGNAL & SAFETY ENGINEERING REGIONAL TRAFFIC ENGINEER - WORK ZONE.
19. THE REDUCED SPEED AHEAD SIGN, W3-S(8) (BLACK ON ORANGE) SHALL BE LOCATED IN ADVANCE OF SPEED LIMIT R9-1 SIGNS WHICH REDUCE THE NORMAL POSTED SPEED LIMIT THROUGH THE CONSTRUCTION ZONE.
20. TRAFFIC FINES DOUBLED IN WORK AREA. R10-1(7)(S), 4 FEET BY 2.5 FEET SIGN SHALL BE LOCATED 500 FEET AFTER THE FIRST ADVANCE WARNING SIGN (W20 SERIES) AT EACH WORK AREA LOCATED WITHIN URBAN AREAS. THIS SIGN SHALL ALSO BE USED ON PROJECTS REQUIRING MOVING OPERATIONS IN WHICH CASE THE SIGN SHALL BE MOUNTED ON A SLOW MOVING CONSTRUCTION VEHICLE.
21. THE FINAL HMA SURFACE PAVEMENT SHALL NOT BE CONSTRUCTED UNTIL THE FINAL STAGE OF THE PROJECT UNLESS OTHERWISE DIRECTED BY THE RE OR INDICATED ON THE PLANS. MANHOLES AND INLETS SHALL BE SET TO FINISHED GRADE AND TEMPORARY PAVEMENT RAMPS ARE TO BE CONSTRUCTED AROUND THEM WITH A MINIMUM 2:1 V. SLOPE IN ALL DIRECTIONS USING HOT MIX ASPHALT PAVEMENT. THIS TEMPORARY MATERIAL WILL BE REMOVED IMMEDIATELY PRIOR TO PLACING THE SURFACE COURSE.
22. TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC. SHALL BE PLACED NONE ON PLANS SIGNS SHALL NOT BE PLACED WITHOUT ACTUAL LANE CLOSURES AND SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.
23. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE RE.
24. TRAFFIC IMPACT NOTICES AND CHANGES
 - A. TERMS: WHEN THE FOLLOWING TERMS ARE USED, THE INTENT AND MEANING SHALL BE AS FOLLOWS:
 - I. IMPACTS TO NORMAL TRAFFIC FLOW - WORK THAT REQUIRES A PORTION OF THE PAVED ROADWAY BEING BLOCKED OR CLOSED WITH SAFETY DEVICES OR VEHICLES, INCLUDING, BUT NOT LIMITED TO, FULL OR PARTIAL LANE CLOSURES, FULL OR PARTIAL RAMP CLOSURES, SHOULDER CLOSURES, MOVING OPERATIONS SUCH AS TRAFFIC STRIPING OR SWEEPING, LANE SHIFTS, OR ALTERNATING TRAFFIC. THIS APPLIES EVEN WHEN DETOURS ARE PROVIDED.
 - II. TEMPORARY LANE CLOSURES - WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH IS ROUTINELY SET UP AND REMOVED ON A DAILY BASIS.
 - III. PERMANENT LANE CLOSURES - WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH REMAINS IN PLACE CONTINUOUSLY FOR 24 HOURS OR MORE.
 - B. ADVANCE NOTICES
 - FOR THE INITIAL START OF WORK THAT REQUIRES "IMPACTS TO NORMAL TRAFFIC FLOW", THE CONTRACTOR SHALL NOTIFY THE RE IN WRITING ON THE ADVANCE FORM TO-99 PROVIDED BY THE DEPARTMENT, OF THE PROPOSED DATE. THE NOTICE SHALL BE SUBMITTED AT LEAST TWENTY-EIGHT CALENDAR DAYS BUT NOT MORE THAN SIXTY CALENDAR DAYS BEFORE THE PROPOSED DATE. START OF WORK THAT IMPACTS NORMAL TRAFFIC FLOW WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR SHALL CONFIRM IN WRITING TO THE RE, THE PROPOSED DATE SEVEN (AND/OR FOURTEEN CALENDAR DAYS BEFORE STARTING THE ESTABLISHMENT OF THE TRAFFIC CONTROL MEASURES FOR THE TRAFFIC IMPACT. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RE IF THE PROPOSED ESTABLISHMENT CAN NOT BE COMPLETED ON THE PROPOSED DATE.
 - FOR A "PERMANENT LANE CLOSURE", THE CONTRACTOR SHALL NOTIFY THE RE IN WRITING ON ADVANCE FORM TO-99, OF THE PROPOSED DATE A NEW TRAFFIC PATTERN WILL BE ESTABLISHED. THE NOTICE SHALL BE SUBMITTED AT LEAST TWENTY-EIGHT CALENDAR DAYS BUT NOT MORE THAN SIXTY CALENDAR DAYS IN ADVANCE OF THE PROPOSED DATE. START OF A NEW TRAFFIC PATTERN WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR SHALL CONFIRM IN WRITING TO THE RE, THE PROPOSED DATE OF THE NEW TRAFFIC PATTERN SEVEN (AND/OR FOURTEEN DAYS BEFORE STARTING TRAFFIC CONTROL MEASURES FOR THE ESTABLISHMENT OF THE NEW PATTERN. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RE IF THE PROPOSED ESTABLISHMENT CAN NOT BE COMPLETED ON THE PROPOSED DATE.
 - STARTING THE ESTABLISHMENT OF A NEW PERMANENT TRAFFIC PATTERN SHALL BEGIN NO EARLIER THAN 10:00 PM FRIDAY AND SHALL BE COMPLETED AND READY FOR OPERATIONS BY 8:00 PM THE FOLLOWING SUNDAY. THE ESTABLISHMENT SHALL BE COMPLETED IN ACCORDANCE WITH THE LANE CLOSURE HOURS SPECIFIED IN THE CONTRACT.
 - C. PROGRESS NOTICES
 - ADVANCE NOTICES SENT PRIOR TO THE PRE-CONSTRUCTION MEETING SHALL BE ADDRESSED TO THE CONTACT PERSON AS SPECIFIED IN SUBSECTION 101.04 OF THE SPECIAL PROVISIONS.
- D. CHANGES TO THE SCHEDULED CLOSURES
 - REQUEST FOR A CHANGE TO THE TRAFFIC CONTROL REQUIREMENTS IN THE CONTRACT DOCUMENTS SHALL BE SUBMITTED IN WRITING TO THE RE AS FOLLOWS:
 - CHANGES TO THE SCHEDULED HOURS FOR "TEMPORARY LANE CLOSURES" SHALL BE SUBMITTED TO THE RE AT LEAST EIGHT CALENDAR DAYS IN ADVANCE OF WHEN THE CHANGE IS PROPOSED TO START.
 - OTHER PROPOSED CHANGES TO "TEMPORARY LANE CLOSURES" AND ALL CHANGES TO "PERMANENT LANE CLOSURES" SHALL BE SUBMITTED TO THE RE AS SPECIFIED IN THE SPECIFICATIONS.
25. WHERE MILLING OR HMA PAVING IS PERFORMED AND THE LANE IS TO BE RE-OPENED TO TRAFFIC EACH DAY, APPLY TEMPORARY TRAFFIC STRIPES.

GENERAL NOTES


N/A

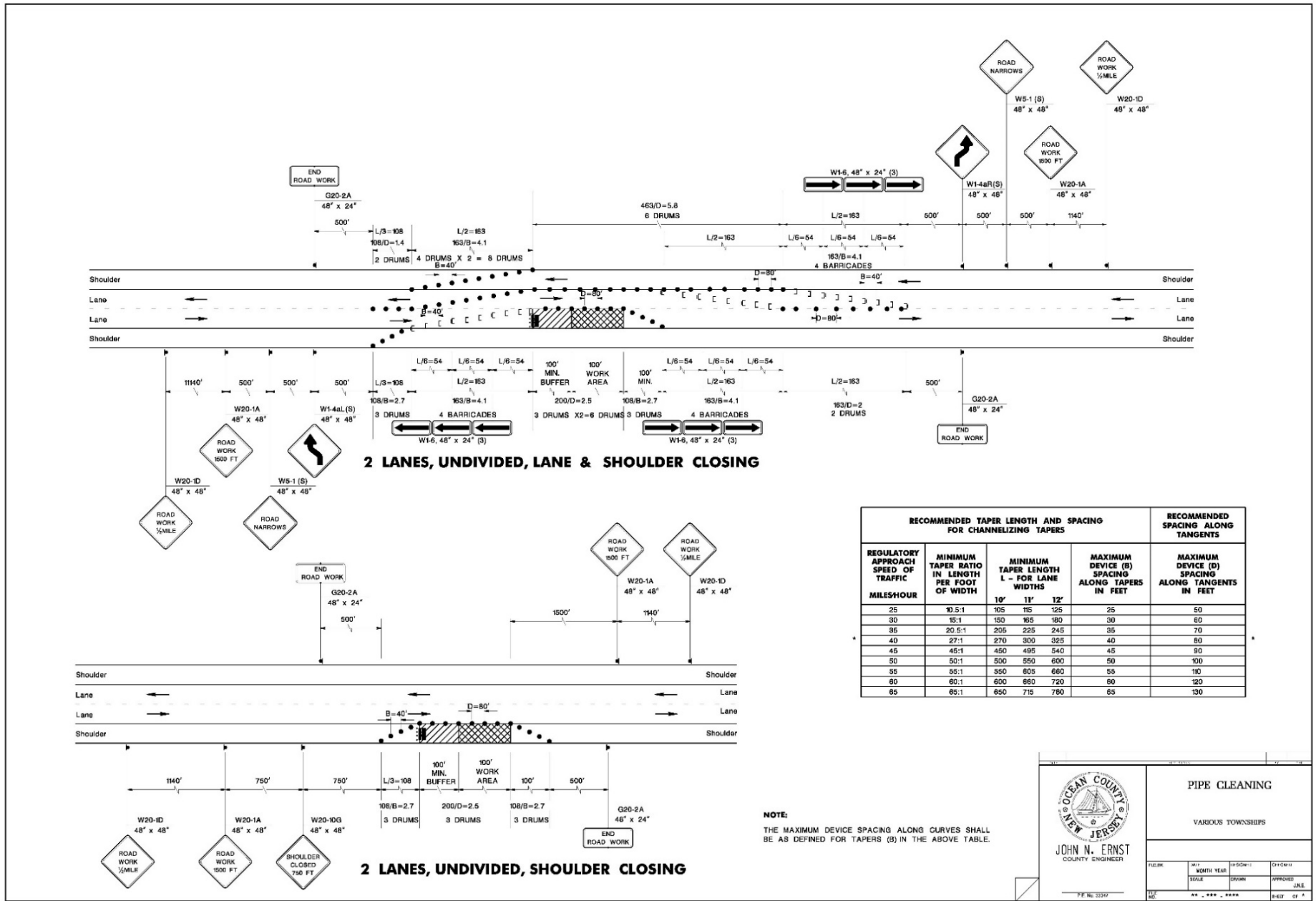
 <p>OCEAN COUNTY NEW JERSEY</p> <p>JOHN N. ERNST COUNTY ENGINEER</p>		<p>PIPE CLEANING</p> <p>VARIOUS TOWNSHIPS</p>	
FILED	DATE	BY	APPROVED
	MONTH YEAR	SIGNATURE	J.N.E.
NO.	DATE	BY	REVISION
	*** - *** - ****		HEET OF 4



REGULATORY APPROACH SPEED OF TRAFFIC MILESHOUR	MINIMUM TAPER RATIO IN LENGTH PER FOOT OF WIDTH	RECOMMENDED TAPER LENGTH AND SPACING FOR CHANNELIZING TAPERS			MAXIMUM DEVICE (B) SPACING ALONG TAPERS IN FEET	RECOMMENDED SPACING ALONG TANGENTS
		MINIMUM TAPER LENGTH L - FOR LANE WIDTHS				
		10'	11'	12'		
25	10.5:1	105	115	125	25	50
30	15:1	150	165	180	30	60
35	20.5:1	205	225	245	35	70
40	27:1	270	300	325	40	80
45	45:1	450	495	540	45	90
50	50:1	500	550	600	50	100
55	55:1	550	605	660	55	110
60	60:1	600	660	720	60	120
65	65:1	650	715	780	65	130

NOTE:
THE MAXIMUM DEVICE SPACING ALONG CURVES SHALL
BE AS DEFINED FOR TAPERS (B) IN THE ABOVE TABLE.

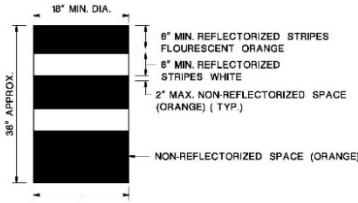
 JOHN N. ERNST COUNTY ENGINEER		PIPE CLEANING		
		VARIOUS TOWNSHIPS		
FILED	DATE	BY	DATE	DATE
** **		SHEET OF 2		



DRUMS SHALL BE MADE OF ORANGE PLASTIC WITH A MINIMUM OF FOUR ALTERNATE FLOURESCENT ORANGE AND WHITE RETROREFLECTIVE STRIPES. IF THERE ARE NON-REFLECTORIZED SPACES BETWEEN THE STRIPES, THEY SHALL BE NO MORE THAN 2" WIDE. RETROREFLECTIVE SHEETING FOR STRIPES SHALL CONFORM WITH ASTM D 4956 TYPE VII OR VIII WITH S2 REQUIREMENTS.

THE TOP OF THE DRUM SHALL NOT BE OPEN. DRUMS SHALL BE CONSTRUCTED TO INHIBIT ROLLING IF KNOCKED OVER.

THE REFLECTORIZED AREA OF DRUMS SHALL BE ROUND EXCEPT THAT OTHER SHAPES, WHICH PROVIDE THE SAME VISIBILITY AS AN 18 INCH DIAMETER ROUND DRUM REGARDLESS OF ORIENTATION, MAY BE USED.



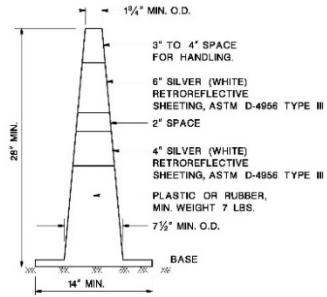
WHEN BALLAST IS REQUIRED BY THE R.E., SAND SHALL BE USED THE MAXIMUM WEIGHT OF THE BALLAST SHALL BE 50 LBS. AND BE LOCATED APPROXIMATELY AT GROUND LEVEL. ALTERNATE TYPES OF BALLAST SHALL BE APPROVED BY THE R.E.

DRUMS

CD-159-1.1

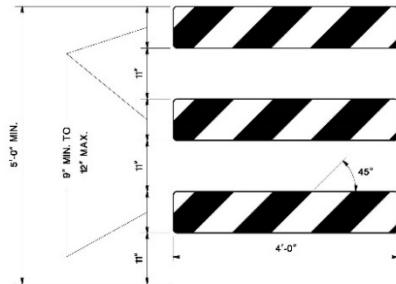
NOTES:

TRAFFIC CONES SHALL BE PREDOMINATELY ORANGE IN COLOR.
 BASES MAY BE OF BREAKAWAY BALLASTED TYPE.
 MINOR MANUFACTURER'S VARIATIONS MAY BE ACCEPTABLE UPON APPROVAL OF THE ENGINEER.



TRAFFIC CONES

CD-159-1.2




TYPE III BARRICADE - FRONT VIEW

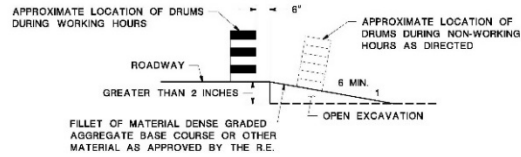
NOTES:

1. THE 9" MIN. x 48", OR 12" MAX. x 48" BARRICADE RAILS SHALL BE FABRICATED FROM 0.125" MAX. PLASTIC SHEETING AND SHALL BE ATTACHED, 4 PER RAIL, WITH 1 INCH NO. 14 PAN HEAD METAL SCREWS OR PLASTIC RIVETS. ALL CORNERS SHALL BE ROUNDED.
2. ORANGE AND SILVER (WHITE) STRIPES SHALL BE RETROREFLECTIVE SHEETING, ASTM D 4956 TYPE III, AS SHOWN FOR CONSTRUCTION SIGNS. ALTERNATE ORANGE AND SILVER (WHITE) STRIPES 6" WIDE SLOPING DOWNWARD AT AN ANGLE OF 45 DEGREES IN THE DIRECTION TRAFFIC IS TO PASS.
3. IF NECESSARY, THE SANDBAGS SHALL BE FABRICATED AND PLACED ACCORDING TO THE MANUFACTURE'S RECOMMENDATION.
4. THE FRAMING FOR BARRICADE PANELS SHALL BE NCHRP-380 CRASHED TESTED AND FHWA APPROVED.

BREAKAWAY BARRICADES

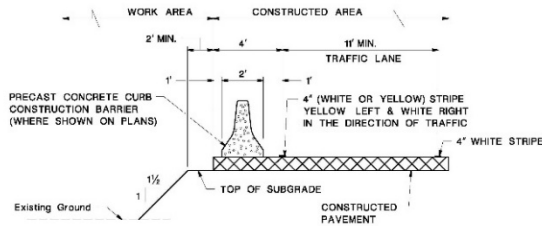
CD-159-1.3

 JOHN N. ERNST COUNTY ENGINEER		PIPE CLEANING	
		VARIOUS TOWNSHIPS	
FILE NO.	DATE	SCALE	APPROVED
TEL. NO.	** - *** - ****		SHEET OF 7



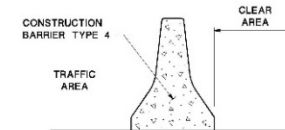
NOTE:
ESCAPE RAMPS MUST BE CONSTRUCTED AND MAINTAINED DURING NON-WORKING HOURS WHERE A VERTICAL DROP GREATER THAN 2 INCHES EXISTS ADJACENT TO TRAVELED LANE.

ESCAPE RAMP DETAIL



TYPICAL SECTION

PLACEMENT OF PRECAST CONCRETE CONSTRUCTION BARRIER



NOTES:
1. CHANGES TO THE PROPOSED JOINT CLASS AT ANY LOCATION MUST BE APPROVED BY THE DEPT.
2. NO ROADWAY DROP OFFS, OBSTRUCTIONS, STORAGE OF MATERIALS OR WORK WILL BE PERMITTED IN THE CLEAR AREA UNLESS APPROVED BY THE R.E.

STAGE	LOCATION	JOINT CLASS
	RTE. STA. TO STA.	

JOINT CLASS	CLEAR AREA
A	20 INCHES
B	18 INCHES
C	11 INCHES

CONSTRUCTION BARRIER, TYPE 4 JOINT CLASS AND CLEAR AREA


REGULATORY APPROACH SPEED OF TRAFFIC MILES/HOUR	RECOMMENDED SIGHT DISTANCE TO BEGINNING OF CHANNELIZING TAPERS		
	DESIRABLE		MINIMUM
	RURAL FEET	URBAN FEET	RURAL AND URBAN FEET
25	375	525	150
30	450	625	200
35	525	725	250
40	600	825	325
45	675	925	400
50	750	1025	475
55	825	1150	550
60	900	1275	650
65	950		725

- NOTES:**
1. AVOIDANCE MANEUVER IS FOR A SPEED, PATH, AND/OR DIRECTION CHANGE PRIOR TO THE BEGINNING OF CHANNELIZING TAPERS.
 2. RECOMMENDED DISTANCES BETWEEN TWO SEPARATE LANE CLOSURES SHALL BE DOUBLE THE VALUES SHOWN ABOVE.
 3. RURAL AND URBAN ROAD DESIGNATIONS SHALL BE AS DEFINED IN THE NJDOT STATE HIGHWAY STRAIGHT LINE DIAGRAMS.
 4. DESIRABLE VALUES SHALL BE PROVIDED WHEREVER POSSIBLE. IF IT IS NOT FEASIBLE OR PRACTICAL TO PROVIDE DESIRABLE VALUES BECAUSE OF HORIZONTAL OR VERTICAL CURVATURE OR IF RELOCATION OF THE TAPER IS NOT POSSIBLE, THEN MINIMUM VALUES CAN BE APPLIED. WHEN MINIMUM VALUES ARE USED, SPECIAL ATTENTION SHOULD BE GIVEN TO THE USE OF SUITABLE TRAFFIC CONTROL DEVICES FOR PROVIDING ADVANCED WARNING OF THE CONDITIONS THAT ARE LIKELY TO BE ENCOUNTERED.
 5. TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.

REGULATORY APPROACH SPEED OF TRAFFIC MILES/HOUR	RECOMMENDED TAPER LENGTH AND SPACING FOR CHANNELIZING TAPERS				RECOMMENDED SPACING ALONG TANGENTS
	MINIMUM TAPER RATIO IN LENGTH PER FOOT OF WIDTH	MINIMUM TAPER LENGTH L - FOR LANE WIDTHS		MAXIMUM DEVICE (B) SPACING ALONG TAPERS IN FEET	
		10'	11'		
25	10.5:1	105	115	125	25
30	12:1	150	165	180	30
35	20.5:1	205	225	245	35
40	27:1	270	300	325	40
45	45:1	450	495	540	45
50	50:1	500	550	600	50
55	55:1	550	605	660	55
60	60:1	600	660	720	60
65	65:1	650	715	780	65

NOTE:
THE MAXIMUM DEVICE SPACING ALONG CURVES SHALL BE AS DEFINED FOR TAPERS (B) IN THE ABOVE TABLE.

NOTE TO DESIGNER:
THIS SHEET REQUIRES DESIGN SPECIFIC INFORMATION TO BE ADDED AND INCLUDED IN THE CONTRACT PLANS. REMOVE THIS NOTE AFTER DESIGN SPECIFIC INFORMATION IS ADDED.



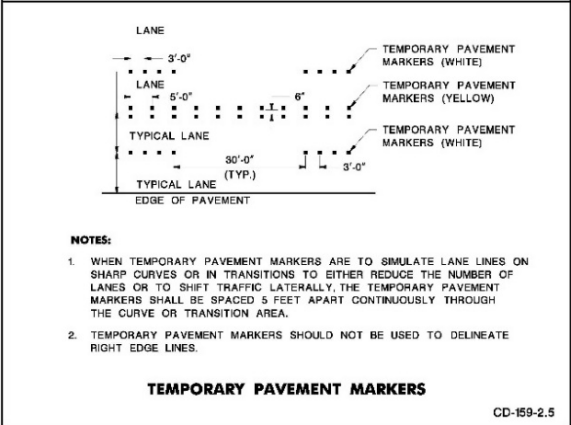
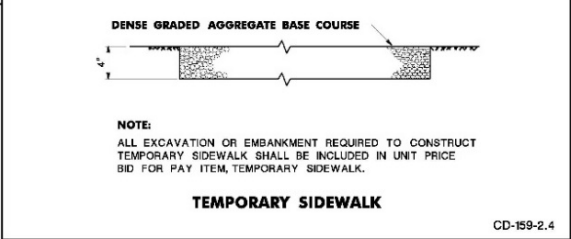
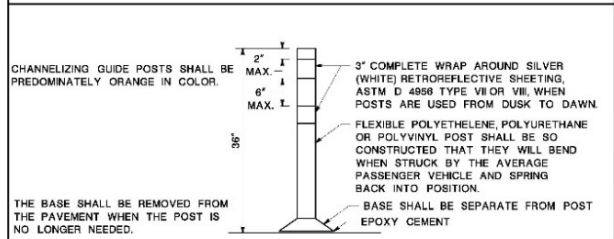
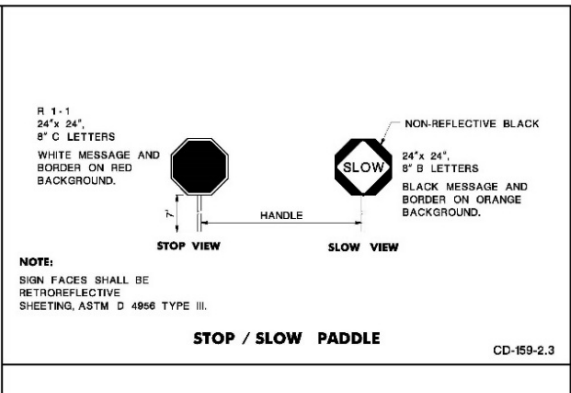
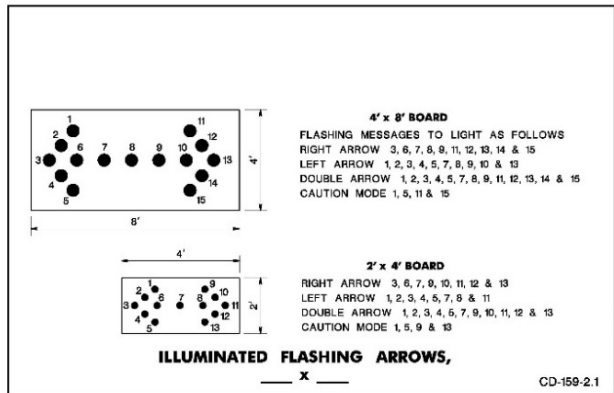
JOHN N. ERNST
COUNTY ENGINEER

PIPE CLEANING


VARIOUS TOWNSHIPS

FILED	DATE	BY	APPROVED
	MONTH YEAR	DESIGNER	ENGINEER

PP No. 0037



TRAFFIC CONTROL DEVICES

 JOHN N. ERNST COUNTY ENGINEER	PIPE CLEANING			
	VARIOUS TOWNSHIPS			
FILED	DATE	BY	DATE	DATE
	MONTH YEAR	DRAWN	APPROVED	J.N.E.
SCALE				
REV	NO.	DATE	BY	DESCRIPTION

PE No 2347

SHEET OF 1