

LANDOWNER/OPERATOR: MASSARO COMMUNITY FARM, INC.
 PROGRAM & CONTRACT YEAR: EQIP 2018

JOB CLASS: V

CALL BEFORE YOU DIG
 TO INSURE SAFE TROUBLE-FREE EXCAVATING
 TO LOCATE UNDERGROUND UTILITY PIPE
 AND CABLE ANYWHERE IN CONNECTICUT
 CALL TWO FULL WORKING DAYS IN ADVANCE
 DIAL 811 or 1-800-922-4455

PRE-CONSTRUCTION MEETING

The landowner/operator will arrange for a pre-construction meeting between the contractor, NRCS, and landowner/operator to review the drawings, standards, and specifications prior to beginning construction. If more than 1 month elapses between the pre-construction meeting and commencement of construction, another meeting is required.

CALL-BEFORE-YOU-DIG Ticket Number: _____

Pre-construction Meeting Record of Attendance: _____
 Date: _____

Landowner/Operator Signature: _____

Contractor Signature: _____

Contractor Signature: _____

NRCS Engineer: _____

NRCS Technician Signature: _____

NRCS Planner Signature: _____

CRITICAL INSPECTION ITEMS

The following items must be inspected by NRCS. The landowner/operator is responsible for providing at least 3 days notice for each of these items in order for NRCS to be able to provide adequate inspection.

Excavation: Date: _____ Inspector: _____

Prepared Sub-grade: Date: _____ Inspector: _____

Placement of Geotextile: Date: _____ Inspector: _____

Placement of Stone: Date: _____ Inspector: _____

Final Grading: Date: _____ Inspector: _____

Seeding and Mulching: Date: _____ Inspector: _____

GENERAL DESIGN NOTES:

- Failure to construct these conservation practices in accordance with the NRCS design or authorized modifications will result in withdrawal of NRCS technical and financial assistance.
- All federal, state, and local laws, rules, and regulations governing the construction of these conservation practices shall be strictly followed. The landowner or operator is responsible for obtaining all construction permits.
- It is the responsibility of the excavating contractor to comply with **CALL-BEFORE-YOU-DIG**.
- A meeting between the landowner, contractor, and NRCS representative shall be required prior to any excavation or construction work.
- A copy of the drawings and specifications shall be on site during all phases of construction.
- OSHA regulations shall be followed at all times.
- The contractor is responsible for implementing all measures necessary to protect work in progress from environmental conditions such as temperature extremes, wind, surface water, and ground water.
- The contractor is responsible for verifying actual field measurements with those shown on the drawings.
- In the event rock, unstable soils, cultural resources or seeps are encountered during excavation, work shall be stopped and the NRCS design engineer shall determine how to proceed.
- The contractor is responsible for the security of the job site until the work has been certified by the NRCS.
- Certification of conformance shall certify that all work was performed according to NRCS specifications.

QUALITY ASSURANCE PLAN - for NRCS inspector

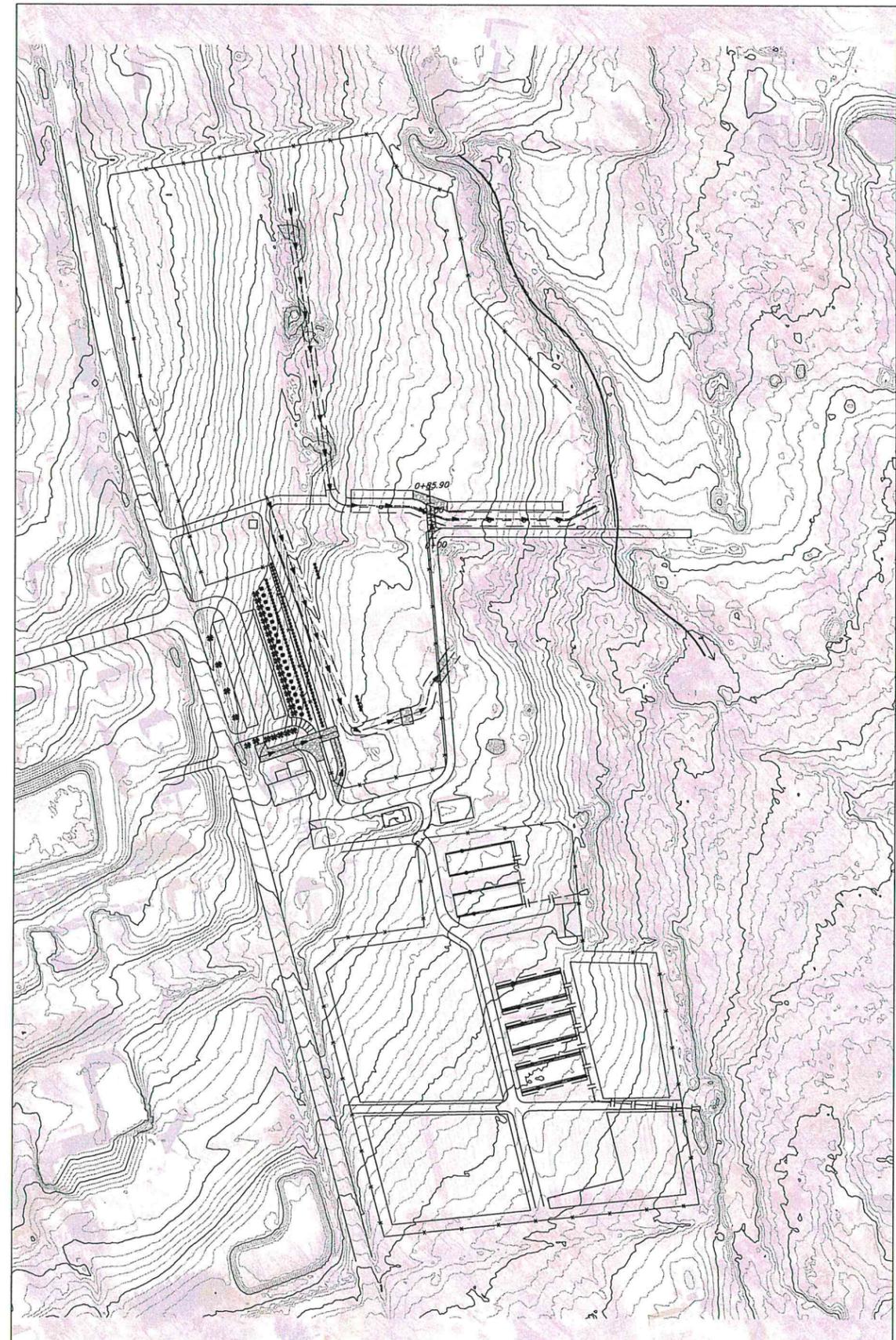
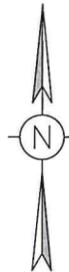
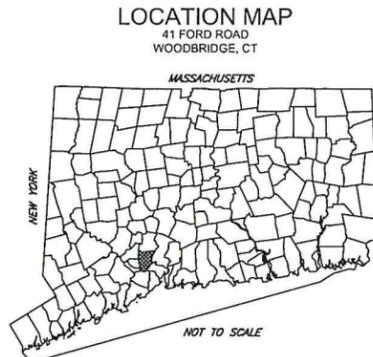
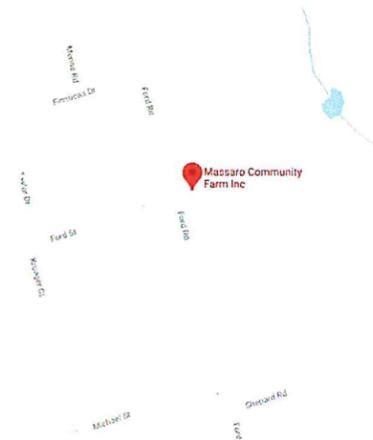
This QA Plan was developed to ensure the designer's objectives are met and quality workmanship is performed. It sets forth the minimum, but not necessarily all, inspection requirements. If additional inspection is necessary, the inspector shall inform the design engineer and document the additional conditions on the NRCS-CPA-6

General Items:

- The site shall be checked at least once per day during the construction period when the contractor is working, expected to work, or could work. These visits shall be unannounced and at random times.
- Material shall match the specifications in the design package; no substitutions may be made without prior approval by the design engineer. If the contractor chooses to use a product other than what has been specified, he or she must provide the necessary information to the design engineer for comparison and approval.
- OSHA standards for trenches and other excavation must be followed. If safety violations are observed, the landowner, contractor, and NRCS inspector or engineer must be notified.
- All visits shall be documented on the NRCS-CPA-6 or in the Job Diary. A continuous record of the construction progress is required.
- It is the primary inspector's responsibility to ensure adequate inspections are performed throughout the construction process. If they are unable to perform the necessary inspections, they must arrange for another inspector to take over the inspection responsibilities. If a secondary inspector agrees to take over, but cannot perform the necessary inspections, they are responsible for finding a substitute.
- All questions, problems, or inconsistencies involving the design and implementation shall be reported to the design engineer as they arise.
- Final documentation of the completed project As-Builts shall be shown in red on the construction drawings.

Specific Items to be Inspected:

- Record contact information and associated work items for each contractor involved in the project.
- Verify a CALL-BEFORE-YOU-DIG utilities check has been completed by the excavator and all utility lines have been marked prior to beginning excavation.
- Document all erosion and sediment control measures have been properly installed prior to beginning excavation.
- Check for seeps and unstable soils during excavation and ensure all sub-base materials are adequate.
- Ensure all soil stockpiles are placed according to the design and not in drainage ways or in the way of construction.
- Document the type and quantity of fill material, processed aggregate, and survey the final grade.
- Document areas seeded, the seeding mix and application rate, and ensure adequate cover is established on all disturbed areas.
- Photograph the work in progress and completed elements of the project.



TOPOGRAPHIC PLAN



Designed	J. Bristol	Date	08/20/20
Drawn	J. Bristol		08/20/20
Checked	J. Longenecker		08/28/20
Approved	J. Longenecker		09/02/20

MASSARO COMMUNITY FARM, INC.
 STORMWATER MANAGEMENT
 TITLE SHEET

United States
 Department of
 Agriculture
USDA
 Natural Resources
 Conservation Service

File No.
 massaro_erosion.dwg

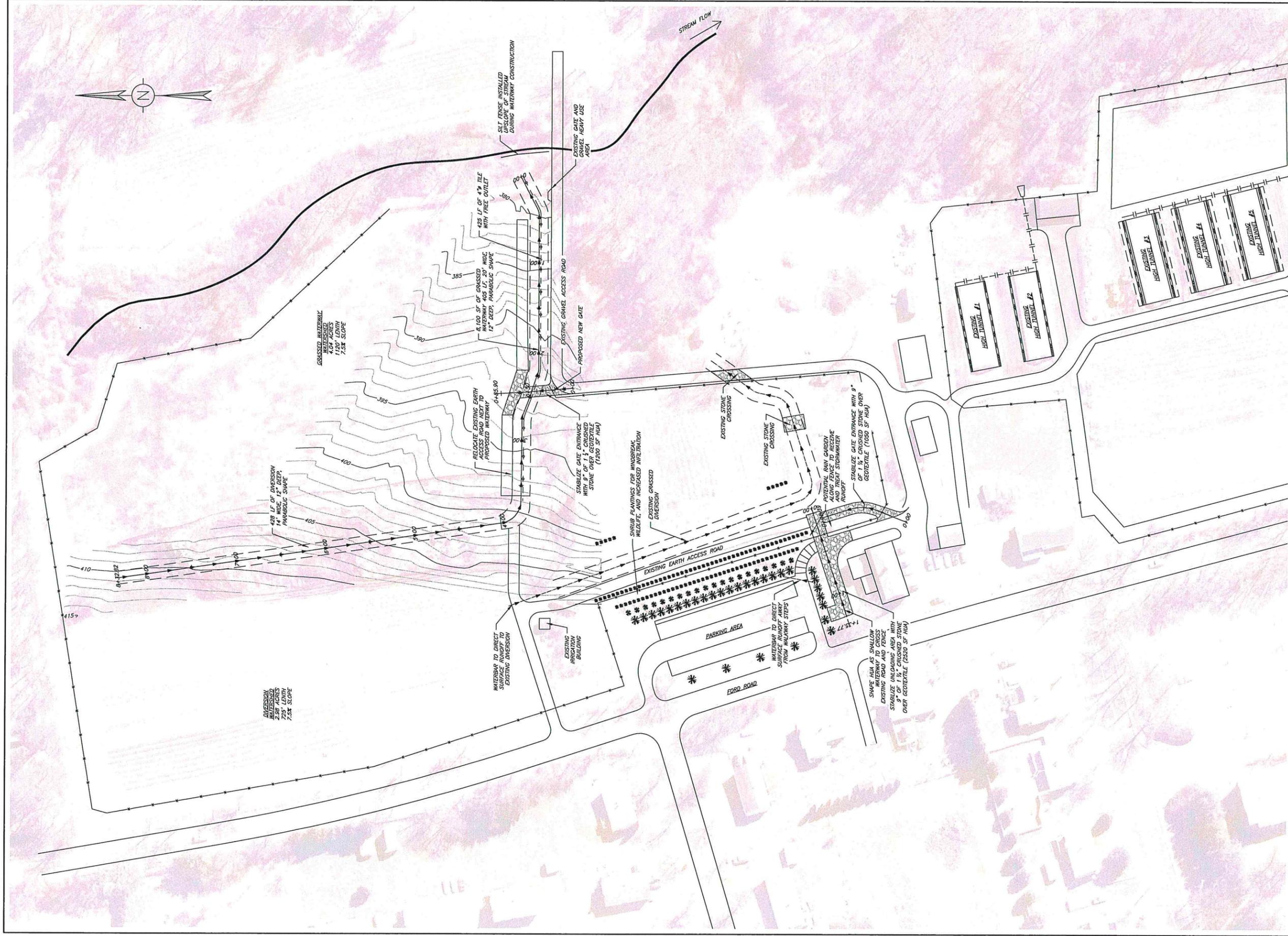
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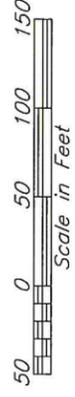
Sheet 1 of 5

41 FORD ROAD, WOODBRIDGE

NEW HAVEN COUNTY, CT



SITE PLAN



United States
Department of
Agriculture
USDA
Natural Resources
Conservation Service

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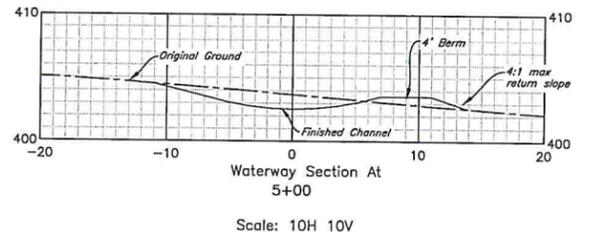
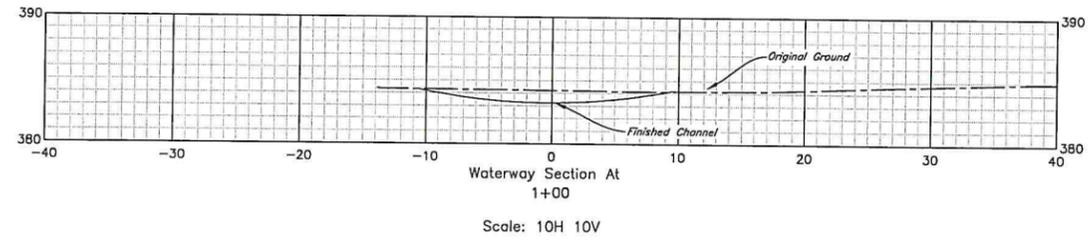
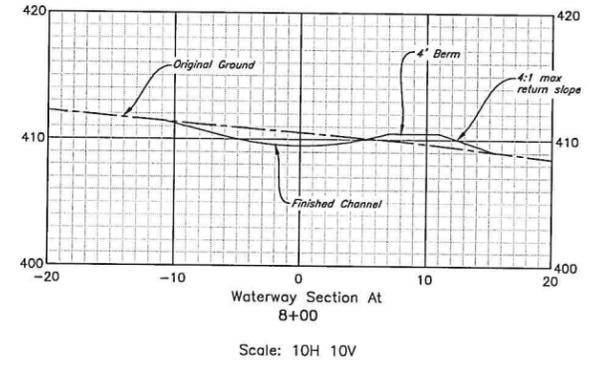
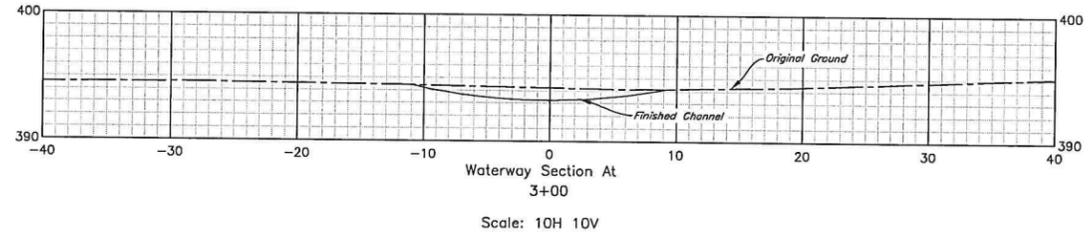
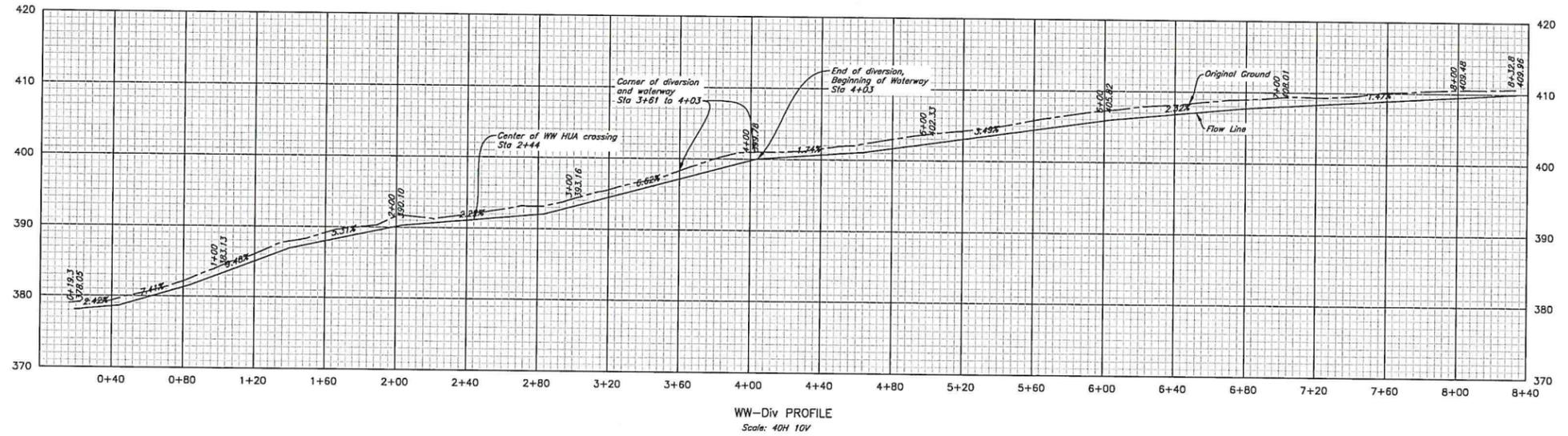
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MASSARO COMMUNITY FARM, INC.
STORMWATER MANAGEMENT
SITE PLAN

Designed J. Bristol Date 08/20/20
Drawn J. Bristol Date 08/20/20
Checked J. Longenecker Date 08/28/20
Approved J. Longenecker Date 09/02/20

41 FORD ROAD, WOODBRIDGE

NEW HAVEN COUNTY, CT



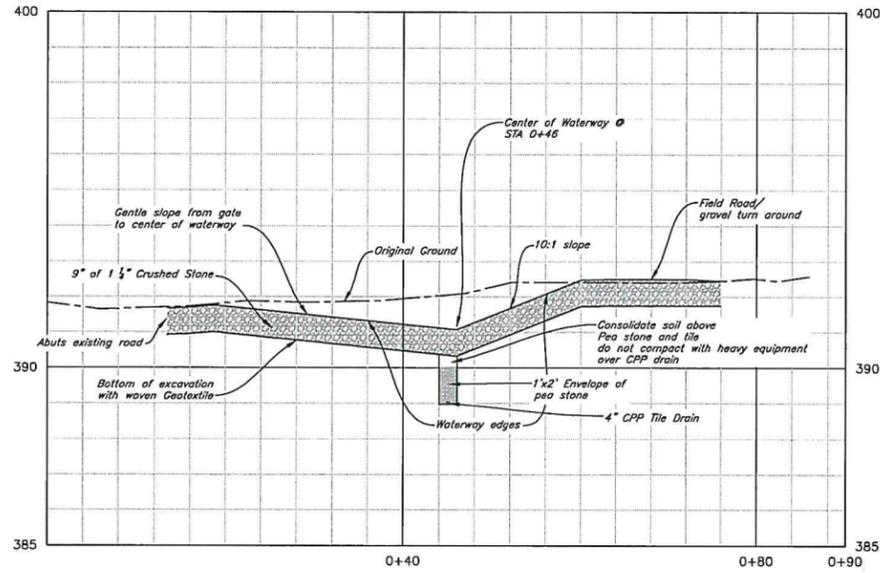
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 Designed by: Bristol
 Drawn by: J. Bristol
 Checked by: J. Longenecker
 Approved by: J. Longenecker
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 Date: 09/02/20

MASSARO COMMUNITY FARM, INC.
 STORMWATER MANAGEMENT
 WW+ DIVERSION PROFILES &
 CROSS-SECTIONS

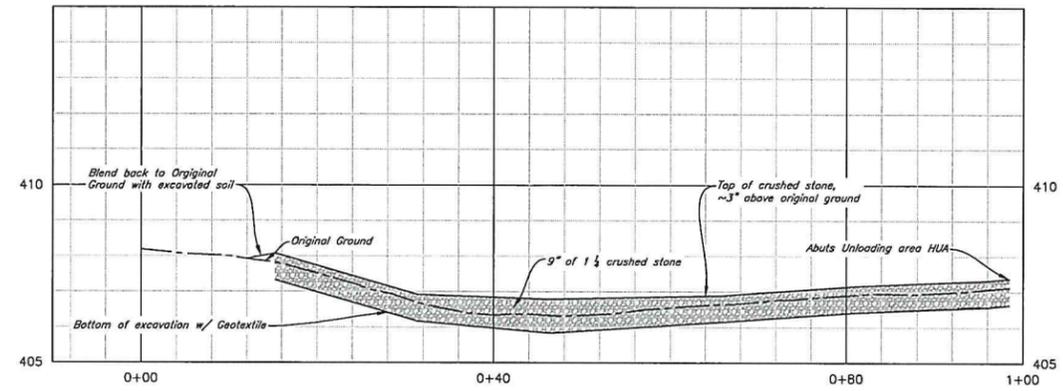
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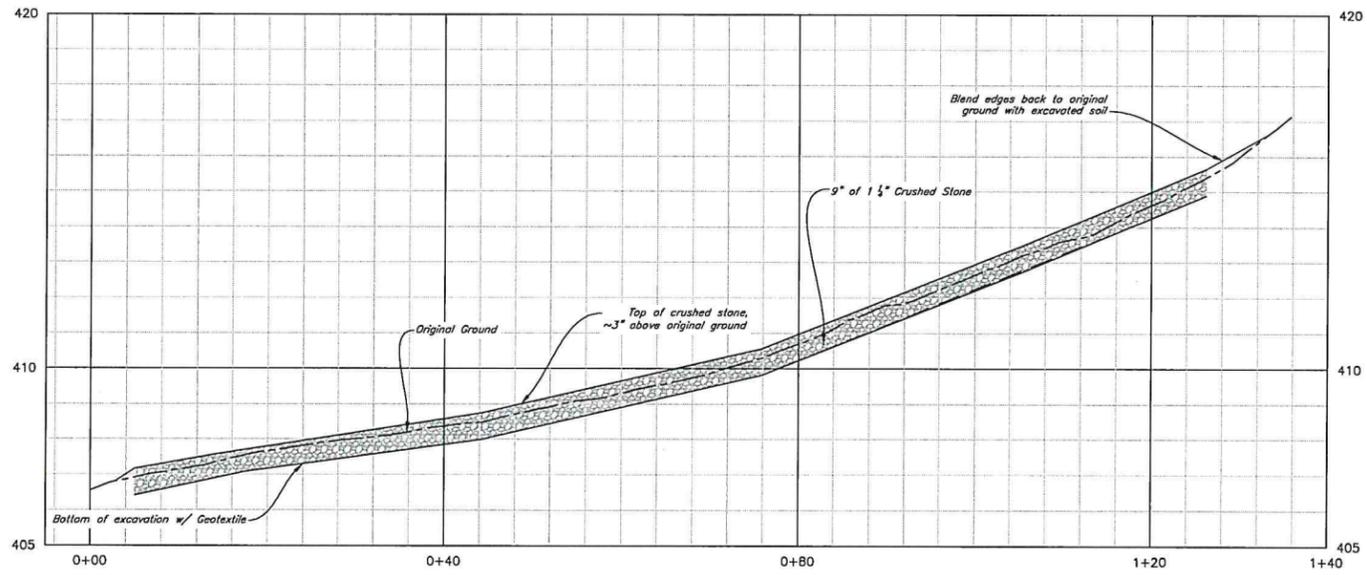
NEW HAVEN COUNTY, CT
 41 FORD ROAD, WOODBRIDGE



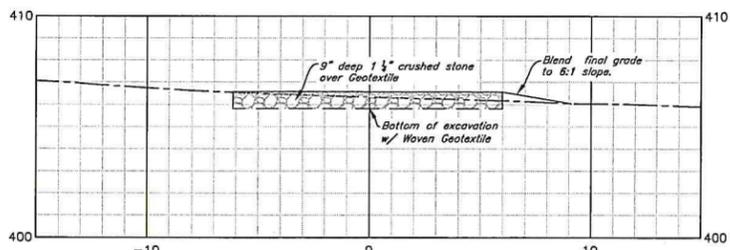
WV crossing PROFILE
Scale: 40H 10V



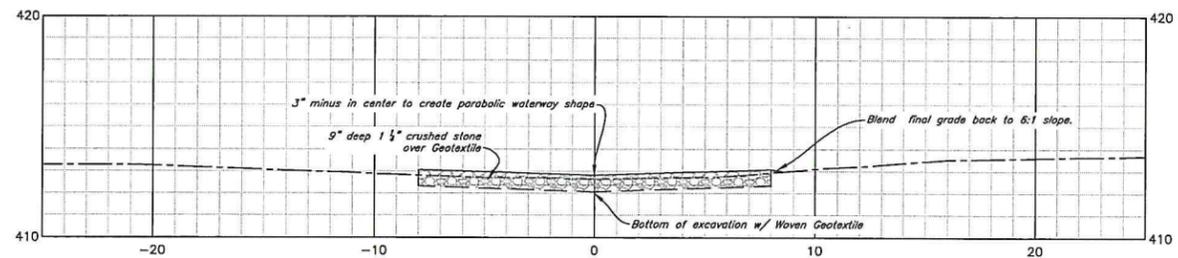
CL HUA Learning Garden PROFILE
Scale: 40H 10V



CL HUA Unloading Area PROFILE
Scale: 40H 10V



Learning Garden HUA Section At
0+50
Scale: 10H 10V



Unloading Area HUA Section At
1+00
Scale: 10H 10V

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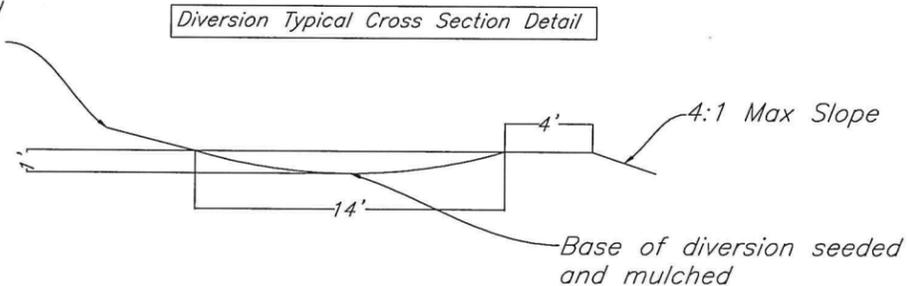
MASSARO COMMUNITY FARM,
INC.
STORMWATER MANAGEMENT
HUA PROFILES AND CROSS SECTIONS
NEW HAVEN County, CT

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Extend Diversion to original ground
4:1 slope max

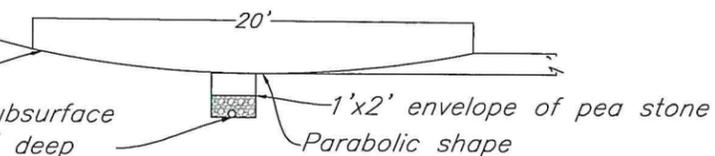


Max 4:1 slope from channel to original ground

Base of waterway seeded and mulched with erosion control blanket

4" CPP subsurface drain, 2' deep

Grassed Waterway Typical Cross Section Detail



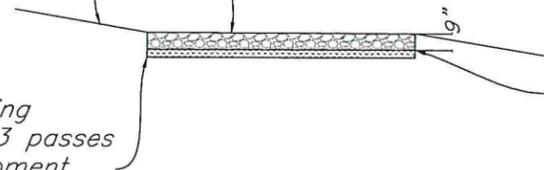
Heavy Use Area Typical Cross Section Detail

Slope edges to original ground at no more than 6:1 slope

Stabilize with 9" of 1 1/4" crushed stone, compacted

Geotextile

Compact existing material with 3 passes of heavy equipment



1 1/4" CRUSHED STONE (CT DOT NO. 4 M.01.01)		
SQUARE MESH SIZE	% PASSING	BY WEIGHT
2"	100	
1 1/2"	90-100	
1"	20-55	
3/4"	0-10	
3/8"	0-5	

Seeding Recommendations for Diversion and Waterway:
A Perennial mix such as a contractor mix formulated for the north, containing quick establishing grasses such as Perennial rye and deeply rooted grasses such as fescues.
OR consult your NRCS Planner

EROSION CONTROL BLANKET:
USE BIODEGRADABLE PRODUCT SUCH AS JUTE
INSTALL ACCORDING TO MANUFACTURER INSTRUCTION
METAL OR BIODEGRADABLE SOD STAPLES MAY BE USED

CLASS IV WOVEN GEOTEXTILE FABRIC SPECIFICATIONS

- GRAB TENSILE STRENGTH: ASTM D 4632 315LBS (min.)
- ELONGATION AT FAILURE: ASTM D 4632 <50%
- TRAPEZOIDAL TEAR STRENGTH: ASTM D 4533 112 LBS (min.)
- PUNCTURE STRENGTH: ASTM D 6241 618 LBS (min.)
- ULTRAVIOLET STABILITY: ASTM D 4355 50% (min.)
- PERMITTIVITY: ASTM D 4491 -
- APPARENT OPENING SIZE: ASTM D 4751 -
- PERCENT OPEN AREA: ASACE CWO-02215 -

COMPACTION REQUIREMENTS:

MATERIAL SHALL BE THOROUGHLY WET BUT NOT SO WET AS TO CAUSE ADHERENCE TO THE COMPACTION EQUIPMENT. MATERIAL SHALL BE COMPACTED w/ (3) PASSES OF HEAVY EQUIPMENT ACROSS THE ENTIRE SURFACE AREA.

RECOMMENDED SEEDING MIX FOR REDRESSING DISTURBED AREAS:

- CONSULT w/ NRCS PLANNER FOR NATIVE SPECIES MIX

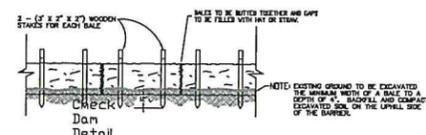
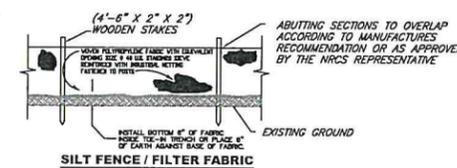
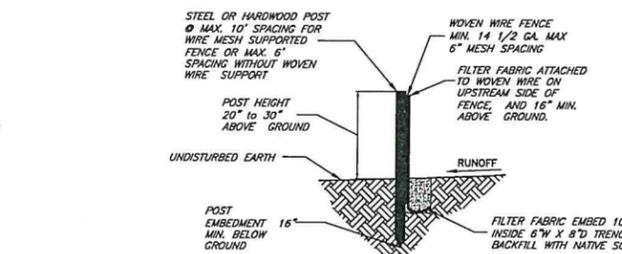
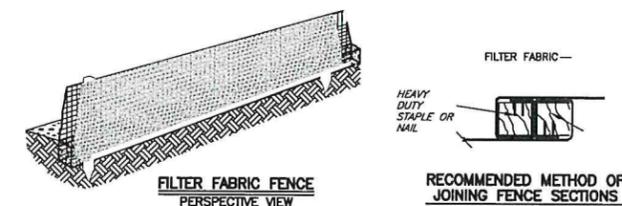
LIME AND FERTILIZE ACCORDING TO SOIL TEST RECOMMENDATIONS.
MULCH w/ CEREAL STRAW OR EQUIVALENT AT A RATE OF 100 LB/1000 S.F.

EROSION AND SEDIMENT CONTROL NOTES

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO AND DURING CLEARING, GRADING, AND EXCAVATION. SILT FENCE (FABRIC TYPE) SHALL BE INSTALLED AS NEEDED, OR AS INSTRUCTED BY THE NRCS REPRESENTATIVE.
2. POSTS SHALL BE (36) INCH MINIMUM LENGTH AND OF EITHER OF THE FOLLOWING MATERIALS: STEEL "1" OR "1/2" TYPE, OR 2" X 2" HARDWOOD.
3. WOVEN WIRE USED AS ADDITIONAL FENCE SUPPORT SHALL BE MINIMUM 14.5 GAUGE WITH (6) INCH MAXIMUM MESH SPACING.
4. WOVEN WIRE SHALL BE PLACED ALONG THE UPHILL SIDE OF THE FENCE AND FASTENED WITH WIRE TIES OR (1) INCH STAPLES ALONG THE UPHILL SIDE OF THE POSTS.
5. FILTER FABRIC SHALL BE FASTENED TO WOVEN WIRE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, OR WITH TIES EVERY (24) INCHES AT TOP AND MID-SECTION.
6. WHERE TWO PIECES OF FILTER FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY (6) INCHES AND FOLDED.
7. WHERE TWO POSTS MEET TO JOIN FENCE SECTIONS, THE TOPS OF THE POSTS SHALL BE SECURED TOGETHER WITH WIRE.
8. THE FENCE SHALL BE CONSTRUCTED ALONG THE CONTOUR AS MUCH AS POSSIBLE.
9. ENDS OF FENCES SHALL BE EXTENDED UP THE SLOPE TO PREVENT RUNOFF FROM MIGRATING AROUND THE END OF THE FENCE.
10. INSPECTION OF THE FENCE SHALL BE PERFORMED WEEKLY, OR IMMEDIATELY AFTER A RAIN EVENT, OR WHEN BULGES APPEAR IN THE FENCE. ACCUMULATED SILT SHALL NOT BE ALLOWED TO EXCEED (1/2) HEIGHT OF THE FABRIC. REPAIR AND OR REPLACEMENT OF DAMAGED FENCE SHALL BE COMPLETED PROMPTLY, AS NEEDED.
11. ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED LOCATION IN SUCH A MANNER THAT IT WILL NOT CONTRIBUTE TO OFF-SITE SILTATION.
12. MULCHING AND FINAL SEEDING SHALL IMMEDIATELY FOLLOW COMPLETED SEGMENTS OF THE WORK. SEE SPECIFICATION FOR SEEDING REQUIREMENTS.
13. ALL FENCING SHALL BE REMOVED WHEN THE CONSTRUCTION SITE IS FULLY STABILIZED SO AS TO NOT IMPED EROSION FLOW OR DRAINAGE.
14. ALL CHEMICALS, FUELS, AND LUBRICATIONS, SHALL BE LOCATED, STORED, AND DISPOSED OF IN SUCH A MANNER AS TO PREVENT THEIR ENTRY INTO WETLAND OR WATERCOURSE. NO EQUIPMENT OR MACHINERY SHALL BE STORED, CLEANED OR REPAIRED WITHIN A WETLAND OR WATERCOURSE.

SEEDING NOTES

1. LIMESTONE AND FERTILIZER SHALL BE APPLIED ACCORDING TO SOIL TEST RESULTS, OR SHALL BE APPLIED AT A RATE OF 800 POUNDS OF "10-10-10" AND 2 TONS OF LIME PER ACRE, WHICHEVER IS GREATER.
2. SEEDING SHALL BE ALLOWED ONLY FROM APRIL 1 - JUNE 15, AND FROM AUGUST 15 - SEPTEMBER 30, UNLESS DIRECTED OTHERWISE BY THE NRCS REPRESENTATIVE. SEE SPECIFICATIONS FOR SEEDING MIXTURES.
3. ALL DISTURBED AREAS SHALL BE MULCHED WITH STRAW OR HAY AT THE RATE OF 4,000 POUNDS PER ACRE.



Designed J. Bristol 08/20/20
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NEW HAVEN COUNTY, CT

MASSARO COMMUNITY FARM, INC.
STORMWATER MANAGEMENT
DETAILS

41 FORD ROAD, WOODBRIDGE

United States Department of Agriculture
Natural Resources Conservation Service

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