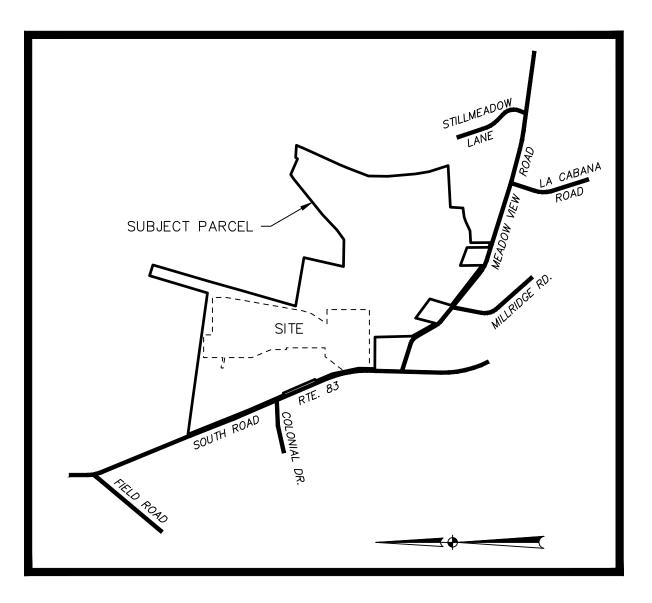
# Somers Solar

# 159 South Road Somers, Connecticut



KEY PLAN MAP

1"=1000'

# <u>Applicant</u>

Santa Fuel, Inc. 154 Admiral Street Bridgeport, CT 06605

Nancy B. Edgar Revocable Trust & Dianne Bordeaux Lenti

11 Mountain View Road

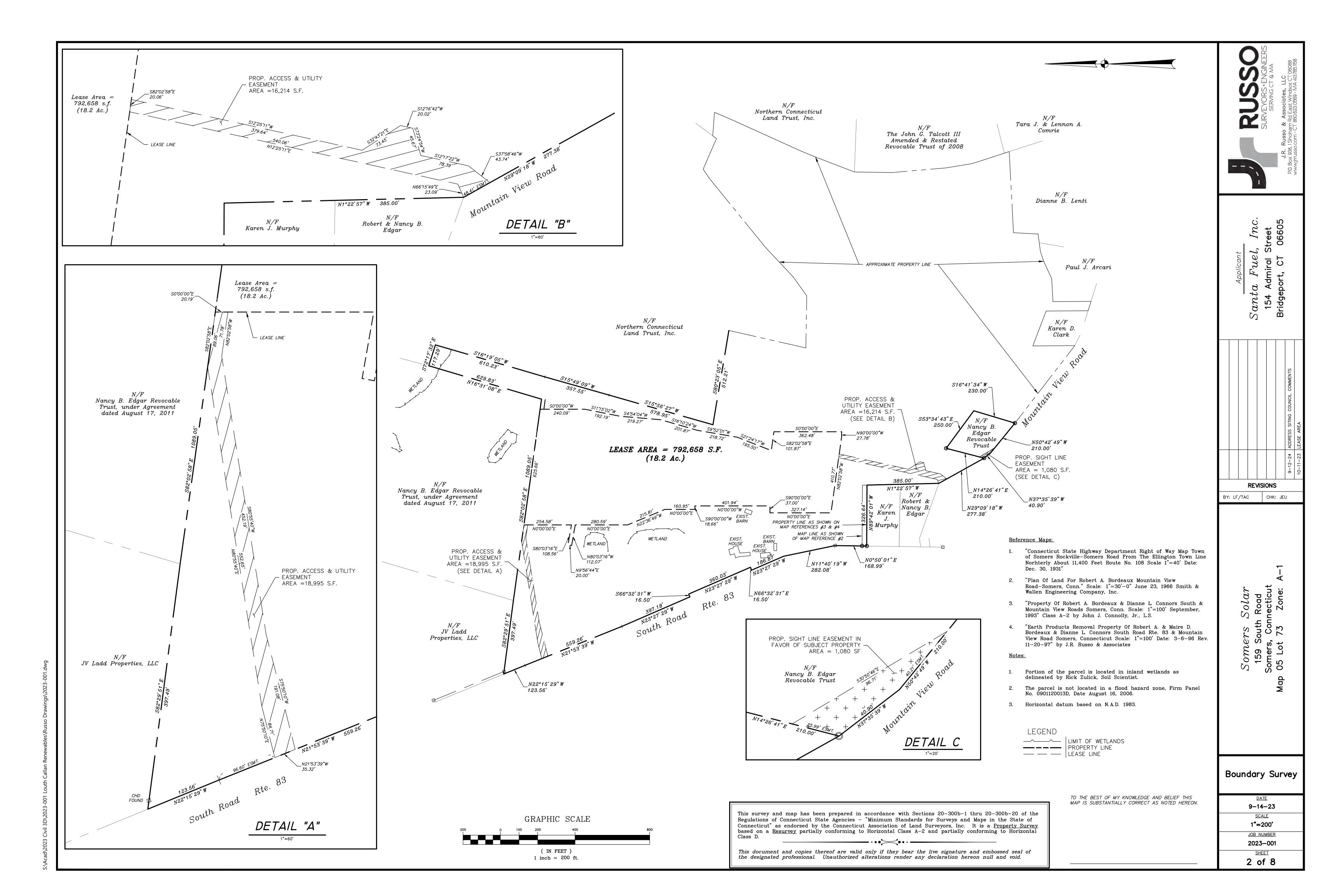
Somers, CT 06071

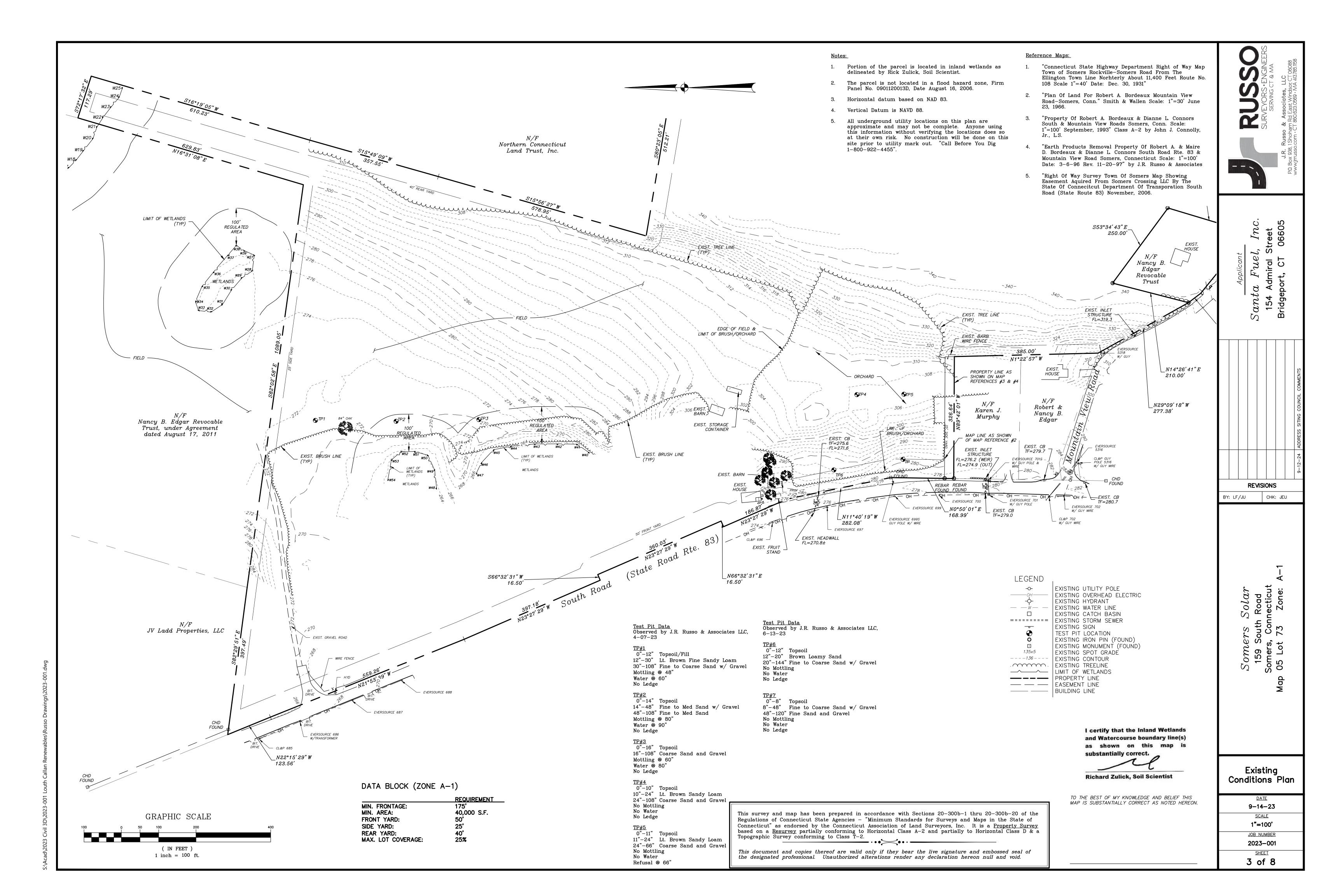
Prepared By



# DRAWING INDEX

SHEET TITLE	SHEET NO.	LATEST REVISIO
CIVIL COVER SHEET	· 2 of 8 · 3 of 8 · 4 of 8 · 5 of 8 · 6 of 8 · 7 of 8	9-12-24 9-12-24 9-12-24 9-12-24 9-12-24 9-12-24 9-12-24
SIGHT LINE DEMONSTRATION PLAN	· 1 of 1	9-12-24







SURVEYORS SERVING C

' $anta\ Fuel,\ Inc.$ 154 Admiral Street

REVISIONS
BY: LF/TAC CHK: JEU

Somers Solar 159 South Road Somers, Connecticut

Overall Aerial Site Plan

DATE
9-14-23

SCALE
1"=200'

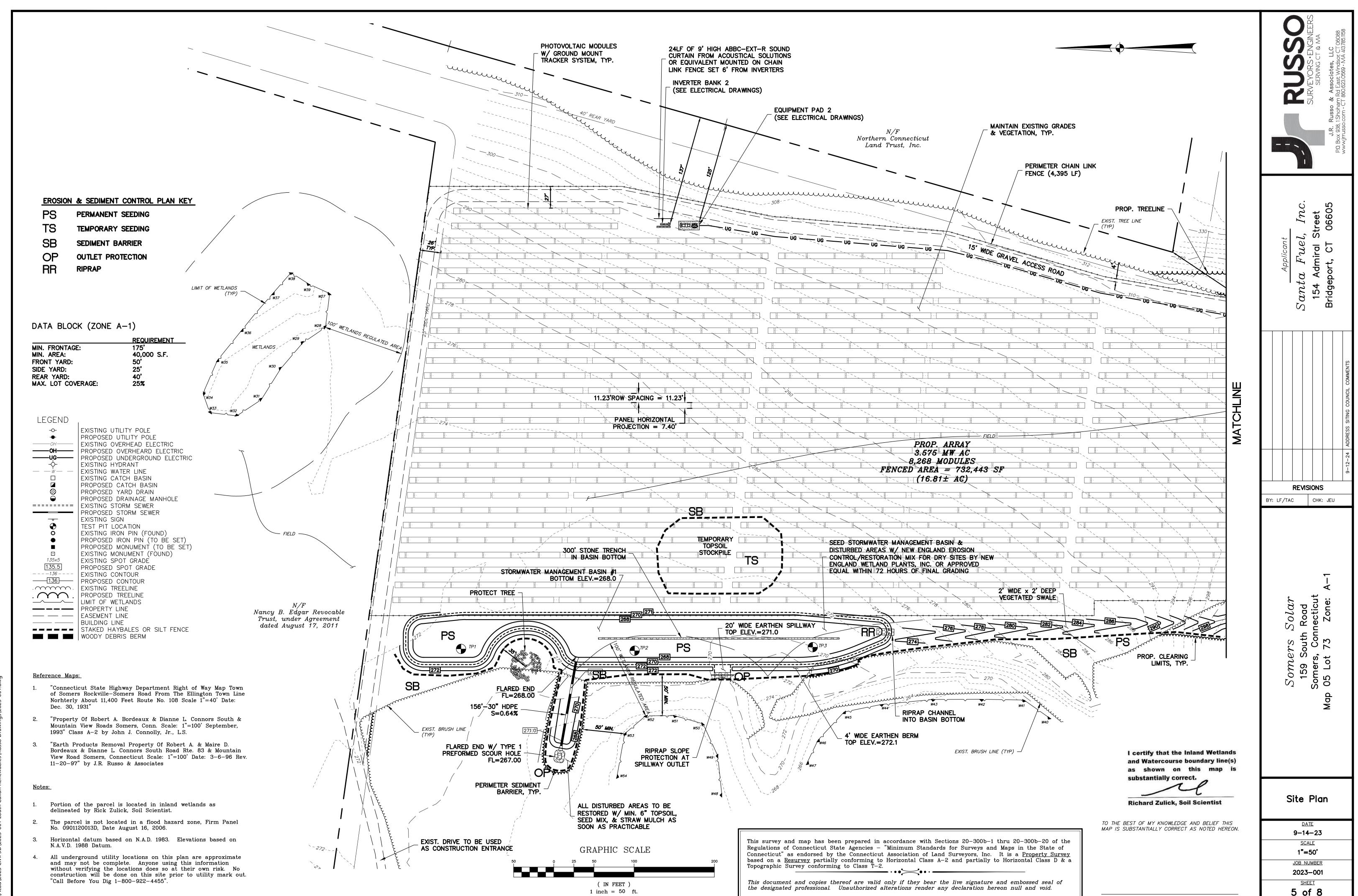
JOB NUMBER
2023-001

SHEET
4 of 8

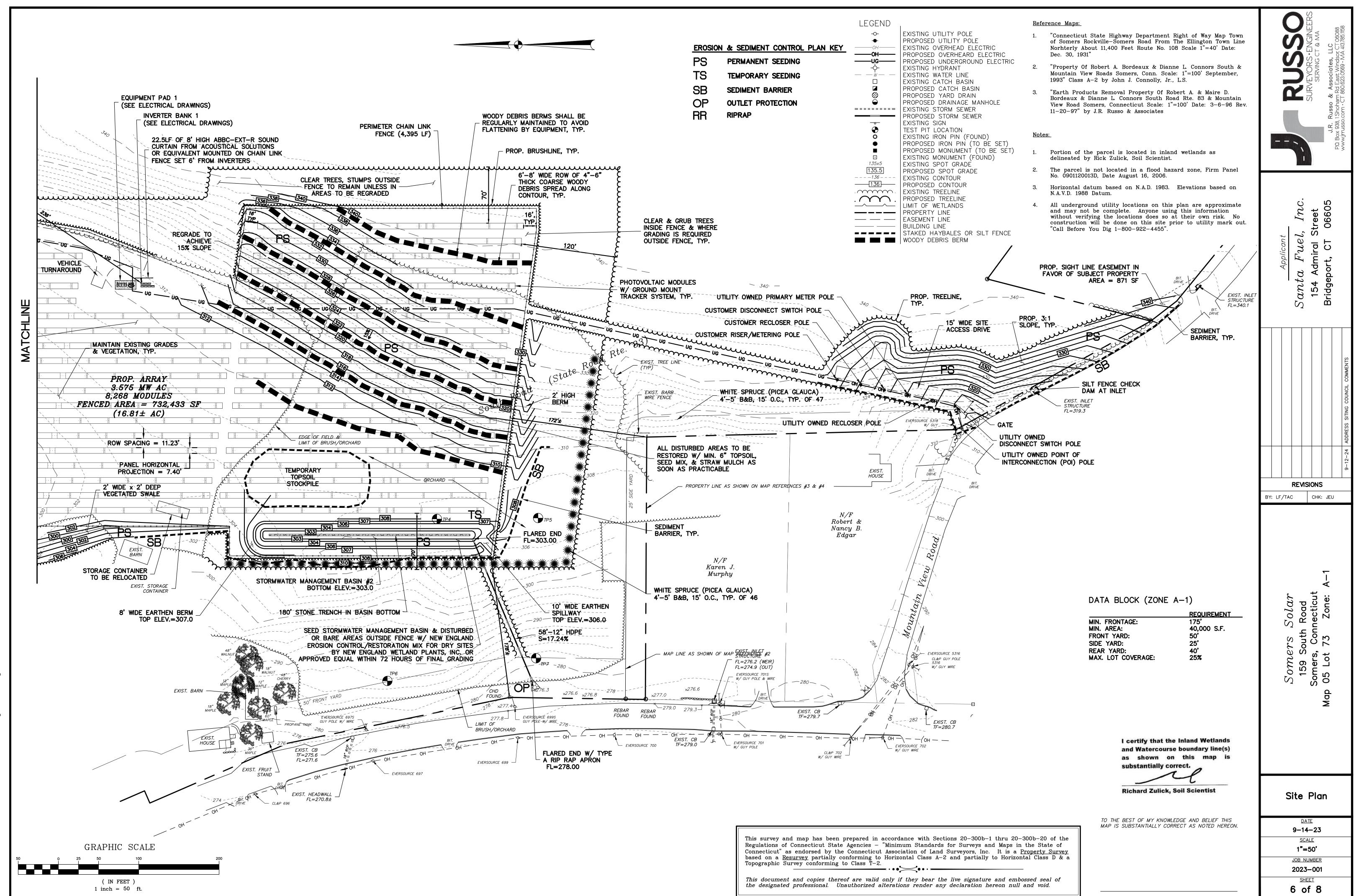
GRAPHIC SCALE

200 0 100 200 400 800

( IN FEET )
1 inch = 200 ft.



\Acad\2023 Civil 3D\2023-001 Louth Callan Benewahles\Busso Drawings\2023-001 dwg



S:\Acad\2023 Civil 3D\2023-001 Louth Callan Renewables\Russo Dra

Grade in accordance with the Land Grading measure which is in the Connecticut Guidelines For Soil Erosion and Sediment Control latest edition.

Install all necessary surface water controls.

For areas to be mowed remove all surface stones 2 inches or larger. Remove all other debris such as wire, cable tree roots, pieces of concrete, clods, lumps, or other unsuitable material.

Field Areas: Showy Northeast Native Wildflower & Grass Mix -Ernmx-153 by Ernst Conservation Seeds or approved equal. Stormwater Basin: New England Erosion Control/Restoration Mix for Dry Sites by New England Wetland Plants, Inc. or approved equal.

Apply topsoil, if necessary, in accordance with the Topsoilina measure which is in the Connecticut Guidelines For Soil Erosion and Sediment Control latest edition.

Apply ground limestone and fertilizer according to soil test recommendations (such as those offered by the University of Connecticut Soil Testing Laboratory or other reliable source).

Where soil testing is not feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 300 pounds per acre or 7.5 pounds per 1,000 square feet of 10-10-10 or equivalent and limestone at 4 tons per acre or 200 pounds per 1,000 square feet.

Work lime and fertilizer into the soil to a depth of 3 to 4 inches with a disc or other suitable equipment.

Inspect seedbed just before seeding. If the soil is compacted, crusted or hardened, scarify the area prior to seeding.

Apply selected seed at rates per manufacturer's recommendations uniformly by hand, cyclone seeder, drill, cultipacker type seeder or hydroseeder (slurry including seed, fertilizer). Normal seeding depth is from 0.25 to 0.5 inch. Increase seeding rates by 10% when hydroseeding or frost crack seeding. Seed warm season grasses during the spring period

See guidelines in the Mulch For Seed measures.

# MAINTENANCE

Inspect temporary soil protection area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater during the first growing season.

Where seed has been moved or where soil erosion has occurred, determine the cause of the failure and repair as needed.

# TEMPORARY SEEDING (TS)

## **SPECIFICATIONS** Site Preparation

Install needed erosion control measures such as diversions, grade stabilization structures, sedimentation basins and grassed waterways in accordance with the approved plan.

Grade according to plans and allow for the use of appropriate equipment for seedbed preparation, seeding, mulch application and mulch anchoring.

Loosen the soil to a depth of 3-4 inches with a slightly roughened surface. If the area has been recently loosened or disturbed, no further roughening is required. Soil preparation can be accomplished by tracking with a bulldozer, discing harrowing, raking or dragging with a section of chain link fence.

Apply ground limestone and fertilizer according to soil test recommendations (such as those offered by the University of Connecticut Soil Testing Laboratory or other reliable source).

If soil testing is not feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 300 pounds per acre or 7.5 pounds per 1,000 square feet of

Apply seed uniformly by hand, cyclone seeder, drill, cultipacker type seeder or hydroseeder. The temporary seed shall be Rye (grain) applied at a rate of 120 pounds per acre. Increase seeding rates by 10% when hydroseeding.

See guidelines in the Mulch For Seed measures.

10-10-10 or equivalent.

Inspect temporary seeding area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for seed and mulch movement and rill erosion.

Where seed has been moved or where soil erosion has occurred. determine the cause of the failure and repair as needed.

# MULCH FOR SEED (MS)

# **SPECIFICATIONS**

Types of Mulches within this specification include, but are not

1. Hay: The dried stems and leafy parts of plants cut and harvested, such as alfalfa, clovers, other forage legumes and the finer stemmed, leafy grasses. The average stem length should not be less than 4 inches. Hay that can be windblown should be anchored to hold it in place.

2. Straw: Cut and dried stems of herbaceous plants, such as wheat, barley, cereal rye, or brome. The average stem length should not be less than 4 inches. Straw that can be windblown should be anchored to hold it in place.

3. Cellulose Fiber: Fiber origin is either virgin wood, post-industrial/pre-consumer wood or post consumer wood complying with materials specification (collectively referred to as "wood fiber"), newspaper, kraft paper, cardboard (collectively referred to as "paper fiber") or a combination of wood and paper fiber. Paper fiber, in particular, shall not contain boron, which inhibits seed germination. The cellulose fiber must be manufactured in such a manner that after the addition to and agitation in slurry tanks with water, the fibers in the slurry become uniformly suspended to form a homogeneous product. Subsequent to hydraulic spraying on the ground, the mulch shall allow for the absorption and percolation of moisture and shall not form a tough crust such that it interferes with seed germination or growth. Generally applied with tackifier and fertilizer. Refer to manufacturer's specifications for application rates needed to attain 80%-95% coverage without interfering with seed germination or plant growth. Not recommended as a mulch for use when seeding occurs outside of the recommended

Tackifiers within this specification include, but are not limited to: Water soluble materials that cause mulch particles to adhere to one another, generally consisting of either a natural vegetable gum blended with gelling and hardening agents or a blend of hydrophilic polymers, resins, viscosifiers, sticking aids and gums. Good for areas intended to be mowed. Cellulose fiber mulch may be applied as a tackifier to other mulches, provided the application is sufficient to cause the other mulches to adhere to one another. Emulsified asphalts are specifically prohibited for use as tackifiers due to their potential for causing water pollution following its application.

**Nettings** within this specification include, but are not limited to: Prefabricated openwork fabrics made of cellulose cords, ropes, threads, or biodegradable synthetic material that is woven, knotted or molded in such a manner that it holds mulch in place until vegetation growth is sufficient to stabilize the soil. Generally used in areas where no mowing is planned.

Site Preparation Grade according to plans and allow for the use of appropriate equipment for seedbed preparation, seeding, mulch application and mulch anchoring.

Timing: Applied immediately following seeding. Some cellulose fiber may be applied with seed to assist in marking where seed has been sprayed, but expect to apply a second application of cellulose fiber to meet the requirements of Mulch For Seed in the Connecticut Guidelines For Soil Erosion and Sediment Control latest edition.

Spreading: Mulch material shall be spread uniformly by hand or machine resulting in 80%-95% coverage of the disturbed soil when seeding within the recommended seeding dates. Applications that are uneven can result in excessive mulch smothering the germinating seeds. For hay or straw anticipate an application rate of 2 tons per acre. For cellulose fiber follow manufacture's recommended application rates to provided 80%-95% coverage.

When seeding outside the recommended seeding dates, increase mulch application rate to provide between 95%-100% coverage of the disturbed soil. For hay or straw anticipate an application rate to 2.5 to 3 tons per acre.

When spreading hay mulch by hand, divide the area to be mulched into approximately 1,000 square feet and place 1.5-2 bales of hay in each section to facilitate uniform distribution.

For cellulose fiber mulch, expect several spray passes to attain adequate coverage, to eliminate shadowing, and to avoid slippage.

Anchoring: Expect the need for mulch anchoring along the shoulders of actively traveled roads, hill tops and long open slopes not protected by wind breaks.

When using netting, the most critical aspect is to ensure that the netting maintains substantial contact with the underlying mulch and the mulch, in turn, maintains continuos contact with the soil surface. Without such contact, the material is useless and erosion can be expected to occur.

# **MAINTENANCE**

Inspect mulch for seed area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater until the grass has germinated to determine maintenance needs.

Where mulch has been moved or where soil erosion has occurred, determine the cause of the failure and repair as

# Site Preparation

Install needed erosion control measures such as diversions, grade stabilization structures, sedimentation basins and grassed waterways in accordance with the approved plan.

Grade according to plans and allow for the use of appropriate equipment for seedbed preparation, seeding, mulch application and mulch anchoring.

roughened surface. If the area has been recently loosened or disturbed, no further roughening is required. Soil preparation can be accomplished by tracking with a bulldozer, discing harrowing, raking or dragging with a section of chain link fence.

recommendations (such as those offered by the University of Connecticut Soil Testing Laboratory or other reliable source).

If soil testing is not feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 300 pounds per acre or 7.5 pounds per 1,000 square feet of 10-10-10 or equivalent.

Apply seed uniformly by hand, cyclone seeder, drill, cultipacker type seeder or hydroseeder. The temporary seed shall be Rye (grain) applied at a rate of 120 pounds per acre. Increase

See guidelines in the Mulch For Seed measures.

# *MAINTENANCE*

Inspect temporary seeding area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for seed and mulch movement and rill erosion.

determine the cause of the failure and repair as needed.

# SOIL EROSION & SEDIMENT CONTROL NOTES

- 1. All soil erosion and sediment control work shall be done in strict accordance with the Connecticut Guidelines For Soil Erosion and Sediment Control latest edition.
- 2. Any additional erosion/sediment control deemed necessary by the addition, the developer shall be responsible for the repair/replacement and/or maintenance of all erosion control
- 3. All soil erosion and sediment control operations shall be in place prior to any grading operations and installation of proposed completed and/or area is stabilized.
- 4. In all areas, removal of trees, bushes and other vegetation as well as disturbance of the soil is to be kept to an absolute minimum while allowing proper development of the site. During construction, expose as small an area of soil as possible for as short a time as
- 5. The developer shall practice effective dust control per the soil debris from these construction activities.
- 6. All fill areas shall be compacted sufficiently for their intended purpose and as required to reduce slipping, erosion or excess
- 7. Topsoil is to be stripped and stockpiled in amounts necessary to complete finished grading of all exposed areas requiring topsoil. The stockpiled topsoil is to be located as designated on the plans. Topsoil shall not be placed while in a frozen or muddy condition, when the subgrade is excessively wet, or in a condition that may otherwise be detrimental to proper grading or proposed sodding or
- 9. Soil stabilization should be completed within 5 days of clearing or inactivity in construction.
- 10. Waste Materials All waste materials (including wastewater) shall be disposed of in accordance with local, state and federal law. Litter shall be picked up at the end of each work day.
- materials as a contingency in the event of a failure or when straw haybales with 10 stakes.

# TEMPORARY SEEDING (TS)

# **SPECIFICATIONS**

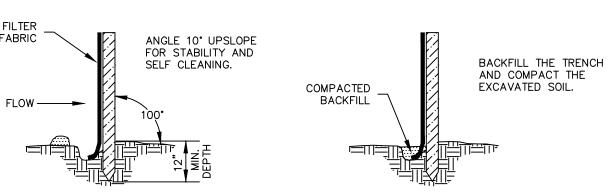
Loosen the soil to a depth of 3-4 inches with a slightly

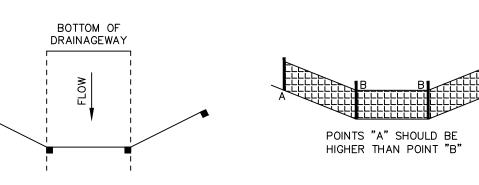
Apply ground limestone and fertilizer according to soil test

seeding rates by 10% when hydroseeding.

Where seed has been moved or where soil erosion has occurred,

- engineer during construction, shall be installed by the developer. In measures until all disturbed areas are stabilized to the satisfaction of the town staff.
- structures or utilities and shall be left in place until construction is
- conservation service handbook during construction and until all areas are stabilized or surface treated. The developer shall be responsible for the cleaning of nearby streets, as ordered by the town, of any
- saturation. Fill intended to support buildings, structures, conduits, etc., shall be compacted in accordance with local requirements or
- 8. Any and all fill material is to be free of brush, rubbish, timber, logs vegetative matter and stumps in amounts that will be detrimental to constructing stable fills. Maximum side slopes of exposed surfaces of earth to be 3:1 or as otherwise specified by local authorities.
- 11. The Contractor shall maintain on—site additional erosion control required to shore up existing BMPs. At a minimum, the on-site contingency materials should include 30 feet of silt fence and 5

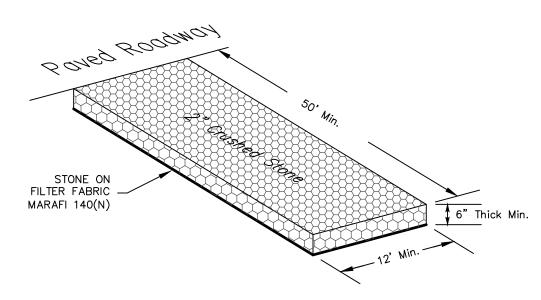




PLAN VIEW

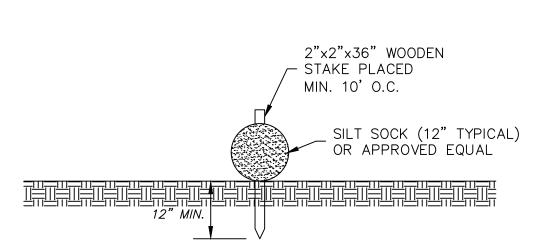
SOURCE: U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, STORRS, CONNECTICUT

# GEOTEXTILE SILT FENCE (SB)



**ELEVATION** 

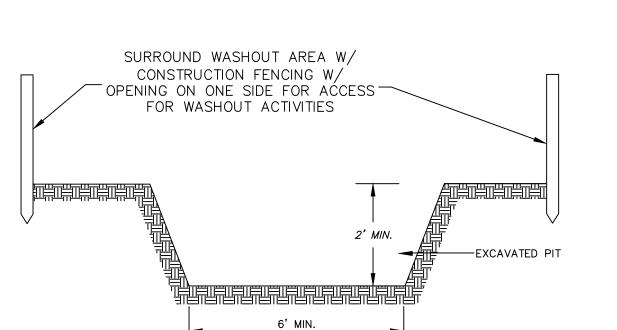
DRIVEWAY/ANTI-TRACKING PAD DETAIL (CE)



NOTE: MAY BE USED AS ALTERNATIVE TO GEOTEXTILE SILT FENCE.

PERIMETER SEDIMENT BARRIER (SB)

NOT TO SCALE



CEMENT TRUCK WASHOUT AREA NOT TO SCALE

# CHECKLIST FOR EROSION CONTROL PLAN

PROJECT: Somers Solar

LOCATION: 159 South Road, Somers, CT

PARCEL AREA: 98± acres

RESPONSIBLE PERSONNEL: Martin Mija, Louth Callan Renewables, 857-492-6926

PROJECT DESCRIPTION: Construction of a Photovoltaic Solar Array

EROSION AND SEDIMENT CONTROL PLAN PREPARER: J.R. Russo & Associates, LLC

CHECKLIST: Work Description Erosion & Sediment Location Date Installed Date Removed Initials Control Measures Install construction As shown on Install perimeter As shown on sediment barriers s shown on

MAINTENANCE OF MEASURES: Description or Number Initials Project Dates:

# PROJECT NARRATIVE AND CONSTRUCTION SEQUENCE

This project is located at 159 South Road in Somers, Connecticut. The proposed activity is the construction of photovoltaic solar array. The suggested schedule of construction is as follows:

- 1. Conduct a pre-construction meeting on-site with the contractor to review the design and requirements of the Stormwater Pollution Control Plan.
- Install anti-tracking pad (CE). Install sediment barriers (SB) at project perimeters.
- Clear trees & grub stumps in areas as shown on Plans. All debris to be removed from the

12. Remove sediment barriers after site is fully stabilized.

- Strip topsoil in the vicinity of the proposed stormwater management basins and areas to be regraded. Stockpile suitable amount of topsoil for reuse on—site in areas shown. Stockpiles shall be surrounded by sediment barriers (SB).
- 6. Perform cuts/fills to establish grades. 7. Construct stormwater management basins/conveyance system. Seed and mulch to establish
- vegetation as soon as practicable.

Date of groundbreaking for project

Date of final stabilization

- Install foundations and solar panels. Install electrical equipment and distribution lines.
- 10. Install security fence. 11. Restore all disturbed areas with topsoil, seed mix and mulch as soon as practicable.

Construction of this site is anticipated to begin in the spring of 2024 and be complete by January 2025, pending approvals. Temporary erosion control measures shall be installed prior to any soil disturbance and maintained throughout construction until soils have been stabilized with permanent vegetation. The Contractor shall keep the area of disturbance to a minimum and establish vegetative cover

on exposed soils as soon as practical. All soil and erosion control measures shall be installed

and maintained in accordance with these plans and the "Connecticut DEP Guidelines for Soil Erosion and Sediment Control", as amended. The Contractor shall verify all conditions noted on the plans and shall immediately notify the Engineer of any discrepancies. The developer shall be responsible for the repair/replacement/maintenance of all erosion control

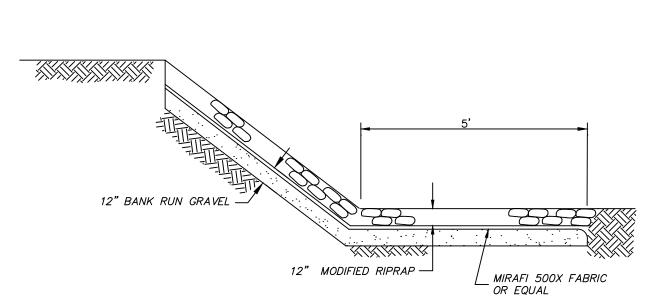
measures until all disturbed areas are stabilized. Accumulated sediment shall be removed as required to keep silt fence functional. In all cases, deposits shall be removed when the accumulated sediment has reached one-half above the ground height of the silt fence. This material is to be spread and stabilized in areas not subject to erosion, or to be used in areas which are not to be paved or built on. Sediment barrier (SB) is to be replaced as necessary to maintain proper filtering action. Sediment barrier (SB) are to remain in place and shall be maintained to insure efficient sediment capture until all areas above the erosion checks are stabilized and vegetation has been established.

# POST CONSTRUCTION MAINTENANCE NOTES:

The property owner shall be responsible for performing the following post construction

maintenance schedule: Maintain lawn & landscape areas with minimal pesticides. Inspect infiltration basin annually for evidence of hydrocarbons and remove by vac-truck. Repair eroded areas and replace riprap and vegetation as required. Dredge bottom to remove accumulated sediment every 10 years or when significant volume reduction is

observed. Mow infiltration basin on a regular basis to maintain as lawn area for filtering of



RIPRAP SLOPE PROTECTION AT SPILLWAY

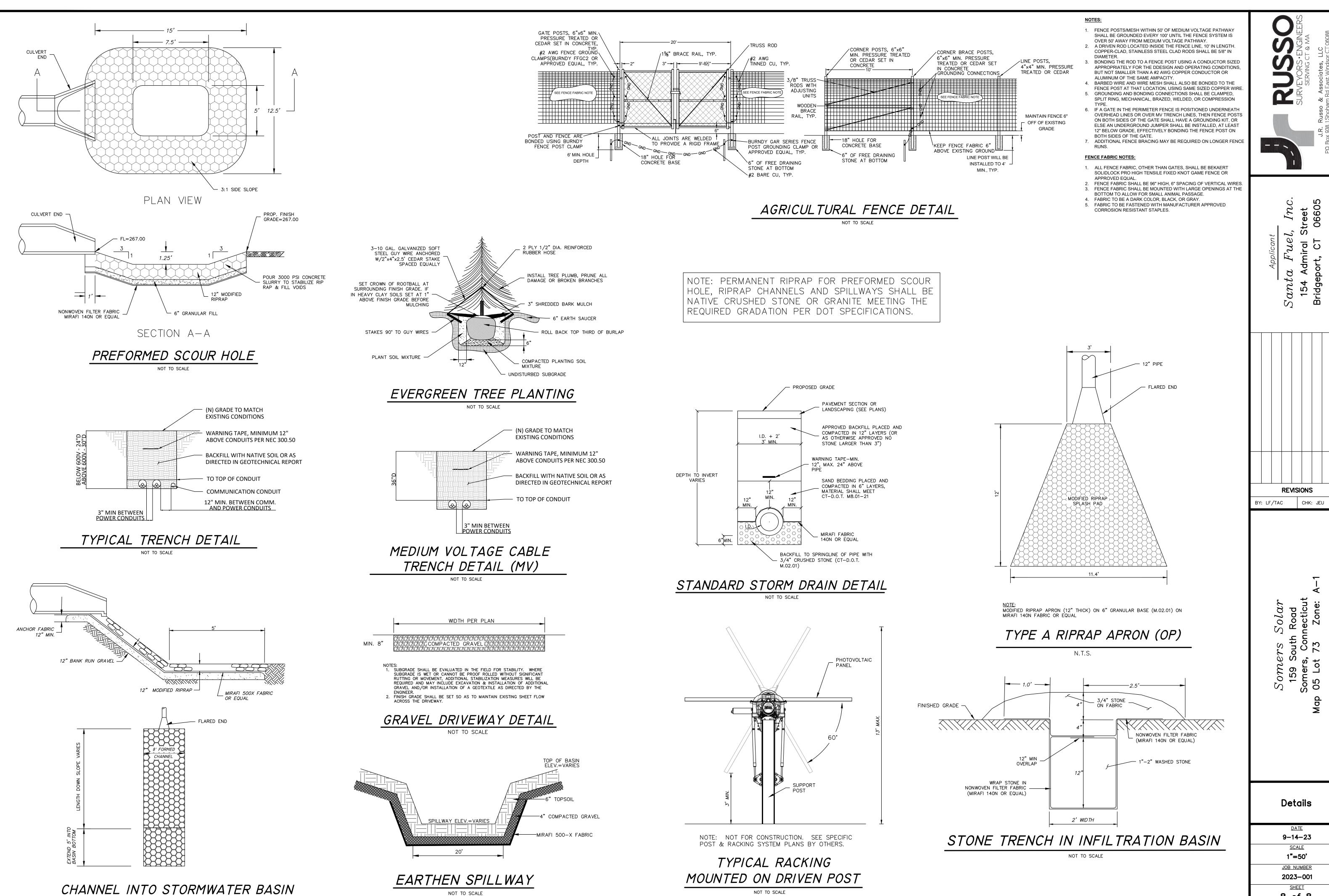
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REVISIONS BY: LF/TAC CHK: JEU

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Erosion & Sediment Control Notes & Details

9-14-23 <u>SCALE</u> 1"=50' JOB NUMBER 2023-001 SHEET 7 of 8



**REVISIONS** 

<u>DATE</u> 9-14-23 <u>SCALE</u> 1"=50" JOB NUMBER

2023-001 SHEET 8 of 8

