# Kilkenny Heights II

Open Space Subdivision

## Maskel Road & Abbe Road South Windsor, Connecticut

Special Permit & Open Space Subdivision Application

Owner

Kevin P. Charbonneau
P.O. Box 1393
South Windsor, Connecticut 06074

Owner

Anita J. Roy 388 Abbe Road South Windsor, Connecticut 06074

Applicant

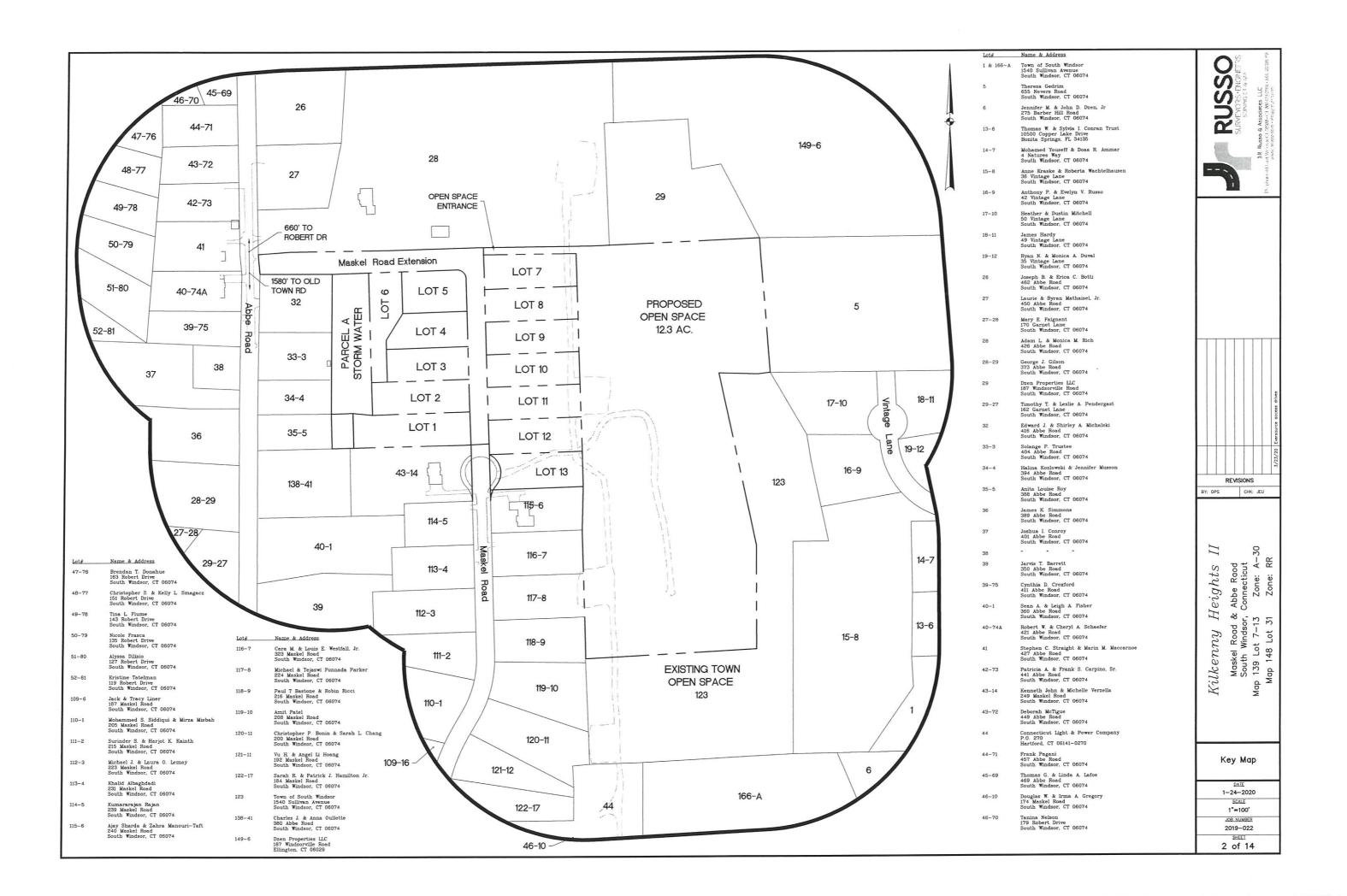
Mannarino Builders Inc. 400 Chapel Road, Unit 3-F South Windsor, Connecticut 06074 DRAWING INDEX

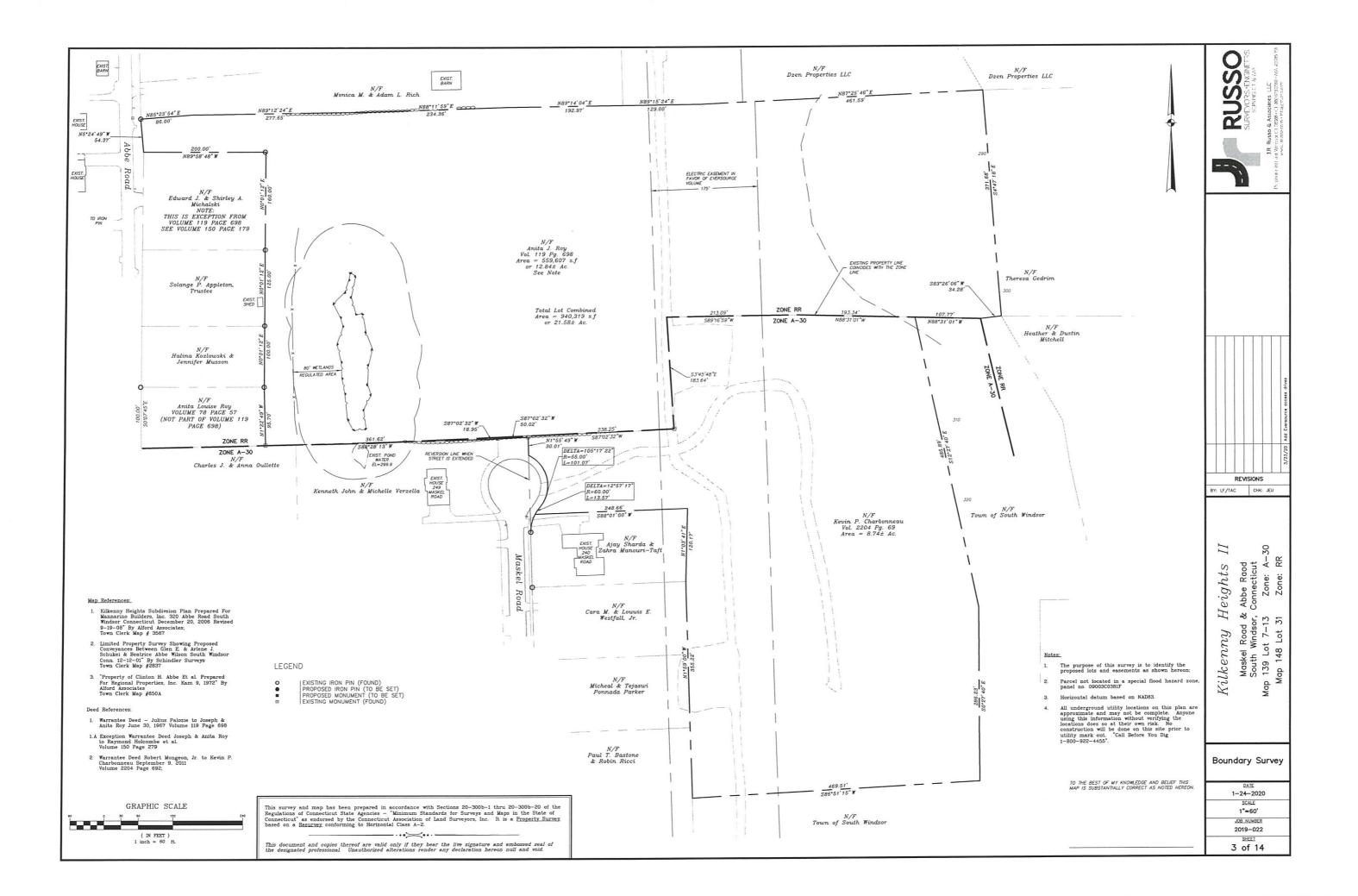
SHEET TITLE	SHEET NO.	LATEST REVISION
CIVIL		
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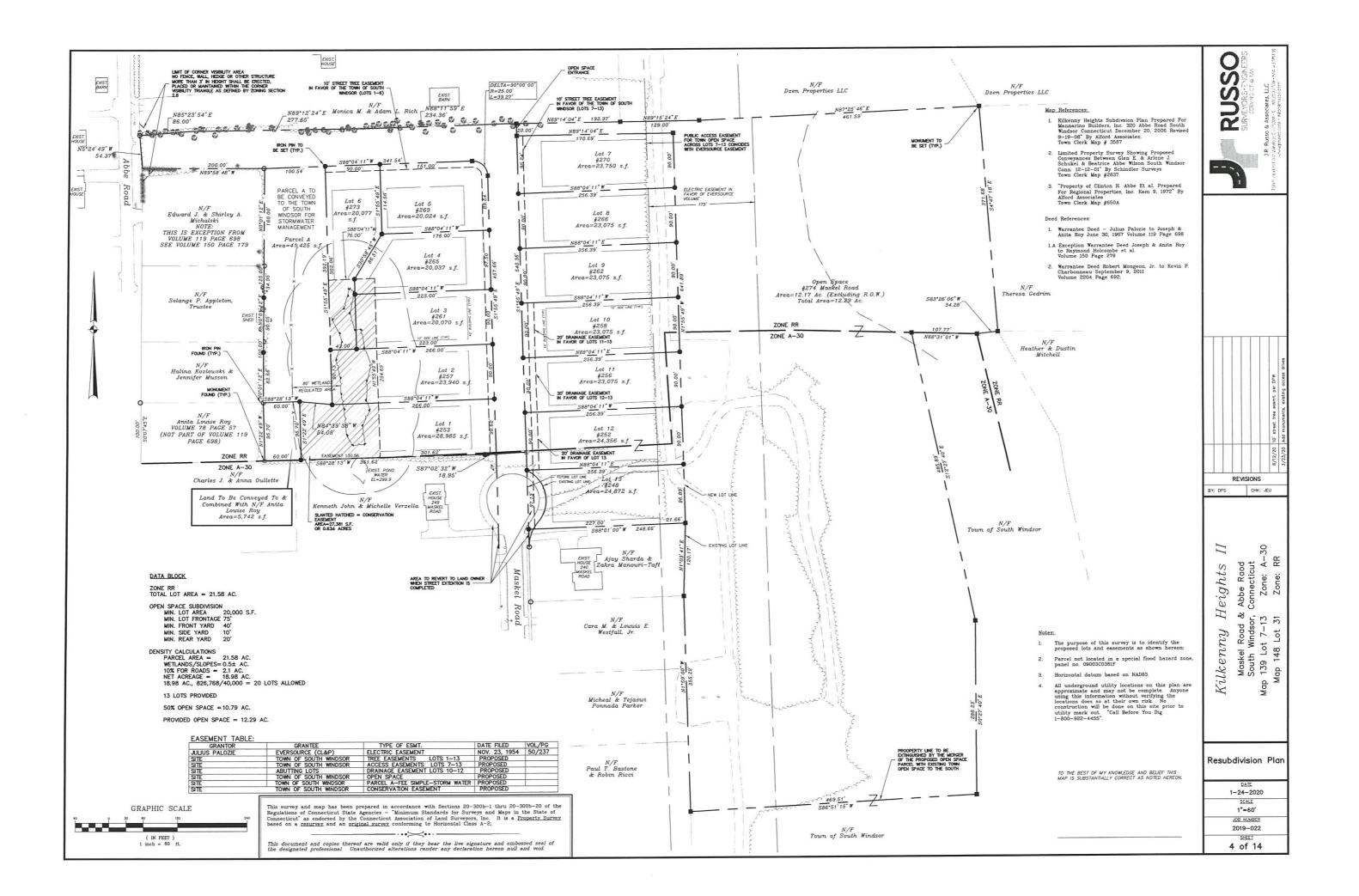
Prepared By

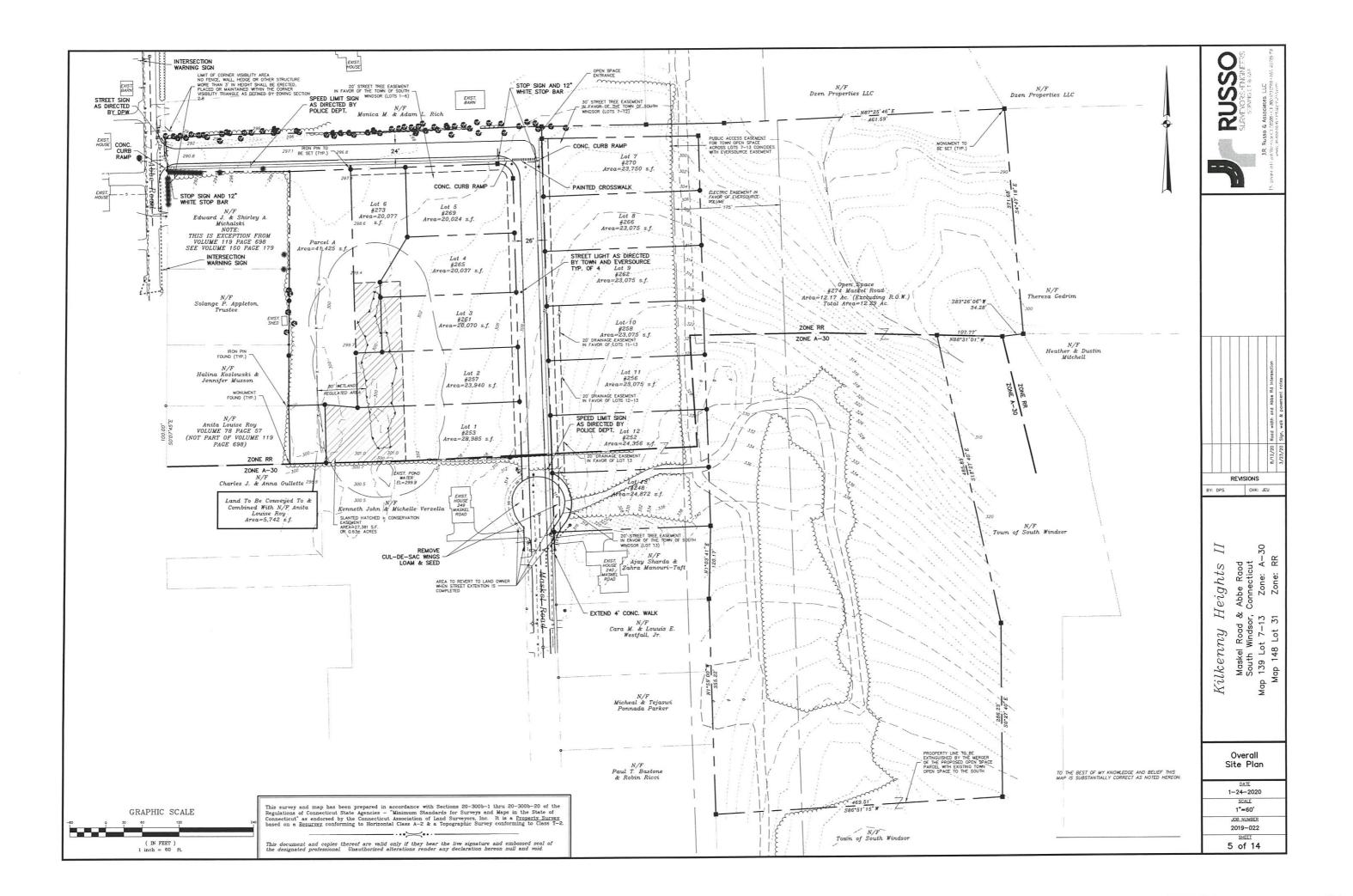


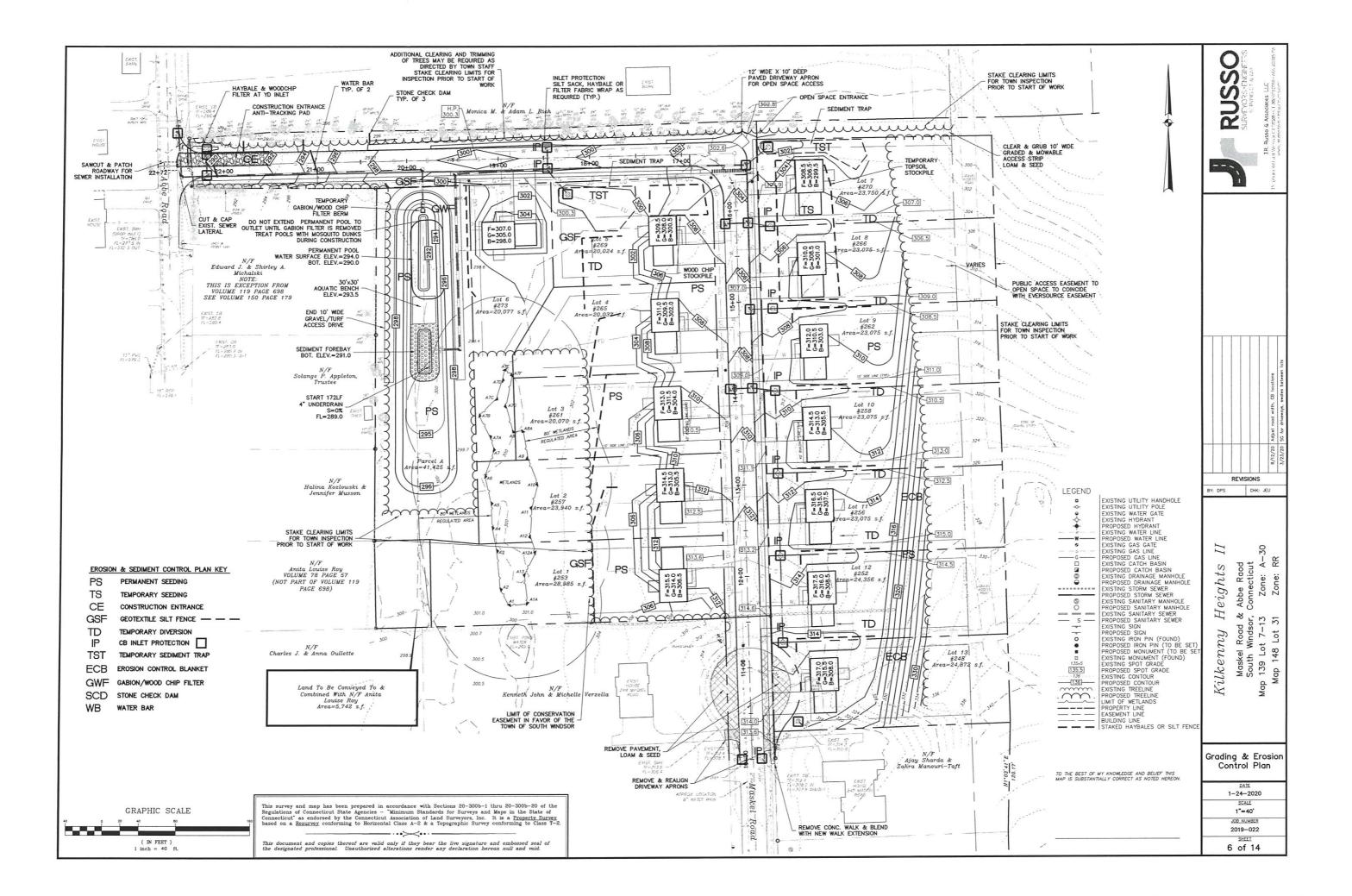
J.R. Russo & Associates, LLC ISroham Rd East Wholey CT LODE - CT LOUIS LIGHT AND LIGHT BD

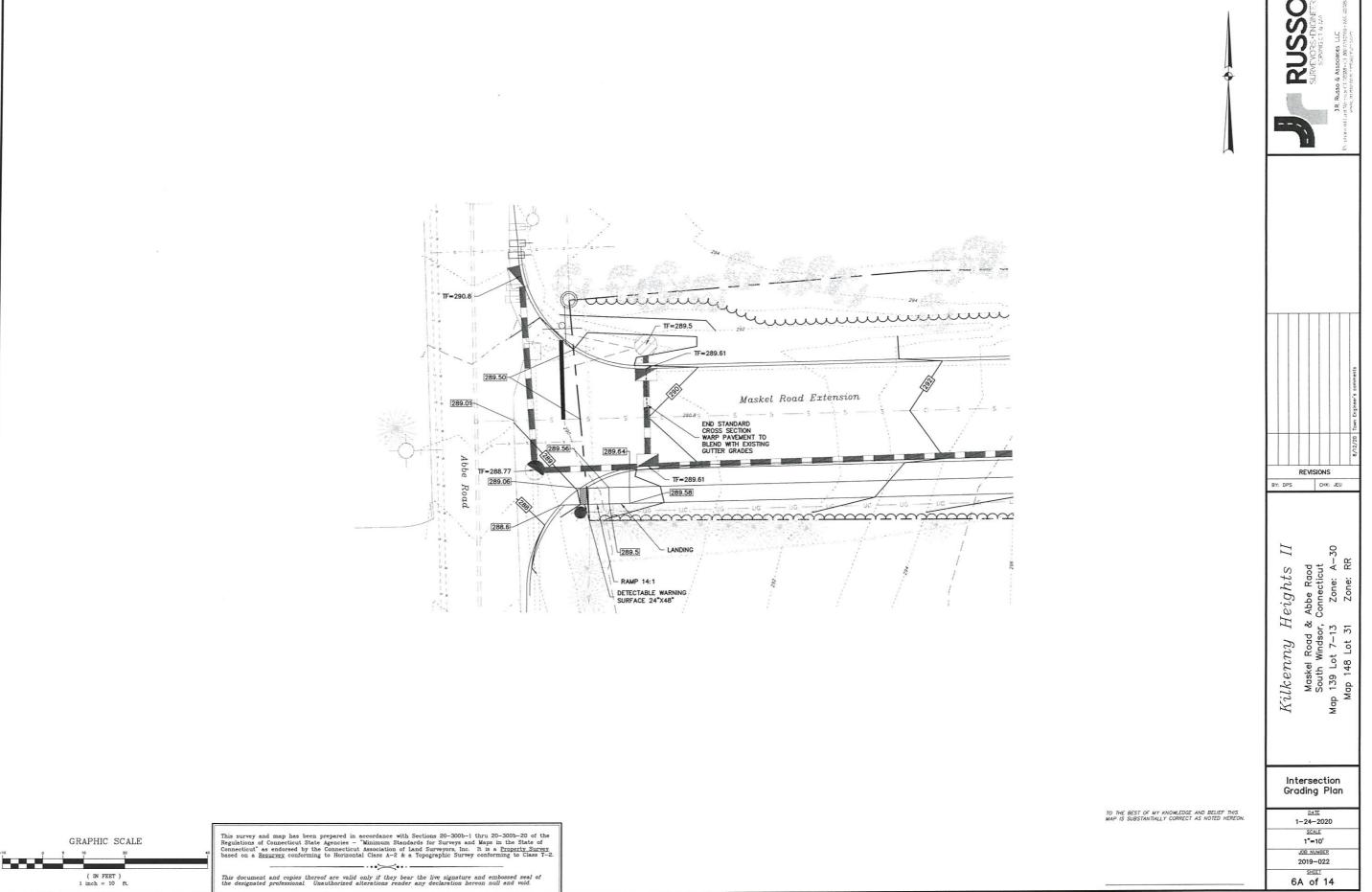




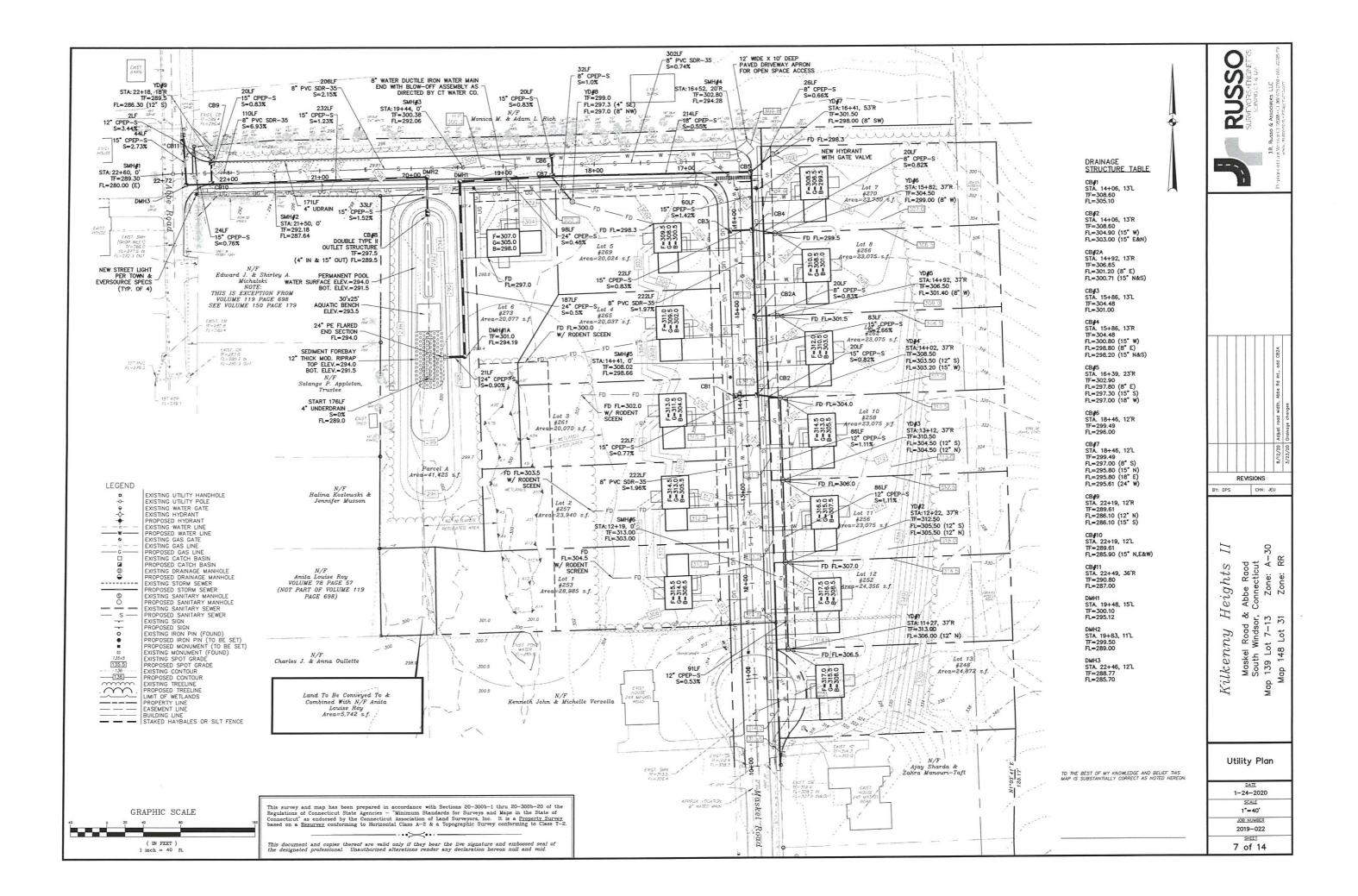


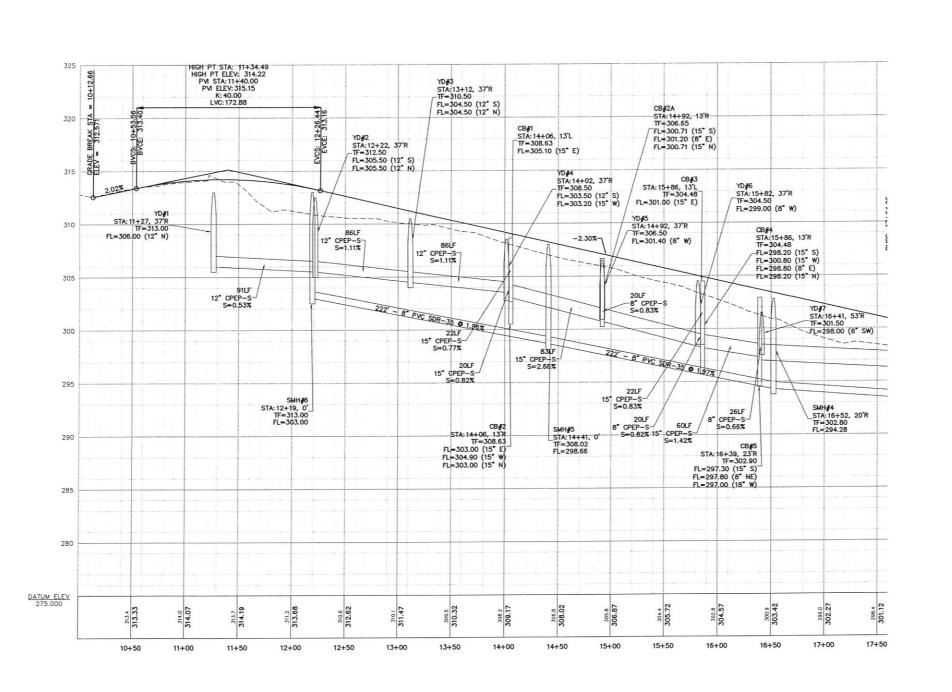






**RUSSO** 

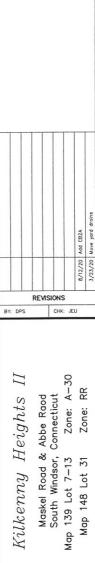






RUSSO

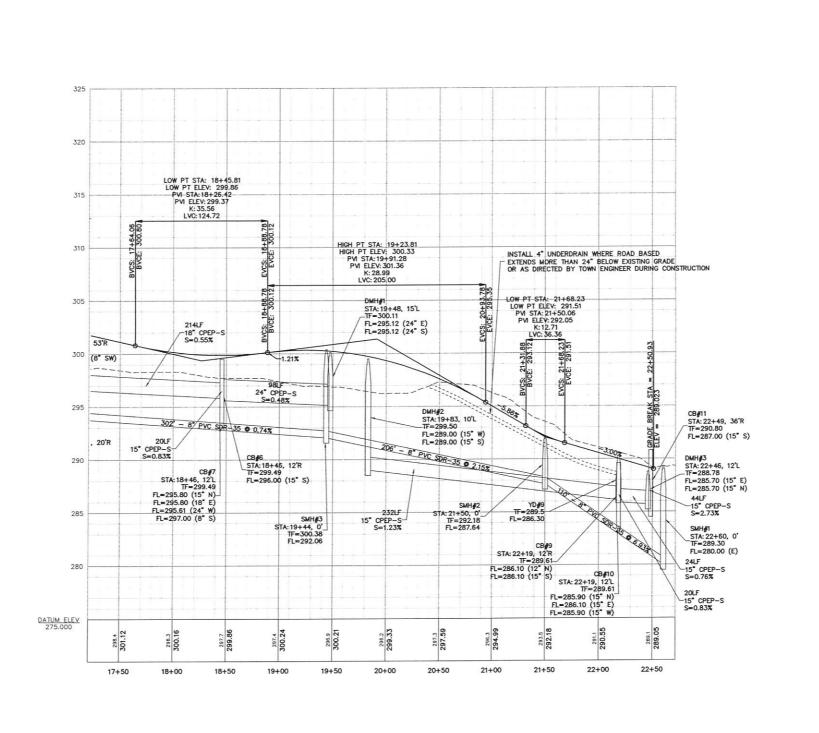
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Profile Plan Sta. 10+00-17+50

DATE
1-24-2020
SCALE
1"=40' Horz., 1"=4' Vert

XOR NUMBER
2019-022
SHEET
8 of 14





REVISIONS	5	_
	8/12/20	3/23/20
	8/12/20 Adjust rood width, Abbe Rd intersection	3/23/20 Adjust vertical alignment
	width,	tical align
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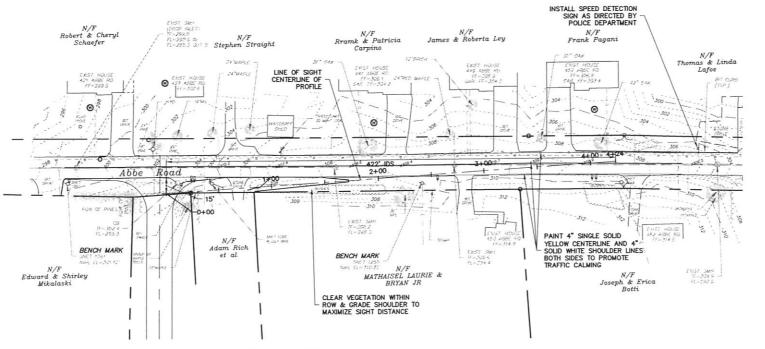
Kilkenny Heights II

Maskel Road & Abbe Rood
South Windsor, Connecticut
Map 139 Lot 7—13 Zone: A—30
Map 148 Lot 31 Zone: RR

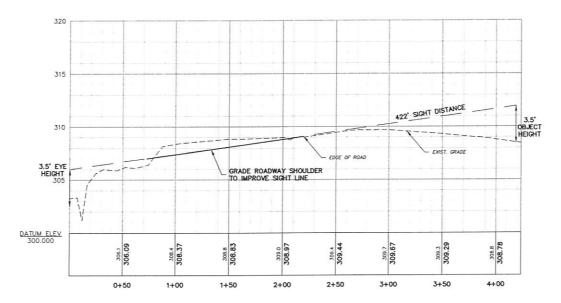
Profile Plan Sta. 17+50-22+50

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- 1	1-24-2020
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	1"=40' Horz., 1"=4' Ver
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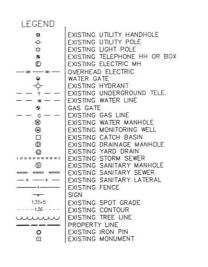




POSTED SPEED = 30 MPH 85th PERCENTILE SPEED = 40 MPH 30 MPH INTERSECTION SIGHT DISTANCE = 335' 40 MPH INTERSECTION SIGHT DISTANCE = 445' 40 MPH STOPPING SIGHT DISTANCE = 305' AVAILABLE INTERSECTION SIGHT DISTANCE = 422' (38.2 MPH)



SIGHT LINE PROFILE TO NORTH



RUSSO REVISIONS BY: DPS CHK: JEU Inc.Mannarino Builders, In Abbe Road & Maskel Road South Windsor, Connecticut

Sight Line Plan

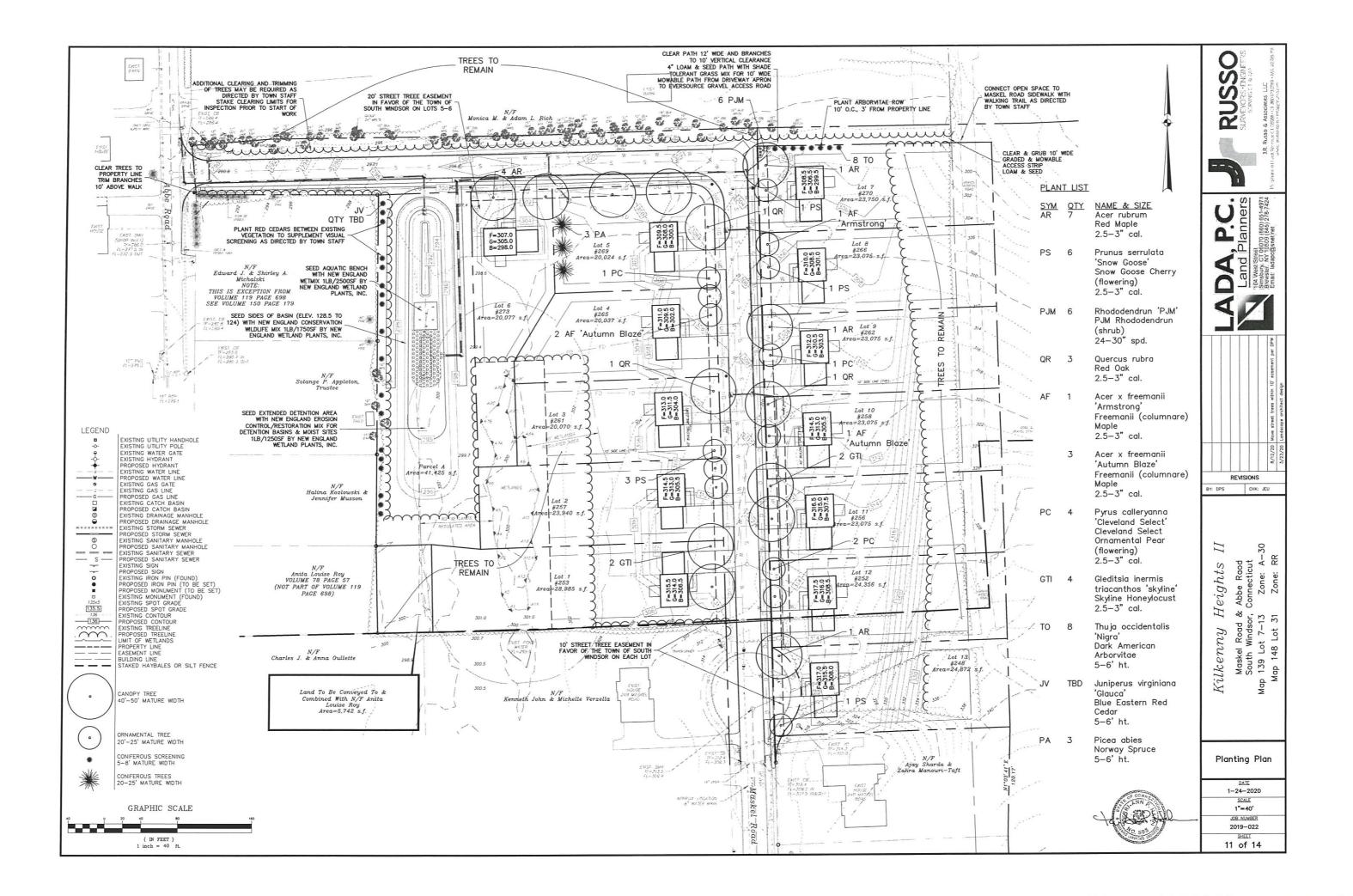
DATE
January 24, 2020

SCALE

1"=40 HORZ., 1"=4" VERT

40 HORZ., 1"=4" VE 308 NUMBER 2019-022

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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.

Seed Selection
Lawn Areas: Premium Seed Mix for Sun and Shade.

<u>Seedbed Preparation</u>
Apply topsoil, if necessary, in accordance with the Topsoiling measure which is in the Connecticut Guidelines For Soil Erosion and Sediment Control latest edition.

Apply ground limestone and fertilizer according to soil test tions (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 ond 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.

Seed Application
Apply selected seed at rates per manufacturer's recommendations uniformly by hand, cyclone seeder, drill, recommendations uninormly by nana, cyclone seeder, arill, 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 only.

<u>Mulching</u> See guidelines in the Mulch For Seed measures.

MAINTENANCE

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.

## TEMPORARY SEEDING (TS)

## SPECIFICATIONS

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

equipment for seedbed preparation, seeding, mulch applica and mulch anchoring.

Seedbed Preparation
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 buildozer, 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 10–10–10 or equivalent.

<u>Seeding</u>
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.

<u>Mulching</u> 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.

## MULCH FOR SEED (MS)

## SPECIFICATIONS

<u>Materials</u>
Types of Mulches within this specification include, but are not

1. Hay: The dried stems and leafy ports of plants cut and harvested, such as olfatin, clovers, other forage legumes and the finer stemmed, leafy grosses. 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 brame. 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,

3. Cellulase Fiber: Fiber origin is either virgin wood, post-industriol/pre-consumer wood or post consumer wood complying with materials specification (callectively referred to as "wood fiber"), newspaper, kraft paper, cardboard (callectively referred to as "paper fiber") or a combination of wood and paper fiber. Paper fiber, in particular, shall not contain borna, which inhibits seed germination. The cellulase 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 hydroulic spraying on the ground, the mulch shall allow for the obsorption 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 germinaturi of growin. Generally upplied with robusts that fertilizer. Refer to manufacturer's specifications for application rates needed to attain 80X-95X coverage without interfering with seed germination or plant growth. Not recommended as a mulch for use when seeding occurs outside of the recommended seeding dates.

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 oids and gums. Good for areas intended to be mowed. Cellulose fiber mulch may be applied as a tockifier to other mulches, provided the application is sufficient to cause the other mulches to adhere to one another. Emulsified apphalts 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: Prefobricated 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

<u>Application</u>
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 Mukch For Seed in the Connecticut Guidelines For Soil Erosion and Sediment Control

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 on application rate of 2 tons per acre. For cellulose fiber followed the seeds that the seeds thad the seeds that the seeds that the seeds that the seeds that th 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 soll. 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.

adequate coverage, to eliminate shadowing, and to avoid

Anchoring: Expect the need for mulch anchoring along the shoulders of actively traveled roads, hill tops and long ope oads, hill tops and long oper 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 continuous 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

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

Periodically moisten exposed soil surfaces on unpaved travelways to keep the travelway damp.

Non-Asphalfic Soil Tacklifer

Non-asphalfic Soil Tacklifer consists of an emulaified liquid soil stabilizer
of organic, inorganic or mineral origin, including, but not limited to the
following: modified resins, colcium chloride, complex surfactant
copolymers or high grade later corylics. The solutions shall be
non-asphaltic, non taxic to human, animal and plant life, non corrosive
and nonflammable. Materials used shall meet local, state and federal
guidelines for intended use. All materials are to be applied according to
the manufacturer's recommendations and all safety guidelines shall be
fallowed in storing, handling and applying materials.

### MAINTENANCE

Repeat application of dust control measures when fugitive dust becomes evident.

- 1. The contractor/developer shall notify the Town Engineer and/or the IWWA Agent at least two working days before the following:

  1. Start of construction

  2. Completion of clearing limit demarcation

  3. Installation of E&S measures:

  4. Completion of site clearing

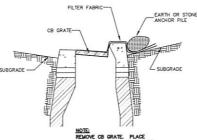
  5. Completion of rough grading

  6. Completion of final grading

  7. Close of construction season

  8. Completion of final indescepting

  9. Prior to the removal of construction E&S control measures
- Any additional erasion/sediment control deemed necessary by the engineer during construction, shall be installed by the developer. In addition, the developer shall be responsible for the repair/replacement and/or maintenance of all erasion control measures until all disturbed areas are stabilized to the satisfaction of the town staff.
- 5. 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 acceptable.
- The developer shall practice effective dust control per the soil 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 debris from these construction activities.
- 7. All fill areas shall be compacted sufficiently for their intended purpose and as required to reduce slipping, erosion or excess saturation. Fill intended to support buildings, structures, cond etc., shall be compacted in accordance with local requirements
- 8. Topsoil is to be stripped and stockpiled in amounts necessary complete finished grading of all exposed areas requiring topsoil stockpiled topsoil is to be located so designated on the plans. Topsoil shall not be placed while in a frazen or muddy condition when the subgrade is excessively yet, or in a condition that in otherwise be detrimental to proper grading or proposed soddin-
- Any and all fill material is to be free of brush, rubbish, timber, I vegetative matter and stumps in amounts that will be detriment constructing stable fills. Maximum side slopes of exposed surface of earth to be 3:1 or as otherwise specified by local authorities.
- 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.



FILTER FABRIC SILT BARRIER AT TYPE "C" CATCH BASIN

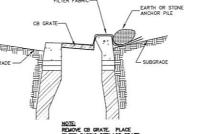
## DUST CONTROL (DC)

\*\*ecuanical sweeping on paved areas where dust and fine materials occumulate as a result of truck traffic, povement saw cutting spillage, and wind or water deposition from adjacent disturbed areas. Sweep dolly in heavily traveled areas.

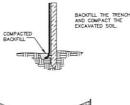
## SOIL ERSOION & SEDIMENT CONTROL NOTES

- All soil erosion and sediment control operations shall be in place prior to any grading operations and installation of proposed structures or utilities and shall be left in place until construction is

- 10. Soil stabilization should be completed within 5 days of clearing or
- 12. The Contractor shall maintain on-site additional erasion control materials as a contingency in the event of a failure or wissing SMPs. At a minimum, the on-site contingency materials should include 30 feet of sit fence and 5 strow hopoles with 10 stakes.





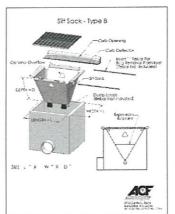




U.S. DEPARTMENT OF AGRICULTURE. SOIL CONSERVATION SERVICE. STORRS, CONNECTICUT

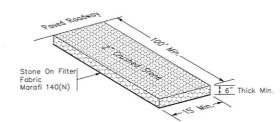
PLAN VIEW

## GEOTEXTILE SILT FENCE (GSF)

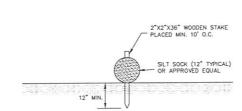


NOTE: SILT SACK SHALL BE SIZED TO FIT EACH INLET GRATE (SINGLE OR DOUBLE) AND SHALL BE CLEANED AND MAINTAINED UNTIL THE CONTRIBUTING WATERSHED IS STABILIZED WITH VEGETATION AND/OR COMPACTED PROCESSED STONE BASE.

## CB GRATE INLET PROTECTION (SILT SACK)



ANTI-TRACKING EXIT PAD DETAIL (CE)



NOTE: MAY BE USED AS ALTERNATIVE TO GEOTEXTILE SILT FENCE. SILT SOCK (ALTERNATE SEDIMENT BARRIER)

CHECKLIST FOR EROSION CONTROL PLAN

PROJECT: Kilkenny Heights II LOCATION: Maskel Road & Abbe Road PROJECT DESCRIPTION: Residential subdivision

RESPONSIBLE PERSONNEL: Rob Mannarino, 860-289-7055

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

Location	Date Installed	Initials	Date Removed	Initials
As shown on plan. As installed.				
	As shown on plan	As shown on plan.	As shown on plan.	As shown on plan.

Location	Description or Number	Date	Initials

Date of final stabilization:

PROJECT NARRATIVE AND CONSTRUCTION SEQUENCE This project is located between Abbe Road and Maskel Road in South Windsor, Connecticut. The proposed activity is a 13 lot open space residential subdivision with 1,130 lf of roadway extension. The suggested schedule of construction is as follows:

Install construction entrance anti-tracking pad (CE).

Date of groundbreaking for project:

- Install sediment barriers (GSF) at project perimeters where downgradient from site disturbance. Install inlet protection (silt sacks, filter fabric wrap or haybale perimeter) at existing catch
- basin. Install stone check dams in existing ditch along northern property line and remove

- basin.

  Install stone check dams in existing ditch along northern property line and remove accumulated sediment during construction.

  Mork clearing limits and call for Town inspection prior to clearing vegetation. Clear & grub existing trees and stumps to limits as directed by town staff. Dispose of stumps in accordance with local regulations.

  Install temporary sediment trops on each side of roadway to collect runoff during construction.

  Install stormwater basin but do not extend permanent pool all the way to the outlet structure. Install stormwater basin but do not extend permanent pool all the way to the outlet structure. Install stormwater basin but do not extend permanent pool all the way to the outlet structure. Install gobion/wood chip filter orange outlet structure in the property of the property stockples subject to erosion shall be vegetated with temporary seeding (TS) if remaining more than 30 days and shall be protected with temporary seeding (TS) if remaining more than 30 days and shall be protected with perimeter sediment barriers (silt fence or sit sock).
- seeding (TS) if remaining more than all automated with a more sediment barriers (silt fence or silt sock).

  Install linlet protection (IP) at new cotch basins (silt socks, filter wrap or haydale ring as needed). Inspect and remove sediment after each rainfall event greater than \frac{1}{2}. Particula attention must be poid to the cotch basins at the low point of the road where water will
- attention must be poid to the cotch bosins at the low point of the road where water will accumulate.

  14. Install light poles and other site utilities.

  15. Install concrete walks and pove binder course. Shim structures for winter maintenance and avoid gutter runoff from bypassing structures prior to find poving course.

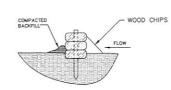
  15. Stobilize areas to receive minimum 4" topsall and permanently seed as son as possible. Stobilize with mulch or existin control binked and terminated to previous on as possible. Stobilize with mulch or existin control binked path from the driveway agron to the open space access shall include a membrane accessment.

  17. grovel accessor and within and after road and binder installation. A binder course is typically required prior to a certificate of occupancy.

  18. Pave top course of roadway after lots are completed or within 5 years of binder course intallation.
- Clean drainage pipes and sumps with jet-vac prior to road acceptance. Remove temporary sediment barriers after site is stabilized with vegetation. Construction of this site is anticipated to begin in the spring of 2020, pending approvals. Root infrastructure and binder course are anticipated to be completed with 6 months of start of construction. House lots are anticipated to be completed with 2 years of start of construction. Temporary erosion control measures shall be installed prior to any sail disturbance and maintained throughout construction until soils have been stabilized with permanent vegetation.

The Contractor shall keep the orea of disturbance to a minimum and establish vegetative cover on exposed soils as soon as practical. All soil and erasion control measures shall be installed and maintained in accordance with these plans and the "Connecticut DEP Guidelines for Soil Erasion 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 erasion control measures until all disturbed areas are stabilized. Accumulated sediment shall be removed as required to keep silt fence (or silt socks) functional. In all cases, deposits shall be removed when the occumulated 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 erasion, or to be used in oreas which are not to be paved or built on. Silt fence (GSF) is to be replaced as necessary to maintain proper filtering action. Silt fence (GSF) are to remain in place and shall be maintained to insure efficients sediment capture until all areas above the erasion checks are stabilized and vegetation has been established.



NOTE: HAYBALES TO BE EMBEDDED 4" IN EXISTING GROUND BUTTED END TO END/STAKED SECURELY.

## STAKED HAYBALE & WOODCHIP FILTER

NOT TO SCALE





BY: DPS CHK: JEU

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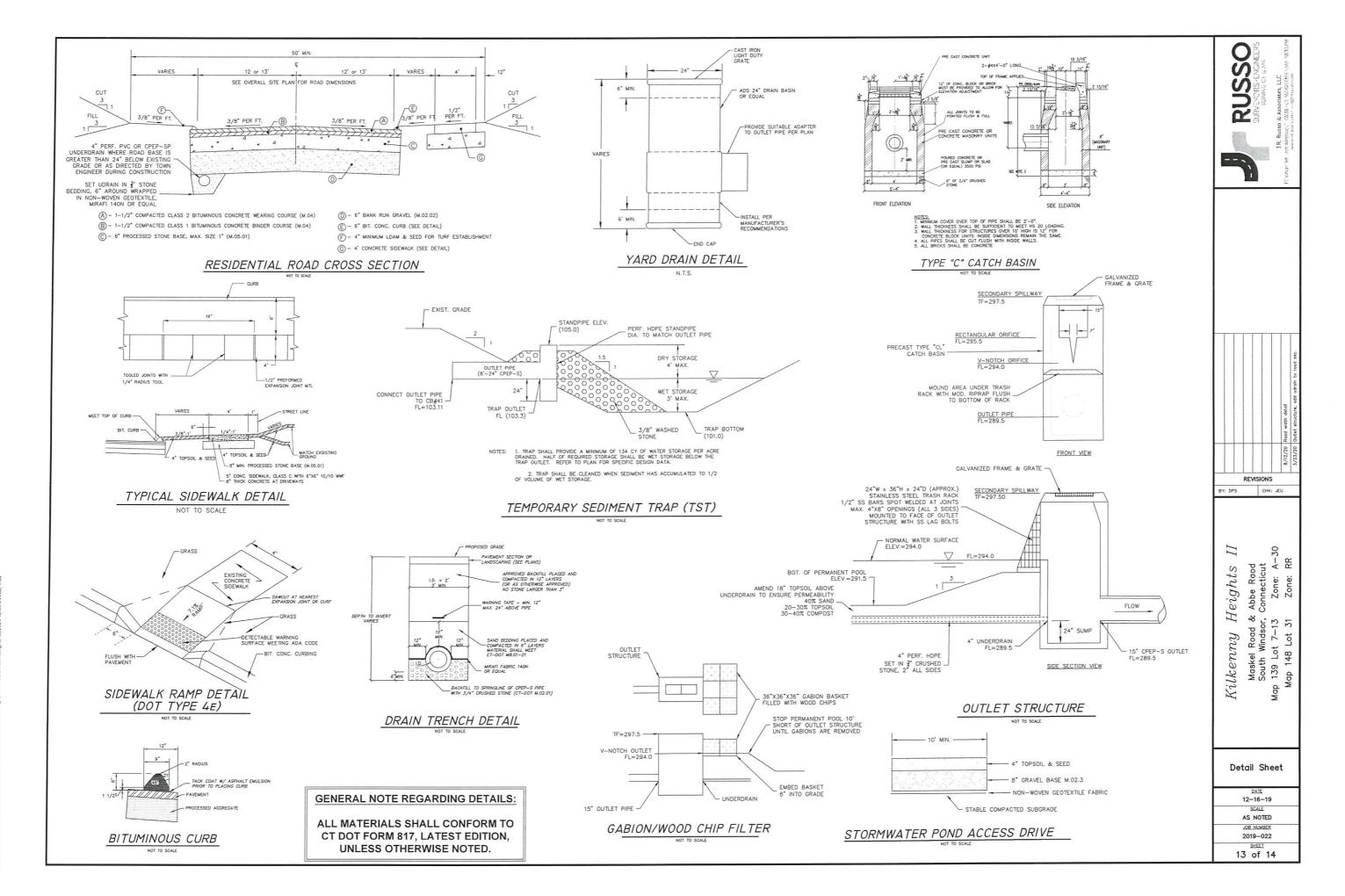
: Abbe Raod Connecticut Zone: A-3 Zone: RR eigi HI Road & Windsor, ( ot 7-13 3 Lot 31 7-1 Lot Lot 148 Lo

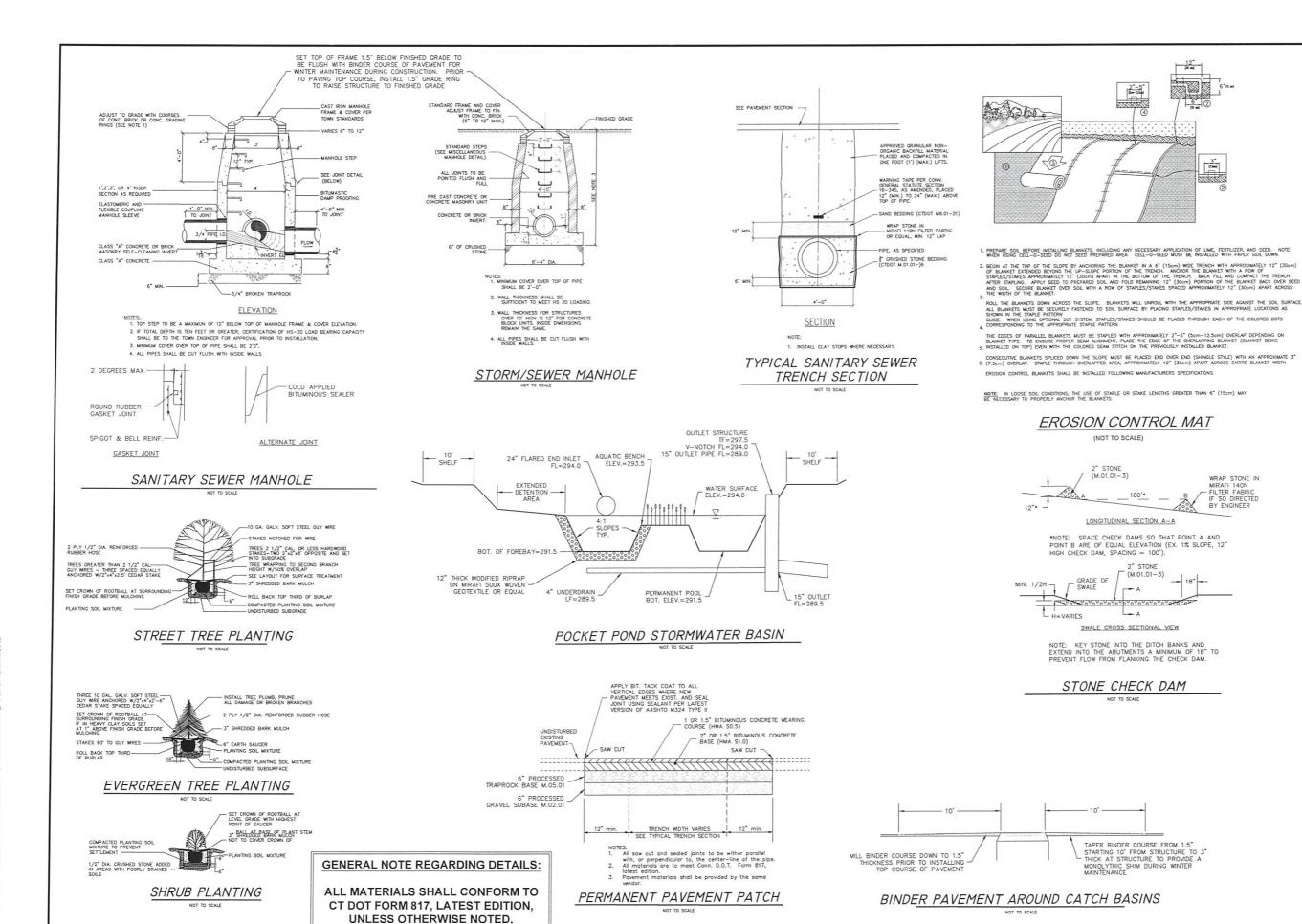
Maskel South V 139 Lo Мар Мар Kilk

Erosion & Sediment Control Notes/Details

1/24/20 SCALE AS NOTED JOB NUMBER 2019-022

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REVISIONS CHK: JEU : Abbe Raod Connecticut Zone: A-3 Zone: RR Heightsskel Road & / uth Windsor, C 9 Lot 7—13 148 Lot 31 KilkennyMaskel South V 139 Lo Detail Sheet 12-16-19 SCALE AS NOTED JOB NUMBER 2019-022 14 of 14

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