



**TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS**

PROJECT NAME: TARBEN II SUBDIVISION
PROJECT NO.: 2021-18
PROJECT LOCATION: SECTION 127, BLOCK 1, LOT 12
REVIEW DATE: 11 APRIL 2024
MEETING DATE: 18 APRIL 2024
PROJECT REPRESENTATIVE: JOHNATHAN CELLA, P.E.

1. This project was previously before the Board in August 2021 being represented by a different consultant.
2. The parcel was subject to an Orange County Department of Health approval previously. Any re-subdivision will require reapproval by Orange County Department of Health for any subsequent lots.
3. The location of the sub-surface sanitary sewer disposal system on the original lot has been modified. Approval of both new septic systems is required from Orange County Department of Health.
4. Compliance with the Town of Newburgh Tree Preservation Ordinance is now required.
5. The length of the driveway is such that an emergency vehicle turnaround must be provided.
6. The extent of the Federal Wetlands should be delineated on the plans.
7. A well separation between the well on Lot 12 and the septic on Lot 11 is identified as 152 feet, where 150 feet is required. Required distance is not correct.
8. The building envelope on Lot 11 should depict the front yard setback where the lot has the 150-foot required lot width.
9. The Highway Superintendent's comments regarding the driveway location should be received.
10. The gravel drive to the proposed house on Lot 11 is identified as "to be removed" on Sheet 1 of 5.
11. The size of the driveway culverst should be depicted on the plans.

NEW YORK OFFICE

33 Airport Center Drive, Suite 202, New Windsor, NY 12553
845-567-3100 | F: 845-567-3232 | mheny@mhepc.com

PENNSYLVANIA OFFICE

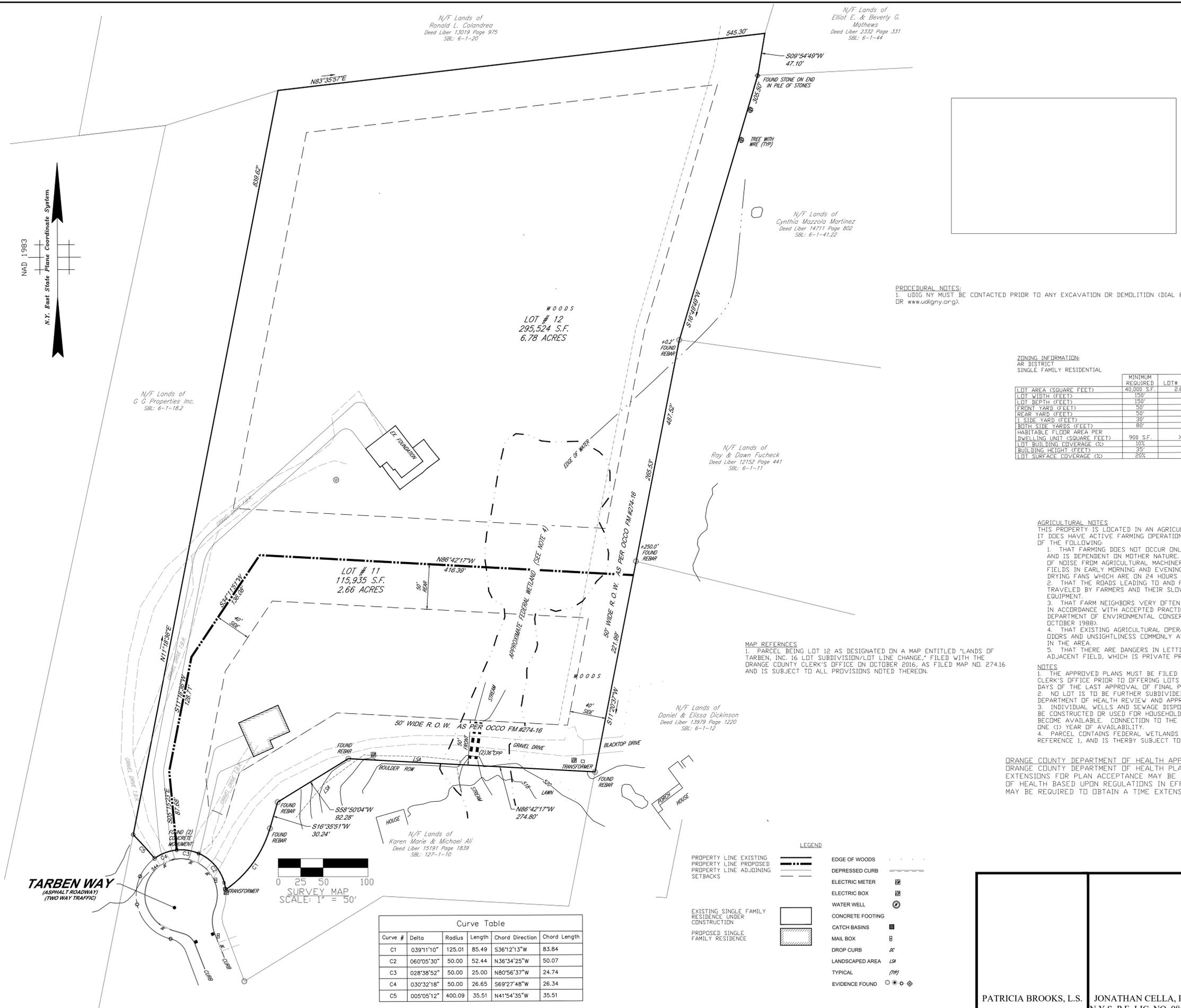
111 Wheatfield Drive, Suite 1, Milford, PA 18337
570-296-2765 | F: 570-296-2767 | mhpa@mhepc.com

Respectfully submitted,

MHE Engineering, D.P.C.

A handwritten signature in blue ink that reads "Patrick J. Hines". The signature is written in a cursive, flowing style.

Patrick J. Hines
Principal
PJH/ltn



PROCEDURAL NOTES:
 1. UDIG NY MUST BE CONTACTED PRIOR TO ANY EXCAVATION OR DEMOLITION (DIAL 811 OR www.udigny.org).

ZONING INFORMATION:
 AR DISTRICT
 SINGLE FAMILY RESIDENTIAL

	MINIMUM REQUIRED	LOT# 11 PROPOSED	LOT# 12 PROPOSED
LOT AREA (SQUARE FEET)	40,000 S.F.	2.66 ACRES	6.78 ACRES
LOT WIDTH (FEET)	150'	170'±	495'±
LOT DEPTH (FEET)	150'	354'±	873'±
FRONT YARD (FEET)	30'	36'±	80'±
REAR YARD (FEET)	50'	164'±	402'±
L SIDE YARD (FEET)	30'	65'±	171'±
R SIDE YARD (FEET)	80'	406'±	236'±
HABITABLE FLOOR AREA PER DWELLING UNIT (SQUARE FEET)	900 S.F.	>900 S.F.	>900 S.F.
LOT BUILDING COVERAGE (%)	10%	1% ±	1% ±
BUILDING HEIGHT (FEET)	35'	<35'	<35'
LOT SURFACE COVERAGE (%)	20%	<5%	<3%

AGRICULTURAL NOTES

- THIS PROPERTY IS LOCATED IN AN AGRICULTURALLY ZONED DISTRICT AND IT DOES HAVE ACTIVE FARMING OPERATIONS IN THE VICINITY. BE ADVISED OF THE FOLLOWING:
1. THAT FARMING DOES NOT OCCUR ONLY BETWEEN 800 AM AND 500 PM AND IS DEPENDENT ON MOTHER NATURE. RESIDENTS SHOULD BE AWARE OF NOISE FROM AGRICULTURAL MACHINERY BEING OPERATED IN NEARBY FIELDS IN EARLY MORNING AND EVENING HOURS AND NOISE FROM CROP DRYING FANS WHICH ARE ON 24 HOURS A DAY DURING HARVEST SEASON.
 2. THAT THE ROADS LEADING TO AND FROM THIS PROPERTY ARE FREQUENTLY TRAVELED BY FARMERS AND THEIR SLOW MOVING FARM VEHICLES AND EQUIPMENT.
 3. THAT FARM NEIGHBORS VERY OFTEN SPRAY THEIR CROPS WITH PESTICIDES IN ACCORDANCE WITH ACCEPTED PRACTICES REGULATED BY THE NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC NOTIFICATION NO. 325 OCTOBER 1988).
 4. THAT EXISTING AGRICULTURAL OPERATIONS MAY CREATE BOTH UNAVOIDABLE ODDORS AND UNSIGHTLINESS COMMONLY ASSOCIATED WITH FARMING OPERATIONS IN THE AREA.
 5. THAT THERE ARE DANGERS IN LETTING CHILDREN AND PETS ROAM INTO ANY ADJACENT FIELD, WHICH IS PRIVATE PROPERTY.

NOTES

1. THE APPROVED PLANS MUST BE FILED WITH THE ORANGE COUNTY CLERK'S OFFICE PRIOR TO OFFERING LOTS FOR SALE AND WITHIN 90 DAYS OF THE LAST APPROVAL OF FINAL PLANS.
2. NO LOT IS TO BE FURTHER SUBDIVIDED WITHOUT ORANGE COUNTY DEPARTMENT OF HEALTH REVIEW AND APPROVAL.
3. INDIVIDUAL WELLS AND SEWAGE DISPOSAL SYSTEMS SHALL NO LONGER BE CONSTRUCTED OR USED FOR HOUSEHOLD PURPOSES WHEN PUBLIC FACILITIES BECOME AVAILABLE. CONNECTION TO THE PUBLIC SYSTEM IS REQUIRED WITHIN ONE (1) YEAR OF AVAILABILITY.
4. PARCEL CONTAINS FEDERAL WETLANDS APPROXIMATELY SHOWN AS PER MAP REFERENCE 1, AND IS THEREBY SUBJECT TO ALL REGULATIONS PROMULGATED THEREUNDER.

ORANGE COUNTY DEPARTMENT OF HEALTH APPROVAL
 ORANGE COUNTY DEPARTMENT OF HEALTH PLAN APPROVAL IS LIMITED TO 5 YEARS. TIME EXTENSIONS FOR PLAN ACCEPTANCE MAY BE GRANTED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH BASED UPON REGULATIONS IN EFFECT AT THAT TIME. A NEW PLAN SUBMISSION MAY BE REQUIRED TO OBTAIN A TIME EXTENSION.

THIS SHEET IS INVALID AND VOID UNLESS ACCOMPANIED BY REMAINING SHEETS IN SET.

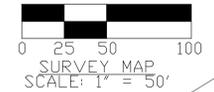
MAP REFERENCES
 1. PARCEL BEING LOT 12 AS DESIGNATED ON A MAP ENTITLED 'LANDS OF TARBEN, INC. 16 LOT SUBDIVISION/LOT LINE CHANGE,' FILED WITH THE ORANGE COUNTY CLERK'S OFFICE ON OCTOBER 2016, AS FILED MAP NO. 274.16 AND IS SUBJECT TO ALL PROVISIONS NOTED THEREON.

LEGEND

PROPERTY LINE EXISTING	---	EDGE OF WOODS	- - - - -
PROPERTY LINE PROPOSED	---	DEPRESSED CURB	---
PROPERTY LINE ADJOINING SETBACKS	---	ELECTRIC METER	⊠
EXISTING SINGLE FAMILY RESIDENCE UNDER CONSTRUCTION	▭	ELECTRIC BOX	⊠
PROPOSED SINGLE FAMILY RESIDENCE	▭	WATER WELL	⊙
		CONCRETE FOOTING	▭
		CATCH BASINS	▭
		MAIL BOX	⊠
		DROP CURB	⊞
		LANDSCAPED AREA TYPICAL	LSA
		EVIDENCE FOUND	⊙ ⊕ ⊞ ⊠

Curve Table

Curve #	Delta	Radius	Length	Chord Direction	Chord Length
C1	039°11'10"	125.01	85.49	S36°12'13"W	83.84
C2	060°05'30"	50.00	52.44	N36°34'25"W	50.07
C3	028°38'52"	50.00	25.00	N80°56'37"W	24.74
C4	030°32'18"	50.00	26.65	S69°27'48"W	26.34
C5	005°05'12"	400.09	35.51	N41°54'35"W	35.51



TARBEN WAY
 (ASPHALT ROADWAY)
 (TWO WAY TRAFFIC)

SURVEY SHEET

PROPOSED TWO (2) LOT RESIDENTIAL SUBDIVISION FOR: LYNN WARREN TARBEN WAY LOT # 12 FILED MAP 274.16 (S/B/L: 127 - 1 - 12) TOWN OF NEWBURGH ORANGE COUNTY, NEW YORK TOWN OF NEWBURGH APPLICATION # 21-18

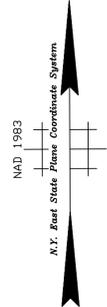
JONATHAN CELLA, P.E.
 51 HUNT ROAD
 WALKKILL, NEW YORK 12589

DATE: 07/01/2023	(845) 741-0363 jonathancellaj@hotmail.com	DRAWN BY: JJC
SCALE: AS NOTED		SHEET NO. : 1 OF 5

REVISIONS:
 1. 12/29/2023: IN HOUSE REVISIONS
 2. 03/15/2024: PER OGDH 03-11-15 COMMENTS AND P.B. SUBMISSION
 3. 04/08/2024: IN HOUSE REVISIONS

PATRICIA BROOKS, L.S. JONATHAN CELLA, P.E.
 N.Y.S. P.E. LIC. NO. 085069

PROCEDURAL NOTES:
 1. UDIG NY MUST BE CONTACTED PRIOR TO ANY EXCAVATION OR DEMOLITION (DIAL 811 OR www.udig.ny.gov).

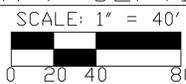


THERE ARE NO EXISTING OR PROPOSED WELLS AND OR SEWAGE DISPOSAL SYSTEMS WITHIN 200' OF PROPOSED WELL AND SEPTIC

THERE ARE NO EXISTING OR PROPOSED WELLS AND OR SEWAGE DISPOSAL SYSTEMS WITHIN 200' OF PROPOSED WELL AND SEPTIC

TARBEN WAY
 (ASPHALT ROADWAY)
 (TWO WAY TRAFFIC)

SITE PLAN / SEPTIC DESIGN



- PROPERTY LINE EXISTING
 PROPERTY LINE PROPOSED
- SETBACKS
 EXISTING CONTOUR 2'
 EXISTING CONTOUR 10'
 PROPOSED CONTOUR 2'
 PROPOSED CONTOUR 10'
- EXISTING SINGLE FAMILY RESIDENCE UNDER CONSTRUCTION
- PROPOSED SINGLE FAMILY RESIDENCE
- FINISHED FIRST FLOOR ELEV. FF 509.5
 BASEMENT FLOOR ELEV. BF 509.5
 LOWEST SEWERABLE ELEVATION LSE 509.5
 GARAGE FLOOR ELEVATION GF 509.5

- LEGEND**
- EDGE OF WOODS
 - DEPRESSED CURB
 - ELECTRIC METER
 - ELECTRIC BOX
 - WATER WELL
 - CONCRETE FOOTING
 - CATCH BASINS
 - MAIL BOX
 - DROP CURB
 - LANDSCAPED AREA
 - TYPICAL
 - EVIDENCE FOUND

LOT # 11 SEWAGE DISPOSAL SYSTEM DESIGN CRITERIA

- NUMBER OF BEDROOMS = 4.
- DAILY FLOW RATE = 440 GALLONS PER DAY MAX.
- SEPTIC TANK REQUIRED = 1,250 GALLONS
- SEPTIC TANK PROVIDED = 1,250 GALLONS
- STABILIZED PERCOLATION RATE = 39 MINUTES PER INCH DESIGN PERCOLATION RATE = 46-60 MINUTES PER INCH
- REQUIRED LENGTH OF ABSORPTION TRENCHES FOUR (4) BEDROOM 163 L.F. ELJEN FIELD REQUIRED IN TRENCHES AT 8' ON CENTER
- PROVIDED LENGTH OF ABSORPTION TRENCHES FOUR (4) ROWS OF 11 (4") ELJEN UNITS = 176 L.F.
- PUMP CHAMBER REQUIRED - SEE DETAILS
- CURTAIN DRAIN REQUIRED

HOUSE (BF)	GRADE	INVERT (IN)	INVERT (OUT)	COVERAGE
SEPTIC TANK	527.0	526.0	526.00 (L.S.E.)	6'
PUMP CHAMBER	526.0	524.25	523.90	11'+
DISTRIBUTION BOX	527.0	525.79	525.63	6'+

L.S.E. = LOWEST SEWERABLE ELEVATION

LATERAL INVERTS		CURTAIN DRAIN INVERTS	
GRADE	LATERAL INVERT	GRADE	LATERAL INVERT
A	527.0	E	527.0
B	526.25	F	526.5
C	526.0	G	521.5
D	526.0		521.0

LOT # 12 SEWAGE DISPOSAL SYSTEM DESIGN CRITERIA

- NUMBER OF BEDROOMS = 4.
- DAILY FLOW RATE = 440 GALLONS PER DAY MAX.
- SEPTIC TANK REQUIRED = 1,250 GALLONS
- SEPTIC TANK PROVIDED = 1,250 GALLONS
- STABILIZED PERCOLATION RATE = 42 MINUTES PER INCH DESIGN PERCOLATION RATE = 46-60 MINUTES PER INCH
- REQUIRED LENGTH OF ABSORPTION TRENCHES FOUR (4) BEDROOM 163 L.F. ELJEN FIELD REQUIRED IN TRENCHES AT 8' ON CENTER
- PROVIDED LENGTH OF ABSORPTION TRENCHES FOUR (4) ROWS OF 11 (4") ELJEN UNITS = 176 L.F.
- PUMP CHAMBER REQUIRED - SEE DETAILS
- CURTAIN DRAIN REQUIRED

HOUSE (BF)	GRADE	INVERT (IN)	INVERT (OUT)	COVERAGE
SEPTIC TANK	531.0	529.17	530.00 (L.S.E.)	6'
PUMP CHAMBER	530.5	528.75	528.40	11'+
DISTRIBUTION BOX	534.0	532.79	532.63	6'+

L.S.E. = LOWEST SEWERABLE ELEVATION

LATERAL INVERTS		CURTAIN DRAIN INVERTS	
GRADE	LATERAL INVERT	GRADE	LATERAL INVERT
A	534.00	E	537.5
B	533.50	F	537.25
C	533.00	G	531.50
D	532.75		530.0

STANDARD NOTES

THE DESIGN, CONSTRUCTION, AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND GENERALLY ACCEPTED STANDARDS IN EFFECT AT THE TIME OF CONSTRUCTION WHICH INCLUDE:
 *APPENDIX 75-A, WASTE TREATMENT - INDIVIDUAL HOUSEHOLD SYSTEMS, NEW YORK STATE SANITARY CODE.
 NEW YORK STATE DEPARTMENT OF HEALTH DESIGN MANUAL "RESIDENTIAL ONSITE WASTEWATER TREATMENT SYSTEMS DESIGN HANDBOOK"
 *PLANNING THE SUBDIVISION AS PART OF THE TOTAL ENVIRONMENT, NEW YORK STATE DEPARTMENT OF HEALTH.

THIS PLAN IS APPROVED AS MEETING THE APPROPRIATE AND APPLIED TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES FOR ARRANGEMENT OF SEWAGE DISPOSAL AND TREATMENT AND WATER SUPPLY FACILITIES.

ALL WELLS AND SEWAGE DISPOSAL SYSTEMS EXISTING OR APPROVED WITHIN 200' OF THE PROPOSED WELLS AND SDS ARE SHOWN ON THIS PLAN ALONG WITH ANY OTHER ENVIRONMENTAL HAZARDS IN THE AREA THAT MAY AFFECT THE DESIGN AND FUNCTIONAL ABILITY OF THE SEWAGE DISPOSAL SYSTEM AND WELL.

IT SHALL BE DEMONSTRATED BY THE CONTRACTOR TO THE CERTIFYING ENGINEER THAT THE SEPTIC TANK IS SEALED, WATER TIGHT, AND ACCEPTABLE FOR USE. THIS SHALL REQUIRE AS A MINIMUM, THE FILLING OF THE TANK WITH WATER TO OBSERVE IF IT IS IN FACT SEALED, WATERTIGHT AND ACCEPTABLE FOR USE.

ALL PROPOSED WELLS AND SERVICE LINES ON THIS PLAN ARE ACCESSIBLE FOR INSTALLATION AND PLACEMENT.

INDIVIDUAL WELLS AND SEWAGE DISPOSAL SYSTEMS SHALL NO LONGER BE CONSTRUCTED OR USED FOR HOUSEHOLD PURPOSES WHEN PUBLIC FACILITIES BECOME AVAILABLE. CONNECTION TO THE PUBLIC SYSTEM IS REQUIRED WITHIN 1 YEAR OF AVAILABILITY.

A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER (OR OTHER DESIGN PROFESSIONAL AS ALLOWED BY THE NEW YORK STATE EDUCATION DEPARTMENT) SHALL INSPECT THE SANITARY FACILITIES (WATER SUPPLY, ANY WATER TREATMENT, AND SEWAGE DISPOSAL FACILITIES) AT THE TIME OF CONSTRUCTION. PRIOR TO OCCUPANCY OF THE DWELLING, THE ENGINEER SHALL CERTIFY TO THE ORANGE COUNTY DEPARTMENT OF HEALTH AND THE LOCAL CODE ENFORCEMENT OFFICER THAT THE FACILITIES HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND THAT ANY SEPTIC TANK JOINTS HAVE BEEN SEALED AND TESTED FOR WATER TIGHTNESS. A COPY OF THE NYSDEC WELL COMPLETION REPORT MUST ALSO BE PROVIDED.

TOWN CERTIFICATION

I HEREBY CERTIFY TO THE TOWN OF NEWBURGH THAT THE SEWAGE DISPOSAL SYSTEM DEPICTED ON THIS PLAT HAS BEEN DESIGNED IN ACCORDANCE WITH THE NEW YORK STATE PUBLIC HEALTH LAW AND ALL REGULATIONS PROMULGATED THEREUNDER.*

ORANGE COUNTY DEPARTMENT OF HEALTH APPROVAL

ORANGE COUNTY DEPARTMENT OF HEALTH PLAN APPROVAL IS LIMITED TO 5 YEARS. TIME EXTENSIONS FOR PLAN APPROVAL MAY BE GRANTED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH BASED UPON REGULATIONS IN EFFECT AT THAT TIME. A NEW PLAN SUBMISSION MAY BE REQUIRED TO OBTAIN A TIME EXTENSION.

STANDARD NOTES

- THE SEPTIC TANK SHALL BE LOCATED A MINIMUM OF 10 FEET FROM ANY BUILDING OR PROPERTY LINE
- CELLAR DRAINS, ROOF DRAINS, OR FOOTING DRAINS SHALL NOT BE DISCHARGED IN THE VICINITY OF THE SEWAGE DISPOSAL SYSTEM (SDS).
- SWIMMING POOLS, DRIVEWAYS, OR STRUCTURES THAT MAY COMPACT THE SOIL SHALL NOT BE CONSTRUCTED OVER ANY PORTION OF THE ABSORPTION FIELD.
- NO TRENCHES SHALL BE INSTALLED IN WET SOIL
- ALL SIDES AND BOTTOM OF ABSORPTION TRENCHES SHALL BE RAKED PRIOR TO PLACEMENT OF ELJEN SAND.
- ALL PIPE PENETRATIONS TO CONCRETE SEPTIC TANK AND DISTRIBUTION BOX SHALL BE GROUTED.
- DISTRIBUTION LINES SHALL BE CAPPED.
- AREAS UPHILL AND/OR ADJACENT TO THE PERIMETER OF THE ABSORPTION FIELD SHOULD BE GRADED TO DIVERT SURFACE WATER.
- ALL NEWLY DISTURBED AREAS SHALL BE IMMEDIATELY STABILIZED UPON CONSTRUCTION COMPLETION USING GRASS, SEED, AND MULCH.
- ALL LAUNDRY AND KITCHEN WASTES SHALL BE DISCHARGED TO THE SDS.
- BENDS SHALL BE USED WHEN THE ENTRANCE OR EXIT FROM THE SEPTIC TANK ARE NOT STRAIGHT. IF BENDS ARE USED AT POINTS OTHER THAN ENTRANCE OR EXIT POINTS A CLEANOUT IS REQUIRED (SEE DETAIL).
- THE DESIGN AND LOCATION OF THE SANITARY FACILITIES (WATER AND SEWER SYSTEMS) SHALL NOT BE CHANGED WITHOUT ORANGE COUNTY DEPARTMENT OF HEALTH REVIEW AND APPROVAL.
- 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 UNDUE COMPACTION THAT COULD RESULT IN A CHANGE OF THE ABSORPTION CAPACITY OF THE SOIL ON WHICH THE DESIGN 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 SDS IS REDESIGNED TO ACCOUNT FOR THEM AND REAPPROVED BY THE ORANGE COUNTY HEALTH DEPARTMENT.
- THERE MUST BE AN UNINTERRUPTED POSITIVE SLOPE FROM THE SEPTIC TANK (OR ANY PUMPING OR DOSING CHAMBER) TO THE HOUSE, ALLOWING SEPTIC GASES TO DISCHARGE THROUGH THE STACK VENT.
- THE PURCHASED 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 NYSDEC WELL, COMPLETION REPORT.
- DISTRIBUTION BOXES/DROP BOXES SHOULD BE INSPECTED ANNUALLY TO ASSURE THAT THEY ARE LEVEL AND OPERATING PROPERLY.
- SEPTIC TANKS SHOULD BE INSPECTED ANNUALLY AND PUMPED OUT EVERY 2-3 YEARS.

THIS SHEET IS INVALID AND VOID UNLESS ACCOMPANIED BY REMAINING SHEETS IN SET.

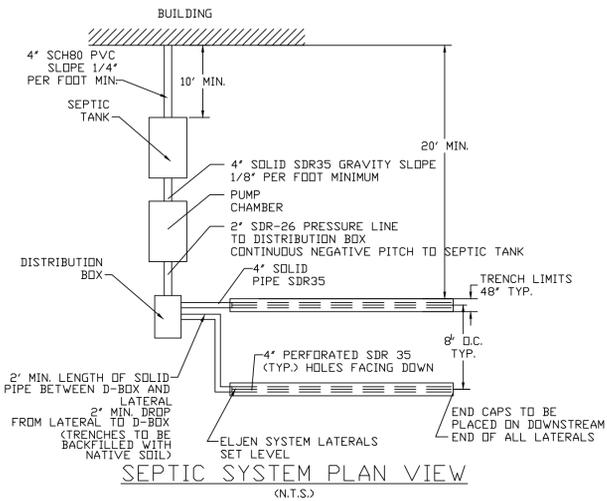
SEPTIC DESIGN AND GRADING PLAN

PROPOSED TWO (2) LOT
RESIDENTIAL SUBDIVISION FOR:
LYNN WARREN
TARBEN WAY
LOT # 12 FILED MAP 274.16 (S/B/L: 127 - 1 - 12)
TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK
TOWN OF NEWBURGH APPLICATION # 21-18
JONATHAN CELLA, P.E.
51 HUNT ROAD
WALLKILL, NEW YORK 12589

DATE: 07/01/2023	DRAWN BY: JJC
SCALE: AS NOTED	SHEET NO. : 2 OF 5

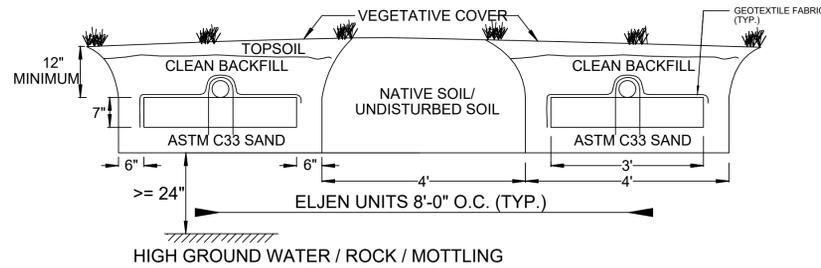
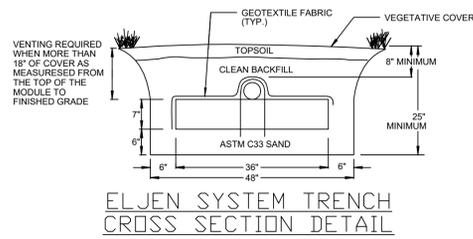
REVISIONS:
 1. 12/29/2023: IN HOUSE REVISIONS
 2. 03/15/2024: PER OGDH 03-11-2024 COMMENTS AND P.B. SUBMISSION
 3. 04/08/2024: IN HOUSE REVISIONS

JONATHAN CELLA, P.E.
 N.Y.S.P.E. LIC. NO. 085069

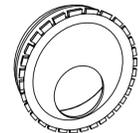


ELJEN SYSTEM
ASTM C33 SAND SPECIFICATION

SIEVE SIZE	SIEVE SQUARE OPENING SIZE	SPECIFICATION PERCENT PASSING (WET SIEVE)
0.375"	9.5 mm	100.0 - 100.0
#4	4.75mm	95.0 - 100.0
#8	2.36 mm	80.0 - 100.0
#16	1.18 mm	50.0 - 85.0
#30	600 um	25.0 - 60.0
#50	300 um	5.0 - 30.0
#100	150 um	< 10.0
#200	75 um	< 5.0



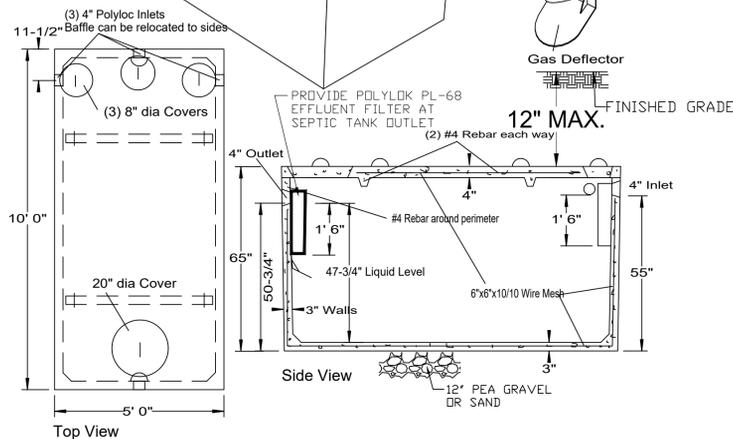
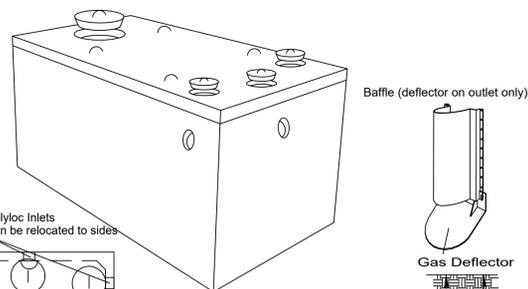
- ELJEN SYSTEM NOTES**
- THIS DESIGN AND CONSTRUCTION REQUIREMENT COMPLIES WITH APPENDIX 75-A AND LOCAL HEALTH DEPARTMENT REGULATIONS.
 - THIS DESIGN COMPLIES WITH AND MUST BE INSTALLED IN ACCORDANCE WITH THE MOST CURRENT ELJEN NEW YORK DESIGN AND INSTALLATION MANUAL.
 - THIS SYSTEM IS NOT DESIGNED FOR USE WITH A GARBAGE DISPOSAL.
 - THIS SYSTEM IS NOT DESIGNED FOR BACKWASH FROM A WATER SOFTENER.
 - ORGANIC MATERIAL THAT CAN RESTRICT FLOW MUST BE REMOVED FOR RAISED BEDS. THE SOIL MUST BE SCARIFIED TO PROVIDE DEEP CHANNELS FOR THE SAND. A PLDOWD INTERFACE ON CONTOUR IS RECOMMENDED TO PREPARE THE SOIL FOR FILL PLACEMENT.
 - SCARIFY ANY SMEARED SUBSOIL PRIOR TO FILL PLACEMENT.
 - FILL MATERIAL SHALL MEET OR EXCEED STATE OF NEW YORK CODE REQUIREMENTS. ALL FILL MATERIAL SHALL BE CLEAN BANK RUN SAND, FREE OF TOPSOIL, HUMUS, AND "DREGGING" DIRECTLY BENEATH THE GSF SYSTEM.
 - ASTM C33 SPECIFIED SAND WITH LESS THAN 10% PASSING A #100 SIEVE AND LESS THAN 5% PASSING A #200 SIEVE SHALL BE PLACED BELOW AND AROUND THE GSF MODULES, WITH 6 INCHES MINIMUM UNDERNEATH AND 6 INCHES MINIMUM SURROUNDING THE GSF MODULES IN TRENCH CONFIGURATIONS. IN BED SYSTEMS, USE 6 INCHES MINIMUM UNDERNEATH THE MODULES WITH 12 INCHES MINIMUM BETWEEN MODULE ROWS AND 12 INCHES MINIMUM AROUND THE PERIMETER OF THE MODULES.
 - ELJEN PROVIDED GEOTEXTILE COVER FABRIC SHALL PROVIDE PROPER TENSION AND ORIENTATION OF THE FABRIC AROUND THE SIDES OF THE PERFORATED PIPE ON TOP OF THE GSF MODULES. FABRIC SHOULD BE NEITHER TOO LOOSE, NOR TOO TIGHT. THE CORRECT TENSION OF THE COVER FABRIC IS SET BY SPREADING THE COVER FABRIC OVER THE TOP OF THE MODULE AND DOWN BOTH SIDES OF THE MODULE WITH THE COVER FABRIC TIGHT OVER THE TOP OF THE PERFORATED DISTRIBUTION PIPE. PLACE SHOVEL FULL'S OF SPECIFIED SAND DIRECTLY OVER THE PIPE AREA ALLOWING THE COVER FABRIC TO FORM A MOSTLY VERTICAL ORIENTATION ALONG THE SIDES OF THE PIPE. REPEAT THIS STEP MOVING DOWN THE PIPE.
 - BACKFILL MATERIAL SHALL BE CLEAN WITH NO ROOTS OR STONES LARGER THAN 2 INCHES IN ANY DIMENSION TO A MINIMUM DEPTH OF 8 INCHES OVER THE GSF MODULES AND FINAL COVER FOR VEGETATION OF 4 INCHES TO 6 INCHES OF CLEAN LOAD.
 - ANY SYSTEM WHICH IS MORE THAN 18 INCHES BELOW FINISH GRADE AS MEASURED FROM THE TOP OF THE MODULE SHALL BE VENTED.



- Insert leveler in the end of all outlet pipes in the distribution box.
- Rotate until effluent enters all outlets equally.
- Compensates for up to 1-1/4" difference in pipe end elevations.
- Fits all 4" smooth wall and corrugated pipes.

SPECIFICATIONS	SPEED LEVELER
Construction: Plastic	FSL-4
	Woodard's Concrete Products, Inc. 629 Lybolt Road, Bullville, NY 10915 (845) 361-3471 / Fax 361-1050

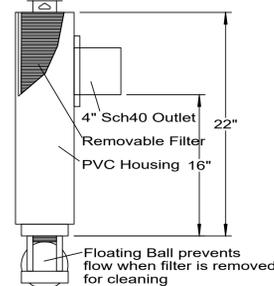
SPEED LEVELER DETAIL (N.T.S.)



SPECIFICATIONS	PRECAST SEPTIC TANKS
Concrete Min. Strength: 4,000 psi at 28 days	MODEL ST-1250 / 1250 GALLONS
Reinforcement: #4 Rebar, 6x6x10ga. WWM	
Air Entrainment: 5%	
Construction Joint: Butyl Rubber Sealant	
Pipe Connection: Polylok Seal (patented)	
Weight = 9,500 lbs	
Load Rating: 300 psf	

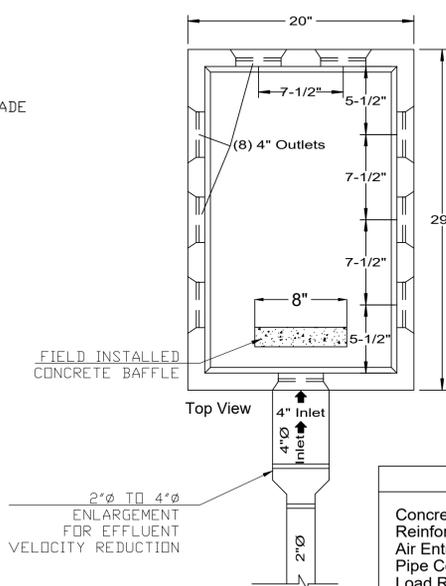
1,250 GALLON SEPTIC TANK (N.T.S.)

SPECIFICATIONS	SEPTIC TANK & GREASE TRAP EFFLUENT FILTERS
Construction: PVC or Polyethylene plastic	
NSF Standard 46 Certified	



Polylok PL-68 (OR NSF46 CERTIFIED APPROVED EQUAL)

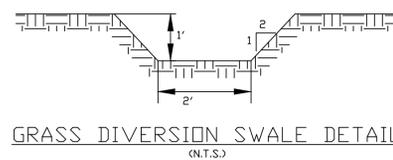
- DISTRIBUTION BOX NOTES:**
- ALL OUTLET INVERT ELEVATIONS MUST BE SET AT THE SAME LEVEL.
 - FLOW EQUALIZERS ARE REQUIRED ON ALL OUTLETS IN USE.
 - OUTLETS MUST BE USED IN A MANNER THAT WILL ALLOW ACCESS TO THE EXPANSION AREA WITHOUT DISTURBING EXISTING PIPING.
 - TO PROVIDE VELOCITY REDUCTION IN CONFORMANCE WITH ELJEN SYSTEM AND STATE REQUIREMENTS THE 2" FORCE MAIN SHALL BE ENLARGED TO 4" OUTSIDE OF THE DISTRIBUTION BOX PRIOR TO DISCHARGING EFFLUENT INTO THE DISTRIBUTION BOX VIA 4" DISCHARGE IN COMBINATION WITH FIELD POURED BAFFLE.



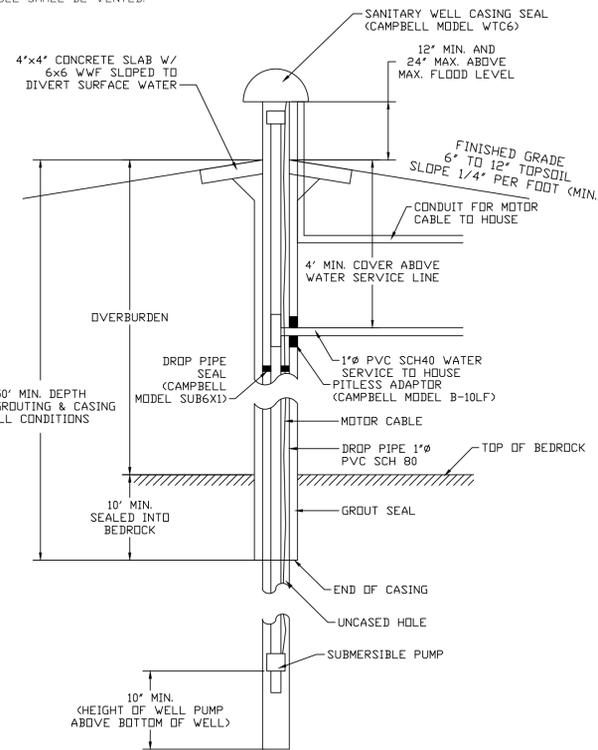
2" TO 4" ENLARGEMENT FOR EFFLUENT VELOCITY REDUCTION

SPECIFICATIONS	PRECAST DISTRIBUTION BOXES
Concrete Min. Strength: 4,000 psi at 28 days	MODEL DB-9 / 8 OUTLET BOX
Reinforcement: Fiber, 10ga. wire mesh	
Air Entrainment: 5%	
Pipe Connection: Polylok Seal (patented)	
Load Rating: 300 psf	
Weight = 290 lbs	

DISTRIBUTION BOX DETAIL (N.T.S.)



GRASS DIVERSION SWALE DETAIL (N.T.S.)



- CONSTRUCT WELL PER NYSDDH APPENDIX 5-B, STANDARDS FOR WATER WELLS, LATEST EDITION.
- PUMP SETTING TO BE ESTABLISHED IN FIELD. STABILIZED YIELD RATE TO BE 5 GPM (MIN).
- GROUTING AROUND PIPE CASING SHALL EXTEND AT LEAST 50' BELOW GRADE AND SHALL BE NEAT CEMENT GROUT. GROUT SHALL BE PLACED UPWARD FROM THE BOTTOM AS ONE CONTINUOUS MASS.
- STEEL CASING 6" (IN ACCORDANCE WITH AWWA STANDARD A-100 MOST CURRENT EDITION) DRILL HOLE 10". THE MINIMUM CASING DEPTH SHALL BE THROUGH THE OVERBURDEN AND AT LEAST 10' INTO BEDROCK. CASING SHALL BE GRouted INTO FIRM BEDROCK. UNDER NO CONDITION SHOULD CASING AND GRouting EXTEND LESS THAN 50' DEEP.
- USE OF TEMPORARY OUTSIDE CASING MAY BE NECESSARY TO PERMIT GRouting WHERE CAVING IN IS ENCOUNTERED.

WELL DETAIL (N.T.S.)

SOIL TEST DATA LOT # 11

DEEP TEST INFORMATION

D111	5'-4" DEEP	03/11/2021
	0-4" TOPSOIL	
	4"-64" CLAY LOAM	
	NO ROCK, NO MOTTLING, WATER AT 64"	
D112	4'-4" DEEP	03/11/2021
	0-4" TOPSOIL	
	4"-52" CLAY LOAM	
	NO ROCK, NO WATER, NO MOTTLING	
D113**	4'-3" DEEP	10/05/2022
	0-4" TOPSOIL	
	4"-51" SILTY CLAY LOAM	
	NO WATER, NO MOTTLING	
	REFUSAL AT 51"	

**WITNESSED BY ORANGE COUNTY HEALTH DEPARTMENT

PERCOLATION TEST INFORMATION

P111	12" DEEP	03/21/21
	STABILIZED PERC. RATE = 21 MIN. PER INCH	
P112	12" DEEP	03/21/21
	STABILIZED PERC. RATE = 18 MIN. PER INCH	
P113**	24" DEEP	10/05/2022
	STABILIZED PERC. RATE = 1 MIN. 4 SECONDS PER INCH	
P114**	24" DEEP	10/06/2022
	STABILIZED PERC. RATE = 39 MIN. 1 SECONDS PER INCH	

**WITNESSED BY ORANGE COUNTY HEALTH DEPARTMENT

SOIL TEST DATA LOT # 12

DEEP TEST INFORMATION

D121	4'-6" DEEP	03/11/2021
	0-4" TOPSOIL	
	4"-54" CLAY LOAM	
	NO ROCK, NO WATER, NO MOTTLING	
D122	4'-0" DEEP	03/11/2021
	0-12" TOPSOIL	
	12"-48" CLAY LOAM	
	NO ROCK, NO WATER, NO MOTTLING	
D123**	5'-4" DEEP	10/05/2022
	0-4" TOPSOIL	
	4"-44" SILTY CLAY LOAM	
	44"-64" SANDY CLAY LOAM	
	NO WATER, NO MOTTLING	
	REFUSAL AT 64"	
D129	5'-4" DEEP	10/22/2004
	0-6" TOPSOIL	
	6"-64" CLAY LOAM	
	NO ROCK, NO WATER, NO MOTTLING	
D140	6'-0" DEEP	10/22/2004
	0-3" TOPSOIL	
	3"-72" CLAY LOAM	
	NO ROCK, NO WATER, NO MOTTLING	
D104**	7'-8" DEEP	06/19/2008
	0-13" TOPSOIL	
	13"-38" CLAY LOAM	
	38"-72" SAND GRAVEL	
	72"-92" FINE SAND WITH MOTTLING	
	NO WATER, NO ROCK	
	MOTTLING AT 72"	

**WITNESSED BY ORANGE COUNTY HEALTH DEPARTMENT

PERCOLATION TEST INFORMATION

P121	12" DEEP	03/21/21
	STABILIZED PERC. RATE = 36 MIN. PER INCH	
P122	12" DEEP	03/21/21
	STABILIZED PERC. RATE = 16 MIN. PER INCH	
P123**	24" DEEP	10/05/2022
	STABILIZED PERC. RATE = 1 MIN. 3 SECONDS PER INCH	
P124**	24" DEEP	10/05/2022
	STABILIZED PERC. RATE = 38 MIN. 57 SECONDS PER INCH	
P29	24" DEEP	11/23/2004
	STABILIZED PERC. RATE = 11 MIN. 52 SECONDS PER INCH	
P40	24" DEEP	11/23/2004
	STABILIZED PERC. RATE = 7 MIN. 23 SECONDS PER INCH	
P53**	24" DEEP	06/20/2008
	STABILIZED PERC. RATE = 42 MIN. 1 SECOND PER INCH	

**WITNESSED BY ORANGE COUNTY HEALTH DEPARTMENT

THIS SHEET IS INVALID AND VOID UNLESS ACCOMPANIED BY REMAINING SHEETS IN SET.

SEWAGE DISPOSAL SYSTEM DETAILS
PROPOSED TWO (2) LOT
RESIDENTIAL SUBDIVISION FOR
LYNN WARREN
TARBEN WAY
LOT # 12 FILED MAP 274.16 (S/B/L: 127 - 1 - 12)
TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK
TOWN OF NEWBURGH APPLICATION # 21-18

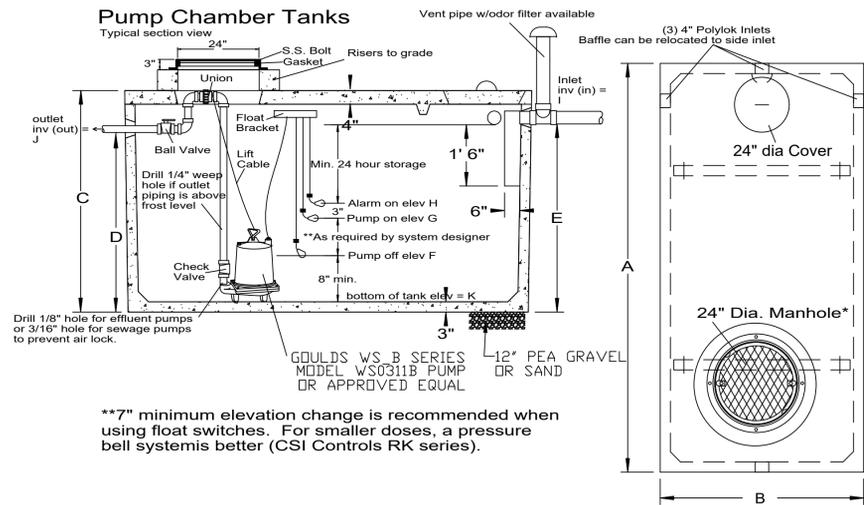
JONATHAN CELLA, P.E.

51 HUNT ROAD

DATE:	WALLKILL, NEW YORK 12589	DRAWN BY:
07/01/2023	(845) 741-0363 jonathancell@bham.com	JC
SCALE:		SHEET NO. :
AS NOTED		3 OF 5

- REVISIONS:**
- 12/29/2023: IN HOUSE REVISIONS
 - 03/15/2024: PER OCDH 03-11-2024 COMMENTS AND P.B. SUBMISSION
 - 04/08/2024: IN HOUSE REVISIONS

JONATHAN CELLA, P.E.
N.Y.S. P.E. LIC. NO. 085069



Model	A	B	C	D	E	Gallons per inch LL
*GT-1000	8'-6"	4'-10"	65"	50.5"	55"	21.6

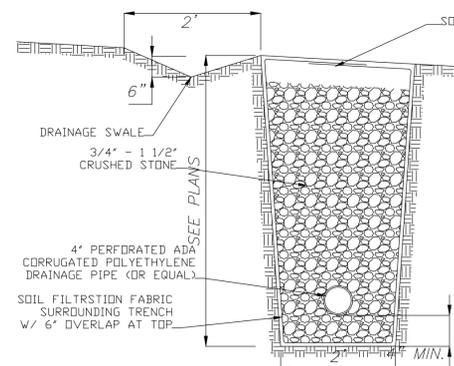
*Indicates stock size

- PUMP CHAMBER NOTES**
- THE CONTRACTOR SHALL DETERMINE REQUIRED LENGTHS OF ELECTRICAL CABLE AND AVAILABLE VOLTAGE PRIOR TO ORDERING EQUIPMENT.
 - ALL WIRING SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE AND LOCAL CODE REQUIREMENTS.
 - THE POWER AND CONTROL WIRING SHALL BE MADE DIRECTLY TO THE CONTROL PANEL WITHOUT ANY OUTSIDE SPLICES.
 - THE PUMP CONTROL PANEL SHALL BE LOCATED IN AN ACCESSIBLE LOCATION OF THE RESIDENCE WITH AUDIBLE ALARMS AND A FLASHING LIGHT.
 - A N.Y.S. PROFESSIONAL ENGINEER MUST CERTIFY TO THE INSTALLATION OF THE SYSTEM.
 - THE QUANTITY DOSED IS BASED UPON 75% OF THE VOLUME OF THE LATERALS AND 100% THE VOLUME OF THE FORCE MAIN.
 - THE PUMPS SHALL BE WIRED SUCH THAT THEY ALTERNATE OPERATIONS.
 - AS BUILT MUST SHOW FORCE MAIN LOCATION.
 - THE PUMP CHAMBER SHALL BE A WOODARD'S MODEL GT-1000 / 1000 GALLON PRECAST CONCRETE SEPTIC TANK WITHOUT THE BAFFLE.
 - THE FORCE MAIN MUST MAINTAIN A POSITIVE SLOPE TO THE DISTRIBUTION BOX ALLOWING EFFLUENT TO RETURN TO THE PUMP CHAMBER BETWEEN PUMPING CYCLES.
 - PUMP STATIONS SHOULD BE INSPECTED PERIODICALLY BY A PROPERLY TRAINED PERSON FOR PROPER OPERATION, INCLUDING HIGH WATER ALARMS, VENTING, AND ANY PHYSICAL DAMAGE.

LOT # 11 DOSING CALCULATIONS
 STORAGE CALCULATION = 21.6 GALS/IN
 LEACH FIELD VOLUME CALCULATION = 0.653 GAL/LF x 176 L.F. = 114.93 GALS.
 DOSE CALCULATION = 114.93 GALS. x 75% = 86.20 GALS.
 FORCE MAIN VOLUME = 0.163 GAL/LF x 120 LF = 19.56 GALS.
 DOSE CALCULATION = (86.20 GALS. + 19.56 GALS.) / 21.6 GALS./IN = 4.90 IN.
 DOSE PROVIDED = 5.0 IN. x 21.6 GALS./IN = 108 GALS.
 STORAGE DEPTH = (524.25-521.00)x12"/1' = 39"
 STORAGE VOLUME = 39' x 21.6 GALS/IN = 842.4 GALS.

LOT # 12 DOSING CALCULATIONS
 STORAGE CALCULATION = 21.6 GALS/IN
 LEACH FIELD VOLUME CALCULATION = 0.653 GAL/LF x 176 L.F. = 114.93 GALS.
 DOSE CALCULATION = 114.93 GALS. x 75% = 86.20 GALS.
 FORCE MAIN VOLUME = 0.163 GAL/LF x 157 LF = 25.59 GALS.
 DOSE CALCULATION = (86.20 GALS. + 25.59 GALS.) / 21.6 GALS./IN = 5.18 IN.
 DOSE PROVIDED = 5.0 IN. x 21.6 GALS./IN = 108 GALS.
 STORAGE DEPTH = (528.75-525.50)x12"/1' = 39"
 STORAGE VOLUME = 39' x 21.6 GALS/IN = 842.4 GALS.

	LOT # 11	LOT # 12
PUMP CHAMBER IN ELEVATION (I)	524.25	528.75
PUMP CHAMBER OUT ELEVATION (J)	523.88	528.38
BOTTOM OF TANK ELEVATION (K)	519.92	524.42
PUMP OFF ELEVATION (F)	520.58	525.08
PUMP ON ELEVATION (G)	521.00	525.50
HIGH WATER ELEVATION (H)	521.25	525.75



- CURTAIN DRAIN NOTES**
- CURTAIN DRAIN SHALL BE INSTALLED UPHILL AND ALONG ONE SIDE OF THE ABSORPTION FIELD AS SHOWN ON THE PLANS.
 - PLACE SOIL FILTRATION FABRIC ALONG THE BOTTOM AND SIDES OF TRENCH. PLACE 4" CRUSHED STONE AT BOTTOM, INSTALL PERFORATED PIPE, AND BACKFILL WITH CRUSHED STONE. OVERLAP SOIL FILTRATION FABRIC OVER CRUSHED STONE BEFORE PLACEMENT OF IMPERVIOUS SOIL.
 - TRANSITION FROM PERFORATED TO SOLID PIPE MAY BE MADE ADJACENT TO THE LAST LATERAL INSTALLED.
 - CLEANOUTS TO BE INSTALLED FLUSH WITH FINISHED GRADE AT LOCATIONS SHOWN ON PLAN.
 - END OF SOLID PVC CURTAIN DRAIN OUTLET SHALL BE SCREENED.
 - SWALES AND CURTAIN DRAIN DISCHARGES TO BE DIRECTED AWAY FROM ABSORPTION FIELD.

CURTAIN DRAIN DETAIL
(N.T.S.)

SYSTEM COMPONENTS	REQUIRED SEPARATION DISTANCES FROM WASTEWATER TREATMENT SYSTEM COMPONENTS			
	WELL OR SUCTION LINE	STREAM, LAKE, WATERCOURSE (b), OR WETLAND	DWELLING	PROPERTY DRAINAGE DITCH OR RAIN GARDEN (h)
HOUSE SEWER DRAIN (WATERTIGHT JOINTS)	25 IF CAST IRON 50' OTHERWISE	25 FEET	3 FEET	10 FEET
SEPTIC TANK, DOSING TANK OR WATER TIGHT (ETU)	50 FEET	50 FEET	10 FEET	10 FEET
EFFLUENT LINE TO D-BOX/DROP-BOX	50 FEET	50 FEET	10 FEET	10 FEET
DISTRIBUTION BOX/DROP BOX	100 FEET	100 FEET	20 FEET	20 FEET
ABSORPTION FIELD (c)(d)	100 FEET (a)	100 FEET	20 FEET	20 FEET
SEEPAGE PIT (e)	150 FEET (a)	100 FEET	20 FEET	20 FEET
RAISED SYSTEM OR MOUND (c)(d)	100 FEET (a)	100 FEET	20 FEET	20 FEET
INTERMITTENT SAND FILTER (d)	100 FEET (a)(f)	100 FEET (f)	20 FEET	20 FEET
NON WATERBORNE SYSTEMS WITH OFFSITE RESIDUAL DISPOSAL	50 FEET	50 FEET	20 FEET	10 FEET
NON WATERBORNE SYSTEMS WITH ONSITE DISCHARGE	100 FEET	50 FEET	20 FEET	20 FEET

- NOTES**
- WHEN WASTEWATER TREATMENT SYSTEMS ARE LOCATED UPGRADE AND IN THE DIRECT PATH OF SURFACE WATER DRAINAGE TO A WELL, THE CLOSEST PART OF THE TREATMENT SYSTEM SHALL BE AT LEAST 200 FEET AWAY FROM THE WELL.
 - MEAN HIGH WATER MARK, WETLAND OR WATERCOURSE DETERMINATIONS SHOULD BE ADDRESSED WITH THE LHD OR OTHER AGENCY HAVING JURISDICTION AND THE APPLICABLE NYSDEC REGIONAL OFFICE.
 - FOR ALL SYSTEMS INVOLVING PLACEMENT OF FILL MATERIAL, SEPARATION DISTANCES ARE MEASURED FROM THE TOE OF SLOPE OF THE FILL, EXCEPT FOR SOME SHALLOW ABSORPTION TRENCH SYSTEMS AS DESCRIBED IN SECTION 9.12.2 OF THIS HANDBOOK.
 - SEPARATION DISTANCES SHALL ALSO BE MEASURED FROM THE EDGE OF THE DESIGNATED ADDITIONAL USEABLE AREA (I.E. RESERVE AREA), WHEN AVAILABLE.
 - THE CLOSEST PART OF THE WASTEWATER TREATMENT SYSTEM SHALL BE LOCATED AT LEAST TEN (10) FEET FROM ANY WATER SERVICE LINE (E.G. PUBLIC WATER SUPPLY MAIN, PUBLIC WATER SERVICE LINE OR RESIDENTIAL WELL WATER SERVICE LINE).
 - WHEN INTERMITTENT SAND FILTERS ARE DESIGNED TO BE WATERTIGHT AND COLLECT ALL EFFLUENT, THE SEPARATION DISTANCE CAN BE REDUCED TO 50 FEET.
 - THE LISTED WATER WELL SEPARATION DISTANCES FROM CONTAMINATION SOURCES SHALL BE INCREASED BY 50% WHENEVER AQUIFER WATER ENTERS THE WATER WELL AT LESS THAN 50 FEET.
 - RECOMMENDED USE SITE EVALUATION TO AVOID DWTS SHORT CIRCUITING TO THE SURFACE OR GROUNDWATER AND TO MINIMIZE IMPACTS ON DWTS FUNCTIONALITY. SEPARATION DISTANCES BELOW GRADE. IF A 50% INCREASE CANNOT BE ACHIEVED, THEN THE GREATEST POSSIBLE INCREASE IN SEPARATION DISTANCE SHALL BE PROVIDED WITH SUCH ADDITIONAL MEASURES AS NEEDED TO PREVENT CONTAMINATION.
 - IF SEPARATION DISTANCES ARE LESS AN AEROBIC TANK MAY BE REQUIRED.

EMBANKMENT OR VERY STEEP SLOPE: IT IS RECOMMENDED THAT SYSTEM COMPONENTS BE LOCATED A MINIMUM OF 25 FEET AND THE ABSORPTION FIELD BE LOCATED A MINIMUM OF 50 FEET FROM AN EMBANKMENT OR VERY STEEP SLOPE. MAXIMIZE SEPARATION DISTANCES AND USE SITE EVALUATION TO AVOID SHORT-CIRCUITING TO SURFACE (BREAKOUT OR SEEPAGE).

SWIMMING POOLS (ABOVE OR BELOW GROUND): IT IS RECOMMENDED THAT SYSTEM COMPONENTS BE LOCATED A MINIMUM OF 20 FEET AND THE ABSORPTION FIELD BE LOCATED A MINIMUM OF 35 FEET FROM SWIMMING POOLS. MAXIMIZE SEPARATION DISTANCES AND USE SITE EVALUATION TO MINIMIZE IMPACTS ON DWTS ACCESSIBILITY AND FUNCTIONALITY.

SPECIFICATIONS

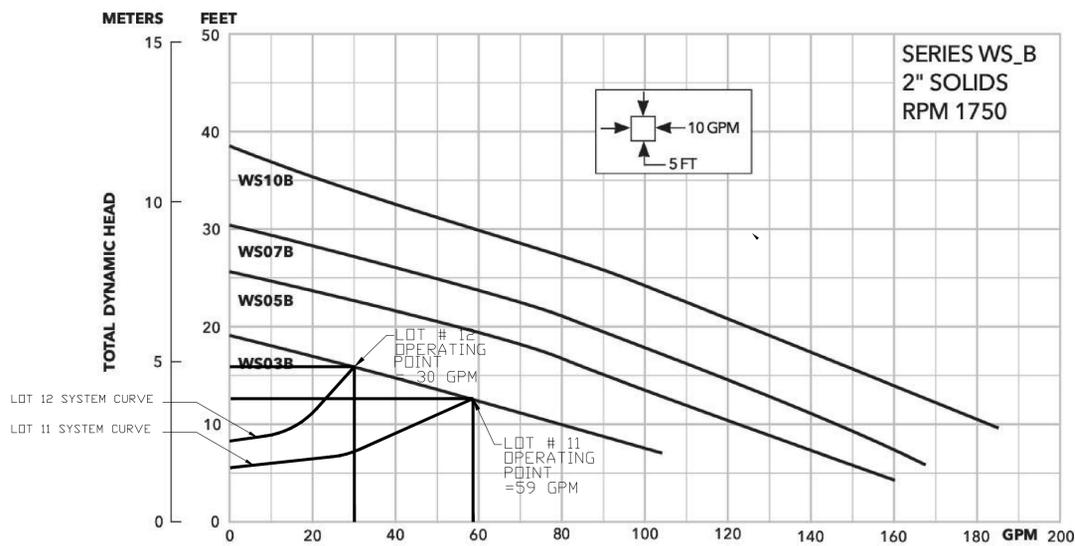
Concrete Min. Strength: 4,000 psi at 28 days
 Reinforcement: WWM & Rebar
 Air Entrainment: 6%
 Pipe Connection: Polylok Seal or Pipe Boots
 Volume: PC-4x4 = 300 gallons
 Load Rating: 300 psf

PRECAST PUMP CHAMBERS RESIDENTIAL GRADE

Woodard's Concrete Products, Inc.
 629 Lybolt Road, Bullville, NY 10915
 (845) 361-3471 / Fax 361-1050

Page 3C 7/30/18

www.woodardsconcrete.com



	LOT # 11	LOT # 12
STATIC HEAD = (DISTRIBUTION BOX IN) - (BOTTOM OF PUMP CHAMBER)	= 525.79' - 519.92' = 5.87 FT.	= 532.79' - 524.42' = 8.37 FT.
HEAD LOSSES = FRICTION LOSSES + BEND LOSSES + ETC.	= 7 FT.	= 8 FT.
TOTAL DYNAMIC HEAD	= 5.87' + 7' = 12.87 FT.	= 8.37' + 8' = 16.37 FT.
OPERATING POINT	= 59 GPM	= 30 GPM
DOSE VOLUME	= 108 GALS.	= 108 GALS.
DOSE TIME	= 1 MINUTE 50 SECONDS	= 3 MINUTE 36 SECONDS

THIS SHEET IS INVALID AND VOID UNLESS ACCOMPANIED BY REMAINING SHEETS IN SET.

DETAILS

PROPOSED TWO (2) LOT
 RESIDENTIAL SUBDIVISION FOR:
 LYNN WARREN
 TARBEN WAY
 LOT # 12 FILED MAP 274.16 (S/B/L: 127 - 1 - 12)
 TOWN OF NEWBURGH
 ORANGE COUNTY, NEW YORK
 TOWN OF NEWBURGH APPLICATION # 21-18

JONATHAN CELLA, P.E.
 51 HUNT ROAD
 WALLKILL, NEW YORK 12589

DATE: 07/01/2023
 DRAWN BY: JJC
 SCALE: AS NOTED
 SHEET NO.: 4 OF 5

REVISIONS:
 1. 12/29/2023: IN HOUSE REVISIONS
 2. 03/15/2024: PER OCDH 03/11/2024 COMMENTS AND P.B. SUBMISSION
 3. 04/08/2024: IN HOUSE REVISIONS

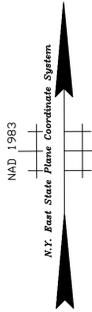
JONATHAN CELLA, P.E.
 N.Y.S. P.E. LIC. NO. 085069

PROCEDURAL NOTES:
 1. UDIG NY MUST BE CONTACTED PRIOR TO ANY EXCAVATION OR DEMOLITION (DIAL 811 OR www.udig.ny.gov).

TEMPORARY VEGETATION NOTES
 TEMPORARY VEGETATION SHALL BE USED TO PROTECT AREAS IN EXCESS OF 1/2 ACRE EXPOSED FOR PERIODS OF TWO (2) WEEKS BEFORE OR DURING DEVELOPMENT.
 A. FIFTY (50) LBS OF NITROGEN, 50 LBS OF APPROVED GRAIN SEED AND 2 TONS OF HAY MULCH PER ACRE OR
 B. ON AREAS THAT WILL BE EXPOSED FOR SHORT PERIODS OF TIME AND WHERE WEATHER CONDITIONS ARE CONDUCTIVE TO AIRBORNE SAND, TRAPS TO CONTROL SUCH SAND SHALL BE INSTALLED AS DIRECTED.
 C. ON AREAS SUCH AS TEMPORARY ROADWAYS, WHEN DRY CONDITIONS PREVAIL, THE CONTRACTOR SHALL BE REQUIRED TO APPLY WATER OR CALCIUM CHLORIDE AS REQUIRED TO PREVENT DUST DURING CONSTRUCTION ACTIVITIES.

EROSION CONTROL STANDARD NOTES
 1. EXCAVATION, FILLING, GRADING, AND STRIPPING ACTIVITIES SHALL BE UNDERTAKEN IN SUCH A MANNER AS TO MINIMIZE THE POTENTIAL OF EROSION AND SEDIMENT AND THE THREAT TO THE HEALTH, SAFETY AND WELFARE OF NEIGHBORING PROPERTY OWNERS AND THE GENERAL PUBLIC.
 2. SITE PREPARATION AND CONSTRUCTION SHALL BE FITTED TO THE VEGETATION, TOPOGRAPHY, AND OTHER NATURAL FEATURES OF THE SITE AND SHALL PRESERVE AS MANY OF THESE FEATURES AS POSSIBLE.
 3. THE CONTROL OF EROSION AND SEDIMENT SHALL BE A CONTINUOUS PROCESS UNDERTAKEN AS NECESSARY PRIOR TO, DURING AND AFTER SITE PREPARATION AND CONSTRUCTION.
 4. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED BY SITE PREPARATION AT ANY GIVEN TIME.
 5. THE EXPOSURE OF AREAS BY SITE PREPARATION SHALL BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME PRIOR TO THE CONSTRUCTION OF STRUCTURES OR IMPROVEMENTS OR THE RESTORATION OF THE EXPOSED AREAS TO AN ATTRACTIVE NATURAL CONDITION.
 6. MULCHING OR TEMPORARY VEGETATION SUITABLE TO THE SITE SHALL BE USED WHERE NECESSARY TO PROTECT AREAS EXPOSED BY SITE PREPARATION, AND PREVENT VEGETATION WHICH IS WELL ADAPTED TO THE SITE SHALL BE INSTALLED AS PRACTICAL.
 7. WHERE SLOPES ARE TO BE REVEGETATED IN AREAS EXPOSED BY SITE PREPARATION, THE SLOPES SHALL NOT BE OF SUCH STEEPNESS THAT VEGETATION CANNOT BE READILY ESTABLISHED OR THAT PROBLEMS OF EROSION OR SEDIMENT MAY RESULT.
 8. SITE PREPARATION AND CONSTRUCTION SHALL NOT ADVERSELY AFFECT THE FREE FLOW OF WATER BY ENCRUACHING ON, BLOCKING OR RESTRICTING WATERCOURSES.
 9. ALL FILL MATERIAL SHALL BE OF COMPOSITION SUITABLE FOR THE ULTIMATE USE OF THE FILL, FREE OF RUBBISH, AND CAREFULLY RESTRICTED IN ITS CONTENT OF BRUSH, STUMPS, TREE DEBRIS, ROCKS, FROZEN MATERIAL, AND SOFT OR EASILY COMPRESSIBLE MATERIAL.
 10. FILL MATERIAL SHALL BE SUFFICIENTLY TO PREVENT PROBLEMS OF EROSION, AND WHERE THE MATERIAL IS TO SUPPORT STRUCTURES, IT SHALL BE COMPACTED TO A MINIMUM OF NINETY PERCENT (90%) OF STANDARD PROCTOR WITH PROPER MOISTURE CONTROL.
 11. ALL TOPSOIL WHICH IS EXCAVATED FROM A SITE SHALL BE STOCKPILED AND USED FOR THE RESTORATION OF THE SITE, AND SUCH STOCKPILES, WHERE NECESSARY, SHALL BE SEEDED OR OTHERWISE TREATED TO MINIMIZE THE EFFECTS OF EROSION.
 12. PRIOR TO, DURING AND AFTER SITE PREPARATION AND CONSTRUCTION, AN INTEGRATED DRAINAGE SYSTEM SHALL BE PROVIDED WHICH AT ALL TIMES MINIMIZES EROSION, SEDIMENT, HAZARDS OF SLOPE INSTABILITY, AND ADVERSE EFFECTS ON NEIGHBORING PROPERTY OWNERS.
 13. THE NATURAL DRAINAGE SYSTEM SHALL GENERALLY BE PRESERVED IN PREFERENCE TO MODIFICATIONS OF THIS SYSTEM, EXCEPTING WHERE SUCH MODIFICATIONS ARE NECESSARY TO REDUCE LEVELS OF EROSION AND SEDIMENT AND ADVERSE EFFECTS ON NEIGHBORING PROPERTY OWNERS.
 14. ALL DRAINAGE SYSTEMS SHALL BE DESIGNED TO HANDLE ADEQUATELY ANTICIPATED FLOWS, BOTH WITHIN THE SITE AND FROM UPSTREAM DRAINAGE BASIN.
 15. SUFFICIENT GRADES AND DRAINAGE FACILITIES SHALL BE PROVIDED TO PREVENT THE PONDING OF WATER, UNLESS SUCH PONDING IS PROPOSED WITHIN SITE PLANS, IN WHICH EVENT THERE SHALL BE SUFFICIENT WATER FLOW TO MAINTAIN PROPOSED WATER LEVELS AND TO AVOID STAGNATION.
 16. THERE SHALL BE PROVIDED WHERE NECESSARY TO MINIMIZE EROSION AND SEDIMENT SUCH MEASURES AS MEASURES AS BENCHES, BERMS, TERRACES, DIVERSIONS AND SEDIMENT, DEBRIS AND RETENTION BASINS.
 17. DRAINAGE SYSTEMS, PLAN TINGS AND OTHER EROSION AND SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED AS FREQUENTLY AS NECESSARY TO PROVIDE ADEQUATE PROTECTION AGAINST EROSION AND SEDIMENT AND TO ENSURE THAT THE FREE FLOW OF WATER IS NOT OBSTRUCTED BY THE ACCUMULATION OF SILT, DEBRIS OR OTHER MATERIAL OR BY STRUCTURAL DAMAGE.

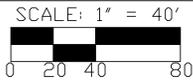
LIMITS OF DISTURBANCE
 THE PROPOSED SINGLE FAMILY RESIDENTIAL DEVELOPMENT WILL DISTURB A TOTAL OF 2.5 ACRES BASED ON NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SPDES GENERAL PERMIT FOR FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY PERMIT No. GP-0-10-001 THE PROPOSED DEVELOPMENT DOES NOT REQUIRE A SWPPP SINCE DISTURBANCE IS LESS THAN 5 ACRES. THEREFORE THE PROPOSED DEVELOPMENT DOES NOT REQUIRE ANY PERMANENT STORMWATER MANAGEMENT FACILITIES FOR WATER QUALITY OR PEAK DISCHARGES.



THERE ARE NO EXISTING OR PROPOSED WELLS AND OR SEWAGE DISPOSAL SYSTEMS WITHIN 200' OF PROPOSED WELL AND SEPTIC

THERE ARE NO EXISTING OR PROPOSED WELLS AND OR SEWAGE DISPOSAL SYSTEMS WITHIN 200' OF PROPOSED WELL AND SEPTIC

EROSION AND SEDIMENTATION CONTROL PLAN



LEGEND

PROPERTY LINE EXISTING	—	EDGE OF WOODS	—
PROPERTY LINE PROPOSED	- - -	DEPRESSED CURB	—
SETBACKS		ELECTRIC METER	⊠
EXISTING CONTOUR 2'	—	ELECTRIC BOX	⊠
EXISTING CONTOUR 10'	- - -	WATER WELL	⊙
PROPOSED CONTOUR 2'	—	CONCRETE FOOTING	■
PROPOSED CONTOUR 10'	- - -	CATCH BASINS	■
EXISTING SINGLE FAMILY RESIDENCE UNDER CONSTRUCTION	▭	MAIL BOX	⊠
PROPOSED SINGLE FAMILY RESIDENCE	▭	DROP CURB	DC
FINISHED FIRST FLOOR ELEV.	FF 509.5	LANDSCAPED AREA	LSA
BASEMENT FLOOR ELEV.	BF 509.5	TYPICAL	(TP)
LOWEST SEWERABLE ELEVATION	LSE 509.5	EVIDENCE FOUND	⊙ ⊠ ⊡
GARAGE FLOOR ELEVATION	GF 509.5		

CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "1" OR "2" 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, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.

3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFT 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.

4. PREFABRICATED UNITS SHALL BE GEDFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.

5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SYMBOL

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

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

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 2" 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.

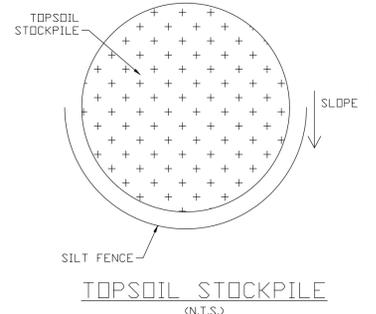
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.

6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.

7. 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 TRACED 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 RAIN.



THIS SHEET IS NOT FOR ORANGE COUNTY DEPARTMENT OF HEALTH REVIEW OR APPROVAL. THIS SHEET IS INVALID AND VOID UNLESS ACCOMPANIED BY REMAINING SHEETS IN SET.

EROSION AND SEDIMENTATION CONTROL PLAN

PROPOSED TWO (2) LOT
 RESIDENTIAL SUBDIVISION FOR:
 LYNN WARREN
 TARBEN WAY
 LOT # 12 FILED MAP 274.16 (S/B/L: 127 - 1 - 12)
 TOWN OF NEWBURGH
 ORANGE COUNTY, NEW YORK
 TOWN OF NEWBURGH APPLICATION # 21-18
 JONATHAN CELLA, P.E.
 51 HUNT ROAD
 WALLKILL, NEW YORK 12589

DATE: 07/01/2023
 SCALE: AS NOTED
 REVISIONS:
 1. 12/29/2023: IN HOUSE REVISIONS
 2. 03/15/2024: PER OCDH 03/11/2024 COMMENTS AND P.B. SUBMISSION
 3. 04/08/2024: IN HOUSE REVISIONS

DRAWN BY: JJC
 SHEET NO.: 5 OF 5

JONATHAN CELLA, P.E.
 N.Y.S. P.E. LIC. NO. 085069

STABILIZED CONSTRUCTION ENTRANCE (TYP.)
 PROPOSED 18" DRIVEWAY CULVERT
TARBEN WAY
 (ASPHALT ROADWAY)
 (TWO WAY TRAFFIC)

