

PATRICIA A. PESHKA

PURCHASING AGENT



JOSEPH J. SOLOMON

MAYOR

CITY OF WARWICK
PURCHASING DIVISION
3275 POST ROAD
WARWICK, RHODE ISLAND 02886
TEL (401)738-2013
FAX (401) 737-2364

The following notice is to appear on the City of Warwick's website Friday, July 24, 2020.
The website address is <http://www.warwickri.gov/bids>.

CITY OF WARWICK
PROPOSALS REQUESTED FOR

RFP2021-073 Manhole and Wet Well Rehabilitation and Related Services

Specifications are available in the Purchasing Division, Warwick City Hall, Monday through Friday, 8:30 AM until 4:30 PM on or after Friday, July 24, 2020. **Our office will be closed on Monday, August 10, 2020 and will reopen on Tuesday, August 11, 2020.**

Sealed proposals will be received by the Purchasing Division, Warwick City Hall, 3275 Post Road, Warwick, Rhode Island 02886 up until 11:00 AM, Tuesday, September 1, 2020. The proposals will be opened publicly commencing at 11:00 AM on the same day in the Lower Level Conference Room at Warwick City Hall. ***Please note due to COVID-19, only one (1) person from each company may attend the bid opening. Employees and visitors must adhere to social distance guidelines. All visitors are advised to wear masks or face coverings at all times***

Awards will be made on the basis of the lowest evaluated or responsive proposal price. Please note that no proposals can be accepted via email or fax.

The City of Warwick, in addition to soliciting proposals in response to this RFP, may consult, consider, and make an award for any and all open proposal offers for a comparable unit as sought herein at the following websites:

RI State MPA: <http://www.purchasing.ri.gov/MPA/MPASearch.aspx>

NASPO: <https://www.naspo.org/>

NJPA (National Joint Powers Alliance): <https://www.njpacoop.org/cooperative-purchasing>

MHEC (Massachusetts Higher Education Consortium): <https://www.mhec.net/>

Individuals requesting interpreter services for the hearing impaired must notify the Purchasing Division at 401-738-2013 at least 48 hours in advance of the proposal opening date.

Original Signature on File

Patricia A. Peshka

Purchasing Agent

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR PROPOSAL

Acknowledgement of Addendum (if applicable)

Addendum Number	Signature of Bidder
_____	_____
_____	_____

COMPANY NAME: _____

COMPANY ADDRESS: _____

COMPANY ADDRESS: _____

BIDDER'S SIGNATURE: _____

BIDDER'S NAME (PRINT): _____

TITLE: _____ TEL. NO.: _____

EMAIL ADDRESS: _____*

*Please include your email address. Future proposals will be emailed, unless otherwise noted.

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II. AWARD AND CONTRACT:

The CITY OF WARWICK, acting as duly authorized through its Purchasing Agent/Finance Director/Mayor, accepts the above proposal and hereby enters into a contract with the above party to pay the proposal price upon completion of the project or receipt of the goods unless another payment schedule is contained in the specifications. All terms of the specifications, both substantive and procedural, are made terms of this contract.

DATE: _____

RFP2021-073

Purchasing Agent

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR PROPOSAL

CERTIFICATION & WARRANT FORM*

**This form must be completed and submitted with sealed bid
Failure to do so will result in automatic rejection.**

Any and all bids shall contain a certification and warrant that they comply with all relevant and pertinent statutes, laws, ordinances and regulations, in particular, but not limited to Chapter 16- Conflicts of Interest, of the Code of Ordinances of the City of Warwick. Any proven violation of this warranty and representation by a bidder at the time of the bid or during the course of the contract, included, but not limited to negligent acts, either directly or indirectly through agents and/or sub-contractors, shall render the bidder's contract terminated and the bidder shall be required to reimburse the City for any and all costs incurred by the City, including reasonable attorney fees, to prosecute and/or enforce this provision.

Signature

Date

Company Name

Address

Address

***This form cannot be altered**

**CITY OF WARWICK
NOTICE TO BIDDERS**

RFP2021-073 Manhole and Wet Well Rehabilitation and Related Services

If you received this document from our homepage or from a source other than the City of Warwick Purchasing Division, please check with our office prior to submitting your proposal to ensure that you have a complete package. The Purchasing Division cannot be responsible to provide addenda if we do not have you on record as a plan holder.

The opening of proposals will be in the order established by the posted agenda and the agenda will continue uninterrupted until completion.

Once an item has been reached and any proposals on that item has been opened, no other proposals on that item will be accepted and any such proposal will be deemed late.

The contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap for any position for which the employee or applicant is qualified and that in the event of non-compliance the City may declare the contractor in breach and take any necessary legal recourse including termination or cancellation of the contract.

A bidder filing a proposal thereby certifies that no officer, agent, or employee of the City has a pecuniary interest in the proposal or has participated in contract negotiations on the part of the City, that the proposal is made in good faith without fraud, collusion, or connection of any kind with any other bidder for the same call for proposals, and that the bidder is competing solely in his own behalf without connection with, or obligation to, any undisclosed person or firm.

All proposals should be submitted with one (1) original, three (3) copies, and three (3) memory sticks in a sealed envelope, which should read: *YOUR COMPANY NAME* plainly marked on the exterior of the envelope as well as "RFP2021-073 Manhole and Wet Well Rehabilitation and Related Services."

All proposals submitted become the property of the City and will not be returned. If the company intends to submit **confidential or proprietary information** as part of the proposal, **any limits on the use or distribution of that material should be clearly delineated in writing. This information should be submitted in a sealed envelope, clearly labeled confidential** and where it should be submitted in the response. Please be advised of the Freedom of Information Act as it may pertain to your submittal.

Proposals received prior to the time of the opening will be securely kept, unopened. No responsibility will be attached to an officer or person for the premature opening of a proposal not properly addressed and identified. No proposals will be accepted via facsimile or email.

Should you have any questions, please contact Dana DiScuillo, WSA Superintendent, 125 Arthur Devine Blvd. Warwick, RI 02888 at Dana.a.DiScuillo@Warwickri.com.

All proposals should be written in ink or typed. If there is a correction with whiteout, the bidder should initial the change.

Negligence on the part of the bidder in preparing the proposal confers no rights for the withdrawal of the proposal after it is open.

Any deviation from the specifications must be noted in writing and attached as part of the bid proposal. The bidder should indicate the item or part with the deviation and indicate how the proposal will deviate from specifications.

The IRS Form W-9 is available on www.warwickri.gov should be completed and submitted with the proposal if the bidder falls under IRS requirements to file this form.

Prevailing Wages will apply to this proposal. Current rates may be viewed at <http://www.dlt.state.ri.us/pw>.

The successful bidder must comply with all Rhode Island Laws, applicable to public works projects, including, but not limited to provisions of Chapter 13 of Title 37 of the Rhode Island General Laws, pertaining to prevailing wage rates, and all other applicable local, state and federal laws.

The contractor must carry sufficient liability insurance and agree to indemnify the city against all claims of any nature, which might arise as a result of his operations or conduct of work.

The contractor must keep himself informed of and comply with all laws, ordinances and regulations of the federal, state and municipal governments which may apply and be in force during the life of the contract, in any manner which may affect himself/employees or the conduct of the work or the materials used or employed in the work. Before submitting proposals, prospective bidders should examine the terms, covenants and conditions of all codes, permits and laws which may apply. By submitting a proposal, the bidder agrees to comply with all pertinent laws/regulations if awarded a contract.

Every contractor and subcontractor awarded a contract for public works, construction, alteration and/or repair, including painting and decorating, or public buildings or public works must submit completed RI Certified Weekly Payroll forms listing employees employed on the project to the awarding authority on a monthly basis for all work completed in the preceding month. These forms may be found at: www.dlt.ri.gov/pw/pwFormsPubs.htm. Certified Payroll forms concerning RI Department of Transportation projects may be submitted on federal forms. However, when a complaint is being investigated by the RI Department of Labor & Training (DLT), the contractor must resubmit the payroll information on the RI Certified Weekly Payroll forms for the entire project.

Awarding authorities, contractors and subcontractors must provide any and all payroll records to the DLT within ten (10) days of any request that is made by the department.

The awarding authority of any public works project will withhold the next scheduled payment to any contractor or subcontractor who fails to comply with the above provisions, as well as any further payments until they comply. The DLT may also impose a penalty of up

to \$500 for each calendar day of noncompliance.

Please refer to Rhode Island state laws Section 37-13 for more information.

The successful bidder must provide the City of Warwick with an original **Certificate of Insurance** for General Liability and Automobile Liability in a minimum amount of \$1 million, naming the **City of Warwick as the additional insured** and so stated on the certificate with the proposal name and proposal number. It is the vendor's responsibility to provide the City of Warwick with an updated Certificate of Insurance upon expiration of the original certificate.

Failure to provide adequate insurance coverage within the specified duration of time as set forth is a material breach of contract and grounds for termination of the contract.

For a bid to be awarded to a corporation, limited liability company or other legal entity, prior to commencing work under the awarded bid, that corporation, company or legal entity may be required to provide to the Purchasing Agent a **Certificate of Good Standing** from **The Rhode Island Secretary of State** dated no more than thirty (30) days prior to the date upon which the bid approval was made. **Please note that no other State's Certificate of Good Standing will be accepted.**

If required, the successful bidder will provide said **Certificate of Insurance, bonds and State of Rhode Island's Certificate of Good Standing** within ten (10) calendar days after notification or the City reserves the right to rescind said award.

Prices to be held firm two (2) years from date of award. Term contracts may be extended for two (2) additional one (1) year terms upon mutual agreement unless otherwise stated.

The City is exempt from the payment of the Rhode Island Sales Tax under the 1956 General Laws of the State of Rhode Island, 44-18-30, Paragraph I, as amended.

The contractor must carry sufficient liability insurance and agree to indemnify the City against all claims of any nature, which might arise as a result of his operations or conduct of work.

The Purchasing Agent reserves the right to reject any and all proposals, to waive any minor deviations or informalities in the proposals received, and to accept the proposal deemed most favorable to the interest of the City.

The City reserves the right to terminate the contract or any part of the contract in the best interests of the City, upon 30-day notice to the contractor. The City will incur no liability for materials or services not yet ordered if it terminates in the best interests of the City. If the City terminates in the interests of the City after an order for materials or services has been placed, the contractor will be entitled to compensation upon submission of invoices and proper proof of claim, in that proportion which its services and products were satisfactorily rendered or provided, as well as expenses necessarily incurred in the performance of work up to time of termination.

No extra charges for delivery, handling or other services will be honored. All claims for damage in transit will be the responsibility of the successful bidder. Deliveries must be made during normal working hours unless otherwise agreed upon.

All costs directly or indirectly related to the preparation of a response to this solicitation, or any presentation or communication to supplement and/or clarify any response to this solicitation which may be required or requested by the City of Warwick will be the sole responsibility of and will be borne by the respondent.

If the respondent is awarded a contract in accordance with this solicitation and fails or refuses to satisfy fully all of the respondents obligations thereunder, the City of Warwick will be entitled to recover from the respondent any losses, damages or costs incurred by the City as a result of such failure or refusal.

The City reserves the right to award in part or full and to increase or decrease quantities in the best interest of the City.

Any quantity reference in the proposal specifications are estimates only, and do not represent a commitment on the part of the City of Warwick to any level of billing activity. It is understood and agreed that the agreement will cover the actual quantities ordered during the contract period.

The City reserves the right to rescind award for non-compliance to proposal specifications.

The successful bidder must adhere to all City, State and Federal Laws, where applicable.

**Warwick Sewer
Authority
REQUEST FOR
PROPOSALS
Manhole and Wet Well Rehabilitation
and Related Services**

I. COMPETITION INTENDED

It is the Warwick Sewer Authority's intent that this Request for Proposals (RFP) allows for competition. It shall be the offeror's responsibility to advise the WSA in writing if any language, requirement, specification, etc. or any combination thereof, inadvertently restricts or limits the requirements stated in the RFP to a single source. The WSA must receive such notification not later than seven (7) days prior to the date set for acceptance of proposals.

The term "Owner" used in this solicitation refers to Warwick Sewer Authority. The terms "Contractor" and "Successful Offeror" refer to the person or firm to whom an award is made to perform the work under the contract.

II. PURPOSE

The purpose of this Request for Proposal (RFP) is to solicit **sealed** proposals to establish a contract with qualified and experienced Firm(s) contractor to provide Manhole and Wet Well Rehabilitation via an epoxy coating system and Related Services to Warwick Sewer Authority (WSA). The owner reserves the right to award contracts to more than one offeror.

III. BACKGROUND

This Request for Proposals is issued by the Warwick Sewer Authority ("Owner") to obtain Manhole and Wet Well Rehabilitation (using an epoxy coating system) and related services for the WSA Sanitary Sewer System. The successful offeror shall perform the required work at the time and place designated by WSA Superintendent or designate. The contract is intended to be open ended with the potential to assign multiple projects over the course of the next fiscal year.

The initial contract term shall be one (2) year with two (2) possible one year renewals upon mutual agreement. Unit prices for subsequent contract years shall not exceed the percentage change from the previous 12 months based on the most recent available data for the U.S. Department of Labor, Bureau of Labor Statistics, Rhode Island New England Area, or three percent (3%), whichever is lower.

Actual quantities for individual project assignments will vary but

will generally include about 10 to 20 manholes or 1 to 3 wet wells per task order unless mutually agreed otherwise by the Owner and successful Offeror. Completion dates for individual project assignments shall be negotiated between the Owner and Contractor. The quantities shown on the price proposal form are intended to provide a sample of a potential project assignment.

Offerors should carefully review the required experience and qualifications especially Section VI, B. Specific Requirements below.

The work primarily consists of Manhole Coating, Manhole Chimney Sealing, Manhole or Wet Well Structure and/or Bench and Invert Reconstruction, Wet Well Coating, and Coating Piping and Miscellaneous Metals in Wet Wells. Coatings shall be completed using a monolithic 100% solids epoxy, formulated with exceptionally high physical strengths and broad range chemical resistance, and capable of being spray applied or hand troweled. When cured, the system shall form a continuous, tight-fitting, hard, impermeable surface that is suitable for sewer system service and chemically resistant to any chemicals, bacteria or vapors normally found in domestic or industrial sewers including H₂S (Hydrogen Sulfide). The system shall effectively seal the interior surfaces of the structure and prevent any penetration of leakage of groundwater infiltration. The work shall be completed in accordance with the attached specifications. The Owner may terminate the contract if inferior work is performed by the successful offeror. The Owner shall be the sole judge of whether work is inferior. The Owner, at its sole discretion, may grant an opportunity to remedy the situation but is not contractually obligated to do so.

IV. STATEMENT OF NEEDS

See Attachment A-Technical Specifications

V. INSTRUCTIONS FOR PREPARING PROPOSALS

Proposals shall be prepared simply and economically, providing concise descriptions of services to be offered, placing emphasis on completeness and clarity. Offerors are encouraged to elaborate on their qualities and performance history including staff, experience pertinent to the scope of services for this project.

Interested firms shall **submit one (1) original (Clearly mark as “Original”) and three (3) copies as well as 3 copies on a memory stick** of their Proposal providing general background information on the firm and the following specific information in

the order listed below:

VI. PROPOSAL FORMAT/SUBMISSION REQUIREMENTS

A. General Requirements

1. Proposals should be organized in the order in which requirements are presented in the RFP. All pages of the proposal should be numbered. Each paragraph in the proposal should reference the paragraph number of the corresponding section of the RFP as outlined in the RFP. It is also helpful to cite the paragraph number and repeat the text of the requirement as it appears in the RFP. If a response covers more than one page, the paragraph number should be repeated at the top of the next page. The proposal should contain a table of contents, which cross references the RFP requirements. Information that the Offeror desires to present that does not fall within any of the requirements of the RFP should be inserted at an appropriate place or be attached at the end of the proposal and designated as additional material. Proposals that are not organized in this manner risk elimination from consideration if the evaluators are unable to find where the RFP requirements are specifically addressed. The Offeror proposal should provide all the information, which it considers pertinent to its qualifications for the project and which respond to the Scope of Services described.
2. Proposals should be returned in a sealed container with the words "Proposal Enclosed" on the face of the container. The RFP Number, the time and date of the RFP opening, title of the proposal, and offeror's company name should be included on the face of the container.
3. Proposals or any addendums to proposals received by the WSA after the closing date and time will not be considered. Actual receipt by the WSA and not the mailing or sending date shall control.
4. Proposals should be as thorough and detailed as possible, such that the Offerors capabilities to provide the required services may be properly and fully evaluated. A Table of Contents and Tabs should be provided and pages and exhibits numbered in an organized manner. Each section must begin on a new page; preferably separated by an index tab.
5. Offerors are encouraged to carefully examine the RFP for discrepancies, errors, omissions or ambiguities. Any questions concerning the requirements of the RFP should be directed in writing to:

Earl Bond CAPM, PMP
Executive Director WSA
125 Arthur Devine Blvd
Warwick, RI 02888
Earl.w.Bond@Warwickri.com
FAX 401-739-1414

6. Each Offeror shall complete and submit the signed RFP Cover Sheet(s) with each Proposal.
7. References may be contacted at the discretion of the WSA. Typically, only references of those offerors that receive high rankings are contacted. The WSA reserves the right to contact entities/firms other than those listed or in addition to those furnished in the offeror's proposal.

The offeror shall furnish the WSA all such information and data as may be requested for this purpose.

B. Specific Requirements

Offerors shall submit the following items in the order listed below:

1. Company Name, address, telephone/fax number, email address, Officers/principals, and a copy of the Contractor's License and Certifications. Provide same information on subcontractors. All contractors and subcontractors shall be properly licensed by the State of Rhode Island.
2. The following information concerning the epoxy system and offeror experience and qualifications:
 - A. The contractor shall provide the following information.
 1. The contractor shall furnish Material Safety Data Sheets (MSDS) for all products used in the coating system.
 2. For all coating system components, the contractor shall provide the manufacturer's application instructions, which shall include the following:
 - a. Surface preparation recommendations.
 - b. Primer type, where required.
 - c. Maximum dry and wet mil thickness.
 - d. Minimum and maximum curing time between coats, including atmospheric conditions for each.
 - e. Curing time before submergence in liquid.
 - f. Thinner to be used with coating material (if applicable).
 - g. Ventilation requirements.
 - h. Minimum atmospheric conditions during which the coating shall be applied.
 - i. Allowable application methods.
 - j. Maximum allowable moisture content.
 - k. Maximum storage life and essential storage requirements.
 - l. Maximum pot life.
 - m. List of application and testing equipment to be used, including inspections confirming satisfactory condition of equipment.

3. List of coating, repair, and infiltration elimination materials proposed to be used under this section, and manufacturer's data and MSDS for each material.
- B. Contractor shall provide copies of independent testing performed on the coating product indicating the product meets the requirements as specified herein.
 - C. Contractor shall provide calculations (or letter from the manufacturer) supporting liner thickness or wall coverage thicknesses.
 - D. Contractor shall provide documentation that Applicator is an approved installer and licensed by the epoxy coating system manufacturer, and that equipment complies with the manufacturer's requirements.
 - E. Contractor shall provide a list of at least 5 past clients, including names and telephone numbers, to verify previous satisfactory performance on projects of similar or greater size and degree of difficulty (using the epoxy coating system intended for use in this contract) and completed in the last 10 years. Contractor must have experience using the epoxy coating system intended for use in this contract on a minimum of 50 manholes. If the contractor is new to the business but the manufacturer has representatives who meet these requirements on site at all times, supervising and/or performing the work, then references for the work performed by the manufacturer's on-site representatives will satisfy this requirement.

3. Documentation that proposed epoxy system meets the following specifications:

MANHOLE AND WET WELL (including wet well piping and miscellaneous metals)
COATING SYSTEM

- A. The monolithic epoxy coating shall consist of a 100% solids epoxy formulated with exceptionally high physical strengths and broad range chemical resistance, and must be capable of being spray applied or hand troweled.
- B. The epoxy coating shall have the following minimum requirements:

1. ASTM-D-790	Flexural Strength	10,000	psi
2. ASTM-D-695	Compressive Strength, Yield	10,000	psi
3. ASTM-D-638	Tensile Strength	7,000	psi
4. ASTM-D-638	% Elongation @ Max Load	1.5	%
5. ASTM-D-2240	Hardness, Shore D	80	
- C. Chemical Resistance: The corrosion resistance of the epoxy coating shall be tested by the coating manufacturer in accordance with ASTM D543. The result of exposure to the chemical solutions listed below shall produce loss of not more than 20% of the initial physical properties when tested in accordance with ASTM D543 for a period of not less than 1 year at a temperature of 73.4° F plus or minus 3.6° F. For applications other than municipal wastewater, conduct chemical resistance tests with actual samples of the fluid to be transported through the manhole and in accordance with procedures approved by the Owner.

Chemical Solution	Concentration (%)
Tap Water (pH 6-9)	100
Nitric Acid	5
Phosphoric Acid	10
Sulfuric Acid	10
Petroleum Hydrocarbon Based Fuels (e.g., Gasoline, diesel, etc.)	100
Vegetable Oil ¹	100
Detergent ²	0.1
Soap ²	0.1
Domestic Sewage	100

¹ Cotton seed, corn, or mineral oil

² As per ASTM D543

4. Understanding of the project and proposed methodology
5. Warranty
6. Completed Forms: **Attachment B**-Price Proposal Form, **Attachment C**-Safety Certification Form.

VII. Evaluation Criteria –Responses will be evaluated using the following criteria:

- a) Qualifications and experience of the firm and staff in performing work of a closely similar nature; qualifications and experience of subcontractors if applicable, understanding of project and proposed methodology
- b) Quality of epoxy coating system including warranty
- c) Proposed cost of services

References may be contacted as part of the evaluation process.

Selection shall be made of two or more offerors deemed to be fully qualified and best suited among those submitting proposals, on the basis of the factors involved in the Request for Proposal, including price if so stated in the Request for Proposal. Negotiations shall then be conducted with each of the offerors so selected. Price shall be considered, but need not be the sole determining factor. After negotiations have been conducted with each offeror so selected, the WSA shall select the offeror which, in its opinion, has made the best proposal, and shall award the contract to that offeror. When the terms and conditions of multiple awards are so provided in the Request for Proposal, awards may be made to more than one offeror. Should the WSA determine in writing and in its sole discretion that only one offeror is fully qualified, or that one offeror is clearly more highly qualified than the others under consideration, a contract may be negotiated and awarded to that offeror.

The Notice of Award shall be posted on the bulletin board for public notices in the Purchasing Office.

VIII. INSURANCE

A. **Workers Compensation and Employers Liability**

Coverage A - Statutory

Coverage B - \$100,000/\$100,000/\$500,000

A broad form of all states endorsement should be attached.

B. **Commercial General Liability Including Contractual and Completed Operations.**

Limit of Liability \$1,000,000 Per Occurrence

C. **Commercial Auto Liability Including Hired and Non-Owned Car Liability Coverage**

Limit of Liability \$1,000,000 Per Occurrence

The Contractor shall purchase and maintain during the life of this Contract such commercial automobile liability insurance including employer's non-ownership liability and hired car liability insurance to protect him and any subcontractors performing work covered by this Contract from claims for damages, whether such operations be by him or any subcontractor, or by anyone directly or indirectly employed by either of them.

D. **Excess Liability**

Contractors have the option of meeting the insurance requirements of A, B and C above with a single primary policy or by providing evidence of an excess policy that, in addition to the primary policy, provides the coverage and meets the limit requirements of the coverage as specified in A, B, and C.

E. **Self Insured Retentions, Deductibles and Aggregate Limits**

All self-insured retentions, deductibles and aggregate limits on any required insurance must be disclosed and approved by the WSA and City of Warwick Rhode Island Purchasing Department.

F. **"Claims Made" Policies**

If the liability insurance purchased by the Contractor has been issued on a "claims made" basis, the Contractor must comply with the following additional conditions. The limits of liability and the extensions to be included as described previously in these provisions, remain the same.

The Contractor must either:

- 1) Agree to provide certificates of insurance evidencing the above coverage for a period of three (3) years after final payment under the Agreement for General Liability policies. This certificate shall evidence a "retroactive date" no later than the beginning of the Contractor's work under this Agreement, or
 - 2) Purchase the extended reporting period endorsement for the policy or policies in force during the term of this Agreement and evidence the purchase of this extended reporting period endorsement by means of a certificate of insurance or a copy of the endorsement itself.
2. The Contractor shall file with the Owner, as herein before required, satisfactory proof of acceptable insurance coverage. Such proof shall, unless otherwise required by the Owner, consist of the following:
 - A. Certificates of insurance on the insurance carrier's standard form indicating all policies required by law and the Contract documents. Certificates of insurance shall be furnished in a number of copies equal to the number of counterparts of the Contract documents executed. Contractor shall notify Owner immediately if Contractor receives notification of non-renewal or cancellation.
3. WSA and the City of Warwick shall be named as an Additional Insured on the Commercial General Liability per ISO 2010 on a primary basis. WSA's or Commercial General Liability shall not contribute in any loss payment insured under the Contractor's Commercial General Liability policy.

IX. INDEPENDENT CONTRACTOR

The Contractor shall be an independent, experienced and a qualified contractor and possess the workers, equipment, and abilities to successfully provide all needed services. The Contractor, and all employees and agents of the Contractor, shall fully comply with all WSA, State and Federal laws and/or mandates applicable to the services to be provided under this Request for Proposal.

X. PROPRIETARY INFORMATION

Ownership of all data, materials and documentation originated and prepared for the WSA pursuant to this RFP shall belong exclusively to the Owners and be subject to public inspection in accordance with the Rhode Island Freedom of Information Act. Trade secrets or proprietary information submitted by an offeror shall not be publicly disclosed under the Rhode Island Freedom of Information Act; however, the offeror shall invoke the protection of this section prior to or upon submission of the data or other materials and must identify the data or other materials to be protected and state the reasons why protection is necessary.

Disposition of material after award is made should be stated by the offeror. Offerors should indicate on the Cover Sheet the portions of their proposal that are proprietary. Please list the page numbers and the reason(s). **Do not mark the**

whole proposal proprietary. If Proprietary information is stated, Offerors shall submit One (1) Original and One (1) Redacted copy (removing any proprietary data or material. Clearly identify on the Cover Sheet the “Original” and “Redacted” copy, as “Redacted Copy of Original Proposal”

XI. POLICY REGARDING CONTACT AFTER PROPOSAL SUBMITTAL

After the date and time established for receipt of proposals by the WSA, any contact, in regard to the proposal initiated by any offeror with any WSA official, other than the Purchasing Office is expressly prohibited. Any unauthorized contact may be deemed grounds for disqualification of any offeror from further review.

XII. SPECIAL TERMS & CONDITIONS

CONTRACTOR’S TITLE TO MATERIALS

No materials or supplies for the work shall be purchased by the Contractor or by any Subcontractor subject to any security interest, installment or sales contract or any other agreement or lien by which an interest is retained by the seller or is given to a secured party. The Contractor warrants that he has clear title to all materials and supplies which he uses in the work or for which he accepts payment in whole or in part.

EXTRA CHARGES NOT ALLOWED

The offeror's price for the work shall include furnishing, delivering, and installing the required equipment; no extra charges shall be allowed.

DELIVERY AND STORAGE

It shall be the responsibility of the Contractor to make all arrangements for delivery, unloading, receiving, and storing materials. The owner will not assume any responsibility for receiving these shipments. The

Contractor shall check with the owner and make necessary arrangements for security and storage space if required.

FINAL INSPECTION

At the conclusion of the work, the Contractor shall demonstrate to the authorized owner's representative that the work is fully operational and in compliance with contract specifications and codes. Any deficiencies shall be promptly and permanently corrected by the Contractor at the Contractor's sole expense prior to final acceptance of the work.

WARRANTY

The Contractor agrees that the goods or services furnished under any award resulting from this solicitation shall be covered by the most favorable commercial warranties the Contractor gives any customer for such goods or services and that the rights and remedies provided therein are in addition to and do not limit those available to the Owner by any other clause of this solicitation. A copy of this warranty should be furnished with the bid. At a minimum, all

materials, equipment and labor shall be fully guaranteed by the Contractor against defects resulting from the use of inferior materials, equipment, or workmanship for one (1) year from the date of final acceptance of the entire project by the owner in writing. Any warranty requirements defined in the Technical Specification shall take precedence over these Special Terms & Conditions Warranty requirements. The Contractor warrants that, unless otherwise specified, all materials and equipment incorporated in the work under the contract shall be new, in first class condition, and in accordance with the contract documents. The Contractor further warrants that all workmanship shall be of the highest quality and in accordance with contract documents and shall be performed by persons qualified at their respective trades. Defects discovered during the warranty period shall be corrected by the Contractor to the Owner's satisfaction, at no cost to the Owner and shall be subject to the provisions of this clause to the same extent as materials initially delivered.

WORK SITE DAMAGES

Any damage to existing utilities, equipment, or finished surfaces resulting from the performance of this contract shall be repaired to the Owner's satisfaction at the Contractor's expense.

SUPERINTENDENCE BY CONTRACTOR

The Contractor shall have a competent foreman or superintendent, satisfactory to the Owner, on the job site at all times during the progress of the work. The Contractor shall be responsible for all construction means, methods, techniques, sequences, and procedures, for coordinating all portions of the work under the contract except where otherwise specified in the contract documents, and for all safety and worker health programs and practices. The Contractor shall notify the owner, in writing, of any proposed change in superintendent including the reason therefore prior to making such change.

USE OF PREMISES AND REMOVAL OF DEBRIS

The Contractor shall: Perform his contract in such a manner as not to interrupt or interfere with the operation of any existing activity on the premises or with the work of any Contractor; and
Store his apparatus, materials, supplies, and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other Contractor; and
Place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work.

The Contractor expressly undertakes, either directly or through his Subcontractor(s), to effect all cutting, filling, or patching of his work required to make the same conform to the drawings and specifications, and, except with the consent of the owner, not to cut or otherwise alter the work of any other Contractor. The Contractor shall not damage or endanger any portion of the work or premises, including existing improvements, unless called for by the contract.

The Contractor expressly undertakes, either directly or through his Subcontractor(s), to clean up frequently

all refuse, rubbish, scrap materials, and debris caused by his operations, to the end that at all times the site of the work shall present a neat, orderly, and workmanlike appearance. No such refuse, rubbish, scrap material, and debris shall be left within the completed work nor buried on the building site, but shall be removed from the site and properly disposed of in a licensed landfill or otherwise as required by law.

The Contractor expressly undertakes, either directly or through his Subcontractor(s), before final payment, to remove all surplus material, false work, temporary structures, including foundations thereof, plants of any description and debris of every nature resulting from his operations and to put the site in a neat, orderly condition; to thoroughly clean and leave reasonably dust free all finished surfaces including all equipment, piping, etc., on the interior of all buildings included in the contract; and to thoroughly clean all glass installed under the contract including the removal of all paint and mortar splatters and other defacements. If a Contractor fails to clean up at the completion of the work, the owner may do so and charge for costs thereof to the Contractor.

SAFETY

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work.

The Contractor shall submit a Safety Certification Form that includes the following information:

- A. The name and phone number of the individual who will be responsible to ensuring all applicable safety procedures are followed and personal protective equipment is used on the project site.
- B. The name and phone number of the individual who should be contacted in the event of an emergency.
- C. A copy of the Safety Certification Form is included.

WORK PERFORMANCE

The Contractor shall perform the work in accordance with manufacturer's recommendations and specifications.

CONTRACTOR RESPONSIBILITIES

Employees of the Contractor must be able to work within a public setting without creating a disruption and conform to all policies, rules and regulations. Contractor shall require that their employees to be courteous at all times and not to use loud or profane language. Contractor shall require that its employees shall not trespass, loiter, cross property to adjoining premises, or tamper with property not covered by the contract resulting from this solicitation.

The Contractor shall be solely responsible for job site conditions and completely supervising and directing the work under this contract and all Subcontractors that he may utilize. Subcontractors who perform work under this contract shall be responsible to the Contractor. The Contractor agrees that he is fully responsible for the acts and omissions of his Subcontractors and of persons employed by them as he is for the acts and omissions of his own employees. These requirements will apply continuously and not be limited to working hours.

It is the Contractor's responsibility to have equipment of suitable type, and in proper condition to operate and maintain uninterrupted schedules.

It is the Contractor's responsibility to follow schedules and instructions provided by designated Owner contacts.

PROTECTION OF PERSONS AND PROPERTY

The Contractor expressly undertakes, both directly and through its Subcontractors, to take every precaution at all times for the protection of persons and property, including (WSA) employees and property.

EMERGENCY

In an emergency affecting the safety of life, the Work, or of the adjoining property, the Contractor, without special instruction or authorization from the Owner, shall act to prevent threatened loss or injury. Any compensation, claimed by the Contractor on account of emergency work, shall be determined by agreement between the Owner and the Contractor.

DAMAGES

The Contractor shall be responsible for damage or injury to property during the prosecution of the Work resulting from any act, omission, neglect, or misconduct in the method of executing the Work or attributable to defective Work or materials. This responsibility shall not be released until final acceptance of the Project by the WSA.

When direct or indirect damage is done to property by or on account of any act, omission, neglect or misconduct in the method of executing the Work or in consequence of the non-execution thereof on the part of the Contractor, the Contractor shall restore such property to a condition similar or equal to that existing before such damage was done by repairing, rebuilding or restoring, as may be directed by the Owner, or making settlement with the property owner. The Contractor shall secure from the property owner a release from any claim against the Owner without additional compensation therefore. A copy of this release shall be furnished to the Owner.

RESTORATION

Proper notice shall be given to the owner and to the homeowners of any expected inconvenience or hazardous condition. Special care must be taken to prevent damage to trees and shrubs. Road surfaces adjacent to excavations shall be cleaned of soil with mechanical brooms at the end of the working day. All surplus materials shall be disposed of in a manner acceptable to the Owner, and the construction area shall be left in a neat condition. No machinery or equipment shall be left or stored on the job site after the project is completed.

LABELING OF HAZARDOUS SUBSTANCES

If the items or products requested by this solicitation are "Hazardous Substances" as defined by Section 1261 of Title 15 of the United States Code (U.S.C.) or "Pesticides" as defined in Section 136 of Title 7 of the United States Code, then the bidder/offeror, by submitting his bid/proposal, certifies and

warrants that the items or products to be delivered under this contract shall be properly labeled as required by the foregoing sections and that by delivering the items or products the bidder/offeror does not violate any of the prohibitions of Title 15 U.S.C. Section 1263 or Title 7 U.S.C. Section 136.

MATERIAL SAFETY DATA SHEETS

Material Safety Data Sheets and descriptive literature shall be provided for each chemical and/or compound offered.

DATE OF COMMENCEMENT AND COMPLETION

The date of commencement shall be established in a written Notice to Proceed issued by the Owner. Work under the Contract shall be completed within time frame established in the Notice to Proceed.

MATERIALS AND WORKMANSHIP

The Contract Documents describe the character and features of the materials and workmanship required to perform the Work. The Contract Documents require first class work and materials in all particulars. It is understood that the contract includes any and all work that may be necessary to connect the work done with the adjoining work in a proper and workmanlike manner.

The Owner reserves the right to employ an independent testing laboratory to conduct tests of materials, etc. as the Owner may deem necessary to assure complete compliance with the requirements of the specifications. The Contractor shall offer full cooperation with personnel in the employ of the Owner in making these tests.

NO DEVIATION FROM CONTRACT DOCUMENTS BY THE CONTRACTOR

In performing the Work, the Contractor shall not deviate from the Contract Documents without the written consent of the Owner. If the Contractor does deviate from the Contract, he shall correct the error at his expense in a manner satisfactory to the Owner. **INTERPRETATION OF CONTRACT DOCUMENTS**
In case of discrepancy between or among Contract Documents, the Owner shall make such interpretations as may be deemed necessary for the fulfillment of the intent of the Contract Documents as construed by him and his decision shall be final.

The Contractor shall verify all figures and will be responsible for the proper coordination of all dimensions as well as the different parts of the Work.

DISCREPANCIES

The Contractor shall immediately report to the Owner, in writing, any discrepancies found between the Contract Documents and site conditions or any inconsistencies or ambiguities in the Contract Documents. The Owner shall promptly correct such inconsistencies or ambiguities in writing. Work done by the Contractor after his discovery of such discrepancies, inconsistencies, or ambiguities shall be done at the Contractor's risk.

XIII. ATTACHMENTS

Attachment A: Technical
Specifications Attachment
B: Price Proposal Form

**Attachment A – Technical Specifications
MANHOLE/WET WELL REHABILITATION
SPECIFICATIONS**

PART 1 – GENERAL

1.01 SUMMARY

- A. This specification covers all labor, materials, equipment and services necessary to complete manhole and wet well rehabilitation work as herein specified. It is the Contractor's responsibility to stop all active leaks in association with the coating of the manhole or wet well interiors.
- B. Work covered by this specification includes Manhole Coating, Manhole Chimney Sealing, Manhole or Wet Well Structure and/or Bench and Invert Reconstruction, Wet Well Coating, and Coating Piping and Miscellaneous Metals in Wet Wells and other related services.
- C. When cured, the system shall form a continuous, tight-fitting, hard, impermeable surface that is suitable for sewer system service and chemically resistant to any chemicals, bacteria or vapors normally found in domestic or industrial sewers. Chemical resistance shall conform to ASTM D543.
- D. The system shall effectively seal the interior surfaces of the structure and prevent any penetration or leakage of groundwater infiltration.
- E. The contractor shall perform all required permanent surface and/or landscape restoration of disturbed areas on private property and within the locality or VDOT right-of-way upon completion of work, to the satisfaction of the Owner.

1.02 REFERENCES

- A. ASTM D638 – Tensile Strength of Plastics.
- B. ASTM D790 – Flexural Properties of Un-reinforced and Reinforced Plastics.
- C. ASTM D695 – Compressive Properties of Rigid Plastics.
- D. ASTM D4414 – Wet Film Thickness by Notched Gages.
- E. ASTM D4541 – Pull-off Strength of Coatings Using a Portable Adhesion Tester.
- F. ASTM D2584 – Volatile Matter Content. - Zero Volatile Organic Compound.
- G. ASTM D2240 – Durometer Hardness, Type Shore D.
- H. ASTM D543 – Resistance of Plastics to Chemical Reagents.
- I. ASTM C579 – Compressive Strength of Chemically Setting Silicate and Silica Chemical Resistance Mortars.

- J. ASTM – The published standards of the American Society for Testing and Materials, West Conshohocken, PA.
- K. NACE – The published standards of National Association of Corrosion Engineers (NACE International), Houston, TX.
- L. SSPC - The published standards of the Society of Protective Coatings, Pittsburgh, PA.

1.03 SUBMITTALS

- A. The contractor shall provide the following information.
 - 1. The contractor shall furnish Material Safety Data Sheets (MSDS) for all products used in the coating system.
 - 2. For all coating system components, the contractor shall provide the manufacturer's application instructions, which shall include the following:
 - a. Surface preparation recommendations.
 - b. Primer type, where required.
 - c. Maximum dry and wet mil thickness.
 - d. Minimum and maximum curing time between coats, including atmospheric conditions for each.
 - e. Curing time before submergence in liquid.
 - f. Thinner to be used with coating material (if applicable).
 - g. Ventilation requirements.
 - h. Minimum atmospheric conditions during which the coating shall be applied.
 - i. Allowable application methods.
 - j. Maximum allowable moisture content.
 - k. Maximum storage life and essential storage requirements.
 - l. Maximum pot life.
 - m. List of application and testing equipment to be used, including inspections confirming satisfactory condition of equipment.
 - 3. List of coating, repair, and infiltration elimination materials proposed to be used under this section, and manufacturer's data and MSDS for each material.
- B. Contractor shall provide copies of independent testing performed on the coating product indicating the product meets the requirements as specified herein.
- C. Contractor shall provide calculations (or letter from the manufacturer) supporting liner thickness or wall coverage thicknesses.
- D. Contractor shall provide documentation that Applicator is an approved installer and licensed by the epoxy coating system manufacturer, and that equipment complies with the manufacturer's requirements.
- E. Contractor shall provide a list of at least 5 past clients, including names and telephone numbers, to verify previous satisfactory performance on projects of similar or greater size and degree of difficulty (using the epoxy coating system intended for use in this contract) and completed in the last 10 years. Contractor must have experience using the epoxy coating system intended for use in this contract on a minimum of 50

manholes. If

the contractor is new to the business but the manufacturer has representatives who meet these requirements on site at all times, supervising and/or performing the work, then references for the work performed by the manufacturer's on-site representatives will satisfy this requirement.

- F. Contractor shall submit product data for manhole casting frames and covers (watertight and non-watertight), manhole chimney seals, chimney rings, riser rings, butyl rope, and other ancillary products necessary to complete the work.

1.04 QUALITY ASSURANCE

- A. Contractor shall initiate and enforce quality control procedures consistent with applicable ASTM and NACE standards together with pull testing and vacuum testing to assure a high quality project.
- B. Repair product(s) shall be fully compatible with coating product(s) including ability to bond effectively, thereby forming a composite system.
- C. The Owner will inspect the manholes or wet wells after surface preparation and after coating application to evaluate the Contractor's work.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Materials are to be kept dry, protected from weather and stored under cover.
- B. Protective coating materials are to be stored at temperatures consistent with the manufacturer's recommendations. Do not store near flame or strong oxidants.
- C. Protective coating materials are to be handled according to their MSDS.

1.06 SPECIAL WARRANTY

- A. The Contractor shall provide an unconditional five (5) year written warranty from the date of completion for materials, workmanship, and resistance against deterioration, failure to maintain an infiltration free surface or pipe/wall interface, or other lining failures. All defects discovered within this period, as determined by the Owner, shall be repaired or replaced in a satisfactory manner, and within a reasonable timeframe, at no cost to the Owner.

PART 2 – PRODUCTS

2.01 REPAIR, RECONSTRUCTION, AND INFILTRATION ELIMINATION PRODUCTS

- A. Repair, reconstruction, and infiltration elimination products shall be compatible with the specified coating product(s) and shall be used and applied in accordance with the

Manufacturer's recommendations.

B. Materials may include:

1. 100% solids, solvent-free epoxy grout specifically formulated for epoxy top-coating compatibility.
2. Factory blended, rapid setting, high early strength, fiber reinforced, non-shrink repair mortar that can be troweled or pneumatically spray applied and that is suitable for epoxy top-coating compatibility.
3. Hydro active urethane grout suitable for epoxy top-coating compatibility.

2.02 MANHOLE AND WET WELL (including wet well piping and miscellaneous metals) COATING SYSTEM

- A. The monolithic epoxy coating shall consist of a 100% solids epoxy formulated with exceptionally high physical strengths and broad range chemical resistance, and must be capable of being spray applied or hand troweled.
- B. The epoxy coating shall have the following minimum requirements:
- | | | |
|-----------------|-----------------------------|------------|
| 1. ASTM-D-790 | Flexural Strength | 10,000 psi |
| 2. ASTM-D-695 | Compressive Strength, Yield | 10,000 psi |
| 3. ASTM-D-638 | Tensile Strength | 7,000 psi |
| 4. ASTM-D-638 % | Elongation @ Max Load | 1.5 % |
| 5. ASTM-D-2240 | Hardness, Shore D | 80 |
- C. All manholes have been determined to have the presence of high levels of hydrogen sulfide deterioration and shall be rehabilitated using hydrogen-sulfide-resistive products
- D. Chemical Resistance: The corrosion resistance of the epoxy coating shall be tested by the coating manufacturer in accordance with ASTM D543. The result of exposure to the chemical solutions listed below shall produce loss of not more than 20% of the initial physical properties when tested in accordance with ASTM D543 for a period of not less than 1 year at a temperature of 73.4° F plus or minus 3.6° F. For applications other than municipal wastewater, conduct chemical resistance tests with actual samples of the fluid to be transported through the manhole and in accordance with procedures approved by the Owner.

Chemical Solution	Concentration (%)
Tap Water (pH 6-9)	100
Nitric Acid	5
Phosphoric Acid	10
Sulfuric Acid	10
Petroleum Hydrocarbon Based Fuels (e.g., Gasoline, diesel, etc.)	100
Vegetable Oil ¹	100
Detergent ²	0.1
Soap ²	0.1
Domestic Sewage	100

¹ Cotton seed, corn, or mineral oil

² As per ASTM D543

PART 3 – EXECUTION

2.03 EXAMINATION

- A. All structures to be coated shall be readily accessible to Applicator. The Owner may assist Contractor with locating and gaining access to manholes blocked by heavy landscaping, buried manholes, paved over manholes, manholes with hard-to-remove covers, etc.
- B. Appropriate actions shall be taken to comply with local, state and federal regulatory and other applicable agencies with regard to environment, health and safety.
- C. Any active flows shall be dammed, plugged or diverted with flow through plugs as required to ensure all liquids are maintained below or away from the surfaces to be coated. By-pass pumping, if required, shall be the responsibility of the Contractor to schedule and perform his work in a manner that does not cause or contribute to incidence of overflows or spills of sewage from the sewer system. The Contractor shall be responsible for any fines or third-party claims for personal or property damage arising out of a spill or overflow that is fully or partially the responsibility of the Contractor.
- D. Temperature of the surface to be coated shall be maintained between 40 and 120 deg F. Specified surfaces shall be shielded to avoid exposure of direct sunlight or other intense heat source. Where varying surface temperatures do exist, coating installation shall be scheduled when the temperature is falling versus rising.
- E. Applicator shall inspect all surfaces specified to receive the monolithic surfacing system prior to surface preparation. Applicator shall notify Owner of any noticeable disparity in the surfaces that may interfere with the proper preparation or application of the monolithic surfacing system. The Owner and the Contractor shall negotiate solutions for any such surfaces.

2.04 SURFACE PREPARATION

- A. Oils, grease, incompatible existing coatings, waxes, form release, curing compounds, efflorescence, sealers, salts, or other contaminants which may affect the performance and adhesion of the coating to the substrate shall be removed.
- B. Concrete and/or mortar damaged by corrosion, chemical attack or other means of degradation shall be removed so that only sound substrate remains. Choice of surface preparation method(s) should be based upon the condition of the structure and metal, concrete, or masonry surface, potential contaminants present, access to perform work, and required cleanliness and profile of the prepared surface to receive the coating product(s).
- C. Surface preparation method, or combination of methods, that may be used include high pressure water cleaning, high pressure water jetting, abrasive blasting, shot blasting, grinding, scarifying, detergent water cleaning, hot water blasting and others as described in NACE No. 6/SSPC SP-13. Whichever method(s) are used, they shall be performed

in a manner that provides a uniform, sound, clean, neutralized surface suitable for the specified coating product(s). The air used for blast cleaning shall be sufficiently free of oil and moisture to not cause detrimental contamination of the surfaces to be cleaned.

- D. Infiltration shall be stopped by using a material which is compatible with the repair products and is suitable for top coating with the coating product(s). Severe water infiltration shall be stopped by using a hydro active urethane grout that is compatible and suitable for top coating with the specified monolithic surfacing system. Drilling may be required in order to pressure grout where severe infiltration is encountered.
Manufacturer's recommendations shall be followed when pressure grouting is required. Some leaks may require weep holes to localize the infiltration during the application, after which the weep holes shall be plugged prior to final liner application.
- E. Quick-setting high strength concrete with latex or curing agent additives shall not be used. Proper surface preparation procedures must be followed to ensure adequate bond strength to any surface to be coated. New cement must cure at least 28 days prior to coating.
- F. Existing coatings shall be removed or thoroughly abraded to provide adequate surface profile for mechanical bond by the new system. Applicator is to maintain strict adherence to the monolithic surfacing system manufacturer's recommendations with regard to proper surface preparation and compatibility with existing coatings.
- G. Roots shall be removed in the manholes where root intrusion is encountered. Special attention should be used during the cleaning operation to ensure almost complete removal of roots from the joints. Any roots which could prevent the proper application of the coating shall be removed. Contractor shall capture and properly dispose of all roots from the manhole.
- H. The contractor shall remove all steps. Removal shall consist of neatly cutting steps flush with the wall prior to any lining installation. The Contractor shall be responsible for proper disposal of steps.
- I. All waste materials, including but not limited to debris from manhole cleaning, excavated materials, demolished pavement, arboreal (landscaping) waste, roots and other debris, that are not suitable for project-related purposes (e.g., backfill) or are surplus to the needs of the project, both as determined by the Owner, shall become the property of the Contractor. The Contractor shall dispose of all such material in accordance with local, state, and federal regulations at no additional cost to the Owner. Under no circumstances shall sludge or other debris removed during the cleaning operations be dumped or spilled into streets, ditches, storm drains, or other sanitary sewers.
- J. Potable water for cleaning may be obtained from the Owner free of charge so long as the Contractor uses the Owner-provided hydrant meter and combination backflow prevention device. There is a refundable deposit required for use of the hydrant meter to ensure its undamaged return.

2.05 APPLICATION OF REPAIR AND RESURFACING PRODUCTS

- A. Repair materials shall meet the specifications of this Section. The materials shall be trowel or spray applied, utilizing proper equipment, onto specified surfaces. Repair products shall be used to fill voids, bug holes, and other surface defects which may affect the performance or adhesion of the coating product(s).
- B. All manhole invert surfaces shall be sufficiently smooth and even, to ensure good flow handling characteristics when coated with epoxy materials.
- C. All repaired or resurfaced surfaces shall be inspected by the Owner for cleanliness and suitability to receive the coating product(s). Additional surface preparation may be required prior to coating application.
- D. Areas where structural steel has been exposed and appears to be significantly deteriorated shall require special attention and are not included within the scope of this contract. Notify the Owner where this condition is encountered.

2.06 APPLICATION OF EPOXY COATING PRODUCTS

- A. The specified materials must be applied by an approved Applicator.
- B. Application procedures shall conform to the recommendations of the coating product(s) manufacturer, including environmental controls, product handling, mixing, application, safety, equipment and methods.
- C. Spray equipment shall be specifically designed to accurately ratio and apply the coating product(s) and shall be in proper working order.
- D. All specified surfaces shall be lined with the epoxy system to provide a minimum total dry film thickness of 125 mils in order to protect and restore the structural value of the manhole. The cured surfacing shall be monolithic with proper sealing of connections to all unsurfaced areas. The thickness of the coating shall be greater than 125 mils if required for structural stability based on the manufacturer's calculations or recommendations.
- E. Subsequent top coating or additional coats of the coating product(s) shall occur within the products recoat window. Additional surface preparation procedures in accordance with the manufacturer's specifications shall be required if this recoat window is exceeded.

2.07 TESTING AND INSPECTION

- A. During application, a wet film thickness gauge, such as those available through Paul N. Gardner Company, Inc., meeting ASTM D4414 – Standard Practice for Measurement of Wet Film Thickness of Organic Coatings by Notched Gauges, shall be used to ensure a monolithic coating and uniform thickness during application. Measurements shall be taken, documented and attested to by Contractor for submission to Owner prior to final payment.
- B. After the system has set hard to the touch, it shall be inspected by the Owner verifying the following:
 1. Groundwater infiltration of the system shall be zero.

2. All pipe connections shall be open and clear.
3. No cracks, voids, pinholes, uncured spots, dry spots, lifts, delamination or other type of defect shall be evident in the system.

Any deficiencies in the finished system shall be marked and repaired according to the procedures set forth herein by Applicator. Lining failure is defined as blistering, cracking, embrittlement, softening, failure to adhere to the substrate, or failure to maintain an infiltration-free surface or pipe/wall interface.

- C. A minimum of 10% of the manholes coated, and each wet well coated, shall be tested for adhesion/bond of the coating to the substrate. Testing shall be conducted in accordance with ASTM D4541 as modified herein. Owner's representative shall select the manholes to be tested. A minimum of three 20 mm dollies shall be affixed to the coated surface at the manhole cone or wet well ceiling area, mid-section and at the bottom of the structure. The adhesive used to attach the dollies to the coating shall be rapid setting with tensile strengths in excess of the coating product and permitted to cure in accordance with manufacturer recommendations. The coating and dollies shall be adequately prepared to receive the adhesive. Failure of the dolly adhesive shall be deemed a non-test and require retesting. Prior to performing the pull test, the coating shall be scored to within 30 mils of the substrate by mechanical means without disturbing the dolly or bond within the test area. Two of the three adhesion pulls shall exceed 400 psi or concrete failure with more than 80% of the subsurface adhered to the coating. Should a structure fail to achieve two successful pulls as described above, additional testing shall be performed at the discretion of the Owner. Any areas detected to have inadequate bond strength shall be evaluated by the Owner. Further bond tests may be performed in that area to determine the extent of potentially deficient bonded area, and repairs shall be made by Contractor. Test areas shall be recoated upon completion of the tests.
- D. The system may be put back into operational service as soon as the final inspection has taken place.
- E. After two weeks cure time, the manholes shall be vacuum tested and repaired if necessary. The vacuum tests shall be performed in accordance with INDUSTRY STANDARDS.

PART 4 – MEASUREMENT AND PAYMENT

4.01 MANHOLE OR WET WELL STRUCTURE AND/OR BENCH AND INVERT RECONSTRUCTION

- A. Reconstruction entails repairs greater than a two (2) square foot (SF) area on the manhole or wet well structure and/or bench and invert and will only be performed in conjunction with Manhole or Wet Well Coating. Replacement or repair of reinforcing steel shall not be included and shall be negotiated separately with the Owner if required.
- B. Measurement and payment for manhole or wet well structure and/or bench and invert reconstruction shall be per square foot (SF) of surface

area reconstructed in excess of the initial 2 SF of surface area covered under Manhole or Wet Well Coating.

- C. Payment shall include flow control, cleaning and surface preparation, collection and disposal of debris, materials, reconstruction of walls, bench and/or invert, traffic control for speed limit zones up to 25 MPH, labor, and incidentals. Traffic control for speed limit zones greater than 25 MPH shall be negotiated with the Owner on a site specific basis.

4.02 MANHOLE COATING

- A. Measurement and payment for manhole coating shall be the actual vertical foot (VF) distance measured along the center of manhole from bottom of the frame to centerline of invert by diameter of manhole (i.e., 4', or 5' diameter) and accessibility as follows:
- Manhole coating VF for 4' diameter accessible manhole (spray application)
 - Manhole coating VF for 5' diameter accessible manhole (spray application)
 - Manhole coating VF for 4' diameter remote manhole (trowel application)
 - Manhole coating VF for 5' diameter remote manhole (trowel application)
- B. Payment shall include flow control, root removal, cleaning and surface preparation, collection and disposal of debris, removal of steps, repairs \leq 2 SF area (repairs greater than a 2 SF area on the manhole structure and/or bench and invert shall be paid for under Manhole Or Wet Well Structure and/or Bench and Invert Reconstruction), materials, coating application, sealing of all surfaces (including walls, chimney, benches, inverts and through-wall pipe interfaces), testing, traffic control for speed limit zones up to 25 MPH, labor, and incidentals. Traffic control for speed limit zones greater than 25 MPH shall be negotiated with the Owner on a site specific basis.

4.03 WET WELL COATING (including wet well piping and miscellaneous metals)

- A. Measurement and payment for Wet Well Coating (including wet well piping and miscellaneous metals coating as required by Owner) shall be per square foot (SF) or linear foot (LF) as follows:
- SF of concrete surface areas including walls, ceilings, floors and fillets
 - SF of metal surface areas including walls, ceilings, and floors
 - SF of miscellaneous metals
 - LF of pipe up to 6" diameter

- LF of pipe $>6''$ and $\leq 12''$ diameter
- B. Payment shall include, cleaning and surface preparation, collection and disposal of debris, repairs ≤ 2 SF area (repairs greater than a 2 SF area on the wet well structure shall be paid for under Manhole or Wet Well Structure and/or Bench and Invert Reconstruction), materials, coating application, sealing of all surfaces (including walls, ceiling, floor, fillets, pipes if required by Owner, miscellaneous metals if required by Owner, and through-wall pipe interfaces), testing, labor, and incidentals.

CITY OF WARWICK

PROPOSAL AND CONTRACT FORM

TITLE OF SPECIFICATION: RFP2021-073 Manhole and Wet Well Rehabilitation and Related Services

I. PROPOSAL:

WHEREAS, the CITY OF WARWICK has duly asked for proposals for performance of services and/or supply of goods in accordance with the above-indicated specifications.

The person or entity does irrevocably offer to perform the services and/or furnish the goods in accordance with the specifications, which are hereby incorporated by reference in exchange for the proposal price.

This offer will remain open and irrevocable until the CITY OF WARWICK has accepted this proposal or another proposal on the specifications or abandoned the project.

The bidder agrees that acceptance by the CITY OF WARWICK will transform the proposal into a contract. This proposal and contract will be secured by Bonds, if required by the specifications.

Pricing as Submitted

Continued next page

ATTACHMENT B

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

(PRICING SHEET MAY NOT BE CONFIDENTIAL)

BIDDER NAME: _____

MANHOLE/WET WELL REHABILITATION BID SCHEDULE					
Item	Description	Quantity	Unit	Unit Price	Extension
1	Manhole or Wet Well Structure and/or Bench and Invert Reconstruction (in excess of the initial 2 SF of surface area covered under Manhole or Wet Well Coating)	5	SF		
2	Manhole Coating for 4' diameter accessible manhole (spray application)	35	VF		
3	Manhole Coating for 5' diameter accessible manhole (spray application)	15	VF		
4	Manhole Coating for 4' diameter remote manhole (trowel application)	20	VF		
5	Manhole Coating for 5' diameter remote manhole (trowel application)	15	VF		
6	Wet Well Coating of Concrete Surface Areas including walls, ceilings, floors, and fillets	2,250	SF		
7	Wet Well Coating of Metal Surface Areas including walls, ceilings, and floors	400	SF		
8	Coating of Miscellaneous Metals in wet wells	25	SF		
9	Coating of Pipes up to 6" dia. in wet wells	30	LF		
10	Coating of Pipes >6" ≤ 12" dia. in wet wells	30	LF		
TOTAL PROPOSED PRICE					