



# INCORPORATED VILLAGE OF SEA CLIFF

OFFICE OF THE VILLAGE OF SEA CLIFF BUILDING DEPARTMENT  
300 SEA CLIFF AVE SEA CLIFF N.Y. 11579 PHONE (516) 671-0080

## Notice of Review

11/17/20

TO:  
PROPERTY OWNER: William Becker  
PROPERTY ADDRESS: 38 Bay Ave.  
SECTION/ BLOCK/ LOT: 21/F/1969

APPLICATION NO: 12182  
APPLICATION REC'D: 11/9/2020  
ZONE: Residence A

**DESCRIPTION:** The applicant proposes to stabilize the shoreline on their property.

### **§ 64-1. Height of fences and walls; finished side to face away from fenced property.**

*No person shall be permitted to erect or maintain or cause to be erected or maintained any fence or wall, other than a wall which is an integral part of a structure, of a height of more than four feet, with the exception of open-wire fences of an approved type, which shall not exceed five feet in height. The height of a fence or wall shall be measured from the ground level on the lower side of such fence or wall. All fences shall be constructed with the finished side facing away from the property on which such fence is erected*

Applicant proposes to construct a retaining walls in excess of 4 feet, requiring Planning Board review.

### **§ 64-1.1 Retaining walls.**

*[Added 2-1-2010 by L.L. No. 1-2010]*

*A. Retaining walls shall not extend more than three inches above the ground that they support.*

*B. No retaining wall shall exceed four feet in height, and no two retaining walls may be closer than five feet to one another, measured from wall face to wall face.*

Applicant proposes to construct a retaining walls in excess of 4 feet, requiring Planning Board review.

### **§ 107-4 Review required.**

*[Amended 10-7-1996 by L.L. No. 1-1996; 12-10-2018 by L.L. No. 7-2018]*

*Site plan review, as provided herein, shall be required for the following, and the Planning Board shall approve, approve with modifications or disapprove applications, as follows:*

*E. Any substantial change in topography. For purposes of this section, any change in topography in excess of one foot in height or elevation, at any point or over any ten-foot linear area, shall be considered a substantial change.*

*F. Any construction involving an enlargement or modification to roof area or building footprint, or an addition or modification to an accessory structure, regardless of whether such structure qualifies for a building permit exemption under § 138-1205, for property abutting Hempstead Harbor.*

Applicant proposes to construct a retaining walls in excess of 4 feet, requiring Planning Board review.

**§ 60-10 Type I actions.**

*For purposes of this chapter, Type I actions are those listed in Part 617. In addition to the list of actions in Part 617, the following actions are deemed by the Village to be Type I actions (where the following list conflicts directly with Part 617 listed actions (as determined by the Agency), the following list supersedes those provisions contained in Part 617):*

*A. Any construction on slopes of 15% or greater (a fifteen-foot rise per 100 feet of length) or where the general slopes in the project area exceed 10%.*

*F. Construction, addition, replacement or significant repair of a bulkhead.*

*G. Construction on or the development or use of a site which may affect a unique or unusual land form found on the site, including, but not limited to, cliffs, dunes, or geological formations.*

*J. Proposed action which will likely cause siltation or other discharge into an existing body of water to the extent that there will be obvious visual contrast to natural conditions.*

*M. Construction on or the development of use of a site which may alter the drainage flow or patterns of surface water runoff.*

*O. Proposed action which may cause substantial erosion.*

*Q. Construction on or the development or use of a site which will be visible to users of an aesthetic resource and which will eliminate or significantly reduce the enjoyment of the aesthetic qualities of that resource.*

*T. Construction on or the development or use of a site which may result in objectionable odors, noise or vibration such that odors will occur routinely (more than one hour per day), noise will be produced which exceeds the ambient noise levels permitted for noise outside of structures or natural barriers that would act as a noise screen will be removed.*

Applicant proposes to stabilize the shoreline on their property. Bulkheads are automatically a Type 1 action. All sections of Chapter 60 of the Village Code will apply including compliance with NYCRR Title 6 Part 617.



**Shane Dommin**  
**Village of Sea Cliff Building Department**

**Note; If the proposed construction does not comply with the Village Code, applicant may apply to the Zoning Board of Appeals for relief, within 60 days hereof. If the proposed construction requires Planning Board approval, an application to the Planning Board may be made. All plans are subject to the Building Codes of New York State.**



**INCORPORATED VILLAGE OF SEA CLIFF**  
**OFFICE OF THE VILLAGE OF SEA CLIFF BUILDING DEPARTMENT**  
300 SEA CLIFF AVE, P.O. BOX 340, SEA CLIFF, NY 11579 TEL 516-671-0080 FAX 516-671-6503  
**BUILDING PERMIT**

APPLICATION ID # 12182 APPLICATION DATE 10/13/20 PERMIT # \_\_\_\_\_

PROPERTY ADDRESS: 38 Bay Avenue SECT: 21 BLOCK F LOT: 363

Owner: William Becker

Address: 38 Bay Avenue

City: Sea Cliff

State: NY

Zip: 11579

Phone: 917-969-7398

Cell: \_\_\_\_\_

Email: william\_e\_becker@yahoo.com

Applicant: (if applicant is different from owner state relationship to owner) Keith J. Masseria, P.E. (Engineer)

Address: 437 South Country Road

City: Brookhaver

State: NY

Zip: 11719

Phone: 516-636-4500

Cell: 516-375-7453

Email: kmasseria@lkma.com

Architect:

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell: \_\_\_\_\_

Email: \_\_\_\_\_

Contractor:

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell: \_\_\_\_\_

Email: \_\_\_\_\_

Plumber:

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell: \_\_\_\_\_

Email: \_\_\_\_\_

Electrician:

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell: \_\_\_\_\_

Email: \_\_\_\_\_

Other/Mechanical:

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell: \_\_\_\_\_

Email: \_\_\_\_\_

A/C, Boiler, etc Model# \_\_\_\_\_

A/C, Boiler, etc Model# \_\_\_\_\_

**PROPOSED WORK:** Be as detailed as possible describing anything that is not going to be specifically provided for in plans or other supporting documents such as number of plumbing fixtures, new services, i.e. gas, water, electric, number of new branch circuits or anything else billable by permit. Billable permit items are listed in Village Code Chapter 142-A as a pdf. Link. The building dept. is responsible for assessing permit fees.

See attached project description



# INCORPORATED VILLAGE OF SEA CLIFF

## OFFICE OF THE VILLAGE OF SEA CLIFF BUILDING DEPARTMENT

300 SEA CLIFF AVE, P.O. BOX 340, SEA CLIFF, NY 11579 TEL 516-671-0080 FAX 516-671-6508

### BUILDING PERMIT

Cost of Improvement:      § Est. Cost \$90,000

Owner: *Depos and says that they are the owner(s) in fee of the Premises, that the work proposed to be done upon the said Premises shall be completed in accordance with the approved application and accompanying plans, and that all the statements herein are true to the deponents own knowledge.*

Owner Signature: William Beecher

Owner Signature: \_\_\_\_\_

ELIZABETH J. VALENTINE  
No. 01VA6138745  
Notary Public, State of New York  
Qualified in Nassau County  
My Commission Expires Dec. 27, 2020

Date: 20th Day of October 2020

Notary: [Signature]

*Contractors must submit proof of current insurance (C-105.2 or U-26.3 for compensation and DB-120.1 for disability or DB-155 for disability) as required by NY State. Form CE-200 may be submitted if exempted. Nassau County requires licensing and liability insurance for residential work. Proof of these are also required of contractors prior to the issuance of the permit*

#### OFFICIAL USE

FEES \$100 PB pd 11/30/2020

#### REQUIRED CERTIFICATES

Application Fee

\$ 75 pd

Permit Fees

- Building
- Plumbing
- Electrical
- Mechanical
- Certificate
- Other

- Cert of Occupancy
- Cert of Approval
- Cert of Completion
- Cert of Compliance
- Cert of Tenancy
- Letter in Lieu

Total Permit Fees \$

Approved by \_\_\_\_\_

Examined for approval on \_\_\_\_\_

**New State Law Requires:** Site visits by the Building Department prior to the issuance of any permit. Changes in project elements or design shall not be made until such changes are approved and documented with the Building Department.

**Village Code Requires:** Zoning variances become invalid if authorized work has not begun within six (6) months of Building Department Approval. Extensions may be applied for to the Zoning Board. (138-1304). Building Permits expire twelve (12) months after the approval. Two (2) subsequent six (6) month extensions may be applied with approval of the Building Department and payment of fees. Additional approvals require application (48-15)

Form IVQSC BP 6/18

ZONING BOARD OF APPEALS \_\_\_\_\_  
PLANNING BOARD X (check one)

-----X  
IN THE MATTER OF THE APPLICATION OF

William Becker

APPLICATION

Village of Sea Cliff.  
-----X

proposing to stabilize shoreline at 38 Bay Ave.

1. Name of applicant: William BECKER

2. Applicant's address: 38 BAY AVENUE

3. If the applicant is not an owner of the property which is the subject of this application, state the relationship of the applicant to the owner(s):

NA

4. The property which is the subject of this application is located at: 38 BAY AVENUE, Village of Sea Cliff, N. Y. and is also known as Section 21, Block F, Lot(s) 1969 on the Nassau County Land and Tax Map.

5. The full name and residence address of all owners of the property (if applicant is not the sole owner) is:

Above

- \_\_\_\_\_
- \*6. The property is located in the A zoning district of the Village of Sea Cliff.
7. The subject property is located on the WEST side of BAY AVENUE (street).
8. The date on which the owner(s) acquired the property was 1999.
- \* 9. The approximate dimensions of the property are 100 feet by 163 feet, and the total acreage of property is 0.4 acres.
10. The property is presently used for residence
- \_\_\_\_\_
- \* 11. Are there existing buildings on the property? yes (1) of 1
12. Are there any outstanding village taxes on the property? NO If so, for what years? —
13. The applicant or owner(s) wish to make use of the property for the purpose of: Residence
- \*14. The Building Department of the Village of Sea Cliff denied an application for a building permit on 11/17/20
- \*15. The proposed construction use of the property does not comply with the following sections of the Village Code: \_\_\_\_\_
- 64-1
- 64-1.1
- 104.4
- 60-10

\*16. This is an application for:

\_\_\_\_\_ an appeal

\_\_\_\_\_ a variance

\_\_\_\_\_ a special permit

X other (describe): site plan review

17. Description of the problem, or reasons for this application, that support the request for relief:

(Note to Applicant - this information is particularly important, and must constitute a complete statement of the grounds for the relief which you are seeking. You may use additional sheets of paper if necessary to provide a complete response)

Please see Attachment A

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18. Has any previous application been made to the Zoning Board of Appeals or Planning Board for the relief sought in this application, or relief similar to that sought in this application? No If so, attach a description of each such prior application, including the date the application was made, the date of the determination by the Zoning Board of Appeals or Planning Board, and a summary of the determination by the Zoning Board of Appeals or Planning Board.

19. Has any previous application been made to the Zoning Board of Appeals or Planning Board for any other relief with respect to the property which is the subject of this application? No

If so, attach a description of each such prior application, including the date the application was made, the date of the determination by the Zoning Board of Appeals or Planning Board, and a summary of the determination of the Zoning Board of Appeals or Planning Board.

20. Are there any outstanding violation notices affecting the subject premises? No

21. Are there any pending court proceedings involving the subject premises? No

22. The undersigned applicant states under penalty of perjury that the foregoing statements and information, and all statements and information contained in papers submitted herewith, are true, correct and complete, to best of the signer's knowledge.

Name of applicant: William Becker  
Signature of applicant: William Becker  
Title of signatory: Owner  
Date: 11/30/20



AFFIDAVIT OF APPLICANT

STATE OF NEW YORK) SS:

COUNTY OF NASSAU )

The undersigned, being duly sworn, deposes and says that deponent has read the foregoing application subscribed by applicant, and knows the contents thereof, and that the contents of the application are true of the deponent's personal knowledge, except as to the matters stated to be upon information and belief, as to which matters deponent believes the contents to be true.

If the applicant is a corporation, the deponent is an officer thereof, to wit the \_\_\_\_\_, and is authorized by the Board of Directors of the corporation to execute this application on behalf of the corporation.

If the applicant is a partnership, the deponent is a general partner thereof, and has authority to execute this application in the name of the partnership.

If the applicant is a limited liability company, the deponent is member thereof, and has authority to execute this application in the name of the company.

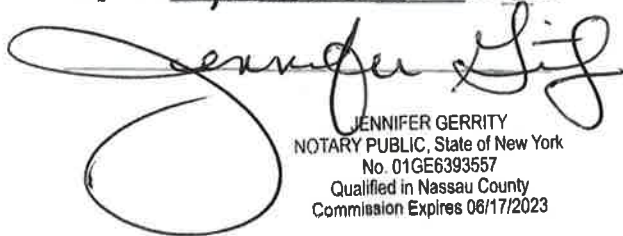
William Becker

Print Name

William Becker

Signature

Sworn to before me this 30  
day of November 2020.



JENNIFER GERRITY  
NOTARY PUBLIC, State of New York  
No. 01GE6393557  
Qualified in Nassau County  
Commission Expires 06/17/2023

AFFIDAVIT OF OWNER(S)

(To be completed only if the applicant is not the sole owner)  
(All owners must sign either as owner or applicant)

STATE OF NEW YORK) ss:

COUNTY OF NASSAU )

William Becker being duly sworn, deposes and says that (s)he is the owner of the property known as 348 Bay Avenue in the Village of Sea Cliff. No other person is an owner of the said property except as described in the attached application. The undersigned hereby acknowledges that the applicant herein is authorized to submit this application to the Village of Sea Cliff on behalf of the owner(s) of the subject property.

William Becker

Sworn to before me on this 30  
day of November 2020

JENNIFER GERRITY  
NOTARY PUBLIC, State of New York  
No. 01GE6393557  
Qualified in Nassau County  
Commission Expires 06/17/2023

Jennifer Gerrity

STATE OF NEW YORK) ss:

COUNTY OF NASSAU )

\_\_\_\_\_ being duly sworn, deposes and says that (s)he is the owner of the property known as \_\_\_\_\_ in the Village of Sea Cliff. No other person is an owner of the said property except as described in the attached application. The undersigned hereby acknowledges that the applicant herein is authorized to submit this application to the Village of Sea Cliff on behalf of the owner(s) of the subject property.

Sworn to before me on this \_\_\_\_\_  
day of \_\_\_\_\_ 20\_\_ .

ZONING BOARD OF APPEALS \_\_\_\_\_  
PLANNING BOARD  (check one)  
VILLAGE OF SEA CLIFF

In the Matter of the Application of

DISCLOSURE  
AFFIDAVIT  
General Municipal Law  
Section 809

William Becker

STATE OF NEW YORK) COUNTY OF NASSAU )

Proposing to stabilize shoreline.

William Becker

, being duly sworn, deposes and says:

1. I am the (applicant with respect to) (owner of the premise which are the subject of) the attached application.
2. I make this affidavit for the purposes of complying with the requirements of General Municipal Law Section 809.
3. No officer of the State of New York, and no officer or employee of the County of Nassau, the Town of North Hempstead or the Village of Sea Cliff, and no party officer of any political party, has an interest in the attached application within the meaning of General Municipal Law Section 809, except as stated hereinafter (if none, state "NONE"):

<u>Name</u>	<u>Address</u>	<u>Position</u>	<u>Nature of Interest</u>
<u>None</u>			

William Becker  
Signature

Sworn to before me this 30  
day of November 2020.

  
JENNIFER GERRITY  
NOTARY PUBLIC, State of New York  
No. 01GE6393557  
Qualified in Nassau County  
Commission Expires 06/17/2023



## Incorporated Village of Sea Cliff

### Office of the Superintendent of Buildings

Sea Cliff Village Hall, 300 Sea Cliff Ave., Sea Cliff, New York 11579

### Inspection Authorization

I hereby authorize the members of the Zoning Board and/or Planning Board, the Superintendent of Buildings, and Legal Counsel to the Zoning Board and/or Planning Board to enter upon and inspect my property prior to the Zoning Board and/or Planning Board rendering a determination on this application.

Homeowner: William Becker

Date: 11/30/20

## Attachment A

### Rationale:

The entire project is an on-going effort to continue to stabilize 38 Bay Avenue as a result of the rising water table and resulting storm damage/wave action. Work is being undertaken largely as a precautionary measure to prevent future damage to the shoreline, cliffs, existing retaining walls and ultimately residence.

### Project Description

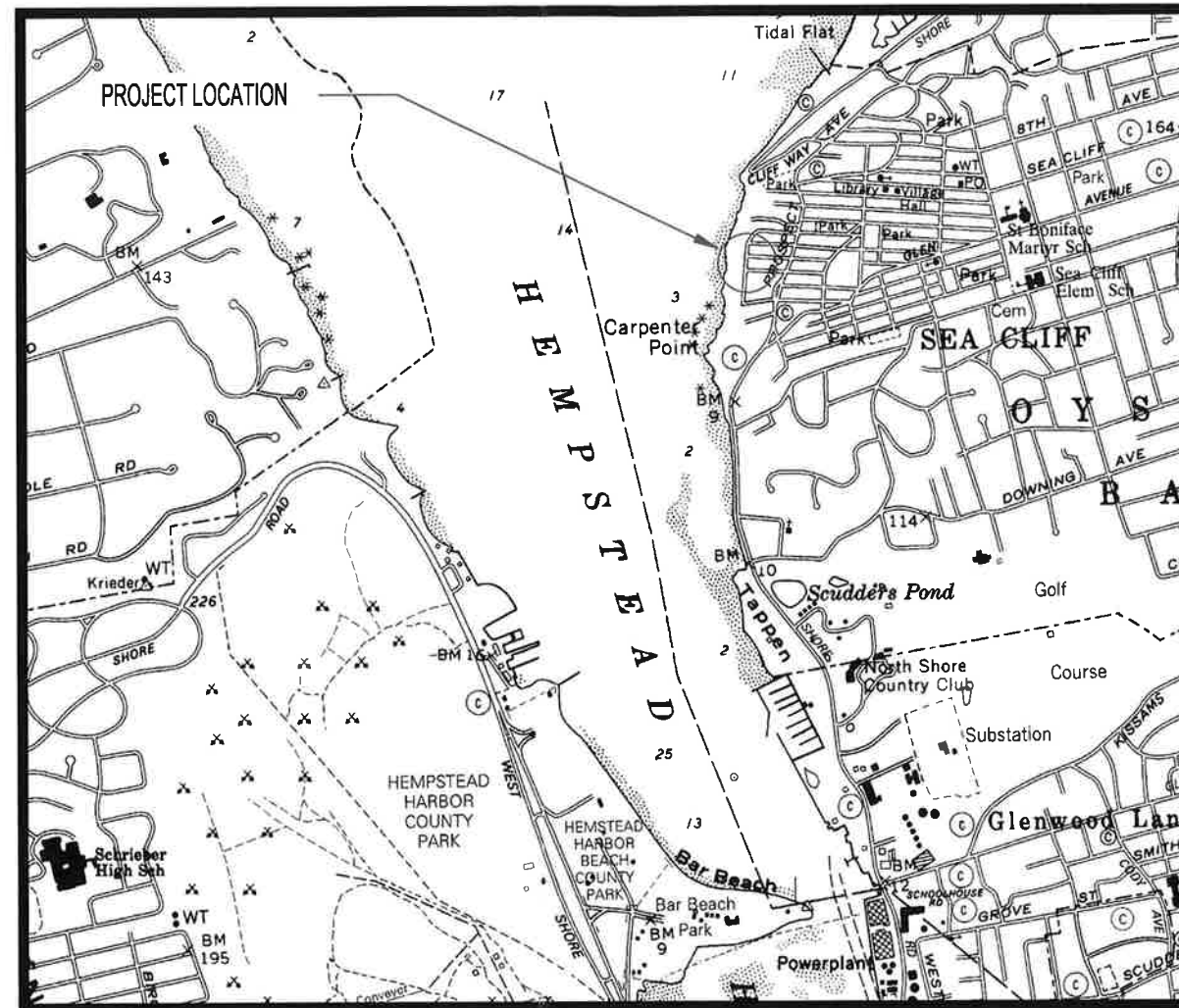
The purpose of the project is to raise the top of the existing bulkhead and the construction of a stone splash apron behind the existing bulkhead at 38 Bay Avenue along Hempstead Harbor in Sea Cliff to protect the property from future storm damage as a result of wind driven waves. All work for this project will be performed landward of the existing bulkhead which has been in existence prior to 1977. We are requesting approval for the following improvements to protect the existing shoreline and property of 38 Bay Avenue:

The existing bulkhead, currently at elevation 8.60± (NAVD88), will be raised to elevation 9.30± (NAVD88) with an 8"x8" CCA treaded exterior timber wale, a 6"x8" CCA treated rear wale and fiberglass grating. It is proposed to install a 121 foot long and 9.8 foot wide stone splash apron directly behind the existing bulkhead to stop further erosion due to storm and wave action. The splash apron will consist of two layers of stone with W50= 400 Lbs. (approximately 89 CY) over a 1 foot layer of stone bedding with W50= 20 Lbs. (approximately 38 CY). The existing bedding stone will be underlain with geotextile filter fabric.

The existing soil (approximate 130± CY), which must be excavated in order to install the stone, will be removed and legally disposed of off-site at a NYSDEC approved upland disposal area. The bottom of the splash apron is proposed to be installed a minimum of 6" above the existing tie rod, up to elevation 9.00± (NAVD88) and extend up at a 1:30 slope until elevation 9.36± (NAVD88) is reached (see General Plan for limits). The northern property line will be stabilized with a proposed 15' long Shoreguard SG550 vinyl sheeting bulkhead return with an anchorage system consisting of galvanized tie rod at 6' on center, CCA Pin Piles and a horizontal CCA lay log.

Note: Retaining walls will not be installed or modified. No fences will be installed.

# THE INCORPORATED VILLAGE OF SEA CLIFF NASSAU COUNTY, NY



LOCATION MAP



SCALE 1" = 1000 FT

## INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	EXISTING CONDITIONS
3	GENERAL PLAN
4	MISCELLANEOUS DETAILS

PREPARED AND  
RECOMMENDED BY:

DATE: \_\_\_\_\_

RAYMOND DiBIASE, P.E., - NYSPE Lic. No. 56985



L. K. McLEAN ASSOCIATES, P.C.  
CONSULTING ENGINEERS 437 SOUTH COUNTRY RD., BROOKHAVEN, NY 11719

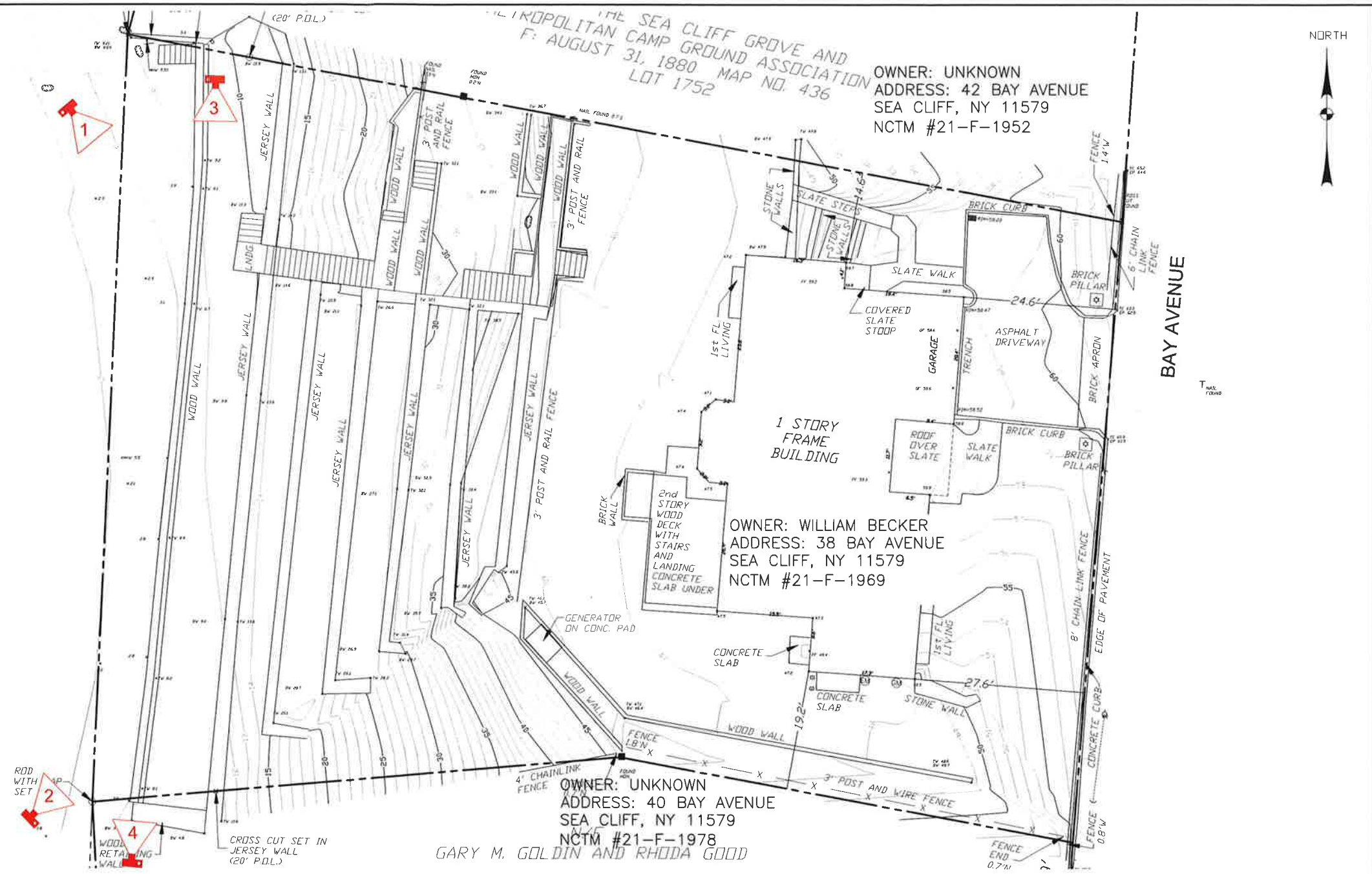
## PRELIMINARY PLANS FOR SHORELINE STABILIZATION AT #38 BAY AVENUE ON HEMPSTEAD HARBOR

SEA CLIFF, NY

NOVEMBER 2020

ALL WORK CONTEMPLATED UNDER THIS CONTRACT  
IS TO BE COVERED BY AND IN CONFORMITY WITH  
THE 2008 NYSDOT STANDARD SPECIFICATIONS (U.S.  
CUSTOMARY UNITS), EXCEPT AS MODIFIED ON  
THESE PLANS AND IN THE ITEMIZED PROPOSAL.

HEMPSTEAD HARBOR



**SITE PLAN**  
SCALE 1"=10'



**LEGEND:**



NCTM# 21-F-1969  
SECTION-BLOCK-LOT



PHOTO NO. 1



PHOTO NO. 2



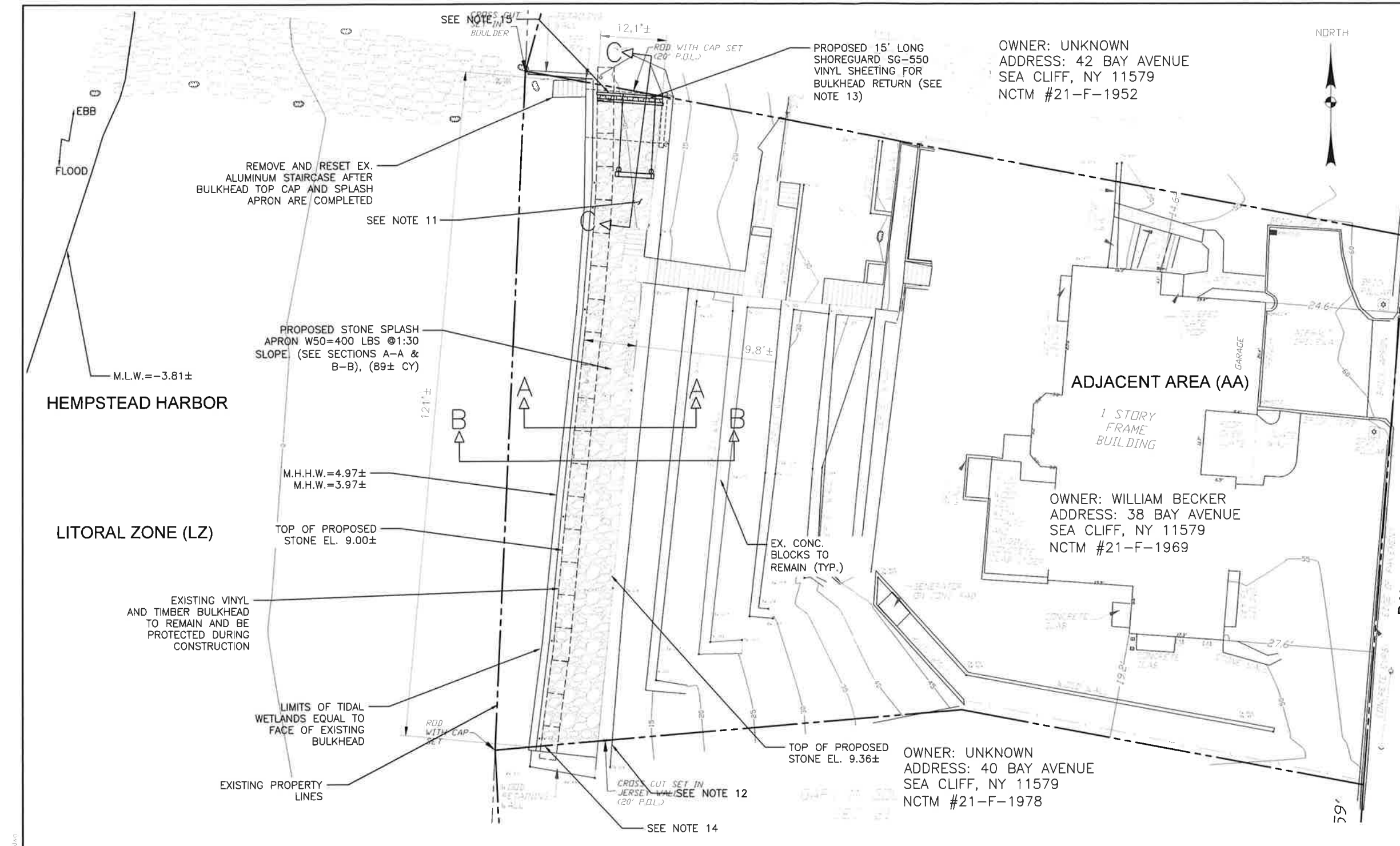
PHOTO NO. 3



PHOTO NO. 4

DATE	BY	DESCRIPTION	APPROV. BY
REVISIONS			
<b>THE INCORPORATED VILLAGE OF SEA CLIFF</b> NASSAU COUNTY, NEW YORK SHORELINE STABILIZATION AT 38 BAY AVENUE ON HEMPSTEAD HARBOR, SEA CLIFF, NEW YORK EXISTING CONDITIONS <b>L. K. McLEAN ASSOCIATES, P.C.</b> CONSULTING ENGINEERS 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719			
Designed By:	KJM	Scale:	AS SHOWN
Drawn By:	DCR	Date:	NOVEMBER 2020
Approved By:	RAS	File No.:	20078.000
			2 OF 4

Rev: 02/2020 - 01/1/20pm  
 P:\20078.000 - 21-F Bay Avenue Sea Cliff (10/1/20) (Civil) (Planning) (Existing) Conditions (Plan) (15.dwg)



OWNER: UNKNOWN  
 ADDRESS: 42 BAY AVENUE  
 SEA CLIFF, NY 11579  
 NCTM #21-F-1952

ADJACENT AREA (AA)

1 STORY  
 FRAME  
 BUILDING





OWNER: UNKNOWN  
 ADDRESS: 40 BAY AVENUE  
 SEA CLIFF, NY 11579  
 NCTM #21-F-1978

- NOTES:
- CONTRACTOR SHALL READ AND FOLLOW ALL PERMIT CONDITIONS AND SPECIAL CONDITIONS CONTAINED IN THE NYSDEC PERMIT TO ENSURE COMPLIANCE DURING THE TERM OF THE PERMIT.
  - HORIZONTAL DATUM IS IN THE NEW YORK STATE PLANE COORDINATE SYSTEM NAD83, LONG ISLAND ZONE.
  - THE VERTICAL DATUM IS NAVD88.
  - CONTRACTOR SHALL RESTORE ANY DISTURBED AREA IN KIND.
  - CONTRACTOR SHALL NOTIFY NEIGHBORS TO THE NORTH AND SOUTH SIDE OF RIGHT OF WAY OF THE PROPOSED CONSTRUCTION START TIME.
  - CONTRACTORS SHALL REMOVE ALL DEBRIS, UNSUITABLE FILL MATERIALS, DEBRIS IN WATER AND DISPOSE OFF SITE. CLEAR AND GRUB EXISTING VEGETATION.
  - FILL SHALL BE FROM ON-SITE OR LOCAL SOURCES.
  - CONTRACTOR SHALL FILL IN ALL AREAS THE SAME DAY THE AREA IS EXCAVATED, A MAXIMUM OF 10' SHALL BE EXCAVATED AT ANY GIVEN TIME BEFORE BACKFILLING.
  - ALL EXCAVATED MATERIAL SHALL BE LEGALLY DISPOSED OF OFF SITE AT A NYSDEC APPROVED UPLAND DISPOSAL AREA.
  - NO EXCAVATION SHALL BE PERFORMED SEAWARD OF THE EXISTING BULKHEAD.
  - STONE SHALL BE PLACED SO THAT FLAT SURFACE IS EXPOSED ON TOP OF SPLASH APRON.
  - CONTRACTOR SHALL EXCAVATE AT FOOTING OF MODULAR CONCRETE WALL ON SOUTH SIDE OF PROPERTY SO THAT THE ENGINEER CAN INSPECT THE FOUNDATION. IF IT IS OBSERVED THAT THE CONCRETE WALL IS SETTLING, THE CONTRACTOR SHALL REMOVE AND RESET THE EXISTING BLOCKS AS NECESSARY.
  - CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF THE EXISTING TIE RODS IN THE VICINITY OF THE PROPOSED BULKHEAD RETURN. THE APPROXIMATE LOCATION OF THE TIE ROD IS SHOWN ON THE PLAN VIEW. THE PROPOSED BULKHEAD RETURN SHALL BE SHIFTED A.O.B.E. TO AVOID CONFLICT WITH THE EXISTING TIE ROD AND ANCHORAGE SYSTEM.
  - CONTRACTOR SHALL RAISE THE ELEVATION OF THE SOUTH BULKHEAD RETURN IN ACCORDANCE WITH DETAIL "A" AS SHOWN ON MISCELLANEOUS DETAILS.
  - PROPERTY LINE ALONG THE NORTH SIDE OF 38 BAY AVENUE SHALL BE STAKED OUT BY A NYS LICENSED LAND SURVEYOR PRIOR TO INSTALLATION OF BULKHEAD RETURN AND STONE FOR SPLASH APRON.
  - CONTRACTOR SHALL ACCESS THE SITE VIA BARGE FROM HEMPSTEAD HARBOR.
  - CONTRACTOR MAY USE UPLAND EARTH MOVING EQUIPMENT ON BEACH AREA DURING PERIODS OF LOW TIDE ONLY.

**SITE PLAN**  
 SCALE 1"=10'



**LEGEND**

-  PROPOSED STONE SPLASH APRON  
W50=400LBS  
(SEE SECTIONS A-A & B-B)
-  PROPOSED SHOREGUARD SG-550 VINYL SHEETING FOR BULKHEAD RETURN
-  EXISTING PROPERTY LINES
-  EXISTING CONCRETE WALL BEHIND EXISTING BULKHEAD

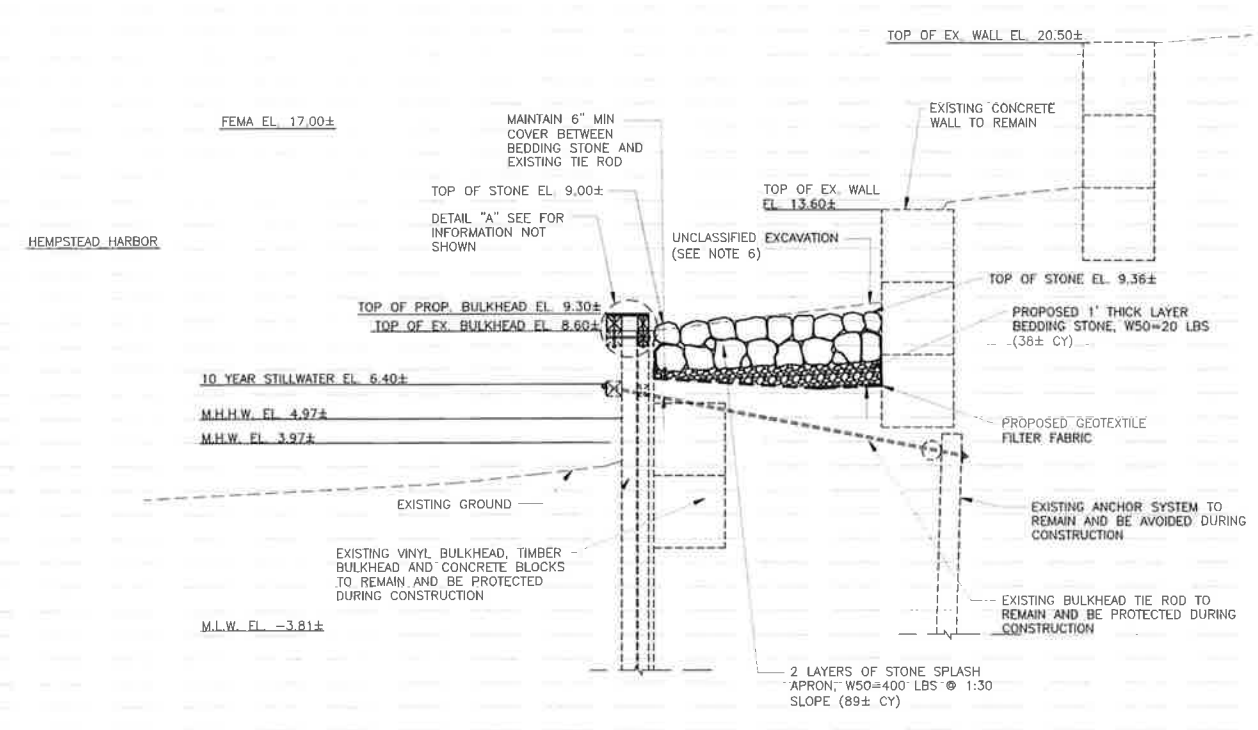
NCTM# 21-F-1969  
 SECTION-BLOCK-LOT

DATE	BY	DESCRIPTION	APPROV. BY
REVISIONS			
<b>THE INCORPORATED VILLAGE OF SEA CLIFF</b> NASSAU COUNTY, NEW YORK			
SHORELINE STABILIZATION AT 38 BAY AVENUE ON HEMPSTEAD HARBOR, SEA CLIFF, NEW YORK			
<b>GENERAL PLAN</b>			
<b>L. K. McLEAN ASSOCIATES, P.C.</b>			
CONSULTING ENGINEERS 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719			
Designed By:	KJM	Scale:	AS SHOWN
Drawn By:	DCR	Date:	NOVEMBER 2020
Approved By:	RAS	File No.:	20078.000
			3 OF 4

Nov 02, 2020 10:54:21am  
 P:\20078\000\_#19 Sea Cliff\City\DWG\Contract Drawings\General Plan #28.dwg

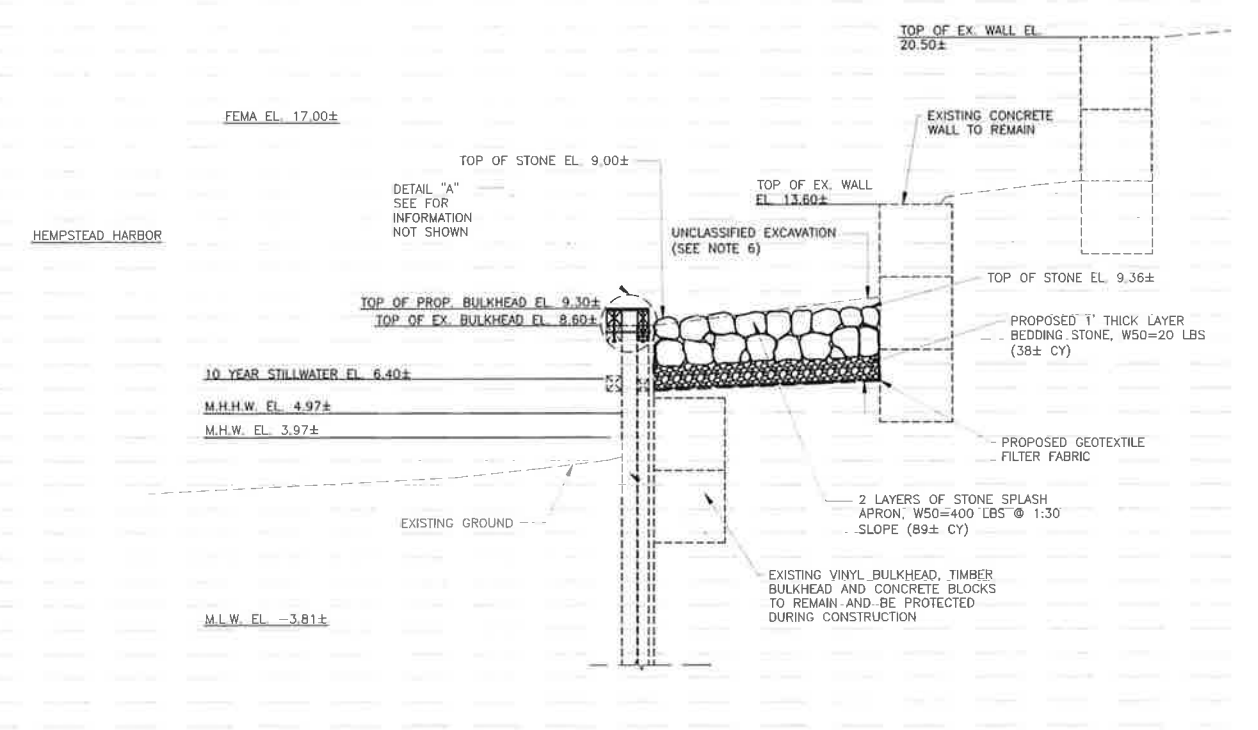


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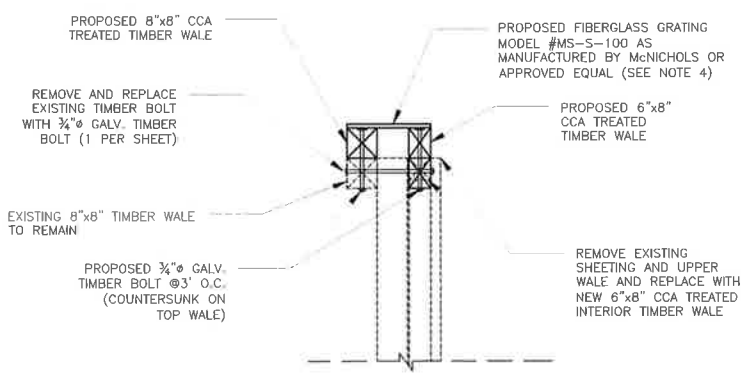


**SECTION A-A**  
STONE SPLASH APRON AT  
EXISTING BULKHEAD TIE ROD  
SCALE 1"=4'

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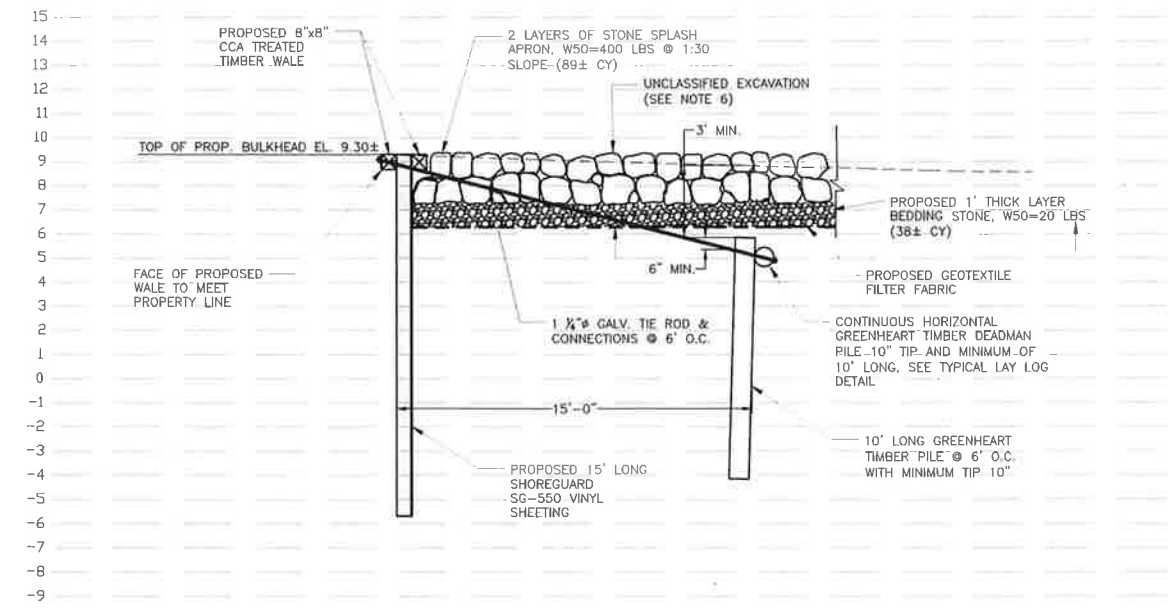


**SECTION B-B**  
STONE SPLASH APRON  
SCALE 1"=4'



**DETAIL "A"**  
N.T.S.

- NOTES:**
- HORIZONTAL DATUM IS IN THE NEW YORK STATE PLANE COORDINATE SYSTEM NAD83, LONG ISLAND ZONE.
  - THE VERTICAL DATUM IS REFERENCED TO NAVD88.
  - CONTRACTOR SHALL EXPOSE EXISTING TIE RODS SO THAT E.I.C. CAN ASSESS THEIR CONDITION. IF TIE RODS ARE FOUND TO BE IN POOR CONDITION, CONTRACTOR SHALL INSTALL HELICAL PILES A.O.B.E.
  - FIBERGLASS GRATING SHALL BE FASTENED TO PROPOSED TIMBER WALES WITH S.S. HARDWARE AS RECOMMENDED BY MANUFACTURER.
  - ALL THE STONE IS TO BE PLACED LANDWARD OF THE EXISTING BULKHEAD AND ABOVE M.H.W.
  - EXCAVATED MATERIAL SHALL BE LEGALLY DISPOSED OF AT AN NYSDEC APPROVED UPLAND FACILITY (APPX 130± CY).



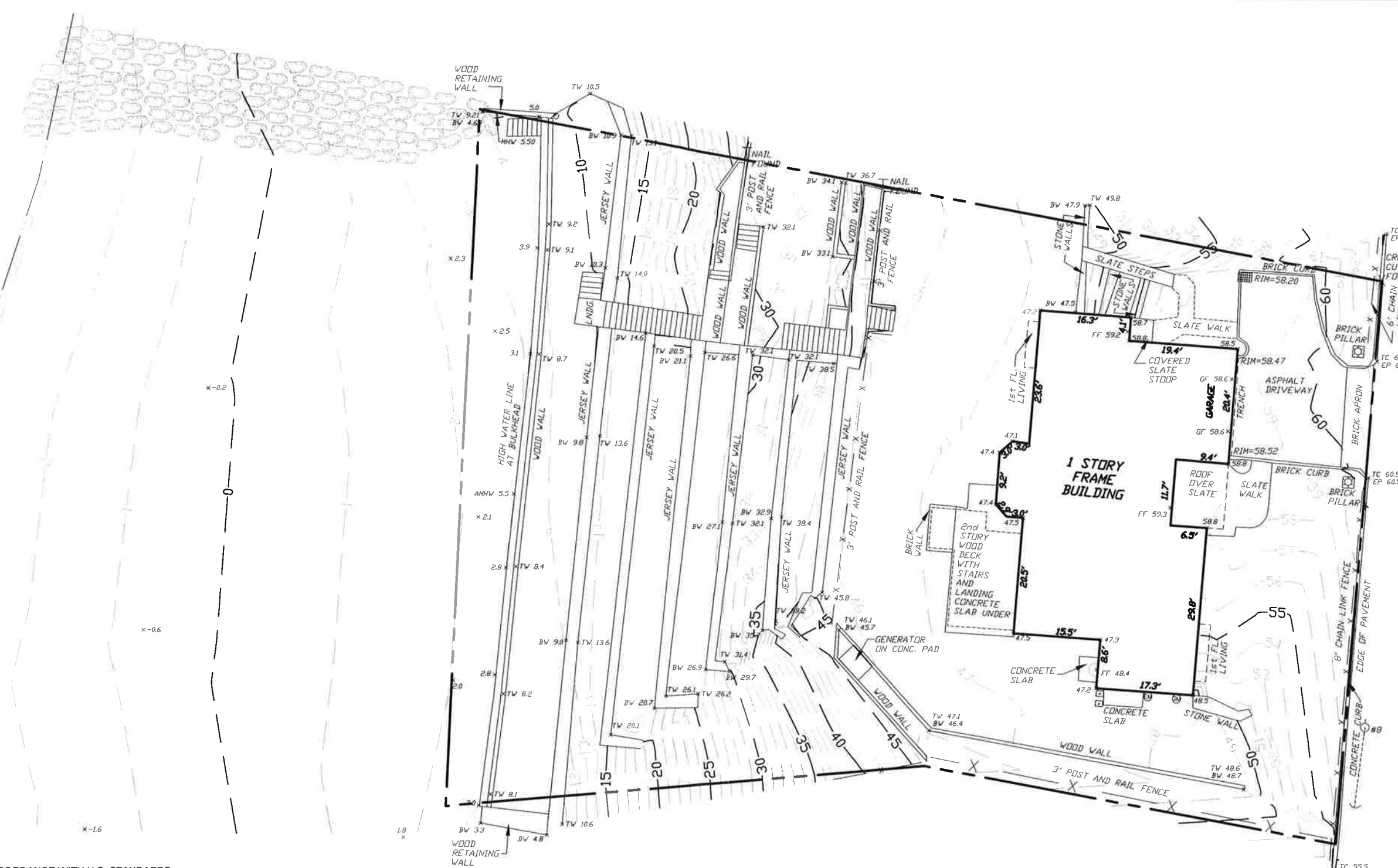
**SECTION C-C**  
STONE SPLASH APRON  
SCALE 1"=4'

TABLE OF STONE	
ARMOR STONE	89± CY
BEDDING STONE	38± CY

DATE	BY	DESCRIPTION	APPROV. BY
REVISIONS			
<b>THE INCORPORATED VILLAGE OF SEA CLIFF</b> NASSAU COUNTY, NEW YORK			
SHORELINE STABILIZATION AT 38 BAY AVENUE ON HEMPSTEAD HARBOR, SEA CLIFF, NEW YORK			
<b>MISCELLANEOUS DETAILS</b>			
<b>L. K. McLEAN ASSOCIATES, P.C.</b>			
<small>CONSULTING ENGINEERS 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719</small>			
Designed By:	KJM	Scale:	AS SHOWN
Drawn By:	DCR	Date:	NOVEMBER 2020
Approved By:	RAS	File No.:	20078.000
			Sheet No. <b>4 OF 4</b>

11/11/2020 10:00 AM 38 Bay Avenue Sea Cliff, NY 11580  
 L:\Projects\2020\38 Bay Avenue Sea Cliff\Drawings\Miscellaneous\Detail\_A.dwg

HEMPSTEAD HARBOR



**LEGEND**

- RECTANGULAR DRAIN INLET
- ⊙ DECORATIVE LAMP
- GF GARAGE FLOOR
- FF FIRST FLOOR
- TC TOP CURB
- EP EDGE OF PAVEMENT
- BW BOTTOM WALL
- TW TOP WALL
- POST
- SPOT ELEVATION
- IRRIGATION BOX
- ⊙ RIP RAP
- ⊙ UTILITY POLE
- ⊙ GUY WIRE
- ⊙ ELECTRIC METER
- ⊙ GAS METER
- AMHW APPROX. MEAN HIGH WATER

- NOTES**
- MEASUREMENTS ARE IN ACCORDANCE WITH U.S. STANDARDS.
  - ELEVATIONS REFERENCE NAVD 1988.
  - UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.
  - ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S "EMBOSSSED" OR "INKED" SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.
  - CERTIFICATIONS INDICATED HEREON SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYORS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. SAID CERTIFICATIONS SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTED HEREON AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.
  - RIGHTS-OF-WAY NOT SHOWN ARE NOT CERTIFIED.

NASSAU COUNTY REAL PROPERTY TAX MAP  
 SECTION 21  
 BLOCK F  
 LOT 1969

I hereby certify that this map was made from an actual survey completed by me on 06/23/2020.

TAMARA L. STILLMAN, P.L.S.  
 NYSPLS No. 50528

DATE	BY	DESCRIPTION	APPROV. BY
<b>REVISIONS</b>			
Town of Oyster Bay Nassau County, New York			
38 Bay Avenue, Sea Cliff			
Topographic Survey			
L. K. McLEAN ASSOCIATES, P.C. CONSULTING ENGINEERS & LAND SURVEYORS 437 SO. COUNTRY ROAD, BROOKHAVEN, NEW YORK			
Surveyed By: P.L./D.M.	Scale: 1" = 20'	Sheet No.	
Drawn By: D.M.	Date: 07/06/2020	1	
Approved By: T.L.S.	File No: 20078.000	1	

**SHORELINE STABILIZATION AT #38 BAY AVENUE  
ON HEMPSTEAD HARBOR, SEA CLIFF NEW YORK**



PHOTO 1  
(SEE EXISTING CONDITIONS PLAN)



PHOTO 2  
(SEE EXISTING CONDITIONS PLAN)

SHORELINE STABILIZATION AT #38 BAY AVE.  
EXISTING CONDITIONS PHOTOS FEBRUARY 2020



PHOTO 3  
(SEE EXISTING CONDITIONS PLAN)



PHOTO 4  
(SEE EXISTING CONDITIONS PLAN)

SHORELINE STABILIZATION AT #38 BAY AVE.  
EXISTING CONDITIONS PHOTOS FEBRUARY 2020



L, K, McLEAN ASSOCIATES, P.C.

SEA CLIFF N.Y.

James Guardino  
Or Current Owner  
42 Bay Ave  
Sea Cliff NY 11579

Gary & Rhoda Goldin  
Or Current Owner  
40 Bay Ave  
Sea Cliff NY 11579

32 Bay Ave LLC  
Or Current Owner  
32 Bay Ave  
Sea Cliff NY 11579

John & Constance Canning  
Or Current Owner  
108 18<sup>th</sup> Ave  
Sea Cliff NY 11579

Dianne Fanger  
Or Current Owner  
65 20<sup>th</sup> Ave  
Sea Cliff NY 11579

Esther Gasser  
Or Current Owner  
224 Prospect Ave  
Sea Cliff NY 11579

Christopher Nielsen  
Or Current Owner  
105 18<sup>th</sup> Ave  
Sea Cliff NY 11579

MaryAnn Kraker  
Or Current Owner  
35 Bay Ave  
Sea Cliff NY 11579

Louis & Esther Gasser  
Or Current Owner  
39 Bay Ave  
Sea Cliff NY 11579

14 Bay Ave Commons, LLC  
c/o Eugene Alletto  
200 Sea Lane  
Farmingdale NY 11735

Paul Anderson  
Or Current Owner  
1 Bay Ave  
Sea Cliff NY 11579

Melisa Geller  
Or Current Owner  
16 Sheridan Lane  
Sea Cliff NY 11579

Natasha Karmiloff  
Or Current Owner  
139 17<sup>th</sup> Ave  
Sea Cliff NY 11579

Gregg & Alison Lerman  
Or Current Owner  
173 16<sup>th</sup> Ave  
Sea Cliff NY 11579

Dennis Buckley  
Or Current Owner  
25 Bay Ave  
Sea Cliff NY 11579

Thomas Pitegoff  
Or Current Owner  
24 Bay Ave  
Sea Cliff NY 11579

Christopher Doran  
Or Current Owner  
6 Bay Ave  
Sea Cliff NY 11579

Donald Kavanaugh  
Or Current Owner  
142 17<sup>th</sup> Ave  
Sea Cliff NY 11579

DONALD & LAURA KAVANAGH  
142 17<sup>TH</sup> AVENUE  
SEA CLIFF, NEW YORK 11579  
516 484-0254

December 9, 2020

Chairman Bruce Trieber  
& Members of the Planning Board  
Incorporated Village of Sea Cliff  
300 Sea Cliff Avenue  
Sea Cliff, New York 11579

Re: Applicants: Sebastian Le, 26 Bay Avenue  
William Becker, 38 Bay Avenue  
Charles & Elizabeth Weinstein, 30 Bay Avenue

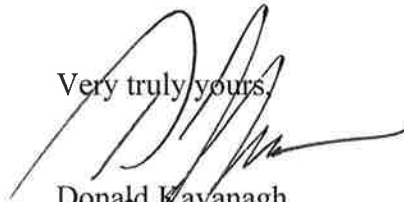
Dear Chairman Trieber and Members of the Board:

We reside on 17<sup>th</sup> Avenue, a few houses away from the applicants.

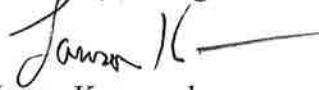
We are familiar with the shoreline along these properties and the condition of the present bulkheads. We believe that these applications for bulkhead extension and shoreline stabilization work will help stabilize the bluff and will be beneficial not only to these properties but to the adjoining properties and the neighborhood as well.

We respectfully request that the Planning Board approve these applications.

Very truly yours,



Donald Kavanagh



Laura Kavanagh

December 13, 2020

Planning Board  
Village of Sea Cliff, NY

**Re: Shoreline Stabilization Meeting on 12/17 – Applications of 26, 30 and 38 Bay Avenue**

I am a member of 32 BAY AVENUE, LLC which owns 32 Bay Avenue. I am writing to you on regarding the shoreline stabilization applications of my neighbors and their adjacent properties.

32 Bay Ave. is experiencing significant erosion and land shift, from the toe of the hill at seaside and along the 18th Ave. paper street to Bay Avenue. Over the last three years since I purchased the property, I have observed that there has been a significant amount of water rushing along my property line from the top of Bay Avenue and 18<sup>th</sup> Street, which has undermined the retaining walls as well as created significant rot of the wooden portion as well. This is due to an inadequate storm drain which catches and pools the majority of the water at the top of the hill, as well as that storm drain being broken in multiple places, due to the erosion on this vacant property that the Village owns. The reason I bring this to your attention is that it has been well documented by engineers and we have notified the Trustees and the Mayor as well that, due to this, we are on unstable ground.

Significant washout under the retaining walls has also occurred from the shoreline, due to the fact that there is no bulkhead on the vacant Village land. It is clearly visible that the cliff has been washed away as the water is able to come upland and around my own bulkhead. These two factors have led to severe ground depression, settling and land shift. We have had our septic system disrupted by this movement, causing our pipes to disconnect underground. I'm getting cracks in the foundation of my home and there's several feet of sloped depression in my yard. As a necessary protective measure, it has been requested for temporary bracing along the 18th Ave. former stairs before any construction is done anywhere remotely close to this unstable property. I have already absorbed the cost of design and engineering for this bracing and submitted plans for this bracing, with the intent to pay for same.

The engineer has also informed the Village that any construction prior to this temporary bracing has the potential for a catastrophic failure -- I am enclosing a copy of the Engineer's letter that has been sent most recently to the Village regarding this issue. I am also including the invoice for the new pipe that we just put in the ground to repair the home to septic break due to the shifting of the landmass. This will be the second time we've done this in only two years while we continue to request the Village to take our concern seriously.

I'm also sending a copy of this letter to the Engineer that was hired for the shoreline stabilization of the three properties on Bay, so that they are made aware of the significant issue with the adjacent properties. Based off of the situation at 14 Bay Ave., with poor engineering then left for many years to further erode and decline, creating an increasingly unstable cliffside and difficult renovation, I am sure we all want to avoid this type of catastrophe again.

While I am encouraged that others are taking action to harden their shorelines and illuminate a significant event on Bay Avenue and I do support the applications of my neighbors, it is critical to realize that this work can only safely proceed if a bulkhead is equally applied to the Village property to create a cohesive plan, along with bracing to my retaining walls. Anything other than this risks complete collapse of my home as result of any further movement.

We request the board review the documentation attached to this letter. We would also ask you to make sure to provide the following items to us:

- 1 – What has been filed with the DEC in sufficient time to have our engineers review, ensuring it is not going to create an issue with our current Dec plans and engineering.
- 2 – Construction plans, methods and work plan addressing details of site preparation, staging and barge location. Due to the significant risk and current erosion, we are looking to ensure that the property line is separated and not combined.
- 3 – A new survey and control lines with markers that are clearly visible. In addition, there must be monitoring to ensure that all final work is located properly and in coordination with the latest boundary demarcation codes.

Finally, we must have site seismic monitoring detail, as well as disclosure of the company that will be performing this work. Our engineers are very concerned with any construction due to the instability of the cliff and the continuous amount of erosion.

It was made very clear to us that having a consistent shoreline in both height and construction methods will provide us the best outcome for the entire cliff and since the properties are all linked together, there must be a hardening of ALL the property lines, so they are NOT the weak link.

Thank you,

Shana Rocheleau  
Member  
32 BAY AVENUE, LLC

Cc: Keith J. Masseria, P.E.  
L. K. McLean Associates, P.C.



**DIETRICH ENGINEERING, P.C.**

**344 Lenox Road  
Huntington Station, N.Y. 11746  
631-427-5540 fax 631-470-0994  
www.depcli.com**

October 28, 2020

Inc. Village of Sea Cliff  
PO Box 340  
300 Sea Cliff Avenue  
Sea Cliff, NY 11579

Re: 18<sup>th</sup> Avenue Property

Dear Trustees;

Thank you for your response to our requests regarding stabilization and repairs to the hillside/bluff at the 32 Bay Avenue, 18<sup>th</sup> Avenue property, and the 34 Bay Avenue property. We believe the solution to the situation previously described is a matter of working together, shared responsibility, and mutual benefit to affect a comprehensive solution. Each of these properties has experienced shoreline erosion for decades, which is now threatening the stability of the hillside.

Please note that the 34 Bay property has only been owned by BASC, LLC for a little over 2 years. It was not during this time frame that the property has been rendered 'derelict'. In actuality, BASC has been actively pursuing plans to stabilize the shoreline of this property, to prevent damage to the neighboring properties. And, the erosion of the 18<sup>th</sup> Avenue property has, in turn, affected the stability of the 32 Bay Avenue property. It is not one party's problem, it is each party's problem, and needs to be treated as such.

We thank you for the offer that has been extended in your letter of October 14, 2020, and we believe we have extremely common ground in affecting a solution.

Enclosed are ten (10) sets of plans for the three properties of concern. The NYSDEC has requested that any submittal for permits be separated in this manner, with each property receiving a separate permit. What is being proposed is described as follows:

**A. Bulkhead Construction for Slope Stabilization**

The proposed bulkhead construction is an extremely heavy-duty type of construction, consisting of heavy steel sheet sections for the face bulkhead and dead-man. The dead-man structure is a tie-back system of steel sheeting and tie-rods, that prevent the face bulkhead sheeting from falling over due to the soil load behind it. The basic reasoning of the design is to establish a solid, firm, unmovable base for the hillside above. The upper parts of the hillside can then be stabilized with new geo-grid

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reinforced retaining walls, founded on that solid base structure. Sketches of the engineering principles are included, describing the failure mode of soil slopes and the intent of the engineering design to intercept and reinforce the failure plane within the soil. The establishment of a firm foundation and reinforcing geo-grid within the soil structure will prevent a future failure of the hillside.

Sketch #1 depicts the 18<sup>th</sup> Avenue property and adjacent areas. The blue shading indicates the existing bulkhead and dead-man system on the 32 Bay Avenue property. These structures form a base foundation which is holding up the western face of the slope on the 32 Bay site. There are no retaining walls on this slope, above the bulkhead, as they are not necessary. The bulkhead/dead-man system is substantial enough to provide all the needed support. However, on the south facing side of the property, there is no base support. There are a series of concrete and timber retaining walls, which are being undermined by the erosion on the adjacent properties – 18<sup>th</sup> Avenue and 34 Bay Avenue. Wave action is eroding the soils out from under the concrete retaining wall at the bottom, which is causing settling of the wall. This, in turn, is resulting in settling and lateral shifting of the upper hillside timber retaining walls. The red shaded area shows the positioning of the proposed bulkhead/dead-man system, creating a base foundation at the bottom of the existing slope. This foundation will provide the solid base needed to construct new retaining walls on the 32 Bay Avenue site, to replace the compromised timber walls.

Sketch #2 depicts the 32 Bay Avenue property and adjacent 18<sup>th</sup> Avenue property to the south. The blue shading indicates the existing base foundation, and the red shading indicates the proposed base foundation across the 18<sup>th</sup> Avenue site. The proposed retaining walls are shown, which will replace the compromised timber walls. Also shown is the positioning of the existing septic system for the 32 Bay Avenue property. The red arrows depict the direction of the lateral shifting of the hillside and timber retaining walls resulting from the undermining of the concrete wall at the base of the slope (shown on Sketch #1). Further discussion of the positioning of these proposed walls is provided in Section D.

Sketch #3 depicts the 34 Bay Avenue property with adjacent areas to the north and south, including the 18<sup>th</sup> Avenue property. The red shading depicts the proposed bulkhead and dead-man system, which creates the base foundation across the bottom of the hillside, at the shoreline. The proposed geo-grid reinforced retaining walls are also shown. In the lower, Section View, the existing and proposed grading are depicted. Also shown is the theoretical soil shear (slip) plane in the hillside. When a slope fails, it does not slide along an angle, but along a circular shear plane, termed a global failure. (See Sketch #5). The failure of a slope occurs when the weight of the soil at the top of the slope weighs more than the soil at the bottom of the slope. This could be due to rainfall, removal of the soil at the bottom, or a combination of both. This type of failure may be observed at the 14 Bay Avenue property. The upper part of the failure is an almost vertical drop, tailing off to a more horizontal surface at the bottom. The construction of the base foundation provides a restrained, solid base, weighing 15,800,000 pounds. In order for the slope to fail, this weight would need to be shifted sideways, toward the water, by the weight of the hillside above.

Sketch #4 depicts a three-dimensional view of all three properties, as proposed, with new bulkheads and retaining walls. The base foundation created by the existing bulkhead system, at 32 Bay Avenue, is

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cross-hatched in blue. The proposed base foundation for the 18<sup>th</sup> Avenue and 34 Bay Avenue properties is cross-hatched in red. As may be seen, the steepest part of the hillside is at the intersection of the 32 Bay Avenue property and the 18<sup>th</sup> Avenue property, at the beach level. The elevation change at this corner is 52 feet vertical over a horizontal distance of 55 feet. This is, essentially a 1 on 1 slope. This is the theoretical maximum slope possible for any soil, without intervention by engineering methods, such as retaining walls. Even at that, timber retaining walls, such as are used at that location, are at the limits of their capabilities. The loading imposed by this 1 on 1 slope is, also, the highest loading experienced on the hillside. This represents the worst loading condition at the weakest most unsupported, unstable, and undermined area of the hillside. I cannot be more succinct in saying that this area is already failing, as observed by the settling and lateral movement of the hillside, but is capable of a catastrophic failure, akin to that at 14 Bay Avenue, at any time.

Sketch #5 depicts the typical failure mode for a soil slope. Weather conditions saturating the soils can add weight to the soil and change the internal soil cohesion, which affect the angle of repose of a given soil. However, the erosion of the soils at the base of the slope cause an increase of the angle of repose. This causes an increase of the weight of the soils at the top, relative to the soils at the bottom of the slope, which resist the weight from above and keep the slope from shifting or sliding.

#### **B. 34 Bay Avenue Property**

A 14-foot-tall steel sheet bulkhead is proposed along the shore-facing line of the property. Due to DEC concerns, the location of this sheeting is to be behind the line of the former timber bulkhead, the remnants of which are still evident. The DEC has determined that these remains are non-functional; therefore, the new sheeting needs to be behind those remnants. The bulkhead would be tied into the neighboring bulkhead to the south neighbor, and to a proposed bulkhead, of similar construction, at the 18<sup>th</sup> Avenue property, as discussed in Section A.

The existing grading of the site is generally a 1 on 1 slope (45°) at the bottom, a 1 on 2 slope (26.5°) at the middle part of the slope, and a 1 on 3 (18.4°) slope towards the top.

Behind this bulkhead, a series of four (4) geo-grid reinforced masonry retaining walls are proposed to stabilize the slope of the hillside. This would create a terraced effect up the hillside. Each of the retaining walls would be 10-feet high and set back 10 feet behind the retaining wall, below. The retaining walls would be returned into the slope on both the north and south sides of the property. The proposed work would provide for an average slope of 1 on 2 (26.5°) for the sloped part, with a relatively flat area at the top of the retaining walls, with views to the north, west, and south.

#### **C. 18<sup>th</sup> Avenue Property**

A 14-foot-tall steel sheet bulkhead is proposed along the shore-facing line of the property. This bulkhead would be in-line with the proposed bulkhead at the 34 Bay Avenue property, and would be fully connected to that bulkhead. The proposed bulkhead would be connected to the existing steel

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sheet bulkhead on the 32 Bay Avenue property. This would provide a continuous bulkhead line from the south end of the 34 Bay Avenue property to the north end of the 32 Bay Avenue property.

Mr. Alletto is offering to have this bulkhead permitted and constructed at his expense, as an extension of the 34 Bay Avenue bulkhead. His benefit of this construction is the protection of the base of the hillside of the 32 Bay Avenue property from further erosion. This will prevent failure of the existing slope and timber retaining walls and allow for replacement of the timber retaining walls and regrading of the slope, which will stabilize the hillside and protect the existing residential structure from damage. Without this bulkhead, it will be extremely difficult, and very costly, to install shoring and bracing along the south property line of 32 Bay Avenue to stabilize the hillside. This work would have to be done forward of the existing concrete and timber retaining walls as removing any of these lower walls to construct the needed shoring would cause the hillside to collapse.

This extension of the bulkhead will also protect the north side of the 34 Bay Avenue property, eliminating the need for a bulkhead return into the hillside, which would be approximately 35 feet long.

The benefit to the Village is that this section of shoreline will be protected from further erosion of the base of the hillside, at no cost to the Village.

It has been discussed at previous meetings that the Village would prefer a 'softer' alternative to erosion protection, rather than the proposed steel sheeting. A stone revetment has been discussed as an alternative, which is 'recommended' by the NYSDEC as a 'softer' option. However, in all practicality, the construction of a stone revetment will not provide the needed protection and structural strength required to support the soil pressures of the existing hillside. First, while a revetment does provide some measure of erosion protection, it is not an impervious structure. Water does pass through it into the underlying soils. The stability of those underlying soils is dependent upon filter fabric materials which are intended to keep the soil from migrating through the stone from wave action. In actuality, during heavy wave action, it is possible for waves to shift the heavy armor stone, exposing the filter fabric to the waves. This causes the underlying soils to be washed out from under the armor stone, essentially negating the reason for the structure. Secondly, because the revetment is not a structurally supporting structure, steel sheeting and shoring would be needed along the north side of the 34 Bay Avenue property and the south side of the 32 Bay Avenue property to provide that structural stability. This is discussed above. Thirdly, the NYSDEC policy for stone revetments is to allow a maximum of 2.5 tons of stone per linear foot of revetment. In practice, this allows for a revetment approximately 5 feet tall, which includes bedding stone, base stone, and the armor boulders. As with a storm such as Hurricane Sandy, this would have been overtopped by 8 feet, with resultant erosion of the hillside behind and above the revetment. The proposed bulkhead is to be 14 feet high.

As mentioned, the Village desires to maintain access to the beach, by the public, over any structures that may be constructed across the property. As part of the construction of the steel bulkhead across the shoreline of the 18<sup>th</sup> Avenue property we would include a stairway from the top of the bulkhead down to the beach. As has been previously discussed, the Village has mentioned a wooden stairway. it

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***Since 1994***

is our recommendation that a steel stairway be constructed, with open grate treads and risers, to allow water and waves to pass through. Wooden stairs would not be resilient in this location and exposure. This stairway would be constructed at Mr. Alletto's expense, as a benefit to the Village.

#### **D. 32 Bay Avenue Property**

The 32 Bay Avenue property has an existing bulkhead and dead-man system facing to the west, at the base of the hillside. This bulkhead is 14 feet high and provides the base foundation support for the west facing portion of the hillside. A bulkhead return, along the south property line, extending approximately 30 feet east, to a concrete retaining wall. The southern portion of the hillside, facing the 18<sup>th</sup> Avenue property, is supported by that concrete wall, at the base, and a series of timber crib retaining walls to the top of the hill. It is at this corner that a bulkhead system is proposed to be constructed, extending southward, across the 18<sup>th</sup> Avenue property and continuing across the entirety of the 34 Bay Avenue property.

This corner is also the location of the worst loading condition across the three concerned properties. The elevation change at this corner is 52 feet vertical over a horizontal distance of 55 feet. This is, essentially a 1 on 1 slope. This is the theoretical maximum slope possible for any soil, without intervention by engineering methods, such as retaining walls. Even at that, timber retaining walls, such as are used at that location, are at the limits of their capabilities.

The construction of a substantial base foundation at this location, the bottom of the 18<sup>th</sup> Avenue property, is essential to the ability to replace the timber retaining walls on the 32 Bay Avenue hillside with geo-grid reinforced masonry retaining walls, which are proposed so as to stabilize the hillside. In the absence of this ability to construct the desired base foundation bulkhead across the 18<sup>th</sup> Avenue property, it will necessitate a huge undertaking to underpin the hillside so that new retaining walls could be constructed. This underpinning would consist of a series of soldier piles and timber lagging, in tiers, up the hillside, with helical pile tie-backs screwed into the hillside, extending under the house, as temporary shoring to prevent the hill from collapsing. Undertaking this work would relegate the house as uninhabitable during the construction, because of the threat of a collapse and that the underground sanitary septic system would be compromised and unserviceable.

A second, resulting, problem with this alternative is that the positioning of the retaining walls entirely on the 32 Bay Avenue property would remove any space to install a new septic system. **It is for this reason that we are asking for permission to extend the proposed retaining walls onto the 18<sup>th</sup> Avenue property.** The geo-grid reinforcing for the retaining walls extends approximately 10 feet behind the wall, acting as a tie-back for the masonry block face of the walls. Additionally, it is required that sanitary and drainage structures be placed a minimum of 20 feet away from the back of the geo-grid, so that the water leaching into the soil does not affect the cohesion of the soil. This was a primary reason for the failure of the 14 Bay Avenue retaining walls.

The proposed retaining walls for the 32 Bay Avenue property shown as extending onto the 18<sup>th</sup> Avenue property, tailing off into the hillside slope. This will allow for the new walls to be positioned for a more reasonable final grading and slope, and will provide the clearance needed to the septic system.

The proposed retaining walls are not intended to cross the 18<sup>th</sup> Avenue property. They will curve around to tail off into the hillside, essentially parallel with the slope. In order to provide a more uniform grading of the slope, the slope will be filled and regraded, resulting in a uniform slope which will be more easily accessible than that which presently exists.

Further, there is an existing storm drainpipe, extending from a catch basin on Bay Avenue to the beach at the bottom of the hill. The outlet of this pipe has been damaged by the erosion of the bottom of the slope. This damage has allowed the storm water to exit the pipe up on the hillside, which adds to the erosion problem. We are proposing to replace this drainage piping with a new drainage system. The NYSDEC requires that any discharge from street drains be passed through a trash removal basin. The new system will consist of a "storm-ceptor" trash removal basin at the top of the hill, a new 15-inch diameter corrugated, high density polyethylene (HDPE) pipe down the hill to the new bulkhead, a surge box to reduce the velocity of the flow, a sleeve through the bulkhead to allow the pipe to pass, and a one-way duckbill tide valve at the pipe discharge to prevent seawater from backing up into the pipe. This work is proposed to be done at the expense of Mr. Alletto, for the benefit of the Village.

#### **E. Temporary Wall Bracing**

As part of our submittal of plans for the three properties is a set of plans to provide temporary shoring and bracing for an existing retaining wall at the top of the hillside, along the southern property line of 32 Bay Avenue, adjacent to the 18<sup>th</sup> Avenue property. This retaining wall consists of vertical steel soldier piles, with horizontal timber lagging between the soldier piles. This wall supports the grade difference between the higher 32 Bay Avenue property and the lower grade of the 18<sup>th</sup> Avenue property. The retaining wall also supports the soil where the underground sanitary septic system is located for 32 Bay Avenue.

Due to the subsidence being experienced on this entire hillside, this retaining wall is starting to lean over. Please note that the structural stability is entirely dependent upon the strength of the steel soldier piles and their depth of installation. There is no tie-back or dead-man system for this type of wall. As we do not know the actual depth of the installed piles, it is not possible to accurately calculate the ultimate load capacity of the wall. What we do know is that it is currently moving and leaning as the hillside subsides.

We are proposing to install temporary bracing of the soldier piles to prevent them from bending and continuing to lean. The purpose of this bracing is to protect the existing septic system from moving as the soil mass moves sideways. Please note that the piping connecting the underground septic tank units has broken twice in the last 3 years as the pipes pull apart from the tanks and leaching pools.

The proposed bracing will extend across the 18<sup>th</sup> Avenue property at four (4) locations, consisting of horizontal steel bracing set on timber base pads built into the hillside. This bracing is only temporary, until the proposed construction of bulkheads, retaining walls, and re-grading are completed. The proposed work will stabilize the hillside and arrest the shifting and subsidence that the hillside is experiencing. The proposed re-grading will lessen the grade difference between the two adjacent properties, which will negate the overloading of this wall, which will stop the subsidence of the septic system.

I understand that this is a lot of information. We are trying to integrate the work as a complete project to stabilize the hillside in a comprehensive plan over the three properties. The 32 Bay Avenue site is extremely complicated and is becoming more unstable as time passes. The current owner did not create the present conditions, but is trying to prevent a catastrophic failure of that property. A failure of the existing hillside would be on the scale of the failure of the 14 Bay Avenue property. It would expose the foundations of the house and result in the loss of the sanitary septic system, rendering the house unusable. It is not possible to remove the existing supporting structures without causing a major failure of the slope. Those existing structures are holding the hillside in place. But, they are being undermined and are aging, with the result that they are starting to fail. In order to leave these structures in place during the construction, it is necessary to construct the new, proposed structures forward of the existing walls. In doing so, it means that this work must encroach on Village property (18<sup>th</sup> Avenue). However, the benefit to this is that the Village property will be stabilized and repaired as part of the overall plan, at little expense to the Village. It will make the 18<sup>th</sup> Avenue property more accessible and will not prevent access to the beach. Conversely, it will provide access to the beach where it presently does not exist.

We sincerely request that the issues presented be deliberated and discussed so that an equitable agreement may be arranged.

Sincerely;

**Dietrich Engineering, P.C.**

Kurt H. Dietrich, P.E.  
President

cc: E. Alletto



DIETRICH ENGINEERING, P.C.  
 344 LENOX ROAD  
 HEMPSTAD STATION, NY 11746  
 TEL: 516-466-1000  
 WWW.DIETRICH-ENR.COM

CONSULTANTS:

PROJECT:

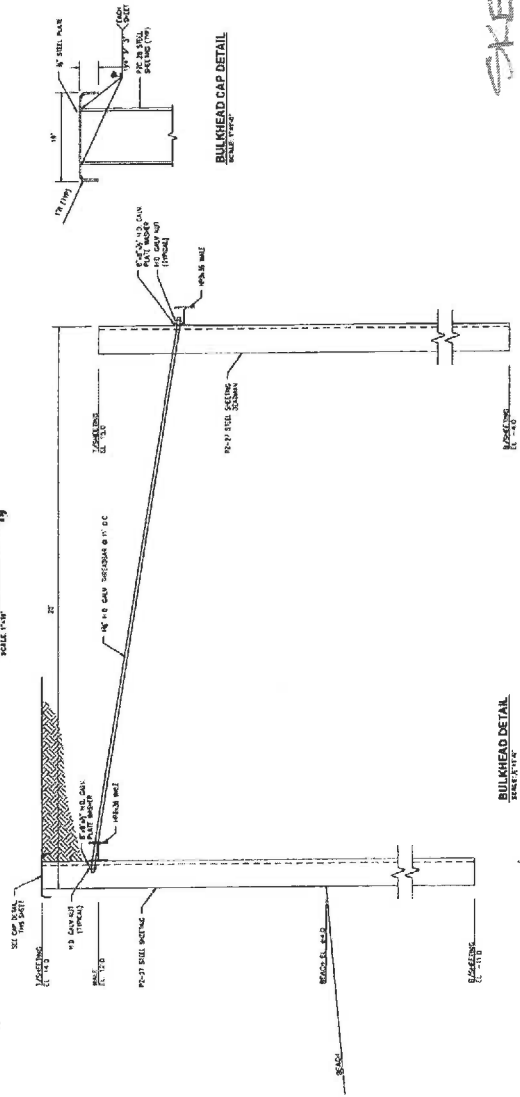
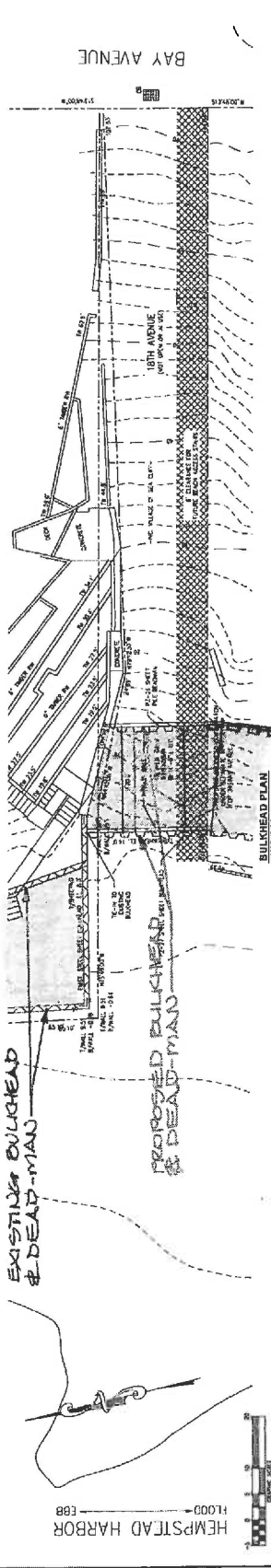
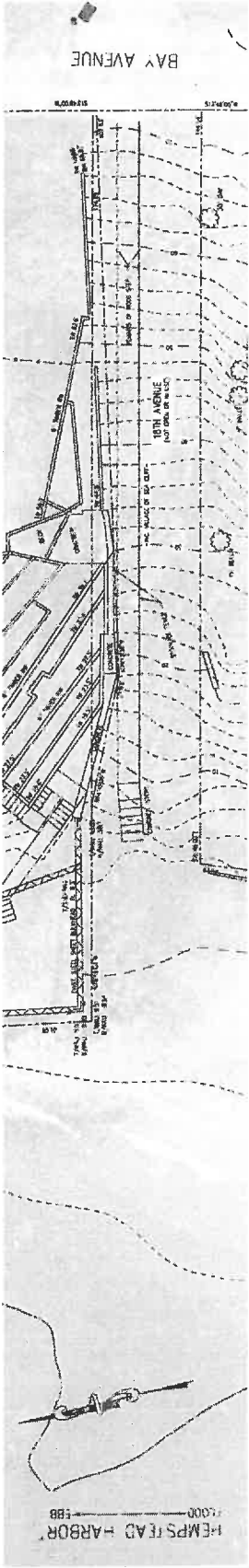
18th AVENUE  
 SEA CLIFF, NY  
 NEW BULKHEAD &  
 GRADING

DATE: 05/20/10  
 EPOCH: 10000

TITLE:

EXISTING CONDITIONS AND  
 BULKHEAD PLAN & DETAILS

DESIGNED BY	DATE	PROJECT NO.	SCALE
CHKD BY	05/20/10	10000	C-1
DATE	05/20/10	10000	C-1



SKETCH #1

BULKHEAD DETAIL  
 SCALE: 1/4"

DIETRICH ENGINEERING, P.C.  
 1142 WEST 114TH STREET  
 HUNTINGTON STATION, NY 11766  
 www.dengr.com

CONSULTANTS

PROJECT:

18<sup>th</sup> AVENUE  
 SEA CLIFF, NY

NEW BULKHEAD &  
 GRADING

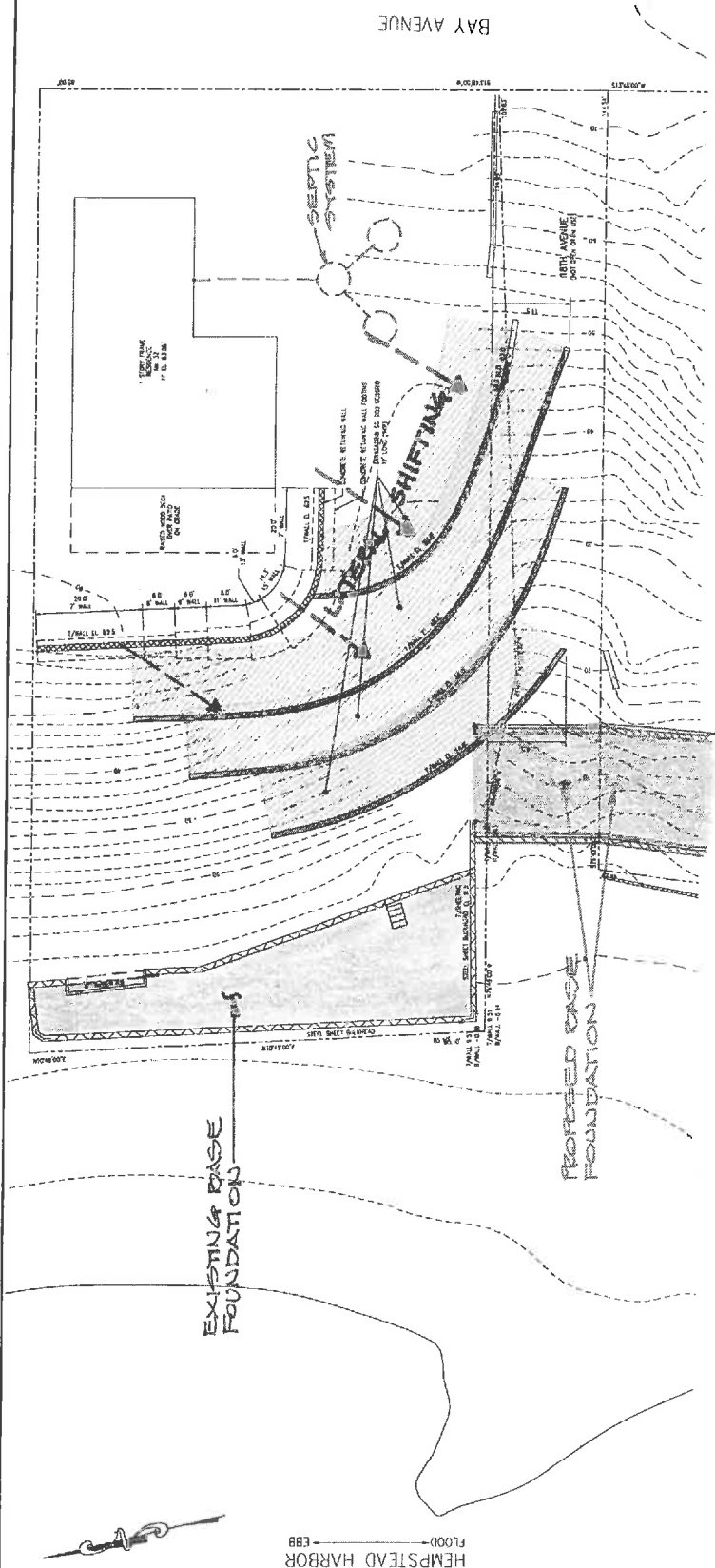
DATE: \_\_\_\_\_

BY: \_\_\_\_\_

TITLE:

CONSTRUCTION PLAN

DESIGNED BY	DATE	BY	PROJECT NO.	SCALE
CHK'D BY	DATE	BY	PROJECT NO.	SCALE
APP'D BY	DATE	BY	PROJECT NO.	SCALE
DATE	DATE	DATE	DATE	DATE



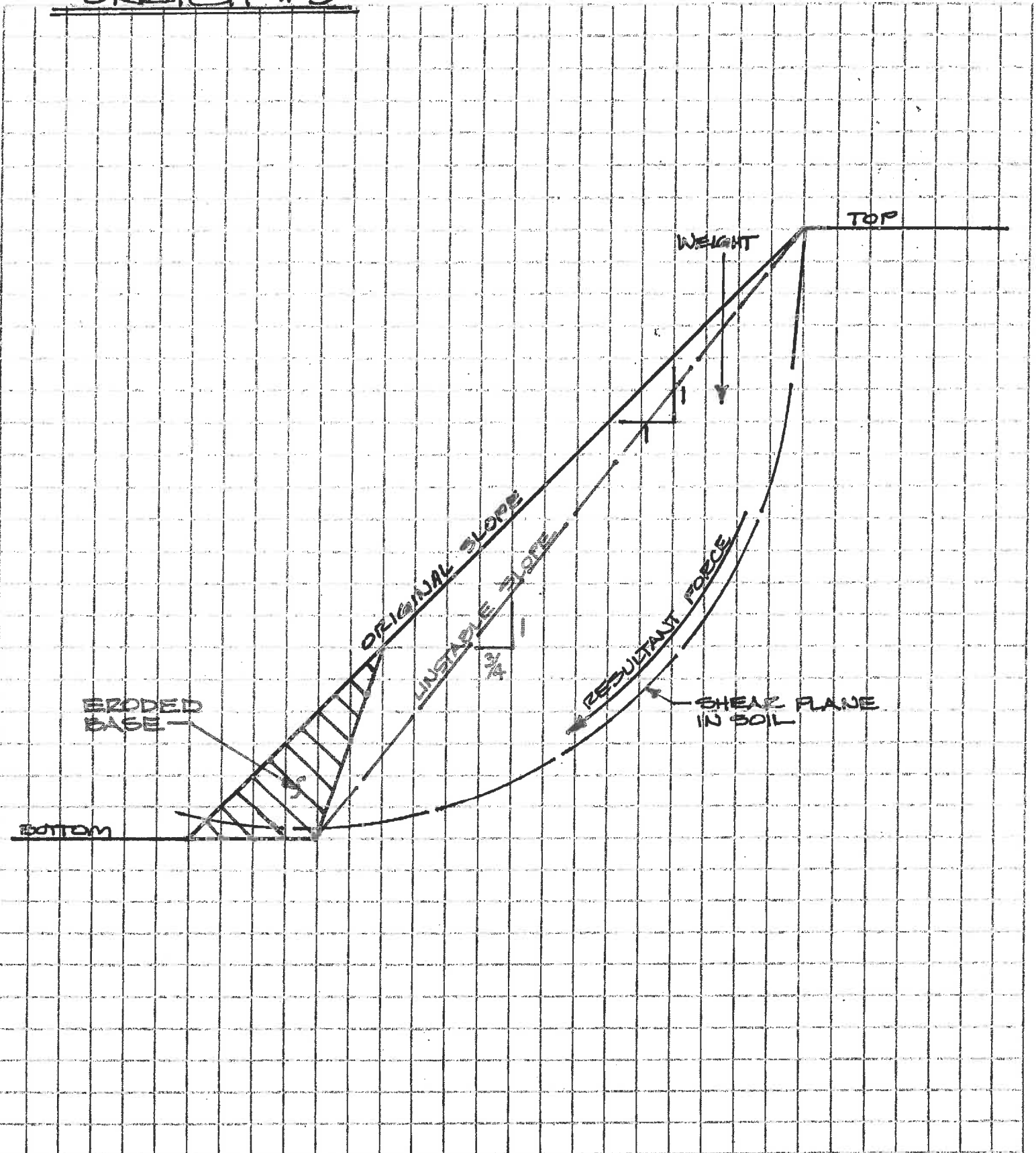
SKETCH #2

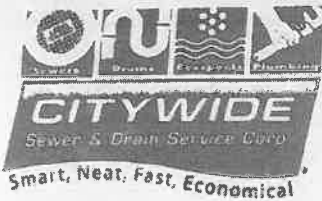






SKETCH #5





P.O. Box 350  
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NAME AIETTO (516) 426-9654  
 ADDRESS 32 BAY AVE  
 CITY SEA CLIFF EMAIL \_\_\_\_\_

JOB #	DATE	SERVICE TECH	LOCATION	PRICE
	<u>12/9/20</u>	<u>HARRY</u>		
<i>Remove main sewer line from Bay under washing machine pits to water tank to seal multiple breaks w/out operations covered by ground shifting and causing dirt + rocks into line &amp; backing system up</i>				
<i>NOTE: ALL MEN WORE PROTECTIVE MARKS WHILE WORKING INSIDE OF HOUSE</i>				
			DIAGNOSTIC FEE	
			MAIN SEWER	
			CESSPOOL LINE	
			STACKS	
			BRANCH LINES	
			DRAINS	
			SINKS	
			BASINS	
			TOILETS	
			SHOWERS	
			BATHTUBS	
			WATER PUMPING	
			DIGGING & LOCATING	
			DRILLING	
			PLUGS	
			CREASE TRAP LINE	
			ROOF / LEADER	
			PRO CLEAN DRAIN CLEANER LOG	
			HOURLY LABOR RATE	
			ELECTRONICS	
			WATER JET	
			VIDEO INSPECTION	
			OTHER WORK	
			SUBTOTAL	
			SALES TAX	
			TOTAL	

Water damage present prior to work performed  Left company sticker on site

**RESIDENTIAL/COMMERCIAL GUARANTEE**  
 MAIN SEWER AUGER TOILET SINK, BASIN, TUB, SHOWER OTHER  
 GUARANTEE IS FOR (1) RETURN SERVICE CALL DURING GUARANTEE PERIOD IF STOPPED UP

**PAYMENT**  
 CASH  CHECK NO. \_\_\_\_\_  
 CREDIT CARD  NET 10 DAYS  
 OVER 30 DAYS = LATE CHARGE OF 1 1/2% PER MONTH  
 \* In the event check is returned, the COMPANY will charge the CUSTOMER a \$26.00 processing fee.

I, \_\_\_\_\_ (card holder) authorize CITY WIDE SEWERS to charge to my  Visa  Mastercard  Discover Auth. # \_\_\_\_\_  
 Account # \_\_\_\_\_ Security Code \_\_\_\_\_  
 Expiration Date \_\_\_\_\_ Total Amount \$ \_\_\_\_\_

I do understand and agreed that all work is performed on following condition: THE ABOVE COMPANIES, will not be responsible for any damage that they occur during or after services provided. NOT RESPONSIBLE FOR BACKUP DUE TO CITY SEWERS.

**WORK AUTHORIZATION & HOLD HARMLESS AGREEMENT**  
 In requesting the services indicated above, I understand that the condition of pipes, etc. cannot be readily determined and that the pipes, etc. may be deteriorated by age or exposure to acid or other chemicals. Therefore, in consideration of the services requested, I hereby release and discharge the above companies, its affiliates, officers, employees, agents and contractors from any claim or property damage, including consequential damages, in connection with or arising out of any services. I further agree to indemnify and hold the above harmless against any such claims made by any third party.  
 I represent and warrant that I am the owner or duly authorized agent of the owner(s) of the premises, and accept full responsibility.  
 I REPRESENT AND AFFIRM THAT I AM OF FULL AGE AND THAT I HAVE EVERY RIGHT TO CONTRACT IN MY OWN NAME.  
 I REPRESENT AND AFFIRM THAT I HAVE READ EACH AND EVERY WORD OF THE FOREGOING.  
 I represent and affirm that this Work Authorization and Hold Harmless Agreement has been explained to me by a duly trained company representative. I understand this agreement, and agree to be bound by its terms. I have inspected the work completed by CityWide and it has been finished to my complete satisfaction.

G346000

12/9/20

FROM O/S PURCHASE			
VENDOR NAME	DESCRIPTION & PO #	QUANTITY	PRICE TO CUST
(25)	YEAR GUARANTEE ON REMAINING OF MAIN LINE TO SEPTIC TANK		
TOTALS			

FROM TRUCK STOCK			
PART #	QTY USED	DESCRIPTION & PO #	PRICE TO CUST
TOTALS			

City Wide values your opinion. Visit our website at [www.citywideplumbers.com/contact](http://www.citywideplumbers.com/contact) to evaluate our service technician - we appreciate your business.

SERVICE TECHNICIAN'S NAME HARRY (516) 690-5394

G346000