

**SANITARY SEWER -**

**HOPMEADOW STREET – PROJECT NO. WPCA-16-04  
SIMSBURY, CONNECTICUT**

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**INVITATION TO BID  
TOWN OF SIMSBURY  
(EQUAL OPPORTUNITY EMPLOYER)**

**Project: HOPMEADOW STREET – SANITARY SEWER PROJECT WPCA 16-04**

Sealed bids, endorsed "**HOPMEADOW STREET – SANITARY SEWER Project WPCA 16-04**" will be received at the office of the Finance Director, 933 Hopmeadow St., (Route 10/202), Simsbury, Connecticut, until **Thursday, November 10, 2016 at 10:00 a.m. (EST)** at which time they will be opened in public by the Director of Finance. Bids received after the time set for the opening may be rejected.

**"NONDISCRIMINATION IN EMPLOYMENT"**

Bidders on this work will be required to comply with the President's EXECUTIVE ORDER NO. 11246. The requirements for Bidders and Contractors under this Order are explained in the Specifications.

Included in this work is the installation of approximately 432 linear feet of 8" sanitary sewer, 24 linear feet of 6" sanitary sewer, three(3) manholes and related work.

NOTE: The Bidder agrees that the unit prices bid may be applied to an increase in the amount of work for the various items bid.

Copies of the contract documents, drawings and specifications may be obtained from the Town website at: <http://www.simsbury-ct.gov/finance/pages/public-bids-and-rfp>

The right is reserved to reject any or all bids or to waive defects in same if it be deemed in the best interest of the Town of Simsbury. The Town of Simsbury is an Equal Opportunity Employer.

Thomas J Roy, P.E.  
Director of Public Works

## INFORMATION FOR BIDDERS

1. Sealed BIDS will be received by the Director of Finance, for the Town of Simsbury (Herein called the "OWNER"), at the Town Office, 933 Hopmeadow St., Simsbury, CT (Mailing address P.O. Box 495, Simsbury, CT 06070 until **10:00 a.m.** prevailing time on **Thursday, November 10, 2016**, and then publicly opened and read aloud.
2. Each BID must be submitted in a sealed envelope, addressed to the Director of Finance, designated on the outside as BID for: "**Town of Simsbury, HOPMEADOW STREET – SANITARY SEWER Project WPCA 16-04**".

Each envelope should also bear, on the outside, the name of the BIDDER and his address. If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to the OWNER, at the above address.

3. Each BID must be made on attached Bid Forms and returned intact. BIDDERS will state, both in writing and in figures, the proposed price for each separate item of the work called for in the annexed blank, by which prices will be compared. If any price is omitted, the blank may be filled with the highest price named by any BIDDER for that item or the BID may be rejected. Only one copy of the BID form is required.
4. Any BID may be withdrawn prior to the above scheduled time for the opening of BIDS or authorized postponement thereof. Any BID received after the time and date specified shall not be considered. No BIDDER may withdraw a BID within 30 days after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the OWNER and the BIDDER.
5. Each BID must be accompanied by a certified check or bank draft, payable to the Town of Simsbury, or a satisfactory BID Bond executed by the bidder and an acceptable surety, in an amount equal to five (5%) percent of the total Base Bid. The certified check, bank draft, or Bid Bond shall be retained as a guarantee that if the proposal is accepted, the Bidder will post with the OWNER, a Performance, Labor and Material Bond in the full amount of the contract, submit the required insurance certificates, and to sign a contract. Attorneys-in-fact who sign Bonds must file with each Bond a certified and effective dated copy of their Power of Attorney.
  - a. As soon as the Bid prices have been compared, the OWNER will return the BONDS of all except the three lowest responsible BIDDERS. When the agreement is executed, the bonds of the two remaining unsuccessful BIDDERS will be returned. The BID BOND of the successful BIDDER will be retained until the Performance, Labor, and Material Bond have been submitted and the required insurance certificates have been filed, after which it will be returned. If a BIDDER refuses to sign a contract or cannot obtain satisfactory Bonds, the Owner will retain his Bid security as liquidated damages, but not as a penalty.
  - b. The OWNER reserves the right to waive any informality in, or to reject any or all proposals or to accept any proposal which, in their opinion, is in the best interest of the Town of Simsbury whether or not such proposal is the lowest bid. The contractor must be responsible and qualified and have previously done work of a similar nature.

- c. The OWNER may make such investigations as he deems necessary to determine the ability of the BIDDER to perform the WORK, and the BIDDER shall furnish to the OWNER all such information and data for this purpose as the OWNER may request. The OWNER reserves the right to reject any BID if the evidence submitted by, or investigation of, such BIDDER fails to satisfy the OWNER that such BIDDER is properly qualified to carry out the obligations of the Agreement and to complete the WORK contemplated therein.
  - d. A conditional qualified Bid will not be accepted.
6. The Contractor to whom the contract shall be awarded must file the requisite Bonds, and certificate of INSURANCE as specified in the General Conditions, and execute said contract in triplicate within ten (10) calendar days from the date when NOTICE OF AWARD is delivered to the BIDDER, and in case of failure to do so, the person or firm will be considered to have abandoned the contract, and the CERTIFIED CHECK or BID BOND shall be forfeited to the Town of Simsbury.
  7. BIDDERS must satisfy themselves of the accuracy of the estimated quantities in the BID schedule by examination of the site and a review of the drawings and specifications including ADDENDA. After BIDS have been submitted, the BIDDER shall not assert that there was a misunderstanding concerning the quantities of WORK or of the nature of the WORK to be done. The failure of omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from obligation in respect to his BID.
  8. Should a BIDDER find any discrepancy or omission in the Plans or Specifications or is in doubt as to the meaning of any portion of them, he shall notify the ENGINEER, who will then instruct all BIDDERS in writing regarding the points in question.
  9. The OWNER, within ten (10) days of receipt of the requisite Bonds, acceptable Insurance Certificates and Agreement signed by the party to whom the Agreement was awarded, shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the OWNER not execute the Agreement within such period, the BIDDER may by WRITTEN NOTICE, withdraw his signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notices by the OWNER.
  10. The NOTICE TO PROCEED shall be issued within ten (10) days of the execution of the Agreement by the OWNER. Should there be reasons why the NOTICE TO PROCEED cannot be issued within such period, the time may be extended by mutual agreement between the OWNER AND CONTRACTOR. If the NOTICE TO PROCEED has not been issued within the ten (10) day period or within the period mutually agreed upon, the CONTRACTOR may terminate the Agreement without further liability on the part of either party.
  11. The Contractor to whom this contract shall be awarded will be required to commence work on the ground within ten days from the date of the NOTICE TO PROCEED from the OWNER notifying the Contractor to begin work and shall complete the work in 60 calendar days. The BIDDER, if he accepts the contract and fails to complete the contract within the allotted time, must pay the sum of \$250.00 as liquidated damages for each consecutive calendar day until the completion of the contract.

12. The OWNER will be responsible for payment in accordance with the terms of the Contract. The OWNER reserves the right to retain five percent (5%) of the final contract price for a period not to exceed 6 months from the date of the acceptance of the project.
13. The CONTRACT DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the OWNER or any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve him from fulfilling any of the conditions of the Contract.
14. Further, the BIDDER agrees to abide by the requirements under Executive Order No. 11246, as amended, including specifically the provisions of the equal opportunity clause set forth in the SUPPLEMENTAL GENERAL CONDITIONS.
15. The LOW BIDDER shall supply the names and addresses of major material SUPPLIERS and SUBCONTRACTORS when requested to do so by the OWNER.
16. The BIDDER'S attention is directed to the fact that all applicable Federal and State law, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.
17. No amount shall be included in the BID for Connecticut State Sales Tax or for Federal Excise Tax.

T:/projects/15162/2016-BidDocs/InfoForBidders.docx

HOPMEADOW STREET SANITAR SEWER PROJECT WPAC 16-04

**SCHEDULE OF PRICES**

ITEM NO.	PAYMENT CLAUSE # *	ITEMS OF WORK	ESTIMATED QUANTITIES	UNIT PRICES BID		AMOUNT**
				WORDS	FIGURES	
1		CONN DOT Permit	LS			
2	2.12	Supply, set-up & move cones, barricades & construction signs	LS			
3	2.12	Maintenance & Protection of Traffic - Flagman	10 hours.			
4	2.12	Maintenance & Protection of Traffic – Uniformed Police	20 hours.			
5	4.11	Remove Concrete walk	6 LF			
6	4.11	Concrete walk-finished surface	6 LF			
7	1.2	Test Pits	2 ea.			
8	2.5	Rock Excavation (trench)	10 c.y.			
9.	2.6	Excavation Below Grade	10 c.y.			
10.	2.7	Selected Material	20 c.y.			
11	3.17	Air and Camera Testing	Lump Sum			

CONTRACTORS SIGNATURE \_\_\_\_\_

HOPMEADOW STREET SANITAR SEWER PROJECT WPCA 16-04

12.	3.18	8" PVC, SDR 35, including excavation, bedding, fabric, stone cover disposal of excess material and trench compaction and dust control	432 l.f.		
13.	3.18	6" PVC, including excavation, bedding, fabric, stone cover disposal of excess material and trench compaction and dust control, end caps & wood markers	30 l.f.		
14.	3.19	8" x 6" PVC wye	5 ea.		
15.	3.24	Core existing Manhole	1 ea.		
16.	3.23	Manholes installation	3 ea.		
17.	4.4	Box out trench area, supply & place process aggregate base, including compaction and disposal of excess material (bike path)	10 s.y.		
18.	4.4a	Box out trench area, supply & place 6" class 4 premix base, including compaction and disposal of excess material (Route 10)	25 s.y.		
19.	4.5	Saw cut trench pavement	90 l.f.		
20.	4.8	2" Class 1 bituminous concrete pavement in trenches, including joint sealer	5 Tons		

HOPMEADOW STREET SANITAR SEWER PROJECT WPCA 16-04

21.	4.8	1 ½ “ Class 2 bituminous concrete pavement on trenches, including joint sealer	6 Tons		
	4.10	Temporary Patch	4 Tons		
23.	4.9	Bituminous curb repair	20 l.f.		
24.	4.6	Mill Trench area	Lump Sum		
25.	5.6 & 5.8	Lawn repair, including erosion control and hay mulch	Lump Sum		
26.		Survey and Layout	Lump Sum		
			<b>TOTAL BID:</b>		

\* The number given is the clause number in the Specifications which defines the payment for the ITEM.

\*\* The Bidder is requested to fill in computed “Amount”: In cases of discrepancy between Unit Prices Bid written in words and the Unit Prices Bid written in figures, the Unit Prices Bid written in words will govern. In case of a discrepancy between the unit prices bid and amount, the Unit Prices will govern.

**Alternate Items’ Prices**

ITEM NO.	PAYMENT CLAUSE # *	ITEMS OF WORK	ESTIMATED QUANTITIES	UNIT PRICES BID		AMOUNT**
				WORDS	FIGURES	
1.	3.18	6” PVC, including excavation, bedding, fabric, stone cover disposal of excess material and trench compaction and dust control(lateral connection for Asian Fusion)	64 l.f.			
2.	3.18	6” PVC, including excavation, bedding, fabric, stone cover disposal of excess material and trench compaction and dust control (lateral connection for Benny’s restaurant)	42 l.f.			



**Bidder's Proposal**

Contractor's Name\_\_\_\_\_

Address\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name\_\_\_\_\_

Signature

Name\_\_\_\_\_

Printed

Title\_\_\_\_\_

Phone Number\_\_\_\_\_

**TOWN OF SIMSBURY**  
**CONTRACT**  
**Sewer Extension, Hopmeadow Street, Simsbury CT**  
**Project -WPCA 16-04**

THIS AGREEMENT, made this \_\_\_\_ day of November, 2016 by and between THE TOWN OF SIMSBURY, 933 Hopmeadow Street, Simsbury, Connecticut hereinafter referred to as the OWNER and \_\_\_\_\_. Inc with an address at \_\_\_\_\_ hereinafter referred to as the CONTRACTOR

WITNESSETH:

That for and in consideration of the mutual covenants and promises between the parties hereto, it is hereby agreed that:

The CONTRACTOR will furnish all of the materials and supplies, equipment, and labor and other services necessary in conformance with these contract documents for the construction and completion of the project described in general as follows: Sewer Extension, Hopmeadow Street, Simsbury CT Project -WPCA 16-04, as defined in the Standard Instruction for Bidders.

1. **COMPLETION OF WORK.** The Contractor shall commence the work covered by this contract within ten (10) calendar days after the date of receipt of the Notice to Proceed and shall complete the same within 60 calendar days unless the period for completion is extended as provided for in the General Conditions.
2. **CONTRACT SUM.** The Owner shall pay the Contractor for the performance of said work the lump sum of \$\_\_\_\_\_, subject to additions or deductions provided herein in conformity with the bid schedule of prices.
3. The Contract Documents include the following:
  - (a) Notice and Instructions to Bidders dated October 25, 2016
  - (b) Bidder's Proposal dated \_\_\_\_\_, 2016
  - (c) Notice of Award dated \_\_\_\_\_, 2016
  - (d) Contract
  - (e) General Conditions
  - (f) Supplemental General Conditions
  - (g) Plans prepared by Ed Lally and Associates, Inc. entitled: "560, 563, 568, 570 & 632 Hopmeadow Street" Simsbury, Connecticut. Dated September 12, 2016.

Specifications prepared by the Town of Simsbury.

(i) Special Provisions

5. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions and in such amounts as required by the Contract Documents.
6. This Contract shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Contract in duplicate, on the date first above written.

**OWNER:**

Signed, Sealed and Delivered  
in the presence of:

\_\_\_\_\_  
Town of Simsbury  
BY: Lisa L. Heavner  
First Selectman

**CONTRACTOR:**

\_\_\_\_\_  
BY:

**PROJECT:**

**Information Needed for  
Communications on the Project**

Name of Company:

Location of Company Office:

Street

City/State

Zip Code

Mailing Address of Company Office (if different than location):

Street

City/State

Zip Code

Phone No. of Company's Office (include area code)

Phone No. of Company's Project Office (if applicable)

Company Official Responsible for this Project:

Name

Title

Phone No. ( )

Project Supervisor or Foreman:

Name

Phone No. ( )

Person to be Contacted in Emergencies after Work Hours:

Name

Phone No. ( )

Person to be Contacted in Emergencies on Weekends and Holidays:

Name

Phone No. \_( )

If any changes to the above information occur during the progress of the work, the Public Works Director shall be immediately notified.

**Town of Simsbury  
Sanitary Sewer  
HOPMEADOW STREET  
Project WPCA 16-04  
OCTOBER 2016**

**SUPPLEMENTAL CONTRACT SECTION**

The Simsbury Code of Ethics is attached to, and is part of, the Contract Documents. All Contractors shall sign the Acknowledgement Form.

**TOWN OF SIMSBURY**

**Acknowledgement Form  
and  
Charter Section 1103  
Code of the Town of Simsbury**

**ACKNOWLEDGEMENT FORM**

I have read Section 1103 of the Charter of the Town of Simsbury, the Code of Ethics Ordinance, and the Guidelines issued thereunder. I understand my responsibilities as a Contractor retained by the Town of Simsbury, and I am in compliance with the Charter and the Code of Ethics. I have indicated in the space below any areas of conflict should they arise in matters before our board, commission, agency or department, and I agree to report any future conflicts under the provisions of Section 1103 of the Charter.

Areas of Exception
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**CONFLICTS OF INTEREST  
SECTION 1103**

CONFLICTS OF INTEREST. It is hereby declared to be the policy of the Town that any elected or appointed officer, any member of any board or commission or any employee of the Town who has a financial interest, direct or indirect, in any contract, transaction or decision of any officer or agent of the Town or any board or commission, shall disclose that interest to the Board of Selectmen, which shall record such disclosure upon the official record of its meetings. Such disclosure of a financial interest, direct or indirect, in any contract, transaction or decision of any officer or agent of the town or of any board or commission shall disqualify such elected or appointed official or such member of a board of commission or such town employee from participation in the awarding, assignment or discussion of said contract, transaction or decision. Violation by any such official, board or commission member or employee of the provisions of this section shall be grounds for his/her removal.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name (Please Print)

\_\_\_\_\_  
Date

**Town of Simsbury  
Board of Ethics**

**Guidelines for Gifts and Favors**

The following guidelines are issued to delineate gifts and favors deemed to be of no substantial value and permissible under the provisions of Section 13-3 of the Code of Ethics Ordinance for the Town of Simsbury:

1. The acceptance of a small gift, the denial of which would appear discourteous, provided the value of the gift does not exceed approximately \$50.00 from a single donor or \$100.00 per calendar year from a single donor, is permitted.
2. If a gift is received which is of such insignificant consequence that the cost of its return exceeds the value of the gratuity, it may be accepted.
3. Inexpensive advertising novelties, such as pens, calendars, and other items customarily distributed to both the public and private sector, may be accepted.
4. An occasional meal or entertainment event may be accepted if it is in the ordinary course of business, but under no circumstances shall a meal or other event be accepted if the value exceeds approximately \$50.00. Occasional means: infrequent, without regularity, and generally not to exceed six or eight occasions per year.
5. Any other offer for travel, meals or entertainment is prohibited by the ordinance unless:
  - (a) it is part of an event related to the Town's business in which the employee or public officials from other municipalities are also offered the same benefit;  
AND
  - (b) the event is approved in advance by the First Selectman in the case of Town officials and employees, or the Superintendent of Schools in the case of Board of Education officials and employees.

Any such approvals by the First Selectman or Superintendent of Schools which exceed \$50.00 in value shall be reported in writing to the Chair of the Board of Ethics within ten (10) business days following the date of approval giving a description of the event, the approximate dollar amount involved, and the reason for the approval.

6. Acceptance of a gift, meal, entertainment event or other gratuity from a family member of person having a close relationship who would ordinarily be giving or exchanging gifts for special occasions such as religious holidays, birthdays, birth or adoption of a child are allowed unless the donor has a matter pending where the recipient of the gift has decision making authority.

Approved by the Board of Selectmen on September 10, 2001

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construction contract on a project for the following named exempt agency or organization:

**Town of Simsbury**

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Full Name of Agency of Organization

**PO BOX 495  
933 Hopmeadow Street  
Simsbury, CT. 06070**

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Address of Same

That such agency is, to the best of my knowledge and belief, exempt from the Sales and Use Tax because it is a

**Town**

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(Town, School, Fire or Police Department, Library etc.,  
or other branch of State or Federal Government)

in accordance with Regulation No. 16 of Sales and Use Tax.

That this certificate is issued to cover all purchases of materials and supplies, designated by me, for use of the project referred to above.

Permit No. (if any) (signed) Contractor

Date:

Place:

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Firm Name

Address:

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## **GENERAL CONDITIONS**

### **1. DEFINITIONS**

- 1.1 Wherever used in the CONTRACT DOCUMENTS, The following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof.
- 1.2 ADDENDA - Written or Graphic Instruments issued prior to the execution of the Agreement which modify or interpret the Contract Documents, Drawings and Specifications, by additions, deletions, clarifications or corrections.
- 1.3 BID - The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.
- 1.4 BIDDER -Any person, firm, or corporation submitting a BID for the WORK.
- 1.5 BONDS - Bid, Performance, and Payment Bonds and other instruments of security, furnished by the CONTRACTOR in accordance with the CONTRACT DOCUMENTS.
- 1.6 CHANGE ORDER - A written order to the CONTRACTOR authorizing an addition, deletion, or revision in the WORK within the general scope of the CONTRACT TIME.
- 1.7 CONTRACT DOCUMENTS - The contract including Advertisement for Bids, information for Bidders, BID, Bid Bond, Agreement, Payment Bond, Performance Bond, NOTICE OF AWARD, NOTICE TO PROCEED, CHANGE ORDER, DRAWINGS, SPECIFICATIONS, AND ADDENDA.
- 1.8 CONTRACT PRICE - The total monies payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.
- 1.9 CONTRACT TIME - The number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK.
- 1.10 CONTRACTOR - The person, firm, or corporation with whom the OWNER has executed the Agreement.
- 1.11 DRAWINGS - The part of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been prepared or approved by the ENGINEER.
- 1.12 ENGINEER - The Director of Public Works for the Town of Simsbury, Connecticut.

- 1.13 FIELD ORDER - A written order affecting a change in the WORK not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, issued by the ENGINEER to the CONTRACTOR during construction.
- 1.14 INSPECTOR - The person appointed by the Town of Simsbury, Conn. to supervise the WORK and shall extend to and include any assistant whom he/she may designate to act in the premises.
- 1.15 NOTICE OF AWARD - The written notice of the acceptance of the Bid from the OWNER to the successful BIDDER.
- 1.16 NOTICE TO PROCEED - Written communication issued by the OWNER to the CONTRACTOR authorizing him/her to proceed with the WORK and establishing the date of commencement of the work.
- 1.17 OWNER - The Town of Simsbury, Connecticut (A Public Body) for whom the WORK is to be performed.
- 1.18 PROJECT - The undertaking to be performed as provided in the CONTRACT DOCUMENTS.
- 1.19 SHOP DRAWINGS - All Drawings, Diagrams, Illustrations, Brochures, Schedules, and other data which are prepared by the CONTRACTOR, A SUBCONTRACTOR, manufacturer SUPPLIER or Distributor which illustrate how specific portions of the WORK shall be fabricated or installed.
- 1.20 SPECIFICATIONS - A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.
- 1.21 SUBCONTRACTOR - An individual firm or corporation having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the work at the site.
- 1.22 SUBSTANTIAL COMPLETION- That date as certified by the ENGINEER when the construction of the PROJECT or a specified part thereof is sufficiently completed, in accordance with the CONTRACT DOCUMENTS, so that the PROJECT or specified part can be utilized for the purposes for which it is intended.
- 1.23 SUPPLEMENTAL GENERAL CONDITIONS - Special provisions required by the funding program or Agency (Federal, State, or

Local) for participation in the PROJECT and included in the CONTRACT DOCUMENTS. Also such requirements that may be imposed by Applicable State Laws and special characteristics of the PROJECT.

- 1.24 SUPPLIER - Any person or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site.
- 1.25 WORK - All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, all construction tools, machinery, and equipment, and all materials and equipment incorporated or to be incorporated in the PROJECT.
- 1.26 WRITTEN NOTICE - Any notice to any party of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posted by Mail to the said party at his/her last given address or delivered in person to said party or his/her authorized representative on the WORK.

## **2. PAYMENT**

- 2.1 On the first of each month, the Contractor may submit an itemized estimate of work completed up to that time, including an estimate of the portion of lump sum items completed.  
He/she must, if requested by the Engineer, submit satisfactory evidence that he/she has paid in full for all labor, materials and equipment included in the monthly estimate. The estimates shall be made on forms furnished by the Town and the Contractor shall certify that the estimate is correct and the work performed is in conformity with the plans and specifications. No later than 31 days after submission by the Contractor, and acceptance by the Town, of the estimate, the Town will pay the estimated cost, less five percent (5%) retained by the Town.

After completion of the project and acceptance by the Town, the Contractor shall submit an itemized final estimate. No later than 31 days after acceptance of the final estimate by the Town, the Town shall pay ninety-five (95%) percent of the Contract price. No later than six months after acceptance of the final estimate the Town will pay the five (5%) retained, unless in that time the materials or workmanship in the project shall have been found to be defective.

## **3. PERMITS DURATION**

- 3.1 The Contractor must obtain all necessary permits and pay the fee

for them. (Town portion of permit fees are waived. The State of Connecticut portion of building permits will not be waived.)

- 3.2 Should the Town be prevented or enjoined from proceeding with work either before or after the start of construction by reason of any litigation or other reason beyond the control of the Town, the Contractor shall not be entitled to or assert claim for damage by reason of said delay; but time for completion of the work will be extended to such reasonable time as the Owner may determine will compensate for time lost by such delay with such determination to be set forth in writing.

#### **4. SUPERVISION**

- 4.1 The Town will be represented at all times by the TOWN DIRECTOR OF PUBLIC WORKS or an employee authorized by the TOWN DIRECTOR OF PUBLIC WORKS to represent him/her; and the DIRECTOR OF PUBLIC WORKS or his/her authorized representative shall have sole authority in the interpretation and execution of the contract.
- 4.2 The Contractor must have a competent Field Supervisor on the job during all working hours and notify the Town of his/her name and address in writing, and where he/she may be reached normally after working hours. In the event of the absence of the Field Supervisor, the Contractor must appoint a second in command to take responsible charge of the job. The actual performance of work and superintendence shall be performed by the Contractor but the owner shall, at all times, have access to the premises for the purpose of observing or inspecting the work performed by the Contractor.

#### **5. LAYOUT**

- 5.1 The Town will provide line and grade by means of offset points. However, the Contractor will protect these offset points and may be charged for replacing of same. Any additional field work required to reestablish these offset points to facilitate construction will be paid for by the Contractor.

#### **6. SITE WORK**

- 6.1 The Contractor will be responsible for maintenance of adequate barricades, signs, and warning systems to protect the job and the public.
- 6.2 The Contractor shall properly protect all underground and above

ground utilities from damage. No interruption shall be caused to any utility without the knowledge of the TOWN DIRECTOR OF PUBLIC WORKS.

## **7. STANDARDS**

7.1 Whenever a material, article, or piece of equipment is identified on the plans or in the specifications by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard and, any material, article, or equipment of other manufacturers and vendors which will perform adequately the duties imposed by the general design will be considered equally acceptable provided the material, article, or equipment so proposed, is, in the opinion of the Town Engineer, of equal substance and function. It shall not be purchased or installed by the Contractor without written approval.

## **8. CHANGES IN WORK**

8.1 The Owner, without invalidating the Contract, may order extra work or make changes by altering, adding to or deducting from the work, the Contract Sum being adjusted accordingly.

## **9. CORRECTION OF WORK AFTER FINAL PAYMENT**

9.1 Neither the final Certificate nor payment nor any provision in the Contract Documents shall relieve the contractor of responsibility for faulty materials or workmanship and, unless otherwise specified, he shall remedy any defects due thereto and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from the date of substantial completion.

9.2 The Owner shall give notice of observed defects with reasonable promptness. All questions arising under this article shall be decided by the DIRECTOR OF PUBLIC WORKS subject to mediation.

## **10. INSURANCE REQUIREMENTS**

The Contractor must carry insurance under which the Town is named as an assured, as follows:

Such insurance must be by insurance companies licensed to write such insurance in Connecticut against the following risks with the following minimum amounts and minimum durations.

A. Workman's Compensation, as required by State Statute.

B. Public Liability, Bodily Injury Liability and Property Damage Liability as follows:

Injury or death of one person:	\$1,000,000
Injury to more than one person in a single accident:	\$1,000,000
Property damage in one accident:	\$1,000,000
Property damage in all accidents:	\$1,000,000

C. Automobile and Truck (Vehicular) Public Liability, Bodily Injury Liability, and Property Damage Liability as follows:

Injury or death of one person:	\$1,000,000
Injury to more than one person in a single accident:	\$1,000,000
Property damage in one accident:	\$1,000,000
Property damage in all accidents:	\$1,000,000

D. Builders Risk including Fire and Extended coverage:  
In an amount equal to the value of construction completed plus materials delivered to the site.

Insurance under B, C, and D above must provide for a 30 day notice to the Town of cancellation/or restrictive amendment.

Insurance under B and C above must be for the whole duration of the contract and for twelve (12) months after acceptance of the project by the Town.

Insurance under D above must be carried for the whole duration of the project and until acceptance by the Town.

Subcontractors must carry A, B and C in the same amounts as above for the duration of the project and until acceptance by the Town.

Certificates of insurance must be submitted to the Director of Public Works prior to the signing of the contract and within ten days of notification of award of contract. Should any insurance expire or be terminated during the period in which the same is required by this contract, the Director of Public Works shall be notified and such expired or terminated insurance must be replaced with new insurance and a new certificate furnished to the Director of Public Works.

Failure to provide the required insurance and certificates may, at the option of the Town, be held to be a willful and substantial breach of this contract.

NOTE: Coverage under "B" shall include XCU coverage as necessary, Collapse and Underground shall be provided for ALL Contracts. Explosion will be provided if specified, or prior to any blasting being performed under the Contract.

## **11. OWNER'S RIGHT TO DO WORK**

If the Contractor fails to prosecute the work properly or fails to perform any provisions of this contract, the Owner, after three days written notice to the Contractor may, without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor. Provided, however, that the Public Works Director shall approve both such action and the amount charged to the Contractor.

## **12. ACCEPTANCE OF FINAL PAYMENT AS RELEASE**

The acceptance by the Contractor of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment however, final or otherwise, shall not release the CONTRACTOR or his sureties from any obligations under the CONTRACT DOCUMENTS or the Performance BOND and Payment BONDS.

## **13. CONTRACT SECURITY**

The Contractor shall within ten (10) days after the receipt of the NOTICE OF AWARD furnish the OWNER with a performance BOND and a payment BOND in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions, and agreements of the CONTRACT DOCUMENTS, and upon the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK provided by the CONTRACT DOCUMENTS. Such BONDS shall be executed by the CONTRACTOR and shall be in a Form acceptable to the Town Director of Finance. When Surety Company Bonds are used, the corporate bonding company shall be licensed to transact such business in the State of Connecticut and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these BONDS shall be borne by the CONTRACTOR. If at any time a surety on any such bond is declared as bankrupt or loses its right to do business in the State in which the WORK is to be performed or is removed from the list of surety



companies accepted on FEDERAL BONDS, CONTRACTOR shall within ten (10) days after notice from the OWNER to do so, substitute an acceptable BOND (or BONDS) in such form and sum as may be satisfactory to the OWNER. The premiums on such BOND shall be paid by the CONTRACTOR. No further payments shall be deemed due nor shall be made until the CONTRACTOR shall have furnished an acceptable BOND to the OWNER.

#### **14. ASSIGNMENT**

Neither the CONTRACTOR nor the OWNER shall sell, transfer, assign, or otherwise dispose of the CONTRACT or any portion thereof, or of his/her right title or interest therein, or his obligations there under, without written consent of the other party.

#### **15. DRAWINGS AND SPECIFICATIONS**

- 15.1 The intent of the DRAWINGS and SPECIFICATIONS is that the CONTRACTOR shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the WORK in accordance with the CONTRACT DOCUMENTS and all incidental work necessary to complete the PROJECT in an acceptable manner ready for use, occupancy, or operation by the OWNER.
- 15.2 In case of conflict between the DRAWINGS AND SPECIFICATIONS, the SPECIFICATIONS shall govern. Figure dimensions on DRAWINGS shall govern over scale dimensions, and detailed DRAWINGS shall govern over general DRAWINGS.
- 15.3 Any discrepancies found between the DRAWINGS AND SPECIFICATIONS and site conditions or any inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS shall be immediately reported to the ENGINEER, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after his/her discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR'S risk.
- 15.4 The OWNER will furnish free of charge to the contractor up to three (3) copies of the DRAWINGS and SPECIFICATIONS as necessary for the proper execution of the WORK.

#### **16. MATERIALS, WORKMANSHIP, SERVICES, AND FACILITIES**

- 16.1 It is understood that except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, tools, equipment, sanitary conveniences, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the WORK within the specified time.
- 16.2 All materials furnished shall be new and of the best quality customarily used in or furnished for work of the character of that herein proposed. Many features of the proposed work are described in detail herein, but the failure to so describe any part of the proposed work or any details or appurtenance thereof shall not be an exception to the above rule. The absence of requirements in drawings or specifications covering details usually included in first class installations of this kind shall not excuse the contractor for their omission in this work.
- 16.3 All workmanship shall be of the best quality for WORK of the character of that herein proposed. The CONTRACTOR shall employ only competent employees to do the WORK required.
- 16.4 Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection.
- 16.5 Materials, supplies, or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.
- 16.6 Drinking water furnished for the employees on the job shall comply with O.S.H.A. regulations.

## **17. PROTECTION OF WORK AND PROPERTY**

- 17.1 The CONTRACTOR will be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the WORK--he/she will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the site and other persons who may be affected thereby, all the work and all materials or

equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

- 17.2 The CONTRACTOR will comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction. He/she will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. He/she will notify owners of adjacent utilities when prosecution of the work may affect them. The CONTRACTOR will remedy all damage, injury, or loss to any property caused, directly or indirectly, in whole or in part, by the CONTRACTOR, and SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or the acts or omissions, of the OWNER or the ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.
- 17.3 The CONTRACTOR will notify the OWNER at least one week prior to the start of construction.
- 17.4 The CONTRACTOR shall be responsible for verifying the location of any existing utilities. The CONTRACTOR shall notify "Call Before You Dig" at 1-800-922-4455 such that any utility lines can be marked.
- 17.5 In emergencies affecting the safety of persons or the work or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the ENGINEER or OWNER, shall act to prevent threatened damage, injury or loss. He/she will give the ENGINEER prompt WRITTEN NOTICE of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby, and a CHANGE ORDER shall thereupon be issued covering the changes and deviations involved.

## **18. CHANGES IN CONTRACT PRICE**

The CONTRACT PRICE may be changed only by a CHANGE ORDER. The value of any WORK covered by a CHANGE ORDER or of any claim for increase or decrease in the CONTRACT PRICE shall be determined by one or more of the following methods in the order of precedence listed below:

- (a) Unit prices previously approved
- (b) An agreed lump sum
- (c) The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the work. In addition there shall be added an amount to be agreed upon but not to exceed fifteen (15) percent of the actual cost of the WORK to cover the cost of general overhead and profit.

## **19. TIME FOR COMPLETION**

- 19.1 The date of beginning and the time for completion of the WORK are essential conditions of the CONTRACT DOCUMENTS and the WORK embraced shall be commenced on a date specified in the NOTICE TO PROCEED.
- 19.2 The CONTRACTOR will proceed with the work at such rate of progress to insure full completion within the CONTRACT TIME. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the CONTRACT TIME for the completion of the WORK described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.
- 19.3 If the CONTRACTOR is delayed at any time in the progress of the WORK by changes ordered in the WORK, by labor disputes, fire, unusual delay in transportation, unavoidable casualties, causes beyond the CONTRACTOR'S control, or by any cause which the ENGINEER may determine justifies the delay, then the CONTRACT TIME shall be extended by CHANGE ORDER for such reasonable time as the ENGINEER may determine.

## **20. SUSPENSION OF WORK, TERMINATION AND DELAY**

- 20.1 The OWNER may suspend the WORK or any portion thereof for a period of not more than ninety days, or such further time as agreed upon by the CONTRACTOR, by WRITTEN NOTICE to the CONTRACTOR and the ENGINEER which notice shall fix the date on which work shall be resumed. The CONTRACTOR will resume that WORK on the date so fixed. The CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any suspension.
- 20.2 If the CONTRACTOR is adjudged as bankrupt or insolvent, or if he/she makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for

any of his property, or if he/she files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if he/she repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he/she repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials, or equipment or if he/she disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK or if he/she disregards the authority of the ENGINEER, or if he/she otherwise violates any provision of the CONTRACT DOCUMENTS, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and his/her surety a minimum of ten (10) days from delivery of a WRITTEN NOTICE, terminate the services of the CONTRACTOR and take possession of the PROJECT and of all materials, equipment, tools, construction equipment, and machinery thereon owned by the CONTRACTOR and finish the WORK by whatever method he/she may deem expedient. In such case the CONTRACTOR shall not be entitled to receive any further payment until the WORK is finished. If the unpaid balance of the CONTRACT PRICE exceeds the direct and indirect costs of completing the PROJECT, including compensation for additional professional services, such excess SHALL BE PAID TO THE CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a CHANGE ORDER.

- 20.3 Where the CONTRACTOR'S services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies by the OWNER due the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.
- 20.4 After ten (10) days from delivery of a WRITTEN NOTICE to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the contract. In such case, the CONTRACTOR shall be paid for all WORK executed and any expense sustained plus reasonable profit.
- 20.5 If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than ninety (90) days by the OWNER or under an order of court or other public authority, or the ENGINEER fails to act on any request for payment within thirty (30) days after it is submitted, or the OWNER fails to pay the

CONTRACTOR substantially the sum approved by the ENGINEER or awarded by arbitrators within (30) days of its approval and presentation, then the Contractor may, after ten (10) days from delivery of a WRITTEN NOTICE to the OWNER and the ENGINEER, terminate the CONTRACT and recover from the OWNER payment for all WORK executed and all expenses sustained. In addition and in lieu of terminating the CONTRACT, if the ENGINEER has failed to act on a request for payment or if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon Ten (10) Days written notice to the OWNER and the ENGINEER stop the WORK until he has been paid all amounts then due, in which event and upon resumption of the WORK until he has been paid all amounts then due, in which event and upon resumption of the WORK, CHANGE ORDERS shall be issued for adjusting the CONTRACT PRICE or extending the CONTRACT TIME or both to compensate for the costs and delays attributable to the stoppage of the WORK.

- 20.6 If the performance of all or any portion of the WORK is suspended, delayed, or interrupted as a result of a failure of the OWNER or ENGINEER to act within the time specified in the CONTRACT DOCUMENTS, or if no time is specified, within a reasonable time, an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both shall be made by CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessarily caused by the failure of the OWNER or ENGINEER.

## **21. INDEMNIFICATION**

- 21.1 The CONTRACTOR will indemnify and hold harmless the OWNER and their agents and employees from and against all Claims, Damage, Loss, or Expense including Attorney's fees arising out of or resulting from the performance of the WORK, provided that any such Claims, Damage, Loss or Expense is attributed to Bodily Injury, Sickness, Disease or Death, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the CONTRACTOR, and SUBCONTRACTOR, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.
- 21.2 In any and all claims against the OWNER or any of their agents or employees, by any employee of the CONTRACTOR or SUBCONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the INDEMNIFICATION OBLIGATION shall not be limited in any

way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any SUBCONTRACTOR under Workmen's Compensation Acts, Disability Benefit Acts or other Employee Benefits Acts.

- 21.3 The obligation of the CONTRACTOR under this paragraph shall not extend to the liability of the OWNER or any of its agents or employees arising out of the preparation or approval of MAPS, DRAWINGS, Opinions, Reports, Surveys, CHANGE ORDERS, Designs, or SPECIFICATIONS.

## **22. SEPARATE CONTRACTS**

- 22.1 The OWNER reserves the right to let other contracts in connection with this PROJECT. The CONTRACTOR shall afford other CONTRACTORS reasonable opportunity for the introduction and storage of their materials and the execution of their WORK, and shall properly connect and coordinate his WORK with theirs. If the proper execution or results of any part of the CONTRACTOR's WORK depends upon the WORK of any other CONTRACTOR, the CONTRACTOR shall inspect and promptly report to the ENGINEER any defects in such WORK that render it unsuitable for such proper execution and results.
- 22.2 The OWNER may perform additional WORK related to the PROJECT by himself, or he may let other Contracts containing provisions similar to these. The CONTRACTOR will afford the other CONTRACTORS who are Parties to such CONTRACTS (or the OWNER, if he is performing the additional WORK himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate his WORK with theirs.
- 22.3 If the performance of Additional WORK by other CONTRACTORS or the OWNER is not noted in the CONTRACT DOCUMENTS prior to the execution of the CONTRACT, written notice thereof shall be given to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believes that the performance of such additional WORK by the OWNER or others involves him in additional expense or entitles him to an extension of the CONTRACT TIME, he may make a Claim therefore as provided in Sections 22 and 23.

## **23. SUBCONTRACTING**

- 23.1 The CONTRACTOR may utilize the services of Specialty

SUBCONTRACTORS on those parts of the WORK which, under normal contracting practices, are performed by Specialty CONTRACTORS.

- 23.2 The CONTRACTOR shall not award WORK to SUBCONTRACTOR(s) in excess of Fifty (50) Percent of the CONTRACT PRICE, without prior written approval of the OWNER.
- 23.3 The CONTRACTOR shall be fully responsible to the OWNER for the Acts and omissions of his SUBCONTRACTORS, and of persons either directly or indirectly employed by him.
- 23.4 The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORS, as applicable to the WORK OF SUBCONTRACTORS and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise of the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.
- 23.5 Nothing contained in this CONTRACT shall create any contractual relation between any SUBCONTRACTOR and the OWNER.

## **24. GUARANTY**

The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of one (1) year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees for a period of one (1) year from the date of SUBSTANTIAL COMPLETION of the PROJECT that the completed PROJECT is free from all defects due to faulty materials or WORKMANSHIP and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the PROJECT resulting from such defects. The

OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other WORK that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The PERFORMANCE BOND or a MAINTENANCE BOND shall remain in force at a value of 25% of the completed WORK through the GUARANTEE PERIOD.

## **25. DISPUTE RESOLUTION**



- 25.1 All claims, disputes and other matters in questions arising out of, or relating to, the CONTRACT DOCUMENTS or the breach thereof, except for claims which have been waived by the making and acceptance of Final Payment as provided by Section 16, shall be decided by Arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. This agreement to arbitrate shall be specifically enforceable under the prevailing Connecticut Arbitration law.
- 25.2 Notice of the Demand for Arbitration shall be filed in writing with the Other Party to the CONTRACT DOCUMENTS and with the American Arbitration Association, and a copy shall be filed with the Engineer. The Demand for Arbitration shall in no event be made on any claim, dispute, or other matter in question which would be barred by the applicable Statute of Limitations.
- 25.3 The CONTRACTOR will carry on the WORK and maintain the Progress Schedule during any Mediation proceedings, unless otherwise mutually agreed in writing.

## **26. TAXES**

The CONTRACTOR will pay all consumer, use, and other similar taxes required by the Law of the Place where the WORK is performed. This WORK is being performed for a Municipal Government and is exempt from Sales Tax.

## SUPPLEMENTAL GENERAL CONDITIONS

1. PA 86-87, AAC Workers' Compensation Insurance Requirements for Contractors on Public Works projects and State licenses, prohibits municipalities from entering into a public works contract with an employer without receiving sufficient evidence from the employer that he has workers' compensation insurance and a statement from the state treasurer that the employer does not owe the Second Injury and Compensation Assurance Fund any money.
2. The Town of Simsbury Public Works Department and Water Pollution Control Authority shall be notified at least five (5) days prior to beginning work. The Town will set up a preconstruction meeting with Dyno Nobel representatives prior to start of work.
3. Prior to beginning work, the "Call Before You Dig" service shall be notified by the Contractor by calling 811 or 1-800-922-4455, or, if the contractor is registered, by e-ticket entry, such that any underground utilities in the immediate vicinity of the work can be marked.
4. All staking and surveying will be the responsibility of the Contractor.
5. All road monuments and lot pins shall be PRESERVED. Cost of resetting will be backcharged to the Contractor.
6. Sales and Use Tax Exempt Purchase Certificate/ The Contractor's attention is called to Regulation 18 as amended promulgated by the Sales and Use Tax Division of the State Tax Department, which provided for the Exemption of the sales and use tax on the purchase of such materials and supplies as are to be physically incorporated in and become a permanent part of the project being performed under this contract. The Contractor or Subcontractor shall furnish his suppliers with a completed certificate, in the prescribed form; a copy of which is attached to these specifications
7. Upon completion or termination of the work, the Contractor shall remove from the vicinity of the work all equipment and all temporary structures, waste materials and rubbish resulting from its operations, leaving the premises in a neat and acceptable condition. In the event of failure to do so, the same may be done by the Owner at the expense of the Contractor.
8. The Contractor shall pay for any broken utility lines, except where the utility company may be liable under the "Call Before You Dig" law. The Owner will only pay for relocations necessary to complete the work of this project.
9. In accordance with Executive Order 11246, the Contractor is obliged not to discriminate against any employee or applicant for employment because of race, color, creed, or national origin. This obligation not to discriminate in employment includes, but is not limited to, the following: hiring, placement, upgrading, transfer, demotion, recruitment, advertising, solicitation for employment training during employment, rates of pay or other forms of compensation, selection for training including apprenticeship, layoff, or

termination.

10. For all new underground facilities installed after January 1, 1989 which is practicable and for all repairs, replacements or modifications involving an exposure of existing underground facilities at least 100 feet longitudinally after January 1, 1989, of which the utility has knowledge of such exposure, the utility shall install a warning tape located above the facility, and keep appropriate records thereof. The minimum separation between the facility and the warning tape shall be 12 inches unless the depth, other underground facilities or other engineering considerations make the minimum separation infeasible. The warning tape shall be durable, designed to withstand extended underground exposure, be of color assigned to the type of facility for surface markings in Section 16-345-5 (h) and durable imprinted with an appropriate warning or message.

## SPECIAL PROVISIONS

1. **Clean Up:** The Contractor shall at all times keep the site and work free from accumulations of waste material or rubbish caused by his employees or work, or the employees or work of any of his subcontractors.

On completion of the work, the Contractor except as otherwise expressly directed or permitted in writing, shall tear down and remove all temporary structures built by him; shall remove all rubbish and abandoned materials of all kinds from all Contract structures and from any grounds, and shall leave all the grounds which may have been affected by his/her operations in a neat and satisfactory condition. Except as noted, all materials salvaged shall be the property of the Contractor.

2. **Act, Or Failure To Act, On Part Of Engineer Does Not Reduce Liability Of Contractor:** Giving notice or failure to give notice; or acting as authorized in the preceding sections, or failure to so act, on the part of the Engineer; or any question as to the adequacy of the notice by the Engineer, or of his/her acts, as provided in those sections, shall not in any way relieve the Contractor from any part of his responsibility or liability for performing any and all of the acts and assuming any and all of the risks, duties and liabilities which the Contractor is obligated to perform or assume.
3. **Disposal of Surplus Materials:** The Contractor shall be responsible for the removal and satisfactory disposal of all surplus materials unless otherwise specified in the Detail Specifications. Town properties shall not be used for such disposal unless specifically authorized by the Engineer in writing. Property owners adjacent to the work may have indicated to the Town that their land might be available for disposal of surplus fill and this fact may be noted on the Contract Drawings. The Contractor shall, however, make his own arrangements for the use of such private lands and shall, if requested by the Engineer, evidence that such arrangements have been made before such use. Any required local permits shall be the responsibility of the Contractor.
4. **Utility Notification Prior to Excavation:** In accord with Public Act 77-350, the Contractor is required to notify any utility with facilities in the vicinity of the excavation at least two full days prior to excavation. Notification may be given by using the "Call Before You Dig" state wide, toll free telephone number, 811 or 1-800-922-4455., or if the contractor is registered, by e-ticket entry. Responsibility for proper notification of all utilities shall rest with the Contractor.

The Contractor shall contact the appropriate Town authorities concerning any public or semi- public events that may occur during the construction period and that may have an effect on his construction. The contractor alone shall be responsible for arranging his construction sequence to conform to any restrictions these events may impose on his schedule.

No claims for extras will be allowed because of any delays, caused by the imposed

restrictions; however, additional time may be granted for completion of the work to compensate for any delays caused by said restrictions.

5. **The State of Connecticut, Department of Environmental Protection and other involved State agencies** shall have access and inspection rights to all parts of the work on this project.
6. **Quantities of work** may be increased or decreased by up to 30% with payment to be based on actual quantities of work completed and the bid unit prices. If work beyond 30% is to be completed payment may be renegotiated.
7. **The State of Connecticut, Department of Transportation permit is required for work completed in the State right of way.**

**SPECIFICATIONS**  
**FOR**  
**SANITARY SEWER**  
**HOPMEADOW STREET – Project WPCA 16-04**

**OCTOBER 2016**

**PREPARED FOR:**           **Town of Simsbury Water Pollution Control Authority  
and Department of Public Works**

**PREPARED BY:**           **Town of Simsbury Engineering Department  
and Ed Lally and Associates, Inc.**

**SANITARY SEWER - HOPMEADOW STREET – SIMSBURY,  
CONNECTICUT**

**PROJECT NO. WPCA 16-04**

## **INDEX TO SPECIFICATIONS**

### **Invitation to Bid**

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Bidder's Proposal  
Schedule of Prices  
Contract Form  
Conflict of Interest Form  
Contractor's Exempt Purchase Certificate  
General Conditions  
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Special Provisions

### Technical Specifications

Division I	Test Holes
Division II	Excavation
Division III	Sewer Pipe Installation
Division IV	Replacing Pavement/Concrete Sidewalks
Division V	Loaming and Seeding

## **DIVISION I TEST PITS**

### **1.01 GENERAL**

- A. All applicable requirements of the General Conditions shall govern all work of this Division.
- B. The Contractor shall furnish all labor, material, equipment, and incidentals necessary to complete the work of this Division as shown in the Drawings and/or specified herein.

### **1.2 TEST PIT EXCAVATION**

- A. Test pits , if required, shall be excavated in the location as directed by the Engineer.
- B. The purpose of the pit is to locate the exact horizontal and vertical location of an existing utilities, or the depth to rock, as directed.
- C. Hand excavation shall be utilized, to the extent necessary, in order to avoid damaging the pipes.
- D. The work shall be closely coordinated with the Simsbury Engineering Department. The Department shall be notified 1 day prior to doing the excavation.
- E. Any changes to the Drawings which may be required by the information obtained from the pits, will be made by the Engineering Department.
- F. Pits shall be backfilled and compacted after the necessary information is obtained. Temporary patch shall be placed.

### **1.3 PAYMENT FOR TEST PITS**

- A. The number of pits excavated shall be paid for under Item No. 7 in the Schedule of Prices. The price is full compensation for all labor, tools, construction equipment, and expense incidental to the excavation of the test pits. The price stated includes the cost of back filling, compaction and temporary patch.



## **DIVISION II EXCAVATION**

### **2.1 GENERAL**

- A. Applicable requirements of the General, Special, and Supplemental Conditions shall govern all work of this division.
- B. The Contractor shall furnish all labor, materials, equipment, and incidentals necessary to complete the work of this Division shown on the drawings and/or specified herein.
- C. When excavation takes place in dry weather, reasonable precautions shall be taken by the Contractor to insure that the inhabitants in the vicinity of the excavation are not unnecessarily inconvenienced by or caused discomfort by dust raised from construction operations. Dust may be stabilized by water spray or, as approved by the Engineer, by chemical means, such as calcium chloride.
- D. Where dewatering is required, the Contractor shall implement dewatering and discharge measures that follow best management practices, are protective to the waters of the State and provide for protection of public health and safety.
- E. Requirements of the Town of Simsbury Water Pollution Control Authority shall govern installation of Sanitary Sewer lines and appurtenances.

### **2.2 WORK INCLUDED**

Work of this division shall include the following:

- ◆ Saw-cutting, removing and stockpiling existing pavement/curbs from trench cuts.
- ◆ Excavation for pipe and structures.
- ◆ Rock excavation/removal
- ◆ Dewatering
- ◆ Incidental construction
- ◆ Traffic control
- ◆ Dust Control
- ◆ Temporary sediment and erosion control

### **2.3 REFERENCE**

- A. Reference to "Form 816" shall mean the publication entitled "State of Connecticut, Department of Transportation, Standard Specifications for Road, Bridges, and incidental construction dated 2004, and any subsequent amendments.
- B. Reference to "MDC Spec" shall mean the specifications set forth in the MDC Project Manual (Version 2015), and Sanitary Sewer and Storm Drain Connection

Manual, MDC (current edition).

## 2.4 TRENCH AND OTHER EXCAVATION

- A. Trench and other excavations shall be of sufficient width and depth at all points to allow all pipe to be laid, joints to be formed, and other construction to be placed or built in the most thorough and workmanlike manner, and to allow for trench side protection, dewatering and draining, and for removing and replacing any unsuitable material. Trenches will be a maximum of six (6) feet in width to allow for installation of shoring.
- B. When trenching in existing pavement, the paving shall be cut with a pavement saw to provide a straight, clean cut. The existing pavement and base, to a total depth of 8 ½ inches, shall be removed and disposed of by the Contractor. The Engineer may authorize, in writing, dispersal of existing pavement at the Simsbury Highway Garage on Town Forest Road. Other surplus material shall be removed by the Contractor and disposed of at the Contractor's cost. NOTE: The Contractor may pulverize the pavement and base on the trenches where existing pavement and base are to be saved, prior to the Contractor beginning work. (Note: the Contractor, at no additional cost, may dispose of old pavement and base, and use other recycled base or process aggregate base)
- C. Sewer trenches shall be of a depth necessary to provide minimum pipe bedding and cover as shown on the Contract Drawings and provided herein.
- D. Excavations in earth (soil materials) and rock shall be nominally 12 inches wider than the outside dimensions of the structure or pipe they are to contain. In earthen materials, the bottom of the pipe trench shall be excavated to 6 inches below the bottom grade of the pipe. Wherever the bottom of trench or other excavation is advanced in rock or boulders, excavations shall be advanced to 12 inches below the bottom grade of the pipe or structure. Where it is not feasible to remove rock from the excavation to attain the minimum trench width and rock protrusions from the sidewall would result in less than 12-inches between the rock protrusion and sanitary sewer pipe, or structure, the Engineer may allow the rock protrusion to remain, but in no cases will rock protrusions that would result in less than 6 inches between the rock protrusion and sanitary sewer pipe, or structure be allowed to remain.
- E. Excavated material, unless deemed to be unsuitable by the Engineer, shall be utilized for backfill and grading. Excess material and waste material shall be disposed of by the contractor at an off-site location. Town properties may not be used for such disposal unless specifically authorized, in writing, by the Engineer.
- F. Payment for earth excavation to design depths depth and disposal of excess/surplus material for the various parts of the work is included in the prices bid for the several items of the work in the Schedule of Prices and will not be paid for under a separate item. Excavation below grade and rock excavation will be

paid for under separate items.

## **2.5 ROCK EXCAVATION (TRENCH)**

- A. Rock excavation shall mean boulders exceeding one cubic yard in volume or solid ledge rock which, in the opinion of the Engineer, requires for its removal drilling and blasting, wedging, sledging, barring. No hardpan, no soft or disintegrated rock which can be removed with a pick, no loose, shaken or previously blasted rock or broken stone in rock filling or elsewhere, and no rocks exterior to the maximum limits of excavation approved by the Engineer, which may fall into the trench, will be measured or allowed as rock excavation. Excavated rock shall be removed and disposed of off-site by the Contractor.
- B. In rock excavation, it is especially required that all blasting shall be executed by experienced powdermen in strict accordance with lawful regulations and shall be conducted with all possible care so as to avoid injury to persons and property, that the rock shall be covered, and that sufficient warning shall be given to all persons in the vicinity of the work before blasting, that care shall be taken to avoid injury to electric and telephone lines, drains and other structures, and that caps or other exploders shall not be kept in the same place in which dynamite or other explosives are stored. Explosives in sufficient quantity to avoid delay of the work shall be kept on hand by the Contractor. The Contractor shall be held responsible for all claims for damage caused by blasting.
- C. The Contractor, in addition to observing all laws and ordinances relating to the storage and handling of explosives, shall also comply with any further regulations which the Engineer or Fire Marshall may deem necessary in this respect.
- D. Pre-blast survey - It is not anticipated that blasting will be required. However, if blasting is planned, the Contractor shall have a pre-blast survey conducted for all structures that are located on abutting properties, in the vicinity of the blasting, as well as any additional homes that the pre-blast survey reconnaissance indicates necessary.
- E. Payment for rock excavation (Trench) - The quality of rock excavation to be paid for under Item No. 8 of the Schedule of Prices is the number of cubic yards of ledge rock or boulders in place, as measured before excavation that would have been removed if the excavation had been made everywhere to a depth of twelve (12) inches below the underside of the pipe or structure and to a width of twelve (12) inches on each side of said pipe or structure.
- F. The price stated under Item No. 8 is full compensation for furnishing all material, labor, tools and equipment, and for all work and expense incidental thereto. The price includes removal from trench and disposal of rock; price includes cost of pre-blast survey.

## **2.6 EXCAVATION BELOW GRADE**

- A. Wherever, in the opinion of the Engineer, the material at or below grade line is unsuitable for foundations, it shall be excavated to such additional depths as directed by the Engineer and shall be replaced with approved material, well compacted in place.
- B. Payment for earth excavation below grade - The quantity of earth excavation below grade to be paid for under Item No.9 in the Schedule of Prices is the number of cubic yards of material so excavated and disposed of, as measured in place by the Engineer.

The price stated under Item No.9 is full compensation for furnishing all material, labor, tools and equipment, and for all work and expense incidental thereto.

## **2.7 SELECTED MATERIAL**

- A. Clean bank gravel or other selected material of a quality satisfactory to the Engineer shall be furnished to replace unsuitable excavated soil material or ledge or rock removed below subgrade, when directed by the Engineer. The material shall be placed and well compacted in suitable lifts.
- B. Payment for furnishing and placing selected material - The quantity of Selected Material to be paid for under Item No. 10 in the Schedule of Prices is the number of cubic yards ordered by the Engineer, as measured in place in the work. The material placed to fill unauthorized excavations shall not be paid for.
- C. The price stated under No. 10 is full compensation for furnishing all material, labor, tools and equipment, and for all other work and expense incidental thereto.
- D. Material delivery slips shall be provided to the Engineer for all selected material delivered.

## **2.8 UNAUTHORIZED EXCAVATION**

- A. If the bottom of any excavation has been removed below grades indicated on the Contract Drawings, or required by the specifications or that prescribed by the Engineer, it shall be brought to grade by backfilling with gravel or other selected material by placing and compacting in suitable lifts, at the Contractor's expense.

## **2.9 DE-WATERING**

- A. The Contractor shall remove by pumping, draining, bailing or otherwise any water which may accumulate or be found in the trench and other excavations

made under this Contract, and shall form all sumps and build drains or other works necessary to keep them entirely clear of water while the pipe lines and other structures are being built. Newly made masonry shall be protected from injury, resulting from the dewatering work. The Contractor shall at all times have upon the work sufficient pumping machinery, filtration devices and discharge devices satisfactory to the Engineer.

- B. Water from the trenches and excavations shall be disposed of in such a manner as will not adversely impact water of the State, cause injury to the public health nor to public or private property, nor to the work completed or in progress, nor to the surface of the roadways/highways, nor cause any interference with the use by the public of the roadways/highways or other traveled ways. Best management practices for filtration and discharge shall be employed in managing dewatering wastewaters.
- C. Payment for all necessary pumping, draining or bailing, etc. is included in the prices stated for the several items in the Schedule of Prices and will not be paid for under a separate item to cover this work only.

## **2.10 TEMPORARY GRADING AND DUST CONTROL**

- A. During pipe and structure construction, the Contractor shall temporarily grade and compact all disturbed areas, on a daily basis. In vehicular traffic areas, this includes placement and compaction of a temporary processed-stone surface, transition graded to adjacent paved surfaces to facilitate vehicle traffic.
- B. The Contractor shall apply dust control measures during construction, as needed, but at least every Friday. Measures shall include street sweeping of all paved areas and use of water or calcium chloride (as approved by the Engineer) in all disturbed areas where soils are exposed.
- C. Payment for temporary grading and dust control is included in the prices bid for the several items of work in the Schedule of Prices and will not be paid for under a separate item.

## **2.11 TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES**

- A. The Contractor shall implement temporary sediment and erosion control measures to prevent discharge of sediments from excavation activities to the waters of the State. Such measures shall include, as a minimum:
  - 1. Use of catch basin filter inserts in all catch basins down-gradient of work area and within catchment area of the active work/disturbance. Inserts shall be manufactured devices designed to capture and trap sediment such as Silt Sack, Enpac Storm Sentinel, Flo-Gard, or other approved by the Engineer.

2. Use of silt fence erosion control or straw wattles at the base of all disturbed slopes. Materials shall be those approved by the Engineer.
  3. Use of erosion control blankets on all disturbed slopes 3:1 (H:V) and steeper. Erosion Control Blanket shall be Curlex I Erosion Control Fabric or similar product approved by the Engineer.
- B. Erosion control measures shall be maintained throughout the duration and after completion of all excavation and earth disturbance activities until all disturbed areas are stabilized.
- C. Payment for implementation and maintenance of temporary sediment and erosion control is included in the prices bid for the several items of work in the Schedule of Prices and will not be paid for under a separate item.

## **2.12 PROTECTION OF THE PUBLIC**

- A. The work area and all open excavations shall be carefully protected with temporary signs, barricades, barrels, construction fencing, or other appropriate means to prevent accident to the public or to workmen. When necessary, barricades or other traffic control devices shall be lighted from sunset to sunrise.
- B. No excavations shall remain open after work hours unless approved by the Town.
- C. Construction plant and materials and any obstruction placed on roads by the Contractor or caused by his operations shall be carefully marked and protected, including flashers, as may be needed.
- D. The Contractor shall dispose his plant, construction materials and excavated material so as not to obstruct roads. No portion of any road shall be closed to traffic unless written permission is obtained from the Town.
- E. Payment for protection of the public, including, but not limited to placing signs, flashers and barricade, and flagmen is included in the prices stated for items 2, 3, & 4 in the Schedule of Prices.

**DIVISION III  
SANITARY SEWER**

**3.1 GENERAL**

- A. Applicable requirements of the General, Special, and Supplemental Conditions shall govern all work of this division.
- B. The Contractor shall furnish all labor, materials, equipment, and incidentals necessary to complete the work of this Division shown on the drawings and/or specified herein.
- C. When excavation takes place in dry weather, reasonable precautions shall be taken by the Contractor to insure that the inhabitants in the vicinity of the excavation are not unnecessarily inconvenienced by or caused discomfort by dust raised from construction operations. Dust may be stabilized by water spray or chemical means, such as calcium chloride.
- D. Requirements of the Town of Simsbury Water Pollution Control Authority shall govern installation of Sanitary Sewer lines and appurtenances.
- E. Special attention shall be given to mechanical compaction of all trenches, as specified herein.

**3.2 WORK INCLUDED**

Work of this division shall include the following:

- ◆ Placing and compacting bedding, and backfill.
- ◆ Supplying and installing sanitary sewer and manholes.
- ◆ Supplying and installing wyes and sanitary sewer laterals.
- ◆ Incidental construction

**3.3 REFERENCE**

- A. Reference to "Form 816" shall mean the publication entitled "State of Connecticut, Department of Transportation, Standard Specifications for Road, Bridges, and incidental construction dated 2004, and any subsequent amendments.
- B. Reference to "MDC Spec" shall mean the specifications set forth in the MDC Project Manual (Version 2015), and Sanitary Sewer and Storm Drain Connection Manual, MDC (current edition).

### **3.4 UNDERGROUND OBJECTS, SOILS, ETC.**

If any contract document or drawing or similar source of information furnished to prospective bidders or to contractors purports to show underground objects or conditions, or pipes, ducts or similar structures, or observations or indications of soils, rock, ground water, etc., made from borings, test pits or prior excavations, such information must be considered as only approximately correct and complete, having been obtained, made and plotted for the information of the Engineer. Bidders and contractors must recognize that, by reason of the methods commonly used for obtaining and expressing such data, this information and data may be limited and subject to error or misunderstanding. The terms used to describe soils, ground water, etc., are subject to local usage and to the individual opinion of the person making the records. Groundwater conditions vary from time to time. The locations, sizes, depths, etc., of underground pipes, ducts and structures are usually obtained from records of others and such data, when shown on plans of the owner, are subject to possible errors in the source of the information and also errors in transcription. The Town, together with its agents, does not warrant or represent that the indications on Contract Drawings or other documents of underground conditions, objects, etc., as described above, are either approximately correct or complete, and any party making use of such indications or basing estimates or proposals thereon must agree that he or it shall have no claim or right of action against either the owner or any person or party acting for or under it for the consequences, delays, expense or losses which may occur or have occurred in event that such indications shall be found to have been incomplete, incorrect or misleading. Bidders must make such investigations as they deem necessary and form their own opinions of the materials, conditions, and difficulties or obstacles likely to be encountered.

### **3.5 TRENCH AND OTHER EXCAVATION**

- A. Trench and other excavations shall be of sufficient width and depth at all points to allow all pipe to be laid, joints to be formed, and other construction to be placed or built in the most thorough and workmanlike manner, and to allow for trench side protection, pumping and draining, and for removing and replacing any unsuitable material. When trenching in existing pavement, the paving shall be cut with a pavement saw to provide a straight, clean cut.
- B. Sanitary sewer trenches shall be of a depth necessary to cover pipes as shown on the Contract Drawings.
- C. Excavations shall be in accordance with Sections 2.04, 2.05, and 2.06 of these specifications.
- D. Trench width: The strength and type of pipe called for on the plans is designed to carry the dead and live loads on it with the following maximum widths of trench below a point one-foot above the top of pipe, which maximum width shall not be exceeded:



Size Sewer Nominal Inside Diameter	Maximum Width of Trench for pipe installation
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6" .....	2.5 feet
8" .....	4.0 feet

**3.6 ROCK EXCAVATION (TRENCH)**

Shall be in accordance with Section 2.5 of these specifications.

**3.7 EXCAVATION BELOW GRADE**

Shall be in accordance with Section 2.6 of these specifications.

**3.8 SELECTED MATERIAL**

Shall be in accordance with Section 2.7 of these specifications.

**3.9 UNAUTHORIZED EXCAVATION**

Shall be in accordance with Section 2.8 of these specifications.

**3.10 DEWATERING**

Shall be in accordance with Section 2.9 of these specifications.

**3.11 BEDDING, BACKFILLING AND DISPOSAL OF SURPLUS MATERIAL**

A. After trench bottom is prepared to design grade, place 3/4-inch crushed stone to form pipe bedding. Haunch stone to fit shape of pipe bottom.

Schedule:      6-inches in soil excavation  
                     12-inches in rock excavation

B. Install sewer pipe in accordance with Simsbury WPCA standards and Section 3.3.

C. After installation of the sewer line, a crushed stone haunching, 3/4-inch trap rock, shall be brought to a level to the top of the pipe and out to the trench wall at this elevation. Coarse sand or fine gravel shall be placed to 1-foot over the pipe. This material shall be tamped in place. The remaining fill shall be compacted in 1-foot lifts. No stones weighing over 50 pounds shall be backfilled into the pipe trench or against structures. In lieu of compacting in 1-foot lifts, a Ho-Pac may be used. Single pass Ho-Pac compaction depth shall not exceed 8 feet. Methods to achieve a minimum 95% Proctor Density shall be used by the Contractor. The

crushed stone shall be wrapped in filter fabric which shall be overlapped at the ends.

- D. A durable warning tape, designed to withstand extended underground exposure shall be installed within the trench backfill directly over the pipe line. The elevation of the warning tape shall be approximately 2 feet below finished grade or as directed by the Engineer. The warning tape shall be of the color assigned to the type of facility for surface marking and durably imprinted with an appropriate warning or message.
- E. The Contractor shall remove all excess material and shall dispose of it. Town properties may not be used for disposal without the written approval of the Engineer. Within the project area, the Engineer may require surplus material to be stockpiled, transported and/or placed as fill.
- F. Payment for backfilling, filter fabric wrap, warning tape, stockpiling, and for disposal of surplus material as directed for the various parts of the work is included in the prices bid for the several items of work in the Schedule of Prices and will not be paid for under a separate item.

### **3.12 TEMPORARY GRADING AND DUST CONTROL**

Shall be in accordance with Section 2.10

### **3.13 SEWER PIPE MATERIALS**

- A. Pipe of the size indicated on the drawings shall meet the following quality specifications:
  - ◆ ASTM Specification D3034 - Type PSM Polyvinylchloride Sewer Pipe and Fittings.
  - ◆ ASTM Specification D3212 - Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals.
- B. Polyvinylchloride (PVC) pipe shall conform to the requirements of ASTM D3034, Standard Specification for Type PSM PVC Sewer Pipe and Fittings. The pipe shall have a pipe diameter to wall thickness ratio (SDR) to a maximum of 35.
- C. Straight pipe shall be furnished in lengths not more than 13 feet.
- D. No single piece of pipe shall be laid unless it is generally straight. The centerline of the pipe shall not deviate from a straight line drawn between the centers of the openings at the ends of the pipe by more than 1/16 inches per foot of length. If a piece of pipe fails to meet the requirements for straightness, it shall be rejected and removed from the site.

- E. Joints for PVC pipe shall be push-on bell and spigot joints using elastomeric ring gaskets. The gaskets shall be securely fixed into place in the bells so that they cannot be dislodged during joint assembly. The gaskets shall be of a composition and texture which is resistant to common ingredients of sewage and industrial wastes, including oil and groundwater, and which will endure permanently under the conditions of the proposed use. The joints shall conform to the requirements of the latest revision of ASTM D3212.

### **3.14 SEWER PIPE INSTALLATION**

- A. Trench excavation and backfill shall be done in accordance with the applicable Sections of this Division.
- B. All pipe shall be laid true to the lines and grades indicated on the drawings. The pipe shall not be laid in water or when trench or weather conditions are unsuitable for the work, except by permission of the Engineer. Water shall be kept out of the trench until joints have been completed and the trench backfilled and tamped to at least twelve inches above the top of the pipe.
- C. When work is not in progress, the open ends of the pipe shall be closed in such a manner as to prevent the entry of groundwater, earth, or foreign materials.
- D. All pipe shall be carefully laid with hubs up and with spigot ends fully entered into adjacent hubs.

### **3.15 MARKERS AT LATERALS**

- A. Markers at the end of service laterals shall be 2 x 6 lumber, extending 1' above the finish ground surface. The end of the lumber shall be painted green. The marker shall extend to the pipe cap. The lumber shall be left in place.
- B. The cost of furnishing and placing such markers shall be included in the various items of work. No separate payment will be made for markers.

### **3.16 LOW PRESSURE AIR TESTING AND CAMERA INSPECTION**

- A. All sewer lines shall pass a low pressure air test and camera inspection prior to acceptance.
- B. The test shall be performed using the below stated equipment, according to stated procedures and under the supervision of the inspecting engineer.
  - 1) Pneumatic plugs shall have a sealing length equal to or greater than the diameter of the pipe to be inspected.
  - 2) Pneumatic plugs shall resist internal test pressures without requiring

external bracing or blocking.

- 3) All air used shall pass through a single control panel.
- 4) Three individual hoses shall be used for the following connection:
  - a) From control panel to pneumatic plugs for inflation.
  - b) From control panel to sealed line for introducing the low pressure air.
  - c) From sealed line to control panel for continually monitoring the air pressure rise in sealed line.
- C. All pneumatic plugs shall be sealed tested before being used in the actual test installation. One length of pipe shall be laid on the ground and sealed at both ends with pneumatic plugs to be checked. Air shall be introduced into the plugs to 25 psig. The sealed pipe shall be pressurized to 5 psig. The plugs shall hold against this pressure without bracing and without movement of the plugs out of the pipe.
- D. After a manhole to manhole reach of pipe has been backfilled and cleaned, and the pneumatic plugs are checked by the above procedure, the plugs shall be placed in the line at each manhole and inflated to 25 psig. Low pressure air shall be introduced into this seal line until the internal air pressure reaches 4 psig greater than the average back pressure of any groundwater that may be over the pipe. At least two minutes shall be allowed for the air pressure to stabilize.
- E. After the stabilization period (3.5 psig minimum pressure in the pipe), the air hose from the control panel to the air supply shall be disconnected. The portion of line being tested shall be termed "Acceptable" if the time required in minutes for the pressure to decrease from 3.5 to 2.5 psig, (greater than the average back pressure of any groundwater that may be over the pipe), shall not be less than 3.0 minutes for 6-inch pipe and 14.0 minutes for 30-inch pipe.
- F. When one or more laterals are connected to the main, the allowable time in the table above will be decreased 30 seconds or one-half minute.
- G. If the installation fails to meet this requirement, the Contractor shall, at his own expense, determine the source of leakage. He shall then repair or replace all defective materials and/or workmanship.
- H. The air tester shall provide a report on each section tested.

### **3.17 PAYMENT FOR AIR TESTING AND CAMERA TESTING**

- A. Air and camera testing for the complete sanitary sewer installation shall be paid as a lump sum under Item 11 in the Schedule of Prices.

- B. The price shall include all labor, materials, equipment, and incidental items to perform the air and camera tests.

### **3.18 PAYMENT FOR SEWER PIPE**

- A. The quantity of furnished and installed pipe to be paid under the various items in the Schedule of Prices is the number of lineal feet of pipe installed. The prices are full compensation for all labor, tools, construction equipment, materials, and expense incidental to the construction of the pipe line, complete as shown on the Drawings and specified here, including joint material, stone bedding, sand cover, compaction, erosion control, dust control, removing of existing pavement and base, placing wood marker, end caps, and the cost of disposing of any excess excavated material, as directed by the Engineer. (If the Contractor chooses to pulverize and/or save existing pavement and base, such work shall be at the Contractor's cost.)

- B. 8" PVC, SDR35, shall be paid under Item No.12.

6" PVC, SDR35, shall be paid under Item No. 13 and Alternate items' 1 and 2.

### **3.19 PAYMENT FOR 8" x 6" PVC WYE CONNECTIONS**

- A. The quantity for furnished and installed wyes under Item No. 14 in the Schedule of Prices in the number of wyes installed. The price is full compensation for all labor, tools, equipment, materials, and expense incidental to the installation of the wyes.

- B. 8" x 6" wye connections shall be paid under Item No.14.

### **3.20 SANITARY MANHOLES**

- A. Manholes shall be installed in locations shown on the Contract Drawings.

- B. The following quality standards apply:

- 1) ASTM Specification C139 - Concrete Masonry Units for Construction of Catch Basins and Manholes.
- 2) ASTM Specifications C478 - Precast Reinforced Concrete Manhole Sections.
- 3) ASTM Specification C443 - Joints for Circular Concrete Sewer and Culvert Pipe.
- 4) ASTM Specification C32 - Sewer and Manhole Brick.
- 5) ASTM Specification A48 - Gray Iron Castings

- C. Precast concrete units, brick and metal items shall be stored in a manner that will

prevent chipping and breakage.

All damaged items shall be removed from the site when directed by the Engineer.

- D. Precast manhole sections shall be similar or equal to that shown on the plans and shall conform to ASTM C-478; and C-443 (joint).

Precast concrete masonry units shall conform to ASTM C-139.

- E. Manhole frame and cover shall be heavy duty, conforming to the dimensions shown on the plans, and shall be cast iron conforming to ASTM A-48, Class 25. Frames and covers shall have a hot-dipped bitumastic coating. The word "SEWER" shall be cast in the cover.
- F. Manhole steps shall be similar or equal to ALCOA Aluminum #12643A or steel reinforced polypropylene plastic as manufactured by M. A. Industries, model PS-2-PF-SL. The portions of aluminum steps to be imbedded in concrete shall have a protective coating of zinc chromate or approved bitumastic material.
- G. Concrete shall conform to Article M.03 of Form 816 and shall be Class A.
- H. Brick shall conform to ASTM C-32, Grade SS for shelves and inverts. All other brick may be Grade MS.
- I. Mortar shall be composed of one part portland cement and two parts by volume of clean sand. No lime shall be added to the mortar.
- J. Flexible joints shall be used for all manhole to pipe connections and shall be similar or equal to "Press Wedge II" as manufactured by Press Seal Gasket Corp., Fort Wayne, Indiana or "Lock Joint Flexible Manhole Sleeve" as manufactured by Interpace Corp., Parsippany, New Jersey.

### **3.21 PIPE CONNECTIONS**

- A. All joints between pipes and walls shall be a flexible joint, such as formed by "Lock Joint Flexible Manhole Sleeve" or "Press Wedge II". An approved equivalent flexible joint may be used. These flexible joints shall be used in all sanitary manholes unless otherwise directed by the Engineer.
- B. Stubs shall be of the types shown on the drawings and shall be short pieces cut from the bell ends of pipe with stoppers or plugs of the same material as the pipe and sealed with gasketed joints.
- C. Payment for plugs will not be paid for as a separate item. The cost shall be included in the various items in the Schedule of Prices.

### **3.22 MANHOLE CONSTRUCTION**

- A. Excavation and backfilling shall conform to the applicable requirements of the section "Trench Excavation and Backfill" herein.
- B. The Contractor's attention is directed to the requirement for rubber gaskets or premoulded sealer strips for joints, which shall be installed in accordance with manufacturer's recommendations. After assembly of all sections is completed, the joints shall be pointed with mortar on both inside and outside surfaces of the manhole. All lifting holes shall be filled with mortar.
- C. Invert channels may be formed in the concrete of the base or brickwork upon the base. The inverts shall conform accurately to the size of the adjoining pipes. Side inverts shall be curved and main inverts, where direction changes, shall be laid out in smooth curves of the longest possible radius which is tangent, within the manhole, to the center-lines of the adjoining pipelines.
- D. Manhole frames shall be set with the tops conforming to the finished grade of the pavement or ground surface or as directed by the Engineer. Bricks shall be used as required, up to a maximum 12-inch height, to adjust the manhole to this grade as shown on the drawings. Frames shall be set concentric with the top of the masonry and in full bed of mortar so that the space between the top of the manhole masonry and the bottom flange of the frame shall be completely filled and made watertight. A thick ring of mortar extending to the outer edge of the masonry shall be placed all around and on the top of the bottom flange. The mortar shall be smoothly finished and have a slight slope to shed water away from the frame. Frames shall be set to grade specified by the Owner. At least three courses of brick shall be used between the precast unit and the manhole frame.

### **3.23 PAYMENT FOR MANHOLES**

- A. The quantity of furnished and installed manholes to be paid in the Schedule of Prices is the number of manholes installed. The prices stated are full compensation for all materials, labor, tools, construction equipment, and expense incidental to the construction of the manholes, including frame, cover, invert, rungs, and pipe flexible couplings. In the case of drop manholes, the price includes inside piping. The price stated includes the cost of excavation, bedding, backfilling, and the cost of disposing of any excess excavated material.
- B. Manholes shall be paid under Item No. 16.

### **3.24 EXISTING MANHOLE CORING AND INSIDE DROP**

- A. The existing sanitary manhole shall be cored and an inside drop installed as shown on the drawings.
- B. The work paid under Item 15 of the Schedule of Prices is the number of corings and boots installed. The Price shall include all labor, materials, equipment and incidental items to core the manhole and install the inside drop.

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**DIVISION IV  
REPLACING BASE & PAVEMENT**

**4.1 GENERAL**

- A. Applicable requirements of the General and Supplemental Conditions shall govern all work of this division.
- B. The Contractor shall furnish all labor, materials, equipment and incidentals necessary to complete the work of this division as shown on the drawings and specified herein.
- C. All areas of existing streets and driveways where pavement was removed shall have the pavement base replaced in accordance with this Division.
- D. The maximum width of pavement cuts and replacements shall be kept to a maximum of nine feet. Greater widths, unless authorized, shall be repaired in accordance with this Division, at the Contractor's expense.

**4.2 WORK INCLUDED**

Work of this division shall include the following:

- ◆ Base materials
- ◆ Bituminous concrete pavement repair
- ◆ Milling
- ◆ Bituminous concrete curb repair

**4.3 REFERENCES**

Reference to "Form 816" shall mean the publication entitled "State of Connecticut, State Highway Department: Standard Specifications for Roads, Bridges and Incidental Construction, Form 816" and any subsequent amendments or issues thereof.

**4.4 RECYCLED BASE ON PIPE TRENCHES ( FARMINGTON VALLEY GREENWAY, Bike Path)**

- A. The Contractor shall box trench areas and haul, place, grade and compact recycled base/pavement. (Note: the Contractor may substitute other recycled base material or process aggregate). All materials shall meet Form 816 Specifications.
- B. The surface of the compacted base shall be 3 1/2 inches below the existing pavement surface.
- C. Payment to box trench areas and haul, place, and compact the base material will be paid under Item 17 in the Schedule of Prices. The quantity of base to be paid in the Schedule of Prices is the number of square yards placed, graded, and

compacted.

- D. The price shall include all labor, materials, equipment, and incidental work for the road base.
- E. Disposal of material from boxing out trench areas shall be paid in accordance with Section 3.11.
- F. Up to a maximum trench width of eight (8') feet will be paid for, unless a wider width is authorized

**4.4a ROAD BASE ON PIPE TRENCHES ( Route 10)**

- G. The Contractor shall box trench areas and haul, place, grade and compact process aggregate base. All materials shall meet Form 816 Specifications.
- H. The surface of the compacted base shall be a minimum of 3 1/2 inches below the existing pavement surface, **subject to CONN DOT permit requirements.**
- I. Payment to box trench areas and haul, place, and compact the base material will be paid under Item 18 in the Schedule of Prices. The quantity of base to be paid in the Schedule of Prices is the number of square yards placed, graded, and compacted.
- J. The price shall include all labor, materials, equipment, and incidental work for the road base.
- K. Disposal of material from boxing out trench areas shall be paid in accordance with Section 3.11.
- L. Up to a maximum trench width of eight (8') feet will be paid for, unless a wider width is authorized

**4.5 SAW CUT EXISTING PAVEMENT**

- A. All trench areas shall be saw cut prior to excavating.
- B. Payment for saw cutting pavement will be paid under Item 19 in the Schedule of Prices. The quantity to be paid is the number of lineal feet cut. The price shall include all labor, equipment and incidental work.

**4.6 MILLING OF TRENCH AREA**

- A. Prior to placing 1-1/2 inch of Class 2 bituminous concrete surface, the trench area shall be milled to a width extending a minimum of 3 feet on each side of the trench.
- B. Payment for milling will be paid under Item 24 in the Schedule of Prices. The

quantity to be paid will be a lump sum amount. The price shall include all labor, equipment, dust control, picking up milled material and sweeping, and incidental work.

#### **4.7 BITUMINOUS CONCRETE PERMANENT TRENCH REPAIR**

- A. The trench shall be repaired, after compaction and placement of the base, with a 2 course Bituminous Concrete pavement. The cross slope shall meet existing grades, unless otherwise directed by the Engineer.
- B. Binder course shall be 2", compacted depth, and a surface course shall be 1 1/2" compacted depth.
- C. A base conforming to the requirements of Section 4.4 of these Specifications, shall be placed in the trench and rolled to full compaction with a 7 to 10 ton roller or vibratory roller of equal capability to within 3 1/2 inches of the existing road surface.
- D. The existing pavement shall then be milled back 3 feet from the edges of the original trench in straight lines. The area immediately adjacent to the edges of the trench shall be swept clean so that no loose sand, temporary patch or other debris remains. The exposed edges of the pavement cuts shall be coated with a tack coat conforming to the requirements of Section M.04, Subarticle M.04.01-1(d) (5) Grade RS-1 or SS-1 of Conn. DOT form 816.
- E. The first course of bituminous concrete materials shall be Class I Bituminous Concrete, conforming to Form 816, Article M.04.01. The materials shall be handled and placed in accordance with Form 816, Section 4.07.01 through 4.07.03.
- F. The second course shall be Class 2 Bituminous Concrete, conforming to Form 816, Article M.04.01.
- G. The new pavement shall be blended into the existing pavement such that cross slopes will be uniform.
- H. The contact surfaces of existing pavements, valve boxes, and other structures in the pavement shall be painted thoroughly with a thin uniform coating of bitumen, specification RC-70 or RS-1 just before the new paving mixture is placed against them.
- I. The edges of paving placed around valve boxes or other structures, if necessary, shall be hand tamped before being compacted by rolling.
- J. All joints shall then be sealed with a hot bituminous asphalt sealer conforming to

the requirements of Article M.04.02 of Conn DOT Form 816.

#### **4.8 PAYMENT FOR BITUMINOUS CONCRETE PERMANENT TRENCH REPAIR**

- A. Payment for furnishing and placing the pavement, as specified, to be paid under Item's No. 20 & 21 in the Schedule of Prices is the number of tons placed. The price under Item's No. 20 & 21 is full compensation for furnishing all materials, labor, tools and equipment, and all other work and expense incidental thereto.
- B. Payment includes bituminous concrete, adjusting manholes, placing tack coats on manholes, placing tack coat on existing pavement and sealing joints.
- C. Delivery slips shall be provided to the Engineer.

#### **4.9 BITUMINOUS CONCRETE LIP CURBING**

- A. Bituminous Concrete Lip Curbing shall consist of machine laid bituminous concrete, constructed on the pavement to the dimensions and details is shown on the plans.
- B. Materials for this work shall conform to the requirements of Form 816, Article M.04.01, Class 3.
- C. Construction Methods shall conform to Form 816, Section 8.15.03.
- D. Payment for furnishing and placing the Bituminous Concrete Curb to be paid under item No. 23 in the Schedule of prices is the number of lineal feet placed. The price stated under Item No. 23 is full compensation for furnishing all materials, labor, tools and equipment and all work and expense incidental thereto.

#### **4.10. TEMPORARY BITUMINOUS CONCRETE PATCH**

- A. If directed by the Engineer, a 1" to 1 ½" Class 2, or equivalent material, patch shall be placed at the end of each day.
- B. Payment for furnishing and placing the temporary patch to be paid under Item No. 22 in the Schedule of Prices is the number of tons placed. The price under Item No. 22 is full compensation for all materials, labor, tools and equipment, and all other work and expenses included thereto.
- C. Delivery slips shall be provided to the Engineer.

#### **4.11. CONCRETE SIDEWALKS**

- A. The work under this item shall be the supplying of materials and construction of new concrete walks to the required grades and dimensions, as shown on the plans. Materials shall conform to the Connecticut DOT Standard Specifications Section

9.21.02. Work includes all excavation, aggregate base, compaction, forms, backfill and clean-up.

- B. Payment for all work associated with sidewalk removal and installation to be paid under Item No. 5 and 6 in the Schedule of Prices is the number of linear feet.

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**DIVISION V  
LOAMING AND SEEDING**

**5.1 GENERAL**

- A. All applicable requirements of the General and Supplemental Conditions shall govern all work of this Division.
- B. The Contractor shall furnish all labor, material, equipment, and incidentals necessary to complete the work of this Division as shown in the Drawings and/or specified therein.
- C. All disturbed areas not restored by paving or drives shall be topsoiled, fertilized, and seeded. The intent is to restore areas where laterals end in front yards. All other areas, unless authorized, shall be restored in accordance with this Division at the Contractor's expense.
- D. All other work shall be completed before undertaking the work of this Division, such that planted areas will not be disturbed.

**5.2 WORK INCLUDED**

Stripping Loam  
Spreading and supplying loam  
Finish grading  
Fertilizing  
Seeding  
Temporary sediment and erosion control measures

**5.3 STRIPPING LOAM**

- A. From areas which are to be excavated and are presently covered with loam, the loam shall be removed from the full width of the excavation and kept separate from the rest of the excavated material.
- B. The loam shall be stockpiled in a location within the project area designated by the Engineer.

**5.4 SPREADING THE LOAM**

- A. In areas requiring loaming and seeding, loam shall be placed to a depth of six (6) inches after the rest of the backfill has been compacted.
- B. Where sufficient material is not available from the stripping operation, the Contractor shall furnish suitable loam from other sources.

- C. After spreading the loam, it shall be graded and raked to conform to existing grades. Care shall be taken to assure that the natural drainage of surface storm water is maintained and that ponding will not occur.
- D. If weeds grow on topsoil surface before fertilizing and seeding, the Contractor shall remove the weeds and again prepare the surface by raking.

**5.5 FERTILIZING AND SEEDING**

- A. Scarify surface of all areas to be topsoiled and place a minimum of 6” of topsoil on all areas to be seeded.
- B. Apply lime at a rate of two tons of ground limestone per acre. (100 lbs/1000 sq. ft.).
- C. Fertilize
  - a. for spring seeding, apply 10-10-10 fertilizer at a rate of 300 lbs. Per acre (7 lbs/1000 sq.ft.) and work into soil. Six to eight weeks later, apply an additional 300 lbs per acre on the surface.
  - b. For fall seeding, apply 10-10-10 fertilizer at a rate of 600 lbs. Per acre (14 lbs./1000 sq.ft.) and work into soil.
- D. Smooth and firm seedbed, apply seed uniformly at the rate specified for the seed type and cover seed with not more than ¼” of soil.
- E. Mulch immediately with hay free from weed seeds, at a rate of 3 bales per 1000 sq. ft.
- F. Permanent seedlings, where an area will be exposed for more than one year, or where final grading is complete:

<b><u>Area Where Seeding Mix Applies</u></b>	<b><u>Seeding Mixture By Weight</u></b>	<b><u>Rate Per 1000 sq.ft.</u></b>	<b><u>Reseeding Dates*</u></b>
All Lawn Areas	Red Fescue 70% Kentucky Bluegrass 20% Perennial Ryegrass 10%	5 Lbs.	Sept. 1 – Oct. 1 April 1 – June 1
Road Cuts and Fills	Kentucky Tall Fescue 80% Annual Ryegrass 20%	3 Lbs.	Sept. 1 – Oct. 1 April 1 – June 1

\* Initial seeding shall be done upon project completion. (Note: Hydro-seeding methods may be used)

## **5.6. SEDIMENT AND EROSION CONTROL MEASURES**

- A. The Contractor shall implement temporary sediment and erosion control measures to prevent discharge of sediments from loam stripping and spreading activities and lawn establishment activities to the waters of the State. Such measures shall include, as a minimum:
1. Use of silt fence erosion control, hay bale erosion checks, straw wattles or erosion control fabric. Materials used shall be as approved by the Engineer.
  2. Implementation shall be in accordance with 2002 Connecticut Guidelines For Soil Erosion and Sediment Control, as published by the CT Department of Energy and Environmental Protection
- B. Payment for implementation and maintenance of temporary sediment and erosion control measures related to loam stripping and spreading activities and lawn establishment activities, as specified, to be paid under Item No. 25 in the Schedule of Prices, a lump sum amount. The price stated under Item no 25 is full compensation for materials, labor, equipment, and incidental work of this item.

## **5.7. MAINTENANCE AND GUARANTEE**

All seeded areas shall be thoroughly watered when required to insure germination and proper establishment. They shall be maintained by the Contractor until permanently established and shall be subject to the one (1) year guarantee of his work.

## **5.08 PAYMENT FOR LOAMING AND SEEDING**

Payment for loaming and seeding, as specified, to be paid under Item No. 25 in the Schedule of Prices, a lump sum amount. The price stated under Item no 25 is full compensation for materials, labor, equipment, and incidental work of this item. The price includes stripping loam, supplying and grading loam, fertilizing, seeding, any mulching, and required maintenance.

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