

AGENDA
CEMETERY COMMISSION MONTHLY MEETING
TUESDAY JANUARY 5, 2021 AT 8:00AM

REMOTE PARTICIPATION ONLY
OPEN PUBLIC FORUM – NEW STEPS – PLEASE READ

1. First, send an email to comment@town.harwich.ma.us (send emails at any time after the meeting agenda has been officially posted)
 - a. In the subject line enter “request to speak, your name”
 - b. In the body of the email please indicate which specific agenda item you wish to speak on.
No further detail is necessary.
2. The meeting will close to new attendees promptly at the scheduled start time for the meeting, generally 8:00 AM. It will remain closed to new attendees until agenda items with scheduled speakers are reached. This is to minimize interruptions. You may join prior to (8:00) or when the meeting has been opened up. You may participate using your computer and the GoToMeeting interface or simply using your phone. Connection information can be found below.
3. After the Chairman has opened the floor to those wishing to speak callers will be taken in the order the emails are received. **Use *6 to mute and unmute your phone.**
When you join the meeting by phone you should turn off channel 18 or your computer if streaming the meeting.

Meeting of the Cemetery Commission
Tuesday, January 5, 2021 8:00 AM – 10:00 AM
Please join my meeting from your computer, tablet or smartphone
<https://global.gotomeeting.com/join/259049229>
You can also dial in using your phone. United States: +1 (872) 240-3311
Access Code: 259-240-3311

- I. CALL TO ORDER
- II. APPROVAL OF THE MINUTES FROM DECEMBER 15, 2020.
- III. CORRESPONDENCE FROM TOWN HALL & ASSOCIATIONS
 - A. **Email from Meggan Eldredge, R.S., CHO Health Director on Funeral Services impacted by COVID-19 Orders by Governor Baker.**
 - B. **Email from Paul Sweetser on surveying Bank Street Cemetery.**
 - C. **Email from Danielle Delaney on requesting Legal Services.**
 - D. **Letter from NSTAR Electric dba EVERSOURCE Electric Company on installation of underground cables on South St abutting Mt Pleasant Cemetery.**
 - E. OTHER BUSINESS.
- IV. OLD BUSINESS
 - A. **Harwich Cemetery Master Plan, Long Term Plans.**
 - B. **Updated Plans for Veterans Memorial Circle in Evergreen Cemetery.**
 - C. **Draft Application for ArbNet for Arboretum Accreditation.**
 - D. **Cemetery Signs.**
 - E. OTHER OLD BUSINESS.
- V. NEW BUSINESS
 - A. **Email from Caleb Ledue on updating Cemetery Commission page on Town Website.**

B. **Deeds:**

C. **Bills; W. B. Mason \$127.98 & \$89.98, Eversource \$6.00, ICCFA Membership 2021 \$99.00, New England Cemetery Membership 2021, \$50.00 and Mileage for Robbin Kelley**

D. OTHER BUSINESS.

VI. DATE AND TIME OF NEXT MEETING

VII. ADJOURNMENT

AUTHORIZED POSTING OFFICER:

POSTED BY: _____
TOWN CLERK

DATE: _____

Robbin Kelley

From: Meggan Eldredge
Sent: Tuesday, December 22, 2020 3:59 PM
To: Robbin Kelley
Subject: FW: Announcement of Temporary Revisions to COVID-19 Measures

Hi Robbin,

I wanted to make you aware of some changes that will take effect on Saturday and run a couple weeks. Funerals are impacted. Religious services are reduced down to 25% capacity and outdoor events are back down to 25 as well.

Let me know if you have any questions.

Thanks!
Meggan Eldredge, R.S., CHO
Health Director
Town of Harwich, MA
508-430-7509

From: OConnor, Ron (DPH) [mailto:ron.oconnor@mass.gov]
Sent: Tuesday, December 22, 2020 11:45 AM
To: OConnor, Ron (DPH) <ron.oconnor@state.ma.us>
Subject: Announcement of Temporary Revisions to COVID-19 Measures

Dear Local Public Health Colleagues,

Today at 1:00 p.m., Governor Baker will announce a temporary Executive Order and revised COVID-19 measures to reduce the spread of the virus in Massachusetts.

The temporary Executive Order will outline the following measures that will take effect at 12:01 a.m. on Saturday, December 26th and will continue until Sunday, January 10th, with a possibility of an extension of another week based upon available data.

This pause will reduce allowable occupancy from current capacity levels of 40% to 25% in multiple sectors.

- Notably, this capacity limit will now apply to restaurants. Capacity will be set at 25% of pre-COVID seating capacity and distancing between tables and other requirements will remain in place. Indoor and Outdoor seating capacity must be calculated separately (rather than combining them).
- Small spaces (such as personal services) and other spaces without clear occupancy standards may use 5 people / 1000 square feet as an alternative to the 25% occupancy .
- The 25% limit will not apply to manufacturing, laboratories, drive in movie theaters, or construction
- Employees/staff are exempted from the capacity count
- Limits at indoor event venues are being reduced to 10 people.
- Limits at outdoor event venues are being reduced to 25 people.
- Current limits at private residences remain the same (10 indoors and 25 outdoors)
- Limits at movie theaters will be reduced to 25% (no more than 50 people per theater)

- Limits outdoor performance venues will remain 25% (with the max number reduced to 25 from 50).
- Office spaces will be required to reduce capacity to 25%, but there will continue to be allowances for offices with “critical services”, such as public safety, public health, and other critical services. There is no approval required for these exemptions.
- K-12 schools continue to be exempted from these capacity limits and will need to follow DESE standards and guidelines.

Sector	Current Capacity Limit	New Limit
Construction	None	None
Drive-In Movie Theaters	None	None
Laboratories	None	None
Manufacturing	None	None
Restaurants	None	25% of seating capacity
Close Contact Personal Services	None	25%
Indoor and Outdoor Events	25 indoor / 50 outdoor	10 indoor / 25 outdoor
Theaters and Performance Venues	Movie theaters – 40%, max 50 ppl Indoor perf venues – Closed Outdoor perf venues – 25%, max 50 ppl	Movie theaters – 25%, max 50 ppl Indoor perf venues – Closed Outdoor perf venues – 25%, max 25 ppl
Office Spaces	40%	25%
Places of Worship	40%	25%
Retail Businesses	40%	25%
Driving and Flight Schools	40%	25%
Golf Facilities	40%	25%
Libraries	40%	25%
Operators of Lodgings	40%	25%
Arcades & Other Indoor & Outdoor Recreation Businesses	40%	25%
Fitness Centers and Health Clubs	40%	25%
Museums / Cultural & Historical Facilities / Guided Tours	40%	25%
Sectors Not Otherwise Addressed	40%	25%

Please watch the press conference live at <https://www.mass.gov/governor-updates>. We will also provide an update during the Inter-agency Local Boards of Health Webinar at 3:00 p.m. today.

Thank you for all you have done and continue to do to keep people safe and save lives.

Jana Ferguson
Assistant Commissioner
Massachusetts Department of Public Health
Jana.ferguson@mass.gov

Ron O'Connor, MPH
Director, Office of Local and Regional Health
Massachusetts Department of Public Health
ron.oconnor@mass.gov

COVID-19 Information for Local Boards of Health - <https://www.mass.gov/info-details/covid-19-information-for-local-boards-of-health>

24/7 DPH Epi Line for COVID-19 Case Support

COVID-19 web site: www.mass.gov/covid19

DPH Website: www.mass.gov/dph



Paul E. Sweetser
PROFESSIONAL LAND SURVEYOR

(508) 737-7560

P.O. Box 1146 • Dennis Port, MA 02639

December 29, 2020

Town of Harwich
Cemetery Commission
100 Oak Street
Harwich, MA 02645
ATTN: Robbin Kelley

RE: Bank Street Cemetery – 251 Bank Street – Assessors Map: 32 Parcel: F1-7
(Please note; this property shows on the Assessors data base under the Selectmen)

Dear Robbin;

The cost estimate to survey and produce an 81X plan for the subject property is between \$900.00 and \$1,100.00, not to exceed the later amount.

Survey includes a traverse to locate monuments around the cemetery, computations and verification of monument locations.

An 81X plan shows the surveyors findings, delineates the boundary lines and is suitable for recording at the Barnstable County Registry of Deeds. This plan does not need Planning Board approval or endorsement.

If you have any questions or comments please do not hesitate to contact me.

Thank you,

Robbin Kelley

From: Danielle Delaney
Sent: Monday, December 28, 2020 1:47 PM
To: Robbin Kelley
Subject: RE: CPC Aricles:

Hi Robbin,

Per Joe legal opinion requests must come from the Board Chair to the Interim Town Administrator.

Thanks,
Danielle

From: Robbin Kelley
Sent: Monday, December 28, 2020 1:06 PM
To: Danielle Delaney <ddelaney@town.harwich.ma.us>
Subject: FW: CPC Aricles:

From: Robbin Kelley
Sent: Wednesday, December 9, 2020 8:56 AM
To: Joe Powers <jpowers@town.harwich.ma.us>
Cc: Danielle Delaney <ddelaney@town.harwich.ma.us>
Subject: CPC Aricles:

Joe

I had met with CPC on Thursday night and Donna Kalinick requested that I get legal opinion on the East Harwich Methodist Gravestone and Fence Articles as the property is owned by the church, but is maintained by the Town. I am attaching my power point as they are brief for a overview for you to see. I am also attaching Mass state law Chapter 114 Section 18.

Section 18. Any town having within its limits an abandoned or neglected burying ground may take charge of the same and keep it in good order, and may appropriate money therefor, but no property rights shall be violated and no body shall be disinterred. No fence, tomb, monument or other structure shall be removed or destroyed, **but the same may be repaired or restored.**

Donna is concerned and you can view her questions for legal opinion at about 1:00 hour into meeting of Dec. 3rd 2020 meeting of the Harwich CPC.

Robbin Marie Kelley
Cemetery Administrator
Town of Harwich
Office: 100 Oak Street
Mailing: 732 Main Street
Harwich, MA 02645
Phone 508-430-7549

TOWN OF HARWICH
NOTICE OF PUBLIC HEARING
January 8, 2021

Pursuant to M.G.L. Ch. 166, § 22, the Interim Town Administrator will hold a Public Hearing at **9:30 AM on Friday, January 8, 2021 via Teleconference** in reference to the following matter:

A petition by NSTAR ELECTRIC dba EVERSOURCE ELECTRIC COMPANY requesting permission to install and maintain underground cables, conduits and manholes, together with sustaining and protecting fixtures as said Company may deem necessary, in, under, along and across the public way or ways

South Street Harwich

PROPOSED: To install approximately 1620' (One thousand six hundred and twenty feet) of conduit and cable and 4 manholes in town road. From Manhole labeled 10/040 on corner of Gilbert Lane to Pole #28/57 on South Street

Gilbert Lane Harwich

PROPOSED: To install approximately 1250' (One thousand two hundred and fifty feet) of conduit and cable and 4 manholes in town road. From Manhole labeled 10/040 at the intersection of South Street to Pole #107/6 on Gilbert Lane.

This work is necessary for system improvement and reliability

All abutters and other interested persons are invited to dial in

TELECONFERENCE ACCESS INSTRUCTIONS

Please join my meeting from your computer, tablet or smartphone.

<https://global.gotomeeting.com/join/872120317>

You can also dial in using your phone.

United States: +1 (872) 240-3311

Access Code: 872-120-317

For further information, please call the Town Administrator's Office at (508) 430-7513 x 3312

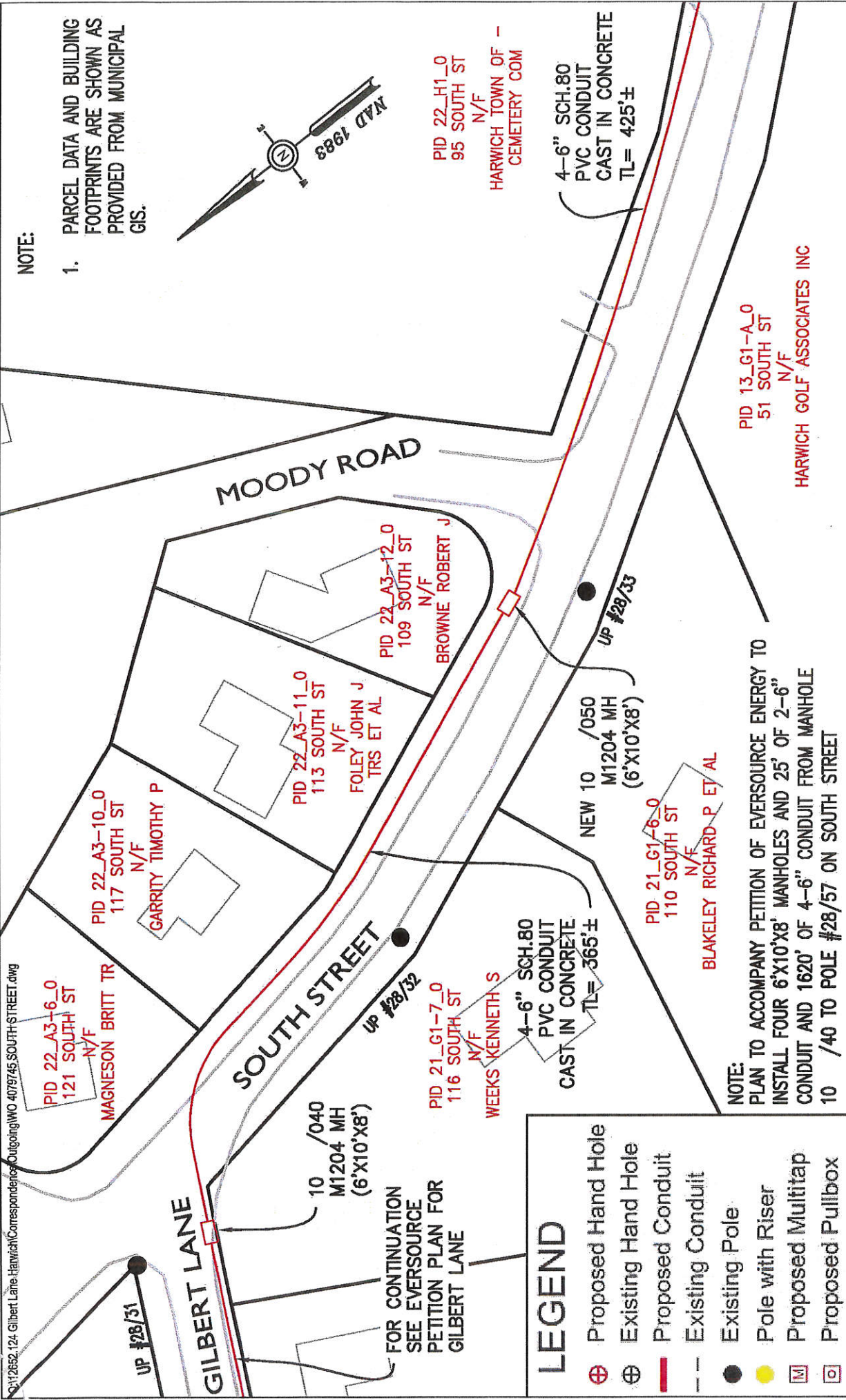
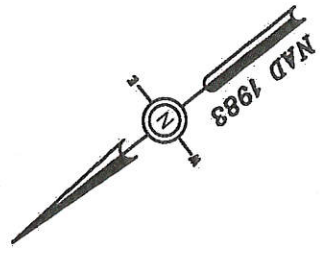
Joseph F. Powers
Interim Town Administrator

Cape Cod Chronicle
December 24, 2020

Q:\12652_124_Gilbert Lane Harwich\Correspondence\Outgoing\WO 4079745 SOUTH STREET.dwg

NOTE:

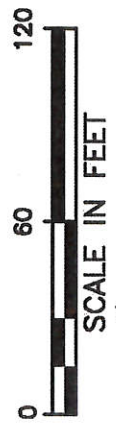
1. PARCEL DATA AND BUILDING FOOTPRINTS ARE SHOWN AS PROVIDED FROM MUNICIPAL GIS.



LEGEND

- ⊕ Proposed Hand Hole
- ⊗ Existing Hand Hole
- Proposed Conduit
- - Existing Conduit
- Existing Pole
- Pole with Riser
- ⌈ Proposed Multitap
- ⌋ Proposed Pullbox

NOTE:
 PLAN TO ACCOMPANY PETITION OF EVERSOURCE ENERGY TO
 INSTALL FOUR 6'X10'X8' MANHOLES AND 25' OF 2-6"
 CONDUIT AND 1620' OF 4-6" CONDUIT FROM MANHOLE
 10 /40 TO POLE #28/57 ON SOUTH STREET



MASS. LAW

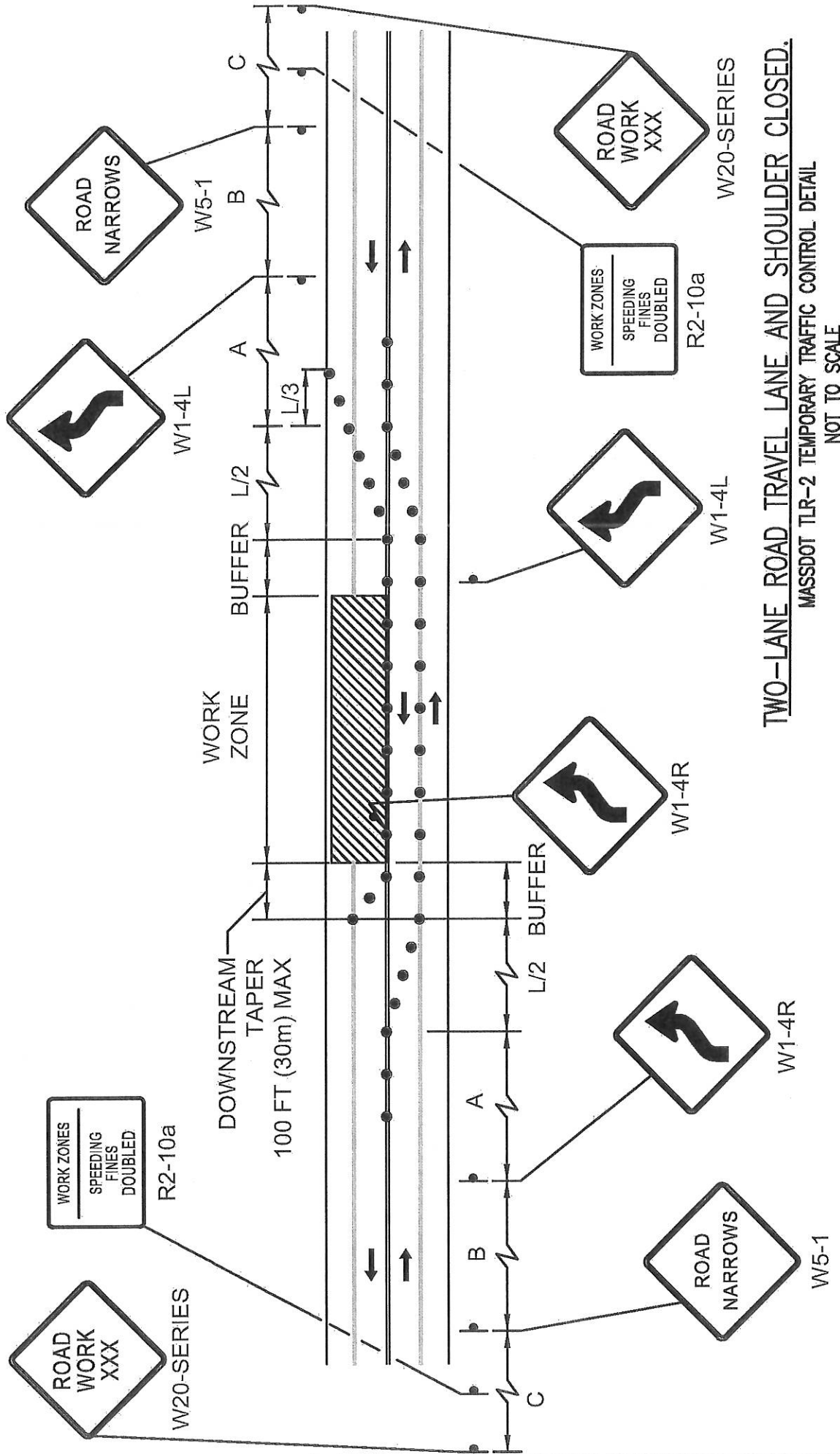
REQUIRES 72 HOURS ADVANCE NOTICE TO UTILITY COMPANIES BEFORE DIGGING BY ANYONE. CALL DIG-SAFE 1-888-344-7233

NOTAR EVERSOURCE
 ELECTRIC
 d/b/a
 1105 MANCHESTER AVE. DORCHESTER, MASS. 02135

C#	
Ward #	
Work Order #	4079745
Surveyed by:	
Research by:	
Plotted by:	NITSCB
Proposed Structures:	
Approved:	
P#	

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Plan of SOUTH STREET
 HARWICH, MA
 Showing
 Scale 1"=60'
 Date 11/19/2020
 SHEET 1 of 6



TWO-LANE ROAD TRAVEL LANE AND SHOULDER CLOSED.
MASSDOT TLR-2 TEMPORARY TRAFFIC CONTROL DETAIL
NOT TO SCALE

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MASS. LAW
 REQUIRES 72 HOURS ADVANCE NOTICE TO UTILITY COMPANIES BEFORE DIGGING BY ANYONE. CALL DIG-SAFE 1-888-344-7233

C#	
Ward #	
Work Order #	4079745
Surveyed by:	
Research by:	
Plotted by:	NITSCH
Proposed Structures:	
Approved:	
P#	

Plan of SOUTH STREET
 HARWICH, MA
 Showing

Scale	NTS	Date	11/19/2020
SHEET	5 of 6		

NEWMAN EVERSOURCE
 ELECTRIC
 1105 MASSACHUSETTS AVE. DORCHESTER, MASS. 02115

Harwich Cemetery Commission

Cemetery Master Plan

MISSION STATEMENT

The Harwich Cemetery Commission's Mission is to preserve Harwich Cemeteries as it pays homage to those who built our town and made it what it is today. We owe it to our pioneering ancestors that their monuments are not forgotten, and their contributions are remembered for future generations to come. The Cemetery Commission is hoping to educate the public on the historical importance of our cemeteries.

Develop a master plan and an implementation plan

- Develop short and long-term planning and improvements. Including expansion opportunities for each of the cemeteries.
- Preservation of memorials and historic landscaping.
- Maintaining the picturesque historic landscape while solving the of public issues of safety, security, appropriateness of use.
- Recommend maintenance practices that are for current and future cemetery needs.
- Increase the quality and quantity of passive recreation opportunities.
- Market the developed Harwich Cemetery Master Plan in consideration for future grant awards.

HARWICH CEMETERIES

The Harwich Cemetery Department oversees the following cemeteries: All of the cemeteries both Town-owned and/or maintained will need to be evaluated for available grave space, condition of memorials and grounds, fencing, and landscaping, indexing of existing burials.

Active Cemeteries (Burial space available)

Evergreen Cemetery, 1403 Orleans Road and 40 Cemetery Road, East Harwich
Island Pond Cemetery, 15 Island Pond Road, Harwich Center
Mount Pleasant Cemetery, 95 South Street, Harwich Port
Kelley Cemetery, 18 Old Brewster Road, North Harwich
South Harwich Cemetery, 270 Chatham Road, South Harwich
Pine Grove Cemetery, 32 Pine Grove Road, West Harwich
North Harwich Cemetery, 610 Depot Street & Main Street Ext., North Harwich

Inactive Cemeteries (No burial plots available for sale)

Bank Street Burial Ground, Bank Street, near Long Road
Baptist Church Cemetery, Depot Street & 62 Route 28, West Harwich

Herring River, West Harwich, Herring River, West Harwich
Hawks Nest Cemetery, corner of Spruce and Walker Roads, East Harwich
Lothrop Cemetery, Off Lothrop Ave, West Harwich
Methodist Church Cemetery, corner Queen Anne Rd. & 15 Church Street, East Harwich
Old Methodist Cemetery, AKA Eldredge Cemetery Queen Anne Rd., East Harwich
Old Smith Cemetery, Bells Neck Road, West Harwich
Ryder Cemetery, Route 39 near the water tower, Harwich

PURPOSE AND GOALS

A primary goal for this master plan is for the future availability of internment space and the impact on the landscape character of these historic cemeteries. Ensuring that the complete landscape character, including the layout of gravesites, is reinforced and maintained. The purpose of this master plan is to develop a strategy for all the Harwich cemeteries with recommendations and an implementation plan for all of its properties keeping in mind the public uses, cemetery development, historical importance, and horticultural and maintenance improvements.

General goals include restoration and rehabilitation of this historic resource, strengthening of an overall image with existing natural and historic assets, expansion of internment potentials, improvement of accessibility for all, and increasing educational and passive recreation opportunities. This master plan sets guidelines necessary to meet the town cemetery needs for the future while maintaining the visual and other qualities that make all of our Harwich Cemeteries a valuable historic cultural resource for the town.

The overall goal is to maintain the historic integrity of all of our cemeteries while making the necessary rehabilitations, accommodate existing and proposed changing needs and conditions. While “restoration” is applicable to the grave markers, “rehabilitation” is applicable to structural elements, drives, and fences. The primary focus of recommendations for improvement is an expansion of internment opportunities as well as the protection, stabilization, and preservation of historic monuments and cemetery fencing. These efforts will prevent significant deterioration of these valuable resources and reduce risk to visitors.

New Development for Burial Space

Cemetery Development for newly expanded areas for interments to serve Harwich residents for the future by allocating 20% of the new space for cremated remains and 80% of the new space for in-ground interments in traditional lots. Cemeteries for expansion are Evergreen in East Harwich, Mount Pleasant in Harwich Port, and Island Pond in Harwich Center.

- In cremation lots only flat flush makers will be permitted for maintenance.
- Traditional lots can accommodate a traditional casket burial or a cremation burial. These lots will be able to have upright memorials.
- Installation of columbarium wall.

Landscape Character

Provide vegetative screening at the perimeter edges to visually separate each section of the cemeteries creating an experience for the cemetery visitors. Reinforce woodland edges with appropriate understory plantings in conjunction with the removal of invasive vegetation and detrimental growth. Restore lawn areas where necessary. Additional improvements need to be made related to landscape issues such as pruning, planting and removals, and accessible pathways.

Access

Maintain the historic pathways and egress points. Addressing roadways within all the cemeteries to better accommodate large service vehicles. Create a more appropriate parking area within the cemeteries for funeral services and passive recreation.

Parking

There is no obvious parking area anywhere within the cemeteries. Parking is usually on the paved roadways or grass/dirt pathways. These create impassable situations when cars are parked on both sides of the roadways/paths and often cause issues within the grounds.

Pedestrian and Handicap Access

The Island Pond Cemetery and Kelley Cemetery are accessible by Cape Cod Rail Trail all of the other cemeteries have to be accessed by driving into the cemeteries, as there is no walk connection into these cemeteries. Except for some paved and dirt/grass internal paths, for the most part, pedestrians walk on paved drives. Most visitors arrive in vehicles and use them to get to their destinations inside the cemetery.

Objectives To provide pedestrian and handicap access and meet current safety standards while restoring historic character. To maintain adequate visitor and maintenance access to the site. To add handicap accessibility to all the cemeteries.

MAINTENANCE MANAGEMENT

Grave Markers and Monuments

General conservation recommendations should be taken into consideration once a cemetery wide or individual stone restoration program is undertaken. Initial work should be done by professional conservators. Cleaning of monuments to remove biological growth.

Security and Vandalism

Although vandalism is not a significant issue at this time, continue to monitor these detrimental activities. Littering within the cemeteries has been an issue and there have been

groups of young adults drinking, leaving alcoholic nips and household trash being dump in undeveloped areas within the cemeteries.

Site Facilities

Provide a consistent sign for the cemeteries including identification, regulatory, informational, and interpretive signs.

Drainage Management

- Eliminate ponding in the older part of the cemeteries.
- Installation and maintaining of catch basins.
- Addressing erosion on hilling areas within the cemeteries.
- Planting vegetation and ground cover.

Water Utilities

- Installing a Well system within the cemeteries if possible.
- Installation of spigots for watering.
- Installation of electrical services to the irrigation system.

Rules and Regulations

- Update and consolidate rules and regulations.
- Update regulations for lot size and usage.
- Update monument size and monument placement on older family lots

Future Needs for each of the Sites

- Create brochures for each of the cemeteries, including the history and historical significance of each. This will create a greater appreciation and use of this historic open space.
- Inventory Cemeteries for available space and possible expansions.
- Inventory all existing burials and create a searchable database including Veterans, Sea Captains, historically significant Harwich residents for future tours and for genealogical resources for family members.
- Identify areas for grounds maintenance improvements within each of the Town maintained cemeteries.

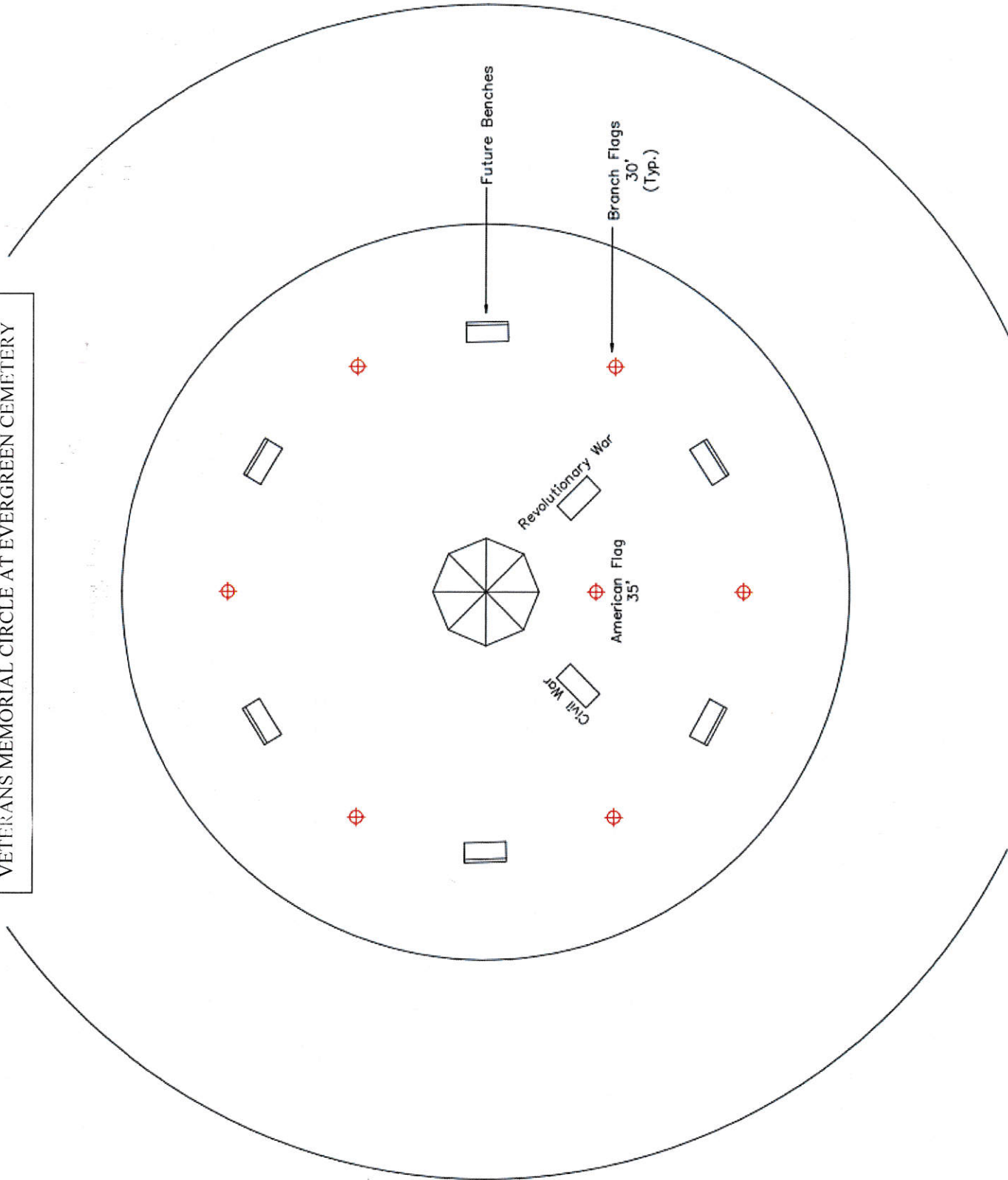
This Master Plan was updated from the Harwich Cemetery Comprehensive plan that was created in 2000.

Project Description:

Installation of Flag Poles & Electricity at Veterans Memorial Circle in Evergreen Cemetery

- Installation of American Flag Pole 35' and 5 Service Flags Poles 30' for each branch of the military.
 - Army, Navy , Air Force, Marines and Coast Guard. \$15,058 includes flags.
 - Additional Space Force Flag Pole and Flag was added \$2,780
- Electric Service to the Veterans Circle from Route 39. (just under 1200 feet).
 - Installation of lighting for American Flag and power to the gazebo existing electrical panel for events. \$26, 148.17.
 - Total of 43,986.17 x 10% contingency \$4,398.62.
 - Total Request \$48,385

VETERANS MEMORIAL CIRCLE AT EVERGREEN CEMETERY





ARBNET ARBORETUM ACCREDITATION APPLICATION FORM

The ArbNet Arboretum Accreditation Program provides standards and guidelines for the establishment and development of an arboretum. The goals of the accreditation program are to:

- 1) *foster the establishment and professionalism of arboreta;*
- 2) *identify arboreta capable of participating or collaborating in certain scientific collections, or conservation activities; and*
- 3) *advance the planting, study, and conservation of trees to improve the world.*

Arboreta that are accredited are encouraged to become leaders and serve as models to promote professional development and engagement with other arboreta.

Different levels of accreditation have been established to recognize arboreta at varying degrees of development, capacity, and professionalism. Accredited arboreta are encouraged to continue their growth and development to achieve higher professional standards.

Arboreta and public gardens are eligible to apply for accreditation by submitting this form along with supporting documentation to demonstrate their level of achievement according to the specified standards. Once the application is completed, a decision will usually be made within four weeks. A site visit by an ArbNet representative may be required as part of the accreditation process.

The ArbNet Arboretum Accreditation Program is sponsored and supported by The Morton Arboretum, Botanic Gardens Conservation International (BGCI), and the American Public Gardens Association (APGA).

Arboreta and public gardens completing an application for ArbNet Accreditation Level III or Level IV are able to provide additional information to be considered for BGCI Botanic Garden Accreditation: <https://www.bgci.org/our-work/services-for-botanic-gardens/bgci-accreditation-scheme/botanic-garden-accreditation/>.

For more information regarding specific accreditation requirements:

Visit: arbnet.org/accreditation

Call: 630-310-7013

Email: arbnet@mortonarb.org

Please submit your completed application via email:

Email: arbnet@mortonarb.org



ARBORETUM:

Name of Arboretum:	James G. Marceline Arboretum at Island Pond Cemetery
Address or PO Box:	15 Island Pond Road, Harwich, MA 02645
Mailing Address:	732 Main Street
City:	Harwich
State/Province:	MA
Country:	USA
ZIP/Postal Code:	02645
Latitude and Longitude:	
Acres:	25
URL:	Facebook.com/groups/MarcelineArboretum.at.Island.Pond We will be registering domain name and creating website.

ARBORETUM CONTACT (FOR ARBNET PURPOSES):

Name:	Robbin Kelley
Title:	Cemetery Administrator
Email:	rkelley@town.harwich.ma.us
Phone:	508-430-7549

INDIVIDUAL SUBMITTING APPLICATION (IF NOT ARBORETUM CONTACT):

Name:	
Title:	
Email:	
Phone:	

TYPE OF ORGANIZATION:

Please check all that apply:

<input checked="" type="checkbox"/>	Arboretum		Historical Site		Nonprofit
	Garden		Museum		City Park
	College	<input checked="" type="checkbox"/>	Cemetery	<input checked="" type="checkbox"/>	Town
	University		Business		City
	Zoo		Golf Course		Community
	Other:				

AUTHORIZATION AND VERIFICATION

The chairperson or leader of the applicant arboretum's governing board, organizational group, or authority (corresponding to Section I. below) must approve this application, specifically verifying the accuracy and authenticity of the information it contains. Approval is indicated by placement below of this individual's name, title or role at arboretum, and contact information.

Authorizing/Verifying Governance Leader (other than individual submitting application):

Name:	Larry Ballantine
Title:	Board of Selectmen, Chairman
Email:	<u>lballantine@townofharwich.us</u>
Phone:	508-430-7513
Name:	Joseph Powers
Title:	Intern Town Administrator
Email:	<u>jpowers@town.harwich.ma.us</u>
Phone:	508-430-7513

ARBORETUM ACCREDITATION STANDARDS

Accreditation standards are outlined on the website, arbnet.org/accreditation, and described in each of the following application sections. Please indicate which of the following standards have been met by the applicant and provide the information requested. Fulfillment of these standards is self-determined by the applicant.

Arboretum accreditation level sought: X LEVEL I

FOUR LEVELS OF ACCREDITATION

Please use this chart as a reference. The levels of accreditation recognize arboreta with different degrees of development, capacity, and professionalism.

	LEVEL I	LEVEL II	LEVEL III	LEVEL IV
Arboretum plan	■	■	■	■
Organizational or governance group	■	■	■	■
Labeled tree and woody plant taxa				
25+	■			
100+		■		
500+			■	■
Staff or volunteer support				
Volunteer or paid	■			
Paid management		■	■	■
Curator			■	■
Scientific or conservation staff				■
Public dimension				
Public access and at least one event per year	■	■	■	■
Enhanced public and educational programs		■	■	■
Substantial educational programming			■	■
Collections policy		■	■	■
Collaboration with other arboreta			■	■
Collections data sharing with networked collections			■	■
Agenda for tree science, planting, and conservation			■	■
Collections conservation				■
Conservation role in Global Trees Campaign				■

1. GENERAL ACCREDITATION REQUIREMENTS (ALL LEVELS)

a. Arboretum Plan

Documentation such as an organizational plan, strategic plan, master plan, or other, that defines the purpose of the arboretum, its audience(s), the types of plants that are to be grown to achieve that purpose and serve those audiences, provisions for the maintenance and care of the plants, and provisions for the continuing operation of the organization through time with a clear succession plan. Sample organizational plans can be found [here](#) on ArbNet.

Provide a brief description or outline of the type and scope of the plan for your arboretum. Attach the Master Plan document if possible.

The Arboretum will be conserving property, educating students and public on the importance of this valuable Town resource, researching for long-term studies. (See Attached Plan)

b. Organizational or Governance Group

A governing board, group of people, or authority that is dedicated to the arboretum plan and its continuation beyond the efforts of a single individual. Such an organizational/governance group will affirm fulfillment of standards and authorize participation as an accredited arboretum.

Describe the nature of your governance board or authority and the number and type of individuals involved. Attach any relevant documents or policies relating to the Governance Group.

Open Town Meeting form of Government; Board of Selectmen 5 members, Town Manager, Cemetery Commission 3 members and Cemetery Administrator, Conservation Commission 7 members and Conservation Administrator.

c. Arboretum Collection

The number of tree and woody plant species being grown in accordance with the arboretum plan. Plants in the arboretum's collection must be labeled in some way to identify them taxonomically, including scientific name and cultivar if applicable, and documented in some way so that information on their acquisition (source or origin, date of acquisition, etc.) is available for access. Minimum numbers are:

25+ Species (Level I) 100+ Species (Level II) 500+ Species (Levels III and IV)

Indicate the number of trees/woody plant species in the collection and describe the method for labeling and documenting the plants. Provide the link to your collections database and indicate if it is shared in a searchable, open-access database, such as BGCI PlantSearch (http://www.bgci.org/plant_search.php). If your collection species list is not shared or accessible online, please attach the list with your application.

List any special taxonomic, geographic, ecological, or conservation collections of note (e.g. oaks; Acer; dwarf conifers; halophytes; woody plants of Madagascar; etc.):

See attached sheet with 44 species listed, containing common name, scientific name and location in the Arboretum.

Botanical Gardens Conservation International (BGCI) is an international organization with a mission to ensure the conservation of threatened plants worldwide. Its global database provides information on the plants kept in living collections around the world. Your data will help conservationists, policy makers and planners, educators, and others working to save plant diversity—and can help measure the threatened plants safely in cultivation somewhere in the world. The location of your plants is kept hidden from Plant Search users so you will not face any security issues regarding rare or valuable plants.



SHARE YOUR DATA

To share your collections database with BGCI, visit: <https://www.bgci.org/resources/bgci-tools-and-resources/plantsearch-upload-instructions/>.

Detailed instructions are provided.

d. Arboretum Staff or Volunteer Support

i. Level I

Employees or volunteers who ensure fulfillment of the arboretum plan and provide for the basic needs of the arboretum collection and functions of the arboretum.

Describe the scope of staff or volunteers engaged in or supporting the work of the arboretum.

Cemetery Administrator Robbin Kelley, oversees the Development and day to day operations of Arboretum property.

Amy Usowski Conservation Agent provides guidance and assistance on grounds within the Conservation parcels within the Arboretum.

AmeriCorps of Cape Cod member serves two days a week to create programming, invasive species removal and general maintenance, planning of new gardens and ground improvements, as well as giving tours.

Russ Norton Cape Cod Cooperative Extension Educator provides tree identification, soil reports, and recommendations for new tree species to be planted and long term goals for property.

Cemetery Commission provides guidance on current and future projects.

Harwich Garden Club and Master Gardeners provide volunteer help with pruning, planting and watering.

Cemetery Maintenance employee's provide day to day maintenance mowing, snow removal.

e. Arboretum Public Dimension

A public dimension that includes some level of public access, and at least one public event or educational program each year focused on trees, forest ecology, or arboretum purposes (for example, an Arbor Day observance).

Describe how the arboretum is open or accessible to the public, and name and describe the public events or programs offered.

Arboretum Walking Tour (See Attached Flyer)

Arbor Day Walking Tour - will be event on Town Website and Channel 18 local TV.

Spring & Fall Walking Tours - Event to be posted with date on Tour Website, signups are required.

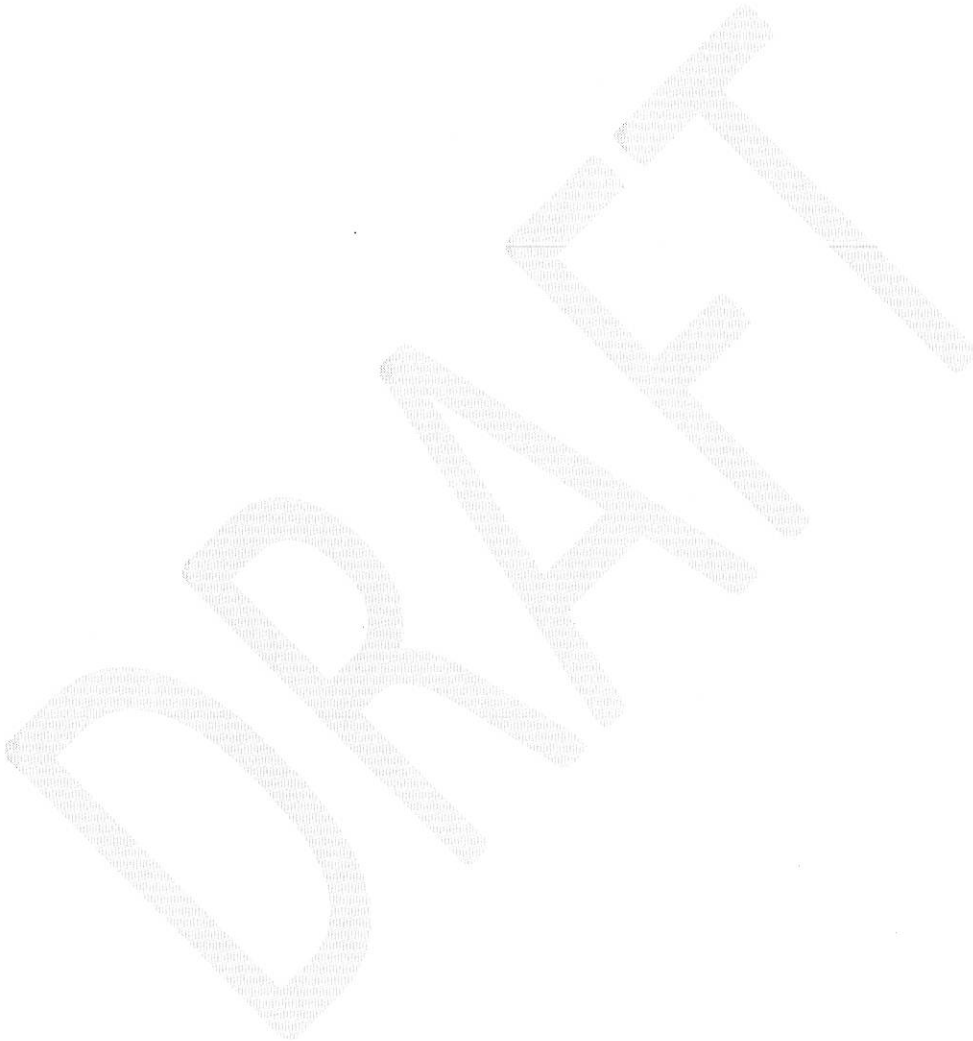
2. COLLECTIONS AND EDUCATION (REQUIRED FOR LEVELS II, III, AND IV)

a. Arboretum Collections Policy

A collections policy describes the purpose, development, and professional management of the plants in the arboretum collection, in accordance with standards developed in the public garden and museum fields. Such a policy and related practices includes a rationale for holding the particular collections of the arboretum, collections inventory, and record-keeping practices. Examples are available on the [ArbNet website](#).

Describe and outline the elements of the collections policy and attach the document if possible.

We have created a Tree Identification sheet. Each tree identified within the property must be filled out with location, pictures will be taken of tree, leaf, bark and berries or fruit. (See attached Identification Sheet)



Optional Accreditation Comments or Explanations:

SUBMIT APPLICATION

Please attach at least two photos of your arboretum (high resolution JPEG format in landscape orientation) with your application for use in the accreditation press release and on the ArbNet website.

For more information regarding specific accreditation requirements:

Visit: arbnet.org/accreditation

Call: 630-310-7013

Email: arbnet@mortonarb.org

Please submit your completed application via email:

Email: arbnet@mortonarb.org

Data Information:

In compliance with the 2018 EU "General Data Protection Regulations", ArbNet has to ensure that EU residents agree to ArbNet using your information provided for processing and evaluating your accreditation application. By instructing us to process your application, your data will be transferred outside of the European Economic Area to the United States, kept secure, and will not be shared with a third party. You have the right to revoke your consent at any time by contacting us at arbnet@mortonarb.org. If you chose to be reviewed for our reciprocal accreditation program with BGCI (BGCI Botanic Garden Accreditation), ArbNet will share your information with BGCI.

The uses of your information, dependent on the success of your accreditation application, are as follows:

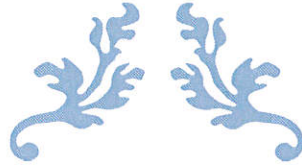
If you are a successful applicant, any personal and institutional data you have provided will be kept by ArbNet for five years, the length of the accreditation period, so that we can contact you in relation to the set up and administration of your accreditation, to provide information useful to maintain and/or upgrade your accreditation (e.g., new resources, opportunities, etc.), and to provide information on the accreditation renewal process as you approach the five year limit of your accreditation. ArbNet will use the institutional data provided in your application to create a website listing in the Morton Register, and potentially to promote your institution on our website, in our newsletter, and through our social media channels.

If you are an unsuccessful applicant, the personal and institutional information you have provided will be kept by ArbNet for five years, so that we can contact you to help you achieve accreditation at a future date.

Data Consent:

I want to be added to ArbNet's mailing list for quarterly newsletters and occasional informational updates.

ArbNet may use the institutional information (not personal data) I provide for populating external datasets for the purpose of research on institutional capacities, networking, and strengthening the garden and arboretum community (e.g., BGCI GardenSearch)



JAMES G. MARCELINE ARBORETUM

At Island Pond Cemetery



DECEMBER 31, 2020
ISLAND POND
15 Island Pond Road
Harwich, MA 02645

I. INTRODUCTION

James G. Marceline Arboretum at Island Pond (“Arboretum”) is comprised of 25 acres (more or less) located in the Harwich Center area of Harwich, Massachusetts off US -6 E/Mid-Cape Highway to Exit 10, Route 134/Pleasant Lake Ave to Main Street to Island Pond Road.

The land comprising the Arboretum was acquired by the Town of Harwich. There are two parcels making up the Arboretum property. The Island Pond Cemetery founded in 1778 consisting of 17 plus acres and 7 plus acres of Harwich Conservation Department land.

General Mission and Goals

The mission of the Arboretum at Island Pond is to engage, educate, improve natural resources, and enrich the lives of our constituents in order to enable them to become better stewards of our local history and environment. The Cemetery Commission is working in collaboration with the Town Conservation Agent, Cape Cod Regional Technical High School Horticultural Students, Monomoy Regional Schools, Bird Watchers of Harwich, Local Historians, AmeriCorps Cape Cod, and the Harwich Garden Club to create the Island Pond Arboretum.

Conservation

To provide stewardship of the Arboretum lands by protecting, sustaining, and enhancing biological diversity. The Arboretum also provides leadership locally and beyond in conservation matters such as the eradication of invasive species, increasing species diversity, water conservation, and the responsible use of chemicals.

Teaching

It will provide an outdoor laboratory for use by Monomoy Regional School District and The Cape Cod Regional Technical High School. The Arboretum a unique and valuable academic resource and support facility.

Research

To support and conduct research in a broad range of subjects including ecology, field biology, horticulture, conservation, and natural history. Island Pond Arboretum will continue to emphasize useful long-term studies.

Collection

To maintain, develop, and interpret well-documented plant specimens for teaching, research, and public education and enjoyment.

Public Education

To provide programs and publications about conservation, horticulture, gardening, botany, and natural history, which work to enhance public understanding of the natural world and foster an appreciation of Island Pond Arboretum mission.

Recreation

To provide a place where people from the community may enjoy passive recreation and where they may come to learn, reflect, and renew themselves through contact with the natural world. With all the elements of the Island Pond Arboretum’s mission, the arboretum enhances the quality of life both for Cape Cod and the residents of the community.

Through volunteer elbow grease, the cemetery department, conservation department and Cape Cod Cooperative Extension, AmeriCorps Cape Cod the vision of Island Pond Arboretum is becoming a reality.

The following are some project goals. Completion of a tree inventory in a limited area of the Arboretum. Development of a Conceptual Master Site Plan that includes: nature trails, elevated boardwalks, educational signage, demonstration gardens, and a parking area. Design and engineering for a parking area with additional phases. Establishment of monthly to weekly volunteer workdays that resulted in the removal of invasive plants. Design and development of printed trail guides. Design and development of color brochures. Construction of a website for the park. Removal of hazardous tree limbs. Remedial work on live oaks and other trees. Removal of invasive plants.

Capital improvements and equipment: Asphalt parking area (20 cars) with water management structure. Overflow parking area (25 cars). ADA accessible trailhead. Educational signage.

Future Objectives and Performance Measures

GOAL 1: Conservation– To provide stewardship of the Arboretum lands by protecting, sustaining, and enhancing biological diversity by removal of invasive plants and planting of natives. Island Pond Arboretum also provides leadership locally and beyond in conservation matters such as the eradication of invasive species, water conservation, and the responsible use of chemicals.

OBJECTIVE 1: Evaluate, restore and maintain the physical aspects of the site.

Performance Measure 1 – Evaluate and ameliorate natural erosion problems. Evaluate and restore sites where human impact has caused erosion (banks of ravine, shortcut trails).

Performance Measure 2 - Remove trash and debris in public areas.

Performance Measure 3 – Write general site best management practices (BMP’s)

OBJECTIVE 2: Identify and eradicate existing exotic invasives following recommended methods and evaluate site for new infestations. Educate neighbors to prevent new infestations.

Performance Measure 1 – Develop early detection and rapid response (EDRR) protocol and follow BMP’s for removal of exotic invasives. EDRR protocol to include mapping, monitoring and weed management plan. BMP’s to include key

prevention actions such as implementation of equipment decontamination protocols.

Performance Measure 2 – Establish and maintain boundaries so that desired plants on the Arboretum property are not inadvertently sprayed. Establish invasive-free buffers between private residences and Arboretum.

Performance Measure 3 – Continue meeting with neighbors to familiarize them with invasive species and their threat to terrestrial ecosystems and to encourage the neighbors to us Cape Cod friendly native species in their landscapes.

OBJECTIVE 3: Protect species of special concern.

Performance Measure 1 – Conduct survey of species of special concern.

Performance Measure 2 – Write management plans for all rare, threatened and endangered species.

Performance Measure 3 - Share data concerning threatened and endangered plant and animal species with appropriate Federal/State entities.

OBJECTIVE 4: Protect health of Island Pond.

Performance Measure 1 – Notify Harwich Conservation Trust and Town Departments with results and recommendations.

Performance Measure 2 – Meet with neighbors to familiarize them with sources of nutrients and their threat to aquatic ecosystems.

Performance Measure 3 – Develop and follow BMP’s for jurisdictional wetlands surrounding Island Pond. Obtain Conservation Commission and Mass DEP permits for work in wetland or their buffer zones.

Performance Measure 4 – Remove debris, snags, and earth clogging feeder streams to Island Pond including feeder man-made ravine.

OBJECTIVE 5: Protect and restore areas of “High Conservation Value Native Landscape” - upland mixed forest.

Performance Measure 1 – Determine “ideal” boundary between wetlands and cemetery property.

Performance Measure 3 – Follow restoration goals detailed for above “High Conservation Value Native Landscapes”.

OBJECTIVE 6: Decide what, if any, restoration or preservation needs to be done in freshwater pond or bordering vegetated wetlands.

Performance Measure 1 – Conduct habitat assessment of freshwater wetlands.

Performance Measure 2 – Write restoration goals for freshwater wetlands.

Performance Measure 3 - Obtain Conservation Commission and Mass DEP permits for work in wetland or their buffer zones.

Performance Measure 4 – Complete restoration.

Performance Measure 5 – Management Plan and Implementation of for the lily pond in Island Pond Cemetery.

OBJECTIVE 7: - Implement an adaptive monitoring program to identify and track status of High Conservation Value Native Landscape Areas and other areas proposed for restoration and to prioritize expenditure of resources and funding in these areas.

Performance Measure 1 – Establish baseline ecological data and status.

Performance Measure 2 – Develop metrics to detect positive and negative trends.

Performance Measure 3 – Develop response actions and metrics that trigger them.

Performance Measure 4 – Develop management matrix to prioritize restoration projects.

Performance Measure 5 – Develop and implement program which integrates the above segments with restoration efforts.

OBJECTIVE 8: Re-evaluate conceptual master site plan in 2021 and every five years thereafter.

GOAL 2: Teaching and Research – To provide an outdoor laboratory for use by Cape Cod Technical High School faculty and students in Horticulture, Monomoy Regional School District in Environmental Studies, and other departments.

To support and conduct research in a broad range of subjects including upland and wetland ecology, field biology, horticulture, conservation and natural history.

OBJECTIVE 1: Provide adequate data upon which to base preservation and conservation decisions.

Performance Measure 1 – Prioritize list of desired research projects and find local or regional High School students or faculty, Federal/State agencies, and citizen science groups associated with public agencies to conduct. Reprioritize list based on results of Adaptive Monitoring Plan.

OBJECTIVE 2: Provide adequate data for recreation, public education activities and collection installations.

Performance Measure 1 – Produce list of desired research projects and find local or regional High School and College students or faculty to conduct.

OBJECTIVE 3: Protect arboretum from abuse and Island Pond Arboretum as well as The Town of Harwich from liability associated with research. Provide adequate oversight of projects.

Performance Measure 1 – Produce application, contracts, and report procedures for researchers conducting projects.

GOAL 3: Collection – To maintain, develop and interpret well-documented plant collections for teaching, research, and public education and enjoyment.

OBJECTIVE 1: Re-evaluate collections policy at least every five years.

OBJECTIVE 2: Augment “high conservation value nature landscapes” with carefully chosen and located collection specimens.

Performance Measure 1 – Installation of plants considered native to this habitat on Cape Cod.

OBJECTIVE 3: Augment non-restorable areas with carefully chosen demonstration gardens.

Performance Measure 1 – Gardens within directive of collection policy installed in mixed hardwood and pollinator areas.

OBJECTIVE 4: Generate map of plants in permanent collection and keep up to date.

Performance Measure 1 – Choose initial plants and gardens, identify layers, and add plants to appropriate layer. Update at least annually.

OBJECTIVE 5: Create and keep current a database to accompany map.

Performance Measure 1 – Choose attributes for table to accompany map (include direction and distance from nearest trail).

OBJECTIVE 6: Field identify plants in collection.

Performance Measure 1 – Label each plant or garden with collection tag.

GOAL 4: Public Education – To provide programs and publications about conservation, horticulture, gardening, water quality, botany, and natural history which work to enhance public understanding of the natural world and foster an appreciation of Island Pond Arboretum’s mission.

OBJECTIVE 1: Provide public with identification of selected plants near trails.

Performance Measure 1 – Annually check and correct, existing public plant ID signs and add new signs as necessary.

OBJECTIVE 2: Use public education opportunities to promote conservation and preservation.

Performance Measure 1 – All educational signage, tours, and outreach activities have preservation and/or conservation components.

OBJECTIVE 3: Use public education opportunities to provide information about ecological processes.

Performance Measure 1 – Adapt programs, tours, and temporary signage to include timely information about ecological processes.

OBJECTIVE 4: Offer scheduled small educational activities (tours, seminars, workshops).

Performance Measure 1 – Develop list of education activities that fit within missions and goals of arboretum.

Performance Measure 2 – Poll visitors to determine their interests.

Performance Measure 3 – Develop list of desired activities, identify number of volunteers to adequately “staff” activities, schedule activities, and recruit and maintain volunteer corps.

Performance Measure 4 – Annually evaluate past year’s offerings and revise list for upcoming year.

OBJECTIVE 5: Educate public about past use of site and impact of humans on native habitats.

Performance Measure 1 – Include information about railroad, cranberry bogs in educational signage, tours, and outreach activities.

OBJECTIVE 6: Provide informal education throughout site.

Performance Measure 1 – Install permanent educational signage on all trails.

OBJECTIVE 7 – Evaluate conceptual master site plan.

GOAL 5: Recreation – To provide a place where people from the community may enjoy passive recreation and where they may come to learn, reflect and renew themselves through contact with the natural world.

OBJECTIVE 1: Provide recreational opportunities.

Performance Measure 1 – Maintain trails as determined in conceptual master site plan. Create new trails if it can be done in an environmentally sensitive, permissible manner, in conjunction with the Harwich Conservation Department.

Performance Measure 2 – Provide access to scenic areas and areas of special interest.

Performance Measure 3 – Provide event areas and areas for gatherings and programs.

Performance Measure 4 – Install and maintain interpretive and educational signage in areas of special interest.

Performance Measure 6 – Partner with non-traditional entities to increase awareness of arboretum in new target groups (e.g. medical and fitness community to promote mental and physical health benefits of outdoor exercise).

OBJECTIVE 2: Accessible, safe, and environmentally sensitive trails and facilities.

Performance Measure 1 – Insure that trails are generally free of obstacles except where removal of an obstacle could cause harm to the natural features of the terrain or vegetation or where compliance would otherwise be impractical. Insure that pathways are as hazard-free as possible

Performance Measure 2 – Clearly mark hazardous areas and install safety barriers where indicated.

Performance Measure 3 – Insure that Island Pond Trail and adjoining event areas are as universally accessible as is practical.

Performance Measure 4 – Install benches along trails.

Performance Measure 5 – Endeavor to clear invasive, poisonous, or hazardous plants away from trails.

Performance Measure 6 – Around the trail and pond area, to the extent feasible without causing an adverse environmental impact, prune underbrush to promote visitor comfort and safety. Abide by the Massachusetts Wetlands Protection Act and Harwich Wetlands Bylaw when pruning, and obtain Conservation Commission approval prior to doing work.

Performance Measure 7 – Incorporate Adaptive Monitoring Plan into trail maintenance projects.

OBJECTIVE 3: Provide visitors with adequate space and facilities for enhanced recreational experience.

Performance Measure 1 – Install picnic tables in non-sensitive areas where their use will not compromise the enjoyment of the park by other visitors.

Performance Measure 2 – Construct permanent “green” restroom facility.

OBJECTIVE 4: Provide access to the Arboretum site and adequate paved parking for daily use and surfaces parking special events.

Performance Measure 1 – Identify, design and install on-site parking to support increased daily traffic and special events.

Performance Measure 2 – Partner with neighboring businesses for extra off-site parking during special events.

Performance Measure 3 – Work toward obtaining annual visitor goal for directional signage on State Road 6 (Mid-Cape Highway). How about also on the bike trail?

OBJECTIVE 5 – Reevaluate conceptual master site plan in 2021 and every five years thereafter.

II. ADMINISTRATIVE SECTION

A. Descriptive Information

1. Common Name of Property:

The property itself is the Island Pond Cemetery and Island Pond Conservation Area. However, within these adjoining properties will be the “**James G. Marceline Arboretum at Island Pond**” Throughout the plan, this parcel of real property will be referred to as the “Arboretum.”

2. Location, Boundaries, and Improvements:

The Arboretum is located in Barnstable County in Harwich, Massachusetts and is approximately 25 plus acres in size. The entrance to the Arboretum is located on Island Pond Road which is off of Main Street in Harwich Center. The Arboretum is bordered to the north by the Cape Cod Lavender Farm, to the east by Harwich Congregational Church, to the West by Harwich Conservation Department and Harwich Conservation Trust Trail system. The southerly boundary lies on the Old Colony Rail Trail, aka Cape Cod Bike Trail.

3. Title Interest Fee simple title to the Arboretum is held by the Town.

C. Agency and Public Involvement

1. Responsibilities of the Town.

The Town is responsible under the terms of the EPA grant to ensure that the property is used for passive recreation.

2. Compliance with the Comprehensive Plan

The Arboretum is in compliance with the Town’s Comprehensive Land Use Plan. Also in compliance with the current Harwich Open Space and Recreation Plan. Both call for the enhancement of natural resources and the opportunity for added passive outdoor recreational activities.

D. Volunteer and Staff Involvement

1. Community Service Volunteers

Community Service Volunteers are members of the community who support the goals and mission of the organization and volunteer their time and expertise to help in their achievement. Community Service Volunteers can generally be divided into two categories:

a. Service Volunteers

Service Volunteers are people who volunteer to help on an “as-needed” basis such as; work days, events, administrative and program support. The need and duties of Service Volunteers don’t change over time and are, therefore, essential throughout all timeframes of organizational development. These volunteers may also include AmeriCorps Cape Cod members.

b. Specialty Volunteers

Specialty Volunteers are people who volunteer their time and expertise to perform a specific function for the organization, i.e.; technology, botanist, ornithology, horticulturist, etc. The needs and duties of Specialty Volunteers change over time and are greatly influenced by the organization’s current needs and ability to hire staff to perform those. The most immediate need is for a volunteer coordinator to help manage, recruit and train the service volunteer corps.

2. Staff

Staff are paid employees whose primary responsibility is management of the day-to-day operations of the organization. Current staff include Cemetery Administrator, Conservation Agent and Cemetery Ground Crews. Staff positions are not static and change over time as the organization grows and its needs and ability to support paid employees changes. Currently there is a part-time consultant/independent contractor who works on special projects. Very soon, the organization needs to obtain funding for part-time Volunteer/Events Coordinator, Development Director and Maintenance positions. Long term needs will include making the above positions full-time and hiring part-time Operations Manager, Program Director and Office Manager.

- a. AmeriCorps of Cape Cod has a member serving at the Marceline Arboretum since 2019. A member serves two days a week to create programming, invasive species removal and general maintenance, planning of new gardens and ground improvements, as well as giving tours.

III. NATURAL RESOURCE SECTION

A. Past Uses

The site has an interesting history. The Island Pond Cemetery is a public garden and historic site located in the Town of Harwich, Massachusetts and it is named after a large adjacent pond to the burial grounds. Established in 1872 the Island Pond Cemetery was

already a burial site in the town with its earliest known internment of George Weekes in 1770. George was born in Dorchester, Massachusetts in 1683 and came to Harwich where he married Deborah Wing in 1714 and preached to the Native Indians. George Weekes is buried with his family in a wooded lot among an oak and five pitch pines trees across from the Lily Pond. The seven acre conservation piece attached to the cemetery has been used as a trail system under the care and custody of the Harwich Conservation Department and Harwich Conservation Trust.

B. Natural Resources

1. Soil Types

See report from United States Department of Agriculture Natural Resources Conservation Service. Custom Soil Resource Report for Barnstable County.

Tables—Suitability for Hand Planting

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
38A	Pipestone loamy coarse sand, 0 to 3 percent slopes	Well suited	Pipestone (70%)		1.2	5.2%
			Deerfield (10%)			
			Walpole Variant, LOAMY SUBSTRATUM (10%)			
55A	Freetown coarse sand, 0 to 3 percent slopes, sanded surface	Moderately suited	Freetown, sanded surface (85%)	Sandiness (0.50)	1.3	5.7%
			Tihonet (3%)	Sandiness (0.50)		
252B	Carver coarse sand, 3 to 8 percent slopes	Well suited	Carver (80%)		8.0	33.7%
			Merrimac (6%)			
			Hinckley (6%)			
			Eastchop (4%)			
			Enfield (4%)			
252D	Carver coarse sand, 15 to 35 percent slopes	Well suited	Carver (65%)		13.1	55.4%
			Plymouth (10%)			
			Hinckley (10%)			
			Eastchop (10%)			
Totals for Area of Interest					23.7	100.0%

Rating	Acres in AOI	Percent of AOI
Well suited	22.3	94.3%
Moderately suited	1.3	5.7%
Totals for Area of Interest	23.7	100.0%

Rating Options—Suitability for Hand Planting

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

2. Archaeological and Historical Resources

The Island Pond Cemetery has been a burial ground since 1770's and contains thousands of memorials and burials with the grounds.

The Old Colony Rail Trail which in on the southern part of the cemetery and where there were train tracks, has now been converted into a bike trail. Old Colony Railroad (OC) was a major railroad system, mainly covering southeastern Massachusetts, from 1845 to 1893.

3. Water Resources

Island Pond itself is located on the western part of the Arboretum. Located in the middle of the cemetery is the Lily Pond. In the northern part of the property is old abandoned cranberry bogs that have reverted to freshwater marshes.

4. Fish and Wildlife

Management of the Arboretum natural areas will focus on maintaining and enhancing ecological diversity. These goals will be accomplished through proven land management techniques such as removal of invasive species and replanting with native species, restoring appropriate undercover, and, where possible. It is assumed that by augmenting the plant community, the animal community will prosper as well. In an effort to better understand the health and function of the ecosystems Island Pond Arboretum will try to partner with AmeriCorps Cape Cod, Cape Cod Regional Technical High School, Monomoy Regional School District and Cape Cod Community College to conduct ecosystem food chain process, ecological succession, and biogeochemistry studies. During this ten year planning period, we will compile a list of observed species, including fish in Island Pond. There are no current plans to release additional animal species.

5. Species of Concern

At this time we will be compiling only endangered or threatened species known to occur on site. Any of these threatened species will be listed and as such no person can take, pursue, hunt, harass, capture or possess or their burrows, nests, or eggs except by permission of the Massachusetts Division of Fisheries & Wildlife Service

6. Swamps, Marshes and Other Wetlands

In addition to the water resources described above, the Arboretum contains the following types of wetland communities- Perennial stream, freshwater marsh, bordering vegetated wetland, wooded swamp, and freshwater ponds. As soon as possible but definitely before restoration or landscaping activities, the Island Pond Arboretum should delineate any jurisdictional wetlands and familiarize itself with state regulations. The wetlands on the Arboretum site protect water quality of Town of Harwich, recharge groundwater, protect against pollution, help control flooding in nearby residential areas, and provide a variety of wildlife habitats. In the interest of maintaining these valuable resource functions, Island Pond Arboretum will incorporate wetland restoration into the overall resource management program as opportunities arise, particularly where wetland resources have been impaired or negatively impacted by previous management activities. Wetland restoration objectives on the Arboretum property include erosion control, restoration of hydrology and/or hydro-period and restoration of wetland plant and animal communities. To achieve these objectives, restoration activities may involve road and soil stabilization, water level control structure removal or installation, exotic species control, site preparation and re-vegetation with native wetland species, and project monitoring. These activities will all require Mass Department of Environmental Protection and Harwich Conservation Commission approval, as well as potentially need approval from other environmental agencies.

IV. MANAGEMENT CONCEPTS BY NATURAL COMMUNITIES AND PROPOSED MANAGEMENT ACTIVITIES

A. Existing and Planned Uses: The Arboretum will be managed under the multiple use concept in order to achieve the greatest benefit to the citizens of Harwich and their guests. Activities to occur on the Arboretum include restoration, maintenance and protection of Outstanding Natural areas, installation of gardens focusing on the native species of northeast Massachusetts and Cape Cod and economic and ethnobotanical selections, and creation of open areas for passive recreation (picnicking, concerts, art and eco walks, etc).

1. **Arboretum Boundaries:** Establishment and Preservation Approximately 25% of the Arboretum boundary has been marked with signage. The establishment, marking, and of boundaries.
2. **Soil and Water Protection** The acquisition and management of public land has several objectives including maximizing ecological restoration of outstanding natural areas and facilitating optimum public use. Overriding both these objectives is the responsibility to be exemplary stewards of the

natural resources on the Arboretum. This is not limited to protecting soil and water but also to improving them when the opportunity arises. The almost 50 year history of unauthorized and unregulated dumping on the Arboretum gives us endless opportunity for both.

3. **Roads:** Currently Island Pond does not have a parking area. Secondary dirt roads are used for parking but are not passable. We are working on a Master Plan includes a parking area to provide access to hiking trails, though there are no plans in the short term to build this out. There are old roadbeds running roughly the older sections of the cemetery through the center of the Arboretum.

4. **Recreation Management** the demand for resource-based outdoor recreation within Barnstable County will continue to grow as the surrounding area is urbanized. Due to its central location and proximity to Harwich Center and the Old Colony Rail Trail, the Arboretum is perfectly positioned to provide quality outdoor experiences to the citizens of the Town of Harwich and their guests. With increases in population and development, public and private parks will become more important than ever in providing quality outdoor recreational experiences and preserving representative and unique natural areas. The Island Pond Arboretum will attempt to minimize deterioration of the Arboretum through normal use by remaining mindful of the tolerances of various communities' usage. We are concerned with trail usage in excess of 100 hikers/mile/day will result in degradation of the surrounding habitat.
 - a. Existing Facilities/Infrastructure/Recreational Activities There are currently no buildings on the Arboretum.

Island Pond Visitor's Center a multiple-use area in the newly acquired 1 acre parcel of land located in the rear of the cemetery and abutting the wetlands, To have a parking area, building, restrooms and boardwalk are conceptual only and thus open to evolve in their shape, function, location and inclusion. These conceptual architectural facilities are designed to provide opportunities for botanical and environmental

Other facilities considered for the future, but not yet in the planning phase, include greenhouses, covered and uncovered decks and platforms for viewing natural areas, and small shelters for rest, observation or small events. Future hardscaped areas within the gardens will include bridges and boardwalks to access natural areas and gardens and an event lawn.

B. Planned Recreational Activities

1. **Public Access/Parking** Public Access to the Arboretum is currently through Island Pond Road. Additional access points, will be developed

with input from user groups and other interested members of the general public.

2. Recreational Trails; A park the size of the arboretum can accommodate of trails (7 acres). We currently have Land Stewardship Report done by BSC Group on Conservation Land Management Plan for Island Pond. Island Pond Arboretum should complete a Best Management Practices for Trail Design and Installation. Trails are the Arboretum's opportunity to invite guests to enjoy and learn about their natural environment. Guests may include individuals in wheelchairs, cross country joggers, families with strollers, senior citizens, nature enthusiasts, and even the environmentally-challenged sector of the general public. All of them are part of our target audience. Some trails also serve a double purpose as vehicular access to inner portions of the Arboretum. To whatever extent possible, all trails will follow sustainable trail design criteria. At the Arboretum, there are basically three levels of trails 1) multipurpose, 2) wheelchair/stroller accessible, and 3) hiking trails. Multipurpose trails, such as the new Island Pond Loop, have 10' tread width, 12 ft clearance, and surfaces sturdy enough to support pickup trucks and small tractors.

Wheelchair/stroller accessible trails have 5' tread width, 8' vertical and horizontal clearance, and firm stable surfaces that are not degraded by use. There are currently no wheelchair/stroller trails. Most garden trails that are within the planted area will be of this type. Hiking trails will have

Not only do people prefer the interest this design imparts but it also provides excellent opportunities to manage water on the trail tread. These design elements keep steeper sections of trail restricted to short distances and provide ample opportunities for resting intervals between each "up and down". These are the same key elements of the proposed accessibility guidelines. Our guests are drawn to edges and boundaries and all of our trails should follow whatever edges and boundaries are available.

Finally, our guests like the feeling of privacy but not isolation. All of our hiking trails, even those that wind back on themselves, have planned screens from nearby trails. The wheelchair/stroller accessible trails through future garden installations that require a several year site preparation process will, by necessity, have large open areas. Plant installations will restore the illusion of privacy to these trails. The multipurpose trails are designed so that vehicles are not visible from either accessible or hiking trails. The line between privacy and dangerous isolation varies widely amongst guests. Great care must be taken to keep all guests relatively comfortable. The safety of our guests while on the trails is of utmost importance. Every reasonable attempt will be made to keep trails accessible re-surfacing with mulch and gravel and with permanent and temporary boardwalks and bridges. In the event that trails

are flooded, or are not safe, they will be closed until they are safely passable. Habitat preservation is obviously necessary in Outstanding Native Landscapes; without it the trails are worthless. When trails are constructed through Outstanding Native Landscapes ground disturbance will be minimal and trail clearing will be no more than the tread width and clearance of the appropriate trail class. No multipurpose trails will be constructed through Outstanding Native Landscapes areas. No wheelchair/stroller accessible trails will be constructed through Outstanding Native Landscapes areas if they require importing tread material. Boardwalks may be added to minimize habitat damage. Trails will avoid rare, threatened/endangered, and fragile plants.

C. Gardens/Specimen Collections

A. Objectives Botanical gardens usually contain various distinct collections of plants identified by scientific and common name. It is the possession of these collections that distinguish gardens from similar entities such as parks and nature preserves. Island Pond Arboretum is currently writing the collections policy.

The ultimate purpose of a collection policy is to guide and limit what a garden collects so that collections are meaningful and relevant to the mission of the garden. The purpose of Island Pond Arboretum's collection is to encourage the appreciation, understanding, maintenance and use of trees, woody shrubs, and other plants, in northeast Massachusetts by demonstrating the value of plants in our daily lives. Collection policy anticipates that its signature collections will include native plants with a special emphasis on the plants which are native to Barnstable County.

“Economic plants” include plants with an economic value to people, again with special emphasis on northeast Massachusetts. The term “Ethnobotanical” refers to the study of how people of a particular culture and region make use of indigenous plants. Ethnobotanists explore how plants are used for such things as fuel, food, beverages, shelter, medicine, fibers and clothing, hunting, and religious ceremonies, or simply, plants that people use in daily life. Ethnobotany has its roots in botany, the study of plants. Botany, in turn, originated in part from an interest in finding plants to help fight illness.

The economic and ethnobotanical collections map overlap to a degree and will represent a wide diversity of uses people make of plants, both native and exotic. These collections may include cultivated noninvasive plants that were transported to the Northeast Massachusetts from other parts of the world by early settlers and exotic non-invasive

plants that are sources of products used by people in NE Massachusetts and can be grown successfully in this area. .

Other plant acquisitions may be appropriate to the Arboretum but these plants must be screened and selected consistent with the mission of the Arboretum. By design, it is our mission to demonstrate and promote the use of plants that demand less water, less chemicals, and less maintenance. We will acquire species that are appropriate for the Cape Cod climate, are not exotic pest plants in Massachusetts, were collected legally, support Island Pond Arboretum's mission and goals to minimize effects on natural resources, promote research and education, conservation and preservation, and are compatible with the collection policy. As outlined above, our plant collections should be plants that are sustainable without burden to our natural resources. The use of plants that require excessive water or significant maintenance is strongly discouraged. Non-native plants which do not meet collection guidelines or which are without botanical or conservation value may be selected for temporary highlights, in landscape beds only and may not be planted as a permanent part of the Arboretum's collection.

There will be a GIS file with a map which identifies the location of each plant in the collection. The associated Attribute Table will include:

- 1) Date added to the collection,
- 2) The scientific name of the plant,
- 3) The common name(s),
- 4) Current GPS coordinates,
- 5) Name of nearest trail,
- 6) origin: if purchased/donated how, when and in what form the plant was acquired; if not planted, the approximate size, age, and condition of the tree/plant when identified on the Arboretum; if collected in the wild, its original location, (including original GPS location, if available), and natural growing conditions. Origination data will be different for different plants. Plants will be inventoried and signs checked at least annually to determine the general health and condition of the plant and to be sure that identification signage is still in place at the correct location.

Plants will be inventoried and signs checked at least annually to determine the general health and condition of the plant and to be sure that identification signage is still in place at the correct location.

Landscape amenities considered for the future include: gardens demonstrating indigenous and non-invasive exotic species within guidelines of our mission statement and collection's policy. Bridges and boardwalks will provide access to natural areas and gardens. Priority areas for landscaping include the parking lot, Island Pond, invasive plant eradication site between Conservation walking trails and Island Pond Cemetery, highly impacted mixed uplands. Other areas which could be designated for gardens are included later in this document under Proposed Management Activities.

6. Access

Plant collections will be accessible to the public during operating hours. Restricted access may be needed to protect certain plants which could be injured by excessive foot traffic or which are located in sensitive areas. Plant records will be available to the Board, staff, and persons granted access to the records.

7. Education

Public Education provides program about conservation, horticulture, gardening, botany, historic tours, and natural history to enhance understanding of the natural world and foster appreciation of the Arboretum's mission.

Currently programs are limited to self-guided tours during COVID but will return to walking tours, talks, and demonstrations during events, those arranged by Cemetery Administrator and Conservation Administrator, and are held on weekend days.

In the future, Island Pond Arboretum plans to develop a core of volunteer guides to offer tours on the weekends and during the week. Island Pond Arboretum also intends to develop a series of weekday and weekend seminars and workshops on topics that further the mission of the Arboretum after polling visitors to determine their interests. Island Pond Arboretum is in the process of writing educational brochures about the communities along each of the trails, checklists for trees and birds and an additional topical brochure on stewardship.

As funds become available and trails are added, we intend to produce educational signage similar to that on existing trails. Plant signs will also be added for all trails. Once Island Pond Arboretum starts to build its specimen collection all plants in the collection, including existing native plants accessed into the collection, will have identification signs.

8. Events

Future Events:

- 1) The Grand Opening and subsequent Anniversary Events - open to the public with guided tours, live music, plants, and educational programs. The Nature Conservancy, and Audubon Society;
- 2) Volunteer workdays, attendees assist with site maintenance, including trail clearing and building, trash removal, and plantings;

9. Research Projects

Research projects and specimen collection may be performed in certain areas of the Arboretum on a temporary or permanent basis for the purpose of obtaining information which furthers the knowledge of habitat ecology, restoration of habitats, appropriateness of species to the collection, and enjoyment of the collection by the public. The Arboretum currently cooperates with local educational institutions (e.g., Cape Cod Cooperative Extension) in the accumulation of this information. In May 2018 a Custom Soil Resource Report was completed by Russell Norton, Agriculture & Horticulture Extension Educator.

10. Non-Native Invasive Species

Island Pond Arboretum will be adhering to Code of Conduct for Botanic Gardens and Arboreta and by doing so has committed to eradicate/control existing exotic invasive populations, screen introductions for exotic invasive species and educate the public about landscape alternatives to exotic invasive.

Over the years, portions of the Arboretum have become infested with invasive plant species. These areas require special attention to prevent their further spread. The Island Pond Arboretum will implement an invasive species eradication plan in those areas and continue to monitor the Arboretum for new infestations. The eradication plan will include a combination of herbicide applications and manual removal.

11. Ground Disturbing Activities

The Arboretum is committed to managing and protecting the sensitive resources on the property. Sensitive resources include wetlands, rare, threatened and endangered species, Outstanding Native Landscapes, and historic sites. It is our goal that these resources will not be adversely impacted by ground disturbing activities. When new activities are considered, such as recreational trails, boardwalks, or construction of roads or buildings, they will

be designed and carefully constructed so as to minimize impact to sensitive areas.

12. **Restoration**

Large portions of the Arboretum have been disturbed directly and indirectly by cranberry activities, dumping of household refuse and colonization by invasive species. Where it is feasible to restore natural areas at the Arboretum, Island Pond Arboretum will focus on restoring species. The management actions to achieve these goals are detailed further in this plan under the desired future conditions and restoration/management section of the community descriptions.

James Godfrey Marceline



1925 — 2018

James G Marceline was a lifelong resident of Harwich, MA. "Jimmy" was educated in Harwich schools and was a strong advocate for both education and the environment.

Jimmy, a decorated WWII Veteran, serving as a Private First-Class in the Army when he was captured by the Nazis in Germany, he was sent to Stalag 4B and was imprisoned for 216 days. He was the recipient of the Purple Heart, European African Middle Eastern Theater Campaign Ribbon w/3 Stars, World War II Victory Medal, Good Conduct Medal and the American Theater Ribbon.

Massachusetts State Senate recognized Jimmy Marceline for his contributions on March 12, 2018. "Mr. Marceline is remembered for his passion for local government, community involvement, and making a true difference for his town and country. He has been described as Harwich's most revered citizen, and will be missed by many. May he rest in peace, having lived a full life and leaving a remarkable legacy," stated the Senate Journal entry prepared by Cape and Islands Senator Julian Cyr, D-Truro.

*Linking the past
to the future.*



Marceline Arboretum is located at 15 Island Pond Road, Harwich, MA 02645

Take Route 6 to exit 10, Route 124/
Pleasant Lake Avenue until you get to
Harwich Center. Right on to Main Street
and first left onto Island Pond Road.

Phone: 508-430-7549
Fax: 508-430-7598
E-mail: rkelly@town.harwich.ma.us

James G. Marceline Arboretum at Island Pond Cemetery

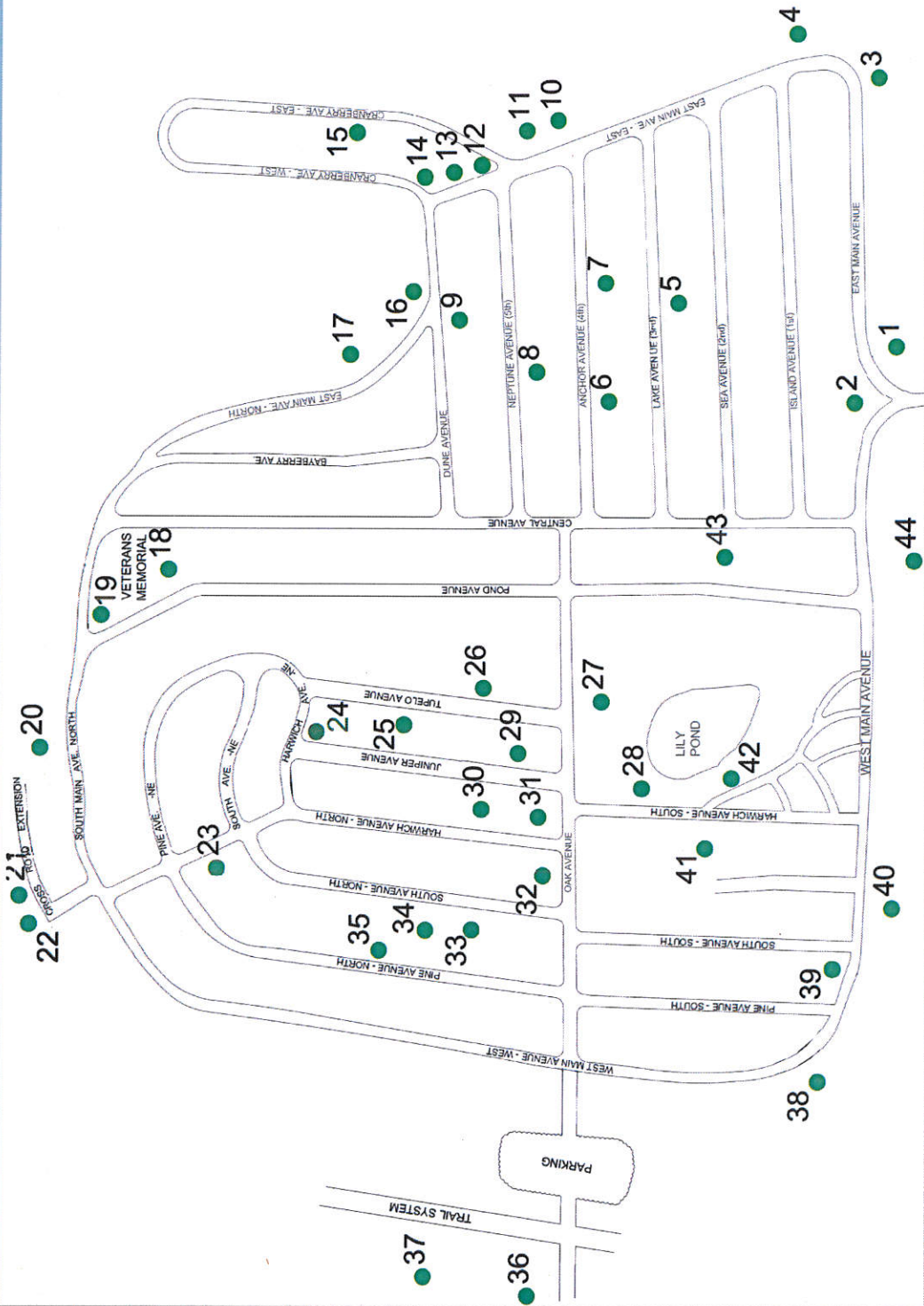
The Island Pond Cemetery is a public garden and historic site located in the Town of Harwich, Massachusetts and named after a large pond adjacent to the burial grounds. Established in 1872, the Island Pond Cemetery was already a burial site in the town with its earliest interment of George Weekes in 1770. The James G. Marceline Arboretum encompasses 18 acres of the Island Pond Cemetery and 7 plus acres of the Harwich Conservation land with walking trails. The Cemetery and Conservation land is located in Harwich Center and is connected to Cape Cod Bike Rail Trail. This Arboretum is an invaluable natural and horticultural resource with many species of Plants, Wildlife and Historic Monumentation. The Arboretum was certified as a Wildlife Habitat in 2019. This is the only regional public Arboretum with historic architecture on Cape Cod and is open to the public free of charge.

The mission of the James Marceline Arboretum at Island Pond is to engage, educate, and enrich the lives of our constituents to become better stewards of our local history and environment.



Trees & Wood Plants

1	Black Locust	<i>Robinia pseudoacacia</i>
2	Eastern Redbud	<i>Cercis canadensis</i>
3	Norway Spruce	<i>Picea abies</i>
4	Black Oak	<i>Quercus velutina</i>
5	American Elm	<i>Ulmus americana</i>
6	Norway Maple	<i>Acer platanoides</i>
7	Ginkgo Maidenhair Tree	<i>Ginkgo biloba</i>
8	Red Cedar	<i>Juniperus virginiana</i>
9	Dawn Redwood	<i>Metasequoia glyptostroboides</i>
10	Leyland Cypress	<i>Chamaecyparis leylandii</i>
11	Eastern Hemlock	<i>Tsuga canadensis</i>
12	Weeping Cherry	<i>Prunus pendula</i>
13	Red Sunset Maple	<i>Acer rubrum 'Red Sunset'</i>
14	Red Dragon Japanese Maple	<i>Acer palmatum</i>
15	White Oak	<i>Quercus alba</i>
16	Sweet Pepperbush	<i>Clethra alnifolia</i>
17	Dwarf Hinoki Cypress	<i>Chamaecyparis obtusa</i>
18	Rhododendron	<i>Rhododendron ferrugineum</i>
19	Hackberry	<i>Celtis occidentalis</i>
20	Dwarf Alberta Spruce	<i>Picea glauca</i>
21	Blue Spruce	<i>Picea pungens</i>
22	Andromeda	<i>Pieris japonica</i>
23	Hedge Maple	<i>Acer campestre</i>
24	Mimosa	<i>Albizia julibrissin</i>
25	Crimson King Norway Maple	<i>Acer platanoides 'Faassen's Black'</i>
26	Kousa Dogwood	<i>Cornus kousa</i>
27	Buttonbush	<i>Cephalanthus occidentalis</i>
28	Sassafras	<i>Odontopus calceatus</i>
29	American holly	<i>Ilex opaca</i>
30	Japanese Flowering Cherry	<i>Prunus serrulata 'Kwanzan'</i>
31	Black Cherry	<i>Prunus serotina</i>
32	American Beech	<i>Fagus grandifolia</i>
33	Pitch Pine	<i>Pinus rigida</i>
34	PJM Rhododendron	<i>Rhododendron PJM</i>
35	Bayberry	<i>Myrica pennsylvanica</i>
36	Grey Birch	<i>Betula populifolia</i>
37	Atlantic White Cedar	<i>Chamaecyparis thyoides</i>
38	Arborvitae	<i>Thuja occidentalis</i>
39	Golden Rain	<i>Koeleruteria paniculata</i>
40	White Pine	<i>Pinus strobus</i>
41	Gallery Pear	<i>Pyrus calleryana</i>
42	Black Gum 'Tupelo'	<i>Nyssa sylvatica</i>
43	Sycamore Maple	<i>Acer pseudoplatanus</i>
44	White Poplar	<i>Populus grandidentata</i>



Data Collection Sheet

Where tree or shrub is growing.

- Swamp/wetlands
- Upland

Bark texture

- Deep ridges or furrows
- Peeling in horizontal strips
- Smooth unbroken bark
- Scales or papery
- Plated
- Fibrous
- Vertical cracks

Leaf Description

- Broadleaves

Broadleaf shape

- Simple
- Compound leaf of two
- Compound leaf of three
- Fan compound leaf
- Singly feather compound
- Double feather compound
- Slender, minute or reduced
- Lobes

- Needles or scaly leaves

Needle or Scale-like leaves

- Single needle on tiny leaf stalks
- Single needle on woody pegs
- Single needles on suction cups
- Long needles/groups of 2s
- Long needles/groups of 2 or 4s
- Long slender needles in 5s
- Scale like with flattened sprays
- Scale like, rounded or 4 sided

Reference No. _____ Date: _____

Number Initial

Common Name: _____

Scientific Name: _____

Location: _____

Habitat: _____

GPS: _____

Name of person collecting data (Please print clearly)

Leaf arrangement and buds

- Alternate leaves and buds
- Opposite leaves and buds
- Spiral leaves and buds
- Whorled leaves and buds

Bud color

- White
- Red/Pink/Orange
- Yellow/Green
- Blue/Violet

Berry Color

- Red/Pink/Orange
- Blue/Violet

Nut or Pine Cone

- Nut
- Pine Cone

PHOTOS OF:

- Whole Tree
- Leaves
- Blossoms/buds
- Bark
- Branches
- Nuts
- Pine Cones

Robbin Kelley

From: Caleb Ladue
Sent: Monday, December 28, 2020 8:48 AM
To: Robbin Kelley
Subject: Re: Update Cemetery Page

Hi Robbin,

All set making the updates to the Cemetery Commission page. Please let me know if you need anything else.

Thanks,
Caleb

From: Robbin Kelley
Sent: Thursday, December 24, 2020 9:46:17 AM
To: Caleb Ladue
Subject: Update Cemetery Page

Hi Caleb

Could you make the following changes to Cemetery Commissioners

Steven H. Conner Chair (2023)
Cynthia A. Eldredge (2021)
Robert B. Thompson (2022)

Robbin Marie Kelley
Cemetery Administrator
Town of Harwich
Office: 100 Oak Street
Mailing: 732 Main Street
Harwich, MA 02645
Phone 508-430-7549
Fax 508-430-7598