

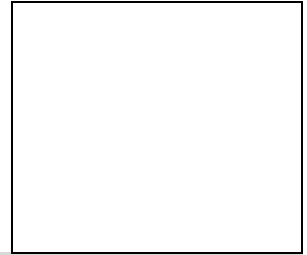


UPDATED MEETING POSTING

Original Posting Date May 17, 2021 Original Posting Number
TOWN OF NANTUCKET

Pursuant to MGL Chapter 30A, § 18-25

All meeting **notices and agenda** must be filed and time stamped with the
Town Clerk's Office and posted at least 48 hours prior to the meeting
(excluding Saturdays, Sundays and Holidays)



Committee/Board/s | Nantucket Historical Commission

Day, Date, and Time | Friday, May 21, 2021 at 10:00 AM

Location / Address | REMOTE PARTICIPATION VIA ZOOM Pursuant to Governor Baker's March 12, 2020 Order Regarding Open Meeting Law (Attached); the meeting will be aired at a later time on the Town's Government TV YouTube Channel
<https://www.youtube.com/channel/UC-sgxAlfdoxteLNzRAUHixA>

Signature of Chair or Authorized Person | Hillary Hedges Rayport, Chair

WARNING: IF THERE IS NO QUORUM OF MEMBERS PRESENT, OR IF MEETING POSTING IS NOT IN COMPLIANCE WITH THE OML STATUTE, NO MEETING MAY BE HELD!

AGENDA

Please list below the topics the chair reasonably anticipates will be discussed at the meeting

Join Zoom Meeting

<https://us06web.zoom.us/j/94332358504?pwd=N25KSGR2QldOeWFuc2tKUXcvaERGdz09>

Meeting ID: 943 3235 8504

Passcode: 770019

One tap mobile

+16465588656,,94332358504#,,, *770019# US (New York)

- Public Comment
- Administrative:
 - Approval of Minutes from 4/16/21 meeting
 - Discussion of in-person meetings
- Announcements
 - Flash updates on
 - Arthur Cooper Memorial
 - Preservation Exhibit & Symposium 2023
 - MHC Survey grant: Kick-off meeting for coordinators 5/25 via zoom
 - Letter sent re: 2 Mayflower Drive
- Protecting Historic Pavement
 - Preservation Institute Nantucket Pavement Survey
 - Request for Town of Nantucket owned historic resources policy

- Review of Stantec comments on our report
 - Mass DOT Cultural Resources Unit – Pavement Unit update
 - Observations about Broad Street work
- 6 Gull Island: Historic Tax Credit application
 - Determination of eligibility
 - Letter of support
- Section 106 Reviews
 - Sewer Main #3
 - Sparks Ave
- Reuse and Salvage of Historic Material
 - Proposal for WPI student project
- Historic Preservation Tax Credit Course
- 2021 ATM Articles
 - Re-submittal of endorsement of pool article
 - Open discussion of any other articles.
- Other Business
 - Joint meeting with HDC
 - Reappointments to NHC
 - Q1 Update to SB
 - Developing NHC guidelines, rules governing operations
 - Statement of what NHC does
 - What we work on
 - How we operate

Future meetings (10am)

Friday June 18

Friday July 16

Friday August 20

Friday September 17

Friday October 15

Friday November 19

Friday December 17

Minutes of Nantucket Historical Commission Meeting – April 16th, 2021

Establishment of Quorum

Commissioners Present: Hillary Rayport (Chair), Angus Macleod (Vice Chair), David Silver (Secretary) Mickey Rowland, Georgia Raysman, Clement Durkes, and Tom Montgomery.

Guests: Kevin Kuester, Dawn Holdgate, Ken Beaugrand, and Mary Bergman.

The meeting was called to order with a quorum present.

3.) Public Comment: N/A

-Approval of Minutes from 1/29 and 3/19 meeting

Motion to accept as-is: Tom

Second: Georgia

All in favor via roll call

4. Announcements

- Confirm Future Meeting Dates

Holly: Will run by the Town. Friday seems to be clear for Town's purposes. Third Friday of each month at 10 am is what is on the table.

- NHC Evaluation of ATM Article 82

Kevin Keuster presented to the Commission regarding ATM Article 82.

H. Rayport recused herself due to having assisted with the development of this article.

The article is intended to ensure that contractors specify the smallest allowable size for street signs on Nantucket. Bright, day glow yellow, diamond warning signs are not preferable unless near school crossings or where the MA DOT deems it appropriate. Simplified, this is an attempt to keep the roadways less cluttered with signs.

Motion to endorse the article: Tom

Second:

All in favor via roll call (H. Rayport recused)

5. Historic Tax Credit Application: 2 Mayflower Circle

Note: As the Local Historical Commission, we support historic preservation tax credits (HTC). Holly Backus has received a request from Epsilon, a consultant assisting the owner of 2 Mayflower Circle, requesting the NHC to support their application to the MHC for a State HTC. The Commission reviewed/discussed the application and the property's historic narrative.

Background: Only properties that are "contributing structures" to the Nantucket National Historic Landmark (NHL) are eligible for tax credits. In order to be considered a "contributing structure" the building must have been constructed during the NHL's periods of significance (which for the Nantucket NHL is through 1975). The property must also must meet the criteria for listing on the National Register of Historic Places, as defined by the US Park Service.

The structures at 2 Mayflower have been moved from their original location. The application for the HTC (Part I) includes a letter from the National Park Service stating they are eligible for listing on the National Register of Historic Places and are pre-1975, contributing structures (main house, garage, and cottage). Originally located near Shimmo Pond, the main house and cottage were moved to Mayflower Circle in 2007. The Cottage was originally located near Angola Street. The commission reviewed the MHC Inventory "Form B" and the "Part I" of the HTC application (Part II was not provided) as prepared by the consultant, for the applicant. The owners are seeking the Commission's support for Part I of the application.

Discussion: The commission discussed that contributing structures should be preserved in-situ and requests that they be moved off site should be denied by the HDC, except in rare extenuating circumstances. The house and garage were approved to be moved in 2007. At that time, they were represented to have been built in the 1980s. This would have made them non-contributing structures eligible to be moved. Going forward, accurate survey data will assist the HDC with evaluating requests for demolition and move off. The Cottage was known to be a 20th century structure when it was moved in 2007. However, at that time the NHL registration had not been updated to include the 20th century as a contributing period for Nantucket. So, it was allowed by the HDC to be moved. The commission discussed that while it would have been better to have the structures remain on their original foundations, at least they had not been demolished.

The Commission agreed that while the historic integrity had been degraded, the structures could still be considered contributing and eligible for HTCs. The commission noted several distinctive attributes of the house and cottage had been lost, when compared to the original photos. These features are candidates for reconstruction as part of the qualified project (to be described in Part II). These features include the extended center chimney, shutters and picket fence on the house, and the Dutch door with strap hinges and visor on the cottage.

Motion for Chair, Vice Chair, and Staff to generate and mail a letter of support confirming the Park Service judgement that these structures are contributing to the NHL, with special request to reconstruct the missing distinctive features, and also note that buildings are preferably preserved on their site.

Motion to endorse the letter: Angus

Second: David

All in favor via roll call

6. Preservation Exhibit (Preservation Week, May 2023)

Esta Lee Stone briefed the group regarding the Preservation Exhibit: *History and Future of the Preservation Movement on Nantucket*.

There was a brief discussion of the economic value of preservation. The team is working to define their mission. The group is in the process of dividing the work into stages and has a list of potential consultants.

Groups Represented: NPT, NHA, Sconset Trust, NHC, PIN, the Atheneum, Museum of African American History, Maria Mitchell.

University of Florida will be the project administrator: this will open door to fundraising, allow for the signing of contracts, insurance, etc.

May of 2023 is the more reasonable timeline since there is so much work to be done.

Part of the objective is to have the different preservation groups, non-profits and municipal groups to collaborate and working together.

Announcements Continued:

Resiliency Guidelines

Design Guidelines Draft is available on the Town's website for review. We will need to provide our comments by end of the month. We are going to be utilizing this document, so all Commissioners ought to familiarize themselves with it.

Planning documents are always evolving. In conjunction with this project, we are required to have a public event. Lisa Craig putting that effort on. There is going to have a lot of different involvement from preservation and planning world.

Kicking off on Earth Day for a 3-day event. What are other coastal communities doing around the world to combat sea-level rise?

Register for event on Town's website. Any questions direct to Holly.

World Monument Watch

NPT was before SB asking for support for WMW fund. Select board supports this nomination. World Monuments Fund is a global heritage organization that has been around since the 1990's. Assists with challenges regarding climate change, cultural tourism, etc.

If we receive the nomination, we may get funding for subject matter experts. This would be very beneficial for Nantucket. Special thanks to NPT.

MHC Survey Grant

Update: NHC received an acceptance letter from MHC. Requested us to give the formal acceptance to the Town of Nantucket.

We are waiting for State Historic Preservation office for next steps/orientation before we can begin to generate the RFQ.

CLG Coordinator, Chris Skelly, has put in his notice to leave the state. The Commission is very appreciative of Chris' time and assistance.

Historic Tax Credit Course for Realtors

Update: David and Hillary are working on the objective of offering a course to realtors on using Historic Preservation Tax Credits. We are reaching out to NAREB about developing an accredited course that can be taught to realtors on Nantucket. We will continue to pursue the creation of this course and will hope to launch in the Fall of '21.

7. Section 106 Review: Complete Streets Funding 'Sparks Avenue'

The review is only for the Sparks Avenue portion of the project. It does not include the Williams/Pleasant Street portion that we discussed.

An archaeological reconnaissance survey is being conducted.

The NHC's concerns about the rural corridor (along Sparks) remains the same: request there should be green space between the road and the proposed multi-use path.

Sewer Main Project

MHC concluded that the project would have no adverse effect on the NHL.

We have requested consulting status and the sewer department has continued to be responsive and cooperative.

They have asked us to hold a meeting after the 75% plans are completed (May 2021).

Ken asked that Holly create a memo to outline what the NHC hopes to see in these historically sensitive areas and that we plan to work with the sewer department as well as the DPW.

We want to have a proper survey so that the contractor can draw up an advanced plan to avoid any 'surprises' at the job site.

8. Announcements Continued

WPI Students Proposal: Town supports NHC idea to request a WPI project to look at salvage/re-use and housing sustainability. Proposal due in May. Will be presented at next meeting.

Sidewalks and Request for a Policy:

Holly: Town is in the process of writing a policy (which we have requested). The NHC is very pleased that Holly will be assisting in the writing of the policy.

Update: Holly is going to take point on this as the Town develops a policy.

Reappointments to NHC

Mickey, Angus and Tom will renew, but Don will not. We want to try and broaden/diversify the Commission so reach out to your friends. Applications due May 28th.

Nantucket Island History and Preservation Associations
Collaborate to Create
An Exhibit and Symposium on the History and Future of Preservation on Nantucket
Expected opening: May 2023

[May 26, 2021] Nantucket's preservation and history organizations, both municipal and private, are collaborating to create an exhibit and symposium that will explore the past, present, and future of the preservation movement on Nantucket.

Participants in the Preservation Collaborative are: The Town of Nantucket Historical and Historic District Commissions and Department of Culture and Tourism, The Nantucket Preservation Trust, the University of Florida Preservation Institute Nantucket, The Nantucket Historical Association, the Nantucket Atheneum, the Museum of African American History, the 'Sconset Trust, and the Maria Mitchell Association. Every participating organization has appointed a staff member or board member to the collaborative. The exhibit and symposium will take place on Nantucket and is planned to launch during Preservation Month (May) 2023, at a still to be determined venue.

In 1955, Nantucket became one of the first two Historic Districts in the Northern United States. At the time, legal protection of historic resources was both visionary and uncommon. Today, nearly every town in Massachusetts has a Historical Commission and has taken steps to protect its cultural resources.

"What we take for granted on Nantucket today is the result of deliberate and difficult work dating as far back to the late 19th century and continuing through the 1970s. The exhibit and symposium will explore the history of the preservation movement, and how Nantucket has benefited from careful protection of historic resources," said Hillary Hedges Rayport, Chair of the Nantucket Historical Commission and Co-Chair of the Preservation Collaborative Steering Committee.

The exhibit will also explore the future of preservation. "In our lifetimes, we will need to make important decisions about what to save, and how to save it. This exhibit and symposium will help Nantucket understand and debate these important questions," said Marty Hylton, Historic Architect for Climate Change Adaptation, National Park Service, and former Director, Preservation Institute Nantucket. Mr. Hylton serves as Chair of the Preservation Collaborative Research Committee.

"Nantucket is blessed with a rich and fascinating history, and many active organizations dedicated to protecting and interpreting that history. A foremost objective of the Preservation Collaborative is to bring all of these organizations – municipal and private non-profit, together to tell a shared story," said Esta-Lee Stone, Project Manager and Co-Chair of the Steering Committee.

Updates will be forthcoming. Please contact Esta-Lee Stone estastone38@gmail.com with questions or comments.



Planning and Land Use Services

Building • Historic District Commission • Planning Board • Zoning Board of Appeals

April 27, 2021

Ms. Brona Simon
State Historic Preservation Officer
Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, MA 02125

Re: Application for Massachusetts State Historic Rehabilitation Tax Credit for 2 Mayflower Circle, Nantucket, MA

Dear Ms. Simon,

I am writing in support of the Massachusetts State Historic Rehabilitation Tax Credit application for the house and garage located at 2 Mayflower Circle. The Nantucket Historical Commission determined at their April 16th meeting that the house, garage, and adjacent 1930s cottage at this location are recognized as contributing to the Local Historic District and National Historic Landmark of Nantucket.

Specifically, the period of significance for Nantucket's historic buildings includes the 20th century up until 1975, for structures built in the revivalist style of earlier periods of significance. The 20th century was recognized as a period of significance when the National Park Service updated Nantucket's National Historic Landmark designation in 2012, and the culturally significant preservation movement on Nantucket in the 20th century was included. In 2007, the Nantucket HDC permitted the house, garage, and cottage to be moved, and at that time, the NHL did not recognize the contribution of 20th century structures. Moreover, the house and garage were believed to be built in 1987, a period which is outside of the period of significance. Fortunately, these buildings were salvaged from demolition and relocated. For this reason, the community can recognize them for what they are today. Because of the applicant's careful research, our community is now aware that the house and garage were in fact built in 1967, not 1987.

Moving a historic home with all its contributing features intact is a challenge, and significant buildings are always preferably preserved on their site. Moving historic buildings is a last resort of salvage. However, embarking on a historic rehabilitation of the structure at 2 Mayflower Circle, will present an opportunity to reconstruct the primary embellishments intended to evoke a sense of the "Colonial New England" that clearly provided the inspiration for the buildings in 1967.

These details include the shutters, picket fence and tall center chimney of the house. On the cottage, these details include the split door with strap hinges and the visor over the door, all as documented in photographs prior to relocation of the buildings. The Commission encourages these features be re-instated as part of the restoration program.

The Nantucket Historical Commission is encouraged that the proposed rehabilitation work will comply with the Secretary of the Interior's Standards for Rehabilitation and appreciates the applicant's research. As a new member of the Certified Local Government Program, the Town of Nantucket is thankful for this proposed project and asks for your favorable consideration for the State Historic Rehabilitation credits for these contributing structures.

Sincerely,

Holly E. Backus,
Preservation Planner
Local CLG Coordinator

cc: (via email)
Andrew Vorce, AICP, Nantucket Planning Director
Ray Pohl, Chair, Nantucket HDC;
Hillary Hedges Rayport, Chair, NHC
Erin R. Doherty, Preservation Planner, Epsilon Associates, Inc.

Nantucket Community Preservation Committee
Grant Application FY2021

SYNOPSIS

Project Title: Historic Streetscape Preservation and Rehabilitation Plan

Name of Organization: Nantucket Preservation Trust in collaboration with
University of Florida Preservation Institute Nantucket

Synopsis of Project:

The Nantucket Preservation Trust (NPT) is collaborating with the University of Florida's Preservation Institute Nantucket (PIN) and the Nantucket Historical Commission (NHC) to complete a Historic Streetscape Preservation and Rehabilitation Plan. The partners propose to work closely with the elected officials and administration of the Town of Nantucket, residents, and other stakeholders to holistically record, evaluate, and study the historic streetscapes of the core historic district and develop a Historic Streetscapes Preservation and Rehabilitation Plan for preserving their character defining features.

Project goals:

- Document historic streetscapes including character defining features and materials;
- Assess existing conditions of the various components and materials of the streetscapes and their overall state of repair;
- Conduct archival research to map changes to streetscapes overtime;
- Partner with the Town of Nantucket elected officials and administrators, residents, and other stakeholders in developing an overall approach for preserving the streetscapes;
- Prepare a Historic Streetscapes Preservation and Rehabilitation Plan compiling documentation, summarizing existing conditions assessment and archival research, and offering prioritized recommendations;
- Create an interactive, cloud-based visual database of historic and contributing contemporary features, from pavement to street furniture; and
- Disseminate information and help raise public awareness of the need to preserve the streetscapes and overall historic urban fabric of Nantucket.

Nantucket Community Preservation Committee
Grant Application FY2021

APPLICANT INFORMATION

Project Title: Historic Streetscapes Preservation Master Plan, Phase 1

Name of Organization: Nantucket Preservation Trust in collaboration with
University of Florida Preservation Institute Nantucket

Address: 11 Centre Street, P.O. Box 158
Nantucket, MA 02554

Location: The Old Historic District in Town

Telephone: 508-228-1387

Fax: 508-228-1371

E-mail: info@nantucketpreservation.org

Web site: www.nantucketpreservation.org

Contact Person: Michael May
Executive Director
mmay@nantucketpreservation.org

Federal Tax ID#: 04-3394648

APPLICANT BACKGROUND

History:

The Nantucket Preservation Trust (NPT) is a nonprofit, membership-based organization with a focus on the preservation of the island's historic architecture. We provide programs that explore the architecture and history of the island and strive to increase awareness about the importance and fragility of our architectural heritage. Of special concern are Nantucket's historic streetscapes that help to establish Nantucket's sense of place.

NPT was established in 1997 and today has 4 full-time employees, a 24-member board of directors, nearly 400-active members, and 100-plus volunteers. Overall, we have over 3,000 supporters consisting of full-time and summer residents and seasonal visitors who participate in our programs and events and have signed up to receive our mailings and e-blasts.

NPT reaches out to all segments of the population to broadcast about the importance of Nantucket's architecture, and provides a host of programs to achieve its goals. We offer educational programs, such as tours and lectures on Nantucket history, architecture, and neighborhoods. Our house marker program provides historic information on properties worthy of preservation and enables the passerby to learn a structure's date, its original owner, and his or her occupation, or other interesting information. NPT completes historic research and publishes books celebrating history and architecture, serves as a preservation advocate at public meetings, and works to protect resources from insensitive renovations by placing easements on historic properties—currently holding 20 preservation restrictions. Even NPT's fundraising events are tied to education—designed to show that historic houses can accommodate modern living while retaining their historic integrity. In recent years, our programs have also provided owners with needed technical assistance—providing resource information on preservation practices. NPT offers free house consultations to assist property owners with preservation-related issues that also can provide information on a building's important features and evolution. In addition, NPT developed a scholarship program to train those interested in learning preservation carpentry or fine-tuning skills to ensure that traditional building methods—so important to Nantucket—remain a vital part of old house restorations.

To:	Robert D. McNeil III, P.E., MPA	From:	William Scarpati, Project Manager 65 Network Drive Burlington, MA 01803
	188 Madaket Road Nantucket, MA 02554		
File:	179410994	Date:	February 6, 2021

Reference: Historic Pavement Review and Comments

The Town of Nantucket retained Stantec Consulting to review, *Preserving Historic Pavement in Nantucket, Information and Guidelines for Preservation and Maintenance*, published in 2021 by The Nantucket Historical Commission (NHC).

The report includes a section titled; *Key Preservation Engineering Observations and Recommendations* that summarizes key elements for consideration in design and rehabilitation of cobblestone roads. Key aspects of the recommendations are reprinted below for convenience and our comments summarized as follows:

1. NHC Report Recommendation - A properly designed and constructed cobblestone road is strong and suitable for modern loads including truck traffic.

Stantec Response

- Stantec concurs and notes that recent roadway projects have been designed/constructed in accordance with this recommendation. Cobblestones with jointing materials behave most similarly to unit concrete pavers. A pavement design procedure is available for unit concrete pavers. This design procedure was used to assess the structural capacity of the cobblestone designs currently used, for the highest traffic loading in Nantucket. The analysis for a 30-year design life indicates the following structure is required:
 - 12" thickness of cobblestones and stone dust bedding combined on,
 - 4" Granular Dense Graded Sub-Base on,
 - 8" Granular Base on a sand subgrade with fair drainage, or 4" sand subgrade with good drainage
- Stone dust and dense graded materials are Massachusetts Department of Transportation (MassDOT) specified materials comprised of hard granites that have been mechanically crushed and graded for interlocking characteristics.
- Stone dust has been used as a base for sidewalk and cobblestone for the last 30 years in Nantucket according to local contractors. Three years ago, Stantec provided Nantucket Public Works with several details for bedding and sub-base options, the

Reference: Historic Pavement Review and Comments

Town choose to continue with their use of stone dust as specified according to Town records. Performance of the earliest Stantec projects from 2017 indicates that stone dust is performing well.

- Increasing loads placed on roadway pavements with the number and weight of trucks overtime has required adjustments to pavement structure design configurations in order to provide a reasonable expected service life.
- 2. NHC Report Recommendation – Historically, Nantucket’s native “dirty sand” which is a natural combination of sand and clay was used... Analysis and testing of potential bedding material including native sand is recommended as a priority.

Stantec Response

- No particle gradation of this “dirty sand” is offered to evaluate this recommendation beyond the bullets shown below.
- All road and sidewalk construction aggregates are imported by barge as there are very limited native sands currently available on Nantucket island for use in construction. As noted above, 12” stone dust bedding and 4” dense graded sub-base is required to accommodate modern traffic loading. Native sand does not have the same structural bearing characteristics as granite sourced construction materials, nor is it well graded without mechanical sifting and blending.
- Stone dust has been specified for bedding and joints by the Town according to our records since at least the 1980’s. Performance of the earliest Stantec projects indicates that stone dust is performing well. The dust remains anchored between the stones and the stones remain anchored. No variation in surface geometry has been observed in freeze conditions indicating there is no frost heaving. Due to proven performance and material availability the continued use of stone dust is recommended.



Reference: Historic Pavement Review and Comments

3. NHC Report Recommendation – The current practice of setting cobblestones in stone dust is not recommended, because most stone dust used in paving does not drain well.

Stantec Response:

- While gravel and cobble roads are semi-impervious, they rely heavily on open/closed drainage systems to gather and discharge most surface water runoff by means of crowning the road, diverting off the shoulder, and into a swale or into the curb line/gutter draining to a closed, catch basin system.
- As noted above, well graded material is required to support modern traffic loading. Rounded cobblestone pavements behave like a ‘gravel road’ which is comprised of well graded materials including fines or dust to interlock and bind road materials together to resist traffic loading.

Note, pavement crown for drainage runoff and use of uniform sized, rectangular pavers with tight joints.

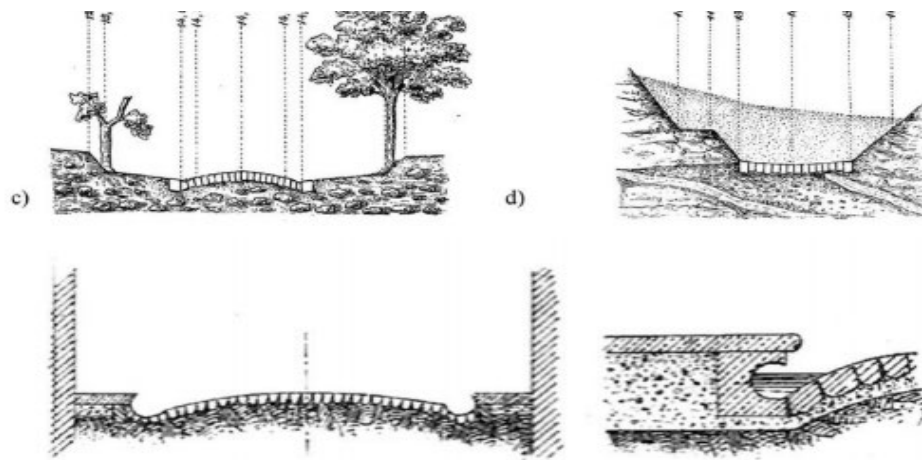


Figure 12 – Several Historic Cross Sections of Stone Pavements.
In Garilli and Giuliani, original period details from Cantalupi,⁹ 1886 (top two images)
Lanino, 1898 (bottom two images).

- The criteria to lock joint materials in place on cobblestone roadways has some similarities to the surface of a gravel road. On gravel roads it is recommended that the surface material have some fines to hold the sand and gravel in place. Work at the California Pavement Research Center, Davis, indicates gravel road performance is dependent on particle size distribution (grading). To maintain stability of the materials at the surface and to minimize dust, the inclusion of fines (200 sieve) that are plastic (PI is greater than zero) is recommended. The recommended plastic fines

Reference: Historic Pavement Review and Comments

content for a gravel road is in excess of 10%. For a sand with minimal gravel, a fines content in the order of 20% with a Plasticity Index (PI) between 7 and 14 is required to help retain the jointing sand between the cobbles. Generally, sands with a fines content greater than 10% have a low permeability with minimal infiltration of water into the cobble pavement structure. The stone dust used meets the criteria for fines content to retain sand particles in the joint. There would be virtually no difference in the infiltration of water into the cobble pavement for a stone dust joint bedding/filler or “dirty sand” bedding and joint filler. As stone dust is most readily available and it meets the fines criteria for sand particle retention the continued use of stone dust is recommended.

4. NHC Report Recommendation – Developing a specification and supply of appropriate bedding material is critical to success.

Stantec Response:

- Stantec concurs and has attached our recommended construction details and notes the Town is already using (i.e., MassDOT specified stone dust as bedding and joint filler material) as a means of defining appropriate material. In pavements composed of cobblestones or concrete pavers the most significant concern related to the use of stone dust is degradation of the joint filler. Stone dust derived from sedimentary bedrock is susceptible to degradation due to its low hardness. Stone dust originating from granites (common to New England sources) has a high abrasion resistance, therefore does not degrade like sedimentary bedrock and is not a concern. As the stone dust breaks down, the finer particles are subject to long term erosion. This results in loss of interlock between the pavers/cobblestones and underlying support. Use of granite derived stone dust extends the time before erosion and the loss of interlock would be a concern.
- The bedding and joint filler is a critical component of pavers and cobbles as it provides interlock between the cobbles to support traffic and retain the cobbles. To maintain this interlock, it is critical that the joint filler material be retained in the joint and, also not degrade over time. On a cobble pavement the gap between stones varies significantly, more than in a manufactured paver or block. Wider joint openings require a well-graded joint filler gradation that locks the particles in place, so they are not eroded out. Stone dust meets this criterion.
- The Interlocking Concrete Pavement Institute (ICPI) concrete paver specifications provide guidance in this respect. Specifications include gradations and material

Reference: Historic Pavement Review and Comments

properties for bedding and jointing material. Stone dust recently placed was tested for particle size analysis. The results are presented in the table below. The gradation specification requirements for jointing sand and bedding sand as recommended by the ICPI are also included.

Sieve Size (mm)	Stone Dust Percent Passing	Jointing Sand Concrete Paver Specification	Bedding Sand Concrete Paver Specification
3/8 (9.5)	100		100
#4 (4.75)	98	100	95-100
#8 (2.36)	73	95-100	80-100
#16 (1.18)	51	70-100	50-85
#30 (0.600)	39	40-75	25-60
#50 (0.300)	31	10-35	5-30
#100 (0.150)	23	2-15	0-10
#200 (0.075)	17	0-5	0-1

- As noted above, retaining the joint filler material is one of the most critical elements to the long-term performance of pavers or cobblestones. If the joint filler material erodes out from the joint the cobblestones will no longer be interlocked and movement of individual stones can occur. The stone dust used in Nantucket is similar in gradation to that specified by the ICPI with some variation. The biggest difference being with the #200 sieve where the percent passing for the material specified in Nantucket is much higher, yet desired in the bedding and within wide, irregular joints where the material acts as a gravel road. As noted earlier, Davis, indicates gravel road performance is dependent on particle size distribution (grading) and inclusion of fines (200 sieve) in excess of 10%.
- This research confirms a graded sand as noted in the table above works and the stone dust gradation being used is finer than the recommended specification on a few sieve sizes. Indicating the material is less permeable, minimizing migration of surface water through the bedding sand. Gradation analysis of the granular dense base indicates it also has low permeability meaning both materials have low permeability. There would be no benefit in changing the bedding material from stone dust to “dirty sand” with a higher permeability gradation. Unless the granular dense base material is changed in unison yet required to withstand present day traffic loading.

February 6, 2021

Robert D. McNeil III, P.E., MPA

Page 6 of 12

Reference: Historic Pavement Review and Comments

- Furthermore, (ICPI) concrete paver specifications are for uniform blocks with tight joints, wider joints require larger aggregates, well graded with sufficient fines to 'glue' the joints.

Brick Crosswalk and Belgian blocks in between were installed in 2019 at the intersection of Straight Wharf and Easy Street using stone dust bedding material. There has been no settlement and storm water runoff drains to the catch basin as intended.



- A visual review of recent cobblestone placements with stone dust indicate the cobbles have remained at the same vertical point indicating the stone dust is not breaking down under loads, cobbles are not moving vertically, and performing acceptably.

Reference: Historic Pavement Review and Comments

5. NHC Report Recommendation – The shape of the stone is important...

Stantec Response:

- Concur. Availability of stones with suitable geometry is a significant concern. Elongated, cobbles with flat tops are not readily available like granite pavers. Rounded cobblestones need to be hand selected and stacked for use or re-use in roadway cobble reconstruction. Many of the proper dimensioned stones in Nantucket have been dispersed since the 1960's through utility work and maintenance activities that did not salvage the cobbles. Several in-Town cobbled roads have been paved over the years. Many properly sized stones that have loosened and 'raised' to the surface likely were removed off site and replaced with spherical, round stones. It is important to properly orient and align stones installing them with the long axis vertical.
- DPW occasionally harvests cobblestones during repairs to or utility construction projects from cobblestone roadways the Town long ago paved over. They maintain a stockpile at DPW yard to draw from for cobblestone reconstruction projects which provides adequately shaped and sized stones to supplement areas of need.

6. NHC Report Recommendation – Curbs require a strong support to resist turning over...

Stantec Response:

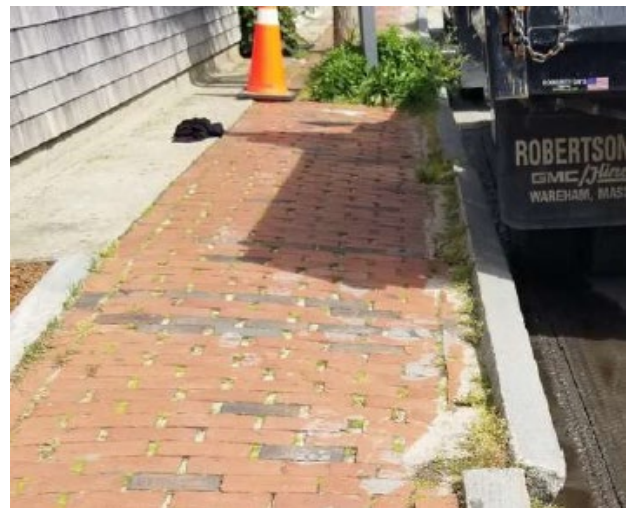
- Concur. Support for stone curbs is provided using Massachusetts DOT standard drawing E 106.3.0 download ([mass.gov](https://www.mass.gov)) page 22, with additional concrete on backside of the curb to stabilize shallow curbs. This technique was specified due to proven performance and re-use of existing shallow curb stones. Resistance to dislodging is necessary, as errant wheel impacts can dislodge the stone curbs if they are not secured by the concrete. The concrete support referenced above is open at the bottom and is not U shaped. Water is able to drain through to the base.
- U shaped concrete saddles are not used to support the stone curbs. As noted in the report, U shape saddles may act as an 'ice cube tray', trapping water/moisture in the saddle with the potential for freezing and cracking. Freeze thaw of water in the saddle and the potentially saturated schist a metamorphic stone can cause deterioration. We do not recommend following this methodology.
- Re-use of existing historic and schist and granite curb stones, which are typically quite shallow, makes it extremely difficult to comply with MAAB/ADA regulations. Often curb stones need to be raised to achieve compliant slopes from back of sidewalk to the inside of the curb stone, while maintaining sufficient lateral support

Reference: **Historic Pavement Review and Comments**

at the bottom side of curb from concrete reinforcers. Since these existing stones tend to run shallower (on average 4" - 12" deep) and in some cases, the depth is different on either end of the stone. Town policy is to re-use as much of these stones as possible. If the stones are too shallow to achieve proper ADA lines and grade while maintaining road profile and drainage inlet elevations, these stones may be relocated and reused as ramp threshold(s) or other flush surface applications within the public right of way, because the limited depth of stones, even using concrete, are insufficient to maintain stability over the long-term.



Shallow historic schist curb, likely unable to be re-used in this location.



Newer granite curb to be re-used in this location.

7. NHC Report Recommendation – Historic curbs should be set with a sacrificial barrier...

Stantec Response:

- As noted above. The stone curbs need to be in intimate contact with the supporting concrete to ensure stability. Bond and adhesion are needed, especially with older historic materials, to prevent tip-over, and maintain stability for new cobble road work. To preserve and re-use existing shallow historic curb stones, where less than a 6" depth of lateral concrete reinforcement support is not available, curb surface area is more crucial to be in direct contact with fresh concrete to maintain bond for long-term stability. We do not recommend the use of sacrificial barriers.

Reference: Historic Pavement Review and Comments

8. NHC Report Recommendation – Restoration and rehabilitation of a sidewalk should be planned together with restoration of the street...

Stantec Response:

- Concur and doing this. The majority of the projects Stantec has been associated with have been roadway resurfacing and sidewalk reconstruction. The Department of Justice published its revised regulations for Titles II and III of the Americans with Disabilities Act of 1990 “ADA” in the Federal Register on September 15, 2010, which include the 2010 Standards for Accessible Design “2010 Standards” or “Standards”. Section 5.151 of 28 CFR Part 35 (i) states:

(1) Newly constructed or altered streets, roads, and highways must contain curb ramps or other sloped areas at any intersection having curbs or other barriers to entry from a street level pedestrian walkway.
- The United States Department of Justice has ruled that resurfacing is an alteration and must provide curb ramps on resurfaced streets. Nantucket Public Works reconstructs all the sidewalks and provides curb cuts on all resurfaced streets while considering other influences like historical significance. This greatly improves accessibility and safety for those who use it. All construction must comply with Massachusetts 521 CMR and the Americans With Disabilities Act (ADA) with regard to slopes.
- The Nantucket Public Works has directed Contractors to preserve and re-use existing historic roadways and sidewalk materials, as technically feasible, to maintain Nantucket’s historic look including curbing, brick and stone pavers. In most cases reconstruction of sidewalks includes resetting existing curb and brick in the same location. Damaged bricks are replaced with new bricks. New bricks are procured from Glen Gery or H&S, to match existing.
- There are also times when the sidewalk was widened such as Easy Street and Straight Wharf where the new bricks were mixed with old bricks to achieve a historical and equitable brick blend including new tactile bricks for the visually impaired and blind that follow modern day universal design. Support for detectable warning panels is provided using Massachusetts DOT standard drawing E 107.6.5 download ([mass.gov](https://www.mass.gov/info-details/detectable-warning-panels)) page 32.
- The NHC report suggests the use of MAAB waivers as necessary and routine when working in historic districts. We disagree. These variances are not easily granted nor does the age of infrastructure and historical setting matter. The law states that when

Reference: Historic Pavement Review and Comments

major roadway alterations are made Commonwealth communities are required to provide accessibility including smooth surfaces and stringent slope requirements. The Mass Architectural Access Board Guidance is below. "In instances where compliance with the Board's regulations appears impracticable, you have the right to apply for variance as laid out in 521 CMR 4.1."

<https://www.mass.gov/architectural-access-board-variance>

- Variances are granted for very specific reasons as follows:
 - Technologically infeasible, or
 - Would result in an excessive and unreasonable cost without any substantial benefit for persons with disabilities.

<https://www.mass.gov/guides/applying-for-an-aab-variance#-gathering-your-documents->

- Consideration for utilizing the Lidar survey undertaken by Preservation Institute Nantucket (PIN) to catalog the various type of historic materials within the PROW and outline acceptable material re-use alternatives when historic materials are not able to be returned to original location due to ADA/MAAB compliance. This would include protocols for stockpiling historic materials at DPW yard.

9. **Stantec Comment: Historic ADA/MAAB Case, Detectable Warning Panels & Universal Design**

- Detectable warning panels come in a variety of materials including plastic, cast iron and brick pavers. This recently was an issue in the Beacon Hill neighborhood in Boston. Similar to Nantucket, the Beacon Hill neighborhood is recognized as a National Historic Landmark. The City of Boston was required by the Massachusetts Architectural Access Board to construct compliant curb cuts in the Beacon Hill section of the city. The construction plans called for concrete ramps with red plastic detectable warning panels. The Beacon Hill Civic Association sued in 2014. The suit sought to stop the city from altering Beacon Hill sidewalks and streetscapes "using historically inappropriate materials and designs." The suit was settled, and the City agreed to use cast iron panels. In this case an argument of not using historic materials did not support removal of detectable panels from the project. For detectable warning panel construction in Nantucket, brick pavers were chosen to best blend with the surrounding pavers while using best construction practices.

Reference: Historic Pavement Review and Comments

(Source: Boston Globe “Lawsuit settled; installation of new Beacon Hill pedestrian ramps begins” by Laura Crimaldi May 6, 2019.

<https://www.bostonglobe.com/metro/2019/05/06/lawsuit-settled-installation-new-beacon-hill-pedestrian-ramps-begins/yx7RtkDGtxOwdfai8RRZqJ/story.html>

- Some more on detectable warning panels and use on Nantucket: The construction of curb ramps currently includes a detectable warning panel. Detectable warning panels are an important part of accessibility to assist the visually impaired and blind. The detectable warning panel essentially acts as a Stop Sign for the visually impaired. The report correctly states that the Massachusetts 521 CMR does not require this panel. The 521 CMR in section s1 states “21.11 DETECTABLE WARNINGS - Reserved until further notice”. However, the Town of Nantucket uses the Massachusetts Department of Transportation Standard Construction Details and Specifications. Drawing Number E107.2.0, showing a wheelchair ramp, requires a detectable warning panel. Additionally, the United States Department of Transportation’s Federal Highway Best Practices for Designing Sidewalk and Trail Access states the best practice for curb ramps “Provide clearly defined and easily identified edges or transitions on both sides of the ramp to contrast with Sidewalk” with a rationale of “Clearly defined edges assist users with vision impairments to identify the presence

of the ramp when it is approached from the side.” [10-Ch7 \(dot.gov\)](#)

- Design and construction of roadways and sidewalks should always follow best complete streets/universal design practices. DPW is committed to improving accessibility within our historic landmark.



All 351 Cities and Towns in Massachusetts are of Historic Significance by age standards when compared to Nantucket and most of these communities adopt universal and complete street design which includes accessibility and follows MassDOT ramp details, including the use of detectable warning panels.

Reference: Historic Pavement Review and Comments

10. **Stantec Comment: Brick and Cobblestone Maintenance & General Recommendations**

- Similar to gravel roads, bi-annual maintenance is very important to maintaining brick and cobblestone surfaces, as part of the Town's pavement/asset management system the Town should frequently inspect these surfaces to ensure that joint filler is intact.
- During construction consolidation of joint dressing materials is crucial; these materials must be swept back into place following rain events to ensure proper 'curing' and long-term performance. Current Nantucket DPW contracts require "cobblestones shall be swept with stone dust and fogged with water. The pavement surface shall be vibrated with a lightweight plate compactor to insure compaction between the joints. Additional joint filler of stone dust shall be uniformly distributed as necessary to fill all voids. The process shall be repeated for a minimum of five days until all the joints are full."
- To enhance retention of stone dust or other sand joint filler materials chemical admixtures may be used. Alternatively, fine materials intermixed with the coarser particles can help retain the joint filler materials, particularly on wide irregular joints attributed to rounded cobbles.

In summary, it is agreed that properly designed and constructed cobblestone roads are strong and suitable for modern loads including truck traffic. The pavement design utilizes a well graded stone dust that has proven reliability and consistently made from readily available sources. Dirty sand does not exist in the construction materials world. A visual review of the cobblestone pavements indicates the currently used materials and construction methods are resulting in acceptable performance and are providing adequate support for current traffic. As noted above, a key factor to ensuring long term performance is the need to maintain the joint filler. It is recommended that the Town regularly inspect and repair joints with stone dust. Regular maintenance will help to preserve the existing stones as the availability of stones with suitable geometry is a concern. We concur that restoration and rehabilitation of a sidewalk should be planned together with restoration of the roadway this approach is being used where practical.

Attachment: Victor Brandon Corp Stone Dust
Victor Brandon Corp Dense Graded
2021 Cobblestone Pavement Detail

40 Strafello Drive, Unit: G
Avon, MA 02322
Office (508) 588-0886
Fax (508) 588-2414



149 Wayside Ave., Rear
W. Springfield, MA 01089
Office (413) 736-1870
Fax (413) 736-1872

October 2, 2020

Report No. 25.45310.002

Victor Brandon Corp
P.O. Box 717
Hudson, MA 01749

Re: Inspection & Testing Services

Gentlemen:

The following are test results of a sample of aggregate as taken by this laboratory on 9/20/20.

1.	<u>Sample Description</u>		
	<u>Sample No.</u>	<u>Description</u>	<u>Source</u>
	C-387	Stone Dust	PJ Keating – Acushnet, MA
2.	<u>Washed Sieve Analysis (% passing by weight)</u>		
	<u>Sieve Size (mm)</u>	<u>Result</u>	
	3/8 (9.5)	100	
	#4 (4.75)	98	
	8 (2.36)	73	
	16 (1.18)	51	
	30 (.600)	39	
	50 (.300)	31	
	100 (.150)	23	
	200 (.075)	17.4	

Should you have any questions or require additional information, please do not hesitate to call.

Sincerely,

Antonio J Rodrigues
Field Manager

AR/sjm

40 Strafello Drive, Unit: G
Avon, MA 02322
Office (508) 588-0886
Fax (508) 588-2414



149 Wayside Ave., Rear
W. Springfield, MA 01089
Office (413) 736-1870
Fax (413) 736-1872

April 9, 2020

Report No. 25.45310.002

Victor Brandon Corp
P.O. Box 717
Hudson, MA 01749

Re: Inspection & Testing Services

Gentlemen:

The following are test results of a sample of aggregate as taken by this laboratory on April 6, 2020.

1.

<u>Sample Description</u>	<u>Description</u>	<u>Source</u>
<u>Sample No.</u> C-112	3/4" Dense Graded Crushed Stone	P.J. Keating – Acushnet, MA
2.

<u>Washed Sieve Analysis (% passing by weight)</u>	
<u>Sieve Size (mm)</u>	<u>Result</u>
1" (25.0)	100
3/4 (19.0)	99
1/2 (12.5)	89
3/8 (9.5)	78
#4 (4.75)	62
10 (2.00)	44
20 (.850)	32
40 (.425)	25
50 (.300)	22
80 (.180)	19
200 (.075)	12.8
3.

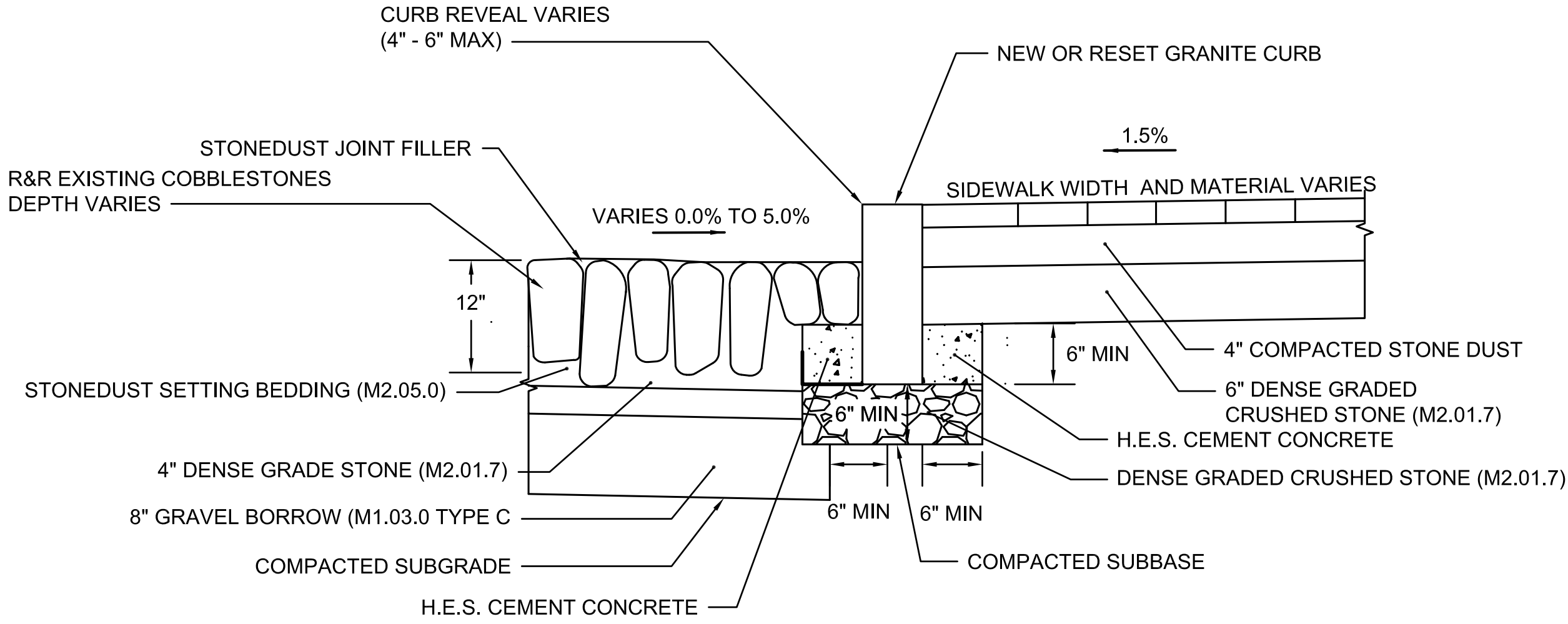
<u>Moisture Density Relation (AASHTO T 180, ASTM D 1557)</u>	
<u>Test</u>	<u>Result</u>
Maximum Dry Unit Weight (p.c.f.)	146.2
Optimum Moisture (%)	5.6

Should you have any questions or require additional information, please do not hesitate to call.

Sincerely,

Antonio Rodrigues
Field Manager

AR/sjm



COBBLESTONE PAVEMENT

FOR HIGHEST TRAFFIC LOADING

NOT TO SCALE
2/1/2021

- NOTE:
- 1. COBBLESTONES SHALL BE ELONGATED. TYPICAL LENGTH 9"-12"
 - 2. COBBLESTONES SHALL BE IN DIRECT CONTACT WITH EACH OTHER

V:\1794\ACTIVE\179410994\DRAWINGS\CAVUS\HIGHWAY\CONSTRUCTION\DETAILS.DWG
2/1/2021 1:53 PM

				Permit-Seal	Consultants	 Street Address City, Prov/State Country Code/Zip www.stantec.com The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project TOWN OF NANTUCKET DEPARTMENT OF PUBLIC WORKS NANTUCKET, MA		Title CONSTRUCTION DETAILS																																												
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6 Gull Island Lane, Newport
@ 1926

Application to the HISTORIC DISTRICT COMMISSION, Nantucket, Massachusetts, for a

CERTIFICATE OF APPROPRIATENESS

for structural work.

All blanks must be filled in using BLUE OR BLACK INK (no pencil) or marked N/A.

NOTE: It is strongly recommended that the applicant be familiar with the HDC guidelines, Building with Nantucket in Mind, prior to submittal of application. Please see other side for submittal requirements. Incomplete applications will not be reviewed by the HDC.

This is a contractual agreement and must be filled out in ink. An application is hereby made for issuance of a Certificate of Appropriateness under Chapter 395 of the Acts and Resolves of Mass., 1970, for proposed work as described herein and on plans, drawings and photographs accompanying this application and made a part hereof by reference.

The certificate is valid for three years from date of issuance. No structure may differ from the approved application. Violation may impede issuance of Certificate of Occupancy.

PROPERTY DESCRIPTION

TAX MAP N°: 42.4.3 PARCEL N°. 61
Street & Number of Proposed Work: 6 Gull Island Lane
Owner of record: Hannah Gardner House, LLC
Mailing Address: 11887 Southeast Shell Avenue
Hobe Sound, FL 33455
Contact Phone #: E-mail:

AGENT INFORMATION (if applicable)

Name: Sarah McLane
Mailing Address:
Contact Phone #: E-mail: smclane@gmail.com

FOR OFFICE USE ONLY

Date application received: Fee Paid: \$
Must be acted on by:
Extended to:
Approved: Disapproved:
Chairman:
Member:
Member:
Member:
Member:
Notes - Comments - Restrictions - Conditions

DESCRIPTION OF WORK TO BE PERFORMED

See reverse for required documentation.

☐ New Dwelling ☐ Addition ☐ Garage ☐ Driveway/Apron ☐ Commercial ☐ Historical Renovation ☐ Deck/Patio ☐ Steps ☐ Shed
☐ Color Change ☐ Fence ☐ Gate ☐ Hardscaping ☐ Move Building ☐ Demolition ☐ Revisions to previous Cert. No.
☐ Pool (Zoning District) ☐ Roof ☒ Other: Revise building size, window sizes + locations per field measurements. Add Brick Veneer
Size of Structure or Addition: Length: 60'-6" (-5.5') Sq. Footage 1st floor: 1626 (-10sf) Decks/Patio: Size: 12sf + 11sf ☒ 1st floor ☐ 2nd floor
Width: 46'-2" (-10') Sq. footage 2nd floor: 1270 (-38sf) Size: 80sf + 40sf ☒ 1st floor ☐ 2nd floor
Sq. footage 3rd floor: 848 (-39sf)

Difference between existing grade and proposed finish grade: North South East West

Height of ridge above final finish grade: North South East West

Additional Remarks

REVISIONS*

1. East Elevation Add Steps
2. South Elevation Add stairs, Add stoop, revise bulkhead to area well
3. West Elevation with steps, Revise windows, Add Dormer
4. North Elevation Revise Gable width, Revise Fenestration, Add Dormer, Add
Stoop, Add stairs, Revise bulkhead to area well + Add Door
Revise windows
Is there an HDC survey form for this building attached? ☐ Yes ☐ N/A *Cloud on drawings and submit photographs of existing elevations.

DETAIL OF WORK TO BE PERFORMED

Foundation: Height Exposed 10"-34" ☐ Block ☐ Block Parged ☒ Brick (type) Waterstruck ☐ Poured Concrete ☐ Piers
Masonry Chimney: ☐ Block Parged ☒ Brick (type) Waterstruck ☐ Other
Roof Pitch: Main Mass /12 Secondary Mass /12 Dormer /12 Other
Roofing material: ☐ Asphalt: ☐ 3-Tab ☐ Architectural
☐ Wood (Type: Red Cedar, White Cedar, Shakes, etc.)
Fence: Height: Type: Length:
Skylights (flat only): Manufacturer Rough Opening Size Location
Manufacturer Rough Opening Size Location
Gutters: ☐ Wood ☐ Aluminum ☐ Copper ☐ Leaders (material)
Leaders (material and size):
Sidewall: ☐ White cedar shingles ☐ Clapboard (exposure: inches) Front ☐ Side
☐ Other
Trim: A. Wood ☐ Pine ☐ Redwood ☐ Cedar ☐ Other
B. Treatment ☐ Paint ☐ Natural to weather ☐ Other
C. Dimensions: Fascia Rake Soffit (Overhang) Corner boards Frieze
Window Casing Door Frame Columns / Posts: Round Square
Windows*: ☒ Double Hung ☒ Casement ☐ All Wood ☒ Other Fixed
☒ True Divided Lights(muntins), single pane ☐ SDL's (Simulated Divided Lights) Manufacturer Boston Sash
Doors* (type and material): ☐ TDL ☐ SDL Front Rear Side
Garage Door(s): Type Material
Hardscape materials: Driveways Walkways Walls

* Note: Complete door and window schedules are required.

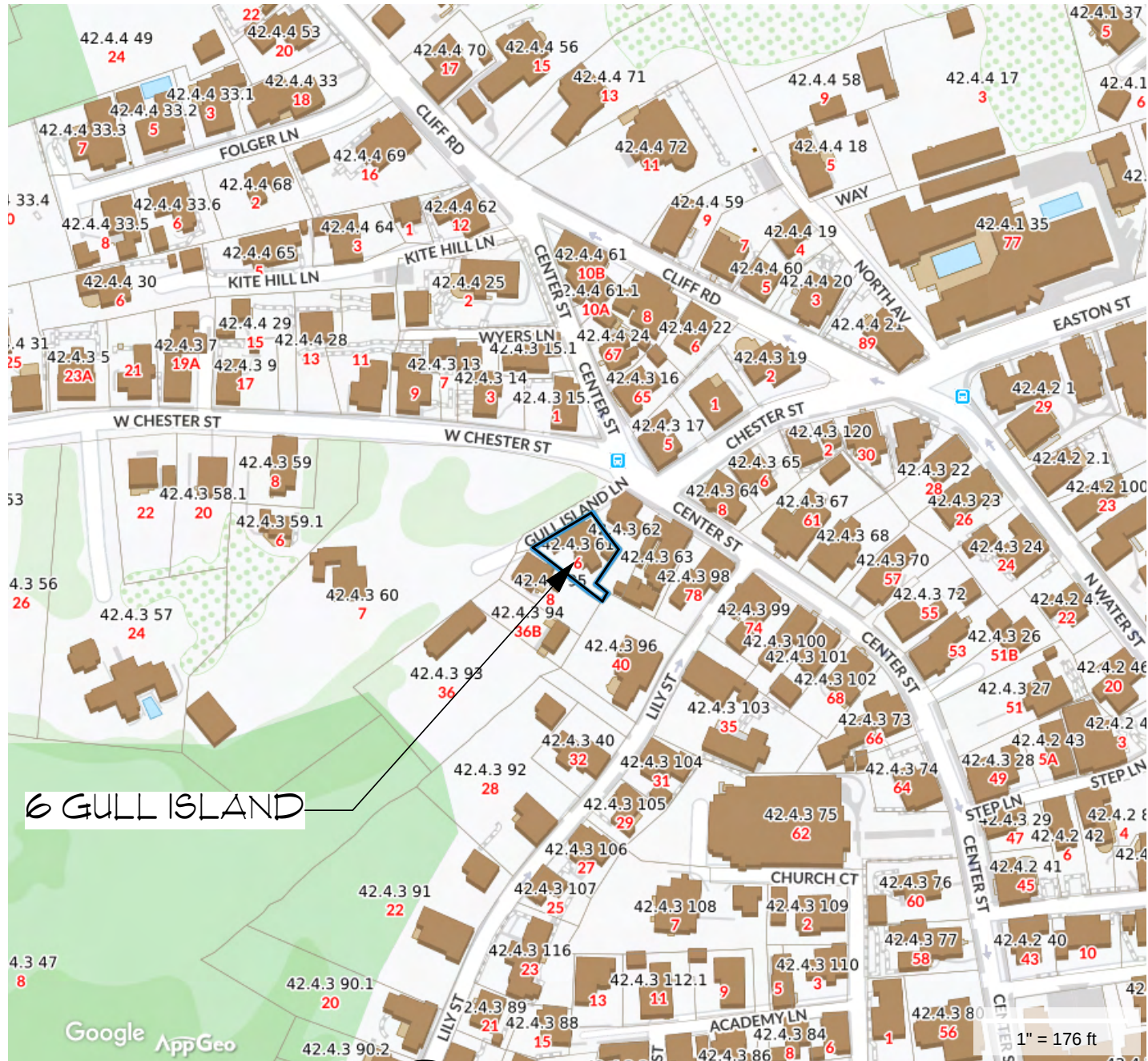
COLORS

Sidewall Clapboard (if applicable) Roof
Trim Sash Doors
Deck Foundation Fence Shutters

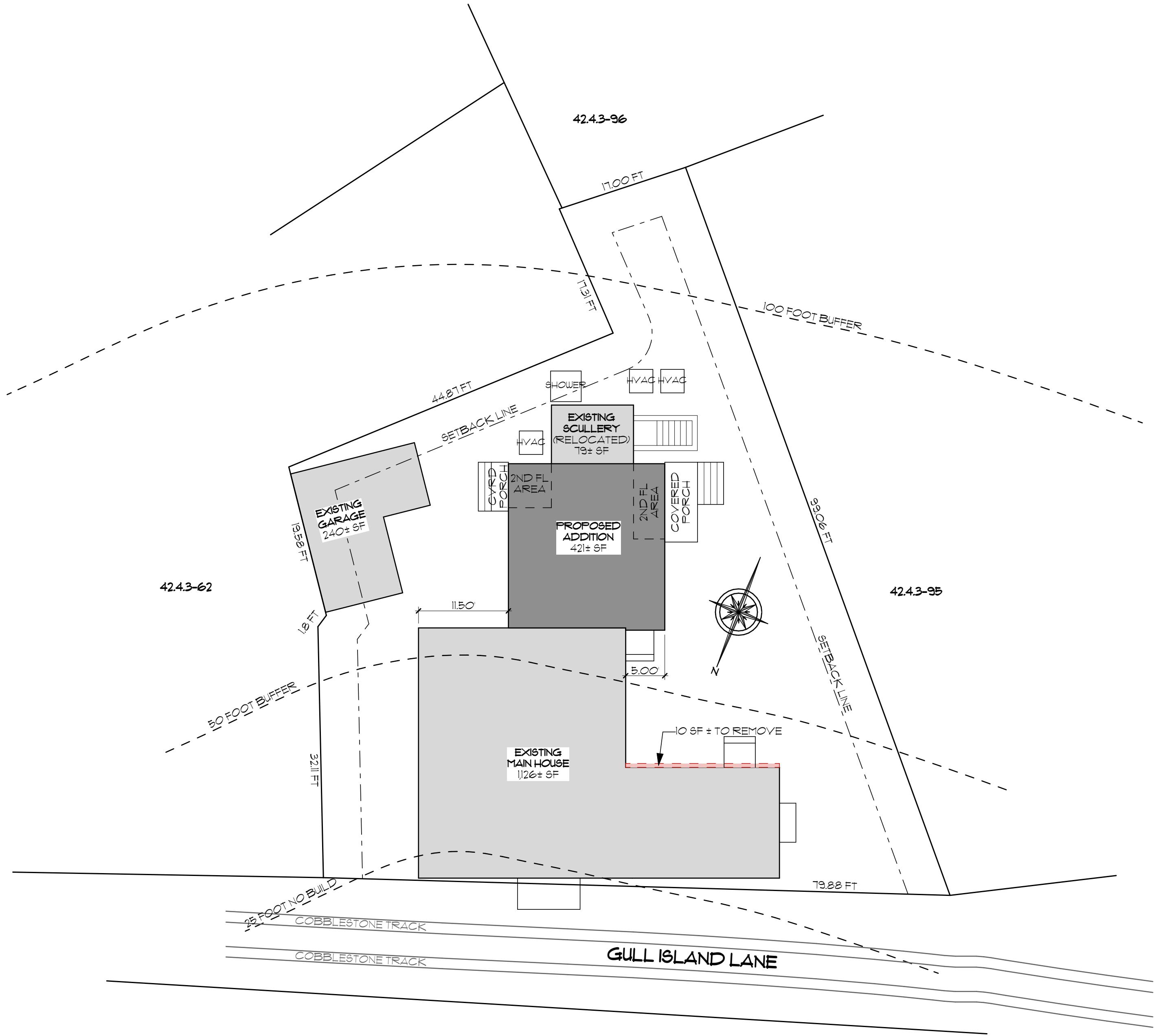
* Attach manufacturer's color samples if color is not from HDC approval list.

I hereby authorize the agent named above to act on my behalf to make changes in the specifications or the plans contained in this application in order to bring the applica-
tion into compliance with the HDC guidelines. I hereby agree to abide by and comply with the terms and conditions of this application. I hereby agree that the submission of
any revisions to this application will initiate a new sixty-day review period.

Date 5/11/21 Signature of owner of record [Signature] for Sarah McLane Signed under penalties of perjury



2 Locus Map



1 PROPOSED SITE PLAN
Scale: 1" = 10'

Residence at

6 Gull Island Lane

Nantucket, MA 02554

MAP NO: 42.4.3 ZONING INFO: ROH

PARCEL NO: 61 PROJECT NO: 41

REVIS: April 25, 2021
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No publication or use of these documents is permitted without prior approval from Botticelli & Pohl, P.C.

ID #

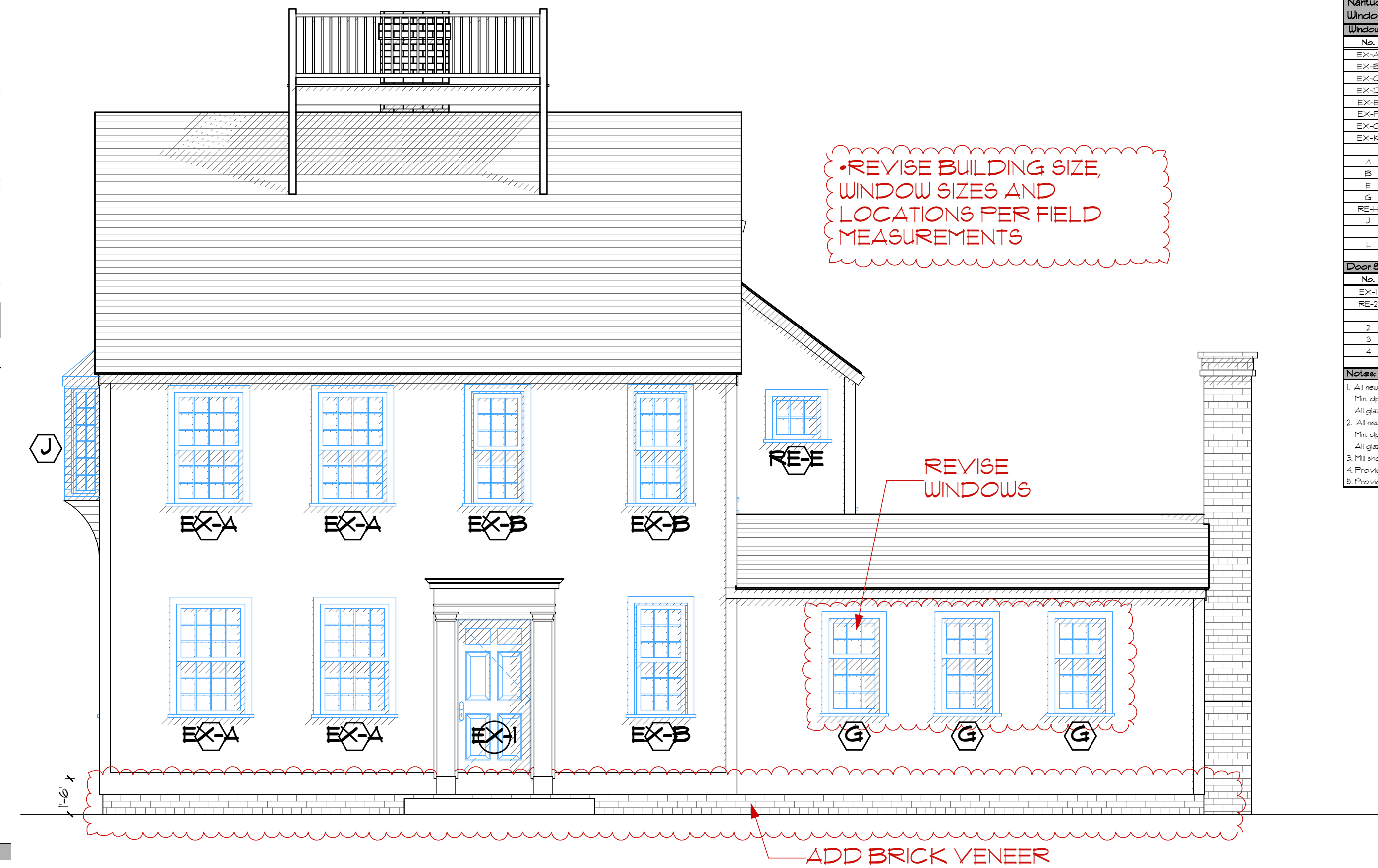
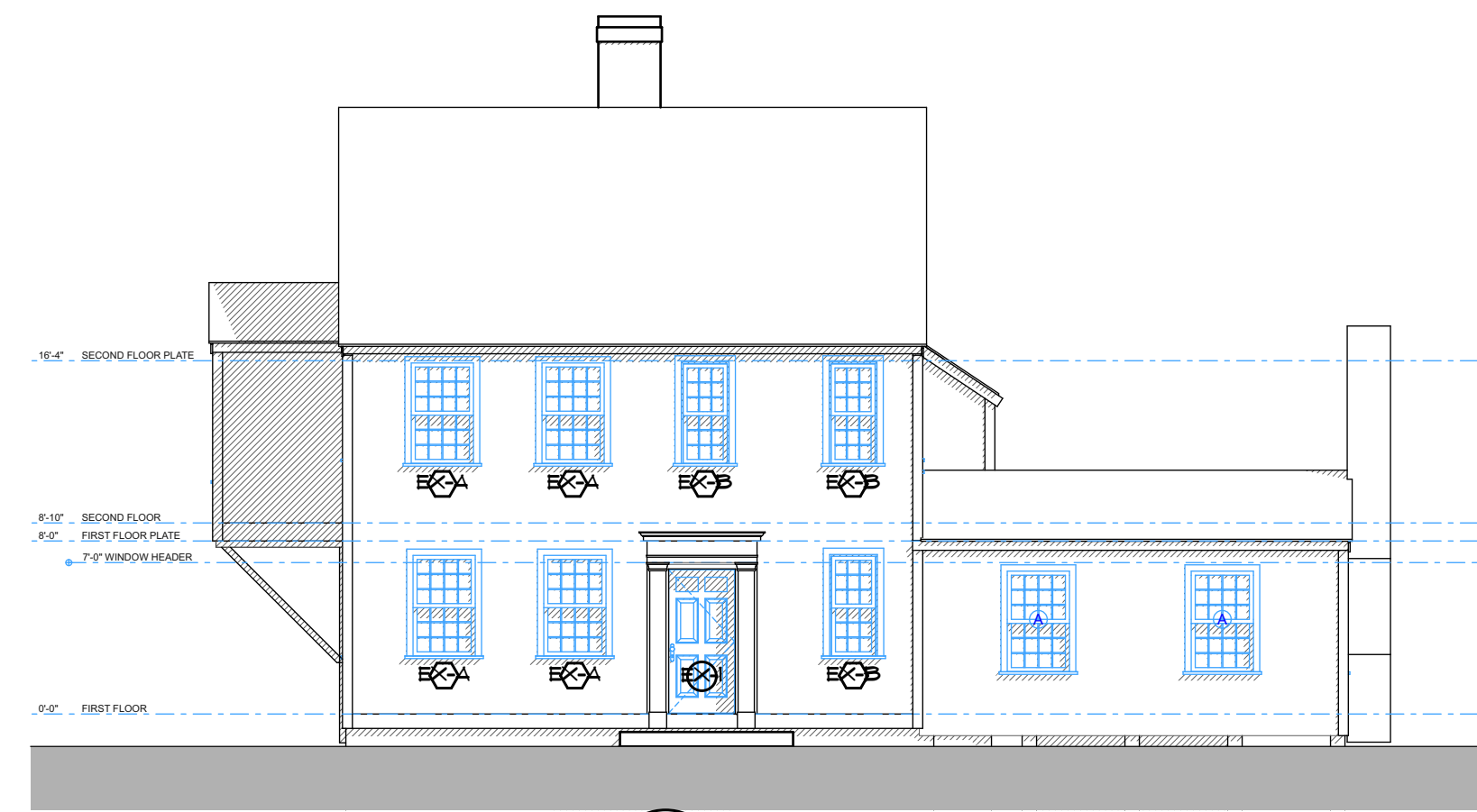
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Site Plan

REVISIONS

DATE

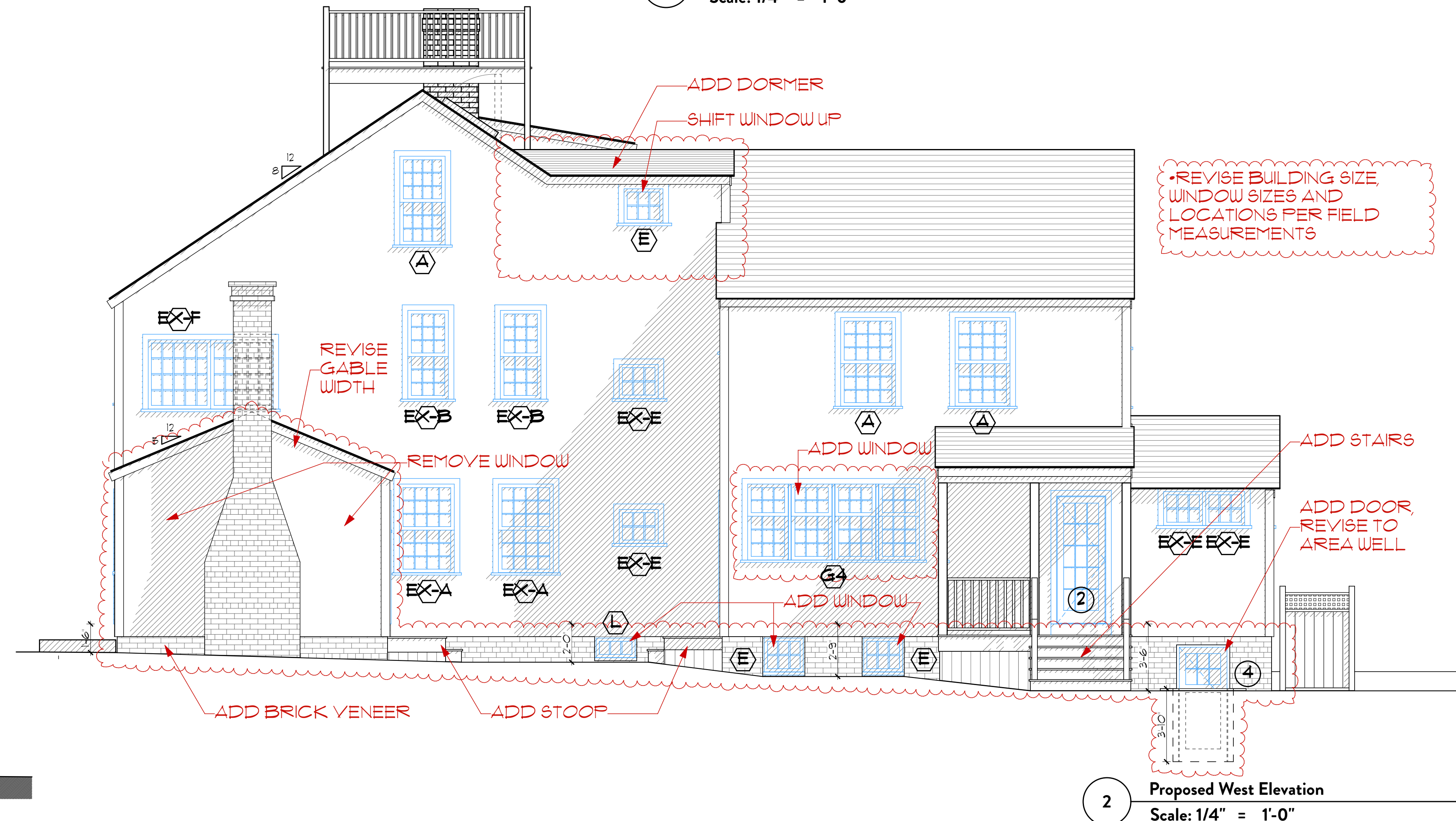
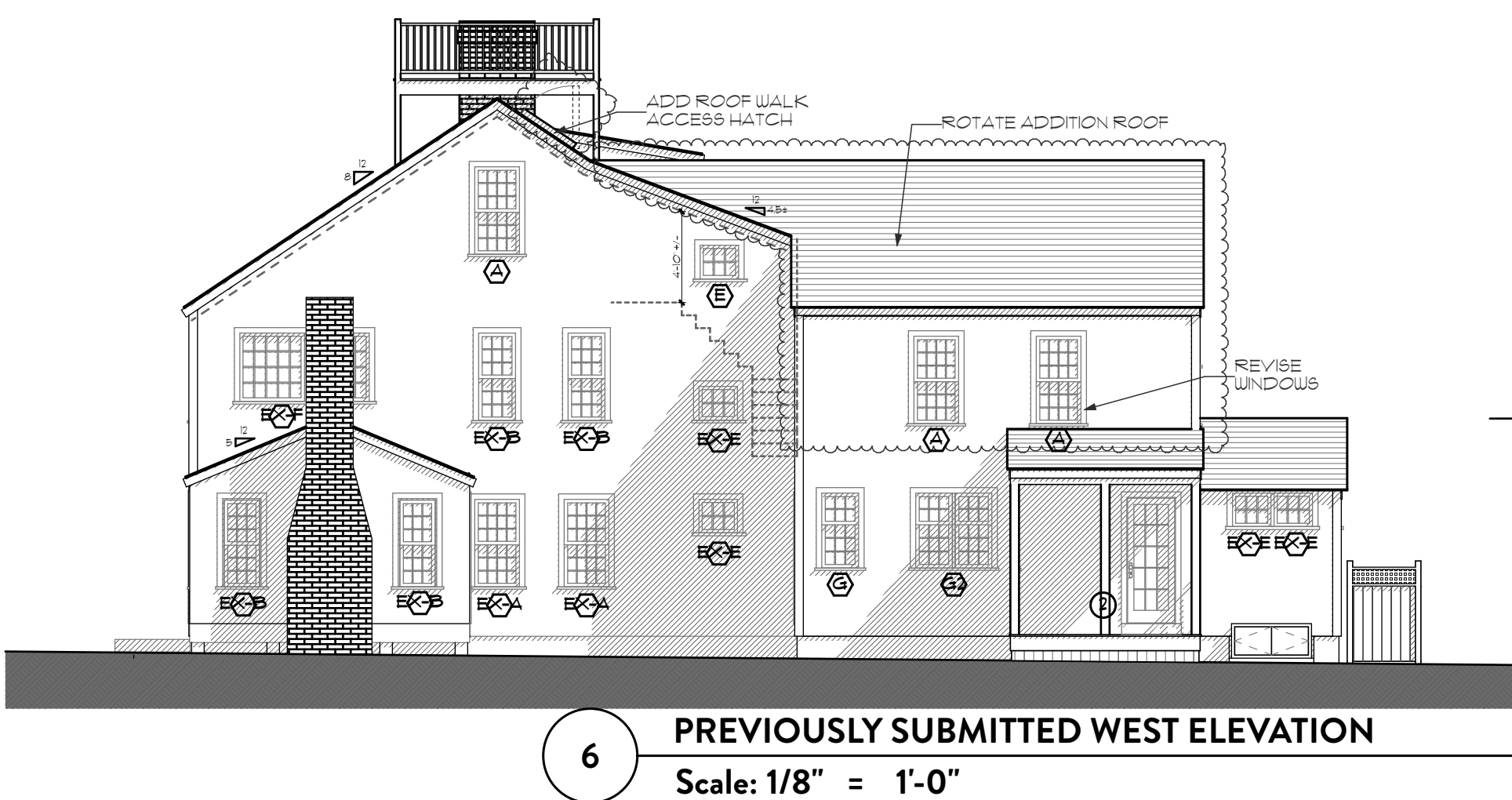
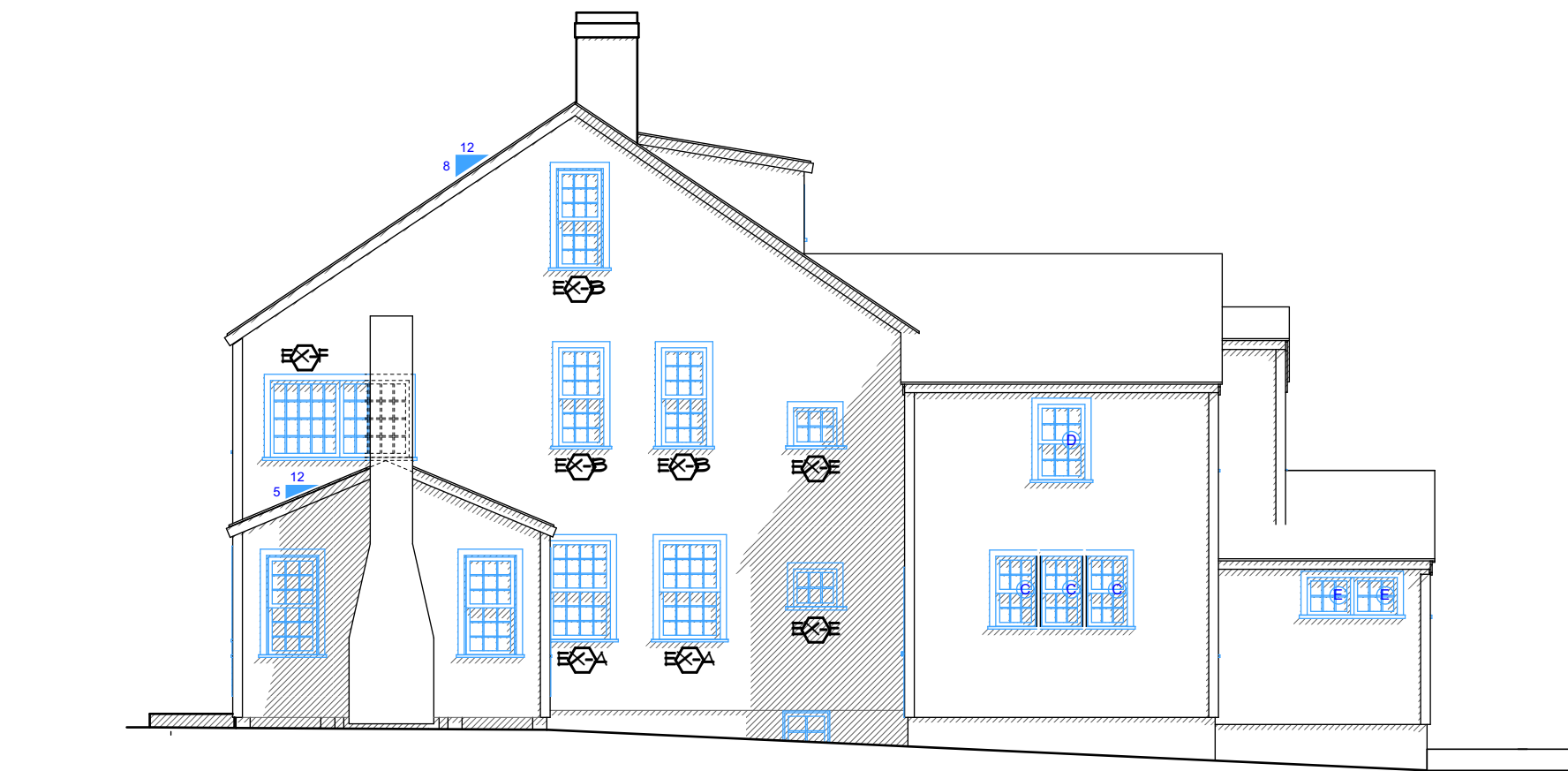
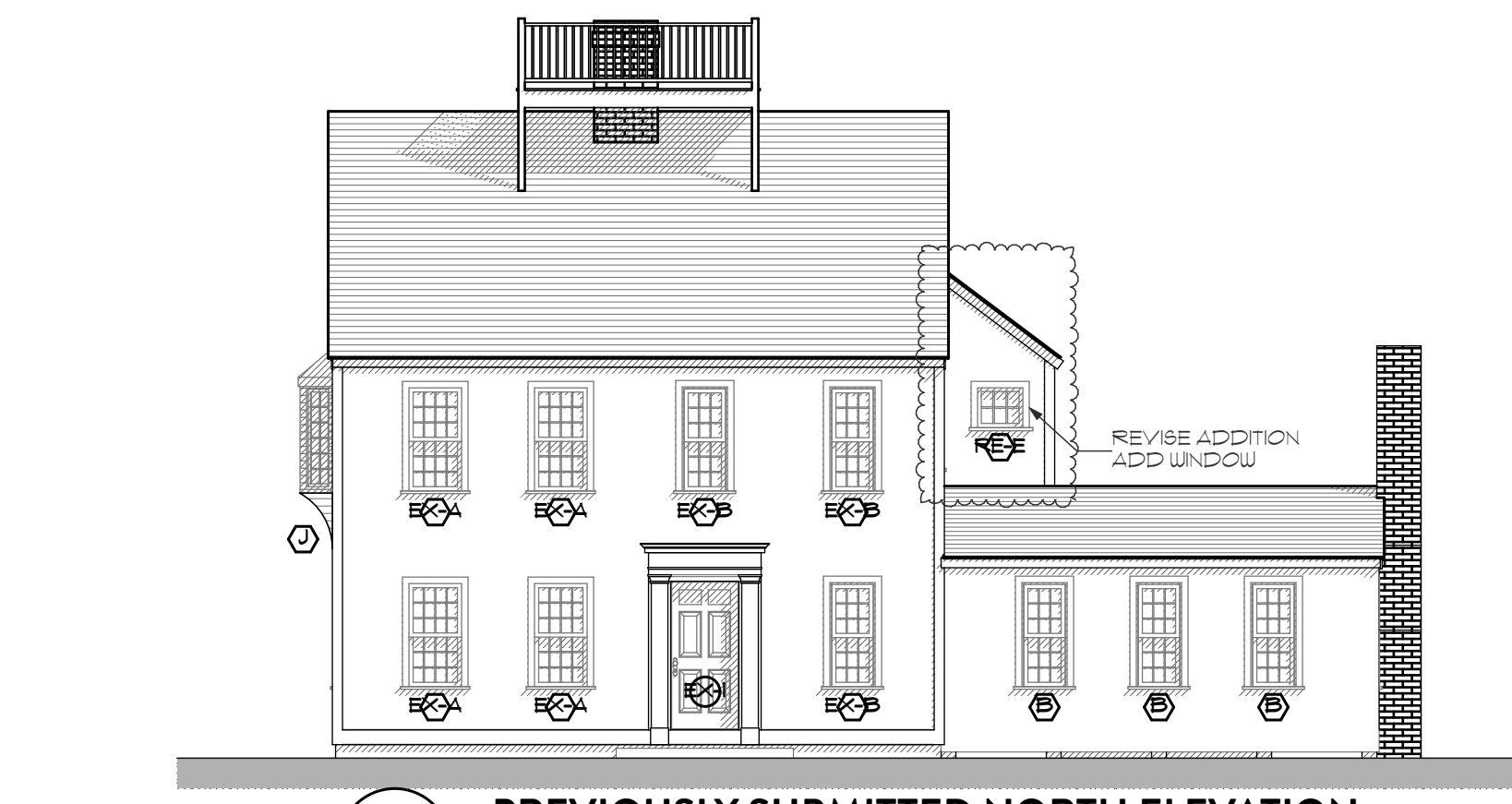
BOTTICELLI & POHL



Renovations at 6 Gull Island Lane Nantucket, MA Window & Exterior Door Schedule							
Rev. 2021-04-13							
Window Schedule							
No.	Ch.	Type	Manuf.	Panel Size	Rough Opening	Lights	Comments
EX-A		Double Hung	EXISTING TO REMAIN	3'-0" x 4'-0" 4/4"	-	12 over 12	Verify in field
EX-B		Double Hung	EXISTING TO REMAIN	2'-6" x 4'-0" 4/4"	-	8 over 8	Verify in field
EX-C		Double Hung	NOT USED	2'-0" x 3'-6" 4/4"	-	8 over 8	Verify in field
EX-D		Double Hung	NOT USED	2'-6" x 3'-6" 4/4"	-	8 over 8	Verify in field
EX-E		Fixed	EXISTING TO REMAIN	2'-0" x 2'-0" 4/4"	-	6	Verify in field
EX-F		Double Casement	EXISTING TO REMAIN	6'-0" x 3'-0" 4/4"	-	10 BA	Verify in field
EX-G		Double Hung	NOT USED	2'-6" x 4'-0" 4/4"	-	8 over 8	Verify in field
EX-H		Fixed	EXISTING TO REMAIN	2'-6" x 2'-6" 4/4"	-	6	Verify in field
A		Double Hung	Boston Sash	3'-0" x 4'-0"	TBD	12 over 12	Match existing A window
B		Double Hung	Boston Sash	2'-6" x 4'-0"	TBD	8 over 8	Match existing B window
E		Fixed	Boston Sash	2'-0" x 2'-0"	TBD	6	Match existing E window
G		Double Hung	Boston Sash	2'-6" x 4'-0"	TBD	8	Match existing G window
RE-1		Fixed	EXISTING TO RELOCATE	2'-6" x 1'-6" 4/4"	TBD	6	Relocate existing window
J		Over Picture	Custom	2'-6" x 4'-6" 4/4"	TBD	24	Base East elevation
L		Over Sidelights	Custom	1'-2" x 4'-6" 4/4"	TBD	12	Base East elevation
M		Fixed	Boston Sash	1'-6" x 1'-0"	TBD	4	Match A window light size
Door Schedule							
No.	Ch.	Type	Manuf.	Door Size	Rough Opening	Lights	Comments
EX-1		Entry Door	EXISTING TO REMAIN	3'-0" x 6'-8" 4/4"	-	2	over 4 panels
RE-2		Single French Door	EXISTING TO RELOCATE	2'-6" x 6'-8" 4/4"	TBD	18	Relocate existing door
2		Single French Door	Custom	2'-6" x 6'-8"	TBD	18	Match existing single french door
3		Double French Door	PROVIDED BY CLIENT	3'-0" x 6'-8" 4/4"	TBD	10 BA	Relocate antique doors provided by client
4		Basement Door	Custom	2'-6" x 6'-0"	TBD	6	over panel

Notes:

- All new windows will be Boston Sash windows with one door or one double door. All new windows will be Boston Sash windows with one door or one double door. All new windows will be Boston Sash windows with one door or one double door.
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REVISIONS

DATE

North & West Elevations

Residence at
6 Gull Island Lane
Nantucket, MA 02554

MAP NO. 42.4.3
PROJECT NO. 61

ZONING INFO: ROH

REVISOR: May 10, 2021

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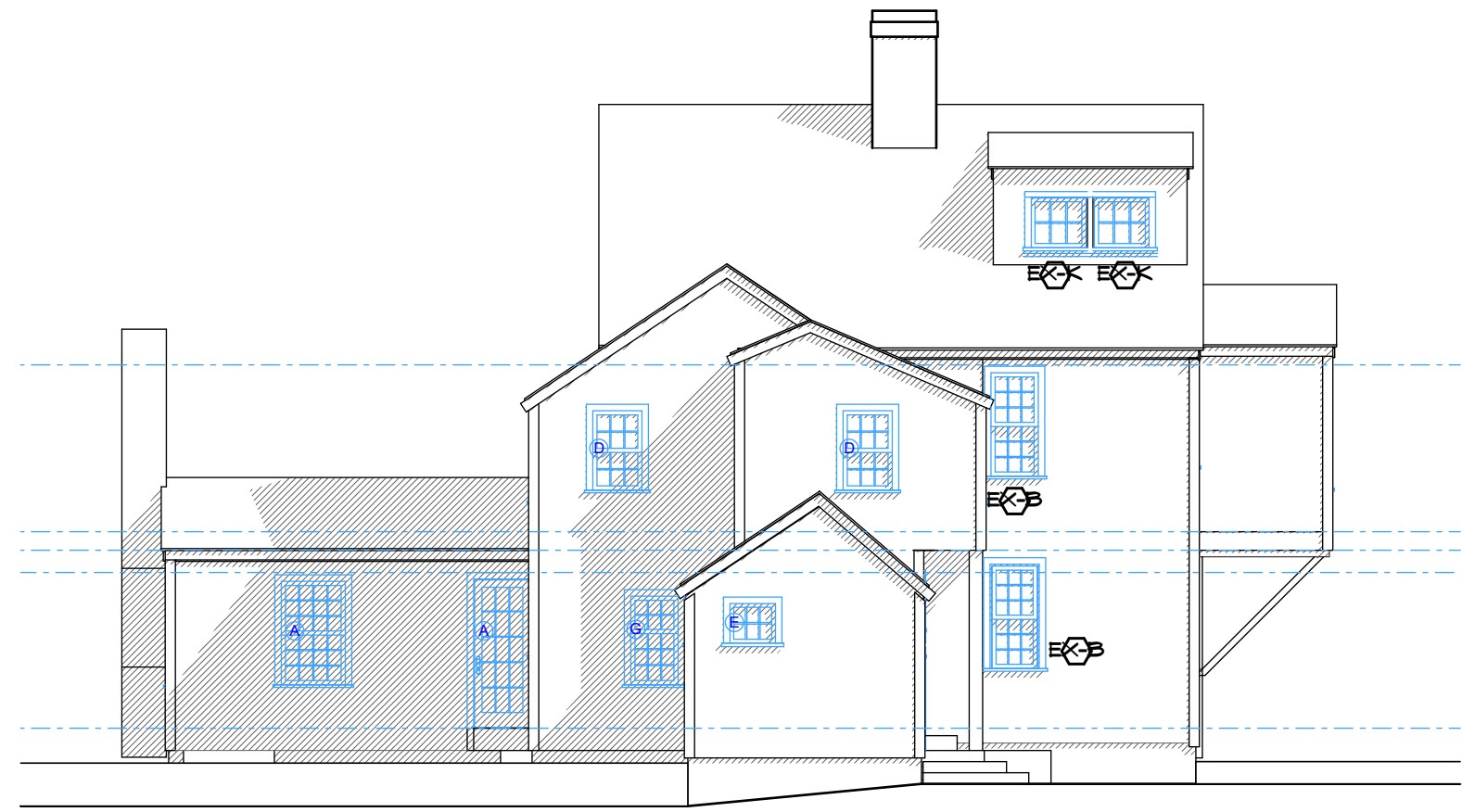
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31 STATE STREET, BOSTON, MA 02109

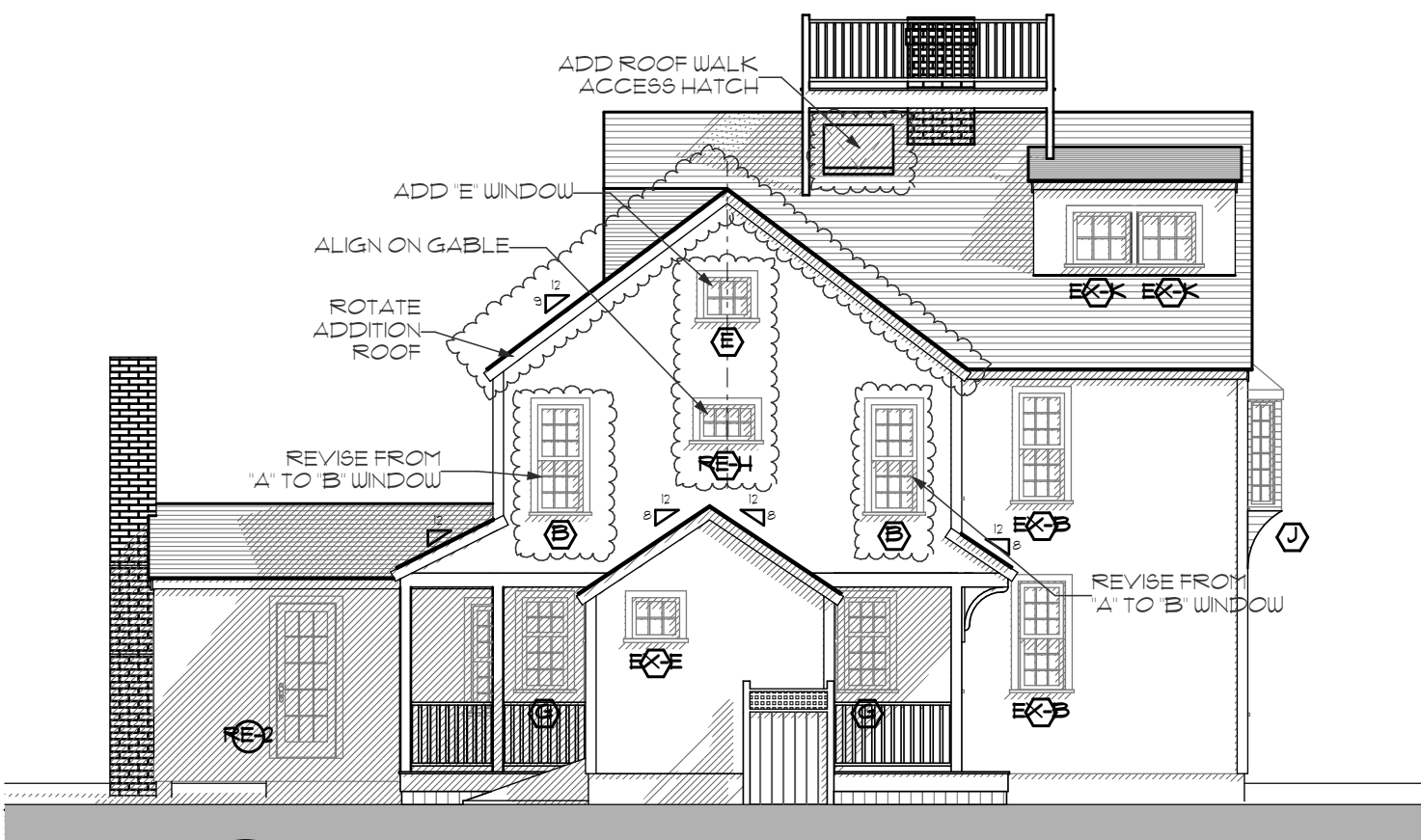
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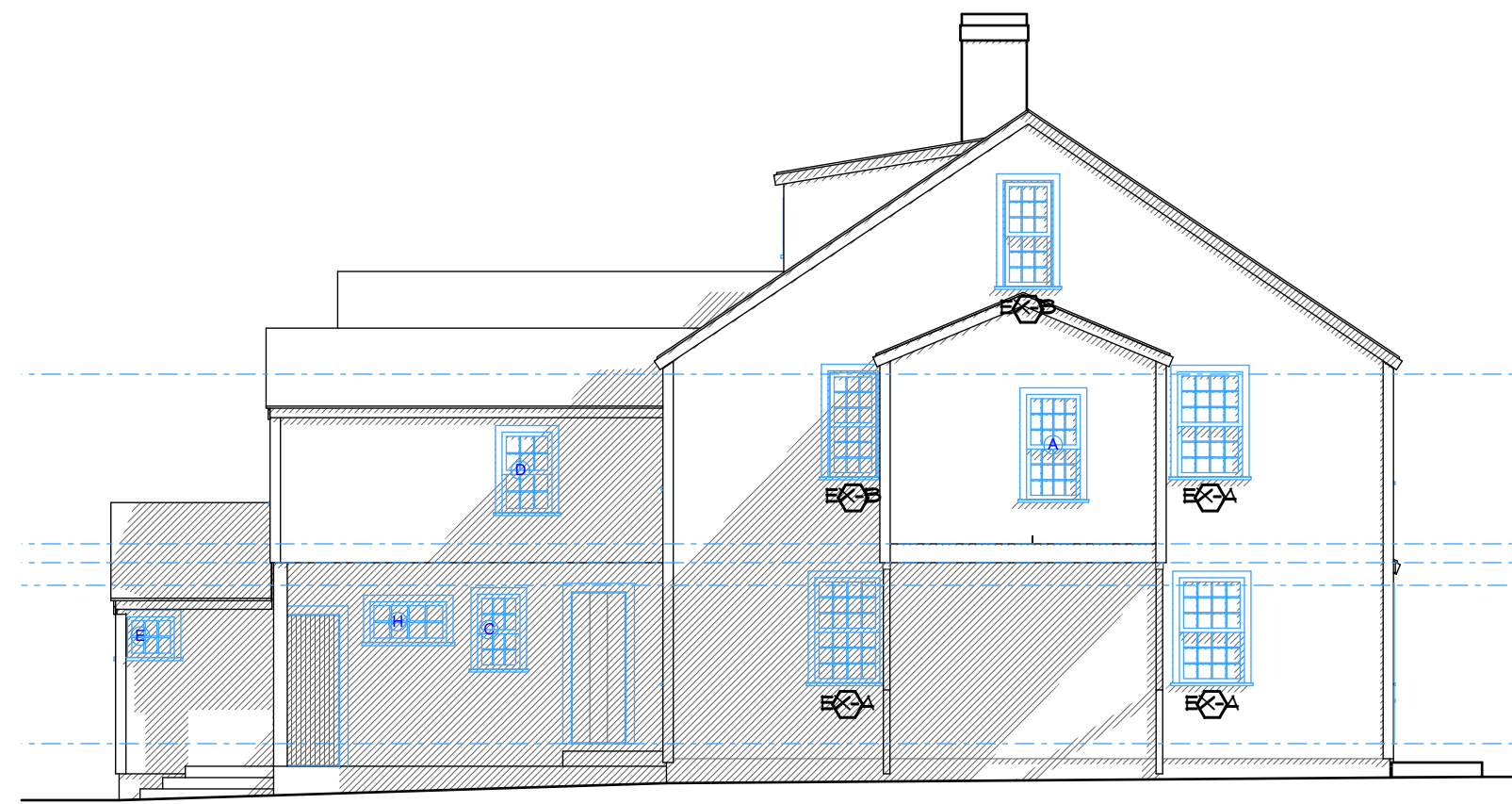
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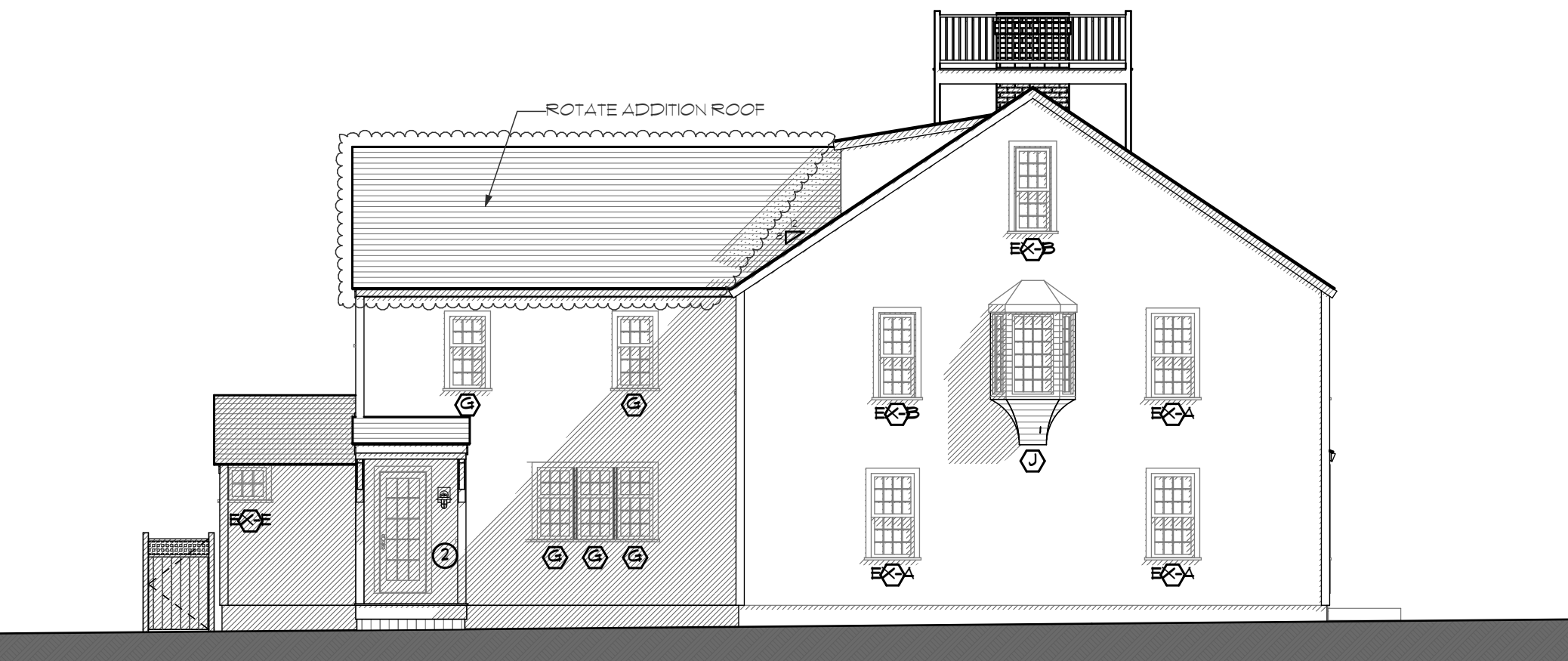
3 Existing South Elevation
Scale: 1/8" = 1'-0"



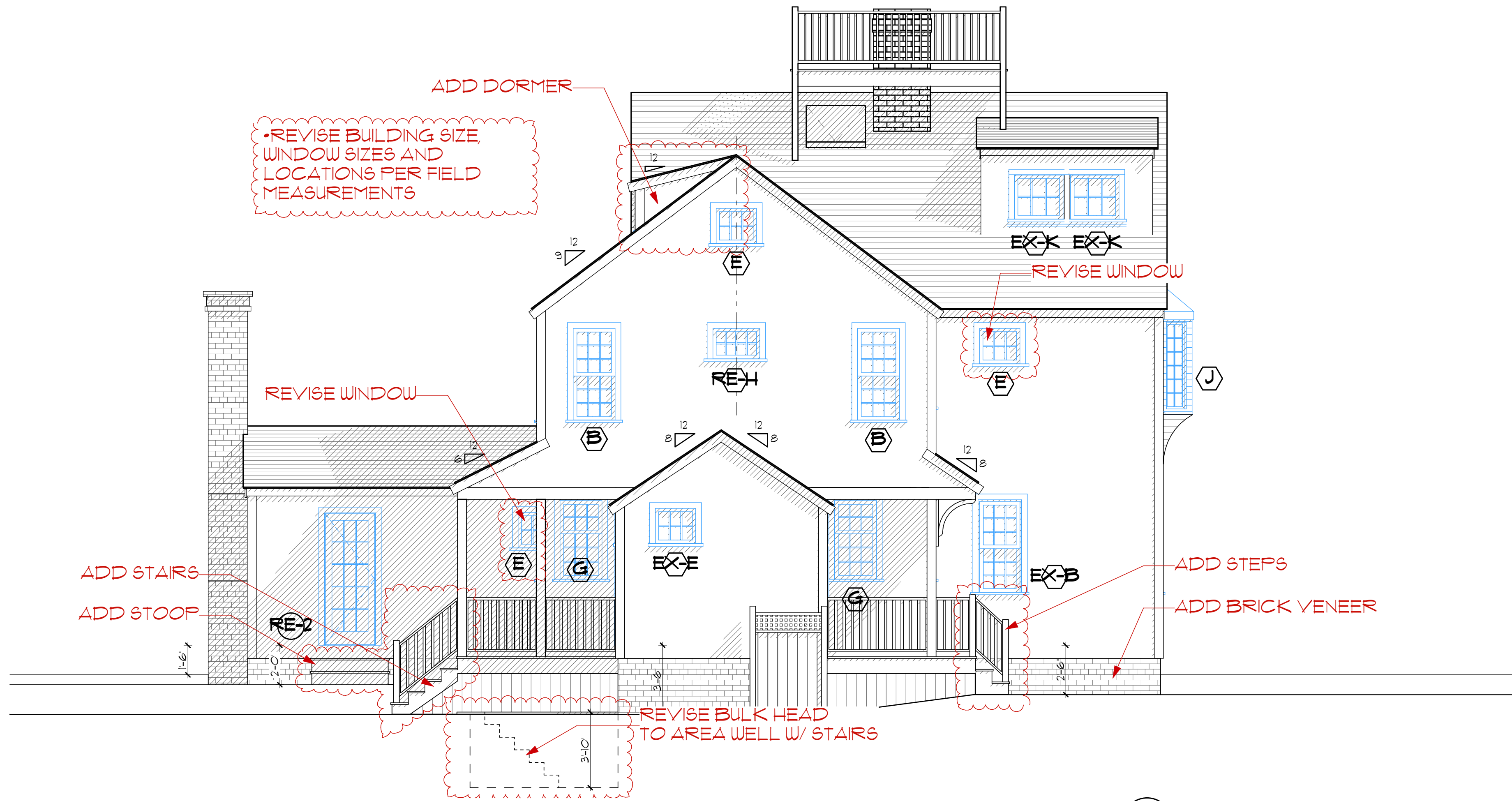
5 PREVIOUSLY SUBMITTED SOUTH ELEVATION
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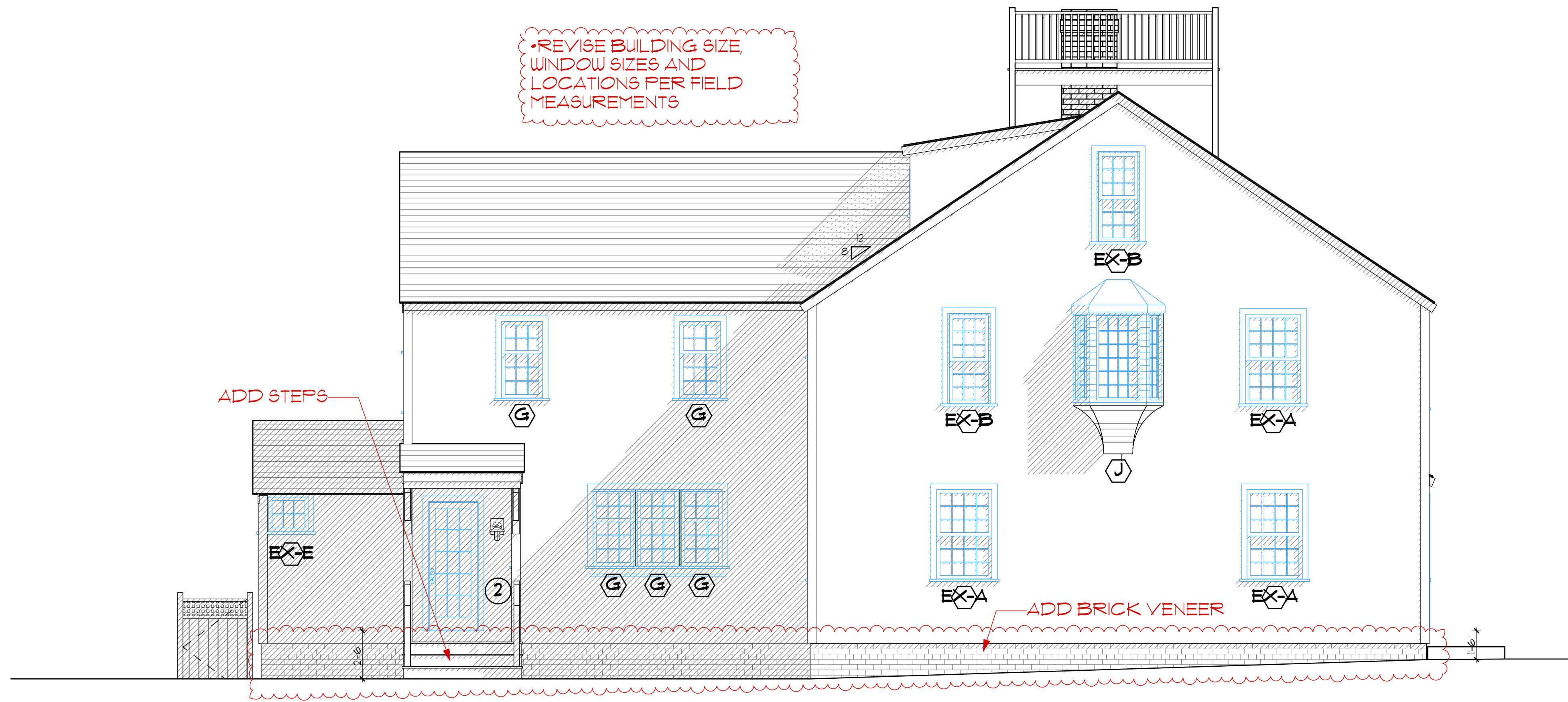
4 Existing East Elevation
Scale: 1/8" = 1'-0"



6 PREVIOUSLY SUBMITTED EAST ELEVATION
Scale: 1/8" = 1'-0"



1 Proposed South Elevation
Scale: 1/4" = 1'-0"



2 Proposed East Elevation
Scale: 1/4" = 1'-0"

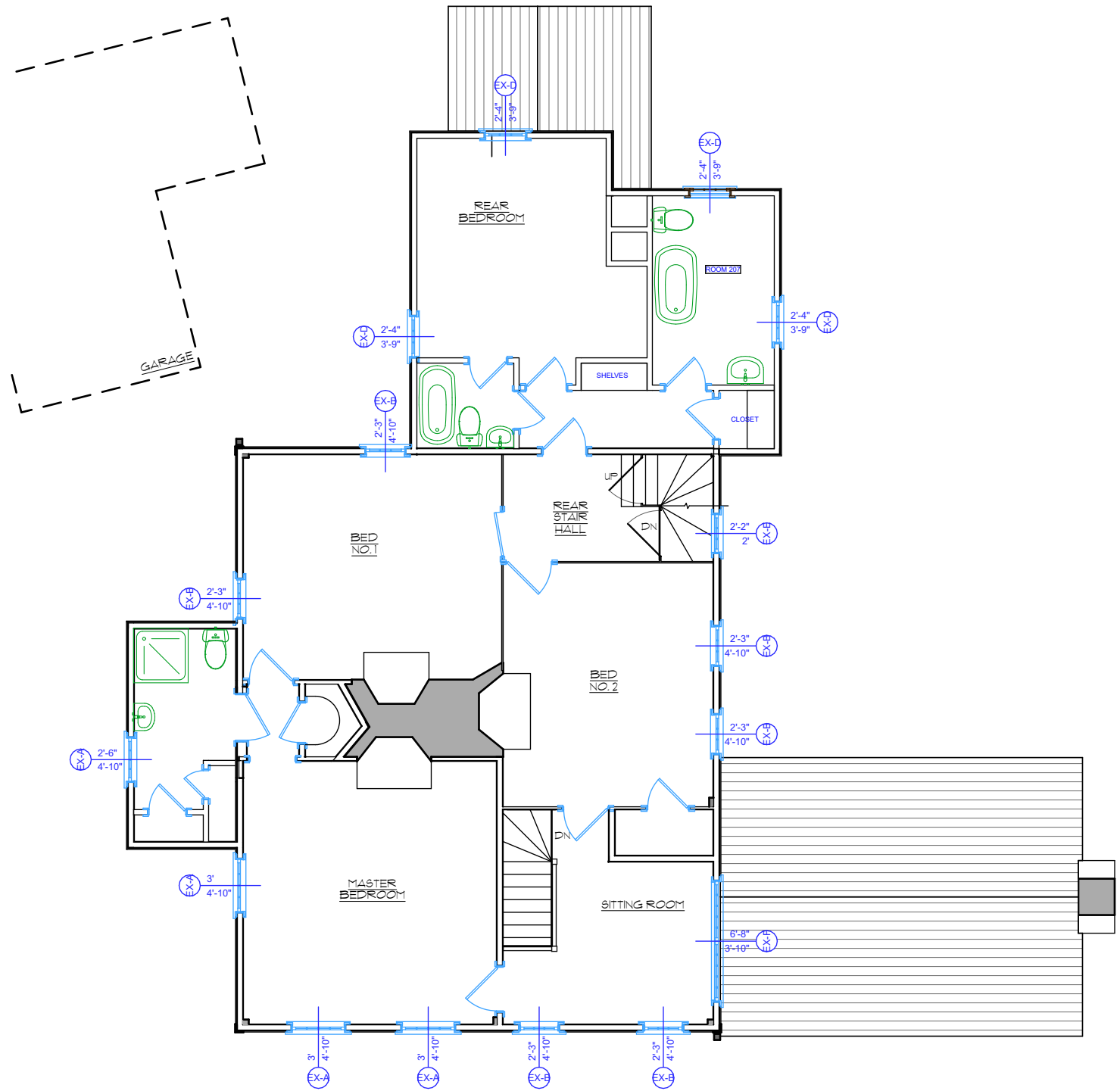
This is a detailed architectural floor plan of a house. The layout includes the following rooms and features:

- Living Room:** Located on the left side, featuring a fireplace, a large window, and a staircase leading to the basement.
- Dining Room:** Adjacent to the living room, containing a dining table and chairs.
- Kitchen:** Situated at the top center, equipped with a sink, stove, and refrigerator.
- Scullery:** A small utility room located between the kitchen and the living area.
- Study:** A room on the left side, near the living room, with a desk and bookshelves.
- Bedroom:** Located on the right side of the plan.
- Entry:** A central hallway area providing access to various rooms.
- Bathroom:** A full bathroom is located near the study and living room.
- Staircase:** Multiple staircases are shown, including one leading to the basement from the living room and another leading to the second floor from the entry.
- Dimensions:** The overall dimensions of the house are 30'-0" wide by 30'-0" deep. Individual room dimensions are provided throughout the plan.
- Orientation:** A compass rose is located in the top right corner, indicating North (N).
- Labels:** Rooms are labeled in all caps: LIVING ROOM, DINING ROOM, KITCHEN, SCULLERY, STUDY, BEDROOM, ENTRY, and BATH.
- Windows and Doors:** Windows are shown with double lines, and doors are indicated by arcs showing the swing direction.
- Basement:** A dashed line indicates the boundary of the basement, with a label "BASEMENT" and a note "BASEMENT BUILDING" at the bottom left.

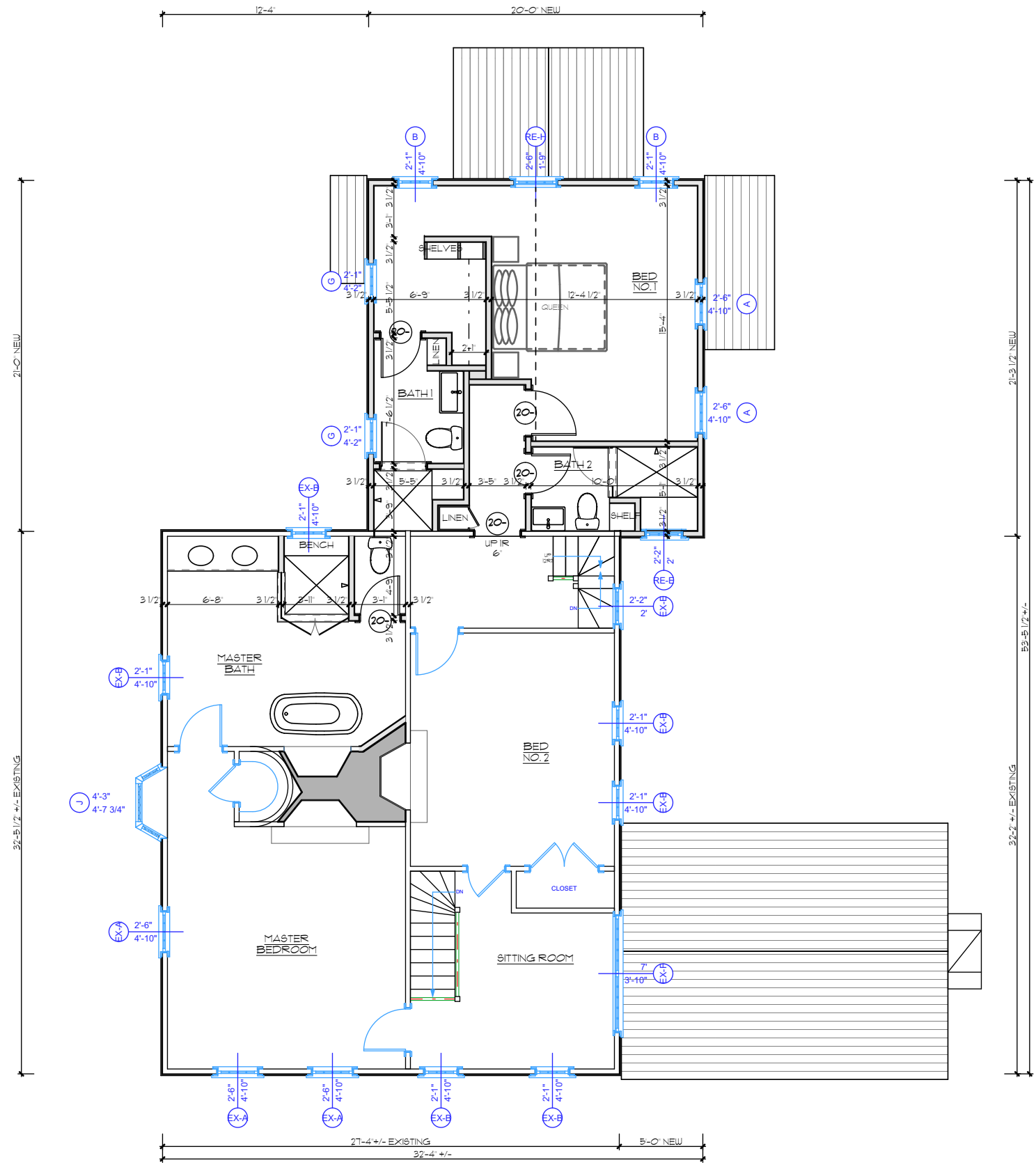
This is a detailed architectural floor plan of a house, oriented with a north arrow pointing towards the upper right. The plan includes the following rooms and features:

- Living Room:** Located in the lower left, featuring a fireplace and a large window.
- Dining Room:** Adjacent to the living room, containing a dining table and chairs.
- Kitchen:** Situated in the center, equipped with a sink, stove, and refrigerator.
- Breakfast Room:** Located near the kitchen, featuring a breakfast bar and a table.
- Entry:** The main entrance area, leading into the living and dining rooms.
- Bedroom:** Located in the lower right, featuring a bed and a closet.
- Bath:** Adjacent to the bedroom, containing a bathtub and toilet.
- Study:** Located in the upper left, featuring a desk and a chair.
- Master Bedroom:** Located in the upper right, featuring a large bed and a closet.
- Master Bath:** Adjacent to the master bedroom, containing a bathtub and toilet.
- Hallway:** A central hallway connecting the various rooms.
- Staircase:** Located in the center of the plan, leading up and down.
- Garage:** Located in the lower left, outside the main house structure.
- Front Porch:** Located in the lower left, outside the main house structure.
- Back Porch:** Located in the upper right, outside the main house structure.
- Dimensions:** The overall dimensions of the house are 47'-0" wide by 38'-0" deep. Individual room dimensions are provided throughout the plan.
- North Arrow:** Located in the upper right corner, pointing towards the upper right.

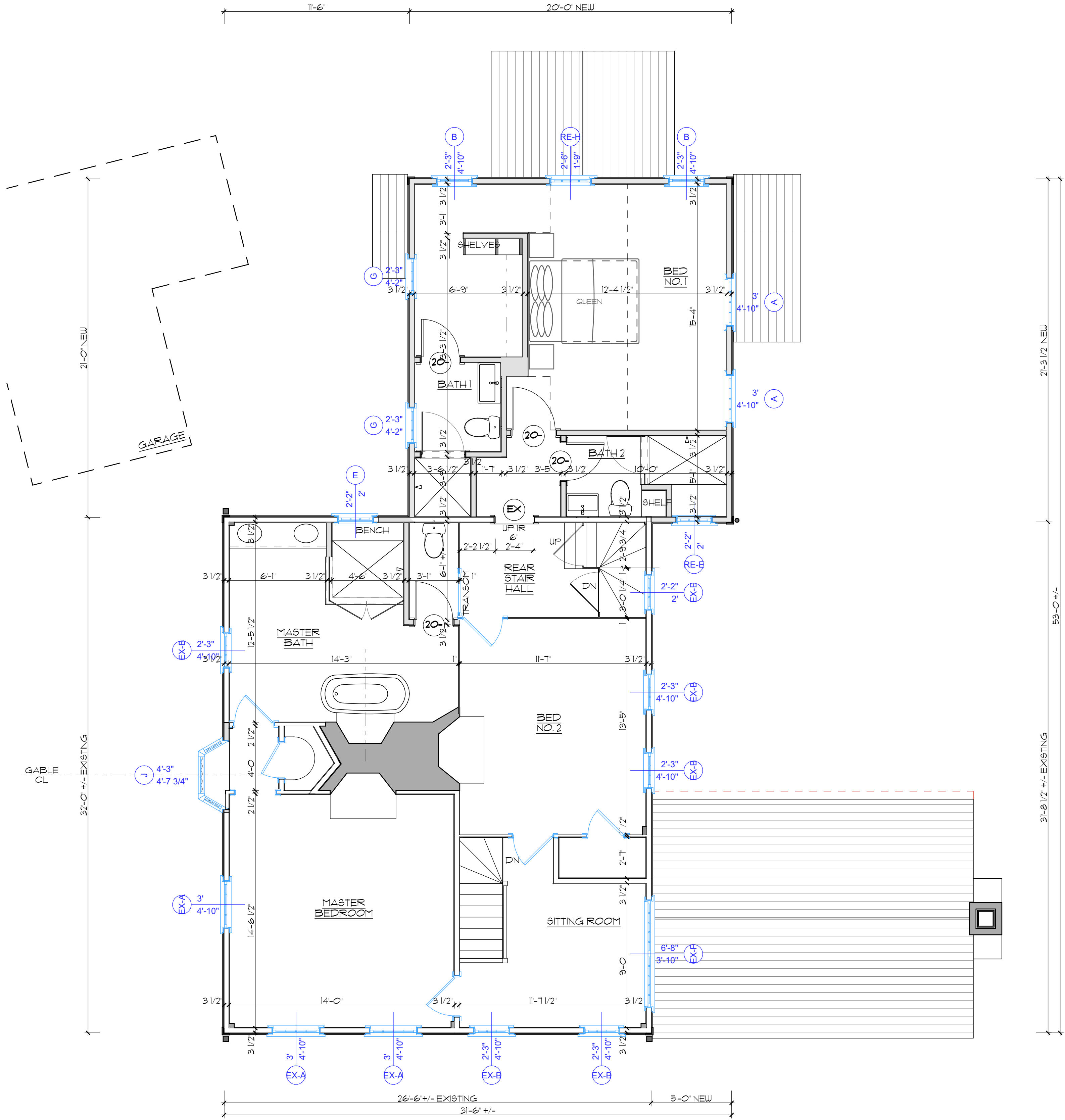
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EXISTING SECOND FLOOR PLAN
Scale: 1/8" = 1'-0"



PREVIOUSLY SUBMITTED SECOND FLOOR PLAN
Scale: 1/8" = 1'-0"



1 PROPOSED SECOND FLOOR PLAN
Scale: 1/4" = 1'-0"

Residence at

6 Gull Island Lane

Nantucket, MA 02554

MAP NO. 42.4.3 ZONING INFO. ROH

PARCEL NO. 61 PROJECT NO. 41

REvised: May 10, 2021

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Second Floor Plan

DATE

REVISIONS

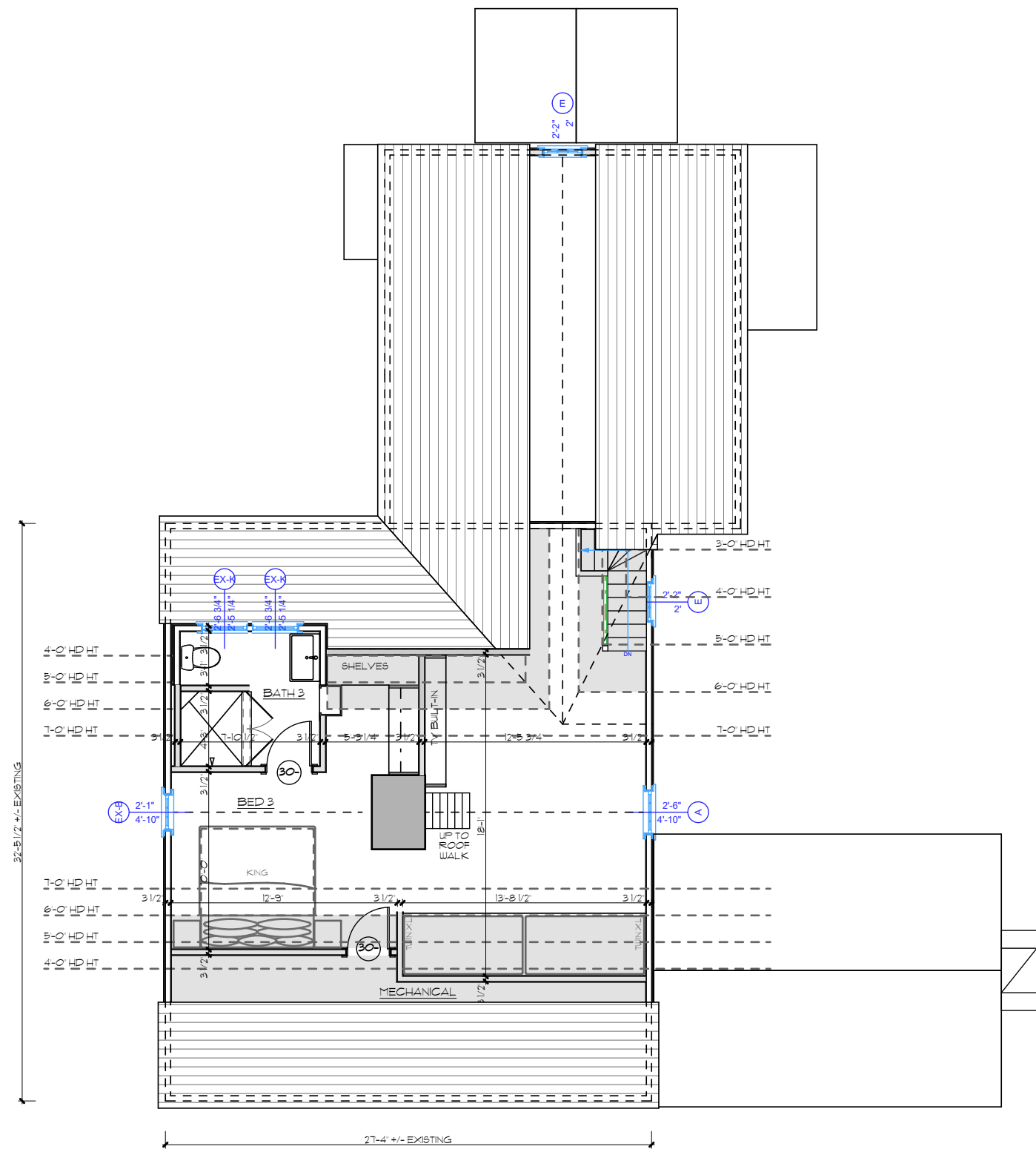
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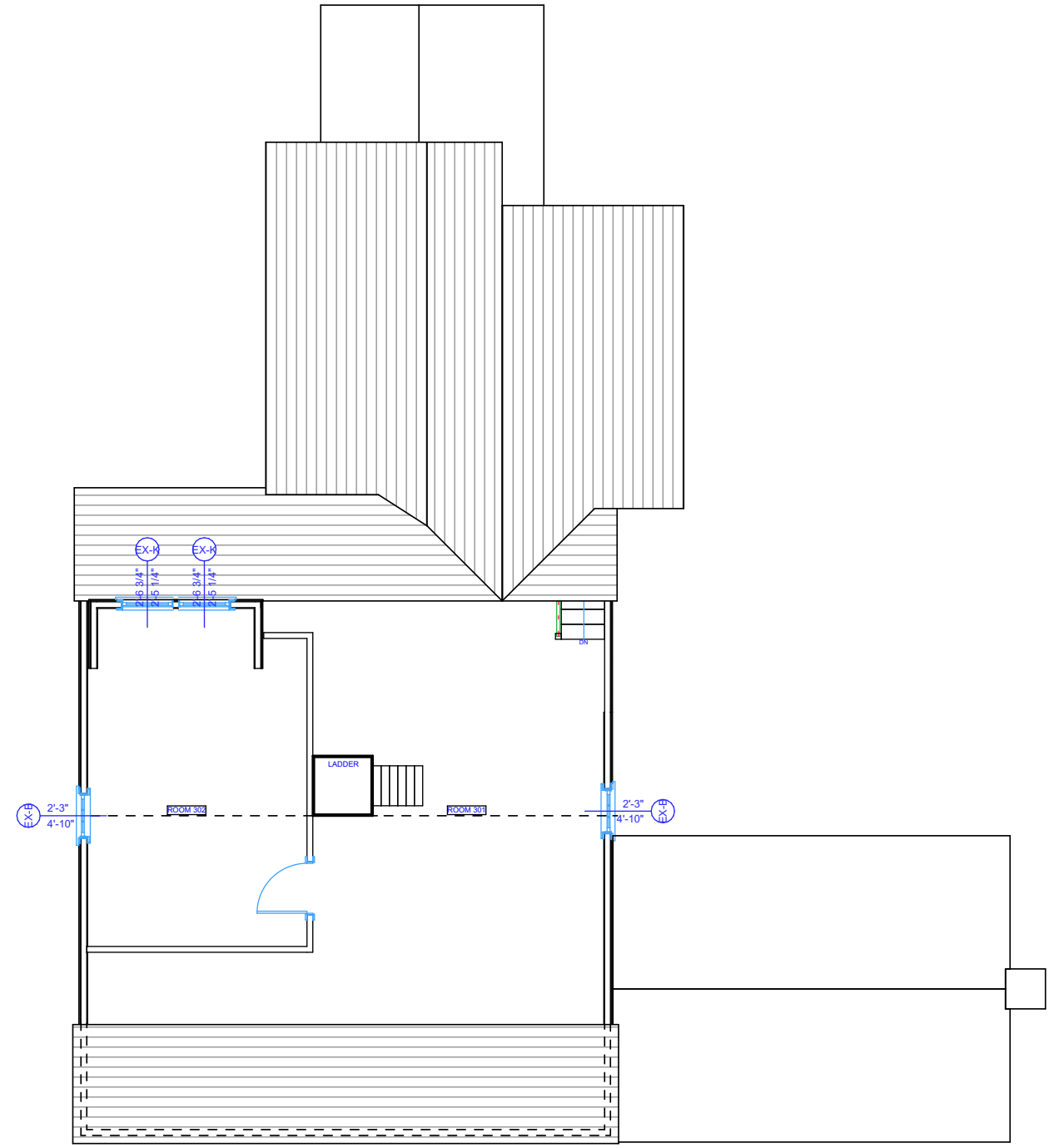
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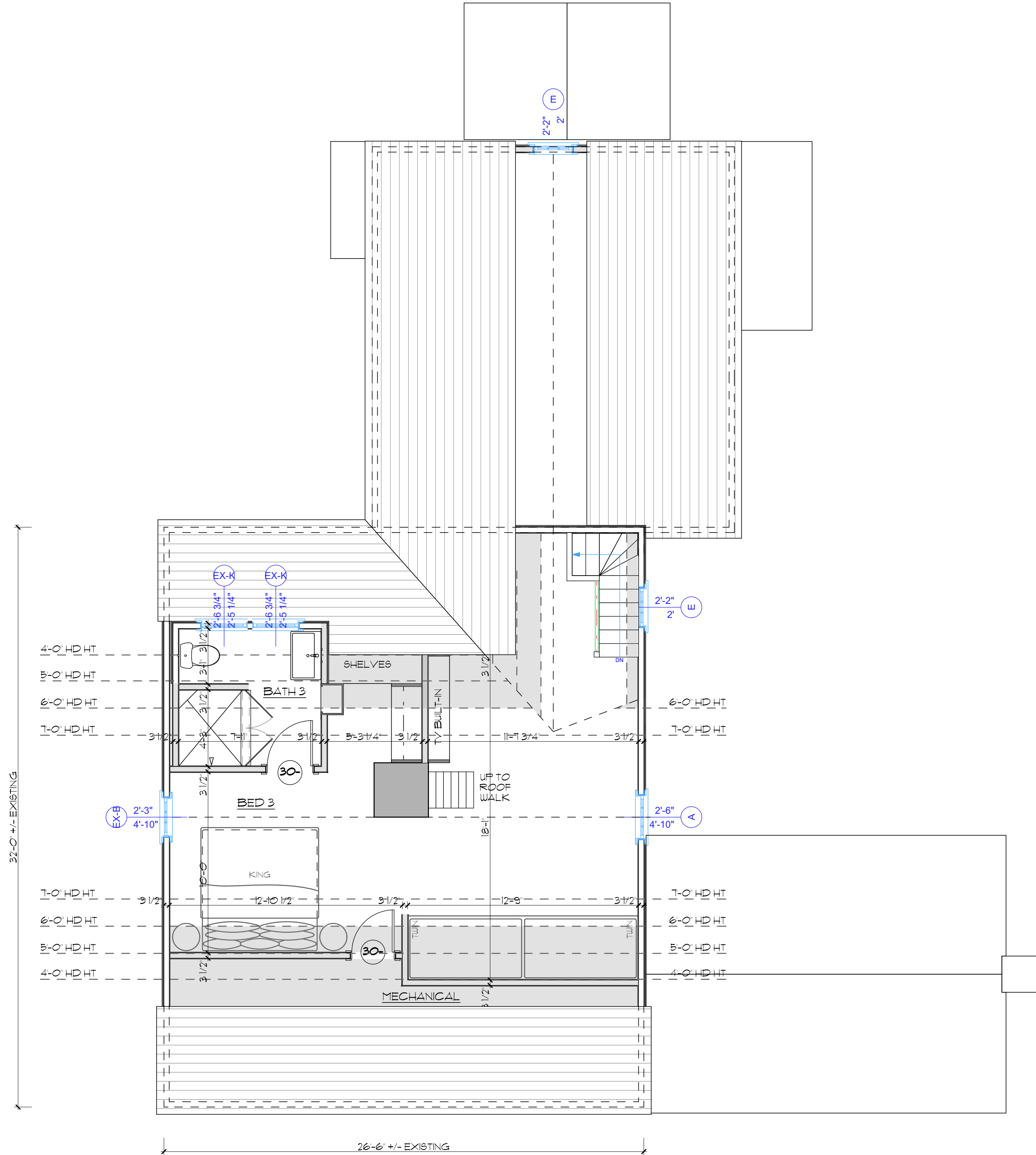
A-1.2



PREVIOUSLY SUBMITTED THIRD FLOOR PLAN
Scale: 1/8" = 1'-0"



EXISTING THIRD FLOOR PLAN
Scale: 1/8" = 1'-0"



PROPOSED THIRD FLOOR PLAN
Scale: 1/4" = 1'-0"

DATE	REVISIONS

Initial Conditions Assessment
6 Gull Island Lane, Nantucket, Massachusetts
June 11, 2016

- I. **Background:** Historic ownership of the house at 6 Gull Island Lane has not been identified in secondary sources or by primary sources made available for this assessment. For this reason, all dates provided are estimates based upon stylist and construction details. Only the house and not the adjacent two-storey garage/outbuilding has been evaluated for its condition.

The house is a complex structure created by at least seven periods of enlargement and alteration. The different portions of the structure are:

- **Main House (ca. 1775-1800 & ca. 1800-25):** The main block of the house seems likely to have been constructed in the third quarter of the eighteenth century and is a two-storey timber-frame structure set on a shallow footing wall of rubble stone and brick with intermediate posts within its crawl space to provide additional support to timber beams. A shallow brick cellar exists at the southwest corner of the structure; once accessible from a stair beneath the rear staircase, this cellar is now inaccessible except by crawling beneath the structure to it.

The building is of timber-frame construction that appears to be a “Typical Nantucket House”; however, its framing varies from this type. Most buildings of this type consist of two structural bays in width and two in depth, creating a frame of four bays with a chimney tucked into the corner of one of the bays. The house is three bays in width, framed by timbers (summer beams) that run north to south at the first and second storeys without visible intermediate posts, although supplementary may be concealed within the chimney-breast at the center of the structure.

The central chimney rises from a base of stone and brick set on grade; bedding and pointing mortars are lime-based without evidence of clay mortar at the chimney’s core. There are three fireboxes at both the first and second storeys, but no kitchen hearth is apparent, suggesting that the chimney may have been modified in the early nineteenth century when the kitchen ell was added to the house.

The exterior retains an exceptionally high proportion of original details including original shingles on the north wall, plank frame windows with original flashing and sash at all elevations, an original water-table at the façade, original corner boards with flashings, original cornices and original rake boards.

- **Rear Ell (ca. 1800-25):** Originally built as a narrow two-storey extension on the south wall of the Main House, the Rear Ell retain several partial and

complete plank window frames that suggest it was constructed in the first quarter of the nineteenth century. The interior of the Ell has been substantially modified by the extension of its east and west walls. Few original interior finishes remain with the exception of a notable batten door and window that were the original back door to the Main House. The chimney of the ell contains a single flue and a brick pad at the first storey, presumably for an iron stove. Mortar is made of clay which was a common mortar material until the end of the eighteenth century, but increasingly rare thereafter.

- **West Extension of Rear Ell (ca. 1900-25):** The west wall of the ell has been removed and extended beneath a shed roof laid atop the original. It is possible that the north end of this extension is earlier, as it stands on an older foundation. Windows appear to date primarily from the twentieth century and to have had frames made to imitate the plank frames of windows at the Main House
- **East Extension of Rear Ell (ca. 1900-25):** The second floor of the Rear Ell was extended eastward in the early twentieth century, leaving the first floor elevation in position. One window at the first storey retains its original plank frame.
- **South Extension of Rear Ell (ca. 1945-60):** The one-storey addition at the south end of the ell appears to have been constructed as a laundry room and does not appear on Sanborn Atlases or on the 1943 survey which accompanied the petition to change the property to Registered Land. The addition contains contemporary materials and is constructed with contemporary techniques.
- **West Livingroom Addition (ca. 1935-40):** Shown on the 1943 survey of the property, this addition is built of nailed dimensional lumber set on piers and sections of foundation wall that partly surround a grade-level crawl space. The structure is enclosed by a pitched roof with an exterior chimney rising at its west gable. All structural and finish elements are contemporary with the wing's period of construction.
- **Projecting East Oriel (post-1949):** Constructed at the center of the east elevation's second storey and supported on struts, this structure is entirely contemporary in its methods of construction and finishes. It was constructed to create a bathroom for second-storey bedrooms.

II. Existing Conditions: Evaluation of existing conditions has focused on the historic core of the structure, specifically the Main House, with the assumption that the Rear Ell and its extensions will be demolished along with the East Oriel Addition, but that West Livingroom Addition will be retained in place.

A. Site, Foundation & Piers: The building stands on a site near the Lily Pond and adjacent to a low area that once providing a connection between the outflow of the pond and the Nantucket Sound. This outflow has been largely blocked with the result that the water table beneath the building is likely to be higher than it was when the building was constructed.

- 1. Foundation:** The north wall is built of early 19th century bricks and is severely damaged with partially collapsed sections. The west wall is also built of 19th century brick in mixed condition. The south wall consists of a mixture of rubble stone, brick and concrete-block patches that date from foundation repairs to the rear ell, ca. 1950-70. The east wall is built of rubble stone at its north end and brick at its south end; both stone and brick sections are damaged and unstable due to loss of mortar and moisture damage.
- 2. Piers:** Soil beneath the house is soft and of uncertain bearing capacity. Posts that have been added to stiffen the structure exhibit heavy staining from moisture absorbed through the floor into their grain ends.
- 3. Rainwater Drainage:** No system currently exists to drain rainwater away from the building. Failed gutters drop water at building corners; much of the water dropped at the northeast and northwest corners enters the crawl space and damages structural wood with its splash back at grade.

RECOMMENDATIONS:

- 1. Conduct additional research to determine the level of the water table beneath the house.**
- 2. Replace wall in sections during timber repair with a frost wall of brick and stone with a footing sufficiently broad to support the wall on soft soil; above grade, the foundation should match the appearance of the historic foundation (allow 100% rebuilding – 119'-6"); [NOTE: creation of a full cellar is probably infeasible both because of the high water table on the site and the damage it may cause the chimney mass; the structure should be jacked only as much as is needed to replace sills and remove sags attributable to sill and joist decay.]**
- 3. Install a vapor barrier between the ground and wooden framing.**
- 4. Hand-dig access channels and line with poured concrete to provide future access for maintenance and utilities.**
- 5. Retain & repair existing partial cellar.**

6. Investigate & install pads to support 8 piers (estimate) on soft soil.
7. Because the site is near wetlands and may have a high water table beneath it, draining rainwater away from the foundation is especially important. If at all possible, draining water to daylight where a positive pitch will cause it to flow away from the house is the ideal choice. If such drainage is not permitted because of the proximity of wetlands or lot lines, then a system of drainage into dry wells is a second-best choice.

B. Timber Frame: In general, the building's frame remains in very good condition with several specific areas of damage, primarily at the first-floor framing and east wall:

1. **First Floor Framing:** Due to the combination of poorly drained roof run-off and a high water table, the frame of the first floor has been exposed to high moisture levels for a prolonged period. All sills are made of hewn white pine. The north sill is completely rotted while the west and south sills are mostly sound except for minor rot on their outer 1". The east sill is decayed near its north end, but sound for the southern $\frac{3}{4}$ of its length. Sills at the southeast corner of the house have decayed beneath the corner post. Decayed sills and joists have caused the structure to settle downward at its southwest corner, leaving the masonry all of the partial cellar as a high point under the wall between rooms 104 & 107, and causing the wall to bow and impeding the swing of the door between these rooms. All joists appear to be weakened by decay due to moisture.
2. **Corner Posts:** All corner posts require repair at the first storey. The northeast corner post has rotted at its base and at much of its outer face which has been exposed to the weather. All other corner posts have rotted at their bases.
3. **Second-storey East Wall:** Decay of portions of the east sill have caused the wall to settle by as much as 3" at the second storey causing joists to deflect. In addition, the oriel addition is cabled into the timber structure at the attic and is pulling the east girt and summer beam. It is likely that the supports of the oriel addition are inadequately engineered. The effects are visible in 202 & 205 where door frames have settled by approximately 3".
4. **Other framing:** All other portions of the frame appear to be in sound condition. First and second-storey wall framing is concealed by finishes, but there is no apparent buckling or sagging that would indicate damage. Attic framing is dry, sound and free of rot, excepting an area of rot due to a leak at the junction of a principal rafter, tie beam and south plate. Pinhole leaks in the roof have the potential to cause damage, but do not appear to have done so to date.

RECOMMENDATIONS: Repair damaged framing using timber-frame joinery and either white oak or white pine timbers to provide durability and physical properties similar to the rest of the frame.

- 1. Shore the structure and jack sagged sections of the framing enough to level flooring and provide space to install new sills.**
- 2. Assume complete replacement of north, west and south sills; assume selective replacement and splicing of east sill (allow for 100% replacement: 119'-6" of 8" x 8" timbers).**
- 3. Cut all corner posts back to sound wood and splice in new bases, leaving interior faces intact, if possible (allow for 50% replacement of first-storey height – 18' of 8" x 8" timber).**
- 4. Assume complete replacement of joists at first storey and of the summer than runs beneath rooms 103 and 104 north of the chimney (allow 360' of 3" x 6" timber).**
- 5. Remove the added oriel at the east wall and jack girt back into position to relieve pressure on joists; inspect and selectively repair girt and second-storey joists as needed.**
- 6. Remove decayed wood at the rafter, tie-beam and plate on the south wall; splice with new wood.**

C. Exterior Wall Cladding & Finishes: Although the claddings of exterior walls are heavily weathered, the Main Block of the house retains an unusual amount of original finishes:

- 1. North elevation:** Shingles on this elevation appear to be original riven white pine. Where shingles are missing, only one row of nailing is visible on original sheathing and it corresponds to the nail placement of existing shingles. Corner boards and plank-frame windows are flashed with wooden shingles set into channels on the sides of these elements; vertical joints between these flashing shingles are skived to provide a downward sloping, overlapping joint. The base of the wall is trimmed with a moulded water table, the upper lip of which is rabbeted to allowing shingles to overlap the water table and provide a better seal against the weather.
- 2. West elevation:** Covered with later shingles, the west elevation retains original plank frame windows, and an original moulded rake board. Alterations consist of West Livingroom Addition that conceals the north end of the first storey, the addition of small six-light windows at the rear staircase near the south end of the elevation, and the installation of two wide casements at the north end of the second storey. Trim is weathered but sound.
- 3. South elevation:** Most of the south elevation is covered by the Rear Ell within which an original batten door with wrought-iron strap hinges and an original window set in a plank frame remain in position at the original back door to the house. The eastern half of the south

elevation is exposed to the weather and is trimmed with a beaded corner board and boxed cornice.

4. **East elevation:** Covered with twentieth-century shingles and altered by the addition of second-storey oriel set on posts and struts, the east elevation retains original beaded corner boards, an original moulded rake board and plank window frames with original wooden-spline flashings.

RECOMMENDATIONS: Repair damaged framing using timber-frame joinery and either white oak or white pine timbers to provide durability and physical properties similar to the rest of the frame.

1. **North elevation:** Document, dismantle and salvage shingles and wooden-spline flashing; repair & splice plank frames as needed, repair sheathing as needed, provide access for utility/wiring lines, provide access for blown-in cellulose insulation. Determine feasibility of re-using some or all of the original shingles; if infeasible, consider restoring this elevation to match its unique historic condition using riven white-pine shingles and splines. Reserve sample of rotted water table and have new water table fabricated to match.
2. **East and west elevation:** Strip existing clapboards, repair sheathing as needed, repair & splice plank frames as needed, provide access for utility/wiring lines, provide access for blown-in cellulose insulation, and re-cover at owner's option with riven white pine shingles or standard red cedar shingles nailed to match spacing of original shingles at façade (north elevation).
3. **South elevation:** Treat the south elevation in the same manner as the east and west. If the Rear Ell is to be demolished, the treatment of the area currently covered by the Ell cannot be specified until plans are developed to indicate the height of the new ell's roof and whether there will be additional fenestration on the second floor of this wall.

D. Windows & Sash: The Main House retains nearly all of its original windows, comprising 9 windows with 12/12 sash, 10 windows with 9/9 sash and 1 window with 4/4 sash (now contained within the rear ell), glazed with 7" x 9" panes, the majority of which are original crown glass or cylinder glass. All windows are set in their original plank frames, the majority of which retain their wooden spline flashing set into channels on jambs and extending over sheathing to seal the joint between the frame and the wall sheathing; this system has performed well during the buildings 200+ year life.

1. **North elevation:** All 7 windows on the north elevation are original and retain original sash with the majority of its early glass in position. The easternmost window at the first storey has jambs that are damaged

by bolts having been attached to them; other frames remain in sound condition.

2. **West elevation:** 5 original windows remain in position with plank frames and original sash. Two 6-light hoppers have been added to light the back staircase near the south end of the elevation and a wide casement with two 20-light sashes has been added to the second storey's north end to illuminate room 201.
3. **South elevation:** 3 original windows remain – 2 on the exterior and one contained within room 108.
4. **East elevation:** 5 original windows remain, 2 per storey at the first and second storeys and one at the attic. The window on the east wall of the Oriel Addition is entirely modern. Windows at the south end of the wall have damaged heads that have been previously repaired by nailing new pieces in position.

RECOMMENDATIONS: Retain and repair all original windows; if the Rear Ell is to be demolished, remove and retain two plank frames and associated sash for re-use.

1. **Inspect and repair all plank frames using joinery to splice in new pieces as needed – assume 6 new spliced lintels or jambs needed.**
2. **Retain all existing sash, de-glaze, repair sash frames splicing in new rails and muntins as needed (assume 10% replacement of bottom rails and muntins), consolidate wood with linseed oil, re-glaze with original glass using linseed oil putty, and repaint.**
3. **Select and install exterior storm windows or storm panels to achieve energy savings.**
4. **Consider installation of weather-stripping to tighten windows.**

E. Doors: The house retains the majority of its eighteenth-century doors and a small amount of early hardware. In the Main House there are 11 original doorways with moulded architraves, four-light transoms and raised-doors some of which retain original wrought-iron hardware. In addition, there are 3 early batten doors, the most notable of which stands between rooms 107 and 108. There are three other early paneled doors set, or re-set in locations without transoms. The Rear ell retains 4 raised-panel doors that were re-set as salvage at the second storey; retain for re-use in the Main House.

RECOMMENDATIONS:

1. **Retain and repair all original or early doors *in situ* together with their moulded architraves and transoms; minor planing and fitting will be needed after the structure is leveled, but most merely require preparation and repainting.**
2. **Remove and retain two plank window frames from the ell and associated sash for re-use.**

F. Roof: The Main House's existing roof structure and deck appear sound, although asphalt shingles are worn out and need replacement. Wooden gutters have decayed beyond repair and downspouts are either missing or damaged. A shed dormer has been added (ca. 1940-60) to the east end of the south slope of the roof. It appears sound, although its 2 6-light windows are broken. Originally, the south slope of the roof had a clean-out hatch for the chimney; this hatch was reached by an early ladder (pre-1825) that remains in position.

RECOMMENDATIONS: Retain and repair all original windows; if the Rear Ell is to be demolished, remove and retain two plank frames and associated sash for re-use.

1. Strip all surfaces back to wooden sheathing, inspect and splice as needed (assume less than 5% replacement)
2. Install new asphalt shingle roof (allow 1,100 square feet); avoid the use of ice & water shield or other impermeable coatings beneath the shingles, as such surfaces increase the likelihood that sheathing boards will rot.
3. Re-flash chimney with lead flashings and counter flashings.
4. Install new wooden gutters and downspouts; connect to drainage system to carry water away from building.
5. If additional flashings against ice damming and heavy rain are needed, use copper at eaves.
6. At owner's option, reconstruct former clean-out hatch adjacent to the central chimney at the attic; retain the historic ladder to the hatch which remains in position.

G. Floor Plan: The existing floor plan with a large, open stair hall at the building's northwest corner and a small, winding rear stair at its southwest corner are character-defining elements of houses of this type, together with the layout of three rooms and fireboxes around a central chimney.

RECOMMENDATIONS: To preserve the largely undisturbed architecture of the building, existing room shapes, partitions, door locations and finishes should be preserved.

1. The installation of bathrooms should, ideally occur within the spaces now used for bathrooms (rooms 105 and 204 immediately adjacent to the east side of the chimney) or in the rear ell.
2. If necessary, re-introduction of a partition along the scar line of a former partition in room 201 could create a bathroom or service room without intruding upon the plan and proportion of the house's major interior spaces.
3. Retain and repair all original windows; remove and retain plank frames and associated sash from the Rear Ell for re-use.

H. Chimney & Fire Boxes: The chimney survives in fundamentally sound condition. The base of the chimney has suffered some dislocation of its footing stones and mortar, but not enough to cause more than slight movement in one first-storey firebox (west). Flues appear to be in good condition, but most of their linings have deteriorated. The chimney cap above the roof is deteriorated and in need of rebuilding.

RECOMMENDATIONS: Repair chimney with lime mortar to match original conditions. [Note: stabilization work cited in #1-3 should be regarded as essential; items #4-5 are desirable but could be deferred without danger of damage to the building.]

- 1. Repair the base of the chimney in the crawlspace and the related crack at the first storey.**
- 2. Rebuild the chimney cap from the attic through the roof, re-flash with lead flashings.**
- 3. Install top-mounted dampers or a vented cap (if fireplaces are not to be operable) to stop rainwater entry into the flues.**
- 4. Re-line all flues with lime mortar to provide a complete lining from firebox to chimney cap.**
- 5. Selectively repair plaster facings around fireboxes and re-set sections of hearths as needed.**

I. Interior Woodwork: The Main House retains virtually all of its architraves at windows and doors as well as baseboards. It contains six fireplaces, each of which is trimmed with a wooden mantelpiece, and some with paneled room ends; a seventh fireplace exists in the Livingroom Addition and has been included on this list. By rooms these are:

- 1. Room 102** – fireplace constructed between 1935-1943 with hard Portland cement mortars. The fireplace is set in a paneled room end of paneling that dates from the time of its construction and is trimmed with a mantelpiece that appears to mimic mid-nineteenth century architectural details. None of these features is essential to the historic character of the Main House and should be retained or removed at the owner's preference.
- 2. Room 103** – fireplace set in a wall of original raised-paneling to which a Federal Period mantelpiece (ca. 1800-25) has been applied; the hearth has been covered in part or completely with an applied cement render.
- 3. Room 104** – fireplace is currently blocked; it is framed by a Federal Period mantelpiece; surrounding raised-panel work appears to date from ca. 1935-43 and has been applied over an unknown surface, perhaps plaster.
- 4. Room 106** – fireplace is framed by a Federal Period mantelpiece; surrounding raised-panel work appears to date from ca. 1935-43 and

has been applied over an unknown surface, perhaps plaster. Plaster at the fireplace's jambs has been damaged.

5. **Room 202** – fireplace is currently blocked but surrounded by a federal Period mantelpiece, the shelf of which appears to be a replacement from the second half of the nineteenth century.
6. **Room 203** – fireplace is currently blocked but surrounded by a mantelpiece that may be Federal Period, although no joinery is evident. The mantel-shelf appears to have been replaced in the mid- or late nineteenth century with a thick shelf bearing a flat edge rather than moulded profiles.
7. **Room 205** – fireplace is surrounded by Federal Period mantelpiece; it is unclear if the shelf is original.

RECOMMENDATIONS: Retain and repair all mantelpieces and woodwork. Subject to confirmation of construction technique and age, the following features may be modified without loss of historic fabric:

1. **Room 102** – any and all features may be modified without loss of historic fabric from the Main House's major period of significance.
2. **Rooms 104 & 106** – removal of applied twentieth-century paneling will not affect the building's historic integrity provided the existing mantelpiece is retained.
3. **Rooms 202, 203 & 205** – all mantelpieces seem to have had their shelves replaced and would typically have had shelves with moulded profiles at the edge. The existing shelves appear to date from the mid-nineteenth century and are in sound condition. Removal is not recommended, as replacement would require some architectural conjecture about original conditions; however, removal would not seriously affect the historic value of these features if sensitively designed shelves were to be installed.

- J. Plaster:** The majority of walls in the Main House appear to retain their original lime plaster on wooden lath. Plaster cannot be fully assessed as it is mostly covered with lining paper that has retained moisture and displays a significant amount of mold. It is likely that the plaster remains in fair and repairable condition.

RECOMMENDATIONS:

1. **Remove all lining paper as soon as possible to reduce mold in the house and to expose plaster.**
2. **Confirm condition of plaster, its keying and surface condition.**
3. **Repair sound plaster & replace missing plaster with new lime plaster set on existing wooden laths.**

K. Floors: With the exceptions of rooms 104, 107 & 206, softwood floors have been previously sanded with a heavy belt-sander that has removed their original hand-finished surfaces. In the three spaces where painted floors remain, they show the usual signs of heavy wear but remain in sound condition.

RECOMMENDATIONS:

- 1. Rooms 104, 107 & 206: Where floors have not been sanded with a belt sander, either retain and renew their painted surfaces or remove paint chemically to avoid removing their original surfaces which sanding does.**
- 2. Where floors have been previously sanded, they cannot be re-sanding with the danger that the boards will be severely damaged, as they have already lost a significant portion of their thickness to the first sanding. If surfaces in these areas are to be renewed, coating with paint or applying a new layer of clear finish after cleaning the surfaces is recommended.**

L. Utilities & HVAC: Existing services are antiquated and worn out. Complete replacement is anticipated and recommended.

RECOMMENDATIONS: Before estimates can be made of construction costs and timing, HVAC, plumbing, electrical wiring and security system plans will be needed. Repairs to the building's timber frame and plaster can be coordinated with creating chases for services that do not require damage to historic features; creating these chases and openings as part of the repair can reduce the cost of installing services in the building.

Submitted June 20, 2016,



Brian Pfeiffer, Building Preservation Associates

DRAFT – for review
Proposal for Worcester Polytechnic Institute Student Project

Topic: Sustainability, Reuse, and Preservation of Housing and building material on Nantucket

Lead Sponsor: The Town of Nantucket Historical Commission

Co-sponsors: The Town of Nantucket Department of Public Works, Housing Nantucket, The Nantucket Preservation Trust

Town of Nantucket Staff liaisons:

Holly Backus, Preservation Planner

Lauren Sinatra, Energy Coordinator

Graeme Durovich: Recycling and Solid Waste Coordinator

Other project specific sponsor contacts:

Hillary Hedges Rayport, Chair, Nantucket Historical Commission

Mary Bergman, Executive Director, Nantucket Preservation Trust

Anne Kuszpa, Executive Director, Housing Nantucket

Project Summary

Nantucket Island currently experiences a high level of residential construction activity. Limited available buildable land and a large number of historic structures results in a high level of renewal: demolition, partial demolition, house relocation, and gut renovation. From 2018 to 2020, 26,000 tons of construction and demolition (C&D) debris was collected at the Nantucket dump and transferred off-island.

The Town of Nantucket is committed to sustainability, preservation of historic structures, efficient town operations, and affordable housing¹. This WPI project will help the Town understand the potential to further these objectives through management of building demolition and re-use.

Project Goal

The project area is large and may be broken into several phases. Students should work with project sponsors and their academic advisor to create a well-defined project that answers some of the key questions below. The project should begin by understanding and quantifying the amount, characteristics, and impacts of demolition and C&D waste on the island. Students should delve further into the sociological, cultural, environmental, and/or economic impacts of demolition. Students may elect to focus on policy responses, or develop more entrepreneurial, market-based responses to the situation depending on their interests. The final project should include a well-supported problem statement, a chosen area of focus, and a concrete deliverable

¹ See Town of Nantucket Select Board Strategic Plan

<https://www.nantucket-ma.gov/DocumentCenter/View/22924/Town-of-Nantucket-Strategic-Planning-as-of-January-13-2021-PDF?bidId=>

in the focus area which could be developed and implemented by a Town department and/or island non-profit.

Project Key Questions

- Current waste and reuse
 - What are the types and quantities of C&D material?
 - How much material is currently being reused?
 - How is it reused?
- Impact of construction debris
 - on the town
 - on neighborhoods
 - on our environment
 - on historic resources
 - What is the economic value to the town of renewal?
- Are there any key drivers or trends?
- Potential for reuse
 - What is the reuse potential of different building waste streams?
 - Relocation and reuse of whole houses
 - Salvage of historic material
 - Non-historic but reusable building material
 - Fixtures
- Models of reuse
 - How do other towns re-use building waste streams?
 - Benefits to towns
 - Models to emulate
- Market for salvage and reuse on Nantucket
 - Who are the potential customers of salvage building supply?
 - How big is the market for re-use?
 - Accessing the market
- Policy
 - What are the relevant policies and fees?
 - Consideration of policies that:
 - discourage demolition
 - encourage reuse
- Student Recommendations
- Barriers to/opportunities for adoption



NANTUCKET HISTORICAL COMMISSION

Town of Nantucket
2 Fairgrounds Road
Nantucket, Massachusetts 02554

February 26, 2020

Ms. Dawn Hill Holdgate
Chair
Select Board
Town of Nantucket
Via email

COMMISSIONERS

Hillary H. Rayport (Chair)
Angus MacLeod (Vice-Chair)
David Silver (Secretary)
Clement Durkes
Thomas M. Montgomery
Georgia U. Raysman
Milton Rowland

ALTERNATES

Don DeMichele
Ben Normand

Dear Dawn:

The Historical Commission met Monday and discussed zoning article 48, restrictions on swimming pools. The Commission requested I convey our unanimous support for this article, which would prohibit swimming pools on lots of less than 7500 sq. ft. in certain areas.

Nantucket is characterized by densely built villages and open moors. In dense settlements, pretty, open yards and small outbuildings help Nantucket retain the old world charm for which she is known. Even as development continues, the large amount of conservation land ensures views across lots often include a distant water view, or windswept moor. This cannot be the case, however, when pools overwhelm small yards, and the tall hedges and fences required to shield them from the public way are ever taller and more prevalent, closing in dense neighborhoods and blocking views.

The increasing popularity of swimming pools in some densely built neighborhoods is at odds with our stewardship of our National Historic Landmark known for its history, its beauty, and the special visual quality that sets it apart from all other places. For preservation of Nantucket, the NHC supports article 48, thanks the Planning Board for its motion, and requests this be noted by the Select Board

Sincerely,

Hillary Hedges Rayport
Chair
Nantucket Historical Commission