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

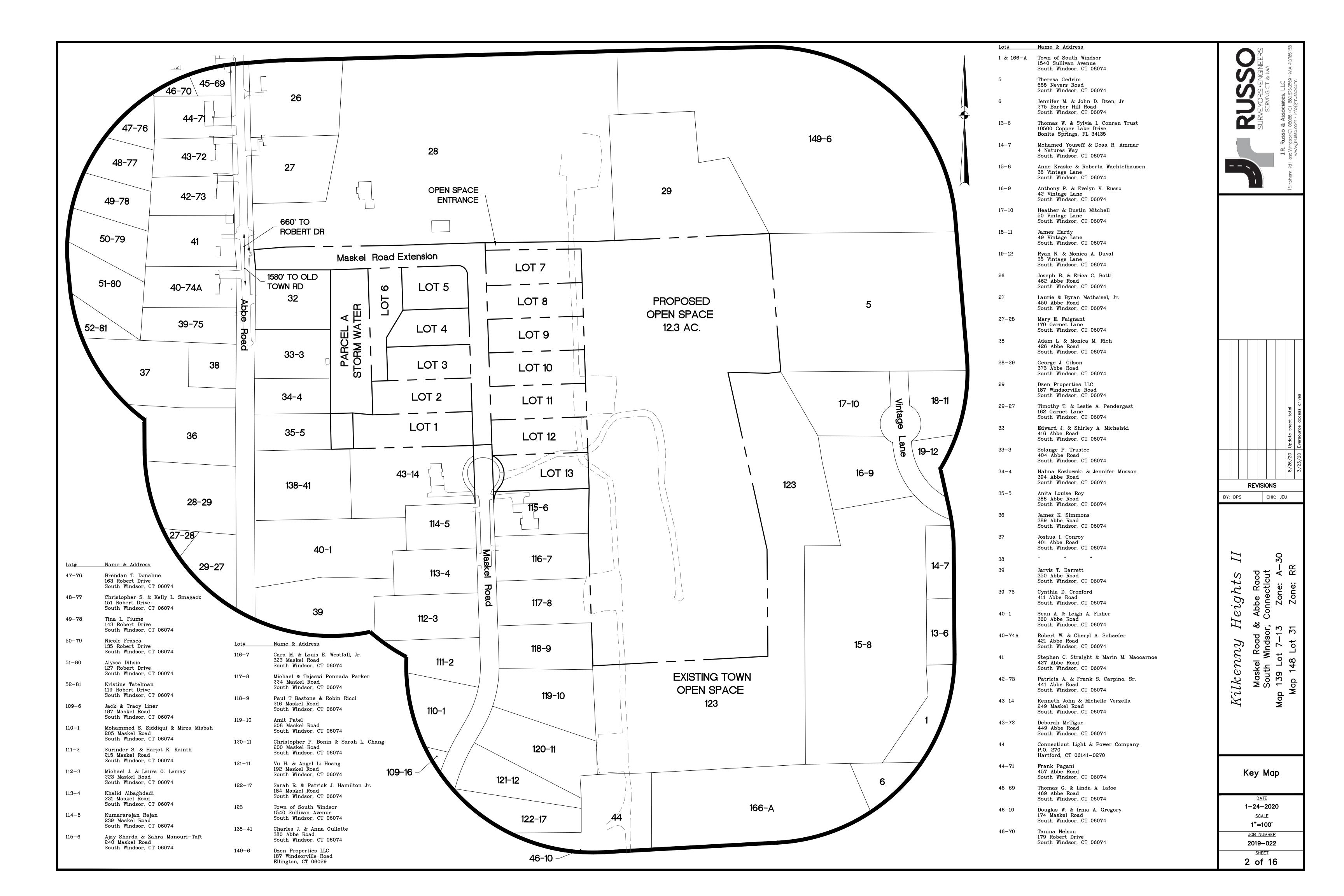
Mannarino Builders Inc.
400 Chapel Road, Unit 3-F
South Windsor, Connecticut 06074

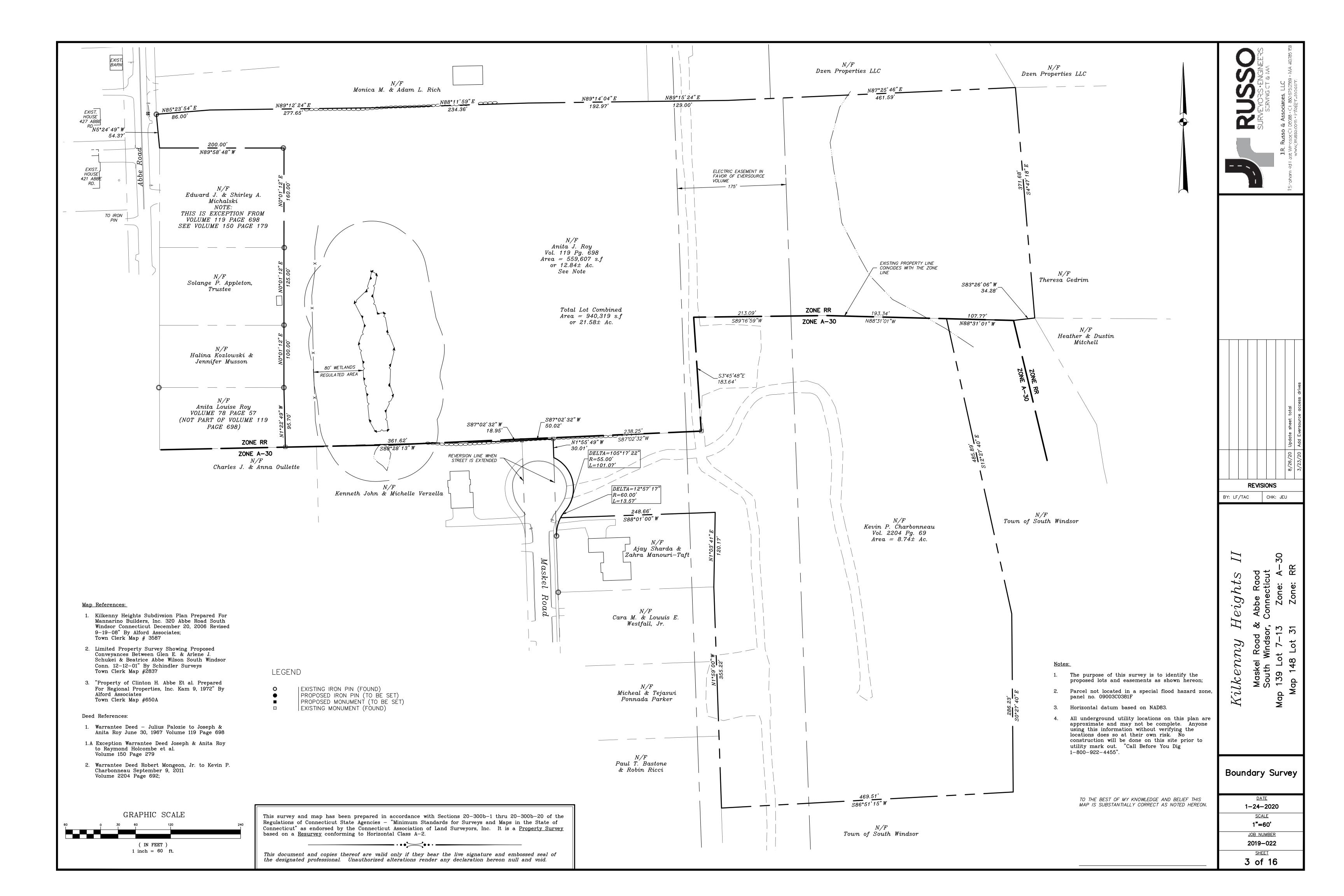
Prepared By

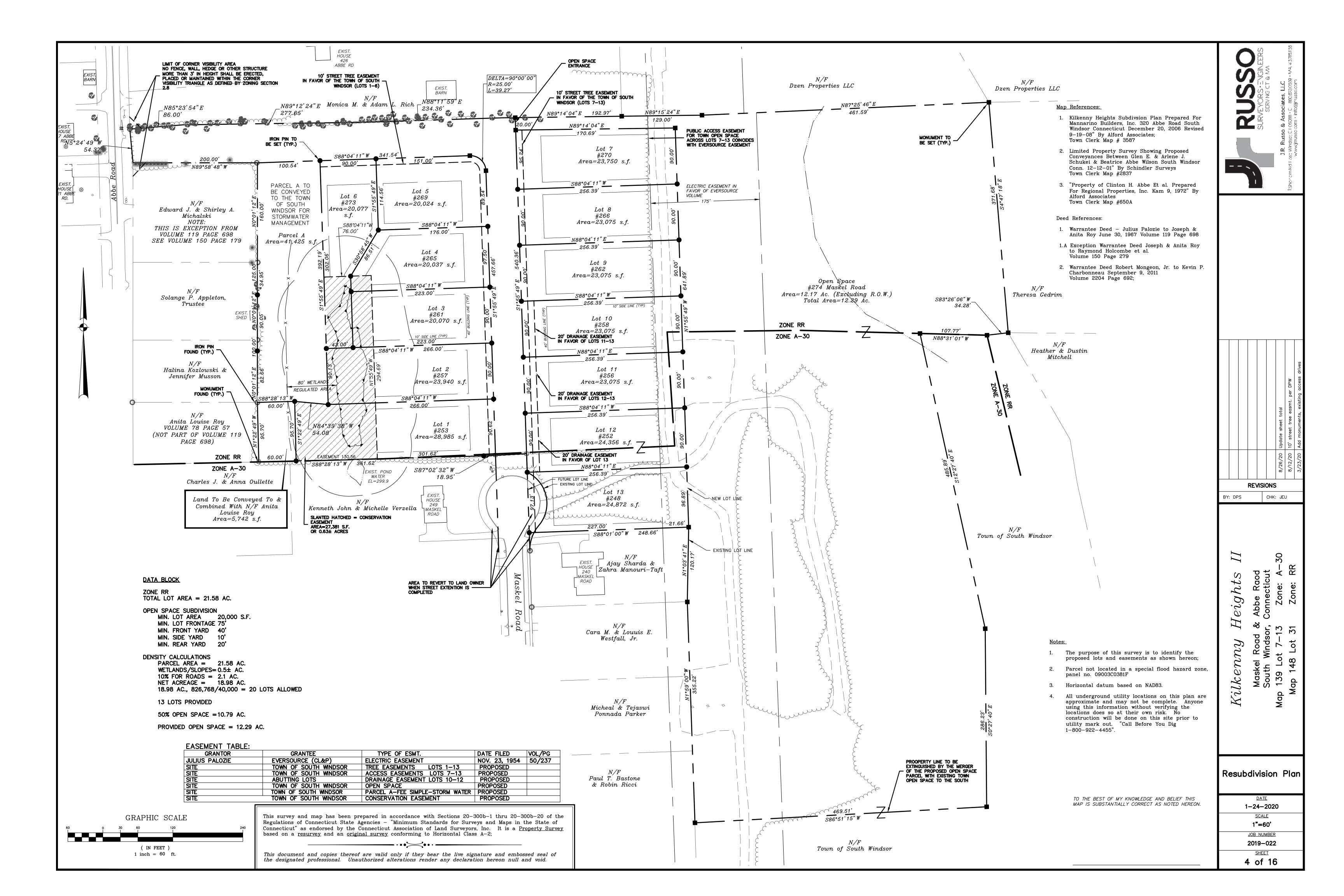


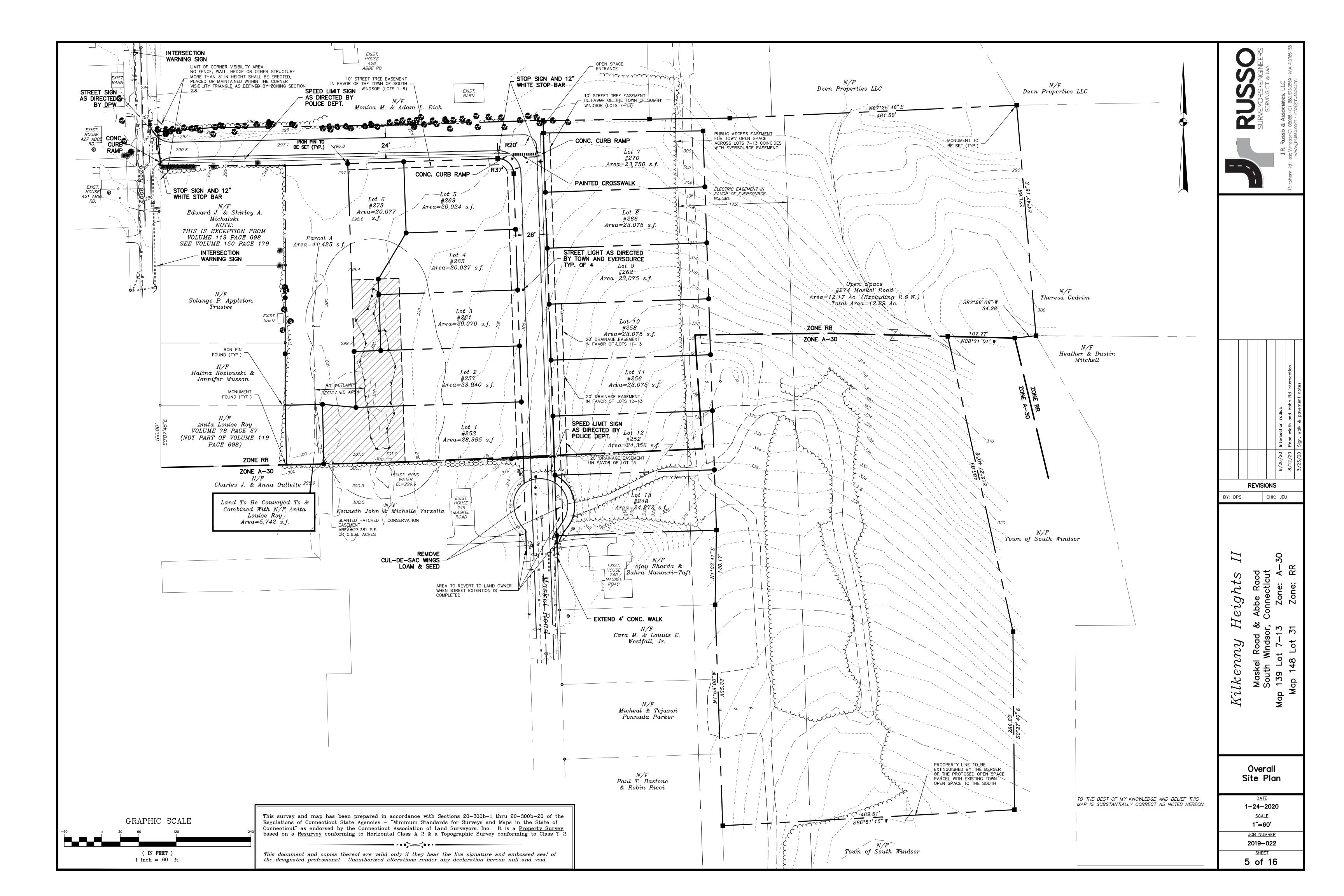
1Shoham Rd East Windsor, CT 06098 • CT 980,623,0569 • MA 413785,158 www.jrrusso.com • info@jrrusso.com

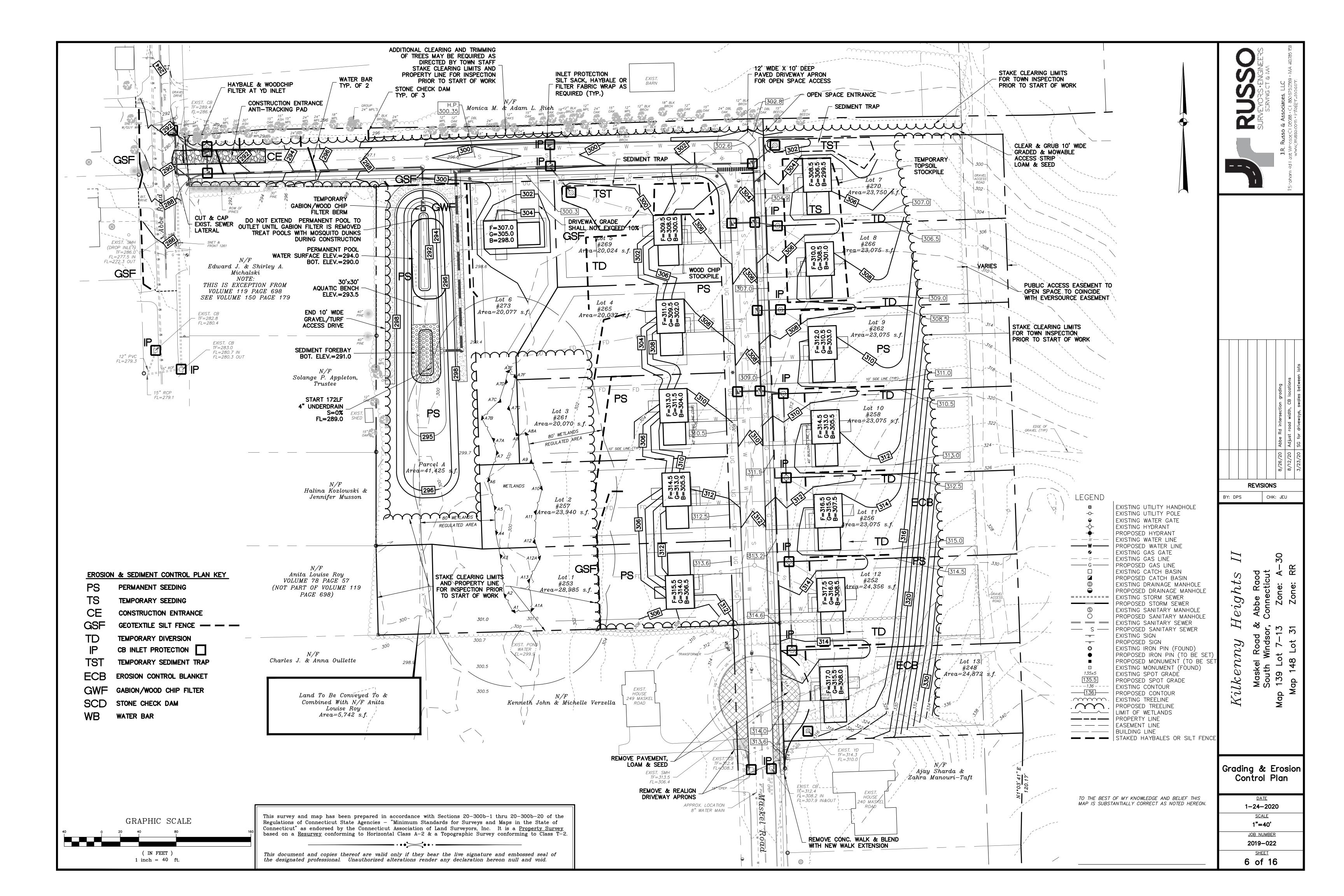
DRAWING INDEX

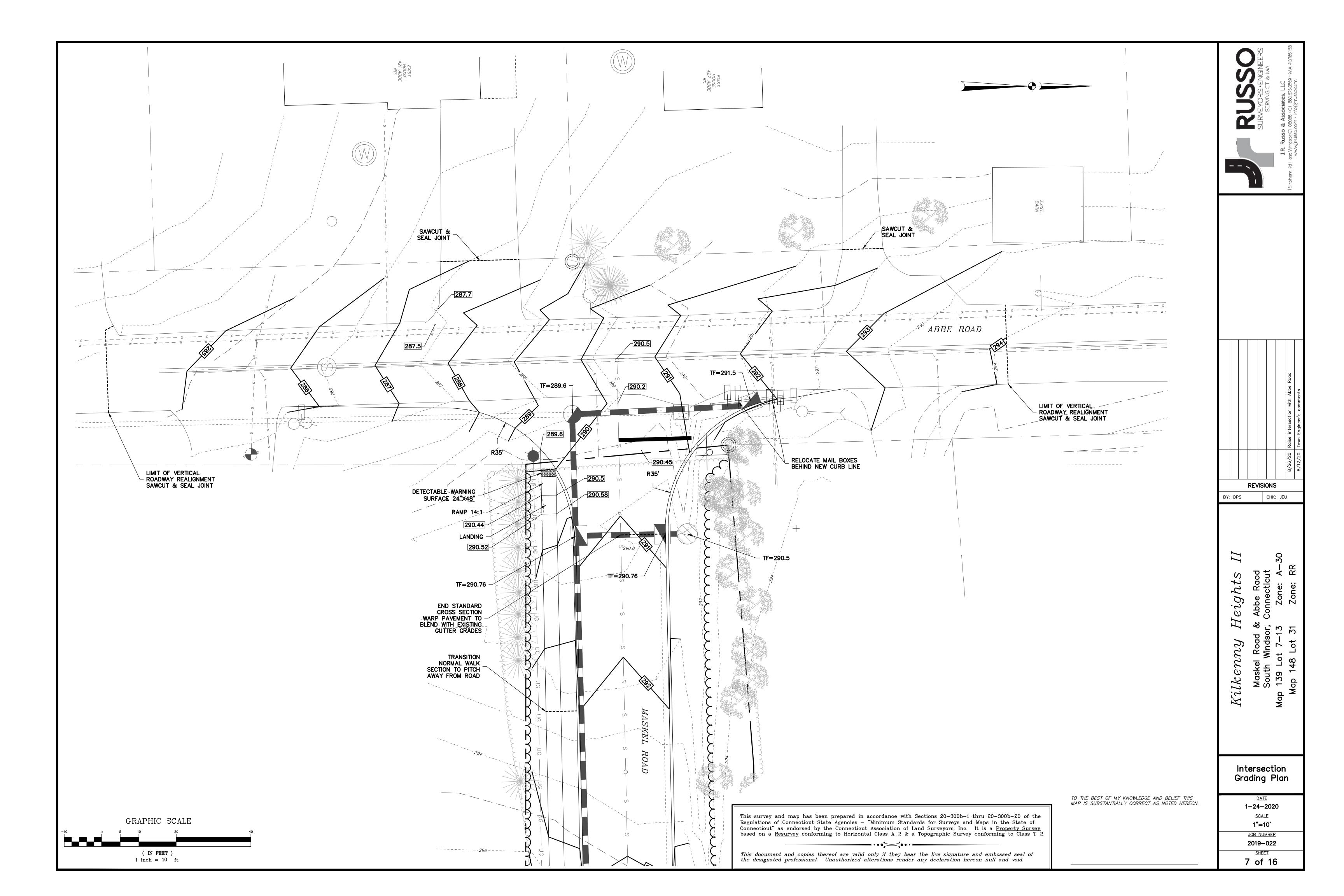


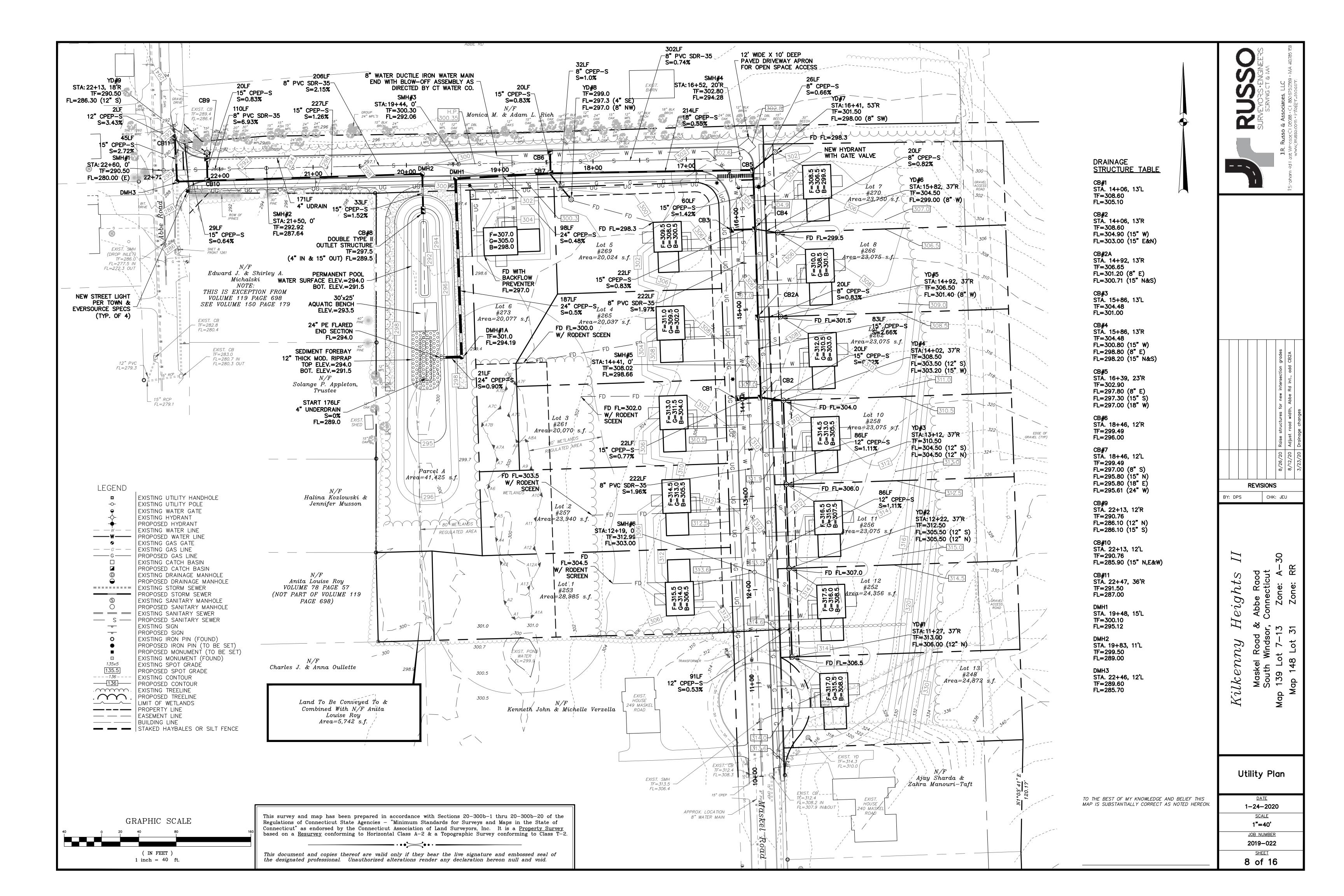


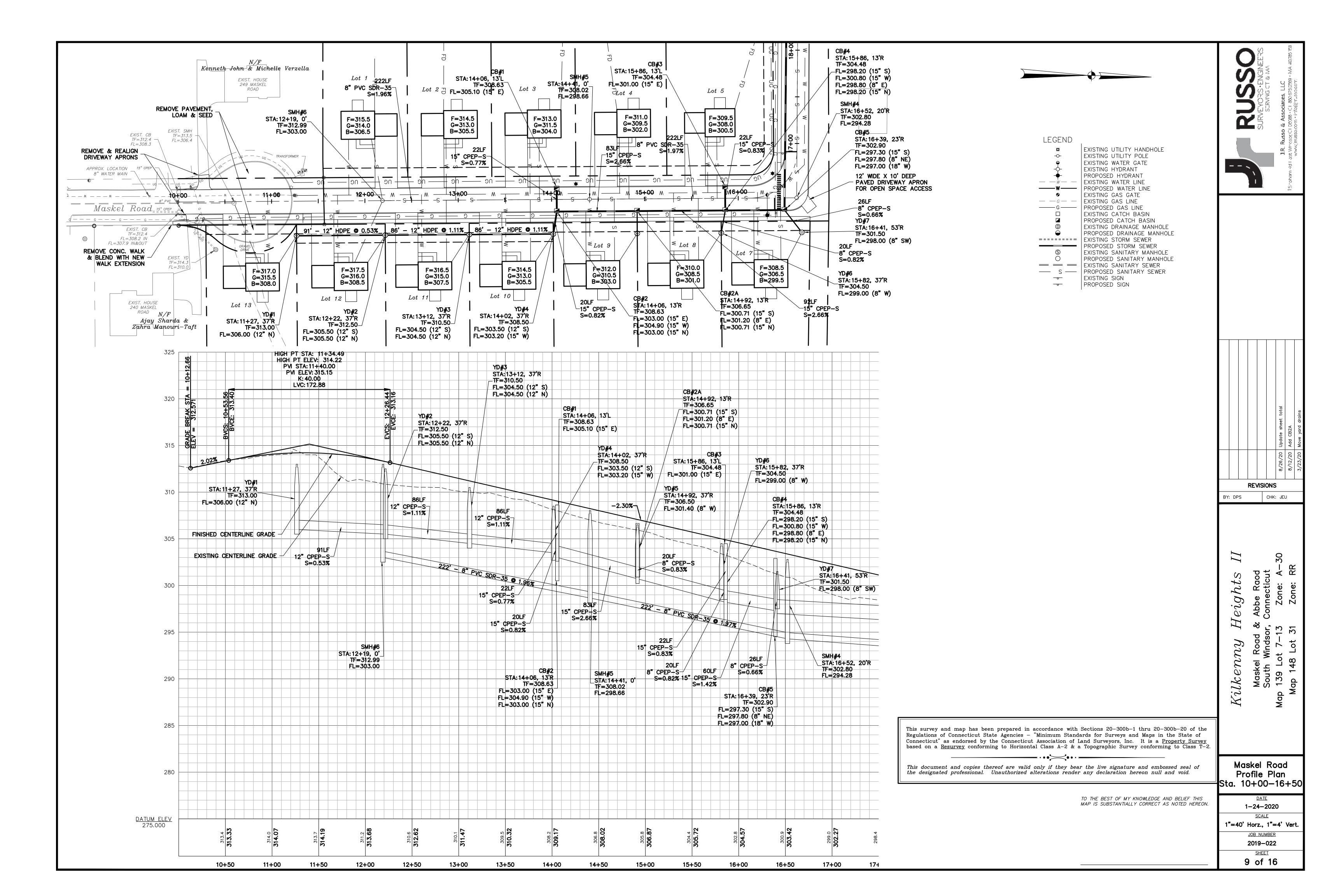


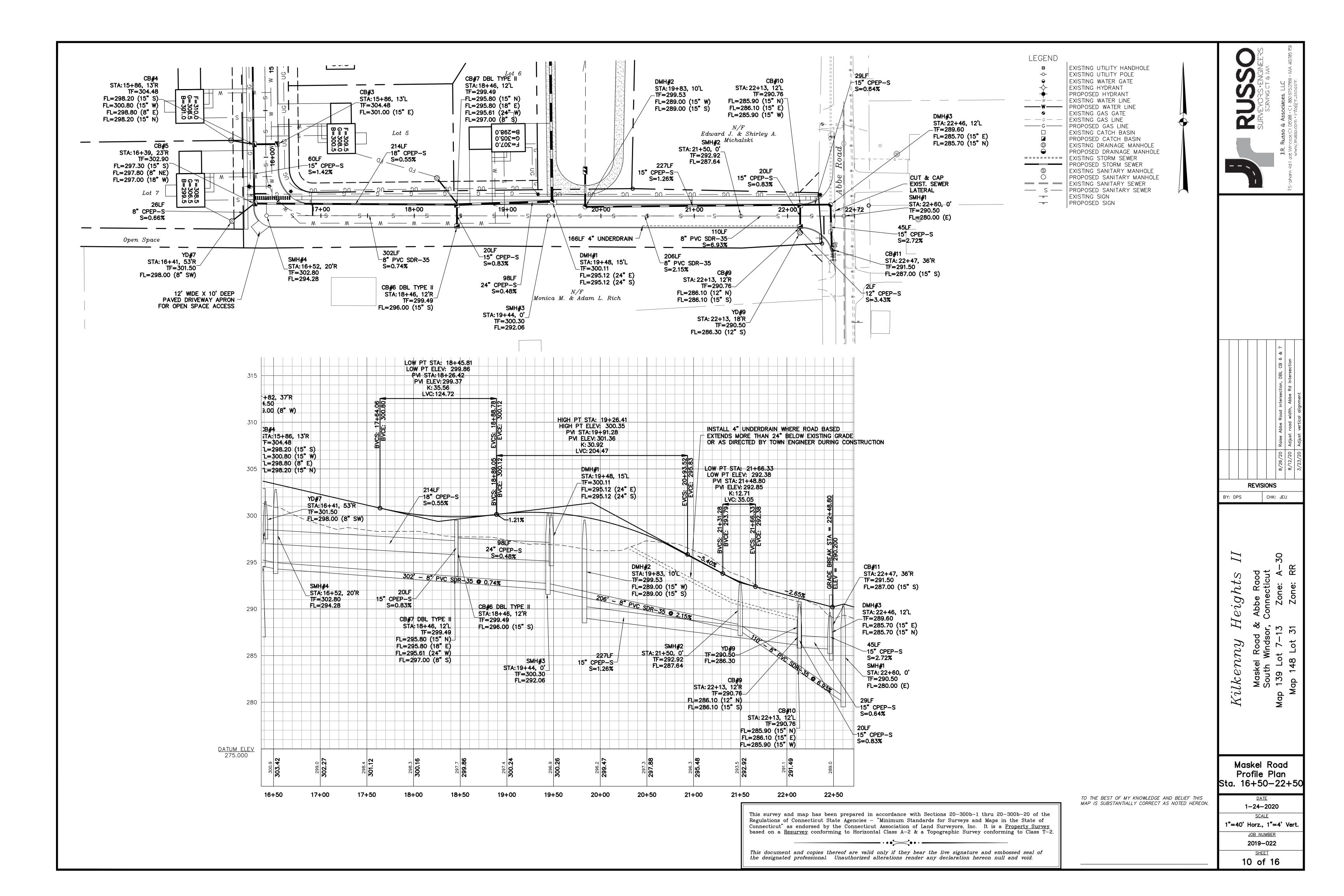


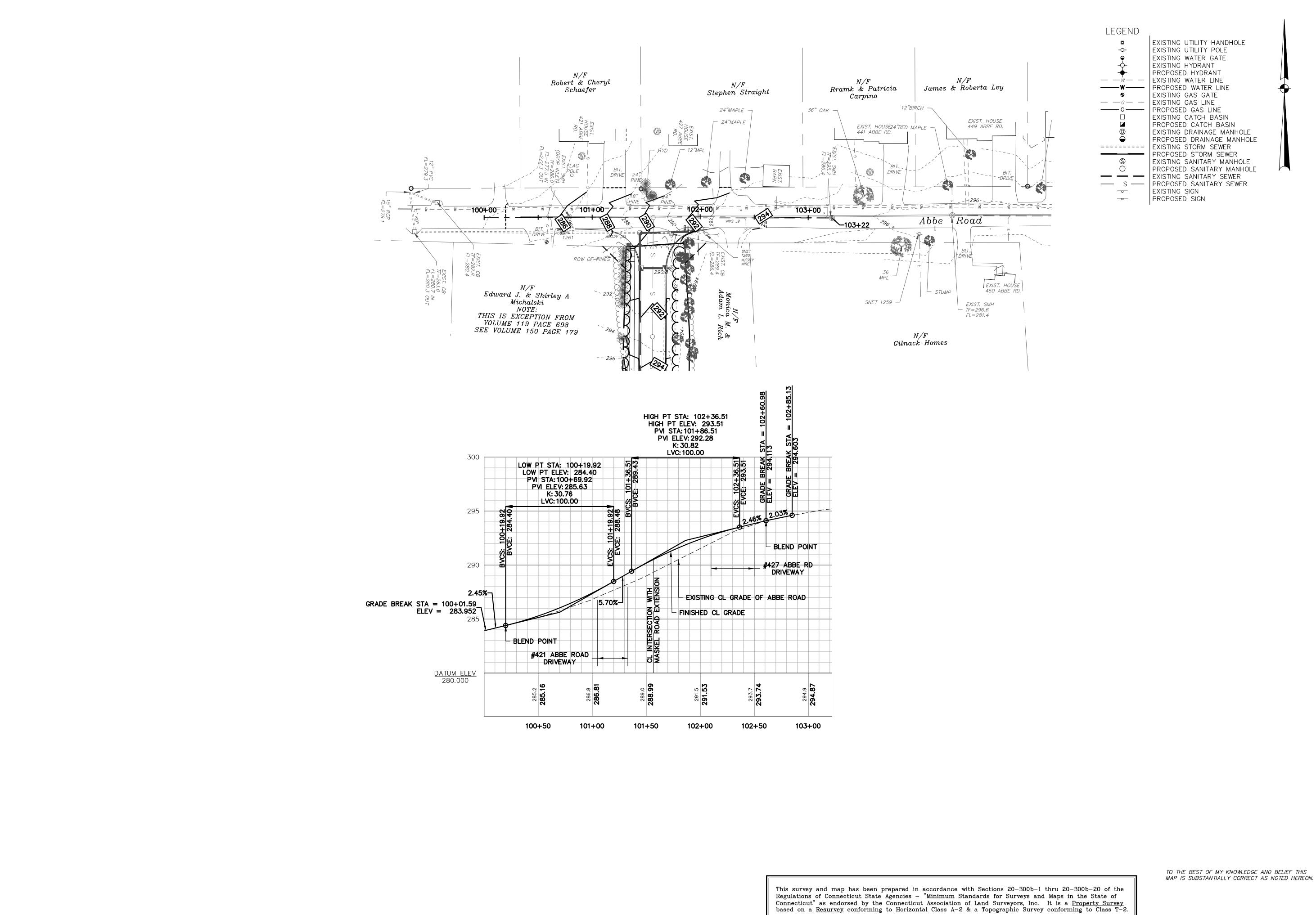






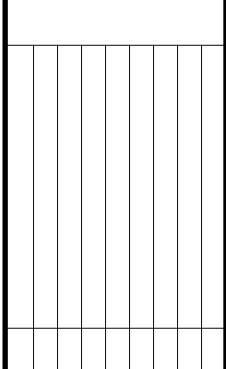






EXISTING UTILITY HANDHOLE EXISTING UTILITY POLE EXISTING WATER GATE EXISTING HYDRANT PROPOSED HYDRANT EXISTING WATER LINE EXISTING GAS GATE
EXISTING GAS LINE PROPOSED GAS LINE EXISTING CATCH BASIN PROPOSED CATCH BASIN EXISTING DRAINAGE MANHOLE PROPOSED DRAINAGE MANHOLE ======= | EXISTING STORM SEWER PROPOSED STORM SEWER EXISTING SANITARY MANHOLE PROPOSED SANITARY MANHOLE EXISTING SANITARY SEWER — S — PROPOSED SANITARY SEWER EXISTING SIGN





REVISIONS CHK: JEU

Abbe Raod Connecticut Zone: A-Zone: RF

reights

Kilkenny

Maskel Road South Windsol ap 139 Lot 7—13 Map 148 Lot 3

ABBE ROAD VERTICAL REALIGNMENT

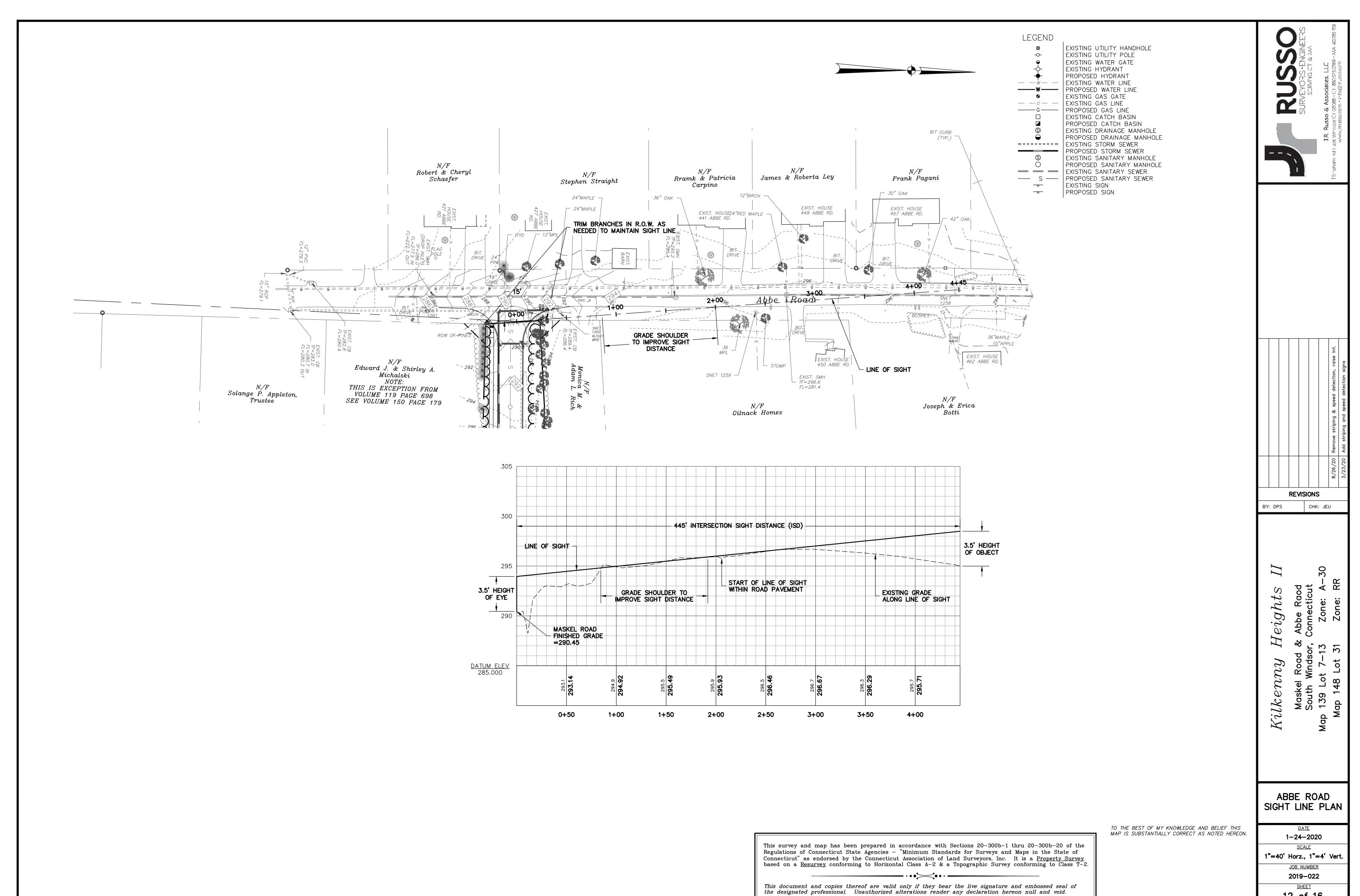
<u>DATE</u>

This document and copies thereof are valid only if they bear the live signature and embossed seal of the designated professional. Unauthorized alterations render any declaration hereon null and void.

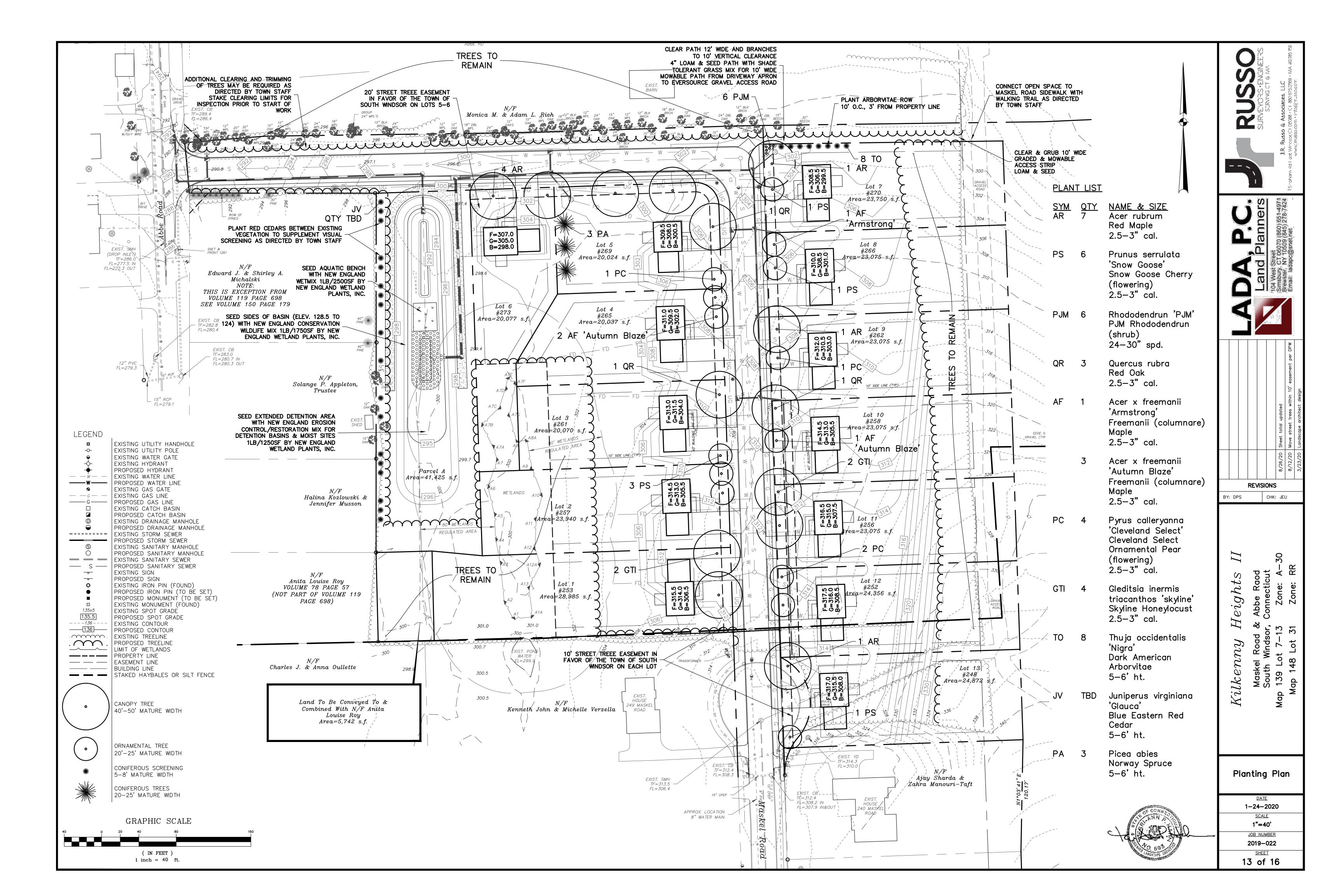
8-26-2020 <u>SCALE</u>

1"=40' Horz., 1"=4' Vert. JOB NUMBER 2019-022

> SHEET 11 of 16



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SPECIFICATIONS

New London, Middlesex, New Haven, and Fairfield counties. In these greas, with the exception of crown vetch (when crown vetch is seeded in late summer, at least 35% of the seed should be hard seed (unscarified), the final fall seeding dates can be extended and additional 15 days. The second exception is frost crack or dormant seeding, the seed is applied during the time of year when no germination can be expected, normally November through February. Germination will take place when weather conditions improve, mulching is extremely important to protect the seed from wind and surface erosion and to provide erosion protection until the seeding becomes established.

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.

Lawn Areas: Premium Seed Mix for Sun and Shade.

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 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.

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 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 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 seeding rates by 10% when hydroseeding.

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.

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 limited to:

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 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 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.

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

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

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

DUST CONTROL (DC)

and wind or water deposition from adjacent disturbed areas. Sweep

Periodically moisten exposed soil surfaces on unpaved travelways to keep

Non-Asphaltic Soil Tackifier

Non-asphaltic soil tackifier consists of an emulsified liquid soil stabilizer of organic, inorganic or mineral origin, including, but not limited to the following: modified resins, calcium chloride, complex surfactant copolymers or high grade latex acrylics. The solutions shall be non-asphaltic, non toxic 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 followed in storing, handling and applying materials.

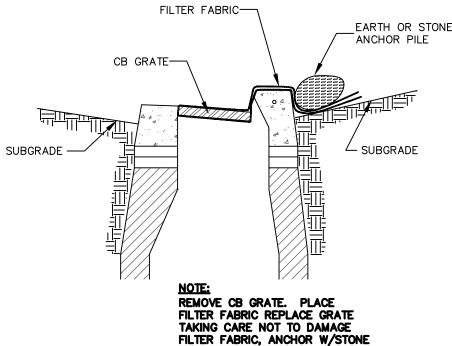
Repeat application of dust control measures when fugitive dust becomes

SOIL ERSOION & SEDIMENT CONTROL NOTES

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

 - 4. Completion of site clearing

 - . Close of construction season 8. Completion of final landscaping
 - 9. Prior to the removal of construction E&S control measures
- 2. All soil erosion and sediment control work shall be done in strict Sediment Control latest edition.
- 3. 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
- 4. All soil erosion and sediment control operations shall be in place prior to any grading operations and installation of proposed
- 6. 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
- 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, conduits,
- 8. 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
- constructing stable fills. Maximum side slopes of exposed surfaces of earth to be 3:1 or as otherwise specified by local authorities.
- inactivity in construction.
- 11. 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.
- 12. The Contractor shall maintain on—site additional erosion control materials as a contingency in the event of a failure or when required to shore up existing BMPs. At a minimum, the on-site contingency materials should include 30 feet of silt fence and 5



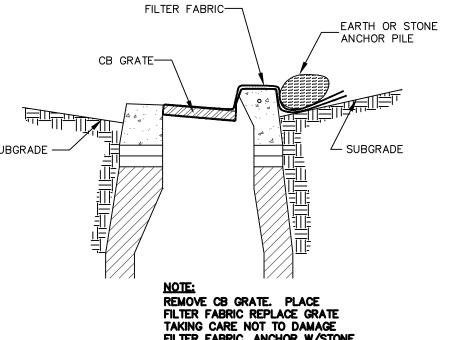
SPECIFICATIONS

Mechanical Sweeping Use mechanical sweeping on paved areas where dust and fine materials accumulate as a result of truck traffic, pavement saw cutting spillage, daily in heavily traveled areas.

the travelway damp.

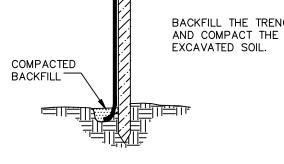
MAINTENANCE

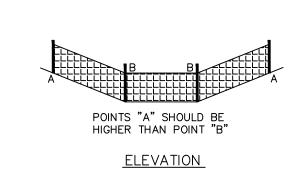
- - Start of construction 2. Completion of clearing limit demarcation
 - 3. Installation of E&S measures
 - 5. Completion of rough grading
 - 6. Completion of final grading
- accordance with the Connecticut Guidelines For Soil Erosion and
- engineer during construction, shall be installed by the developer. 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 completed and/or area is stabilized.
- 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
- debris from these construction activities.
- etc., shall be compacted in accordance with local requirements or
- 9. 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
- 10. Soil stabilization should be completed within 5 days of clearing or
- straw haybales with 10 stakes.



FILTER FABRIC SILT BARRIER AT TYPE "C" CATCH BASIN







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

GEOTEXTILE SILT FENCE (GSF)

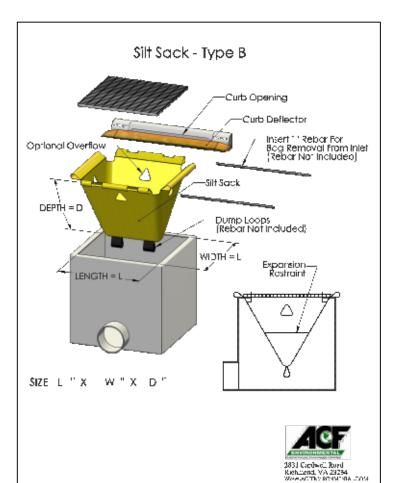
ANGLE 10° UPSLOPE

FOR STABILITY AND

FLOW —

DRAINAGEWAY

PLAN VIEW



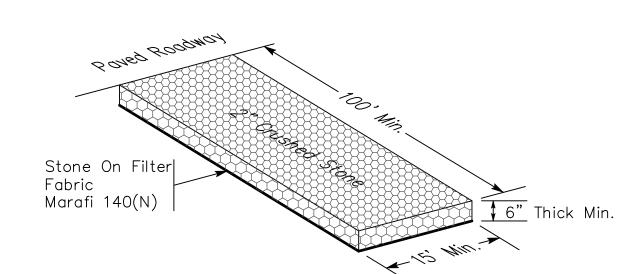
NOTE:
SILT SACK SHALL BE SIZED TO FIT EACH INLET GRATE (SINGLE OR DOUBLE)

WATER SIZED TO FIT EACH INLET GRATE (SINGLE OR DOUBLE) AND SHALL BE CLEANED AND MAINTAINED UNTIL THE CONTRIBUTING WATERSHED

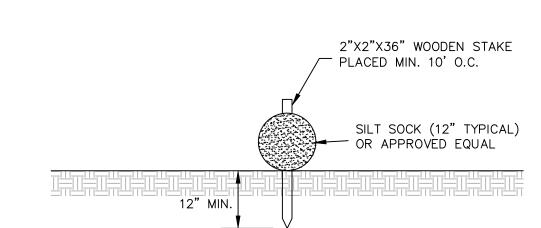
IS STABILIZED WITH VEGETATION AND/OR COMPACTED PROCESSED STONE BASE.

CB GRATE INLET PROTECTION (SILT SACK)

NOT TO SCALE



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

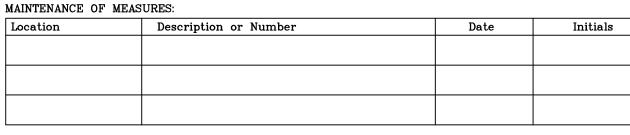
PARCEL AREA: 21.58 acres

RESPONSIBLE PERSONNEL: Rob Mannarino, 860-289-7055

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

OTTEGET TOM

Work Description Erosion & Sediment Control Measures	Location	Date Installed	Initials	Date Removed	Initials
Install perimeter sediment barriers	As shown on plan.				
Install sediment barrier at CB	As installed.				



Project Dates:

Date of groundbreaking for project:

Date of final stabilization:

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

Install construction entrance anti-tracking pad (CE).

The suggested schedule of construction is as follows:

2. Install sediment barriers (GSF) at project perimeters where downgradient from site

3. Install inlet protection (silt sacks, filter fabric wrap or haybale perimeter) at existing catch 4. Install stone check dams in existing ditch along northern property line and remove

accumulated sediment during construction. Mark 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.

6. Install temporary sediment traps on each side of roadway to collect runoff during Install storm drainage structures at Abbe Road and up to the stormwater basin.

Install stormwater basin but do not extend permanent pool all the way to the outlet structure. Install gabion/wood chip filter around outlet structure.

Strip topsoil. Stockpile suitable amount of topsoil for reuse on—site in areas shown. Stockpiles shall be surrounded by sediment barriers (GSF). Rough grade site to finished subgrade elevations. Direct runoff to traps with temporary diversion (TD) berms where discharge points exceed 2 acres of concentrated flow.

with the deepest utilities first. Install sanitary and storm drainage starting at the downstream end and working upstream. 12. Box out new road and install gravel and processed stone base. Remove excess material from the site. Temporary stockpiles subject to erosion shall be vegetated with temporary

seeding (TS) if remaining more than 30 days and shall be protected with perimeter sediment barriers (silt fence or silt sock). 13. Install inlet protection (IP) at new catch basins (silt sacks, filter wrap or haybale ring as needed). Inspect and remove sediment after each rainfall event areater than \frac{1}{2}". Particula attention must be paid to the catch basins at the low point of the road where water will

14. Install light poles and other site utilities. Install concrete walks and pave binder course. Shim structures for winter maintenance and avoid gutter runoff from bypassing structures prior to final paving course.

Stabilize areas to receive minimum 4" topsoil and permanently seed as soon as possible. Stablize with mulch or erosion control blankets as needed to prevent erosion. The open space access shall include a mowable 10' wide path from the driveway apron to the existing gravel access road within the Eversource easement.

Clean drainage pipes and sumps with jet-vac prior to road acceptance. Remove temporary

Construct homes during 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

sediment barriers after site is stabilized with vegetation. Construction of this site is anticipated to begin in the spring of 2020, pending approvals. Road infrastructure and binder course are anticipated to be completed within 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 soil disturbance and maintained throughout construction until soils have been stabilized with permanent vegetation.

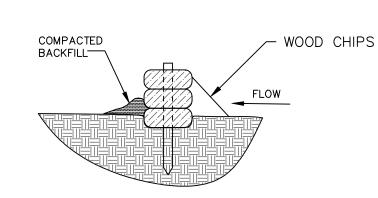
The Contractor shall keep the area of disturbance to a minimum and establish vegetative cover

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

Erosion and Sediment Control", as amended. The Contractor shall verify all conditions noted on

and maintained in accordance with these plans and the "Connecticut DEP Guidelines for Soil

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 (or silt socks) 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. Silt fence (GSF) is to be replaced as necessary t maintain proper filtering action. Silt fence (GSF) 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.

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

STAKED HAYBALE & WOODCHIP FILTER

NOT TO SCALE

11. Install sanitary sewer, storm drainage, water, gas, electric, lighting and other utilties starting **REVISIONS** CHK: JEU

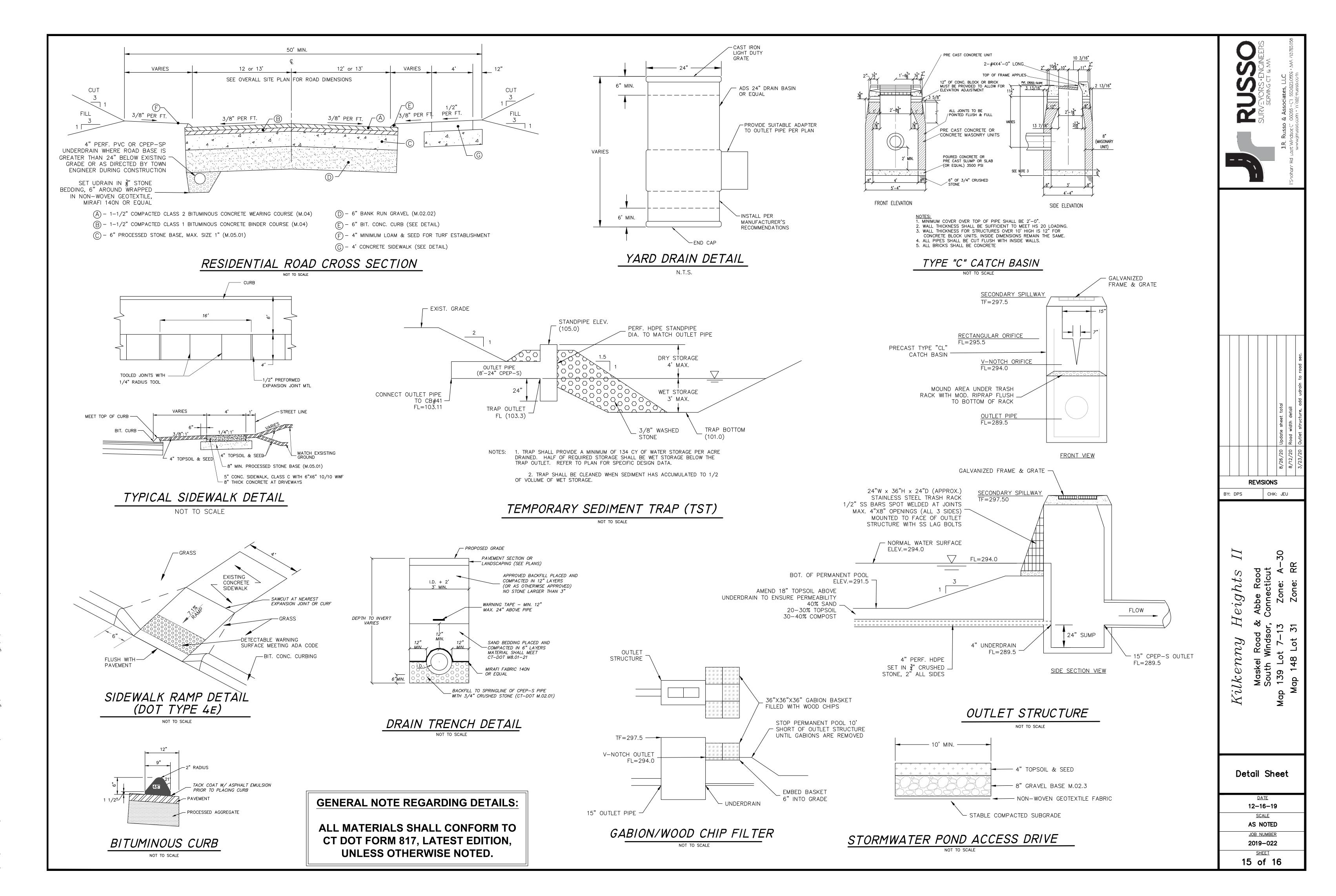
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Erosion & Sediment Control Notes/Details

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

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