

McGOEY, HAUSER and EDSALL
CONSULTING ENGINEERS D.P.C.

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Principal Emeritus:
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**TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS**

PROJECT: MADAN SUBDIVISION
PROJECT NO.: 20-06
PROJECT LOCATION: SECTION 1, BLOCK 1, LOT 132
REVIEW DATE: 24 JUNE 2020
MEETING DATE: 2 JULY 2020
PROJECT REPRESENTATIVE: MECURIO-NORTON-TAROLLI-MARSHALL ENGINEERING

1. Comments from the Highway Superintendent on the driveway locations and clearing notes should be received.
2. The project will be circulated to the Town of Plattekill as it is located on the Town of Newburgh/Town of Plattekill Town line.
3. Any conditions of approval should include the relocation of the utilities serving the existing structure prior to filing of the map.

Respectfully submitted,

***McGoey, Hauser and Edsall
Consulting Engineers, D.P.C.***

Patrick J. Hines
Principal

PJH/dns

Lawrence J. Marshall, P.E.
John Tarolli, P.E., L.S.

Zachary A. Peters, P.E.
Kenneth W. Vriesema, L.S.

May 28, 2020

Planning Board
Town of Newburgh
308 Gardnertown Road
Newburgh, NY 12550
Also via email: planningboard@townofnewburgh.org

Re: Job No. 2822-110B
Tax Parcel 1-1-32
Town of Newburgh, Orange County
757 Orchard Drive
Residential Subdivision

Dear Board Members:

Enclosed please find the following items in reference to the above-captioned project:

1. Ten (10) copies of the revised Subdivision Plan

The following comments are in response to a review by Patrick Hines of McGoey, Hauser, & Edsall Consulting Engineers, dated May 7, 2020:

1. The proposed utility easement has been widened to 20-feet. The applicant has agreed to relocate the utility line prior to the filing of the subdivision map. We anticipate this will be a condition of approval for the maps the signed.
2. The Sight Distance Table on sheet 2 has been revised to specify the sight line to the left out of the proposed driveways requires minor clearing of overhanging branches and roadside brush along the project frontage. A note to this effect has been added to the referenced area on sheet 1. No major clearing is required other than trimming of vegetation that overhangs into the right-of-way. We do not believe a permanent clearing easement is required. Note 9 has been included on sheet 1 specifying individual lot owners are responsible for clearing and maintaining 13 feet from the edge of pavement along Orchard Drive to maintain adequate sight distance.
3. Note 10 has been included on sheet 1 referencing the required as-built sewer certification prior to the issuance of a certificate of occupancy. If different wording or notation is required, please advise.
4. No response required.
5. A copy of the subdivision plan has been forwarded to the Highway Superintendent for review and comment. The proposed driveway locations have also been staked in the field for his review.
6. No response required.



Please place this project on the next available meeting agenda for discussion.

If you have any questions or concerns, please feel free to contact me at (845) 744-3620 or by email at zpeters@mntm.co.

Sincerely,

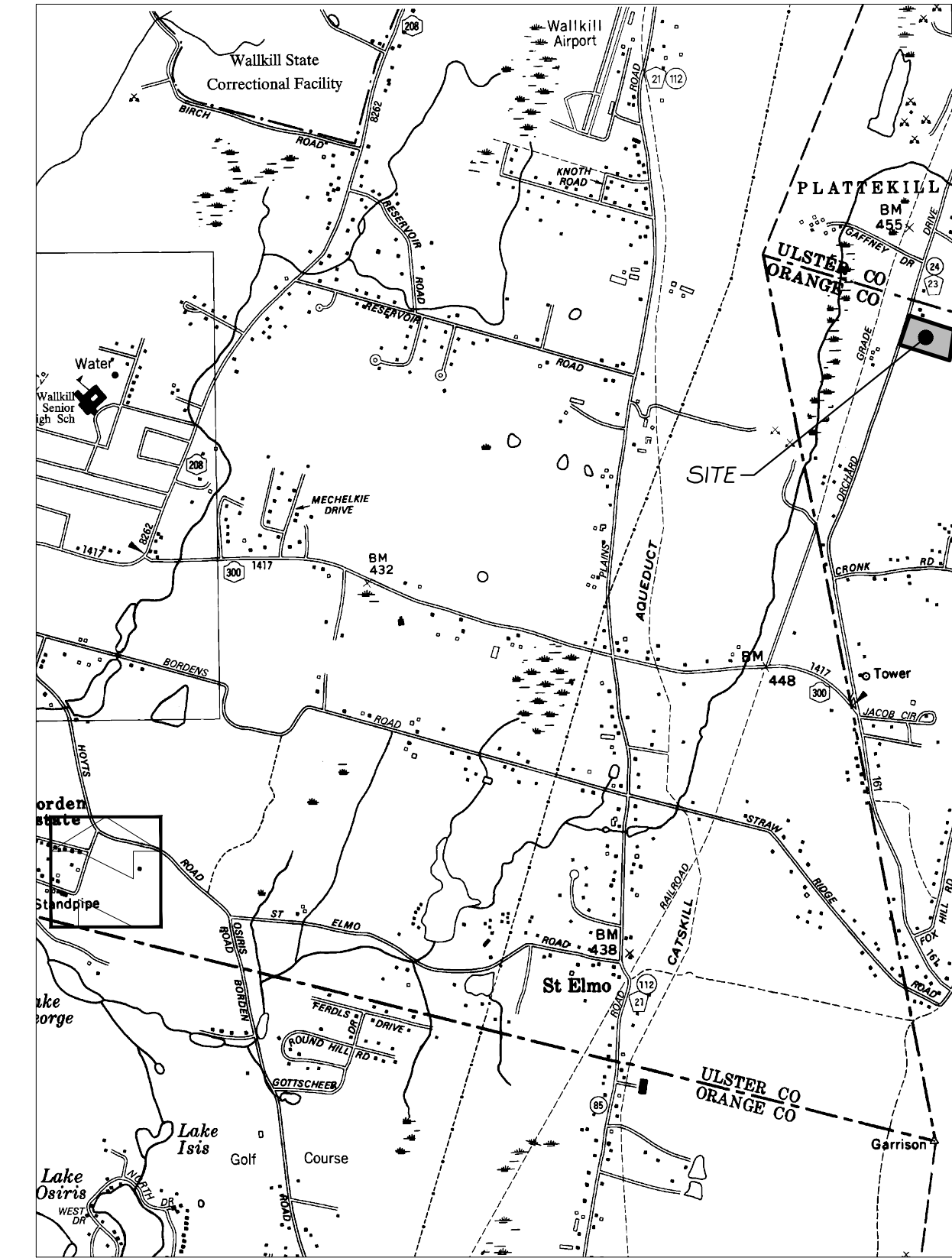
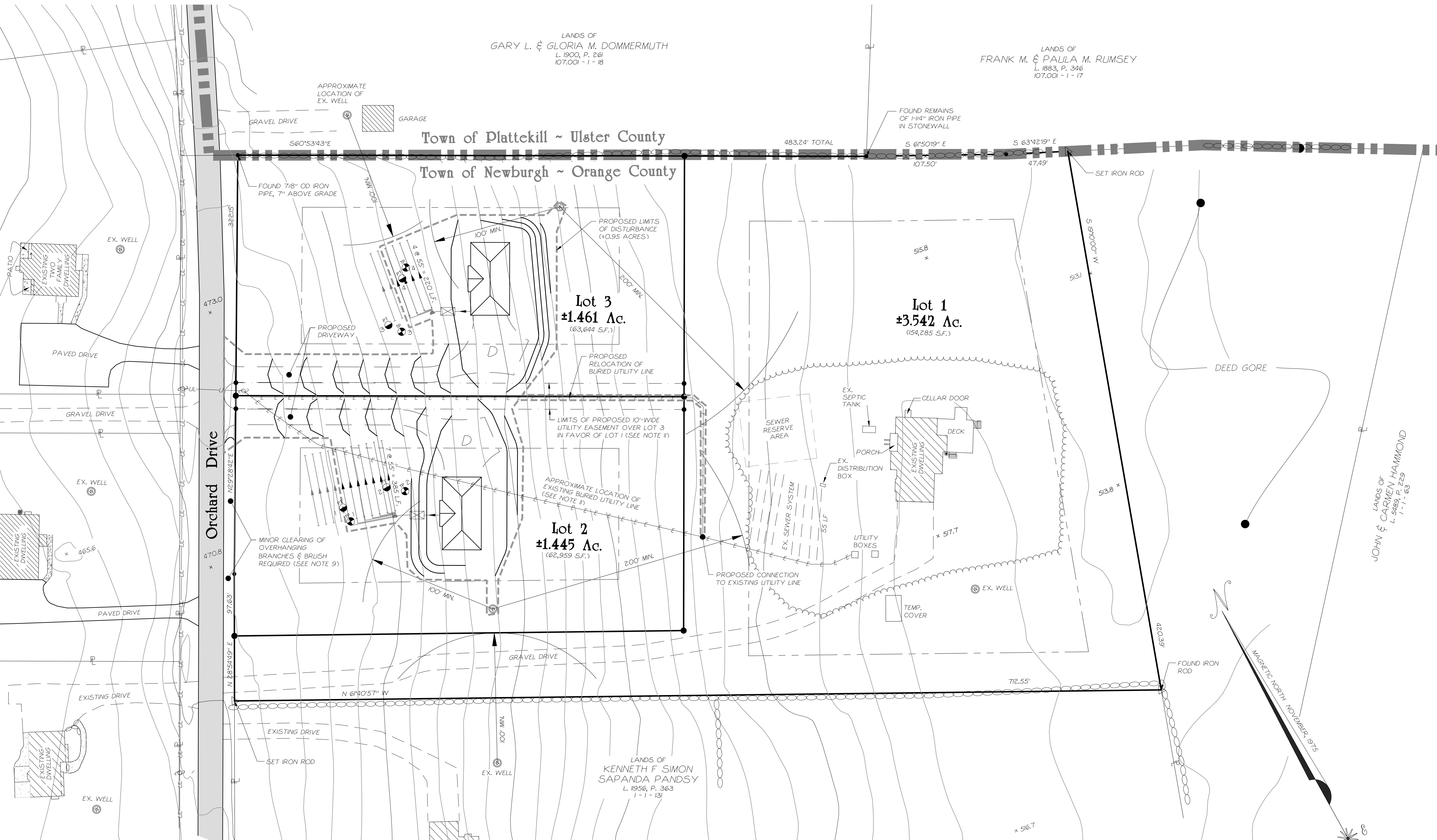


Zachary A. Peters, P.E.

ZAP/zap
Enc.

Cc: Patrick Hines (*via email & mail*) - *w.enc*
Dominic Cordisco (*via email*) - *w.enc*
Robert Madan (*via email*) - *w.enc*
Ann-Margaret Bolton (*via email*) - *w.enc*





Location Map
SCALE: 1" = 2,000'

- Notes:**
- 1) THE INFORMATION SHOWN HEREON IS BASED UPON AN ACTUAL FIELD SURVEY COMPLETED BY MERCURIO-NORTON-TAROLLI-MARSHALL ENGINEERS & LAND SURVEYING, P.C. ON JULY 23, 2002 AND MOST RECENTLY UPDATED ON FEBRUARY 15, 2020.
 - 2) SUBJECT TO ANY FACTS THAT MAY BE REVEALED BY AN ACCURATE, UP TO DATE, TITLE ABSTRACT REPORT.
 - 3) SUBJECT TO UTILITY GRANTS OF RECORD.
 - 4) SUBJECT TO THAT PORTION OF LAND WITHIN THE BOUNDS OF ORCHARD DRIVE FOR USE AS A PUBLIC HIGHWAY.
 - 5) VERTICAL DATUM IS NAVD88.
 - 6) THIS PARCEL IS KNOWN AS LOT 10 OF A MAP ENTITLED "SURVEY & SUBDIVISION MAP OF LANDS OF NORTHEAST CONSTRUCTION CORPORATION", FILED IN THE ORANGE COUNTY CLERK'S OFFICE ON NOVEMBER 25, 2002, AS MAP NUMBER 252-02. SUBJECT TO ALL NOTES AND DETAILS AS SHOWN ON SAID FILED MAP.
 - 7) THERE ARE NO WELLS AND SEWAGE DISPOSAL SYSTEMS ON ADJACENT PROPERTIES WITHIN 100' OR 200' (AS REQUIRED BY NYS DOH STANDARDS) OF THE PROPOSED WELLS AND SEWAGE DISPOSAL SYSTEMS FOR EACH LOT.
 - 8) NO EXCAVATED MATERIAL IS ANTICIPATED TO BE REMOVED FROM THE SITE. APPROXIMATELY 160 C.Y. OF FILL IS REQUIRED FOR THE HOUSE AND DRIVEWAY CONSTRUCTION. THE PROPOSED DISTURBANCE IS APPROXIMATELY 0.94 ACRES.
 - 9) LOT OWNERS SHALL BE RESPONSIBLE FOR CLEARING AND MAINTAINING 13 FEET FROM THE EDGE OF ORCHARD DRIVE PAVEMENT TO MAINTAIN ADEQUATE SIGHT DISTANCES.
 - 10) PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR ANY SEWERAGE SYSTEM SUBJECT TO THE PROVISIONS OF LOCAL LAW 1, 1989, THE TOWN OF NEWBURGH BUILDING INSPECTOR MUST RECEIVE AN "AS-BUILT" PLAN OF SUCH SYSTEM BEARING THE FOLLOWING CERTIFICATION OF A PROFESSIONAL ENGINEER OR OTHER AUTHORIZED DESIGN PROFESSIONAL AS SET FORTH ABOVE: "I HEREBY CERTIFY TO THE TOWN OF NEWBURGH THAT THE SEWERAGE SYSTEM DEPICTED ON THIS PLAN HAS BEEN DESIGNED AND INSTALLED IN ACCORDANCE WITH THE NEW YORK STATE PUBLIC HEALTH LAW AND ALL REGULATIONS PROMULGATED THEREUNDER."
 - 11) THE EXISTING BURIED UTILITY LINE SERVING THE DWELLING ON LOT 1 WILL BE RELOCATED AS SHOWN, SUBJECT TO A PROPOSED UTILITY EASEMENT THROUGH LOT 3 IN FAVOR OF LOT 1.

Zoning Legend: AR

REQUIRED	LOT 1	LOT 2	LOT 3	
MINIMUM LOT AREA	40,000 S.F.	154,285 S.F.	62,959 S.F.	63,644 S.F.
MINIMUM LOT WIDTH	150'	185'	184'	184'
MINIMUM LOT DEPTH	150'	342'	345'	345'
MINIMUM FRONT YARD	50'	158'	157'	178'
MINIMUM REAR YARD	50'	10'	156'	134'
MINIMUM SIDE YARD (ONE)	30'	16'	62'	62'
MINIMUM SIDE YARD (BOTH)	80'	34'	126'	129'
MINIMUM HABITABLE FLOOR AREA	900 S.F.	>900 S.F.	>900 S.F.	>900 S.F.
MAXIMUM LOT BUILDING COVERAGE	10%	15%	24%	27%
MAXIMUM BUILDING HEIGHT	35'	<35'	<35'	<35'
MAXIMUM LOT SURFACE COVERAGE	20%	6.6%	8.6%	9.1%

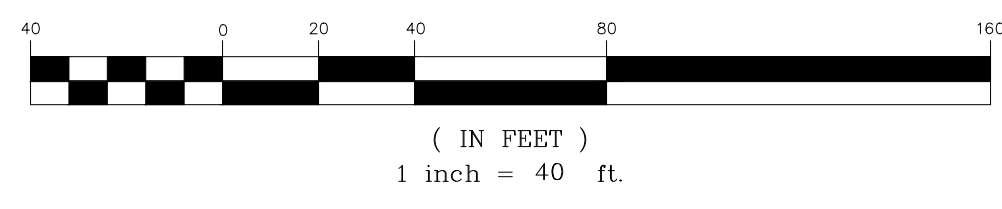
Parcel Information

TAX PARCEL:	SECT. 1, BLOCK 1, LOT 132
AREA:	6.448 ACRES
RECORD OWNER:	ROBERT P. & DEBORAH C. MADAN 757 ORCHARD DRIVE WALLKILL, NY 12589
DEED REFERENCE:	LIBER #623, PAGE 1588
MAP REFERENCE:	LOT 10, NORTHEAST CONSTRUCTION CORP. SUBD. FILED MAP #252-02 (11-25-2002)

Legend

- | | | | |
|--|---|--|---|
| | PROPERTY LINE & CORNER | | TEST PIT LOCATION |
| | SET 5/8" IRON ROD AT PROPERTY CORNER | | PERCOLATION LOCATION |
| | ADJOINER PROPERTY LINE | | PROPOSED BUILDING |
| | DEED LIBER, PAGE | | ZONING MINIMUM SETBACK LINE |
| | TAX PARCEL DESIGNATION (SECTION - BLOCK - LOT) | | PROPOSED 1250-GALLON SEPTIC TANK & 4" DIA SOLID WALL PVC SDR35 PIPE |
| | EXISTING UTILITY POLE & LINE | | PROPOSED SEWER CLEANOUT |
| | EXISTING CULVERT & SIZE | | PROPOSED DISTRIBUTION BOX & 4" DIA SOLID WALL PVC SDR35 PIPE |
| | STONE WALL | | PROPOSED 4" DIA PERFORATED PVC SEWER DISTRIBUTOR PIPE |
| | WIRE FENCE | | RESERVE 4" DIA PERFORATED PVC SEWER DISTRIBUTOR PIPE |
| | WATERCOURSE | | PROPOSED DRIVEWAY |
| | APPROXIMATE LOCATION OF EXISTING BUILDING / STRUCTURE | | PROPOSED WELL LOCATION |
| | SIGN LOCATION | | PROPOSED CURTAIN DRAIN (SEE DETAIL) |
| | EXISTING TREELINE | | PROPOSED DIVERSION SWALE (SEE DETAIL) |

GRAPHIC SCALE



"UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S EMBOSSED SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW."
"ONLY COPIES FROM THE ORIGINAL TRACINGS OF THIS SURVEY MAP MARKED WITH THE LAND SURVEYORS EMBOSSED SEAL SHALL BE CONSIDERED VALID, TRUE COPIES."
"CERTIFICATIONS INDICATED HEREON SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYORS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. SAID CERTIFICATIONS SHALL RUN ONLY TO THOSE NAMED INDIVIDUALS AND/OR INSTITUTIONS FOR WHOM THE SURVEY WAS PREPARED. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS, OR SUBSEQUENT OWNERS."

NO.	DATE	REVISION	BY
1	5-14-20	ENGINEER COMMENTS	1

I HEREBY CERTIFY TO ROBERT P. MADAN & DEBORAH C. MADAN THAT THIS MAP IS THE RESULT OF AN ACTUAL FIELD SURVEY COMPLETED BY MERCURIO-NORTON-TAROLLI-MARSHALL ENGINEERS & LAND SURVEYING, P.C. ON JULY 23, 2002 AND MOST RECENTLY UPDATED ON FEBRUARY 15, 2020.

JOHN TAROLLI LS #049201
LAWRENCE MARSHALL PE #087107

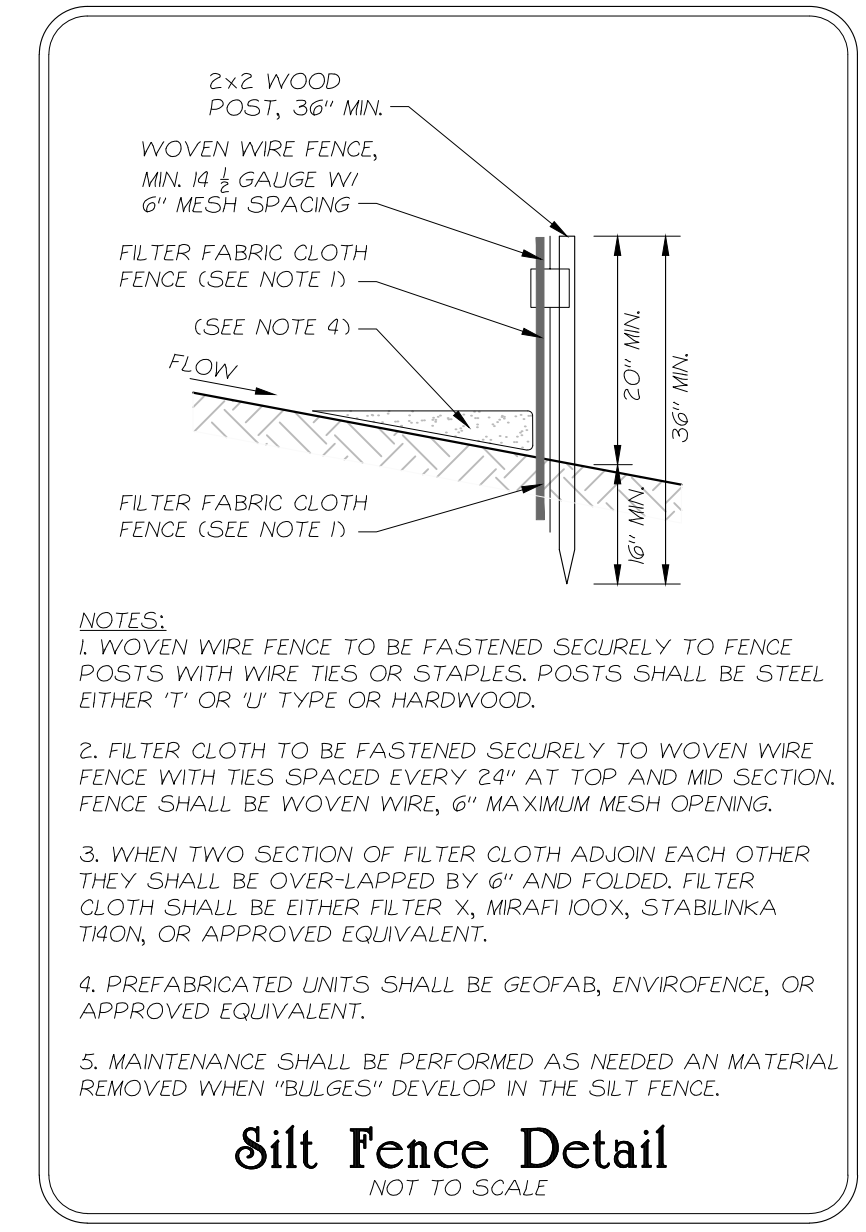
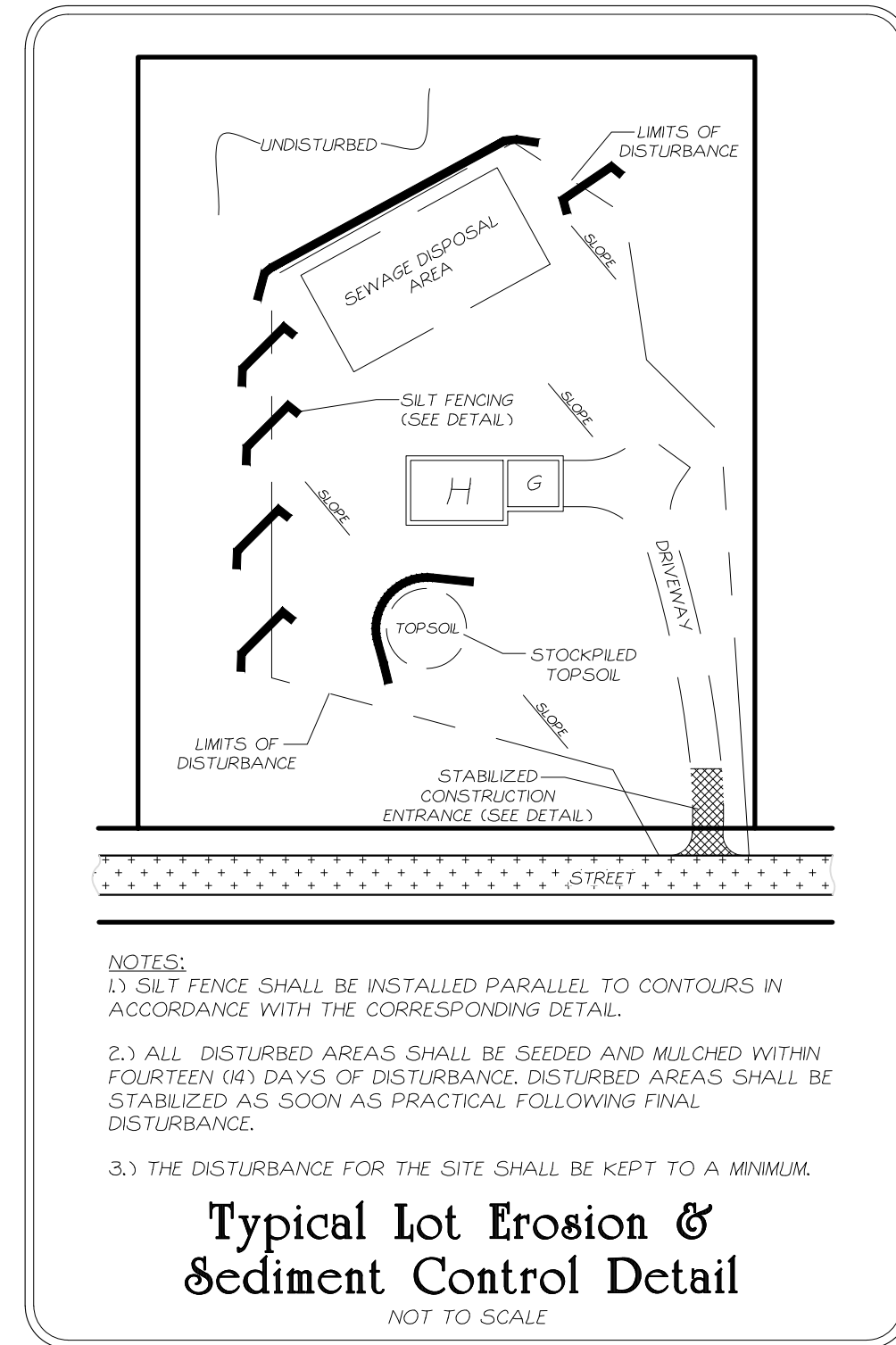
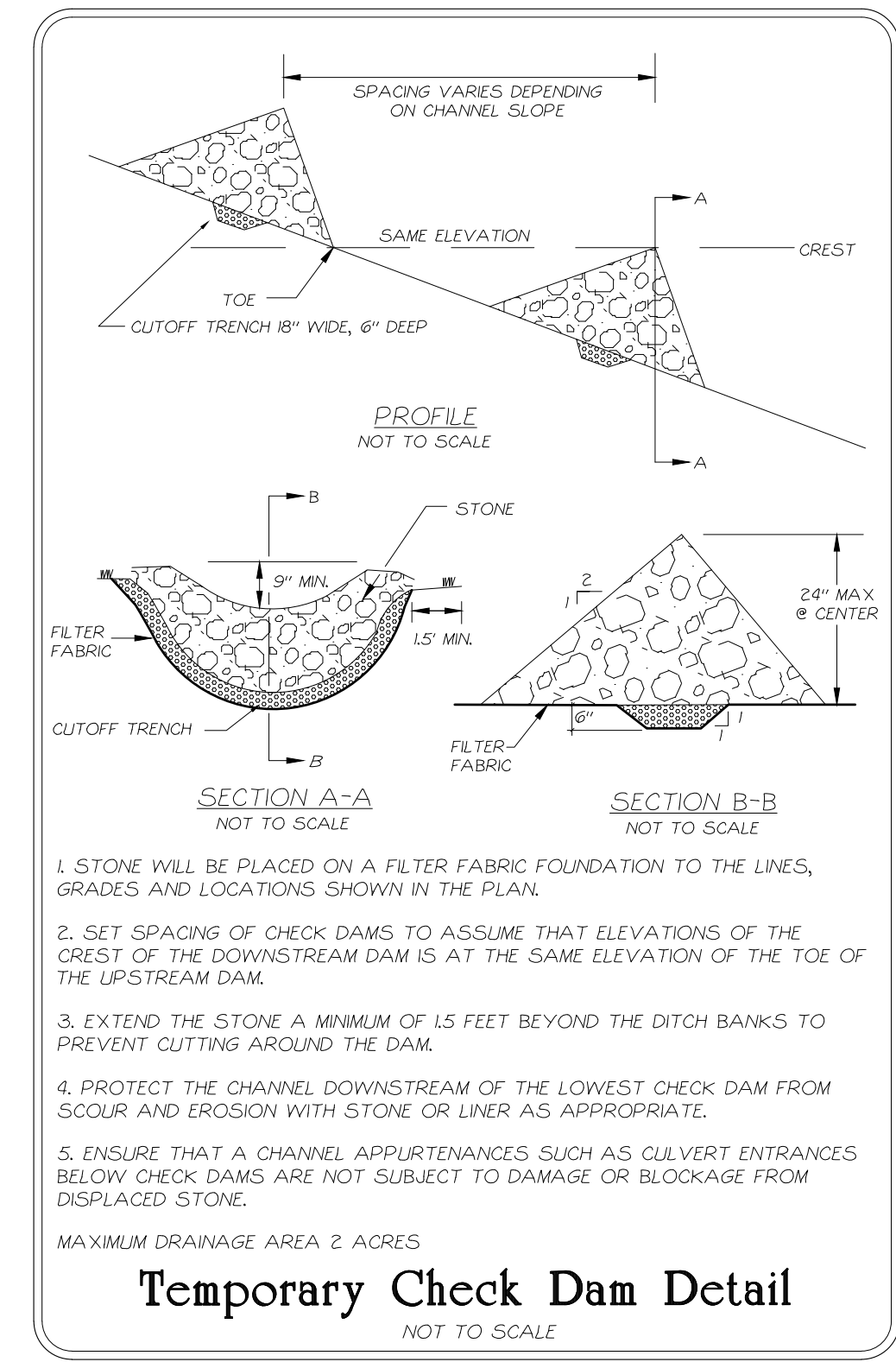
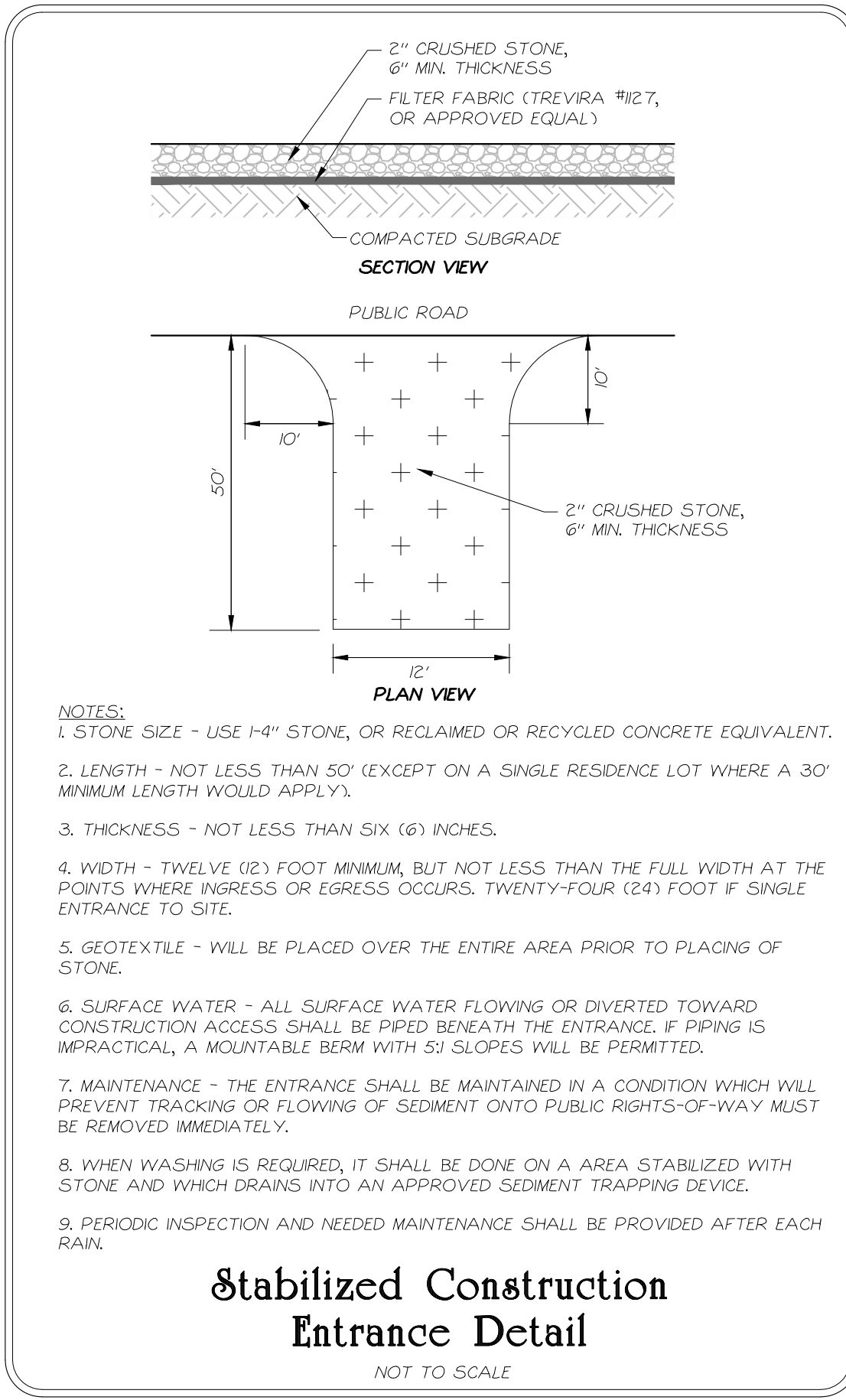
Survey Map & Subdivision Plan for Lands of Robert P. & Deborah C. Madan

MNTM
Mercurio-Norton-Tarolli-Marshall
ENGINEERING & LAND SURVEYING
PO BOX 166, 45 MAIN STREET, PINE BUSH, NY 12566
P: (845)744.3620 F: (845)744.3805 MNTM@MNTM.CO

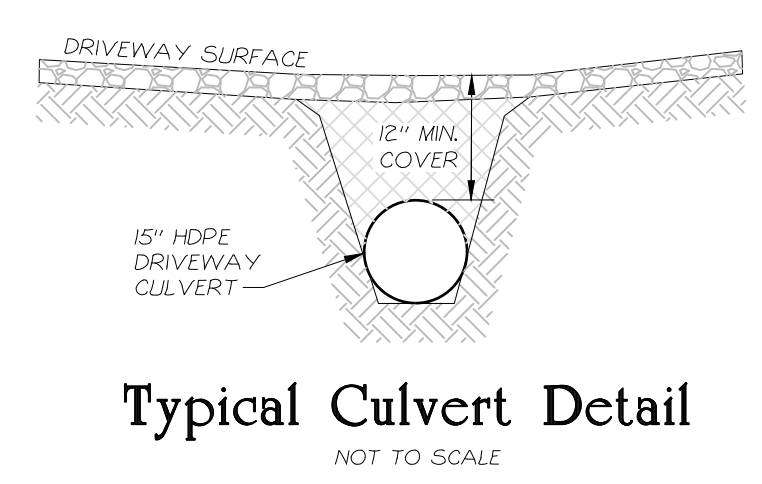
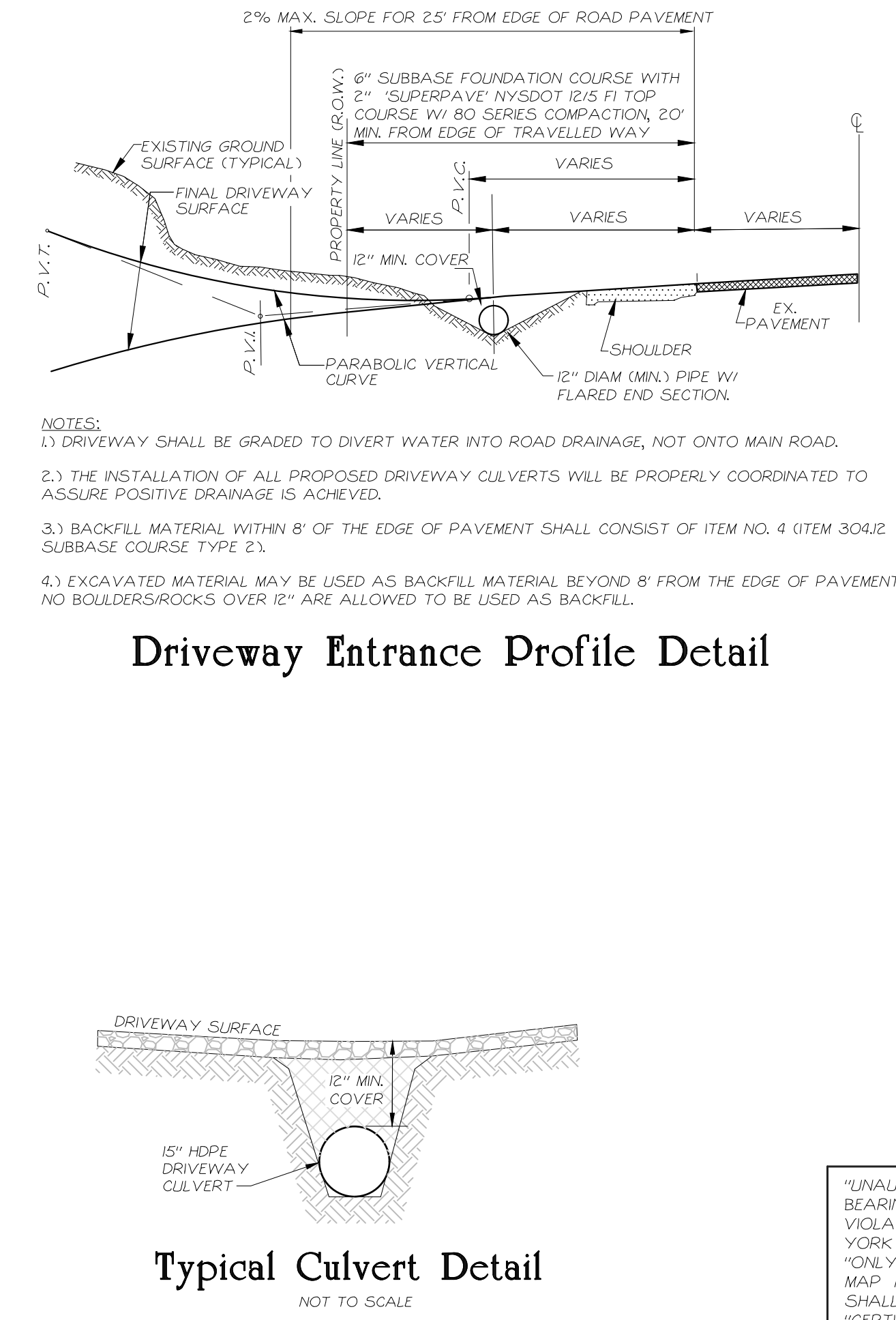
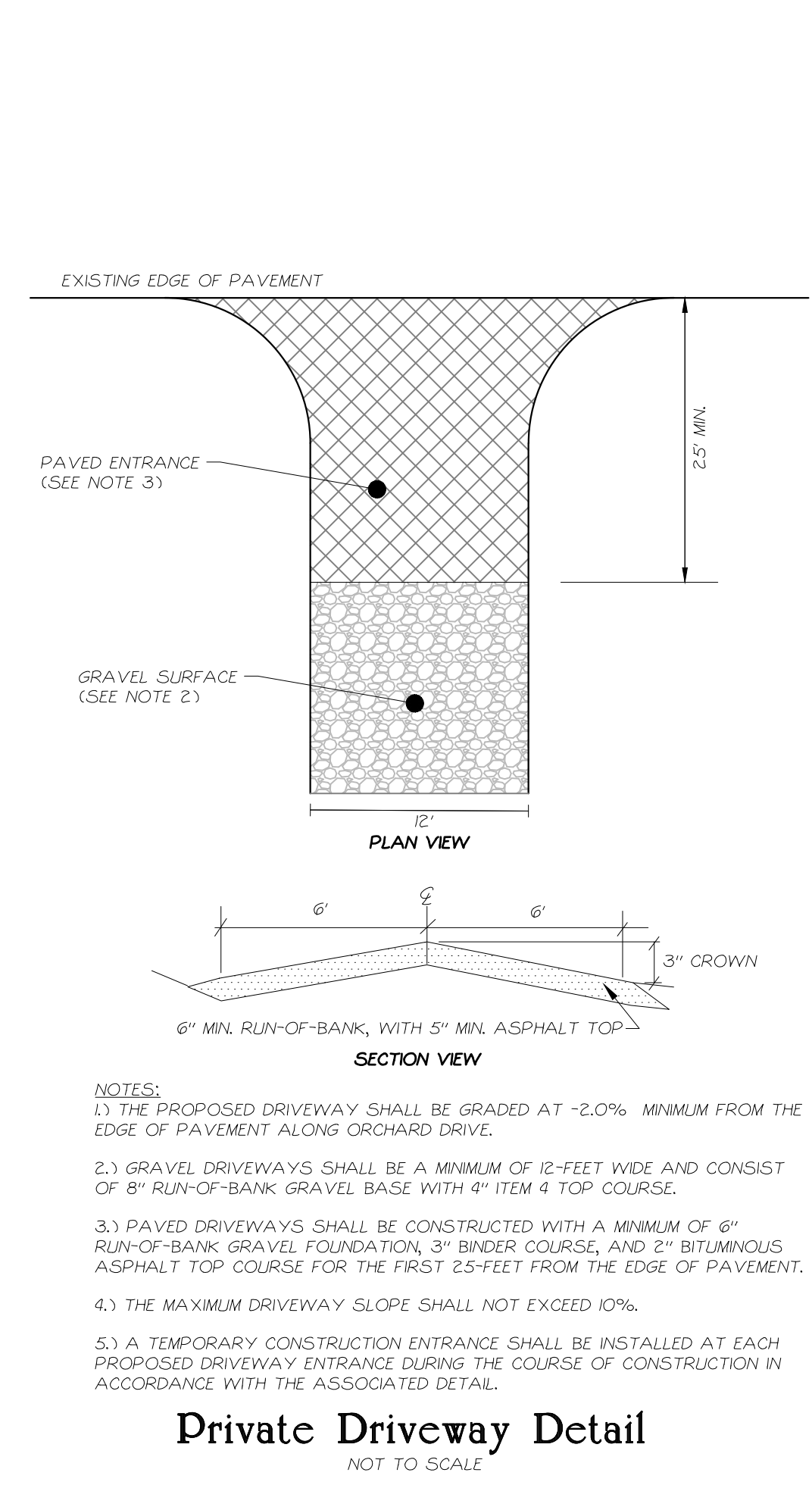
THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.

TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK

DRAFTED BY: KVV
DATE: FEBRUARY 24, 2020
PROJECT: 2822-10B
SHEET: 1 / 4



- Erosion & Sediment Control Notes:**
- DUST CONTROL SHALL BE PROVIDED IN TIMES OF DRY WEATHER. AREAS SHALL BE SPRAYED WITH WATER TO PREVENT DUST FROM TRANSFERRING TO ADJACENT PROPERTIES.
 - THE PROPOSED AREA OF DISTURBANCE IS APPROXIMATELY 0.94 ACRES.
 - IDLE DISTURBED AREAS SHALL BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION REQUIREMENTS IN THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, JULY 2006 EDITION. TEMPORARY STABILIZATION SPECIFICATIONS INCLUDE:
 - ANNUAL OR PERENNIAL RYEGRASS SEEDING WITH STRAW MULCHING AT A RATE OF 30 LBS PER ACRE.
 - COARSE WOOD CHIPS AT A RATE OF 500 LBS PER ACRE.
 - WOOD FIBER HYDROMULCH, AS PER MANUFACTURERS SPECIFICATIONS.
 - ALL DISTURBED AREAS NOT ENCLUMBERED BY LANDSCAPING MULCH, PAVEMENT, CONCRETE, OR OTHER IMPERVIOUS COVER BE STABILIZED WITH BLUE GRASS BLEND, WITH THE FOLLOWING SPECIFICATIONS:
 - 25% FESTUCA RUBRA COMMUTATA (CHEWING FESCUE)
 - 15% LOLIUM PERENNE (PERENNIAL RYEGRASS)
 - 60% POA PRATENSIS (KENTUCKY BLUEGRASS)
 - SEEDING SHALL BE PERFORMED AT A RATE OF FIVE (5) LBS. PER ACRE.



Sight Distance Table

MEASUREMENTS RECORDED BY: R. SMITHEM DATE: FEBRUARY 19, 2020

SPEED LIMIT ALONG ORCHARD ROAD = 30 MPH

LOCATION	SIGHT LINE	DISTANCE	NOTES
LOT 2	1	160'	LIMITED BY VERTICAL CURVE
	2	157'	MINOR CLEARING OF OVERHANGING BRANCHES & ROADSIDE BRUSH REQUIRED ALONG PROJECT FRONTAGE (SEE NOTE 9, SHEET 1)
LOT 3	1	157'	LIMITED BY VERTICAL CURVE
	2	160'	MINOR CLEARING OF OVERHANGING BRANCHES & ROADSIDE BRUSH REQUIRED ALONG PROJECT FRONTAGE (SEE NOTE 9, SHEET 1)

* NO CHANGES TO THE EXISTING LOT 1 DRIVEWAY PROPOSED OR REQUIRED.

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NO.	DATE	ENGINEER COMMENTS	ZAP	BY
1	5-14-20			

LAWRENCE MARSHALL PE #087107

Construction Detail Sheet
for
Robert P. & Deborah C. Madan

MNTM
ENGINEERING - LAND SURVEYING
Mercurio-Norton-Tarolli-Marshall
PO BOX 166 45 MAIN STREET, PINE BUSH, NY 12566
P: (845) 744-3620 F: (845) 744-3805 MNTM@MNTM.CO

TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DRAFTED BY: ZAP
DATE: FEBRUARY 24, 2020
PROJECT: 2822-10B
SHEET: 2 / 4

THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.

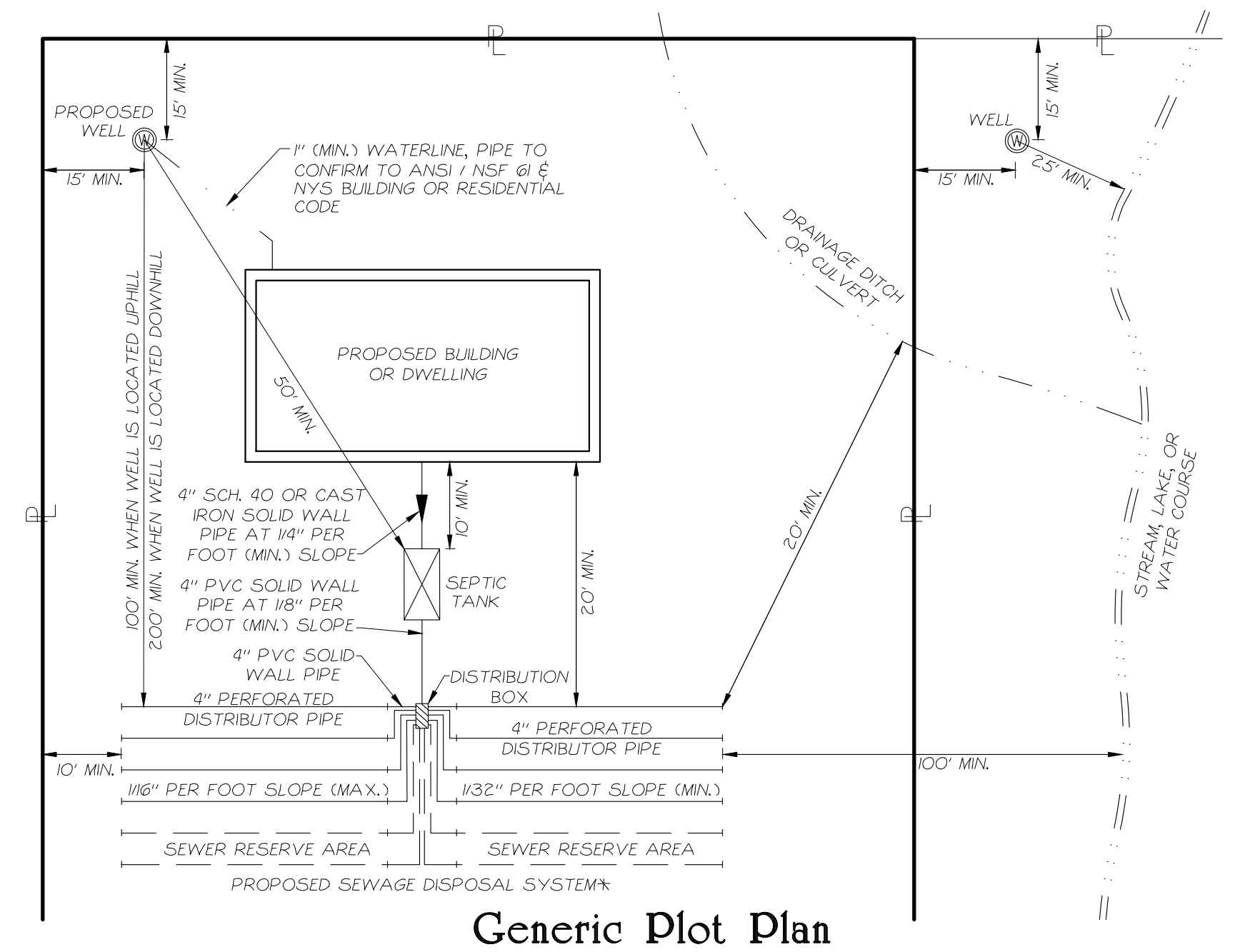
Deep Soils Testing Results

TEST HOLE #	1	2	3	4
TESTING DATE:	2-19-20	2-19-20	2-19-20	2-19-20
TESTER:	RTS	RTS	RTS	RTS
DEEP TEST SOIL LOG *NO WATER OR ROCK UNLESS SO NOTED	0' TOPSOIL 6"	0' TOPSOIL 6"	0' TOPSOIL 9"	0' TOPSOIL 9"
	1' SILT LOAM 18"	1' SILT LOAM 24"	1' SILT LOAM 24"	1' SILT LOAM 24"
	2' SILT LOAM W. SHALE FRAGMENTS 48"	2' SILT LOAM W. SHALE FRAGMENTS 48"	2' SILT LOAM W. RIPPLE SHALE 63"	2' SILT LOAM W. RIPPLE SHALE 63"
	3' SILT LOAM W. RIPPLE SHALE 66"	3' SILT LOAM W. RIPPLE SHALE 66"	3' SILT LOAM W. RIPPLE SHALE 66"	3' SILT LOAM W. RIPPLE SHALE 66"
	4' SILT LOAM W. RIPPLE SHALE 66"	4' SILT LOAM W. RIPPLE SHALE 66"	4' SILT LOAM W. RIPPLE SHALE 66"	4' SILT LOAM W. RIPPLE SHALE 66"
	5' SILT LOAM W. RIPPLE SHALE 66"	5' SILT LOAM W. RIPPLE SHALE 66"	5' SILT LOAM W. RIPPLE SHALE 66"	5' SILT LOAM W. RIPPLE SHALE 66"
	6' SILT LOAM W. RIPPLE SHALE 66"	6' SILT LOAM W. RIPPLE SHALE 66"	6' SILT LOAM W. RIPPLE SHALE 66"	6' SILT LOAM W. RIPPLE SHALE 66"
	7' SILT LOAM W. RIPPLE SHALE 66"	7' SILT LOAM W. RIPPLE SHALE 66"	7' SILT LOAM W. RIPPLE SHALE 66"	7' SILT LOAM W. RIPPLE SHALE 66"
8' SILT LOAM W. RIPPLE SHALE 66"	8' SILT LOAM W. RIPPLE SHALE 66"	8' SILT LOAM W. RIPPLE SHALE 66"	8' SILT LOAM W. RIPPLE SHALE 66"	

NOTES:

Percolation Testing Results

TEST HOLE #	1	2	3	3
TESTING DATE:	4-15-20	4-15-20	4-15-20	4-15-20
DEPTH / TESTER:	24" - RTS	24" - RTS	24" - RTS	24" - RTS
PERCOLATION TEST RESULTS *TESTING COMPLETED WITH A STOPWATCH *RELEASED TIMES ARE IN MINUTES	RUN 1 ELAPSED TIME:	1:04	2:3:03	1:52
	RUN 2 ELAPSED TIME:	1:31	2:7:27	2:09
	RUN 3 ELAPSED TIME:	1:37	2:8:42	2:20
	RUN 4 ELAPSED TIME:		2:9:02	
	RUN 5 ELAPSED TIME:			
	RUN 6 ELAPSED TIME:			
	RUN 7 ELAPSED TIME:			
	STABILIZED RATE:	1:37	2:9:02	2:20



Generic Plot Plan

*THE "GENERIC PLOT PLAN" IS INTENDED FOR ILLUSTRATION PURPOSES ONLY. FOR SPECIFIC DESIGN INFORMATION ON THE PROPOSED SEWAGE DISPOSAL SYSTEM, SEE THE SEWAGE DISPOSAL SYSTEM REQUIREMENTS TABLE, DETAILS, AND NOTES ON THIS SHEET.

General Notes:

- PIPE JOINTS TO BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.
- ALL 4" OUTLET PIPES (SOLID WALL) LEAVE DISTRIBUTION BOX AT SAME ELEVATION ON A MINIMUM SLOPE OF 1/8" PER FOOT UP TO A DISTRIBUTOR LATERAL.
- SEWAGE DISPOSAL SYSTEMS LOCATED OF NECESSITY UPGRADE IN THE GENERAL PATH OF DRAINAGE TO A WELL MUST BE SPACED 200' OR MORE AWAY.
- NO DRIVEWAY, ROADWAY, PARKING AREA OR ABOVE GROUND SWIMMING POOL IS TO BE CONSTRUCTED OVER ANY PORTION OF THE SEWER SYSTEM. HEAVY EQUIPMENT SHALL BE KEPT OUT OF THE ABSORPTION FIELD AREA.
- ALL DISTRIBUTOR LINES (PERFORATED) SHALL BE OF EQUAL LENGTH.
- ALL TREES TO BE CUT & REMOVED FROM SEWAGE DISPOSAL AREA IN A MANNER THAT WILL NOT DISTURB THE VIRGIN SOIL LAYER.
- MAXIMUM GROUND SLOPE OF TILE FIELD AREA SHALL NOT EXCEED 15%.
- NO BASEMENT FIXTURES ARE PERMITTED WITHOUT A SPECIAL DESIGN FOR SEWAGE DISPOSAL.
- NO COMPONENT PART OF ANY SEWAGE DISPOSAL SYSTEM SHALL BE LOCATED OR MAINTAINED WITHIN 100' OF ANY SPRINGS, RESERVOIR, BROOK, MARSH OR ANY OTHER BODY OF WATER.
- NO ROOF, CELLAR OR FOOTING DRAINS ARE TO BE DISCHARGED IN THE SEWAGE DISPOSAL SYSTEM.
- FLOW EQUALIZERS SHALL BE USED FOR SYSTEMS WHOSE SIDE SLOPES ARE BETWEEN 10-15% AND ARE RECOMMENDED FOR ALL SYSTEMS.
- SLOPE BETWEEN SEPTIC TANK OR PUMPING CHAMBER AND THE HOUSE SHALL BE POSITIVE AND UNINTERRUPTED, AS TO ALLOW SEPTIC GASSES TO DISCHARGE THROUGH THE STACK VENT.
- THE SEWER PIPE RUNNING FROM THE HOUSE TO THE SEPTIC TANK MUST BE LAID ON SUITABLY COMPACTED EARTH OR VIRGIN SOIL WITH THE FIRST WATERTIGHT JOINT LOCATED AT LEAST 3' FROM THE HOUSE. THE PIPE SHALL BE SCH 80 PVC OR CAST IRON.
- THE DESIGN AND LOCATION OF SANITARY FACILITIES (WELL, SEPTIC TANK, AND LEACH FIELD) SHALL NOT BE CHANGED. ANY RELOCATION OF THE SEPTIC SYSTEMS OR WELLS SHOWN, TO AREAS OTHER THAN AS SHOWN ON THE APPROVED PLANS, MUST BE APPROVED BY THE DESIGN ENGINEER.
- ALL WELLS AND SEPTIC SYSTEMS WITHIN 200 FEET THAT IMPACT SEPARATION DISTANCES FOR THE PROPOSED WELLS AND SEPTIC SYSTEMS ARE SHOWN ON THE PLANS.
- THERE SHALL BE NO REGRADING, EXCEPT AS SHOWN ON THE APPROVED PLANS, IN THE AREA OF THE ABSORPTION FIELDS.
- HEAVY EQUIPMENT SHALL BE KEPT OFF THE AREA OF THE ABSORPTION FIELDS EXCEPT DURING THE ACTUAL CONSTRUCTION THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT IN THE ABSORPTION FIELD AREA BEFORE, DURING, OR AFTER CONSTRUCTION. EXTREME CARE MUST BE TAKEN DURING THE ACTUAL CONSTRUCTION SO AS TO AVOID ANY UNDUCE COMPACTION THAT COULD RESULT IN A CHANGE OF THE ABSORPTION CAPACITY OF THE SOIL ON WHICH THE DESIGN LOAD WAS BASED.
- THIS SYSTEM WAS NOT DESIGNED TO ACCOMMODATE GARBAGE GRINDERS, JACUZZI TYPE SPA TUBS OVER 100 GALLONS, OR WATER CONDITIONERS. AS SUCH, THESE ITEMS SHALL NOT BE INSTALLED UNLESS THE SYSTEM IS REDESIGNED TO ACCOUNT FOR THEM.
- THE PURCHASER OF EACH LOT SHALL BE PROVIDED WITH A COPY OF THE APPROVED PLANS AND AN ACCURATE AS-BUILT DRAWING OF ANY EXISTING SANITARY FACILITIES, INCLUDING A COPY OF THE NYSDEC WELL COMPLETION REPORT.
- SEPTIC TANKS SHOULD BE INSPECTED PERIODICALLY AND PUMPED EVERY 2-3 YEARS.
- DISTRIBUTION BOXES SHOULD BE INSPECTED PERIODICALLY TO ASSURE THAT THEY ARE LEVEL AND OPERATING PROPERLY.

MINIMUM SEPARATION DISTANCES FROM EXISTING OR PROPOSED FEATURES

SYSTEM COMPONENTS	WELL OR SUCTION LINE	STREAM, LAKE, OR WATERCOURSE (B)	DWELLING	PROPERTY LINE	DRAINAGE DITCH (B) (G)
HOUSE SEWER (WATERTIGHT JOINTS)	50' (E)	25'	3'	10'	--
SEPTIC TANK	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' (A)	100'	20'	10'	50'
SEEPAGE PIT	150' (A)	100'	20'	10'	50'
DRY WELL (ROOF & FOOTING)	50'	25'	20'	10'	10'
RAISED OR MOUND SYSTEM (C)	100' (A)	100'	20'	10'	50'

- (A) WHEN SEWAGE TREATMENT SYSTEMS ARE LOCATED IN COARSE GRAVEL OR UPGRADE AND IN THE GENERAL PATH OF DRAINAGE TO A WELL, THE CLOSEST PART OF THE TREATMENT SYSTEM SHALL BE AT LEAST 200' AWAY FROM THE WELL.
(B) MEAN HIGH WATER MARK.
(C) FOR ALL SYSTEMS INVOLVING THE PLACEMENT OF FILL MATERIAL, SEPARATION DISTANCES ARE MEASURED FROM THE TOE OF THE SLOPE OF THE FILL.
(D) RECOMMENDED SEPARATION DISTANCES.
(E) UNLESS CAST IRON OR PVC WITH O-RING JOINTS IS UTILIZED, THEN 25'.

SYSTEM COMPONENT	SWALE, STREAM, OR WATERCOURSE	CEMETERY PROPERTY LINE	SUBDIVISION BOUNDARY
ABSORPTION FIELD	25'	100'	50'

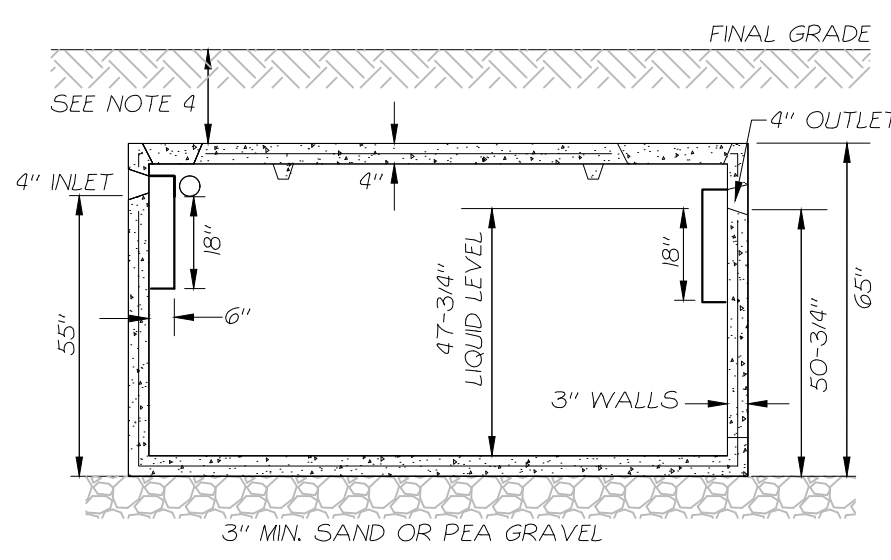
(F) ALL DRAINAGE PIPES WITHIN 25 FEET OF ANY WELL SHALL BE WATERTIGHT

SYSTEM COMPONENT	HIGH WATER LINE OF A WET POND	INTERMITTENT STREAM, DRY WELL, CULVERT OR STORM SEWER (NON-GASKETED PIPE), OR CATCH BASIN	CULVERT OR STORM SEWER (GASKETED, TIGHT PIPE)	CURTAIN DRAIN	TOP OF EMBANKMENT OR STEEP (1 ON 3) SLOPE	SOLID CURTAIN DRAIN, ROOF OR FOOTING PIPES, SNOW STORAGE EASEMENT
ABSORPTION FIELD	100'	50'	35'	15'	25'	10'

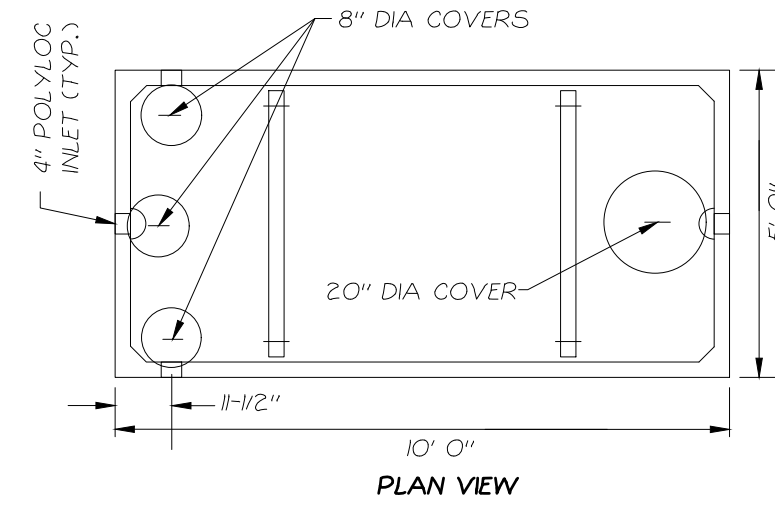
Minimum Separation Distances From Existing Or Proposed Features

- FOR ORANGE COUNTY -
AS PER NEW YORK STATE DEPARTMENT OF HEALTH "RESIDENTIAL ONSITE WASTEWATER TREATMENT SYSTEMS DESIGN HANDBOOK", 2012 EDITION & ORANGE COUNTY POLICY & STANDARDS LAST REVISED SEPTEMBER 2019

*UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S EMBOSSED SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. *ONLY COPIES FROM THE ORIGINAL TRACING OF THIS SURVEY MAP MARKED WITH THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED VALID, TRUE COPIES. *CERTIFICATIONS INDICATED HEREON SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYORS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. SAID CERTIFICATIONS SHALL RUN ONLY TO THOSE NAMED INDIVIDUALS AND/OR INSTITUTIONS FOR WHOM THE SURVEY WAS PREPARED. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS, OR SUBSEQUENT OWNERS."	NO.	DATE	REVISION	BY	LAWRENCE MARSHALL PE #087107	<h3>Well & Sewage Disposal System</h3> <h3>Detail Sheet I for</h3> <h3>Robert P. & Deborah C. Madan</h3>	<p>THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.</p> <p>TOWN OF NEWBURGH COUNTY OF ORANGE STATE OF NEW YORK</p> <p>DRAFTED BY: ZAP DATE: FEBRUARY 24, 2020 PROJECT: 2822-10B</p> <p>SHEET: 3 / 4</p>



CROSS SECTION VIEW



PLAN VIEW

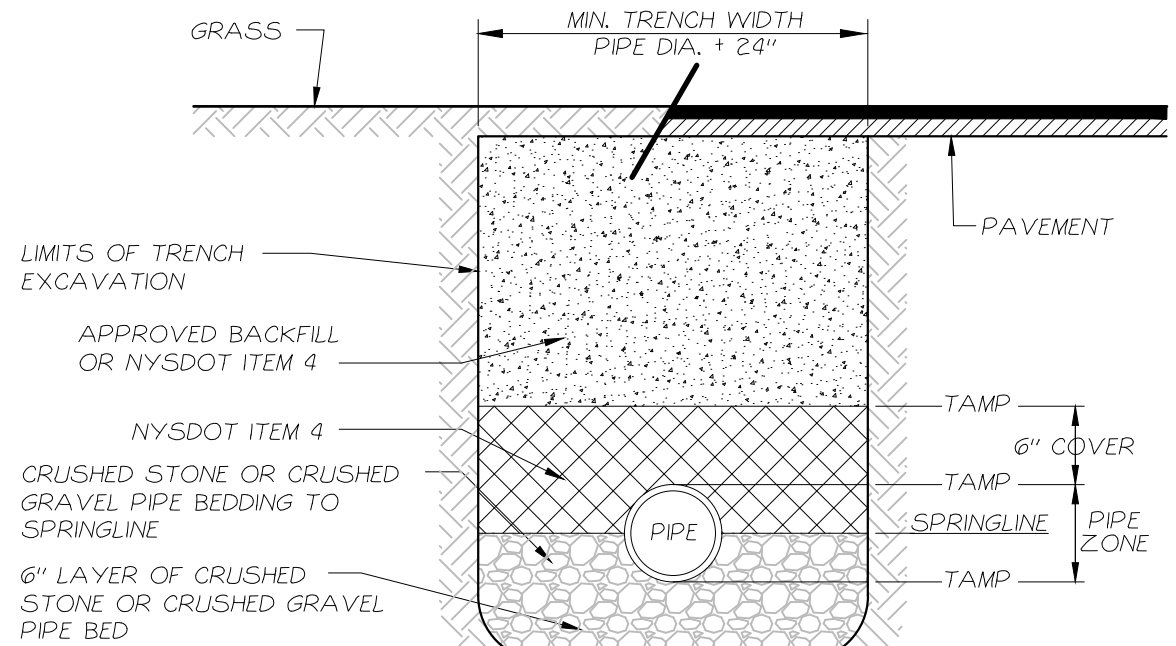
NOTES:
 1.) SEPTIC TANK SHALL BE MODEL ST-1250, OR APPROVED EQUAL, AS MANUFACTURED BY:
 WOODARDS CONCRETE PRODUCTS, INC.
 629 LYBOLT ROAD
 BULLVILLE, NY 10915
 (845) 361-3471

- 2.) ALL PIPE JOINTS (INLET & OUTLET PIPES) SHALL BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.
- 3.) INLET BAFFLE CAN BE RELOCATED TO THE SIDE.
- 4.) IF COVER EXCEEDS 12" A RISER MUST BE USED TO ALLOW ACCESS.

CONCRETE MINIMUM STRENGTH: 4,000 P.S.I. AT 28 DAYS
 STEEL REINFORCEMENT: #4 REBAR AROUND PERIMETER
 CONSTRUCTION JOINT: SEALED WITH BUTYL RUBBER CEMENT
 WEIGHT: 9,500 LBS
 LOAD RATING: 300 PSF

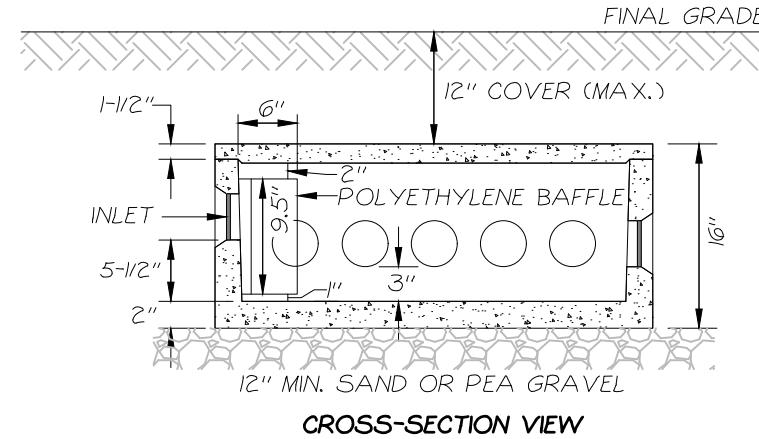
Typical Precast 1,250-Gallon Concrete Septic Tank

NOT TO SCALE

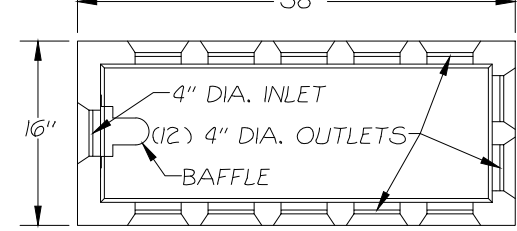


NOTES:
 1.) NYS DOT ITEM 4 BACKFILL SHALL BE INSTALLED IN 6" LIFTS.
 2.) IN LAWN AREAS, A MINIMUM OF 6 INCHES OF TOPSOIL SHALL BE PLACED ON TOP OF THE NYS DOT ITEM 4 BACKFILL AND SHALL BE SEEDED AND MULCHED WITH SEED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS.
 3.) IN PAVED AREAS, THE EXISTING PAVEMENT SHALL BE SAW CUT PRIOR TO REMOVAL. REPLACEMENT OF THE PAVEMENT SHALL BE COMPLETED WITH A MINIMUM OF 4" NYS DOT ITEM 4 LEVELING COURSE, 3" ASPHALT BINDER COURSE, AND 1/2" ASPHALT TOP COURSE.

Typical Trench Detail



CROSS-SECTION VIEW



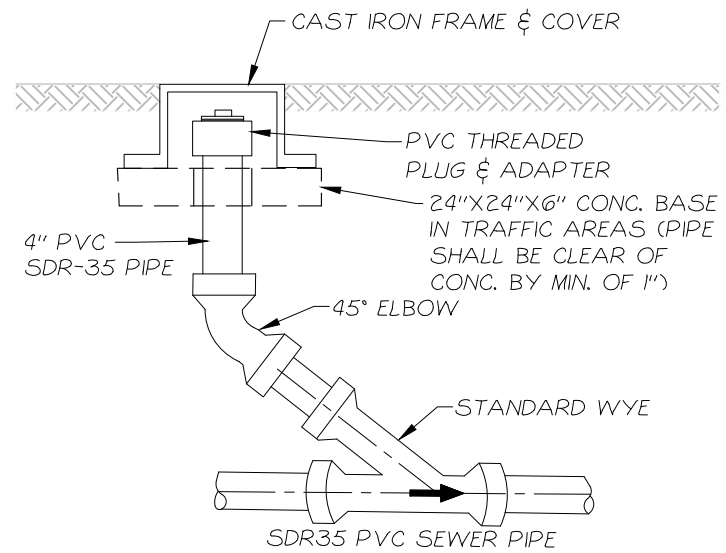
PLAN VIEW

NOTES:
 1.) DISTRIBUTION BOX SHALL BE MODEL DB-12, OR APPROVED EQUAL, AS MANUFACTURED BY:
 WOODARDS CONCRETE PRODUCTS, INC.
 629 LYBOLT ROAD
 BULLVILLE, NY 10915
 (845) 361-3471

- 2.) FLOW EQUALIZERS SHALL BE USED TO ENSURE EQUAL FLOW TO EACH OUTLET PIPE. YEARLY CHECKING AND ADJUSTMENT IS RECOMMENDED.
- 3.) ALL PIPE JOINTS (INLET & OUTLET) SHALL BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.
- 4.) A SANITARY TEE, 90° ELBOW, OR OTHER APPROVED BAFFLE SHALL BE INSTALLED AT THE INLET.
- 5.) OUTLET INVERTS SHALL BE SET AT THE SAME ELEVATION.
- 6.) OUTLETS MUST BE USED IN A MANNER TO ALLOW ACCESS TO THE NECESSARY NUMBER OF OUTLETS FOR THE EXPANSION AREA WITHOUT DISTURBING THE INITIAL SYSTEM.

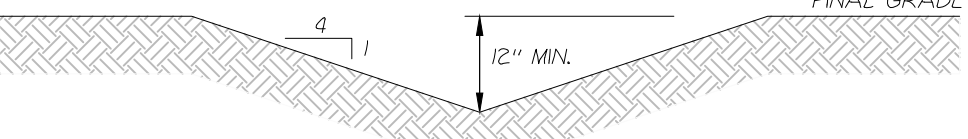
Typical Precast Concrete Distribution Box

NOT TO SCALE



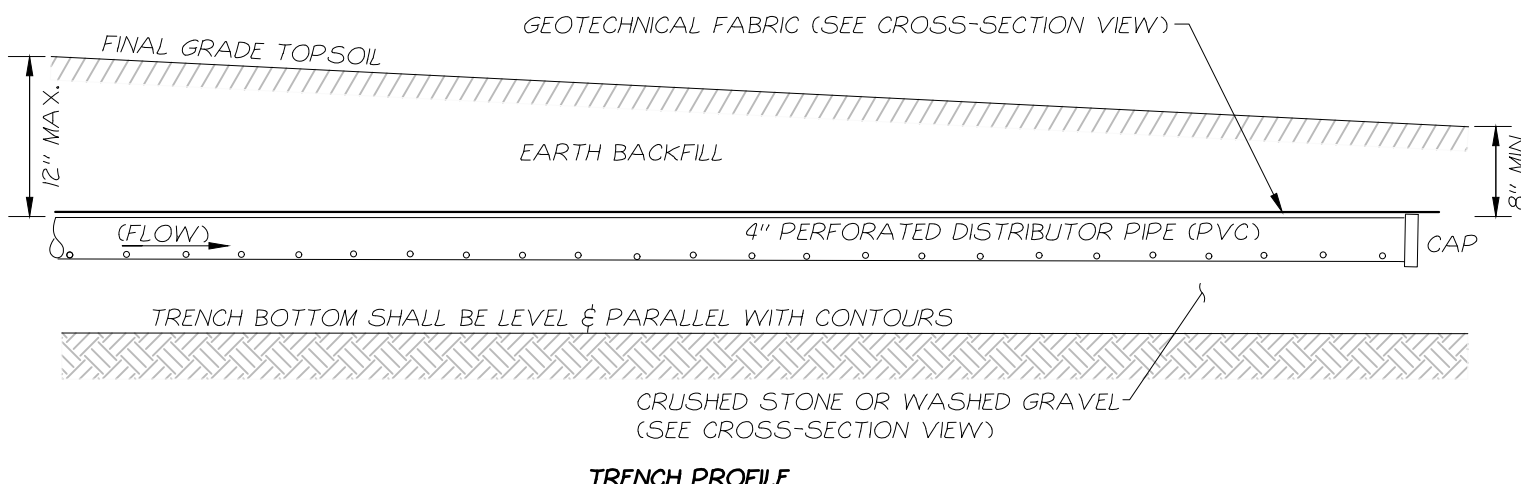
NOTES:
 1.) CAST IRON FRAME & COVER AND CONCRETE BASE SHALL ONLY BE INSTALLED IF CLEANOUT IS IN VEHICULAR TRAFFIC AREAS.

In-line Sewer Cleanout

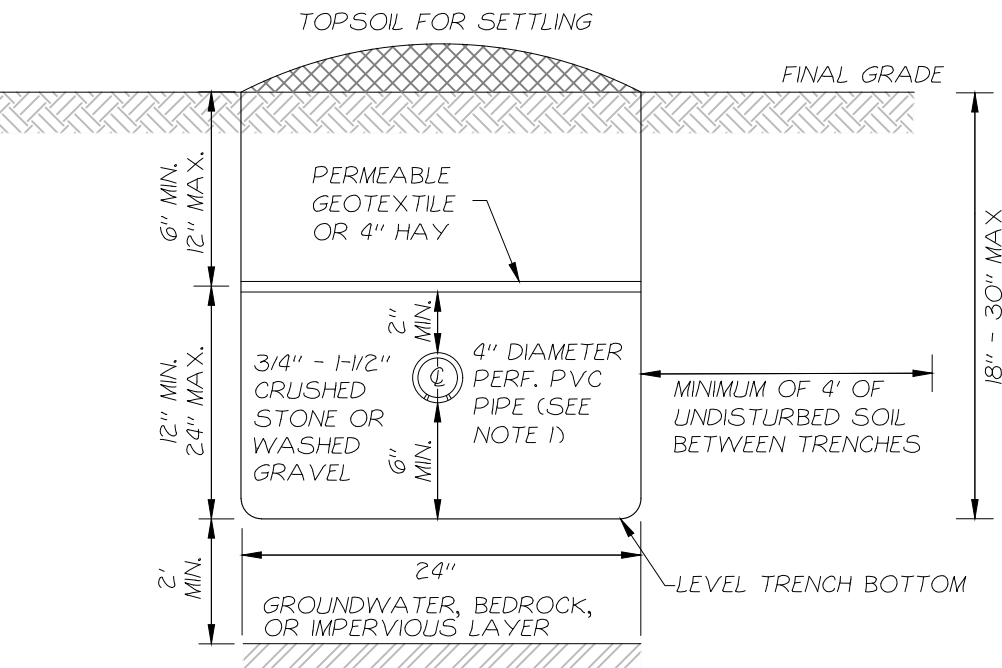


NOTE: THE DIVERSION SWALE SHALL BE SEEDED & MULCHED IMMEDIATELY FOLLOWING CONSTRUCTION

Diversion Swale Detail



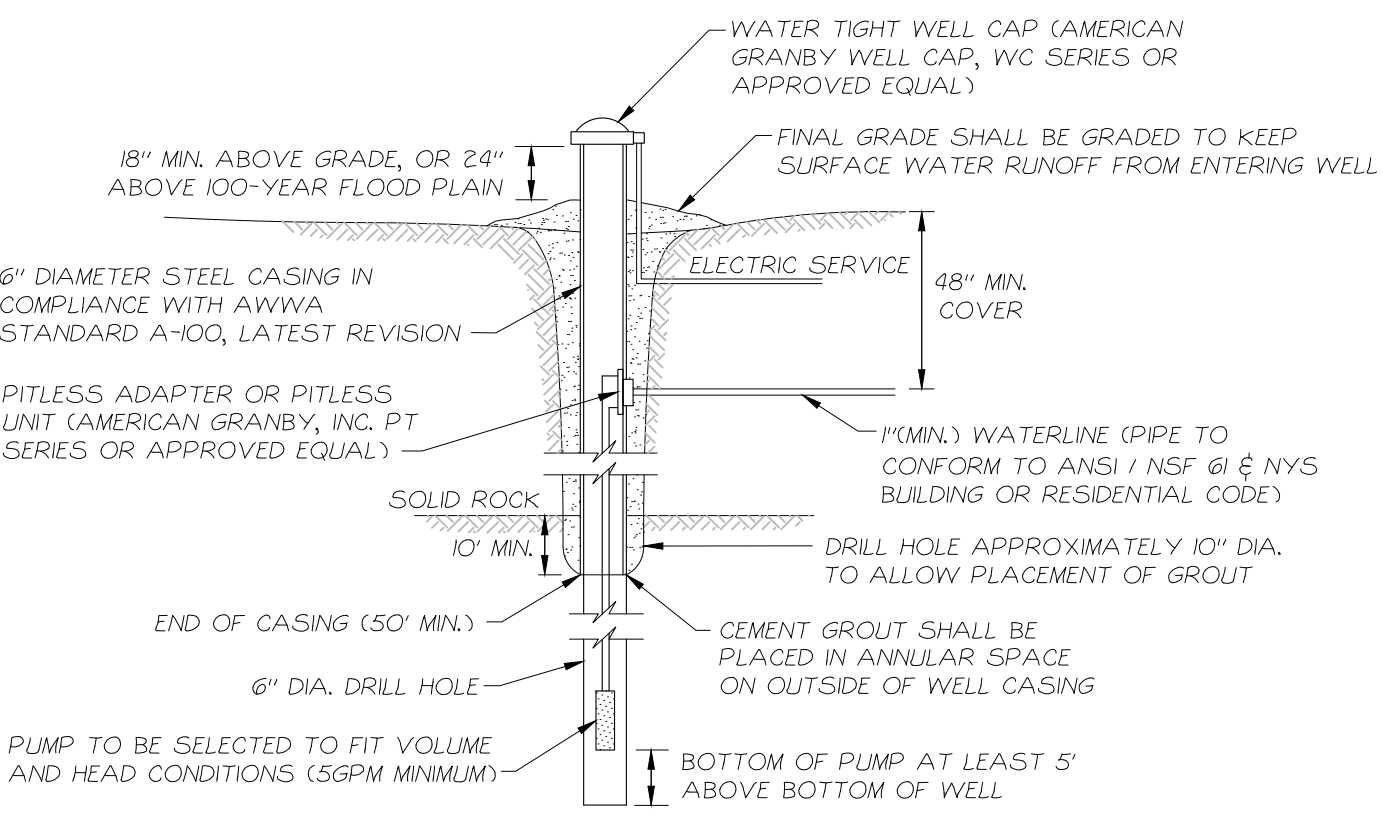
TRENCH PROFILE



CROSS-SECTIONAL VIEW

NOTES:
 1.) DISTRIBUTION PIPE SHALL BE INSTALLED WITH PIPE PERFORATIONS FACING DOWN.
 2.) DO NOT INSTALL TRENCHES IN WET SOIL. TRENCH SIDES AND BOTTOMS SHALL BE RAKED PRIOR TO INSTALLATION OF GRAVEL.
 3.) THE END OF EACH LATERAL SHALL BE CAPPED.
 4.) LATERALS SHALL BE SLOPED 1/16" - 1/32" PER FOOT FOR GRAVITY SYSTEMS. LATERALS SHALL BE INSTALLED LEVEL FOR PUMPED OR DOSED SYSTEMS.
 5.) LATERALS SHALL BE INSTALLED SIX (6) FEET ON CENTER, MINIMUM, MAINTAIN A MINIMUM OF FOUR (4) FEET OF UNDISTURBED SOIL BETWEEN TRENCHES.

Absorption Trench Detail



NOTES:
 1.) WELL SHALL BE CONSTRUCTED IN ACCORDANCE WITH TABLE 2 OF THE NEW YORK STATE DEPARTMENT OF HEALTH (NYS DOH) APPENDIX 5-B "STANDARDS FOR WATER WELLS."
 2.) THE WELL CAP MUST BE A MINIMUM OF TWO (2) FEET ABOVE THE 100 YEAR FLOOD ELEVATION.
 3.) THE END OF WELL CASING SHALL EXTEND TO A MINIMUM DEPTH OF 50 FEET.

Typical Well Detail

Sewage Disposal System Requirements

LOT	DESIGN FLOW RATE (GPD)	SEPTIC TANK SIZE (GALLONS)	DISTRIBUTION BOX MODEL NUMBER	TYPE OF SYSTEM	DESIGN STABILIZED PERCOLATION RATE (MIN.)	MIN. LENGTH OF ABSORPTION TRENCH (L.F.)	PROPOSED LENGTH OF ABSORPTION TRENCH (L.F.)	SEWAGE DISPOSAL SYSTEM DESIGN
2	440	1,250	DB-12	A.T.	21 - 30	367	385	7 ROWS @ 55 L.F.
3	440	1,250	DB-12	A.T.	6 - 7	220	220	4 ROWS @ 55 L.F.

NOTES:
 1.) A.T. = ABSORPTION TRENCH TYPE SYSTEM
 2.) THE DESIGN FLOW RATE OF 440 GALLONS PER DAY (GPD) IS BASED UPON 10 GPD PER BEDROOM & 4 BEDROOM.
 3.) NO CHANGES ARE PROPOSED TO THE EXISTING SEWAGE DISPOSAL SYSTEM OR RESERVE SEWER AREA ON LOT 1.

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	NO.	DATE	REVISION	BY	LAWRENCE MARSHALL	PE #087107						

Well & Sewage Disposal System
Detail Sheet II for
Robert P. & Deborah C. Madan

MNTM
 ENGINEERING - LAND SURVEYING
 PO BOX 166, 45 MAIN STREET, PINE BUSH, NY 12566
 P: (845) 744-3620 F: (845) 744-3805 MNTM@MNTM.COM

THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.
 TOWN OF NEWBURGH
 COUNTY OF ORANGE
 STATE OF NEW YORK
 DRAFTED BY: ZAP
 DATE: FEBRUARY 24, 2020
 PROJECT: 2822-10B
 SHEET: 4 / 4