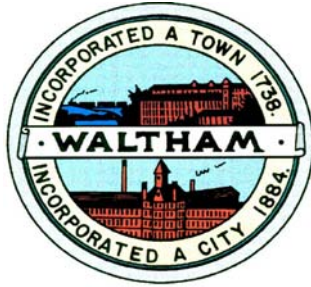


# The City of Waltham



**Invites  
Interested Parties  
To propose the best offer and or bid  
For the service or product herewith described:**

**Manhole Replacement, 52 Winthrop Street**

**The bid opening will be held: Thursday December 27, 2012**

*Phone: 781-314-3244, Fax: 781-314-3245*

# **Invitation to Bid**

# **The City of Waltham**

## **Purchasing Department**

### **REQUEST FOR BID (RFB)**

Under the rules of M.G.L. Chapter 30, 39M, the Chief Procurement Officer of the City of Waltham Purchasing Department hereby requests sealed bids for:

### **Manhole Replacement, 52 Winthrop Street**

Price Proposals will be received at the office of the Purchasing Agent, City Hall, 610 Main Street, Waltham MA 02452, until,

**Thursday December 27, 2012 at 10:00 am**

At which time and place the bids will be publicly opened and read.

Specifications and information available on line by visiting the Waltham Purchasing Department web site at [www.city.waltham.ma.us/open-bids](http://www.city.waltham.ma.us/open-bids)

**BIDS MUST BE SIGNED AND ENCLOSED IN A SEALED ENVELOPE AND MARKED:**

**BID FOR: Manhole Replacement, 52 Winthrop Street**

A 5% Bid Bond or Certified Check must accompany each bid submitted and made payable to, and become the property of the City of Waltham, if the successful bidder refuses or neglects to comply with the terms of the Contract.

If the Bidder is a corporation, state your correct corporate name and State of incorporation. If Bidder is a partnership, state names and addresses of partners. If Bidder is a trust or other legal entity, state correct names and addresses of trustees or names and address of those legally authorized to bid and enter into contracts.

**EXCEPTION OR ALTERNATES TO SPECIFICATIONS, TERMS OF SALE, AND DISCOUNTS AVAILABLE, MUST BE INCLUDED IN THE BID PRIOR TO OPENING DATE.**

# Intent of Project

Replace the failed drain manhole and perform pipe rehabilitation on the manhole pipes in the backyard of 52 Winthrop Street, Waltham, MA

## **AGREEMENT**

### **CITY OF WALTHAM**

**ARTICLE 1.** This agreement, made this \_\_\_\_\_ day of \_\_\_\_\_, 2012 by and between the CITY OF WALTHAM, party of the first part, hereinafter called the CITY, by its MAYOR, and

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hereinafter called the CONTRACTOR.

**ARTICLE 2.** Witnesseth, that the parties to this agreement, each in consideration of the agreement on the part of the others herein contained, do hereby agree, the CITY OF WALTHAM for itself, and said contractor for his heirs, executors, administrators and assigns as follows:

To furnish all equipment, machinery, tools and labor, to furnish and deliver all materials required to be furnished (except as otherwise specified) and deliver in and about the project and to do and perform all work in strict conformity with the provisions of this Contract and of the Notice to Bidders, bid, Project Manual, and Drawings hereto annexed. The said Notice to Bidders, bid, Project Manual, and Drawings are hereby made a part of this contract as fully and to the same effect as if the same had been set forth at length and incorporated in the contracts.

**ARTICLE 3.** In consideration of the foregoing premises the CITY agrees to pay and the CONTRACTOR agrees to receive as full compensation for everything furnished and done by the CONTRACTOR under this contract, including all work required by not included in the items herein mentioned, and also for all loss or damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen obstruction or difficulty encountered in the prosecution of the work, and for all expenses incurred by or in consequence of the suspension or discontinuance of the work specified, and for well and faithfully completing the work, and the whole thereof, as herein provided, such prices as are set forth in the accompanying bid.

This Agreement entered into as of the day and year first written above.

CITY OF WALTHAM, MASSACHUSETTS

**FOR THE CITY**

\_\_\_\_\_  
Jeannette A. McCarthy, MAYOR,  
City of Waltham  
Date: \_\_\_\_\_

\_\_\_\_\_  
John B. Cervone, City Solicitor  
Date: \_\_\_\_\_

APPROVED AS TO FORM ONLY

\_\_\_\_\_  
Stephen Casazza, City Engineer  
Date: \_\_\_\_\_

\_\_\_\_\_  
Joseph Pedulla, Purchasing Agent  
Date: \_\_\_\_\_

\_\_\_\_\_  
Paul Centofanti, Auditor  
Date: \_\_\_\_\_

I CERTIFY THAT SUFFICIENT FUNDS  
ARE AVAILABLE FOR THIS CONTRACT

**FOR THE COMPANY**

\_\_\_\_\_  
CONTRACTOR (Signature),  
Date: \_\_\_\_\_

\_\_\_\_\_  
Company

\_\_\_\_\_  
Address

## INSTRUCTIONS FOR BIDDERS

1. READ ALL DOCUMENTS.

Bidders should familiarize themselves with all the documents contained herein; it is mandatory that all Bids be in compliance with all the provisions contained in said documents.

2. FORMS AND ATTACHMENTS.

Bids are to be completed on the forms provided ONLY and enclosed in a sealed envelope marked on the outside "BID (title)" and the name and address of bidder. Attachments submitted in addition to the Waltham Purchasing Department produced forms may not be considered.

3. PRINTED OR TYPED RESPONSE.

All information must be typewritten or printed in ink, including the price the bidder offers in the space as provided on the bid form.

4. CORRECTIONS.

Bids that are submitted containing cross outs, white outs or erasures, will be rejected. All corrections or modifications to the original bid are to be submitted in a separate envelope, properly marked on the outside, "CORRECTION/ MODIFICATION TO BID (title)" and submitted prior to the bid opening.

ALL DOCUMENTS SUBMITTED WITH YOUR RESPONSE WILL BE INCORPORATED INTO THE CONTRACT.

5. PRICE IS ALL INCLUSIVE.

Bid prices shall encompass everything necessary for furnishing all items, materials, supplies or services as specified, and in accordance with the specifications, including proper packing, cost of delivery, and in the case of services, completion of same, as per specifications.

6. PRICE DISCREPANCY.

In the event of a discrepancy between the Unit Price and the Extension, the Unit Price shall prevail.

7. EXPLANATIONS, EXCEPTIONS

Explanations, exceptions or other information pertinent to the specifications may be made in writing and included in the same envelope with the bid.

8. BID DEPOSITS.

Bid deposits are to be made payable to the City of Waltham. In the event that the successful bidder fails to execute a Contract within (10) days of the receipt of said contract, such security shall be retained by the city as liquidated damages. Unsuccessful bidders' deposits will be returned immediately following the award to said successful bidder.

9. WITHDRAW.

A Bid may be withdrawn by written request prior to the schedule for the Bid Opening. No withdrawals are permitted after the bid opening date and time. Withdrawals after the bid opening date will cause the forfeit of the bid Deposit.

10. AWARD.

Bids will be awarded not later than (90) ninety days after the scheduled bid opening date, unless otherwise stated, in the specifications. Unless otherwise specified, bids will be evaluated on the basis of, completeness of your RFP response, responsiveness, responsibility, best price and experience.

11. AWARD CRITERIA.

Qualified and responsive proposals will be evaluated based on Price, Technical, and Compliance requirements:

12. DISCOUNTS.

Discounts for prompt payments will be considered when making awards.

13. TAX EXEMPT.

Purchases by the City of Waltham is exempt from any Federal, State or Massachusetts Municipal Sales and/or Excise Taxes.

14. SAMPLES.

The City of Waltham may require the submission of samples either before or after the awarding of a contract. Samples are to be submitted, at no charge to the City, so as to ascertain the product's suitability. If specifically stated in the Bid that samples are required, said samples must be submitted with the Bid prior to the Official Bid Opening. Failure to submit said samples would be cause for rejection of Bid. All samples must be called for and picked up within (30) thirty days of award or said samples will be presumed abandoned and will be disposed of.



15. ACTIVE VENDOR LIST.

Vendors who wish to remain on the Active Bid List must either submit a Bid, No Bid, or a letter requesting same, no later than the Official Bid Opening. This is applicable to those vendors who have received the Invitation to Bid.

16. FUNDS APPROPRIATION.

THE CONTRACT OBLIGATION ON BEHALF OF THE CITY IS SUBJECT TO PRIOR APPROPRIATION OF MONIES FROM THE GOVERNMENTAL BODY AND AUTHORIZATION BY THE MAYOR.

17. THE AWARDING AUTHORITY RESERVES THE RIGHT TO REJECT ANY OR ALL BIDS, OR ANY PART OF ANY BID, WHICH IN THE OPINION OF THE AWARDING AUTHORITY, IS IN THE BEST INTERESTS OF THE CITY OF WALTHAM.

18. THE TAX ATTESTATION CLAUSE, CERTIFICATION OF NON-COLLUSION AND THE CERTIFICATE OF VOTE AUTHORIZATION, are required by statute and are an integral part of the Invitation for Bid and must be completed and signed by the person submitting the Bid, or by the person/persons who are officially authorized to do so. Failure to do so may disqualify the bid.

19. STANDARD OF QUALITY.

Where, in the specifications, one certain kind, type, catalog number, brand or manufacturer of material is named, it shall be regarded as the required standard of quality. Where two or more are named, these are presumed to be equal and the Bidder may select one or the other. If the Bidder proposes to offer a substitute as an equal, he shall so indicate on the Bid Form, the kind, type, catalog number, brand, or manufacturer of material that is offered as an equal, and describe where it differs from the specifications. Substituted items must be capable of performing all the functions and/or operational features described or indicated in the specifications. Failure to indicate the description of any substitute item on the Bid will be interpreted to mean that the Bidder will furnish the item or service as specified.

20. MODIFICATION.

No agreement, understanding, alteration or variation of the agreement, terms or provisions herein contained shall bind the parties, hereto unless made and executed in writing by the parties hereto.

21. ASSIGNMENT.

The final payment for work done under this Contract shall be made only after the Contractor has signed a statement under the penalty of perjury, certifying that he has completed the work described in the final estimate. Neither party hereto shall assign this Contract or sublet it in part or as a whole without the prior written consent of the other party hereto. The Contractor shall not assign any sum or sums due or becoming due to him hereunder without the prior written consent of the City.

22. DELIVERIES:

a) The Contractor shall pay all freight and delivery charges. The Waltham Purchasing Department does not pay for shipping and packaging expenses. Items must be delivered as stipulated in the specifications. All deliveries must be made to the inside of city buildings. Sidewalk deliveries will not be accepted. City personnel are not required to assist in the deliveries and contractors are cautioned to notify their shippers that adequate assistance must be provided at the point of delivery, when necessary.

b) All items of furniture must be delivered inside the building, set up, in place and ready for use. Deliveries are to be made between the hours of 8:30 a.m. and 3:00 p.m., Monday through Friday, except on holidays.

c) All damaged items, or items which do not comply with specifications will not be accepted and title therefore will not vest to the Waltham Purchasing Department until such items are accepted and signed for, in good order, by the receiving department.

d) The contractor must replace, without further cost to the Waltham Purchasing Department, such damaged or non-complying items before payment will be made.

23. LABELING.

All packages cartons or other containers must be clearly marked with (a) building and room destination; (b) description of contents of item number from specifications; (c) quantity; (d) City of Waltham Purchase Order Number and (e) Vendor's name and order number.

24. GUARANTEES.

Unless otherwise stipulated in the specifications, furniture, equipment and similar durable items shall be guaranteed by the contractor for a period of not less than one year from the date of delivery and acceptance by the receiving department. In addition, the manufacturer's guarantee shall be furnished. Any items provided under this contract which are or become defective during the guarantee period shall be replaced the contractor free of charge with the specific

understanding that all replacements shall carry the same guarantee as the original equipment.

The contractor shall make such replacement immediately upon receiving notice from the Purchasing Agent.

25. SINGLE VENDOR.

The Waltham Purchasing Department desires to award a single contract based on the Grand Total Price. However, where applicable, the City reserves the right to make multiple awards on a unit price basis if, in the opinion of the Waltham Purchasing Department, it is in the best interest of the Waltham Purchasing Department.

26. CHANGE ORDERS.

Change orders are not effective until, if, as and when signed by the Mayor and no work is to commence until the change orders are fully executed.

28. BID OPENING INCLEMENT WEATHER

If, at the time of the originally scheduled bid opening, City Hall is closed to inclement weather or another unforeseeable event, the bid opening will be extended until 2:00 PM on the next normal business day. Bids will be accepted until that date and time.

## **GENERAL CONDITIONS**

### **1. INFORMATION**

All information shall come from the Office of the City Purchasing Agent. The Contractor shall inquire at this office for any information needed. Wherever the words “or equal as approved” are used, it is to be understood that the opinion of the City Purchasing Agent shall govern.

### **2. SUITS**

The Contractor shall assume defense of and shall indemnify and hold the City and its agents harmless from all suits and claims against the City and its sub-contractors arising from the use of any invention, patent right labor or employment, or from any act of omission or neglect of the City, its agents, employees or any subcontractor in performing the work, under this contract.

### **3. LAWS AND REGULATIONS**

The Contractor shall conform to all the applicable rules, regulations, laws and ordinances of the City of Waltham, the Commonwealth of Massachusetts, the United States of America and all agencies having jurisdiction over this contract.

### **4. PROTECTION OF PROPERTY**

The Contractor shall take all proper precautions to protect the City’s property from damage and unnecessary inconvenience. Any City property damaged by the Contractor in carrying out the provisions of this contract shall be restored to its original condition, by and at the expense of the Contractor.

### **5. PROTECTION OF PERSONS**

The Contractor shall take all proper precautions to protect persons from injury, unnecessary inconvenience, and shall be responsible for his failure to do so. The Contractor agrees to hold the City harmless from any and all liabilities of every nature and description, which may be suffered through bodily injury, including death, to any person, by reason of negligence of the Contractor, his agents or employees, or any subcontractor.

### **6. CONTRACT DURATION.**

This contract is for the period required to complete the project.

### **7. INSURANCE**

A. WORKMAN’S COMPENSATION: The Contractor shall provide insurance for the payment of compensation and furnishing of other benefits under Chapter 152 of the General

Laws of the Commonwealth of Massachusetts to all persons to be employed under this contract, the premiums for which shall be paid by the Contractor. Contractors shall provide insurance on a primary basis and the contractor's policy shall be exhausted before resorting to other policies. The contractor's policy is the primary one not the contributory.

**B. COMPREHENSIVE GENERAL LIABILITY**

Bodily Injury:	\$1,000,000 Each Occurrence
	\$2,000,000 Aggregate
Property Damage:	\$1,000,000 Each Occurrence
	\$2,000,000 Aggregate

**C. AUTOMOBILE (VEHICLE) LIABILITY**

Bodily Injury	\$2,000,000 Each Occurrence
Property Damage	\$1,000,000 Aggregate

**D. UMBRELLA POLICY**

General liability	\$2,000,000
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Your bid response must include a Certificate of Insurance with the above limits as a minimum.

In addition, the Certificate of Insurance must have the following text contained in the bottom left box of the Certificate: "The City of Waltham is a named Additional Insured for all Insurance". The Certificate of Insurance must be mailed directly to:

Office of the Purchasing Agent  
Purchasing Department  
City of Waltham  
610 Main Street  
Waltham, MA 02452

**8. LABOR AND MATERIALS BOND**

The Contractor agrees to execute and deliver to the City, a Labor and Materials or Payment Bond equal to 100% of the contract value. This contract shall not be in force until said bond has been delivered and accepted by the City. Bond to be issued by a company licensed by the Commonwealth of Massachusetts.

A LETTER FROM A SURETY COMPANY CERTIFYING THAT THE CONTRACTOR IS QUALIFIED AND CAPABLE OF OBTAINING THE ABOVE BONDS MUST BE INCLUDED WITH HIS/HERS BID.

9. PERSONNEL:

The Contractor shall employ a competent supervisor and all properly licensed personnel necessary to perform the services required in this contract. The City Purchasing Agent shall have the right to require the Contractor to remove and/or replace any of the personnel for nonperformance or for unprofessional behavior. The City Purchasing Agent may require the Contractor to submit a weekly performance record of the areas and of the work performed, on forms approved by the City Purchasing Agent. The Contractor or his supervisor shall be available to inspect such work as required by the City Purchasing Agent.

10. PREVAILING WAGES

The Contractor is required to pay the prevailing wages as determined under the provisions of Chapter 149, Sections 26 and 27D of the Massachusetts General Laws, including the submission of weekly payrolls to the awarding authority. The prevailing Wage Schedule is available in the City Web Site at [www.city.waltham.ma.us/open-bids](http://www.city.waltham.ma.us/open-bids) . The Prevailing Wage Schedule is too large to attach here.

11. MATERIALS

The City or its Agent reserves the right to approve or reject any supplies, material or equipment used by the Contractor. The Contractor agrees to replace any supplies, material or equipment used by the Contractor. The Contractor agrees to replace any rejected supplies, materials or equipment, to the satisfaction of the City or its Agents.

12. TERMINATION OF CONTRACT

This contract may be terminated by the City upon deliverance to the Contractor of a five-day written notice of said termination.

13. CONTRACT OBLIGATIONS

Contract obligations on behalf of the City are subject to an annual appropriation to cover the contract obligation.

14. BIDDER EXPERIENCE EVALUATION

Each bidder shall submit with his bid, all the information relative to their experience and qualifications in performing the work required under this contract and shall have been in business for a minimum of five (5) years, in order for their bid to be considered.

15. NOT-TO-EXCEED AMOUNT

The bid amount proposed in your company's response is a "not-to- Exceed" amount unless the City makes changes, in writing, to the scope of work to be performed. The Change Order must be signed and approved by the City's Purchasing Agent, City Auditor, Law Department and the Mayor prior to the commencement of the change order work. No work is to begin until the proper approvals have been obtained. A change order will be priced at the unit price. Failure to comply with this procedure will result in the cancellation of the contract and the non-payment of services provided

16. FINANCIAL STATEMENTS.

The City may require, within five (5) days after the bid opening, a complete and detailed Financial Statement prepared by a Certified Public Account, to determine a bidder's financial stability.

17. BREACH OF CONTRACT/ NON PERFORMANCE

If the Contractor shall provide services in a manner, which is not to the satisfaction of the City, the City may request that the Contractor refurnish services at no additional cost to the City until approved by the City. If the Contractor shall fail to provide services, which are satisfactory to the City, the City in the alternative may make any reasonable purchase or Contract to purchase services in substitution for those due from the Contractor. The City may deduct the cost of any substitute Contract for nonperformance of services together with incidental and consequential damages from the Contract price and shall withhold such damages from sums due or to become due to the Contractor. If the damages sustained by the City exceed sums due or to become due, the Contractor shall pay the difference to the City upon demand. The Contractor shall not be liable for any damages sustained by the City due to the Contractor's failure to furnish services under the terms of this Contract if such failure is in fact caused by the occurrence of a contingency the nonoccurrence of which was a basic assumption under which this Contract was made, including a state of war, embargoes, expropriation of labor strike or any unanticipated federal, state or municipal governmental regulation of order, provided that the Contractor has notified the City in writing of such cause within seven (7) days after its occurrence.

18. RIGHT TO AUDIT

The City of Waltham has the right to review and audit documents related to this contract. This right extends to any subcontractor, supplier or other entity used by the prime contractor to fulfill the obligations under this contract.

19. CITY ORDINANCE. APPROVAL OF CONTRACTS BY MAYOR, SEC. 3-12 OF THE CITY ORDINANCES.

All contract made by any department, board or commission where the amount involved is two thousand dollars (\$2,000) or more shall be in writing, and no such contract shall be deemed to have been made or executed until the approval of the Mayor is affixed thereto. Any construction contract shall, and all other contracts may, where the contract exceed five thousand dollars (\$5,000) be required to be accompanied by a bond with sureties satisfactory to the Mayor.

**NOTE**

Failure to submit any of the required documents, in this or in other sections, with your bid response package may cause the disqualification of your proposal



## **PROJECT SCOPE**

### **1. OVERVIEW OF REQUEST:**

The City of Waltham requests your quote to replace the failed drain manhole and perform pipe rehabilitation on the manhole pipes in the backyard of 52 Winthrop Street, Waltham, MA. The selected contractor will be responsible for all permits (street opening, excavation) associated with the manhole structure improvements. This will be a turn key operation requiring a minimum of involvement of City personnel.

**2. PROJECT LOCATION:** Project location is 52 Winthrop Street. See the accompanying plans.

**3. PROJECT SCOPE:** The goal of this project is to replace the failed manhole constructed of concrete block with a manhole structure constructed of precast concrete and also to perform pipe rehabilitation and replacement on the manhole's pipes.

The work includes, but is not limited to:

- Obtain a Street Opening Permit from City of Waltham Consolidated Public Works Department for a no permit charge fee.
- All set up mobilization, completion and removal of existing manhole material.
- Drain Manhole Installation – Replace failed 4-ft diameter manhole with 8-ft diameter precast concrete manhole (8-inch walls) with cast-in-place table.
- Access Manhole Frame and Cover – Replace existing 24-inch diameter access manhole frame and cover with 30-inch diameter access manhole frame and cover to be marked "DRAIN". The frame and cover should be furnished and installed to full grade.
- Drain Inlet - Replace 4 LF of 20-inch vitrified clay pipe (VCP) inlet with 4 LF of 24-inch reinforced concrete pipe (RCP). The 24" RCP pipe stub should transition and reduce in size to meet the existing 20" VCP pipe at S=0.05.
- Sibley Brook Drain Inlet - Replace existing 10 LF of 36-inch corrugated metal pipe (CMP) with 10 LF of 36-inch RCP at S=0.004.
- Master's Brook Drain Outlet – Replace 4 LF of existing 42-inch CMP with 4 LF of 42-inch RCP to transition to existing 42" CMP pipe at S=.0075.
- Backfill and compaction, regarding, restoration of property to finish grade, all clean up.

4. COMPLETION TIME: The time for Substantial Completion of the work is 30 days from notice to proceed. The Contractor shall submit shop drawings, data, and samples and place his/her order sufficiently early to permit consideration and approval by the City Engineer before materials are necessary for incorporation into the Work. Any delay resulting from the Contractor's failure to do so shall not be used as a basis against the Owner.

5. CONTRACT DOCUMENTS: The Contract Documents are enumerated in the Agreement, and include these Specifications and the Drawings for the City of Waltham. All documents should be labeled Drain Manhole Replacement at Masters/Sibley Brooks.

6. INSPECTION OF THE SITE: A non mandatory site visit is scheduled for **Thursday Dec. 20, 2012 at 10 am,** meet at 53 Winthrop Street. By submitting a bid they confirm that they are thoroughly familiar with the site and all existing conditions which impact and affect their work. Requests for extra compensation will not be considered for any work which could have been foreseen by a visual inspection of the site.

7. CONTRACTOR'S USE OF THE SITE: The Contractor shall furnish his/her own toilet facilities on-site. The Contractor shall take all precautions necessary to protect the abutting properties during construction. Any and all damage caused by construction operations shall be repaired. The project site shall be kept clean and free from accumulation of waste material and debris. The Contractor, his/her Subcontractors, and their employees shall be respectful and courteous of the neighborhood while working on site.

8. CITY OF WALTHAM NOISE ORDINANCE: The Contractor is advised that the City of Waltham has a Noise Ordinance, Section 10-6, which has the authority to regulate the noise generating activities of this Contract. In general the Ordinance prohibits excessive noise created by construction, building, remodeling, excavating, land clearing, or by any of the equipment associated with such work. The Police Department considers the startup or idle running of truck engines and/or equipment prior to 7:00 AM a violation.

9. ENCLOSURES: Provide at the earliest practical time temporary enclosure of materials, work in progress and completed portions of the work to provide protection to the work and the employees.

10. SAFETY AND SECURITY: The Contractor shall be responsible for the safety and security of those areas of the site where construction is occurring and for the safety of the general public. The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work. He/she shall promulgate safety regulations and shall notify the Owner of particular hazards. The Contractor shall erect and maintain, as required by existing conditions and progress of work, all reasonable safeguards for safety and security. This includes the construction of barriers and the posting of danger signs and other warnings against hazards.

The Contractor shall cooperate with and maintain a close liaison with the Engineering Department, Water and Sewer Department, Police Department, and Fire Department, and he/she shall abide by safety or security related requests from any of these authorities.

11. PAYMENT: Payment shall be made following completion of the work.

12. CLARIFICATIONS: Firms planning to submit a quote are encouraged to ask for clarification on any aspect of this request so that the submitted quote fulfills the requirements of the Engineer. Such information shall be shared with interested parties of record. Clarification on any aspect may be obtained via e-mail only to [jpédulla@city.waltham.ma.us](mailto:jpédulla@city.waltham.ma.us)

END OF SECTION

## Compliance

The compliance documents in this section must be completed, signed and returned with your bid package.

Purchasing Department  
City of Waltham  
610 Main Street  
Waltham, MA 02452

Failure to submit the completed documents will cause the disqualification of the proposal.

### Section Index

Check when Complete

- Non-collusion form and Tax Compliance form..... \_\_\_\_\_
- Corporation Identification Form..... \_\_\_\_\_
- Certificate of Vote Authorization..... \_\_\_\_\_
- Certificate of Insurance (showing all limits of WC &GL)..... \_\_\_\_\_
- Three (3) References..... \_\_\_\_\_
- 5% Bid Bond or Certified Check..... \_\_\_\_\_
- Debarment Certificate ..... \_\_\_\_\_
- Prevailing Wage Certificate..... \_\_\_\_\_
- Right-to-know Law..... \_\_\_\_\_
- OSHA 10 Certificate for all Assigned Employees (MGL ch30, §39M and Ch 149) \_\_\_\_\_

Before the commencement of the Job, the contractor must provide to the above office:

- Performance Bond for 100% of the contract value and naming the City of Waltham  
(*Letter must be included with your response*)

Your Company's Name: \_\_\_\_\_

Service or Product Bid \_\_\_\_\_

**NOTE:** Failure to submit any of the required documents, in this or in other sections, with your bid response package may cause the disqualification of your proposal.

**NON-COLLUSION FORM AND TAX COMPLIANCE FORM**

**CERTIFICATE OF NON-COLLUSION**

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity or group of individuals. The undersigned certifies that no representations made by any City officials, employees, entity, or group of individuals other than the Purchasing Agent of the City of Waltham was relied upon in the making of this bid

\_\_\_\_\_  
(Signature of person signing bid or proposal)      Date

\_\_\_\_\_  
(Name of business)

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**TAX COMPLIANCE CERTIFICATION**

Pursuant to M.G.L. c. 62C, & 49A, I certify under the penalties of perjury that, to the best of my knowledge and belief, I am in compliance with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

\_\_\_\_\_  
Signature of person submitting bid or proposal      Date

\_\_\_\_\_  
Name of business

**NOTE**

Failure to submit any of the required documents, in this or in other sections, with your bid response package may cause the disqualification of your proposal.

**CERTIFICATE OF VOTE OF AUTHORIZATION**

Date:

I \_\_\_\_\_, Clerk of \_\_\_\_\_ hereby certify that at a meeting of the Board of Directors of said Corporation duly held on the \_\_\_\_\_ day of \_\_\_\_\_ at which time a quorum was present and voting throughout, the following vote was duly passed and is now in full force and effect:

VOTED: That \_\_\_\_\_ (*name*) is hereby authorized, directed and empowered for the name and on behalf of this Corporation to sign, seal with the corporate seal, execute, acknowledge and deliver all contracts and other obligations of this Corporation; the execution of any such contract to be valid and binding upon this Corporation for all purposes, and that this vote shall remain in full force and effect unless and until the same has been altered, amended or revoked by a subsequent vote of such directors and a certificate of such later vote attested by the Clerk of this Corporation.

I further certify that \_\_\_\_\_ is duly elected/appointed \_\_\_\_\_ of said corporation

SIGNED:

(Corporate Seal)

\_\_\_\_\_  
Clerk of the Corporation:

Print Name: \_\_\_\_\_

---

COMMONWEALTH OF MASSACHUSETTS

County of \_\_\_\_\_

Date:

Then personally appeared the above named and acknowledged the foregoing instrument to be their free act and deed before me, \_\_\_\_\_

Notary Public;

My Commission expires: \_\_\_\_\_

CORPORATION IDENTIFICATION

The bidder for the information of the Awarding Authority furnishes the following information.

If a Corporation:

Incorporated in what state \_\_\_\_\_

President \_\_\_\_\_

Treasurer \_\_\_\_\_

Secretary \_\_\_\_\_

Federal ID Number \_\_\_\_\_

If a foreign (out of State) Corporation – Are you registered to do business in Massachusetts?

Yes \_\_\_\_\_, No \_\_\_\_\_

If you are selected for this work you are required under M.G.L.ch. 30S, 39L to obtain from the Secretary of State, Foreign Corp. Section, State House, Boston, a certificate stating that you Corporation is registered, and furnish said certificate to the Awarding Authority prior to the award.

If a Partnership: (Name all partners)

Name of partner \_\_\_\_\_

Residence \_\_\_\_\_

Name of partner \_\_\_\_\_

Residence \_\_\_\_\_

If an Individual:

Name \_\_\_\_\_

Residence \_\_\_\_\_

If an Individual doing business under a firm's name:

Name of Firm \_\_\_\_\_

Name of Individual \_\_\_\_\_

Business Address \_\_\_\_\_

Residence \_\_\_\_\_

Date \_\_\_\_\_

Name of Bidder \_\_\_\_\_

By \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_

Business Address (POST OFFICE BOX NUMBER NOT ACCEPTABLE)

City

State

Telephone Number

Today's Date

## CORI CHECK VERIFICATION

### NOTICE TO ALL CONTRACTORS

ALL CONTRACTORS AWARDED A CONTRACT MUST PROVIDE THE WALTHAM PURCHASING DEPARTMENT WRITTEN CONFIRMATION OF ITS FULL COMPLIANCE WITH M.G.L. CHAPTER 71, SECTION 38R, WHICH REQUIRES CORI CHECKS FOR ALL SCHOOL EMPLOYEES AND VOLUNTEERS, AS WELL AS ANY AND ALL CONTRACTORS OF ANY KIND, OR LABORERS WHO PERFORM WORK ON SCHOOL GROUNDS, AND WHO MAY HAVE DIRECT AND UNMONITORED CONTACT WITH CHILDREN PLEASE SIGN BELOW TO INDICATE THAT THE ABOVE MASSACHUSETTS GENERAL LAW HAS BEEN ADDRESSED BY YOUR COMPANY.

PLEASE SIGN BELOW TO INDICATE THAT THE ABOVE MASSACHUSETTS GENERAL LAW HAS BEEN ADDRESSED BY YOUR COMPANY

\_\_\_\_\_  
COMPANY NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

Signature \_\_\_\_\_, Date \_\_\_\_\_

Print Name \_\_\_\_\_, Title \_\_\_\_\_

### NOTE

Failure to submit any of the required documents, in this or in other sections, with your bid response package may cause the disqualification of your proposal.



**PROVIDE THREE (3) SERVICE APPROPRIATE REFERENCES**

1. Company Name:

Address:

Contact Name:

Phone #

Type of service/product provided to this Company:

Dollar value of service provided to this Company:

2. Company Name:

Address:

Contact Name:

Phone #

Type of service/product provided to this Company:

Dollar value of service provided to this Company:

3. Company Name:

Address:

Contact Name:

Phone #

Type of service/product provided to this Company:

Dollar value of service provided to this Company:

**NOTE**

Failure to submit any of the required documents, in this or in other sections, with your bid response package will be cause for the disqualification of your company.

**WEEKLY PAYROLL RECORDS REPORT &  
STATEMENT OF COMPLIANCE**

In accordance with Massachusetts General Law c. 149, §27B, a true and accurate record must be kept of all persons employed on the public works project for which the enclosed rates have been provided, A Payroll Form has been printed on the reverse of this page and includes all the information required to be kept by law. Every contractor or subcontractor is required to keep these records and preserve them for a period of three years from the date of completion of the contract.

In addition, every contractor and subcontractor is required to submit, on a weekly basis, a copy of his or her weekly payroll records to the awarding authority. For every week in which an apprentice is employed, a photocopy of the apprentice's identification card must be attached to the payroll report. Once collected, the awarding authority is also required to preserve those reports for three years.

In addition, each such contractor, subcontractor, or public body shall furnish to the awarding authority directly, within fifteen days after completion of its portion of the work, a statement, executed by the contractor, subcontractor or public body who supervises the payment of wages, in the following form:

---

**STATEMENT OF COMPLIANCE**

\_\_\_\_\_, 200\_\_\_\_\_

I \_\_\_\_\_,  
(Name of signatory party) (Title)

I do hereby state that I pay or supervise the payment of the persons employed by

\_\_\_\_\_ on the \_\_\_\_\_  
(Contractor, subcontractor or public body) (Building or Project)

and that all mechanics and apprentices, teamsters, chauffeurs and laborers employed on said project have been paid in accordance with wages determined under the provisions of sections twenty-six and twenty-seven of chapter one hundred and forty nine of the General Laws.

Signature \_\_\_\_\_, Title \_\_\_\_\_

Print \_\_\_\_\_



### **RIGHT TO KNOW LAW**

Any vendor who receives an order or orders resulting from this invitation agrees to submit a Material Safety Data Sheet (MSDS) for each toxic or hazardous substance or mixture containing such substance, pursuant to M.G.L. c. 111F, §§8,9 and 10 and the regulations contained in 441 CMR 21.06 when deliveries are made. The vendor agrees to deliver all containers properly labeled pursuant to M.G.L. c. 111F §7 and regulations contained in 441 CMR 21.05. Failure to furnish MSDS and/or labels on each container may result in civil or criminal penalties, including bid debarment and action to prevent the vendor from selling said substances, or mixtures containing said substances within the Commonwealth. All vendors furnishing substances or mixtures subject to Chapter 111F or M.G.L. are cautioned to obtain and read the laws, rules and regulations referenced above. Copies may be obtained from the State House Bookstore, Secretary of State, State House, Room 117, Boston, MA (617) 727-2834.

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Authorized Signature Indicating Compliance with the Right-to-know laws:

---

Signature

Date

---

Print Name

#### **NOTE**

Failure to submit any of the required documents, in this or in other sections, with your bid response package may cause the disqualification of your proposal.

### **DEBARMENT CERTIFICATION**

In connection with this bid and all procurement transactions, by signature thereon, the respondent certifies that neither the company nor its principals are suspended, debarred, proposed for debarment, declared ineligible, or voluntarily excluded from the award of contracts, procurement or non procurement programs from the Commonwealth of Massachusetts, the US Federal Government and /or the City of Waltham. "Principals" means officers, directors, owners, partners and persons having primary interest, management or supervisory responsibilities with the business entity. Vendors shall provide immediate written notification to the Purchasing Agent of the City of Waltham at any time during the period of the contract of prior to the contract award if the vendor learns of any changed condition with regards to the debarment of the company or its officers. This certification is a material representation of fact upon which reliance will be placed when making the business award. If at any time it is determined that the vendor knowingly misrepresented this certification, in addition to other legal remedies available to the city of Waltham, the contract will be cancelled and the award revoked.

---

Company Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_, State \_\_\_\_\_, Zip Code \_\_\_\_\_

Phone Number (\_\_\_\_) \_\_\_\_\_

E-Mail Address \_\_\_\_\_

Signed by Authorized Company Representative:

\_\_\_\_\_

Print name \_\_\_\_\_,

Date \_\_\_\_\_

**10 HOURS OSHA TRAINING CONFIRMATION**

Chapter 306 of the Acts of 2004

CONSTRUCTION PROJECTS

AN ACT RELATIVE TO THE HEALTH AND SAFETY ON PUBLIC

The undersigned hereby certifies that all employees to be employed at a worksite for construction, reconstruction, alteration, remodeling, repair, installation, demolition, maintenance or repair of any public work or any public building estimated to cost more than \$10,000.00 have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first payroll report for each employee and will comply with all laws and regulations applicable to awards of subcontracts subject to section 44F.

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Print Name \_\_\_\_\_

\_\_\_\_\_  
Date

*See Chapter 306 of the Acts of 2004*

**NOTE**

Failure to submit any of the required documents, in this or in other sections, with your bid response package will be cause for the disqualification of your company.

### **BID PRICE FORM**

**My Company proposes the following all inclusive price to provide the services described within this bid document.**

**\$:** \_\_\_\_\_

---

**Company Name:** \_\_\_\_\_

**Authorized Signature:** \_\_\_\_\_

**Print Name:** \_\_\_\_\_

**E-Mail Address:** \_\_\_\_\_

**Date:** \_\_\_\_\_

## TECHNICAL SPECIFICATIONS

### ITEM 141.000

### GENERAL TRENCH EARTH EXCAVATION (0' TO < 8')

### ITEM 141.001

### GENERAL TRENCH EARTH EXCAVATION (8' TO BOTTOM)

**GENERAL:** General earth excavation shall include excavating all bituminous concrete, bituminous concrete pavement base, brick, curbing (edge stone), In-Situ Soils, Control Density Fill, tracks, ties, steel rails, gravel, organic and unsuitable materials necessary to a depth to prosecute the work.

**METHOD:** The edges of bituminous concrete shall be saw-cut or cut with pneumatic tools along even lines and shall be cut back to obtain clean, sound vertical edges of the abutting material. All edges shall be coated with an approved bituminous material for proper bonding of new pavement construction with the existing pavements. All preparation of edges of existing pavements shall be provided as specified herein and shall be subject to approval by the Engineer.

Suitable excavated materials shall be removed and stored off site by the Contractor until the proposed construction is complete and ready for backfilling. Storing of material will be the responsibility of the Contractor. The City of Waltham, at its own discretion, may retain the right to retain the excavated gravel and the Engineer may select a site for said gravel to be placed. On-site gravel, if requested by the Engineer, shall be saved for re-use on the job. The gravel shall be excavated separately from the bituminous, stored (if required) and/or relocated on the site or at a site within the city selected by the Engineer, all at no additional cost to the City of Waltham. If requested by the Engineer, any suitable excess material meeting the specifications and excavated from the site shall be re-used to fill areas below subgrade. When material remains on the site, this shall be done at no extra cost to the City. Unsuitable excavated material such as organic material, peat, silt, concrete, asphalt, brick, tracks, ties, bituminous, earth, curbing, signposts, and/or any incidental items shall be legally disposed of by the Contractor.



**ITEM 170.201**

**BACKFILLING AND COMPACTION**  
**WITH GRAVEL BORROW**

**GENERAL:** This work shall consist of furnishing and placing ordinary gravel borrow in accordance with these Specifications, and/or as directed by the Engineer.

**MATERIALS:** Gravel borrow shall consist of hard durable stone and coarse sand free from loam and clay, well graded and containing no stone having any dimension greater than two inches (type C), as per Section M1.03.0 of the Commonwealth of Massachusetts Standard Specifications, including any and all addenda. Gradation requirements for gravel shall be determined by AASHTO-T11 and T27 and shall conform to the following:

SIEVE	% PASSING
1/2"	50 - 85
#4	40 - 75
#50	08 - 28
#200	0 - 08

The gravel shall be tested for sieve analysis at the plant prior to delivery on the job site. The written results shall be given to the inspector for the city for approval prior to delivery. Failure to do so may result in the refusal of the material by the City. All costs incurred shall be paid for by the Contractor at no cost to the City. The gravel borrow shall be placed in six inch (maximum) layers and then compacted to not less than 95% of maximum optimum density as determined by AASHTO Test Designation: T99-57, Method C.

**ITEM 202.013**

**DRAIN MANHOLES**  
**(MUNICIPAL STANDARD 8')**

**GENERAL:** This work shall consist of furnishing materials for and the construction of standard drain manholes as shown on the contract drawings or as designated by the Engineer. The manholes shall be constructed in accordance with the details shown on the contract drawings.

**MATERIALS:** Drain Manholes shall be pre-cast concrete units. The materials used in the construction of drain manholes shall conform to Section 201.40 of the Commonwealth of Massachusetts "Standard Specifications for Highways and Bridges," current edition, and/or as designated by the Engineer.

Frames shall conform to LeBaron type LA 246 or the equivalent. Covers shall conform to LeBaron type L24C19 or the equivalent, and shall have the word "DRAIN" imprinted on top.

**METHODS:** Construction methods shall conform to Section 201 of the "Standard Specifications for Highways and Bridges," current edition, and/or as designated by the Engineer.

Manhole frames shall be set at finished grade in a cement concrete collar. The size of the collar shall be four (4) inches in depth and will extend to a radius of one (1) foot beyond the circumference of the frame.

**MEASUREMENT:** Measurement for drain manholes shall be based on a standard complete unit in place and accepted as determined from actual count by the Engineer. Payment line for measurement shall be as measured from the finished invert of the pipe to the top of the rim at finished grade.

**PAYMENT:** Payment for drain manholes shall be made for the number of completed units furnished, constructed and accepted as determined above at the contract unit price for ITEM 202.010 as set forth in the Bid. Said price and payment shall be full compensation for furnishing all materials, all construction of standard manholes, all materials, tools, labor, equipment, pumping if needed, all bituminous concrete collars, castings, excavation, backfill, gravel and all else incidental to the work within this item. All work is subject to approval by the Engineer.

<u>ITEM 243.240</u>	<u>24" REINFORCED CONCRETE PIPE (CLASS IV)</u>	<u>LINEAR FOOT</u>
<u>ITEM 243.360</u>	<u>36" REINFORCED CONCRETE PIPE (CLASS IV)</u>	<u>LINEAR FOOT</u>
<u>ITEM 243.420</u>	<u>42" REINFORCED CONCRETE PIPE (CLASS IV)</u>	<u>LINEAR FOOT</u>

**GENERAL:** This work shall consist of furnishing and installing various sizes of class IV reinforced concrete pipe as designated by the Engineer.

**MATERIALS:** Concrete pipe shall conform to the requirements of AASHTO M170 for Extra Strength Reinforced Concrete Culvert Pipe for Class IV Pipe. All pipe shall be the bell and spigot type. Regardless of the process used in the manufacturing of the pipe, all pipe shall be manufactured of concrete having uniform high density and impermeability, and free from any objectionable voids, and shall have uniform positive and complete steel reinforcement bond and shall conform to any additional requirements specified herein. Contractor shall submit a submittal drawing or product data for approval on the proposed Reinforced Concrete Pipe. Crushed stone for gravity line bedding shall conform to specifications in ITEM 170.202.

**METHODS:** Four feet of twenty-four inch RCP pipe shall be laid from the manhole to the existing twenty inch CMP pipe and the two different sized pipes shall be connected by an appropriate water proof adaptor. Four feet of forty-two inch RCP pipe shall be laid from the manhole to the existing forty-two inch CMP pipe and the two shall be connected by an appropriate water proof adaptor. Ten feet of thirty-six inch RCP pipe shall be laid from the manhole to the Sibley Brook nearby existing manhole. The grades for these pipes are indicated by the Engineer on the manhole details. All joints shall be fully mortared for the entire circumference of the pipe joint. All reinforced concrete pipe shall be placed in a crushed stone bedding unless otherwise directed by the Engineer.

**ITEM 460.200**

**CLASS I BITUMINOUS CONCRETE**  
**TYPE I-1 (PATCHING)**

**GENERAL:** This work shall consist of fine grading and compaction of gravel base material and/or crusher run base material prior to placing mix, and furnishing, spreading and compacting bituminous concrete base courses and wearing surfaces in accordance with the details shown on the Contract Drawings, as specified in these Specifications, or as directed by the ENGINEER.

**MATERIALS:** Class I bituminous concrete pavement, Type I-1, shall conform to the requirements of Section 460.00 of the "Standard Specifications for Highways and Bridges," Commonwealth of Massachusetts, ENGINEERING DEPARTMENT.

**METHODS:** The CONTRACTOR shall provide a thermometer for the use of the ENGINEER that is specifically designed for measuring the temperatures set forth below.

Bituminous concrete shall be spread at a temperature of not less than 225 degrees Fahrenheit and all initial rolling or tamping shall be performed when the temperature of the mixture is such that the sum of the air temperature plus the temperature of the mixture is between 300 and 375 degrees Fahrenheit. All mixtures shall be placed only when the atmospheric temperature is above 40 degrees Fahrenheit.

The edges of the trench shall be sawcut prior to installation of bituminous concrete.

Bituminous concrete for wearing surfaces and base courses shall be spread in individual layers and compacted to the required lines, grades and cross section.

Rolling shall commence at the lower edges and shall progress toward the highest portion. Vibratory rollers are not to be used without the approval of the ENGINEER.

Each completed surface shall be thoroughly compacted, smooth and free from ruts, humps, depressions, or irregularities.

Where new bituminous meets existing bituminous surfaces, an emulsifying agent shall be applied to seal the joint. A sand overcoat shall then be applied over the emulsifying agent.

All trench patches shall be maintained until the end of the contract period or a minimum of 90 days after installation. Any patches which settle during the 90-day maintenance period will be removed and replaced at no additional cost to the owner.

Any paving material that adheres to concrete sidewalks shall immediately be removed.

**ITEM 751.000**

**PLANTING MULCH**

**GENERAL:** *This work shall consist of furnishing and placing bark mulch at the required depths and on approved areas in accordance with these Specifications, as indicated on the Contract Drawings, and/or as designated by the Engineer. Only screened bark mulch will be accepted for use.*

**MATERIALS:** *Mulch shall be pine bark mulch aged a minimum of six (6) months and not longer than two (2) years. The mulch shall be shredded to a uniform size; dark brown in color; free of dirt, extraneous materials; with no pieces thicker than one-quarter inch (1/4"). Mulch must be free of stringy material or long chunks over three inches (3") in size and shall not contain, in the judgment of the Landscape Architect, an excess of fine particles. Submit sample for the Landscape Architect's approval.*

**METHOD:** *Mulch shall be placed and uniformly spread on the subgrade. When laid out, the depth of the mulch shall be eight inches. The finished surface shall be even with the top of the drain manhole cover.*

**ITEM 850.221**

**SAFETY SIGNING**  
**FOR CONSTRUCTION OPERATIONS**

**GENERAL:** *This work shall consist of furnishing, installing, maintaining, repositioning, removing and storing temporary signs for the protection of the traveling public and working personnel during construction and maintenance operations. The design, application and installation of such signs shall comply with the Massachusetts Manual on Uniform Traffic Control Devices, latest edition. If required by the Engineer, all materials provided by the Contractor under this item shall remain the property of the Contractor upon completion of this project.*

**MATERIALS AND METHODS:** *Materials required under this section need not be new but must be in excellent condition. Any materials that in the judgment of the Engineer are unsatisfactory in appearance or performance shall be removed and immediately replaced by acceptable units at no additional cost to the City. Signs that are missing shall be immediately replaced by the Contractor at no additional cost to the City. Signs that are not consistent with the use of the roadway shall be removed or covered. All work shall be done by the Contractor and to the satisfaction of the Engineer.*

*Materials shall conform to Sections 828 and 840 of the Commonwealth of Massachusetts Standard Specifications except the plywood material shall conform to the following: Plywood sign panels shall be fabricated from five-ply 5/8" thick Medium Density Overlaid Exterior Type, A-B both sides surface in natural color and the whole conforming with the requirements and tests for the above as set forth in U. S. product Standard PS1-74 for Construction and Industrial Plywood. Plywood shall bear the grade trade mark of an approved testing agency. The entire sign face shall reflective sheeting conforming to M9.30.0, type III of the Commonwealth of Massachusetts Standard Specifications.*

*Background sheeting shall be fluorescent orange. The maximum spectral radiance factor, in accordance with Section 5.1 of ASTM E991 for the fluorescence shall be 110% minimum for new signs and 60% minimum for weathered signs. Actual size and legend shall be determined by the Engineer. The sign shall state "For Work Area – Keep Out."*

*Temporary signs such as detour signs shall be properly supported by appropriate tripods. They shall not be leaned against drums.*

**ITEM 859.200**

**REFLECTORIZED DRUM W/LIGHT (TYPE C)**

**GENERAL:** *Work done under this item shall conform to the relevant provisions of Section 850 of the 1988 MDPW Standard Specifications.*

**MATERIALS:** *All reflectORIZED drums shall be new upon initiation of work and shall be repaired and/or replaced as directed by the Engineer if damaged. Drum material must be approved ultraviolet resistant, low density, impact resistant linear polyethylene or approved equal. Minimum drum wall thickness shall be 3/32 inch. Minimum drum diameter shall be 18 inches. Drum height shall be approximately 36 inches. Sheeting must be approved orange and white type IV reflectORIZED sheeting, conforming to M9.30.0. Drum design and application must be as per Manual on Uniform Traffic Devices. Drums shall not be weighted with sand, water or any material to the extent that would make them hazardous to motorists.*

*Metal drums are prohibited.*

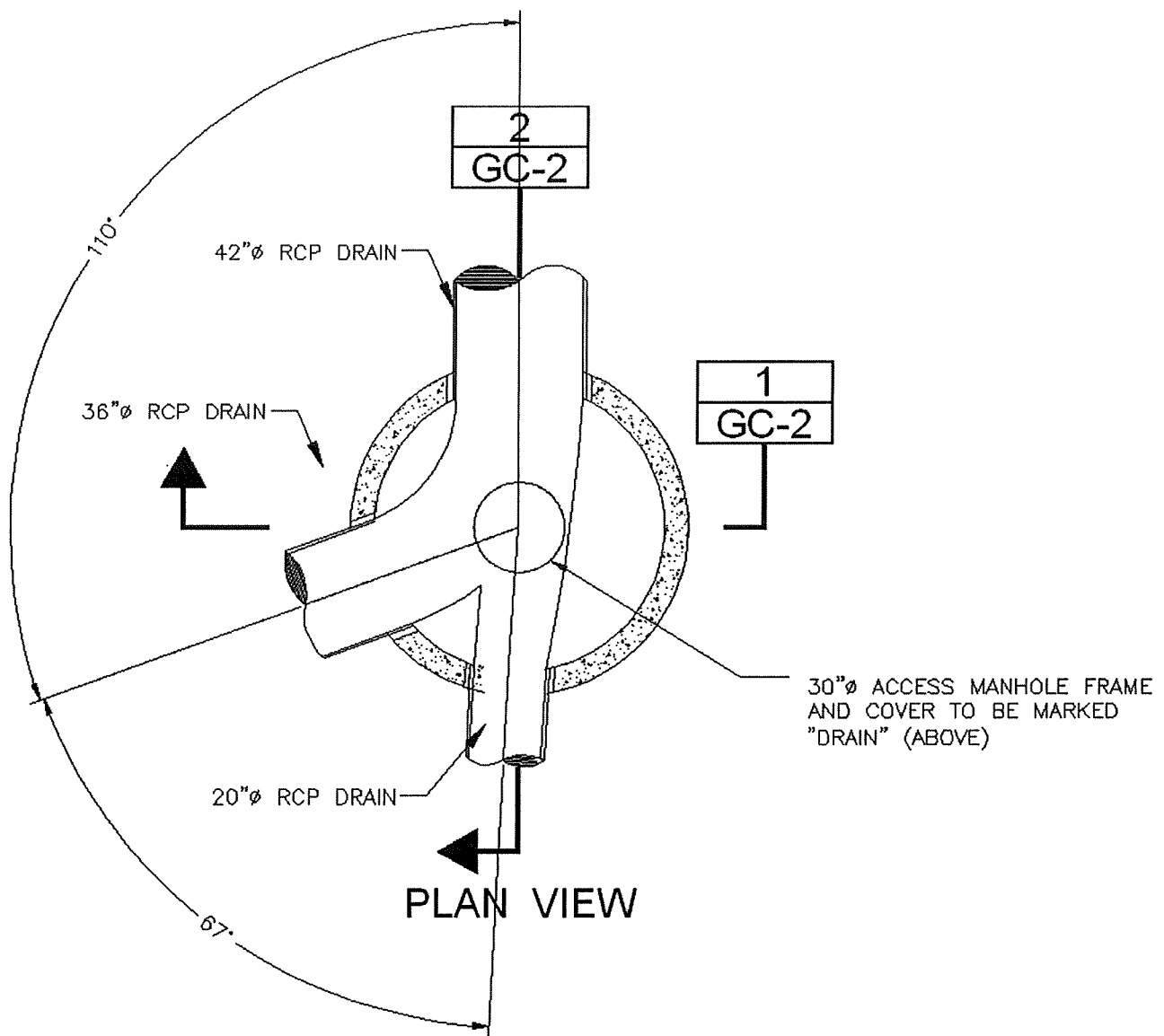
**METHODS:** *All drums, lights and batteries shall be regularly maintained, including removal of dust and road film, so as not to reduce reflective efficiency. When drum loses target value, it shall be replaced. Plastic drums with type "C" lights shall be used as channelizing devices in the work zone. Plastic drums with type "A" flashers shall be used for hazard markings. Upon completion of each work day, drums shall be placed so that they are sufficiently back from the edge of the lanes used for travel so as not to encroach upon through traffic.*

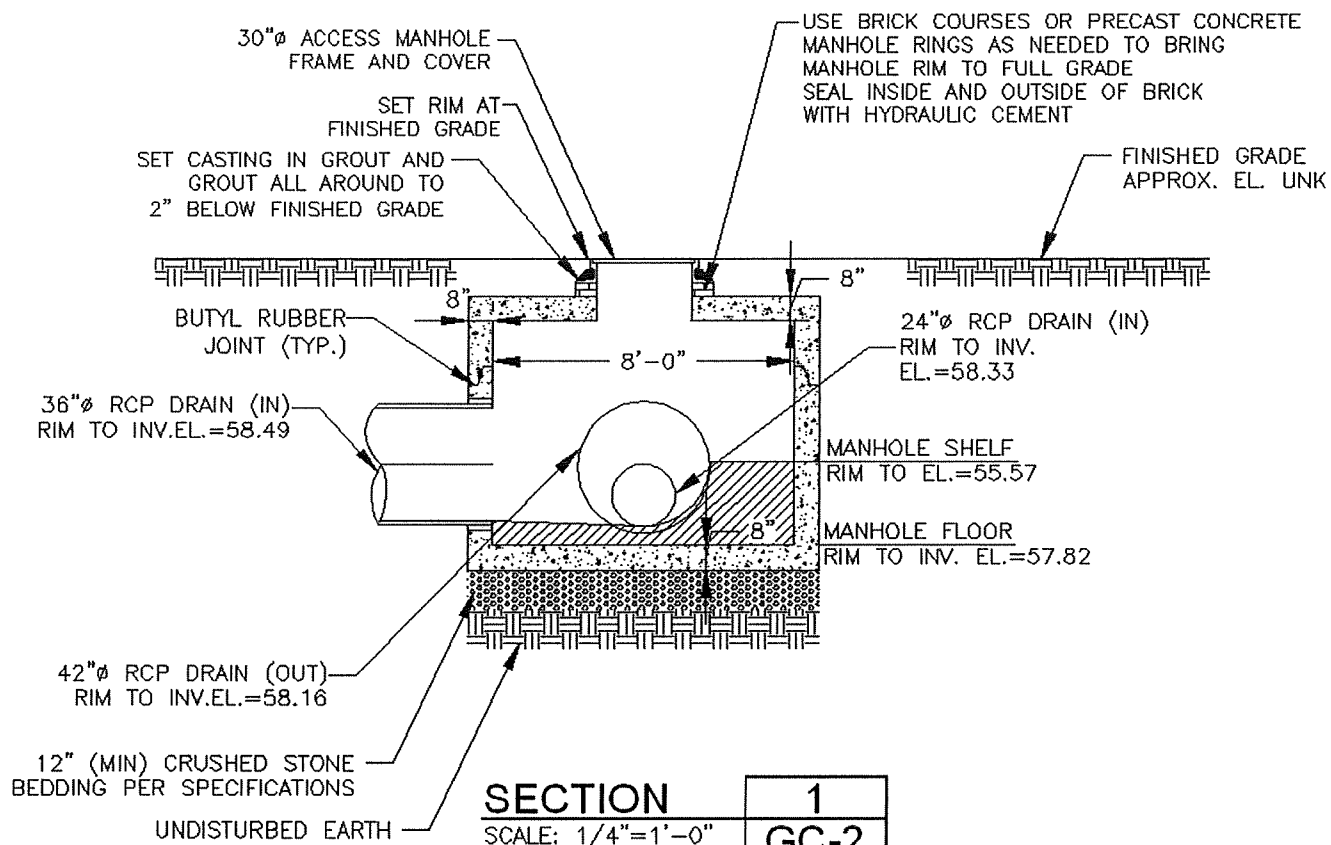
*Drums may be required to be repositioned on a daily basis, on weekends, or even removed for long holiday weekends as directed by the Engineer.*

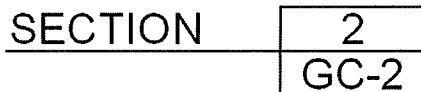
## ***ATTACHMENT A***

### ***DETAIL INTERSECTION OF DRAIN LINES***







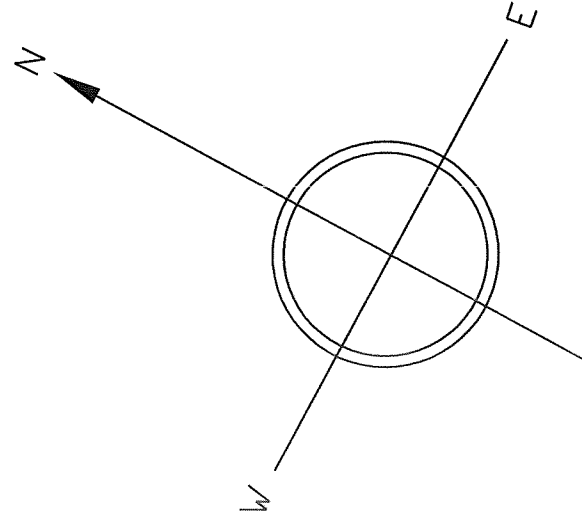


# MASTER'S/SIBLEY INTERSECTION DMH

## ***ATTACHMENT B***

### ***PLAN OF INTERSECTION OF DRAIN LINES***

DRAIN MANHOLE  
REPLACEMENT AT  
MASTERS / SIBLEY  
CULVERTS



WINTHROP STREET

#52  
WINTHROP ST.

MASTERS  
BROOK  
CULVERT

EXIST DMH  
INV = 57.83

42" CMP

FLOW

\*PROPOSED DMH\*  
FURNISH & INSTALL  
8'-0" Ø PRECAST  
CONCRETE MANHOLE

(B) 10' OF 36"Ø RCP CONNECTION  
TO SIBLEY BROOK MANHOLE  
@ S = 0.004  
INV (B) = 58.49

SIBLEY  
BROOK  
CULVERT

FLOW

EXIST DMH  
INV = 58.53

36"Ø CMP

(A) 4' OF 42"Ø RCP V/  
CONNECTION TO EXISTING  
42"Ø CMP @ S = 0.0075  
INV (A) = 58.16

FURNISH & INSTALL  
30"Ø (OPENING)  
FRAME & COVER  
TO BE MARKED  
'DRAIN' (ABOVE)

(C) 4' OF 24"Ø RCP STUB  
W/ ADAPTOR TO 20" VCP  
@ S = 0.05  
INV (C) = 58.33

20"Ø VCP

FLOW

- 4'-24"Ø RCP W/ ADAPTOR TO 20"Ø VCP
- 10'-36"Ø RCP W/ CONNECTION TO EXISTING MANHOLE
- 4'-42"Ø RCP W/ CONNECTION TO EXISTING 42"Ø CMP
- 8'Ø PRECAST CONCRETE DMH COMPLETE IN PLACE  
W/ 30"Ø FRAME & COVER SET TO GRADE

*ATTACHMENT C*

*SURVEY OF SIBLEY BROOK DRAIN  
AND  
MASTERS BROOK DRAIN*

