



REQUEST FOR QUOTATIONS

RABBITT ROAD CULVERT REPAIR PROJECT

Solicitation Issued: August 23, 2016

Proposals Due: September 14, 2016 Time: 1:00 PM

Submissions Received By: Upton Reed, Project Engineer
Department of Public Works
800 Rabbitt Road
Gaithersburg, Maryland 20878

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SECTION 1: Definitions

Notwithstanding any of the other definitions established hereinafter, the following definitions shall apply herein.

City: "City" means the City of Gaithersburg, Maryland, a municipal corporation of the State of Maryland.

City Manager: "City Manager" means the City Manager of the City or his or her designee.

Contract: "Contract" means the binding agreement awarded pursuant to this Solicitation, if any.

Contractor: "Contractor" means the Offeror awarded the Contract.

Offeror: "Offeror" means any Person submitting a Proposal in response to this Solicitation.

Person: "Person" means any individual, or association or entity recognized by law.

Procurement Webpage: "Procurement Webpage" means the webpage on the City's website dedicated to procurement: <http://www.gaithersburgmd.gov/government/procurement/current-quotes>.

Proposal: "Proposal" means the offer submitted to the City by an Offeror in response to this Solicitation.

Services: "Services" means the goods and/or services to be provided to the City by the Contractor under the Contract as described in this Solicitation.

Solicitation: "Solicitation" means this Request for Quotations dated August 23, 2016.

Solicitation Schedule: "Solicitation Schedule" refers to the events and dates and times thereof specified in Section 3.1 of this Solicitation.

Solicitation Documents: "Solicitation Documents" mean this Solicitation and any and all documents issued and/or used by the City to solicit Proposals, including but not limited to: addendums, amendments, forms and specifications.

~ END OF SECTION 1 ~

SECTION 2: Introduction and Notices to Offerors

2.1. INTRODUCTION

The City is seeking sealed Proposals from qualified and experienced Offerors capable of construction of the Rabbitt Road Culvert Repairs which is located within the corporate limits of the city (hereinafter referred to as "Services").

2.2. DISCLAIMER

This is a Solicitation only, it is not a contract. The City shall assume no obligation to pay or reimburse any Person for any costs, fees, or expenses incurred in preparation of a response to this Solicitation, or for any meetings or travel costs related to such response. All Proposals submitted to and accepted by the City shall become the exclusive property of the City and shall not be returned. The City reserves the right to reject any or all Proposals in full or in part and/or to waive any technicalities and/or informalities as best may serve the interests of the City. The City is under no obligation to any Offeror until a contract is executed for the Services described herein.

2.3. AUTHORITY TO DISTRIBUTE SOLICITATION DOCUMENTS

The City is the sole entity with the authority to issue and/or distribute any Solicitation Documents and/or information related thereto. Any and all Solicitation Documents obtained from any source other than the City may be incomplete or incorrect. The City assumes no responsibility for any error, omission or misinterpretation resulting from the reliance or use of any Solicitation Documents not both issued and distributed by the City. Any and all Solicitation Documents shall be posted on the Procurement Webpage and eMaryland.

2.4. ACCEPTANCE

The submission of a Proposal shall constitute acknowledgement and acceptance by the Offeror of the requirements, specifications and terms and conditions specified herein.

2.5. RESTRICTED DISCUSSIONS

Offerors are prohibited from discussing this Solicitation or any part thereof with any employee, agent, or representative of the City except as expressly authorized herein. The City may, in its sole discretion, reject the Proposal submitted by any Offeror who is in violation of this provision. Any and all verbal statements and/or answers to questions relative to this Solicitation shall not be considered binding, valid or enforceable.

2.6. STATE OF MARYLAND BID AND CONTRACT REQUIREMENTS

- A. Offerors must be qualified to bid in the State of Maryland in accordance with §16-202 and §16-203 of the State Finance and Procurement Article of the Annotated Code of Maryland.
- B. To enter into any contract with the City, Offerors must be in compliance with the State of Maryland Code of Regulations Title 21, State Procurement Regulations.

2.7. ADA REQUIREMENTS

Individuals with a disability, who would like to receive the information in this Solicitation in another form, may contact the City's Procurement Manager by phone at 301-258-6320 or by email at wrhodes@gaitthersburgmd.gov.

~ END OF SECTION 2 ~

SECTION 3: Solicitation Schedule and Information

3.1. SOLICITATION SCHEDULE

Below is the schedule of events for this Solicitation. The City reserves the right to modify the Solicitation Schedule at any time as best may serve the interests of the City; any and all modifications shall be made by addendum or amendment and posted on the City's Procurement Webpage. Unless otherwise specified, all references herein to times of day shall be Eastern Time (daylight or standard, as applicable).

EVENT	DATE	TIME
A. Solicitation Issued	August 23, 2016	N/A
B. Pre-Solicitation Meeting	August 31, 2016	10:00 a.m.
C. Offeror Questions Due in Writing	August 31, 2016	10:00 a.m.
D. Answers to Questions Due	September 7, 2016	10:00 a.m.
E. Submission Deadline and Opening ↳ Submitted To Upton Reed, Project Engineer Department of Public Works 800 Rabbitt Road Gaithersburg, Maryland 20878	September 14, 2016	by 1:00 p.m.

3.2. SUBMISSION OF QUESTIONS

All questions regarding this Solicitation shall: (i) be submitted by email to Becky Uebele, at buebele@gaithersburgmd.gov; and (ii) be received by the August 31, 2016 by 10:00 a.m. Any and all questions received not in compliance with this paragraph will not be answered unless the City, at its sole discretion, deems that a response to a question is necessary to clarify anything in the Solicitation Documents.

3.3. CITY'S ANSWERS TO QUESTIONS

The City's answers to questions submitted by Bidders will be posted by addendum on the City's Procurement Webpage on the date specified in the Solicitation Schedule.

3.4. PROPOSAL SUBMISSION INSTRUCTIONS

Each Respondent shall submit one (1) paper original and one (1) identical paper copy of their Proposal in a sealed envelope to the location and by the date and time due specified in Section 3.1(B) hereinabove.

Any and all Proposals submitted not in compliance with any of the provisions herein may be rejected as non-responsive and be removed from consideration.

3.5. PROPOSAL FORMS

Each Proposal shall be made upon the following forms, which are attached hereto in Attachment A:

- ↳ Offeror References Form
- ↳ Litigation and Lien Information Form
- ↳ Proposal Sheet (Schedule of Prices)

3.6. CONTRACT DOCUMENT

The successful Respondent (hereinafter referred to as the “Contractor”) shall complete and return a Contract document to the City within ten (10) days of the date of the notice of intent to award by the City. A draft of this document has been attached hereto in Attachment B:

- ↳ Draft Contract Document

In addition to the above, the Contractor shall also provide bonds consistent with Section 5.2.

~ END OF SECTION 3 ~

SECTION 4: General Terms and Conditions

The following terms and conditions shall apply to and survive this Solicitation and be incorporated into the Contract:

4.1. HEADINGS

Any and all of the headings contained in any of the Solicitation Documents are for reference purposes only and shall not in any way affect the meaning or interpretation of any of the same.

4.2. ACCEPTANCE AND REJECTION OF PROPOSALS

The City reserves the right: (i) to accept or reject any or all Proposals in whole or in part; (ii) to waive any technicalities or informalities in Proposals; and (iii) to cancel or postpone this Solicitation at any time if determined to serve the best interests of the City. The City may reject the Proposal of any Offeror in arrears or in default to the City on any contract, debt, or other obligation.

4.3. ACCURATE INFORMATION

The Offeror certifies that all information provided or to be provided to the City is true and correct and may be relied upon by the City in awarding the Contract. Any false and/or misleading information is cause for the City to reject the Offeror's Proposal or to terminate the Contract if awarded to the Offeror. Such rejection or termination shall relieve the City of any direct or consequential damages or costs incurred by the Offeror.

4.4. ADDENDA AND AMENDMENTS

In the event any addenda or amendments are issued to this Solicitation, all the terms and conditions of this Solicitation shall govern and apply unless specifically stated or modified in any such addenda or amendments. Any and all written communication not posted on the City's Procurement Webpage relative to this Solicitation shall not be considered binding, valid or enforceable. It is the responsibility of the Offeror to inquire about and obtain any and all addenda and/or amendments issued, all of which shall be published on the City's Procurement Webpage.

4.5. ALTERNATE PROPOSALS

The Offeror is expected to clearly respond to the requirements set forth in this Solicitation. Any and all alternate Proposals for the Services shall be rejected as non-responsive and shall be removed from consideration.

4.6. BINDING PROPOSAL

All Proposals shall remain binding for 180 calendar days following the Submission Deadline; Proposals may not be withdrawn at any time within this period. In the event an award is not made during such period, all Proposals shall be automatically extended and remain binding for an additional 180 calendar day period. Proposals shall automatically be renewed until such time as either an award is made or proper notice is given to the City by an Offeror of its intent to withdraw its Proposal. Proposals may only be withdrawn by written notice to the City at least fifteen (15) calendar days prior to the expiration of the then current 180 calendar day period.

4.7. CONFIDENTIALITY

- A. The City agrees, to the extent permitted by law and in accordance with the terms set forth in this Solicitation, to hold all confidential information and material belonging to the Offeror in strictest confidence. The Offeror shall specify in writing to the City the information and/or material the Offeror deems to be a trade secret or other confidential information and/or material. Written notification shall also contain the reason such information and/or material is considered to be a trade secret and/or confidential.
- B. The Offeror agrees that all knowledge and information it may receive from the City or from its officials, employees or other sources, or by virtue of the performance of Services under and pursuant to the Contract, if awarded the Contract, which are included or referenced in Title 4 of the General Provisions Article of the Annotated Code of Maryland, shall not be directly or indirectly disclosed to any person whatsoever unless authorized to do so by the City Manager. This confidentiality provision shall also apply to any information, activity, or record designated by the City as being “confidential” or “privileged”.

4.8. ERRORS IN PROPOSALS

Obvious error(s) in calculations in any Proposal may not be corrected without the prior written consent of the City and may be cause for the Proposal to be deemed non-responsive. If an error is made in an extended price, the unit price will govern.

4.9. INTEREST IN MORE THAN ONE PROPOSAL AND COLLUSION

Multiple Proposals submitted in response to this Solicitation by any Offeror under the same or different names shall be rejected as non-responsive. Reasonable grounds for believing that any Offeror has interest in more than one (1) Proposal for this Solicitation, both as the Offeror and as a subcontractor for another Offeror, shall result in the rejection of all Proposals in which the Offeror has interest and disqualify the Offeror from responding to any reissuance of this Solicitation. However, a Person acting only as a subcontractor may be included as a subcontractor for multiple Offerors. The City may reject all Proposals if reasonable cause exists for believing that collusion exists among Offerors.

4.10. LATE PROPOSALS

It is the responsibility of the Offeror to ensure the delivery of its Proposal by the Submission Deadline and to the location specified in Section 3.1 of this Solicitation. Any and all Proposals delivered or submitted late or to any location other than the designated location shall be rejected as non-responsive. The submission of any Proposal by way of facsimile or e-mail is strictly prohibited; any and all Proposals submitted as such shall be rejected as non-responsive. The City assumes no responsibility for any delays and/or errors in the delivery of a Proposal; postmarking by the Submission Deadline shall not substitute for actual receipt. Any and all Proposals submitted not in compliance with any of the provisions of this paragraph shall be rejected as non-responsive.

4.11. MODIFICATIONS TO PROPOSALS

The Offeror may only modify its Proposal prior to the Submission Deadline and in accordance with and subject to the following:

- A. The City shall consider a modified Proposal as an entirely new Proposal and shall replace the original Proposal, which shall be deemed to be withdrawn and null and

void.

- B. The modified Proposal shall be subject to all the requirements, specifications and terms and conditions set forth herein.
- C. Notwithstanding the provisions with respect to the submission of a Proposal herein, the modified Proposal shall clearly be labeled "Modified Proposal".

4.12. CONTRACT AWARD

- A. It is the intent of the City to award the Contract to one (1) Offeror. The City reserves the right to award the Contract to multiple Offerors and/or to award the Contract in whole or in part. If for any reason, through no fault of the City, the Contract is not executed within thirty (30) days' following formal award, the City may withdraw the award and award to another Offeror, or solicit new Proposals.
- B. In the event the City receives only one (1) Proposal in response to this Solicitation, the City reserves the right, in its sole discretion, to proceed as a negotiated procurement with the Offeror that submitted the Proposal.

4.13. OPTIONAL GOODS AND/OR SERVICES

The City reserves the right to request and evaluate optional goods and/or services which may be in the best interests of the City, and to negotiate the price of such goods and/or services with the successful Offeror or with another Offeror, whichever is determined to be the most advantageous to the City. While pricing for optional goods and/or services may be requested in this Solicitation, the City is under no obligation to consider such optional goods and/or services when selecting the successful Offeror unless otherwise stated.

4.14. SOLICITATION DOCUMENTS

The Offeror is expected to carefully and thoroughly examine all of the Solicitation Documents for accuracy and completeness, and to become familiar with the same. If doubt exists as to the meaning and/or intent in or of any of the Solicitation Documents, the Offeror shall make an inquiry as to such meaning and/or intent. The failure of the Offeror to examine and become familiar with any and all of the Solicitation Documents shall in no way relieve the Offeror of its obligations under the Contract, if awarded to the Offeror. The submission of a Proposal shall be taken as prima facie evidence of compliance with this provision and that the Offeror fully understands everything in the Solicitation Documents.

4.15. SOLICITATION PROTEST

- A. Any protest of this Solicitation shall be in writing to the City Attorney. The provisions of COMAR Title 21.01.03.01A(7), State Procurement Regulations, do not apply to municipalities and are not applicable to this Solicitation. Protests of alleged improprieties in this Solicitation shall be filed prior to the Submission Deadline.
- B. Any written protest shall, at a minimum, include: (i) the name, address, telephone number, and if available, email address of the Person making the protest; (ii) the Solicitation number and a detailed statement of the legal and factual grounds for the protest, including a description of resulting harm to the Person making the protest; and (iii) any and all copies of supporting exhibits, evidence and/or documents to substantiate the claim.

4.16. USE OF BROKER

The Offeror warrants that no person or selling agency has been employed or retained to solicit or secure the Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except bona fide employees, or bona fide established commercial or selling agencies maintained by the Offeror for the purpose of securing business. For violation of this provision, the City shall have the right, in its sole discretion: (i) to terminate or suspend the Contract without liability to the City, its officials or employees; or (ii) to deduct from the Contract price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

4.17. ACCOUNTING SYSTEM AND AUDIT

A. The Contractor certifies its accounting system conforms to Generally Accepted Accounting Principles (GAAP) and is sufficient to comply with its budgetary and financial obligations under the Contract. In addition, the Contractor acknowledges and agrees to the following:

I. The Contractor: (i) shall maintain any and all necessary source documentation, accounting records and supporting documentation in such a manner that will provide for a separation between direct and indirect costs; and (ii) shall enforce sufficient internal controls as dictated by GAAP to properly account for expenses incurred under the Contract.

II. The Contractor: (i) shall allow the City to examine and/or obtain copies of the Contractor's records to determine and verify compliance with the terms and conditions of the Contract; (ii) shall grant the City access to such records at all reasonable times during the Contract term and for a period of five (5) years thereafter; and (iii) shall make such records available for examination and/or to obtain copies by any and all Federal, State and/or County authorities if the Contract is supported to any extent with any funds of the same.

B. The Contractor shall include a similar provision in any and all subcontracts.

4.18. ASSIGNMENT OF THE CONTRACT

The City's rights under the Contract are personal to the Contractor. It is mutually understood and agreed that the Contractor shall not assign, convey, sublet, transfer or otherwise dispose of its Contract or its right, title or interest therein, or its power to execute the Contract, to any other person without the express written consent of the City; however, in no case shall such consent relieve the Contractor from its obligations under the Contract, or change the terms and conditions of the Contract.

4.19. CHANGES IN GOODS AND/OR SERVICES

The City, without invalidating the Contract, may order changes in the goods and/or Services within the general scope of the Contract, consisting of additions, deletions and/or other revisions, and the Contract sum and term shall be adjusted accordingly. Any cost or credit to the City from a change in Services shall be determined by mutual written agreement between the City and the Contractor. The Contractor shall provide all of the goods and services that may be required to complete the Contract at the price agreed upon. Any

alterations of variables to the terms of the Contract shall not be valid or binding upon the City unless made in writing and signed by the City and the Contractor.

4.20. CONTRACT DISPUTES

Any and all disputes arising under the Contract, except under the provisions for termination, which are not disposed of by agreement between the City and the Contractor, shall be decided under procedures A-D listed below. Pending final resolution of a dispute, the Contractor shall proceed diligently with Contract performance. A claim must be in writing for a sum certain and any money requested must be fully supported by all cost and pricing information.

- A. All disputes, claims, questions of fact or interpretations of the documents of the Contract not disposed of by agreement or express provision of the Contract arising between the City and the Contractor after performance of the Contract has commenced but before final payment and termination of the Contract, are decided by the City Manager or designee ("City Manager").
- B. The City Manager must give the Contractor not less than three (3) working days to submit documentation and written reasons supporting the Contractor's position in the dispute. The City Manager may consider any other information or written submissions from City employees or agents and may conduct an informal, non-record hearing for receipt of testimony, evidence and/or argument. The City Attorney may participate in the hearings to protect the City's interest.
- C. The City Manager must render a decision, in writing, stating reasons for such decision and provide copies to the Contractor and the City Attorney. If the decision is mailed to the Contractor, it must be mailed "certified" and dated the date of mailing; otherwise, it must be dated the date of delivery to the Contractor.
- D. The City Manager's decision may be submitted to Binding Arbitration by either Party under the auspices of an arbitrator appointed by the American Arbitration Association.

4.21. DISSEMINATION OF DATA

The Offeror shall not release any information related to the Solicitation or publish any reports or documents related to the same without the prior written approval of the City. The Contractor shall not release any information related to the Services under the Contract or publish any reports or documents related to the same without the prior written approval of the City. The Contractor shall include a similar provision in all subcontracts.

4.22. EMPLOYMENT AS INDEPENDENT CONTRACTOR

The City and the Contractor recognize and agree: (i) that the Contractor shall act as an independent Contractor to the City; (ii) that the Contract does not create any actual or apparent agency, partnership, franchise, or relationship of employer and employee between the parties; (iii) that neither party shall be entitled to participate in any of the other party's benefits, including without limitation, any health or retirement plans; (iv) that the Contractor shall not be entitled to any remuneration, benefits, or expenses other than as specifically provided for in the Contract; and (v) that the City shall not be liable for any insurance, taxes, or withholding for or on behalf of the Contractor; all such insurance, taxes or withholding, and costs for same, shall be the sole responsibility of the Contractor.

4.23. ETHICS LAWS AND REQUIREMENTS

The Contractor shall comply with the financial disclosure and conflict of interest and lobbying provisions of the City's ethics laws, which may be found on the City's website at: <http://www.gaithersburgmd.gov/government/city-code>.

4.24. FORCE MAJEURE

The City and the Contractor acknowledge and agree that either party hereto will be relieved of its obligations hereunder in the event and to the extent that the performance of its obligations under the Contract is delayed or prevented by any cause beyond its control, including, without limitation, acts of God, public enemies, war, insurrection, acts or orders of governmental authorities, fire, flood, explosion, or riots ("Force Majeure"). Failure to receive necessary materials and supplies will not excuse performance hereunder unless such failure is itself due to an event of Force Majeure. A party obtaining relief under this provision shall make every reasonable effort to minimize the effects thereof and will promptly resume performance as soon as possible. The City shall decide the extent of such delay or the justification of any other delay, and then extend the Completion Date for such reasonable time as the City may decide.

4.25. GOVERNING LAW

The Contract shall be construed in accordance with the laws and regulations of the Federal Government, State of Maryland, and the City. For purposes of litigation involving the Contract, exclusive venue and jurisdiction shall be in the Circuit Court of Maryland for Montgomery County, District Court of Maryland for Montgomery County or the United States District Court of Maryland.

4.26. IMMIGRATION REFORM AND CONTROL ACT

The Contractor shall warrant that it does not and shall not hire, recruit or refer for a fee for employment under the Contract, an alien, knowing the alien is an unauthorized alien, and hire any individual without complying with the requirements of the Immigration Reform and Control Act of 1986 ("Act"), including but not limited to any verification and record keeping requirements. The Contractor shall further assure the City that, in accordance with the Act, it does not and will not discriminate against an individual with respect to hiring, or recruitment or referral for a fee, of the individual for employment or the discharging of the individual from employment because of such individual's national origin or in the case of a citizen or intending citizen, because of such individual's citizenship status.

4.27. INCONSISTENT PROVISIONS

- A. Notwithstanding any provisions to the contrary in the terms and conditions of any contract supplied by the Contractor, the conditions of this Solicitation and the Contract supersede those terms and conditions in the event of inconsistency.
- B. In the event of any inconsistency between any of the provisions of this Solicitation and any of the provisions of the Contract, the provisions of the Contract shall take precedence over and supersede those provisions in the event of any inconsistency.

4.28. INDEMNIFICATION

The Contractor shall indemnify and hold harmless the City, its officials, employees and agents from the following:

- A. Any and all direct or indirect damages, costs, claims, actions, suits, judgments or

liens resulting from the negligent act or commission or omission of the Contractor, its employees, agents or subcontractors; and

- B. Any and all direct or indirect costs, claims, actions, suits, judgments or liens for damages resulting from the Contract arising from the negligence or omission of the Contractor, its employees, agents or subcontractors. The Contractor shall, upon completion of the Services, provide the City with a Release of Liens from any subcontractor, supplier, material, or other supplier of goods and services to the project.

4.29. LAWS AND REGULATIONS

The Contractor shall comply with any and all applicable federal, state and local laws, codes and regulations with respect to the Services under the Contract.

4.30. NO LIENS

The Contractor shall have no title or interest in any of the goods delivered to the City under the Contract. In no event shall the Contractor encumber any such goods delivered to the City with any lien of any kind or offer such goods as collateral in any transaction whatsoever.

4.31. NO WAIVER

Except as otherwise specifically provided in the Contract, a waiver by either party to the Contract of any breach of any provision of the Contract, or either party's decision not to invoke or enforce any right under the Contract, shall not be deemed a waiver of any right or subsequent breach, and all provisions of the Contract shall remain in force.

4.32. NON-DISCRIMINATION REQUIREMENTS

- A. The Contractor acknowledges and agrees that during the term of the Contract it shall:
 - I. Not discriminate against any employee or applicant for employment because of gender preference, race, color, creed, religion, ancestry, sex, sexual orientation, national origin, affection preference, disability, age, marital status or status with regard to public assistance or as a disabled veteran or veteran of the Vietnam era.
 - II. Take affirmative action to ensure that applicants and employees are treated without regard to their race, color, creed, religion, ancestry, sex, sexual orientation, national origin, affection preference, gender preference, disability, age, marital status or status with regard to public assistance or as a disabled veteran or veteran of the Vietnam era. Such action shall include but not be limited to the following: employment, upgrade, demotion or transfer; recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
 - III. In all solicitations for employees, state that all qualified applicants will receive consideration for employment without regard to race, color, creed, religion, ancestry, sex, sexual orientation, national origin, affection preference, gender preference, disability, age, marital status or status with

regard to public assistance or as a disabled veteran or veteran of the Vietnam era. The Contractor agrees to use clauses similar to those above in all contracts and subcontracts. In the event the Contractor fails to comply with the nondiscrimination clauses of the Contract, or fails to include such provisions in all contracts and subcontracts, as hereinabove provided, the Contract may at the sole discretion of the City be declared void AB INITIO, canceled, terminated or suspended in whole or in part with waiver of any recourse by the Contractor against the City or its officials or employees, and the Contractor may be declared ineligible for further contracts with the City.

- B. Any employee, applicant for employment, or prospective employee with information concerning any breach of these requirements may communicate such information to City Manager who shall commence a prompt investigation of the alleged violation. Pursuant to such investigation, the Contractor shall permit access to their books, records and accounts. In the event the City Manager concludes, on the basis of such investigation, that the Contractor has failed to comply with these nondiscrimination clauses, the City Manager may invoke the remedies hereinabove set out.

4.33. NONEXCLUSIVE

Nothing in the Contract shall be deemed to act as a bar to the City's solicitation or purchasing of equipment, goods or services from any other company or entity.

4.34. OWNERSHIP OF MATERIALS

Unless otherwise agreed in writing by the City and the Contractor, any work, specifications, information, data, drawings, software and other items produced under the Contract, other than any Contractor Tool, is to be deemed a work-for-hire to the extent permitted by law, and, to the extent not so permitted, shall be assigned to, and shall become, the exclusive property of the City.

4.35. PATENTS

- A. Whenever any article, material, appliance, process composition, means or things called for by the specifications ("Materials") under this Solicitation is covered by Letters of Patent, the Contractor shall secure, prior to using or employing such Materials, the assent in writing of the owner or licensee of such Letters of Patent and file the same with the City.
- B. The Contractor shall defend, at its own expense, and pay the cost and damages awarded in any action brought against the City based on an allegation that the Materials provided by the Contractor infringe on any patent, copyright, license or trade secret. In the event that an injunction shall be obtained against the City's use of the Materials by reason of infringement of any patent, copyright, license or trade secret, the Contractor shall, at its own expense, procure for the City the right to continue using the Materials or replace or modify the same so that it becomes non-infringing.

4.36. PAYMENT TERMS, TAXES AND INVOICES

The City shall only pay original proper invoices issued in accordance with the following:

A. Payment Terms

The City's standard terms of payment are net thirty (30) days; however, this does not preclude the Contractor from providing a prompt payment discount for the payment of invoices in less than thirty (30) days. Payments considered past-due may be subject to incurred interest not to exceed one percent (1%) per month.

B. Taxes

The City is exempt from sales and use taxes. The Contractor shall exclude such taxes from all forms of requests for payments issued to the City; the City shall not be liable for or pay or reimburse the Contractor for any such taxes. A copy of the City's Sales and Use Tax Exemption Certificate is provided below.



C. Invoices

Original invoices shall include at a minimum, the Contractor's name, address, telephone and fax numbers, and if applicable, email address and corresponding purchase order number. Invoices shall be submitted to: City of Gaithersburg, Accounts Payable Division, 31 South Summit Avenue, Gaithersburg, Maryland 20877.

4.37. RECORDS

- A. The Contractor shall retain any and all records and documents relating to the Services under the Contract for a minimum of five (5) years following payment of the Contractor's final undisputed proper invoice for the complete rendered Services.
- B. The Contractor shall make available to the City, State of Maryland and any and all appropriate Federal agencies, all records and documents with respect to any and all matters under the Contract at any time during normal business hours, as often as the City deems necessary, to audit, examine, and make copies, excerpts and/or transcripts of any and all relevant data.
- C. The Contractor shall include similar provisions in all subcontracts.

4.38. SUBCONTRACTORS

The Contractor acknowledges and agrees: that if it shall be necessary to hire or subcontract with competent personnel to fulfill its obligations under the Contract, it shall do so at its own expense; and to ensure that any and all work assigned to any subcontractor shall be performed in compliance with all of the terms and conditions of the Contract. Nothing contained in the Contract shall create any contractual relation between any subcontractor and the City.

4.39. SURVIVAL

The representations, warranties and indemnities contained herein shall survive the termination of the Contract.

4.40. TERMINATION

A. Termination for Cause

If through any cause, the Contractor fails to fulfill in a timely and proper manner its obligations under the Contract, or if the Contractor violates any of the provisions of the Contract, the City may upon written notice to the Contractor, terminate the right of the Contractor to proceed under the Contract or with such part or parts of the Contract to which there has been default, and may hold the Contractor liable for any damages caused the City by reason of such default and termination, if the default is not corrected within 15 days' notice to cure. In addition, the Contract may be terminated for the bankruptcy, dissolution, assignment for the benefit of creditors, or other similar action of the Contractor.

In the event of such termination, any completed Services performed by the Contractor under the Contract shall, at the option of the City, become its property and the Contractor shall be entitled to receive equitable compensation for any work completed to the satisfaction of the City. The Contractor, however, shall not thereby be relieved of liability to the City for damages sustained by the City by reason of any breach of the Contract by the Contractor, and the City may withhold any payments to the Contractor for the purpose of setoff until such time as the amount of damages due the City from the Contractor is determined. The Contractor shall not be responsible for damages under this article solely for reasons of delay if the delay is due to causes beyond its control and without its fault or negligence, but this shall not prevent the City from terminating the Contract for such delay.

B. Termination for Convenience

The City may, upon written notice and without cause, terminate the Contract in whole or in part at any time for its convenience. In such instance, payment shall be made to the Contractor for the reasonable costs of the work performed through the date of termination. Termination costs do not include lost profits, consequential damages, delay damages, unabsorbed or under-absorbed overhead of the Contractor or its subcontractors or suppliers. Failure of the Contractor to include a termination for convenience clause into its subcontracts and material purchase orders shall not result in any liability to the City for lost profits in conjunction with a termination for convenience.

The Contractor expressly waives any damages, delay damages, or indirect costs which may arise from the City's election to terminate the Contract in whole or in part for its convenience.

C. Termination for Non-Appropriation of Funds

The City shall not be obligated to the Contract for any future fiscal year until funds are appropriated for each such future fiscal year. In the event funding appropriation is not approved, the City may, upon written notice, terminate the Contract in whole or in part and without penalty or expense to the City. The effect of such action shall terminate the Contract on the last day of the fiscal year for which appropriations were made.

~ END OF SECTION 4~

SECTION 5: Special Terms and Conditions

Notwithstanding any of the General Terms and Conditions of this Solicitation, the following Special Terms and Conditions are not subject to change and shall apply to and survive this Solicitation and be incorporated into the Contract.

5.1. Offeror Qualifications

Notwithstanding any of the qualifications specified in any other section of this Solicitation, the Offeror shall meet the following minimum qualifications in order to be eligible to submit a Proposal in response to this Solicitation:

- A. The Offeror shall have a minimum of five (5) years' experience providing services similar to those under this Solicitation.
- B. The Offeror shall be able to fulfill its obligations under the terms and conditions of this Solicitation and the Contract.

5.2. Bonds

A bid bond, a payment bond and a performance bond, all of which are hereinafter referred to collectively as ("Bonds"), shall be furnished to the City utilizing the latest AIA Contract Documents and in accordance with the following:

- A. The Offeror shall submit with its Proposal an executed bid bond in an amount equal to five percent (5%) of the Offeror's total Proposal price. A certified copy of the Power of Attorney of the attorney-in-fact executing said bond shall be attached and be certified by manual signature.
- B. The Contractor shall furnish to the City an executed payment bond in an amount equal to one hundred percent (100%) of the total Contract sum with the Contract. A certified copy of the Power of Attorney of the attorney-in-fact executing said bond shall be attached, be certified by manual signature, and bear the same date at the performance bond.
- C. The Contractor shall furnish to the City an executed performance bond in an amount equal to one hundred percent (100%) of the total Contract sum with the Contract. A certified copy of the Power of Attorney of the attorney-in-fact executing said bond shall be attached, be certified by manual signature, and bear the same date at the payment bond.
- D. The Bonds shall be executed in accordance with and subject to the following:
 - I. The bonding entity shall be registered and in good standing in the State of Maryland in accordance with the State of Maryland Code of Regulations Title 21, State Procurement Regulations. This provision shall apply to any and all co-sureties utilized by the bonding entity in execution of the Bonds.
 - II. The bonding entity shall maintain a rating of A-minus (A-) or better with A.M. Best. This provision shall apply to any and all co-sureties utilized by the bonding entity in execution of the Bonds.

- III. The bonding entity shall consent to exclusive venue and jurisdiction in the Circuit Court for Montgomery County, Maryland. This provision shall apply to any and all co-sureties utilized by the bonding entity in execution of the Bonds.
- IV. The date of the Bonds shall not exceed the date of the Contract or subsequent thereto.
- V. The Bonds shall contain provisions which are similar to the following:
 - **GOVERNING LAW.** *This Bond shall be governed by, and construed in accordance with the laws of the State of Maryland without regard to its conflict of laws provisions.*
 - **NO THIRD PARTY BENEFICIARIES.** *The Surety provides this Bond for the sole and exclusive benefit of the City and, if applicable, any dual obligee designated by attached rider, together with their heirs, administrators, executors, successors and assigns. No other party, person or entity shall have any rights against this Surety.*
 - **VENUE.** *In the event any legal action shall be filed upon this Bond, venue shall lie exclusively in the Circuit Court for Montgomery County, Maryland.*
 - **WAIVER OF NOTICE.** *The Surety waives notice of any modifications to the Contract, including changes in the Contract Time, the Contract Sum, the amount of liquidated damages, or the Work and/or Services performed.*

5.3. **INSURANCE**

- A. The Contractor shall be responsible for obtaining and maintaining in force, at its expense, policies of insurance with minimum limits as follows:
 - I. Automobile liability insurance in an amount no less than one million dollars (\$1,000,000);
 - II. Commercial general liability insurance in an amount no less than one million dollars (\$1,000,000); and
 - III. Workers' compensation insurance in an amount no less than one million dollars (\$1,000,000).
- B. Prior to the execution of the Contract, the Contractor shall provide the City with a certificate of insurance, which: (i) shall evidence the above policies and name the City as additional insured with respect to the Commercial General Liability Insurance only; and (ii) shall contain a provision that requires the Contractor's insurers to provide the City with a written notice of any cancellation or adverse material change in the insurance and that such cancellation or adverse material change shall not be effective with respect to the City for thirty (30) days after such written notice is given.

- C. The Contractor hereby acknowledges and agrees that its failure to provide the City with a certificate of insurance and/or the failure by the City to demand the delivery of said certificate shall not operate or be deemed to operate as a waiver of the insurance and associated endorsements required under this provision, and the Contractor shall hold the City harmless from any liability arising as a result of any such failure(s).

5.4. CONTRACT INFORMATION AND PAYMENTS

- A. The City expects to award a fixed price contract based on fixed unit rates.
- B. Payments under the Contract shall be made in installments based on the percentage of the Services completed as to be later determined and agreed upon between the City and the Contractor, but subject to the provisions of paragraph C directly below. All applications for payment shall be issued in accordance with Section 5.37 (Payment Terms, Taxes and Invoices) of this Solicitation.
- C. On each application for payment, the Contractor shall deduct, as retainage, five percent (5%) of the total respective application amount until ninety (90) days after final completion and acceptance of all work covered by the Contract. Upon completion and acceptance of all contract work in the amount due, the Contractor will be paid upon presentation of a final bill. In the event the Contractor fails to deduct such retainage, the City shall deduct the retainage. The Contractor shall be paid the total amount of retainage deducted following Project Closeout.
- D. All Applications for Payment shall be submitted using AIA G702 and AIA G703 forms.

5.5. CHANGES TO CONSTRUCTION DOCUMENTS

No alterations, changes, modifications or variations of the Construction Documents or terms thereof shall be valid unless in writing and signed by the City and the Contractor or their duly authorized representatives.

5.6. COPIES OF DRAWINGS AND SPECIFICATIONS

The City will furnish to the Contractor free of charge additional copies of all drawings and specifications if necessary.

5.7. NOTICE TO PROCEED AND COMPLETION OF SERVICES

Within thirty (30) calendar days following the effective date of the Contract, the City will issue the Contractor a written notice to proceed, after which the Contractor shall reach Substantial Completion within ninety (90) calendar days thereafter (hereinafter referred to as "Completion Date"), with an additional thirty (30) calendar days for Project Closeout.

5.8. EQUIPMENT, LABOR, MATERIALS AND SUPPLIES

Following the effective date of the Contract, the Contractor shall order and/or obtain any and all equipment, labor, materials and supplies necessary to secure the availability of the same to complete the Services under the Contract by the Completion Date.

5.9. CONTRACTOR RESPONSIBILITY

Notwithstanding any of the responsibilities of the Contractor specified in other sections of this Solicitation, the Contractor:

- A. Shall be responsible for the Services under the Contract until said Services are complete and accepted by the City.
- B. Shall assign a competent supervisor: who shall remain on site at all times while providing the Services under the Contract; and who shall be responsible for:
 - I. Coordinating, directing and supervising all work and workers employed on the site;
 - II. Verifying any and all measurements at the site;
 - III. Ensuring all work under the Contract progresses without delay;
 - IV. Receiving, inspecting, accepting, and protecting any and all equipment and/or material delivered to or stored at the site; and
 - V. Inspecting and protecting any and all completed work at the Site.

Any and all instructions and/or orders given by the City to any and all supervisors assigned to the site by the Contractor shall have the same force and effect as if given directly to the Contractor by the City.

5.10. DAMAGES DEDUCTED

In the event of the failure, neglect, or default of the Contractor in the performance of the Contract, the amount of such costs or damages caused by the Contractor may be deducted and withheld from any money due or to become due under the Contract.

5.11. LIQUIDATED DAMAGES

- A. The City and the Contractor will acknowledge and agree that time is of the essence with respect to the Contract and that in the event the Contractor fails to substantially complete the Services within the Contract by the Completion Date for reasons which the Contractor is solely responsible, the City will incur actual and considerable monetary damage, including delays in starting and completing other projects and increasing the City's costs, the actual amounts of which are uncertain and not readily ascertainable. An amount of \$300.00 per day is reasonable in proportion to the probable loss to the City and that amount per day will be agreed upon as liquidated damages. This amount shall in no event be considered as a penalty or otherwise than as liquidated damages to the City because of the delay. Contractor waives any defense as to the validity of any liquidated damages stated in the Contract on the grounds that such liquidated damages are void as penalties or are not reasonably related to actual damages.
- B. The assessment or payment of any liquidated damages imposed shall not constitute a defense to the Contractor nor an election of remedies by the City, or an estoppel against the City, and shall not prevent the City from terminating the Contract for breach thereof when the failure of performance is repeated by the Contractor. Prior failure to perform the work according to the Construction Documents or the election

of the City to refrain from assessing liquidated damages for any failure of the Contractor shall not constitute a waiver on the part of the City in the event it shall later elect to terminate the Contract for breach thereof as provided in the Contract and Construction Documents.

5.12. SCHEDULE OF SERVICES

It shall be the Contractor's responsibility to submit a schedule of operations sequences and methods of maintaining traffic to the Project Engineer and obtain approval prior to starting work on this project.

The Services shall be performed: Monday through Friday between the hours of 7:00 a.m. and 5:00 p.m. ET; and, with the City's written permission, on weekends and holidays between the hours of 9:00 a.m. and 6:00 p.m. ET. The Contractor may set its own schedule provided the Services are completed by the Completion Date and do not conflict with the City's noise ordinance, which is incorporated herein and attached hereto as Exhibit B.

5.13. SUPERINTENDENT

The Contractor shall assign a full time superintendent who shall have a minimum of five (5) years' experience in providing services similar to the Services hereunder and shall be present at the site at all times during construction. This superintendent shall coordinate the work so that it will progress without delay, reject all unsuitable or inferior materials, and be responsible for the proper protection of all completed work. Any instructions given to the superintendent shall have the same force as if given directly to the Contractor.

5.14. SITE SAFETY AND USE OF PREMISES

While performing the Services under the Contract, the Contractor shall:

- A. At all times enforce suitable rules and provide any and all guards, signs, fences, dust barriers and/or protective devices required for the safe completion the Services.
- B. Confine operations at the site to the areas permitted under the Contract. Any and all portions of the site, beyond the areas on which work is indicated, shall not to be disturbed.
- C. Conform to any and all site rules and regulations affecting the work while engaged in construction.
- D. Keep planned egresses outside the construction zones clear. Do not use these areas for parking or the storage of materials; parking areas and areas for the storage of materials shall be limited to those areas within the construction zone.
- E. Not unreasonably encumber the site with materials or equipment. Confine any and all storage of materials, and locations of storage sheds, to the areas within the construction zone. If any additional storage is necessary, obtain and pay for such storage off site at the Contractor's expense.

5.15. FIELD VERIFICATION AND IDENTIFICATION

The Contractor shall verify all field conditions and dimensions within five (5) days of mobilizing construction site activity. The Contractor shall report any discrepancies and/or conflicts to the Contract Administrator. In the event that field conditions differ significantly from the Construction Documents, a revision will be issued by the City with sketches and/or revised Construction Documents.

The Contractor shall verify all measurements at the construction site and shall be responsible for their correctness. No extra charge or compensation will be allowed because of differences between actual dimensions and the measurements indicated on the drawings unless such differences are submitted to the City Manager to be resolved.

5.16. PERMITS AND INSPECTIONS

The Contractor shall obtain any and all necessary permits, licenses, and/or inspections to properly execute the work under the Contract. The fee for any permits, which are both required by and issued by the City, will be waived. The Contractor shall give all notices and comply with any and all laws, ordinances, rules, and/or lawful orders. If the Contractor observes that any portion of the Contract is at variance with any applicable law, statute, and/or building code, the Contractor shall promptly notify the City in writing and necessary changes will be accomplished by modification.

The Contractor shall be responsible for scheduling any and all required inspections necessary to complete the Services under the Contract.

5.17. INSPECTIONS

The Work will be under the supervision of a City inspector or inspectors, whose duties will be to see that the requirements of the Construction Documents are carried out, but their presence is in no manner to be presumed to relieve in any degree the responsibility or obligations of the Contractor.

The Contract shall at all times shall give to the Contractor Administrator or his representative and her or his assistants and to any person designated by the City, access to the Work Site, whether necessary or convenient, for inspecting and making tests for the work to be done and materials to be furnished under the Contract, without extra compensation.

5.18. INCREASED OR DECREASED QUANTITIES

For this project, quantities are approximate and unit price Proposal shall apply regardless of any increase or decrease in the estimated quantities shown in the Proposal. Any increase or decrease in the quantity of these items, or their deletion will not be considered justifiable claims for compensation in addition to the contract unit price Proposal in the Proposal. The work under this term will consist of but not limited to the following in the Construction Documents.

5.19. STORAGE OF MATERIALS AND EQUIPMENT

Proposed areas for the storage of materials and equipment shall be provided as per the plans or approved by the Project Engineer or Site Representative.

5.20. TOILET FACILITIES

The Contractor shall be responsible providing such toilet facilities as may be required for the use of the workmen while providing the Services under the Contract.

5.21. PROTECTION OF WORK

The Contractor shall properly cover, secure and/or protect its work when the whole or a portion of the work is suspended for any reason.

5.22. IMPERFECT WORK

Upon completion of the work and prior to final payment, the Contract Administrator and the Contractor shall carefully inspect the work area. Any imperfect work shall be corrected prior to final payment, at no additional cost to the City.

5.23. CORRECTION OF WORK BEFORE FINAL PAYMENT

The Contractor shall promptly remove from the premises, all materials condemned by the City as failing to conform to the Contract, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute its own work in accordance with the Contract and at no cost to the City.

5.24. CORRECTION OF WORK AFTER FINAL PAYMENT AND WARRANTY PERIOD

Neither the final payment nor any provision in the Contract shall relieve the Contractor of responsibility for faulty materials or workmanship and it shall remedy any defects due thereto and pay for any damage to other work resulting therefrom which shall appear within a period of one (1) year from date of final payment (referred to herein as "Warranty Period"). During the Warranty Period, the Contractor shall:

- A. Make any and all adjustments, repairs and/or replacements which become necessary due to: initial settlement and/or shrinkage; and defects in materials, workmanship, and/or installation.
- B. Provide any and all labor and materials necessary to restore any and all adjacent areas to the work their original condition.
- C. Provide the date of any and all manufacturer's warranty for the products.

The City shall give notice of observed defects with reasonable promptness.

5.25. DEDUCTIONS FOR UNCORRECTED WORK

If the City deems it inexpedient to correct work injured or done not in accordance with the Contract, the City shall determine the value thereof and a deduction from the Contract price shall be made therefore.

5.26. PROJECT CLOSEOUT

Upon written notification by the Contractor that the work is complete, the City will conduct a final inspection of all work. When the City determines that the work has been satisfactorily completed, and the Contract requirements are fully satisfied (including warranty documents, final inspections and maintenance manuals), the City will issue the Contractor a Project Closeout letter and process the final payment.

5.27. SHOP AND AS-BUILT DRAWINGS

The Contractor shall provide Shop Drawings as needed and As-Built Drawings to the Contract Administrator as part of Project Closeout. All Shop Drawings shall be provided in PDF format and per the Construction Documents.

5.28. FLOAT TIME OWNERSHIP

The City and Contractor shall have shared ownership of any float time, if applicable.

5.29. CLEAN-UP

The Contractor shall keep the premises clean at all times and shall remove all rubbish and debris as often as required. The Contractor shall clean all fixtures and equipment installed under this Contract. Upon completion of the work, all materials, equipment, and appurtenances not required, as part of the completed project shall be completely removed from the site. All waste material from concrete and asphalt operations and scattered or unused aggregates shall be removed.

~ END OF SECTION 5 ~

SECTION 6: Scope of Work

6.1. SCOPE OF WORK

The Contractor shall provide the Services in accordance with and subject to: the General Requirements, Reference, and Specifications, and the Project Drawings, which are incorporated herein and attached hereto as Exhibit A.

~ END OF SECTION 6 ~

SECTION 7: Attachments and Exhibits

7.1. ATTACHMENT A

The following documents and forms are incorporated herein and attached hereto:

- ↳ Bidder Reference Data Sheet
- ↳ Litigation and Lien Information
- ↳ Proposal Sheet (Schedule of Prices)

7.2. ATTACHMENT B

The following document is incorporated herein and attached hereto:

- ↳ Draft Contract Document

7.3. EXHIBIT A

The following exhibits are incorporated herein and attached hereto:

- ↳ General Requirements, References and Specifications
- ↳ Rabbitt Road Culvert Repairs Plans

7.4. EXHIBIT B

The following document is incorporated herein and attached hereto:

- ↳ Noise Ordinance

~ END OF SECTION 7 ~

RABBITT ROAD CULVERT REPAIR PROJECT

ATTACHMENT A

PROPOSAL FORMS

The Respondent shall complete and include the following forms in their Proposal:

- ↳ Bidder References Form
- ↳ Litigation and Lien Information Form
- ↳ Proposal Sheet (Schedule of Prices)



City of Gaithersburg

Bidder References

Solicitation No. _____

Please complete this form in its entirety and include it with your Bid Proposal.

Name of Entity: _____

Street Address: _____

City, State & Zip Code: _____, _____ _____

BIDDER REFERENCES

1. Organization Information

Name: _____

Address: _____

Contact Name: _____ Phone #: _____

Description of Work: _____

2. Organization Information

Name: _____

Address: _____

Contact Name: _____ Phone #: _____

Description of Work: _____

3. Organization Information

Name: _____

Address: _____

Contact Name: _____ Phone #: _____

Description of Work: _____



City of Gaithersburg

Litigation and Lien Information

Solicitation No. _____

Please complete this form in its entirety and include it with your Bid Proposal. For the purpose of completing this form, "entity" means an individual, sole proprietor, partnership, corporation, limited liability corporation (LLC), company, or association.

Name of Entity: _____

Street Address: _____

City, State & Zip Code: _____, _____ _____

Telephone Numbers: (P) _____ (F) _____

LITIGATION INFORMATION

Is your entity currently involved in any litigation or had a litigation claim(s) within the previous twenty-four (24) month period?

Yes / No

If yes, please provide a detailed list including case number, jurisdiction, status and brief summary of such litigation.

<u>Case Number</u>	<u>Jurisdiction</u>	<u>Status</u>	<u>Summary</u>
_____	_____	_____	_____
_____	_____	_____	_____

LIENS

Does your entity have any outstanding mechanics liens?

Yes / No

If yes, please explain: _____

Does your entity have any outstanding tax liens?

Yes / No:

If yes, please explain: _____

Signature Title Date

Printed Name

PROPOSAL SHEET (SCHEDULE OF PRICES)

RABBITT ROAD CULVERT REPAIR PROJECT

Please complete this form in its entirety and include it with the Proposal.

Company Name: _____

Company Address: _____

Company Phone Number: _____

Proposal Submitted By: _____

Line Item	Bid Item	Unit Price	Units	Estimated Quantity	Line Item Total
101-01	Clearing and Grubbing		LS	1	
104-01	Maintenance of Traffic with Traffic Control Plan		LS	1	
107-01	Construction Stakeout		LS	1	
201-01	Class 2 Excavation for Reuse on Site as Fill		CY	200	
202-01	Class 5 (Streambed Excavation) and On-Site Disposal		LS	1	
203-01	Common (Clean Earth) Borrow		CY	230	
205-01	Test Pit Excavation		CY	15	
206-01	Removal of Existing Curb and Gutter		LF	80	
206-02	Full Depth Cut		LF	120	
206-03	Removal of Existing Pavement		CY	28	
206-04	Removal of Existing Concrete Slab		SY	110	
206-05	Remove Existing Sidewalk		CY	2	
301-01	Class 3 Excavation		CY	50	
302-01	Select Backfill using Crusher Run Aggregate CR-6		CY	80	
303-01	18" RCP Class IV		LF	178	
303-02	Removal of Existing Pipe		LF	50	
303-03	Clean Existing Pipe Any Size		LF	340	
303-04	Field Connection to Existing Riser		EA	2	
305-01	Pre-Cast Concrete Manholes (48" Diameter)		EA	4	
305-02	Pre-Cast Concrete Inlet		EA	1	
305-03	Removal Of Existing Inlets		EA	1	
305-04	Concrete Collar		CY	1	
305-05	Concrete Cradle		CY	16	
305-06	Concrete Slab		CY	19	
308-01	Stabilized Construction Entrance		EA	2	
308-02	Sand Bags		EA	510	
308-03	Silt Fencing		LF	540	
308-05	Sump Pit		EA	1	
308-06	Dewatering Bags		EA	1	

308-07	Geotextile Class ST		SY	68	
308-08	Maintenance of Stream Flow		LS	1	
312-01	Class II Riprap		CY	50	
314-01	Flowable Fill		CY	160	
505-01	HMA Surface Course 9.5mm (3" thickness)		TON	14.5	
505-02	HMA Base Course 19mm (5" Thickness)		TON	21.8	
505-03	CR-6 (6" Thickness)		TON	25.5	
602-01	Standard Type A Concrete Combination Curb and Gutter		LF	80	
603-01	5-Inch Concrete Sidewalk		SY	11	
605-01	Removal and Replacement of Existing Guardrail		LF	60	
607-01	4 Foot High Galvanized Chain Link Fence		LF	61	
607-02	Remove and Dispose of Chain Link Fence		LF	550	
701-01	Furnish and Place Topsoil, 4 Inch Depth		CY	170	
701-02	Place Salvaged Topsoil, 4 Inch Depth		SY	1,000	
704-01	Temporary Seed		SY	1,000	
708-01	Sodding		SY	1,000	
709-01	Type A Soil Stabilization Matting		SY	2,500	
1001-01	6 Foot Temporary Chain Link Fencing		LF	500	
1304-01	Expoxy Injection of Cracks		LF	100	
1308-02	Corrugated Metal Pipe Saddle Plates		EA	3	
COST ESTIMATE TOTAL (BASE BID)					
ALTERNATE # 001 - CENTRIFUGAL SPINCAST GEOPOLYMER STRUCTURAL LINING					
1309-01	Centrifugal Cast Concrete Pipe Structural Lining		LF	510	
ALTERNATE # 002 - JOINT SEAL WITH POLYUREA ELASTOMER SPRAY					
1308-01	Seal Openings, Separations and Joints with Polyurea Elastomer Spray Coating		SF	6,400	
COST ESTIMATE TOTAL (BASE BID + ALTERNATE #001 AND #002)					

By my signature: I hereby testify: that I am a duly authorized representative of the Company named hereinabove; that I have fully examined and reviewed the items and totals represented on this Schedule of Prices; and that they are accurate and complete.

Signature

Title

Date

Printed Name

RABBITT ROAD CULVERT REPAIR PROJECT

ATTACHMENT B

DRAFT CONTRACT DOCUMENT

The following has been provided for a reference only. The successful Contractor shall be issued the final document that must be complete and return the following documents to the City within ten (10) days of the date of the notice of intent to award by the City:

↳ Draft Contract Document

CONSTRUCTION SERVICES CONTRACT

This Contract is made and entered into this _____ day of _____, 2016, by and between _____, a _____ corporation licensed to do business in the State of Maryland, located at _____ ("Contractor"), and the **City of Gaithersburg, Maryland**, a municipal corporation of the State of Maryland, located at 31 South Summit Avenue, Gaithersburg, Maryland 20877 ("City"), both of which are hereinafter referred to jointly as the ("Parties") and sometimes individually as the ("Party").

RECITALS

WHEREAS, the City requires the availability and services of a contractor to provide all the equipment, labor and materials for the construction of the Rabbitt Road Culvert Repairs project ("Services"); and

WHEREAS, the City issued a Proposal Request dated <insert date> to solicit bid proposals for the Services ("Solicitation"), which is incorporated herein and attached hereto as **EXHIBIT A**; and

WHEREAS, the Contractor submitted a proposal in response to the Solicitation, which the City deems to be the lowest responsible and responsive bid proposal received ("Bid Proposal"), and which is incorporated herein and attached hereto as **EXHIBIT B**; and

NOW, THEREFORE, in consideration of good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and in consideration of the mutual benefits and promises herein made, the Contractor agrees to provide the enumerated Services on the terms as more fully described throughout this Contract, as follows:

1. EMPLOYMENT AS INDEPENDENT CONTRACTOR AND SUBCONTRACTORS

a. Employment as Independent Contractor

The Parties to this Contract recognize and agree that: (i) the Contractor shall act as an independent Contractor to the City; (ii) this Contract does not create any actual or apparent agency, partnership, franchise, or relationship of employer and employee between the Parties; (iii) neither Party shall be entitled to participate in any of the other Party's benefits, including without limitation, any health or retirement plans; (iv) the Contractor shall not be entitled to any remuneration, benefits, or expenses other than as specifically provided for in this Contract; and (v) the City shall not be liable for any insurance, taxes, or withholding for or on behalf of the Contractor; all such insurance, taxes or withholding, and costs for same, shall be the sole responsibility of the Contractor.

b. Subcontractors

The Contractor acknowledges and agrees that if it shall be necessary to hire or subcontract with competent professional personnel to fulfill its obligations under this Contract, it shall do so at its own expense.

2. SCOPE OF SERVICES

The Contractor hereby acknowledges and agrees to provide the Services in accordance and in compliance with all of the requirements, specifications, and terms and conditions contained in Exhibits A and B, in a usual and customary manner consistent with industry standards.

3. COMPENSATION

a. For the Contractor's availability and Services under and pursuant to this Contract, the City shall pay the Contractor compensation at the fixed prices described in the Bid Proposal Sheet, which is incorporated herein and attached hereto as Exhibit B, in accordance with the Solicitation and subject to the following:

- i. Total compensation under this contract shall not exceed _____Thousand __ Hundred and ___ Dollars and Zero Cents (\$0.00), for the Services rendered. Compensation shall be payable following the receipt of a proper invoice for same, which the Contractor shall submit in accordance with the provisions for Payment Terms, Taxes and Invoices specified in Section 4 of this Contract.
- ii. Compensation shall be paid in a progressive manner following completion by the Contractor and acceptance by the City of each phase of the project. The City shall hold as retainage five percent (5%) of each undisputed proper invoice and, upon completion and acceptance by the City of complete rendered Services, the City shall pay the Contractor the accrued retainage following the receipt of a final undisputed proper invoice for such complete rendered Services ("Final Payment").

b. In the event the Services for which the Contractor has been hired is abandoned, curtailed or canceled by the City at any time, the following shall occur: (i) this Contract shall terminate in accordance with the provisions for termination specified in Section 6 of this Contract; and (ii) the Contractor shall be paid for the Services performed to date of termination for which the Contractor has not otherwise been compensated to the time of such termination.

4. PAYMENT TERMS, TAXES AND INVOICES

The Contractor hereby recognizes the City shall only pay original proper invoices issued in accordance with and subject to the following:

a. Payment Terms

The City's standard terms of payment are net thirty (30) days; however, this does not preclude the Contractor from providing a prompt payment discount for payment of invoices in less than thirty (30) days. Payments considered past-due may be subject to incurred interest not to exceed one percent (1%) per month.

b. Taxes

The Contractor recognizes the City is exempt from sales and use taxes, and agrees; (i) to exclude such taxes from all forms of requests for payments issued to the City; and (ii) that the City shall not be liable or pay or reimburse the Contractor for any such taxes.

c. Invoices

Original invoices shall include at a minimum, the Contractor's name, address, telephone and fax numbers, and if applicable, email address and corresponding purchase order number. Invoices shall be submitted to:

City of Gaithersburg
Accounts Payable Division
31 South Summit Avenue
Gaithersburg, Maryland 20877

5. DURATION

This Contract shall become effective as of the date and year first above written and shall continue until payment is made by the City on the Contractor's final undisputed proper invoice for the Services rendered ("Termination Date").

6. TERMINATION

- a. Notwithstanding the Termination Date specified in Section 5 of this Contract, this

Contract may be terminated pursuant to the following:

i. By the City: (i) for the bankruptcy, dissolution, assignment for the benefit of creditors, or other similar action of the Contractor; (ii) for the breach of any confidential matter or release of confidential information by the Contractor; (iii) for the Contractor's involvement in a conflict of interest as defined by the City's Ethics Code, provided the Contractor fails to cure the conflict of interest within fifteen (15) days' notice of same; (iv) for the breach of any material provision of this Contract by the Contractor, or any material representation, omission, or fraudulent conduct by the Contractor, provided the Contractor fails to cure such breach within fifteen (15) days' notice of same; (v) for the Contractor's breach or violation of any antidiscrimination law, licensing regulation or requirement related to the Services or failure to timely pay any employee, subcontractor or supplier of the Contractor, provided the Contractor fails to cure such breach within fifteen (15) days' notice of same; (vi) for convenience, subsequent to giving the Contractor fifteen (15) days' written notice of such termination; and (vii) due to insufficient funding or the non-appropriation of funds, subsequent to giving the Contractor fifteen (15) days' written notice of termination for same.

ii. By either Party: (i) with the written mutual consent of the other Party; and (ii) for the material breach or non-compliance of or with any of the provisions of this Contract, provided the breaching or non-complying Party fails to cure such breach or non-compliance within fifteen (15) days' notice of same.

b. Upon termination of this Contract for any reason, the Contractor shall return to the City any property, documents or records of the City in the possession of the Contractor.

7. INSURANCE

a. The Contractor certifies and agrees that during the term of this Contract it shall procure and maintain in force at its expense policies of insurance with minimum limits as follows:

- | | | |
|------|---|----------------|
| i. | Automobile Liability Insurance: | \$1,000,000.00 |
| ii. | Comprehensive Commercial Liability Insurance: | \$1,000,000.00 |
| iii. | Workers' Compensation Insurance: | \$1,000,000.00 |

b. The City shall be named as an additional insured under the comprehensive commercial general liability policy, and shall receive at least thirty (30) days written notice of any cancellation or adverse material change in that policy, such that any cancellation or adverse material change shall not be effective with respect to the City for thirty (30) days after such written notice is given.

c. Prior to the execution of this Contract, the Contractor shall provide the City with a certificate of insurance, which shall: (i) evidence the above policies; (ii) name the City as additional insured with respect to the comprehensive commercial general liability insurance policy only; and (iii) contain a provision that requires the Contractor's insurers to provide the City with a written notice of any cancellation or adverse material change in the insurance and that such cancellation or adverse material change shall not be effective with respect to the City for thirty (30) days after such written notice is given.

d. The Contractor acknowledges and agrees that its failure to provide the City with a certificate of insurance and/or the failure by the City to demand the delivery of said certificate shall

not operate or be deemed to operate as a waiver of the insurance and associated endorsements required under this provision, and the Contractor shall hold the City harmless from any liability arising as a result of any such failure(s).

8. PERMITS AND LICENSES

The Contractor shall be responsible for obtaining, at the expense of Contractor, any and all permits and/or licenses required to complete the Services. The City acknowledges and agrees to waive the fees for permits which are both required by and issued by the City.

9. NOTICE TO PROCEED

Following the effective date of this Contract, the City shall issue the Contractor a written notice to proceed, after which the Contractor acknowledges and agrees to complete the Services within Ninety (90) calendar days thereafter; working days shall be Monday through Friday between the hours of 7:00 a.m. and 7:00 p.m. EST or dusk, whichever occurs first; and on weekends and holidays between the hours of 9:00 a.m. and 6:00 p.m. EST.

10. SITE CLEAN-UP AND SAFETY

While performing the Services under and pursuant to this Contract, the Contractor shall: (i) keep the Site clean and free from all rubbish and debris; and (ii) enforce suitable rules and provide any and all guards, fences, and/or protective devices required for the safe completion of the Services and for the safety and health of the general public and all workers employed at the site.

11. WARRANTY AND REMEDY

A. General Warranty

The Contractor warrants the Services, for a period of one (1) year from date of final payment, that Services conform to any specifications, drawings, samples and descriptions given as part of this Contract and will not fail to accomplish any stated objectives. The foregoing warranties will survive inspection and acceptance by the City.

B. Warranty of Qualification

The Contractor warrants that the Contractor is an expert, fully competent in all phases of the work involved in providing the Services hereunder. The Contractor agrees that the City is entitled to and has relied upon the Contractor as an expert and the Contractor will not deny any responsibility or obligation hereunder to the City on the grounds that the City provided specifications or accepted test data, samples, or the Services.

C. Warranty of Licensing

The Contractor warrants that it has obtained all permits and licenses required by all applicable authorities to provide the Services specified in this Contract and will continue, at its own expense, to be so licensed throughout the term of this Contract. The Contractor further agrees to provide the City with documentation as requested by the City to demonstrate compliance with this provision.

D. Warranty of Title

The Contractor warrants that it has the legal right to enter into this Contract.

E. Warranty Remedy

In the event that the Services are found to be defective or fail within the warranty period, the Contractor will at its own expense promptly make any necessary repairs.

F. Cost of Warranty Repairs

All warranty repairs, modifications, improvements, corrections and replacements made by the Contractor pursuant to this Contract will be at the Contractor's expense, including, but not limited to, labor, materials, and freight.

G. Dispute of Warranty Claim

In the event that the Contractor disputes a claim made by the City under the warranty specified under this Contract, the Contractor will advise the City of such dispute within five (5) days of receiving the City's warranty claim or such dispute will be deemed waived.

H. Contractor's Debts

In the event that the Contractor owes the City money under the terms and conditions of this Contract, and particularly, but without limitation, as a result of the warranties or indemnities provided herein, the Contractor will pay such sums to the City within thirty (30) days. The Contractor acknowledges and agrees that without limiting the foregoing, the City will have the right to deduct amounts due to the City from amounts invoiced to the City.

12. INDEMNIFICATION

A. The Contractor hereby agrees to indemnify and save harmless the City from any loss, damages and other expenses suffered or incurred by the City by reason of the Contractor's negligent acts, errors or omission in carrying out/providing the Services; and

B. Any third party damages, costs, claims, actions, suits, judgments or liens resulting from the negligent act or commission or omission of the Contractor, its employees, agents or subcontractors; and

C. Any third party damages, costs, claims, actions, suits, judgments or liens for damages resulting from the Contract arising from the negligence or omission of the Contractor, its employees, agents or subcontractors. The Contractor shall, upon completion of the Services, provide the City with a Release of Liens from any subcontractor, supplier, material, or other supplier of goods and services to the project.

D. In the event of litigation between the Parties to this Contract arising under, related to, or in connection with this Contract, the prevailing Party shall be entitled to recover reasonable attorneys' fees from the non-prevailing Party at the arbitration, trial and/or appellate levels.

13. SURVIVAL

The representations, warranties and indemnities contained herein will survive the termination of this Contract.

12. OWNERSHIP OF MATERIALS

Any work, specifications, information, documents, data, drawings, software and any other electronic, computerized or written material produced or developed as a result of this Contract shall be the exclusive property of the City. The City shall have the right to use and reproduce any documents, materials and/or data used in the performance of, or developed as a result of, this Contract. The City may use such documents, materials and/or data for its own purposes, including but not limited to reporting to state and federal agencies. The Contractor warrants that it has title and/or right of use of all documents, materials and data used and/or developed in connection with this Contract.

14. FORCE MAJEURE

The Parties agree that either Party hereto will be relieved of its obligations hereunder in the event and to the extent that the performance of its obligations under this Contract is delayed or prevented by any cause beyond its control, including, without limitation, acts of God, public enemies, war, insurrection, acts or orders of governmental authorities, fire, flood, explosion, or riots ("Force Majeure"). Failure to receive necessary materials and supplies will not excuse performance hereunder unless such failure is itself due to an event of Force Majeure. A Party obtaining relief under this provision will make every reasonable effort to minimize the effects thereof and will promptly resume performance as soon as possible.

15. ARBITRATION

All disputes arising under this Contract, except provisions for termination specified in Section 6 of this Contract, which are not disposed of by agreement of the Parties must be decided under procedures a-d listed below. Pending final resolution of a dispute, the Contractor must proceed diligently with Contract performance. A claim must be in writing for a sum certain and any money requested must be fully supported by all cost and pricing information.

a. All disputes, claims, questions of fact or interpretations of the documents of this Contract not disposed of by agreement or express provision of this Contract arising between the City and the Contractor after performance of this Contract has commenced but before final payment and termination of this Contract, are decided by the City Manager or designee ("City Manager").

b. The City Manager must give the Contractor not less than three (3) working days to submit documentation and written reasons supporting the Contractor's position in the dispute. The City Manager may consider any other information or written submissions from City employees or agents and may conduct an informal, non-record hearing for receipt of testimony, evidence, and argument. The City Attorney may participate in the hearings to protect the City's interest.

c. The City Manager must render a decision, in writing, stating reasons for it and provide copies to the Contractor and the City Attorney. If the decision is mailed to the Contractor, it must be mailed "certified" and dated the date of mailing; otherwise, it must be dated the date of delivery to the Contractor.

d. The written decision of the City Manager must be sent to all Parties. Such decision may be submitted to Binding Arbitration by either Party under the auspices of an arbitrator appointed by the American Arbitration Association.

16. ASSIGNMENT

The City's rights under this Contract are personal to the Contractor, and may not be assigned to any other person, firm or organization without the express written consent of the City.

17. GOVERNING LAW

This Contract shall be construed in accordance with the laws and regulations of the Federal Government, State of Maryland, and the City. The Contractor shall, without additional cost to the City, pay any necessary fees and charges, obtain any necessary licenses and permits, and comply with applicable federal, state and local laws, codes and regulations. For purposes of litigation involving this Contract, exclusive venue and jurisdiction shall be in the Circuit Court of Maryland for Montgomery County, District Court of Maryland for Montgomery County or the United States District Court of Maryland.

18. NON-DISCRIMINATION REQUIREMENTS

A. The Contractor acknowledges and agrees that during the term of this Contract it shall:

I. Not discriminate against any employee or applicant for employment because of race, color, creed, religion, ancestry, sex, sexual orientation, national origin, affection preference, gender preference, genetic testing, disability, age, marital status or status with regard to public assistance or as a disabled veteran or veteran of the Vietnam era.

II. Take affirmative action to ensure that applicants and employees are treated without regard to their race, color, creed, religion, ancestry, sex, sexual orientation, national origin, affection preference, gender preference, genetic testing, disability, age, marital status or status with regard to public assistance or as a disabled veteran or veteran of the Vietnam era. Such action shall include but not be limited to the following: employment, upgrade, demotion or transfer; recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

III. In all solicitations for employees, state that all qualified applicants will receive consideration for employment without regard to race, color, creed, religion, ancestry, sex, sexual orientation, national origin, affection preference, gender preference, genetic testing, disability, age, marital status or status with regard to public assistance or as a disabled veteran or veteran of the Vietnam era. The Contractor agrees to use clauses similar to those above in all contracts and subcontracts. In the event the Contractor fails to comply with the nondiscrimination clauses of this Contract, or fails to include such contract provisions in all contracts and subcontracts, as hereinabove provided, this Contract may at the sole discretion of the City be declared void AB INITIO, canceled, terminated or suspended in whole or in part with waiver of any recourse by the Contractor against the City or its officials or employees, and the Contractor may be declared ineligible for further contracts with the City.

B. Any employee, applicant for employment, or prospective employee with information concerning any breach of these requirements may communicate such information to City Manager who shall commence a prompt investigation of the alleged violation. Pursuant to such investigation, the Contractor shall permit access to their books, records and accounts. In the event the City Manager concludes, on the basis of such investigation, that the Contractor has failed to comply with these nondiscrimination clauses, the City Manager may invoke the remedies hereinabove set out.

19. ADVERTISING

Neither Party shall use any name or trademark, whether registered or not, of the other Party in publicity releases or advertising or in any other manner without securing the prior written approval of the other Party. Notwithstanding the foregoing, either Party may include the name of the other on its customer/contractor list provided that such inclusion is not represented to constitute or imply an endorsement of the other's goods or services except to the extent that this may be inferred from inclusion on such list.

20. ENTIRE CONTRACT

This Contract shall constitute the entire agreement between the Parties, and any prior understanding or representation of any kind preceding the date of this Contract shall not be binding upon either Party, except to the extent incorporated in this Contract.

21. HEADINGS

Any and all of the headings contained herein are for reference purposes only and shall not in any way affect the meaning or interpretation of this Contract.

22. NONEXCLUSIVE

Nothing in this Contract shall be deemed to act as a bar to the City's solicitation or purchasing of products from any other company.

23. ORDER OF PRECEDENCE

Notwithstanding any provisions to the contrary in and of the exhibits incorporated herein, the provisions in the main body of this Contract shall take precedence over and supersede those provisions in the event of any inconsistency.

Additionally, both Parties acknowledge that the City may use preprinted purchase orders or other formats as it deems fit and agree: (i) that in the event of conflict between the text of an order and this Contract, the terms and conditions of this Contract shall prevail; and (ii) that no additional or different terms contained in any quotation, offer or acknowledgement or other document issued by the Contractor shall be of any force or effect.

24. MODIFICATION OF CONTRACT

Any modification of this Contract or additional obligation assumed by either Party in connection with this Contract shall be binding only if evidenced in writing and signed by each Party or an authorized representative of each Party.

25. CONFIDENTIALITY

The Contractor agrees that all knowledge and information that the Contractor may receive from the City or from its officials, employees or other sources, or by virtue of the performance of services under and pursuant to this Contract which are included or referenced in Title 4 of the General Provisions Article of the Annotated Code of Maryland shall not be directly or indirectly disclosed by the Contractor to any person whatsoever unless authorized to do so by the City Manager. This confidentiality provision shall also apply to any information, activity, or record designated to the Contractor by the City as being "confidential" or "privileged".

26. NO LIENS

The Contractor shall have no title or interest in any of the goods delivered to the City under this Contract. In no event shall the Contractor encumber any such goods delivered to the City with any lien of any kind or offer such goods as collateral in any transaction whatsoever.

27. NO WAIVER

Except as otherwise specifically provided in this Contract, a waiver by either Party of any breach of any provision of this Contract, or either Party's decision not to invoke or enforce any right under this Contract, shall not be deemed a waiver of any right or subsequent breach, and all provisions of this Contract shall remain in force.

28. NOTICES

Any notice provided for or concerning this Contract shall be in writing and be deemed sufficiently given when sent by certified or registered mail, sent to the respective address of each Party or an authorized representative of each Party as indicated below:

- a. For the City:
Project Engineer
800 Rabbitt Road
Gaithersburg, Maryland 20878

- b. With a copy to:
City Attorney
31 South Summit Avenue
Gaithersburg, Maryland 20877

Procurement Manager
31 South Summit Avenue
Gaithersburg, Maryland 20877

- c. For the Contractor:
[Name]
[Company]
[Address]
[City/State/Zip]

29. EFFECT OF PARTIAL INVALIDITY

The invalidity of any portion of this Contract will not and shall not be deemed to affect the validity of any other provision. In the event that any provision of this Contract is held to be invalid, the Parties agree that the remaining provisions shall be deemed to be in full force and effect as if they had been executed by both Parties subsequent to the expungement of the invalid provision.

30. NO THIRD PARTY RIGHTS

This Contract shall not create any rights or benefits to parties other than the City and the Contractor. No third party shall have the right to rely on the Contractor's opinions rendered in connection with the services without the written consent of the Contractor and the third party's agreement to be bound to the same conditions and limitations as the City.

IN WITNESS WHEREOF, the Parties have executed this Contract as of the date and year first above written.

FOR THE CONTRACTOR:

By: _____
Authorized or Duly Authorized Representative Witness

Printed Name and Title

FOR THE CITY:

By: _____
City Manager or Designee Witness

Printed Name

RABBITT ROAD CULVERT REPAIR PROJECT

EXHIBIT A

- ↳ **General Requirements, References and Specifications**
 - ↳ **Rabbitt Road Culvert Repair Plans**

CATEGORY 000 – GENERAL REQUIREMENTS, REFERENCES, AND SPECIFICATIONS

A. SUMMARY DESCRIPTION OF WORK

The intent of this contract is to establish a unit price contract for repair of the Rabbitt Road Culvert in Gaithersburg, Maryland. The culvert is a triple 96” corrugated metal pipe (CMP) culvert connect to an existing stormwater management riser structure located on the north side of Rabbitt Road. The City of Gaithersburg Department of Public Works (the “City”) owns and maintains the culverts, riser structure, outfall and adjacent areas. All work will take place within existing property owner by the City or public right-of-way.

The project will include the following activities:

- 1. Conducting cleaning and spot repair of culvert deficiencies (BASE BID);**
- 2. Abandoning existing field connections on Culvert Cells #1 and #3 with saddle plates;**
- 3. Conducting a complete cleaning and lining of the three 96” CMP pipes with Centrifugally Cast Concrete Structural Liner (Bid Alternate #001);**
- 4. Spraying and sealing joints with polyurea elastomer spray (Bid Alternate #002);**
- 5. Abandoning of existing storm drain pipe field connections the existing CMP culverts and installing saddle plates to cover and seal openings;**
- 6. Installing two (2) new storm drain systems to replace the abandoned field connections;**
- 7. Removing and replacing and existing concrete slab that provides turbulence protection at the existing riser structure;**
- 8. Removing the existing chain link fence of the north side of Rabbitt Road and installation of a new portion of 4-foot-tall chain link fence;**
- 9. Cleaning of sediment accumulation at the culvert outfall location to expose previously installed riprap outfall protection.**
- 10. Removing the existing concrete at the culvert outfall and replacing with riprap.**

This unit price contract will allow the City to perform this project according to its design, but also allows for variations in field conditions at the time of construction, and the ability to address these changes in a timely, responsive manner. Most of the work will be performed in coordination with Engineer’s Technical Representative (ETR) with a fully permitted design.

Pressure grouting and backfilling at the abandoned storm drain connection and under the existing concrete slab must meet the material, soil compaction, and grade standards, as established by the ETR. Independent material testing will be provided by the Contractor and shall be included in the bid prices. All work will involve the technical oversight of the City and its technical representatives and the contractual oversight of the City.

Where applicable, specifications shall apply in the following order of preference:

1. A Specification provided in these Contract Documents;
2. A Montgomery County Department of Transportation Standard Specification or Detail;
3. The most recent version of the Maryland State Highway Administration Standard Specifications for Construction and Materials.

The project is located on property owned and operated by the City. The construction access will be established from public road right-of-way.

The work must be done in an environmentally sensitive manner. Special concern must be given to sediment control issues, due to the close proximity of the receiving streams. Stream restrictions dates must be honored, and all work performed with all local, State, and Federal applicable regulations and project permits. Trees and wildlife must be protected and conserved in the process of the work. Access to the projects is often through private properties, which must be restored in a manner sensitive to the property residents. Handling of stormwater

flows through the work areas must be considered. Pumping around the work areas must mitigate any sediment release and fish loss.

The Contractor must provide the Work in accordance with all permits provided by the City for the Projects in the Task Order; the permits are part of the Task Order Documents. The Contractor must obtain, and provide the Work in accordance with, all other permits required by law as necessary to complete the Work. The Contractor must schedule all required meetings and inspections with, and obtain required approvals from, the Regulatory Agencies administering each permit. **Specifically, the Contractor must obtain required approval signatures, as the inspections are completed, on any Construction Inspection Check-off List provided in the Task Order Documents.** See Section 308 for additional Contractor responsibilities related to the Erosion and Sediment Control permit.

The Contractor will ensure the quality of work by employing qualified, experienced personnel, trained in environmental restoration and sediment control measures. Contractor will provide all necessary management, supervision, personnel, labor, tools, materials, and equipment for each of the Unit Prices bid. This is the means of payment, and is intended to be the price inclusive of all Contractor costs.

B. REFERENCED STANDARDS AND SPECIFICATIONS

The following specifications and standards, including addenda, amendments and errata, form a part of this specification to the extent required by the references thereto. The Contractor must adhere to any newer versions of the referenced standards and specifications. The list below is the most frequently used standards that are referenced but other references may be referenced in the standard specifications.

American Association of State Highway and Transportation Officials (AASHTO). Washington D.C. <<http://www.transportation.org/>>. Referenced as “AASHTO”.

American Concrete Institute (ACI), Farmington Hills, Michigan. <<http://www.concrete.org/general/home.asp>>. Referenced as “ACI”.

- ACI-318-11 – “Building Code Requirements for Reinforced Concrete”.
- ACI-350-06 – “Code Requirements for Environmental Engineering Concrete Structures and Commentary”.
- ACI SP-66-04 – “ACI Detailing Manual”. This standard replaced ACI 315-92.

American National Standards Institute (ANSI), Washington D.C.

- A300 – “American National Standard for Pruning”, 2008.
- Z60.1 – “American Standard for Nursery Stock”, 2004.

American Public Health Association (APHA), American Water Works Association (AWWA), and Water Environment Federation (WEF), “Standard Methods for the Examination of Water and Wastewater”. Washington D.C. 2012, 22nd Edition. <<http://www.standardmethods.org/>>. Referenced as “Standard Methods for the Examination of Water and Wastewater”.

American Society of Testing and Materials International, Standards Worldwide. West Conshohocken, PA. <<http://www.astm.org/Standard/index.shtml>>, Referenced as “ASTM”.

Concrete Reinforcing Steel Institute (CRSI). Schaumburg, Illinois. <<http://www.crsi.org/>>. Referenced as “CRSI”

- CRSI “Manual of Standard Practice 2009”, 28th edition.
- CRSI “Placing Reinforcing Bars 2011”, 9th edition,

International Code Council (ICC), International Building Code (IBC) as adopted by City of Gaithersburg. Washington D.C. <<http://www.iccsafe.org/>>. Referenced as “International Building Code”

Maryland Department of the Environment (MDE), Water Management Administration in association with Soil Conservation Service and State Soil Conservation Committee, “2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control”. Baltimore, Maryland. 2011. Referenced as “MDE Specifications for Soil Erosion and Sediment Control”.

Maryland Department of Environment, Water Resources Administration, “Maryland’s Guidelines to Waterway Construction”, Baltimore, Maryland. November 2000 revision. Referenced as “MDE Construction Guidelines”.

Maryland Department of Transportation (MDOT), State Highway Administration (MSHA), Hanover, Maryland. <<http://www.roads.maryland.gov/home.aspx/>>. As revised on MSHA website. Referenced as “MSHA”.

- “Book of Standards for Highway and Incidental Structures”. Referenced as “MSHA Standard Details”.
- “Standard Specifications for Construction and Materials”, July, 2008. Referenced as “MSHA Standard Specifications” or “MSHA”.

Montgomery County Department of Transportation (MCDOT), Rockville, Maryland.

- “Design Standards”; <<http://www2.montgomerycountymd.gov/DOT-DTE/Common/Standards.aspx>>
- “Montgomery County Road Code”, 2008.
- “Work Zone Traffic Control Standards (MCWZTCS)”, July 2008.

Montgomery County Government, Noise Control Ordinance. Rockville, Maryland. 1996.

National Asphalt Pavement Association (NAPA), Lanham, Maryland. <<http://www.asphalt pavement.org/>>.

- “Design, Construction and Maintenance Guide for Porous Asphalt Pavements for Stormwater Management,” Information Series No. 131, 2008.
- “Design, Construction, and Maintenance of Open-Graded Friction Courses”, Information Series 115, 2002.

NSF International, “NSF/ANSI Standard 61-2012” (NSF 61). Ann Arbor, Michigan. <<http://www.nsf.org/>>.

United States Department of Agriculture, Natural Resources Conservation Service (NRCS), Maryland, “Conservation Practice Standard, Pond, Code 378”, January 2000. Washington D.C. Referenced as “NRCS MD-378”.

United States Department of Agriculture (USDA), United States Composting Council (USCC),

“Test Methods for the Examination of Composting and Composts (TMECC)”. Washington D.C. 2002.

United States Department of Justice (USDJ), American Disabilities Act (ADA), “ADA Standards for Accessible Design”. Washington D.C. 2010. <<http://www.ada.gov/>>

United States General Services Administration, “Index of Federal Specifications, Standards and Commercial Item Descriptions (FMR 102-27)”. Washington D.C. <<http://apps.fas.gsa.gov/pub/fedspecs/>>. Referenced as “Federal Specifications”

United States Occupational Safety and Health Administration (OSHA), “Confined Spaces Standard, 2004”. Washington D.C. <<http://www.osha.gov/>>.

Washington Suburban Sanitary Commission (WSSC). Laurel, Maryland. <http://www.wsscwater.com/>

- “General Conditions and Standard Specifications”, 2011. Referenced as “WSSC General

- Conditions and Standard Specifications”.
- “Standard Details for Construction”, 2005. Referenced as “WSSC Standard Details”.

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C. SUMMARY OF REQUIRED MATERIALS AND INSTALLATION SUBMITTALS AND CERTIFICATIONS

1. **GENERAL: The Contractor will be responsible for completing all submittals in accordance with the terms and conditions of the contract documents. The submittals required for Work under this Contract include, but may not be limited to, those listed in this section.**
 - a. Project Schedule showing each work task, date of commencement and date of completion using a GANTT format bar chart.
2. **SHOP DRAWINGS (PE stamp required):** The Contractor must submit the following shop drawings for the City’s approval:
 - a. CATEGORY 300: Structural details for pre-cast manholes and inlets.
 - b. CATEGORY 1300: Centrifugally Cast Concrete Pipe Structural Lining
3. **CERTIFICATIONS and MATERIAL APPROVALS:** The Contractor must submit the following material and site preparation certifications for the City’s approval:

CATEGORY 200: GRADING:

- CATEGORY 200: Reports and Certifications as specified in this Division.

CATEGORY 300: DRAINAGE:

- SECTION 303: Piping Material Certifications.
- SECTION 308: Erosion Control Material Certifications.
- SECTION 312: Riprap and Geotextile Material Certifications.
- SECTION 314: Flowable Fill Material Certifications and Mix Design.

CATEGORY 400: STRUCTURES

- Design Mix Certifications as specified in this section.
- Poured Concrete Certifications as specified in this section.
- Concrete Batch tickets as specified in this section.
- Concrete Installation testing requirements.

CATEGORY 500: PAVING

- Hot Mix Asphalt Certification as specified in this section
- Aggregate Certification as specified in this section

CATEGORY 600: SHOULDERS

- Concrete Mix Design and Material Certifications for Cast in Place Concrete Curb and Sidewalk.
- Chain Link Fence and Accessory Material Certifications.

CATEGORY 700: LANDSCAPING

- Topsoil Fill test report.
- Turf Establishment by sodding.
- Seed Mixes

CATEGORY 900: MATERIALS

- Aggregate.
- Geotextile.

CATEGORY 1000: GENERAL

- Temporary Chain Link Fence

CATEGORY 1300: REPAIRS AND MAINTENANCE

- Polyurea Elastomer Spray Material Certifications.
- Centrifugally Cast Concrete Pipe Structural Lining Material Certifications.

SPECIFICATIONS/SCOPE OF WORK: NOTE: The specification sections are organized as per Bid Items listed in the Schedule of Unit Prices (listed in Section C).

Where applicable, items are cross-referenced to, and incorporate, information and requirements provided in the Part III – Technical Requirements of the Maryland State Highway Administration (MSHA) July 2008 Standard Specifications for Construction and Materials and the MSHA Book of Standards, latest revision.

The link to the Specifications is: <http://roads.maryland.gov/OHD/FrontPage.pdf>

Note: Part I (General Provisions) and Part II (Terms and Conditions) of the MSHA Standard Specifications for Construction and Materials **DO NOT APPLY** to, and are not incorporated into, this Contract or Task Order. Refer to the terms and conditions of this Contract or Task Order including the General Conditions of Construction Contract.

Any references in MSHA Part III – Technical Requirements to the “Administration” or “MSHA” shall be interpreted as referring to “City of Gaithersburg Public Works”.

Any references in MSHA Part III – Technical Requirements to the “Engineer” shall be interpreted as referring to the “Contract Administrator” as defined in the Contract.

Any references in MSHA Part III – Technical Requirements to the “MDE” shall be interpreted as referring to the “City of Gaithersburg Public Works”. However, any such changing shall not be to the exclusion of any required MDE reviews.

Any references in MSHA Part III – Technical Requirements to material testing by the Engineer shall be deemed to be the Contractor’s responsibility. Contractor must utilize the services of accredited material testing laboratories that are acceptable to the Contract Administrator. All field and laboratory testing required by the Contract must be performed by qualified professionals who are licensed to perform such tests. The results of all material tests must be submitted to the Contract Administrator promptly and before requesting payment for the Work being tested for compliance.

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CATEGORY 100 – PRELIMINARY (MSHA-BASED)

GENERAL NOTE: The referenced MSHA Sections and Subsections apply unless noted otherwise elsewhere in the Contract Documents. In case of conflict between MSHA specifications and other Contract Documents, the requirements of the other Contract Documents shall apply.

SECTION 101 – CLEARING AND GRUBBING

Line Item 101-01: Clearing and Grubbing (LS)

DESCRIPTION:

Comply with Subsection 101.01 of MSHA. This work consists of clearing and grubbing within the limits specified in the Contract Documents. Clearing includes removing and disposing of all trees (less than 6” in diameter), brush, shrubs, vegetation, rotten wood, rubbish, fences and structures in construction area for removal and disposal, and trimming and disposal of tree limbs that interfere with performance of the Work. Grubbing covers removal and disposal of all stumps, roots, stubs, brush and debris within Limits of Disturbances specified in the Contract Documents. No tree greater than 6 inches in diameter, not explicitly shown to be removed in the Contract Documents, may be removed without prior approval by the City.

MATERIALS:

Comply with Subsection 101.02 of MSHA unless noted otherwise on Contract Documents.

CONSTRUCTION:

Comply with Subsection 101.03 of MSHA unless noted otherwise on Contract Documents.

1. For all sites that are subject to an approved Forest Conservation Plan, the Contractor must schedule an inspection by, and obtain approval from, City of Gaithersburg prior to any land disturbing activities (including clearing, stripping, and grading). Notice must be provided at least 2 business days prior to the start of any such activities.
2. Erosion and sediment control measures and tree protection devices must be in place prior to mass clearing and grubbing operations.
3. Vegetation: The Contractor must mark (do not use paint) the clearing limits including any trees, shrubbery, and plants that are to be removed, as well as those that are to remain and be protected, prior to work. The City and other appropriate regulatory agencies must review and approve the clearing limits. The Contractor must protect the marked items from any damage. Branches and exposed roots of trees overhanging and interfering with the Work must not be cut without the City’s prior approval. All trimming must be done under the field supervision of a tree expert furnished by the Contractor and licensed by the State of Maryland, including trimming of trees by the Contractor for any other reason. Trimming, and/or repair of cuts and scars must be properly bandaged (Referenced Standards: American National Standard Institute (ANSI), “American National Standard for Pruning.”)
4. Grubbing:
 - a. All embedded stumps and roots must be removed to a depth of not less than 3 feet below the subgrade or slope surfaces. Depressions made below the subgrade or slope surfaces by removal of stumps must be refilled with soil or as specified on Contract Documents.
 - b. In the area of a dam embankment, all embedded stumps and roots must be completely removed on the embankment or beneath the embankment subgrade. Depressions made below the subgrade or

embankment surfaces by removal of stumps must be refilled with materials suitable for dam embankment construction, and compacted in accordance with USDA, Natural Resources Conservation Services, "Code MD-378" requirements, hereinafter referenced as MD-378. The embankment material must be overlaid with 6" of top soil, seeded, and mulched. The final grade must match the adjacent grades.

- c. Disposal: Unless designated for reuse on the Contract Documents, material and debris collected as a result of the clearing and grubbing operation is the property of the Contractor and must be disposed of in accordance with the local and state regulations. No burning will be permitted within the Work Site or on CITY properties. Disposal of wood to the general public can be made so long as the wood piles do not interfere with the Work.
5. Fallen and storm-damaged trees: Removal of all fallen and/or storm-damaged trees, regardless of size, shall be cleared and removed per this Clearing and Grubbing Section.

MEASUREMENT AND PAYMENT:

Payment per the units shown on Schedule of Unit Prices will be full compensation for the removal and disposal of fences, removal and resetting of mailboxes, selective tree trimming and scar repair, repair or replacement of damaged trees, restoration measures for damaged or destroyed protected resources, repair to other damaged properties, removal and disposal of existing buildings when not covered as a specific pay item in the Contract Documents, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

SECTION 104 – MAINTENANCE OF TRAFFIC

- Comply with MSHA Subsection 104.00 unless noted otherwise on Contract Documents.

Line Item 104-01: Maintenance of Traffic with Traffic Control Plan (LS)

- Comply with MSHA Subsections 104.01 and 104.02

DESCRIPTION:

Comply with MSHA Subsections listed above unless noted otherwise on Contract Documents. Work shall be performed in accordance with MSHA and/or MC-DOT requirements; whichever is applicable.

MATERIALS:

Comply with MSHA Subsections listed above unless noted otherwise on Contract Documents.

CONSTRUCTION:

Comply with MSHA Subsections listed above unless noted otherwise on Contract Documents.

MEASUREMENT AND PAYMENT:

Payment per units shown on the Schedule of Unit Prices will be full compensation for relocating, turning, completely covering and uncovering or removing and resetting, maintaining in like new condition, and cleaning existing and temporary traffic signs and other traffic control devices. Included is the inventory of all existing pavement markings and the treatment of any other traffic control device not included in these Specifications but necessary for the fulfillment of the Contract requirements and implementation of the approved Traffic Control Plan, and for all material, labor, equipment, tools, and incidentals necessary to complete the work. Payment of the Contract lump sum price will be prorated and paid in equal amounts on each monthly estimate. The number of months used for prorating will be the number estimated to complete the work.

- (a) Cones, reflective collars, anchoring devices, STOP/SLOW paddles, sign flags, and warning lights will not be measured but the cost will be incidental to the Contract price for Maintenance of Traffic unless otherwise specified.
- (b) Temporary traffic control devices that need replacement shall be replaced immediately, as directed. The cost of replacement, including all material, labor, equipment and tools, will not be measured but will be incidental to the Contract price for Maintenance of Traffic except when specifically set up in the Contract Documents as a separate Contract pay item.
- (c) Material, equipment, and labor necessary for the construction and removal of temporary or detour roads will be measured and paid for at the Contract unit price for the pertinent items used.

SECTION 107 – CONSTRUCTION STAKEOUT

Line Item 107-01: Construction Stakeout (LS)

DESCRIPTION:

Comply with Subsection 107.01 of MSHA unless noted otherwise on Contract Documents. This work consists of providing a construction layout (stakeout) performed by a licensed surveyor currently registered in the State of Maryland. Also, see Article 5.6.2, Construction Stakeout, in the General Conditions of Construction Contract.

Note: In addition to the items listed below to be provided by a licensed surveyor, the Contractor must provide construction stakeout as incidental to all related construction work. The Contractor must use competent personnel and appropriate equipment for all work required to set and maintain the elevations and dimensions as specified in the Contract Documents. This stakeout must be installed to the satisfaction of all appropriate permit inspectors before any operation commences. If any discrepancies between plan and field conditions are found, the Contractor must resolve any needed field adjustments with the City before starting construction.

MATERIALS:

Comply with Subsection 107.02 of MSHA unless noted otherwise on Contract Documents. The surveyor must use marker materials that can be maintained by the Contractor during the course of construction.

CONSTRUCTION:

Comply with Subsection 107.03 of MSHA unless noted otherwise on Contract Documents.

The Contractor must have the licensed surveyor provide the following:

1. Project Layout: The Contractor's surveyor shall accurately locate the Work horizontally and vertically – to ensure that the Work is performed in accordance with the Contract and Task Order Documents.
2. Baseline Stakeout
 - a. A licensed surveyor must stakeout all construction baselines with the maximum spacing of stations (stakes, nails, crosses, etc.) of 100 feet unless a closer stakeouts are specified in the Task Order Documents.
3. Site Stakeout
 - a. Right-of-Way and Easement Lines: Where required by the Contract Documents, the Contractor must have a surveyor define right-of-way and easement lines of the project for adjacent property owners.
 - b. The Contractor must perform a surveyed stake out of any alignment centerlines (e.g., embankments or stream) and structure locations.
4. As-built survey
 - a. An as-built survey of the completed Work shall be performed and shall include but not limited to: horizontal dimensions, grading limits, elevations, slopes, types/length/height of restoration features, and any new pipes, structures, profiles or typical details. The as-built survey shall include a final as-built topographic survey for all grading and stream measures; a final as-built survey of all storm drain and sewer structures must also be performed for inverts and distances.
 - b. See Section 121 for submission of as-built survey information with red-lined drawings.

5. **Equipment and Personnel:** Where a licensed surveyor is required, the surveyor must be currently registered in the State of Maryland.
6. **Control Markers:** The Contractor must preserve the center line and bench marks set by the surveyor. When the center line and bench marks are disturbed or destroyed, they must be replaced by the Contractor at no additional cost to the CITY.
7. **Control Stakes:** For construction baselines, the surveyor must furnish and set stakes at each station as shown on the Contract Documents or offset along one side of the project as site conditions require and per the CITY's approval. As applicable, each of these stakes must be marked with its offset distance from the center line along with key reference elevation(s) needed for proper construction. Maintenance of surveyor stakes and additional stakes needed for the horizontal and vertical controls necessary for the correct layout of the work must be provided by the Contractor at no additional cost to the CITY.
8. **Utilities:** When applicable, the Contractor must furnish to the utility companies or agencies working within the limits of the project, reference information related to control points, alignment and grade data. These must be furnished promptly upon request, so that the utility companies may properly locate and coordinate their work related to the project.

MEASUREMENT AND PAYMENT:

Payment per units shown on the Schedule of Unit Prices will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work. Payment of the Contract lump sum price will be prorated and paid in equal amounts on each monthly estimate. The number of months used for prorating will be the number estimated to complete the work.

All other stakeout maintenance and flagging of clearing limits, wetlands, etc., shall be incidental to, and included in this line item.

SECTION 108 – MOBILIZATION

DESCRIPTION:

Comply with Subsection 108.01 of MSHA unless noted otherwise on Contract Documents.

MATERIALS:

Comply with Subsection 108.02 of MSHA unless noted otherwise on Contract Documents.

CONSTRUCTION:

Comply with Subsection 108.03 of MSHA unless noted otherwise on Contract Documents.

MEASUREMENT AND PAYMENT:

Cost is incidental to other cost line items and Sections.

SECTION 109 – CRITICAL PATH METHOD (CPM) PROJECT SCHEDULE

DESCRIPTION:

Comply with Subsection 109.01 of MSHA unless noted otherwise on Contract Documents. Comply with Article 11 of the General Conditions of Construction Contract.

MATERIALS:

Comply with Subsection 109.02 of MSHA unless noted otherwise on Contract Documents.

CONSTRUCTION:

Comply with Subsection 109.03 of MSHA unless noted otherwise on Contract Documents.

MEASUREMENT AND PAYMENT:

Cost is incidental to other cost line items and Sections.

SECTION 121 – MAINTENANCE OF REDLINED CONSTRUCTION DRAWINGS

DESCRIPTION:

This work consists of the Contractor's maintenance and submission of a set of a full-size, redlined Construction Drawings to record any changes to the Work that have occurred during construction. The redlined drawings must be kept on-site and must be available to the Engineer and City throughout Project implementation. The drawings must be updated, at a minimum, for each bi-weekly construction progress meeting.

MATERIALS:

At minimum, a full-size set of Construction Drawings with legible redlined edits indicating any modifications or in-field adjustments made to the Project by the Contractor during construction. Redlined drawings must be provided to the Engineer at the time of Project Substantial Completion.

METHODS:

The Contractor shall provide redlined edits to Construction Drawings to reflect any modifications to the plans. Any proposed plan modifications must receive prior approval by the City before construction and subsequent redline edits. One set of redlined Construction Drawings must be maintained and kept on-site at all times. Any deviations from approved plans must be marked, in red, on the redlined Construction Drawings.

Redlined information for the project shall consist of any deviation to the approved plan including but not limited to: grading limits, elevations, slopes, types/length/height of restoration features, and any modifications to pipes, structures, profiles or typical details. Redlined Construction Drawings require a final as-built topographic survey for all grading and stream measures; a final as-built survey of all storm drain and sewer structures must also be performed for inverts and distances.

The Contractor is required to maintain current "as-built" (red-lined) Record Drawings throughout the life of the Task Order. At each dimension on the each Record Drawing, the Contractor shall either check (√) the design dimension as an actual dimension, or cross out the design dimension and provide the actual dimension. Marks shall be made using red pencil or pen

Redlined drawings also include as-built planting plans required by Category 700.

At Substantial Completion of the Work, the Contractor must submit legible redlined Construction Drawings, including results of the final as-built survey, to the Engineer for approval. Any missing, erroneous, or incomplete information shall be re-surveyed within 72 hours of Engineer's request at no additional cost. Retainage shall not be released until redlined Construction Drawings, including the final survey, are approved. The costs for stakeout, survey and maintenance of redlined information shall be considered incidental to the work and no specific payments will be made.

MEASUREMENT AND PAYMENT:

Cost is incidental to other cost line items and Sections.

SECTION 122 – CONTRACTOR KEY PERSONNEL REQUIREMENTS

DESCRIPTION:

This Section provides minimum requirements for the Contractor's key personnel on the Project – the Project Manager and Superintendent. The full requirements for the Project Manager and Superintendent shall be to provide adequate management and supervision to ensure performance of the Work in accordance with the Contract and/or Task Order.

SUBMITTALS:

Within ten (10) days of Notice to Proceed, the Contractor must submit resumes of its Project Manager and Superintendent to the City and Engineering Consultant for approval in accordance with Subsections 5.4.2 and 9.1.2.4 of the General Conditions of Construction Contract. The resumes must be current and must reflect experience relevant to the Work.

REQUIREMENTS:

The Project Manager:

- Is an experienced and knowledgeable person designated as such by the Contractor, and approved by the City, having authority to act on behalf of the Contractor with respect to all aspects of the Project and to whom the Superintendent reports;
- Must attend all bi-weekly progress meetings at the site;
- Must attend other meetings scheduled by the City or Engineering Consultant needed to progress the work;
- Must submit the Contractor's Requests for Substantial and Final Completion in accordance with Article 14 of the General Conditions of Construction Contract;
- Must be fluent in written and spoken English;
- Must respond, on behalf of the Contractor, to all Task Order correspondence from the City and/or Engineering Consultant;
- Must coordinate with the Superintendent regularly in order to adequately progressing the Work;
- Must coordinate the Contractor's approval, record keeping, and timely processing of Shop Drawings, Product Data, Samples, and other Submittals;
- Must submit Project Schedules on behalf of the Contractor;
- Must approve Requisitions for Payments on behalf of the Contractor, prior to submittal; and
- Must process Change Proposals and Change Documents in an accurate and timely manner.

The Superintendent:

- Is an experienced and knowledgeable person designated as such by the Contractor, and approved by the City, who serves as the Contractor's representative at the Site with overall responsibility for direction, execution and quality of the Work (including any Subcontractor's, Sub-subcontractor's or Supplier's work) and, unless otherwise designated by the Contractor, for the protection of persons and property at and adjacent to the Site and compliance with all applicable Laws and Regulations;
- Must be in attendance and performing his/her duties at the Site at all times during the performance of the Work or any other operations by the Contractor (including any operations by Subcontractors, Sub-subcontractors or Suppliers) until issuance of the Certificate of Substantial Completion and for such additional time thereafter as necessary for completion of Punch List work.

- Unless approved otherwise by the City, must serve as the Safety Officer and must have completed, as a minimum, the OSHA 30-hour Construction Training program;
- As Safety officer, must maintain a full-time presence on the Site and must: ensure conformance to OSHA and MOSH requirements, facilitate the prevention of accidents, and must maintain safety programs, precautions and procedures;
- Must have a Certificate of Attendance at a Maryland Department of the Environment approved training program for the control of sediment and erosion. The City may request proof of this Certification at any time;
- Must oversee the work of all Subcontractors, Sub-subcontractors and Suppliers at the Site;
- Must oversee the quality of all installed work to ensure that it is in compliance with the Task Order Documents and approved Shop Drawings; this includes but is not limited to: approving material tickets for material delivered to the site, ensuring that testing and inspections occurs when required, and reviewing quality of installed work;
- Must attend all bi-weekly progress meetings at the Site;
- Must attend all Pre-Construction meetings;
- Must provide full Site access and assistance to agents of regulatory agencies;
- Must coordinate with Utilities as necessary for completion of the Work;
- Must attend other meetings scheduled by the City or Engineering Consultant needed to progress the work;
- Must be fluent in written and spoken English;
- Must maintain Daily Records of Work performed by the Contractor at the Site, on a form approved by the City, and submit these Daily reports regularly to the City (each week or more frequently);
- Must perform all Work measurements and related activities including bookkeeping, and coordinate same with the City's representative, to ensure true and accurate quantities for billing purposes;
- Must maintain current copies of all Task Order Documents at the Site;
- Must maintain approved copies of all Shop Drawings, Product Data, Samples, and other Submittals at the Site; and
- Must maintain redlined drawings in accordance with Section 121.

MEASUREMENT AND PAYMENT:

Cost is incidental to other cost line items and Sections.

CATEGORY 200 – GRADING (MSHA-BASED)

GENERAL NOTE: The referenced MSHA Sections and Subsections apply unless noted otherwise elsewhere in the Contract Documents. In case of conflict between MSHA specifications and other Contract Documents, the requirements of the other Contract Documents shall apply.

General Description: Work consists of all labor, materials, equipment, dewatering, sheeting and shoring, and services necessary for and incidental to the execution and completion of Grading (Earthwork), as indicated on the Contract Documents and specified herein. The extent of excavation, filling, and grading is shown in the Contract Documents. Preparation of subgrade for slabs and pavements is part of this Work. Backfilling required to establish proposed grade around facilities such as structures, curbs, pavements etc. is included as part of this Work.

All borrow sites and off-site disposal sites utilized by the Contractor to perform work under this Contract must have all necessary State and CITY permits. The Contractor must identify these sites and provide a copy of appropriate permit(s) to the City prior to starting work.

Note: Excavation and backfilling of native material incidental to the installation of in-stream structures and concrete structures should be included as incidental to the Unit Costs for those items provided in these specifications.

Existing Utilities:

1. Notify “Miss Utility” a minimum of 48 hours prior to performing earthwork by calling 1-800-257-7777. Locate existing underground utilities in the areas of work. If utilities are to remain in place, provide adequate means of protection during earthwork operations. The Contractor must repair any Contractor damage to utilities shown on the Drawings or identified in the field. All utility work must be done in accordance with specific utility requirements including the use of utility-approved contractors and/or inspectors as appropriate; all costs for utility requirements shall be borne by the Contractor.
2. Should piping or other utilities (not shown on the Drawings) be encountered during excavation, stop work in that area and consult the City immediately for direction. Cooperate with the CITY and utility companies in keeping respective services and facilities in operation. Repair any Contractor-damaged utilities to satisfaction of utility company.
3. Do not interrupt existing utilities serving occupied facilities, except when permitted in writing by the City, and only after acceptable temporary utility services have been provided.

General Execution Requirements:

1. Use of Explosives: The use of explosives is prohibited unless authorized in writing by the City.
2. Protection:
 - a. Safety: Provide protective measures necessary for the safety of the workers, public, and adjacent property. Prevent cave-ins, collapse of walls, structures and slopes, both on and adjacent to the site.
 - b. Standards: Comply with regulations of local authorities having jurisdiction, including all applicable OSHA and MOSH requirements.

- c. Repair: Remove damaged materials and replace with new materials (as required by the Contract Documents) where such materials are affected by settlement or other damage caused by improper earthwork.

SECTION 201 – EARTH EXCAVATION

Line Item 201-01: Class 2 Excavation for Reuse on Site as Fill (CY)

DESCRIPTION:

Comply with Subsection 201.01 of MSHA unless noted otherwise on Contract Documents.

Although the MSHA title and specification Section refers only to roadway excavation, this Section applies to all excavation not identified elsewhere in these Specifications.

This Section covers excavation and handling of any soil material not classified elsewhere (e.g., pond dredge material, stream excavation, or topsoil). Excavation will be measured as the difference between an existing and the final design grades (e.g., cut) as shown on the Contract Documents. Earth excavated for reuse as fill on site must be kept in separate stockpiles for top soil and general soil regrading as required by the Contract Documents, City, or Permit Inspectors.

MATERIALS:

Comply with Subsection 201.02 of MSHA unless noted otherwise on Contract Documents.

Referenced Standards:

- American Association of State Highway and Transportation Officials (AASHTO)
- American Society for Testing and Materials (ASTM)
- Maryland Department of Transportation, State Highway Administration “Standard Specifications for Construction and Materials” (MSHA), July, 2008.
- American National Standard for Pruning, ANSI A300 (2008)
- Montgomery County Department of Transportation Standard specifications hereinafter referred to as MCDOT.

Material Storage:

1. Stockpile excavated material suitable for backfill or fill where permitted by the Contract Documents, until required. Place, grade and shape stockpiles for proper drainage.
2. Locate and retain soil materials away from edge of excavations.
3. Dispose of excess and or unsatisfactory materials as specified herein.
4. Temporarily stabilize or cover the stockpile as required.

CONSTRUCTION:

Comply with Subsection 201.03 of MSHA unless noted otherwise on Contract Documents.

1. Excavation consists of cutting, removing, stockpiling and grading of material encountered when establishing required grade elevations in accordance with the Contract Documents that are not classified rock excavation, pond dredging or unauthorized excavation. Salvaging, stockpiling and placing topsoil

must be in accordance with MSHA Standard Specifications Section 701, and will be measured and paid separately under that Line Item.

2. Unauthorized excavation consists of site grading that extends beyond the specified bottom elevations or horizontal limits without the direction of the City. All remedial work, to correct unauthorized excavation, including backfilling and compacting with earth or gravel, lean concrete fill or any other material to bring elevations to grade as specified and to the satisfaction of the City, must be performed at the Contractor's expense.
3. The CITY must be contacted, and work in that area must be stopped, if unsuitable bearing materials, as determined by a qualified Geotechnical Engineer, are encountered at required elevations. Any additional work must be authorized by the City **before work** continues including deeper excavation and placement of suitable replacement material. Excavating unsuitable material solely to facilitate performance of other work shall be considered Contractor "means and methods" and shall be done at the Contractor's sole expense.
4. All areas to be paved must be proof-rolled at sub-grade in the presence of the City. If deemed necessary, soils below sub-grade must be undercut and replaced as described below. At the end of each day undercutting is performed, the Contractor must certify in writing the quantity, in cubic yards, of undercutting performed in agreement with the City. Both parties must sign the certification which must be submitted to the City at the end of the month.
5. Stability of Excavations: Slope sides of excavations to comply with local codes and ordinances having jurisdiction. Shore and brace the excavation where sloping is not possible because of space restrictions or stability of materials excavated.
6. Site Information: Data on indicated subsurface conditions is not intended to be a representation or warrant of continuity of such conditions between soil borings. It is expressly understood that the CITY will not be responsible for interpretations or conclusions drawn there from by the Contractor. Data is made available for the convenience of the Contractor.
7. Excavation for Structures:
 - a. Excavation for structures must conform to elevations and dimensions shown on the Contract Documents within a tolerance of plus or minus 0.1 foot. Excavation should extend sufficient distance from footings and foundations to permit placing and removal of concrete formwork in addition to other utilities or adjacent structures. Excavation must not be backfilled without the City's approval.
 - b. In excavating for footings and foundations, do not disturb bottom of excavation. Excavate by hand to final grade just before concrete is placed. The horizontal limits of excavation must be within 18 inches of the surface of installed structures unless specified otherwise on the Contract Documents or covered separately for deep excavation.
 - c. Abandoned structures, which may exist where footings, foundations, etc., are to be placed, are to be removed to one foot below the elevations of bottoms of such footings, foundations, etc, unless additional excavation is directed in writing by the City.
8. Excavation for Stone and Bituminous Pavements:
 - a. Cut surface under pavements to comply with cross-section, elevations and grades as shown. All excavated areas which are to be paved must be compacted to 95% of maximum density as determined by AASHTO T-99.
 - b. Where rock is encountered, carry excavation 1'-0" below subgrade and backfill with suitable material approved by the Certified Geotechnical Engineer.

- c. All topsoil from under areas to be paved with stone, asphalt or concrete, must be removed, until suitable soil is encountered. At that point, the Contractor must not proceed until the City has inspected the soil to determine if the excavated area is deeper than the required elevation for sub-base, sub-grade, etc. The City may then determine and/or direct that any replacement material be provided to bring grades up to required specifications for compaction until required density is achieved before proceeding with the next step.

9. Fine Grading

- a. General: Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finish surface within specified tolerances, with uniform levels or slopes between points where elevation are shown, or between such points and existing grades.
- b. Ditches: Finish ditches to ensure proper flow and drainage. Manage excavation equipment and travel paths as to minimize soil compaction. Stabilize the soil surface with temporary or final stabilization in accordance with sediment control guidelines.
- c. Grass Areas: Finish areas to receive topsoil must conform to within a tolerance of 0.1 foot above or below the required sub-grade elevations.
- d. Walks: Shape surface or areas under walks to line, grade and cross-section, with finish surface not more than ½ inch above or below the required sub-grade elevation, duly compacted.
- e. Pavements: Shape surface of areas under pavement to line, grade and cross-section, with finish surface not more than 1 inch above or below the required subgrade elevation, duly compacted.

10. Maintenance

- a. Protection of Graded Areas: Protect newly graded areas from traffic and erosion in accordance with CITY and State Sediment Control Standards and keep free of trash and debris. Repair and reestablish grades in settled, eroded, and rutted areas to specified tolerances.
- b. Reconditioning Compacted Areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, reshape, and compact to required density prior to further construction.
- c. Disposal of excess and waste materials: Remove waste materials, including unacceptable excavated material, trash, and debris from the construction site. All excess and waste materials must be disposed of in accordance with local requirements.

11. Rock Excavation

- a. Refer to MSHA 201.03.04.
- b. Rock excavation consists of removal and disposal of materials encountered that cannot be excavated without the use of explosives or pneumatic equipment. Typical materials classified as rock are, solid rock, rock in ledges, and rock hard aggregate deposits. Intermittent drilling performed to increase production and not necessary to permit excavation of material encountered will be classified as earth excavation.
- c. The determination of rock excavation will be determined and measured in the field by the CITY. Rock is defined as that material which cannot be removed by use of a bulldozer blade with a single-tooth ripper and will require blasting or use of pneumatic equipment for breaking. The removal of disintegrated rock is classified as Earth Excavation. The rock excavation as measured in the field must be deducted from the volume of Earth Excavation item provided it is within the grading limits of the area. Rock Excavation outside of these limits must be carried out only at the discretion and direction of the City.
- d. Minimum Effort: If rock is not removed during the process of normal digging and ripping, contact the City for prior approval, then extend the excavation to expose the rock surface within the limit of original excavation. The contractor must perform any and all rock excavation required to complete the Work.

MEASUREMENT AND PAYMENT:

Payment per units shown on the Schedule of Unit Prices will be full compensation for all excavation and hauling, temporary stockpiles, formation and compaction of embankments and backfills, disposing of excess and unsuitable materials, preparation and completion of subgrade, preparation of final grade for stabilization, sheeting/shoring, all excavation-related safety measures, and for all material, labor, equipment, tools, and incidentals necessary to complete the Work. Payment will not be made for excavation of any material used for purposes other than those specified.

SECTION 202 – CHANNEL OR STREAM CHANGE EXCAVATION (CLASS 5)

Line Item 202-01: Class 5 (Streambed) Excavation and On-Site Disposal (CY)

DESCRIPTION:

Comply with Subsection 202.01 of MSHA unless noted otherwise on Contract Documents.

This item covers excavation and handling of any soil material from channels or stream beds. Excavation will be measured as the difference between an existing and the final design grades (e.g., cut) as shown on the Contract Documents. Earth excavated for reuse on site must be kept in stockpiles as required by the Contract Documents, City, or Permit Inspectors. Excavation and backfill of native material around in-stream restoration structures are incidental to those items.

MATERIALS:

Comply with Subsection 202.02 of MSHA unless noted otherwise on Contract Documents.

Comply with preceding Section 201 unless noted otherwise on Contract Documents

CONSTRUCTION:

Comply with Subsection 202.03 of MSHA unless noted otherwise on Contract Documents.

Comply with preceding Section 201 unless noted otherwise on Contract Documents.

Dewatering of the excavation area, including but not limited to stream pump-around or diversion, is required as part of the excavation.

MEASUREMENT AND PAYMENT:

Class 5 Excavation will not be measured but will be paid at the Contract lump sum price for each referenced line item. Monthly payments will be prorated based on estimated completion of the excavation work. The payment will be full compensation for all excavation and hauling, formation and compaction of embankments and backfill, backfilling old stream beds or otherwise disposing of excess and unsuitable materials, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

SECTION 203 – BORROW EXCAVATION (FILL)

Line Item 203-01: Common (Clean Earth) Borrow (CY)

DESCRIPTION:

Comply with Subsection 203.01 of MSHA unless noted otherwise on Contract Documents.

The work consists of the provision and placement of earth fill material. Fill is material, described below, placed above an existing or interim grade required by the Contract Documents. Backfill directly adjacent to in-stream restoration structures are incidental to those items. Placement of topsoil is covered under the Landscaping Section.

MATERIALS:

Comply with Subsection 203.02 of MSHA unless noted otherwise on Contract Documents.

Fill material must conform to MSHA Section 916. Streambed material must consist of the coarser segment of streambed sands and gravels as identified in the field by the City. The Contractor must provide the proper care of excavated material including protection against contamination, moisture and other undesirable effects.

CONSTRUCTION:

Comply with Subsection 203.03 of MSHA unless noted otherwise on Contract Documents.

Placement must be in accordance with MSHA Section 204 for embankment and subgrade fills, and MSHA Section 210.03 for tamped fills. Fill materials must be placed in maximum lifts of 8” around structures and 12” for embankment and other fills unless specified otherwise in the Contract Documents. Compaction of fill materials must be to 95% of the laboratory density as determined by AASHTO method T-99 (Standard Proctor) unless specified otherwise in the Contract Documents.

Backfill adjacent to pipes and structures associated with pond embankments must be of the type and quality conforming to that for adjoining fill. The fill must be placed in horizontal layers not to exceed 4 inches in thickness and compacted by hand tampers. The fill material must fill completely all voids under and adjacent to pipes and structures. Equipment must not be driven over any part of concrete structure or pipe unless there is compacted fill of 24 inches or more over the structure or pipe.

Test Report Submittals:

Where the Contract Documents specify a subgrade to an embankment, pavement or structure, submit two copies of the following reports directly to the Engineering Consultant from the testing service, with a single copy to the City. Reports must be submitted at least every week.

1. Verification of each footing subgrade.
2. Field density test reports.
3. One optimum moisture-maximum density curve for each type of soil encountered.
4. Report of actual unconfined compressive strength and/or results of bearing tests of each stratum tested.

Minimum Requirements:

1. Cohesionless materials must be classified in accordance with AASHTO guidelines as either A-3 (sand) or A-2 (sand and fines), and the minimum dry unit weight must not be less than 110 PCF maximum dry density as determined by ASTM D-698 or ASTM D-4253.
2. Cohesive materials must be classified in accordance with AASHTO guidelines as either A-4 (silt), A-5 (silt), A-6 (clay) or A-7 (clay). The minimum dry unit weight must not be less than 105 PCF maximum dry density as determined by ASTM D-698.
3. Backfill and fill materials: Satisfactory soil materials approved by the City and free of rock or gravel larger than 2" in any dimension, debris, waste, frozen materials, organic and other deleterious matter.
4. Fills and Backfills:

Unpaved areas: Areas on which fill is to be placed must be stripped of all topsoil and then scarified prior to placement of fill. Fill material must be placed in 8" (maximum thickness before compaction) layers to be continuous and horizontal over the entire length of fill. Each layer of fill (cohesive soils) must be compacted by a power roller approved by the City.

For structural compaction as required by the Contract Documents, compaction must be carried out at optimum moisture content to a dry density of 95% of the maximum density (Standard Proctor density per ASTM D 698 and AASHTO method T-99). The moisture content of the compacted embankment layers must be as specified elsewhere.

For vegetative compaction as required by the Contract Documents, compaction must be carried out at a less than optimum moisture content (e.g., at a water content of less than 13% on a soil having an optimum content of 15%) to a dry density of between 80% and 85% of the maximum density (Standard Proctor density per ASTM D 698).

In the event the fill is rocky, same must be used up to 9" below elevation of proposed sub-grade. The remaining fill must be suitable earth fill, free from stones that will be retained on a sieve with 2" square openings, and compacted as specified above.

- a. Appropriate proof-rolling and compaction equipment must meet the requirements as per ASTM. Soft spots identified by the City during proof-rolling must be undercut and backfilled. Payment for undercutting and backfilling to eliminate soft spots must be made in accordance with the Contract provisions affecting the work.
- b. Paved surfaces and slab backfill: Compact after proof-rolling, each layer of backfill or fill materials to 95% maximum dry density.
- c. Footings and Foundations: When permitted to be placed by the City, select fill under footings and foundations must be compacted to not less than 95% maximum density.
- d. Walkways: Compact top 6" of sub-grade and each layer of backfill or fill material at 95% maximum density for cohesionless soil material.
- e. Pavements: Compact top 12" of sub-grade and each layer of backfill or fill material at 95% maximum density for cohesionless and cohesive soil material.
- f. Moisture Control: The soils used in fill and backfill must be moistened or aerated to within 2% of the optimum at no additional cost to the City. Where the soil layer is too dry, the Contractor must apply water uniformly using City-approved equipment to increase the moisture content to within 2% of the

optimum. Where the soil layer is too wet, the Contractor must dry the soils by plowing or discing to aerate the soil and reduce the moisture content to within 2% of the optimum.

5. Prohibited Backfill: Soils classified as A-6 or A-7 (per AASHTO classification) or CL or CH (per ASTM classification) must not be used under pavements, slabs, footing/foundations or walkways due to expansive nature of the soils.

MEASUREMENT AND PAYMENT:

Payment per units shown on the Schedule of Unit Prices will be full compensation for clearing and grubbing, furnishing, excavating and hauling, sloping, draining and reclamation of pits (if Option 2 or 3 is selected), the formation and compaction of embankments, backfills, subgrade, manipulation and additives for select borrow, all work and materials for earth shoulders except as otherwise specified, disposing of all unsuitable spoil material, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

This will be full payment for providing fill material, hauling/delivery, labor, tools, equipment, compaction, geotechnical testing, and incidentals necessary to complete the work.

SECTION 204 – EMBANKMENT AND SUBGRADE

DESCRIPTION:

Comply with Subsection 204.01 of MSHA unless noted otherwise on Contract Documents.

Although the title refers only to embankment and subgrade placement, this Section applies to all soil placements resulting from excavation – and not identified elsewhere in these Specifications.

MATERIALS:

Comply with Subsection 204.02 of MSHA unless noted otherwise on Contract Documents.

CONSTRUCTION:

Comply with Subsection 204.03 of MSHA unless noted otherwise on Contract Documents.

MEASUREMENT AND PAYMENT:

Cost is incidental to cost of excavation.

SECTION 205 – TEST PIT EXCAVATION

Line Item 205-01: Test Pit Excavation (CY)

DESCRIPTION:

Comply with Subsection 205.01 of MSHA unless noted otherwise on Contract Documents.

This work consists of hand excavation of test pits to determine the location and elevation of utilities and other underground facilities as specified in the Contract Documents. The Contractor must determine the location of underground structures, pipes and utilities by use of test pit excavation prior to equipment excavation. Hand excavation is required; if appropriate, the CITY may approve the use of pot-holing equipment to dig the test pits.

MATERIALS:

Comply with Subsection 205.02 of MSHA unless noted otherwise on Contract Documents.

CONSTRUCTION:

Comply with Subsection 205.03 of MSHA unless noted otherwise on Contract Documents.

Test Pits must not exceed one square yard in surface area without the permission of the Engineer’s Technical Representative. All test pits must be backfilled with compacted soil and restored to the original site elevation and grades unless otherwise specified.

MEASUREMENT AND PAYMENT:

Test Pit Excavation will be measured and paid for at the Contract unit price per cubic yard for the material actually removed from within the limits specified. The payment will be full compensation for all excavation, tamped backfill, and all material, labor, equipment, tools, and incidentals necessary to complete the work.

Unit cost includes all cost of restoring site to original conditions except any paving which would be paid under separate line item

SECTION 206 — REMOVAL OF EXISTING PAVEMENT, SIDEWALK, PAVED DITCHES, CURB, OR COMBINATION CURB AND GUTTER

Line Item 206-01: Removal of Existing Curb and Gutter (LF)

Line Item 206-02: Full Depth Cut (LF)

Line Item 206-03: Removal of Existing Pavement (CY)

Line Item 206-04: Removal of Existing Concrete Slab (SY)

Line Item 206-05: Removal of Existing Sidewalk (CY)

DESCRIPTION:

Comply with Subsection 206.01 of MSHA unless noted otherwise on Contract Documents.

Materials must be removed down to subgrade or bedding. Material and debris collected as a result of the removal and disposal operation become the property of the Contractor and must be disposed of in accordance with local and state regulations.

MATERIALS:

Comply with Subsection 206.02 of MSHA unless noted otherwise on Contract Documents.

Any saws shall be specifically designed to perform this type of work.

CONSTRUCTION:

Comply with Subsection 206.03 of MSHA unless noted otherwise on Contract Documents.

The Contractor must submit a report to the City any time waste materials resulting from repair or maintenance of a storm water facility have been disposed of off-site. The report must be submitted within 24 hours after disposing the materials, and include the following information along with a copy of the receipt from the disposal facility where the materials are deposited:

1. Date the material was removed;
2. Name, address, and phone number of the person transporting the materials;
3. Types of structures and location from which the materials were removed;
4. Amount and types of waste materials removed;
5. Location of the facility to which the materials were delivered for disposal.

MEASUREMENT AND PAYMENT:

The payment per units shown on the Schedule of Unit Prices will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work. The payment will also include off-site disposal, hauling costs and disposal fees.

SECTION 208 – SUBGRADE PREPARATION

DESCRIPTION:

Comply with Subsection 208.01 of MSHA unless noted otherwise on Contract Documents.

MATERIALS:

Comply with Subsection 208.02 of MSHA unless noted otherwise on Contract Documents.

CONSTRUCTION:

Comply with Subsection 208.03 of MSHA unless noted otherwise on Contract Documents.

MEASUREMENT AND PAYMENT:

Cost is incidental to other cost line items.

SECTION 210 – TAMPED FILL

DESCRIPTION:

Comply with Subsection 210.01 of MSHA unless noted otherwise on Contract Documents.

MATERIALS:

Comply with Subsection 210.02 of MSHA unless noted otherwise on Contract Documents.

CONSTRUCTION:

Comply with Subsection 210.03 of MSHA unless noted otherwise on Contract Documents.

MEASUREMENT AND PAYMENT:

Cost is incidental to other cost line items.

CATEGORY 300 – DRAINAGE (MSHA-BASED)

GENERAL NOTE: The referenced MSHA Sections and Subsections apply unless noted otherwise elsewhere in the Contract Documents. In case of conflict between MSHA specifications and other Contract Documents, the requirements of the other Contract Documents shall apply.

SECTION 301 – CLASS 3 EXCAVATION FOR INCIDENTAL CONSTRUCTION

Line Item 301-01: Class 3 Excavation (CY)

DESCRIPTION:

Comply with Subsection 301.01 of MSHA unless noted otherwise on Contract Documents.

MATERIALS:

Comply with Subsection 301.02 of MSHA unless noted otherwise on Contract Documents.

CONSTRUCTION:

Comply with Subsection 301.03 of MSHA unless noted otherwise on Contract Documents.

Disposition of excavated material must be in accordance with MSHA Subsection 402.03.01.

Any required backfill shall be provided per MSHA Section 302.

MEASUREMENT AND PAYMENT:

Payment per units shown on the Schedule of Unit Costs will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work.

The cost of the disposition of excavated material shall be incidental to, and included in, the unit cost for this line item.

Any required backfill shall be measured and paid for per MSHA Section 302.

SECTION 302 – SELECTED BACKFILL

Line Item 302-01: Select Backfill using Crusher Run Aggregate CR-6 (CY)

DESCRIPTION:

Comply with Subsection 302.01 of MSHA unless noted otherwise on Contract Documents.

MATERIALS:

Comply with Subsection 302.02 of MSHA unless noted otherwise on Contract Documents.

CONSTRUCTION:

Comply with Subsection 302.03 of MSHA unless noted otherwise on Contract Documents.

MEASUREMENT AND PAYMENT:

Payment per units shown on the Schedule of Unit Prices will be full compensation for compaction and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

SECTION 303 – PIPE CULVERTS INCLUDING TRENCH EXCAVATION

Line Item 303-01: 18 inch Reinforced Concrete Pipe, Class IV (LF)

Line Item 303-02: Removal of Existing Pipe (LF)

Line Item 303-03: Clean Existing Pipe Any Size (LF)

Line Item 303-04: Field Connection to Existing Riser (EA)

DESCRIPTION:

Comply with Subsection 303.01 of MSHA unless noted otherwise on Contract Documents.

This Section includes the requirements to install and/or reconstruct temporary and permanent stormwater drainage and piping systems to the limits indicated in accordance with the Contract Documents.

This Work includes trench excavation for installation of pipe, including when the trench excavation requires shoring.

MATERIALS:

Comply with Subsection 303.02 of MSHA unless noted otherwise on Contract Documents.

Reinforced concrete pipe associated with storm drains must meet the applicable MSHA Standard Specifications Section 905. Reinforced concrete pipes associated with stormwater pond embankments and spillways must be watertight and meet NRCS MD-378 and ASTM C 361 standards. These pipes must have bell and spigot joints with o-ring rubber gaskets.

CONSTRUCTION:

Comply with Subsection 303.03 of MSHA unless noted otherwise on Contract Documents.

Reinforced concrete pipe installation in dam embankments must meet the manufacturer's recommendation and NRCS MD-378 requirements, and must be laid in concrete cradle. Mechanical pipe pullers or come-along devices must be utilized to bring the pipe joints into the home position. All backfill within the public right-of-way, near structures and in other critical areas identified on the Contract Documents will be compacted to 95% of the maximum density as determined by AASHTO T-99.

All temporary pipes must be removed at the end of the project.

1. Excavation for Ditches: Cut ditches to cross-sections and grades as shown. Deposit excavated materials to prevent cave-ins or material falling or sliding into ditch. Keep ditches free of debris until final acceptance of the work. Ditches must meet OSHA requirements to prevent cave-ins.
2. Sheeting, Shoring, and Bracing must be provided to prevent cave-ins when necessary. Professional Engineer-designed sheeting and shoring shop drawings must be submitted to the CITY for approval prior to installation.
 - a. Sheeting, shoring, and bracing materials must be timber, steel or aluminum, or a combination thereof, designed by a Professional Engineer registered in the State of Maryland, to retain the earth around structures, prevent cave-in and settlements, and to fulfill all safety requirements.
 - b. Timber must be structural grade with minimum working stress of 1,100 psi.

- c. Steel sheet piling must conform to requirements of ASTM A328, continuous interlocking type. Struts, bracing and all other accessories required for the sheet piling system must meet requirements of ASTM A36.
3. Cold Weather Protection: Protect excavated bottoms against freezing when atmospheric temperature is less than 35°F.

Any work performed in the CITY Right of Way, specifically including attachment to existing structures, must be coordinated with, and inspected by, the CITY ' Right-of-Way Inspector. Any defective work rejected by the Right-of-Way Inspector must be re-done at no additional cost to the CITY.

MEASUREMENT AND PAYMENT:

The payment per the units shown on the Schedule of Unit Prices will be full compensation for all applicable excavation, sheeting, shoring, dewatering, hauling, invert paving, storing, rehandling of material, removal and disposal of excess and unsuitable material, tamped fill, forming bed or foundation, bedding, backfill, compaction, inspection, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

New pipe culverts will be measured complete in place and paid for at the Contract unit price per linear foot.

Pipe Connections will be measured and paid for at the Contract unit price per each. No deduction from the pipe measurement will be made for pipe connections. Connections to drainage structures containing prefabricated holes in which the pipe will be connected with grout or mortar will not be measured, but the cost will be incidental to the pertinent Pipe item.

Excavation required below the planned elevation will be measured and paid for as specified in 301.

Removal of Existing Pipe will be measured and paid for per the total number of linear feet removed, regardless of the condition. When a multiple pipe installation is removed, each pipe will be measured and paid for. End walls, end sections, etc. removed with the pipe will not be measured but the cost will be incidental to the Contract price.

Selected backfill will be measured and paid for as specified in Section 302.

Flowable Backfill will be measured and paid for as specified in Section 314.

Select Borrow will be measured and paid for as specified in Section 203.

Encasement concrete, and concrete or brick masonry to plug existing pipes will be measured and paid for at the Contract price for the pertinent Concrete Mix No. 2 for Miscellaneous Structures, or Brick Masonry for Miscellaneous Structures item.

Clean Existing Pipe Any Size will be measured and paid for at the Contract unit price per linear foot. Removal of construction debris and sediment will not be measured for payment.

Removal of any temporary shoring, shoring or bracing or related material from the site will be incidental to the work. Removal of any temporary piping or related material from the site will be incidental to the work.

SECTION 305 – MISCELLANEOUS STRUCTURES

- Line Item 305-01: Precast Concrete Manholes (EA)**
- Line Item 305-02: Precast Concrete Inlets (EA)**
- Line Item 305-03: Removal of Existing Inlets (EA)**
- Line Item 305-04: Concrete Collar (CY)**
- Line Item 305-05: Concrete Cradle (CY)**
- Line Item 305-06: Concrete Slab (CY)**

DESCRIPTION:

Comply with Subsection 305.01 of MSHA unless noted otherwise on Contract Documents.

This Work includes excavation for installation of underground structures, including when the excavation requires shoring.

MATERIALS:

Comply with Subsection 305.02 of MSHA unless noted otherwise on Contract Documents.

Reinforced concrete pipe and end sections associated with storm drains must meet the applicable MSHA Standard Specifications provided in Section 905. End sections must conform with MSHA 305 and per the standard detail as specified in the Contract Documents.

Manhole frames, covers, and steps must be provided in accordance with Construction Documents, MSHA, MCDOT, and WSSC Standard Details. Where materials are traffic bearing, they must be designed to withstand H-20 loading. Manholes Steps must be Polypropylene Encapsulated manufactured per MSHA Standard Detail MD-383.92.

CONSTRUCTION:

Comply with Subsection 305.03 of MSHA unless noted otherwise on Contract Documents.

MEASUREMENT AND PAYMENT:

The payment per the units shown on the Schedule of Unit Prices will be full compensation for all excavation, concrete, masonry, special or precast units, reinforcement, ladder rungs, drip stones, No. 57 aggregate, underdrain stubs, frames, grates and covers, grade and slope adjustments, backfill, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

No separate or additional measurement will be made for any precast concrete units, metal, or castings used in the construction of any of the items noted above.

SECTION 308 – EROSION AND SEDIMENT CONTROL

- Line Item 308-01: Stabilized Construction Entrance (EA)**
- Line Item 308-02: Sand Bags (EA)**
- Line Item 308-03: Silt Fencing (LF)**
- Line Item 308-05: Sump Pit (EA)**
- Line Item 308-06: Dewatering Bags (EA)**
- Line Item 308-07: Geotextile Class ST (SY)**
- Line Item 308-08: Maintenance of Stream Flow (LS)**

GENERAL DESCRIPTION:

This Work consists of the provision and installation of all Sediment Control Devices as indicated in the Contract Documents. Control Devices must comply with the latest version of the Maryland Department of the Environment (MDE) “2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control” and “Maryland’s Guidelines to Waterway Construction” and all CITY standards. **If case of any conflict between standards, the CITY standards control.**

Work includes measures to prevent erosion and run-off of earth and silt, methods to prevent the transport of sediment off-site by construction vehicles, dust control, and contact and coordination with CITY PUBLIC WORKS Inspection staff and any other involved regulatory agencies throughout the project.

The Contractor shall assume all Erosion and Sediment Control obligations and responsibilities placed on the CITY per the approved Erosion and Sediment Documents. The Contractor shall perform all layout, construction, scheduling, bookkeeping, notification, review and maintenance assigned to the City as the Erosion and Sediment Control permittee.

DESCRIPTION:

Comply with Subsection 308.01 of MSHA except Subsections 308.01.03 and 308.01.04 unless noted otherwise on Contract Documents.

MATERIALS:

Comply with Subsection 308.02 of MSHA unless noted otherwise on Contract Documents.

All materials must be in accordance to MDE specifications for Soil Erosion and Sediment Control, MDE Construction Guidelines, and CITY standards unless otherwise specified in the Contract Documents.

Geotextile fabrics must conform to Section H of the MDE “2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control”.

Straw mats (bales) with any type of plastic netting will not be accepted. The Straw/Single Jute Mat must be East Coast Erosion Blanket ECS-1B, Straw Biodegradable Single Net Blanket or CITY-approved equal and must provide biodegradable ground cover for seeding purposes with an estimated field life of less than 12 months.

Any Soil Reinforcement Matting must be Enkamat 7020 or City-approved equal and must be installed per manufacturer’s specifications.

Sand Bags: Sand bags must be made of UV resistant material, resistant to tear and puncture and woven tightly to prevent leakage of the sand. The sand bag must be at least 14” x 26” in size and hold a minimum of 50 pounds of sand.

Temporary HDPE pipe shall be flexible corrugated pipe.

The dewatering bag must be made of non-woven geotextile with a minimum surface area of 225 square feet per side. All structural seams must be sewn with double stitch using a double needle machine with high strength thread. The seam strength must withstand 100 lb/in using ASTM D-4884 test method. The dewatering bag must have a nozzle large enough to accommodate a 4 inch discharge hose. The geotextile fabric must be a nonwoven fabric with the following properties:

Weight:	ASTM D-3776	12oz/yd
Grab Tensile	ASTM D-4632	300 lbs
Puncture	ASTM D-4833	180 lbs
Flow Rate	ASTM D-4491	75 gal/min/sq ft
Permittivity	ASTM D-4491	1/1 sec
UV Resistance	ASTM D-4355	70%
AOS	ASTM D-4751	100

CONSTRUCTION:

Comply with Subsection 308.03 of MSHA unless noted otherwise on Contract Documents.

1. The Contractor must employ a responsible person involved in the Project who has a Certificate of Attendance at a Maryland Department of the Environment approved training program for the control of sediment and erosion as the Superintendent/Supervisor. At any time, the City may request proof of this Certification.
2. Upon issuance of the Notice to Proceed, the Contractor shall layout the Limits of Disturbance and mark utilities via Miss Utility interaction. After these activities are completed, the Contractor shall schedule a pre-construction meeting with: CITY PUBLIC WORKS Inspection staff, the Contractor, and other appropriate permit inspection staff. The Contractor must not access the Project Site for any reason other than visual observation and surveying prior to this meeting; no land disturbance activities are permitted prior to this pre-construction meeting.
3. The phone number for CITY PUBLIC WORKS Sediment Control Inspection requests is (301) 258-6330. In addition, the CITY PUBLIC WORKS Sediment Control Inspectors may be reached at their individual phones, or a message may be left on their “voice mailbox”.
4. The Contractor will be provided with a copy of the Sediment Control Permit and all other required permits at the pre-construction meeting (or earlier), and must keep a copy of each permit on the Project Site at all times.
5. Installation of sediment control devices must begin only after the CITY PUBLIC WORKS Inspector has granted approval, and must include any modifications to the approved Sediment Control Plan that the CITY PUBLIC WORKS Inspector has required. The CITY PUBLIC WORKS inspector has the authority to make field modifications to the approved Sediment Control Plan. The Contractor must notify, and receive approval from, the Engineer before making any changes as directed by the Inspector. Upon approval by the Engineer, revised work shall be provided as required. The contractor is eligible for compensation for revised work in accordance with the Contract Documents.
6. All Sediment Control features must be constructed and installed in accordance with the Contract Documents or, if not indicated in the Contract Documents, then in accordance with the appropriate detail as specified in the MDE Specifications for Soil Erosion and Sediment Control and MDE Construction Guidelines. All proprietary sediment control devices must be installed per manufacturer’s instructions.

7. All notifications for inspection and coordination with the CITY PUBLIC WORKS Inspector are the responsibility of the Contractor.
8. Events requiring Sediment Control inspection and approval include, but may not be limited to: start of land disturbance activities, compliance with warning notices, lifting of stop work orders for violations, start of temporary or permanent stabilization, removal of Sediment Control facilities, and any other pertinent events noted in the Contract Documents.
9. Grading must be accomplished such that existing surface drainage is not impaired, a potential hazard is not created, hazardous erosion will not occur, or sediment will not collect in existing drainage systems.
10. All sediment control devices must be maintained, inspected and repaired as necessary at the end of each working day and after each rain event. If sediment leaves the construction area, it must be removed immediately and the area must be cleaned to the satisfaction of the CITY. Inspections must be documented on the MDE Construction Activity Inspection Form as required by permit. Completed inspection forms are required to be kept at the site in a notebook should an MDE representative wish to review them. Temporary stabilization must be provided.

The Contractor shall assume any City requirements identified on State or CITY Erosion and Sediment Control permit for the project. The Contractor must complete and comply with any formal transfer of permit responsibilities including completion and compliance with the MDE NPDES Transfer Form for individual and general permits, which must be filed with MDE by the Contractor. Once the NPDES permit conditions have been met, and the permit is ready to be closed, the MDE Notice of Termination must be filed for individual and general permits.

11. Removal of sediment control devices:

Once the Project has been completed, and all disturbed areas have been restored (seeded, sodded, paved, constructed, etc) as called for in the Contract Documents and there is a good stand of grass in the seeded/sodded areas, the Contractor must contact the CITY PUBLIC WORKS inspector (with concurrent notification to the City and Engineer) for approval to remove the sediment control devices. The sediment control devices must be removed within 14 days from the date of the CITY OF GAITHERSBURG Sediment Control Inspector's approval.

12. As permitted, after removal of all sediment control devices, the Contractor must re-grade affected areas to proposed designed grades and seed/or sod them as required for stabilization. **The Work is not considered complete until all temporary sediment control devices have been removed and all regrading and seeding/sodding is completed and the CITY PUBLIC WORKS Inspector has released the Sediment Control permit.**
13. Dust Control: The Contractor must provide water as necessary to reduce airborne dust when directed by the City, at no additional cost to the CITY.
14. Dewatering: Prevent surface water and subsurface or groundwater from flowing into excavations and from flooding Project Site and surrounding area. Do not allow water to accumulate in excavations or other areas of the Site. Remove water to prevent softening of foundation bottoms, undercutting footings, and soil changes detrimental to stability of sub-grades and foundations. Provide and maintain pumps, sumps, suction and discharge lines, and other dewatering system components necessary to convey water from excavations. Convey water removed from excavations and rainwater to collecting or run-off structures. Provide and maintain temporary drainage ditches and other diversions outside excavations limits for each structure. Do not use trench excavations as temporary drainage ditches. Dewatering activities must be performed at no additional cost to the CITY. Any repair to foundations which results from deficient dewatering is the sole responsibility and cost of the Contractor.

Dewatering (Filter) bags: Water encountered within the Site must be pumped through a dewatering (filter) bag before it is allowed to drain away from the Site. Dewatering setup must be made in accordance with the Contract Documents; if not shown; the filter bag must be placed so that the incoming water flowing into the bag will pass through the system and then off site without creating erosion. The neck of the system must be tied off tightly to stop water from flowing out of the system without passing through the walls of the bag. The filter bag must be placed over a wood chip (mulch) bed to allow the water to flow in all directions. The filter bag must be placed on level or gently sloping grade and secured in place by wooden stakes spaced at 5 feet on center.

Contractor shall provide adequate pump(s) for all dewatering. All dewatering installations must be inspected by appropriate permit inspectors and the City prior to being placed into operation.

Install standard Stabilized Construction Entrances (SCEs) in accordance with Contract Documents and MSHA 308 and applicable State and CITY guidelines. The price must include off-site removal of all related materials upon project completion.

Temporary curb inlet protection must be installed around all storm drain curb inlets to control sedimentation into the storm drainage system.

Maintenance of Stream Flow (Stream Diversion):

Any stream diversion (maintenance of stream flow) must be set up and operated in accordance with the MDE Construction Guidelines Section 1.2 unless otherwise directed by the City. The Contractor must notify all applicable inspectors as well as CITY PUBLIC WORKS 48 hours before initiating pump-around. If required, CITY will advise on fish removal requirements. All pumps must be maintained in proper working condition. All stream diversion outfalls must utilize a velocity reduction device to prevent erosion. Pipes must be checked regularly for leaks and repaired as necessary. Any piping that crosses paved trails must have a wooden ramp at a slope of 1:20 (vertical: horizontal) for pedestrian and bike passage. A warning sign must be placed in advance of the pipe crossing. Pump inlets must have a screen (mesh size <1 inch) over opening. If pump operations occur between 5pm and 7am, the Contractor must have an employee on site at all times to monitor pumping operations. Pumps utilized in the stream diversion must be in compliance with the County Noise Ordinance and if necessary the Contractor must construct devices to muffle pump noise at no additional compensation.

The Contractor must properly anchor and support all diversion piping to prevent failure. In the event of any failure, the Contractor must, at its sole expense, immediately repair the diversion piping to properly convey the diversion water.

MEASUREMENT AND PAYMENT:

Payment per units shown on the Schedule of Unit Prices will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work. The maintenance, repair, resetting, and final removal of all erosion and sediment control devices will not be measured, but the cost will be incidental to the Contract price to construct the device unless otherwise specified in the Contract Documents.

Any maintenance for erosion and sediment controls shall be incidental to the Erosion and Sediment Control costs.

Geotextile material will not be paid separately but shall be incidental to, and included in, other line item costs.

Sump Pit will be measured and paid for at the Contract unit price per each. The payment will also include excavation, pipe, stone, geotextile, wire mesh, steel plate, hose, pump, and connections.

Stabilized Construction Entrance and Rehabilitate Stabilized Construction Entrance will be measured and paid for each. When pipe is required, it will not be measured but the cost will be incidental to the Contract price.

Dewatering Bags will be measured and paid for at the Contract unit price per each and will include pump, hose, connections, straw bales locating, relocating, disposal and any other incidentals necessary. No adjustments will be made for resizing or relocating bags to meet stream clarity discharge requirements.

Temporary Mulch will be measured and paid for as specified in 704.04.02.

Temporary Seed will be measured and paid for as specified in 704.04.01.

Temporary Wood Cellulose Fiber will be incidental to Temporary Seed.

Soil Stabilization Matting will be measured and paid for as specified in 709.04.

Turfgrass Sod will be measured and paid for as specified in 708.04.01.

Each sediment control will be paid for once. Any rework, repair or re-installation of sediment control devices shall be performed at the Contractor's expense.

Maintenance of Stream Flow will not be measured but will be paid at the Task Order lump sum price. The payment will also include designing and providing diversion structures regardless of the type required to satisfactorily divert the stream flow, excavation, backfill, dewater the site and excavated areas within the stream diversion area, maintenance of the diversion system, sandbags, polyethylene sheeting, diversion pipes, pumps, hoses, connections, and portable sediment tanks. This price will not be adjusted when consideration is given to an alternative stream diversion system regardless of any changes in quantities from that shown in the Contract Documents.

SECTION 312 — RIPRAP SLOPE AND CHANNEL PROTECTION

Line Item 312-01: Class II Riprap (CY)

DESCRIPTION:

Comply with Subsection 312.01 of MSHA unless noted otherwise on Contract Documents.

This section includes the requirements for the provision and installation of rip-rap and round river rock for the purpose of channel and slope stabilization in accordance with the Contract Documents.

MATERIALS:

Comply with Subsection 312.02 of MSHA unless noted otherwise on Contract Documents.

The material for rip-rap (round river rock per MSHA’s “stone” terminology) slope and channel protection must conform to the requirements of MSHA Standard Specifications listed below unless otherwise specified in the Contract Documents:

a.	Aggregate Filter Blanket (Graded Aggregate Sub-base)	901, Table 901a
b.	Stone (Rock)	901.02
c.	Geotextile, Class as specified	921.09

CONSTRUCTION:

Comply with Subsection 312.03 of MSHA unless noted otherwise on Contract Documents.

Excavation must conform to the lines and grades specified in the Contract Documents. The subgrade must be smooth and firm, free from protruding objects that would damage the geotextile, and constructed in a manner acceptable to the Owner.

Geotextile Filter Cloth: Unless specified otherwise by Contract Documents, the geotextile must be placed on the prepared subgrade with the adjacent edges overlapping a minimum of 2 feet (0.6m). Geotextile torn or damaged must be replaced or repaired at the Contractor’s expense in a manner acceptable to the Owner.

Aggregate Filter Blanket (Graded Aggregate Sub-base): When aggregate filter blanket is specified in lieu of geotextile, it must conform to the lines and grades specified in the Contract Documents and must be compacted in a manner acceptable to the Owner.

Installation of rip-rap aprons must be in accordance with MSHA Section 312. Installation of rip-rap in stacked configurations must be in accordance with Contract Documents. The Maryland Department of the Environment (MDE) Maryland’s Guidelines to Waterway Construction must be followed unless specified otherwise in the Contract Documents.

Stacked Imbricated Rip-rap Placement: The placement of rip-rap must begin with the cutoff walls or tie-in locations. The larger stones must be placed in the cutoff walls and along the outside edges of the limits of slope and channel protection. Rock must be stacked to prevent sliding due to loads from streambank soils or storm flows. Gaps in between stacked rocks must be minimized. The Contractor must use a “thumb” attachment to an excavator bucket to place rock unless otherwise approved by the Owner.

Backfill: Any excavation voids existing along the edges of the completed slope and channel protection must be backfilled in a manner acceptable to the Owner.

MEASUREMENT AND PAYMENT:

The payment per units shown on the Schedule of Unit Prices will be for full compensation for all applicable excavation (e.g., structure volume plus up to 18 inches to edge of cut), geotextile, sheeting, shoring, de-watering, hauling, storing, re-handling of material, removal and disposal of excess material, backfill, grading and slope adjustments, and for all material, labor, equipment, tools, and incidentals necessary to complete the work as specified in the Contract Documents.

SECTION 314 – FLOWABLE FILL

Line Item 314-01: Flowable Fill (CY)

DESCRIPTION:

Comply with Subsection 314.01 of MSHA unless noted otherwise on Contract Documents.

Flowable Fill is fly ash-based flowable material, and can be used to backfill excavated trenches around pipes and structures and other applications as indicated in the Contract Documents. Flowable Fill can be a structural backfill used in lieu of compacted soil

MATERIALS:

Comply with Subsection 314.02 of MSHA unless noted otherwise on Contract Documents.

The fill material must meet the requirements of MD 378 as modified. The mix must have a 28-day, unconfined compressive strength of 200 pounds per square inch (psi) minimum, and must be certified by the manufacturer.

CONSTRUCTION:

Comply with Subsection 314.03 of MSHA unless noted otherwise on Contract Documents.

When backfilling around concrete pipe(s), the material used must be placed at least up to the spring line level of the pipe. The CMP or PVC pipe must be backfilled at least to a level 1 foot above the top of pipe. The rate and staging of the pours must be considered to prevent floatation of the pipe. Cure Flowable Fill for at least 24 hours before placing backfill or paving.

MEASUREMENT AND PAYMENT:

Payment per units shown on the Schedule of Unit Prices will be for full for all material, labor, equipment, tools, and incidentals necessary to complete the work.

CATEGORY 500 – PAVING (MSHA-BASED)

GENERAL NOTE: The referenced MSHA Sections and Subsections apply unless noted otherwise elsewhere in the Contract Documents. In case of conflict between MSHA specifications and other Contract Documents, the requirements of the other Contract Documents shall apply.

All work performed in the CITY Right of Way must be coordinated with, and inspected by, the Montgomery CITY PUBLIC WORKS Right-of-Way Inspector. Any defective work rejected by the Right-of-Way Inspector must be re-done at no additional cost to the CITY.

Unless otherwise described in each Line Item, in general, work performed under this Division is subject to inspection and acceptance by the City prior to payment. Any work not accepted must be re-done at no additional cost to the CITY.

SECTION 505 – HOT MIX ASPHALT PATCHES

Line Item 505-01: Hot Mix Asphalt Superpave 12.5MM for Surface Course (SC) (TON)

Line Item 505-02: Hot Mix Asphalt Superpave 19.0MM for Base Course (BC) (TON)

Line Item 505-03: CR-6 Aggregate Base (TON)

DESCRIPTION:

Comply with Subsection 505.01 of MSHA unless noted otherwise on Contract Documents.

MATERIALS:

Comply with Subsection 505.02 of MSHA unless noted otherwise on Contract Documents.

Refer to the MSHA Standard Specification Sections 505 and 904 for applicable Quality Assurance and Material references. HMAs must be provided according to the following applications:

HMA – Surface Course (SC) for Roadways: Superpave 12.5 mm, PG 64-22.

HMA – Base Course (BC), all applications: Superpave 19.0 mm, PG 64-22.

CONSTRUCTION:

Comply with Subsection 505.03 of MSHA unless noted otherwise on Contract Documents.

MEASUREMENT AND PAYMENT:

Payment for the units shown on the Schedule of Unit Prices will be full compensation for saw cutting, milling, grinding, removal, disposal, trimming of the existing pavement, subgrade preparation, placing all materials including tack coat, steel plates, emergency filler, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

After removal, steel plates and emergency filler will remain the property of the Contractor.

Partial Depth Patching and Full Depth Patching will be measured and paid for at the Contract unit price per square yard or per ton as specified. The payment will be full compensation for furnishing, hauling, placing all material,

additional removal of pavement above the aggregate base, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

Removal of Unsuitable Material and Refill will be measured and paid for at the Contract unit price per cubic yard. The payment will also include excavation and disposal of unsuitable material, backfilling with aggregate, and compaction.

CATEGORY 600 – SHOULDERS (MSHA-BASED)

GENERAL NOTE: The referenced MSHA Sections and Subsections apply unless noted otherwise elsewhere in the Contract Documents. In case of conflict between MSHA specifications and other Contract Documents, the requirements of the other Contract Documents shall apply.

All work performed in the CITY Right of Way must be coordinated with, and inspected by, the CITY PUBLIC WORKS' Right-of-Way Inspector. Any defective work rejected by the Right-of-Way Inspector must be re-done at no additional cost to the CITY.

Unless otherwise described in each specification section, in general, work performed under this Division is subject to inspection and acceptance by the City prior to payment. Any defective work not accepted must be re-done at no additional cost to the CITY.

SECTION 602 – CURB, COMBINATION CURB AND GUTTER AND MONOLITHIC MEDIAN

Line Item 602-01: Standard Type A Concrete Combination Curb and Gutter (LF)

DESCRIPTION:

Comply with Subsection 602.01 of MSHA unless noted otherwise on Contract Documents.

MATERIALS:

Comply with Subsection 602.02 of MSHA unless noted otherwise on Contract Documents.

CONSTRUCTION:

Comply with Subsection 602.03 of MSHA unless noted otherwise on Contract Documents.

In addition to meeting the requirements of MSHA Standard Specifications Section 602 concrete curb and gutters must meet the following requirements (unless noted otherwise):

1. Unless noted otherwise, replacement curb and gutter must match the configuration of the curb and gutter that was removed.
2. Curb and gutter must meet the latest Montgomery County Standard Type "A" (MC-100.01) or MSHA Standard Type "A" (620.02) unless noted otherwise in the Contract Documents.
3. All curb transitions, nose downs and depressed curb (gutter sections) through sidewalk ramps and driveways are included in the work.
4. In the course of work, the Contractor must take care to protect existing curb and gutter, driveway apron or other structures as required in the Contract Documents. Any Contractor-caused damage must be reported to the City and must be repaired to the satisfaction of the City at no additional cost to the CITY.
5. Slope requirements for sidewalk ramp curb openings must be in accordance with the American Disabilities Act (ADA).
6. Formwork for curb and gutter work shall be approved by the Right-of-Way Inspector prior to concrete placement.

7. All construction waste and debris must be swept and removed from the Site. **Construction waster and debris must not be swept or washed into the inlets or storm sewer system.**

In addition to meeting the requirements for asphalt in specification section 504 above, asphalt curb (with related sections) must be in accordance with MCDOT's standard detail MC-103.01 in addition to the following requirements:

1. Unless noted otherwise, replacement curb and gutter must match the configuration of the curb and gutter that was removed.
2. Curb and gutter must meet the latest Montgomery County or MSHA Standard Details for curb and gutter.
3. Included in the Work are all curb transitions, nose downs and depressed curb (gutter sections) through sidewalk ramps and driveways.
4. In the course of the Work, the Contractor must take care to protect existing curb and gutter, driveway apron or other structures as required in the Contract Documents. Any Contractor-caused damage must be reported to the City and must be repaired to the satisfaction of the City at no additional cost to the CITY.
5. Slope requirements for sidewalk ramp curb openings must be in accordance with the American Disabilities Act (ADA).

MEASUREMENT AND PAYMENT:

Payment per the units shown on the Schedule of Unit Costs will be full compensation for all concrete, hot mix asphalt, forms, excavation, backfill, disposal of excess material, drainage openings, joint sealer, tack coat, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

Curb, Combination Curb and Gutter, and Monolithic Median will be measured and paid for at the Contract unit price per linear foot. Hot Mix Asphalt Curbs, Concrete Curbs, and Concrete Combination Curb and Gutter will be measured along the front face of the curb. Monolithic Concrete Median will be measured along the center line of the finished top of median.

SECTION 603 – SIDEWALKS

Line Item 603-01: 5 Inch Concrete Sidewalk (SY)

DESCRIPTION:

Comply with Subsection 603.01 of MSHA unless noted otherwise on Contract Documents.

MATERIALS:

Comply with Subsection 603.02 of MSHA unless noted otherwise on Contract Documents.

CONSTRUCTION:

Comply with Subsection 603.03 of MSHA unless noted otherwise on Contract Documents.

Unless noted otherwise on the Contract Documents, sidewalks must be 4 inches thick and constructed in accordance with MSHA Standard Specifications Section 603 (and related sections) and MCDOT Standard 110.01 or 111.01. Handicap ramp installation (new or replacement) must be in accordance with MCDOT Standard 112.01, 113.01 or 113.02.

Concrete Driveway Aprons must meet requirements provided on applicable MCDOT Standard 301.01 and related details (e.g., MC-300, 301 and 302 series) in addition to meeting the requirements of MSHA Standard Specifications Sections 602 and 603.

Formwork for sidewalks and driveway entrances shall be approved by the Right-of-Way Inspector prior to concrete placement.

MEASUREMENT AND PAYMENT:

Payment per units shown on the Schedule of Unit Prices will be full compensation for all excavation, backfill, disposal of excess or unsuitable material, forms, reinforcement when specified, joints, sealer, compaction, curing, finishing, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

SECTION 605 – METAL TRAFFIC BARRIERS

Line Item 605-01: Removal and replacement of existing metal guardrail (LF)

DESCRIPTION:

Comply with Subsection 605.01 of MSHA unless noted otherwise on Contract Documents.

MATERIALS:

The existing guardrail shall be removed, salvaged and reinstalled at the completion of construction. Comply with Subsection 605.02 of MSHA unless noted otherwise on Contract Documents.

W” Beam Traffic Barrier must be in accordance with MSHA Standard Specifications Section 605 and MSHA Standard Detail 605.01. Materials supplied must meet the required specifications for “Corten” with the following exception: The assembly hardware (nuts, bolts, etc.) must be galvanized.

CONSTRUCTION:

Comply with Subsection 605.03 of MSHA unless noted otherwise on Contract Documents.

Traffic Barriers shall be approved by the Right-of-Way Inspector.

MEASUREMENT AND PAYMENT:

Payment per units shown on the Schedule of Unit Prices will be full compensation for all excavation, removal of the existing end treatment to be replaced, installation of temporary end treatment, fabrication of all component parts, transitions to barriers, reflectorization, backfill, compaction, restoration of grassed or paved areas, seed and mulch, soil stabilization matting, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

SECTION 607 – CHAIN LINK FENCE

Line Item 607-01: 4 Foot High Galvanized Chain Link Fence (LF)

Line Item 607-02: Remove and dispose of chain link fence (LF)

DESCRIPTION:

Comply with Subsection 607.01 of MSHA unless noted otherwise on Contract Documents.

This item specifies the requirements for permanent chain link fencing installation as indicated on the Contract Documents. See separate Section for temporary construction fencing. As directed by the CITY, replacement of unusable existing fence after temporary removal will be covered as newly installed fencing. This section also specifies the gate requirements for chain link fence gate installation.

MATERIALS:

Comply with Subsection 607.02 of MSHA unless noted otherwise on Contract Documents.

Chain link fence must be in accordance with MSHA Sections 607, 902 and 914 and coated with black vinyl unless indicated otherwise.

Chain link gate materials must be in accordance with MSHA Section 914 and installed in accordance with MSHA Section 607 and MSHA Standard Detail 692.01. The width of gates must be as indicated on the Contract Documents. Gates wider than 10 feet must be constructed as double gates.

CONSTRUCTION:

Comply with Subsection 607.03 of MSHA unless noted otherwise on Contract Documents.

Chain link fence must be installed with 1-2 inches of clearance above the ground. All fencing must be four (4) feet high. Where chain link fence is specified to be anchored to a concrete structure, the MSHA standard details (BR-SS (3.03)-75-23) must be used.

MEASUREMENT AND PAYMENT:

Payment per units shown on the Schedule of Unit Prices will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work.

When an item for Clearing and Grubbing is not specified in the Contract Documents, clearing and grubbing will not be measured but the cost will be incidental to the Contract unit price for the pertinent Chain Link Fence item.

CATEGORY 700 – LANDSCAPING (MSHA-BASED)

GENERAL NOTE: The referenced MSHA Sections and Subsections apply unless noted otherwise elsewhere in the Task Order Documents. In case of conflict between MSHA specifications and other Contract or Task Order Documents, the requirements of the other Contract or Task Order Documents shall apply.

Unless specifically specified otherwise in the individual Specification Sections below, the following minimum acceptance and maintenance requirements apply to all plant and seeding installations:

Initial Watering: The Contractor must provide at least one initial watering after planting, sodding or seeding. All watering must be accomplished using a hose with nozzle end breaker or a sprinkler. Water must be applied in sufficient quantities to maintain moist soil to a depth of at least 4 inches. Water must be applied at low water pressure directly to each plant, allowing water to be absorbed into the planting area until saturated, but without runoff. The Contractor must avoid the application of too much water.

The Contractor must water plantings as necessary until Initial Acceptance.

Contractor must be able to supply the required water from a water truck or from a nearby hydrant. When a hydrant is used, the Contractor is responsible for all regulations, permits or expenses necessary to use the public water supply.

Final Cleanup: Prior to Initial Acceptance, the Contractor must remove all trash and materials incidental to the project and dispose of it off-site. All rejected materials must be immediately removed from the site.

Inspection and Initial Acceptance: The Contractor must notify the City in writing that the Plantings, sod and/or seeds are installed in accordance with these specifications. The Contractor must request an inspection by the City. The inspection shall be performed by the City and Contractor within two weeks of written notification from the Contractor. If the installation and plantings are satisfactory, the City will provide a Certificate of Initial Acceptance to the Contractor. The Warranty period will begin from the date of the Certificate.

WARRANTY (ESTABLISHMENT AND MAINTENANCE) PERIOD WORK

After Initial Acceptance of any Planting work, and before receiving complete payment for any planting installations, the Contractor must provide a written Warranty to the City for the planting work. The Warranty must be provided using the City's form or other form acceptable to the City. The Warranty must acknowledge the Contractor's responsibility to: establish and maintain all plantings, sodding, and/or seeding, and to replace all deficient work at the Contractor's sole cost. The length of the warranty will vary depending on the nature of the work; see the individual Specification Sections for information on Warranty length. Work to be performed during the Warranty period shall include, but not be limited to:

Maintenance Watering: The Contractor must provide sufficient watering as necessary to maintain the plantings, sodding, and/or seeding in good health throughout the Warranty period. This maintenance watering of planted trees, shrubs, herbaceous plants, sod, and/or seeded areas shall be as required for proper growth and health of the plantings. Water used on plants must be free of any substance harmful to the plants.

During the Warranty period, the Contractor must monitor the water needs of all plant material at least once per month between March 31 and October 31. Additionally, the Contractor shall perform more frequently water monitoring visits in periods of low rain (defined as any two-week period with less than an inch of rain at the Site). When the Contractor identifies the need for watering, the Contractor must notify the City of the timing of the Contractor's planned watering. After City notification, the Contractor shall proceed with its planned watering – whether the City attends the watering or not.

While the City has no obligation to monitor watering, the City may notify the Contractor if the City feels that the Contractor has failed to properly water plantings. If so notified, the Contractor must start watering within 24 hours of that notification. The Contractor must provide watering until all plant material has been properly watered as approved by the City. All required watering must be completed within five calendar days of City notification.

Contractor must be able to supply the required water from a water truck or from a nearby hydrant. When a hydrant is used, the Contractor is responsible for all regulations, permits or expenses necessary to use the public water supply.

Maintenance: The Contractor shall be responsible for all maintenance during the Warranty period including but not limited to: watering, invasive plant control, fence maintenance, stake and guy maintenance, and mowing (as applicable). See individual Sections for additional requirements.

Final Inspection: The Contractor will conduct a Final Inspection with the City at the end of each Warranty period. It will be the Contractor's responsibility to notify the City at least two weeks before the anticipated meeting. Any planting installation that does not meet the Task Order Documents and/or the Warranty must be corrected or replaced by the Contractor at its own expense.

Replacements and Conditions: The Contractor must meet the required Warranties for replacement of deficient plantings. During the Warranty period, the Contractor will not be responsible for plant material that has been damaged due to vandalism, fire, relocation or other activities beyond the Contractor's control as determined by the City. The Contractor is responsible for maintaining adequate protection against deer (and other animal) damage, as specified in the specifications, during the Warranty period.

The cost of the Planting Warranty work (including watering, maintenance, care and replacement) will not be paid for directly. Cost is incidental to other cost Line Items and Sections. If the Contractor fails to perform any Warranty work, the City has the right to perform the work and back-charge the Contractor.

SECTION 701 – TOPSOIL AND SUBSOIL

Line Item 701-01: Furnish and Place Topsoil, 4 Inch Depth (CY)

Line Item 701-02: Place Salvaged Topsoil, 4 Inch Depth (SY)

DESCRIPTION:

Comply with Subsection 701.01 of MSHA unless noted otherwise on Contract Documents.

This work consists of providing and installing topsoil over prepared subsoil prior to establishment of vegetation.

MATERIALS:

Comply with Subsection 701.02 of MSHA unless noted otherwise on Contract Documents.

New topsoil must be in accordance with MSHA Section 920.01.02 and must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Soils having low moisture content, low nutrient levels, low pH, materials toxicity to plants, and/or unacceptable soil gradation are not acceptable. Topsoil must not be a mixture of contrasting textured subsoils, and shall contain less than 5 % by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2 " in diameter.

Maximum sand content in topsoil shall be 50%.

CONSTRUCTION:

Comply with Subsection 701.03 of MSHA unless noted otherwise on Contract Documents.

If the Bid Sheet includes a line item for the salvaging and/or re-use of topsoil, the Contractor must salvage and reuse existing topsoil to the maximum extent possible. Salvaging and placing of salvaged topsoil shall be performed in accordance with MSHA Subsections 701.03.02 and 701.03.03.

Topsoil must be placed according to the Contract and Task Order Documents. Thirty days prior to installation, the Contractor must provide the City with a soil test report from an accredited soils testing lab for the existing subsoil on site and a soils report for all to-be supplied topsoil. The soil test must verify the material is in accordance with MSHA section 920.01.02. Only topsoil meeting MSHA section 920.01.02 (and Contract limit on sand content) can be applied according to the Contract Documents.

Before topsoil placement, the subsoil must be tilled to a minimum depth of 6 inches. Where the subsoil is either highly acidic or composed of heavy clay, ground limestone must be spread according to the soil test results, or if not specified, at the rate of 4-8 tons/acre (200-400 lbs per 1000 sq ft) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil. Topsoil shall be tested and amended as per soil test recommendations.

During installation, topsoil must be uniformly distributed in a 6-8 inch layer and lightly compacted to a minimum thickness of 4 inches. Any irregularities in the surface resulting from the installation of topsoil or other operations must be corrected in order to prevent the formation of water pockets or depressions. The Contractor must minimize soil compaction during installation and avoid applying topsoil on frozen, muddy or other conditions that may be detrimental to proper grading and seedbed preparation. All necessary erosion and sediment control practices must be maintained as required by the CITY.

Temporary stockpiling and replacement of local top soil on a construction site will be covered under Excavation.

MEASUREMENT AND PAYMENT:

Payment per the unit shown on the Schedule of Unit Prices will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work.

Salvaging Topsoil will not be measured but the cost will be incidental to the Contract unit price for Class 1 Excavation.

SECTION 704 – TEMPORARY SEEDING AND TEMPORARY MULCHING

Line Item 704-01: Temporary Seed (SY)

DESCRIPTION:

Comply with Subsection 704.01 of MSHA unless noted otherwise on Task Order Documents.

This work consists of establishment of temporary ground cover as specified in the Task Order Documents.

This subsection also includes the installation of mulch or wood chips (with a maximum chip size of 2 inch in any dimension) to create or protect access road, to protect soil, and/or for root protection.

MATERIALS:

Comply with Subsection 704.02 of MSHA unless noted otherwise on Task Order Documents.

Seed must be fresh, clean, and a new seed crop composed of the following varieties mixed in the proportion shown:

Temporary Seed Mix – 100% Cereal Rye or 100% Annual Ryegrass

Straw must meet the specifications in MSHA Section 920.04.01.

CONSTRUCTION:

Comply with Subsection 704.03 of MSHA unless noted otherwise on Task Order Documents.

Acceptance of Newly Seeded Areas: Areas with temporary seeding must meet the approval of the City and all regulatory agencies (including the sediment control inspector). The Contractor must schedule all initial and follow up regulatory inspections required by the inspectors in a timely manner.

The Contractor shall submit a request for City Acceptance when at least 90 percent of the surface has germinating grass. An inspection will be conducted to verify completion. Acceptance will be granted when at least 90 percent of the surface has germinating grass. As needed, the Contractor shall perform overseeding, at its sole cost, to obtain the 90% grass coverage.

Watering to develop and maintain a good stand of grass, must be provided as described in Category 700 until Acceptance by the City and all regulatory agencies.

Mulch: Install wood chips or mulch to a minimum depth of 6 inch along all access paths. Chips/mulch shall be assumed to be obtained off-site but, as available can be generated by on-site clearing. The width of the mulch access must be, at a minimum, the tracking width of the equipment using the access routes plus two feet. Mulch placed beside an existing paved trail will be a minimum of 5 feet wide. When stabilizing an area for a week or longer, the Contractor must grade out ruts and low spots on a daily basis on all access ways and replenish access as required. Upon completion of construction activities, materials must be removed.

MEASUREMENT AND PAYMENT:

Payment per units shown on the Schedule of Unit Prices will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work

After City Acceptance, Temporary Seeding shall be measured and paid in accordance with the Task Order Unit Price per the Schedule of Unit Prices. Payment shall be full compensation for furnishing and incorporating seed including all, materials, labor, equipment, tools, maintenance and incidentals necessary to complete the work as specified in the Task Order Documents.

Temporary mulching shall be measured and paid in accordance with the Task Order Unit Price per the Schedule of Unit Prices. Payment shall be full compensation for furnishing and incorporating mulch including all, materials, labor, equipment, tools, maintenance and incidentals necessary to complete the work as specified in the Task Order Documents. The unit price shall include off-site removal of all related chip/mulch materials and all access road replenishing activities.

SECTION 708 – TURFGRASS SOD ESTABLISHMENT

Line Item 708-01: Sodding (SY)

DESCRIPTION:

Comply with Subsection 708.01 of MSHA unless noted otherwise on Task Order Documents.

This work consists of establishment of turfgrass sod as specified in the Task Order Documents.

MATERIALS:

Comply with Subsection 708.02 of MSHA unless noted otherwise on Task Order Documents.

Submittals:

1. At least one month prior to proposed installation date, the Contractor must submit documentation identifying the source of the sod and indicating that the sod was inspected and approved by the Maryland Department of Agriculture. Proposed sod must be approved by the City prior to installation.
2. Warranty: After the Contractor receives a Certificate of Initial Acceptance from the City, the Contractor must submit a written Warranty covering the establishment and maintenance of the turfgrass. The Warranty period shall begin from the date of the Certificate of Initial Acceptance

Sod

1. Sod must be of high quality and free from noxious weeds and excessive amounts of insects, diseases, and weed plants at the time of harvest. All sod must be laid on site no more than 36 hours after harvest. Sod must be 90/10 mix with 90% of any of the following varieties of tall fescue and at least 5% bluegrass:

Amigo	Chieftain	Guardian	Mesa	Rebel II
Apache	Finelawn 1	Hounddog	Mustang	Shenandoah
Bonanza	Finelawn 5GL	Jaquar	Olympic	Tribute

2. Sod pegs or stakes must be untreated wood pegs driven through and flush with sod. All slopes with grade 3 to 1 or steeper must be pegged at a minimum of 4 pegs per square yard of sod.
3. Water used in the establishment or sod must be free from any substance that is injurious to plant life.
4. Limestone applications must be determined by soil test results and recommendations and as approved by the City. Pulverized limestone must contain 50% calcium oxide equivalent (CaO or Ca Mg O) and ground to such fineness that at least 50% will pass through a 100 mesh sieve and 90% will pass through a 20 mesh sieve.
5. Fertilizer applications must be determined by soil test results and recommendations and as approved by the City. Fertilizer must be 100 percent organic based fertilizer and meet the following specifications:
 - a. Organic Fertilizer (5-3-4) – The organic fertilizer must be 100% organic based fertilizer (free of synthetic materials). The fertilizer may be derived of fish by-products, cottonseed meal, alfalfa meal, feather meal, rock phosphate, kelp meal, cocoa meal, blood meal, dried whey, natural nitrate of soda, natural sulfate of potash, and magnesium sulfate, and must meet the following chemical requirements:

Total Nitrogen (N)	5.00%
Water Soluble Nitrogen	1.50%
Water Insoluble Nitrogen	3.50%
Available Phosphate (P ₂ O ₅)	3.00%
Soluble Potash (K ₂ O)	4.00%

CONSTRUCTION:

Comply with Subsection 708.03 of MSHA unless noted otherwise on Task Order Documents.

1. Only areas disturbed by construction shall be sodded in accordance with the Task Order Documents. Undisturbed areas must NOT be sodded.
2. Soil must be tested by an accredited soil testing laboratory for acidity (pH), phosphorous (P₂O₅), potassium (K₂O), soluble salts concentrations and organic matter.
3. All areas to be sodded must conform to the finished grades as specified on the Task Order Documents and be free of all weeds, trash, debris, brush, clods, stones and other foreign materials larger than 3 inches in diameter or length that would interfere with seeding, or future grass maintenance. All gullies, washes or disturbed areas that develop subsequent to final dressing must be repaired prior to sodding.
4. Sodding must be performed during the following time periods unless otherwise approved by the City:
 - a. Spring: March 1 through June 1
 - b. Fall: September 1 through November 15
5. Sod must not be placed on frozen ground or when the temperature is 32°F/0°C or lower. Frozen sod must NOT be laid.
6. The soil must be irrigated within 12 to 24 hours prior to laying the sod. Sod should not be laid on soil that is dry and powdery. During periods of high temperature and/or drought, the soil must be watered immediately prior to laying the sod.
7. Before sodding, all soils must be loosened with rototillers, disk harrows, chisel plows, or other City-approved equipment, to a minimum depth of 4 inches. All stones over ¾ inch in any dimension must be removed from the top 4 inches of soil by use of a “Rock Hound” or other means. Fertilizer and limestone application may be accomplished at this time according to the results of the soil test. Fertilizer and limestone must be evenly distributed on the seed and/or sod bed areas, and worked into the depth of 3 inches.
8. All sod must be laid at right angles to slopes. Use longest possible rolls or lengths. Small pieces of sod may be used only to fill irregular areas; use only lengths of 4 feet or more in ditch inverts and swales. Sod joints must be staggered. All sod laid in ditches and/or swales must be staked.
9. Stake all sod on slopes of 3 to 1 or steeper with untreated wood pegs, or metal stakes. Stakes are to be driven flush with the sod.
10. Initial Watering must be provided as described in Category 700.
11. Rolling is imperative to a proper sodding operation and must be done prior to watering or after the ground has become firm. Rolling must be accomplished only with the standard City-approved turf equipment not over one ton.

Initial Acceptance: After the Contractor has completed its initial turfgrass sod installation (including soil preparation, soil loosening, fertilizing, staking, and initial watering), the Contractor shall submit a request for Initial Acceptance. A City Inspection will be conducted to verify completion. If complete, an Initial Acceptance Certificate will be issued at that time.

Warranty:

1. The Contractor must provide a written establishment, maintenance, and replacement Warranty on all turfgrass sod. The length of the Warranty shall be the longer of: a) one year or b) until adequate grass growth is obtained.
2. The Warranty period shall begin upon the date of the Initial Acceptance Certificate.
3. As necessary, the Contractor must re-sod all areas experiencing less than a 95% sod survival rate at its sole cost. As practicable, re--sodding shall be performed prior to May 15 of the year following Initial Acceptance.

Establishment and Maintenance of Newly Sodded Areas:

1. Maintenance of sod areas consists of fertilizing, watering, mowing, weeding, and re-sodding as necessary to obtain a City-approved stand of grass. These activities must continue until the work is finally accepted. If the Work, in its entirety, is not accepted by the following sodding season, it is the responsibility of the Contractor to refertilize all of the grassed areas during the following sodding season. The actual timing and rate of application of the refertilization must be approved by the City consistent with MSHA 708.03.05. Proper maintenance of the turf will continue until the project is finally accepted.
2. When watering sod, the Contractor must monitor the water needs of the sod to maintain adequate moisture in the upper 4 inches of the soil. All watering must be accomplished using a hose with nozzle end breaker or watering probe to prevent damage to the plants and disturbance of mulch during the watering operation. Water must be applied at low water pressure directly to each plant, allowing water to be absorbed until saturated, but without runoff.
3. Flooded, washed-out, rilled or otherwise damaged or defective areas of sod, mulch, grade, swales or berms must be reconstructed and all grades re-established in accordance with the grade plans or other Task Order Documents.
4. The Contractor must perform all mowing until Final Acceptance. Mowing must not remove more than one-half of the grass blade length. Heavy mowing, resulting in grass piles must be "double mowed" or piles must be removed by the Contractor. Height of the grass must be maintained at 3 inches, unless otherwise specified.
5. The following are examples of deficiencies that will result in the City's non-acceptance of the work:
 - a. Improper Grades:
 - Low or high spots on flat ball field-type areas.
 - Improper drainage such as swales, low areas, rip-rapped outlets and paved areas.
 - Washed out or rilled areas.
 - Exposed rock and log debris
 - b. Turf Grass Conditions:

- Poor or thin stand; improper application of sod, dead grass or sod; use of sod, other than specified in the specifications.
- Improper fertilizer application – Uneven spreading, insufficient amounts, failure to re-fertilize during extended acceptance.
- Persistent weeds established in turf areas.

Final Acceptance: When: 1) the Contractor has established adequate turfgrass establishment, and 2) a minimum of 11 months has elapsed since the date of the Initial Acceptance Certificate, the Contractor shall submit a request for Final Acceptance. City and/or Regulatory Inspections will be conducted to verify completion. If complete, Final Acceptance will be granted by the City at that time.

Final Acceptance will be granted when the turfgrass sod has grown at least 4 in., exhibits dark green color, has at least 95 percent coverage, and is firmly rooted into the soil.

If Establishment is not complete at the time of the Inspection, the Contractor shall take immediate steps to establish adequate coverage during the next planting season.

MEASUREMENT AND PAYMENT:

Payment per unit shown on the Schedule of Unit Prices will be full compensation for furnishing and installing sod, including maintenance and Warranty, all materials, labor, equipment, tools and incidentals necessary to complete the work as specified in this Section and on the Task Order Documents.

Turfgrass Sod Establishment, including preparing soil, applying fertilizer, placing sod and fasteners, mowing, and watering will be measured and paid for at the Task Order unit price per square yard.

The Contractor shall be paid 100% of the Unit Price after Initial Acceptance and the CITY's receipt of the Contractor's written Warranty.

The cost of any Warranty work is incidental to the Unit Price; the Contractor shall perform all Warranty work at its own cost. **If the Contractor fails to perform any Warranty work, the City has the right to perform the work and back-charge the Contractor.**

SECTION 709 – SOIL STABILIZATION MATTING

Line Item 709-01: Type A Soil Stabilization Matting (SY)

DESCRIPTION:

Comply with Subsection 709.01 of MSHA unless noted otherwise on Task Order Documents.

MATERIALS:

Comply with Subsection 709.02 of MSHA unless noted otherwise on Task Order Documents.

The Soil Stabilization Matting (SSM) must be Enkamat 7020 or City-approved equal and must be installed per manufacturer's specifications.

CONSTRUCTION:

Comply with Subsection 709.03 of MSHA unless noted otherwise on Task Order Documents.

Initial Acceptance: After the Contractor has completed its installation (including SSM installation, overlapping, keying-in, trenching, fastening, infilling, seeding, and initial watering), the Contractor shall submit a request for Initial Acceptance. A City Inspection will be conducted to verify completion. If complete, Installation Acceptance will be granted at that time.

Warranty: Soil stabilization matting shall be warranted as part of the turf seeding Warranty. See Section 705 for further information.

When turfgrass establishment seeding is not acceptable, remove soil stabilization matting. Prepare soil, reseed, and install new matting unless the original matting is approved by the City for reuse. Apply additional fertilizer or soil amendments as directed.

Final Acceptance: Final Acceptance for soil stabilization matting shall be granted by the City at the same time as when Final Acceptance is granted for Turfgrass Establishment (Section 705). See Section 705 for further information.

MEASUREMENT AND PAYMENT:

Payment per unit shown on the Schedule of Unit Prices will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work

The Contractor shall be paid 100% of the Unit Price after Initial Acceptance and the CITY's receipt of the Contractor's written Warranty.

The cost of any Warranty work is incidental to the Unit Price; the Contractor shall perform all Warranty work at its own cost. **If the Contractor fails to perform any Warranty work, the City has the right to perform the work and back-charge the Contractor.**

CATEGORY 900 – MATERIALS (MSHA-BASED)

GENERAL NOTE: The material specifications of MSHA Category 900 shall apply as referenced in other Specification Sections. The material specifications of MSHA Category 900 are not repeated below. Following are only modifications to the referenced MSHA material specifications:

SECTION 901 – AGGREGATES

- In addition to conformance with MSHA Section 901 (Tables 901 A and B), aggregate must conform to the following ASTM/AASHTO gradation table (M 43). Washed aggregate and river rock/gravel must also conform to ASTM C-33.

SIZES OF COARSE AGGREGATE, (AASHTO M 43) (inches)																
Size number	Nominal size square openings ⁽¹⁾	Amounts finer than each laboratory sieve (square openings), percentage by weight														
		4	3-½	3	2-½	2	1-½	1	¾	½	3/8	No. 4	No. 8	No. 18	No. 50	No. 100
1	3-½ to 1-½.	100	90 to 100		25 to 60		0 to 15		0 to 5							
2	2-½ to 1-½.			100	90 to 100	35 to 70	0 to 15		0 to 5							
24	3-½ to ¾.			100	90 to 100		25 to 60		0 to 10	0 to 5						
3	2 to 1.				100	90 to 100	35 to 70	0 to 15		0 to 5						
357	2 to No. 4.				100	95 to 100		35 to 70		10 to 30		0 to 5				
4	1-½ to ¾.					100	90 to 100	20 to 55	0 to 15		0 to 5					
467	1-½ to No. 4.					100	95 to 100		35 to 70		10 to 30	0 to 5				
5	1 to ½.						100	90 to 100	20 to 55	0 to 10	0 to 5					
56	1 to 3/8.						100	90 to 100	40 to 75	15 to 35	0 to 15	0 to 5				
57	1 to No. 4.						100	95 to 100		25 to 60		0 to 10	0 to 5			
6	¾ to 3/8.							100	90 to 100	20 to 55	0 to 15	0 to 5				
67	¾ to No. 4.							100	90 to 100		20 to 55	0 to 10	0 to 5			
68	¾ to No. 8.							100	90 to 100		30 to 65	5 to 25	0 to 10	0 to 5		
7	½ to No. 4.								100	90 to 100	40 to 70	0 to 15	0 to 5			
78	½ to No. 8.								100	90 to 100	40 to 75	5 to 25	0 to 10	0 to 5		
8	3/8 to No. 8.									100	85 to 100	10 to 30	0 to 10	0 to 5		
89	3/8 to No. 16.									100	90 to 100	20 to 55	5 to 30	0 to 10	0 to 5	
9	No. 4 to No. 16.										100	85 to 100	10 to 40	0 to 10	0 to 5	
10	No. 4 to 0 ⁽²⁾ .										100	85 to 100				10 to 30

⁽¹⁾ In inches, except where otherwise indicated. Numbered sieves are those of the United States Standard Sieve Series.
⁽²⁾ Screenings. Where standard sizes of coarse aggregate designated by two or three digit numbers are specified, the specified gradation may be obtained by combining the appropriate single digit standard size aggregates by a suitable proportioning device which has a separate compartment for each coarse aggregate combined. Blending must be done as directed by the Laboratory.

- SUBMITTALS:** The Contractor must submit, for City approval, sample aggregate material a minimum of thirty days prior to starting work.
- Sand (Fine Aggregate):** In addition to conformance with MSHA Section 901 (Tables 901 A and B), sand for bioretention facilities and other applicable infiltration facilities must be double-washed and otherwise conform to ASTM Standard C33 for fine aggregate.

SECTION 921.09 – GEOTEXTILES

1. Geotextile Filter Fabric (Non-Woven): In addition to conformance with MSHA Subsection 921.09, Non-Woven geotextile filter fabric must conform to Class C per Table H-24-1 in the MDE “2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control.” The fabric must have minimum grab strength of 200 pounds and minimum puncture strength of 80 pounds. Note: This item will not be paid when fabric is incidental to other work (e.g., riprap).

CATEGORY 1000 – GENERAL (NON MSHA-BASED)

GENERAL NOTE: The specification sections in this Category are not based on the MSHA.

SECTION 1001 – TEMPORARY CHAIN LINK FENCING

Line Item 1001-01: 6 Foot Temporary Chain Link Fencing (LF)

DESCRIPTION:

This section specifies the requirements for temporary construction fencing needed to secure construction sites for resident safety and resource protection.

MATERIALS:

Unless otherwise indicated, type of temporary chain link fencing shall be Contractor's option. Following types are acceptable:

1. New materials or previously used chain link fencing in good condition.
2. Posts: Galvanized steel pipe of diameter to provide rigidity. Post must be suitable for setting in concrete footings, driving into ground, anchoring with base plates, or inserting in pre-cast concrete blocks.
3. Fabric: Woven galvanized steel wire mesh. Provide in continuous lengths to be wire tied to fence posts or prefabricated into modular pipe-framed fence panels.
4. Gates: Provide personnel and vehicle gates of the quantity and size indicated on the Contract Documents or required for functional access to site. Fabricate of same material as used for fencing.
5. Vehicle gates:
 - a. Minimum width: 20 feet to allow access for emergency vehicles.
 - b. Capable of manual operation by one person.
 - c. Locked outside working hours

CONSTRUCTION:

Install fencing for safety and to mark limits of disturbance as per the Contract Documents. The fence must be removed from the site with all related materials upon project completion.

1. Installation of temporary fencing must not deter or hinder access to fire hydrants.
 - a. Maintain 3 feet diameter clear space around fire hydrants.
 - b. Where fire hydrant or hose connection is blocked by fencing, provide access gate.
2. Chain link posts:
 - a. Space 10 feet maximum.
 - b. Drive posts, set in holes and backfill, or anchor in pre-cast concrete blocks. Posts must be set in a manner sufficient to ensure against toppling under high winds.
 - c. For soft and unstable ground conditions, cast concrete plug around post.
 - d. Posts over pavement: Use steel post plates or pre-cast concrete blocks.
 - e. Gate posts: Use bracing or concrete footings to provide rigidity to accommodate size of gate.

3. Fabric: Securely attach to posts.
4. Gates: Install with required hardware.
5. Maintain fencing in good condition and check stability regularly, including after strong winds. If damaged, immediately repair.
6. Remove temporary fencing upon completion of Work or when no longer required for security or control. Backfill holes, compact and restore area to original or final condition. Holes in pavement must be surfaced to match existing paving. Repair all damage caused by installation of temporary fencing.

MEASUREMENT AND PAYMENT:

Payment per unit shown on the Schedule of Unit Prices will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work. The price must include off-site removal of all related materials. The cost of gates shall be incidental to the fence cost.

SECTION 1007 – CERTIFIED TESTING AND INSPECTION SERVICES

DESCRIPTION:

The Contractor must provide Certified Inspection and Testing services as required to determine all material compliance with Contract and Task Order Document requirements including testing and inspection services required by Task Order permits. These services include but are not limited to: allowable soil bearing pressures, compaction tests, verification of adequacy of fill material, and concrete material testing as specified on the Contract and Task Order Documents.

MATERIALS: NA

CONSTRUCTION:

The provider(s) of all inspection and testing services, including geotechnical and/or structural inspection and testing services, must be approved by the City prior to commencement of the Work. All inspection and testing reports, including geotechnical and material reports must be clearly produced and submitted by the Contractor to the City and Engineering Consultant as part of the construction Record Documents.

The Contractor must provide compaction and geotechnical analysis of fill material placed under this Contract.

This Section requires the services of a Certified Engineer registered in the State of Maryland as well as the technical staff under the supervision of the Certified Engineer conducting soil tests in accordance with the requirements of the Contract Documents.

MEASUREMENT AND PAYMENT:

Certified Testing and Inspection Services will not be paid for separately; they shall be included in the unit costs for related line items requiring inspection(s) and/or testing.

Payment for related line items may be withheld by the City pending receipt of certified inspection/testing reports indicating compliance with Contract and Task Order Documents.

CATEGORY 1300 – REPAIRS AND MAINTENANCE (NON MSHA-BASED)

GENERAL NOTE: The specification sections in this Category are not based on the MSHA.

SECTION 1304– REPAIR OF EXISTING CONCRETE STRUCTURES

Line Item 1304-01: Epoxy Injection of Cracks (LF)

DESCRIPTION:

This section includes the requirements to repair existing concrete structures including grouting cracks and joints, epoxy injection, and parging. Note: Repairs involving masonry or concrete reconstruction will be covered separately under the appropriate Line Items.

MATERIALS:

Quality Assurance and Applicable Standards:

1. Grout and Concrete Repairs must comply with:
 - a. AASHTO: T277, M235.
 - b. ASTM: C273, C293, C666, C679, C884, C920, D412, D624, D1622, D1623, D2126, D2127, D2240, D2842, D4121, E96, G3.
 - c. Federal Specification: TT-S-00227E
 - d. MSHA 902.11(c)
2. Submittals: Submit manufacturer’s specifications and recommendations for City’s approval.
3. Delivery, Storage, and Handling of the product must be in accordance with manufacturer’s recommendations.
4. City-Approved Equal or Approved Equivalent must be submitted and approved in accordance with the General Conditions of Construction Contract before use by contractor.

General Material Information:

1. Bonding Agent and Reinforcement Protection: Three-component, epoxy modified, cementitious bonding agent and anti-corrosion coating used for bonding plastic concrete to existing concrete and protecting existing reinforcement must be “Sika Armatec 110 EpoCem” as manufactured by the Sika Corporation, or equivalent as approved by the City.
2. Concrete Protective Seal: Two component, polymer-modified cement-based protective and waterproofing slurry coating used for sealing cracks in existing concrete where noted, must be “SikaTop Seal 107” as manufactured by the Sika Corporation, or equivalent as approved by the City.
3. Polyurethane Grout: Expanding, polyurethane, liquid chemical grout used for preventing water infiltration and sealing cracks in existing concrete where noted, must be “SikaFix HH” as manufactured by the Sika Corporation, or equivalent as approved by the City.
4. Portland Cement Mortar: Two component, polymer-modified, cementitious, non-sag mortar used for repairing spalls in existing concrete must be “Sika Top 123 Plus” as manufactured by the Sika Corporation, or equivalent as approved by the City.

5. Elastomeric Joint Sealant: Two component, polyurethane-based, elastomeric sealant used for sealing existing joints in concrete where noted, must be “Sikaflex – 2c, NS/SL” as manufactured by the Sika Corporation, or equivalent as approved by the City.
6. Adhesive Primer: Adhesive primer used in conjunction with elastomeric joint sealant must be “Sikaflex Primer 35” as manufactured by the Sika Corporation, or equivalent as approved by the City.
7. Non-Shrink Grout: Non-corrosive, non-shrink grout must be Master Builders Company Embeco 153 Grout or City-approved equal.
8. Quartzite Aggregate: Quartzite aggregate must be supplied by epoxy grout manufacturer and used as epoxy grout filler when required.
9. Epoxy Grout:
 - a. Two component epoxy-resin used for crack repairs to existing concrete where noted and for epoxy grouting of bolts and dowels for horizontal services where noted, must be “Sikadur 35 Hi-Mod LV” as manufactured by the Sika Corp., or equivalent as approved by the City.
 - b. Two component epoxy-resin used in conjunction with the City-approved epoxy-resin for crack repairs to existing concrete where noted, and for epoxy grouting of bolts and dowels for vertical and overhead surfaces where noted, must be “Sikadur 31, Hi-Mod Gel”, as manufactured by the Sika Corp., or equivalent as approved by the City.
10. Parging: Large gaps or cracks in concrete must be filled with a non-shrink grout meeting MSHA 902.11(c) specifications. Mortar must be QUIKRETE® Non-Shrink Precision Grout or City-approved equal. Before mortaring any cracks, each crack must be washed clean with a wet brush. Immediately prior to placing the mortar, the concrete must be thoroughly wetted. Free water must not be allowed to come in contact with the mortar until well after initial set (more than 1 day is recommended). The grout must be protected from rapid moisture loss (cured with wet burlap).
11. Prior to the start of any concrete repair work, the repair areas and appropriate repair method must be delineated by the City.
12. Cracks measuring 1/32 inch wide or wider must be repaired with the City-approved epoxy grout. Cracks measuring smaller than 1/32 inch wide must be repaired with the City-approved concrete protective seal. However, any cracks exhibiting visible signs of water infiltration must be repaired with City-approved polyurethane grout as directed by the City.
13. Prior to repairing spalls with Portland cement mortar, the deteriorated concrete must be removed to sound concrete by use of a 30 lb, maximum weight, chipping hammer to the limits as directed by the City. After completion of the removal of deteriorated concrete, detergent cleaning followed by sandblasting and air blast may be required as determined by the City in order to remove foreign materials detrimental to achieving bond.
14. The cracks and adjacent substrate must be clean, sound, and free from frost. All bond inhibiting substances including dust, laitance, grease, curing compounds, waxes, impregnations, foreign particles, and efflorescence must be removed from all surfaces adjacent to and in the area to be repaired by mechanical means (e.g., sandblasting, high pressure water blasting, etc.) as approved by the City.
15. All preparations to the area to be repaired must be done in accordance with all manufacturers’ specifications pertaining to the City-approved repair material, and as directed by the City.

16. All repair material must be mixed, applied, handled, installed, etc. in accordance with the manufacturers' specifications and as directed by the City.
17. Elastomeric joint sealant for use in concrete pipe joint repairs must be limited to a maximum depth of repair of ½ inch, or as directed by the City. Prior to beginning repairs, water must be temporarily diverted until joint repairs are complete and as directed by the City.
18. Before parging a crack, it must be washed clean with a wet brush. Immediately prior to placing the mortar, the concrete must be thoroughly wetted. Free water must not be allowed to come in contact with the mortar until well after initial set (more than 1 day is recommended). The grout must be protected from rapid moisture loss (cured with wet burlap).

MEASUREMENT AND PAYMENT:

Payment per Unit Price shown on the Schedule of Unit Prices will include all labor, materials, tools, equipment and incidentals.

SECTION 1308– REPAIR OF EXISTING CORRUGATED METAL CULVERTS

Line Item 1308-01: Seal Openings, Separations and Joints with Polyurea Elastomer Spray Coating (SF)

Line Item 1308-02: Corrugated Metal Pipe Saddle Plates (EA)

DESCRIPTION:

This section includes the requirements to repair existing corrugated metal pipe including injecting openings with structural foam to fill voids behind culvert and sealing of joints and openings with a fast set, rapid curing, 100% solids, flexible, two-component polyurea elastomer spray coating material. Note: Repairs involving masonry or concrete reconstruction will be covered separately under the appropriate Line Items.

MATERIALS:

Polyurea elastomer spray coating material shall be VersaFlex FSS 50DM or CITY approved equal. The polyurea elastomer spray coating material shall be appropriate for the indicated corrective measures.

1. Submittals: Submit manufacturer's specifications and recommendations for City's approval.
2. Delivery, Storage, and Handling of the product must be in accordance with manufacturer's recommendations.
3. City-Approved Equal or Approved Equivalent must be submitted and approved in accordance with the General Conditions of Construction Contract before use by contractor.
4. Installation shall be done by a manufacturer approved installer.

General Material Information:

1. Prior to the start of any corrugated metal pipe repair work, the repair areas and appropriate repair method must be delineated by the City.
2. The cracks and adjacent substrate must be clean, sound, and free from frost. All bond inhibiting substances including dust, laitance, grease, curing compounds, waxes, impregnations, foreign particles, and efflorescence must be removed from all surfaces adjacent to and in the area to be repaired by mechanical means (e.g., sandblasting, high pressure water blasting, etc.) as approved by the City. The corrugated metal pipes shall also be cleaned in accordance with the manufacturer's recommendations.
3. All preparations to the area to be repaired must be done in accordance with all manufacturers' specifications pertaining to the City-approved repair material, and as directed by the City.
4. All repair material must be mixed, applied, handled, installed, etc. in accordance with the manufacturers' specifications and as directed by the City.

Corrugated metal saddle plate shall be a galvanized corrugated metal plate matching the inside diameter of the existing pipe and conform to the requirement of ASTM A760 and AASHTO M36. The flat gasket between the existing pipe and saddle plate shall be 3/8-inch thick conform to the requirements of ASTM D1056 and AASHTO M36. The saddle plate shall be bolted to the existing corrugated metal pipe in accordance with manufacturer's recommendations. Bolts and nuts shall be galvanized and conform to the requirements of ASTM A449 and ASTM A563 Grade C, respectively.

CONSTRUCTION:

Install per manufacturer's recommendations and City's approval. The saddle plate shall extend a minimum of 2 feet beyond the openings being covered.

MEASUREMENT AND PAYMENT:

Payment per Unit Price shown on the Schedule of Unit Prices will include all labor, materials, tools, equipment and incidentals.

SECTION 1309– CENTRIFUGALLY CAST CONCRETE PIPE STRUCTURAL LINING

Line Item 1309-01: Centrifugally Cast Concrete Pipe Structural Lining (LF)

DESCRIPTION:

This section includes the requirements for structural lining of the existing corrugated metal culverts utilizing centrifugally cast concrete.

MATERIALS:

The centrifugally cast concrete pipe structural lining shall be Action Products Marketing (APM) Permaform Centi-Pipe

1. Submittals: Submit manufacturer's specifications and recommendations for City's approval.
2. Delivery, Storage, and Handling of the product must be in accordance with manufacturer's recommendations.
3. City-Approved Equal or Approved Equivalent must be submitted and approved in accordance with the General Conditions of Construction Contract before use by contractor.
4. Installation shall be done by a manufacture approved installer.

General Material Information:

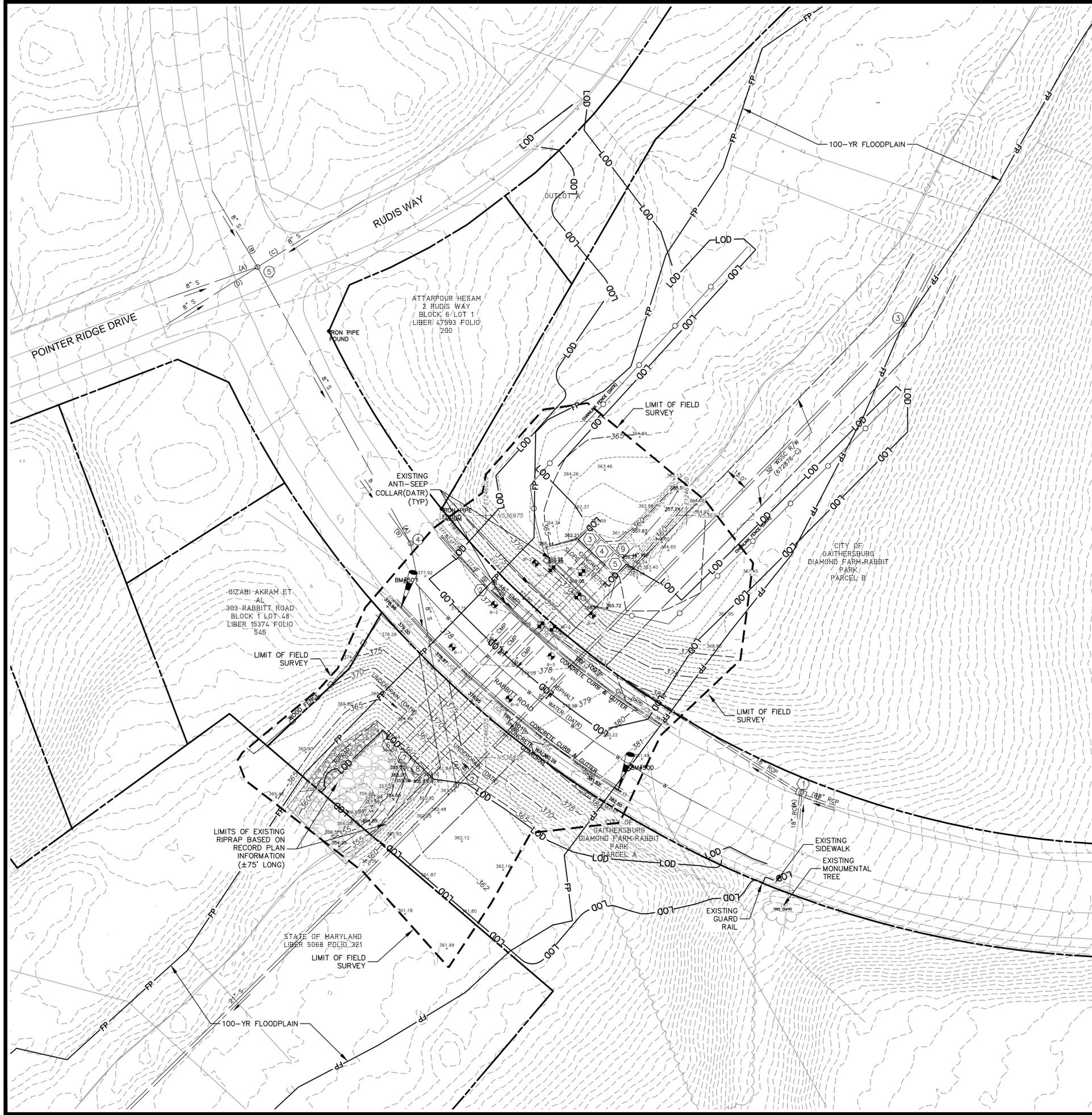
1. Prior to the start of any corrugated metal pipe repair work, the repair areas and appropriate repair method must be delineated by the City.
2. The cracks and adjacent substrate must be clean, sound, and free from frost. All bond inhibiting substances including dust, laitance, grease, curing compounds, waxes, impregnations, foreign particles, and efflorescence must be removed from all surfaces adjacent to and in the area to be repaired by mechanical means (e.g., sandblasting, high pressure water blasting, etc.) as approved by the City. The corrugated metal pipes shall also be cleaned in accordance with the manufacturer's recommendations.
3. All preparations to the area to be repaired must be done in accordance with all manufacturers' specifications pertaining to the City-approved repair material, and as directed by the City.
4. All repair material must be mixed, applied, handled, installed, etc. in accordance with the manufacturers' specifications and as directed by the City.

CONSTRUCTION:

Install per manufacturer's recommendations and City's approval.

MEASUREMENT AND PAYMENT:

Payment per Unit Price shown on the Schedule of Unit Prices will include all labor, materials, tools, equipment and incidentals.



MARYLAND STATE PLANE
NAD 83/2011

LEGEND

- LOD — PROJECT LIMIT OF DISTURBANCE
- ⊙ STORM MANHOLE
- ⊕ STORM INLET
- ⊗ LIGHT POLE
- ⊙ GROUND SHOT
- ⊙ SANITARY SEWER MANHOLE
- ⊙ FIRE HYDRANT
- ⊙ TRAVERSE
- ⊙ SOIL BORING LOCATION
- ⊙ TEST HOLE LOCATION
- ⊙ BENCHMARK
- — — — — PROPERTY LINE
- — — — — STORM DRAIN
- — — — — SANITARY SEWER
- — — — — ELECTRIC PAINT MARK
- — — — — WATER LINE PAINT MARK
- — — — — CHAIN LINK FENCE
- — — — — WOOD FENCE
- — — — — GUARD RAIL
- — — — — DATR
- — — — — DATA ACCORDING TO RECORDS

TRAVERSE DATA:

NO	NORTHING	EASTING	ELEV	DESCRIPTION
100	536877.2280	1246095.9610	379.22	REBAR AND CAP
101	536841.1790	1246049.4200	379.73	REBAR AND CAP

BENCHMARK DATA:

BM	ELEV	DESCRIPTION
500	382.22	SQUARE CUT AT TOP OF CURB
501	378.70	SQUARE CUT AT TOP OF CURB

SEWER DATA:
SHOWN AS ②

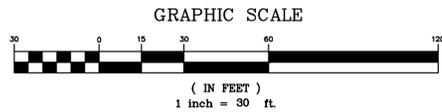
- TOP=360.26
INV IN=349.61
INV OUT=349.56
- TOP=362.59
(A) INV IN=353.08
(B) INV IN=352.88
INV OUT=352.85
- TOP=371.05
INV IN=356.45
INV OUT=356.35
- TOP=378.11
(A) INV IN=354.11
(B) INV IN=367.21
INV OUT=354.00
- TOP=383.56
(A) INV IN=372.31
(B) INV IN=369.06
(C) INV IN=369.06
(D) INV IN=368.95
INV OUT=368.90

STORM DRAIN DATA:
SHOWN AS ①

- CURB INLET
TOP=389.27
(A) INV IN=384.93
(B) INV IN=383.85
INV OUT=382.37
- CURB INLET
TOP=377.49
INV OUT=369.43
- 96" CMP
INV=356.49
- 96" CMP
INV=356.37
- 96" CMP
INV=356.46
- 96" CMP
INV=355.85
- 96" CMP
INV=355.72
- 96" CMP
INV=355.63
- 48" ORIFICE
INV OUTSIDE=356.16
INV INSIDE=356.20

NOTES:

- SURVEY PREPARED BY A. MORTON THOMAS AND ASSOCIATES, DATED APRIL 2016.
- HORIZONTAL DATUM: NAD 83/2011 FROM GPS OBSERVATIONS
- VERTICAL DATUM: NAVD 88 FROM GPS OBSERVATIONS.
- PROPERTY LINES SHOWN ARE BASED ON VISIBLE FIELD EVIDENCE AND AVAILABLE RECORDS AND SHOULD NOT BE CONSIDERED A BOUNDARY SURVEY.
- UTILITIES SHOWN ARE BASED ON FIELD INVESTIGATION, VISIBLE FIELD EVIDENCE, AND AVAILABLE RECORDS. RECORDS FOR SOME UTILITIES WERE NOT OBTAINED.



CITY OF GAITHERSBURG
DEPARTMENT OF PUBLIC WORKS
FINAL APPROVAL

APPLICATION NO. SITE-11196-2016
DATE 08/19/16
BY *Alia Rumpover*

AMT

A. MORTON THOMAS AND ASSOCIATES, INC.
CONSULTING ENGINEERS
800 KING FARM BLVD, 4TH FL, ROCKVILLE, MD 20850
(301) 581-2584 FAX: (301) 581-0414
EMAIL: AMT@AMTENGINEERING.COM

CONSULTANTS

KIM ENGINEERING
1500 Caton Center Drive, Suite C
Baltimore, MD 21227
(410) 501-3669 FAX: (410) 696-1615

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32151, EXPIRATION DATE 07/18/2017.

REGISTRATION STAMP

OWNER

CITY OF GAITHERSBURG

Gaithersburg
800 Rabbit Road Gaithersburg, MD
20878-1600 (301) 258-6370
(301) 258-6375 FAX

PROJECT TITLE

**RABBIT ROAD
CULVERT REPAIRS**
GAITHERSBURG, MARYLAND

REVISIONS

MARK	DATE	DESCRIPTION

AMT FILE NO.	15-0290.003
DATE:	AUGUST 18, 2016
SCALE:	1"=30'
DESIGNED BY:	MAE
DRAWN BY:	SAL
CHECKED BY:	MAE

FINAL SUBMISSION

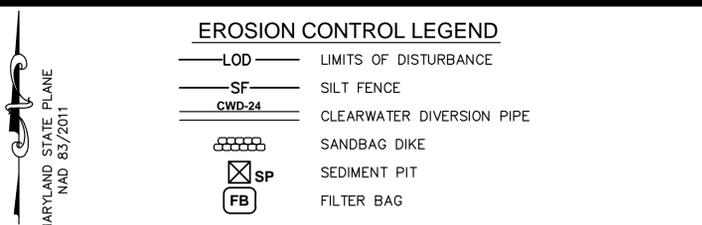
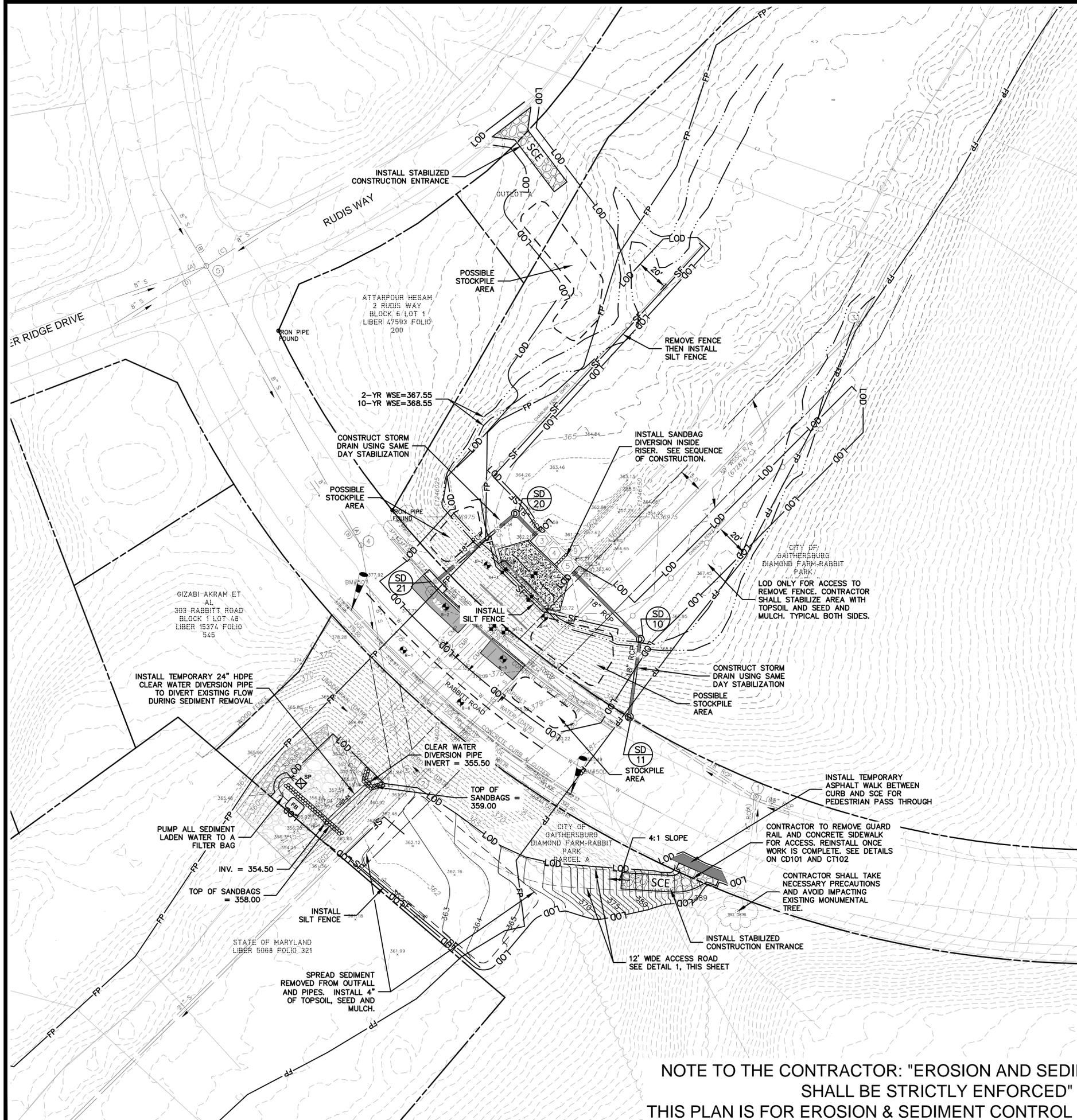
SHEET TITLE

**EXISTING
CONDITIONS
PLAN**

SHEET

VF101

SHEET 4 OF 15

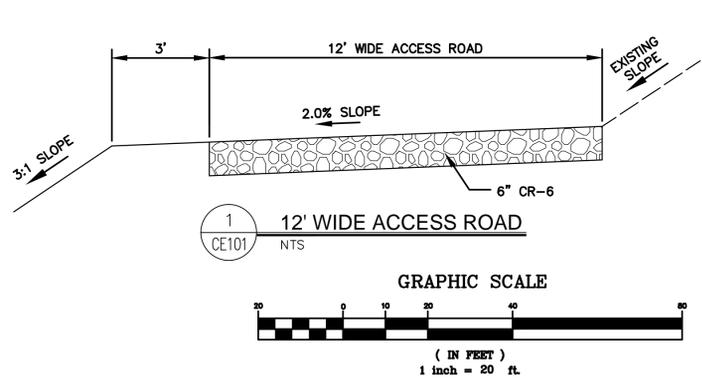


EROSION AND SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION

1. THE CONTRACTOR SHALL NOTIFY THE CITY OF GAITHERSBURG INSPECTOR AND CONTRACTING OFFICER FOR PRE-CONSTRUCTION MEETING AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION.
2. FIELD MARK LIMITS OF DISTURBANCE PRIOR TO CLEARING OF SITE OR INSTALLATION OF SEDIMENT CONTROL DEVICES.
3. CULVERT AND OUTFALL SEDIMENT REMOVAL AND CULVERT REPAIRS.
 - 3.1. DURING A 5-DAY NOAA DRY WEATHER FORECAST, INSTALL SCE, SILT FENCE AND SANDBAGS. 24-INCH DIVERSION PIPE AND BLOCK THE INSIDE OF THE RISER STRUCTURE WITH SANDBAGS TO PREVENT RUN-OFF FROM ENTERING CELLS #1 AND #2. THE SANDBAGS SHALL EXTEND TO THE WEIR CREST OF THE RISER.
 - 3.2. FLUSH AND REMOVE THE SEDIMENT FROM CULVERT CELLS #1 AND #2. THE CONTRACTOR SHALL ALSO REMOVE ALL SEDIMENT FROM THE OUTFALL AREA INDICATED. THE SEDIMENT SHALL BE SPREAD OUT IN THE AREA INDICATED. THE EXISTING VEGETATION SHALL BE MOWED AND THE SEDIMENT SHALL BE TILLED INTO THE EXISTING GROUND. ONCE ALL SEDIMENT IS SPREAD OUT, THE CONTRACTOR SHALL INSTALL 4-INCHES OF TOP SOIL AND MULCH. THE SEED TYPE SHALL BE MATCH THE EXISTING VEGETATION AT THE SITE.
 - 3.3. FOR CELLS #1 AND #2, THE CONTRACTOR SHALL CONDUCT THE CULVERT SPOT REPAIRS AS INDICATED ON SHEET CS502. CONTRACTOR SHALL ALSO REMOVE EXISTING DETERIORATED CONCRETE APRON AND INSTALL NEW RIPRAP AS SHOWN ON CS101.
 - 3.4. ONCE THE REPAIRS ON CELLS #1 AND #2 ARE COMPLETE, RECONFIGURE THE SANDBAGS TO BLOCK CELL #3 TO PREVENT RUN-OFF FROM ENTERING THE CULVERT AND CONDUCT THE SPOT REPAIRS INDICATED ON SHEET CS502.
 - 3.5. ONCE ALL SEDIMENT REMOVAL AND CULVERT REPAIR WORK IS COMPLETE, WITH THE APPROVAL FROM THE CITY INSPECTOR, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT CONTROL MEASURES AND STABILIZE THE AREAS DISTURBED BY THEIR REMOVAL. ONCE THE SANDBAGS CAN BE REMOVED, THE CONTRACTOR SHALL CUT OPEN ALL SANDBAGS AND SPREAD AND MIX THE SAND IN THE SAME AREA AS THE SEDIMENT DISPOSAL. ALL BAGS SHALL BE REMOVED AND DISPOSED OF. THE CONTRACTOR SHALL INSTALL THE REMOVED GUARDRAIL AND RECONSTRUCT THE PORTION OF SIDEWALK DISTURBED.
4. NEW STORM DRAIN, CONCRETE SLAB REPAIRS AND FENCE IMPROVEMENTS.
 - 4.1. DURING A NOAA 5-DAY DRY WEATHER FORECAST THE CONTRACTOR SHALL REMOVE THE EXISTING FENCE AND STABILIZE THE AREA DISTURBED BY ITS REMOVAL WITH TOP SOIL, SEED AND MULCH. INSTALL SILT FENCE AS SHOWN.
 - 4.2. THE CONTRACTOR SHALL REMOVE THE EXISTING CONCRETE SLAB AND RECONSTRUCT AS INDICATED ON SHEET CS503. THE CONTRACTOR SHALL NOTIFY THE CITY AND ENGINEER 72-HOURS IN ADVANCE OF THE SLAB REMOVAL SO THEY CAN BE AT THE SITE TO INSPECT THE CONDITIONS BELOW THE SLAB.
 - 4.3. CONSTRUCT NEW STORM DRAIN PIPING AS SHOWN. ONCE CONSTRUCTED, INSTALL SF AS INDICATED AND ABANDON EXISTING FIELD CONNECTIONS TO EXISTING CMP PIPE AS SHOWN. RECONSTRUCT PAVEMENT AND INSTALL NEW CURB. STABILIZE ALL NON-PAVED DISTURBED AREAS AT THE END OF EACH DAY WITH SOIL STABILIZATION MATTING.
 - 4.4. ONCE THE NEW SLAB AND STORM DRAIN ARE INSTALLED, WITH THE APPROVAL FROM THE CITY INSPECTOR, INSTALL NEW CHAIN LINK FENCE AND REMOVAL ALL SEDIMENT CONTROL MEASURES AND STABILIZE ALL AREAS DISTURBED BY THEIR REMOVAL.

EROSION AND SEDIMENT CONTROL NOTES:

1. ALL AREAS SHALL BE STABILIZED AT THE END OF EACH WORK DAY WITH SOIL STABILIZATION MATTING UNLESS THE RUNOFF DRAINS TO AN APPROVED EROSION CONTROL DEVICE.
2. THE STORM DRAIN FIELD CONNECTION ABANDONMENT AND PAVEMENT INSTALLATION IS TO BE CONDUCTED DURING A NOAA 5-DAY DRY WEATHER FORECAST.
3. SEE SHEET CE501 AND CE502 FOR STANDARD EROSION CONTROL NOTES AND DETAILS.
4. CONTRACTOR SHALL CLEAR ALL STREETS FREE OF SEDIMENT AT THE END OF EACH WORK DAY. ALL EFFORTS ARE TO BE MADE TO PREVENT SEDIMENT FROM GETTING ON THE STREETS. ALL SEDIMENT SPILLED, DROPPED OR TRACKED ONTO THE ROAD MUST BE REMOVED IMMEDIATELY BY VACUUMING, SCRAPING OR SWEEPING. WHEN WASHING WATER IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE THAT DRAINS TO AN APPROVED SEDIMENT CONTROL DEVICE.



CITY OF GAITHERSBURG
DEPARTMENT OF PUBLIC WORKS
FINAL PLAN APPROVAL
SEDIMENT & EROSION CONTROL
APPLICATION NO. SEC-7325-2016
APPROVAL DATE 08/19/16
BY *Oliver J. Jumper*
PLAN APPROVAL EXPIRES AT THE TIME OF ASSOCIATED SITE PLAN

NOTE TO THE CONTRACTOR: "EROSION AND SEDIMENT CONTROL SHALL BE STRICTLY ENFORCED"
THIS PLAN IS FOR EROSION & SEDIMENT CONTROL PURPOSES ONLY.



CONSULTANTS
KIM ENGINEERING
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Baltimore, MD 21227
(410) 501-9569 FAX: (410) 656-1615

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32151, EXPIRATION DATE 07/18/2017.



OWNER
CITY OF GAITHERSBURG

800 Rabbit Road Gaithersburg, MD
20878-1600 (301) 258-6370
(301) 258-6375 FAX

PROJECT TITLE
RABBITT ROAD CULVERT REPAIRS
GAITHERSBURG, MARYLAND

REVISIONS		
MARK	DATE	DESCRIPTION

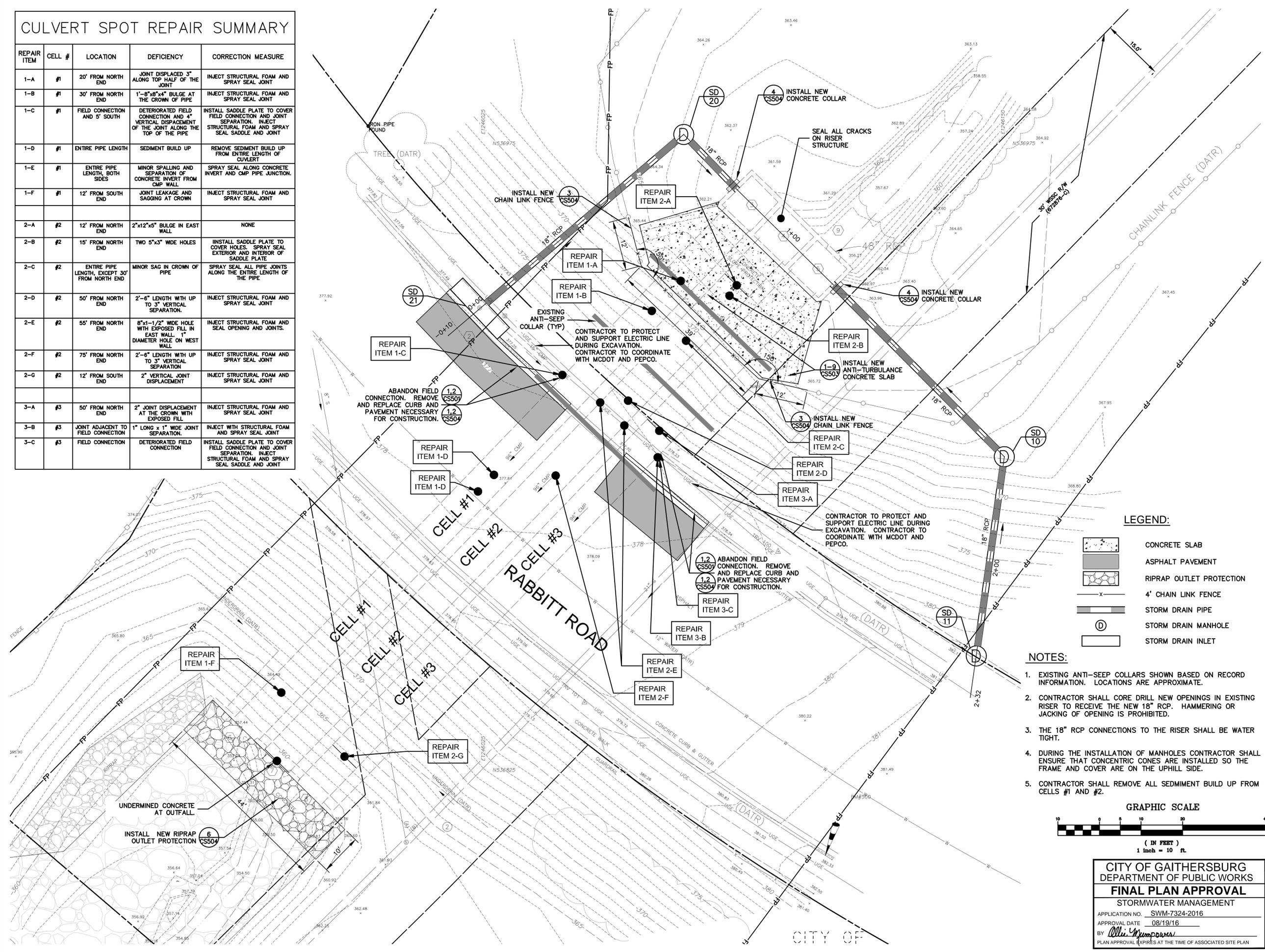
AMT FILE NO.	15-0290.003
DATE:	AUGUST 18, 2016
SCALE:	1"=20'
DESIGNED BY:	MAE
DRAWN BY:	SAL
CHECKED BY:	MAE

FINAL SUBMISSION
SHEET TITLE
EROSION AND SEDIMENT CONTROL PLAN

SHEET
CE101
SHEET 6 OF 15

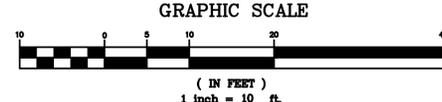
CULVERT SPOT REPAIR SUMMARY

REPAIR ITEM	CELL #	LOCATION	DEFICIENCY	CORRECTION MEASURE
1-A	#1	20' FROM NORTH END	JOINT DISPLACED 3" ALONG TOP HALF OF THE JOINT	INJECT STRUCTURAL FOAM AND SPRAY SEAL JOINT
1-B	#1	30' FROM NORTH END	1'-8"x8"x4" BULGE AT THE CROWN OF PIPE	INJECT STRUCTURAL FOAM AND SPRAY SEAL JOINT
1-C	#1	FIELD CONNECTION AND 5' SOUTH	DETERIORATED FIELD CONNECTION AND 4" VERTICAL DISPLACEMENT OF THE JOINT ALONG THE TOP OF THE PIPE	INSTALL SADDLE PLATE TO COVER FIELD CONNECTION AND JOINT SEPARATION. INJECT STRUCTURAL FOAM AND SPRAY SEAL SADDLE AND JOINT
1-D	#1	ENTIRE PIPE LENGTH	SEDIMENT BUILD UP	REMOVE SEDIMENT BUILD UP FROM ENTIRE LENGTH OF CULVERT
1-E	#1	ENTIRE PIPE LENGTH, BOTH SIDES	MINOR SPALLING AND SEPARATION OF CONCRETE INVERT FROM CMP WALL	SPRAY SEAL ALONG CONCRETE INVERT AND CMP PIPE JOINTS.
1-F	#1	12' FROM SOUTH END	JOINT LEAKAGE AND SAGGING AT CROWN	INJECT STRUCTURAL FOAM AND SPRAY SEAL JOINT
2-A	#2	12' FROM NORTH END	2"x12"x3" BULGE IN EAST WALL	NONE
2-B	#2	15' FROM NORTH END	TWO 5"x3" WIDE HOLES	INSTALL SADDLE PLATE TO COVER HOLES. SPRAY SEAL EXTERIOR AND INTERIOR OF SADDLE PLATE
2-C	#2	ENTIRE PIPE LENGTH, EXCEPT 30' FROM NORTH END	MINOR SAG IN CROWN OF PIPE	SPRAY SEAL ALL PIPE JOINTS ALONG THE ENTIRE LENGTH OF THE PIPE
2-D	#2	50' FROM NORTH END	2'-6" LENGTH WITH UP TO 3" VERTICAL SEPARATION.	INJECT STRUCTURAL FOAM AND SPRAY SEAL JOINT
2-E	#2	55' FROM NORTH END	8"x1-1/2" WIDE HOLE WITH EXPOSED FILL IN EAST WALL. 1" DIAMETER HOLE ON WEST WALL	INJECT STRUCTURAL FOAM AND SEAL OPENING AND JOINTS.
2-F	#2	75' FROM NORTH END	2'-6" LENGTH WITH UP TO 3" VERTICAL SEPARATION	INJECT STRUCTURAL FOAM AND SPRAY SEAL JOINT
2-G	#2	12' FROM SOUTH END	2" VERTICAL JOINT DISPLACEMENT	INJECT STRUCTURAL FOAM AND SPRAY SEAL JOINT
3-A	#3	50' FROM NORTH END	2" JOINT DISPLACEMENT AT THE CROWN WITH EXPOSED FILL	INJECT STRUCTURAL FOAM AND SPRAY SEAL JOINT
3-B	#3	JOINT ADJACENT TO FIELD CONNECTION	1" LONG x 1" WIDE JOINT SEPARATION.	INJECT WITH STRUCTURAL FOAM AND SPRAY SEAL JOINT
3-C	#3	FIELD CONNECTION	DETERIORATED FIELD CONNECTION	INSTALL SADDLE PLATE TO COVER FIELD CONNECTION AND JOINT SEPARATION. INJECT STRUCTURAL FOAM AND SPRAY SEAL SADDLE AND JOINT



- LEGEND:**
- CONCRETE SLAB
 - ASPHALT PAVEMENT
 - RIPRAP OUTLET PROTECTION
 - 4' CHAIN LINK FENCE
 - STORM DRAIN PIPE
 - STORM DRAIN MANHOLE
 - STORM DRAIN INLET

- NOTES:**
- EXISTING ANTI-SEEP COLLARS SHOWN BASED ON RECORD INFORMATION. LOCATIONS ARE APPROXIMATE.
 - CONTRACTOR SHALL CORE DRILL NEW OPENINGS IN EXISTING RISER TO RECEIVE THE NEW 18" RCP. HAMMERING OR JACKING OF OPENING IS PROHIBITED.
 - THE 18" RCP CONNECTIONS TO THE RISER SHALL BE WATER TIGHT.
 - DURING THE INSTALLATION OF MANHOLES CONTRACTOR SHALL ENSURE THAT CONCENTRIC CONES ARE INSTALLED SO THE FRAME AND COVER ARE ON THE UPHILL SIDE.
 - CONTRACTOR SHALL REMOVE ALL SEDIMENT BUILD UP FROM CELLS #1 AND #2.



CITY OF GAITHERSBURG
DEPARTMENT OF PUBLIC WORKS
FINAL PLAN APPROVAL
STORMWATER MANAGEMENT
APPLICATION NO. SWM-7324-2016
APPROVAL DATE 08/19/16
BY *Alii Humphreys*
PLAN APPROVAL EXPIRES AT THE TIME OF ASSOCIATED SITE PLAN



CONSULTANTS
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OWNER
CITY OF GAITHERSBURG

800 Rabbitt Road Gaithersburg, MD
20878-1600 (301) 258-6370
(301) 258-6375 FAX

PROJECT TITLE
**RABBITT ROAD
CULVERT REPAIRS**
GAITHERSBURG, MARYLAND

REVISIONS

MARK	DATE	DESCRIPTION

AMT FILE NO. 15-0290.003
DATE: AUGUST 18, 2016
SCALE: 1"=10'
DESIGNED BY: MAE
DRAWN BY: SAL
CHECKED BY: MAE

FINAL SUBMISSION
SHEET TITLE
**CULVERT REPAIR
PLAN**

SHEET
CS101
SHEET 8 OF 15

CONSULTANTS

KIM ENGINEERING

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Baltimore, MD 21227
(410) 501-9569 FAX: (410) 656-1615

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REGISTRATION STAMP



OWNER

CITY OF GAITHERSBURG



Gaithersburg

800 Rabbit Road Gaithersburg, MD
20878-1600 (301) 258-6370
(301) 258-6375 FAX

PROJECT TITLE

**RABBIT ROAD
CULVERT REPAIRS**
GAITHERSBURG, MARYLAND

REVISIONS

MARK	DATE	DESCRIPTION

AMT FILE NO.	15-0290.003
DATE:	AUGUST 18, 2016
SCALE:	AS SHOWN
DESIGNED BY:	MAE
DRAWN BY:	SAL
CHECKED BY:	MAE

FINAL SUBMISSION

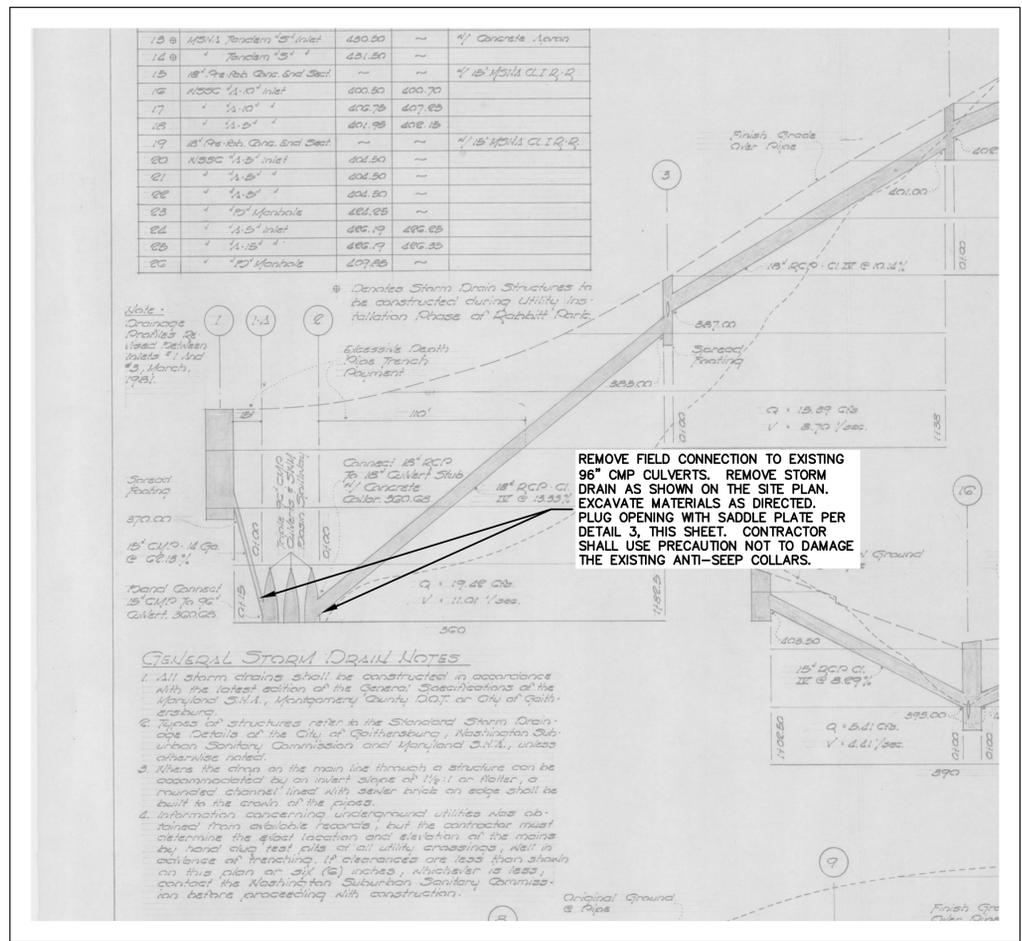
SHEET TITLE

**CULVERT REPAIR
DETAILS**

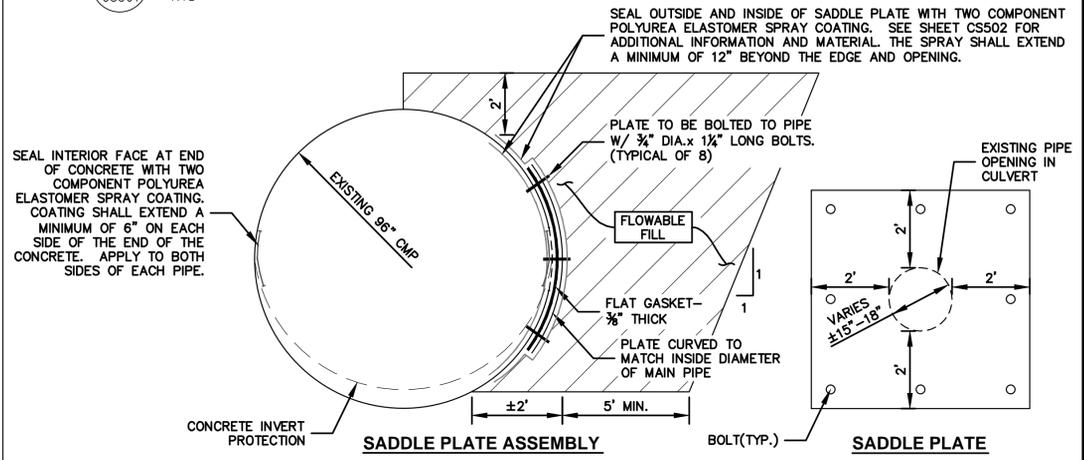
SHEET

CS501

SHEET 10 OF 15



2 EXISTING CONDITIONS FIELD CONNECTION



- NOTES:**
- SADDLE PLATE SHALL BE GALVANIZED AND CONFORM TO THE REQUIREMENTS OF ASTM A760 AND AASHTO M36.
 - FLAT GASKET SHALL CONFORM TO THE REQUIREMENTS OF ASTM D1056 AND AASHTO M36.
 - BOLTS AND NUTS SHALL BE GALVANIZED AND CONFORM TO THE REQUIREMENTS OF ASTM A449 AND ASTM A563 GRADE C RESPECTIVELY.
 - SADDLE PLATE SHALL EXTEND A MINIMUM OF 2' BEYOND THE EXISTING PIPE OPENING.
 - INSTALL PLATE AND BOLTS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 - THE TWO COMPONENT POLYUREA ELASTOMER SPRAY SHALL BE VERSAFLEX FSS 50DM, OR APPROVED EQUAL.

3 SADDLE PLATE INSTALLATION

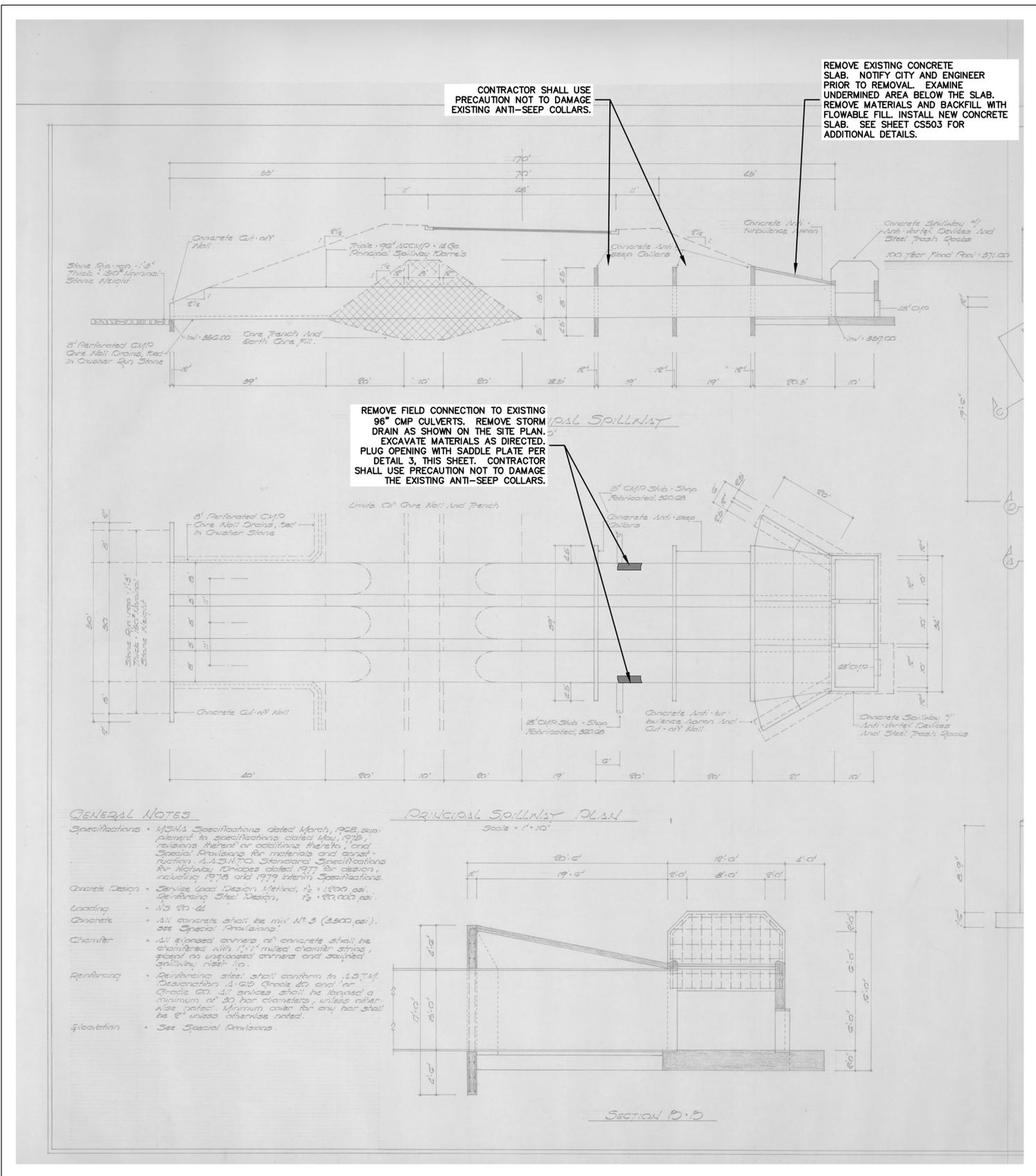
**CITY OF GAITHERSBURG
DEPARTMENT OF PUBLIC WORKS
FINAL PLAN APPROVAL**

STORMWATER MANAGEMENT

APPLICATION NO. SWM-7324-2016
APPROVAL DATE 08/19/16

BY *Ali Mumpress*

PLAN APPROVAL EXPIRES AT THE TIME OF ASSOCIATED SITE PLAN



1 EXISTING CONDITIONS FIELD CONNECTION

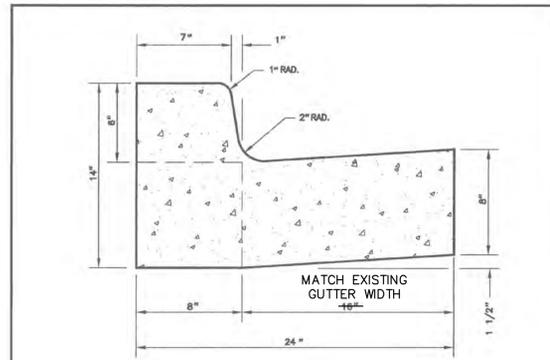
**CITY OF GAITHERSBURG
DEPARTMENT OF PUBLIC WORKS
FINAL PLAN APPROVAL**

STORMWATER MANAGEMENT

APPLICATION NO. SWM-7324-2016
APPROVAL DATE 08/19/16

BY *Ali Mumpress*

PLAN APPROVAL EXPIRES AT THE TIME OF ASSOCIATED SITE PLAN

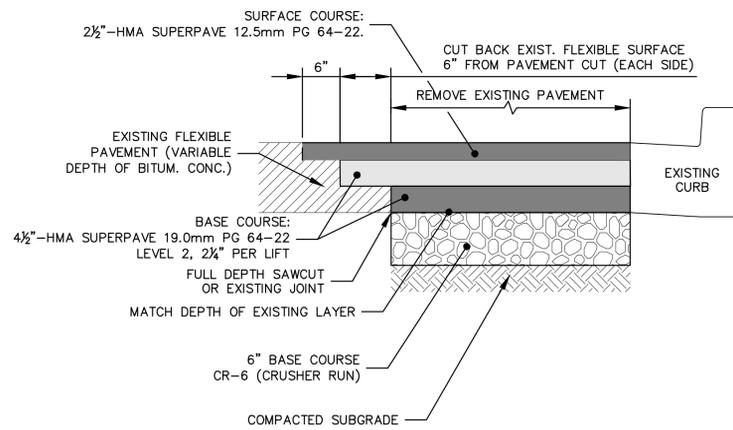


GENERAL NOTES

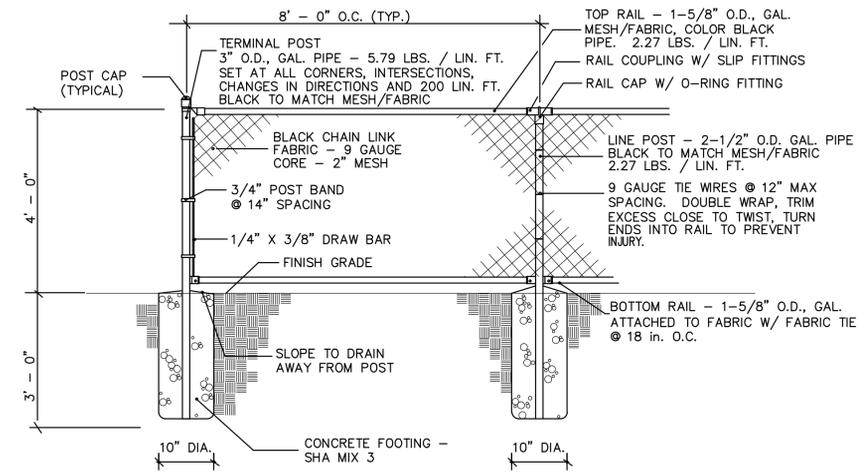
- REFER TO MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR MATERIALS, METHODS OF CONSTRUCTION AND EXPANSION JOINT LOCATIONS.
- THIS STANDARD SHALL BE USED ON PRIMARY RESIDENTIAL, ARTERIAL AND BUSINESS DISTRICT ROADS AS WELL AS CURB RETURNS AND INLET THROTTLES.
- WHENEVER STANDARD MC-101.01 CURB IS USED IN CONJUNCTION WITH THIS STANDARD, A TEN FOOT TRANSITION SHALL BE PROVIDED FROM STANDARD MC-100.01 TO STANDARD MC-101.01 FOR CURB RETURNS AND CURB SECTIONS WHICH INCLUDE INLETS.
- THE STANDARD DISTANCE BETWEEN JOINTS SHALL BE TEN FEET (MAXIMUM AND MINIMUM DISTANCES SHALL BE THIRTEEN FEET AND FIVE FEET RESPECTIVELY).
- EXPANSION JOINT MATERIAL SHALL BE 1/2 INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING TWO-COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMERIC TYPE SEALANT COMPLYING WITH ASTM-C926.

APPROVED DATE: 11/20/06 DIRECTOR, DEPT. OF PUBLIC WORKS & TRANSPORTATION CHIEF, DIV. OF CAP. DEV.	REVISED DATE: 04/2006	MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION COMBINATION CONCRETE CURB AND GUTTER TYPE A STANDARD NO. MC-100.01
--	--------------------------	---

1 CONCRETE CURB AND GUTTER
CS504 NTS

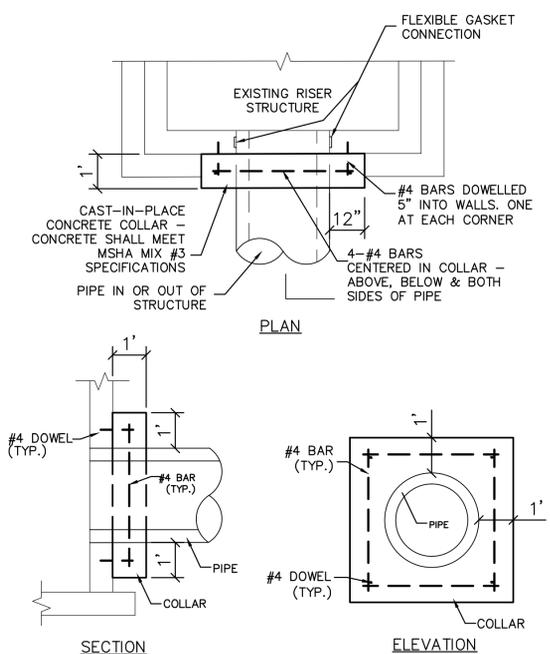


2 ASPHALT PAVEMENT SECTION
CS504 NTS

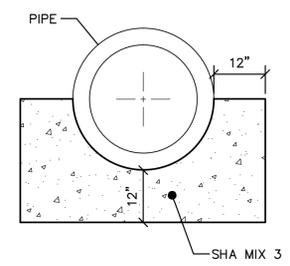


- NOTES:**
- PROVIDE FENCE FABRIC WITH KNUCKLED SELVAGE ALONG EDGES.
 - SECURE FENCE FABRIC WITH 6 GA. TIES COLOR TO MATCH FENCE FABRIC @ 12" O.C. ALONG SIDES AND RAILS.
 - MOUND AND SLOPE ALL CONCRETE FOOTINGS AROUND POSTS FOR POSITIVE DRAINAGE.
 - PROVIDE 3" O.D. POSTS AT TERMINAL POSTS, CORNER POSTS, INTERSECTIONS, CHANGES IN DIRECTION AND EVERY 200 LIN. FT. FOR ALL CHAIN LINK FENCING
 - POST COLOR - BLACK
 - FENCE FABRIC - VINYL COATED BLACK CHAIN LINK

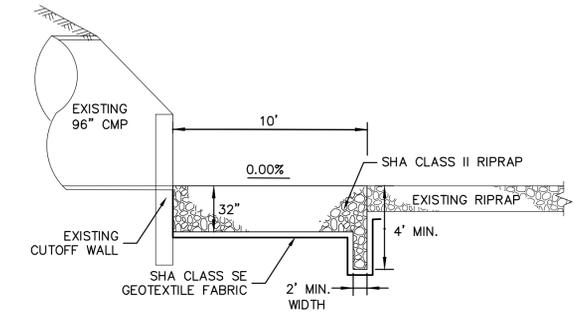
3 4' CHAIN LINK FENCE WITH 3" TERMINAL POST
CS504 NTS



4 CAST IN PLACE COLLAR DETAIL
CS504 NTS



5 CONCRETE CRADLE
CS504 NTS



6 RIPRAP OUTLET PROTECTION
CS504 NTS

CITY OF GAITHERSBURG
DEPARTMENT OF PUBLIC WORKS
FINAL PLAN APPROVAL
STORMWATER MANAGEMENT
APPLICATION NO. SWM-7324-2016
APPROVAL DATE 08/19/16
BY *Alii Humphreys*
PLAN APPROVAL EXPIRES AT THE TIME OF ASSOCIATED SITE PLAN

CONSULTANTS
KIM ENGINEERING
1500 Caton Center Drive, Suite C
Baltimore, MD 21227
(410) 501-3550 FAX: (410) 656-1615

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32151, EXPIRATION DATE 07/18/2017.



OWNER
CITY OF GAITHERSBURG

800 Rabbitt Road Gaithersburg, MD
20878-1600 (301) 258-6370
(301) 258-6375 FAX

PROJECT TITLE
**RABBITT ROAD
CULVERT REPAIRS**
GAITHERSBURG, MARYLAND

REVISIONS		
MARK	DATE	DESCRIPTION

AMT FILE NO.	15-0290.003
DATE:	AUGUST 18, 2016
SCALE:	AS SHOWN
DESIGNED BY:	MAE
DRAWN BY:	SAL
CHECKED BY:	MAE

FINAL SUBMISSION

SHEET TITLE
SITE DETAILS
SHEET
CS504
SHEET 13 OF 15

**RABBITT ROAD CULVERT
REPAIR PROJECT**

EXHIBIT B

NOISE ORDINANCE



Exhibit B

Sec. 15-8. - Disturbing the peace.

It shall be unlawful for any person or business entity to operate or permit the operation of noise producing instruments, devices, or equipment in such a manner or at such times that the peace and quiet of the residents of the city is disturbed. The following actions or conduct shall constitute public nuisances which disturb the peace, and are prohibited:

- (a) Except in the case of emergency repairs and other unique circumstances specifically approved by the city manager. The operation of lawnmowers, power tools, bulldozers, construction or building equipment, or other power driven labor-saving devices between the hours of 9:00 p.m. and 7:00 a.m. on weekdays, or between the hours of 9:00 p.m. and 9:00 a.m. on weekends and federal holidays, which are audible beyond the nearest common property line.
- (b) The playing or operation of radios, stereos, television sets or similar devices between the hours of 10:00 p.m. and 8:00 a.m. which are audible beyond the confines of the dwelling unit within which such sound is played or relayed; or if such devices are placed or operated in an outdoor area, which are audible beyond the nearest common property line at the hours specified herein.
- (c) Noise discharged from any motor vehicle or motorcycle, or the operation of the same in such a manner as to disturb the peace and quiet of residents of the city. This prohibition shall include engine, exhaust, or tire noise, music and improper use of the horn.

(Ord. No. 0-5-95, 6-5-95)