**LJA** | **Leonard Jackson Associates** **Consulting Engineers**

26 Firemens Memorial Drive . Pomona, New York 10970 . (845) 354-4382 . FAX (845) 354-4401



October 17, 2022

Village of Mamaroneck
123 Mamaroneck Ave
Mamaroneck, NY 10543

Attn: Frank Tavolacci Building Inspector/Flood Plain Administrator

Re: **800 Rushmore Avenue**
**Mamaroneck, NY**
**Tax Lot # 9-38-15**

Dear Mr. Tavolacci:

The substantial improvement of the dwelling at 800 Rushmore Avenue (structure value increased by greater than 50%) requires that the structure be modified to conform with the FEMA floodplain regulations adopted within the Village of Mamaroneck Floodplain Ordinance for construction within an AE Tidal Floodplain: Base Flood Elevation 12.0 [BFE:12] shown on FEMA FIRM #36119C0353F effective 09/28/2007.

This requires that the lowest habitable floor elevation (first floor) be at or above the Base Flood Elevation (BFE) of 12.0 NAVD.

In New York State two feet of freeboard are required hence the first floor must be at elevation 14.0 or higher.

These requirements have been met as the first floor has been set at elevation 15.83.

The proposed garage extension will also be in compliance with its floor slab at elevation 14.0.

The original construction of this dwelling preceded the adoption of FEMA regulations and the Flood Insurance Rate Map (FIRM); hence this pre-FIRM structure has an existing basement.

Basements below the BFE however are not permitted under current regulations and hence modifications are required to eliminate the basement and, in its place, construct a flood damage resistant, flood vented, enclosed storage area beneath the first floor to achieve current floodplain regulation compliance.

FEMA defines a basement as "Any area of the building having its floor subgrade below ground level on all sides".

The modification therefore requires that the rear wall of the entire dwelling be exposed to the existing basement floor slab elevation of 7.25.

# Leonard Jackson Associates

The excavation required to expose this rear wall will create a patio area at elevation 7.20 that must be free draining.

The exposed rear concrete block foundation wall and a sidewall must be vented to allow floodwaters to freely enter and exit the enclosed storage area to eliminate the possibility of unbalanced hydrostatic loading on the foundation walls.

FEMA acceptable flood vents are readily available. The total area of these vents is calculated at one square inch of vent for one square foot of interior floor area. Vents will be installed one foot above the finished grade adjacent to the dwelling. The top of each vent will be below the BFE.

Approximately 18 square feet of venting is required.

All damageable existing construction (sheet rock walls, utilities, etc.) will be removed and replaced with flood resistant materials.

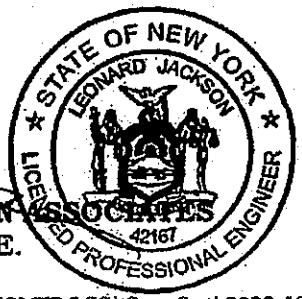
Exterior grading and drainage will allow free inflow and exit of floodwaters to the patio area and the structure.

Attached are the following data that clarify these requirements:

- Annotated site plan (10/16/2022) showing schematic patio, drainage and vent locations.
- Excerpts from FEMA Technical Bulletin #1 March 2020 showing schematic flood vent locations (2 pages).
- Excerpts from FEMA Technical Bulletin #2 showing flood resistant construction and Figure 2, wall section schematic (3 pages).

This design will be included within the applicant's Engineer and Architect submissions.

Very truly yours,




**LEONARD JACKSON ASSOCIATES**
Leonard Jackson, P.E.
LJ/ks
P:\PROJECTS\22\22030\MGMTDOCS\Corr.Out\2022-10-17 Village of Mamoroneck.doc

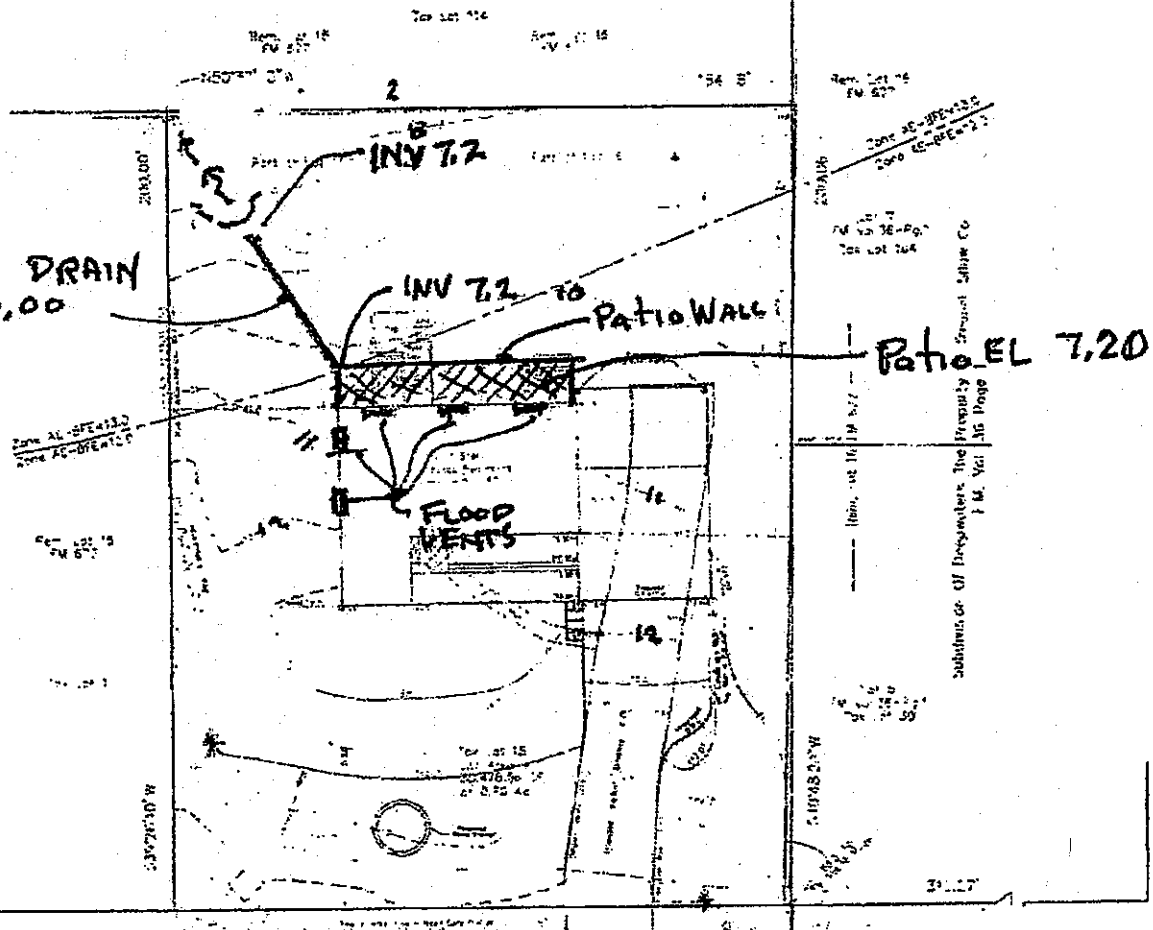
*Topographic Survey & Grading Plan of Parts of Lot's XV (15) and XVI (16) on map entitled "Map of Edge-Water Delanceys Neck Long Island Sound" filed in the W.Co.R.O. on April 22, 1858 as Map No. 677 Situate in The Village/Town of Mamaroneck Westchester County, New York.*

*Village & Town of Mamaroneck Tax Id: 9-38-15*

*Date: December 10, 2021* *Scale: 1"=20'*
*February 28, 2022: Topography & Trees Added*
*April 5, 2022 Proposed Grading, Cut/Fill Analysis Added*


RICHARD J. DOMATO
LAND SURVEYOR
[illegible]


*Notes*
1. *Property shown is in Flood Zones AE as shown on FIRM Panel 0353F, Map 36119C0353F and has base flood elevations of 12.00 and 13.00'.*
2. *Division lines shown between areas of different base flood elevations are approximate and no guarantee is made to the accuracy of their location*
3. *Vertical Datum NAVD 88*
4. *Map made for design purposes and Building Dept. use only*



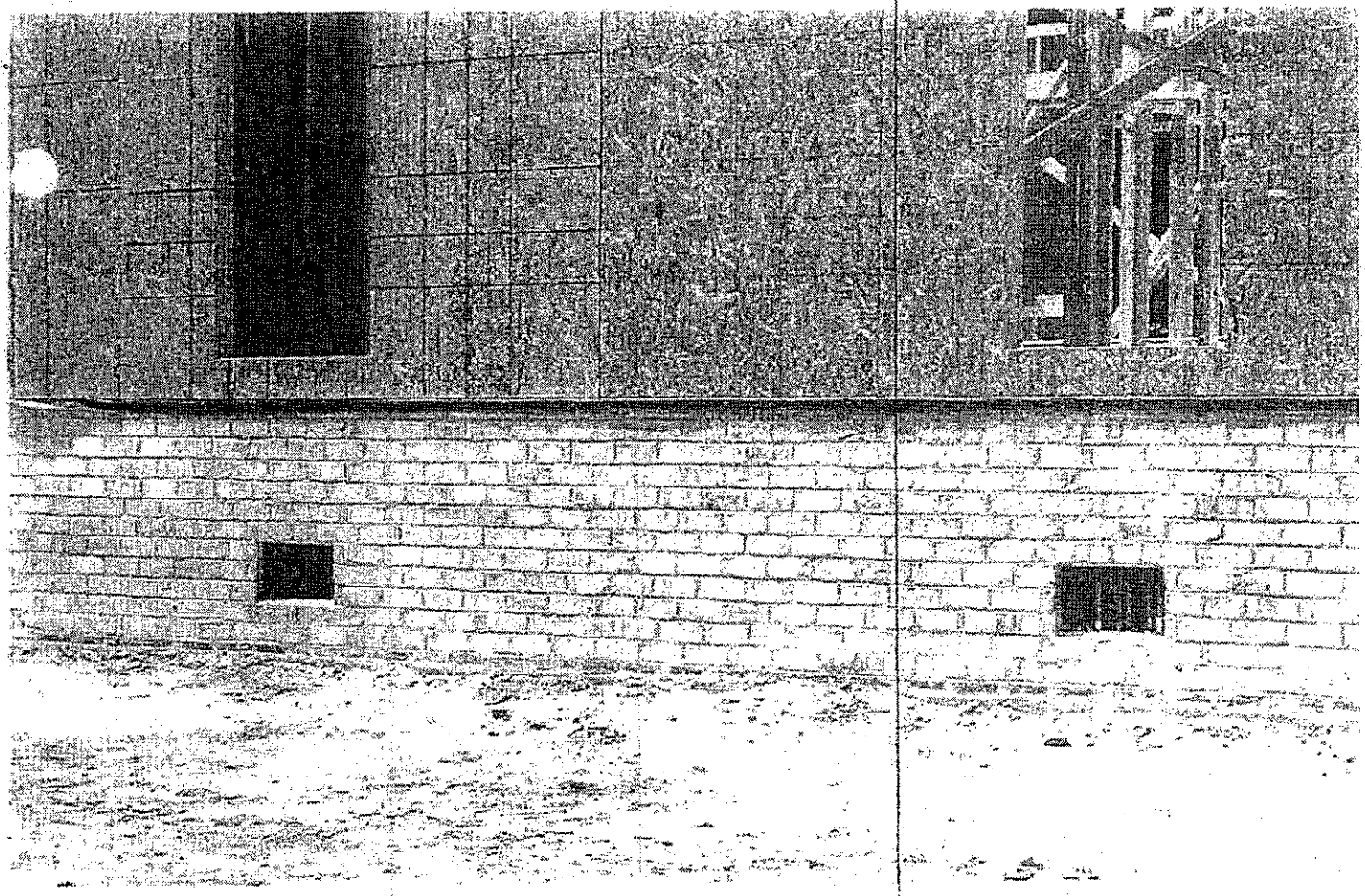

ANNOTATED SITE PLAN

Cut / Fill Volume Report

*Annotated by Leonard Jackson P.E. 10/16/2022

"SURVEYED AS IN POSSESSION"

1 of 1



# Requirements for Flood Openings in Foundation Walls and Walls of Enclosures

## Below Elevated Buildings in Special Flood Hazard Areas In Accordance with the National Flood Insurance Program

*NFIP Technical Bulletin 1 / March 2020*

FEMA

TB#1 1 of 2

When viewed from the outside, an enclosure with the interior grade or floor higher than the exterior grade may appear non-compliant with the installation requirements for openings because the openings appear to be too high above the exterior grade. Therefore, the final documentation of as-built elevations should note the difference in interior and exterior grades. For example, if the NFIP Elevation Certificate is used, the comments should indicate whether the openings are (or are not) within 1 foot of the higher of the two grades and should explain that the interior grade or floor is higher than the exterior grade. Without the explanation, NFIP flood insurance premiums may be higher than necessary.

**INTERIOR GRADE OR FLOOR ABOVE BFE**

When the interior grade or floor of an enclosure below an elevated building is entirely above the BFE, flood openings are recommended but not required. When the floor of an enclosure is above the BFE, the NFIP flood insurance policy will be rated using the enclosure floor as the lowest floor rather than the next higher floor above the enclosure. Installing flood openings in these situations will result in lower NFIP flood insurance premiums.

### 8.3.2 Sloping Sites

Buildings on solid perimeter foundation walls set into sloping sites present a special situation for the installation of flood openings. Careful attention must be paid to the following:

- The interior grade or floor along the lowest side of the building must be at or above the exterior grade across the entire length of the lowest side, and there must be positive surface drainage away from the building; otherwise, the enclosure will be considered a basement as defined by the NFIP.
- The bottom of each opening must be no higher than 1 foot above the exterior or interior grade immediately below the opening, whichever is higher (see Figure 13).
- For flood openings to perform their intended function, they should be below the BFE.

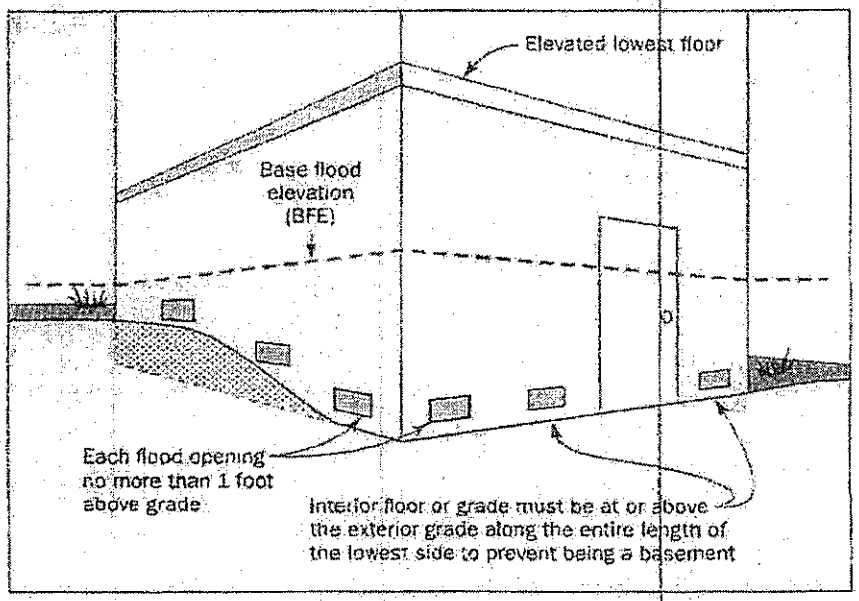
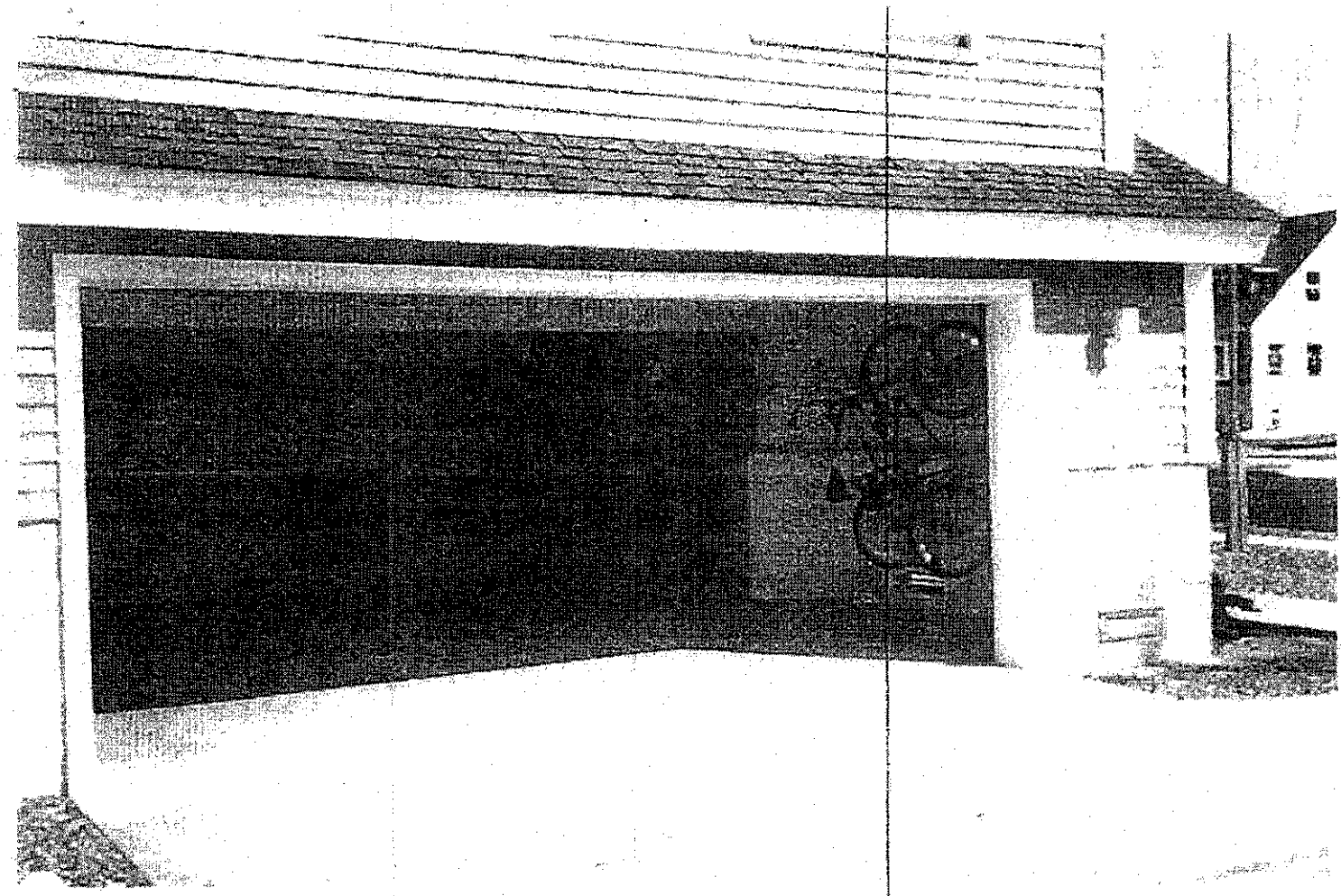



Figure 13: Flood openings in enclosure walls on a sloping site



TB#1 2of2



# Flood Damage-Resistant Materials Requirements

for Buildings Located in Special Flood Hazard Areas in accordance with the National Flood Insurance Program

*Technical Bulletin 2 / August 2008*

FEMA

TB #2

1 of 3

additional guidance, see Technical Bulletin 8, *Corrosion Protection for Metal Connectors in Coastal Areas.* Also see TPI/WTCA *Guidelines for Use of Alternative Preservative Treatments with Metal Connector Plates* for further guidance on metal plate connected wood trusses manufactured with preservative treated lumber (http://www.sbcindustry.com/images/PTWGuidelines.pdf).

## Construction Examples

### Buildings in Zones A, AE, A1-A30, AR, AO, and AH

Figure 1 illustrates a solid foundation wall (crawlspace) elevated to meet the minimum requirement that the lowest floor be at the BFE. Figure 2 illustrates framed walls that may be used for enclosures below the BFE that are used for parking of vehicles, building access, and storage.

To maximize allowable use of enclosures below the BFE, it is a common practice to extend the foundation a full story, even though that puts the lowest floor well above the BFE. In such cases, while the NFIP requirement is that flood damage-resistant materials be used only below the BFE, it is strongly recommended that such materials be used for all construction below the lowest floor. This will reduce flood damage to the enclosed area in the event flooding exceeds the BFE. For additional guidance on enclosures in A zones, see Technical Bulletin 1, *Openings in Foundation Walls and Walls of Enclosures Below Elevated Buildings in Special Flood Hazard Areas.*

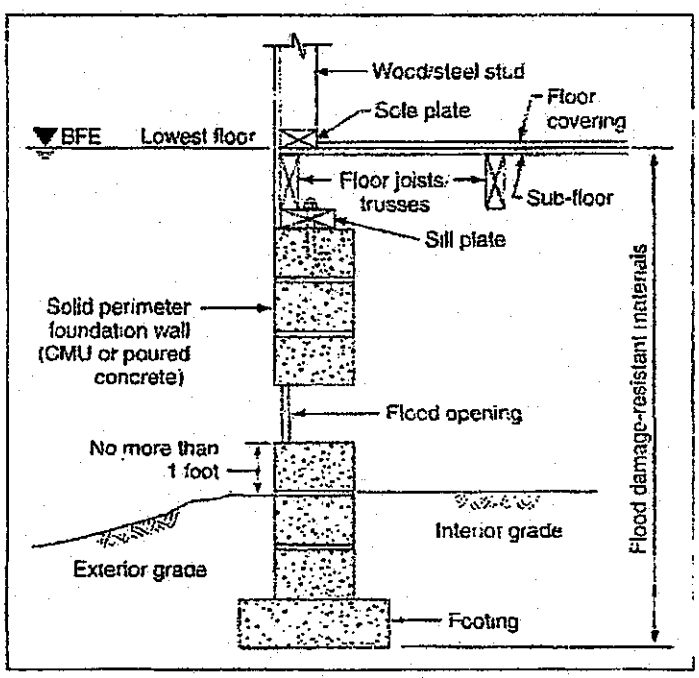



**Figure 1. Building elevated on solid foundation walls meeting the minimum NFIP requirements for Zones A, AE, A1-A30, AR, AO, and AH**



TB#2 2of3

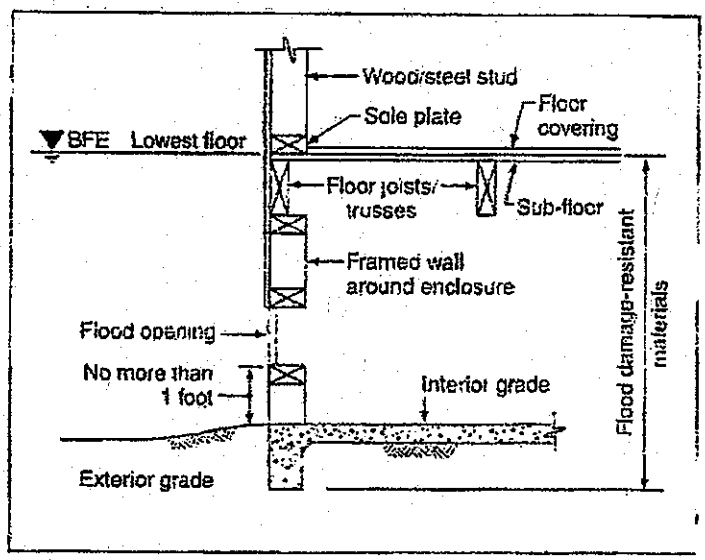



Figure 2. Framed enclosure under building elevated in accordance with NFIP requirements for Zones A, AE, A1-A30, AO, and AH

### Buildings in Zones V, VE, and V1-V30

The NFIP regulations require that the bottom of the lowest horizontal structural member of the lowest floor (usually the floor beam or girder) of buildings in Zones V, VE, and V1-V30 be at or above the BFE. Therefore, all materials below the bottom of those members must be flood damage-resistant materials. This requirement applies to lattice work and screening, and also to materials used to construct breakaway walls that enclose areas below the lowest floor. Depending on the design parameters selected, breakaway walls may remain in place during low-level floods and must be flood damage-resistant so that they can be readily cleaned and not deteriorate over time due to wetting. Figure 3 illustrates the requirement. For additional guidance on breakaway walls used to enclose areas under buildings in V zones, see Technical Bulletin 9, *Design and Construction Guidance for Breakaway Walls Below Elevated Coastal Buildings*.

## Additional Uses of Flood Damage-Resistant Materials

### Accessory Structures

Accessory structures may be allowed in SFHAs provided they are located, installed, and constructed in ways that comply with NFIP requirements. Some communities allow accessory structures that are limited to the uses specified for enclosures below the BFE: parking of vehicles and storage. As with other buildings, accessory structures below the BFE are required to be constructed with flood damage-resistant materials. In addition, accessory structures must be anchored to resist flotation, collapse, and lateral movement and comply with other requirements based on the flood zone. For additional information and requirements, contact the appropriate community permitting office.



TB #2

3 & 3

Gmail

Marek Gazda <gazdaconstruction@gmail.com>

# 800 Rushmore ave, Mamaroneck

1 message

**Marek Gazda** <gazdaconstruction@gmail.com>
To: John Kellard <jkellard@kelses.com>
Cc: Frank Tavolacci <ftavolacci@vomny.org>

Tue, Oct 25, 2022 at 1:29 PM

Hi John,

Attached is a revised site plan for 800 Rushmore Ave with notes and small adjustments to address your comments. We will drop off hard copies at the building department today. Please let me know if any additional information is needed.

These were your comments (I underlined my corrections):

> We received the October 17, 2022 submission for the referenced project. The proposed lowest finished floor will be greater than 2 feet above the BFE of elevation 12.0 which satisfies the FEMA regulations. The existing basement which is below the BFE is proposed to be modified by exposing the rear wall of the basement and providing free drainage. The former basement will be of flood damage- resistant materials, will include flood vents and be limited to Storage use. Free drainage will be provided through an 18 inch diameter pipe at elevation 7.2.
>
> The basement modifications will technically comply with the FEMA regulations for pre-FIRM structures with basements undergoing renovations in excess of 50% of its value. Future Homeowners however will likely be confused with a pipe directing flood waters to their home and will likely plug the pipe and install a sump pump. The Site Plan therefore should include a clear explanation of what the pipe is for and the need to maintain it unobstructed and free flowing in both directions. Also the Site Plan should explain the permitted use of the former basement area going forward.
>
> See Note # 3 & Note # 4 on Revised Site Plan
>
> The applicant is also proposing to raise the garage to elevation 14.0. Based on the grading provided this will result in a 10% grade entering the garage in the area cars will park. This is extremely steep for a residential parking area. The applicant could easily reduce the grade to 5% by maintain the existing 12.0 elevation within the driveway which will provide a much more manageable slope up to the garage. The driveway will also have a 3 foot high drop off from its edge in the vicinity of the garage. Either a railing should be provided of the area graded to a gentler slope.
>
> Garage Floor elevation to remain as approved. See Note # 2
>
> The applicant needs to provide a plan which shows the proposed filling within the floodplain as well as the compensatory storage provided to offset the lost floodplain. It would help if the plan were color coded ( per one foot intervals ) and included a chart which show the lost floodplain and compensatory storage at each elevation interval.
>
> Grades in flood plain to remain as approved. See Note # 1

Thank You.

Marek Gazda

Marek Gazda

800 Rushmore Ave

Mamaroneck, NY 10543

Date 10/17/2022

To: Village of Mamaroneck Building Inspector:

169 Mt Pleasant Ave

Mamaroneck, NY 10543

I am the owner of 800 Rushmore Ave in the Village of Mamaroneck. As you know we are currently doing renovation and addition work on our house. It was brought to our attention that the lower area of our house, that was existing and original to the house and is not part of our on-going renovation/addition project, may not be conforming with the current requirements for property in a flood zone.

We immediately contacted Leonard Jackson Associates (Consulting Engineers), that specializes in properties located in flood zones and FEMA regulated areas. I am attaching a letter from Mr. Leonard Jackson P.E. with proposed actions and recommendations to bring that lower area to comply with the current codes and regulations. Also attached is amended proposed site plan showing additional work required as per their recommendations.

Please let us know if you need any additional information.

That lower area in our house was always intended to be used as storage and is currently used to store materials, such as tiles and fixtures, etc., needed for our construction work. Providing the work as shown in attachments to this letter is putting a big financial burden on us, but we are committing to complete it with the completion of our current project before asking for Certificate of Occupancy for our house, which we plan to be in spring of 2023.

Sincerely,

Marek Gazda

PLEASE SCAN

## Frank Tavolacci

**From:** John Kellard <jkellard@kelses.com>
**Sent:** Wednesday, October 26, 2022 3:38 PM
**To:** Frank Tavolacci
**Cc:** dcinguina@kelses.com; Joe Cermele
**Subject:** RE: 800 Rushmore Ave. 220562

Hi Frank

I reviewed applicants resubmission dated 10/25/2022 and find that the applicant has addressed my comments of 10/24/2022 noted below. He will be leaving the garage at the elevation provided on the original approved plan.

John

**From:** John Kellard
**Sent:** Monday, October 24, 2022 9:57 AM
**To:** ftavolacci@vomny.org
**Cc:** Danielle Cinguina <dcinguina@kelses.com>; Joe Cermele <jcermele@kelses.com>
**Subject:** 800 Rushmore Ave.

Hi Frank

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The applicant is also proposing to raise the garage to elevation 14.0. Based on the grading provided this will result in a 10% grade entering the garage in the area cars will park. This is extremely steep for a residential parking area. The applicant could easily reduce the grade to 5% by maintain the existing 12.0 elevation within the driveway which will provide a much more manageable slope up to the garage. The driveway will also have a 3 foot high drop off from its edge in the vicinity of the garage. Either a railing should be provided of the area graded to a gentler slope.

The applicant needs to provide a plan which shows the proposed filling within the floodplain as well as the compensatory storage provided to offset the lost floodplain. It would help if the plan were color coded ( per one foot intervals ) and included a chart which show the lost floodplain and compensatory storage at each elevation interval.

Please let me know if you have any questions.

John

# VILLAGE OF MAMARONECK

OFFICE OF THE
BUILDING INSPECTOR

*Village Hall*
*Mamaroneck, N.Y. 10543*

TELEPHONE
914-777-7731

FAX
914-777-7792

*Address Reply to:*
*Building Department*
*169 Mt. Pleasant Avenue*

RECEIVED
OCT 13 2022
VILLAGE OF MAMARONECK
BUILDING DEPARTMENT

**REVISED PLAN APPLICATION**

**Date:** 10/13/22

**Permit No.** 22-0562 **Type of Original Improvement** Addition - Renovation.

**Section:** 9 **Block:** 85 **Lot:** 18

**Location:** 800 Rushmore Ave

**Applicant:** Coastline Mechanical **Contact Phone #** (914) 760-2049

**This Application is hereby made for the approval of the following amendment to the plans and specifications on file with the above numbered permit and subject to all the conditions, agreements and statements contained in the original application and permit. (All changes must be bubbled.)**

**Description of additional work:**
Existing basement to become storage only
Install floor vents and sump pumps.

**Estimate of Amended Value: $** 0

**Additional Permit Fee: $** _____ **Amendment Review Fee $** _____

**Residential: $17.00**
**Fee Based on Per $1000 of New Construction Cost**
**Commercial $ 30.00**

**Residential: $125.0**

**Commercial: $250.00**

**TOTAL DUE: $** 125

_____ **HERBY CERTIFY THAT THE ABOVE STATEMENTS ARE TRUE TO THE BEST OF MY KNOWLEDGE**

_____ **(2) Sets of Plans Received**

**Application Received By:** _____
**Approved By:** _____ **Date Approved:** _____

Rev:10-13-21