

TOWN OF SIMSBURY

**DEPARTMENT OF PUBLIC WORKS
933 HOPMEADOW STREET
SIMSBURY, CT 06070**

INVITATION TO BID

FOR

SIMSBURY CENTER SIDEWALK IMPROVEMENTS

The Town of Simsbury is soliciting bids for SIMSBURY CENTER SIDEWALK IMPROVEMENTS. The scope of work includes furnishing all labor, materials, equipment necessary for the removal and replacement of approximately 545 LF of concrete sidewalk, the installation of approximately 25 LF of new concrete sidewalk and the installation of ADA compliant concrete sidewalk ramps and related work as specified.

Sealed proposals will be accepted by Amy Merriweather, Director of Finance, 933 Hopmeadow Street (Rt. 10/202), Simsbury, CT until 10:00 a.m., AUGUST 29, 2019.

Specifications and bidding documents may be obtained electronically via the Town's web site at the following link: <http://www.simsbury-ct.gov/finance/pages/public-bids-and-rfp>. Bid documents will not be mailed or faxed.

**STANDARD INSTRUCTIONS TO BIDDERS
SIMSBURY CENTER SIDEWALK IMPROVEMENTS**

1. Project Overview:

The Town of Simsbury is soliciting bids for furnishing all labor, materials, equipment necessary for the removal and replacement of approximately 545 LF of concrete sidewalk, the installation of approximately 25 LF of new concrete sidewalk as well as the installation of ADA compliant concrete sidewalk ramps and related work as specified.

The scope of work for this project includes furnishing all labor, materials and equipment required to complete the project as specified.

2. Key Event Dates:

Invitation to Bid Issued	August 8, 2019
Pre-Bid Conference	
Bids Due	August 29, 2019 10:00 AM
Commencement of Work	Within ten (10) calendar days of Notice to Proceed

3. Bid Submission Instructions:

- A. One (1) original and one (1) copy of all bids must be submitted in a sealed envelope with the bidder's name on the outside of the envelope and clearly marked "Sealed Bid for Town of Simsbury – SIMSBURY CENTER SIDEWALK IMPROVEMENTS". If forwarded by mail or courier, the sealed envelope must be addressed to "Amy Meriwether, Director of Finance, 933 Hopmeadow Street (Rt. 10/202), Simsbury, CT 06070". Bids must be at the office of the Director of Finance prior to 10:00 a.m., AUGUST 29, 2019. Postmarks are NOT an acceptable waiver of this policy. Once the first bid is opened, all bids are deemed final and no corrections or alterations may be made.
- B. Ditto marks or words such as "SAME" must not be used for the bid to be considered.
- C. All information must be submitted in ink or typewritten. Errors, alterations or corrections must be shown on both the original and all required copies and each must be initialed by the person signing the bid.
- D. Bids are considered valid for ninety (90) days after bids are opened. Bidders may not withdraw, cancel or modify their bid during this ninety (90) day period after bids are opened.
- E. An authorized person representing the legal entity of the bidder must sign bids.

- F. The inability to meet any specified requirement(s) must be stated in writing and attached to the bid form, or written on the bid form. If no exceptions are noted, it shall be assumed that the terms of the Invitation to Bid have been accepted.
- G. The Town of Simsbury reserves the right to waive any minor informality in a bid when such a waiver is in the best interest of the Town.

4. Questions:

Any questions about this project should be directed to: Mr. Thomas J. Roy, Director of Public Works by fax (860) 408-5416, or by mail Department of Public Works, PO Box 495, Simsbury, CT 06070. To receive consideration, such questions must be received at least five (5) business days before the established date for receipt of bids. No oral interpretations shall be made to any respondent as to the meaning of any of the bid documents. Every request for an interpretation shall be made in writing.

The Town will respond to all appropriate questions received via an addendum available to all prospective bidders. Such addenda will become part of this Invitation to Bid and the resulting contract. At least two (2) days prior to the receipt of bids, the Town will post a copy of any addenda to its website, located at: www.simsbury-ct.gov/finance/pages/public-bids-and-rfp. It shall be the responsibility of each bidder to determine whether addenda have been issued, and if so, to download copies directly from the Town's website.

5. Presumption of Bidder Being Fully Informed:

At the time the first bid is opened, each bidder is presumed to have read and is thoroughly familiar with all bidding documents as well as all contract documents for this project. Failure or omission of the bidder to receive or examine any documentation or information concerning this bid shall in no way relieve any bidder from obligations with respect to their bid.

6. Pre-Bid Conference:

~~A pre bid conference will be held at the Public Works Department at 66 Town Forest Road, West Simsbury at 11am on Tuesday August 20, 2019. The intent of this conference is to provide an outline of the project and to provide clarification to any potential bidders. Prospective bidders are encouraged to visit and inspect the project site and to carefully review the Invitation to Bid in advance of this conference to provide for a meaningful discussion. All salient points of the conference and responses to any questions will be provided via addendum.~~

7. Interpretation of Acceptable Work:

All work on this project is to be in accordance with the specifications, bidding and contract documents are to be interpreted as meaning those acceptable to the Town of Simsbury. Work is to be done in a clean and workman like fashion and meet industry best practices for quality and performance.

8. Wage Rates:

State of Connecticut Department of Labor Prevailing Wage rates apply for any contract over \$100,000. Copies of these wage rates are incorporated in the Contract Documents. Each ~~CONTRACTOR or Subcontractor performing Work on this Project shall comply in all respects with all laws governing the employment of labor, Social Security, and Unemployment insurance of both State and Federal government. Contractors must submit certified payroll documentation with each payment application for processing. Payment applications will not be approved without certified payroll.~~

9. Tax Exemptions:

The bidder shall be aware that the Town of Simsbury is exempt from Federal Excise Taxes and Connecticut Sales and Use Taxes. Appropriate tax exempt forms will be provided to the successful bidder(s) as part of the contract award process.

10. Insurance Requirements:

The firm must carry insurance under which the Town is named as an additional insured, 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 & \$100,000 employers liability limit.

- B. Public Liability, Bodily Injury Liability and Property Damage Liability as follows:
 - Injury or death of one person: \$2,000,000
 - 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: \$2,000,000

- 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

Insurance under B, and C 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.

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.

11. Substitution for Name Brands:

~~Should brand name items appear in this bid, the bidder must attach specifications for any substitutions and explain how the substitution compares with the specifications of the named brand. The decision on whether to use the substitution or the named brand rests solely with the Town of Simsbury.~~

12. Awarding the Bid:

The Town reserves the right to accept any bid or any part of bids, to reject any, all, or any part of bids, and to waive formalities and informalities in the bidding process. The Town at its discretion will award the bid to the lowest responsible bidder. That bidder is the person or firm who is qualified and competent to do the work, whose past performance is satisfactory to the Town and whose bid documents comply with the procedural requirements stated herein.

Bid Alternates will be awarded if it is determined to be in the best interest of the Town. The Town reserves the right to award any and all alternatives in the order that best suits the Town.

13. Rejection and/or Cancellation of Bids:

The Town reserves the right to reject or cancel any and all bids, or any part of any or all bids, if such action is deemed to be in the best interest of the Town.

14. Delivery Arrangements: Not applicable

15. Bid Bond: Not applicable

16. Performance Bond: Not applicable

17. W-9 Form

The successful bidder must provide the Town of Simsbury with a completed W-9 Form prior to commencing work.

18. Submittals:

The Bidder shall, as soon as practicable, but not exceed fifteen (15) calendar days, after notification of selection of the award of the bid, furnish to the Owner, in writing the following:

- A. Designation of the Work to be performed by the Contractor's own forces

- B. Names of the manufacturers, products and suppliers of the principal items of materials proposed for the work
- C. Project work schedule

19. Agreement Documents:

The Agreement Documents are defined as:

- The Standard Instructions to Bidders
- The Agreement as executed
- The General Specifications
- Any Addenda, if issued

END OF STANDARD INSTRUCTION TO BIDDERS

BID FORM
SIMSBURY CENTER SIDEWALK IMPROVEMENTS

Pursuant to and in compliance with the "Invitation to Bid" and Standard Instructions to Bidders relating thereto, the undersigned, having visited the sites and carefully examined all Bidding Documents and complete General Specifications together with all Addenda issued and received prior to the scheduled closing time for receipt of Bids, hereby offers and agrees as follows:

- To provide all labor, materials, and anything else reasonably necessary to complete all work per the attached specifications.
- If awarded this Contract, we will execute a Contract with the Town of Simsbury, Owner of the properties.

In submitting this BID, the BIDDER acknowledges that:

1. Each lump sum price includes all labor, materials, transportation, hauling, overhead, fees and insurances, profit, and all other costs to cover the finished work called for regarding the specified section of Town as stated in the Contract Documents. No additional payment of any kind in the form of a surcharge will be made for work accomplished under the lump sum prices, as bid.
2. No representation of warranty has been made by the OWNER that the estimated quantities used for comparison of BIDS will even approximate the actual quantities required to satisfactorily complete the WORK required under this CONTRACT.
3. Upon receipt of written notice of acceptance of this BID by the OWNER, the BIDDER shall execute the CONTRACT attached to these documents within ten (10) calendar days and other documents as required in these documents.
4. In regard to all conditions affecting the WORK to be done and the labor and materials to be furnished, this BID is based solely on the BIDDER'S investigations and findings and neither the OWNER nor its officers, employees or agents shall be held responsible for the accuracy of, or be bound by any information contained in these Contract Documents.

Submitted By: _____
Company *Phone*

Street *City* *Zip*

Authorized Signature: _____
Signature *Printed Name*

**BID FORM
SIMSBURY CENTER SIDEWALK IMPROVEMENTS**

ITEM NO.	SPEC. SECTION	ITEMS OF WORK	UNIT	ESTIMATED QUANTITIES	BID UNIT PRICE	EXTENDED AMOUNT
1	1	EARTH EXCAVATION	CY	30		
2	6	BITUMINOUS CONCRETE CURB	LF	70		
3	7	5" CONCRETE SIDEWALK	SY	200		
4	7	5" CONCRETE SIDEWALK AND CURB MONOLITHIC	SY	120		
5	7	6" CONCRETE SIDEWALK RAMP	SF	615		
6	10	RELOCATE SIGN	EA	1		
7	11	RESTORATION OF LAWN AREAS	SY	35		
				TOTAL BID:		

AUTHORIZED SIGNATURE

PRINTED NAME

* 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 writtin in words and the Unit Prices Bid written in figures, the Unit Prices Bid writtin in words will govern. In case of a discrepancy between the unit prices bid and amount, the Unit Prices will govern.

IF A SOLELY OWNED COMPANY:

Company Name _____
Address _____
Town _____
By _____
(Authorized Signature)
Title _____ Date _____

IF A CORPORATION OR LIMITED LIABILITY COMPANY:

A corporation or limited liability company organized under the laws of _____, composed of officers as follows:

_____ President	_____ Secretary
_____ Vice President	_____ Treasurer

IF A PARTNERSHIP:

A partnership doing business under the firm name and style of _____, composed of partners as follows:

_____ Name & Title (if any)	_____ Name & Title (if any)
_____ Name & Title (if any)	_____ Name & Title (if any)

This Bid must bear the written signature of the BIDDER. If the BIDDER is a partnership, the Bid must be signed by a partner. If the BIDDER is a corporation or limited liability company, the Bid must be signed by a duly authorized officer of such corporation or Limited Liability Company.

BIDDER'S QUALIFICATIONS STATEMENT

The BIDDER shall answer all of the following questions, as part of the Bid, so that the OWNER can judge the BIDDER's ability, experience and facilities for performing the proposed work.

1. Name of BIDDER: _____
2. Bidder's Tax Identification Number: _____
3. What year was company organized/formed? _____
4. How many years has the BIDDER been engaged in business under the present firm or trade name? _____
5. What is the general character or type of work you perform? _____

6. Has a claim ever been brought in court or to arbitration against the BIDDER for failure to complete any contracted work or default on a contract? _____

If yes, explain with whom and why: _____

7. For other similar projects you have under contract at the present time: Attach list with description of work; the name of the client/owner with telephone number; and the approximate value of the work to be performed.

NOTE: The BIDDER is required to have completed a minimum of five (5) similar projects as a demonstration of competency and experience for the project proposed herein. Such projects are to be listed below.

8. Attach a list of all projects that your present organization has completed within the past ten years or is presently working on, including name of project, owner and name and telephone number of the owner's representative. Indicate here how many additional pages attached: ____pages.
9. Attach a list of the names, addresses and the background/experience of all principal or key members of the BIDDERS organization, including its officers:

Indicate the number of pages attached: _____pages

NOTE: If requested, the BIDDER agrees to furnish the OWNER with a detailed financial statement and other relevant information that may be required by the Town of Simsbury to properly evaluate the qualifications of the BIDDER.

PROPOSED SUBCONTRACTORS

BIDDER intends to utilize the following subcontractors on this project:

If none, write "None" here: _____

NAME AND ADDRESS
OF SUBCONTRACTOR _____ DESCRIPTION OF WORK:

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____

NON-COLLUSION AFFIDAVIT OF BIDDER

State of _____, County of _____, being first duly sworn, disposes and says that:

1. He is the owner, officer, representative or agent of: _____ the BIDDER that has submitted the attached BID;
2. The attached BID is genuine; it is not a collusive or sham BID.
3. He is fully informed respecting the preparation, and contents of, and knowledgeable of all pertinent circumstances respecting the attached BID.
4. Neither BIDDER nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly, with any other bidder, firm or person to submit a collusive or sham BID in connection with the AGREEMENT for which the attached BID has been submitted or to refrain from bidding in connection with any contract, or has in any manner, directly or indirectly, sought by agreement, collusion, communication or conference with any other bidder, firm or person to fix the price or prices in the attached BID or of any other bidder, or to fix any overhead, profit or cost element of the BID prices or the bid price of any other bidder, or to secure through collusion, conspiracy, connivance or unlawful agreement any advantage against the Town of Simsbury or any other person interested in the proposed AGREEMENT.
5. The price(s) quoted in the attached BID are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the BIDDER or any of its agents, representatives, owners, employees, or parties in interest, including this affiant; and
6. That no elected or appointed official or other officer or employee of the Town of Simsbury, who is directly or indirectly interested in this BID, or in the supplies, materials, equipment, work or labor to which it relates, or in any of the profits thereof.

(Signed) _____

(Name of Bidder)

Subscribed and sworn to before me this _____ day of _____, 2019

Title
My Commission expires _____, 20__

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

**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

A copy of the Town Code is available from the Office of the Town Clerk or is available on line at http://www.simsbury-ct.gov/sites/simsburyct/files/file/file/towncode_1.pdf

**STATEMENT OF BIDDERS COMPLIANCE WITH
EQUAL EMPLOYMENT OPPORTUNITY LAW AND
REGULATION INCLUDING EXECUTIVE ORDER NO. 3**

This statement must be completed by the Bidder and shall accompany his bid for this project.

IT IS HEREBY CERTIFIED THAT:

NAME OF BIDDER: _____

BUSINESS ADDRESS: _____

To the extent required by law, the Bidder has complied on past Contracts and will fully comply on this project with all applicable laws and regulation regarding equal employment opportunities for minorities and women, and;

Has _____ has not _____ previously performed work under the conditions of the Governor's Executive Order No. 3 of the State of Connecticut, or any preceding similar Executive Order with regards to Non-Discrimination.

Signature

Title

Subscribed and sworn to before me this
_____ day of _____, 2017

Title

My Commission expires _____, 20__

IMPORTANT: THIS STATEMENT MUST BE SUBMITTED WITH BID

END OF SECTION

SIMSBURY CENTER SIDEWALK IMPROVEMENTS

INDEX TO STANDARD SPECIFICATIONS

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Section 8 – Bituminous Concrete Driveway

Section 9 – Erosion and Sedimentation Controls

Section 10 – Signs

Section 11 – Lawn Restoration

Section 12 – Maintenance and Protection of Traffic

Appendix A – Replacing Base and Pavement

SECTION 1
EXCAVATION

DESCRIPTION

“Earth Excavation” shall consist of the removal and satisfactory disposal of all material taken from the elevation of the existing ground and the **finished grade** of new sidewalk, driveway, slope, or unsuitable material when directed by the Director of Public Works or his Assigned Agent. Excavation below the finished grade of new sidewalk, driveway or slope necessary to install new sidewalk, driveway or slope is included in the unit price bid for “Concrete Sidewalk,” “Bituminous Concrete Sidewalk”, “Bituminous Concrete Driveway” or “Restoration of Lawn Areas” of the type specified.

“Rock Excavation” shall consist of the removal and satisfactory disposal of rock in ledge formation and boulders, or the portion of boulders, one cubic yard or more in volume, within the excavation limits or trench excavation limits.

“Test Pit Excavation” shall consist of the careful excavation to determine the horizontal and vertical location and size and material of an existing underground utility where shown on the plans or as directed by the Director of Public Works.

CONSTRUCTION DETAILS

Excavation shall be made in conformance to the limits and grades required. Excavation beyond the limits shown on the plans will not be measured for payment. Topsoil, sod and other organic matter shall be removed and disposed of.

When bedrock is encountered, it shall be excavated to the slope lines and depths indicated on the plans. All loose and unstable material shall be removed and disposed of. Any blasting shall conform to applicable local, State and Federal laws and regulations. The Contractor shall be responsible for all damage due either directly or indirectly to such operation.

All suitable excavated material obtained within the project limits shall be used in the formation of embankments. Embankments shall be constructed of earth only. No bituminous concrete or reclaimed waste shall be used in the embankment. The material shall be free from refuse, stumps, roots, rocks, brush, weeds or other unsuitable material.

The depth of each layer, before compaction, shall not exceed twelve inches (12”). The embankment shall be crowned or pitched to provide drainage at the close of each day’s operation.

The entire embankment area shall be leveled off by suitable grading equipment and shall be compacted to at least the required minimum density by use of compaction equipment consisting of rollers, compactors or a combination thereof. The dry density after compaction shall not be less than 95 percent of the dry density for that soil when tested in accordance with AASHTO T180, Method D. Each layer shall be compacted at optimum moisture. All surplus excavated material shall become the property of the Contractor and disposed of off of the project site unless otherwise directed by the Director of Public Works.

Earth slopes shall be tracked by traversing the slopes with cleated tracks so that the cleat indentations are horizontal. Tracking shall be completed prior to placing topsoil. After all grading for the roadbed has been substantially completed and all drains installed, the subgrade shall be brought to the lines, grades and cross-sections shown on the plans. No particle over 3" shall in its greatest dimension be placed within 12" below the top of the prepared subbase.

All soft and yielding material within the subgrade shall be removed and replaced with suitable material. Compaction shall be as specified in Section 2.02 of Form 817. The Contractor shall protect the completed subgrade from damage. The subgrade shall be checked and approved by the Director of Public Works prior to placing pavement structure thereon.

For test pit excavation, the Contractor shall follow all the requirements of "Call Before You Dig", including requesting utility markouts and hand-digging in the vicinity of the underground utility. The Contractor shall notify the Director of Public Works 48 hours in advance of digging the test pit so the Director of Public Works and the appropriate utility representative may be present.

Prior to excavation, the Contractor and Director of Public Works shall agree on the exact location of the test pit based upon available mapping and the utility markout. The Contractor shall adjust the limits of excavation as needed to successfully locate the utility.

Horizontal and vertical locations and size and material of utilities must be obtained during test pit excavation and provided to the Director of Public Works for review. Horizontal utility locations shall be field-surveyed or field-measured with a minimum of two (2) swing-ties from fixed physical features identified on the plans. Vertical utility elevations shall be field-surveyed using a level or other related equipment to provide elevation to the nearest hundredth of a foot (0.01'). The Contractor is made aware that additional test pits may be required and the proposed design may be modified based on results of test pit information obtained.

MEASUREMENT

"Earth Excavation" shall be measured for payment by the cubic yard

"Rock Excavation" shall be measured for payment by the cubic yard. Payment lines for "Rock Excavation" shall coincide with the slope and grade lines as shown on the plans in areas where rock is encountered. The payment lines will be based on a predetermined limit as mutually agreed to by the Director of Public Works and Contractor. Prior to any rock excavation, the Director of Public Works and Contractor shall survey the conditions and agree on the payment limits for each item. In no case will the payment limits extend beyond the lines and grades shown on the plans and cross sections.

"Test Pit Excavation" shall be measured for payment by the cubic yard.

Trench excavation for culverts, sanitary sewers, sanitary sewer laterals, water mains, water services, underdrains and conduits will not be measured for payment; its costs shall be considered as included in the cost for the appropriate item herein.

Excavation beneath the finished grade for curbs, sidewalk, driveways and pavement will not be measured for payment; its costs shall be considered as included in the cost for the appropriate

item herein.

PAYMENT

Payment for “Earth Excavation” and “Rock Excavation” will be made at the contract unit price bid per cubic yard for each item subject to the method of measurement above. The prices shall constitute full compensation for all equipment, tools, and labor incidental to the completion of the excavation, the formation and compaction of embankments, the formation and compaction of subgrades, and the disposal of surplus or unsuitable material in accordance with these Specifications.

Payment for “Test Pit Excavation” will be made at the contract unit price bid per cubic yard for each item subject to the method of measurement above. The prices shall constitute full compensation for all equipment, tools, and labor incidental to the completion of the excavation and location of utilities as indicated herein, and the backfill and compaction of the excavation to restore the ground surface to the original condition in accordance with these Specifications.

Pay Item

Earth Excavation
Rock Excavation
Test Pit Excavation

Pay Unit

Cubic Yard
Cubic Yard
Cubic Yard

SECTION 2
GRANULAR FILL

DESCRIPTION

“Granular Fill” includes the furnishing and installation of material to be used as a foundation for structures, to replace unstable material in slopes and shoulders, to replace rock and unsuitable material in trenches, and elsewhere as indicated on the Plans or Specifications or where directed by the Director of Public Works. It shall consist of gravel conforming to the requirements of these specifications.

MATERIALS

Granular fill shall conform to the requirements of Section M.02.02 of Form 817 for Bank of Crushed Gravel.

The Town of Simsbury will supply all granular fill for this project at no additional cost to the Contractor. This material shall be used for all aspects of this project which require granular fill. The material may be picked up Monday through Friday between the hours of 7:00 A.M. and 2:00 P.M. at the Simsbury Highway Garage, 66 Town Forest Road, West Simsbury.

CONSTRUCTION DETAILS

When granular fill is used for foundation for structures, as backfill or to replace rock or unsuitable material in trenches, it shall be deposited in layers not over six (6) inches in depth, with each layer thoroughly compacted before the addition of other layers.

MEASUREMENT

Only granular fill used to replace unsuitable material and rock in trenches or other areas directed by the Director of Public Works will be measured for payment. It will be measured in place by the cubic yard after compaction within the payment lines shown or specified by the Director of Public Works.

PAYMENT

This work will be paid for at the contract unit price per cubic yard for "Granular Fill", complete in place, which price shall constitute full compensation for all materials, tools, equipment and labor incidental thereto.

Pay Item
Granular Fill

Pay Unit
Cubic Yard

SECTION 3
PROCESSED AGGERGATE BASE

DESCRIPTION

“Processed Aggregate Base” shall consist of furnishing and installing processed aggregate base as a foundation for bituminous concrete roadways, concrete sidewalks, curbs, driveways and other items where shown on the Plans in accordance with these Specifications and in conformity with the lines, grades, compacted thickness and typical cross-section as shown on the Plans.

MATERIALS

At the discretion of the Director of Public Works, contractors shall supply copies of material test results, certified by an approved testing laboratory.

The materials for this work shall conform to the requirements of Section M.05.01, Processed Aggregate Base and Pavement of Form 817.

CONSTRUCTION DETAILS

Coarse aggregate shall be broken stone. Only one type of coarse aggregate shall be used on a project unless otherwise permitted by the Director of Public Works.

Prior to placing the bottom coarse of the processed aggregate base, the prepared subbase shall be maintained true to line and grade. After the aggregate is spread, it shall be thoroughly compacted and bound by use of equipment approved by the Director of Public Works. Water may be used during the compaction and binding operation.

When the bottom course has been completed, as specified above, the top course aggregate shall be spread over it to such thickness that, after final compaction and binding, the total thickness of the two courses will equal that thickness specified for the completed base. The top course shall be spread, compacted and bound exactly as specified above for the bottom course.

The final surface of the subbase course shall be fine graded so that, after final compaction and just prior to placement of base or pavement courses, the surface elevation shall not vary more than one-quarter inch above or below the design grade at any location. The surface shall be completed to the above tolerance and approved by the Director of Public Works prior to any work at a given location to place an overlying course. If after approval, the course becomes displaced or disturbed in any way for any reason, the Contractor shall repair and regrade the damage to the satisfaction of the Director of Public Works prior to placing the overlying course. All repaired sections shall be re-compacted until they meet the requirements as stated herein.

MEASUREMENT

“Processed Aggregate Base” shall be measured for payment by the cubic yard.

Processed Aggregate Base material for driveways and sidewalks will not be measured for payment, but its costs shall be considered as included in the unit prices for Driveway, Driveway Apron, Sidewalk or Ramp of the type specified.

PAYMENT

When measured for payment, this work will be paid for at the contract unit price per cubic yard for "Processed Aggregate Base" complete in place, which price shall include all materials, equipment, tools and labor incidental thereto.

Pay Item

Processed Aggregate Base

Pay Unit

Cubic Yard

SECTION 4
FORMATION OF SUBGRADE

DESCRIPTION

“Formation of Subgrade” shall consist of the grading and compaction of the subgrade in accordance with the specifications and in conformity with the typical cross section shown on the Plans or as directed by the Director of Public Works. It shall also include the moving, stockpiling, spreading and compaction of reclaimed bituminous concrete pavement necessary to achieve the specified pavement section.

MATERIALS

Not applicable

CONSTRUCTION DETAILS

Construction methods and compaction requirements shall conform to Section 2.09 of Form 817.

If unsuitable material is encountered during this work, it shall be excavated and replaced with granular fill to the depth and limits directed by the Director of Public Works. This additional work shall be measured and paid for as “Earth Excavation” and “Granular Fill” in accordance with these specifications.

MEASUREMENT

“Formation of Subgrade” shall be measured for payment by the square yard.

Formation and Compaction of Subgrade material for driveways and sidewalks will not be measured for payment, but its costs shall be considered as included in the unit prices for Driveway, Driveway Apron, Sidewalk or Ramp of the type specified.

PAYMENT

When measured for payment, this work will be paid at the contract unit price bid per square yard for “Formation of Subgrade” which price shall constitute full compensation for all equipment, tools, and labor incidental to the completion of the formation and compaction of subgrades as specified herein.

Pay Item

Formation of Subgrade

Pay Unit

Square Yard

SECTION 5
BITUMINIOUS CONCRETE (HOT MIX ASPHALT)

DESCRIPTION

“Bituminous Concrete (Hot Mix Asphalt)”, hereafter referred to as HMA, of the type specified includes the furnishing and installation of a bituminous concrete constructed on a prepared processed aggregate base or existing pavement course in accordance with the lines, grades and depths shown on the Plans or as directed by the Director of Public Works. It also includes furnishing quality control testing as required in the Specification.

All references to the “State” or “State Inspector” shall mean the Town of Simsbury or the Town of Simsbury’s designated inspector.

MATERIALS

HMA shall conform to the requirements of Section M.04 “Bituminous Concrete Materials” of Form 817.

Class 1 mix shall be used for the binder on all Town roads.

Class 2 mix shall be used for all bituminous sidewalks and the top coat on all Town roads.

Class 3 Curb mix shall be used for all curbing on Town roads.

Driveway mix shall be used for driveways and driveway aprons.

CONSTRUCTION DETAILS

HMA shall be installed in accordance with Section 4.06 “Bituminous Concrete” of Form 817.

The furnishing of a “Material Transfer Vehicle” as described in 4.06.03.3 will not be required for this project.

Core correlation density samples as described in Section 4.06.03.10 will not be required for this project.

MEASUREMENT

“HMA” of the type specified within the limits of roadway construction shall be measured for payment by the actual number of tons, complete and accepted in place.

Adjustments may be applied to bituminous concrete quantities and will be measured for payment using the formulas in Section 4.06.04.2.

Material used for tack coat will not be measured separately for payment, but its cost shall be included in the unit price for “HMA” of the type specified.

Bituminous concrete for sidewalk, driveways and driveway aprons will not be measured for payment under this item; it shall be measured as specified in the item “Bituminous Concrete Sidewalk” or “Bituminous Concrete Driveway”.

PAYMENT

This work will be paid for at the contract unit price bid per ton for “HMA” of the type specified, which price shall constitute full compensation for all equipment, tools, labor and materials incidental thereto. No separate payment will be made for tack coat or material transfer vehicle.

<u>Pay Item</u>	<u>Pay Unit</u>
HMA Class 1	Ton
HMA Class 2	Ton
HMA Class 3 Curb Mix	Ton
HMA Driveway Mix	Ton

SECTION 6
BITUMINOUS CONCRETE CURB

DESCRIPTION

Bituminous concrete curbing shall consist of machine laid bituminous concrete, constructed on the pavement to the dimensions and details shown on the plans, or as ordered, and in accordance with the specifications.

MATERIALS

Materials for this work, including tack coat, shall conform to the requirements of Form 817, Article M.04.01, Class 3 Curb Mix.

CONSTRUCTION DETAILS

“Bituminous Concrete Curbing” shall be constructed in accordance with the following requirements:

1. Prior to the arrival of the mixture on the Project Site, the surface of the pavement where the curbing is to be constructed shall be cleaned of all loose and foreign material. The surface, which shall be perfectly dry and clean at the time the mix is placed, shall be coated with an approved tack coat just prior to placing the mixture.
2. On arrival at the Site, the mixture shall be transferred from the truck to the hopper of the curbing machine; and the mixture shall be kept clean and free from dirt and foreign materials at all times.
3. The surface of the curbing shall be tested with a 10-ft straightedge, and any variation from a true line exceeding 1/4 in shall be satisfactorily corrected. The only compaction required shall be that obtained by the approved mechanical curbing machine.
4. Where machine work is impractical, the Director of Public Works may permit hand-laid curbing to be constructed.
5. If the design of the curbing machine is such that the outside wheels operate outside of the curb, the Contractor will be required to obtain a smooth surface by grading and consolidating the area on which the outside wheel of the machine rides, and this work shall be done at the Contractor's expense.
6. After the completion of curbing, traffic shall be kept at a safe distance for a period of not less than 24 hours and until the curbing has set sufficiently to prevent injury or damage to the work.

MEASUREMENT

This work will be measured for payment along the top of the curb and will be the actual number of linear feet of bituminous concrete curbing completed and accepted.

The following will not be measured for payment, but shall be considered as included in the unit

price bid for “Bituminous Concrete Curb”:

1. Excavation
2. Removal and disposal of existing curb
3. Tack Coat
4. Backfill and Lawn Restoration

PAYMENT

Payment for this work will be made at the contract unit price per linear foot for “Bituminous Concrete Curb” of the type specified, complete in place, which price shall include all materials, equipment, tools and labor incidental thereto.

Pay Item

Bituminous Concrete Curb

Pay Unit

Linear Foot

SECTION 7
CONCRETE SIDEWALK AND CONCRETE SIDEWALK RAMPS

DESCRIPTION

“Concrete Sidewalk” of the thickness specified includes the construction of concrete sidewalk on a prepared processed aggregate base course in conformance with the lines, grades, dimensions and details as shown on the Plans, or as directed by the Director of Public Works. It shall also include the sawcutting, removal and disposal of existing sidewalk, steps, ramps or pavement within the excavation limits for “Concrete Sidewalk”.

“Concrete Sidewalk and Curb Monolithic” of the thickness specified includes the construction of concrete curb and sidewalk, monolithically poured, on a prepared processed aggregate base course in conformance with the lines, grades, dimensions and details as shown on the Plans, or as directed by the Director of Public Works. It shall also include the sawcutting, removal and disposal of existing sidewalk, steps, ramps or pavement within the excavation limits for “Concrete Sidewalk and Curb Monolithic”.

“Concrete Sidewalk Ramp” of the thickness specified includes the construction of a concrete ramp on a prepared processed aggregate base course in conformance with the lines, grades, dimensions and details as shown on the Plans, or as directed by the Director of Public Works. It shall also include the sawcutting, removal and disposal of existing sidewalk, steps, ramps or pavement within the excavation limits and installation of detectable warning tiles for “Concrete Sidewalk Ramp”.

MATERIALS

1. Concrete:

- a. All Portland Cement Concrete shall conform to the following specifications:

All concrete used shall be proportioned by weight for one cubic yard as follows:

Cement (7 sacks)	658 lbs.
Sand	1,244 lbs.
3/8" crushed stone	700 lbs.
3/4" crushed stone	1,080 lbs.
Water	34 gals.
Darex II (A.E.A.)	3.29 oz.
Air Entrainment	5-7 percent
Slump	3 inches (max.)
Strength (28 day)	4,000 PSI (min.)

- b. The proportions listed are based on the weight of cement and surface dry aggregates with a

bulk specific gravity of 2.65 for sand with a fineness modulus of 2.70 and trap rock with a specific gravity of 2.90.

- c. Portland Cement shall be Type II or IIA and shall comply with AASHTO M-85. Type III or IIIA may not be used except as directed by the Director of Public Works for special conditions. All cements must meet requirements of ASTM C-150. Should air entraining cement be used, it must be capable of producing entrained air within the specified limits without air entraining admixtures.
- d. The air entraining agent used shall be of the vinsol resin type and shall conform to Form 817, Sections M.03.01-5. The air entraining agent shall be added to the mixing water prior to its addition to the mix, for non air entrained cement mixes only. Air entraining agent may not be used with air entrained cement.
- e. All Portland Cement Concrete used shall be "ready-mixed concrete", (Portland Cement Concrete manufactured for delivery to a purchaser in a plastic state and delivered to the job site suitably mixed for placing in the work). Ready-mixed concrete shall be either (1) mixed completely at a central mix plant and transported to the job in a truck mixer operating at agitator speed or (2) mixed completely in a truck mixer while in transit or at the point of delivery. Ready-mixed concrete shall be obtained from suppliers approved by the Inspector. Batching equipment, stationary mixes and truck mixers shall conform to the requirements of Form 817, Section 4.01.03 and Section 6.01.03, as applicable, and be in good condition and operated as designated by the manufacturer. The concrete shall be discharged at the site of the work in a thoroughly mixed and uniform mass of the consistency and workability required without the use of additional mixing water. The slump of the concrete at and during discharge at the work shall be three (3) inches or less.
- f. As determined in accordance with AASHTO T-119, discharge of the batch shall be complete within one (1) hour of the addition of water to the mix. Concrete delivered in outdoor temperatures lower than 40° F shall be discharged at the work site having a temperature not less than 60° F nor greater than 90° F. Every load of concrete delivered to the job site shall have a ticket clearly marked indicating the proportionment of the batch and stamped by a time clock indicating the time the batch was placed in the truck mixer. This ticket shall be presented to the Inspector on the job prior to beginning discharge. Additional water for tempering will be added to the mix only on direction of the Inspector. The concrete supplier shall guarantee proper frequency of delivery to allow conformance with placing requirements of these specifications. Failure to conform with all the requirements of this technical specification will result in the rejection of the nonconforming load(s). Rejected loads that have been "doctored up" will not be accepted. Repeated failure of a supplier to conform to these specifications will result in loss of approval by the Engineer as an approved source of material for construction within the Town.
- g. No additional materials will be added to the concrete mix at the job site without the prior approval of the Director of Public Works.

2. Reinforcing:

- a. Welded Wire Mesh: WWM shall be used in all driveways and specified sidewalk locations. The WWM shall be W1.4xW1.4 and conform to the latest AASHTO M 55M/M 55 "Standard Specifications for Welded Steel Wire Fabric for Concrete Reinforcement."

Written requests may be made to substitute synthetic fibers such as Fibermesh or approved equal for welded wire mesh with written approval of the Director of Public Works. The addition rate shall be 1.5 lb/cu yard.

- b. Smooth Metal Dowels: Smooth metal dowels shall be 5/8" in diameter and 18 inches in length. All metal dowels shall conform to the requirements of AASHTO M31-92, Grade 60.
- c. Deformed Bars: Deformed bars shall conform to AASHTO M31-92, Grade 60.
- d. Bond breaker shall be Reed Wax #100 Emulsion as manufactured by Roger A. Reed, Inc., Reading, MA (1-781-944-4640) or approved equal.
3. Construction/Isolation Joint Material: Joint material shall be one-half (2) inch in thickness, equal in width to the slab thickness and conform to AASHTO M33, Asphaltic Expansion Joint Materials.
4. Forms: The forms used shall be straight and firmly supported and staked to the line and grades as shown on the plans or as directed by the Director of Public Works. The forms shall be free from warp and shall be of sufficient strength to resist springing out of shape. All forms shall be cleaned and oiled before use.
5. Curing Materials: A liquid membrane curing compound such as Masterkure by Master Builders or approved equal and meeting AASHTO M148 shall be applied in accordance with the manufacturer's instructions over the completed concrete surface area.
6. Processed Aggregate Base: Processed aggregate base shall conform to the requirements of "Processed Aggregate Base" elsewhere in these Specifications.
7. Granite Stone Transition Curb: Granite stone transition curb and associated concrete and mortar shall conform to the requirements of "Granite Stone Curb" elsewhere in these Specifications.
8. Detectable Warning Tiles: Prefabricated detectable warning tile (2' x 4') to be furnished by the Contractor and shall be chosen from the ConnDOT's Qualified Products List for retrofit or cast in place applications. Suppliers can be found at the following link:
<http://www.ct.gov/dot/cwp/view.asp?a=1387&q=259630>

CONSTRUCTION DETAILS

1. Excavation

Excavation, including the removal and disposal of any type of existing sidewalk, curb, ramp,

steps or pavement, shall be made to the required depths below the finished grade as shown on the plans or as directed. All soft and yielding material shall be removed and replaced with suitable material.

2. Processed Aggregate Base

The base course shall be placed in layers not to exceed six inches (6") in depth and to such a depth that after compaction it shall be at the specified depth below the finished grade of the walk.

3. Forms

Forms shall be straight, free from warp and of sufficient strength to resist springing from the pressure of the concrete. Forms shall be of minimum 5" depth and shall have a flat surface on the top. Forms shall be securely staked, braced and held firmly to the required line and grade and shall be sufficiently tight to prevent leakage of mortar. All forms shall be cleaned and oiled or wetted before concrete is placed against them. Sheet metal templates one-eighth ($\frac{1}{8}$) inch in thickness, of the full depth and width of the walk, shall be spaced at intervals of fifteen feet (15') or as directed by the Director of Public Works. If the concrete is placed in alternate sections, these templates shall remain in place until concrete has been placed on both sides of the template. As soon as the concrete has obtained its initial set, the templates shall be removed.

4. Joints

- a. Construction Joints: At maximum intervals of thirty feet (30'), install a construction joint as detailed on the drawings. Install dowels as shown on the drawings. Minimum embedment on each side of the joints shall be six inches (6"). All dowels shall be straight, square on the ends with no burrs. Locate 12" from the edge of the slab. Bars must be carefully aligned and square with the form face. Prevent bonding to the concrete on one side of the joint by using a plastic sleeve over the dowel or coat with an approved bond breaker. Alternate protected end on each side of the joints.

Dowels are also to be installed between new and existing concrete slabs. Where new or repaired walks abut existing concrete sidewalks, the contractor shall drill holes measuring $\frac{3}{4}$ of an inch in diameter and twelve (12) inches in depth at 24" on centers into the existing concrete slab. The dowels, dipped in a liquid asphalt and coated with an approved bond breaker or plastic sleeve, shall be set into the existing sidewalk slab prior to the placement of concrete. The dowels are to be level with the latitude pitch of the sidewalk and shall conform to the details of these specifications. Any variations in dowel installation procedures must be approved by the Director of Public Works.

Other locations to which dowels may be required will be directed by the Director of Public Works.

- b. Control Joints: Follow joint spacing as shown on the drawings. At intervals of approximately fifteen (15) feet, a full control joint shall be provided. A tooled joint, to the depth of $\frac{3}{8}$ of an inch, shall be installed at approximately five (5) foot intervals along the sidewalk. The resulting areas should be as square as practical. All joints shall be installed using straight

guides set at right angles to the longitudinal direction of the walk.

- c. Isolation Joints will be installed wherever concrete is placed against already installed concrete of structures such a curbing, building, or other, previously existing paving.

If it becomes necessary to adjust the locations, horizontal or vertical dimensions of the above listed items due to interference with utilities or for other valid reasons, the Contractor, with the approval of the Director of Public Works, shall construct said items to the modified dimensions and locations.

5. Concrete Placement and Finishing

- a. Subgrade preparation: The subgrade shall be approved by the Director of Public Works prior to placement of concrete. The grade will be free of soft areas, roots, rubble and large stones. It shall be fully compacted and graded to provide the specified slab thickness within $\pm 1/4$ ".
- b. Forms: Align forms as shown on drawings and secure to provide straight edges and uniform curves. Remove only after the concrete has gained sufficient strength to prevent chipping or raveling of the edges.
- c. Where required, install welded wire mesh. Support the mesh on concrete bricks or other supports so that it will remain in the upper third of the slab.
- d. Moisten the subgrade before starting concrete placement to eliminate water loss.
- e. Place continuously, using construction joints at locations shown on the drawings or as approved by the Director of Public Works. If an interruption occurs of a duration that may cause a cold joint, install a construction joint as described in this specification.
- f. Water may be added to the truck mixer to adjust the slump when the discharge begins, only if the concrete is below the specified water cement ratio and maximum slump upon arrival at the job site. Water shall not be added to the batch at any later time. If higher slumps are required, use a high range water reducer such as Rheobuild 1000 by Master Builders or equal as approved by the Director of Public Works.
- g. Screed the concrete to grade, bull float or darby, consolidate formed edges by spading with a hand float, and leave until edging can begin. Allow to harden sufficiently so that a foot leaves only a slight imprint. Floating should not begin until the water sheen has disappeared. The surface shall be worked and floated with a wooden, aluminum or magnesium float or finishing machine using float blades. The outside edges of the slab shall be edged with one-quarter ($1/4$) inch radius tool. The slab shall then be broomed crosswise with a fine hair broom leaving the surface free from all tool marks.
- h. Immediately upon the disappearance of the water sheen following the final finishing and before any marked dehydration or checking occurs, the curing compound shall be applied using an approved spraying device. The sprayer shall deliver a fine spray with uniform coverage. Coverage rate shall be that recommended by the curing compound manufacturer.

- i. The Contractor shall have on the job, at all times, sufficient polyethylene film or waterproof paper to provide complete coverage in the event of rain. Protect the surface if rain occurs before final set or use for curing in the event of a breakdown of the spray equipment.
- j. If rain falls on the newly coated sidewalk before the curing film has dried sufficiently to resist damage, or if the film is damaged in any other manner, the contractor shall reapply same. Treated surfaces shall be protected from all foot or vehicular traffic for a sufficient period of time to prevent damage.

6. Reinforcing

Reinforcing of the type specified shall be used in all concrete sidewalk ramps and at concrete sidewalks which cross driveways. Welded wire fabric for concrete reinforcement shall be embedded at mid-depth in the slab.

7. Detectable Warning Tile

All sidewalk ramps shall have detectable warning tiles as shown on the Plan or as directed by the Director of Public Works. The detectable warning tile shall be set directly in poured concrete according to the Plans, the manufacturer's specifications or as directed by the Director of Public Works. The Contractor shall place two 25 pound concrete blocks or sandbags on each tile to prevent the tile from floating after installation in wet concrete. Detectable warning tiles shall be furnished by the Contractor.

8. Special Conditions

- a. Low Temperature Placements: No concrete is to be placed when air temperature is below 50°F unless additional precautions are taken and prior approval is given by the Director of Public Works. The Director of Public Works must approve all placements below 50°F. No concrete will be placed on frozen sub-grade or at temperatures below 20°F. Concrete exposed to temperatures below 40°F after placement must be protected through the use of insulating blankets, a six (6) inch layer of straw that is maintained in a dry condition by a covering of plastic sheeting, or other appropriate methods. Any concrete placed during cold weather that is damaged because of freezing shall be replaced at the Contractor's own expense.
- b. Special consideration for high temperature placements and rapid drying conditions should be discussed with the Director of Public Works. No additional materials will be added to the concrete mix at the job site without the prior approval of the Director of Public Works.
- c. Where reconstruction of an existing approach walk is required, the reconstructed portion of the approach walk shall match the existing approach walk in color, texture and appearance.
- d. Where the new "Concrete Sidewalk" crosses a driveway, the sidewalk thickness shall be increased to 8".

9. Curb Transitions

Curb transitions shall be provided when sidewalk ramps are adjacent to existing and proposed curb. Granite stone curb transitions shall be provided adjacent to granite curb and concrete curb transitions shall be provided adjacent to concrete curb and bituminous concrete

curb unless approved otherwise by the Director of Public Works.

10. Backfilling and Removal of Surplus Material

The sides of all finished concrete work shall be backfilled to the limits shown on the Typical Details or as directed by the Director of Public Works, with suitable material thoroughly compacted and finished flush with the top of the concrete. All surplus material shall be removed and the site left in a neat and presentable condition to the satisfaction of the Director of Public Works.

11. Protection

The Contractor shall protect newly poured concrete surfaces so as to prevent damage from falling objects, vandalism, etc. The Contractor shall repair or remove and replace any damaged or defaced concrete surface at his own expense. Determination to repair or remove and replace will be at the sole discretion of the Director of Public Works.

12. Utility Adjustments

If an existing utility box, valve box or manhole is located within the limits of the new sidewalk or ramp, the Contractor shall be responsible for the coordination and scheduling with the owner of the facility, for the adjustment of the facility to grade, if necessary.

MEASUREMENT

“Concrete Sidewalk” will be measured by the actual number of square feet of completed and accepted concrete sidewalk of the thickness specified.

“Concrete Sidewalk and Curb Monolithic” will be measured by the actual number of square feet of completed and accepted concrete sidewalk of the thickness specified measured from face of curb to back of walk.

“Concrete Ramps” will be measured by the actual number of square feet of completed and accepted concrete ramps of the thickness specified.

The following items will not be measured separately for payment, but shall be considered as included in the unit price bid for “Concrete Sidewalk”, “Concrete Sidewalk and Curb Monolithic” or “Concrete Sidewalk Ramp” of the thickness specified:

1. Excavation
2. Processed Aggregate Base (Broken Angular Stone)
3. Dowels and other reinforcement
4. Sawcutting and removal of existing sidewalks, ramps, driveways or roadway within the sidewalk or ramp excavation limits
5. Supplying and installing Detectable warning tiles
6. Installing curb transitions
7. Adjustment of existing valve boxes, utility boxes, or handholes to grade
8. Erosion and Sedimentation Controls
9. Backfill and lawn restoration
10. Bituminous concrete restoration within the sidewalk or ramp excavation limits

PAYMENT

This work will be paid for at the contract unit price per square yard for “Concrete Sidewalk” and “Concrete Sidewalk and Curb Monolithic”, or square foot for “Concrete Sidewalk Ramp”, of the thickness specified, complete in place, which prices shall include all excavation; formation of subgrade; sawcutting, removal and disposal of existing sidewalk and ramps; processed aggregate base; backfill, reinforcement, expansion joints, curing, disposal of surplus material, supplying and installing detectable warning tiles, bituminous concrete restoration, equipment, tools, materials and labor incidental thereto.

Granular fill used to replace unsuitable material or used as borrow material to bring the sidewalk subbase to grade will be paid under the item “Granular Fill” elsewhere in these Specifications. Granular fill will only be paid for if directed by the Director of Public Works.

Pay Item

5” Concrete Sidewalk
8” Concrete Sidewalk
5” Concrete Sidewalk and Curb Monolithic
6” Concrete Sidewalk Ramp

Pay Unit

Square Yard
Square Yard
Square Yard
Square Foot

SECTION 8
BITUMINOUS CONCRETE DRIVEWAY

DESCRIPTION

“Bituminous Concrete Driveway” includes the construction of a bituminous concrete surfaced driveway or driveway apron, constructed on a processed aggregate base course in the locations and to the dimensions and details shown on the Plans, as directed by the Director of Public Works and in accordance with these Specifications.

MATERIALS

Processed Aggregate Base shall conform to the requirements of “Processed Aggregate Base” elsewhere in these Specifications.

Bituminous concrete shall meet the requirements of “Bituminous Concrete (Hot Mix Asphalt)” elsewhere in these Specifications.

The tack coat to be used on all cold joints shall conform to the requirements of Section M.04.04.1 of Form 817.

Joint seal shall conform to the requirements of Section M.04.01.8 of Form 817.

CONSTRUCTION DETAILS

1. Excavation: Excavation, including removal of any existing sidewalk, driveway, or driveway apron shall be made to the required depth below the finished grade, as shown on the Plans or as directed by the Director of Public Works. All soft and yielding material shall be removed and replaced with suitable material.
2. Forms: When the bituminous concrete is spread by hand, forms shall be used. Forms shall be of metal or wood, straight, free from warp and of sufficient strength to resist springing from the impact of the roller. If of wood, they shall be of two (2) inch surfaced plank except that at sharp curves thinner material may be used; if of metal, they shall be of an approved section. All forms shall be of a depth equal to the depth of the sidewalks or driveways and shall be securely staked, braced, and held firmly to the required line and grade. All forms shall be cleaned and oiled each time they are used.
3. Base Course: Processed Aggregate Base for the base course shall be uniformly spread upon the subgrade to the required depth and thoroughly compacted with a roller weighing not less than 500 pounds.
4. Bituminous Concrete Surface: This surface shall be constructed in accordance with the requirements of Section 4.06 of Form 817, except that the material may be spread by hand and thoroughly compacted by multiple passes of a roller weighing not less than 500 pounds.
5. Backfilling and Removal of Surplus Material: The sides of the driveway or apron shall be backfilled with suitable material and thoroughly compacted and finished flush with the top of the driveway. All surplus material shall be removed and the site left in a neat and presentable

condition to the satisfaction of the Director of Public Works. In sections inaccessible to the roller, the base course, surface course and backfill shall be hand-tamped with tampers weighing not less than 12 pounds, the face of which shall not exceed 50 square inches in area.

6. Where a joint is formed, the old pavement shall be sawcut square with the pavement in a vertical and horizontal direction. The exposed edge shall receive a thin coating of RS-1 or other approved bitumen. The joint between the new and old pavement shall be sealed with an approved joint sealant.

MEASUREMENT

“Bituminous Concrete Driveway” will be measured by the actual number of square yards of “Bituminous Concrete Driveway” constructed and accepted.

The following items will not be measured separately for payment, but shall be considered as included in the unit price bid for “Bituminous Concrete Driveway”:

1. Excavation below finished grade
2. Processed Aggregate Base
3. Removal and disposal of existing sidewalks or pavement within the driveway apron or excavation limits
4. Tack Coat
5. Sawcutting
6. Joint Sealant
7. Erosion and Sedimentation Controls

PAYMENT

This work will be paid for at the contract unit price for “Bituminous Concrete Driveway”, which price shall constitute full compensation for excavation, removal and disposal of existing sidewalk or driveway, sawcutting, processed aggregate base, formation of subgrade, tack coat, joint seal, and all materials, equipment and labor necessary to complete the work as specified on the Plans or as directed by the Director of Public Works.

Driveways damaged due to carelessness on the part of the Contractor shall be restored by the Contractor, as directed by the Director of Public Works, at no expense to the Town.

<u>Item</u>	<u>Pay Unit</u>
Bituminous Concrete Driveway	Square Yard

SECTION 9
EROSION AND SEDIMENTATION CONTROLS

DESCRIPTION

“Silt Fence” includes the furnishing, placing, maintaining and removal of manufactured geotextile silt fence where shown on the Plans or where directed by the Director of Public Works.

“Hay Bales” includes the furnishing, placing, maintaining and removal of hay bales where shown on the Plans or where directed by the Director of Public Works.

“Silt Sack” includes the furnishing, placing, maintaining and removal of manufactured geotextile silt sacks specifically made to protect catch basins where shown on the Plans or where directed by the Director of Public Works.

“Construction Entrance” includes the furnishing and installation of a temporary crushed stone pad on a geotextile surface located so as to prevent dirt and mud from tracking onto existing pavement. The exact location(s) of “Construction Entrance” shall be determined by the Director of Public Works.

MATERIALS

Geotextile shall conform to Section M.08.01.19 of Form 817.

Silt Sack shall be Hi-Flow Siltsack® Type A (for Type “C-L” catch basin tops) and Type B with curb deflector (for Type “C” catch basin tops or other structure with curb inlets) or approved equal. Silt sack shall be provided with internal overflows and meet the following criteria:

<u>Properties</u>	<u>Test Method</u>	<u>Units</u>
Grab Tensile Strength	ASTM D-4632	265 lbs
Gran Tensile Elongation	ASTM D-4632	20%
Puncture	ASTM D-4833	135 lbs
Mullen Burst	ASTM D-3786	420 psi
Trapezoid Tear	ASTM D-4533	45 lbs
UV Resistance	ASTM D-4355	90%
Apparent Opening Size	ASTM D-4751	#20 U.S. Sieve
Flow Rate	ASTM D-4491	200 gal/min/sq ft
Permittivity	ASTM D-4491	1.5/sec

Crushed stone for Construction Entrances shall conform to “Grading A” of Section M.02.06 of Form 817.

RESPONSIBILITY

It is the Contractor’s sole responsibility to provide and continually inspect and maintain all erosion and sedimentation control measures on the site. Failure to do so may result in

enforcement actions by the Town of Simsbury or State of Connecticut. The erosion and sedimentation control measures shown on the Plans or in these Specifications are intended as a guideline to show the minimal control measures required based on the intended construction. Additional control measures may be necessary depending upon the Contractor's operations and scheduling of the project.

CONSTRUCTION DETAILS

Geotextile sedimentation control systems may consist of either a prefabricated geotextile fence or a geotextile fence assembled by the Contractor in the field. Geotextile sedimentation control systems shall be installed so that the bottom four (4) inches of the fabric is buried by either trenching or by laying the four (4) inch section horizontally on the ground and burying by ramping the soil up to the control fence. All geotextile fences shall be a least 36 inches in exposed height as installed, with not less than a two (2) degree and not more than a 20 degree inclination toward the potential silt source. Hardwood posts shall have a minimum cross-section size of at least 1.5 inches by 1.5 inches and a minimum length of 30 inches. Steel posts shall be at least 0.5 pound per linear foot with a minimum length of 48 inches. Spacing between posts shall not exceed ten (10) feet, and all posts shall be driven a minimum of 12 inches into the ground. When joints between sections of geotextile sedimentation control systems are necessary, geotextile shall be spliced together only at a support post, with a minimum six (6) inch overlap, and securely sealed.

The installations shall be maintained or replaced until they are no longer necessary for the purpose intended or are ordered removed by the Director of Public Works. Cleanout of accumulated sediment shall be accomplished when one-half of the original height of the sedimentation control system, as installed, becomes filled with sediment or as ordered by the Director of Public Works.

The geotextile fence systems will be completely removed from the project at the completion of the project, unless specifically authorized by the Director of Public Works to be left in place.

Unless a specific type of sedimentation control system is indicated on the plans or directed by the Director of Public Works, the type of system will be at the Contractor's option.

Silt sacks shall be installed in accordance with manufacturer's instructions and shall be emptied when they have collected 6" to 12" of sediment and when directed by the Director of Public Works. Silt sacks shall be inspected every 1 to 2 weeks and after every major rainfall event.

Erosion and sedimentation control measures shall be installed prior to any excavation, grubbing or other operation that disturbs existing ground.

MEASUREMENT

"Silt Fence" and "Hay Bales" will be measured for payment by the actual number of linear feet of "Silt Fence" or "Hay Bales" installed and accepted. Measurement shall be made along the center-line of the system. Replacement systems will not be measured for payment. "Silt Sacks" will be measured for payment by the actual number of silt sacks installed and accepted. Different types of silt sacks installed for catch basin tops (with and without curb inlets)

and replacement systems will not be measured separately for payment.

“Construction Entrances” will be measured for payment by the actual number of construction entrances installed and accepted. Replacement systems will not be measured for payment.

Any other erosion and sedimentation control systems required as a result of the Contractor’s operation will not be measured for payment.

Erosion and Sedimentation Controls associated with the permanent removal or installation of driveways and sidewalks will not be measured for payment, but its costs shall be considered as included in the unit prices for Underdrain, Yard Drain, Lawn Restoration, Driveway, Driveway Apron, Sidewalk or Ramp of the type specified.

PAYMENT

“Silt Fence” and “Hay Bales” will be paid for at the contract unit price per linear foot for “Silt Fence” or “Hay Bales”, complete in place, which price shall include all materials, equipment, tools and labor incidental to the installation, maintenance, replacement, removal and disposal of the system and surplus material. No payment shall be made for the cleanout of accumulated sediment.

“Silt Sack” will be paid for at the contract unit price each for “Silt Sack” complete in place, which price shall include all materials, equipment, tools and labor incidental to the installation, maintenance, replacement, removal and disposal of the system. No separate payment shall be made for the cleanout of accumulated sediment or for different types of silt sacks installed for catch basin tops (with and without curb inlets) and replacement systems.

“Construction Entrance” will be paid for at the contract unit price each for “Construction Entrance” complete in place, which price shall include all materials, equipment, tools and labor incidental to the installation, maintenance, replacement, removal and disposal of the system. No payment shall be made for the cleanout of accumulated sediment.

<u>Pay Item</u>	<u>Pay Unit</u>
Silt Fence	Linear Foot
Hay Bales	Linear Foot
Silt Sack	Each
Construction Entrance	Each

SECTION 10 SIGNS

DESCRIPTION

“Sign Face – Sheet Aluminum” includes the furnishing and installation of permanent sign face sheet aluminum signs of the type specified on new breakaway type metal sign posts at the locations indicated on the plans. It does not include the furnishing and installation of temporary construction signs which are included in the unit price for the item “Maintenance and Protection of Traffic”.

“Remove Sign” includes the removal and disposal of existing signs and sign posts at the locations shown on the Plans or where directed by the Director of Public Works.

“Relocate Sign” includes the resetting of existing signs and sign posts at new locations as shown on the Plans or where directed by the Director of Public Works.

MATERIALS

Reflective sheeting shall conform to the requirements of Section M.18.09.01, Type I, II or III of Form 817.

Silk screening shall conform to the requirements specified by the reflective sheeting manufacturer.

Metal sign posts shall conform to the requirements of Section M.18.14 of Form 817.

CONSTRUCTION DETAILS

Placement and dimensions of copy, border and mounting holes shall conform to details of the Department of Transportation typical details.

Reflective sheeting shall be applied in such a manner that the finished sign shall be wrinkle and bubble free.

Cutout, copy and border shall conform to the manufacturer’s requirements.

Signs shall be mounted on metal sign posts. Metal sign posts shall be driven or the holes augered and the backfill thoroughly tamped after the posts have been set level and plumb.

When signs are to be placed in new concrete sidewalk, the Contractor shall provide a PVC sleeve, at the locations approved by the Director of Public Works, to accommodate the resetting of signs.

The overlap for breakaway posts shall extend four inches (4”) above finished grade.

MEASUREMENT

“Sign Face – Sheet Aluminum” of the type specified will be measured for payment by the actual

number of square feet of sign face-sheet aluminum of the type specified, installed and accepted.

“Remove Sign” will be measured for payment by the actual number of signs removed and disposed of.

“Relocate Sign” will be measured for payment by the actual number of signs relocated.

PAYMENT

The contract unit price for “Sign Face – Sheet Aluminum” shall include fabricating and furnishing the sign, posts and mounting hardware and all materials, equipment, labor and work incidental thereto to provide a complete sign installation.

The contract unit price for “Remove Sign” shall include all labor, equipment, materials and incidental work involved with the removal and disposal of existing sign and post at locations shown on the Plans or where directed by the Director of Public Works.

The contract unit price for “Relocate Sign” shall include all labor, equipment, materials and incidental work involved with the resetting of existing signs and posts at locations shown on the Plans or where directed by the Director of Public Works.

<u>Pay Item</u>	<u>Pay Unit</u>
Sign Face Sheet Aluminum (Type III Reflective Sheeting)	Each
Remove Sign	Each
Relocate Sign	Each

SECTION 11
RESTORATION OF LAWN AREAS

DESCRIPTION

“Restoration of Lawn Areas” includes all work required to establish turf, including the furnishing and installation of screened topsoil, finish grading, fertilizing, seeding, mulching and temporary sediment and erosion control measures where shown on the Plans or where directed by the Director of Public Works. The work of this section shall be considered as separate from lawn restoration associated with the permanent removal or installation of sidewalks or sidewalk ramps.

MATERIALS

Fertilizer: 18-18-5, (Nitrogen, Phosphoric Acid, Potassium), water-soluble or an approved equal at a rate of 25-lbs per 1,000-sq. ft. Submit Manufacturer’s product specifications and guaranteed purity analysis for fertilizer.

Mulch: Cellulose fiber or hay mulch shall conform to the requirements of Section M.13.05.3 of Form 817. Apply at a minimum rate of 40 lbs/ 1,000 SF.

Topsoil: The term topsoil used herein shall mean a soil meeting the soil textural classes established by the United States Department of Agriculture Classification System based upon the proportion of sand, silt, and clay size particles after passing a two (2) millimeter (mm) sieve and subjected to a particle size analysis. The topsoil shall not contain less than 6% nor more than 20% organic matter as determined by loss-on-ignition of oven dried samples dried at 105 degrees centigrade.

The following textural classes shall be acceptable:

Loamy sand, including coarse, loamy fine, and loamy very fine sand
Sandy loam, including coarse, fine and very fine sandy loam

Loam

Silt loam, with not more than sixty (60) percent silt

The topsoil to be furnished by the Contractor shall be loose, friable, reasonably free of admixtures of subsoil, free from refuse, stumps, roots, brush, weeds, rocks, and stones ½ inch and over in all dimensions. The topsoil shall also be free from any material that will prevent the formation of a suitable seedbed or prevent seed germination and plant growth.

Seed: Shall be fresh and clean and new crop seed composed of an evenly graded mixture by proportion and testing minimum percentages of purity and germination indicated, or as approved by the Director of Public Works.

The seed mixture for lawns shall conform to the following requirements:

<u>Area Where Seeding Mix Applies</u>	<u>Seeding Mixture By Weight</u>	<u>Rate Per. 1000 sq. ft.</u>	<u>Reseeding Dates*</u>
All Lawn Areas	Red Fescue 70% Kentucky Bluegrass 20% Perennial Ryegrass 10%	5 Lbs.	Aug. 15 – Oct. 1 April 1 – June 15
Road Cuts and Fills	Kentucky Tall Fescue 80% Annual Ryegrass 20%	3 Lbs.	Aug. 15 – Oct. 1 April 1 – June 15

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

CONSTRUCTION DETAILS

Construction methods shall be those established as agronomically acceptable and feasible and which are approved by the Director of Public Works.

The existing ground shall be graded to a reasonably true surface.

Topsoil shall be spread and shaped to meet existing elevation, after settlement and compaction has occurred, and have a minimum depth of six (6) inches with all stone larger than ½" removed.

In wetland areas, 8" of native topsoil/organic matter shall be stripped, stockpiled and reused for wetlands plantings.

It shall be the Contractor's responsibility to restore to the line, grade and surface all eroded areas with approved material and to keep topsoiled areas in acceptable condition until the completion of the construction work.

Examine work area before proceeding with any work and notify the Director of Public Works in writing on conditions which may prevent the proper execution of this work. Failure to report unsuitable conditions will require the contractor to rectify unacceptable work at no additional cost to the Town.

Hydroseeding:

1. Allow the planting area soil surface to dry out for one day only prior to the hydroseeding application. Exercise care not to allow the soil surface to be overly saturated with water prior to the hydroseeding installation. At the same time the soil surface should not become too dry during this period. There should be some residual moisture within the first 1/4 inch of the soil surface.
2. Notify the Director of Public Works at least 48 hours prior to starting the hydroseeding operation. The Director of Public Works shall be present during the hydroseeding operation and has final determination if conditions are acceptable for hydroseed application.
3. Application rates for hydroseed shall be as defined by the manufacturer.
4. Apply the hydroseed in the form of a slurry consisting of organic soil amendments, commercial

fertilizer, and any other chemicals that are called out. When hydraulically sprayed onto the soil, the mulch shall form a blotter-like material. Direct the spray operation so that this procedure will drill and mix the slurry components into the soil, the slurry spray will also penetrate the soil surface, thus ensuring maximum impregnation and coverage. The impregnation and mixing of the components will help in retaining moisture while stabilizing soil surface from superficial erosion.

5. Do not leave the hydroseeding slurry components in the hydroseeding machine for more than two (2) hours because of possible seed destruction. If slurry components are left idle for more than two hours in the machine, add 50% more of the originally specified seed mix to any slurry mixture which has not been applied within the two hours after mixing. Add 75% more of the original seed mix to any slurry mixture which has not been applied eight (8) hours after mixing. All mixtures more than eight (8) hours old, must be disposed, offsite, at the contractor's expense.
6. Spray the area with a uniform visible coat, using the dark color of the cellulose fiber as a visual guide. The slurry shall be applied in a downward drilling motion via a fan stream nozzle. Insure that all of the slurry components enter and mix with the soil. Insure the uniformity of the hydroseed application.
7. Exercise special care to prevent any of the slurry from being sprayed onto any hardscape areas including concrete walks, fences, walls, buildings, etc. Remove all slurry sprayed onto these surfaces at the contractor's expense.

Conventional Seeding:

1. Scarify surface of all areas to be top soiled and place a minimum of six (6) inches of topsoil on all areas to be seeded.
2. Apply lime at a rate of two (2) tons of ground limestone per acre (100 lbs./1000 sq. ft.).
3. Fertilize:
Meet the above material requirements for fertilizer or the following requirements:
 - a. For spring seeding, apply 10-10-10 fertilizer at a rate of three hundred (300) pounds per acre (7 lbs./1000 sq. ft.) and work into soil. Six (6) to eight (8) weeks later, apply additional three hundred (300) pounds per acre on the surface.
 - b. For fall seeding, apply 10-10-10 fertilizer at a rate of six hundred (600) pounds per acre (14 lbs./1000 sq. ft.) and work into soil.
4. Smooth and firm seedbed, apply seed uniformly at the rate specified for the seed type and cover seed with not more than ¼ inch of soil.
5. Mulch immediately with hay free from weed seeds, at a rate of three (3) bales per 1000 sq. ft.

Contractor shall save all seed and fertilizer tags and fiber mulch bags for the Director of Public Works to verify compliance with the drawings and specifications.

The Contractor shall maintain the area until sufficient seed growth has occurred to stabilize the soil. This includes the restoration of all eroded areas, and the placing and maintaining of erosion control measures as required to prevent further erosion.

Normal seeding season shall be:

For Grass:

Spring seeding - April 1 through June 15

Fall seeding - August 15 through October 1

For Wildflower:

Spring seeding - March 1 to May 15

Fall seeding - November 15 to December 15

Seeding at other times will be allowed only with permission of the Director of Public Works.

The Contractor may be required to top dress and reseed certain areas to achieve sufficient, uniform turf establishment.

MAINTENANCE

Upon completion of seeding operations, maintain all seeded areas for a period of 90 calendar days as follows:

1. Germination stage irrigation: Approximately 24 hours after seeding the planting areas, initiate the watering sequence. Leave the water on long enough to moisten the soil thoroughly, taking care not to super saturate or wash away the seed. Perform frequent, light irrigation until the seed has germinated. Repair all seed washings and erosion.
2. Establishment stage irrigation: After germination, reduce each watering. The specific watering program shall be approved by the Director of Public Works.

Fertilize all hydroseeded areas with an approved commercial fertilizer approximately thirty (30) calendar days from the start of the maintenance period.

ACCEPTANCE

Final approval and acceptance will be given in writing by the Director of Public Works following a final acceptance inspection. The Director of Public Works reserves the option to extend the maintenance period to achieve complete germination of all turf or other plant materials with a uniform height, color and density throughout all seeded areas. Final acceptance may be given at the end of the 90 calendar day maintenance period if an acceptable germination of turf and adequate plant establishment has been obtained, as determined by the Director of Public Works.

GUARANTEE AND REPLACEMENT

Provide a guarantee for a period of one (1) year after final acceptance, that the installed grass areas be at least the quality and condition as at the time of acceptance. Re-seed unacceptable areas during the guarantee period. The guarantee shall not include damage or loss of turf due to acts of God, acts of vandalism or negligence on the part of the Town.

MEASUREMENT

“Restoration of Lawn Areas” will be measured for payment by the actual number of square yards of turf establishment performed in accordance with the Plans and Specifications.

The following items will not be measured separately for payment, but shall be considered as included in the unit price bid for “Restoration of Lawn Areas”:

1. Excavation
2. Fertilizer, seed or mulch
3. Topdressing and reseeded
4. Water
5. Lawn areas outside grading limits disturbed by the Contractor
6. Erosion and Sedimentation Controls

Final payment for this item will not be issued until grass is established to the approval of the Director of Public Works. Partial payments may be made, but in no case will more than 50% of the item be paid until the grass is established to the approval of the Director of Public Works.

PAYMENT

This work will be paid for at the contract unit price bid for "Restoration of Lawn Areas", which price shall include all the furnishing and fine grading of slope and lawns areas, topsoil, fertilizer, seed, replacement of lawn structures, labor, tools and equipment incidental thereto.

Lawn restoration associated with the permanent removal or installation of sidewalks or sidewalk ramps, curbing and the installation of underdrains and yard drains shall be considered as part of the unit cost for those items and will not be paid for separately.

Unless authorized by the Director of Public Works, any disturbance of lawns beyond the grading limits shown on the Plans shall be restored to its original condition by the Contractor at no expense to the Town of Simsbury.

Final payment for this item will not be issued until grass is established to the approval of the Director of Public Works. Partial payments may be made, but in no case will more than 50% of the item be paid until the grass is established to the approval of the Director of Public Works.

Pay Item

Restoration of Lawn Areas

Pay Unit

Square Yard

SECTION 12
MAINTENANCE AND PROTECTION OF TRAFFIC

DESCRIPTION

“Maintenance and Protection of Traffic” includes the furnishing, installation, maintenance, adjusting, cleaning, storing and removal when no longer required of all temporary signs (sheet aluminum or plywood), sign supports, cones, drums, barricades or other approved traffic control devices necessary to maintain and protect traffic within the project area in accordance with the Plans, Specifications, the Manual of Uniform Traffic Control Devices (MUTCD), the Town of Simsbury Traffic Control Ordinance, or as directed by the Director of Public Works.

SUBMITTALS

Unless a Traffic Detour Plan is provided elsewhere in these specifications, all temporary road closures and detours proposed by the Contractor must be approved by the Chief of Police prior to implementation. In these instances, the Contractor shall submit a plan of the proposed detour, complete with sign patterns, and estimated duration of detour to the Director of Public Works for approval at least seven (7) days prior to execution. Detours will only be considered for infrequent, short- term operations.

MATERIALS

All materials under this item including any warning devices, such as signs, barricades, flashers, cones, drums, vests, paddle signs, delineators, and other incidentals necessary to protect the work area and maintain vehicular and pedestrian traffic through and adjacent to the project area shall be in accordance with the MUTCD, as amended, or as approved by the Director of Public Works.

REQUIREMENTS

The Contractor shall maintain and protect traffic in the project area in accordance with the requirements and regulations of the Town of Simsbury, and these Specifications. Unless otherwise specified, the Contractor must maintain pedestrian and vehicular traffic to permit access to businesses, factories, residences, and intersecting streets.

1. The Contractor shall keep the roadway under construction open to vehicular and pedestrian traffic for the full length of the project. Traffic is to be maintained on one section of existing pavement, proposed pavement, or a combination thereof. Alternating one way traffic may be utilized and limited to a maximum length of five hundred (500) feet during construction hours. Lane width for alternating one-way traffic shall be kept to a minimum width of ten (10) feet, or as directed by the Director of Public Works. A sufficient number of travel ways and pedestrian pass ways shall be provided to move that traffic ordinarily using the roadway. The travel lanes and pedestrian pass ways shall be drained and kept reasonably smooth, and in a suitable condition at all times in order to provide minimum interference to traffic consistent with the prosecution of the work. Suitable ingress and egress shall be provided at all times where required for all intersections, driveways and for all abutting properties having legal access.

2. Traffic patterns shall conform to the Connecticut Department of Transportation Special Provisions Item 0971001A – Traffic Control Plans & Typical Materials.
3. The Contractor shall use Certified Flaggers as necessary to provide traffic control. Unless the use of uniformed officers is ordered by the Chief of Police, all costs associated with the use of uniformed officers will be borne by the Contractor.
4. For such instances where detouring is unavoidable, the Contractor shall provide the Director of Public Works a proposed detour route that will be subject to the Town's approval prior to the beginning of construction activities. For any instance when the Contractor proposes to detour traffic, the Director of Public Works shall be provided a minimum of seventy two (72) hours' notice. The right to detour traffic is not implied and the decision to do so will be the sole responsibility of the Town.
5. Where flashers or other warning devices are used, all signs shall be erected and placed in accordance with the MUTCD as amended.
6. The Contractor shall furnish a sufficient number of traffic control devices such as signs, barricades, traffic drums, cones, flashers, construction fencing, flaggers, warning devices, temporary pavement markings, and delineators to forewarn traffic of the impending construction and to guide the traveling public through the construction safely.
7. All signs in any one signing pattern shall be mounted the same height above the roadway. The Contractor shall keep all signs in proper position, clean and legible at all times. Care shall be taken so that weeds, shrubbery, construction materials, equipment and soil are not allowed to obscure any sign, light, or barricade. Signs that do not apply to construction conditions should be removed or adjusted so that the legend is not visible to approaching traffic.
8. All proposed construction area traffic control is subject to the review and approval by the Director of Public Works, or Simsbury Police Department. If the traffic control is deemed unacceptable or hazardous, construction operations may be suspended until the Contractor corrects the traffic control issue. The construction suspension shall be at the Contractor's expense.

MEASUREMENT AND PAYMENT

“Maintenance and Protection of Traffic” shall include all materials, labor, tools and equipment incidental to furnishing, maintaining and removing approved traffic control devices as shown on the Plan or as directed by the Director of Public Works, and other pertinent work necessary to comply with this specification, including, but not limited to:

- notifying public authorities of any proposed traffic changes;
- furnishing, installing, relocating, replacing and removal of traffic cones, traffic drums, barricades, construction signs, temporary marking tape, and opposing traffic lane dividers;
- furnishing, installing, and removing the material for a temporary traversable slope in those areas where a longitudinal dropdown exists;

- furnishing, installing, and removing the material for a temporary transition where a transverse dropdown exists;
- temporarily relocating existing signs and sign supports as many times as deemed necessary and furnishing, installing, and removing temporary sign supports and foundations if necessary during construction;
- removal or sanding of snow or ice or removal of leaves on the roadway or sidewalk if the Contractor's operations interfere with the removal or sanding of snow or ice or the removal of leaves by the public authorities or adjoining land owners in an ordinary manner with regular highway equipment.

Maintenance and Protection of Traffic for driveways and sidewalks will not be measured for payment, but its costs shall be considered as included in the unit prices for Driveway, Driveway Apron, Sidewalk or Ramp of the type specified.

**SIMSBURY CENTER SIDEWALK
IMPROVEMENTS**

**STANDARD CONTRACT DOCUMENTS
FOR THE DEPARTMENT OF PUBLIC WORKS**

TOWN OF SIMSBURY
SIMSBURY CENTER SIDEWALK IMPROVEMENTS

THIS AGREEMENT, made this day of _____ by and between THE TOWN OF SIMSBURY, 933 Hopmeadow Street, Simsbury, Connecticut hereinafter referred to as the OWNER and WINNING BIDDER with an address at ADDRESS OF WINNING BIDDER 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:

1. 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: _____, as defined in the Standard Instruction for Bidders.

2. 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 _____ calendar days unless the period for completion is extended as provided for in the General Conditions.

3. CONTRACT SUM. The Owner shall pay the Contractor for the performance of said work the sum of \$ _____, subject to additions or deductions provided herein in conformity with the bid schedule of prices.

4. The Contract Documents include the following:
 - (a) Notice and Instructions to Bidders dated _____
 - (b) Bidder's Proposal dated _____
 - (c) Notice of Award dated _____
 - (d) Contract
 - (e) General Conditions
 - (f) Supplemental General Conditions
 - (g) Plans prepared by: _____

(h) Technical Specifications prepared or issued by the Town of Simsbury dated _____

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: Maria Capriola
Town Manager

CONTRACTOR:

BY: _____

Printed Name: _____

Title: _____

PROJECT: SIMSBURY CENTER SIDEWALK IMPROVEMENTS

**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

SUPPLEMENTAL CONTRACT SECTION

CODE OF ETHICS

Chapter 13 of the Code of Ordinances, the Simsbury Code of Ethics, is hereby incorporated by reference as if fully set forth, and is made a 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

**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

CONTRACTOR'S EXEMPT PURCHASE CERTIFICATE

I hereby certify, under penalties of perjury, that I am engaged in the performance of a construction contract on a project for the following named exempt agency or organization:

Town of Simsbury

Full Name of Agency of Organization

**933 Hopmeadow Street
Simsbury, CT. 06070**

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

(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: _____
_____ Firm Name

Address:

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:	\$2,000,000
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 to date. 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. In no event shall Contractor be entitled for costs and expenses for work not yet completed.

- 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 defend 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 shall be notified at least five (5) days prior to beginning 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.
13. 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.
14. 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.

15. 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. **Cleaning 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.

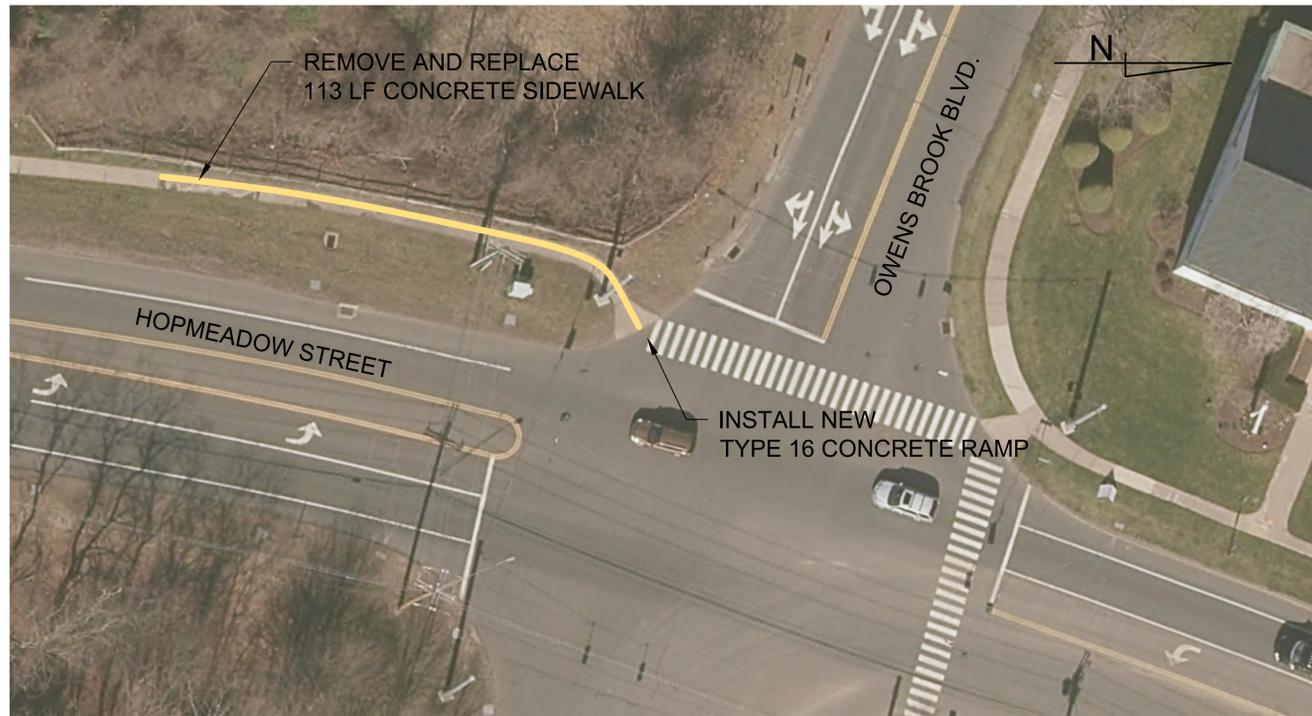
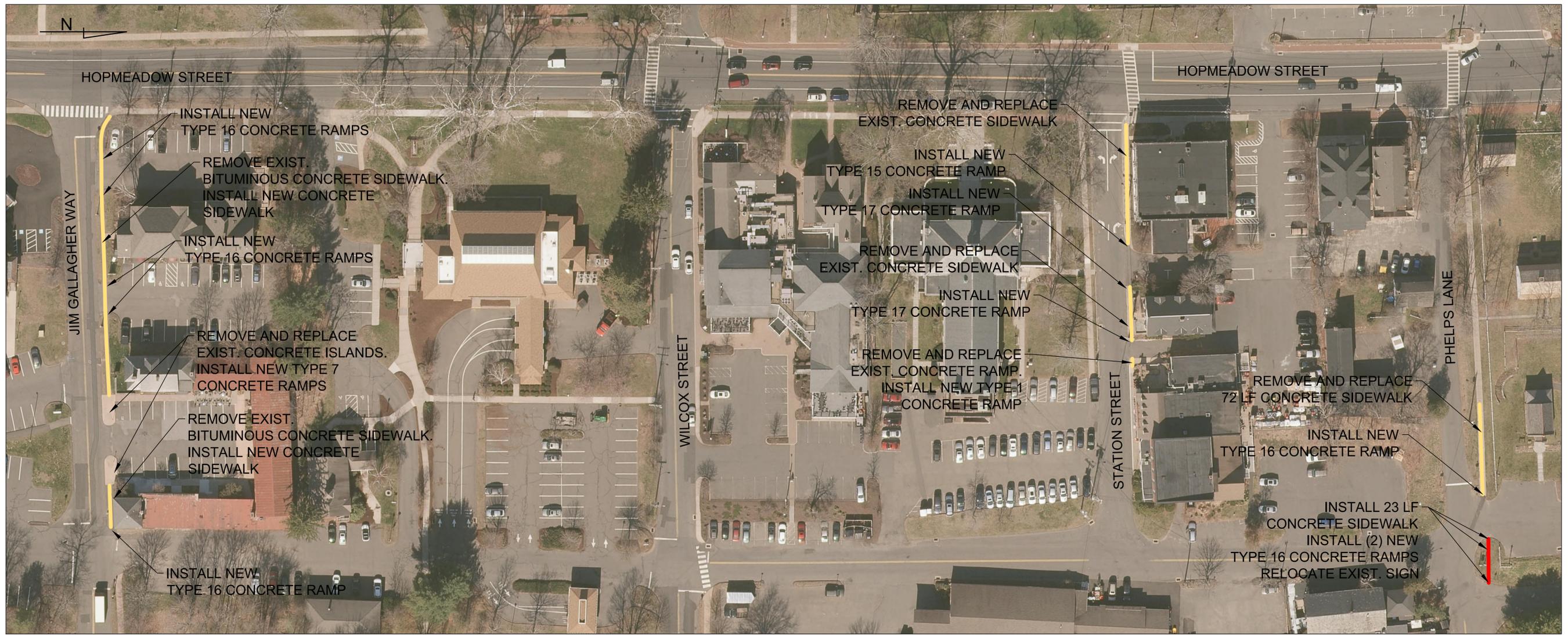
4. **Utility Notification Prior to Excavation:** In accord with Public Act 77-350, the Contractor is required to notify any utility with facilities in the vicinity of the excavation at least two full days prior to excavation. Notification may be given by using the "Call Before You Dig" state wide, toll 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.

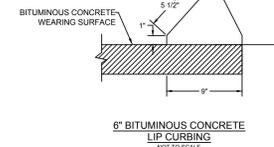
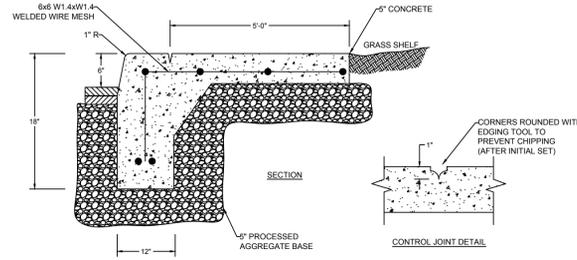
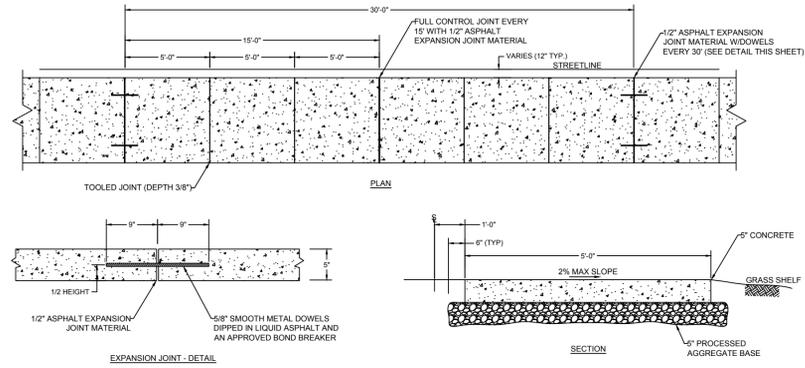
No claims for extras will be allowed because of any delays, caused by the imposed

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 50% with payment to be based on actual quantities of work completed and the bid unit prices.



DATE	BY	
REVISION		
NO.		
		
TOWN OF SIMSBURY DEPARTMENT OF PUBLIC WORKS 66 TOWN FOREST ROAD SIMSBURY CONNECTICUT		
PROPOSED SIMSBURY CENTER SIDEWALK IMPROVEMENTS		PLAN
DRAWN BY:	CHECKED BY:	
JJC		
DATE:	SCALE:	
AUG. 5, 2019	NONE	
SHEET 1		

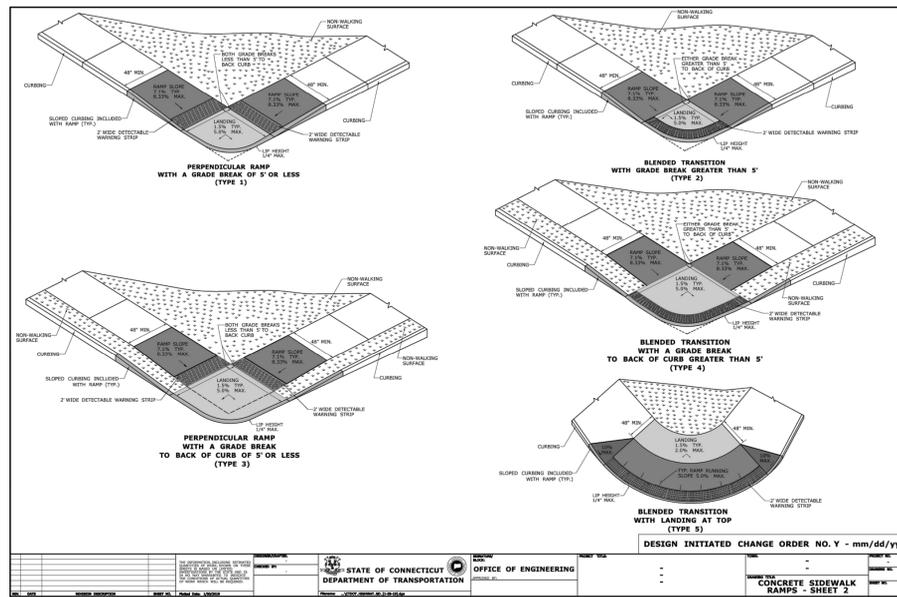


- NOTES:**
- A MINIMUM 36" CLEAR WIDTH SHALL BE MAINTAINED BETWEEN THE EDGES OF THE SIDEWALK AND ANY OBSTRUCTIONS WITHIN THE SIDEWALK LIMITS.
 - AT THE END OF THE DAILY POUR OF CONCRETE, METAL DOWELS ARE TO BE INSERTED IN THE LAST SLAB FOR THE EXTENSION OF THE SIDEWALK.
 - INSTALL APPROVED BOND BREAKER BETWEEN GRANITE CURB AND SIDEWALK.

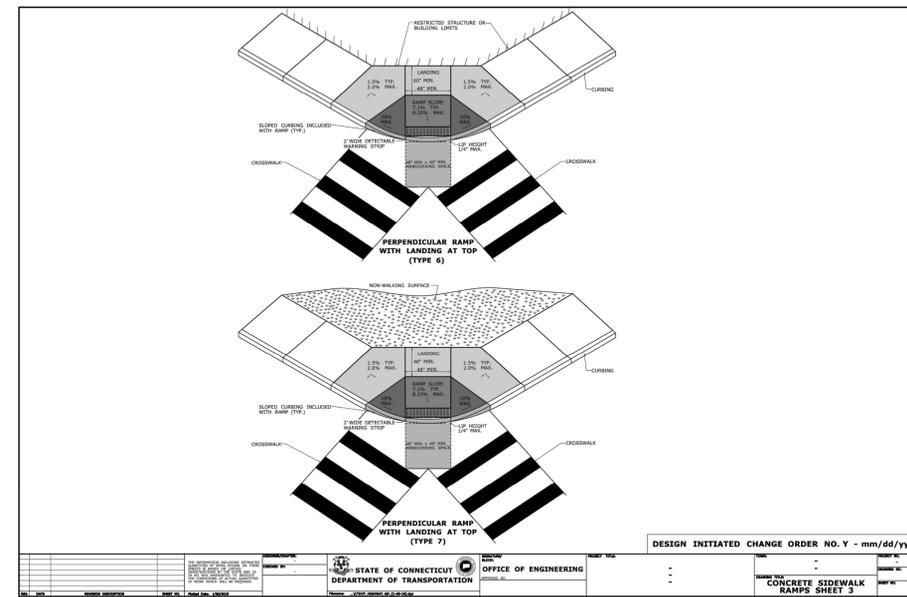
5" CONCRETE SIDEWALK
NOT TO SCALE

CONCRETE SIDEWALK AND MONOLITHIC CURB
NOT TO SCALE

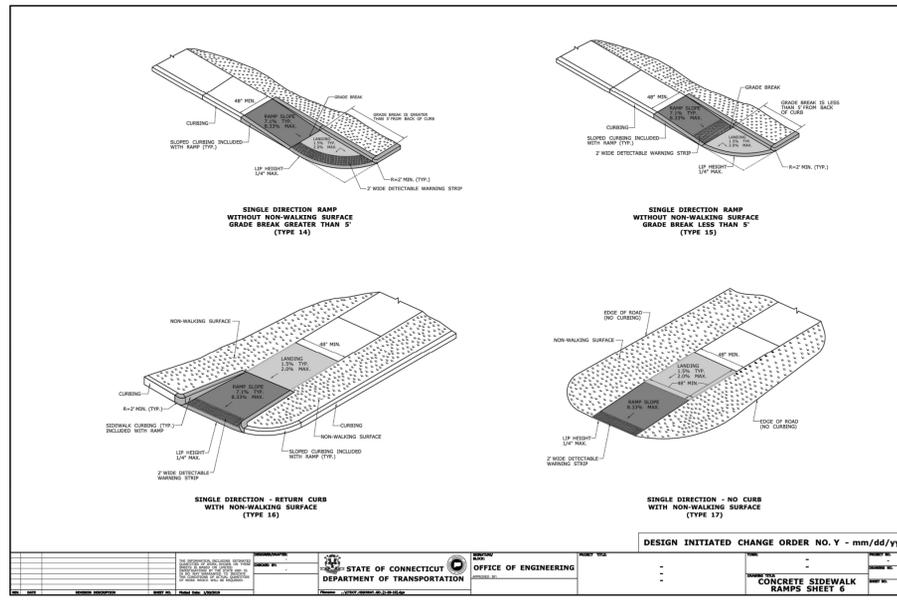
6" BITUMINOUS CONCRETE LIP CURBING
NOT TO SCALE



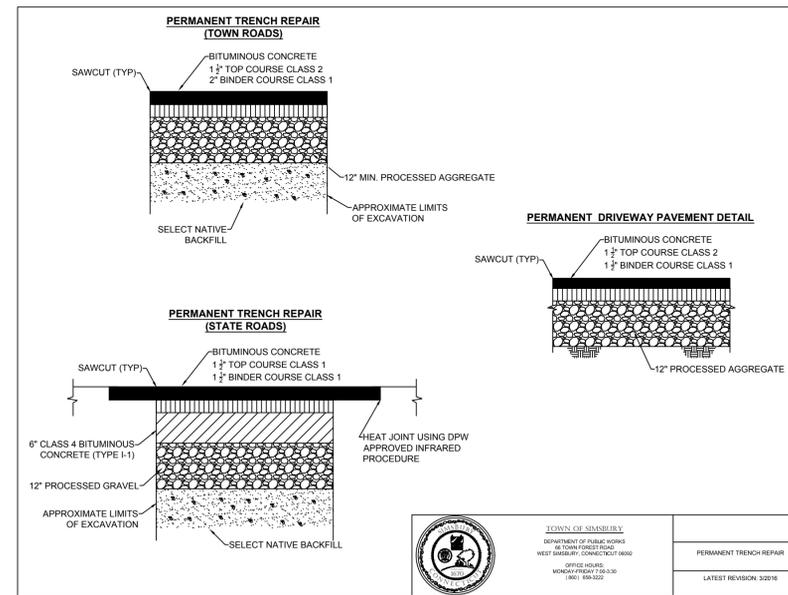
DESIGN INITIATED CHANGE ORDER NO. Y - mm/dd/yy
CONCRETE SIDEWALK RAMP - SHEET 2



DESIGN INITIATED CHANGE ORDER NO. Y - mm/dd/yy
CONCRETE SIDEWALK RAMP - SHEET 3



DESIGN INITIATED CHANGE ORDER NO. Y - mm/dd/yy
CONCRETE SIDEWALK RAMP - SHEET 4



TOWN OF SIMSBURY
DEPARTMENT OF PUBLIC WORKS
66 TOWN FOREST ROAD
WEST SIMSBURY, CONNECTICUT 06092
OFFICE HOURS:
MONDAY-FRIDAY 7:30-3:30
1987 004-0020
PERMANENT TRENCH REPAIR
LATEST REVISION: 3/2016

NO.	REVISION	DATE	BY



TOWN OF SIMSBURY
DEPARTMENT OF PUBLIC WORKS
66 TOWN FOREST ROAD
SIMSBURY CONNECTICUT

PROPOSED SIMSBURY CENTER
SIDEWALK IMPROVEMENTS
DETAILS

DRAWN BY: JJC
DATE: AUG. 5, 2019
CHECKED BY:
SCALE: NONE