

## Gabriel E. Senor, P.C.

Engineers Planners Surveyors 90 N Central Park Avenue Hartsdale, NY 10530 *Tel*: (914) 422-0070 *Fax*: (914) 422-3009 *E-Mail*: info@gesenor.com

May 24, 2021

Alan R. Kaufman, AICP Director of Planning Town of North Castle 17 Bedford Rd. Armonk, NY 10504

### Re: ODOARDI – Vacant Lot 22 Nethermont Ave. – New House Construction Tax ID: Section 122.16 – Block 4 – Lot 7

Dear Mr. Kaufman & Members of the Board,

This letter accompanies a revision to the plans, in response to the draft resolution received from the Planning Board Staff and Town Consulting Engineer.

The tax ID of the property is, Section 122.16 - Block 4 - Lot 7, and is in zoning district R-5 with a total land area of 0.16 acres (6,948 Sq. Ft). The property is situated on the easterly side of Nethermont Ave, approximately 180 feet from the intersection of Freedom Road.

The purpose of the application is to construct one (1) single family residence, which will be constructed to conform with all the Town of North Castle code requirements (Zoning, Building, Engineering, etc.). The existing lot is currently vacant with vegetation on the majority of the lot and a small gravel area along Nethermont Avenue. The lot currently has fourteen (14) trees located within the property lines (See Tree Inventory table on "Existing Conditions and Removals" plan, sheet 2 of 4) that have a caliper of 6" or greater. There are a total of twelve (12) trees proposed for removal, and ten (10) out of the twelve (12) trees proposed for removal are between 6" to 8" in caliper, while the remaining two (2) trees being removed are 12" and 16" in caliper. There is a proposed landscape/planting plan included in the submittal which shows replacement trees for the proposed removals.

This application was presented to the board on January 27, 2020. At the planning board meeting the board expressed concerns regarding rock removal and the aesthetics of the home. In addition there were comments issued from bopth the members of the planning board and the town engineer. As part of this submittal we have addressed all comments issued by the board and the town engineer on January 24, 2020, including the concern of rock removal and the aesthetics of the home. The applicant has retained Geotechnical Engineering Services, P.C., to analyze the rock on the building site and advise on the methods of removal. A report has been included with the submittal.



If you have any additional questions, comments or concerns regarding the project, please feel free to contact our office.

Thank you for your consideration.

Very Truly Yours,

Eliot Senor, P.E., L.S.



Site Plan and Tree Removal Permit Approvals for Odoardi [19-039] May 10, 2021 Page 3 of 9 SEE ANNOTATED RE

SEE ANNOTATED RESPONSES FROM GABRIEL E SENOR PC BELOW.

WHEREAS, the Proposed Action would be classified as a Type II Action pursuant to the State Environmental Quality Review Act (SEQRA); and

WHEREAS, the Planning Board has inspected the site and is familiar with the nature of the site, the surrounding area, and the proposed development; and

WHEREAS, the Planning Board has requested, received, and considered comments from the Town Attorney, Town Engineer, and Town Planner regarding the proposed development; and

WHEREAS, the requirements of the Zoning Ordinance of the Town of North Castle have been met by said application; and

NOW THEREFORE BE IT RESOLVED, that the application for site plan and tree removal permit approvals, as described herein, are hereby conditionally approved, subject to the following conditions and modifications; and

BE IT FURTHER RESOLVED that, this site plan and tree removal permit approvals shall expire one (1) year after the date of this resolution unless all of the conditions and modifications identified below have been substantially completed or an extension of time has been requested by the applicant or granted by the North Castle Planning Board.

#### **Prior to the Signing of the Site Plan:**

(*The Planning Board Secretary's initials and date shall be placed in the space below to indicate that the condition has been satisfied.*)

1. The applicant shall provide a sight distance exhibit demonstrating 200' of sight distance available to the left and right of the driveway to the satisfaction of the Town Engineer. The plan and profiles shall establish the driver's eye set 3.5 feet above grade, 14 feet back from the edge of the road with a line of sight to an object in the road 2 feet above grade. The elevations shall use the same datum as the submitted plans and correspond to the grades on the profiles. As shown, the plan does not provide adequate sight distance to the north. The sight line profiles are missed label and shall be corrected to the satisfaction of the Town Engineer.

\_\_\_\_\_2. The Applicant shall demonstrate how average grade was calculated to the satisfaction of the Planning Department. The Town Code requires where the finished ground level slopes away from the exterior walls, the average grade shall be the lowest point within six feet of the perimeter of the building.

See grading and stormwater plan sheet 2 of 7

\_\_\_\_\_3. The driveway profile shall be revised to include vertical curve data, of length vertical curve, and existing and proposed station elevations, to demonstrate compliance with Section 355-59 B (1) and (3) of the Town Code to the satisfaction of the Town Engineer. The platform at the garage is proposed at 6%

Site Plan and Tree Removal Permit Approvals for Odoardi [19-039] May 10, 2021 Page 4 of 9

grade for 10 feet, then increases to a slope of 14%, the maximum permitted by Code. The driveway platform by the garage shall be lengthened to at least 20 feet to avoid parking vehicles at 14% grade. The grading plan shall be coordinated with the driveway profile to the satisfaction of the Town Engineer.

Driveway profile has been revised to accommodate the sight distance and additional parking

- 4. The grading plan shall be revised to adjust for the removal of all previously proposed retaining walls to the satisfaction of the Town Engineer. Proposed spot grades at the garage shall be verified.
- 5. The applicant has provided stormwater mitigation design calculations proposed to mitigate the net increase in runoff generated for the 100-year, 24-hour design storm event. The curve number for ledge (pre-developed) shall be revised to a CN of 98. The land areas used in the model shall be revised, as necessary to the satisfaction of the Town Engineer. All invert elevations for the components of the stormwater detention system and outlet structures shall be coordinated between the plan, details and the calculations to the satisfaction of the Town Engineer. The CN number for the pre development has been revised to 98.
  - 6. The Trench Restoration Detail shall be revised to comply with North Castle Highway Department Standards to the satisfaction of the Town Engineer. The detail shall indicate k-crete backfill for the full depth of the trench. All saw cut lines shall be tack coated and all joints crack seal. The water service curb stop shall be located on the plan.

Trench Restoration detail on the stormwater and site plan details sheet 3 of 7 notes full depth K-Crete in paved areas

- 7. The driveway detail shall be revised to illustrate an 18 foot maximum curb cut width to the satisfaction of the Town Engineer. Driveway detail now shows an 18 foot curb cut maximum on sheet 3 of 7.
- 8. The stormwater calculations shall be removed from Drawing SW-1 to the satisfaction of the Town Engineer. Stormwater Calcs have been removed from Drawing SW-1.
- 9. The proposed trench drain detail shall include dimensions and note that it is suitable for H-20 Vehicle Loading to the satisfaction of the Town Engineer. Proposed trench drain detail now includes dimensions and notes H20 Loading.
  - 10. Erosion control measures shall be illustrated on the plan, including, but not limited to, inlet protection, and tree protection to the satisfaction of the Town Engineer. The limit of disturbance shall be revised to illustrate and quantify all areas of disturbance on and off site.

All erosion control measures are shown on the Staging Erosion Control and Utility Plan Sheet 7 of 7.

11. The Applicant shall provide a maximum exterior wall height analysis to the satisfaction of the Planning Department (34' max). Plan A-002 is not correct. Maximum exterior wall should shall also be depicted on the front elevation. According to the elevation it should be measured from elevation 502.1 (grade at garage) to the roof midpoint. This would appear to result in a maximum exterior wall height in excess of the 34 foot maximum. In addition, the left elevation max exterior wall height measurement is from elevation 505, this does not appear to be

#### Site Plan and Tree Removal Permit Approvals for

Odoardi [19-039] May 10, 2021 Page 5 of 9

correct as the front elevation has the garage at 502.1, not 505. The elevations need to be coordinated.

See Building Height and Wall Height Analysis Revised on sheets A-001 and A-002

- \_\_\_\_12. The architectural cross section of the house indicates internal stairs to a basement level and first and second floors. However, the plan shall illustrate how the stair from the garage level will connect to the first to the satisfaction of the Town Engineer and Town Planner. This shall be clarified and coordinated on the plans, to the satisfaction of the Town Engineer and Town Planner. Modular company architect will provide cross section.
- 13. The applicant shall provide a separate Site Plan and Grading and Utility Plan to the Existing Conditions Plan for clarity of ease and review, to the satisfaction of the Town Engineer. The applicant shall prepare a Site Plan that includes all proposed improvements, including, but not limited to, proposed residence, walkways, patios, driveway including dimensions, a zoning compliance table, the minimum building envelope illustrating building setbacks and dimensions, retaining walls and existing neighboring buildings and driveways. Existing and proposed grading, utilities, erosion controls, etc., should be illustrated on separate plan sheets.

Plan sheets have been separated for clarity. There are now 7 site plan sheets corresponding to the Planning Board Submittal.

14. As shown, the proposed grading does not tie-in to the existing grading at the rear of the property. The plan shall be revised accordingly to the satisfaction of the Town Engineer.

Grading has been fixed

- 15. The plans shall include a cut and fill calculation to provide an estimate of the rock removal required and an anticipated duration, to the satisfaction of the Town Engineer. The estimated cut and fill quantity and the duration of rock removal is provided on the "Rock Removal Plan / Summary" document attached.
- 16. The Rock Removal Plan shall be revised to include a discussion regarding warning levels to be monitored before maximum thresholds are experienced, provisions and protocol for immediate shut-down should the maximum allowable vibration be detected, reporting requirements, and methods of notification to the Town, owner, contractor, design professional and adjacent property owners in the event the threshold is met, to the satisfaction of the Town Planner and Town

Engineer. The "Rock Removal Plan / Summary" document has been revised to include the warning levels to be monitored, and the provisions and protocols requested.

- 17. The garage elevation shown on the plan shall be coordinated with the elevation noted on the driveway profile, to the satisfaction of the Town Engineer.
   The garage elevation shown on the basement/foundation plan is 502.8 and matches the driveway profile and site plan.
  - 18. As shown, it appears the Trench Restoration Detail, Stone Retaining Wall Detail, and Impervious Surface Area Detail on Drawing SW-2 did not plot correctly. These details shall be illustrated on the plan to the satisfaction of the Town Engineer.

Sheet SW-2 has been re printed to show all of the required details.

#### **22 NETHERMONT AVE ROCK REMOVAL PLAN / SUMMARY**

Rock removal will be performed in accordance with the recommendations of Geotechnical Engineering Services, P.C., written by Ziad Maad, P.E., which is attached to this Rock Removal Plan as *Exhibit A*.

The excavation for the construction of the new home will require approximately 314.5 C.Y. of Cut (Rock Removal) and 35 C.Y. of Fill. Please refer to the attached "Rock Removal Diagram" for calculations. Not more than 20 days nor less than two days prior to a scheduled hammering, the permit holder shall serve a notice of intent to hammering, stating when and where activity is scheduled to occur, on each occupant or user of each structure, adjoining or abutting the parcel of property on which the hammering is to take place, regardless of the distance an adjoining owner is from site. The notice shall include the building permit number, the permit holder's name, and emergency telephone numbers for police, fire and ambulance service. A copy of the notice of intent must be submitted to the Building Inspector for his review and approval prior to distribution. Notice of Intent is Attached as *Exhibit B*.

The notice of intent to remove rock may be served by posting a copy of such notice in each building or dwelling in a conspicuous place where it is reasonable to believe that persons entering or leaving the premises will see such notification.

A pre-hammering inspection report providing an existing condition of the site and all structures adjacent to the site shall be performed. The report shall be accompanied with a videotape showing the external and interior characteristics of each building and structure adjacent to the property. If access is not provided for such inspection, the applicant will not be held liable for any damage which may occur. Any property owner adjacent to the property shall be furnished a copy of the report upon request. The applicant shall make a copy of the inspection report available to the Building Inspector.

When an instrument is used to measure the seismic effect of hammering, the maximum peak particle velocity on any one component of an instrument measuring three-component motion shall not exceed 1.00 inches per second at 0-100 feet. However, while 1.00 inches per second at 0-100 feet reflects the maximum threshold, there will be a velocity "Warning Level" of 0.75 inches per second at 0-100 feet, which will indicate to all persons involved that the rock removal vibrations are approaching the maximum threshold. The measuring instrument transducer shall be firmly coupled. Once the seismographs indicate velocities of 0.75 inches per second at 0-100 feet, the work will immediately stop and all persons who live within 100 feet of the property, Ziad Maad P.E., Eliot Senor P.E. (design engineer), Town of North Castle Building Inspector, and any additional party deemed necessary by the Town of North Castle, will be notified via e mail, mail and telephone, and the Geotechnical Professional, Ziad Maad, P.E., will advise the construction team on how to adjust the rock removal process in order to reduce the vibration caused by the rock removal. Ziad Maad, P.E. will produce a written report once the "Warning Level" is reached and describe what occurred and the proposed remediation / adjustment to the rock removal process to reduce the vibration being caused. The report will be filed with the Town of North Castle Building Department and once Ziad Maad, P.E. determines that the necessary adjustments were made to the rock removal process, he will then notify the Town of North Castle Building Department, who will then authorize construction to proceed once they are comfortable that the remediation recommended by the professional has been achieved. Should the "Warning Level" be reached during the rock removal process, the remediation recommended

on the written report by Ziad Maad, P.E., will serve as the new means and methods of rock removal for the contractor and those means and methods will be enforced by the Town of North Castle Building Department. The locations and placement of the seismograph instruments on each structure will be determined by Geotechnical Engineering Services, P.C., Ziad Maad, P.E., and monitored by Ziad Maad P.E., Eliot Senor P.E. (design engineer), Town of North Castle Building Inspector, and any additional party deemed necessary by the Town of North Castle. The seismograph instrument does come along with an application that can be downloaded onto a smart phone and this will serve as the primary source of notification to all individuals named above, whom are monitoring the project, and all property owners within 100 feet of the rock removal sight. In addition, everyone will receive a copy of the written report via mail at the time the report is completed and submitted to the building department.

In addition, the following seismograph information must be recorded with a duplicate copy provided to the Building Inspector:

- 1. The seismograph serial number.
- 2. The range/gain setting.
- 3. The date of last shake table calibration.

4. The exact seismograph location and location in relation to the hammering. Placement will be as required by Building Inspector

- 5. The peak particle velocity readout.
- 6. The name of the operator.

For any additional questions regarding the technicalities of the operation, please call the Building Inspector who will connect you with the Geotechnical Engineer, Ziad Maad.

## EXHIBIT A

**GES** Geotechnical Engineering Services, P.C.

October 13, 2020

Alan R. Kaufman, AICP Director of Planning Town of North Castle 17 Bedford Rd. Armonk, NY 10504

#### Re: Rock Excavation - Letter 22 Nethermont Avenue White Plains, New York

Dear Mr. Kaufman:

This letter is intended to provide additional recommendations with regard to rock removal, for the proposed construction at 22 Nethermont Avenue in White Plains, New York.

We previously performed a geotechnical investigation at the above-referenced address, and provided rock excavation recommendations during construction, as discussed in our August 2020 Geotechnical Letter Report. In this report, we recommended the usage of line drilling along the limits of the excavation, wherever excavation is to proceed within 25 feet of adjacent properties, to reduce the amount of rock overbreak and to limit vibrations. We also recommended a limit of 1 in/sec for vibrations, as recorded by seismographs placed within nearby properties.

In accordance with recent discussions between Gabriel E. Senor, P.C. and Mr. Ziad H. Maad, P.E., D. GE. of Geotechnical Engineering Services, P.C. (GES), we understand that the Town has requested recommendations for alternate rock excavation methods, if vibration exceedances occur. Therefore, if vibrations are measured to exceed 1 in/sec in the seismographs within adjacent structures, we recommend that the work be temporarily stopped, and the means and methods modified to reduce vibration levels. Such modifications may include using smaller sized excavation or drilling equipment, smaller drill holes, or additional distance from adjacent properties for the usage of the hoe-ram. Should there be additional exceedances, we recommend that rock excavation is performed within 25 feet of adjacent structures using small hydraulic rock splitters, chipping guns, or other hand-held equipment with an air compressor. Nearby or adjacent properties must be protected at all times during rock excavation from adverse impacts of the work. No blasting is needed or recommended for this project.

Alan R. Kaufman, AICP – Town of North Castle 22 Nethermont Avenue – White Plains, New York Letter – October 13, 2020 Page 2 of 2

#### CLOSING

Thank you for this great opportunity to work with you on this project. If you have any questions or would like to discuss the contents of this letter report, please don't hesitate to call me in the office at 914-592-4616 or on my mobile at 973-727-7329.

Very truly yours, Geotechnical Engineering Services, P.C.

ziad maad, P.E.

Ziad H. Maad, P.E., D. GE.



### **ROCK REMOVAL NOTIFICATION FORM**

#### **BUILDING PERMIT #:**

#### **PERMIT HOLDER NAME:**

#### **EMERGENCY TELEPHONE NUMBERS**

FIRE – North Castle South Fire District - (914) 761-4545

**POLICE - 911** 

AMBULANCE – 911

**NOTICE IS HEREBY GIVEN** that the **Rock Removal Operations at 22 Nethermont Ave, White Plains, NY 10603** of the Town of North Castle will be occurring on on the above referenced premises on, Starting on \_\_\_\_\_\_\_,20 at \_\_\_\_\_am/pm

Attached to this notice is the Rock Removal Plan for your reference.

Please Contact the Building Inspector with any comments or concerns regarding the removal operations at (914) 273-3000 ext. 44.

BUILDING INSPECTOR

DATE

#### ROCK REMOVAL DIAGRAM scale: 1" = 15'





To whom it may concern:

Westchester modular homes has been to the site at Nethermont Ave in the town North Castle .

Our crane will back up onto the property and Have the modules one at a time

Pull up in front of crane and pick the Modules off the road and Place them on

The foundation.

If you have any questions please feel free to call.

Alfie Muoio

## WESTCHESTER MODULAR HOMES PICK PLAN





#### Area Listing (all nodes)

Area	CN	Description
 (acres)		(subcatchment-numbers)
0.039	98	<50% Grass cover, Poor, HSG B (Pre Dev)
0.065	98	Impervious Area Constructed (Post Dev)
0.119	98	Ledge (Ledge)
0.120	98	Rock-Ledge (Pre Dev)
0.344	98	TOTAL AREA

#### 22 Nethermont Ave - Proposed Stormwater System 25 Year & 100 Year - 05/19/2021 **NETHERMONT HYDROCAD** Prepared by GABRIEL E SENOR PC HydroCAD® 10.00-26 s/n 01594 © 2020 HydroCAD Software Solutions LLC Printed 5/24/2021

Page 3

#### Soil Listing (all nodes)

Area	Soil	Subcatchment
(acres)	Group	Numbers
0.000	HSG A	
0.039	HSG B	Pre Dev
0.000	HSG C	
0.000	HSG D	
0.305	Other	Ledge, Post Dev, Pre Dev
0.344		TOTAL AREA

#### 22 Nethermont Ave - Proposed Stormwater System 25 Year & 100 Year - 05/19/2021 NETHERMONT HYDROCAD

Prepared by GABRIEL E SENOR PC	Printed 5/24/2021
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#### Ground Covers (all nodes) Ground HSG-A HSG-B HSG-C HSG-D Other Total Subcatchment (acres) (acres) (acres) (acres) Cover Numbers (acres) (acres) Pre 0.000 0.039 0.000 0.000 0.000 0.039 <50% Grass cover, Poor Dev Impervious Area Constructed Post 0.000 0.000 0.000 0.000 0.065 0.065 Dev 0.000 0.000 0.000 0.000 0.119 0.119 Ledge Ledge 0.000 0.000 0.120 Rock-Ledge Pre 0.000 0.000 0.120 Dev 0.000 0.000 0.000 0.344 TOTAL AREA 0.039 0.305

22 Nethermont Ave - Pro	posed Stormwater System 25 Year & 100 Year - 05/19/2021					
<b>NETHERMONT HYDROCAD</b>	NRCC 24-hr C 25 YEAR Rainfall=6.41"					
Prepared by GABRIEL E SENOR PC	Printed 5/24/2021					
<u>HydroCAD® 10.00-26 s/n 01594 © 2020 Hydro</u>	CAD Software Solutions LLC Page 5					
Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method						
Subcatchment Ledge: Post Development	Runoff Area=5,185 sf 100.00% Impervious Runoff Depth>6.17"					
Flow Length=35'	Slope=0.1800 '/' Tc=0.2 min CN=98 Runoff=0.87 cfs 0.061 af					
Subcatchment Post Dev: Addnl Imp Surf	Runoff Area=2,848 sf 100.00% Impervious Runoff Depth>6.17"					
Flow Length=35'	Slope=0.1800 '/' Tc=0.2 min CN=98 Runoff=0.48 cfs 0.034 af					
Subcatchment Pre Dev: Ledge	Runoff Area=6,948 sf 100.00% Impervious Runoff Depth>6.17"					
Flow Length=60'	Slope=0.1800 '/' Tc=3.8 min CN=98 Runoff=1.11 cfs 0.082 af					
Pond Imp: 40 L.F 36" PIPE	Peak Elev=498.93' Storage=133 cf Inflow=0.48 cfs 0.034 af Outflow=0.27 cfs 0.034 af					
Link Runoff Post Dev: Runoff Post Dev	Inflow=1.11 cfs 0.095 af Primary=1.11 cfs 0.095 af					

Total Runoff Area = 0.344 ac Runoff Volume = 0.177 af Average Runoff Depth = 6.17" 0.00% Pervious = 0.000 ac 100.00% Impervious = 0.344 ac

#### Summary for Subcatchment Ledge: Post Development

[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.87 cfs @ 12.05 hrs, Volume= 0.061 af, Depth> 6.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs NRCC 24-hr C 25 YEAR Rainfall=6.41"

	A	rea (sf)	CN	Description					
*		3,402	98	Ledge					
*		1,783	98	Ledge					
		5,185	98	Weighted A	verage				
		5,185		100.00% In	npervious A	rea			
	Тс	Length	Slop	e Velocity	Capacity	Description			
(	min)	(feet)	(ft/f	t) (ft/sec)	(cfs)				
	0.2	35	0.180	0 2.81		Sheet Flow, Smooth surfaces	n= 0 011	P2= 3 50"	

#### Subcatchment Ledge: Post Development



#### Summary for Subcatchment Post Dev: Addnl Imp Surf

[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.48 cfs @ 12.05 hrs, Volume= 0.034 af, Depth> 6.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs NRCC 24-hr C 25 YEAR Rainfall=6.41"

	A	rea (sf)	CN	Description					
*		2,848	98	Impervious	mpervious Area Constructed				
		2,848 100.00% Impervious Area							
(	Tc min)	Length (feet)	Slope (ft/ft	e Velocity ) (ft/sec)	Capacity (cfs)	Description			
	0.2	35	0.1800	) 2.81		Sheet Flow, Smooth surfaces	n= 0.011	P2= 3.50"	

#### Subcatchment Post Dev: Addnl Imp Surf



#### Summary for Subcatchment Pre Dev: Ledge

[49] Hint: Tc<2dt may require smaller dt

Runoff = 1.11 cfs @ 12.10 hrs, Volume= 0.082 af, Depth> 6.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs NRCC 24-hr C 25 YEAR Rainfall=6.41"

	Area (sf)	CN	Description					
*	1,703	98	<50% Gras	s cover, Po	or, HSG B			
*	5,245	98	Rock-Ledge	e				
	6,948	98	Weighted A	verage				
	6,948		100.00% In	npervious A	rea			
۲ mii)	rc Length n) (feet)	Slop (ft/fl	e Velocity t) (ft/sec)	Capacity (cfs)	Description			
3	.8 60	0.180	0 0.27		Sheet Flow, Grass: Dense	n= 0.240	P2= 3.50"	

#### Subcatchment Pre Dev: Ledge



22 Nethermont Ave - Proposed Stormwa	ter System 25 Yea	r & 100 Year - 05	/19/2021
NETHERMONT HYDROCAD	NRCC 24-hr C	25 YEAR Rainfa	all=6.41"
Prepared by GABRIEL E SENOR PC		Printed 5	/24/2021
HydroCAD® 10.00-26 s/n 01594 © 2020 HydroCAD Software Sol	lutions LLC		Page 9

#### Summary for Pond Imp: 40 L.F. - 36" PIPE

[92] Warning: Device #2 is above defined storage

Inflow Area	=	0.065 ac,10	0.00% Impervio	ous, Inflow De	epth > 6.17"	for 25 Y	EAR event
Inflow	=	0.48 cfs @	12.05 hrs, Vol	ume=	0.034 af		
Outflow	=	0.27 cfs @	12.12 hrs, Vol	ume=	0.034 af, At	ten= 43%,	Lag= 4.3 min
Primary	=	0.27 cfs @	12.12 hrs, Vol	ume=	0.034 af		-

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs Peak Elev= 498.93' @ 12.12 hrs Surf.Area= 120 sf Storage= 133 cf

Plug-Flow detention time= 3.6 min calculated for 0.034 af (100% of inflow) Center-of-Mass det. time= 3.3 min (743.1 - 739.8)

Volume	Invert	Avail.Storag	ge Storage Description
#1	497.50'	283	cf <b>36.0" Round Pipe Storage</b> L= 40.0'
Device	Routing	Invert C	Dutlet Devices
#1 #2	Primary Primary	497.50' <b>3</b> 500.50' <b>2</b>	<b>8.0" Vert. Orifice/Grate</b> C= 0.600 <b>2.0' Iong Sharp-Crested Rectangular Weir</b> 2 End Contraction(s) 0.5' Crest Height
Primary	<b>OutFlow</b> Max	=0.27 cfs @ <sup>-</sup>	12.12 hrs HW=498.90' (Free Discharge)

-1=Orifice/Grate (Orifice Controls 0.27 cfs @ 5.43 fps)

-2=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)



#### Pond Imp: 40 L.F. - 36" PIPE

22 Nethermont Ave - Proposed Stormwat	ter System 25 Year & 100 Year - 05/19/202	1
NETHERMONT HYDROCAD	NRCC 24-hr C 25 YEAR Rainfall=6.41	1″
Prepared by GABRIEL E SENOR PC	Printed 5/24/202	21
HydroCAD® 10.00-26 s/n 01594 © 2020 HydroCAD Software Sol	utions LLC Page 1	1

#### Summary for Link Runoff Post Dev: Runoff Post Dev

Inflow Are	a =	0.184 ac,10	0.00% Imper	vious, Inflow De	epth > 6.1	7" for 25 Y	'EAR event
Inflow	=	1.11 cfs @	12.05 hrs, V	/olume=	0.095 af		
Primary	=	1.11 cfs @	12.05 hrs, N	/olume=	0.095 af,	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs



#### Link Runoff Post Dev: Runoff Post Dev



22 Nethermont Ave - Pro	posed Stormwater System 25 Year & 100 Year - 05/19/2021				
<b>NETHERMONT HYDROCAD</b>	NRCC 24-hr C 100 year Rainfall=9.23"				
Prepared by GABRIEL E SENOR PC	Printed 5/24/2021				
<u>HydroCAD® 10.00-26 s/n 01594 © 2020 Hydro</u>	CAD Software Solutions LLC Page 12				
Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method . Pond routing by Stor-Ind method					
Subcatchment Ledge: Post Development	Runoff Area=5,185 sf 100.00% Impervious Runoff Depth>8.99"				
Flow Length=35'	Slope=0.1800 '/' Tc=0.2 min CN=98 Runoff=1.25 cfs 0.089 af				
Subcatchment Post Dev: Addnl Imp Surf	Runoff Area=2,848 sf 100.00% Impervious Runoff Depth>8.99"				
Flow Length=35'	Slope=0.1800 '/' Tc=0.2 min CN=98 Runoff=0.69 cfs 0.049 af				
Subcatchment Pre Dev: Ledge	Runoff Area=6,948 sf 100.00% Impervious Runoff Depth>8.99"				
Flow Length=60'	Slope=0.1800 '/' Tc=3.8 min CN=98 Runoff=1.60 cfs 0.119 af				
Pond Imp: 40 L.F 36" PIPE	Peak Elev=499.76' Storage=229 cf Inflow=0.69 cfs 0.049 af Outflow=0.35 cfs 0.049 af				
Link Runoff Post Dev: Runoff Post Dev	Inflow=1.56 cfs 0.138 af Primary=1.56 cfs 0.138 af				

Total Runoff Area = 0.344 ac Runoff Volume = 0.258 af Average Runoff Depth = 8.99" 0.00% Pervious = 0.000 ac 100.00% Impervious = 0.344 ac

#### Summary for Subcatchment Ledge: Post Development

[49] Hint: Tc<2dt may require smaller dt

Runoff = 1.25 cfs @ 12.05 hrs, Volume= 0.089 af, Depth> 8.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs NRCC 24-hr C 100 year Rainfall=9.23"

	A	rea (sf)	CN	Description					
*		3,402	98	Ledge					
*		1,783	98	Ledge					
		5,185	98	Weighted A	verage				
		5,185		100.00% In	npervious A	rea			
	Тс	Length	Slop	e Velocity	Capacity	Description			
(m	in)	(feet)	(ft/f	t) (ft/sec)	(cfs)	-			
(	).2	35	0.180	0 2.81		Sheet Flow,			
						Smooth surfaces	n= 0.011	P2= 3.50"	

#### Subcatchment Ledge: Post Development



#### Summary for Subcatchment Post Dev: Addnl Imp Surf

[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.69 cfs @ 12.05 hrs, Volume= 0.049 af, Depth> 8.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs NRCC 24-hr C 100 year Rainfall=9.23"

	Ar	ea (sf)	CN	Description					
*		2,848	98	Impervious	Area Cons	tructed			
		2,848		100.00% In	npervious A	rea			
(m	Tc in)	Length	Slope (ft/ft	e Velocity	Capacity	Description			
(111)	).2	35	0.1800	) 2.81	(010)	Sheet Flow, Smooth surfaces	n= 0.011	P2= 3.50"	

#### Subcatchment Post Dev: Addnl Imp Surf



#### Summary for Subcatchment Pre Dev: Ledge

[49] Hint: Tc<2dt may require smaller dt

Runoff = 1.60 cfs @ 12.10 hrs, Volume= 0.119 af, Depth> 8.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs NRCC 24-hr C 100 year Rainfall=9.23"

	Area (sf)	CN	Description					
*	1,703	98	<50% Gras	s cover, Po	or, HSG B			
*	5,245	98	Rock-Ledge	e				
	6,948	98	Weighted A	verage				
	6,948		100.00% In	npervious A	rea			
-	Fc Length	Slope	e Velocity	Capacity	Description			
(mi	n) (feet)	(ft/ft	) (ft/sec)	(cfs)	-			
3	.8 60	0.1800	0.27		Sheet Flow,			
					Grass: Dense	n= 0.240	P2= 3.50"	

#### Subcatchment Pre Dev: Ledge



22 Nethermont Ave - Proposed Stormwa	ater System 25 Year	& 100 Year - 0	5/19/2021
NETHERMONT HYDROCAD	NRCC 24-hr C	100 year Rain	fall=9.23"
Prepared by GABRIEL E SENOR PC		Printed	5/24/2021
HydroCAD® 10.00-26 s/n 01594 © 2020 HydroCAD Software So	olutions LLC		Page 16

#### Summary for Pond Imp: 40 L.F. - 36" PIPE

[92] Warning: Device #2 is above defined storage

Inflow Area	=	0.065 ac,10	0.00% Impervious,	Inflow Depth >	8.99" 1	for 100 y	/ear event
Inflow	=	0.69 cfs @	12.05 hrs, Volume	e= 0.049	af		
Outflow	=	0.35 cfs @	12.13 hrs, Volume	e= 0.049	af, Atten	n= 50%,	Lag= 4.9 min
Primary	=	0.35 cfs @	12.13 hrs, Volume	e= 0.049	af		-

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs Peak Elev= 499.76' @ 12.13 hrs Surf.Area= 103 sf Storage= 229 cf

Plug-Flow detention time= 4.3 min calculated for 0.049 af (100% of inflow) Center-of-Mass det. time= 4.0 min (738.9 - 734.9)

Volume	Invert	Avail.Storag	ge Storage Description
#1	497.50'	283	cf <b>36.0" Round Pipe Storage</b> L= 40.0'
Device	Routing	Invert C	Dutlet Devices
#1	Primary	497.50' <b>3</b>	.0" Vert. Orifice/Grate C= 0.600
#2	Primary	500.50' <b>2</b> 0	<b>.0' long Sharp-Crested Rectangular Weir</b> 2 End Contraction(s) 0.5' Crest Height
Primary	<b>OutFlow</b> Max	=0.34 cfs @ 1	12.13 hrs HW=499.74' (Free Discharge)

-1=Orifice/Grate (Orifice Controls 0.34 cfs @ 7.00 fps)

-2=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)



### Pond Imp: 40 L.F. - 36" PIPE

22 Nethermont Ave - Proposed Stormwa	iter System 25 Year	& 100 Year - 05/19/2021
NETHERMONT HYDROCAD	NRCC 24-hr C	100 year Rainfall=9.23"
Prepared by GABRIEL E SENOR PC		Printed 5/24/2021
HydroCAD® 10.00-26 s/n 01594 © 2020 HydroCAD Software So	lutions LLC	Page 18

#### Summary for Link Runoff Post Dev: Runoff Post Dev

Inflow Are	ea =	0.184 ac,10	0.00% Impervi	ious, Inflow D	Depth > 8.9	99" for 100	year event
Inflow	=	1.56 cfs @	12.05 hrs, Vo	lume=	0.138 af		
Primary	=	1.56 cfs @	12.05 hrs, Vo	lume=	0.138 af,	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs



#### Link Runoff Post Dev: Runoff Post Dev



TOWN OF NORTH CASTLE

WESTCHESTER COUNTY 17 Bedford Road Armonk, New York 10504-1898

PLANNING DEPARTMENT Adam R. Kaufman, AICP Director of Planning

Telephone: (914) 273-3542 Fax: (914) 273-3554 www.northcastleny.com

#### FLOOR AREA CALCULATIONS WORKSHEET

Applicat	tion Name or Identifying Title:	PLANNIANG BOARD APPLICATION # 19-039 ODOARDI - 22 NETHERMONT ANE	Date: 07/31/2020
Tax Map	Designation or Proposed Lot No.:	5: 122.16-4-7	
Floor Ar	<u>rea</u>		
1.	Total Lot Area (Net Lot Area for Lots	Created After 12/13/06):	6,948 SF
2.	Maximum permitted floor area (per Se	ection 355-26.B(4)):	2,987 SF
3.	Amount of floor area contained within $O$ existing + $1_1 O C O$ pr	first floor: roposed =	1068.9 SF
4.	Amount of floor area contained within existing + $1,002.0$ pr	second floor: roposed =	1,068.05F
5.	Amount of floor area contained within $0$ existing + $200$ pr	garage: roposed =	280 SF
6.	Amount of floor area contained within $\underline{O}$ existing + $\underline{78.2}$ pr	porches capable of being enclosed: roposed =	<u>78.2 sf</u>
7.	Amount of floor area contained within pr	basement (if applicable – see definition): roposed =	O SF
8.	Amount of floor area contained within existing + pr	attic (if applicable – see definition): roposed =	<u> </u>
9.	Amount of floor area contained within          O       existing +       O       pr	all accessory buildings: roposed =	0 SF
10.	Proposed floor area: Total of Lines 3	- 9 =	2,494.2 SF

If Line 10 is less than or equal to Line 2, your proposal **complies** with the Town's maximum floor area regulations and the project may proceed to the Residential Project Review Committee for review. If Line 10 is greater than Line 2 your proposal does not comply with the Sown Sciential Science Scienc

Signature and Seal of Profes

08/02/2020 Date

Q.c)





#### **TOWN OF NORTH CASTLE**

WESTCHESTER COUNTY 17 Bedford Road Armonk, New York 10504-1898

PLANNING DEPARTMENT Adam R. Kaufman, AICP Director of Planning

Telephone: (914) 273-3542 Fax: (914) 273-3554 www.northcastleny.com

#### **GROSS LAND COVERAGE CALCULATIONS WORKSHEET**

Applica	ation Name or Identifying Title:	3 App # 19-039 - Odoardi - 22 Nethermont Ave	Date:
Tax Ma	p Designation or Proposed Lot No.: 122.1	6 - 4 - 7	
Gross I	.ot Coverage		
1.	Total lot Area (Net Lot Area for Lots Cr	reated After 12/13/06):	6,948 SF
2.	Maximum permitted gross land coverag	ge (per Section 355-26.C(1)(a)):	3,084.4 SF
3.	BONUS maximum gross land cover (pe	r Section 355-26.C(1)(b)):	
	Distance principal home is beyond minin 0 x 10 =	mum front yard setback	0
4.	TOTAL Maximum Permitted gross la	<b>nd coverage</b> = Sum of lines 2 and 3	3,084.4 SF
5.	Amount of lot area covered by <b>principa</b> existing +pro	l building: posed = NEW HOME NO EXISTING COVERED LOT AREAS	1,147.3 SF
6.	Amount of lot area covered by accessor existing + pro	y buildings: posed =	0
7.	Amount of lot area covered by <b>decks:</b> existing + prop	posed =	78,2 SF
8.	Amount of lot area covered by <b>porches:</b> existing + prop	posed =	0
9.	Amount of lot area covered by <b>driveway</b> existing + prop	y, parking areas and walkways: posed =	1,423_4 SF
10.	Amount of lot area covered by <b>terraces:</b> existing +prop	posed ==	156,5 SF
11.	Amount of lot area covered by tennis co existing + prop	<b>purt, pool and mechanical equip:</b>	12,5 SF
12.	Amount of lot area covered by <b>all other</b> existing + prop	structures: posed =	29.6 SF
13.	Proposed gross land coverage: Total of	$f_{Lines} 5 - 12 =$	2,847.5 SF

If Line 13 is less than or equal to Line 4, your proposal **complies** with the Town's maximum gross land coverage regulations and the project may proceed to the Resident project we Committee for review. If Line 13 is greater than Line 4 your proposal does not comply with the Town's resultations.

Signature und eal of Professio

05/19/2021 Date



#### Possession NOT indicated

This is to certify that this map and the survey on which it is based were made in accordance with the "Minimum Standard" Detail Requirements for New York State Association of Land Surveyors. This Survey is a representation of the property as surveyed on March 25,2021, the date that the field work was performed. Subsequent revision dates do not constitute an updated survey.

Copies of the survey map not bearing the land surveyor's original blue signature and embossed seal shall not be considered to be a true and valid copy. Copyright Gabriel E. Senor, P.C., 2018. ALL RIGHTS RESERVED.

A Title report lists easements and restrictions if the report was not provided these easements and or restrictions may not be shown . A copy of the title report was not provided. A copy of the deed was provided. Survey may be subject to easements not shown.

Surface elevations and underground appurtenances, if any, whether or not shown are not guaranteed. Fences or possession lines generally do not follow a straight line. The survey shows straight lines between located points. Any dimensions shown are to the surveyed point only. Labeled dimensions cannot be used for any other point along the line.

Unauthorized alteration or additions to the survey map is a violation of Section 7209 sub-section 2 of the New York State Education Law

NOT FOR TITLE TRANSFER

SURVEY OF 22 NETHERMONT AVE TAX ID: SECTION 122.16 BLOCK 4 LOT 7 AS SHOWN ON THE OFFICIAL TAX MAP OF NORTH CASTLE LOCATED IN THE TOWN OF NORTH CASTLE P.O. BOX: WHITE PLAINS, NY WESTCHESTER COUNTY, NEW YORK.

SCALE: 1" = 20'



Eliot Senor, L.S. New York State Lic. No. 049822

DATE: JANUARY 11, 2020 REV: July 31, 2020 REV: MARCH 25, 2021



Locations, sizes and descriptions of all utilities are based on field survey location of surface appurtenances and available record plate data. Same is subject to scale and method limitations. Exact location for existing service installations may require verification by the respective utility companies (call 800-962-7962) and by excavation. The location, material and size of existing underground improvements or encroachments hereon are not certified underground routing cannot be guaranteed. Exact connections for existing service installations may require verification by excavation or dye testing. Such tests will be subject to additional fee based on time. Underground utilities may not always follow a straight line between surface appurtenances and should be confirmed by excavation and the respective companies. Please note that there are usually no utility company records of the location of on-site utilities connections.

2	05/19/2021	RESOLUTION	GC
1	04/11/2021	PB COMM	GC

# TOPOGRAPHIC MAP, TREE

TAX ID: SECTION 122.16 BLOCK AS SHOWN ON THE OFFICIAL TAX MAP OF NORTH CASTLE TOWN OF NORTH CASTLE P.O. BOX: WHITE PLAINS, NY WESTCHESTER COUNTY, NEW YORK.

NOTE: CONTOUR ELEVATIONS ARE ASSUMED.

CONSULTING ENGINEER 0LAND SURVEYORS 90 NORTH CENTRAL AVE., HARTSDALE, NEW YORK, 10530 (914) 422-0070 FAX 422-3009 SCALE: 1" = 10' DATE: JANUARY 11, 2020 CHECKED BY: DRAWN BY: GC ES.

TS - 1

SHEET 1 of 7

### GENERAL NOTES

- 1. Gabriel E. Senor, P.C. is not responsible for construction supervision unless retained under separate contract. 2. Gabriel E. Senor, P.C. must be notified prior to backfilling any storm water system for inspection if The Engineering Dept. will require a final letter of certification from the design engineer for the storm water approval, site work and drainage installation. 3. Any changes made to these plans shall be approved by Gabriel E. Senor, P.C. Any changes must be filed and approved
- by the appropriate Department as amendments. 4. Gabriel E. Senor, P.C. is not responsible for damages if changes are made and not approved as in item 1 above. 5. All conditions, locations, dimensions and elevations shall be verified by the Contractor or Owner and must report all
- discrepancies to the Design Engineer prior to the start of construction. 6. All work and materials shall comply with all applicable codes including, but not limited to the following: NYS
- Building Code, Local Zoning Code, ACI and AISC. 7. The Contractor is responsible for all construction means and methods to implement the designs shown.
- 8. Safety during construction is the responsibility of the Contractor and shall conform to all Local, State and Federal
- Agencies' requirements. 9. The Contractor shall apply for and receive all necessary permits to perform the work shown on these plans prior to the start of construction.
- 10. Final grading shall be sloped away from the building and foundations.
- 11. Unless noted, all drainage piping on this plan is to be 6" Rigid HDPE ASTM F810-07 or better. 12. This storm water design plan is not designed to accept footing drains. Refer to Architectural plans for footing drain
- design. Do not connect footing drains or sump pumps to this surface water drainage system. 13. If the drainage system is to be built in a filled area, the fill should be well drained material with a settling period of one to three months prior to the system installation. Additional percolations are required after the settling period and the system design will be revised as necessary.
- 14. Proposed Silt Fence to be installed along existing and proposed contours. 15. Orange Construction Fence to be installed along the limits of the proposed disturbance limits line.
- 16. Roof leaders to be connected to the drainage system with 6" rigid HDPE pipe at 2% min. slope or as shown. 17. The Contractor and all Sub-Contractors must submit a "Contractor Certification Statement" as per section 294-8 of the NYSDEC "Stormwater Pollution Prevention Plan" manual prior to the start of construction.
- 18. If imported fill material is required, it shall be certified in writing by a New York State licensed Professional Engineer as non-contaminated, clean fill suitable for the intended use. Percolation tests shall be performed by the Design Engineer to demonstrate that the stormwater management practice will draw down the entire water quality volume within 48 hours. The results of the percolation test (s) shall be submitted to the Municipal Engineer for review and approval.
- 19. All proposed temporary seeding mixture shall be in accordance with the New York State Standards and Specifications for Urban Erosion Control, dated August 2005.
- 20. New sewer laterals are required for all new construction. Laterals must be extra heavy cast iron or ductile iron pipe or as directed by Municipal Engineer. 21. Connection permits are is required from the Department of Public Works for Sewer, Water, and Storm Water System
- overflows. 22. All trenches in the Municipality Right of Way must be backfilled with controlled density fill (k-crete) or as
- directed by Municipal Engineer
- 23. A street opening permit must be obtained from the Municipality, all work in the Right of Way and an
- inspection performed prior to back filling and final approvals. 24. Replace or re-lay stone curb as directed by Municipal Engineer
- 25. A non-conversion agreement for the basement in Special Flood Hazard Zone must be signed and filed prior to the issuance of a C. of O. for properties subjected to flooding.
- 26. Curb cut permit is required from the Department of Public Works. Curb cut maximum width is 18 feet.
- 27. The contractor shall schedule with the Municipality a rough grading inspection prior to any framing of a building above the first floor braced decking. Excess soils of significance shall be removed and disposed of upon completion of the rough
- 28. The structures for the storm water management system shall be installed at the earliest date possible when the structure's roof is complete. The contractor shall consult with the Municipality and schedule this work upon completion and inspection of the rough grading activities.
- 29. The contractor shall secure a Street Opening Permit with the Municipality for all work to take place on the right of way including construction of a new driveway apron, and installation of new service laterals. 30. If necessary, the Contractor shall secure a Tree Removal Permit with the Municipality prior to the commencement of
- construction activities. 31. Contractor required to provide Dig Safe NY ticket prior to issuance of permits.

#### **EROSION CONTROL NOTES**

INSTALLATION & MAINTENANCE OF EROSION CONTROL

CONSTRUCTION SCHEDULE

NOTIFY APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION AT LEAST 5 DAYS PRIOR TO START.

- EROSION CONTROL MEASURES
- 1. Install all erosion control measures prior to start of construction.
- 2. Call for inspection from the appropriate Municipal Agency having jurisdiction at least 2 Days prior to finish.

INSPECTION BY MUNICIPALITY

- MAINTENANCE (TO BE PERFORMED DURING ALL PHASES OF CONSTRUCTION) 1 After any rain causing runoff, Contractor to inspect silt fences, etc. and remove any excessive sediment and inspect stockpiles and correct and problems with seed
- establishment. 2 Inspections shall be documented in writing and submitted to the appropriate Municipal
- Agency having jurisdiction.
- STOCK PILING OF EXCAVATED MATERIAL 1 Strip Topsoil and Stockpile.
- 2 Stockpile Excavation Subgrade.
- 3 Seed piles with 1 lb. total annual rye or remove from site within two days.
- INSPECTION BY MUNICIPALITY
- FINAL GRADING
- 1 Remove unneeded subgrade from site.
- 2 Call for inspection from the appropriate Municipal Agency having jurisdiction at least 2 days prior to finish.

INSPECTION BY MUNICIPALITY

LANDSCAPING 1 Spread topsoil evenly over areas to be seeded. Hand rake

2 Broadcast 1 25lb. bag of Jonathan Green "Fastgrow" mix or equal over areas to be seeded.

22 NETHERMONT A VE - A VERAGE GRADE CALCULATIONS FRONT LEFT CORNER TO FRONT RIGHT CORNER OF HOUSE Point # ELEV ELEV DIST AVG ELEV (DIST) X (AVG ELEV) 502.5 502.5 14.0 502.5 502.8 16.0 507.5 512.2 511.5 13.0 511.9 RIGHT SIDE OF HOUSE Point # ELEV ELEV DIST AVG ELEV 511.5 515.3 36.0 513.4 REAR OF HOUSE ELEV ELEV DIST AVG ELEV Point # 515.3 515.3 13.0 515.3 515 4 515.6 514.0 514.8 15.0 LEFT SIDE OF HOUSE Point # ELEV DIST AVG ELEV ELEV 514.0 505.0 34.2 505.0 502.5 503 TOTAL DISTANCE X TOTAL DISTANCE = ELEV =

AVG. GRADE ELEV. 510.7



CORNERS





Eastern Red Cedar (Juniperus Virginiana) >

GIANT ARBORVITAE (Thuja Plicata)

Eastern Red Bud (Cercis Canadensis)

CHINEESE HOLLY (Ilex crenata convexa)



INKBERRY "Shamrock" (Ilex glabra "Compacta")



COMMON FLOWERING DOGWOOD (Cornus florida)

### TREES TO BE PLANTED

TYPE/NAME SIZE	COUNT	
EASTERN RED CEDAR	2" - 3" CAL	2
GIANT ARBORVITA	6' - 7' HEIGHT	9
EASTERN REDBUD	2" - 3" CAL	2
CHINEESE HOLLY	3.5' - 4' HEIGHT	5
INKBERRY "Shamrock"	2' - 2.5' HEIGHT	6
FLOWERING DOGWOOD	2.5"-3" cal.	2





GABRIEL	E.	SENOR,	P.C.					
CONSULTING ENG	INEER	LAND SURVE	LIORS					
90 NORTH CENTRAL A • (914) 422	90 NORTH CENTRAL AVE., HARTSDALE, NEW YORK, 10530 ● (914) 422–0070 FAX 422–3009							
	_							
	S	CALE: 1" = 10'						
OF NEW		ATE. IANILADV 10	2020					







RESOLUTION

ARB COMM

PB COMM

DESC

GRADES

22 NETHERMONT AVE

NORTH WHITE PLAINS, NY

SECTION 122.16 - TAX BLOCK 4 - LOT 7

GC

GC

GC

GC

SHEET 4 of 7

BY

Grapes The Wine Company

LGI Forensic Engineering, P

Reservoir Rd

05/19/2021

04/21/2021

02/17/2021 03/10/2020

LANDSCAPE PLAN

PREPARED FOR: ODOARDI

DATE

TOWN OF NORTH CASTLE

WESTCHESTER COUNTY, NEW YORK

COPYRIGHT GABRIEL E. SENOR, P.C. 2019

KBS-Kitchen and Bath Source

4

3

2

1

NO

REVISIONS

ADDRESS:

TAX ID:

SITUATED IN THE

Virgin Mary & St Demiana Coptic... Wallauer Hardware



LEGEND





TOPOGRAPHIC DATA USED IN THE SIGHT DISTANCE ANALYSIS WAS TAKEN FROM WESTCHESTER COUNTY GIS



DRAWN BY: CHECKED BY: ES. GC

SCALE: 1"=20' DATE: APRIL 11, 2021

SD-1

GABRIEL E. SENVI, . U. CONSULTING ENGINEER LAND SURVEYORS 90 NORTH CENTRAL AVE., HARTSDALE, NEW YORK, 10530 ● (914) 422-0070 FAX 422-3009

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OF NEV

WESTCHESTER COUNTY, NEW YORK

TOWN OF NORTH CASTLE

SITUATED IN THE

SECTION 122.16 - TAX BLOCK 4 TAX ID:

NORTH CASTLE, NY (WHITE PLAINS P.O.)

PREPARED FOR: ODOARDI ADDRESS: 22 NETHERMONT AVE

## SIGHT DISTANCE ANALYSIS

		1				
6	05/19/2021	RESOLUTION	GC			
NO	DATE	DESC	BY			
REVISIONS						

ZONING TABLE - 22 NETHERMONT AVE								
ZONE: SINGLE FAMILY RESIDENCE DISTRICT "R-5"								
TOTAL LOT AREA:	0.16 Acres (6,948 SF)							
DESCRIPTION	MIN/REQUIRED		PROPOSED					
MINIMUM LOT AREA	5000	SF	6,948	SF				
75% WETLAND AREA	-		N/A	SF				
50% STEEP SLOPE AREA	-		0	SF				
NET LOT AREA	-		6,948	SF				
MIN LOT FRONTAGE	50	FT	96.5	FT				
MIN LOT WIDTH	50	FT	71.2 (AVG)	FT				
MIN LOT DEPTH	100	FT	127.5 (AVG)	FT				
FRONT YARD SETBACK	30	FT	30.0	FT				
SIDE SETBACK	8	FT	8.0	FT				
SECOND SIDE SETBACK	Total Both Sides - 18	FT	18.4	FT				
REAR YARD SETBACK	30	FT	30.2	FT				
OFF-STREET PARKING	2	FT	2.0	FT				
OFF-STREET LOADING	1	FT	1.0	FT				
MAX BUILDING HEIGHT	34	FT	33.7	FT				
MAX BUILDING COVERAGE	30	%	15.3	%				

No.

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SHEET 6 of 7

ES.



WESTCHESTER COUNTY, NEW YORK

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## TOWN OF NORTH CASTLE

SITUATED IN THE

SECTION 122.16 - TAX BLOCK 4 - LOT 7 TAX ID:

> <u>GABRIEL E. SENOR, P.</u>C. CONSULTING ENGINEER LAND SURVEYORS

22 NETHERMONT AVE

NORTH WHITE PLAINS, NY

PREPARED FOR: ODOARDI

PROPOSED IMPROVEMENTS / ZONING PLAN

REVISIONS

ADDRESS:

LEGEND

_							
NO	DATE	DESC	BY				
BEVISIONS							



LOCATION MAP







## JUTILITY POLE ──SIGN POST 💢 HYDRANT · WATER VALVE · GAS VALVE · LIGHT POLE - GUY WIRES TELE, MANHOLE S SEWER MANHOLE () WATER MANHOLE E ELECTRIC MANHOLE D DRAIN MANHOLE (M) MANHOLE ELECTRIC BOX EXISTING GRADE (102) PROPOSED GRADE ا4TREE کردیکی | SIZE TREE TO BE REMOVED SILT FENCE or HAYBALES AS REQ'D AREA OF DISTURBANCE LOCATION MAP Vestchester Jewis Grapes The Wine Company Virgin Mary & St Demiana Coptic... Wallauer Hardware Reservoir Rd Wells Fargo Bank DATE DESC BY REVISIONS STAGING, EROSION CONTROL AND UTILITY PLAN PREPARED FOR: ODOARDI ADDRESS: 22 NETHERMONT AVE NORTH WHITE PLAINS, NY SECTION 122.16 - TAX BLOCK 4 - LOT 7 TAX ID: SITUATED IN THE

JOB NUMBER: R.O. 3311-414

LEGEND

NO



<b></b>				_ 1 1
	WMH DRAWING LIST	TOTAL AREA	= 2,134 SQ. FT.	
PAGE #		USE GROUP	= DETACHED SINGLE FAMILY DWELLING	
1	ELEVATIONS	CONST. TYPE	= WOOD FRAME UNPROTECTED	A AGE
2	FOUNDATION PLAN	GROUND SNOW LOAD	= 40 LB/SF	
3A,3B	FLOOR PLAN	SEISMIC DESIGN CAT.	= C	
3W	BRACED WALL PLAN	SOIL SITE CLASS	= D	
4	CROSS SECTION	WIND SPEED (Vult)	= 115 MPH	
5A,5B	PLUMBING PLAN	EXPOSURE CATEGORY	<b>=</b> B	Review Only
6A,6B	ELECTRICAL PLAN	FLOOD ZONE	= NO	Date: 07/11/2019 PFS Corporation Bloomsburg, PA
8	STD. NOTES & DETAILS	FLOOR LIVE LOAD	=	· · · · · · · · · · · · · · · · · · ·
		1st FL.	= 40  LB/SF	K Charles Charles
		2nd FL.	= 30 LB/SF	
		CLIMATE ZONE	4 (5470 HDD)	
<ul> <li>DESIGNED TO NYS UNIFORI</li> <li>2017 UNIFOR WHICH REPLA</li> <li>REFERENCES 2015 IPC, 20 SPECIFIC CO IN THE 2017</li> <li>NYS ENERGY</li> <li>2016 SUPPLI CODE, PUBLI REFERENCES AMENDED TO</li> <li>REFERENCES AS PUBLISHE PRINTING, AF ECS.</li> <li>ASHREA 90.7</li> <li>OTHER REFE</li> <li>2014 NATION</li> <li>NOTES:</li> <li>THE PLANS CONSISTENT THE DEPART</li> <li>ENERGY COM IN COMPLIAN</li> <li>BLOWER DOO IN ACCORDA</li> </ul>	M CODE (WHICH INCORPORATES BY REFERENCE): M CODE (WHICH INCORPORATES BY REFERENCE): M CODE SUPPLEMENT, PUBLICATION DATE JULY 2017 (2017 UCS), ACES THE 2016 UNIFORM CODE SUPPLEMENT (2016 UCS) THE INTERNATIONAL CODE COUNCIL PUBLICATIONS (2015 IRC, 2015 IBC, 2015 IMC, 2015 IFGC, 2015 IFC, 2015 IPMC, AND 2015 IEBC), WITH DE PRINTINGS, APPENDICES, AND REFERENCED STANDARDS AS IDENTIFIED UCS. CODE (WHICH INCORPORATES BY REFERENCE): EMENT TO THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CATION DATE AUGUST 2016, REVISED AUGUST 2016 (2016 ECS). ALL S WITHIN THE 2016 ECS TO THE 2017 UCS. THE 2015 INTERNATIONAL ENERGY CONSERVATION CODE (2015 IECC), 20 BY THE INTERNATIONAL ENERGY CONSERVATION CODE (2015 IECC), 20 BY THE INTERNATIONAL CODE COUNCIL, WITH SPECIFIC CODE 20 PENDICES, AND REFERENCED STANDARDS AS IDENTIFIED IN THE 2016 11–2013, PRINTING AS IDENTIFIED IN THE 2016 ECS. RENCED STANDARDS MENTIONED IN 19 NYCRR PART 1240. VAL ELECTRICAL CODE AND SPECIFICATIONS OF THIS PERMIT PLAN SET ARE DERIVED FROM AND WITH THE SYSTEMS SET OF PLANS AND SPECIFICATIONS ON FILE WITH MENT OF STATE, UNDER SYSTEMS NUMBER M0659–2016–073. IPLIANCE IS SHOWN THROUGH THE USE OF RESCHECK SOFTWARE AND IS ICE WITH CHAPTER 11 OR THE CODE. WITH MANTEL SUSTING SHALL BE PERFORMED ON SITE BY A QUALIFIED HERS RATER NCE WITH N1102.4.1.2.RATING COMPANY TO BE USED IS GLENN HOOPER,	1. ALL ITEMS NOTED AS "B/P" REFER TO THE BI HOME. 2. B/P SHALL BE RESPONSIBLE TO SUPPLY AND ACCORDANCE WITH MANUFACTURE'S SPECIFICATION INCLUDING BUT NOT LIMITED TO THE FOLLOWING STAIRS, RAILS AND GUARDS, ALL SUPPORTING S' THE MODULES TO GRADE AND BELOW, ALL PLUMI SHEATHING (INCLUDING CLEANOUTS), HOT WATER TO THE PANEL BOX LOCATION, ALL EQUIPMENT F COOLING OF THE RESIDENCE NOT INSTALLED BY 3. B/P SHALL BE RESPONSIBLE TO COMPLETE TO IN THE FACTORY: INSTALL ALL REMAINING SIDING PLUMBING VENT THROUGH ROOF, CONNECT PIPINO GWB AT MATING LINE, INSTALL ALL WIRING AND BOX, AND LOCATE ROOF TRUSS TYPE SIGNAGE A BY WMH AND INSTALLED ON SITE BY B/P) 4. ALL CUTTING, BORING, AND NOTCHING OF ST DONE IN ACCORDANCE WITH R502.7, R602.6, R80 QUALIFIED DESIGN PROFESSIONAL. NOTE: UNAUTHORIZED ALTERATION THIS DRAWING IS A VIOLATION ARTICLE 145 OF THE NYS E PROJECT ADD 21 NETHERMOUNT NORTH CASTLE, NY "WESTCHESTER" C	UILDER AND/OR PURCHASER OF THE INSTALL ALL MATERIALS ON SITE IN DNS AND STATE AND LOCAL CODES ITEMS: ALL PORCHES, DECKS, TRUCTURE FROM THE BOTTOM OF BING PIPING BELOW THE 1ST FLOOR HEATER, ALL ELECTRICAL SERVICE REQUIRED FOR HEATING AND WMH. O FOLLOWING ITEMS PARTIALLY DONE AND ACCESSORIES, CONNECT G TO HOT WATER HEATER, INSTALL BREAKERS TO ELECTRIC PANEL AT THE ELECTRIC METER (SUPPLIED RUCTURAL MEMBERS SHALL BE 02.7 OR AS APPROVED BY A OR ADDITION TO OF SECTION 7209, EDUCATION LAW. RESS T AVE Y 10603 COUNTY	D NULES & ULALLS UWG #0 C ROUTE 22 STER, NY 10509 STER, NY
PO BOX 101. 4. WHOLE HOUS SITE BY B/F WITH A MININ 5. THERE ARE LOCATED ON	3, SMITHTOWN, NY 11787. SE VENTILATION SYSTEM TO BE DESIGNED, SUPPLIED, AND INSTALLED ON 9 WITH A MINIMUM CONTINUOUS FLOW RATE OF PER TABLE M1507.3.3(1). MUM CONTINUOUS FLOW RATE OF 45cfm. NO LOT LINE SEPARATION REQUIREMENTS FOR THIS DWELLING AS THIS LOT.	ANTHONY S. PISARRI, P.E. F DESIGN PROFESSIONAL 3RD 3 ROSALIND DRIVE 1 CORTLANDT MANOR, NY 10567 (914) 739–6580	P.F.S. CORPORATION PARTY INSPECTION AGENCY 1115 OLD BERWICK ROAD BLOOMSBURG, PA 17815 (570) 784–8396	SEL SIANUAR USE GROUP: BUILDER DETACHED SINGLE FAMILY DWELLING CONST. TYPE: 1995 WOOD FRAME UNPROTECTED DESIGNER: DESIGNER: DATE: 02/05/2019 SCALE: N / A

### SCHEDULE OF MATERIALS

	Name	Туре	Color
Siding	Andersen	MainStreet Standard	Sterling Grey
Windows	Andersen	400 Series	White (Standard)
Trim	Ply Gem	PVC Trim Board	White
		Therma Tru Smooth	
Ext. Door	Andersen	Star (S262)	White
		Therma Tru Smooth	
Ext. Door (Transom)	Andersen	Star (S263SL)	White
Roofing	Timberline	HDZ Shingles	Charcoal
Stone/Brick	NONE	NONE	NONE
Decking	Trex	Composite	Grey "Foggy Wharf"
	Vinyl & Black		
Deck Railing	Aluminum Spindles	Transcend Railing	Classic White
Style	Colonial		
Gross Floor Area			
(See GFA Worksheet	Gross Floor Area: 2,494		
Attached)	SF		



A - 001

DATE - 01/01/2020

ND. DATE DESCRIPTION 02/20/2021 BAR COMM 04/11/2021 AVG GRADE 04/23/2021 GRADE

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## ROOF SECTION ELEVATION VIEW



FRONT AND REAR ELEVATION VIEW

SCALE:  $\frac{3}{16}'' = 1'$ 

## A-002 DATE - 04/11/2021 REVISIONS ND. DATE DESCRIPTION 1. 04/23/2021 GRADE 2. 05/19/2021 RESOL. **ROOF SECTION ELEVATION VIEW** $\neg$ $\mathcal{T}$ SECTION B $\square \leq$ \_\_\_\_ SECTION A 4'-5" $\bigcirc$ SECTION C $\triangleleft$ $\triangleleft$ $\bigcirc$ SECTION B Ö μ SEC $\bigcirc$ EDG **SIDENC GARAGE** F EDGE OF EVE PROPOSED RE: Addition to 22 Nethermor

WEIGHTED	NEIGHTED MEAN ROOF LEVEL CALCULATIONS									
M EVE TO			(MEAN LEVEL ELEVATION PER SECTION) X							
EVEL	MEAN LEVEL ELEVATION PER SECTION	LENGTH OF ROOF SECTION	(LENGTH OF ROOF SECTION)							
0	515.25	4.42	2275.8592							
2.09	536.33	15.17	8134.4943							
3.44	537.68	27	14517.427							
1.88	536.12	12	6433.442							
	TOTAL LENGTH	58.58	31361.2235							
I PER SECTION) X (LENGTH OF ROOF SECTION)] / TOTAL LENGTH OF ROOF SECTION										
MEAN ROOF	/IEAN ROOF ELEV. = 31361.22/58.58									
	535.32									

![](_page_46_Picture_9.jpeg)

ral Ave. 10530

Engineers Su 90 North Cent Hartsdale, NY 914-422-0070

Ш

Gabriel

![](_page_47_Figure_0.jpeg)

NOTE: ALL WINDOWS WITH A SILL HEIGHT LESS THAN 24" ABOVE FINISHED FLOOR AND WITH A EXT. HEIGHT OF GREATER THAN 6'-0" TO GRADE SHALL BE EQUIPPED WITH FALL PROTECTION SUPPLIED AND INSTALLED ON SITE BY B/P IN ACCORDANCE W/ R312.2

LIGHT & VENTILATION SCHEDULE (SF)								
POOM		LIG	ΗT	VENT				
	AREA	REQUIRED	SUPPLIED	REQUIRED	SUPPLIED			
DINING RM	163	13.0	23.6	6.52	13.54			
KITCHEN	218	17.4	43.1	8.70	25.16			
FAMILY RM	335	26.8	47.2	13.4	27.08			
•	•	•	•	•				
	•	•	•	•	•			

![](_page_48_Figure_0.jpeg)

NOTE: ALL WINDOWS WITH A SILL HEIGHT LESS THAN 24" ABOVE FINISHED FLOOR AND WITH A EXT. HEIGHT OF GREATER THAN 6'-0" TO GRADE SHALL BE EQUIPPED WITH FALL PROTECTION SUPPLIED AND INSTALLED ON SITE BY B/P IN ACCORDANCE W/ R312.2

LIGHT & VENTILATION SCHEDULE (SF)							
POOM		LIG	ΗT	VENT			
	AREA	REQUIRED	SUPPLIED	REQUIRED	SUPPLIED		
BDRM 2	134	10.7	19.8	5.37	11.52		
BDRM 3	139	11.2	19.8	5.58	11.52		
BDRM 4	118	9.5	19.8	4.73	11.52		
MBDRM	218	17.4	19.8	8.72	11.52		
	•	•	•	•	•		

#### Foundations & Footings:

- 1. All footings shall bear on minimum 4000 pounds per square foot virgin 1. All structural steel shall conform to the requirements of the AISC sand or compacted fill approved by Architect or Engineer. Contractor to verify soil bearing capacity prior to construction of footings. No footings are to be cast on uncontrolled fill, soil, organic material, frozen ground, mud, soft clays or other objectionable or unapproved materials. 2. Sub-base for slabs on grade to 4" crushed rock on virgin grade or
- approved compacted fill.
- a minimum of 3'-6" below grade.
- 4. Contractor shall take all necessary de-watering precautions to properly 4. All steel pipes shall conform to ASTM 53; steel tubes shall conform to cast new footings in areas with high water table.
- 5. Footings shall be reinforced as shown and doweled to receive the pier or 5. All bolts shall be <sup>3</sup>/<sub>4</sub>" diameter ASTM A325 bolts in bearing type wall above.
- 6. Reinforcing dowels between footing and foundation wall shall be tied in place prior to placing concrete (dowels shall not be "wet set.")
- 7. All lumber bearing on masonry is to be pressure treated. 8. All framing lumber shall be rigidly assembled, plumbed and accurately fitted in place.
- 9. All concrete blocks to comply with ASTMc-90 standard minimum grade "N", type "I", sizes as shown on plan. all mortar to be type "S".
- 10.Key all first courses of concrete block to footings, fill top courses solid for joist bearings, and fill solid full height for girder bearing points. 11. Provide horizontal masonry reinforcement continuous at every other
- course (full width of block). 12. Location of anchors (1/2" diameter) to be 1'-0" maximum from each end of periods of exposure during construction or permanent exposure to corner and 4'-0" maximum on centers, min. 2 per sill, embedded 16" into
- masonry 13. Provide damproofing or waterproofing on exterior wall surfaces below grade.
- 14. Provide exterior perimeter footing drains, pitch to low point.
- Cast in Place Concrete:
- 1. All work shall comply with the requirements of the ACI building code, AC318, latest edition, and the Building Code of New York State.
- 2. All concrete for cast in place work shall be stone concrete with a minimum
- 28 day compressive strength of 3,500 psi.
- 3. No admixtures shall be allowed without prior review and acceptance by the architect or engineer.
- 4. All requirements for batching, mixing, finishing, curing etc. shall be as per (LLV) for each 4" of masonry thickness. ACI301
- 5. All reinforcing steel shall conform to ASTM A615 grade 60, except that
- 6. All welded wire fabric shall conform to ASTM A-185
- 7. All reinforcement shall be securely tied in place and adequately supported. All bars marked continuous (cont.) shall be lapped 40 bar diameters, unless otherwise noted.

#### Backfill:

1. All fill shall be placed in eight to twelve inch loose lifts (maximum) compacted with vibratory rollers. Fill material shall be tested by modified proctor density method (ASTM D1557-78) and must qualify as select, with less than 10% passing through the no. 200 sieve. Soil shall be placed with moisture content and energy to provide 92% of maximum dry density. In place density tests shall be taken for each 500 S.F. In each lift. For acceptance of soil, average of density tests must exceed specified compaction. No tests shall be permitted to fall below 87% compaction.

- Structural Steel:
- "specifications for structural steel for buildings"- latest edition and all current supplements. For other code and specification requirements, see
- the contract specifications. 2. All welding work shall conform to the American welding Society Code AWS D1.1. All welding work shall be done by AWS certified welders. Field
- welding shall be done by the manual shielded metal arc welding method. 3. Base of footing exposed to weather or in unheated space shall be placed 3. All steel shaped, plates, bars, rod, and anchor bolts, shall conform to ASTM A36 or A992 for all C-channels and W shapes.
  - ASTM A500, grade B.
  - connections, unless otherwise noted specifically on the drawings. Provide a minimum of two bolts per connection.
  - 6. Where a weld is required, and no weld is shown on the drawings, provide a ¼" fillet weld all around, unless a larger weld is required as a minimum weld size as per AISC.
  - 7. All groove welds shall be AWS pre-qualified complete joint penetration groove welds, unless otherwise noted on the drawings. 8. The contractor shall submit shop drawings of the steel to the architect or
  - engineer for his review prior to fabrication. 9. All steel shall be cleaned as per SSPC SP2 hand tool cleaning, or SSPC SP3 power tool cleaning and painted with a zinc rich primer (red or brown, one coat shop paint.) A finish coat shall be applied - coordinated with the architect and engineer, and shall be weather resistant as required for long
  - weather. All connections shall be painted after installation 10. Contractor must provide shop drawings prepared by technical personnel under the supervision of a qualified engineer licensed by the State of New York, for review & approval by the project engineer or architect prior to fabrication.

#### Masonry lintel notes:

- 1. All steel lintels shall have a minimum of 6" bearing at each end. Hollow CMU at bearing points shall be grouted solid minimum three courses below
- 2. For masonry openings 4'-0" wide or less use one L 3 1/2 x 3 1/2 x 3/8" for each 4" of masonry thickness.
- 3. For masonry openings 4'-0" wide to 6'-0" wide, use one L 5 x 3 1/2 x 3/8"
- 4. For masonry openings 6'-0" wide to 8'-0" wide, use one L 6 x 3 1/2 x 3/8" (LLV) for each 4" of masonry thickness.
- reinforcing steel welded directly to structural steel shall be ASTM A706. 5. For masonry openings greater than 8'-0" wide, refer to the plan for size.

Roof 30. NYS Residential Code requirements

![](_page_49_Figure_41.jpeg)

be selected. Painting to include all areas disturbed by the wo

19. Colors of switches, receptacles and plates to be selected by owner.

28. Structural lumber shall be Douglas fir (DF) Sb = 875 P.S.I. Stress grade to be marked on lumber. All lumber to be free of splits/ cracks and mould. Sill plates to be pressure treated.

29. Design Load: Floor/ Deck

Stairs

#### GENERAL NOTES AND SPECIFICATIONS

1. Contractor shall provide a warranty on all labor and materials for a period of one year.

#### 2. The Engineer shall not be responsible for the identification, removal, testing and/ or certification of removal relative to any hazardous substance including, but not limited to, PCB, petroleum, mold

ation, hazardous waste, asbestos, lead paint, lead piping, and similar substance 3. All new or relocated windows and doors shall be wired for burglar alarms. (Connect to existing). Work to be performed by others but coordinated by General Contractor.

#### New- finished elevations to match existing.

5. Install hard- wired smoke detectors with battery backup as per Code. (i.e.: install units in second floor hall at 10 foot max from all bedrooms, within all bedrooms, and one per level). Install carbon monoxide detectors at halls adjoining bedrooms, and basemen

6. All windows and sliding doors as noted to be "Andersen" perma-shield (white) 400 series double hung, double glass with low "E" film and insect screens. Provide all flashing and trim. Window sizes indicated on plans are approximate only. All sleeping areas are provided with escape windows as per Code 5.7 S-F opening - Min. width 20", min. height 24" clear.

7. All pipes in unheated spaces shall be wrapped and sealed with ½" thick foam insulation.

8. Provide shut-off valves at all plumbing fixtures. Label/ tag valves at lower level areas. All piping shall be adequately secured to framing.

9. Supply and install interior wood door, window trim, sills and base and hardware to match existing.

#### 10. All interior finishes are to be $\ensuremath{\ensuremath{\mathcal{I}}}\xspace''$ gypsum board and 3 coats of spackle/ sanded.

11. Interior painting - Prime and paint all walls and ceilings with 2 coats "Benjamin Moore" latex flat. All base, doors and trim to be semi-gloss. Windowsills, frames and trim to be oil based enamel. Colors to

12. Exterior painting - All cedar siding, trim, fascias and soffits to be primed and painted with 2 coats of "Olympic" pigmented stain. Color to be selected.

13. Exterior painting - All siding, trim fascias and soffits to be primed and painted with 2 coats of "Benjamin Moore" exterior grade latex satin finish. Color to be white.

14. Install latex caulking at intersections of dissimilar materials (i.e.: siding with trim, trim with trim, trim with window/ door frames).

15. All material specified herein or indicated on the drawing shall be new and of first quality.

16. All deck lumber shall be pressure treated. All fasteners to be approved for A.C.Q. lumber.

17. Electrical fixtures/ "high hats" shall be "Lightolier" (white baffle #1171) with 100-watt lamps.

18. All light switches and dimmer controls shall be "Levito-Devora".

20. The General Contractor has visited the site and is familiar with all building conditions and systems.

21. The General Contractor shall verify all dimensions and existing conditions. The Architect shall be informed of all discrepancies prior to proceeding with the work.

22. Written dimensions on drawings shall take precedence over scaled dimensions.

23. All framing shall be left exposed until the Building Inspector has approved all work. No work shall commence until all permits have been issued. 24. The General Contractor shall obtain all required permits and approvals including the Certificate of Occupancy

25. The General Contractor shall maintain Workman's Compensation liability and automobile insurance during the work.

#### 26. All work to be performed in an orderly, clean and "grade A" workmanlike manner.

27. The General Contractor shall maintain the site (remove rubbish) and protect the owner's property. Provide shielding at areas adjoining the work. Disturbed lawn areas shall be reseeded. Install new drywells as located on site plan. Secure property at the end of each workday. Provide protection to adjoining properties during construction (i.e. silt fencing and hay bales).

![](_page_49_Figure_83.jpeg)

![](_page_49_Figure_84.jpeg)

- 44. All filled areas shall be compacted.

Climate Zone		Zone			4					
			Insulation	and Fen	estration Re	equiremen	ats by Co	mponent		
	Climate	Fenestration	Skylight	Ceiling R.	Wood Frame Wall	Mass Wall R-	Floor	Basement Wall	Slab R-Value	Crawl Space Wall R.

	4	0.32	0.60	49	21	5	19	10/13	10, 2ft	10/13	
a.	1	R-values a	re minin	nums. I	U-factors	s. R-19	insula	tion shall	be perm	itted t	o be
1	-	C1 C .		c .	1	1 1	1 1	· · · ·			

The first R-value applies to continuous insulation, the second framing cavity insulation; either insulation meets the requirements.

![](_page_49_Figure_112.jpeg)

![](_page_50_Figure_0.jpeg)

ANDERSEN WINDOW SCHEDULE	EXTERIOR DOOR S	SCHEDULE
WINDOW         SERIES/STILE         GLASS(ST)         VENT(ST)         U VALUE         SHOUCH         CUUCH         UPENING         UNITA           > DH3056         200 DOUBLE HUNG         11.8         6.77         0.30         0.32         3'-0" x 5'-6"         16.           > DH3049         200 DOUBLE HUNG         9.9         5.76         0.30         0.32         3'-0" x 4'-9"         13.           DH2449         200 DOUBLE HUNG         7.2         4.34         0.30         0.32         2'-4" x 4'-9"         10.	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	IT (SP) "U" VALUE MATERIAL REMARKS 20 0.28 FIBERGLASS 3-LIGHT 20 0.28 FIBERGLASS 3-LIGHT
CN245 400 CASEMENT 10.7 9.60 0.29 0.31 3'-5 1/4" x 4'-5 3/8" 15		
	DOOR     TYPE     SIZE       PS61611     PERMA-SHIELD GLIDING     6'-1"x 6'-1"	RS CLASS(SF) VENT(SF)"U"VALUE MATERIAL 32.40 15.56 0.29 WOOD/VINYL
<ul> <li>◇ = THESE UNITS MEET OR EXCEED A CLEAR OPENABLE AREA OF 5.7 SQ. FT., WDTH OF 20", &amp; HEIGHT OI WNDOWS FOLLOWED BY 'T' IN FLOOR PLANS ARE TEMPERED</li> </ul>	24". 24". 24". 24". 24". 24". 24". 24".	ESS OTHERWISE NOTED ON PLANS.
FLOOR P	AN NOTES	
<ol> <li>THE BUILDER/PURCHASER IS NOTED AS B/P.</li> <li>SEE FLOOR PLANS FOR LABEL LOCATIONS, ABBREVIATIONS ARE AS FOLLOWS:</li> <li>SITATE LABELS</li> <li>IITHIRD PARTY INSPECTION AGENCY</li> <li>IIITD PARTY INSPECTION AGENCY</li> <li>IIIITD PARTY INSPECTION AGENCY</li> <li>IIIIID PARTY INSPECTION AGENCY</li> <li>IIIIIID PARTY INSPECTION AGENCY</li> <li>IIIIIID PARTY INSPECTION AGENCY</li> <li>IIIIIIID PARTY INSPECTION AGENCY</li> <li>IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII</li></ol>	<ul> <li>7) ALL AREAS TO BE FINISHED OR BUILT BY B/P ON APPLICABLE CODE REQUIREMENTS INCLUDING (BUT PORCHES &amp; FIRE SEPARATIONS. TO BE INSPECTED OFFICIALS</li> <li>NCY</li> <li>8) ALL INTERIOR AND EXTERIOR HANDRAILS OR GUARE HAVING SPINDLES SPACED 4" APART. HANDRAILS F THE FULL LENGTH OF THE FLIGHT, FROM A POINT FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST</li> <li>9) ALL FACTORY INSTALLED/SUPPLIED FIREPLACES AR INCLUDING FLUE PIPES AND FIRE STOPS. NOTE: N BEDROOMS.</li> </ul>	SITE TO BE IN COMPLIANCE WITH ALL NOT LIMITED TO) CARAGE, ADDITIONS, AND APPROVED BY LOCAL BUILDING RAILS ARE INSTALLED BY B/P OR STAIRWAYS SHALL BE CONTINUOUS FOR DIRECTLY ABOVE THE TOP RISER OF THE RISER OF THE FLIGHT. E TO BE COMPLETED ON SITE BY B/P, O COMBUSTION AIR TO BE DRAWN FROM
SUPPLY NOTES	DWV NOTES	
<ol> <li>MATERIALS ARE TYPE A PEX.</li> <li>WATER SUPPLY SHALL BE SECURELY ATTACHED TO THE BUILDING AT NOT GREATER DISTANCE BETWEEN SUPPORT INTERVALS THAN SPECIFIED: HORIZONTAL PIPE @ 32"</li> </ol>	<ol> <li>MATERIALS ARE PVC SCHEDULE 40.</li> <li>DRAINAGE AND VENT PIPING SHALL BE SECURELY A SUPPORT INTERVALS THAN SPECIFIED.</li> <li>HORIZONTAL PIPE @ 4'-0" FOR 2"ø OR LARGE</li> </ol>	TTACHED TO THE BUILDING AT NO GREATER
<ul> <li>VERTICAL PIPE AT MID-STORY (10' MAX)</li> <li>3) WATER HEATER SHALL BE SUPPLIED AND INSTALLED BY B/P.</li> <li>4) ALL SUPPLY LINES ARE STUBBED THROUGH THE FIRST FLOOR. SUPPLY LINES BELOW FIRST FLOOR SUPPLIED AND INSTALLED BY B/P.</li> <li>5) ALL HOT WATER LINES IN UNHEATED SPACES SHALL BE INSULATED BY B/P.</li> <li>6) ALL TUBS AND/OR SHOWERS SHALL BE SUPPLIED WITH ANTI-SCALD VALVES.]</li> <li>7) ALL DEVICES INSTALLED WITH SELF CLOSING VALVES (I.E. WASHER, DISHWASHER) SHALL HAVE WATER HAMMER ARRESTING DEVICE ON THE SUPPLY LINE SUPPLIED AND INSTALLED BY B/P.</li> <li>8) ALL FIXTURE SUPPLY LINES 1/2" &amp; SHALL HAVE INDIVIDIAL SHIT OFF VALVES.</li> </ul>	A A A A A A A A A A A A A A	MALLER DNTAL AND VERTICAL TO HORIZONTAL VENT BRANCH OR STACK SHALL OCCUR ST FIXTURE SERVED BY THE HORIZONTAL CHES AND NOT GREATER THAN 42 INCHES
ELECTRIC	AL NOTES	
<ol> <li>1) ELECTRICAL PANEL IS RATED 200 AMPS (UNLESS OTHERWISE NOTED) AND LOCATED PER PLAN</li> <li>2) NON-METALLIC SHEATHED WITH INSULATED STAPLES.</li> <li>3) WIRES ARE INSTALLED WITH INSULATED STAPLES.</li> <li>4) ELECTRIC SERVICE SHALL BE GROUNDED BY B/P IN COMPLIANCE WITH NEC, STATE AND LOCAI CODES.</li> <li>5) ALL ELECTRICAL COMPONENTS SHALL BE LISTED AND/OR LABELED BY A NATIONALLY RECOGNI TESTING LAB AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS AND LOCATIONS/USE INSTRUCTIONS.</li> <li>6) ELECTRIC PANEL SHALL BE LOCATED AND MOUNTED IN BASEMENT BY B/P, UNLESS NOTED OTHERWISE.</li> <li>7) A SERVICE DISCONNECT SHALL BE INSTALLED AT A READILY ACCESSIBLE LOCATION NEAREST POINT OF ENTRANCE OF THE SERVICE CONDUCTORS.</li> <li>8) TELEPHONE, AND TELEVISION CABLES TO BE RUN TO THE ELECTRIC PANEL LOCATION. UNLESS OTHERWISE REQUESTED/NOTED</li> </ol>	<ul> <li>MIRELESS DOOR BELL TO BE SHIPPED LOOSE (INCLU</li> <li>9) WIRELESS DOOR BELL TO BE SHIPPED LOOSE (INCLU</li> <li>10) ONE GFI CIRCUIT SHALL BE INSTALLED IN BASEMENT</li> <li>11) WATER HEATER, FURNACE, BASEMENT GFI, BASEMENT</li> <li>12) A CLOTHES WASHER CIRCUIT SHALL BE INSTALLED IN</li> <li>12) A CLOTHES WASHER CIRCUIT SHALL BE INSTALLED IN</li> <li>13) RECEPTACLES SHALL NOT BE INSTALLED DIRECTLY C</li> <li>13) RECEPTACLES SHALL NOT BE INSTALLED DIRECTLY C</li> <li>14) CIRCUIT BREAKERS FOR ELECTRIC BASEBOARD HEATH HOUSES WITH ELECTRIC BASEBOARD HEATH HOUSES WITH ELECTRIC BASEBOARD SYSTEMS.</li> <li>15) SMOKE DETECTORS ARE INTERCONNECTED AND INSTIMUENT INTERVENING SWITCHES ON THAT CIRCUIT.</li> <li>16) SMOKE DETECTORS SHALL HAVE A BATTERY BACK-I</li> <li>17) BASEMENT SMOKE DETECTORS SHALL HAVE A BATTERY BACK-I</li> <li>18) ALL RECCESSED LIGHTS SHALL BE IC RATED AND AI</li> </ul>	DES 2 BUTTONS) BY B/P I LIGHTS, ETC. ARE THE SITE I LIGHTS, ETC. ARE THE SITE NER ELECTRIC BASEBOARD HEATERS. FRS ARE ONLY INSTALLED IN PANELS OF ALLED ON A LIGHTING CIRCUIT WITH NO UP POWER SOURCE. IN AND INSTALLED BY B/P ON SITE. SO RATED FOR WET LOCATIONS.
FHW (FORCED HOT WATER) BASEBOARD HEATING NOTES 1) BASEBOARD RATINGS ARE BASED ON 190°F WATER TEMPERATURE AT 1 GPM	B (ELECTRICAL BASEBOARD) TYPICAL HEATING NOTES	B/P FOUNDATION DETAIL
<ol> <li>FLOW RATE WITH 65' ENTERING AIR.</li> <li>FILOW RATE WITH 65' ENTERING AIR.</li> <li>FIRST FLOOR BASEBOARD UNITS ARE INSTALLED WITH HEATING PIPES BETWEEN BASEBOARD STUBBED THRU FLOOR. SECOND FLOOR HEATING PIPES BETWEEN BASEBOARD UNITS ARE INSTALLED IN FLOOR AND/OR WALL PANELS. B/P IS</li> <li>UNITS ARE INSTALLED IN FLOOR AND/OR WALL PANELS. B/P IS</li> <li>UNITS ARE INSTALLED IN FLOOR AND/OR WALL PANELS. B/P IS</li> <li>RESPONSIBLE FOR INTERCONNECTION BETWEEN MODULES AND FLOORS.</li> <li>BALANCE OF HEATING SYSTEM IS TO BE DESIGNED, SUPPLIED AND</li> <li>INSTALLED BY B/P.</li> <li>ALL HEATING PIPES IN UNHEATED SPACES SHALL BE INSULATED BY B/P.</li> <li>ALL HEATING PIPES IN UNHEATED SPACES SHALL BE INSULATED BY B/P.</li> <li>ALL HEATING PIPES IN UNHEATED SPACES SHALL BE INSULATED BY B/P.</li> <li>ALL HEATING PIPES IN UNHEATED SPACES SHALL BE INSULATED BY B/P.</li> <li>ALL HEATING PIPES IN UNHEATED SPACES SHALL BE INSULATED BY B/P.</li> <li>ANINMUM THERMOSTAT RANGE IS 45' TO 75F.</li> <li>ALL HEATING SYSTEM. THE INTERCONNECTION OF THE HEATING SYSTEM. THE INTERCONNECTION OF THE HEATING SYSTEM. THESE PANELS MAY BE PERMANENTLY ATTACHED AND FINISHED OVER BY B/P AFTER HEATING SYSTEM IS COMPLETED.</li> </ol>	C BASEBOARD HEATING CIRCUITS ARE 220 VOLTS WITH 12–2 NON-METALLIC HED CABLE TYPE NM–B. M WATTAGE PER CIRCUIT SHALL BE M WATTAGE PER CIRCUIT SHALL BE VATTS ARDS ARE RATED AT 250 WATTS PER ARDS ARE RATED AT 250 WATTS PER FOOT. A THERMOSTAT RANGE IS 45° TO 75°F. A THERMOSTAT RANGE IS 45° TO 75°F. COLUM L LIGHTING RECEPTACLES SHALL NOT BE ED ABOVE ELECTRIC BASEBOARD HEATING ED ABOVE ELECTRIC BASEBOARD HEATING	L PLATE TN WALL OLUMN N FTG N
SE GROUP:     BUILDER:     HOMEOWNER:       TACHED SINGLE     WMHCC       MILY DWELLING       WILY DWELLING       100.6       DINO & BRUNO ODOARDI	<u>9022 pe / ra third p</u>	ARTY INSPECTION AGENCY
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	0 DATE DATE DATE DATE	

20 NETHERMONT AVE SINGLE FAMILY RESIDENCE

![](_page_52_Picture_1.jpeg)

![](_page_52_Picture_2.jpeg)

![](_page_52_Picture_3.jpeg)

21 NETHERMONT AVE VACANT LOT

19 NETHERMONT AVE SINGLE FAMILY RESIDENCE

SS-1

DATE - 01/01/2020

REVISIONS NO. DATE DESCRIPTION

PHD T D S

SCAPE

 $\mathbb{A} \bigvee \mathbb{F}$ 

NETHERMONT

STREET 22 NETH

24 NETHERMONT AVE SINGLE FAMILY RESIDENCE

![](_page_52_Picture_11.jpeg)

![](_page_52_Picture_12.jpeg)

![](_page_52_Picture_13.jpeg)

![](_page_52_Picture_14.jpeg)

![](_page_52_Picture_15.jpeg)

![](_page_52_Picture_16.jpeg)

T AVE

-

![](_page_53_Figure_0.jpeg)

![](_page_54_Figure_0.jpeg)

TOTAL AREA OF LEDGE POST CONSTRUCTION = 3,402 SF

THE FINAL AREA TO ACCOUNT FOR IN OUR CALCULATIONS IS THE TOTAL AREA OF GRAVEL/GRASS POST CONSTRUCTION. OUR PRE DEVELOPMENT CALCULATIONS TOLD US THAT THE TOTAL AREA OF GRAVEL/GRASS IS 1,702 SF. 15% OF THE AREA WAS GRAVEL AND 85% OF THE AREA WAS GRASS.

![](_page_54_Figure_3.jpeg)

OUR POST DEVELOPMENT CALCULATIONS SHOW US THAT THERE IS 1,240 SF OF GRASS/GRAVEL AREA REMAINING POST CONSTRUCTION. WHICH CAN BE OBTAINED BY: 1,702 SF - 462 SF (DRIVEWAY AREA) = 1,240 SF OF GRASS/GRAVEL.

![](_page_54_Figure_5.jpeg)

1,240 SF OF GRASS/GRAVEL IS USED IN THE POST DEVELOPMENT CALCULATIONS. SHEE

SHEET 2 of 2

![](_page_55_Picture_0.jpeg)

June 23, 2020

Alan R. Kaufman, AICP Director of Planning Town of North Castle 17 Bedford Rd. Armonk, NY 10504

#### Re: Letter Report – Geotechnical Investigation 22 Nethermont Avenue White Plains, New York

Dear Mr. Kaufman:

As described by our April 2, 2020 proposal, this letter report outlines the findings resulting from the drilling of one (1) geotechnical boring within the open lot at the above referenced address, for the purpose of constructing a new two-story residence. One (1) geotechnical boring was drilled on Tuesday, June 22, 2020 by Municipal Testing Laboratory, Inc. (MTL), by a Portable Gas-Powered Drill Rig, under continuous inspection by Messrs. Haykel Melaouhia, Ph. D. and Aflaaz Saleem of Geotechnical Engineering Services, P.C. (GES). We understand the proposed construction includes a new two-story single-family house, with a garage and driveway in front, and rear porch, located 22 Nethermont Avenue, in Westchester County, White Plains, New York. The site is currently undeveloped, and currently covered by exposed bedrock, trees and grass.

Please refer to our attached Boring Location Plan for the approximate as-drilled location of the boring, as well as a typed boring log for the stratigraphy and sample descriptions. Elevations noted on the base plan for the Boring Location Plan are based on an "Existing Conditions, Removals, Erosion Control and Steep Slopes Plan", which shows "assumed" ground surface elevations range across the site from about el. +522 (near the southeast corner of the proposed new building) to about el. +499 at street level. No datum for these elevations was provided in any of the drawings provided to us. GES did not perform any surveying, and measurements of the boring location in this letter report are from fixed points. Boring B-1 was performed from about el. +517, and elevations referenced in this letter report refer to the Plan discussed above.

#### METHODOLOGY

One (1) geotechnical boring, referred to as B-1, was drilled in approximately the location shown on the attached Boring Location Plan, as measured from fixed locations around the property. The boring was drilled utilizing the mud-rotary drilling method. Since there was only a small amount of fill overlying bedrock, no soil samples were obtained, and core drilling was performed from ground surface, first using an oversized 4-inch-diameter single tube core barrel, then an NX-Size,

6 Bayberry Road Elmsford, NY 10523 Alan R. Kaufman, AICP – Town of North Castle 22 Nethermont Avenue – White Plains, New York Letter Report – June 23, 2020 Page 2 of 3

double tube, core barrel, with a diamond bit, for which the length of Core Recovery  $(REC)^1$  and the Rock Quality Designation  $(RQD)^2$  were recorded. All rock samples were transported to GES's Office for classification and storage.

#### FINDINGS

The following general descriptions of the subsurface strata are based on our interpretations of the results of the field investigation. The purpose for our investigation was to take rock core samples of the bedrock. SPT split-spoon sampling was not relevant to this particular investigation, and therefore was not performed:

**Stratum 1 – Fill:** The Fill generally consists of a very thin layer of brown topsoil, with rock fragments and gravel, with varying amounts of sand and silt, as is indicative of miscellaneous fill. No soil samples were taken within this stratum. The fill generally covers the surface of the rock. Soil description is based on the appearance of cuttings at the top of the boring.

<u>Stratum 2 – Bedrock</u>: Other than a six-inch zone of weathered rock, from a depth of about 1 to 1.5 feet below grade (about el. +516 to +515.5, respectively), generalized subsurface conditions at the boring location consist of intermediate to hard, slightly weathered, gray and light brown Granite, with trace amounts of schist, and weathered joints. Rock Core Recovery ranged from 60 to 100 percent, while RQD ranged from 43 to 100 percent. Boring B-1 was terminated at a depth of about 10.5 feet, after extending to and at least five (5) feet into competent bedrock, to about el. +506.5.

#### RECOMMENDATIONS

Based on our experience with very similar projects and the information provided to us regarding the proposed construction, we recommend that, based on the rock samples collected, the rock mass be removed using conventional equipment, such as hoe ramming or ripping along the joints. At this point of the project, <u>no blasting is needed or recommended.</u>

It is recommended that the planned construction be supported on footings bearing on Stratum 2 (Bedrock), with a maximum allowable bearing pressure of 20 tons per square foot (tsf). Settlement under the building loads is expected to be less than  $\frac{1}{2}$  inch, and would occur during construction. Should the rock at the design subgrade elevation be found to be weaker than expected, new footing requirements should be reviewed with the structural engineer to confirm the rock present can support the design bearing pressures. All new footing or wall footing subgrades must be inspected and approved by a Professional Engineer, licensed in New York State.

<sup>&</sup>lt;sup>1</sup> The Core Recovery is defined as the ratio (expressed as a percent) of the total length of recovered core to the length cored.

<sup>&</sup>lt;sup>2</sup> The Rock Quality Designation (RQD) is defined as the ratio (expressed as a percentage) of the total length of recovered core samples having a length of at least twice the core diameter (e.g., about 4 in for NX-core) to the total length of core.

Alan R. Kaufman, AICP – Town of North Castle 22 Nethermont Avenue – White Plains, New York Letter Report – June 23, 2020 Page 3 of 3

#### CLOSING

Thank you for this great opportunity to work with you on this project. If you have any questions or would like to discuss the contents of this letter, please don't hesitate to call me in the office at 914-592-4616 or on my mobile at 973-727-7329.

Very truly yours, Geotechnical Engineering Services, P.C.

Ziad H. Maad, P.E., D. GE.

#### Attachments:

- Boring Location Plan
- Typed Boring Log (Boring B-1)
- Rock Core Photo Log

![](_page_58_Figure_0.jpeg)

![](_page_58_Picture_1.jpeg)

No.	DESCR	IPTION		DATE	BY			
GES								
GEOTECHNICAL ENGINEERING SERVICES, P.C.								
6 BAYBERRY ROAD								
ELMSFORD, NEW YORK 10523 PHONE: 914–592–4616 FAX: 914–592–0416								
WHITE PLAINS NY								
BLOCK:	LOT:	ZONE:		MAP:				
BORING								
LOCATION PLAN								
UNAUTHORIZED ALTERATION OR ADDITION TO THIS PLAN IS A VIOLATION OF SECTION 7209 OF THE NYS EDUCATION LAW. COPIES OF THIS PLAN NOT BEARING THE PROFESSIONAL ENGINEER'S INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY.								
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PROFESSION	IAL ENGINEER	SHEET NO:	1	OF 1				
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### Log of Boring B-1

#### Project: 22 Nethermont Avenue Project Number: 2020031 Location: White Plains, NY Date(s) Drilled Haykel Melaouhia, PhD., Aflaaz North: East: Coordinates 6/16/20 - 6/16/20 Inspector Saleem Drilling Municipal Testing Laboratory Approximate Surface Foreman Fiad Khan Agency (MTL) Elevation (feet) ± 517 Completion Depth (feet) Rock Depth 0.0 Drilling Drilling 10.5 **Portable Gas** Mud Rotary Equipment Method Sampler Type(s) Size/Type Casing Size/Type 4" Steel NA NA of Bit Hammer Wt/Drop NA Casing Hammer Size/Type of Core Barrel Groundwater Level NA 4" and NX and Date Measured NA Wt/Drop NA No. of Samples Dist.: 0 Undist.: 0 Boring Location See Boring Location Plan (Figure 1) Core (ft):11 Soil Samples Rock Coring Water Cont.(%) Plastic Limit Pen. Resist. (blows/6 in) Liquid Limit % Recov. (ft) DESCRIPTION Fines RQD (%) Graphic Log Depth, feet Type, Number Run Number Recov. REMARKS % 0 Medium Hard, Slightly weathered, Gray and light brown Cored from grade to 1.5 100 Granite, weathered joints C-1 100 ft with 4" single tube core barrel Decomposed, Weathered Gray and light brown Granite, 0 C-2 60 broken Switched to NX Double Intermediate to medium Hard, Weathered, Gray and light brown Granite, trace Schist, Weathered joints Tube core barrel at 1.5 C-3 75 43 5 Medium Hard to Hard, slightly weathered, gray and light brown Granite, trace Schist, slightly weathered joints C-4 92 85 10 Boring completed to 10.5 ft below ground. Boring backfilled with cuttings upon completion 15 20 GES P.C.

Template: GENERAL GES LOGO Proj ID: 22 NETHERMONT AVENUE.GP.

22 NETHER MONT AVENUE, WHITE PLA GES, P.C. Boring #. Run #. Length (H.) Depth (H.) Decon. -B-1 C-3 4.0 1.5'-5.5' 75 B-1 C-4 5.0 5.5'-10.51 92	INJS NY (17) RDJ (17) 42.7 85

CEC	ROCK CORE PHOTOGRAPHIC PLATE				Project Name:	22 Nethermont Avenue			
GES	Boring No.	Core No.	Depth (ft)	Rec %	RQD %	Project	Northeast of Intersection of Nethermont		
	B 1	C-3	1.5 - 5.5	75	43	Location: Ave and		d Freedom Rd, White Plains, NY	
GEOTECHNICAL ENGINEERING SERVICES, P.C. 6 Bayberry Road Elmsford, NY 10523	D-1	C-4	5.5 - 10.5	92	85	Dwg No.	Plate 1		
						Drawn By:	DIG	Project No:	2020031
						Diawii Dy.			2020001
						Ch'ked By:	714	Date:	6/18/2020
						on Keu Dy.	<u>۲</u> ۱۷۱	Date.	0/10/2020

![](_page_61_Picture_0.jpeg)

October 13, 2020

Alan R. Kaufman, AICP Director of Planning Town of North Castle 17 Bedford Rd. Armonk, NY 10504

#### Re: Rock Excavation - Letter 22 Nethermont Avenue White Plains, New York

Dear Mr. Kaufman:

This letter is intended to provide additional recommendations with regard to rock removal, for the proposed construction at 22 Nethermont Avenue in White Plains, New York.

We previously performed a geotechnical investigation at the above-referenced address, and provided rock excavation recommendations during construction, as discussed in our August 2020 Geotechnical Letter Report. In this report, we recommended the usage of line drilling along the limits of the excavation, wherever excavation is to proceed within 25 feet of adjacent properties, to reduce the amount of rock overbreak and to limit vibrations. We also recommended a limit of 1 in/sec for vibrations, as recorded by seismographs placed within nearby properties.

In accordance with recent discussions between Gabriel E. Senor, P.C. and Mr. Ziad H. Maad, P.E., D. GE. of Geotechnical Engineering Services, P.C. (GES), we understand that the Town has requested recommendations for alternate rock excavation methods, if vibration exceedances occur. Therefore, if vibrations are measured to exceed 1 in/sec in the seismographs within adjacent structures, we recommend that the work be temporarily stopped, and the means and methods modified to reduce vibration levels. Such modifications may include using smaller sized excavation or drilling equipment, smaller drill holes, or additional distance from adjacent properties for the usage of the hoe-ram. Should there be additional exceedances, we recommend that rock excavation is performed within 25 feet of adjacent structures using small hydraulic rock splitters, chipping guns, or other hand-held equipment with an air compressor. Nearby or adjacent properties must be protected at all times during rock excavation from adverse impacts of the work. No blasting is needed or recommended for this project.

Alan R. Kaufman, AICP – Town of North Castle 22 Nethermont Avenue – White Plains, New York Letter – October 13, 2020 Page 2 of 2

#### CLOSING

Thank you for this great opportunity to work with you on this project. If you have any questions or would like to discuss the contents of this letter report, please don't hesitate to call me in the office at 914-592-4616 or on my mobile at 973-727-7329.

Very truly yours, Geotechnical Engineering Services, P.C.

ziad maad, P.E.

Ziad H. Maad, P.E., D. GE.