

LOCATION MAP
SCALE: 1"=2,000'

# FORESTBURGH POND NYS ROUTE 42

### TOWN OF FORESTBURGH

COUNTY OF SULLIVAN

STATE OF NEW YORK

### OWNER:

NEW YORK LAND AND LAKES DEVELOPMENT LLC 155 MAIN STREET, SUITE D ONEONTA, NEW YORK 13820

### APPLICANT/DEVELOPER:

NEW YORK LAND AND LAKES 155 MAIN STREET, SUITE D ONEONTA, NEW YORK 13820

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### DRAWINGS PREPARED BY

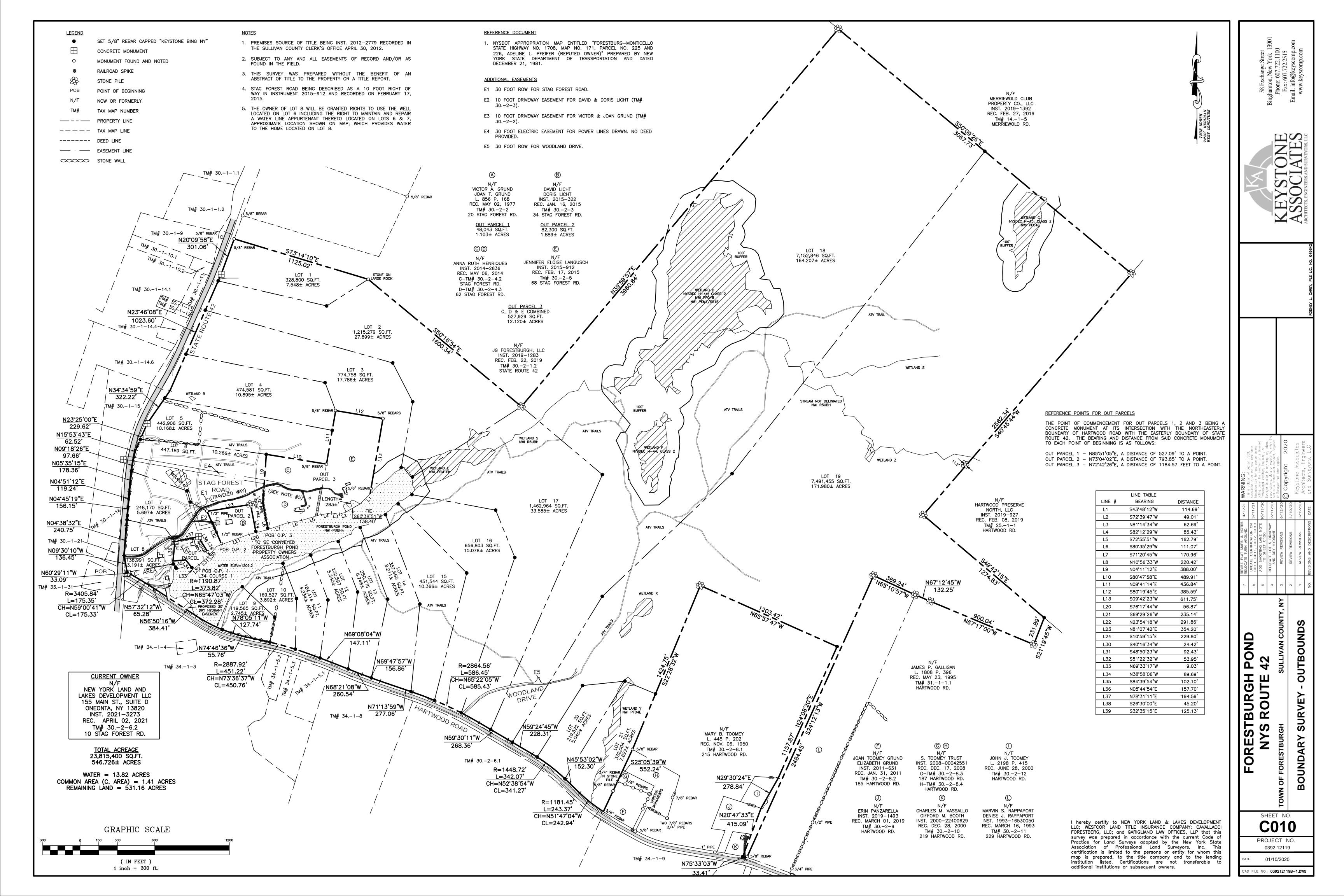


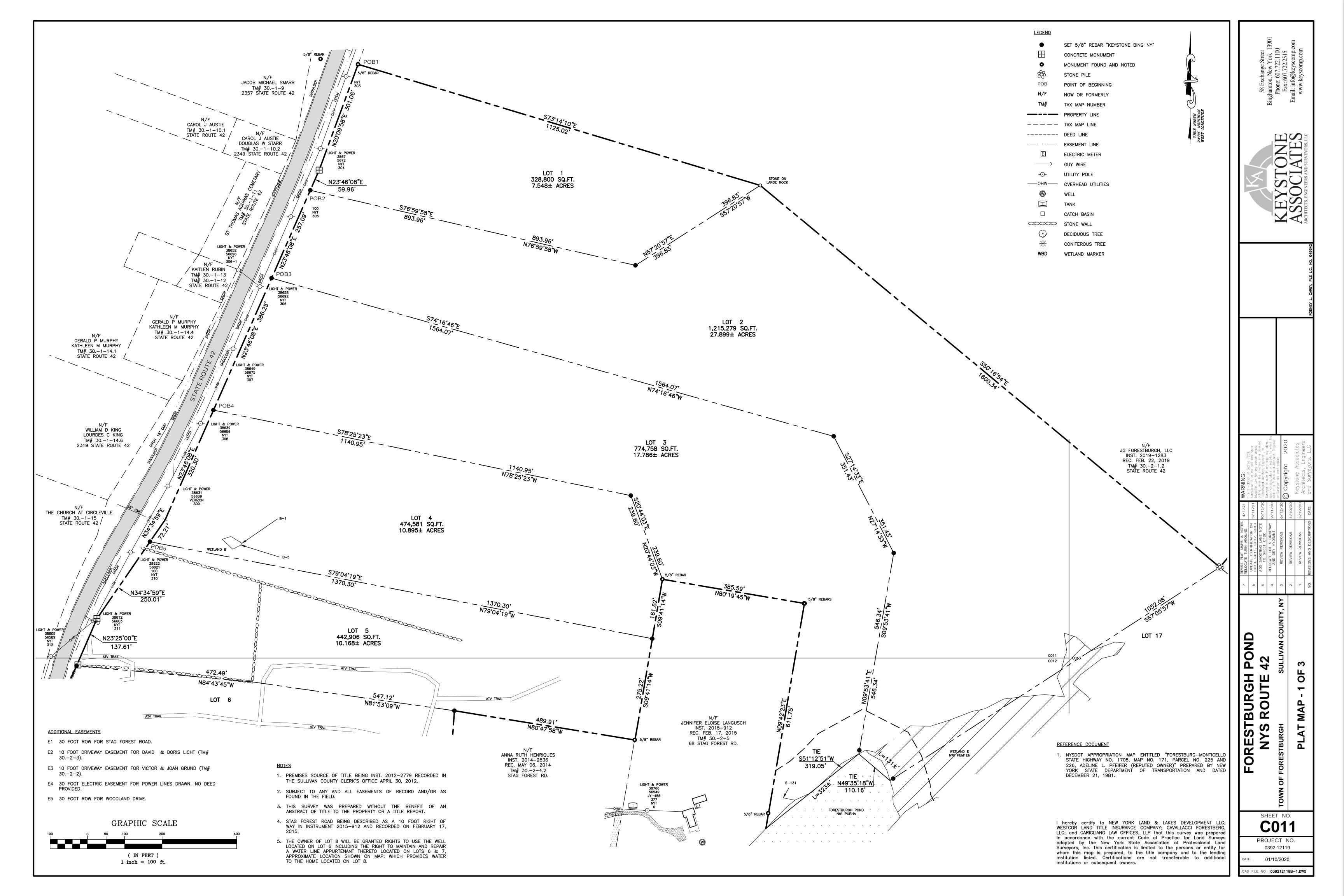
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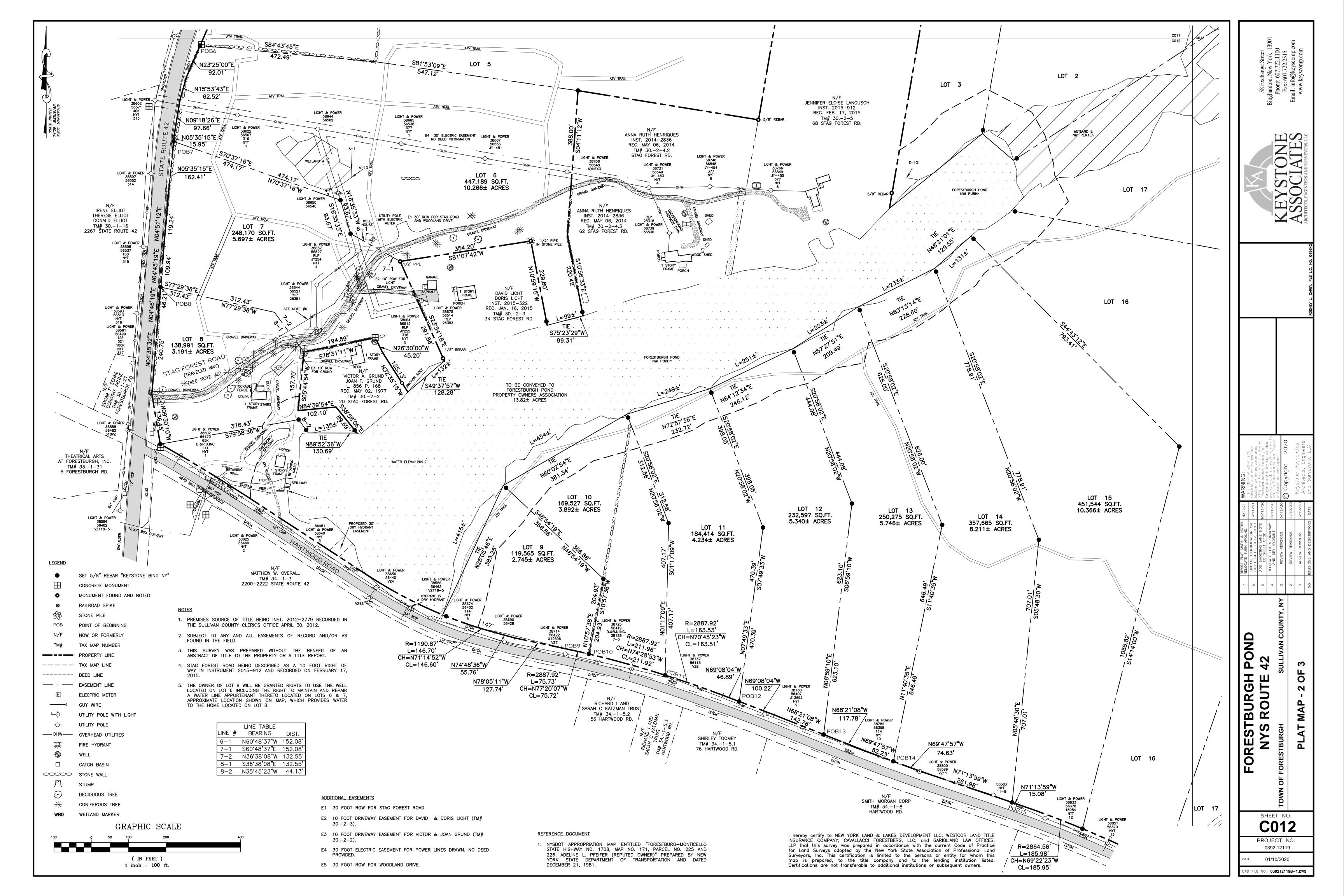
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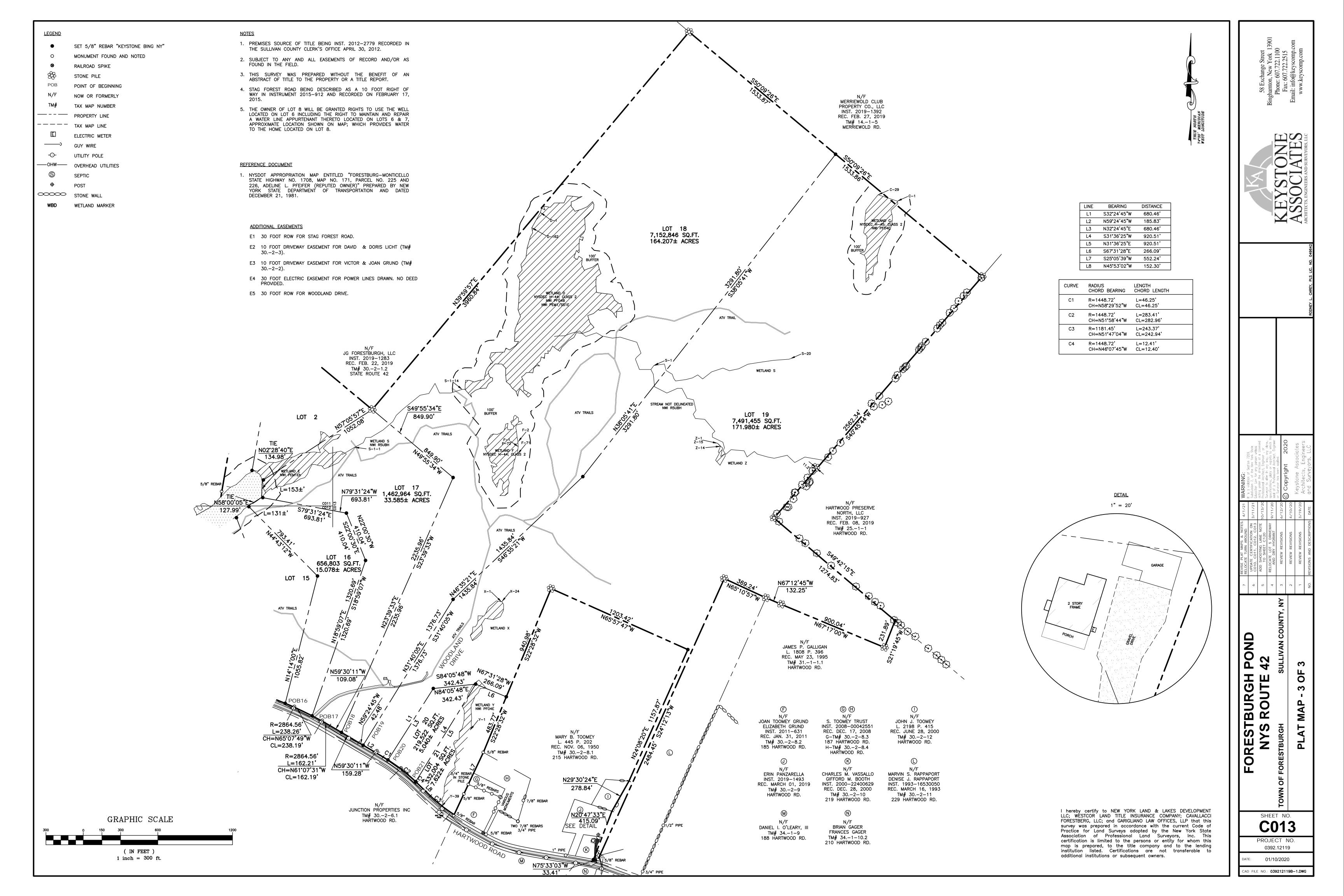
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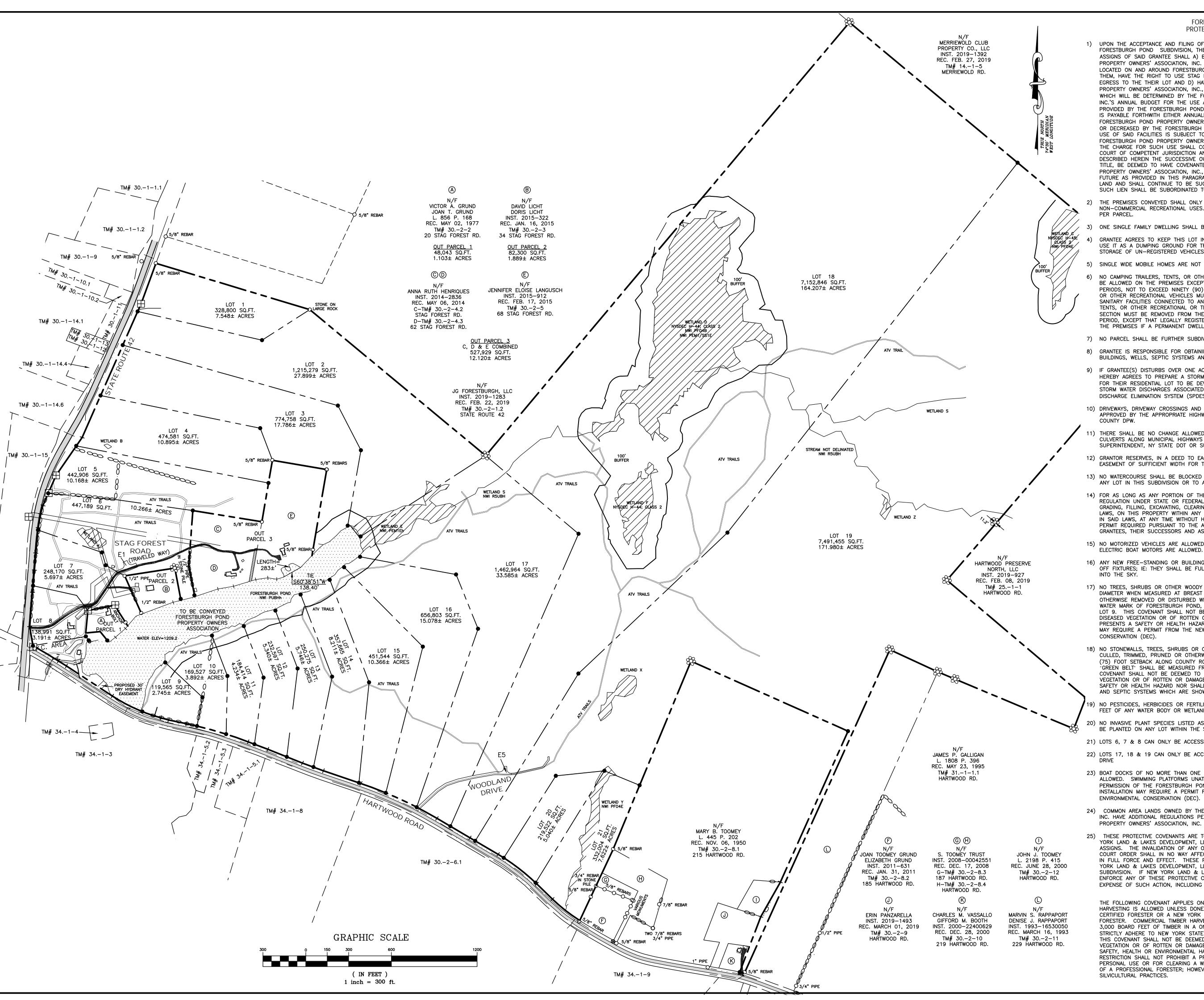
MARK W. PARKER, P.E. LIC. No. 093972 ALTERATIONS NOT CONFORMING TO SECTION 7209, SUBDIVISION 2, NEW YORK STATE EDUCATION LAW ARE PROHIBITED BY LAW.











### **FORESTBURGH POND** PROTECTIVE COVENANTS

1) UPON THE ACCEPTANCE AND FILING OF A DEED TO ANY GRANTEE OF ANY LOT IN THE FORESTBURGH POND SUBDIVISION, THE SAID GRANTEE AND THE HEIRS, SUCCESSORS AND ASSIGNS OF SAID GRANTEE SHALL A) BECOME MEMBERS OF THE FORESTBURGH POND PROPERTY OWNERS' ASSOCIATION, INC. B) HAVE THE RIGHT TO USE THE COMMON AREA LOCATED ON AND AROUND FORESTBURGH POND, C) FOR THOSE LOTS THAT HAVE FRONTAGE ON THEM, HAVE THE RIGHT TO USE STAG FOREST ROAD AND WOODLAND ROAD FOR INGRESS AND EGRESS TO THE THEIR LOT AND D) HAVE THE RIGHT TO PAY THE FORESTBURGH POND PROPERTY OWNERS' ASSOCIATION, INC., ITS SUCCESSORS AND ASSIGNS, AN ANNUAL CHARGE WHICH WILL BE DETERMINED BY THE FORESTBURGH POND PROPERTY OWNERS' ASSOCIATION INC.'S ANNUAL BUDGET FOR THE USE AND MAINTENANCE OF THE FACILITIES OWNED AND PROVIDED BY THE FORESTBURGH POND PROPERTY OWNERS' ASSOCIATION, INC. SAID CHARGE IS PAYABLE FORTHWITH EITHER ANNUALLY OR MONTHLY AS DETERMINED SOLELY BY THE FORESTBURGH POND PROPERTY OWNERS' ASSOCIATION, INC. SAID CHARGE MAY BE INCREASED OR DECREASED BY THE FORESTBURGH POND PROPERTY OWNERS' ASSOCIATION, INC. SUCH USE OF SAID FACILITIES IS SUBJECT TO THE REASONABLE RULES AND REGULATIONS OF THE FORESTBURGH POND PROPERTY OWNERS' ASSOCIATION, INC., ITS SUCCESSORS AND ASSIGNS. THE CHARGE FOR SUCH USE SHALL CONSTITUTE A DEBT WHICH MAY BE COLLECTED IN ANY COURT OF COMPETENT JURISDICTION AND UPON THE CONVEYANCE OF ANY OF THE LAND DESCRIBED HEREIN THE SUCCESSIVE OWNER OR OWNERS SHALL FROM THE TIME OF ACQUIRING TITLE, BE DEEMED TO HAVE COVENANTED AND AGREED TO PAY TO THE FORESTBURGH POND PROPERTY OWNERS' ASSOCIATION, INC., ITS SUCCESSORS AND ASSIGNS ALL CHARGES PAST OR FUTURE AS PROVIDED IN THIS PARAGRAPH. THIS CHARGE SHALL BECOME A LIEN ON THE LAND AND SHALL CONTINUE TO BE SUCH LIEN UNTIL FULLY PAID; PROVIDED, HOWEVER, THAT SUCH LIEN SHALL BE SUBORDINATED TO A FIRST MORTGAGE TO THE LOT OWNER.

THE PREMISES CONVEYED SHALL ONLY BE USED FOR SINGLE FAMILY (RESIDENTIAL) HOMES OR NON-COMMERCIAL RECREATIONAL USES. ONE SINGLE FAMILY DWELLING SHALL BE ALLOWED

ONE SINGLE FAMILY DWELLING SHALL BE ALLOWED PER PARCEL.

- GRANTEE AGREES TO KEEP THIS LOT IN A GOOD AND SANITARY CONDITION AND SHALL NOT USE IT AS A DUMPING GROUND FOR TRASH AND RUBBISH. THE OUTSIDE PLACEMENT OR STORAGE OF UN-REGISTERED VEHICLES IS PROHIBITED.
- SINGLE WIDE MOBILE HOMES ARE NOT ALLOWED
- NO CAMPING TRAILERS, TENTS, OR OTHER RECREATIONAL OR TEMPORARY LIVING QUARTERS WILL BE ALLOWED ON THE PREMISES EXCEPT FOR THE PURPOSE OF CAMPING FOR TEMPORARY PERIODS, NOT TO EXCEED NINETY (90) DAYS PER CALENDAR YEAR. SUCH CAMPING TRAILERS OR OTHER RECREATIONAL VEHICLES MUST HAVE FULLY SELF CONTAINED SANITARY FACILITIES OR SANITARY FACILITIES CONNECTED TO AN APPROVED SEPTIC SYSTEM. ALL CAMPING TRAILERS, TENTS, OR OTHER RECREATIONAL OR TEMPORARY LIVING QUARTERS ALLOWED UNDER THIS SECTION MUST BE REMOVED FROM THE PREMISES AT THE END OF THE NINETY (90) DAY PERIOD, EXCEPT THAT LEGALLY REGISTERED RECREATIONAL VEHICLES MAY BE STORED UPON THE PREMISES IF A PERMANENT DWELLING EXISTS ON THE LOT.
- 7) NO PARCEL SHALL BE FURTHER SUBDIVIDED.
- 8) GRANTEE IS RESPONSIBLE FOR OBTAINING THE NECESSARY STATE AND LOCAL PERMITS FOR BUILDINGS, WELLS, SEPTIC SYSTEMS AND DRIVEWAYS.
- 9) IF GRANTEE(S) DISTURBS OVER ONE ACRE OF LAND ON THEIR PARCEL, GRANTEE(S) ALSO HEREBY AGREES TO PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SPECIFIC FOR THEIR RESIDENTIAL LOT TO BE DEVELOPED AND FILE A NOTICE OF INTENT (NOI) FOR THE STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) GENERAL PERMIT IN EFFECT AT THE TIME OF FILING.
- 10) DRIVEWAYS, DRIVEWAY CROSSINGS AND CULVERT SIZES ALONG MUNICIPAL HIGHWAYS SHALL BE APPROVED BY THE APPROPRIATE HIGHWAY SUPERINTENDENT, NY STATE DOT OR SULLIVAN COUNTY DPW.
- THERE SHALL BE NO CHANGE ALLOWED TO EXISTING DRAINAGE PATTERNS OF DITCHES AND CULVERTS ALONG MUNICIPAL HIGHWAYS WITHOUT APPROVAL FROM THE APPROPRIATE HIGHWAY SUPERINTENDENT, NY STATE DOT OR SULLIVAN COUNTY DPW.
- 12) GRANTOR RESERVES, IN A DEED TO EACH PARCEL, THE RIGHT TO GRANT A STANDARD EASEMENT OF SUFFICIENT WIDTH FOR THE DISTRIBUTION OF UTILITIES.
- 13) NO WATERCOURSE SHALL BE BLOCKED OR DIVERTED SO AS TO CAUSE MATERIAL DAMAGE TO ANY LOT IN THIS SUBDIVISION OR TO ANY NEIGHBORING PROPERTY.
- 14) FOR AS LONG AS ANY PORTION OF THE PROPERTY DESCRIBED IN THIS DEED IS SUBJECT TO REGULATION UNDER STATE OR FEDERAL WETLAND LAWS, THERE SHALL BE NO CONSTRUCTION, GRADING, FILLING, EXCAVATING, CLEARING OR OTHER RELATED ACTIVITY, AS DEFINED BY THESE LAWS, ON THIS PROPERTY WITHIN ANY WETLAND AREA OR ANY ADJACENT AREA AS SET FORTH IN SAID LAWS, AT ANY TIME WITHOUT HAVING FIRST SECURED THE NECESSARY PERMISSION AND PERMIT REQUIRED PURSUANT TO THE ABOVE NOTED LAWS. THIS RESTRICTION SHALL BIND TH GRANTEES, THEIR SUCCESSORS AND ASSIGNS.
- 15) NO MOTORIZED VEHICLES ARE ALLOWED ON FORESTBURGH POND AT ANY TIME EXCEPT THAT
- 16) ANY NEW FREE-STANDING OR BUILDING MOUNTED OUTDOOR LIGHTS SHALL EMPLOY FULL CUT OFF FIXTURES; IE: THEY SHALL BE FULLY SHIELDED TO DIRECT LIGHT DOWNWARD AND NOT INTO THE SKY.
- 17) NO TREES, SHRUBS OR OTHER WOODY STEMMED VEGETATION GREATER THAN SIX (6) INCHES IN DIAMETER WHEN MEASURED AT BREAST HEIGHT, MAY BE CUT, CULLED, TRIMMED, PRUNED OR OTHERWISE REMOVED OR DISTURBED WITHIN ONE HUNDRED (100) FEET OF THE MEAN HIGH WATER MARK OF FORESTBURGH POND, WITH THE EXCEPTION OF DRIVEWAY CONSTRUCTION FOR LOT 9. THIS COVENANT SHALL NOT BE DEEMED TO PREVENT THE REMOVAL OF DEAD OR DISEASED VEGETATION OR OF ROTTEN OR DAMAGED TREES OR OTHER VEGETATION THAT PRESENTS A SAFETY OR HEALTH HAZARD. TREE CLEARING ALLOWED UNDER THIS COVENANT MAY REQUIRE A PERMIT FROM THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC).
- 18) NO STONEWALLS. TREES. SHRUBS OR OTHER WOODY STEMMED VEGETATION MAY BE CUT. CULLED, TRIMMED, PRUNED OR OTHERWISE REMOVED OR DISTURBED WITHIN THE SEVENTY FIVE (75) FOOT SETBACK ALONG COUNTY ROUTE 48 (HARTWOOD ROAD) OR STATE ROUTE 42. THIS GREEN BELT" SHALL BE MEASURED FROM THE BOUNDS OF THE RESPECTIVE ROADWAYS. THIS COVENANT SHALL NOT BE DEEMED TO PREVENT THE REMOVAL OF DEAD OR DISEASED VEGETATION OR OF ROTTEN OR DAMAGED TREES OR OTHER VEGETATION THAT PRESENTS A SAFETY OR HEALTH HAZARD NOR SHALL IT PREVENT THE INSTALLATION OF UTILITIES, DRIVEWAYS AND SEPTIC SYSTEMS WHICH ARE SHOWN ON THE APPROVED PLANS.
- 9) NO PESTICIDES, HERBICIDES OR FERTILIZERS SHALL BE APPLIED WITHIN FIVE HUNDRED (500) FEET OF ANY WATER BODY OR WETLAND.
- 20) NO INVASIVE PLANT SPECIES LISTED AS A PROHIBITED SPECIES IN 6 NYCRR PART 575.3 SHALL BE PLANTED ON ANY LOT WITHIN THE SUBDIVISION.
- 21) LOTS 6, 7 & 8 CAN ONLY BE ACCESSED FROM THE PRIVATE ROAD CALLED STAG FOREST ROAD
- 22) LOTS 17, 18 & 19 CAN ONLY BE ACCESSED FROM THE PRIVATE ROAD CALLED WOODLAND
- 23) BOAT DOCKS OF NO MORE THAN ONE HUNDRED (100) SQUARE FEET IN SIZE WILL BE ALLOWED. SWIMMING PLATFORMS UNATTACHED TO SHORE SHALL BE ALLOWED WITH THE PERMISSION OF THE FORESTBURGH POND PROPERTY OWNERS' ASSOCIATION. DOCK INSTALLATION MAY REQUIRE A PERMIT FROM THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC).
- 24) COMMON AREA LANDS OWNED BY THE FORESTBURGH POND PROPERTY OWNERS' ASSOCIATION, INC. HAVE ADDITIONAL REGULATIONS PERTAINING TO THEM. REFER TO THE FORESTBURGH POND PROPERTY OWNERS' ASSOCIATION, INC. BY-LAWS AND RULES & REGULATIONS FOR DETAILS.
- 25) THESE PROTECTIVE COVENANTS ARE TO RUN WITH THE LAND AND SHALL BE BINDING ON NEW YORK LAND & LAKES DEVELOPMENT, LLC. AND THE GRANTEES, THEIR SUCCESSORS AND ASSIGNS. THE INVALIDATION OF ANY ONE OF THE PROTECTIVE COVENANTS BY JUDGMENT OR COURT ORDER SHALL IN NO WAY AFFECT ANY OF THE OTHER PROVISIONS WHICH SHALL REMAIN IN FULL FORCE AND EFFECT. THESE PROTECTIVE COVENANTS MAY BE ENFORCED BY NEW YORK LAND & LAKES DEVELOPMENT, LLC, OR THE OWNER OF ANY PARCEL WITHIN THE SUBDIVISION. IF NEW YORK LAND & LAKES DEVELOPMENT, LLC. BRINGS AN ACTION TO ENFORCE ANY OF THESE PROTECTIVE COVENANTS, THE VIOLATOR MUST PAY ALL COSTS AND EXPENSE OF SUCH ACTION, INCLUDING REASONABLE ATTORNEY'S FEES.

THE FOLLOWING COVENANT APPLIES ONLY TO LOTS 18 & 19: NO COMMERCIAL TIMBER HARVESTING IS ALLOWED UNLESS DONE SO UNDER THE SUPERVISION OF A NEW YORK STATE CERTIFIED FORESTER OR A NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION FORESTER. COMMERCIAL TIMBER HARVESTING IS DEFINED AS THE REMOVAL OF MORE THAN 3,000 BOARD FEET OF TIMBER IN A ONE YEAR PERIOD. ALL SILVICULTURAL ACTIVITIES SHOULD STRICTLY ADHERE TO NEW YORK STATE'S BEST MANAGEMENT PRACTICES FOR WATER QUALITY. THIS COVENANT SHALL NOT BE DEEMED TO PREVENT THE REMOVAL OF DEAD OR DISEASED VEGETATION OR OF ROTTEN OR DAMAGED TREES OR OTHER VEGETATION THAT PRESENTS A SAFETY, HEALTH OR ENVIRONMENTAL HAZARD. NO "CLEAR CUTTING" IS ALLOWED. THIS RESTRICTION SHALL NOT PROHIBIT A PROPERTY OWNER FROM CUTTING FIREWOOD FOR PERSONAL USE OR FOR CLEARING A WALKING TRAIL WHICH DOES NOT REQUIRE THE OVERSIGHT OF A PROFESSIONAL FORESTER; HOWEVER, ALL SUCH CUTTING MUST BE DONE USING PROPER SILVICULTURAL PRACTICES.

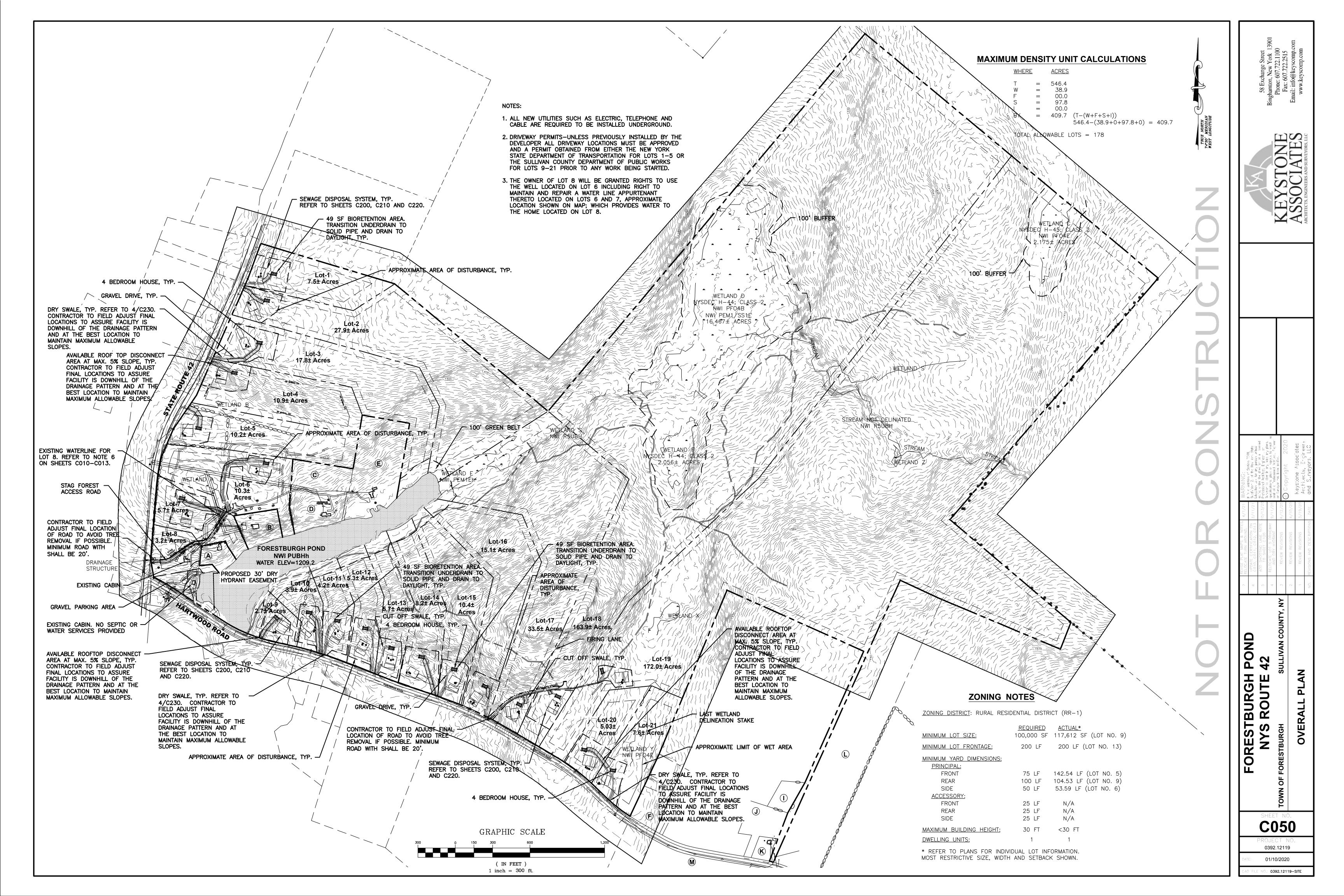
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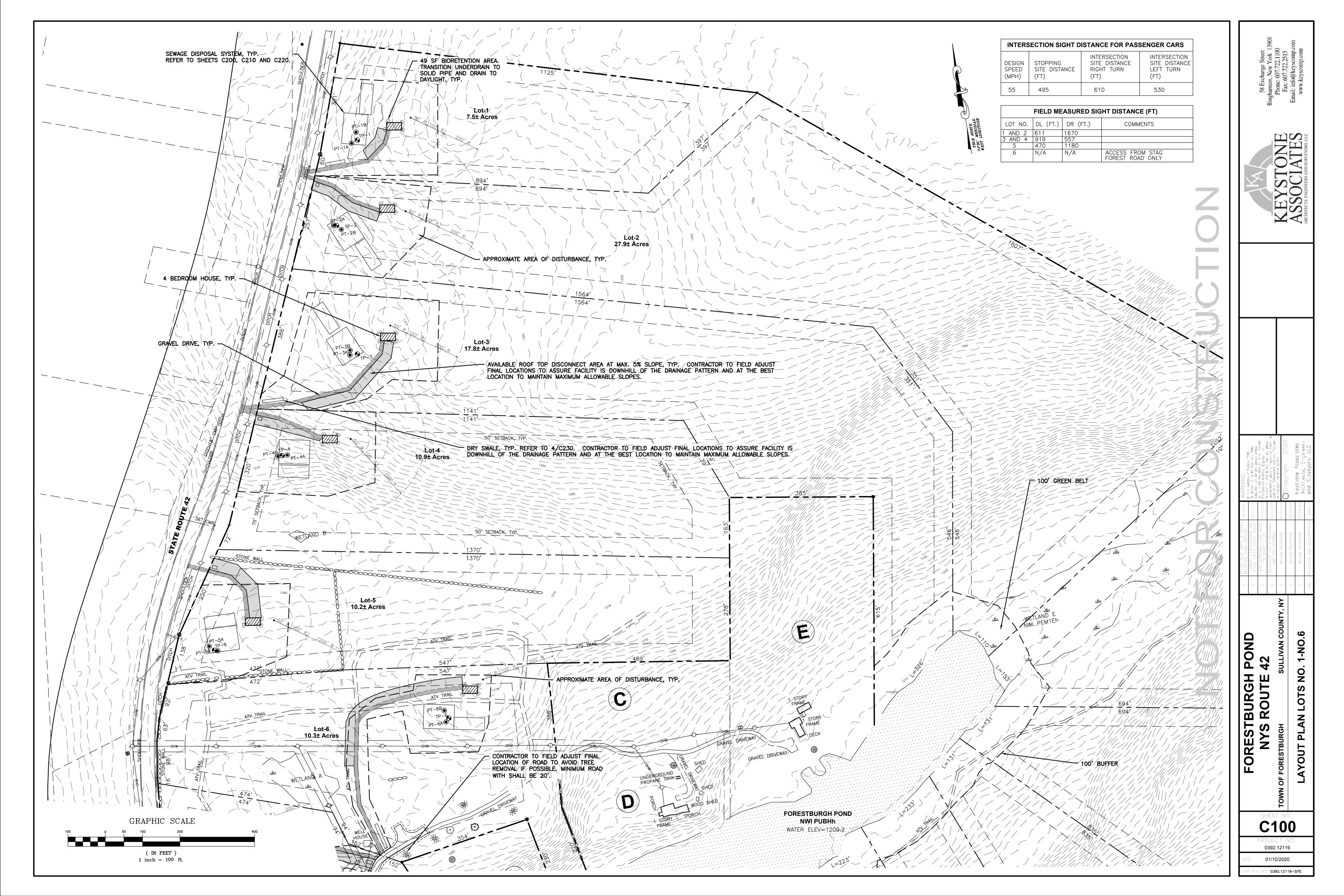
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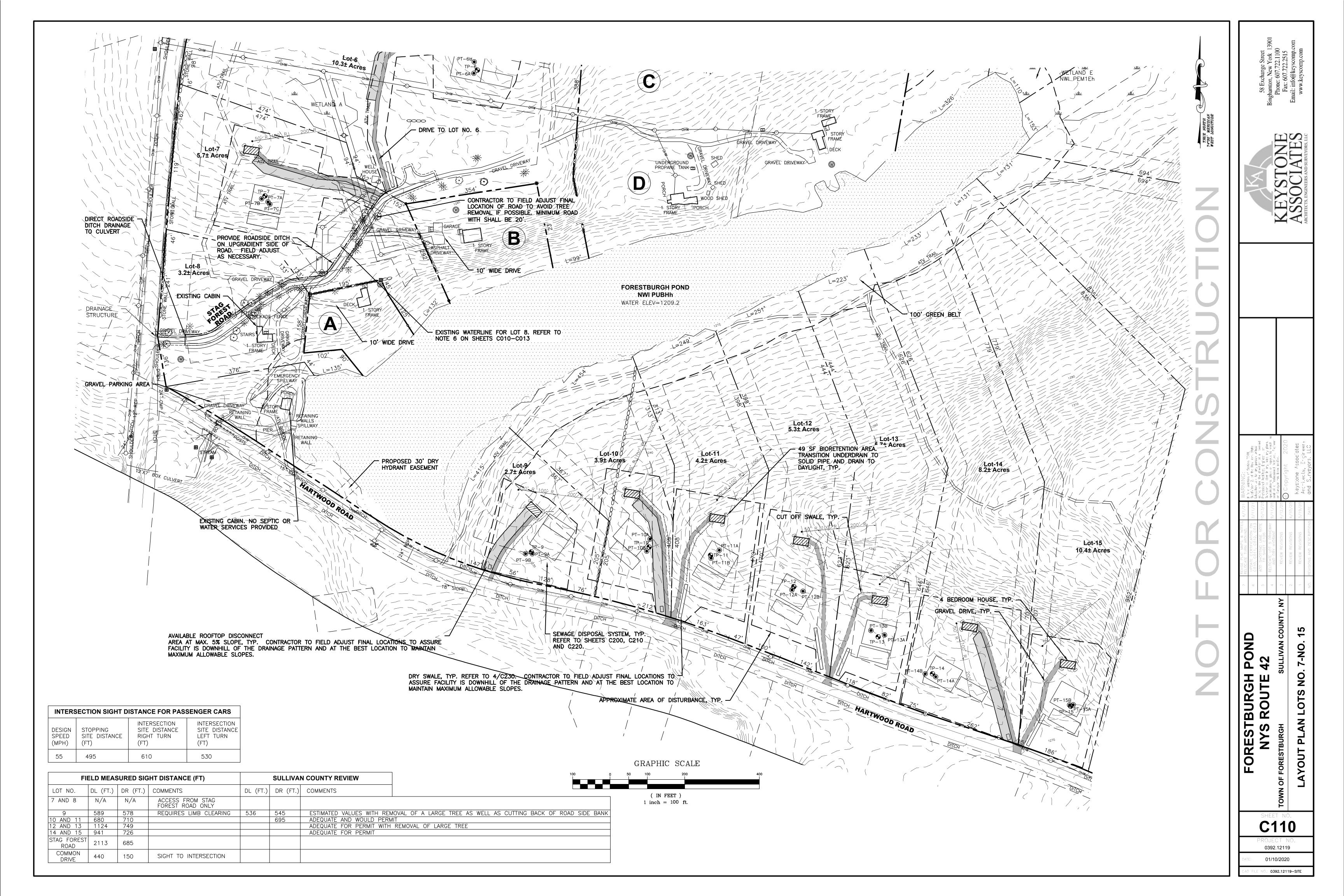
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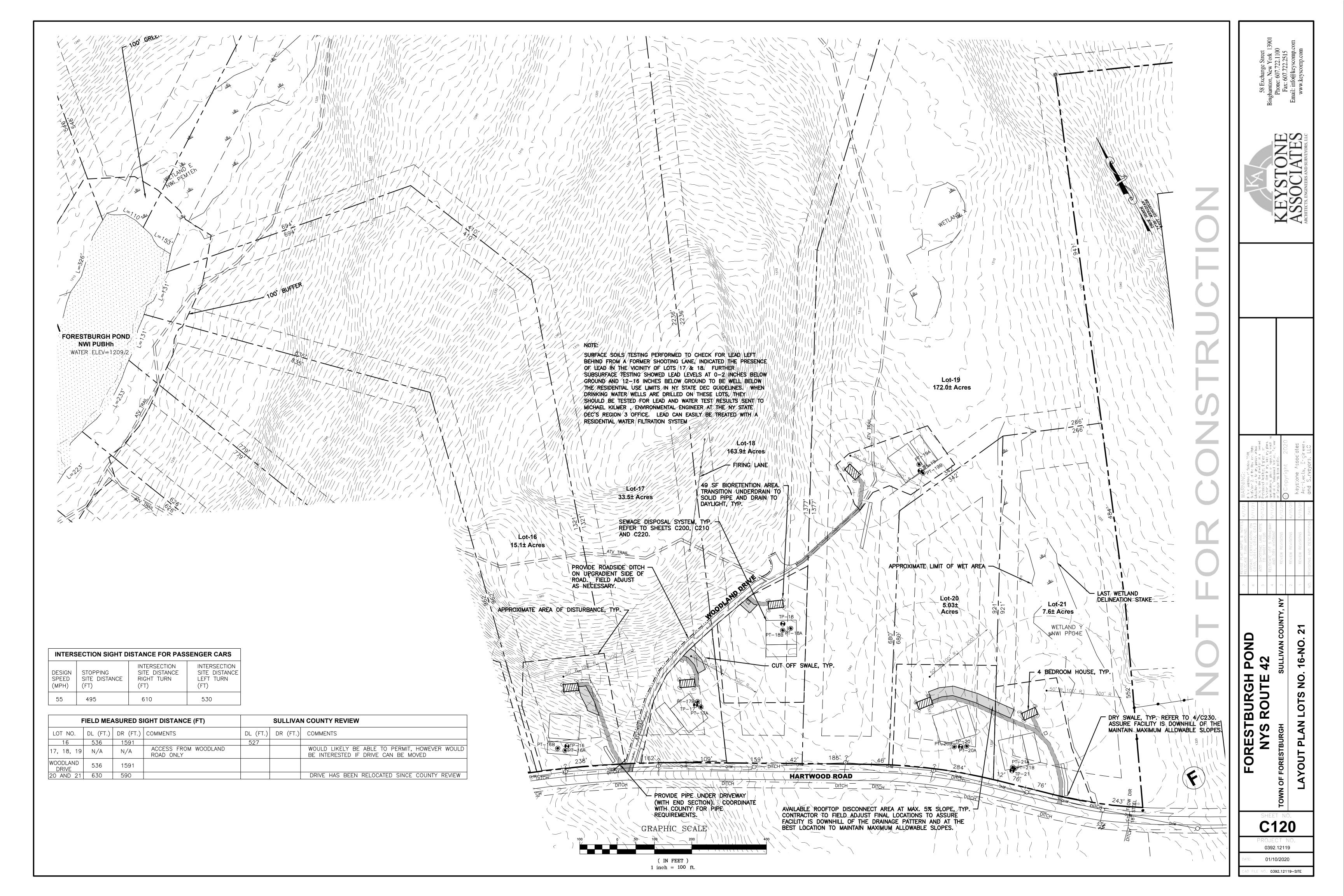
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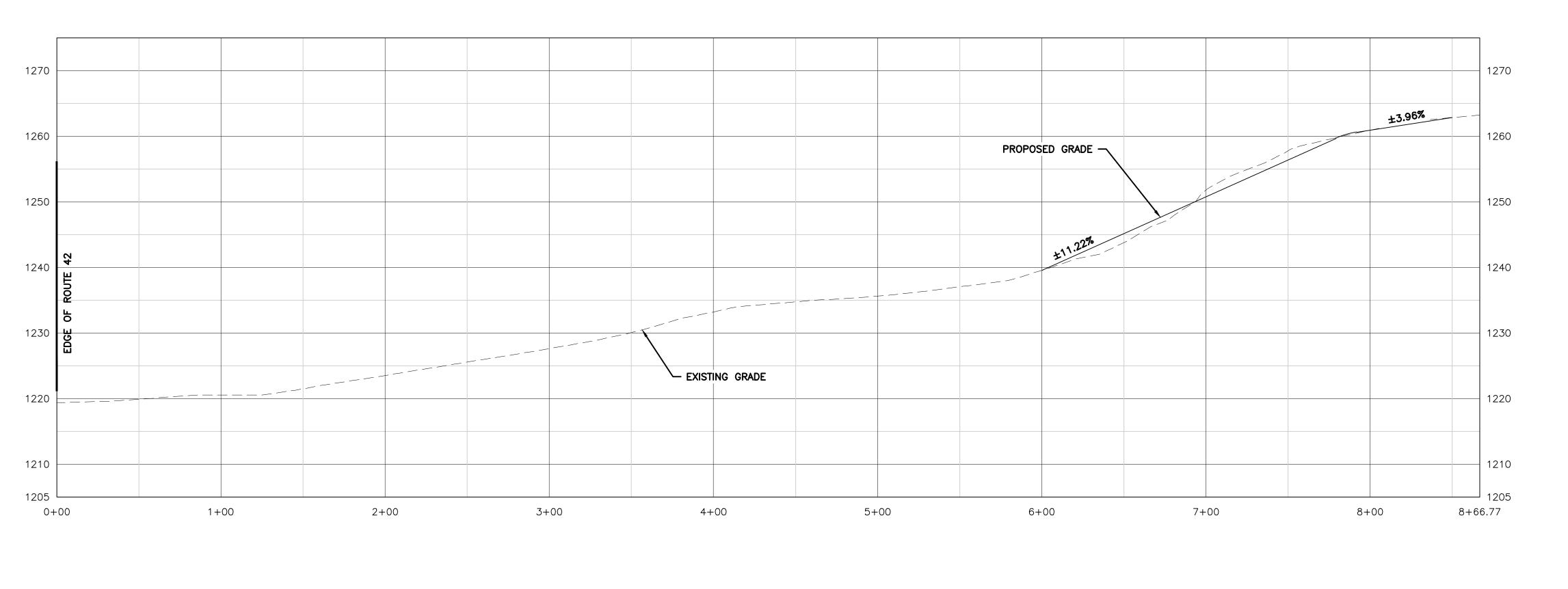
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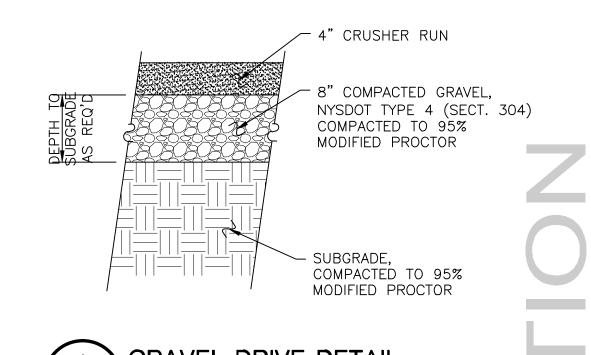








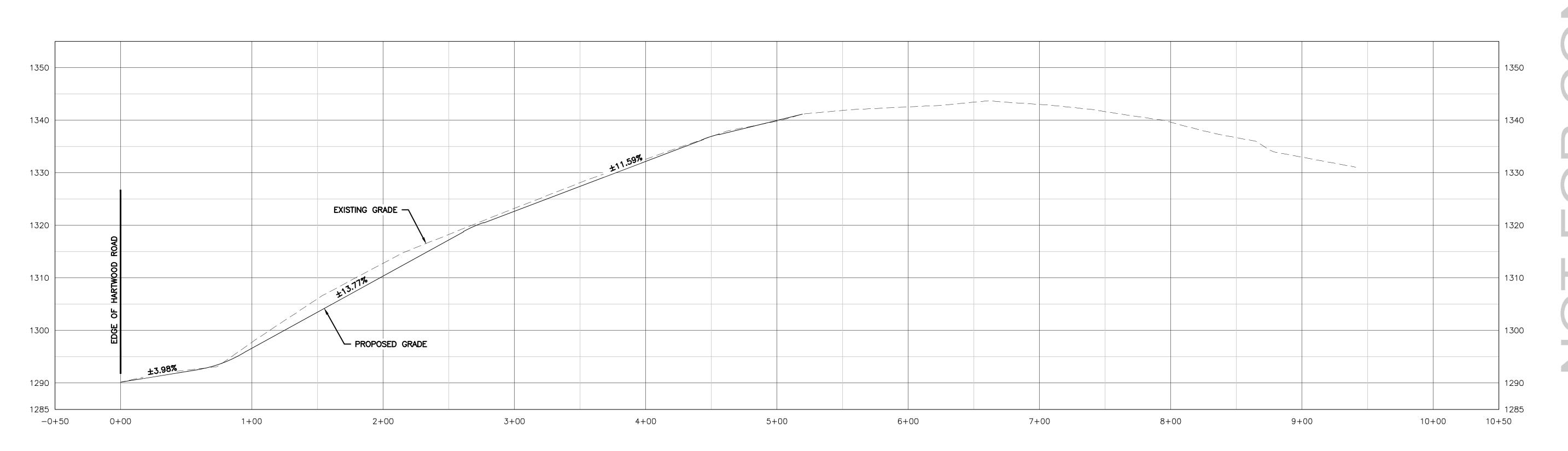




GRAVEL DRIVE DETAIL
C130
N.T.S.

## STAG FOREST ROAD PROFILE

SCALE: HORIZ. 1"=40' VERT. 1"=10'



WOODLAND DRIVE PROFILE

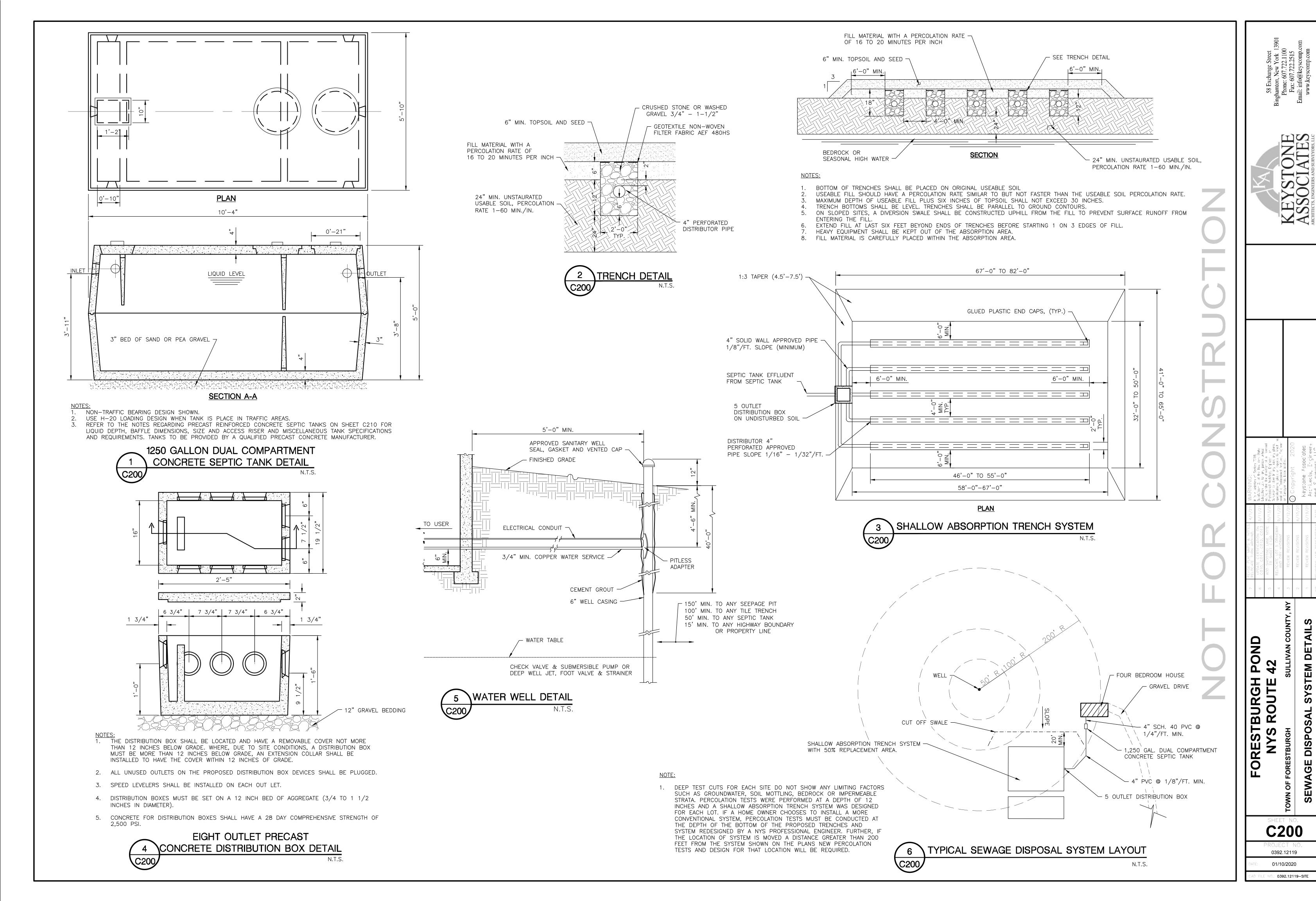
LE: HORIZ. 1"=40 VERT. 1"=10 AND DETAIL ROAD PROFILES

C130

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### SHALLOW ABSORPTION TRENCHES GENERAL INFORMATION

SHALLOW ABSORPTION TRENCHES ARE CONSTRUCTED PARALLEL TO GROUND CONTOURS WITH THE BOTTOM AS LEVEL AS POSSIBLE AND LOCATED AT OR BELOW ORIGINAL GROUND SURFACE LEVEL. THESE SYSTEMS MAY BE USED WHERE SITES CONTAIN AT LEAST TWO FEET BUT LESS THAN FOUR FEET OF PERMEABLE SOIL (I.E., ONE TO 60 MINUTES PER INCH PERCOLATION RATE). DIVERSION OF SURFACE RUNOFF AROUND THE FILL AREA BY MEANS OF DITCHING/BERMING IS REQUIRED UPHILL OF ALL SLOPED SITES. HEAVY EQUIPMENT SHALL NOT ENTER THE ABSORPTION AREA. FILL MATERIAL SHALL HAVE APPROXIMATELY THE SAME PERCOLATION RATE AS THE UNDERLYING PERMEABLE SOIL. FILL MATERIAL, INCLUDING A SIX INCH TOPSOIL LAYER, SHALL NOT BE MORE THAN 30 INCHES ABOVE ORIGINAL GRADE, SHALL EXTEND AT LEAST SIX FEET HORIZONTALLY FROM AND AT THE SAME DEPTH AS THE TRENCH SIDEWALL IN FILL, AND SHALL HAVE A MAXIMUM SLOPE OF ONE VERTICAL TO THREE HORIZONTAL AT THE EDGE TO INTERSECT WITH THE ORIGINAL GROUND SURFACE. A CONVENTIONAL ABSORPTION FIELD SYSTEM (I.E., TRENCHES WITH DISTRIBUTION LINES AND AGGREGATE) IS CONSTRUCTED IN THE FILL AND ORIGINAL SOIL. FILL MORE PERMEABLE THAN THE ON—SITE PERMEABLE SOIL SHALL NOT BE UTILIZED TO AVOID SHORT—CIRCUITING OF WASTEWATER TO THE SURFACE OF THE GROUND.

### SITE REQUIREMENTS

THESE SYSTEMS ARE USED WHERE THERE IS AT LEAST TWO FEET BUT LESS THAN FOUR FEET OF USABLE SOIL. VERTICAL SEPARATION DISTANCES BETWEEN TRENCH BOTTOMS AND BOUNDARY CONDITIONS (I.E., BEDROCK, GROUND WATER, AND IMPERMEABLE STRATA). IN ADDITION, THE HORIZONTAL SEPARATION DISTANCES NOTED IN TABLE 2 SHALL BE MET.

### DESIGN CRITERIA

A MINIMUM TWO FEET SEPARATION MUST BE MAINTAINED BETWEEN THE BOTTOM OF EACH TRENCH AND ALL BOUNDARY CONDITIONS (I.E., BEDROCK, GROUND WATER, AND IMPERMEABLE STRATA). THE BOTTOM OF EACH TRENCH MUST NOT BE ABOVE THE ORIGINAL GROUND SURFACE AND SHOULD PREFERABLY BE AT LEAST SIX INCHES BELOW ORIGINAL GRADE. AT LEAST TWO PERCOLATION TESTS SHALL BE PERFORMED WITHIN THE PROPOSED ABSORPTION AREA WITH THE BOTTOM OF THE TEST HOLES AT THE DEPTH OF THE PROPOSED TRENCHES OR AT SIX INCHES BELOW GRADE IF THE BOTTOM OF THE PROPOSED TRENCHES WILL BE BETWEEN GRADE AND SIX INCHES BELOW GRADE. THE SLOWEST PERCOLATION RATE OBSERVED SHALL BE USED TO DESIGN THE ABSORPTION FACILITY. FILL MATERIAL SHALL HAVE A PERMEABILITY SIMILAR TO BUT NOT MORE PERMEABLE THAN THE UNDERLYING IN SITU USABLE SOIL. THE DEPTH OF FILL MATERIAL, INCLUDING A SIX INCH TOPSOIL LAYER, SHALL NOT EXCEED 30 INCHES ABOVE THE ORIGINAL GROUND ELEVATION. A CONVENTIONAL ABSORPTION FIELD SYSTEM (I.E., TRENCHES WITH DISTRIBUTION LINES AND AGGREGATE) IS DESIGNED AND CONSTRUCTED IN THE FILL AND ORIGINAL SOIL. PERCOLATION TEST RESULTS OF THE IN SITU FILL MATERIAL (I.E., AT THE BORROW PIT) SHALL BE USED TO ASSURE THAT THE PERMEABILITY OF THE FILL MATERIAL IS COMPATIBLE WITH THE ON—SITE SOIL PERMEABILITY.

### <u>CONSTRUCTIO</u>

GENERALLY, SITES WITH LARGE TREES, NUMEROUS SMALL TREES, OR LARGE BOULDERS ARE UNSUITABLE FOR A SHALLOW ABSORPTION TRENCH SYSTEM BECAUSE OF THE DIFFICULTY IN PREPARING THE SITE AND THE REDUCED INFILTRATION AREA BENEATH THE SYSTEM. IN AREAS WHICH ARE SUITABLE, ALL TREES AND STUMPS SHALL BE CUT AT GRADE AND REMOVED. OTHER VEGETATION (I.E., BRUSH, VINES, WEEDS, GRASS) SHALL BE CUT AS CLOSE TO GRADE AS POSSIBLE AND REMOVED. ALL LEAVES, LIMBS AND BOULDERS ABOVE GRADE SHALL ALSO BE REMOVED. ROOT STRUCTURE BELOW GRADE SHOULD NOT BE REMOVED. ROTOTILLING OR SOIL SCARIFICATION WITH CONSTRUCTION EQUIPMENT IS NOT RECOMMENDED.

HEAVY EQUIPMENT SHALL BE KEPT OUT OF THE ABSORPTION AREA. GRADE STAKES MAY BE USED TO DELINEATE THE LIMITS OF FILL AND PREVENT OVER—EXCAVATION OF ABSORPTION TRENCHES. FILL MATERIAL SHALL BE CAREFULLY PLACED WITHIN THE ABSORPTION AREA. THE EDGE OF THE FILL MATERIAL SHALL BE TAPERED FROM AT LEAST SIX FEET BEYOND ANY TRENCH TO ORIGINAL GRADE AT A SLOPE NO GREATER THAN ONE VERTICAL TO THREE HORIZONTAL. ON SLOPED SITES A DIVERSION DITCH OR BERM SHALL BE CONSTRUCTED ON THE UPHILL, SIDE OF THE FILL MATERIAL TO PREVENT SURFACE RUNOFF FROM ENTERING THE FILL. THE SHALLOW ABSORPTION TRENCH SYSTEM IS CONSTRUCTED IN THE FILL MATERIAL AND UPON OR IN EXISTING IN SITU SOIL. CONSTRUCTION OF TRENCHES AT LEAST SIX INCHES INTO EXISTING IN SITU SOIL IS PREFERRED TO UTILIZE A STABILIZED SIDEWALL INFILTRATIVE SURFACE.

### **DISTRIBUTION DEVICES**GENERAL INFORMATION

SEPTIC TANK OR AEROBIC UNIT EFFLUENT IS USUALLY CONVEYED TO MULTIPLE ABSORPTION FACILITIES (I.E., LATERALS). FOR THE TREATMENT SYSTEM TO FUNCTION PROPERLY THE SEPTIC TANK/AEROBIC UNIT EFFLUENT MUST BE EQUALLY DISTRIBUTED TO EACH LATERAL UTILIZING PROPERLY DESIGNED DISTRIBUTION DEVICES. SEVERAL TYPES OF DISTRIBUTION DEVICES MAY BE USED TO PERFORM THIS FUNCTION. DISTRIBUTION BOXES ARE MOST COMMONLY USED CONJUNCTION WITH ABSORPTION FIELDS. DISTRIBUTION BOXES MAY BE USED ON SLOPED SITES PROVIDED THE INVERTS OF THE OUTLETS ARE ALL AT THE SAME ELEVATION AND THE FIRST TEN FEET OF OUTLET LINES HAVE THE SAME SLOPE OR SPEED LEVELERS ARE USED. DROP MANHOLES WITH DISTRIBUTION LINES TO ABSORPTION TRENCHES AND SERIAL DISTRIBUTORS WITH ELBOW SECTIONS MAY BE USED WITH SERIAL ABSORPTION TRENCHES ON MODERATE TO STEEP SLOPES.

### GRAVITY DISTRIBUTION

THE MAXIMUM LENGTH OF ABSORPTION LINES USED IN CONJUNCTION WITH GRAVITY DISTRIBUTION SHALL BE 60 FEET. GRAVITY PERFORATED DISTRIBUTION LINES SHALL BE INSTALLED WITH A SLOPE OF 1/16 TO 1/32 INCH PER FOOT. THE INVERTS OF PERFORATED DISTRIBUTION LINES SHALL NOT BE INSTALLED DEEPER THAN 24 INCHES BELOW GRADE.

### DISTRIBUTION BOX

A DISTRIBUTION BOX IS USED TO EVENLY DISTRIBUTE SETTLED SEWAGE TO SUBSURFACE ABSORPTION LATERALS. DISTRIBUTION BOXES SHOULD BE INSPECTED ANNUALLY TO ASSURE THAT: (A) ALL OUTLET INVERTS ARE AT THE SAME ELEVATION; (B) EXCESSIVE SOLIDS ARE NOT FLOWING OUT OF THE SEPTIC TANK OR AERATION UNIT; AND, (C) ANY REQUIRED BAFFLE IS IN PLACE AS DESIGNED. FOR ACCESSIBILITY, IT IS NECESSARY THAT THE DISTRIBUTION BOX BE LOCATED AND HAVE A REMOVABLE COVER NOT MORE THAN 12 INCHES BELOW GRADE. WHERE, DUE TO SITE CONDITIONS, A DISTRIBUTION BOX MUST BE MORE THAN 12 INCHES BELOW GRADE, AN EXTENSION COLLAR SHALL BE INSTALLED TO HAVE THE COVER WITHIN 12 INCHES OF GRADE. THE LOCATION OF DISTRIBUTION BOX COVERS SHOULD BE IDENTIFIED BY INSTALLING A LOCATION STAKE FROM GRADE TOWARD THE COVER. SUCH STAKES PERMIT RAPID LOCATION FOR INSPECTION/MAINTENANCE WITH MINIMAL LANDSCAPE DISTURBANCE.

TO MINIMIZE FROST ACTION AND REDUCE THE POSSIBILITY OF MOVEMENT ONCE INSTALLED, DISTRIBUTION BOXES MUST BE SET ON A BED OF SAND OR PEA GRAVEL AT LEAST 12 INCHES DEEP. A 12 INCH BED OF AGGREGATE (3/4 TO 1 1/2 INCHES IN DIAMETER) MAY BE USED IN—LIEU—OF THE REQUIRED 12 INCH BED OF SAND OR PEA GRAVEL IF SPEED REVELERS ARE USED ON ALL OUTLETS. THE DROP BETWEEN INLET AND OUTLET INVERTS SHALL BE AT LEAST TWO INCHES. A BAFFLE IS REQUIRED AT THE INLET SIDE OF THE BOX WHEN THE SLOPE OF THE PIPE FROM THE SEPTIC TANK TO THE BOX EXCEEDS 1/2 INCH PER FOOT OR WHEN SIPHON DOSING IS USED. A PARTIALLY TRUNCATED SHORT SANITARY TEE WITH THE BASE TOWARD THE INLET OPEN OR CONTAINING PERFORATIONS MAY BE USED AS A BAFFLE SINCE IT MINIMIZES SHORT—CIRCUITING AND ENABLES ABSORPTION FIELD GASES TO FLOW BACK TO THE SEPTIC TANK AND THENCE UP THE SOIL STACK. WHEN SUCH SHORT SANITARY TEES ARE USED, A MINIMUM OF ONE INCH CLEARANCE BETWEEN THE UNDERSIDE OF THE DISTRIBUTION BOX COVER AND THE TOP OF THE SANITARY TEE SHALL BE PROVIDED TO PERMIT VENTING OF ABSORPTION FACILITY GASES.

THE INVERTS OF BOX OUTLETS SHALL BE AT LEAST TWO INCHES ABOVE THE BOTTOM OF THE BOX TO PREVENT SHORT—CIRCUITING AND REDUCE SOLIDS CARRY—OVER. USE OF ADJUSTABLE OUTLET REVELERS IS RECOMMENDED IN DISTRIBUTION BOXES. DISTRIBUTION BOXES MAY BE CONSTRUCTED IN PLACE OR PURCHASED PREFABRICATED. WHEN CONCRETE IS USED TO CONSTRUCT BOXES, IT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAY SET. PREFABRICATED BOXES MAY BE CONSTRUCTED OF CONCRETE, FIBERGLASS, OR PLASTIC. THE BOXES SHALL BE INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S INSTRUCTIONS IN ADDITION TO THE ABOVE—NOTED REQUIREMENTS.

NON-PERFORATED PIPE SHALL BE USED TO CONNECT THE DISTRIBUTION BOX TO THE ABSORPTION FACILITY. THE NON-PERFORATED PIPE SHALL HAVE A MINIMUM SLOPE OF 1/32 INCH PER FOOT AND BE OF TIGHT JOINT CONSTRUCTION ON UNDISTURBED EARTH OR PROPERLY BEDDED THROUGHOUT ITS LENGTH.

### PRECAST REINFORCED CONCRETE SEPTIC TANKS

- A) CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 POUNDS PER SQUARE INCH (PSI) AT 28 DAYS SET; 3,000 PSI CONCRETE IS RECOMMENDED.
- B) WALL THICKNESS SHALL BE A MINIMUM OF THREE INCHES UNLESS THE DESIGN HAS BEEN CERTIFIED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER AS COMPLYING WITH ALL APPROPRIATE REQUIREMENTS FOR THIN—WALL CONSTRUCTION. ALL WALLS, FLOOR, ROOF, AND ACCESS COVERS SHALL CONTAIN REINFORCING TO ASSURE SUPPORT FOR 300 PSF
- C) ALL JOINTS SHALL BE SEALED SUCH THAT THE TANK IS WATERTIGHT.
- D) TANKS WITH A JOINT BELOW THE LIQUID LEVEL MUST BE TESTED FOR WATERTIGHTNESS PRIOR TO BACKFILLING.

### DESIGN AND INSTALLATION

THE FOLLOWING GENERAL REQUIREMENTS APPLY TO ALL SEPTIC TANKS REGARDLESS OF CONSTRUCTION MATERIAL:

- A) A MINIMUM LIQUID DEPTH OF 30 INCHES. THE MAXIMUM DEPTH FOR DETERMINING THE ALLOWABLE DESIGN VOLUME OF A TANK SHALL BE 60 INCHES. DEEPER TANKS PROVIDE EXTRA SLUDGE STORAGE BUT NO CREDITIS GIVEN TOWARD DESIGN VOLUME.
- B) THE MINIMUM DISTANCE BETWEEN THE INLET AND OUTLET SHALL BE SIX FEET. ALL TANK SHALL MEET THE MINIMUM SURFACE AREA REQUIREMENT FOR THE SPECIFIC DESIGN VOLUME IN TABLE 3. THE EFFECTIVE LENGTH OF RECTANGULAR TANKS SHOULD NOT BE LESS THAN TWO OR GREATER THAN FOUR TIMES THE EFFECTIVE WIDTH.
- C) TANKS MUST BE WATERTIGHT, CONSTRUCTED OF DURABLE MATERIAL, AND NOT SUBJECT TO EXCESSIVE CORROSION, DECAY, FROST DAMAGE, OR CRACKING. WHEN INSTALLED, THE TOP OF ALL TANKS SHALL BE ABLE TO SUPPORT AT LEAST 300 POUNDS PER SQUARE FOOT (PSF).
- D) TANK ACCESS COVERS AND MANHOLE COVERS SHALL BE WITHIN 12 INCHES OF FINAL GRADE TO PERMIT INSPECTION AND MAINTENANCE. TANKS SHALL HAVE AT LEAST ONE MANHOLE OPENING AND VISUAL ACCESS OPENINGS ABOVE THE INLET AND OUTLET BAFFLES. A MANHOLE OPENING MAY REPLACE A VISUAL ACCESS OPENING. TANKS WITH A LIQUID DEPTH OF 48 INCHES OR MORE SHALL HAVE A TOP OPENING WITH A MINIMUM OF 20 INCHES IN THE SHORTEST DIMENSION TO ALLOW ENTRY INTO THE TANK. TANKS WITH A LIQUID DEPTH LESS THAN 48 INCHES SHALL HAVE A TOP OPENING THAT IS AT LEAST 12 INCHES IN THE SHORTEST DIMENSION. WHEN THE TOP OF A SEPTIC TANK IS MORE THAN 12 INCHES BELOW FINAL GRADE, WATERTIGHT EXTENSION COLLARS SHALL BE USED TO BRING ACCESS COVERS AND MANHOLE COVERS WITHIN 12 INCHES OF FINAL GRADE. SEPTIC TANK ACCESS COVERS LOCATED AT OR ABOVE GRADE SHOULD BE LOCKABLE TO PREVENT ENTRY BY UNAUTHORIZED PERSONS. ESPECIALLY CHILDREN.
- E) TANKS SHALL HAVE INLET AND OUTLET BAFFLES, SANITARY TEES OR OTHER DEVICES TO PREVENT THE PASSAGE OF FLOATING SOLIDS AND TO MINIMIZE DISTURBANCE OF SETTLED SLUDGE OR FLOATING SCUM BY SEWAGE ENTERING AND LEAVING THE TANK. OUTLET DESIGNS INCORPORATING GAS BUBBLE DEFLECTION (I.E., GAS DEFLECTION BAFFLES) ARE STRONGLY RECOMMENDED TO MINIMIZE SOLIDS LOADING OF THE ABSORPTION SYSTEM. INLET AND OUTLET BAFFLES SHALL EXTEND A MINIMUM OF 12 INCHES AND 14 INCHES, RESPECTIVELY, BELOW THE LIQUID LEVEL IN TANKS WITH A LIQUID DEPTH OF LESS THAN 40 INCHES, AND 16 AND 18 INCHES, RESPECTIVELY, IN TANKS WITH A LIQUID DEPTH OF 40 INCHES OR GREATER. THE HORIZONTAL DISTANCE BETWEEN THE OUTLET BAFFLE AND THE OUTLET SHALL NOT EXCEED SIX INCHES. BAFFLES SHALL BE CONSTRUCTED OF A DURABLE MATERIAL NOT SUBJECT TO EXCESSIVE CORROSION, DECAY, OR CRACKING. INCREASING THE DIAMETER OF THE VERTICAL SECTION OF OUTLET SANITARY TEES TO MORE THAN FOUR (4) INCHES IS RECOMMENDED TO DECREASE UPFLOW VELOCITY AND POTENTIAL DISCHARGE OF SUSPENDED SOLIDS TO THE ABSORPTION SYSTEM.
- F) THERE SHALL BE A MINIMUM OF ONE INCH CLEARANCE BETWEEN THE UNDERSIDE OF THE ROOF OF THE TANK AND THE TOP OF ALL BAFFLES, AND/OR TEES TO PERMIT VENTING OF TANK GASES. MULTI-CHAMBER AND MULTI-TANK SYSTEMS SHALL ALSO BE DESIGNED TO PERMIT VENTING OF TANK GASES.

TANKS SHALL BE PLACED ON AT LEAST A THREE-INCH BED OF SAND OR PEA GRAVEL. THIS WILL PROVIDE FOR PROPER LEVELING AND BEARING. A FIVE-INCH BED OF AGGREGATE  $(3/4\ TO\ 1-1/2\ INCHES\ IN\ DIAMETER)$  MAY BE USED IN-LIEU-OF THE REQUIRED THREE INCH BED OF SAND OR PEA GRAVEL. ANY ADDITIONAL INSTRUCTIONS PROVIDED BY THE TANK MANUFACTURER SHALL ALSO BE FOLLOWED.

- G) THERE SHALL BE A MINIMUM DROP IN ELEVATION OF TWO INCHES BETWEEN THE INVERTS (BOTTOM OF INSIDE OF PIPE) OF THE INLET AND OUTLET PIPES.
- H) GARBAGE GRINDERS. AN ADDITIONAL 250 GALLONS OF CAPACITY AND SEVEN SQUARE FEET OF SURFACE AREA ARE REQUIRED WHEN A GARBAGE GRINDER CAN REASONABLY BE EXPECTED AT THE TIME OF CONSTRUCTION OR IN THE FUTURE. A GAS DEFLECTION BAFFLE OR OTHER ACCEPTABLE OUTLET MODIFICATION (E.G., GAS BAFFLES) AND A DUAL COMPARTMENT TANK OR TWO TANKS IN SERIES MUST ALSO BE PROVIDED.
- SEPTIC TANKS MAY BE FORCED TOWARD THE GROUND SURFACE DURING CLEANING OR DEWATERING OPERATIONS IF THEY HAVE BEEN INSTALLED WITHIN THE GROUND WATER ZONE. THIS IS CAUSED BY THE BUOYANCY EFFECT OF THE DISPLACED VOLUME OF THE TANK. SEPTIC TANKS SHOULD NOT BE COMPLETELY DEWATERED IF GROUND WATER LEVELS ARE SIGNIFICANTLY HIGHER THAN THE BOTTOM OF THE TANK UNLESS SAID TANKS ARE PROPERLY ANCHORED. TANKS CONSTRUCTED OF FIBERGLASS, PLASTIC, OR STEEL ARE MORE LIKELY TO FLOAT THAN REINFORCED CONCRETE TANKS BECAUSE OF THEIR LIGHTER WEIGHT PER GIVEN VOLUME.
- I) SPECIAL CARE MUST BE TAKEN IN BEDDING THE HOUSE SEWER, SEPTIC TANK, AND OUTLET LINE TO PREVENT UNEVEN SETTLEMENT AND POSSIBLE CRACKING OR RUPTURE WHERE THE INLET AND OUTLET LINES CONNECT TO THE SEPTIC TANK.

# TABLE 2 REQUIRED SEPARATION DISTANCES FROM WASTEWATER SYSTEM COMPONENTS

SYSTEM COMPONENTS	WELL OR SUCTION LINE	TO STREAM, LAKE WATERCOURSE OR WETLAND	<u>DWELLING</u>	<u>PROPERTY LINE</u>	DRAINAGE DITCH OR RAIN GARDENS
HOUSE SEWER (WATERTIGHT JOINTS)	25' IF CAST IRON OR PVC WITH O-RING JOINTS, 50' OTHERWISE	25'	3'	10'	10'
SEPTIC TANK, DOSING TANK WATERTIGHT ETU	50'	50'	10'	10'	10'
EFFLUENT LINE TO DISTRIBUTION BOX	50'	50'	10'	10'	10'
DISTRIBUTION BOX	100'	100'	20'	10'	20'
ABSORPTION FIELD	100'	100'	20'	10'	20'
RAISED SYSTEM OR MOUND	100'	100'	20'	10'	20'
INTERMITTENT SAND FILTER (C)	100'	100'	20'	10'	20'

### **GENERAL NOTES**

- 1) ALL WORK SHALL CONFORM TO NYSDOH REGULATIONS AND STANDARDS.
- 2) ALL WORK SHALL BE INSPECTED AND CERTIFIED BY A LICENSED NYS PROFESSIONAL ENGINEER OR HIS REPRESENTATIVE.
- 3) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKEOUT.
- 4) ALL AREAS WITHIN OR OUTSIDE THE EXISTING EASEMENTS OR ANY CONTRACT LIMITS DESIGNATED, THAT ARE DISTURBED BY CONTRACTORS OPERATIONS SHALL BE RESTORED AT THE EXPENSE OF THE CONTRACTOR, TO THE SATISFACTION OF THE OWNER.
- 5) CONTRACTOR SHALL CALL DIG SAFELY NY TWO WORKING DAYS BEFORE DIGGING. 1-800-962-7962 NON-MEMBERS MUST BE CONTACTED SEPARATELY.
- 6) THERE ARE NO GUARANTEE THAT ALL EXISTING UNDERGROUND OR OVERHEAD UTILITIES WHETHER FUNCTIONAL OR ABANDONED, WITHIN THE PROJECT AREA ARE SHOWN ON THIS PLAN. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UTILITIES BEFORE STARTING WORK AND SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM THIS WORK.
- 7) KEYSTONE ASSOCIATES ARCHITECTS, ENGINEERS AND SURVEYORS, LLC. IS NOT RESPONSIBLE FOR ANY CONSTRUCTION WORK PERFORMED PRIOR TO FINAL APPROVAL OF ALL PLANS AND SECURING OF ALL PERMITS AND FILING OF ALL MAPS.
- 8) CONTRACTOR TO COMPLY WITH ALL O.S.H.A. AND OTHER STATE AND LOCAL SAFETY REQUIREMENTS DURING CONSTRUCTION. (PROPER SHORING, ETC.).
- 9) THE CONTRACTOR SHALL FIELD VERIFY EXISTING TOPOGRAPHY PRIOR TO COMMENCEMENT OF EARTHWORK OPERATIONS. ANY ELEVATION DISCREPANCIES WHICH WILL AFFECT THE WORK REQUIRED AS PART OF THE CONTRACT DOCUMENTS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER.

### DESIGN BASIS: FOR ALL SYSTEMS (BASED ON ASSUMED 4 BEDROOMS)

- A) AVERAGE DAILY WATER USAGE: (SEE TABLE 1) 4 BEDROOM (440 GPD)
- B) <u>SEPTIC TANK SIZE:</u> (SEE TABLE 3) 4 BEDROOM (1250 GAL.)
- C) PERCOLATION TEST DATA: \*
- REFER TO SHEET C220
- D) SHALLOW ABSORPTION TRENCHES
- RFER TO SHEET C220
- E) <u>TEST PIT DATA:</u> \*

REFER TO SHEET C220

3.0 GPM MAX. FAUCETS/SHOWERHEADS

\* PERCOLATION TESTS AND TEST CUT PERFORMED IN NOVEMBER 18, 2019 BY KEYSTONE ASSOCIATES, ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

### TABLE I

### DESIGN FLOWS FOR VARIOUS HOUSEHOLD PLUMBING FIXTURES

PLUMBING FIXTURES	DESIGN FLOWS <u>GPD PER BEDROOM</u>
WATER SAVING FIXTURES (POST 1991) 1.6 GPF MAX. WATER CLOSETS AND	

### TABLE 3

### MINIMUM SEPTIC TANK CAPACITIES

NUMBER OF BEDROOMS 1, 2, OR 3	MINIMUM TANK <u>CAPACITY (GALLONS)</u> 1,000	MINIMUM LIQUID <u>SURFACE AREA (SQ. FT.)</u> 27
4	1,250	34
5	1,500	40
6	1,750	47

NOTE:
TANK SIZE REQUIREMENTS FOR MORE THAN SIX BEDROOMS SHALL BE CALCULATED BY ADDING 250 GALLONS AND SEVEN SQUARE FEET OF SURFACE AREA FOR EACH ADDITIONAL BEDROOM. A GARBAGE GRINDER SHALL BE CONSIDERED EQUIVALENT TO AN ADDITIONAL BEDROOM FOR DETERMINING TANK SIZE. A HOT TUB/SPA SHOULD BE CONSIDERED EQUIVALENT TO AN ADDITIONAL BEDROOM FOR DETERMINING TANK SIZE.

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KEYSTONE ASSOCIATES ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

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VISE PLAT MAPS & NOTES. 4/1/21

LOCATE TURN AROUND.

11 s e winching of Schön 770g, 11 s e winching of Schön 770g, 12 sudvice 2, 31 for 12 sudvice 3 for 12

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**DESIGN BASIS: LOT NO. 8** OMITTED **DESIGN BASIS:** LOT NO. 9 PERCOLATION TEST DATA: PERC. TEST 9A: 4 MIN./IN. @ 12" PERC. TEST 9B: 11 MIN./IN. @ 12' B) SHALLOW ABSORPTION TRENCHES APPLICATION RATE: 0.80 GPD/SF ABSORPTION AREA REQUIRED: 440 GPD/0.80 GPD/SF = 550 SF ABSORPTION AREA PROPOSED: 5 TRENCHES (2' WIDE)(55' LONG) = 550 SF 0-7" TOPSOIL AND LEAF LITTER COVER 7"-19" LIGHT BROWN, FINE SANDY SILT 19"-30" GRAY FINE SILTY SAND AND SOME GRAVEL 30"-66" COBBLES NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED. **DESIGN BASIS: LOT NO. 10** A) PERCOLATION TEST DATA: PERC. TEST 10A: 5 MIN./IN. @ 12" PERC. TEST 10B: 12 MIN./IN. @ 12" B) SHALLOW ABSORPTION TRENCHES APPLICATION RATE: 0.80 GPD/SF ABSORPTION AREA REQUIRED: 440 GPD/0.80 GPD/SF = 550 SF ABSORPTION AREA PROPOSED: 5 TRENCHES (2' WIDE)(55' LONG) = 550 SF TEST PIT DATA: 0-7" TOPSOIL AND LEAF LITTER COVER 7"-15" REDDISH BROWN FINE SANDY SILT AND COBBLES 15"-72" GRAY FINE SILTY SAND AND COBBLES NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED. **DESIGN BASIS:** LOT NO. 11 PERCOLATION TEST DATA: PERC. TEST 11A: 4 MIN./IN. @ 12" PERC. TEST 11B: 6 MIN./IN. @ 12' B) SHALLOW ABSORPTION TRENCHES APPLICATION RATE: 1.00 GPD/SF ABSORPTION AREA REQUIRED: 440 GPD/1.00 GPD/SF = 440 SF ABSORPTION AREA PROPOSED: 4 TRENCHES (2' WIDE)(55' LONG) = 440 SF C) <u>TEST PIT DATA:</u> 0-5" TOPSOIL AND LEAF LITTER COVER 5"-10" REDDISH BROWN FINE SANDY SILT AND COBBLES 10"-48" GRAY FINE SILTY SAND AND GRAVEL WITH COBBLES AND BOULDERS 48"-60" BOULDERS NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED. **DESIGN BASIS:** LOT NO. 12 PERCOLATION TEST DATA: PERC. TEST 12A: 8 MIN./IN. @ 12" PERC. TEST 12B: 1:30 MIN./IN. @ 12" SHALLOW ABSORPTION TRENCHES APPLICATION RATE: 0.90 GPD/SF ABSORPTION AREA REQUIRED: 440 GPD/0.90 GPD/SF = 489 SF ABSORPTION AREA PROPOSED: 5 TRENCHES (2' WIDE)(49' LONG) = 490 SF TEST PIT DATA: 0-3" TOPSOIL AND LEAF LITTER COVER 3"-13" REDDISH BROWN FINE SANDY SILT AND COBBLES 13"-25" GRAY FINE SILTY SAND AND GRAVEL WITH COBBLES 25"-64" COBBLES AND BOULDERS NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED. **DESIGN BASIS:** LOT NO. 13 A) PERCOLATION TEST DATA: PERC. TEST 13A: 2 MIN./IN. @ 12" PERC. TEST 13B: 14 MIN./IN. @ 12" B) SHALLOW ABSORPTION TRENCHES APPLICATION RATE: 0.80 GPD/SF ABSORPTION AREA REQUIRED: 440 GPD/0.80 GPD/SF = 550 SF ABSORPTION AREA PROPOSED: 5 TRENCHES (2' WIDE)(55' LONG) = 550 SF C) <u>TEST PIT DATA:</u> 0-5" TOPSOIL AND LEAF LITTER COVER 5"-14" REDDISH BROWN FINE SANDY SILT, COBBLES, DAMP 14"-60" LIGHT BROWN SILTY SAND AND GRAVEL SOME COBBLES, DAMP NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED. **DESIGN BASIS:** LOT NO. 14 A) PERCOLATION TEST DATA: PERC. TEST 14A: 3 MIN./IN. @ 12" PERC. TEST 14B: 3 MIN./IN. @ 12" B) SHALLOW ABSORPTION TRENCHES APPLICATION RATE: 1.20 GPD/SF ABSORPTION AREA REQUIRED: 440 GPD/1.20 GPD/SF = 367 SF ABSORPTION AREA PROPOSED: 4 TRENCHES (2' WIDE)(46' LONG) = 368 SF C) <u>TEST PIT DATA:</u> 0-6" TOPSOIL AND LEAF LITTER COVER 6"-13" REDDISH BROWN, FINE SANDY SILT SOME GRAVEL 13"-33" LIGHT BROWN SILTY SAND AND GRAVEL 33"-72" LIGHT BROWN SILTY SAND AND GRAVEL WITH SOME COBBLES NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED. **DESIGN BASIS:** LOT NO. 15 PERCOLATION TEST DATA: PERC. TEST 15A: 6 MIN./IN. @ 12" PERC. TEST 15B: 3 MIN./IN. @ 12" B) SHALLOW ABSORPTION TRENCHES APPLICATION RATE: 1.00 GPD/SF ABSORPTION AREA REQUIRED: 440 GPD/1.00 GPD/SF = 440 SF ABSORPTION AREA PROPOSED: 4 TRENCHES (2' WIDE)(55' LONG) = 440 SF C) <u>TEST PIT DATA:</u> 0-5" TOPSOIL AND LEAF LITTER COVER 5"-10" REDDISH BROWN COURSE SAND WITH SOME SILT 10"-72" BROWN COURSE SAND WITH SOME SILT NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

PERCOLATION TEST DATA: PERC. TEST 16A: 5 MIN./IN. @ 12" PERC. TEST 16B: 5 MIN./IN. @ 12" B) SHALLOW ABSORPTION TRENCHES APPLICATION RATE: 1.20 GPD/SF ABSORPTION AREA REQUIRED: 440 GPD/1.20 GPD/SF = 367 SF ABSORPTION AREA PROPOSED: 4 TRENCHES (2' WIDE)(46' LONG) = 368 SF C) <u>TEST PIT DATA:</u> 0-5" TOPSOIL AND LEAF LITTER COVER 5"-17" REDDISH BROWN FINE SANDY SILT AND GRAVEL 17"-24" LIGHT BROWN SANDY SILT AND GRAVEL 24"-72" LIGHT BROWN SANDY SILT AND GRAVEL WITH SOME COBBLES NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED **DESIGN BASIS:** LOT NO. 17 PERCOLATION TEST DATA: PERC. TEST 17A: 25 MIN./IN. @ 12" PERC. TEST 17B: 26 MIN./IN. @ 12" B) SHALLOW ABSORPTION TRENCHES APPLICATION RATE: 0.60 GPD/SF ABSORPTION AREA REQUIRED: 440 GPD/0.60 GPD/SF = 735 SF ABSORPTION AREA PROPOSED: 7 TRENCHES (2' WIDE)(53' LONG) = 742 SF C) <u>TEST PIT DATA:</u> 0-5" TOPSOIL WITH LEAF LITTER COVER 5"-17" REDDISH BROWN FINE SANDY SILT AND GRAVEL 17"-24" LIGHT BROWN SANDY SILT AND GRAVEL 24"-72" LIGHT BROWN SANDY SILT AND GRAVEL WITH COBBLES NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED. **DESIGN BASIS:** LOT NO. 18 PERCOLATION TEST DATA: PERC. TEST 18A: 5 MIN./IN. @ 12" PERC. TEST 18B: 5 MIN./IN. @ 12" B) SHALLOW ABSORPTION TRENCHES APPLICATION RATE: 1.20 GPD/SF ABSORPTION AREA REQUIRED: 440 GPD/1.20 GPD/SF = 367 SF ABSORPTION AREA PROPOSED: 4 TRENCHES (2' WIDE)(46' LONG) = 368 SF C) <u>TEST PIT DATA:</u> 0-5" TOPSOIL AND LEAF LITTER COVER 5"-11" REDDISH BROWN, FINE SANDY SILT AND GRAVEL 11"-33" LIGHT BROWN SANDY SILT AND GRAVEL 33"-65" LIGHT BROWN SANDY SILT AND GRAVEL WITH COBBLES NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED DESIGN BASIS: LOT NO. 19 A) PERCOLATION TEST DATA: PERC. TEST 19A: 16 MIN./IN. @ 12" PERC. TEST 19B: 16 MIN./IN. @ 12" B) SHALLOW ABSORPTION TRENCHES APPLICATION RATE: 0.70 GPD/SF ABSORPTION AREA REQUIRED: 440 GPD/0.70 GPD/SF = 629 SF ABSORPTION AREA PROPOSED: 6 TRENCHES (2' WIDE)(53' LONG) = 636 SF C) <u>TEST PIT DATA:</u> 0-5" TOPSOIL AND LEAF LITTER COVER 5"-10" REDDISH BROWN FINE SANDY SILT AND GRAVEL, DAMP 10"-23" LIGHT BROWN SANDY SILT AND GRAVEL 23"-72" REDDISH BROWN FINE SILTY SAND AND GRAVEL, SOME COBBLES NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED. **DESIGN BASIS:** LOT NO. 20 A) PERCOLATION TEST DATA: PERC. TEST 20A: 6 MIN./IN. @ 12" PERC. TEST 20B: 5 MIN./IN. @ 12" B) SHALLOW ABSORPTION TRENCHES APPLICATION RATE: 1.00 GPD/SF ABSORPTION AREA REQUIRED: 440 GPD/1.00 GPD/SF = 440 SF ABSORPTION AREA PROPOSED: 4 TRENCHES (2' WIDE)(55' LONG) = 440 SF C) <u>TEST PIT DATA:</u> 0-5" TOPSOIL AND LEAF LITTER COVER 5"-18" REDDISH BROWN FINE SANDY SILT AND GRAVEL 18"-72" LIGHT BROWN SANDY SILT AND GRAVEL WITH COBBLES NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED. DESIGN BASIS: LOT NO. 21 A) PERCOLATION TEST DATA: PERC. TEST 21A: 1:30 MIN./IN. @ 12" PERC. TEST 21B: 9 MIN./IN. @ 12" B) SHALLOW ABSORPTION TRENCHES APPLICATION RATE: 0.90 GPD/SF ABSORPTION AREA REQUIRED: 440 GPD/0.90 GPD/SF = 489 SF ABSORPTION AREA PROPOSED: 5 TRENCHES (2' WIDE)(49' LONG) = 490 SF C) TEST PIT DATA: 0-8" TOPSOIL AND LEAF LITTER COVER 8"-17" REDDISH BROWN FINE SANDY SILT AND GRAVEL 17"-25" LIGHT BROWN SANDY SILT AND GRAVEL 25"-72" LIGHT BROWN SANDY SILT AND GRAVEL AND COBBLES NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED. 1. PERCOLATION TESTS AND TEST CUTS PERFORMED ON OCTOBER 28, 2019 AND OCTOBER 29, 2019 BY KEYSTONE ASSOCIATES, ARCHITECTS, ENGINEERS AND SURVEYORS, LLC. 2. PERCOLATION TEST RESULTS SHOWN INDICATE SLOWEST PERCOLATION RATE OBTAINED FROM MULTIPLE TESTS CONDUCTED FOR EACH LOT. 3. ALL LAYOUTS SHOWN ON PLANS ARE BASED ON GRAVITY FLOW OF WASTEWATER FROM HOMES TO SEWAGE DISPOSAL SYSTEMS. IF SYSTEM IS LOCATED WHERE GRAVITY FLOW IS NOT PROVIDED IT WILL REQUIRE THE USE OF A SEWAGE PUMP STATION WHICH WILL REQUIRE DESIGN AND SUBMISSION TO TOWN OF FORESTBURGH

BUILDING DEPARTMENT.

**DESIGN BASIS: LOT NO. 16** 

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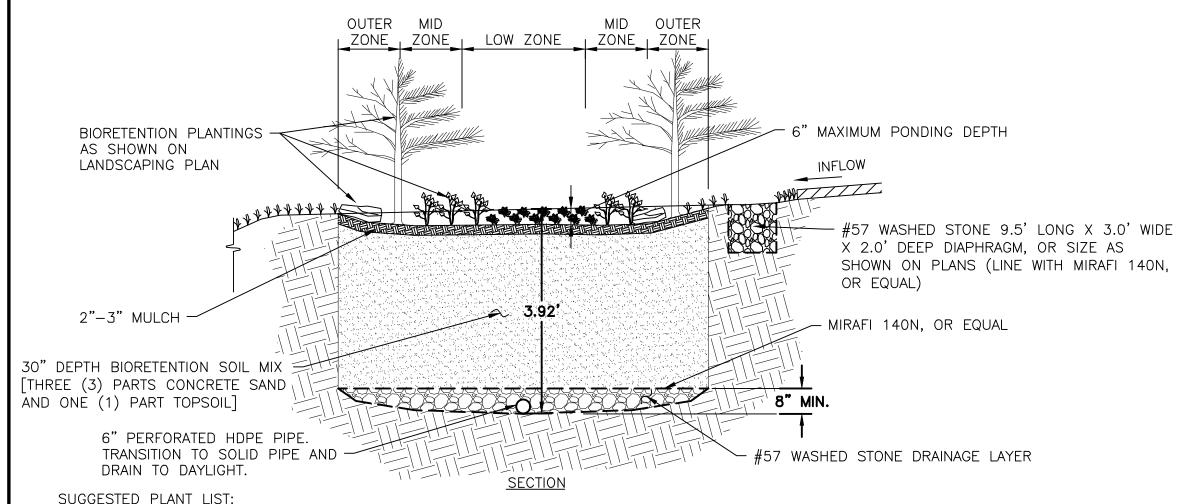
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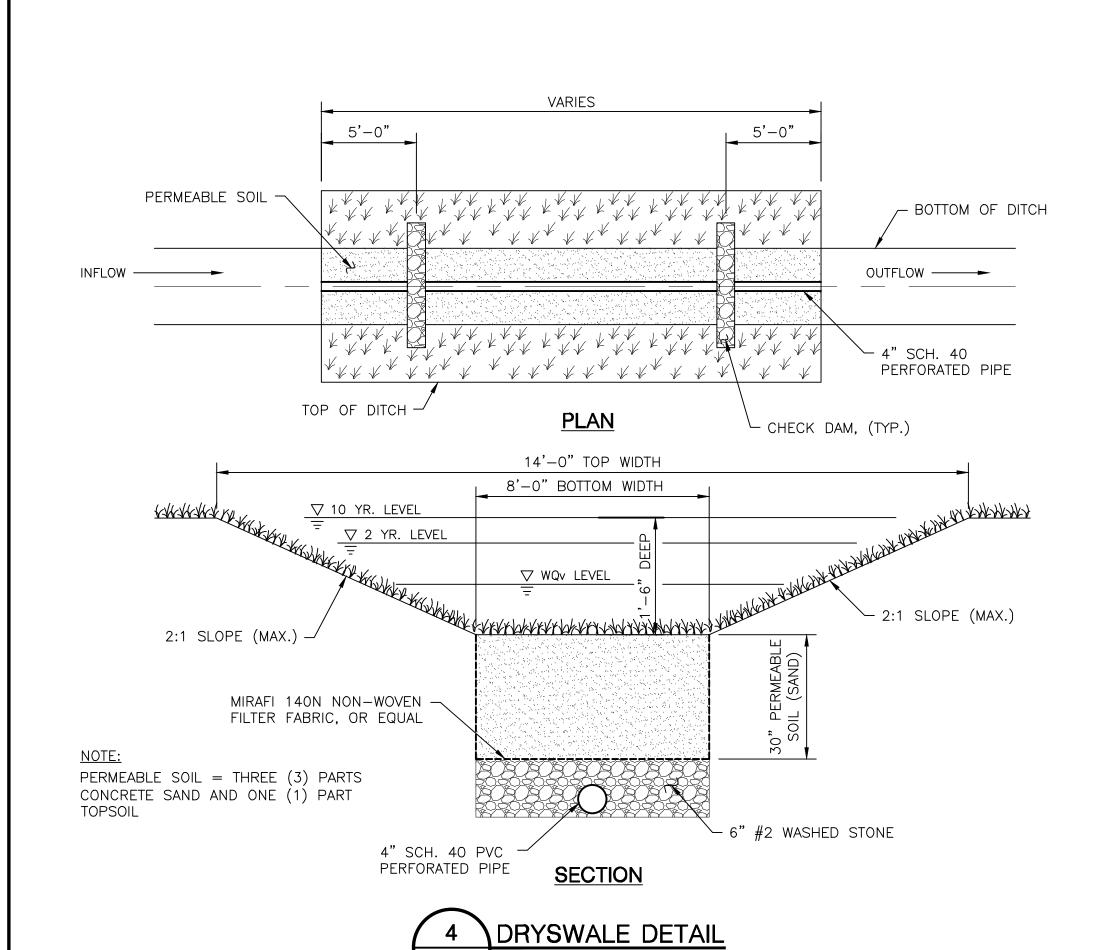
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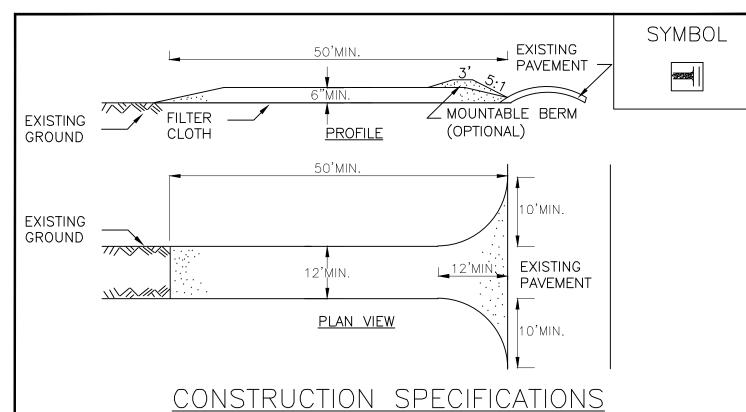


SUGGESTED PL	ANT LIST:		
	LOW ZONE	MID ZONE	OUTER ZONE
HERBACEOUS	ARROW ARUM (PELTANDRA VIRGINICA)		
(PLANTED	BLUE FLAG IRIS (IRIS VERSICOLOR)		
APPROXIMATELY	BLUE JOINT (CALAMAGROTIS CANADENSIS)	BLUE JOINT (CALAMAGROTIS CANADENSIS)	
2.5' ON CENTER)	BROOMSEDGE (ANDROPOGON VIRGINICUS)	· · · · · · · · · · · · · · · · · · ·	
		CARDINAL FLOWER (LOBELIA CARDINALIS)	CARDINAL FLOWER (LOBELIA CARDINALIS)
	COMMON THREE-SQUARE (SCIRPUS PUNGENS)		· ·
		FOWL MANNAGRASS (GLYCERIA STRIATA)	
	HARDSTEM BULRUSH (SCIRPUS ACUTUS)		
	LIZARD'S TAIL (SAURURUS CERNUUS)		
	PICKERELWEED (PONTEDERIA CORDATA)		
	REDTOP (AGROSTIS ALBA)	REDTOP (AGROSTIS ALBA)	REDTOP (AGROSTIS ALBA)
	RICE CUTGRASS (LEERSIA ORYZOIDES)		
	SEDGES (CAREX SPP.)		
	SOFT RUSH (JUNCUS EFFUSUS)	SOFT RUSH (JUNCUS EFFUSUS)	
	SPATTERDOCK (NUPHAR LUTEUM)		
	SWITCHGRASS (PANICUM VIRGATUM)	SWITCHGRASS (PANICUM VIRGATUM)	SWITCHGRASS (PANICUM VIRGATUM)
	SWEET FLAG (ACORUS CALAMUS)	i '	<u> </u>

- CHOOSE PLANTINGS FROM THE ABOVE LIST TO RESEMBLE A RANDOM AND NATURAL SYSTEM AND TO ESTABLISH A DIVERSE, DENSE PLANT COVER TO TREAT STORM WATER RUNOFF AND WITHSTAND URBAN STRESSES FROM INSECT AND DISEASE INFESTATIONS, DROUGHT, TEMPERATURE, WIND AND EXPOSURE.





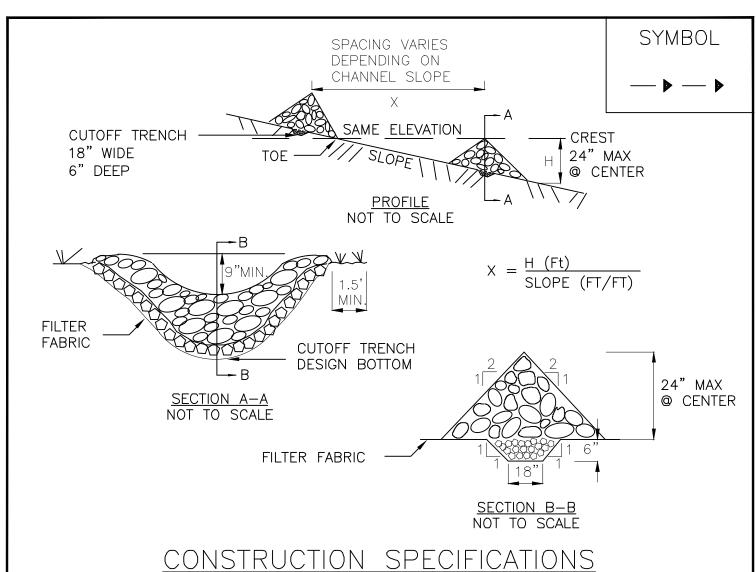


- 1. STONE SIZE USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- 2. LENGTH NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- 3. THICKNESS NOT LESS THAN SIX (6) INCHES.
- 4. WIDTH TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
- 5. GEOTEXTILE WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- 6. SURFACE WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CON— STRUCTION ACCESS SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- . MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- 8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- 9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH

ADAPTED FROM DETAILS PROVIDED BY: USDA — NRCS,
NEW YORK STATE DEPARTMENT OF TRANSPORTATION,
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

STABILIZED CONSTRUCTION ACCESS

### STABILIZED CONSTRUCTION ACCESS

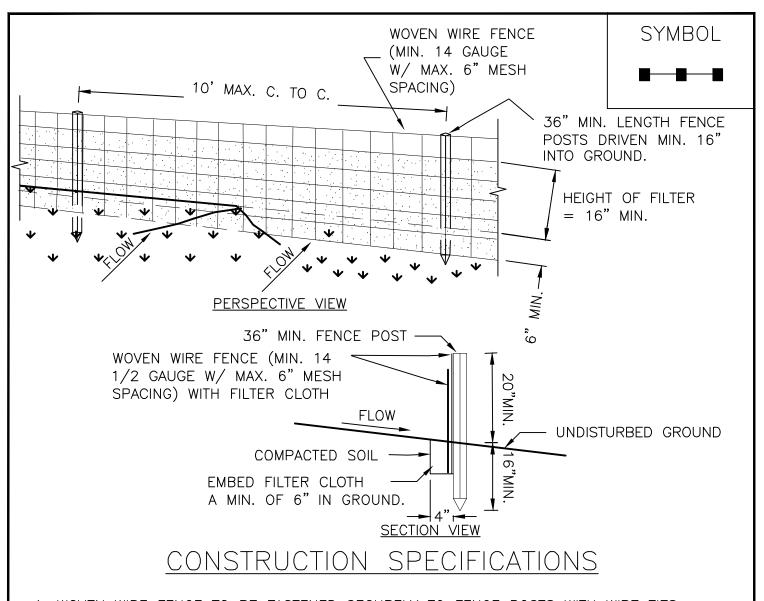


- 1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
- 2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
- 3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
- 4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
- 5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE. MAXIMUM DRAINAGE AREA 2 ACRES.

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

CHECK DAM

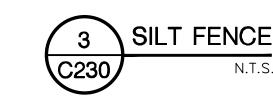


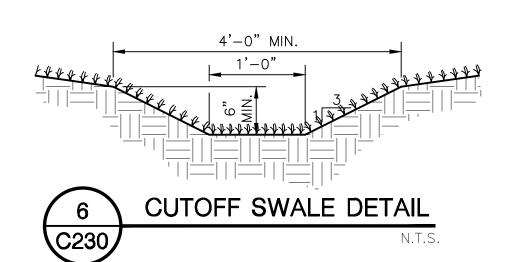


- 1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
- 2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
- 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER— LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
- 4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
- 5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

SILT FENCE



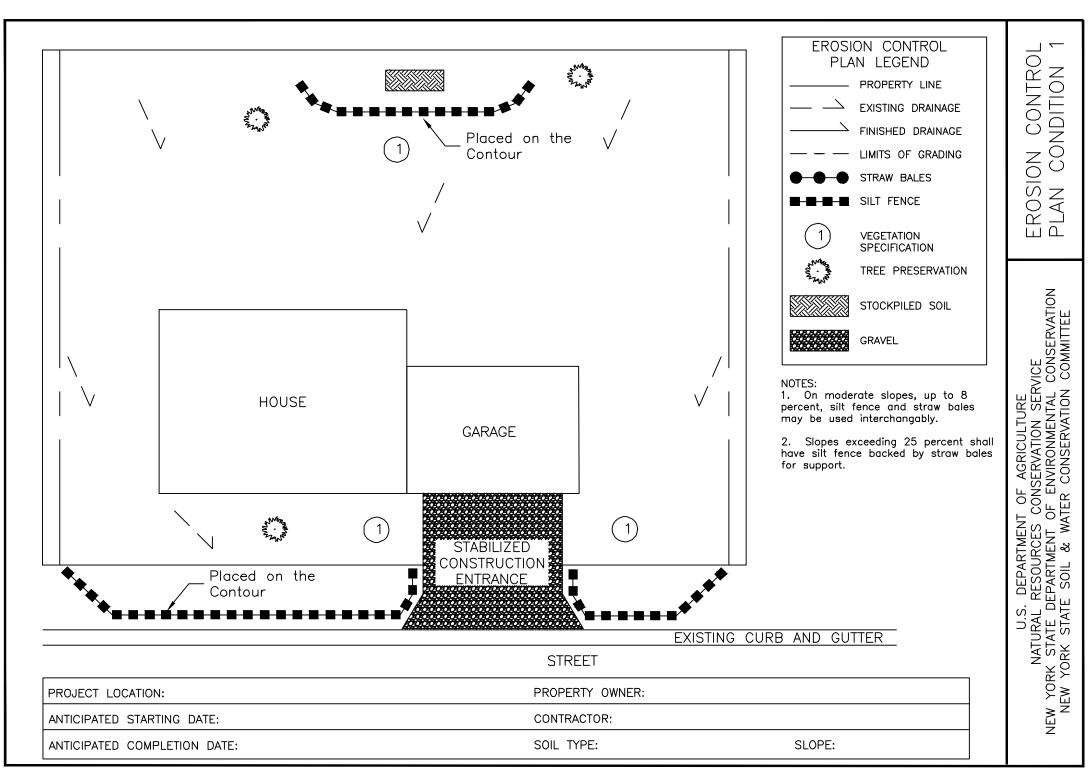


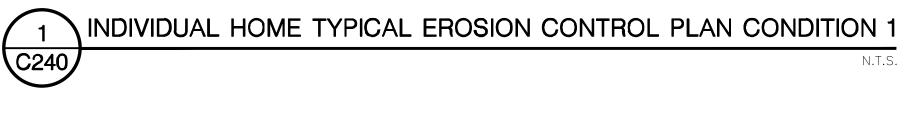
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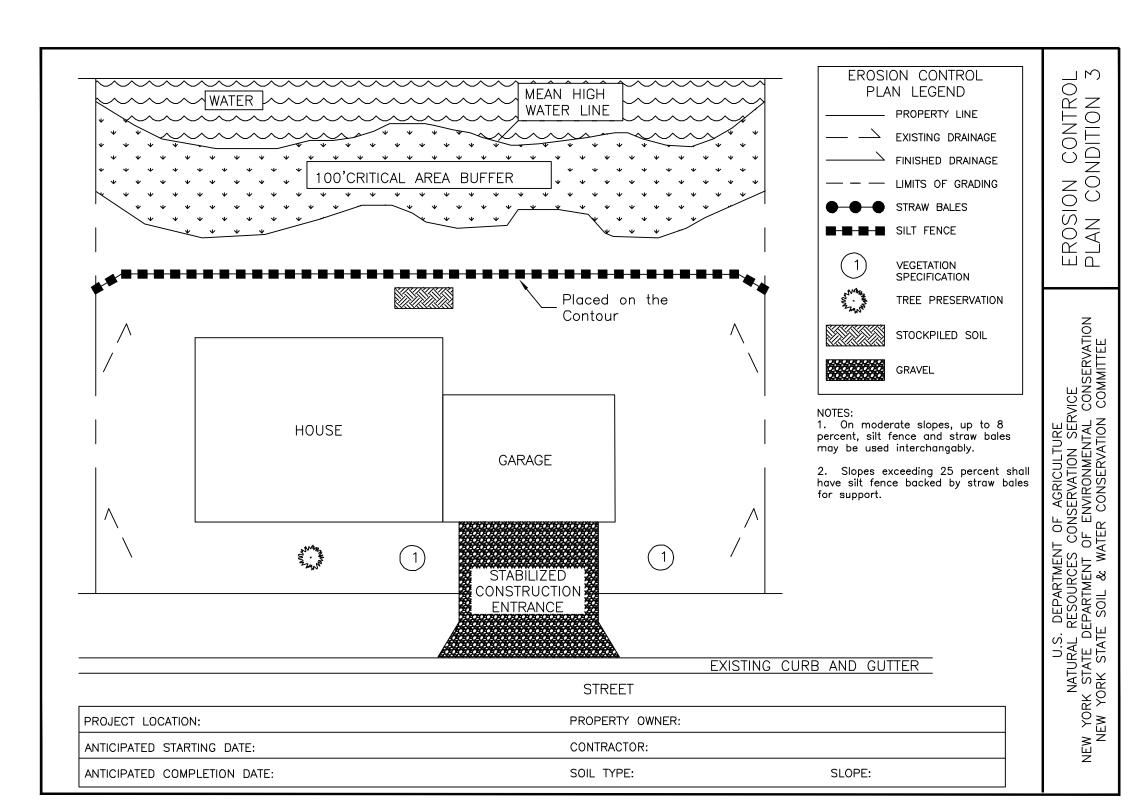
**DETAILS 1** STORMWATER

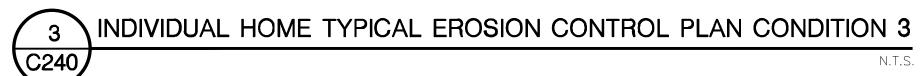
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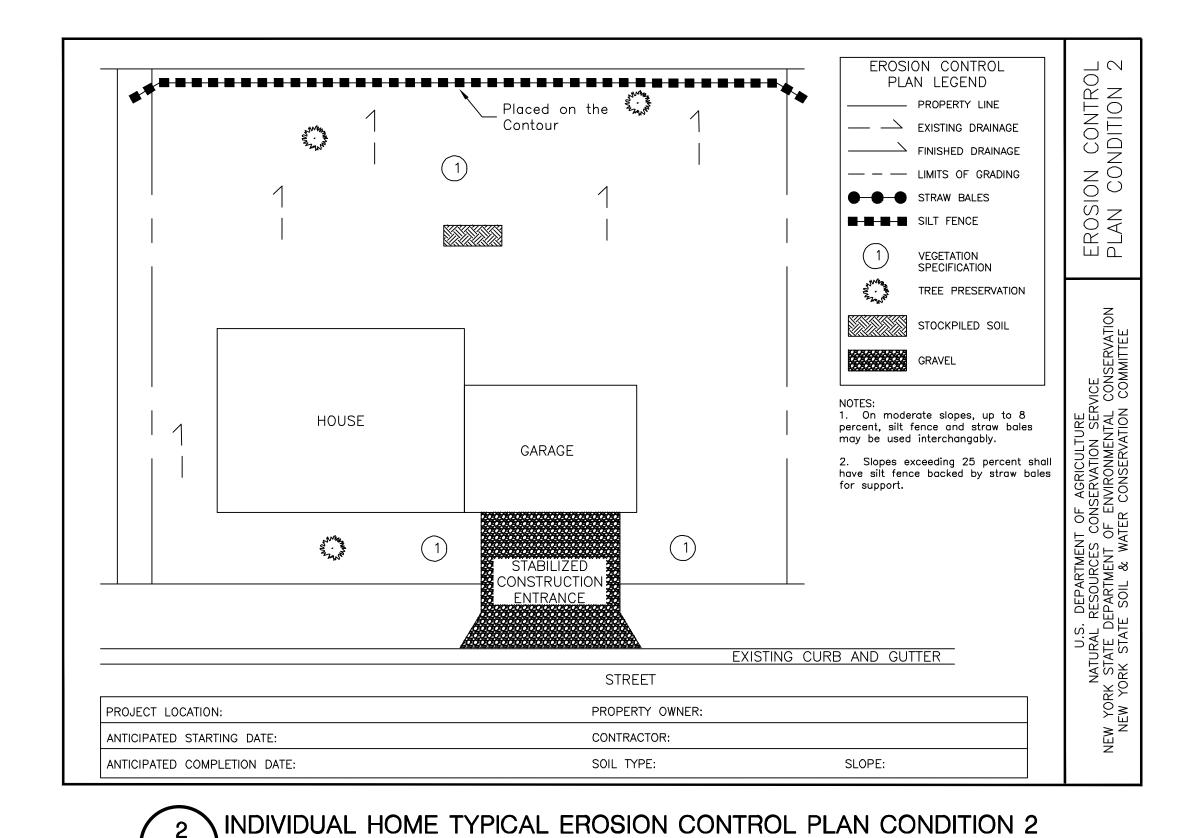
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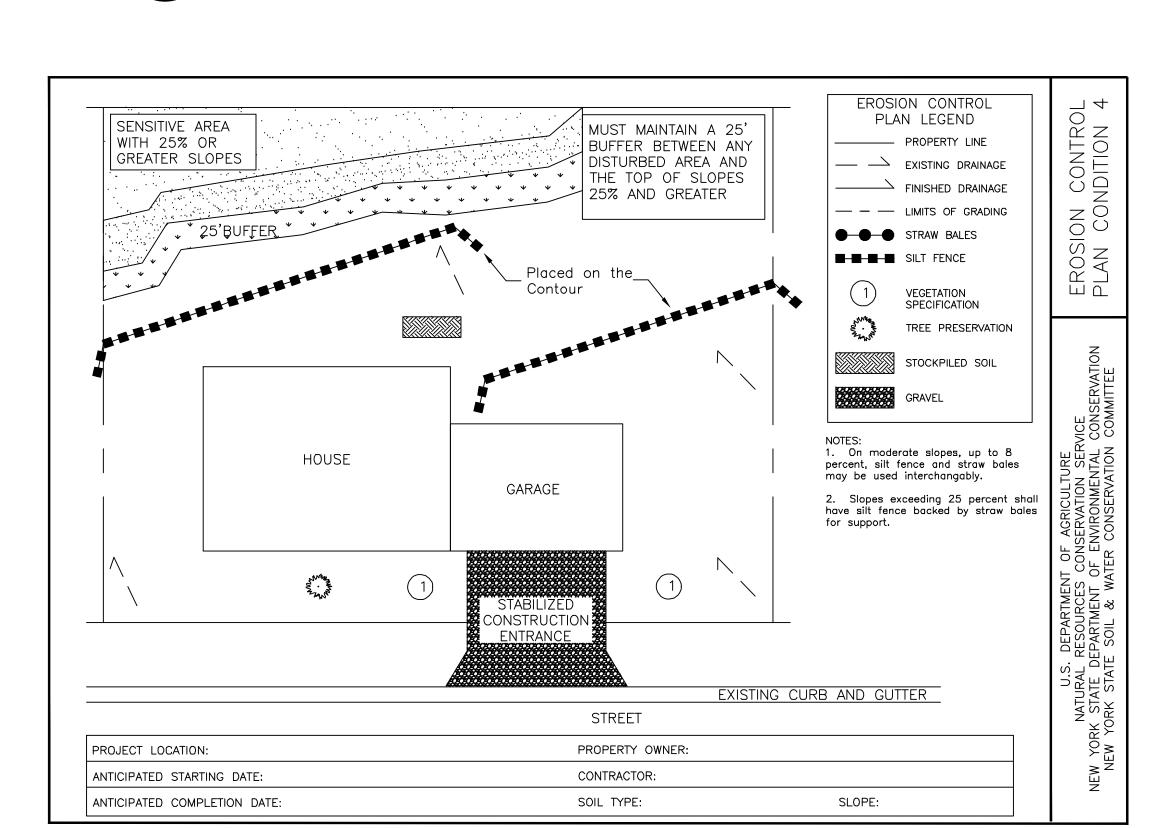












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TOWN OF FORESTBURGH SULLIVAN COLINDIVIDUAL HOME TYPICAL EROSIC

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