

ALFONZETTI ENGINEERING, P.C.

1100 Route 52, Carmel, N.Y. 10512

(845) 228-9800

Info@AlfonzettiEng.com

Adam R. Kaufman, AICP
Director of Planning
Planning Department
Town of North Castle
17 Bedford Road
Armonk, NY 10504

July 13, 2020

Re: Farrelly Residence/6 Pine ridge Rd.
Town of North Castle

Adam:

For your use, please find enclosed one (1) copy the following:

- Site Plan, dated July 10, 2020, Farrelly Residence, Town of North Castle, Westchester County, New York.
- Site Details, dated July 10, 2020, Farrelly Residence, Town of North Castle, Westchester County, New York.

We are requesting placement on the next Planning Board agenda, to re-introduce the project to the Planning Board again. The project was last in front of the Planning Board in December or 2018. The project has not changed. We have conducted field testing and provided stormwater mitigation, and addressed other comments.

Please call if there are any questions.

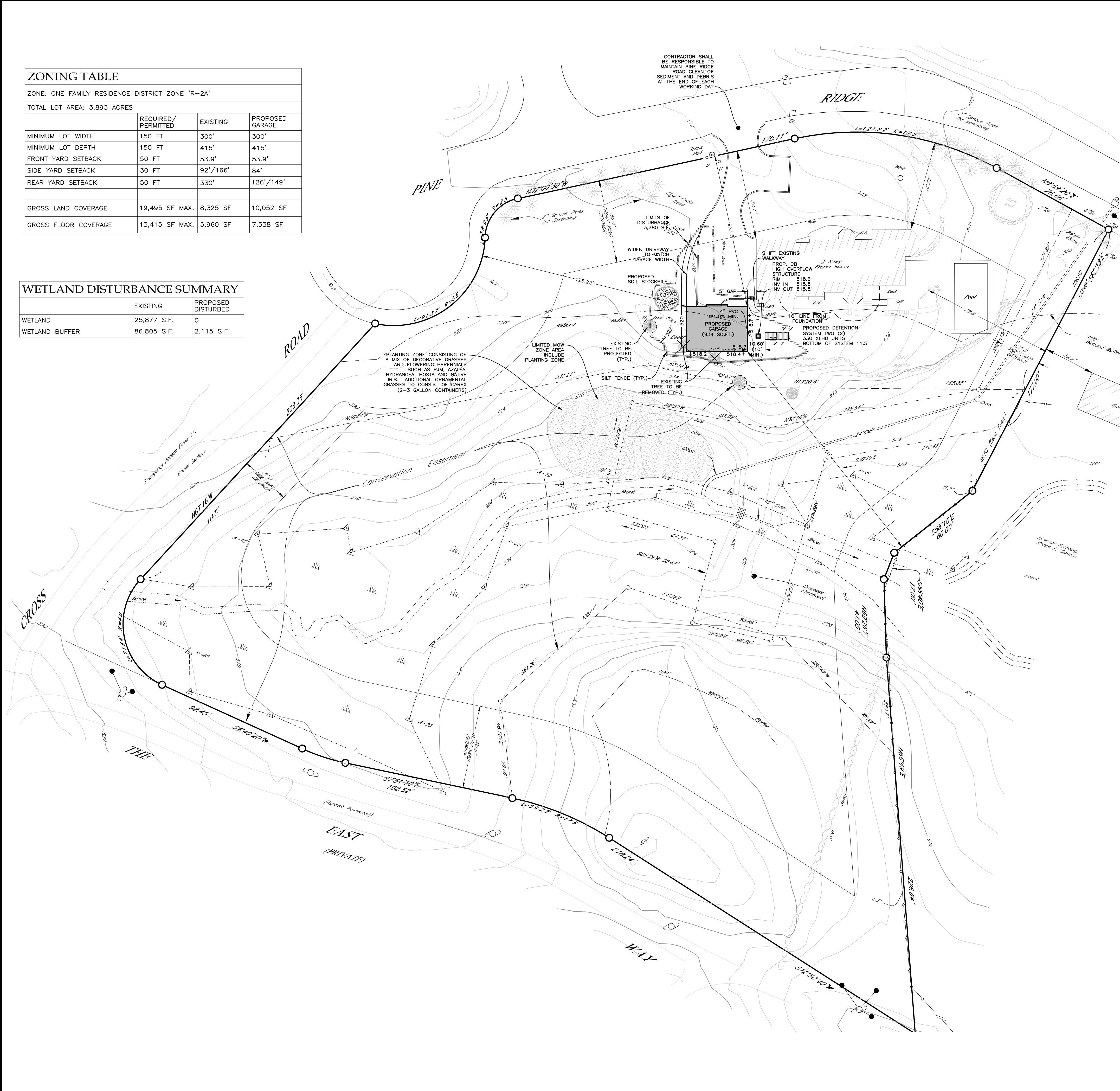
Thank You,



Ralph Alfonzetti
ALFONZETTI ENGINEERING, P.C.

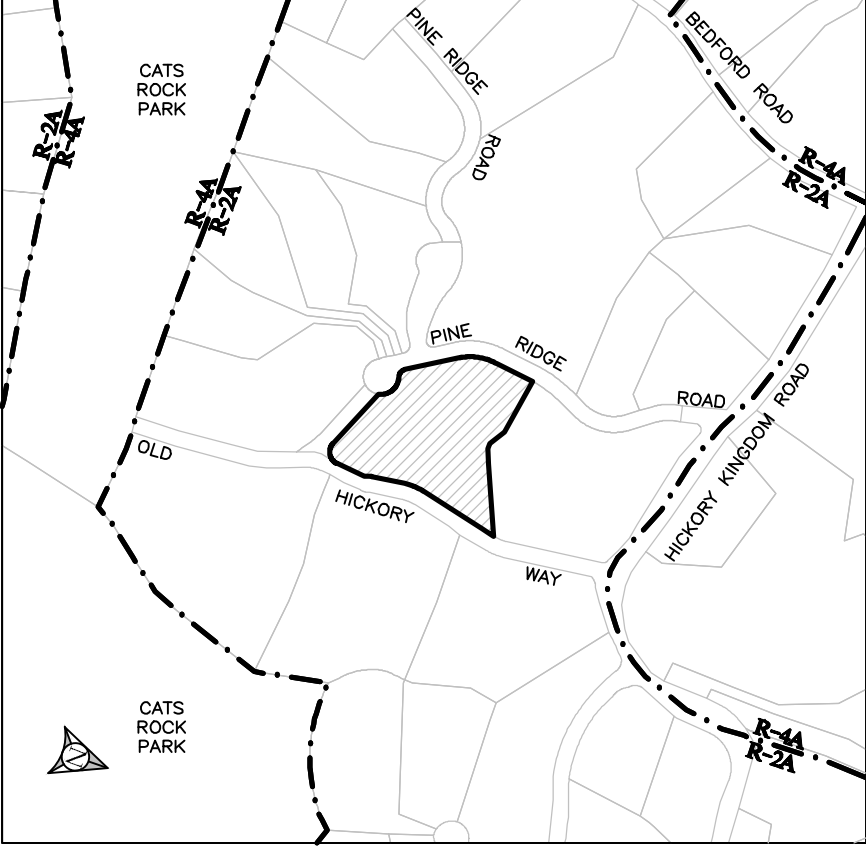
ZONING TABLE			
ZONE: ONE FAMILY RESIDENCE DISTRICT ZONE "R-2A"			
TOTAL LOT AREA: 3.893 ACRES			
	REQUIRED/ PERMITTED	EXISTING	PROPOSED GARAGE
MINIMUM LOT WIDTH	150 FT	300'	300'
MINIMUM LOT DEPTH	150 FT	415'	415'
FRONT YARD SETBACK	50 FT	53.9'	53.9'
SIDE YARD SETBACK	30 FT	92'/166'	84'
REAR YARD SETBACK	50 FT	330'	126'/149'
GROSS LAND COVERAGE	19,495 SF MAX.	8,325 SF	10,052 SF
GROSS FLOOR COVERAGE	13,415 SF MAX.	5,960 SF	7,538 SF

WETLAND DISTURBANCE SUMMARY		
	EXISTING	PROPOSED DISTURBED
WETLAND	25,877 S.F.	0
WETLAND BUFFER	86,805 S.F.	2,115 S.F.



Using Stormwater Chambers GULTEC Recharger 330 XL HD		
Drainage Study Area:	s.f.	1000
Design Storm (25 yr.):	in.	6.46
Hydrologic Soil Type:		B
Existing CN:		69
Proposed CN:		98
Required Storage Volume Calculation		
Ex. Runoff Depth:	in.	3.08
Pr. Runoff Depth:	in.	6.22
Delta Runoff Depth:	in.	3.15
REQUIRED STORAGE VOLUME:	c.f.	262.1
Chamber information		
Length of 1 chamber:	ft.	8.5
Width of 1 chamber:	ft.	4.33
Height of chamber:	ft.	2.54
Width of stone surrounding chamber:	ft.	1
Depth of stone under chamber:	ft.	0.5
Stone void ratio:		0.33
Volume per chamber (as per manufacturer):	c.f./l.f.	7.46
Trench size		
Trench width:	ft.	6.33
Trench length (unit length):	ft.	1
Trench height:	ft.	3.04
Trench volume:	c.f./l.f.	19.2
Stone void volume:	c.f.	3.89
Percolation Area:	s.f./l.f.	6.33
Percolation Rate:	min./in.	15
Percolation Hole Diameter:	in.	10
Water Level Drop	in.	1
Average Depth Of Water	in.	8.5
Percolation Hole Bottom Area:	s.f.	0.55
Percolation Hole Side Area:	s.f.	1.85
Percolation Hole Total Area:	s.f.	2.40
Percolation Volume Change	c.f.	0.04
Adjusted Percolation Rate:	c.f./s.f./day	1.82
Percolation Vol. Per Day:	c.f./day/l.f.	11.5
Soil Clogging Factor:		25%
Percolation With Clogging:	c.f./day/l.f.	8.6
Total Volume Of Chambers:	c.f./day/l.f.	20.0
Required Length Chambers:	L.F.	13.12
Required Number of Chambers @ 7 L.F./Chamber:		1.87
Proposed Number of Chambers		2.00

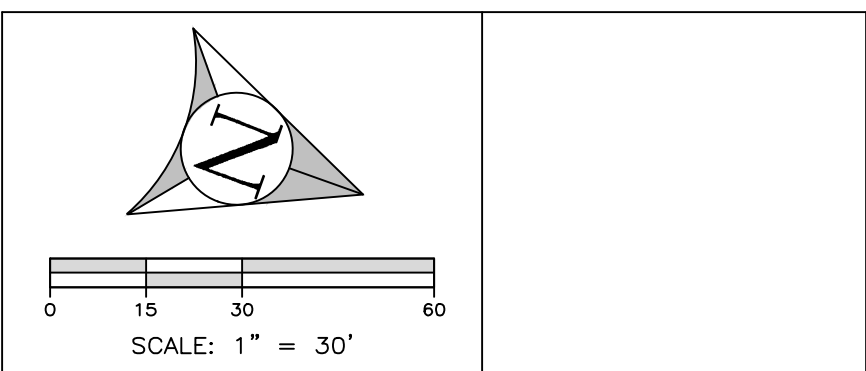
- EROSION CONTROL NOTES:**
1. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL SEDIMENT AND EROSION CONTROL PRACTICES. THE SEDIMENT AND EROSION CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, AND MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD OR UNTIL PERMANENT PROTECTION IS ESTABLISHED.
 2. PRIOR TO ANY EXCAVATION, SILT FENCE SHALL BE INSTALLED AT THE LOCATIONS NOTED ON THE EROSION CONTROL PLAN. ADDITIONAL SILT FENCE MAY BE REQUIRED BY THE ENGINEER IN THE FIELD. SILT FENCING SHALL BE MAINTAINED IN EFFECTIVE CONDITION AND SHALL NOT BE REMOVED UNTIL DISTURBED AREAS ARE THOROUGHLY STABILIZED.
 3. INSTALL ANTI-TRACKING PAD AT ALL CONSTRUCTION ENTRANCES. ANTI-TRACKING PAD SHALL BE 2"-3" DIAMETER CRUSHED STONE 6" DEEP.
 4. TIMELY MAINTENANCE OF SEDIMENT CONTROL STRUCTURES IS THE RESPONSIBILITY OF THE CONTRACTOR. ALL STRUCTURES SHALL BE MAINTAINED IN GOOD WORKING ORDER AT ALL TIMES. THE SEDIMENT LEVEL IN ALL SEDIMENT REMOVING DEVICES SHALL BE CLOSELY MONITORED AND SEDIMENT REMOVED PROMPTLY WHEN MAXIMUM LEVELS ARE REACHED OR AS ORDERED BY THE ENGINEER. SEDIMENT SHALL BE DISPOSED OF IN A MANNER THAT DOES NOT RESULT IN ADDITIONAL EROSION OR POLLUTION. ALL SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED ON A REGULAR BASIS, AND IMMEDIATELY AFTER EACH RAINFALL TO INSURE PROPER OPERATION AS DESIGNED. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
 5. ALL TOPSOIL NOT TO BE USED FOR FINAL GRADING SHALL BE REMOVED FROM THE SITE IMMEDIATELY AND PLACED IN A STABILIZED STOCKPILE OR FILL AREA. ALL TOPSOIL REQUIRED FOR FINAL GRADING AND STORED ON SITE SHALL BE LIMED, FERTILIZED, TEMPORARILY SEEDED AND MULCHED WITHIN 14 DAYS OF STORAGE. TEMPORARILY SEEDED, DO NOT STOCKPILE MATERIALS ON STEEP SLOPES, IN DRAINAGE SWALES OR IN WETLAND AREAS. SURROUND ALL STOCKPILE AREAS WITH STAKED HAYBALES OR SILT FENCE.
 6. ALL SLOPES CONSTRUCTED WITH FILL MATERIAL AND ALL SLOPES WITH GRADE X:1 OR STEEPER SHALL BE TOPSOILED, SEEDED, MULCHED AND STABILIZED WITHIN MORE THAN 14 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC. SHALL IMMEDIATELY RECEIVE TEMPORARY SEEDING. MULCH SHALL BE USED IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER. DISTURBED AREAS SHALL BE LIMED AND FERTILIZED PRIOR TO TEMPORARY SEEDING.
 7. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 14 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, SHALL IMMEDIATELY RECEIVE TEMPORARY SEEDING. MULCH SHALL BE USED IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER. DISTURBED AREAS SHALL BE LIMED AND FERTILIZED PRIOR TO TEMPORARY SEEDING.
 8. ALL DISTURBED AREAS WITHIN 500 FEET OF A BUILDING SHALL BE WETTED BY WATER TO PROVIDE DUST CONTROL. A WATERING TRUCK WILL BE USED IN DRY SEASON TO WET DOWN DUST AREAS.
 9. THE CONTRACTOR SHALL KEEP THE ROADWAYS WITHIN THE PROJECT CLEAR OF SOIL AND DEBRIS AND IS RESPONSIBLE FOR ANY STREET CLEANING NECESSARY DURING THE COURSE OF THE PROJECT.
 10. ALL CATCH BASINS AND DRAIN INLETS ARE TO BE PROTECTED WITH SEDIMENT FILTERS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE STABILIZED.
 11. UTILITY LINE EXCAVATED MATERIAL SHALL BE TEMPORARILY STOCKPILED ON THE HIGH SIDE OF EXCAVATION SO RUNOFF IS DIRECTED AWAY FROM TRENCH. AFTER BACK-FILLING, AREA IS TO BE TOPSOILED, SEEDED AND MULCHED.
 12. SEDIMENT AND EROSION CONTROL STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED BY PERMANENT MEASURES.
 13. ALL AREAS OF DISTURBED SOIL SHALL BE STABILIZED BY THE CONTRACTOR. IN ADDITION TO ALL SPECIFIED EROSION CONTROL MEASURES, THE CONTRACTOR SHALL TAKE ALL STEPS PRUDENT AND NECESSARY TO STABILIZE THE SITE AT ALL TIMES.
 14. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT EDITION OF "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROLS" (BLUE BOOK).
- CONSTRUCTION NOTES:**
1. THE CONTRACTOR SHALL LOCATE AND VERIFY IN THE FIELD ALL UTILITIES: SEWER, WATER, GAS, ELECTRICAL, ETC. PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL CALL CODE 733 (FORMERLY CODE 53) PRIOR TO THE START OF CONSTRUCTION.
 2. THE INSTALLATION OF WATER AND SEWER SHALL BE INSPECTED UNDER THE DIRECTION OF A N.Y. STATE LICENSED PROFESSIONAL ENGINEER.
 3. EROSION AND SEDIMENT CONTROL MEASURES, SHALL BE REQUIRED AS INDICATED ON THIS PLAN OR THE EROSION CONTROL PLAN OR AS DIRECTED BY THE GOVERNING AGENCY, IN ACCORDANCE WITH THE CURRENT EDITION OF "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROLS" (BLUE BOOK).
 4. AS BUILT PLANS IF REQUIRED, SHALL BE CERTIFIED BY A N.Y. STATE LICENSED SURVEYOR OR PROFESSIONAL ENGINEER.
 5. ALL PROPERTY DISTURBED IN THE RIGHT-OF-WAY OR ON PRIVATE LANDS, SHALL BE RESTORED TO ACCEPTABLE CONDITIONS, AS REQUIRED BY THE GOVERNING AGENCY.
 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL APPLICATIONS AND PERMITS REQUIRED FOR CONSTRUCTION.
 7. THE ROAD AND UTILITIES SHALL BE STAKED IN THE FIELD BY A NEW YORK STATE LICENSED SURVEYOR OR ENGINEER.
 8. UNDERGROUND UTILITIES: GAS, ELECTRIC, CABLE, TELEPHONE, ETC., SHALL BE AS REQUIRED BY THE GOVERNING AGENCY AND THE APPROPRIATE UTILITY COMPANY.
 9. ALL PROPOSED OR DISTURBED SLOPES, 1H:2V OR GREATER SHALL BE STABILIZED WITH AN EROSION CONTROL BLANKET.
 10. IN LIEU OF BLASTING, ROCK RIPPING WILL BE USED WHEREVER POSSIBLE. IF BLASTING IS REQUIRED, BLASTING WILL OCCUR IN ACCORDANCE WITH REGULATIONS AND STANDARDS PRESCRIBED BY THE GOVERNING AGENCY. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY PERMITS IF BLASTING IS REQUIRED.
 11. NO REPRESENTATION OF THE SUB-SURFACE SOIL CONDITIONS ON THIS SITE ARE MADE OR IMPLIED. IT IS THE DEVELOPER/CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL IMPROVEMENTS ARE PLACED ON SOIL WITH A SUITABLE BEARING CAPACITY.
 12. OVERNIGHT EXCAVATIONS WILL NOT BE PERMITTED.



LOCATION MAP N.T.S.

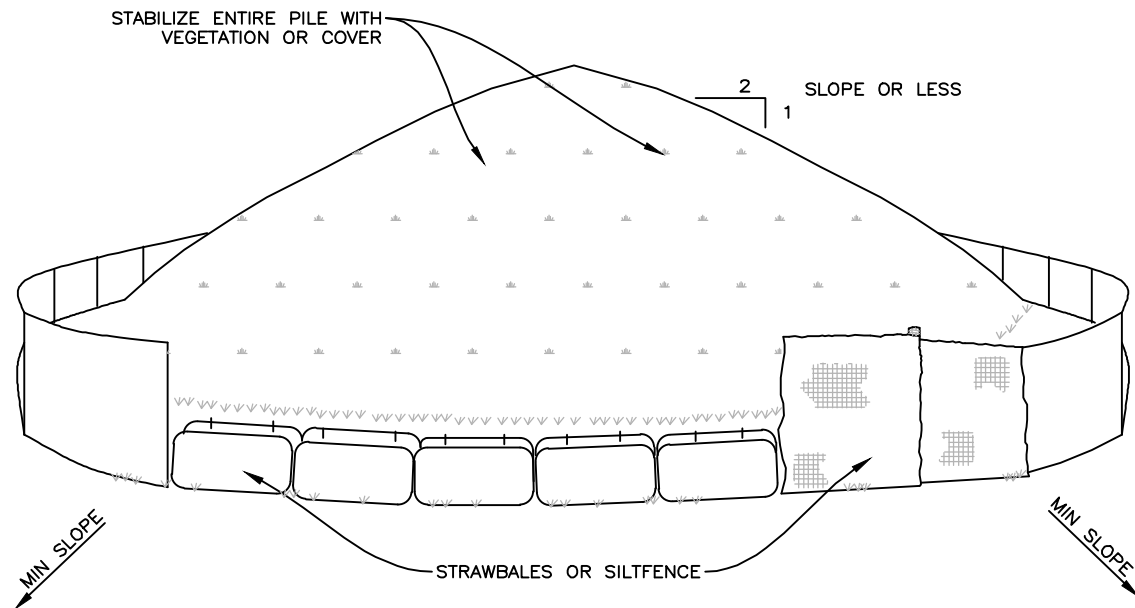
- NOTES**
1. EXISTING FEATURES SHOWN HEREON ARE TAKEN FROM SITE PLAN ENTITLED:
- DETACHED GARAGE SITE PLAN, DATED NOVEMBER 13, 2018, PREPARED FOR STEVEN AND STEFANIA FARRELLY PREPARED BY NADERMAN LAND PLANNING AND ENGINEERING, P.C. (RIP)
- THE PURPOSE OF THIS SITE PLAN IS TO ADDRESS COMMENTS ON THE STAFF REPORT - TOWN OF NORTH CASTLE PLANNING DEPARTMENT DATED DECEMBER 7, 2018 AND TOWN ENGINEER MEMORANDUM DATED DECEMBER 6, 2018.
 2. THIS SITE PLAN IS NOT A SURVEY.

IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, ARTICLE 145, SECTION 7208(2), FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER ANY ITEM ON THIS PLAN IN ANY WAY. IF ANY ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."



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SITE DATA	
OWNER/APPLICANT:	STEFANIA FARRELLY STEVEN FARRELLY
SITE ADDRESS:	6 PINE RIDGE ROAD BEDFORD, NY 10506
TAX MAP #:	102.01-2-9
LOT AREA:	3.893 ACRES
ZONING:	R-2A
DRAWING:	SITE PLAN JULY 10, 2020
PROJECT:	FARRELLY RESIDENCE TOWN OF NORTH CASTLE, WESTCHESTER COUNTY, NEW YORK



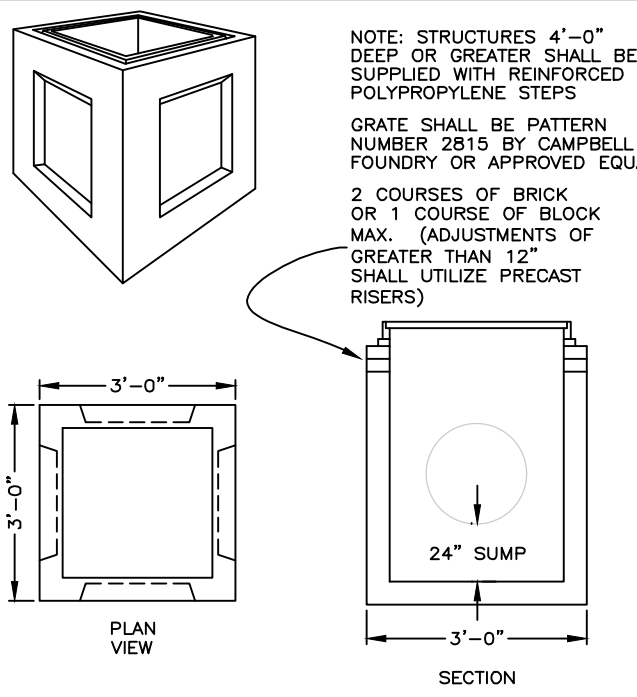
TO BE USED WHERE TOPSOIL PRESERVATION IS NECESSARY FOR REGRADING AND VEGETATING DISTURBED AREAS. TOPSOIL IS APPLIED TO SUBSOILS THAT ARE DROUGHTY (HAVING LOW AVAILABLE MOISTURE FOR PLANTS), STONY, SALTY, HAVE LOW PERMEABILITY, OR ARE EXTREMELY ACID. IT IS ALSO USED TO BACKFILL AROUND SHRUB AND TREE TRANSPLANTS. PRESERVATION OF EXISTING TOPSOIL IS BENEFICIAL FOR ALL TYPES OF LAWN OR ORNAMENTAL PLANTINGS.

TEMPORARY STOCKPILE STABILIZATION MEASURES INCLUDE VEGETATIVE COVER, MULCH, NON-VEGETATIVE COVER, AND PERIPHERAL SEDIMENT TRAPPING BARRIERS. THE STABILIZATION MEASURE(S) SELECTED SHOULD BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, AND REQUIRED DURATION OF USE.

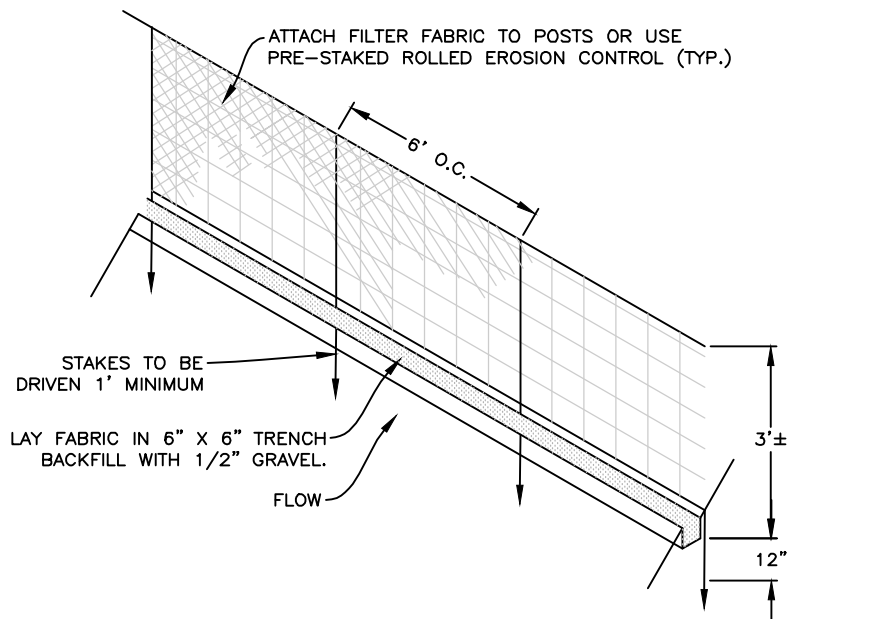
INSTALLATION NOTES

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1:2.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAWBALES, THEN STABILIZED WITH VEGETATION OR COVERED.

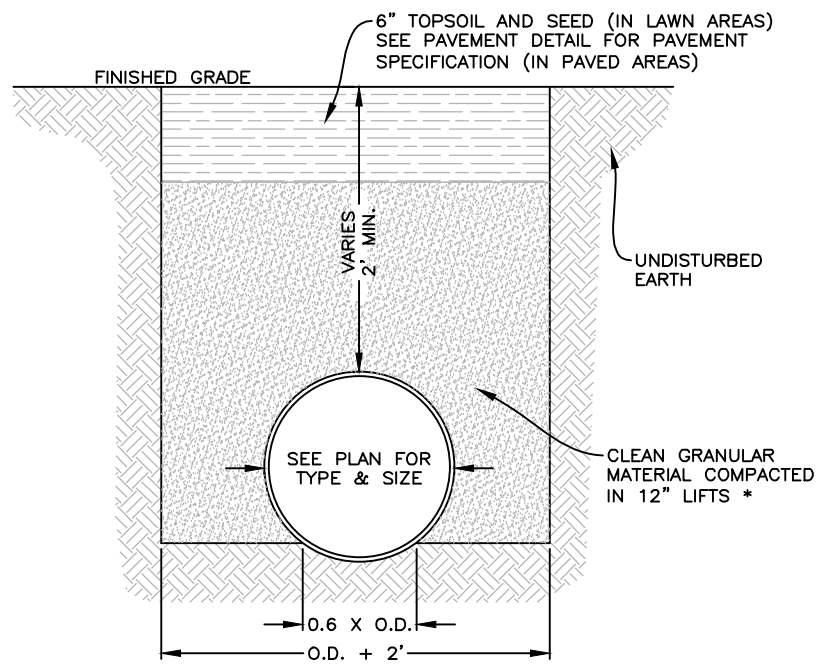
TEMPORARY MATERIAL STOCKPILE N.T.S.



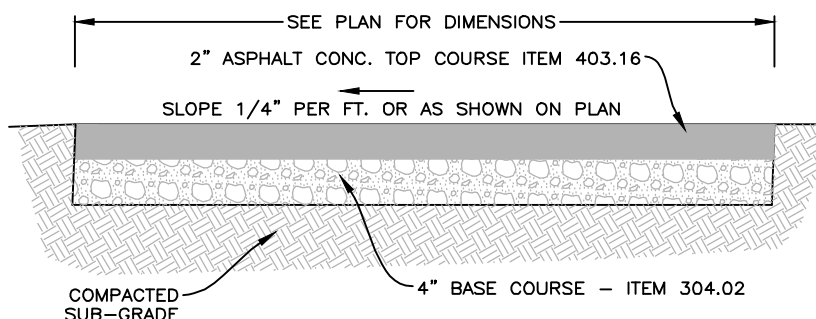
YARD DRAIN N.T.S.



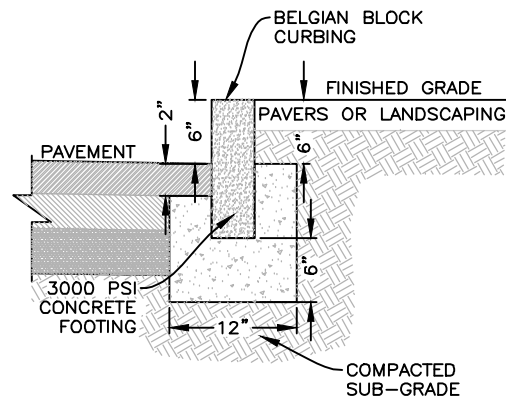
SILT FENCE N.T.S.



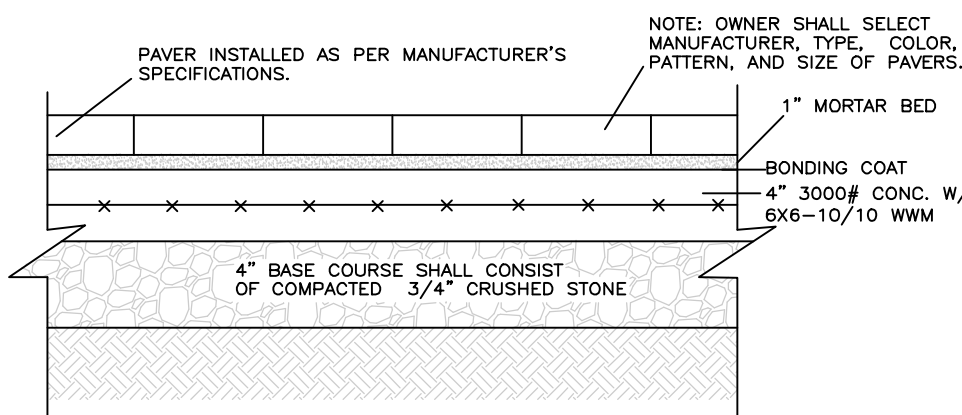
DRAIN PIPE TRENCH DETAIL N.T.S.



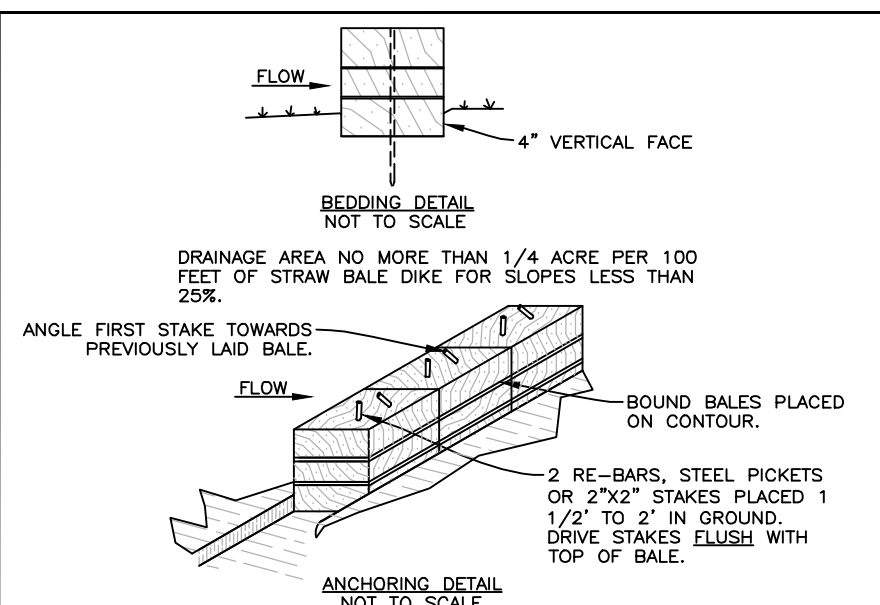
DRIVEWAY SECTION N.T.S.



BELGIAN BLOCK CURB N.T.S.



WALKWAY DETAIL N.T.S.



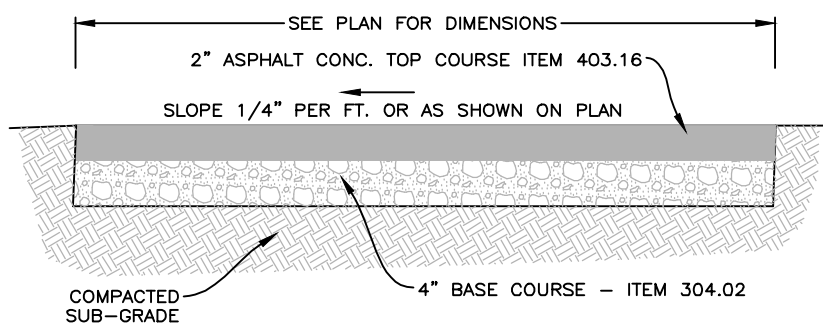
CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

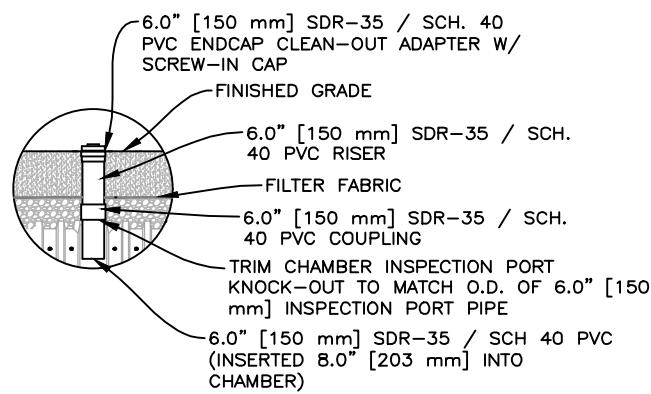
U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

STRAW BALE
DIKE

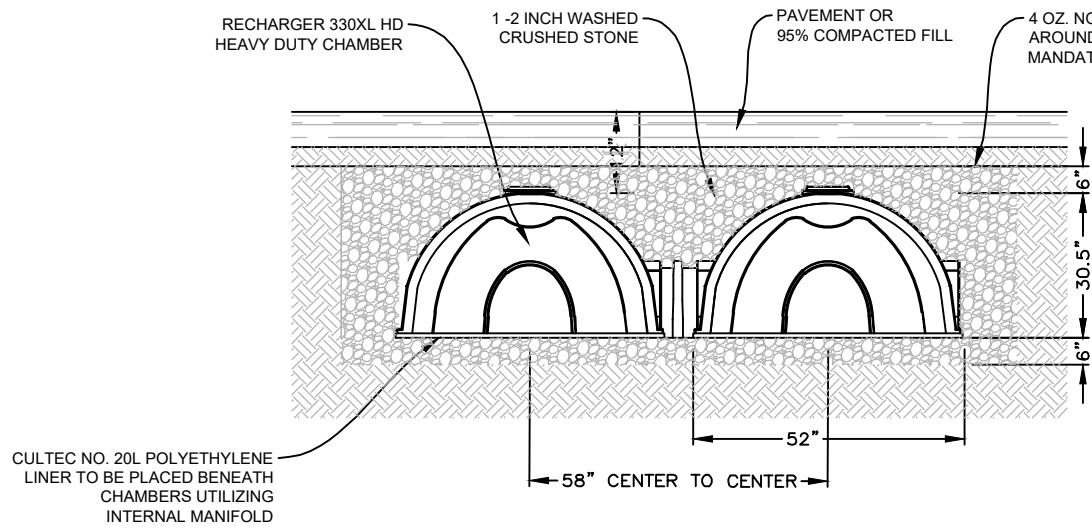
HAYBALE SEDIMENT BARRIERS N.T.S.



DRIVEWAY SECTION N.T.S.



'CULTEC' CHAMBERS INSPECTION PORT NON-TRAFFIC APPLICATION N.T.S.



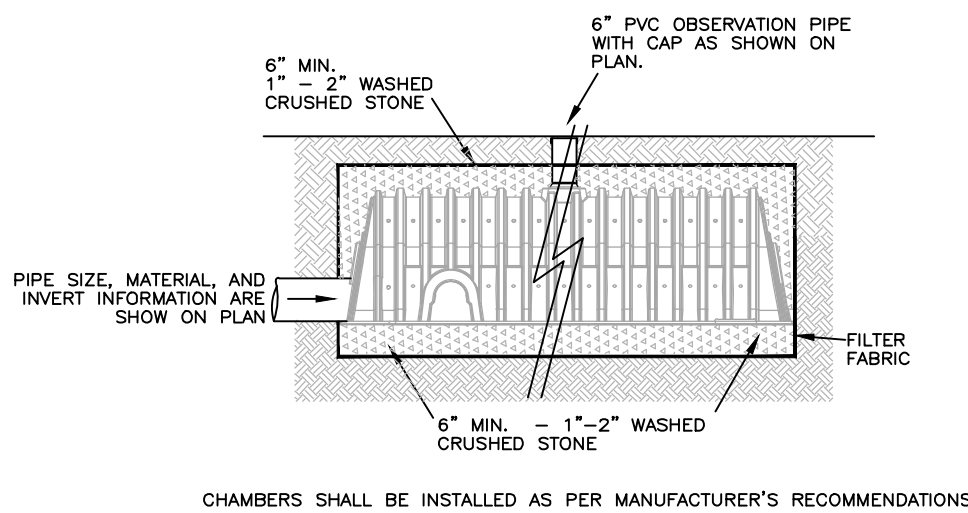
GENERAL NOTES
RECHARGER 330XL HD BY CULTEC, INC. OF BROOKFIELD, CT.
STORAGE PROVIDED = 11.32 CF/FT PER DESIGN UNIT.
REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
USE RECHARGER 330XL HD HEAVY DUTY FOR TRAFFIC AND/OR H-25 APPLICATIONS.

ALL RECHARGER 330XL HD HEAVY DUTY UNITS ARE MARKED WITH A COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.
ALL RECHARGER 330XL HD CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

GENERAL NOTES
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STORMWATER CHAMBER CROSS SECTION N.T.S.

STORMWATER CHAMBER INSTALLATION N.T.S.



CHAMBERS SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS

APPROVED BY TOWN OF NORTH CASTLE
PLANNING BOARD
RESOLUTION, DATED: _____

ENGINEERING DRAWINGS,
PLANS REVIEWED BY TOWN
ENGINEER
JOSEPH M. CERMELE, P.E.
KELLARD SESSIONS CONSULTING
CONSULTING TOWN ENGINEERS

CHRYSTOPHER CARTHY, CHAIRMAN
TOWN OF NORTH CASTLE PLANNING BOARD

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BEDFORD, NY 10506
TAX MAP #: 102.01-2-9
LOT AREA: 3.893 ACRES
ZONING: R-2A

DRAWING:

SITE DETAILS JULY 10, 2020

FARRELLY RESIDENCE
TOWN OF NORTH CASTLE,
WESTCHESTER COUNTY, NEW YORK

SHEET
02
OF
02