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

PROJECT: OPR ASSOCIATES
PROJECT NO.: 17-17
PROJECT LOCATION: SECTION 3 BLOCK 1 LOT 140
REVIEW DATE: 30 JUNE 2017
MEETING DATE: 6 JULY 2017
PROJECT REPRESENTATIVE: MERCURIO, NORTON, TAROLLI & MARSHALL

1. Response from Orange County Planning is outstanding. Response will time out on July 20, 2017.

Respectfully submitted,

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

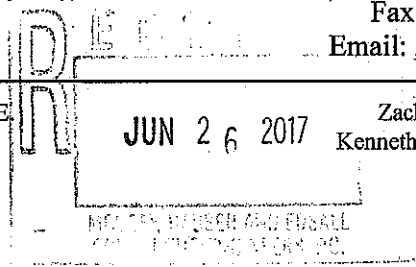
Patrick J. Hines
Principal

PJH/kbw

William G. Norton, L.S.
Alphonse Mercurio, L.S.

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

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



June 19, 2017

Planning Board
Town of Newburgh
308 Gardnertown Road
Newburgh, NY 12550

Re: Job No. 2130-2
Lands of OPR Associates
Tax Map Parcels: 3-1-140
Countryman Lane, Town of Newburgh
Town of Newburgh Project #2017-17
Town of Newburgh Project #2017-18

Dear Board Members:

Enclosed please find the following items in reference to Town of Newburgh Project #2017-17,
Tax Map Parcel 3-1-140:

1. Fourteen (14) copies of the transmittal letter

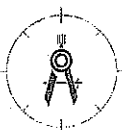
Enclosed please find the following items in reference to Town of Newburgh Project #2017-18,
Tax Map Parcel 3-1-141:

1. Fourteen (14) copies of the transmittal letter

Eighteen (18) sets of the revised site plan have also been provided with these submissions. The site plan includes the proposed development information for both of the existing parcels.

The following responses are based upon a review by Patrick J. Hines dated May 24, 2017 in reference to Town of Newburgh Project #2017-17:

1. Note 3 has been revised to specify the most recent delineation performed by Peter Torgerson on May 5, 2017. The revised plan has been submitted to NYSDEC for approval.
2. The Zoning Legend on sheet 1 of the plan set has been revised to specify the minimum buildable area for the project parcel, no portion of the onsite wetland or buffer have been included in the calculation.
3. The revised site plan has been submitted to NYSDOT for re-approval of the driveway location.
4. The site plan has been revised to more clearly designate the most recent percolation test location.
5. Survey note 10 has been modified to specify the lot numbers, as requested.
6. Proper notification will be provided for the required public hearing.



The following responses are based upon a review by Patrick J. Hines dated May 24, 2017 in reference to Town of Newburgh Project #2017-18:

1. Note 3 has been revised to specify the most recent delineation performed by Peter Torgerson on May 5, 2017. The revised plan has been submitted to NYSDEC for approval.
2. The Zoning Legend on sheet 1 of the plan set has been revised to specify the minimum buildable area for the project parcel, no portion of the onsite wetland or buffer have been included in the calculation.
3. The revised site plan has been submitted to NYSDOT for re-approval of the driveway location.
4. The site plan has been revised to more clearly designate the most recent percolation test location.
5. Note 5 has been added to sheet 1 of the plans specifying that the existing shallow well located on Tax Map Parcel 3-1-141 shall be abandoned in accordance with AWWA standards.
6. Survey note 10 has been modified to specify the lot numbers, as requested.
7. Proper notification will be provided for the required public hearing.

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

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

Sincerely,



Lawrence Marshall, P.E.

LM/rs
Enc.

cc: Debbie Nathanson (via email)
Patrick Hines
Michael Donnelly, Esq.

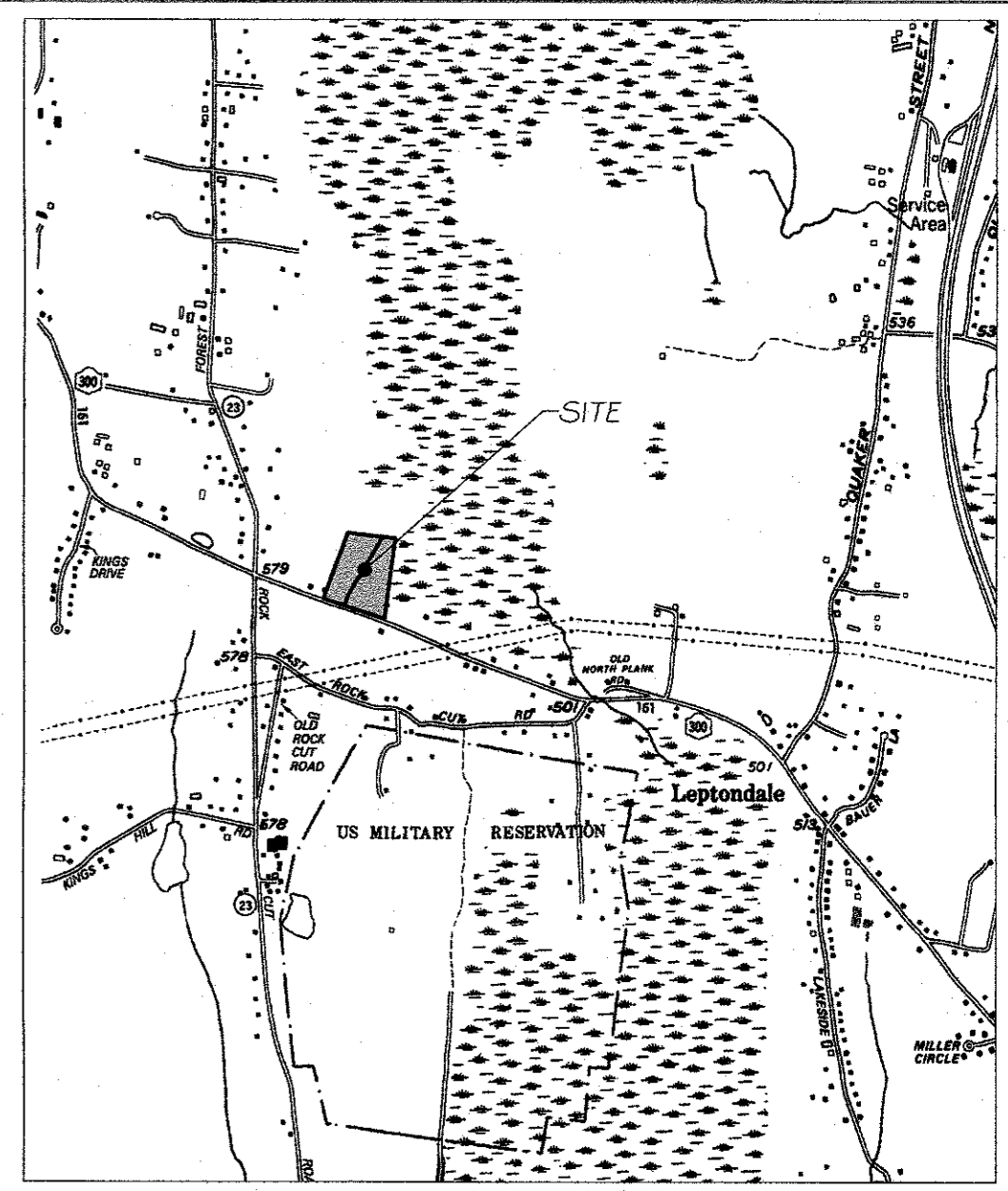
LANDS OF
Patrick M. & Kimberly C. Callahan
L 1337, P. 963
3-1-82
LOT 3, FILED MAP NO. 18-96

Zoning Legend: AR

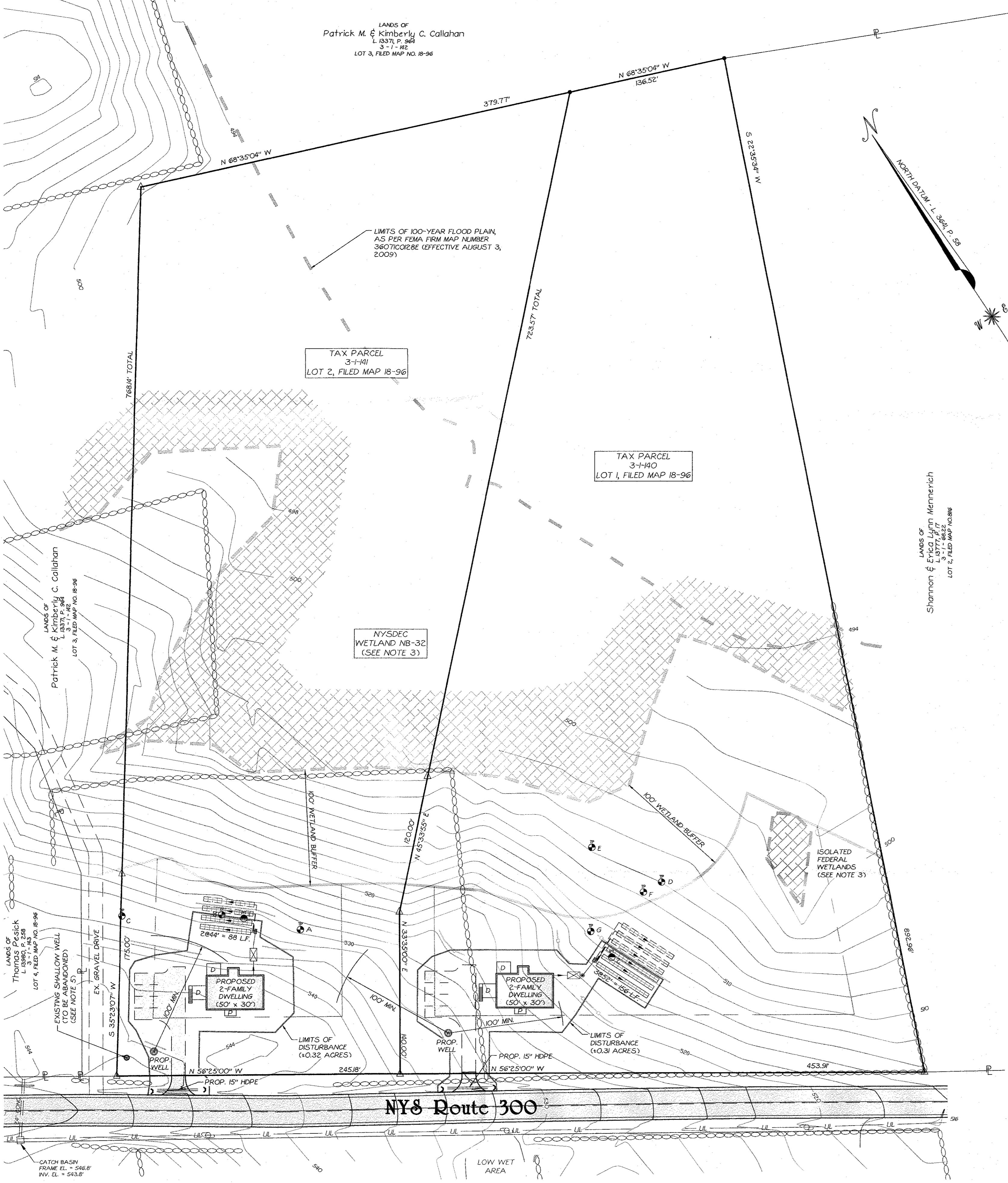
TWO-FAMILY DWELLING	REQUIRED	PARCEL 3-1-140	PARCEL 3-1-141
MINIMUM LOT AREA	100,00 SF	6,058 ACRES	5,394 ACRES
MINIMUM LOT WIDTH	200'	1675'	1244'
MINIMUM LOT DEPTH	150'	1862'	1813'
MINIMUM FRONT YARD	50'	158'	160'
MINIMUM SIDE YARD (EACH)	30'	143'	177'
MINIMUM SIDE YARD (BOTH)	80'	1386'	1192'
MINIMUM REAR YARD	40'	178'	1680'
MINIMUM BUILDABLE AREA	17,500 SF	139,800 SF	119,000 SF
HABITABLE FLOOR AREA PER DWELLING UNIT	900 SF	41500 SF	41500 SF
MAXIMUM LOT BUILDING COVERAGE	20%	11.0%	11.0%
MAXIMUM BUILDING HEIGHT	35'	<35'	<35'
MAXIMUM SURFACE COVERAGE	40%	12%	12%

Parcel Information

TAX PARCEL	AREA	REFERENCE
3-1-140	6,058 ACRES	LOT 1, FILED MAP NO. 18-96
3-1-141	5,394 ACRES	LOT 2, FILED MAP NO. 18-96



Location Map
SCALE: 1" = 2,000'



Notes

- RECORD OWNER: OPR ASSOCIATES, 342 SOUTH PLANK ROAD, WESTTOWN, NY 10998
- APPLICANT: OPR ASSOCIATES, LLC, 342 SOUTH PLANK ROAD, WESTTOWN, NY 10998
- LIMITS OF NYSDEC WETLAND NB-32 AND ISOLATED FEDERAL WETLAND AS DELINEATED BY PETER TORGERSON ON MAY 5, 2017.
- THE TOTAL PROPOSED LIMITS OF DISTURBANCE IS APPROXIMATELY 0.63 ACRES.
- THE EXISTING SHALLOW WELL LOCATED ON TAX MAP PARCEL 3-1-141 SHALL BE ABANDONED IN ACCORDANCE WITH AWWA STANDARDS.

Survey Notes

- SUBJECT TO ANY FACTS THAT MAY BE REVEALED BY AN ACCURATE, UP TO DATE, TITLE ABSTRACT REPORT.
- SUBJECT TO THAT PORTION OF LAND WITHIN THE BOUNDS OF NYS ROUTE 300, FOR USE AS A PUBLIC HIGHWAY.
- SUBJECT TO UTILITY GRANTS OF RECORD.
- PRIOR TO 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."
- TOPOGRAPHY MARCH, 1995
- APPROPRIATION PARCELS SHOWN ON NYS ROUTE 300, STATE HIGHWAY NO. 161, ARE SHOWN ON MAPS ON FILE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION, AND ARE RECORDED IN LIBER 1535 OF DEEDS, PAGES 472, 473, 475, 476, 479 AND 486, L 1491, P. 387 & L 1487, P. 491 RECORDED IN THE ORANGE COUNTY CLERK'S OFFICE.
- UNLABELED, OFF-PREMISES STRUCTURES ARE TAKEN FROM A MAP PREPARED BY LANC & TULLY, ENGINEERING AND SURVEYING, P.C., ENTITLED "TOPOGRAPHY SURVEY PREPARED FOR ALMAG DEVELOPMENT CORPORATION", DATED OCTOBER 1, 1986.
- PROPOSED DRIVEWAY GRADES SHALL NOT EXCEED 15%.
- THE FOLLOWING SHALL BE ADDED TO EACH DEED FOR THE LOTS SHOWN: "FOR AS LONG AS ANY PORTION OF THE PROPERTY DESCRIBED IN THIS DEED IS SUBJECT TO REGULATION UNDER ARTICLE 24 (THE FRESHWATER WETLANDS ACT) OF THE ENVIRONMENTAL CONSERVATION LAW OF THE STATE OF NEW YORK (ECL), THERE SHALL BE NO CONSTRUCTION, GRADING, EXCAVATING, CLEARING OR OTHER REGULATED ACTIVITY AS DEFINED BY ARTICLE 24 OF THE ENVIRONMENTAL CONSERVATION LAW ON THIS PROPERTY WITHIN THE FRESHWATER WETLAND AREA OR 100' ADJACENT AREA AS SHOWN ON THE FINAL SUBDIVISION PLAT AT ANY TIME WITHOUT HAVING FIRST SECURED THE NECESSARY PERMISSION AND PERMIT REQUIRED PURSUANT TO THE ABOVE NOTED ARTICLE 24. THIS RESTRICTION SHALL BIND THE GRANTEE'S, THEIR SUCCESSORS AND ASSIGNS AND SHALL BE EXPRESSLY SET FORTH IN ALL SUBSEQUENT DEEDS TO THIS PROPERTY."
- THESE PARCELS ARE KNOWN AND DESIGNATED AS LOT NUMBERS 1 & 2 ON A MAP ENTITLED "SURVEY & SUBDIVISION MAP (4 LOTS) OF LANDS OF ALBERT & LUCY MICHELUCCI" FILED IN THE ORANGE COUNTY CLERK'S OFFICE AS MAP NUMBER 18-96 AND IS SUBJECT TO ALL NOTES AND DETAILS AS SHOWN ON SAID FILED MAP.
- THIS MAP IS BASED ON A FIELD SURVEY COMPLETED IN MARCH, 1995.

Legend

- PROPERTY LINE & CORNER SET 5/8" IRON ROD WITH PLASTIC ID. CAP
- UTILITY LINE AND POLE
- ADJOINER'S PROPERTY LINE
- LIBER OF DEEDS, PAGE XXXX, P. XXXX
- TAX MAP DESIGNATION
- STONE WALL
- EXISTING SIGN
- MINIMUM ZONING SETBACK
- TEST PIT LOCATION
- PERCOLATION TESTING LOCATION
- PROPOSED SEPTIC TANK & 4" DIA SOLID WALL PVC 50R35 PPE
- PROPOSED SEWER CLEANOUT
- PROPOSED DISTRIBUTION BOX & 4" DIA. SOLID WALL PVC 50R35 PPE
- PROPOSED 4" DIA. PERFORATED PVC SEWER DISTRIBUTOR PIPE
- PROPOSED 4" DIA. PERFORATED PVC SEWER DISTRIBUTOR PIPE
- PROPOSED SEWER CLEANOUT
- PROPOSED DRIVEWAY
- PROPOSED SILT FENCE (DETAIL)
- LIMITS OF NYSDEC WETLAND BUFFER
- LIMITS OF NYSDEC WETLAND (SEE NOTE 3)
- LIMITS OF FEDERAL WETLAND (SEE NOTE 3)

NYSDEC FRESHWATER WETLAND BOUNDARY VALIDATION

THE FRESHWATER WETLAND BOUNDARY AS REPRESENTED ON THESE PLANS ACCURATELY DEPICTS THE LIMITS OF FRESHWATER WETLAND NB-32 AS DELINEATED BY PETER TORGERSON ON MAY 5, 2017

DEC STAFF: _____ SURVEYOR/ENGINEER: WILLIAM NORTON, L.S.

DATE: _____ SEAL

WETLAND BOUNDARY DELINEATIONS AS VALIDATED BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION REMAIN VALID FOR FIVE (5) YEARS UNLESS EXISTING EXEMPT ACTIVITIES, AREA HYDROLOGY, OR LAND USE PRACTICES CHANGE (E.G. AGRICULTURAL TO RESIDENTIAL). AFTER FIVE (5) YEARS THE BOUNDARY MUST BE REVALIDATED BY DEC STAFF. REVALIDATION MAY INCLUDE A NEW DELINEATION AND SURVEY OF THE WETLAND BOUNDARY.

ANY PROPOSED CONSTRUCTION, GRADING, FILLING, EXCAVATING, CLEARING OR OTHER REGULATED ACTIVITY IN THE FRESHWATER WETLAND OR WITHIN 100 FEET OF THE WETLAND BOUNDARY AS DEPICTED ON THIS PLAN REQUIRES A PERMIT FROM THE NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION UNDER ARTICLE 24 OF THE ENVIRONMENTAL CONSERVATION LAW (FRESHWATER WETLANDS ACT) PRIOR TO COMMENCEMENT OF WORK.

TOWN OF NEWBURGH PROJECT #2017-17 (TAX MAP PARCEL: 3-1-140)
TOWN OF NEWBURGH PROJECT #2017-18 (TAX MAP PARCEL: 3-1-141)

Site Plan
for
OPR Associates, LLC

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

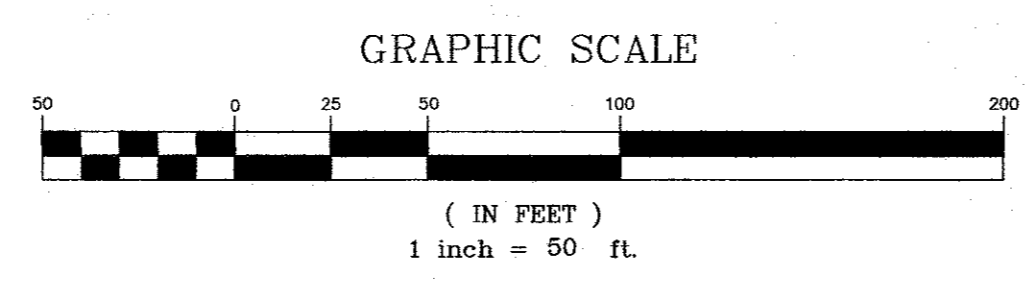
RECORD OWNER:
OPR ASSOCIATES, LLC
TAX MAP REFERENCE:
SECTION 3, BLOCK 1, LOTS 140 & 141
DEED REFERENCE:
LIBER 14203, PAGE 1064
TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DATE: MAY 2017
DRAFTED BY: RTS
PROJECT: 2130-2
SHEET
1 / 3

Parking Requirements

USE:	TOWN PARKING REQUIREMENT:	PROPOSED CRITERIA:	SPACES REQUIRED:	SPACES PROVIDED:
2-FAMILY	2 PER DWELLING UNIT	2 DWELLING UNITS	4	4

I HAVE REVIEWED THE PLAN AND AGREE TO ITS FILING IN THE ORANGE COUNTY CLERK'S OFFICE.

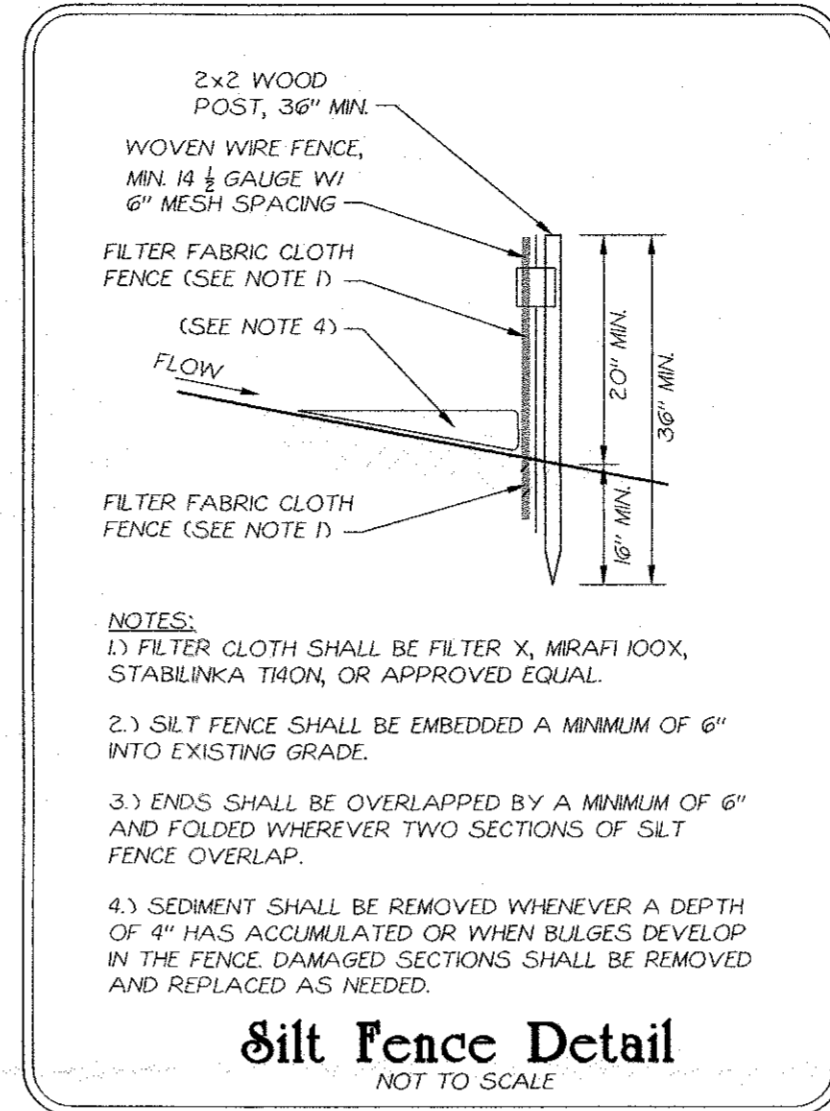
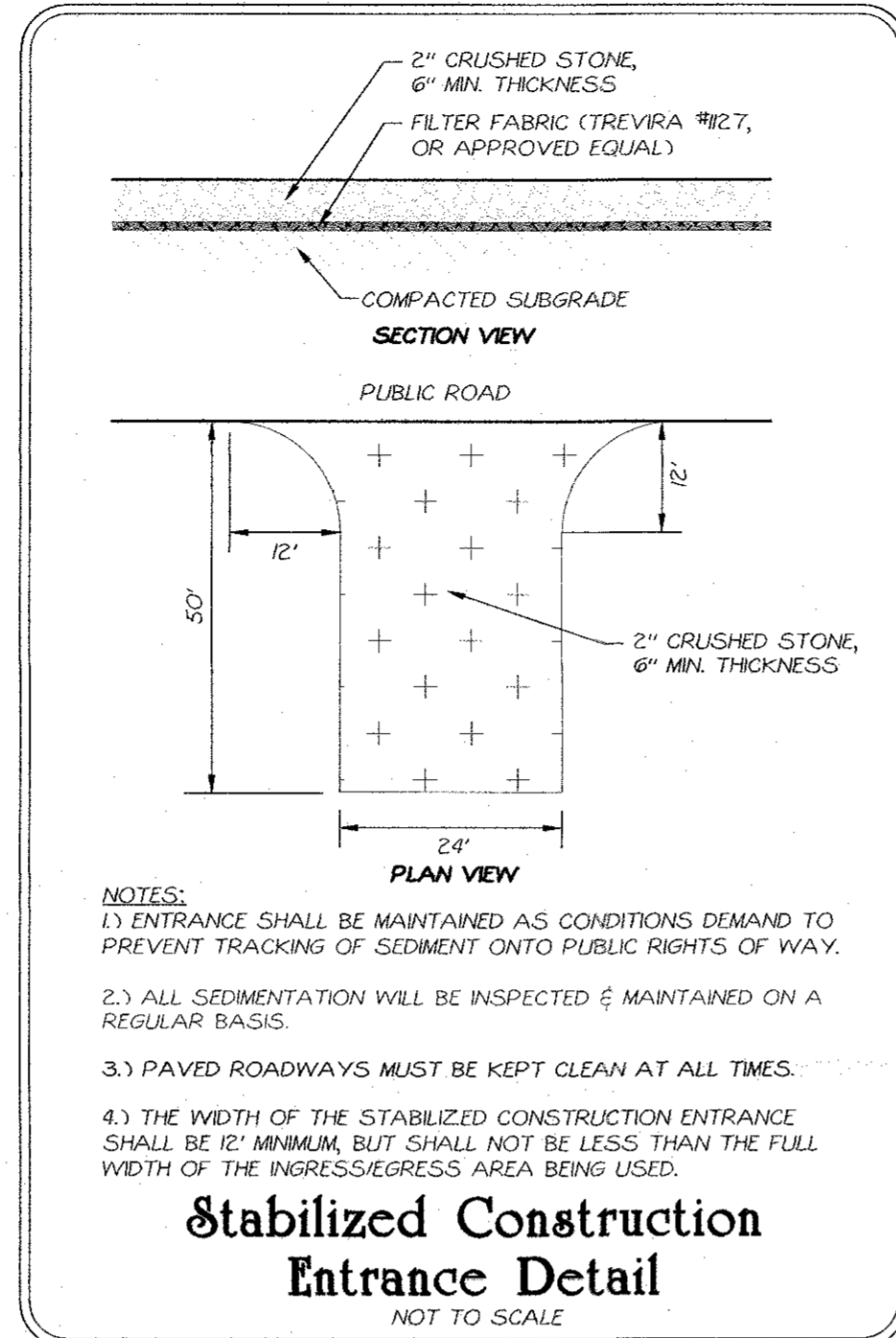
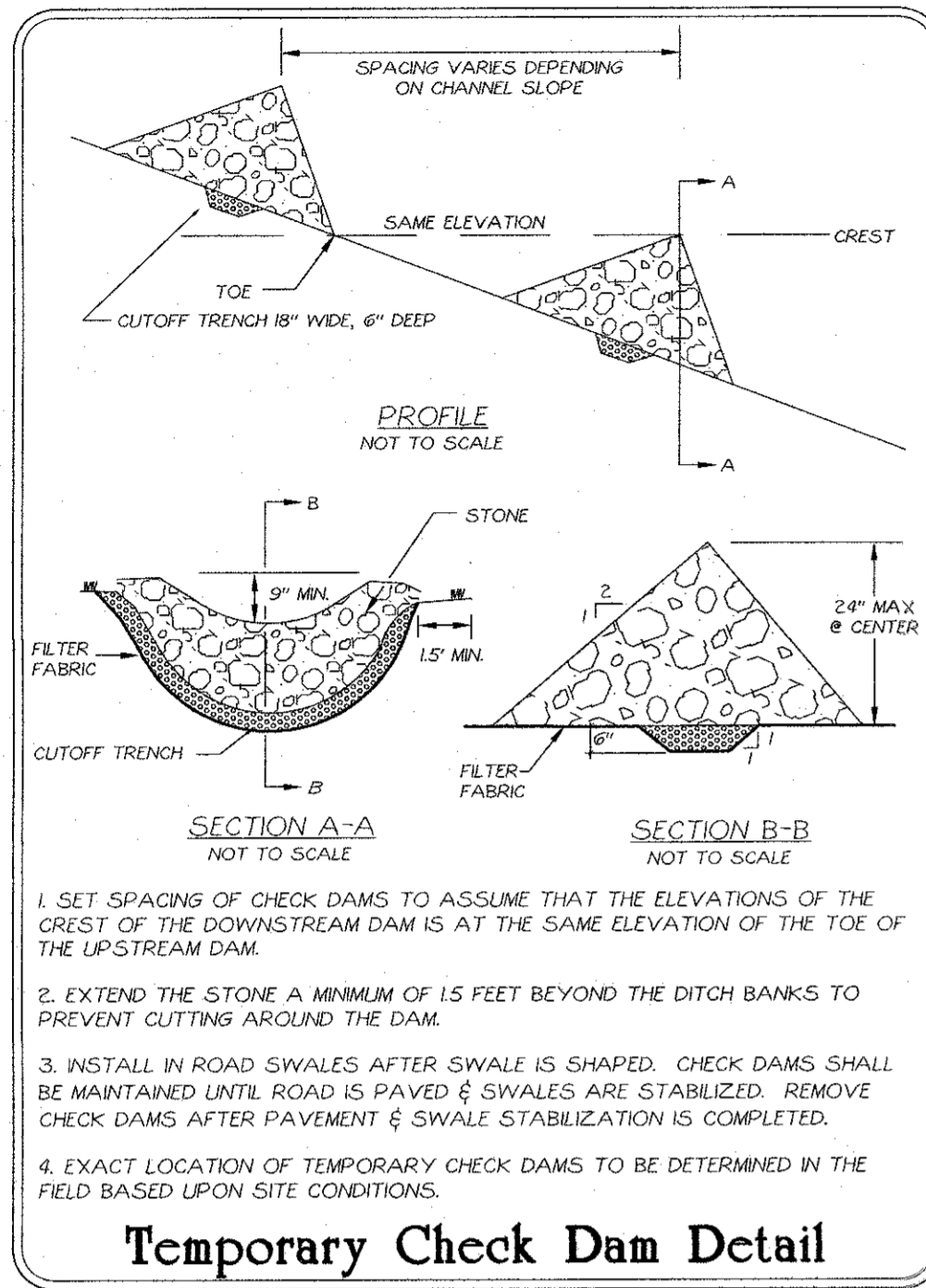
OPR ASSOCIATES, LLC
(DEBORAH NATHANSON - MEMBER)



"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."

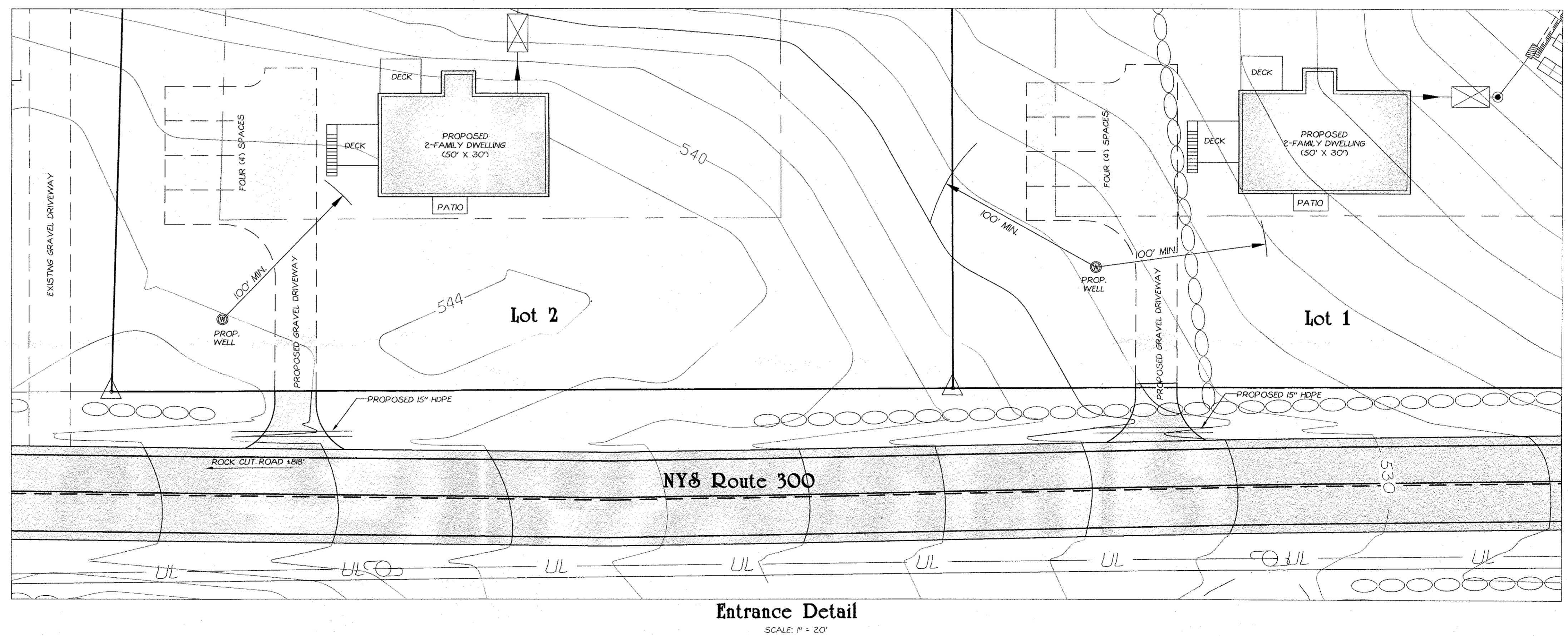
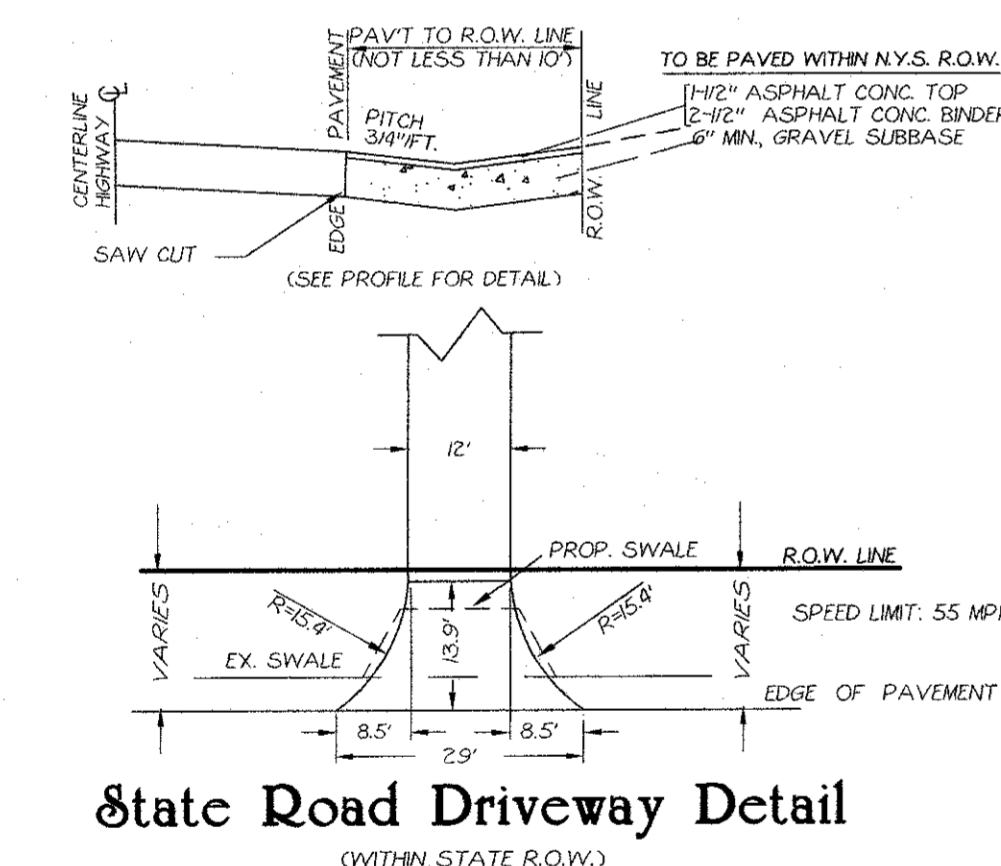
NO.	DATE	REVISION	BY
1	4/17	OWNER'S COMMENTS	RTS
2			
3			

LAWRENCE MARSHALL, PE #08707



Erosion & Sediment Control Notes:

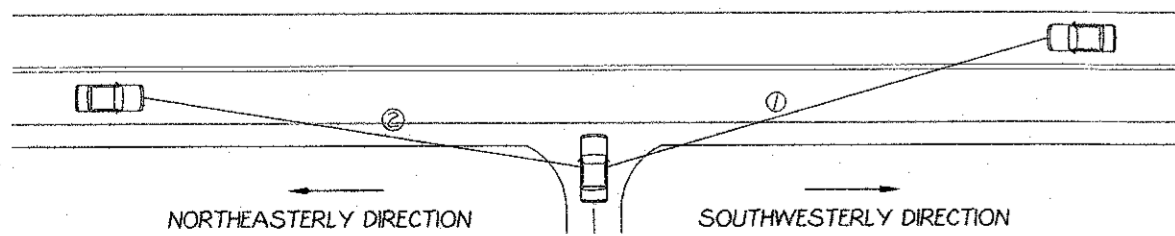
- DUST CONTROL SHALL BE PROVIDED IN TIMES OF DRY WEATHER. AREAS SHALL BE SPRAYED WITH WATER TO PREVENT DUST FROM TRANSFERRING TO ADJACENT PROPERTIES.
- ALL DISTURBED AREAS NOT STABILIZED WITH IMPERVIOUS COVER SHALL BE TOPSOILED & SEED.



Sight Distance Table

*BASED UPON FIELD ASSESSMENT NYS ROUTE 300 SPEED LIMIT: 55 MPH

LOCATION	SIGHT LINE	DISTANCE	NOTES
3-H-140	1	>800'	
	2	>800'	
3-H-141	1	>800'	
	2	>800'	



TOWN OF NEWBURGH PROJECT #2017-17 (TAX MAP PARCEL: 3-1-140)
TOWN OF NEWBURGH PROJECT #2017-18 (TAX MAP PARCEL: 3-1-141)

Site Plan for OPR Associates, LLC

RECORD OWNER:
OPR ASSOCIATES, LLC
TAX MAP REFERENCE:
SECTION 3, BLOCK 1, LOTS 140 & 141
DEED REFERENCE:
LIBER 14203, PAGE 1084
TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK

DATE: MAY 2017
DRAFTED BY: RTS
PROJECT: 2330-2

DESIGNER'S COMMENTS: [Signature]
NO. DATE REVISION BY: LAWRENCE MARSHALL, PE #087107

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 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.

2 / 3

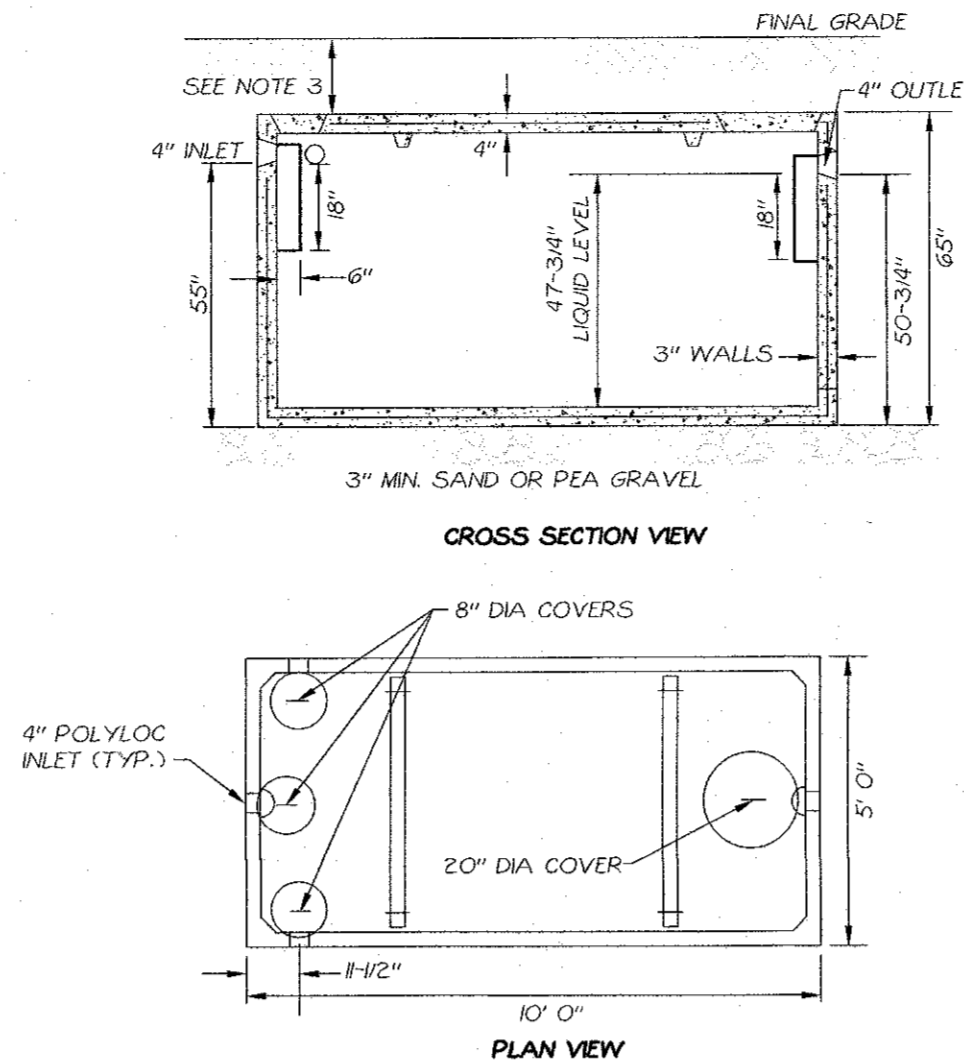
Deep Soils Testing Results

TEST HOLE #	A	B	C	D	E	F	G
TESTING DATE:	H7-95	H7-95	H7-95	H7-95	H7-95	H7-95	H7-95
TESTER:	JT	JT	JT	JT	JT	JT	JT
	0' TOPSOIL 1' BROWN SILT LOAM 2' BROWN SILT LOAM 3' BROWN GRANULAR SILT LOAM 4' 72" 5' 72" 6' 72" 7' 72" 8' 72"	0' TOPSOIL 1' 12" 2' BROWN SILT LOAM 3' BROWN SILT LOAM 4' BROWN SILT LOAM 5' 72" 6' 72" 7' 72" 8' 72"	0' TOPSOIL 1' 12" 2' BROWN SILT LOAM 3' 36" 4' BROWN SILTY SAND SILT LOAM 5' 72" 6' 72" 7' 72" 8' 72"	0' TOPSOIL 1' 12" 2' BROWN SILT LOAM 3' 36" 4' BROWN GRANULAR SILT LOAM 5' 72" 6' 72" 7' 72" 8' 72"	0' TOPSOIL 1' 8" 2' BROWN SILT LOAM 3' 33" 4' BROWN GRANULAR SILT LOAM 5' 72" 6' 72" 7' 72" 8' 72"	0' TOPSOIL 1' 6" 2' BROWN SILT LOAM 3' 24" 4' BROWN SILT LOAM 5' 72" 6' 72" 7' 72" 8' 72"	0' TOPSOIL 1' 6" 2' BROWN SILT LOAM 3' 24" 4' BROWN SILT LOAM 5' 72" 6' 72" 7' 72" 8' 72"

DEEP TEST SOIL LOG
(NO WATER OR ROCK UNLESS SO NOTED)

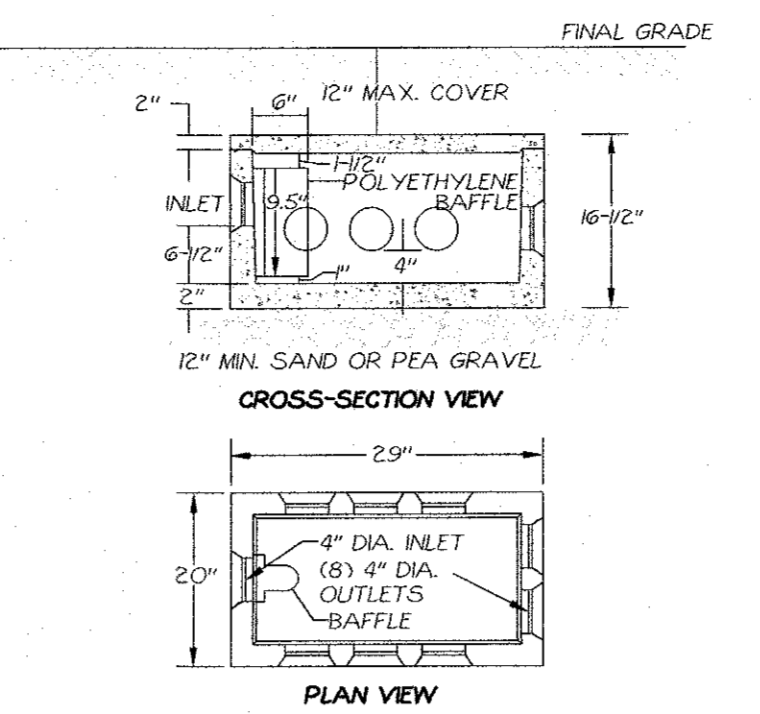
Percolation Testing Results

TEST HOLE #	A	B	C	F	G	I	Z
TESTING DATE:	H8-95	H8-95	H8-95	H8-95	H8-95	3-20-17	3-20-17
DEPTH / TESTER:	24" - AM	24" - AM	24" - AM	24" - AM	24" - AM	24" - RTS	24" - RTS
PERCOLATION TEST RESULTS (CALL TESTING TIME FROM WHEN STOPPED TO WHEN IT STARTS TO ELAPSE IN MINUTES)							
RUN 1 ELAPSED TIME:	6	5	2	2.8	6	1.8	1.7
RUN 2 ELAPSED TIME:	6	8	3	2.8	8	1.38	1.28
RUN 3 ELAPSED TIME:	8	10	3	3.4	12	1.52	1.31
RUN 4 ELAPSED TIME:	8	10		3.4	13	2.01	
RUN 5 ELAPSED TIME:							
RUN 6 ELAPSED TIME:							
RUN 7 ELAPSED TIME:							
STABILIZED RATE:	8	10	3	3.4	13	2.01	1.31

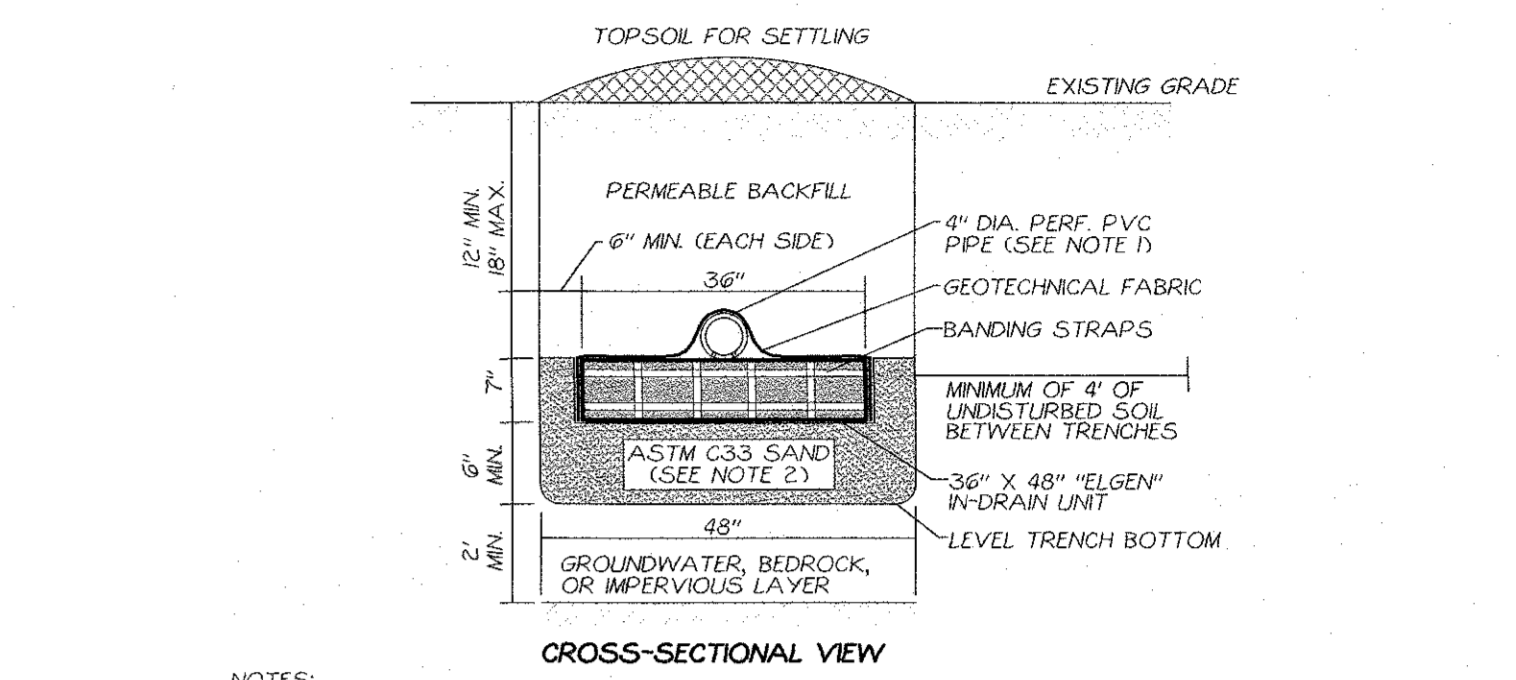
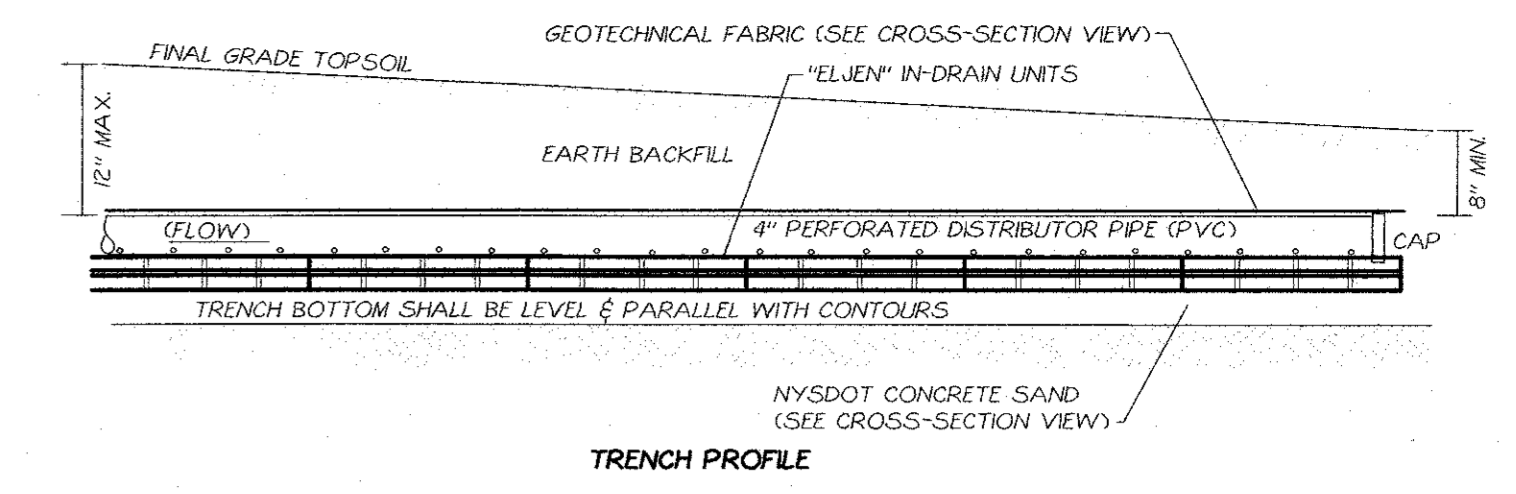


CONCRETE MINIMUM STRENGTH: 4,000 P.S.I. AT 28 DAYS
 STEEL REINFORCEMENT: #6 X 6" X 10 GA. STEEL WIRE MESH
 #4 REBAR AROUND PERIMETER
 CONSTRUCTION JOINT: SEALED WITH BUTYL RUBBER CEMENT

Typical Precast 1.250 Gallon Concrete Septic Tank
 AS MANUFACTURED BY "WOODARDS CONCRETE PRODUCTS, INC.", BULLVILLE, N.Y.
 MODEL ST-1250 (OR APPROVED EQUAL)
 NOT TO SCALE



Typical Precast Concrete Distribution Box
 AS MANUFACTURED BY "WOODARDS CONCRETE PRODUCTS, INC.", BULLVILLE, N.Y.
 MODEL DB-9 (OR APPROVED EQUAL)
 NOT TO SCALE

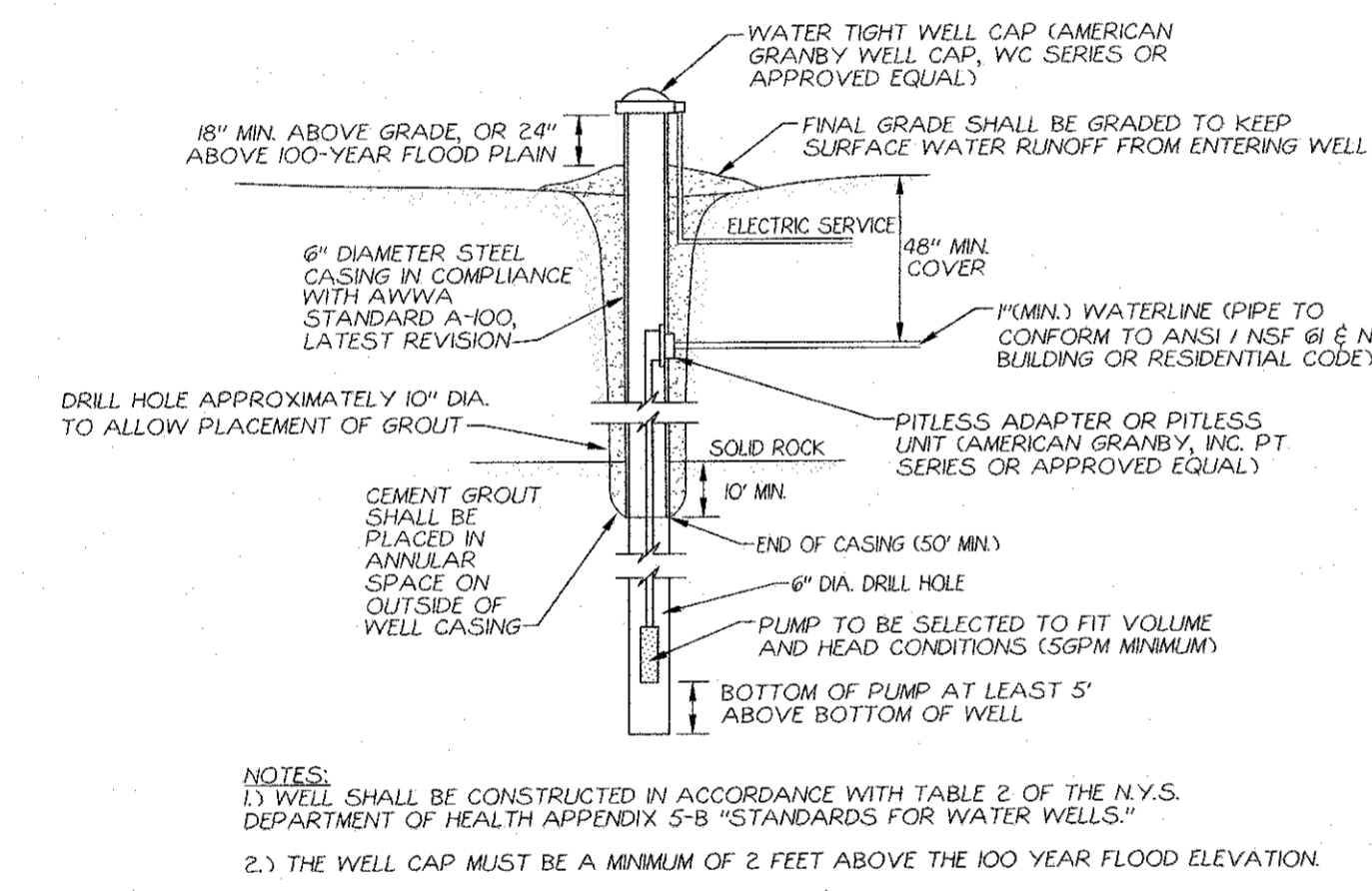


Eljen In-Drain Absorption Trench Detail

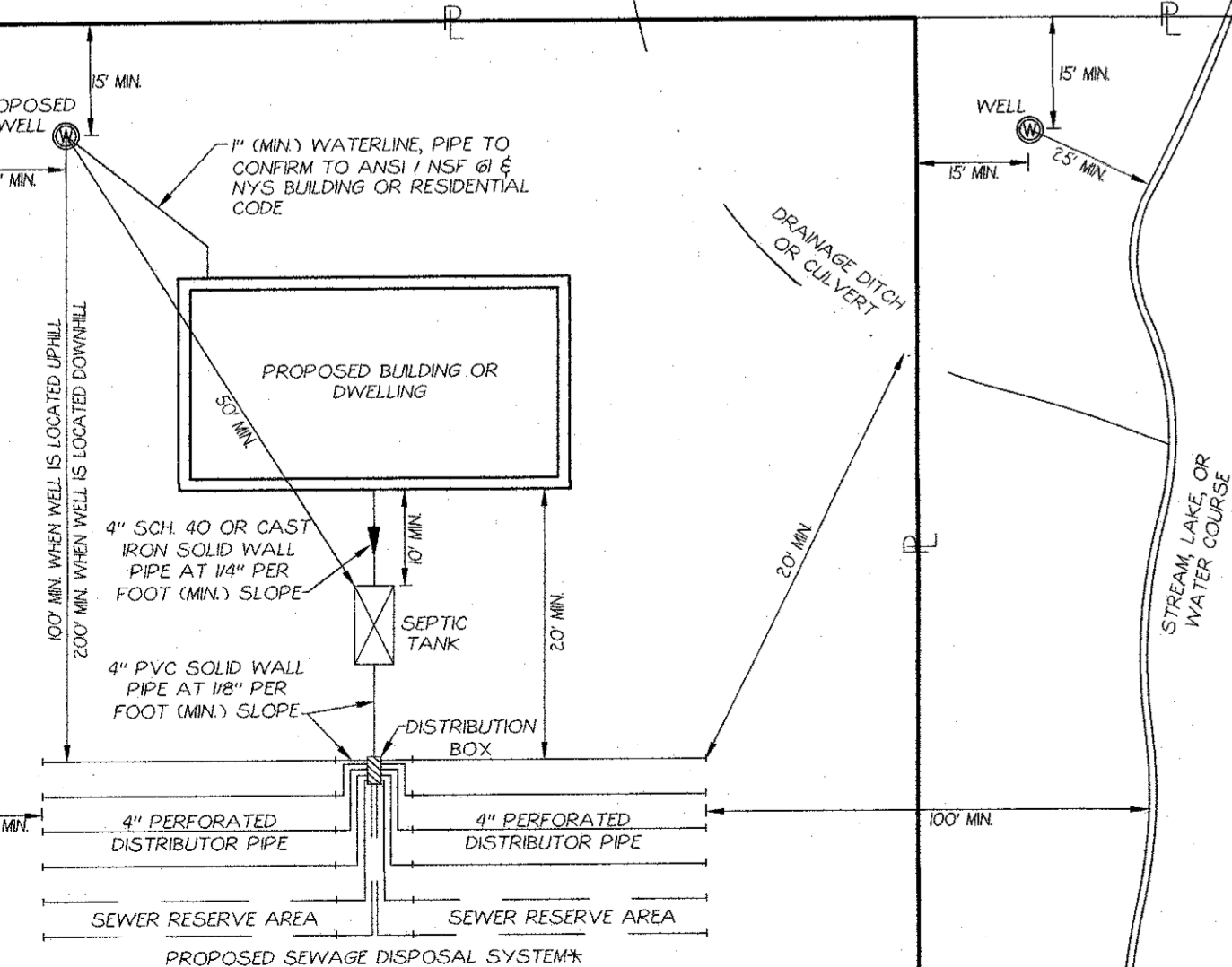
NOTES:
 1) DISTRIBUTION PIPE SHALL BE INSTALLED WITH PIPE PERFORATIONS FACING DOWN
 2) "ELJEN" SAND SHALL MEET ALL THE SPECIFICATIONS FOR ASTM C33 SAND AS FOLLOWS:

SEIVE SIZE	PERCENT PASSING BY WEIGHT	
	MINIMUM	MAXIMUM
3/8"	100	---
NO.4	95	100
NO.10	80	100
NO.16	50	85
NO.30	25	60
NO.50	5	30
NO.100	0	10
NO.200(WET)	0	5

3.) DO NOT INSTALL TRENCHES IN WET SOIL. TRENCH SIDES AND BOTTOMS SHALL BE RAKED PRIOR TO INSTALLATION OF SAND.
 4.) THE END OF EACH LATERAL SHALL BE CAPPED.
 5.) LATERALS SHALL BE SLOPED 1/8" - 1/32" PER FOOT FOR GRAVITY SYSTEMS. LATERALS SHALL BE INSTALLED LEVEL FOR PUMPED OR DOSED SYSTEMS.
 6.) LATERALS SHALL BE INSTALLED 6 FEET ON CENTER, MINIMUM.

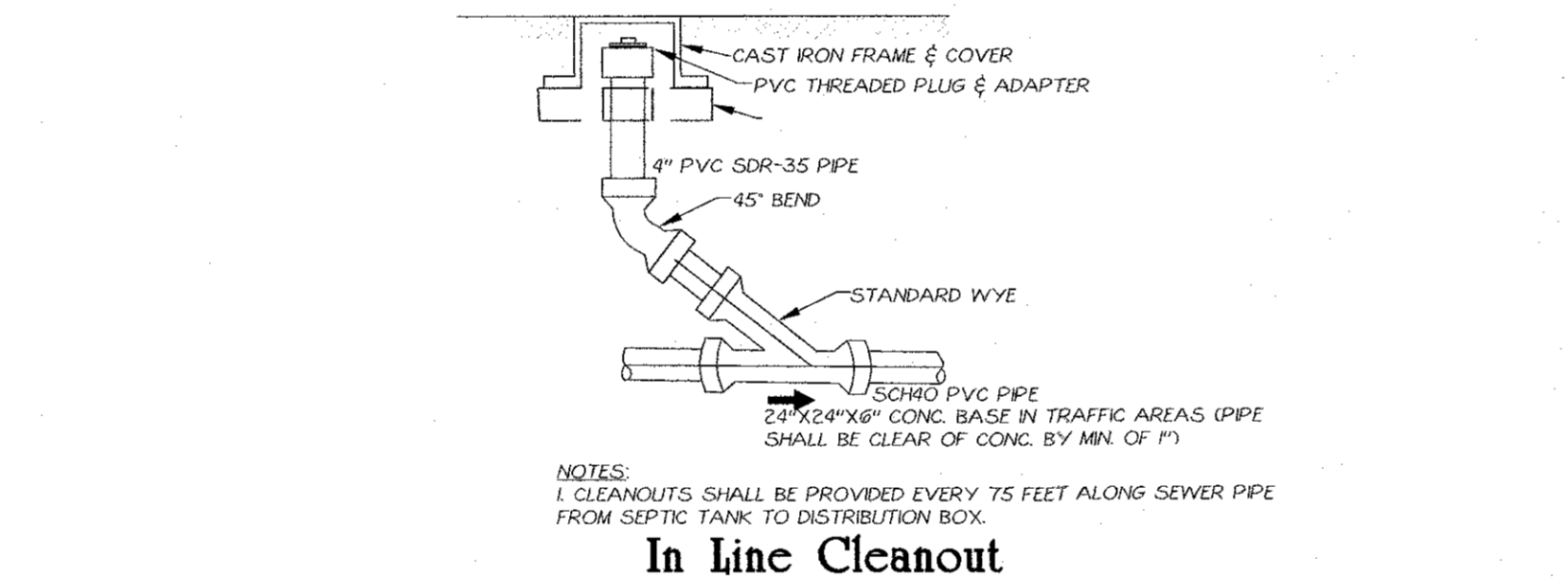


Well Detail



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.



In Line Cleanout

FEATURES	SEPTIC TANK	SEWER LINE	ABSORPTION FIELDS	SEEPAGE PITS
DRILLED WELL (PUBLIC WATER SUPPLY)	100'	50'	200'	200'
DRILLED WELL (PRIVATE WATER SUPPLY)	50'	50'	100' (A) (B)	150'
WATERLINE (PRESSURE)	10'	10' (C)	10'	10'
WATERLINE (SUCTION)	50'	50'	100'	150'
DUG WELL / SPRING	75'	50'	150' (B)	150'
SURFACE WATER	50'	25'	100'	100'
RESERVOIR (PRIVATE WATER SUPPLY)	50' (D)	50' (A)	100' (D)	100' (D)
RESERVOIR (PUBLIC WATER SUPPLY)	50' (D)	50' (A)	100' (D)	100' (D)
OPEN DRAINAGE DIVERSION	25'	25'	50' (D)	50' (D)
STORMWATER MANAGEMENT - INFILTRATION	25'	25'	50'	50'
STORMWATER MANAGEMENT - SURFACE DISCHARGE	50'	25'	100'	100'
CULVERT (TIGHT PIPE)	25'	10'	35'	35'
CULVERT OPENING	25'	25'	50'	50'
CATCH BASIN	25'	--	50'	50'
SWIMMING POOL (IN-GROUND)	10'	10'	35'	50'
FOUNDATION	20'	--	20'	20'
PROPERTY LINE	10'	10'	10'	10'
TOP OF EMBANKMENT / STEEP SLOPE	25'	25'	50'	50'
WETLAND (NYSDEC)	100'	100'	100'	100'

(A) IF THE ABSORPTION FIELD IS LOCATED IN GRAVEL SOILS, THEN 200' SEPARATION.
 (B) WHEN WASTEWATER TREATMENT SYSTEMS ARE LOCATED UP-GRADE AND IN THE DIRECT PATH OF SURFACE RUNOFF TO A WELL, THE CLOSEST PART OF THE SYSTEM SHOULD BE AT LEAST 200' AWAY FROM THE WELL.
 (C) WATER (PRESSURE) AND SEWER LINES MAY BE IN THE SAME TRENCH IF WATER LINE IS PLACED ON AN UNDISTURBED BENCH OR SHELF SO THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18" HIGHER THAN THE TOP OF THE SEWER MAIN, AND THE SEWER MAIN IS NOT SUBJECT TO SETTLING, VIBRATION, SUPERIMPOSED LOADS, OR FROST ACTION.
 (D) IF BOTTOM OF DRAIN IS ABOVE FINISHED GRADE AT LEACHING FACILITY, OTHERWISE 50'.
 (E) REFER TO LOCAL WATERSHED RULES AND REGULATIONS FOR POSSIBLE SUPERSEDING SPECIFICATIONS.
 (F) FOR ALL SYSTEMS INVOLVING THE PLACEMENT OF FILL MATERIAL, SEPARATION DISTANCES ARE MEASURED FROM THE TOE OF THE SLOPE OF THE FILL.

Minimum Separation Distances From Existing Or Proposed Features
 AS PER NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION "DESIGN STANDARDS FOR INTERMEDIATE SIZED WASTEWATER TREATMENT SYSTEMS", PUBLISHED MARCH 5, 2014

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 SPRING, 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 THAT IMPACT SEPARATION DISTANCES FOR THE PROPOSED WELLS AND SEPTIC SYSTEMS ARE SHOWN ON THE PLANS.
- THERE SHALL BE NO GRADING, 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 UNLIE COMPACTATION 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.

Sewage Disposal System Requirements

NO. OF BODIES	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
4	440	1,250	DB-9	E.I.D.	3-45	117	156	3 ROWS @ 52 L.F.
4	440	1,250	DB-9	E.I.D.	8-10	82	88	2 ROWS @ 44 L.F.

* E.I.D. = "ELJEN" IN-DRAIN GRAVELLESS ABSORPTION TRENCH SYSTEM
 ** THE RESERVE SYSTEM DESIGN IS THE SAME AS THE PRIMARY SYSTEM

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.

DATE: 11-8-17
 REVISION: 1
 BY: LAWRENCE MARSHALL PE #087107

TOWN OF NEWBURGH PROJECT #2017-17 (TAX MAP PARCEL: 3-140)
 TOWN OF NEWBURGH PROJECT #2017-18 (TAX MAP PARCEL: 3-141)

Well & Sewage Disposal System Details for OPR Associates, LLC

RECORD OWNER:
 OPR ASSOCIATES, LLC
 TAX MAP REFERENCE:
 SECTION 3, BLOCK 1, LOT 140 & 141
 DEED REFERENCE:
 LIBER #23, BLOCK 1064
 TOWN OF NEWBURGH
 COUNTY OF ORANGE
 STATE OF NEW YORK
 DATE: MAY 2017
 SHEET
 DRAFTED BY: RTS
 PROJECT: 2130-2
 3 / 3

Mercurio-Norton-Tarolli-Marshall
 ENGINEERING & LAND SURVEYING
 PO BOX 166, 45 MAIN STREET, PINE BUSH, NY 12566
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