



# Town of Nantucket Nantucket Harbor Shimmo & Plus Parcels Sewer Extensions



**Our Island Story**  
NEWEA Presentation

January 30, 2019



# Town of Nantucket Shimmo & Plus Sewer Extensions

## Project Team:

- David Gray, Sewer Director
- Frank Ayotte, OPM
- Laurie Toscano
- Drew Patnode
- Steve Pedersen
- Kent Nichols
- Countless Others...





Town of Nantucket

# Nantucket Harbor Shimmo & Plus Sewer Extensions

## Our Island Story Agenda

- Project Background, Overview & Schedule
- Shimmo & Plus Parcels Sewer Summary
- Technical Aspects & Challenges of Island Work





Nantucket Shimmo & Plus Sewer Extensions

# Nantucket Background

## About Nantucket - “The Grey Lady”

- Island located nearly 30 miles off Massachusetts coastline
- Inhabited by Wampanoag people until Europeans arrived in 1641
- Notable for its part in whaling industry
- Can be reached by ferry or airplane
- Year-round population of ~10,000 people
- Popular ‘summer colony’ and tourist destination, with summer population of over 60,000 & growing
- Town of Nantucket is also Nantucket County





# Town of Nantucket Shimmo & Plus Sewer Extensions Project Background

## CWMP (by others)

- Identified Needs Areas & Recommended Sewer Extensions to most remaining developed areas of the island.
- Protect water resources – surface water and ground water from Nutrient loading





# Town of Nantucket Shimmo & Plus Sewer Extensions

## Project Background

- NH Shimmo is the 1<sup>st</sup> of the CWMP Needs areas for Sewer Extension
- Plus Parcel Areas were added as infill pockets in the existing sewer system
- Last prior large-scale Town sewer project was early 1990's







# Town of Nantucket

## Shimmo & Plus Sewer Extensions

### Project Details:

- Properties Served by Proposed Sewer Extensions
  - Approximately **360 properties** to be Connected
- Conventional Gravity Sewer (approx. **13,500 feet**)
  - Meadow View, Tashama/Maclean & Green Meadows Areas
  - Including 2 Pump Stations with 5,000 feet of force main
- Low Pressure Sewers (approx. **38,000 feet**)
  - NH Shimmo & Bayberry Areas
  - Low Pressure Approach Required due to Topography
  - Systems Require Individual Pump Units for Each Home





# Town of Nantucket

## Shimmo & Plus Sewer Extensions

### Project Overview

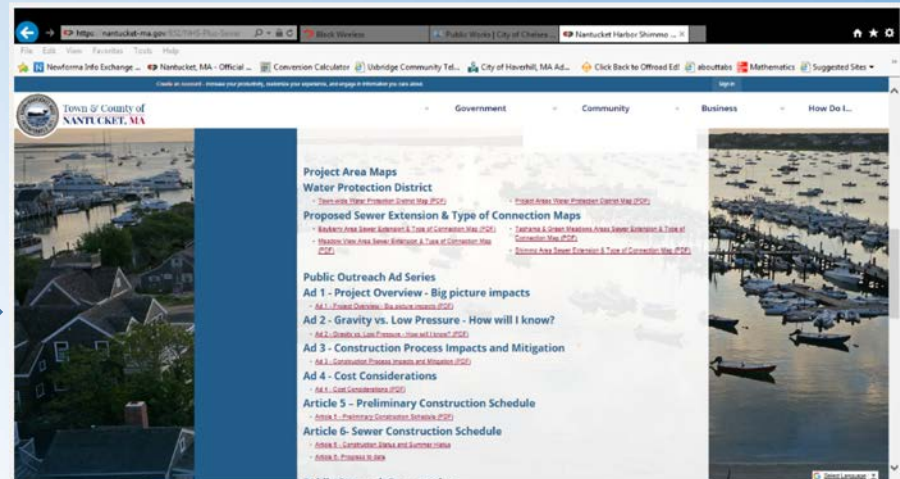
- Design Phase
  - ✓ Survey/Datum Conformance
  - ✓ Construction Cost Refinement
  - ✓ Public Outreach
  - ✓ Utility Easements for Private Roads
  - ✓ Traffic Management
  - ✓ Permitting
  - ✓ On-lot Considerations



# Town of Nantucket Shimmo & Plus Sewer Extensions

## Public Outreach

✓ Town website: [www.nantucket-ma.gov/NHS-Plus-Sewer](http://www.nantucket-ma.gov/NHS-Plus-Sewer)



- ✓ Local newspaper articles in *The Inquirer & Mirror*
- ✓ Social media: Twitter
- ✓ Subscribe to receive project news via e-mail



# Town of Nantucket

## Shimmo & Plus Sewer Extensions

### Project Overview (cont'd)

- Project Bid Phase
  - Challenging for Contractor's to Estimate
  - On-island Resource Limitations
  - Schedule Limitations
- ✓ Received 2 Competitive Bids
- ✓ Awarded to Robert B. Our for \$12.049M



Town of Nantucket  
Shimmo & Plus Sewer Extensions

- Project Construction Phase Challenges:
  - ✓ Island Accessibility
  - ✓ Time of Year Constraints
  - ✓ Private Roads/Easements
  - ✓ Public & Private Utilities
  - ✓ Traffic Management/Limited Road Width
  - ✓ Existing Utilities/Drainage Infrastructure
  - ✓ Large Parcels/Multiple Dwellings
  - ✓ Archaeological/Tribal Coordination





# Town of Nantucket Shimmo & Plus Sewer Extensions

## Island Accessibility - By Air or By Sea





# Town of Nantucket Shimmo & Plus Sewer Extensions

## Time of Year Constraints- When to Go and When to Stay





# Town of Nantucket Shimmo & Plus Sewer Extensions

## Public Roads

Boston Ave.
Cathcart Rd.
Polpis Rd.
Monomoy Road
Vesper Lane
Hummock Pond Rd.

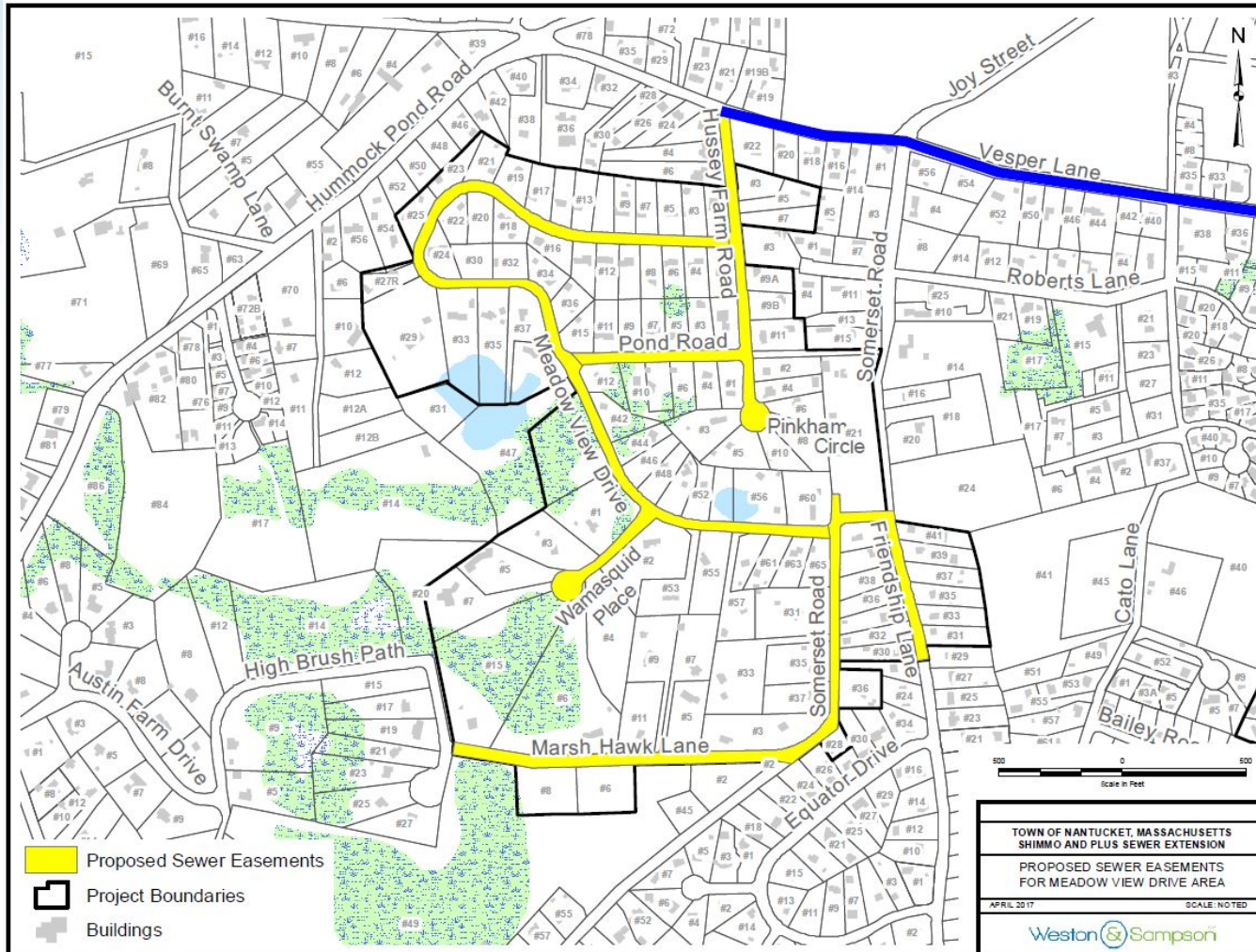
## Private Roads

Bayberry Ln.
Berkeley Ave.
Brewster Rd.
Dooley Ct.
Drew Ln.
Friendship Ln.
Gardner Rd.
Green Meadows Dr.
Harbor View Drive
Hussey Farm Rd.
Juniper Hill
Kelley Rd.
MacLean Ln.
Marsh Hawk Ln.
Meadow View Dr.
Middle Valley Rd.
Moors End Ln.
North Road
Pinkham Cir.
Pippen's Way
Pond Rd.
Rugged Rd.
Shawkemo Road
Shimmo Pond Rd.
Somerset Rd.
South Valley Rd.
Tashama Ln.
Ticcoma Way
Wamasquid Pl.





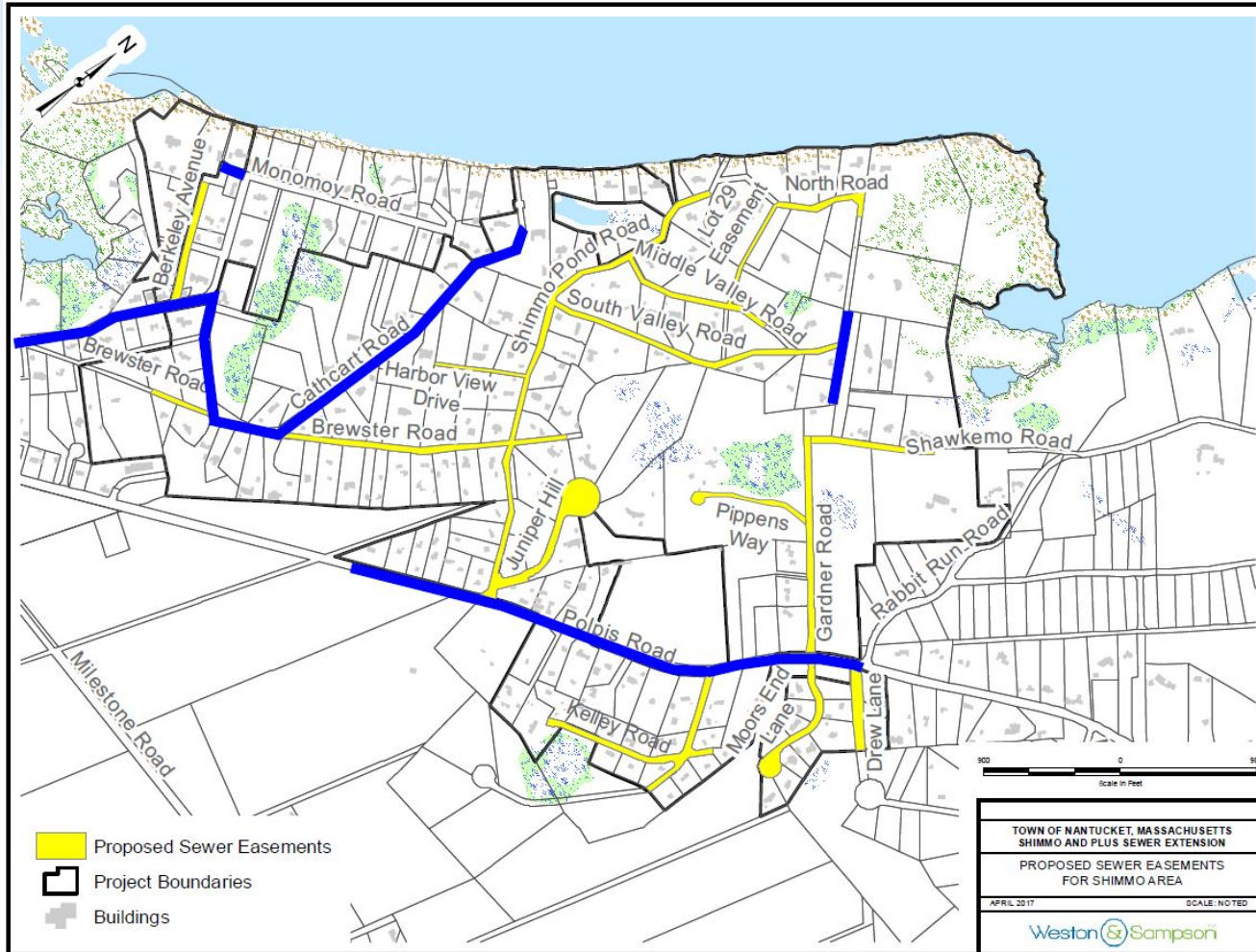
# Town of Nantucket Shimmo & Plus Sewer Extensions Easements





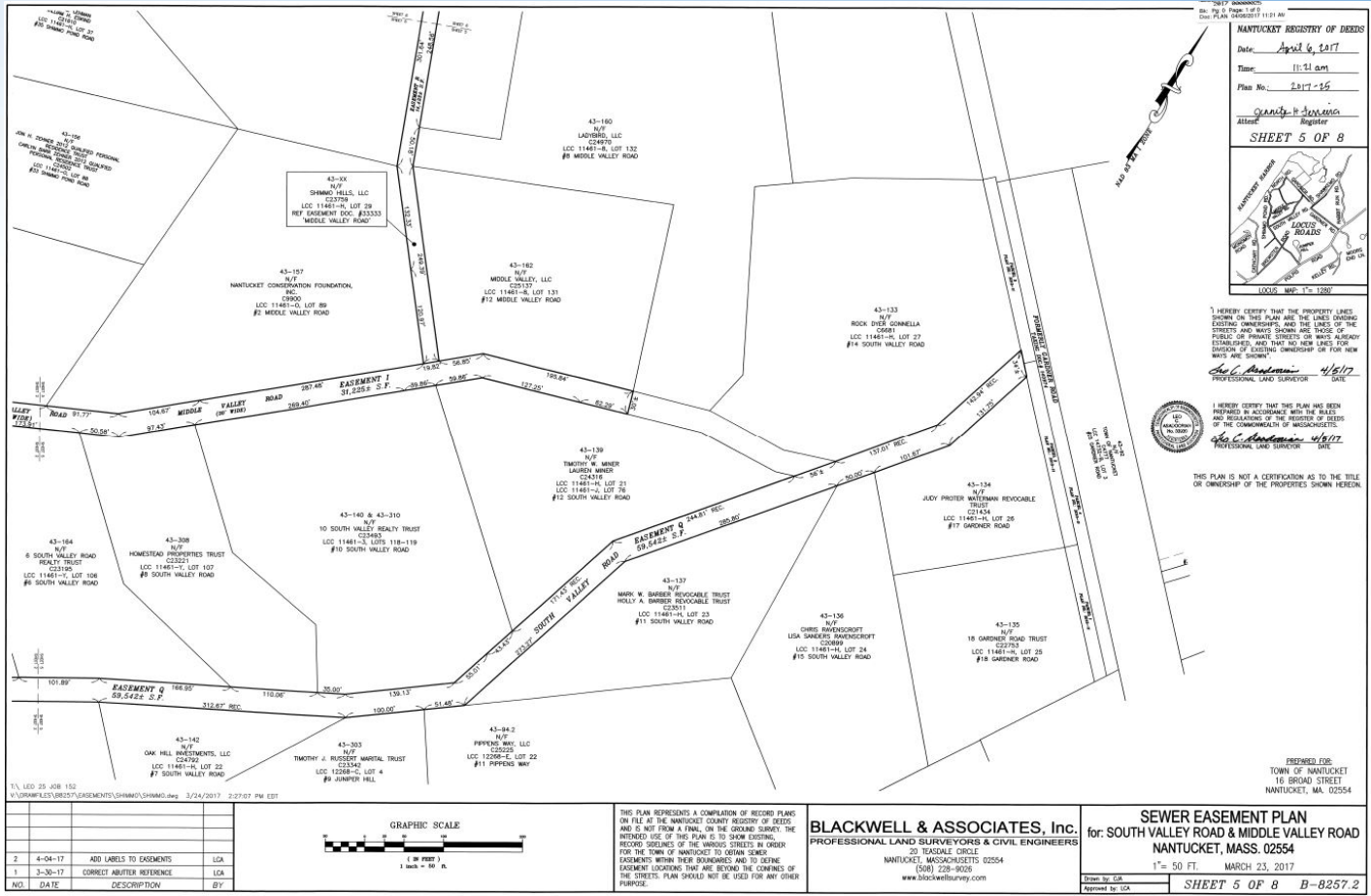


# Town of Nantucket Shimmo & Plus Sewer Extensions





# Town of Nantucket Shimmo & Plus Sewer Extensions Easements



2017 0000000  
Sht. No. of Page: 1 of 8  
Date: APRIL 6, 2017  
Time: 11:11 am  
Plan No.: B-8257-155  
Project: GRANDY B. SHIMMO  
Sheet: SHEET 5 OF 8

**NANTUCKET REGISTRY OF DEEDS**  
Date: April 6, 2017  
Time: 11:11 am  
Plan No.: B-8257-155  
Project: GRANDY B. SHIMMO  
Sheet: SHEET 5 OF 8

I HEREBY CERTIFY THAT THE PROPERTY LINES SHOWN ON THIS PLAN ARE THE LINES CHARGED EXISTING OWNERSHIPS AND THE LINES OF THE STREETS AND WAYS SHOWN ARE THOSE OF THE PUBLIC-USE "ROAD" SURVEYS OR WAYS HERETOFORE ESTABLISHED AND THAT THE REG. DEEDS FOR SHADERS OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE CORRECT.

*Sheila C. Anderson* 4/6/17  
PROFESSIONAL LAND SURVEYOR DATE



THIS PLAN IS NOT A CERTIFICATION AS TO THE TITLE OR OWNERSHIP OF THE PROPERTIES SHOWN HEREON.

1. LOT 25 JOB 152  
V:\WORK\KLS\88257\EASEMENTS\SHIMMO\SHIMMO.dwg 3/24/2017 2:27:07 PM EDT

NO.	DATE	DESCRIPTION	BY
2	4-04-17	ADD LABELS TO EASEMENTS	LGA
1	3-30-17	CORRECT NUMBER REFERENCE	LGA

THIS PLAN REPRESENTS A COMPILATION OF RECORD PLANS ON FILE AT THE NANTUCKET COUNTY REGISTRY OF DEEDS AND IS NOT FROM A FINAL ON THE GROUND SURVEY. THE INTENDED USE OF THIS PLAN IS TO SHOW EXISTING RECORD SIZES OF THE VARIOUS STREETS IN ORDER FOR THE TOWN OF NANTUCKET TO OBTAIN GRANTS OF EASEMENTS WITHIN THEIR BOUNDARIES AND TO OBTAIN EASEMENT LOCATIONS THAT ARE BEYOND THE CORNERS OF THE STREETS. PLAN SHOULD NOT BE USED FOR ANY OTHER PURPOSES.





# Town of Nantucket Shimmo & Plus Sewer Extensions

## Narrow Travelled Ways

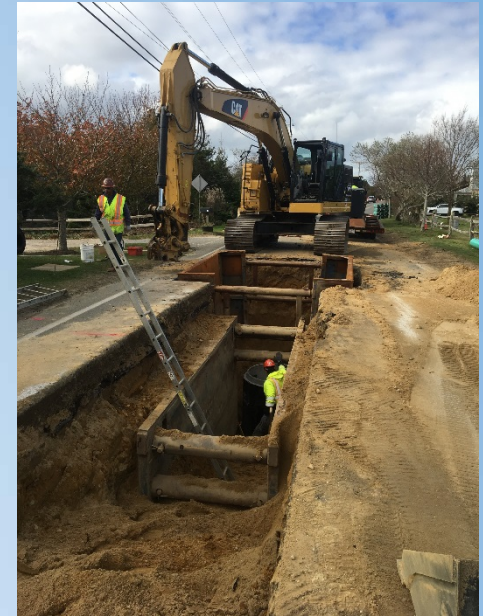
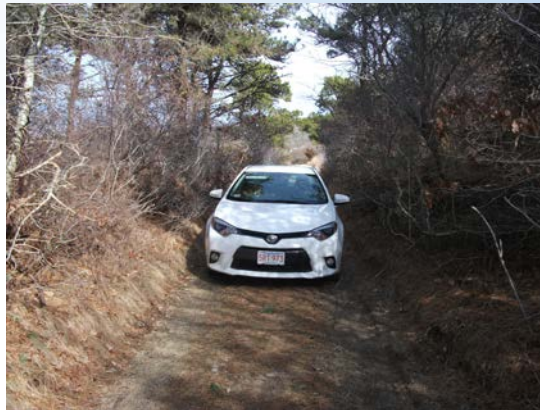






# Town of Nantucket Shimmo & Plus Sewer Extensions

## Traffic Management







# Town of Nantucket Shimmo & Plus Sewer Extensions

## Existing Utilities







# Town of Nantucket Shimmo & Plus Sewer Extensions

## Drainage Infrastructure





# Town of Nantucket Shimmo & Plus Sewer Extensions

## Multiple Dwellings







# Town of Nantucket Shimmo & Plus Sewer Extensions

## Large Lots/Large Dwellings/Big Development

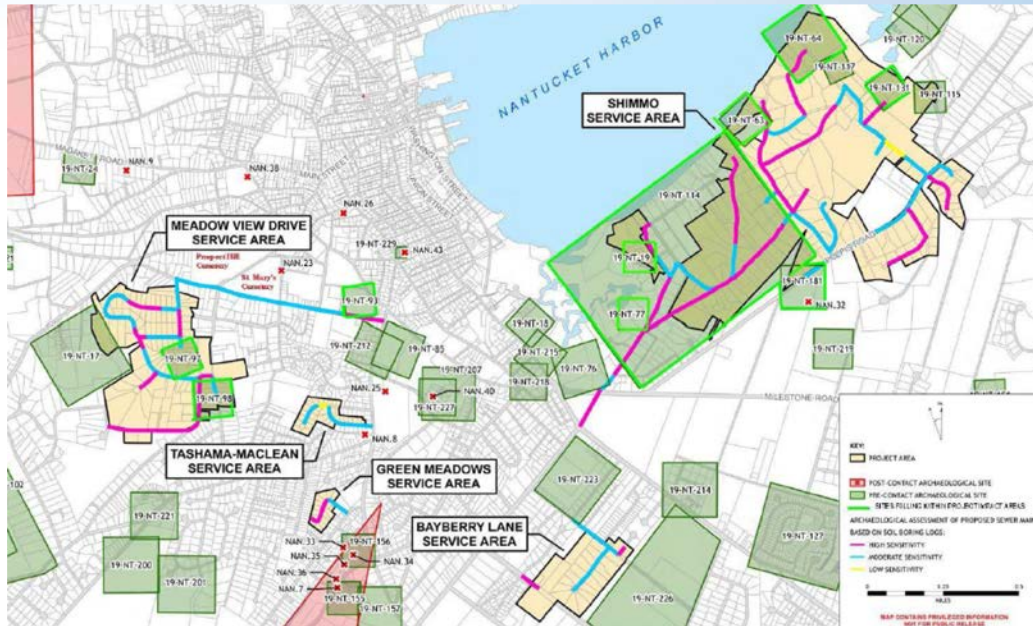






# Town of Nantucket Shimmo & Plus Sewer Extensions

## Archaeological/Tribal Coordination Archaeological & Cultural Resource Sensitivity Assessment Results & Monitoring



### KnowHow #4

INFORMATION AND ASSISTANCE FROM THE MASSACHUSETTS HISTORICAL COMMISSION

#### What to Do When Human Burials are Accidentally Uncovered

##### 1. Why are human remains found?

In Massachusetts, many unmarked graves exist without grave markers, fences, tombstones, or other surface indications of their presence. These are chiefly the graves of prehistoric and historic Indians, which may never have been marked at all, and graves which had been identified at one time in the past, but the markings are no longer visible. As a result, burials are often found during ordinary ground disturbance activities such as the construction of new homes, utilities, or roads, in the approach and/or initial use of a site, or the excavation of sand or gravel borrow. Bones are also sometimes found floating out of areas exposed by natural erosion, floodwater rising, or sand dune formation.

A new law has been enacted which establishes procedures to follow when human bones are accidentally discovered.

##### 2. Who is involved?

Private owners, State and Local Police, Medical Examiner, State Archaeologist, and the Commission on Indian Affairs.

##### 3. What should you do if you discover bones?

Do not touch or disturb the bones. Notify the state or local police and the regional medical examiner about the discovery and location.

##### 4. What does the Medical Examiner do?

The Medical Examiner investigates the discovery to determine whether the bones are human, and whether they are recent or more than 100 years old. If the bones are less than 100 years old, a criminal investigation may be warranted. If the bones are more than 100 years old, the Medical Examiner then notifies the State Archaeologist, who immediately conducts an archaeological investigation of the site. Throughout these investigations, the police officers must insure that the site is protected from further damage.

##### 5. What does the State Archaeologist do?

The State Archaeologist investigates the site to determine the age, cultural association and identity of the burial. If the State Archaeologist determines that the burial is that of a Native American, the Commission on Indian Affairs is notified. The State Archaeologist consults with the landowner to determine whether the burial can remain undisturbed. In the case of development projects, the owner and State Archaeologist discuss whether there are prudent and feasible ways the owner can take to protect the burial. If it is impossible to avoid future harm to the burial, the State Archaeologist removes the remains.

##### 6. What does the Commission on Indian Affairs do?

The archaeological investigation of Indian burials is monitored by the Commission on Indian Affairs to insure that the remains are treated respectfully.

Please remember: Once bones or artifacts are removed from the site, valuable information concerning the identity and age of the burials remains in tact. Therefore, it is important not to disturb the site in any way until the State Archaeologist can conduct an investigation and record the discovery.

##### BIBLIOGRAPHY

Massachusetts General Laws, Chapter 93C, section 88; Chapter 9, sections 26A & 27C; Chapter 7, section 38A; Chapter 114, section 17; as amended by Chapter 829 of the Acts of 1983 and Chapter 389 of the Acts of 1985.

##### For Further Information:

Please contact the State Archaeologist at the Massachusetts Historical Commission.

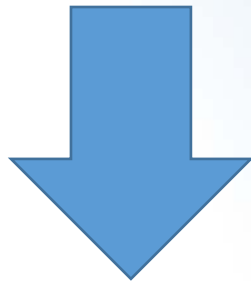
William Francis Galvin  
Secretary of the Commonwealth  
Chairman, Massachusetts Historical Commission  
Massachusetts Archives Building, 229 Murray Street, Boston, MA 02125  
Phone: (617) 727-8470 Fax: (617) 727-5126 TDD: 1-800-360-4030  
Website: www.mass.gov/info/about/mhc



# Town of Nantucket

## Shimmo & Plus Sewer Extensions

- Challenges present Opportunity:
  - ✓ Flexibility
  - ✓ Understanding
  - ✓ Communication
  - ✓ Integrating Public Input
  - ✓ Respect for Local Culture







# Town of Nantucket Nantucket Harbor Shimmo & Plus Sewers

## Moral of the Story

“We’re all in the same boat!”

Working together for a successful project







# Town of Nantucket Nantucket Harbor Shimmo & Plus Sewers

## Questions & Discussion

*Acknowledgements:* Select Board members, C. Elizabeth Gibson, Erika Mooney, Brian Turbitt, Lora Kebbati, Christine Herrmann, Roberto Santamaria, Andrew Vorce, Florencia Rullo, Rob McNeil, Nantucket Sewer Department, Nantucket Police Department, Nantucket Fire Department, Kopelman & Paige, Blackwell & Associates, Robert B. Our staff & crew members, Residents and visitors (for being understanding of impacts) and many others on and off island.