6/16/2020

Hanson Open Space and Recreation Plan

February 2017 revised through June, 2020

Old Colony Planning Council

2017 Open Space and Recreation Plan

Hanson, Massachusetts

Hanson Open Space Committee

Hanson Conservation Commission

Bald Eagle at Indian Crossway

Photo by Laurie Bianchi

Notice of Nondiscrimination Rights and Protections to Beneficiaries

Federal "Title VI/Nondiscrimination" Protections

The Old Colony Metropolitan Planning Organization (MPO) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of **race**, **color,** or **national origin** (including **limited English proficiency**), be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal assistance. Related federal nondiscrimination laws administrated by the Federal Highway Administration, the Federal Transit Administration, or both prohibit discrimination on the basis of **age**, **sex**, and **disability**. These protected categories are contemplated within the Old Colony MPO's Title VI Programs consistent with federal interpretation and administration. Additionally, the Old Colony MPO provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with US Department of Transportation policy and guidance on federal Executive Order 13166.

State Nondiscrimination Protections

The Old Colony MPO also complies with the Massachusetts Public Accommodation Law, M.G.L. c 272 §§ 92a, 98, 98a, prohibiting making any distinction, discrimination, or restriction in admission to or treatment in a place of public accommodation based on **race**, **color**, **religious creed**, **national origin**, **sex**, **sexual orientation**, **disability**, or **ancestry**. Likewise, the Old Colony MPO complies with the Governor's Executive Order 526, section 4 requiring all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on **race**, **color**, **age**, **gender**, **ethnicity**, **sexual orientation**, **gender identity or expression**, **religion**, **creed**, **ancestry**, **national origin**, **disability**, **veteran's status** (including Vietnam-era veterans), or **background**.

Additional Information

To request additional information regarding Title VI and related federal and state nondiscrimination obligations, please contact:

Old Colony Planning Council
Title VI/ Nondiscrimination Coordinator
Mary Waldron
70 School Street
Brockton, MA 02301
508-583-1833 Extension 202
mwaldron@ocpcrpa.org

Title VI Specialist
MassDOT, Office of Diversity and Civil Rights
10 Park Plaza
Boston, MA 02116
857-368-8580
TTY: 857-368-0603
MASSDOT.CivilRights@state.ma.us

Complaint Filing

To file a complaint alleging a violation of Title VI or related federal nondiscrimination law, contact the Title VI Specialist (above) within 180 days of the alleged discriminatory conduct.

To file a complaint alleging a violation of the state's Public Accommodation Law, contact the Massachusetts Commission Against Discrimination within 300 days of the alleged discriminatory conduct at:

Massachusetts Commission Against Discrimination (MCAD)

One Ashburton Place, 6th Floor

Boston, MA 02109

617-994-6000

TTY: 617-994-6196

Translation

English
If this information is needed in another language, please contact the MPO Title VI Coordinator at 508-583-1833 ext. 202.

Spanish
Si necesita esta información en otro idioma, por favor contacte al coordinador de MPO del Título VI al 508-583-1833 ext. 202.

Portuguese
Caso estas informações sejam necessárias em outro idioma, por favor, contate o Coordenador de Título VI da MPO pelo telefone 508-583-1833, Ramal 202

Chinese Simple
如果需要使用其它语言了解信息，请联系 Old Colony 大都会规划组织（MPO）《民权法案》第六章协调员，电话 508- 583-1833，转 202。

Chinese Traditional
如果需要使用其他語言瞭解資訊，請聯繫 Old Colony 大都會規劃組織（MPO）《民權法案》第六章協調員，電話 508- 583-1833，轉 202。

Vietnamese
Nếu quý vị cần thông tin này bằng tiếng khác, vui lòng liên hệ Điều phối viên Luật VI của MPO theo số điện thoại 508- 583-1833, số máy nhánh 202.

Haitian Creole
Si yon moun bezwen enfòmasyon sa a nan yon lòt lang, tanpri kontakte Koòdonatè a Title VI MPO nan 508-583-1833 ext. 202.

French Creole
Si yon moun vle genyen enfòmasyon sa yo nan yon lòt lang, tanpri kontakte Kowòdinatè MPO Title VI la nan nimewo 508-583-1833, ekstansyon 202.

Russian
Если Вам необходима данная информация на любом другом языке, пожалуйста, свяжитесь с Координатором Титула VI в MPO по тел: 508-583-1833, добавочный 202.

French
Si vous avez besoin d'obtenir une copie de la présente dans une autre langue, veuillez contacter le coordinateur du Titre VI de MPO en composant le 508-583-1833, poste 202.

Italian
Se ha bisogno di ricevere queste informazioni in un’altra lingua si prega di contattare il coordinatore MPO del Titolo VI al 508- 583-1833 interno 202

Mon-Khmer, Cambodian

ប្រសិនបើលោក-អ្នកត្រូវការបកប្រែព័ត៌មាននេះ
សូមទាក់ទងអ្នកសម្របសម្រួលជំពូកទី**6** របស់ **MPO** តាមរយៈលេខទូរស័ព្ទ **508-583-1833** រួចភ្ជាប់ទៅលេខ **202**។

Arabic

إذا كنت بحاجة إلى هذه المعلومات بلغة أخرى، يُرجى الاتصال بمنسق الفقرة السادسة لمنظمة التخطيط الحضري على الهاتف: 1833-583 -508 وثم اضغط الأرقام 202.

Updated December 2019

Old Colony Planning Council

Colony Planning Council (OCPC)

President	**Christine Joy**
Treasurer	Sandra Wright
Secretary	Robert Moran, Jr.

COMMUNITY	DELEGATE	ALTERNATE
Abington	Steven SanTeusanio	
Avon	Frank P. Staffier	John Costa
Bridgewater	Sandra Wright	
Brockton	Robert G. Moran, Jr.	Preston Huckabee, P.E.
Duxbury	Valarie Massard , AICP, CFM	George D. Wadsworth
East Bridgewater		
Easton	Jeanmarie Kent Joyce	
Halifax		
Hanover	Michele Grenier	
Hanson	Matthew Dyer	Philip Lindquist
Kingston	Robert Downey	Paul Basler
Pembroke	Rebecca Colletta	Daniel Trabucco
Plymouth	Lee Hartmann, AICP	
Plympton	Christine Joy	
Stoughton	Douglas Sylvestre	Forrest Lindwall
West Bridgewater	Eldon F. Moreira	
Whitman	Fred L. Gilmetti	Daniel L. Salvucci
Delegate-at-Large	Troy E. Garron	

OCPC Staff

Mary Waldron	**Executive Director and Records Access Officer**
Brenda Robinson	Fiscal Officer
David Klein	AAA Administrator
Lila Burgess	Ombudsman Program Director
Laurie Muncy, AICP	Principal Comprehensive Planner
Joanne Zygmunt	Senior Comprehensive Planner
Jimmy Pereira	Community/ Transportation Planner
Bruce Hughes	Economic Development/ Community Planner
Andrew Vidal	GIS Manager
Charles Kilmer, AICP	Assistant Director/ Transportation Program Manager
Raymond Guarino	Principal Transportation Planner
William McNulty	Principal Transportation Planner
Paul Chenard	Senior Transportation Planner
Kyle Mowatt	Senior Transportation Planner
Shawn Bailey	Transportation Planner

Table of Contents

SECTION 1. PLAN SUMMARY 15
SECTION 2. INTRODUCTION 18
Statement of Purpose 18
Planning Process and Public Participation 20
SECTION 3. REGIONAL CONTEXT 23
History of the Community 25
Population Characteristics 27
Recreational Needs by Age Group 29
Environmental Justice 30
Income, Employment and Jobs: 32
Growth and Development Patterns 34
Patterns and Trends 34
Commercial and Industrial Development 34
SECTION 4. ENVIRONMENTAL INVENTORY AND ANALYSIS 46
Geology and Topography 46
Soils 47
Landscape Character 51
Water Resources 52
Vegetation 87
Fisheries and Wildlife 89
Environmental Challenges 102
Scenic Resources and Unique Environments 111
Major Characteristic or Unusual Geologic Features and Special Landscape Features 121
SECTION 5. INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST 122
Benefits of Outdoor Recreation and Open Space Protection 122
Public and Non-Profit Parcels 127

Municipal 143
Smith-Nawazelski Conservation Area 143
Poor Meadow Brook Greenway 146
Poor Meadow Brook Confluence Protection Project 147
Rocky Run Conservation Area 150
Alton J. Smith Reserve (Smitty's Bog) 151
Nathaniel Thomas Mill 152
Veterans Memorial Town Forest 153
Webster-Billings Conservation Area 154
Brian M. Gaffey Conservation Area 156
Private Parcels 157
Other Areas and Parcels 159
State and Non-Profit Organizations 159
SECTION 6. COMMUNITY VISION 160
Description of Process 160
Statement of Open Space and Recreation Goals 163
SECTION 7. ANALYSIS OF NEEDS 164
Summary of Resource Protection Needs 164
Water Resources: 164
Summary of Community Needs 167
1. Improved Trail Amenities 167
2. Bike Paths and Sidewalks 168
3. Swimming 168
4. Management Needs 169
Implications of the Statewide Comprehensive Outdoor Recreation Plan 171
Goal 1: Access for Underserved Populations 172
Goal 2. Support the Statewide Trails Initiative 172
Goal 3. Increase the Availability of Water-based Recreation 173
Goal 4. Support the Creation and Renovation of Neighborhood Parks. 174
SECTION 8. GOALS, OBJECTIVES AND ACCOMPLISHMENTS 175
Goal 1. Preserve and Enhance Hanson's Rural Character and 175

Scenic Quality 175
Goal 2. Expand and Improve Recreational Opportunities 176
Goal 3. Protect Natural Resources and Biodiversity 176
Goal 4. Protect and Enhance Conservation Lands 176
Goal 5. Implement Camp Kiwanee Master Plan 176
Goal 6. Monitor OSRP Action Plan Progress 177
SECTION 9. SEVEN-YEAR ACTION PLAN 178
Reviewing Accomplishments of 2009 OSRP 178
Funding Sources 179
SEVEN-YEAR ACTION PLAN 181
Process to Identify Priorities for the 7-Year Action Plan 181
Goal 1: Preserve and Enhance Hanson's Rural Character and Scenic Quality 185
Goal 2: Protect Hanson's Water Resources and Biodiversity 186
Goal 3: Improve Connectivity of and Access to Recreational Resources 187
Goal 4: Protect Agricultural Land Including Fields, Meadows, and Orchards 188
Goal 5: Improve Collaboration and Management 189
Practical Ways for All Landowners to Improve Land in Hanson 190
Conservation Design 200
Making Regulations Reflect Priorities 207
SECTION 10. PUBLIC COMMENTS 209
SECTION 11. REFERENCES 219
APPENDIX A: COMMUNITY SURVEY 223
APPENDIX B: MAPS 225
APPENDIX C: ADA SELF EVALUATION 232
Hanson's ADA Self-Evaluation for Handicap Access 232
Administrative Requirements 232
Program Accessibility 232
504 Administrative Requirements 233
Opportunities for Accessible Trails 234
Appendix D: CONSERVATION SCORECARD 379
Appendix E: CHAPTER 61 LANDS 385

Appendix F: BIOMAP2 CORE HABITAT 400
Appendix G: PARKSERVE REPORT 403
APPENDIX H: TRAIL MAPS 405

List of Figures

Figure 1: Wampatuck Pond 18
Figure 2; Map of Pembroke, Including Hanson Territory, AD 1704 23
Figure 3: Town of Hanson, Massachusetts 25
Figure 4: Marcus Urann 26
Figure 5: Ocean Spray Brand 26
Figure 6: Town Hall Hanson, MA 27
Figure 7: Hanson Demographic Profile 28
Figure 8: Massachusetts Environmental Justice Populations 31
Figure 9: Income and Education Attainment 33
Figure 10: Industrial Development, Hanson 34
Figure 11: South Hanson Railroad Station 35
Figure 12: Old Colony Railroad 1845-1874 36
Figure 13: Route 14 Proposed Roadway Layout 39
Figure 14: Route 14 Project Sections 40
Figure 15: Bicycle and Pedestrian Connectivity 42
Figure 16: Hanson Bicycle Level of Service 43
Figure 17: Pedestrian Level of Service 43
Figure 18: Chickadee Burrage Pond Wildlife Management Area 45
Figure 19: Hanson General Soils Map 49
Figure 20: Taunton River Watershed 52

Figure 21: North River Watershed 53
Figure 22: Impaired Water Bodies 54
Figure 23: Massachusetts River Basins 55
Figure 24: FIRM Maps Legend 58
Figure 25: FIRM Map 25023C0184J 59
Figure 26: FIRM Map 25023C0192J 60
Figure 27: FIRM Map 25023C0194J 61
Figure 28: FIRM Map 25023C0204J 62
Figure 29: FIRM Map 25023C0203J 63
Figure 30: Boat Ramp on Indian Head Pond 66
Figure 31: Nathaniel Thomas Mill 67
Figure 32: Oldham Pond 68
Figure 33: Magenta Polygons Denote Town Owned Property 69
Figure 34: Oldham Pond, 2001 70
Figure 35: Oldham Pond Today 71
Figure 36: Maquan Pond, circa 1928 72
Figure 37: Maquan Pond, circa 1930s 73
Figure 38: Fern Island, Wampatuck Pond 74
Figure 39: Wampatuck Pond looking south 75
Figure 40: Wampatuck Pond, Hanson, MA 76
Figure 41: Wampatuck Pond Algae Blooms 77
Figure 42: Factory Pond Dam, prior to repair work 78
Figure 43: Factory Pond Dam, during repair work 79
Figure 44: Factory Pond Dam, left embankment reconstruction 79
Figure 45: Dam crest from left abutment, 2015 80
Figure 46: Burrage Pond Wildlife Management Area in winter 81
Figure 47: Burrage Pond Wildlife Management Area Sandhill Cranes 82

Figure 48: Monponsett Lakes 83
Figure 49: West Lake Monponsett 84
Figure 50: Algae Cyanobacteria blooms West Lake Monponsett Pond 84
Figure 51: Cyanobacteria blooms on West Lake - see left side of photo 85
Figure 52: Osprey, photo by Rob MacDonald 89
Figure 53: Burrage Wildlife Management Area Osprey 90
Figure 54: BioMap2 Core Habitat 94
Figure 55: New England Bluet 98
Figure 56: Damselfly 99
Figure 57: Spotted Turtle 99
Figure 58: Certified Vernal Pools 100
Figure 59: Generalized Phosphorus Budget 103
Figure 60: The Phosphorus Cycle 104
Figure 61: Shumatussacant River at West Washington Street 108
Figure 62: Bay Circuit Trail Map 111
Figure 63: Plymouth County Hospital News Article 112
Figure 64: Resident Children at Play, Plymouth County Hospital 113
Figure 65: Plymouth County Hospital 113
Figure 66: Stump Brook at Burrage Pond Wildlife Management Area 116
Figure 67: Burrage Pond WMA 117
Figure 68: Burrage Pond Sandhill Cranes 119
Figure 69: Camp Kiwanee Lodge 120
Figure 70: Needles Lodge at Camp Kiwanee 120
Figure 71: Open Space Map Poor Meadow Brook Greenway 148
Figure 72: Poor Meadow Brook at the Railroad Bridge 149
Figure 73: Alton J. Smith Reserve (Smitty's Bog) 150
Figure 74: Rocky Run Conservation Area 150

Figure 75: Smitty's Bogs Wetland Reserve Easement 151
Figure 76: Nathaniel Thomas Mill Pre-1900s 152
Figure 77: Privately-Owned Open Space 158
Figure 78: Indian Head River in the Rocky Run Conservation Area 168

List of Tables

Table 1: Environmental Justice Demographics 31
Table 2: Zoning District Minimum Lot Size 44
Table 3: Public and Non-Profit Owned Open Space Parcels 128
Table 4: Town Owned Conservation Properties 129
Table 5: Town Owned Water Department Properties 132
Table 6: Hanson Municipal Recreation Lands 133
Table 7: Unprotected Municipal Land without Buildings 133
Table 8: Town Owned Unprotected Municipal Land without Buildings 134
Table 9: Town-Owned Unprotected Municipal Land with Buildings 138
Table 10: Public Schools Unprotected Municipal Land 138
Table 11: Commonwealth of Massachusetts Land Article 97 139
Table 12: Plymouth County Land 139
Table 13: Non-Profit Organizations Land 139
Table 14: Land Permanently Protected by CR - Article 97 140
Table 15: Unprotected Private Lands 140
Table 16: Temporarily Protected Private Lands in Chapter 61 Forestry 141
Table 17: Temporarily Protected Private Lands in Chapter 61A Agriculture 141
Table 18: Temporarily Protected Private Lands in Chapter 61B Recreation 142

Table 19: Goal 1 Protect Hanson's Large Natural Areas and Major Wildlife Corridors..... 185

Table 20: Goal 3 Improve Connectivity of and Access to Recreational Resources 187

Table 21: Goal 4 Protect Agricultural Land Including Fields, Meadows, and Orchards..... 188

Table 22: Goal 5 Improve Collaboration and Management 189

SECTION 1. PLAN SUMMARY

The 2017 Hanson Open Space and Recreation Plan is a seven-year planning document based on the requirements of the Massachusetts Executive Office of Environmental Affairs. It provides information on the town's regional context, geographical and geological features, natural resources, and recreational opportunities. It outlines specific actions that should be taken in the next seven years to advance the realization of the following vision as taken from the 2008-2009 Master Plan:

> ***Hanson is known by its citizens and neighbors as a 'very nice town,' where the serenity, green appearance, open space, and aesthetic characteristics, which contribute to the quality of life, are maintained and enhanced for future generations.***
>
> ***Its residents recognize that they are the Town's most important asset, and, therefore, diversity, quality education, access to the arts, lifelong recreation, and learning are emphasized in planning for the future.***
>
> ***The citizens will work together to improve Town government and provide safe circulation and convenient access to recreation areas and open space for all age groups.***

The Town of Hanson is mostly residential, with some farming and cranberry production. Hanson, considered one of the inland towns of Massachusetts South Shore, contains a total area of 15.7 square miles of which 15 square miles is land and 0.66 square miles, or 4.21 percent is water. Hanson is dominated by lakes, rivers, and swamps. The largest ponds include Oldham Pond along the Pembroke town line, Indian Head Pond (the source of Indian Head Brook) just south of Oldham Pond, Maquan Pond, located east of the center of town, and Wampatuck Pond, and located in the center of town. In addition to Indian Head Brook the town has several other brooks and rivers, including the Shumatuscacant River and Poor Meadow Brook to the west, and White Oak Brook to the south. To the north of town lies the Little Cedar Swamp, along Indian Head Brook. There is a small-town forest and two camps, the Rainbow Camp and Camp Kiwanee. Burrage Pond Wildlife Management Area lies mainly in the section of town called Burrage or South Hanson.

The need to improve and upgrade park facilities and preserve and protect open spaces is widely recognized and deeply felt by the citizens of Hanson. Changing demographics in Hanson have altered the needs for and demands on public resources for outdoor recreation, physical fitness, and other active and passive recreational facilities.

The Town faces serious management, staffing and financial challenges to address these diverse needs for conservation land, parks, playgrounds, and outdoor sports facilities. Although some progress has been made to enhance several key sites and a couple of volunteer Friends groups have been formed to advocate for open space and conservation lands, it is recognized that more efforts to supplement resources are needed. The Town of Hanson needs to develop a stronger open space management program and incorporate region-wide solutions where feasible, to meet the competing demands of many different constituencies.

The planning process fostered public participation and communication among town boards. This document presents an updated inventory of Hanson's open spaces, documents open space and recreation needs, lays out specific objectives and actions, and identifies responsible parties to lead to implementation of the following main goals that pertain to Open Space and Recreation:

1. **Goal 1: Preserve and Enhance Hanson's Rural Character and Scenic Quality**
    - ***Permanently protect open space, protect Hanson's cultural heritage, and plan for appropriate residential growth.***

2. **Goal 2: Protect Hanson's Water Resources and Biodiversity**
    - ***Manage quantity and quality of groundwater and surface water to protect the town's water resources***
    - ***Promote town-wide water saving techniques***
    - ***Protect and monitor Hanson's streams, rivers, ponds, and wetlands***
    - ***Prioritize remaining parcels along waterways for protection when they become available***

3. **Goal 3: Improve Connectivity of and access to recreational resources**
    - ***Continue developing the local/regional trail network for transportation and nature-based recreation***
    - ***Study and plan for bicycle use in Hanson***
    - ***Provide neighborhood-oriented opportunities for recreation and gardening by creating informal playing fields, expanding community gardens locations, maintaining improving existing playgrounds***

4. **Goal 4: Protect agricultural land including fields, meadows, and orchards**
    - ***Prioritize agricultural land to protect based on threat of development, proximity to other farmland, lot size, and overlap with other OSRP goals, water availability, and prime agriculture soils.***

5. **Goal 5: Improve collaboration and management.**
    - ***Incorporate the OSRP in town and community decision making.***
    - ***Think regionally and work collaboratively with neighboring towns.***
    - ***Continue to partner with land trusts, government entitles, and individuals to make full use of available government funds and programs to acquire and/or protect important land parcels.***
    - ***Secure funding and partner with other entities for open space land protection.***

Hanson's open space and trail system is a precious and limited resource that has been difficult to acquire and maintain and needs to be protected ardently. This plan presents opens space goals, objectives and actions that will guide Hanson's open space and recreation philosophy, planning, improvement, maintenance, and management through 2023.

SECTION 2. INTRODUCTION

Statement of Purpose

Open space and recreation are priority issues for Hanson residents. The residents of Hanson value its open space and recreational resources and understand the important role these features play in preserving the town's character and quality of life. This plan integrates community input, research, and the work described in the previous *Open Space and Recreation Plans,* to identify current priority issues in town affecting open space and recreation planning. This plan highlights specific achievable goals and action items that can be carried out in the coming seven years to enhance Hanson's natural and recreational resources.

Figure 1: Wampatuck Pond

Photo by Rebecca Nehiley

This updated Plan reviews the goals, objectives and accomplishments from previous plans and examines shifts in priorities with respect to the Open Space and Recreation Goals listed in Section 9. The result incorporates all the goals that are still relevant in a focused and concise format for improved readability. Actions listed in this Plan that also appear in other plans are so noted.

The Town of Hanson understands that to be eligible for Massachusetts Division of Conservation Services grant programs, it must have a state-approved Open Space and Recreation Plan. Hanson passed the Community Preservation Act in May of 2008 and expects to take advantage of both funding sources to further its open space and recreation goals.

The purpose of this document is to establish priorities and recommend future actions that will help with the cultivation and management of open space and recreation resources. Development pressure, high land costs, the need for low-income housing, and the various consequences of climate change all underscore the need to carefully plan for the future and protect resources to ensure the continued health and vitality of Hanson's natural resources and recreational opportunities. This report contains a detailed inventory of Hanson's natural, cultural, and recreational resources. It analyzes the major patterns of those resources within the Town and the region and suggests ways to enhance their preservation and management. Understanding both the detail and the larger patterns is critical to creating a plan. This plan concludes with specific actions to achieve these goals.

This report builds on the foundation of plans drafted in 1999 and especially on the last state-approved *Open Space and Recreation Plan dated 2008-2015*. This 2017 plan builds on and updates the previously established Open Space Framework. Other relevant planning documents include the 1988 Bay Circuit Trail/Open Space Plan, a draft 1999 Open Space and Recreation Plan, a 2004 Community Development Plan, the 2005 Camp Kiwanee Master Plan, the 2008 Hanson Master Plan and the 2006 and 2012 "*Massachusetts Outdoors*" Statewide Comprehensive Outdoor Recreation Plan. The plan can be found at this web address: http://www.mass.gov/eea/docs/eea/dcs/scorp-2012-final.pdf

Challenges identified in these earlier documents, as well as more recent initiatives helped inform the current analysis process, which determined that careful planning for the future of the Town's resources must also include: water security (e.g., protection/supply of drinking water for Hanson residents), and implementation of sustainable land management practices. While the full effects of these new challenges may not be directly felt by residents within the next seven years, beginning to plan now for future changes will help to ensure that the Town is better prepared to meet them. This report sets specific, achievable goals, including prioritized areas to protect, improved trail connectivity of recreational resources and enhanced watershed protection.

This framework clearly identifies the large natural and agricultural areas as the highest priority for open space protection in Hanson because they protect biodiversity, increase food security, and conserve the character of the town. Also, of high-priority are the major water-protection and wildlife corridors that connect the large patches of open space. Several core parcels within large natural and agricultural areas, as well as in major water-protection and wildlife corridor, remain unprotected.

The town's network of large open space areas and major corridors are part of a larger structure of regional landscape patterns. This highlights the significance of several of these patches and corridors due to their size, integrity, and potential as species migration routes. In addition to protection, these priority resources should be managed based on planning goals for the network. Farming, for example, may be difficult in the suburbs, yet the town is well served by maintaining large agricultural areas and facilitating farming. A similar process needs to be formalized to accelerate stewardship of their resources in neighborhoods across the town.

This open space plan is a particularly effective tool for analyzing, understanding, and setting land protection priorities for open space resources. Through this lens, the recommendations of this plan address challenge and opportunities in the town today. By keeping up to date on changing land use and open space patterns and processes across the region, this approach can continue to inform decision-making well into the future.

Planning Process and Public Participation

The Open Space Committee was formed with members of the Board of Selectmen, Planning Board, Town Planner, Conservation Commission, and members of the Town Forest Committee. The current planning process for this Open Space and Recreation Plan was begun in May 2016. Scott MacFaden of Wildlands Trust and Joan Pierce of Massachusetts Department of Fish and Game as well as citizens at large participated in public meetings.

In May 2016, the Open Space Committee distributed a survey to 1100 residents of Hanson as a colored paper insert in the local paper, the Hanson Express. The survey was also distributed at the Town Library and at the Town Hall and provided to all 287 registered voters who attended the Annual Town Meeting of May 2016. Hard copies of the survey were made available to all town offices. Section 6 of this report summarizes comments received at the community meetings, public hearings and from the survey. A copy of the survey can be found in the Appendix A. There were 49 surveys returned at the close of the Annual Town Meeting resulting in a return rate of nearly 17 percent. A total of 96 completed surveys were returned from the newspaper distribution resulting in a return rate of nearly 9 percent. The total number of returned surveys was 145.

The Committee held several visioning sessions for relevant board and committee members to review responses to the survey beginning in June 2016 and continuing through August 2016. These meeting were attended by representatives from a variety of town boards and commissions including the Water Board, Assessors, Board of Appeals, Trails Committee members, Board of Selectmen, and Planning Board. Several town employees were also present.

The Open Space Committee hosted a second visioning session for the public on July 18, 2016 with 14 concerned citizens attending. During this public meeting, a Powerpoint was presented to the assembled public. A copy of this presentation is included as an appendix to this plan. This presentation reviewed the results of survey questions related to why the respondents choose to live in Hanson, how they currently use the open spaces, and what should guide which open spaces to protect.

A third visioning session was held on August 1, 2016 with 8 citizens attending. These visioning sessions were held to review with the public the survey responses resulting in productive conversations.

The Town Planner developed a draft that drew heavily from the 2009 OSRP and sent it to committee members for review. The team completed GIS mapping with support from Andrew Vidal of the Old Colony Planning Council. Town records and additional reports were used extensively.

All community meetings were public meetings held at the Town Hall, with advance town notices appropriately posted, including newspaper articles and website postings. These meetings were recorded and presented on the local community access channel.

This plan was prepared following the guidelines established by the Massachusetts Division of Conservation Services for the preparation of state-approved open space and recreation master plans.

This Plan was prepared by

Laurie Muncy, Principal Comprehensive Planner, Old Colony Planning Council

with support from the Town of Hanson's Open Space Committee and the Conservation Commission whose members were actively involved in all parts of the Plan's development.

Conservation Commission members and staff:

Philip Clemons, Chairman

Brenna Audette

Sharon LePorte

Paul Andruk

William Woodward

Howard Dillon (Associate)

Rebecca Nehiley, Administrative Assistant

And past Conservation Commission members:

John Kemmett

Frank Schellenger

Brad Kirlin

Hanson Open Space Committee members:

Philip R. Lindquist, Chairman

Philip Clemons, Vice Chairman

Howard Dillon

Joseph Gamache

James McGahan

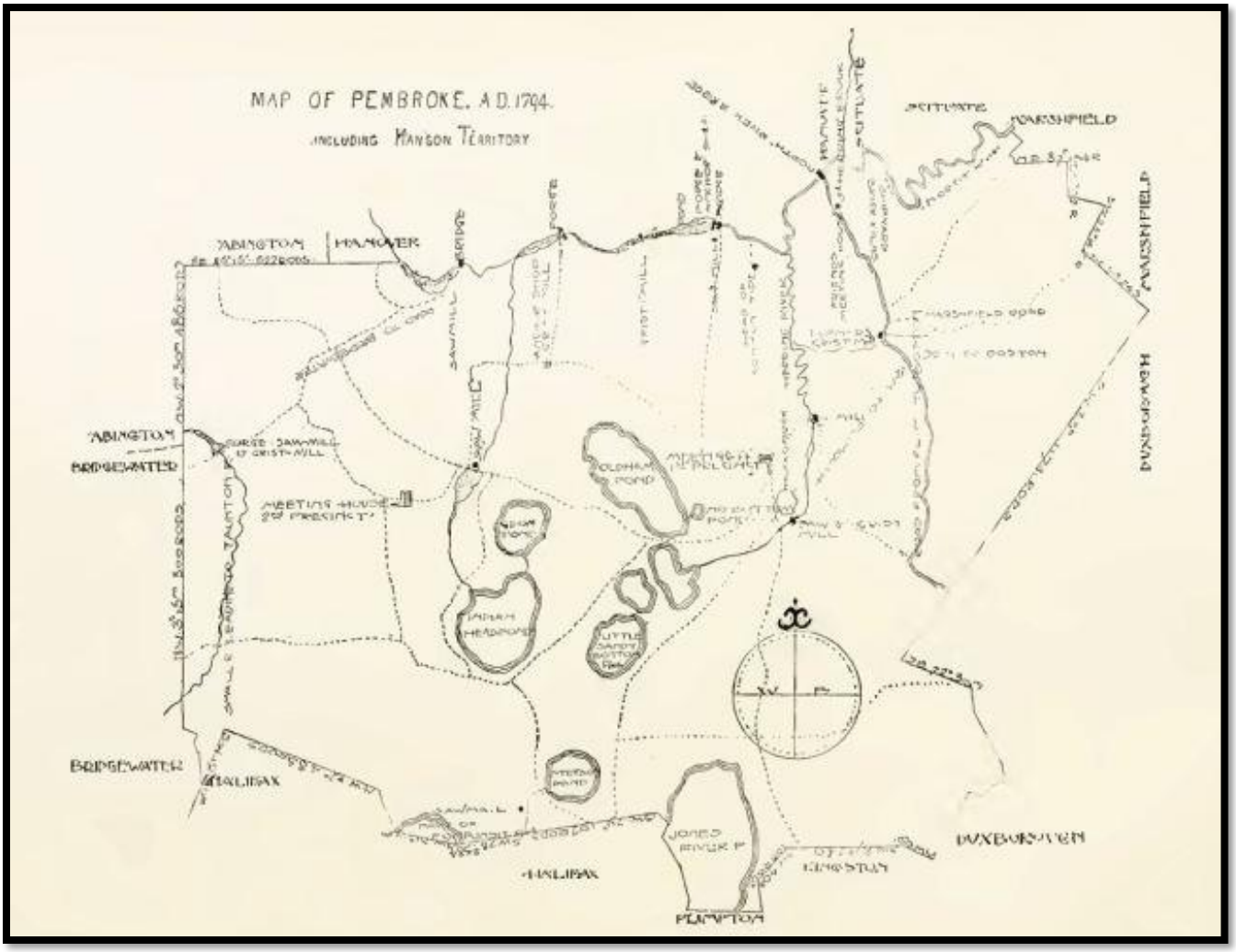
Joseph Campbell

Additional assistance to complete this report provided by Deborah Pettey, Esquire

SECTION 3. REGIONAL CONTEXT

The Town of Hanson, located in Plymouth County, was first settled in 1695 as the western parish of Pembroke and was officially incorporated on February 22, 1820, and was named for Maryland newspaper publisher and U.S. Senator Alexander Contee Hanson. The town's early industry revolved around farming, as well as bog iron and quarrying. Today the town is mostly residential. Ocean Spray was first started in Hanson and remained headquartered here before moving to Middleboro in 1974.

Figure 2; Map of Pembroke, Including Hanson Territory, AD 1704



According to the United States Census Bureau, the town has a total area of 15.07 square miles, of which 15.0 square miles is land and 0.66 square miles, or 4.21 percent is water. The 2010 U.S. Census shows the population of Hanson at 10,218 residents. Located 25 miles southeast of Boston, it is accessed by routes 58, 27 and 14, and a commuter rail that connects to Boston's South Station was reopened in 1997.

Originally a strictly agricultural community, Hanson today consists of several small centers and residential subdivisions. It is semi-rural in character, with little industry and few businesses. Hanson is bordered on the east by Pembroke, on the south by Halifax, on the west by East Bridgewater, on the north and west by Whitman, and on the north by Rockland and Hanover. The amount of developed land has increased steadily from 23 percent of the town's acreage in 1984 to 54 percent in 2005.

Hanson, like many towns in central Plymouth County, is dominated by lakes, rivers, and swamps. The largest ponds include Oldham Pond along the Pembroke town line, Indian Head Pond just south of Oldham Pond, Maquan Pond (the source of Indian Head Brook), located east of the center of town and Wampatuck Pond, which is located in the center of town. In addition to Indian Head Brook, the town has several other brooks and rivers including Bretts Brook, Shumatuscacant River and Poor Meadow Brook to the west, and White Oak Brook to the south. To the north of town lies the Little Cedar Swamp, draining into Indian Head Brook. There is a small-town forest (now Conservation land) and two camps, Rainbow Camp and Camp Kiwanee within the town. Burrage Pond Wildlife Management Area may be accessed from several points in the sections of town called Burrage and South Hanson. Hanson is in both the North River Watershed and the Taunton River Watershed. It has a varied landscape of forest, open agricultural cranberry bogs, large house lots and small pond-side cottages, which were once summer residences, converted for year-round living. It is a quiet community, but larger subdivisions are becoming more common.

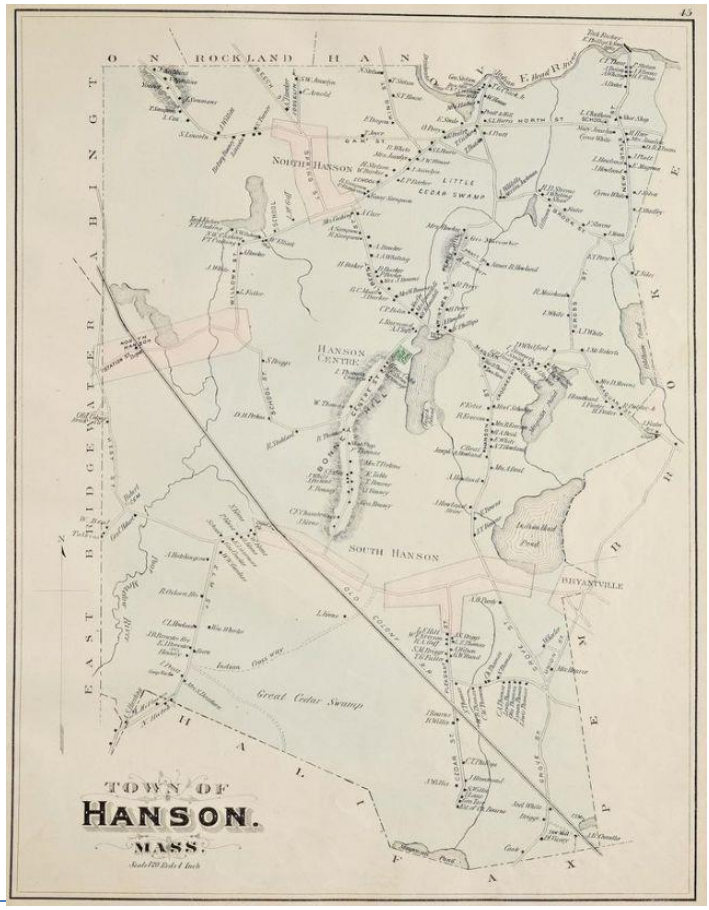
Hanson has an open Town Meeting form of government structured by a Town Bylaw. It is headed by a part-time five-member Board of Selectmen and assisted by a full time Town Administrator. It is in the 6th Congressional District, the 2nd State Senatorial District and is one of few towns in Massachusetts that is divided into two US Congressional Districts: 9th and the 10th. The Regional Planning Agency for Hanson is the Old Colony Planning Council.

History of the Community

In 1662, Major Josiah Winslow purchased territory around what was a Native American crossway between two small Algonquin settlements. Residents of the area established a preserve for the native population of the area on 1,000 acres of land at that time. In 1712 the new Town of Pembroke was "set aside" from Duxbury and included what is now most of the Hanson area. The General Court of Massachusetts granted the incorporation petition of Hanson as an individual Town in 1820.

The area's abundant natural resources attracted early settlers. Early settlers farmed and lumbered, setting up the first sawmill in 1695 on the Indian Head Brook near the present Town Hall. Throughout the 18th and 19th centuries, wood lots and cedar swamps provided wood products and meadows were drained for hayfields. The introduction of wetlands cranberry cultivation in the late 19th century reinforced the agricultural orientation of the Town. Several small industries were active in the early centuries including several sawmills, an iron forge, and a manufacturer of porcelain parts used in electrical appliances. Later, the LiteControl Company was founded in 1936 as a manufacturer of light reflectors and light fixtures. LiteControl relocated from Hanson in 2015 and plans are in the works for LiteControl to donate their property to the Town of Hanson and the Mass. Dept. of Fish and Game.

Figure 3: Town of Hanson, Massachusetts



Lumbering, shingle making, and cranberry growing dominated the Town's economy in the 19th century. In 1912, a large cranberry packing house was built in South Hanson by a Boston lawyer named Marcus L. Urann, who earned a reputation as the "Cranberry King" by selling his popular cranberry sauce in tins. He named his company the Ocean Spray Preserving Company which has expanded into the national corporation it is today. Urann was a savvy businessman who knew how to work a market. After he set up cooking facilities at a packinghouse in Hanson, he began to consider ways to extend the short selling season of the berries. Canning them he knew would make

the berry a year-round product. Before canning technology, the product had to be consumed immediately and the rest of the year there was almost no market. Urann's canned cranberry sauce and juice are revolutionary innovations because they produced a product with a shelf life of months instead of just days.

The business model worked on a small scale at first, families and members of the community harvested wild cranberries and then sold them locally or to a middleman before retail. By 1915 there were 21 cranberry growers and 20 poultry farms in the town. Urann also helped develop several novel cranberry products, like the cranberry juice cocktail in 1933, and six years later, he came up with syrup for mixed drinks. The famous cranberry sauce "log" we know today became available nationwide in 1941.

Figure 4: Marcus Urann

In 1930, Urann convinced his competitors John C. Makepeace of the AD Makepeace Company, the nation's largest grower at the time, and Elizabeth F. Lee of the New Jersey based Cranberry Products Company to join forces under the cooperative, Cranberry Canners, Inc. His creation, a cooperative that minimized the risks from the crop's price and volume instability, would have been illegal had attorney, John Quarles not found an exemption for agricultural cooperatives in the Capper-Volstead Act of 1922, which gave "associations" making agricultural products limited exemptions from anti-trust laws.

After World War II, in 1946, the cooperative became the National Cranberry Association and by 1957 changed its name to Ocean Spray. Later, Urann would tell the Associated Press why he believed the cooperative structure worked, "grower control (which) means 'self-control' to maintain the lowest possible price to consumers. Ocean Spray is still a cooperative of 600 independent growers across the United States that work together to set prices and standards.

The cranberry industry continued to expand and thrive over the next 40-50 years but has suffered from a variety of economic challenges including the 'amino triazole' scare of 1959 and the resultant decline in use of cranberry products. Just before Thanksgiving of that year, the government announced that amino triazole, an herbicide used primarily on the west coast, was carcinogenic. Even though the chemical was not even used in Massachusetts, public perception and fear drove down sales. The industry slowly recovered and became a very profitable business up until the year 2000, but then dipped again when supply excessively outweighed demand and prices dropped. The industry continues to consolidate with four or five growers remaining in Hanson.

Figure 5: Ocean Spray Brand

Population Characteristics

Figure 6: Town Hall Hanson, MA

At the time of Hanson's incorporation on February 22, 1820, the population was reported at 917. Growth was slow and steady, increasing by about 100 people every decade. The state census of 1865 provides us with a picture of population statistics of the time: the 1,195 residents were in 294 families, indicating an average family size of four. The 272 houses in town at that time suggest a small number of multi-family occupancies. Towards the end of the 19th century, growth slowed, reaching 1,265 in 1875 and then 1,490 in 1905. The rate of growth since 1980 has been moderate, going from 8,617 in 1980, to 9,028 in 1990, and to 9,424 in 2000, with an average increase in population of 439 persons each decade.

The 2000 Census data shows there were 9,424 people, 3,123 households and 2,544 family households. Of the 3,123 households there were 1,259 (40.3%) of which had children under the age of 18 living with them, 2,173 (69.6%) were married couples living together, 272 households (8.7%) had a female householder with no husband present, and 579 (18.5%) were non-families. Of all households within town, 461 (14.8%) were made of individuals living alone and 190 (6.1%) had someone living alone who was 65 years of age or older. The average household size was 3.03 and the average family size was 3.38.

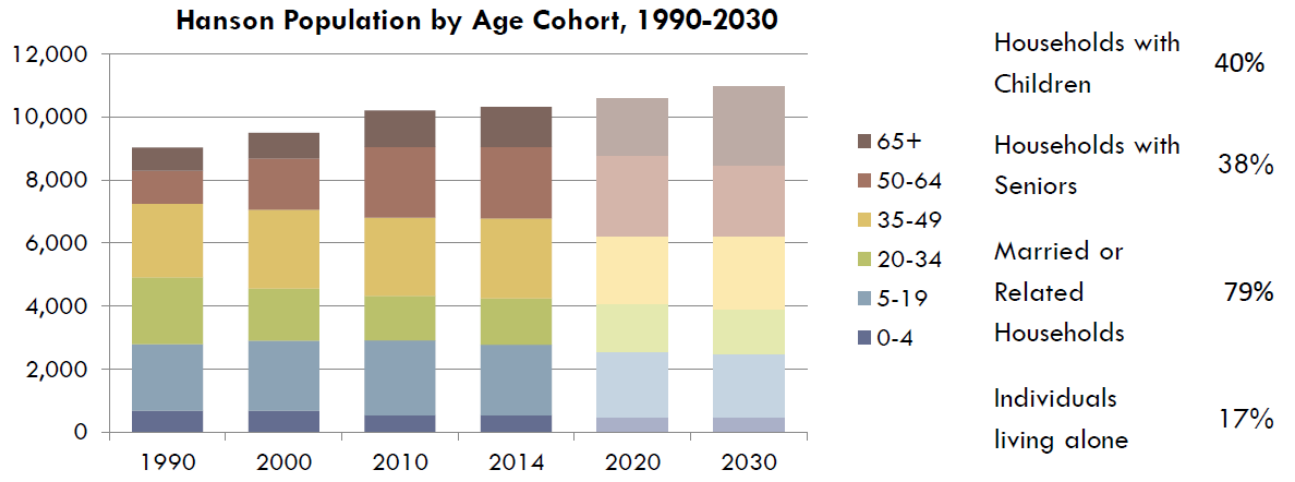
The 2010 Census data shows a population count of 10,218, an increase of 8.43 percent with the total population increase of 794 persons. The 2010 Census data states there were 3,472 households and 2,713 family households residing in town. Of the 3,472 households there were 1,272 (36.6%) of which had children under the age of 18 living with them, 2,248 (64.7%) were married couples living together, 333 households (9.6%) had a female householder with no husband present, and 759 (21.9%) were non-families. Of all households within town, 600 (17.3%) were made of individuals living alone and 84 (2.4%) had someone living alone who was 65 years of age or older. The average household size was 2.94 and the average family size was 3.33. The population density from the 2000 Census was 632.5 people per square mile which increased in the 2010 Census to 650 people per square mile. Despite the

increasing town-wide densities from 2000 to 2010, the density of typical neighborhoods has probably dropped with large lot development requirements.

From the year 2000 to the year 2010 the total population of Plymouth County increased from 472,449 persons to 494,919 persons, an increase of 4.76 percent. The rate of growth in the Town of Hanson has increased more than many of its neighbors. Hanson's population increase, in percentage, was larger than most of the communities within Plymouth County except for Hingham, Abington, Middleboro and Rochester. This may be attributed to the town's recent rail accessibility being offset by the quality and location of its limited buildable land, and an increase to the number of 55 and over age restricted units constructed during the last decade. Statistically, Hanson is the 177th most populated town in the state, and the 154th most densely populated (out of a total of 351 cities and towns).

Figure 7: Hanson Demographic Profile

Resources and Needs: Demographic Profile



	Median Income All Households	Change in Household Income since 2010	Median Family Income	Median Nonfamily Income	Median Income Senior Households
Hanson	$93,771	14.41%	$103,140	$37,333	$53,403
Massachusetts	$67,846	5.20%	$86,132	$39,227	$39,550

Hanson Community Preservation Committee - 2016

As reported in the 2010 Census, the median age of Hanson residents was 40.4 years which is younger than the median age of Plymouth County as a whole, which is 41.1 years. This figure was up from 1970, when the median age was 25.8 years and 36.1 years from the 2000 Census. This increase in median age follows the trend in the rest of the country, which can be attributed to several factors also affecting many other communities. One factor is that families are having fewer children than in the past, and these children are born to parents who, on average, are older.

In terms of the age of the population, the residents of Hanson are getting older. In the decade between 2000 and 2010, Hanson's elderly population continued to increase, from 818 residents (8.6%) over the age of 65 in census year 2000 to 1,162 residents (11.3%) over the age of 65 in 2010 resulting in an increase of the age cohort by 43.28 percent. At the same time, the percentage of the population under age 18 decreased by 2.1 percent from 30.6 percent in the census year 2000 to 28.5 percent in the census year 2010. As the result of continuing changes in demographics, the needs of residents can be expected to change in relation to transportation, public facilities and services, economic development, and recreation as well as housing.

Recreational Needs by Age Group

Under the age of five, most recreation is done with parental supervision. This recreation tends to be close to home due to the difficulties of traveling with children. This age group also needs structured preschool programs that focus on teaching basic skills. For older children, adults seek places to take their children for walks. Adults with older children also seek out programs for their children that provide family recreational opportunities.

Adolescents are a difficult age group to serve because they do not like to participate in traditional programs that are structured or involve adult supervision. They prefer programs where they are more actively involved in determining the activities. Programs that work well for adolescents include rock climbing, adventure programs, skateboarding, hiking, band concerts, cook outs, dances, and sports.

The needs of elderly residents are divided between the younger, more active senior citizens and the frail elderly. The frail elderly generally requires therapeutic recreational services. More active seniors tend to enjoy walking, golf, tennis, and swimming.

The needs of residents with disabilities also vary. Some residents with disabilities can participate in regular recreational programs without any modifications while others may need some assistance. Depending on the degree of physical limitation, there may also be a need for specific programs geared for that population. Physical barriers are a key factor and will need to be evaluated through the American Disabilities Act Section 504 process and eliminated in a systematic fashion. Programmatic changes may also be necessary, including training staff on how to work with disabled residents.

Environmental Justice

Since 2002, EOEEA has been implementing an Environmental Justice Policy to help ensure that all Massachusetts residents experience equal protection and meaningful involvement with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies and the equitable distribution of environmental benefits. This policy was instituted recognizing that communities across the Commonwealth, particularly those densely populated urban neighborhoods in and around the state's older industrial areas, are facing many environmental challenges associated with Massachusetts' industrial legacy. Residents in these predominantly low-income and minority communities – nearly 29 percent of the state population – lack open space and recreational resources and often live side-by-side numerous existing large and small sources of pollution and old abandoned, contaminated sites, which can pose risks to public health and the environment.

Critical to advancing environmental justice (EJ) in the Commonwealth is the equitable distribution of environmental assets such as parks, open space, and recreation. Toward this end, and where applicable, municipalities shall identify and prioritize open space sites in their Open Space and Recreation Plans that are socially, recreationally, and ecologically important to EJ populations within the community.

Environmental Justice Criteria

The state considers a community to be an environmental justice community if it meets one or more of the following criteria:

1. 25% of the households earn 65% or less of the statewide household median income; or,
2. 25% or more of the residents are minority; or,
3. 25% or more of the residents are foreign-born; or,
4. 25% or more of the residents are lacking English language proficiency.

Hanson does not meet the criteria to be designated an Environmental Justice population.

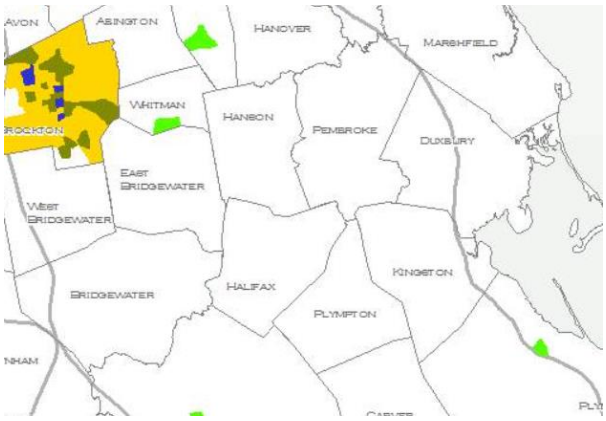


Table 1: Environmental Justice Demographics

Environmental Justice Demographics

Race	2010 Census % of the Population	Percent
Total Population	10,218	100%
One Race	10,078	98.60%
White	9,859	96.50%
African American	104	1%
American Indian	4	0.00%
Asian	48	0.50%
Native Hawaiian	1	0.00%
Some other race	63	0.60%
Hispanic or Latino	95	0.90%
Mexican	15	0.10%
Puerto Rican	30	0.30%

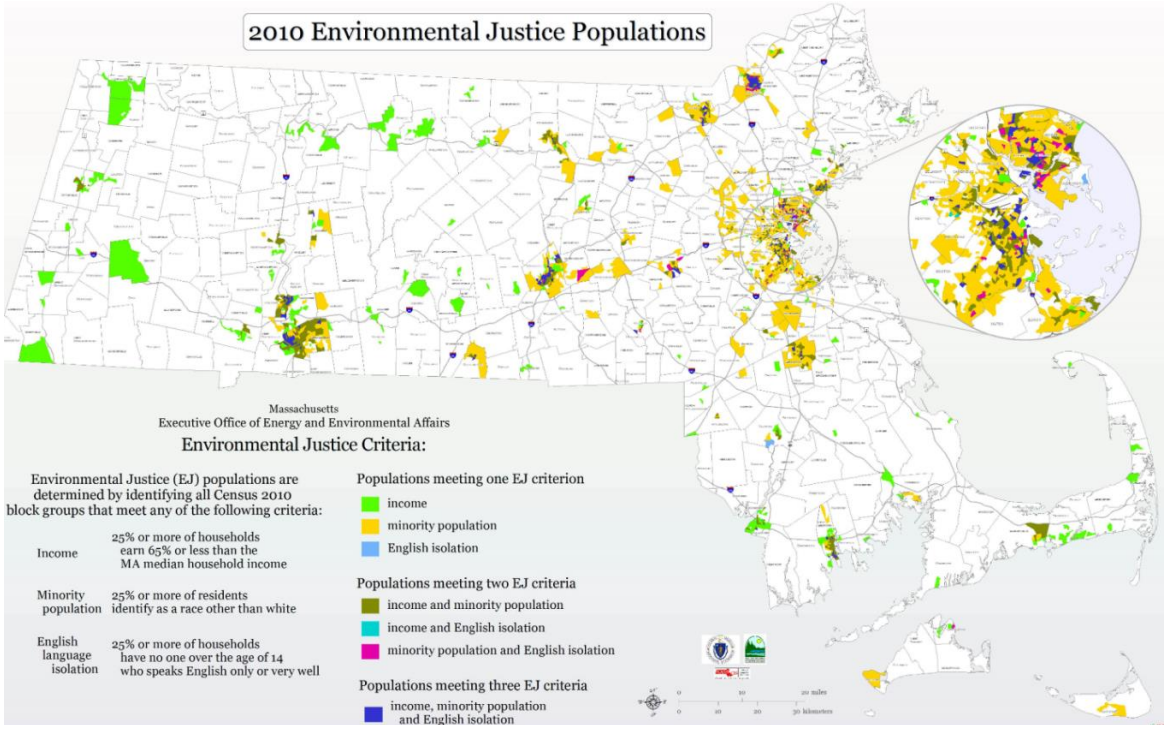


Figure 8: Massachusetts Environmental Justice Populations

Environmental Equity: the equal distribution of environmental risk among population groups regardless of race, income, gender, or age. Development, implementation and enforcement of environmental policies and laws to ensure that no group or community is made to bear a disproportionate share of the harmful effects of pollution or environmental hazards because it lacks economic or political clout.

There are three fundamental Environmental Justice principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health or environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of project benefits by minority populations and low-income populations.

Income, Employment and Jobs:

According to the US Census Bureau, the income per capita for Hanson is $29,331 which is less than the Massachusetts average of $35,485 but greater than the National average of $28,051. The income per capita in Hanson is 5 percent higher than the national average. The median household income for Hanson residents is $92,625 which is substantially more than the Massachusetts average of $66,658 and the National average of $53,046. The estimated median household income was $82,980 in 2007, up from $64,896 in the year 2000. The median household income in Hanson is 75 percent higher than the National average. The percentage of Hanson residents living below the poverty level is 4.8 percent according to the 2010-2014 American Community Survey, 5-year profiles. Male median earnings in Hanson are 41 percent higher at $43,958 than female median earnings of $26,657. The poverty level in Hanson is 77 percent lower than the National average.

Since 2005 the unemployment rate in Hanson, Massachusetts has ranged from 2.1 percent in October 2000 to 12.0 percent in June 1991. The current unemployment rate for Hanson is 2.2 percent in November 2016.

According to the 2000 U.S. Census, most people (62.5 percent of all workers) worked either in "management" positions or in "sales/office" positions. When looked at by industry, "education, health and social services" accounted for the highest number of employees (1,059), followed by "retail trade" (715). The 2008 Master Plan emphasizes the development of local businesses in Hanson, especially retail businesses and services, to offer opportunities for part-time employment, local services, reduced travel time for workers and customers, and increased Town recognition.

Figure 9: Income and Education Attainment

Income and Education Attainment

Massachusetts' median household income is $64,509 compared to $51,914 nationally.[7] Income levels vary widely across the state. Norfolk and Middlesex Counties, both within commuting distance of Boston, have two of the highest median household incomes in the state at $81,027 and $77,377 respectively. Hampden ($47,724) and Berkshire ($48,907) Counties have the lowest.[8]

Statewide, 88.7% of Massachusetts residents have a high school diploma and 38.3% have a bachelor's degree or higher. Both figures are higher than the national average (85.0% and 27.9% respectively). This percentage varies widely based on region. For example, almost half of Middlesex County's residents (49.3%) have a bachelor's degree while less than a quarter (23.8%) of residents in Hampden County do.[9]

County	Median Income 2006-2010
Hampden	$47,724
Berkshire	$48,907
Suffolk	$50,597
Franklin	$52,002
Bristol	$54,955
Hampshire	$59,505
Barnstable	$60,317
Dukes	$62,407
Worcester	$64,152
Essex	$64,153
Plymouth	$73,131
Middlesex	$77,377
Norfolk	$81,027
Nantucket	$83,347
Massachusetts	$64,509

http://www.mass.gov/eea/docs/eea/dcs/scorp-2012-final.pdf

2012 SCORP

Growth and Development Patterns

Patterns and Trends

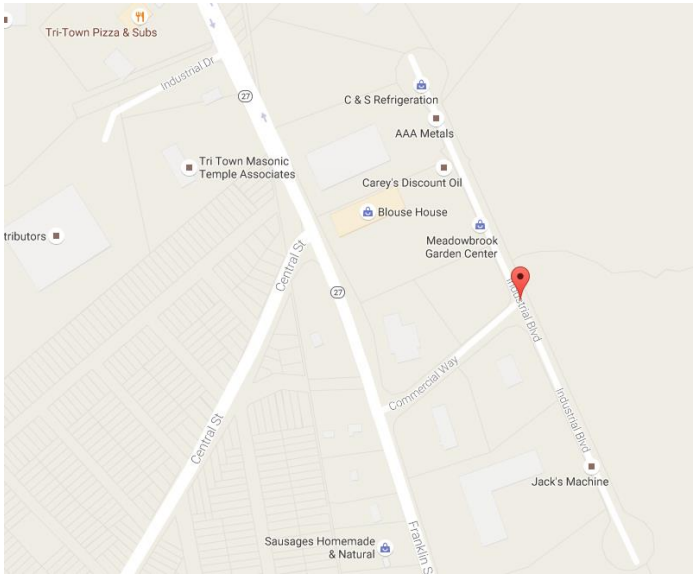
Hanson's residential land use pattern remains one of low density "sprawling" residential development along existing roads and in small subdivisions. Historically, most residential development occurred on relatively high ground along existing roads, largely on the east side of the town near the Pembroke line, with the greatest concentration in the Monponsett neighborhood. Trends indicate a considerable increase in single-family housing from 1036 acres in 1965 to 5588 acres in 1999; a 439 percent increase. Two-family and multi-family have increased from 8.5 acres to 51.62 acres (over 5 times) in the same period. Business acreage has more than doubled from 30.5 acres to 69.3 acres.

Over 90 percent of Hanson homes are single-family houses. The median housing value is $331,900 according to the 2010-2014 American Community Survey, 5-year profiles. This is a reduction from the 2007 median sales price of $359,900 and a rise from $215,000 in 2001. Today Hanson has 148 units of state-qualified "affordable" housing, which is about 4.1 percent of its total housing stock.

Commercial and Industrial Development

Commercial and industrial development has always been limited in Hanson. In 1966, Shaw's Supermarket opened at the intersection of Rt. 58 and Rt. 14, allowing residents to stay in town for their grocery shopping, and attracting other retailers to set up business in Hanson. Today, Hanson is home to many retail shops, several small independent machine shops that make specialized products, and a few auto repair businesses.

Figure 10: Industrial Development, Hanson



By 1971 business was concentrated in the present shopping center and small scattered nearby sites along Liberty Street (Route 58) and along Main Street (Route 27) in South Hanson. This pattern continues through 2016 with the greatest concentration in the Center, and increased amounts of retail and service activity along local roads with a small concentration at the junction of Route 27 and Union Street/Mattakeesett Street in Bryantville on the Pembroke line. Very few commercial uses are shown in the business- zoned strip of Monponsett Street in the Monponsett neighborhood on the Halifax line.

Infrastructure

In 1845 the Old Colony Railroad first came through Hanson, followed in 1900 by the electrified Brockton and Plymouth Street Railway. However, the increasingly popular automobile spelled an early demise for the electric railway. Eventually, native trails became the region's highways. The primary east-west road developed into Bridgewater Path, now Main Street (Route 27), and Maquan-Liberty-County-West Washington Streets (Route 14).

Figure 11: South Hanson Railroad Station

Passenger service on the Old Colony Line, discontinued in 1959, was restored by the MBTA in 1997.

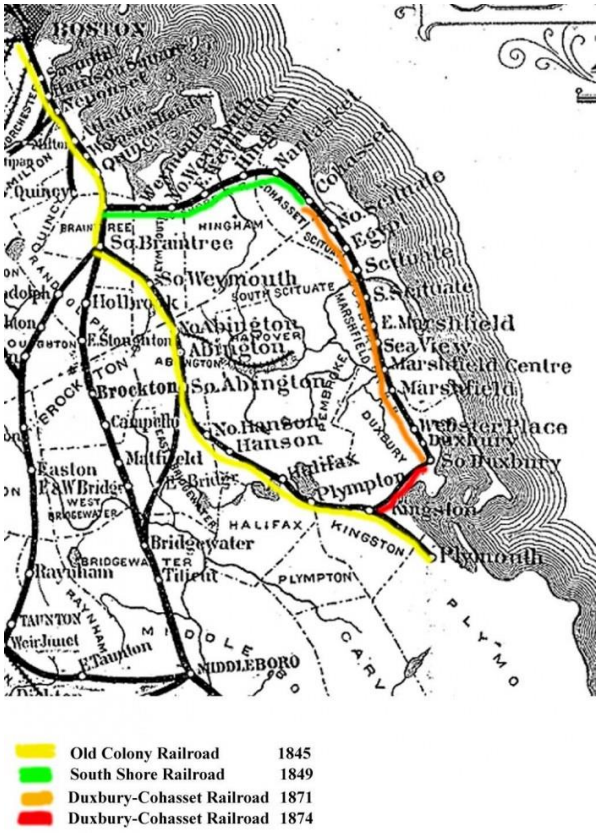
Passenger rail service started in 1845 but stopped in 1959 with the opening of the Southeast Expressway. The rails were rebuilt, and passenger service started up again in 1998, which spurred a surge in new home building for several years. The home building industry has continued to thrive over the last 100 years. The commuter rail station is in South Hanson next to the former station and has been studied as a prospective Transit Oriented Development (TOD) site.

The only municipal infrastructure is the public water supply system. The Town began its first groundwater testing program in the 1960's in response to a severe water drought. At that time, Hanson had become water dependent on the Abington-Rockland and Brockton water supplies. In l979, it became evident that the City of Brockton's water supply would not adequately service Hanson's growing demands. The next several years were dedicated to conducting surveys and investigations in determining feasibility of ground water development in the Franklin Street/Main Street area which directly abuts the Town of East Bridgewater. In 1983, Hanson's first water supply system was placed online.

Today, most of the town is serviced by the Crystal Springs well field which is 30 acres along Poor Meadow Brook in the southwest portion of town. The water supply and quality are good. However, a small portion of the town, primarily along Main Street, continues to buy water from Brockton. The quality of this water is not as high as the Crystal Springs water and both Hanson and Brockton would like to discontinue this situation in the future.

Water conservation efforts to reduce overall and peak day demand are central to Hanson's water supply strategy. The Water Board continues to investigate a variety of programs to support and encourage wise water use. Water withdrawals in town may impact water quality and quantity in streams, water levels in ponds, vernal pools, and wetlands and in aquatic ecosystems close to withdrawal locations. Water withdrawals are not limited to public water supply, but include private wells used for drinking water and irrigation. Agricultural withdrawals primarily associated with crop irrigation also influence groundwater and surface water levels.

Figure 12: Old Colony Railroad 1845-1874



Water-monitoring data has commenced to determine water elevations for Maquan Pond in a limited manner, but no systematic study of the surface waters or aquatic ecosystems has been done. Conducting a water quantity and quality survey of Hanson surface waters would provide an important baseline for the Town to evaluate future development. Also, in the face of continuing urbanization within and around Hanson, continuing open-space protection near well sites remains a wise investment.

There is no public sewer in any part of the town. However, to address pond degradation and eutrophication, it may be necessary to sewer densely populated areas around some of the ponds. All of Hanson's households have septic systems, most of which predate the rigorous standards required by the state's Title 5 regulations. Thus, wastewater from most households drains into septic tanks, underground pipes, and groundwater in yards across the Town. Surface waters such as streams and ponds are fed, indirectly, by groundwater. With proper operation and maintenance, organic matter associated pathogens (e.g. *E. coli*) in household wastewater is effectively treated by septic systems, before reaching surface waters. Also, with appropriate travel time through soil, mineral nutrients (especially phosphorus and nitrogen) in wastewater may also be diluted within the groundwater system, prior to being released into nearby surface water systems. Importantly, septic systems offer the only way to effectively recharge water locally.

However, with old or malfunctioning septic systems, the organic matter and mineral nutrients are more likely to reach and impair the town's streams and ponds. Furthermore, with increased development adding new septic systems across the town, increasing amounts of impurities may reach these surface waters. Septic organic matter reaching surface water can lead to a reduction of oxygen in ponds and streams that not only impart nuisance odors but could result in the loss of sensitive fish populations. Excess mineral nutrients, especially phosphorus and nitrogen, from septic wastes can increase the rate of eutrophication and degrade associated aquatic ecosystems.

Route 14 Corridor Improvements

The Town of Hanson requested consideration for funding of transportation corridor improvements for Route 14 Maquan Street from the Pembroke town line to Indian Head Street and received a determination that the project is eligible for Federal Aid highway funding. Route 58 is classified as an Urban Minor Arterial road that connects residential areas to a town center or major connector. Route 14 provides connections between Pembroke, Hanson, Whitman, and East Bridgewater including links to Route 58 and Route 36. This roadway is owned by the Town of Hanson and located in a suburban low-density area.

The overall project goal is to reconstruct Maquan Street to create a Complete Street and improve safety and convenience for all users. Specific goals include constructing pedestrian and bicycle facilities to provide a safe route between residential neighborhoods, the center of town and stores/restaurants, a church, the Hanson Public Library/Senior Center, Indian Head School, Maquan School and various track and sports fields and recreational paths. It is also the goal to provide a missing connection for pedestrian and bicycle accommodations between the recently constructed Route 14 project in Pembroke (terminating at the town line) to accommodations along Route 59 in Hanson including connections via Maquan Street and School Street.

The intent of this project is to address safety concerns created by drainage and roadway flooding issues, breaks in pedestrian accommodations and a lack of bicycle accommodations. Congestion is not a concern at this location. This project provides an opportunity to promote healthy transportation modes of walking, biking, or transit use by improving pedestrian, bicycle, and transit infrastructure operations. The primary need of the project is to improve safety for multi-modal transportation, including vehicular traffic, pedestrians, and bicyclists, through providing adequate and continuous accommodations for each as well as improving drainage and eliminating roadway flooding frequently caused by the high water table.

This project is proposed to provide pedestrian and bicycle connectivity between centers in Hanson and Pembroke and the neighborhoods in between. Sidewalks are currently provided along Route 14 from the Hanson Town Center to School Street. However, along Maquan Street from Indian Head Street to School Street, protection such as vertical curbing is not provided, and sidewalks do not comply with ADA requirements.

Indian Head School, Maquan Elementary School and Hanson Public Library are located on School Street off from Maquan Street therefore high pedestrian traffic is currently using the existing non-ADA compliant sidewalk travelling from the Town Center. No sidewalks are provided from School Street to the Pembroke Town line where sidewalks will be installed as part of Pembroke's Route 14 STIP project.

There are some locations with rutted paths implying pedestrian travel along the roadway lacking sidewalks. The construction of ADA compliant sidewalks will provide safe pedestrian connectivity between schools and ball fields while improving traffic flows. Currently there is no safe area to walk or bicycle along the roadway. Pedestrian and

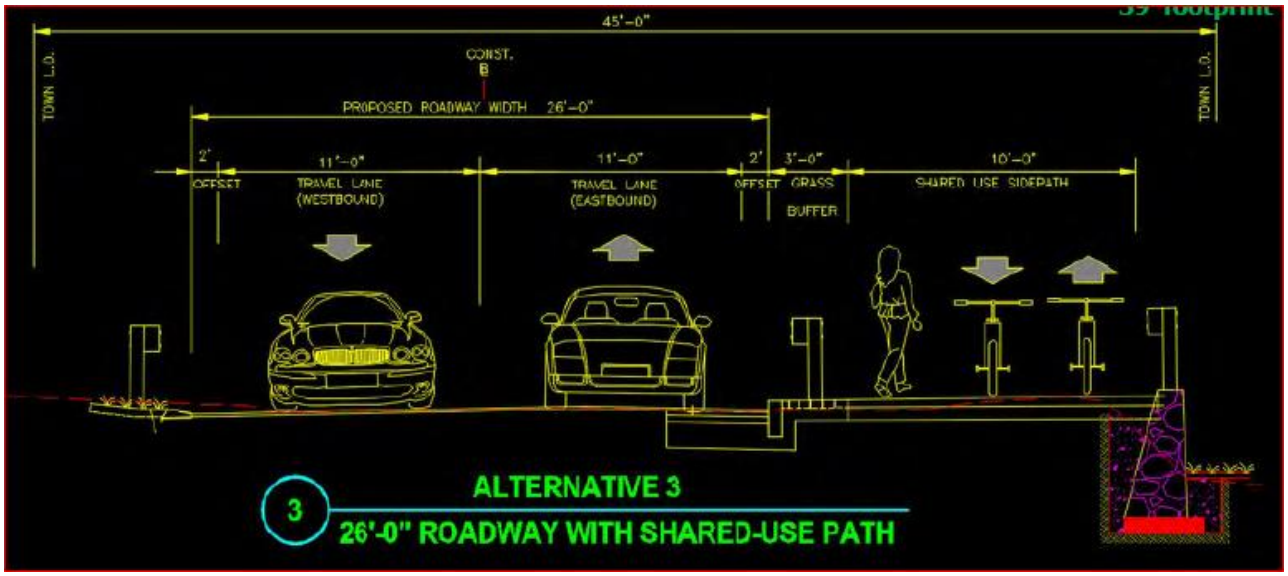
bicycle connectivity are further hindered by the existing high-water table along Route 14 adjacent to wetlands where flooding frequently occurs. This project is proposed to provide pedestrian and bicycle connectivity between centers in Hanson and Pembroke and the neighborhoods in between.

The Maquan Street width limits safety for bicycle accommodations. Maquan Street is the narrowest segment of Route 14 within Hanson that does not provide for bicycle accommodations.

Several alternatives have been identified and presented to the public. Alternatives have included conventional 5-foot bicycle lanes in each direction with 5.5-foot wide sidewalks on both or one side of the roadway. Several impacts were identified with these concepts including utility pole relocations, wetland impacts and the need for extensive retaining walls. The public remained concerned that the required roadway widening would further increase speeds along this corridor. Further, the horizontal curvature of the roadway coupled with changes in topography and high speeds posed concern for bicycle safety within the vehicular traveled way.

The concept that gained overwhelming support during the Town's public outreach consists of a 10-foot two-way shared use path for pedestrians and bicyclists separated by a landscaped buffer and guardrail. The shared use path would be located along the southern side of Maquan Street. Under this concept with bicycle travel outside of the vehicular traveled way, a narrower roadway width could be retained. Proposed granite curbing and hot mix asphalt berm would be provided throughout as well as the needed upgrades to the existing drainage system and signage. A separated shared use path would not only provide safe accommodations for pedestrians and bicyclists but would provide a welcoming setting for such alternative modes of transportation and therefore increase usage. It would also provide a nice connection to a town-owned parcel of land along the same side of Maquan Street that protrudes into Maquan Pond, providing an opportunity for a scenic pedestrian/bicycle hub or a small recreational park for fishing. With the shared use path located on the southern side of Maquan Street, a crossing would only be required at School Street where the crossing would be at grade through a raised median island.

Figure 13: Route 14 Proposed Roadway Layout

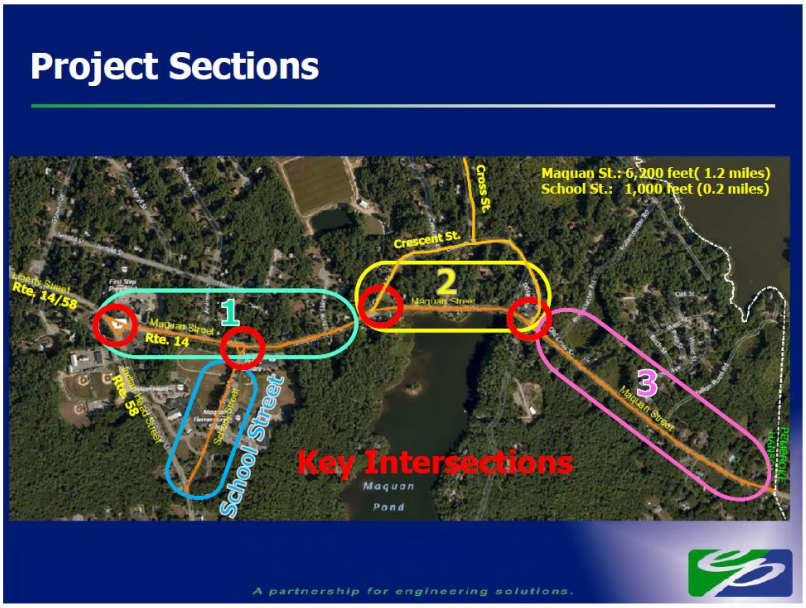


Improvements are also proposed along an 800-foot section of School Street from Maquan Street to the Maquan Elementary School. The preferred proposed cross section for School Street includes extending a 10-foot wide two-way separated shared use path past the many destinations along School Street to the Indian Head School driveway where a trail hub would be provided with bike racks and pedestrian connections to the school. The shared use path would be located on the west side of the road and separated from the roadway by existing trees and brush. One raised crosswalk is proposed to provide a connection to the elementary school entrance for the safety of school students.

This project will provide safe protected pedestrian accommodations that comply to ADA/AAB requirements where none currently exist and where pedestrians are currently exposed to fast moving vehicles. It will complete a missing gap in pedestrian accommodations along the Route 14 corridor that will result in continuous regional pedestrian connections. The proposed two-way shared use path along the southern side of Maquan Street and the western side of School Street will separate and protect pedestrians from moving vehicles along the narrow roadway, and will encourage more walking between destinations given the pedestrian-friendly accommodations. Compliant crossings are proposed at all side street intersections.

The proposed bicycle-friendly shared use path will be located outside of the stream of vehicular traffic along the windy and hilly Route 14, resulting in substantial improvements to bicycle safety and a likely increase in bicycle volumes. Accommodations will connect to bicycle accommodations being installed along the Route 14 TIP project in Pembroke. A shared use path along School Street will further expand bicycle connections to schools, recreational fields, paths, and Route 58, extending well beyond project limits.

Figure 14: Route 14 Project Sections



Efforts to improve wildlife passage along Maquan Street and Indian Head Street are also important aspects of town planning. During late spring-early summer of 2017, Phil Clemons, Chairman of the Conservation Commission, and local college intern Emily Murad conducted a turtle study along these two corridors. There survey indicated no turtle kills during the study period.

Complete Streets Policy

On May 17, 2016, the Hanson Board of Selectmen voted to adopt a Complete Streets Policy on behalf of the Town of Hanson. Complete Streets principals contribute toward the safety, health, economic viability, and quality of life in a community by providing greater opportunities in multi-modal and non- motorized transportation; therefore, the purpose of the Town of Hanson Complete Street Policy is to accommodate all road users by creating a road network that meets the needs of individuals utilizing a variety of transportation modes. It is the intent of the Town of Hanson to formalize the plan, design, operation, and maintenance of streets so that they are safe for all users of all ages and abilities. These policies direct decision makers to consistently fund, plan for, design, and construct streets to accommodate all anticipated users including pedestrians, bicyclists, motorists, transit, freight, and commercial vehicles.

The Town of Hanson policies recognize that all users of all transportation modes, including, but not limited to, pedestrians, cyclists, transit and school bus riders, motorists, delivery and service personnel, freight haulers, and emergency responders, are legitimate users of streets and deserve safe streets. "All Users" includes users of all ages and abilities.

The Town of Hanson recognizes that all projects, new, maintenance, or reconstruction, are included as opportunities to implement Complete Streets principles. The Town will, to the maximum extent possible, design, construct, maintain, and operate all streets to provide for a comprehensive and integrated street network for people of all ages and abilities.

The focus of the Town of Hanson Complete Streets Policy is on developing a connected, integrated network that serves all road users. As feasible, the Complete Streets Policy will be integrated into policies, planning, and design of all types of public and private projects, including new construction, reconstruction, rehabilitation, repair, and maintenance of transportation networks.

Complete Streets principles include the development and implementation of projects in a context sensitive way project implementation is sensitive to the community's physical, economic, and social setting. The context sensitive approach to process and design includes a range of goals by considering stakeholder and community values on a level plane with the project need. It includes goals related to livability with greater participation of those affected to gain project consensus. The overall goal of this approach is to preserve and enhance scenic, aesthetic, historical, and environmental resources while improving or maintaining safety, mobility, and infrastructure conditions.

Complete Streets implementation and effectiveness should be constantly evaluated for success and opportunities for improvement. The Town will develop performance measures to gauge implementation and effectiveness of the policies.

Implementation of the Complete Streets Policy will be carried out cooperatively within all departments in the Town of Hanson with multi-jurisdictional cooperation, to the greatest extent possible, among private developers, and state, regional, and federal agencies. The Town's Planning Department will serve as the Town of Hanson Street Commissioners' technical review agency for all Complete Street projects. The Planning Department will forward the project documentation and plans to all applicable Town departments for comment during the review process. Ultimately, the project will require a vote by the Town of Hanson Street Commissioners.

The Town shall make the Complete Streets practices a routine part of everyday operations, shall approach every transportation project and program as an opportunity to improve streets and the transportation network for all users, and shall work in coordination with other departments, agencies, and jurisdictions.

The Town will review and revise or develop proposed revisions to all appropriate planning documents, zoning codes, subdivision regulations, laws, procedures, rules, regulations, guidelines, and programs to integrate the Complete Streets principles in all street projects, as feasible.

The Town will maintain a comprehensive priority list of transportation improvement projects including problem intersections and roadways. The Town will maintain a comprehensive inventory of pedestrian and bicycle infrastructure that will prioritize projects to eliminate gaps in the sidewalk and bikeway network. The Town will coordinate with Massachusetts Department of Transportation to confirm the accuracy of a baseline pedestrian and bicycle accommodations inventory to prioritize projects. The Town received MassDOT approval of the Prioritization Plan for infrastructure improvements on August 4, 2017.

Bicycle and Pedestrian Connectivity

In the Town of Hanson, they seek sidewalks on roadways surrounding two neighborhoods. The first neighborhood is north of Route 14. The surrounding roads that would receive sidewalks consist of Winter Street, Brook Street, Cross Street, Crescent Street, and Route 14. The second neighborhood is south of Route 14. The surrounding roads that would receive sidewalks consist of Main Street (Route 27) and High Street. Route 58 all the way to Main Street (Route 27) already has sidewalks, as well as Route 14 between Winter Street and Crescent Street. These sidewalk improvements are illustrated in the Towns Recommendations map.

For all the existing sidewalks along the neighborhood walking loop, it is suggested that these sidewalks receive an upgrade (ADA compliant curb cuts). The sidewalk to the Hanson MBTA Commuter Rail Station and the sidewalk to the Hanson Middle School via Liberty Street (Route 58) are examples where sidewalks should be upgraded.

Figure 15: Bicycle and Pedestrian Connectivity

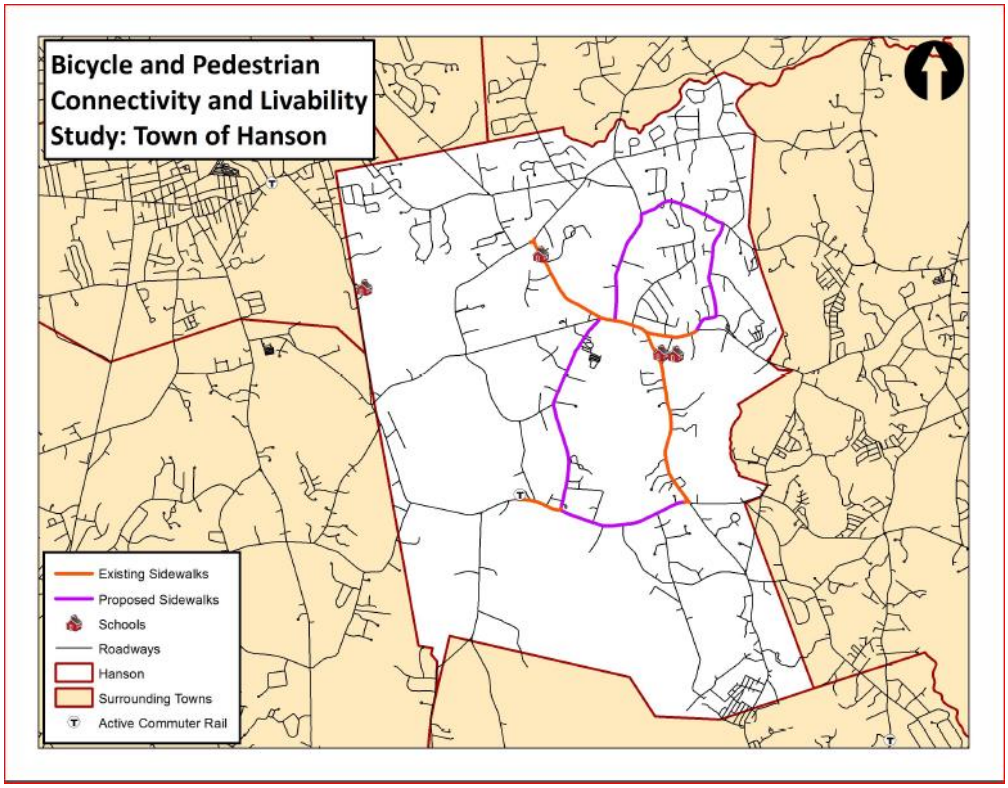


Figure 16: Hanson Bicycle Level of Service

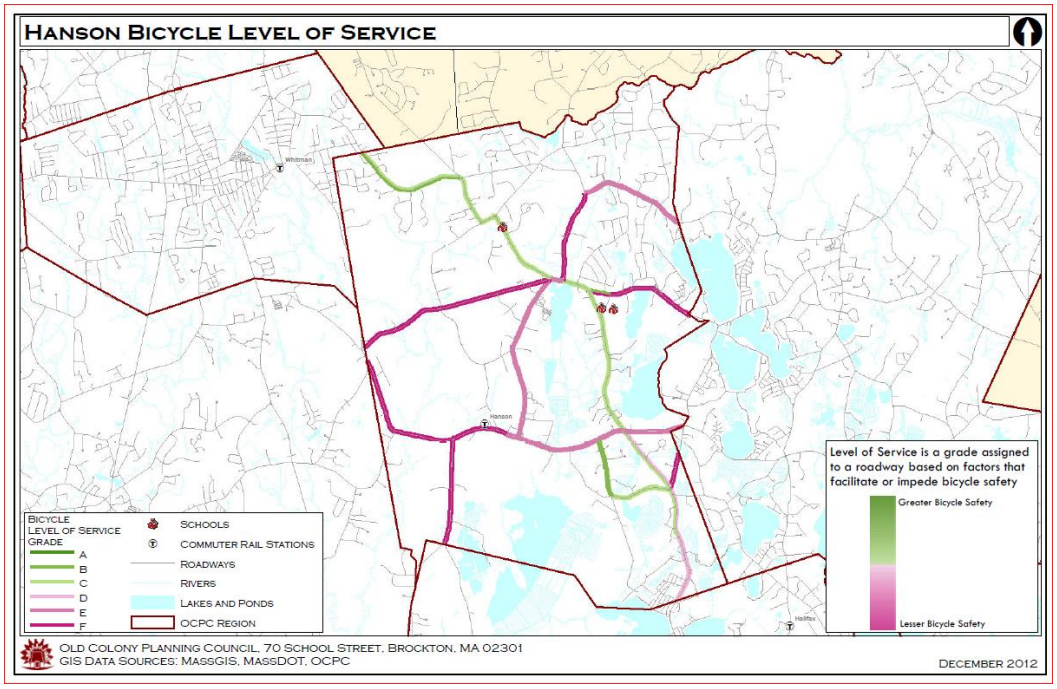
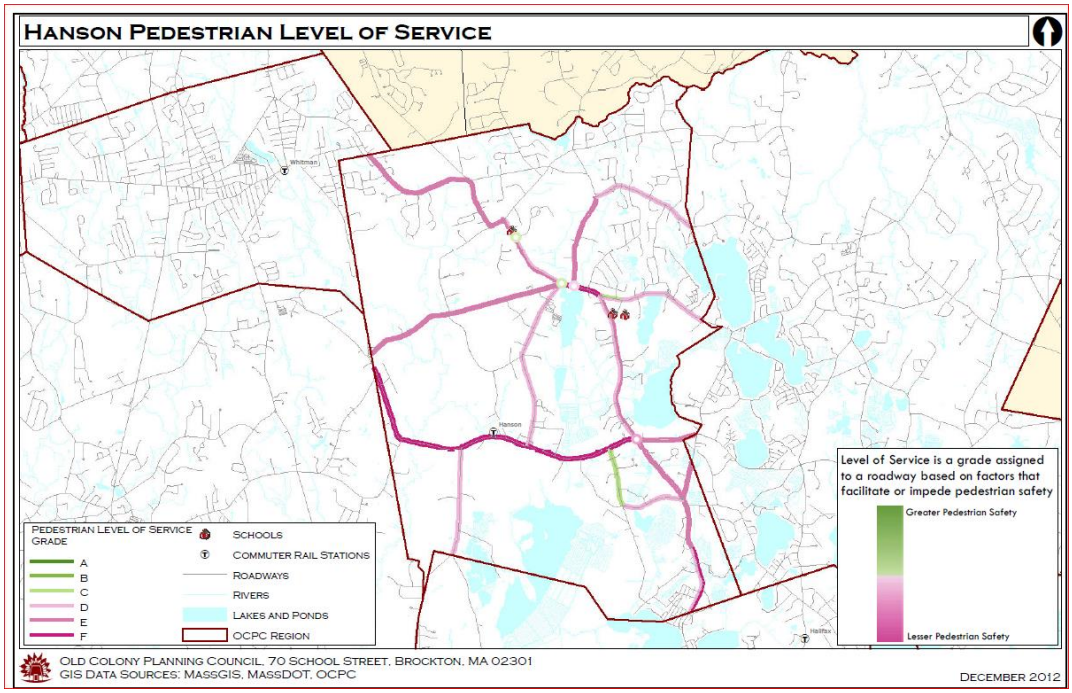


Figure 17: Pedestrian Level of Service



Long-Term Development Patterns

There are seven zoning districts in town: Agriculture-Recreation, Residence A, Residence AA, Residence B, Business, Commercial-Industrial and Flexible Zone – Overlay Districts. Residence A covers most of the eastern half of town and Residence AA is primarily the western part of town. The Business districts are along Route 58 and 27 and the Commercial-Industrial is along the railroad and western section of town. There are four Overlay Districts: Flexible, Adult Entertainment, Medical Marijuana Distribution Area Overlay District and Aquifer Protection Districts. There are six sub-areas to the Aquifer Protection District.

Table 2: Zoning District Minimum Lot Size

Zoning District	Minimum Lot Size
Agricultural, Recreation, and Residence AA	40,000 square feet of land area per dwelling unit
Residence A, Residence B	30,000 square feet of land area per dwelling unit, except for units on special permit. (multi-family on special permit: 60,000 square feet for the first unit and 5,000 square feet for each additional until to a total of eight units)
Flexible Zone	35,000 square feet of land area per dwelling unit with exceptions for some uses on special permit (see above)
Commercial-Industrial	44,000 square feet of land area per dwelling unit

Until the town can get its affordable housing stock percentage up to 10 percent, Hanson is subject to subdivisions coming in under the state's Chapter 40B Comprehensive Permit process. This permit entitles the developer to seek waivers from local bylaws and regulations so long as at least 25 percent of the units are affordable (as defined by the state). Hanson only has one partially completed 40B project, "Dunham Farms" which is restricted to residents over the age of 55. As of October 2008, 35 of the proposed 52 units are either fully occupied or under construction. A 70-unit "Depot Village" rental project was approved in 2003 through Chapter 40B but is not yet under construction. The permit was recently extended by the Zoning Board of Appeals to provide the applicant additional time for construction activities to commence.

There continue to be few industrial and heavy commercial uses though they are spreading in some portions of Town. During 2015 the owner of the current LiteControl property on Hawks Avenue, Hubbell, has begun work on the site to remediate the contamination resulting from historic plant operations. The proposed project includes removal of debris to remediate soils and groundwater contamination within upland and wetland areas, and demolition most of the buildings on site.

In recent years there has been further industrial and heavy commercial activity in the Hanson Commerce Park off Route 27 near Route 14, along Route 27 itself, and in the smaller Hanson Industrial Park in South Hanson.

The Regional Build-Out Analysis prepared under the Community Preservation Initiative of the Executive Office of Environmental Affairs found 3,510 acres of buildable land in Hanson as of 2000, with a potential for 3,907 lots under current zoning. To achieve the land use goals and objectives described in the Hanson 2008 Master Plan, the recommended plan for Hanson is to:

- Guide development based on the best features of the existing land use pattern.
- Preserve open space.
- Concentrate intensive development in and near the two centers.
- Reduce the potential build-out in the low-density areas and to preserve the quiet green Town that the resident's value.

Figure 18: Chickadee Burrage Pond Wildlife Management Area

Photo by Rob MacDonald

SECTION 4. ENVIRONMENTAL INVENTORY AND ANALYSIS

Geology and Topography

The geology of Hanson is dominated by glacial features, such as sand, gravel, glacial till soils, and low eskers and drumlins. Elevations range from 25 to just 160 feet above sea level, so the landscape is relatively flat and unremarkable, with few steep slopes or outcrops of stone or ledge. The most obvious features are water-related ponds, streams, and swamps, as described elsewhere in this document.

Interestingly, two surface water bodies (Maquan Pond and Indian Head Pond) exhibit sharply different qualities despite being near each other and connected by Indian Head Brook. Maquan Pond has "*remarkably soft water*" (quoting an 1830 surveyor's map notes), and recent studies by Professor William Hagar of UMass Boston confirm that typically acidic rain events are very poorly buffered due to the pond's relative purity, to such an extent that day-old sunfish fry are actually killed by brief but severe pH drops. In contrast, Indian Head Pond, located downstream, has a higher mineral content, such that the same 1830 surveyor notes "*[bog] iron ore of high quality was formerly taken from this pond.*" Indeed, in many locales the groundwater seeping to the surface is coated with reddish-brown iron oxide (rust) or a bluish-black metallic sheen of manganese oxide, or both; these discolorations are often mistaken for pollution by uninformed sources.

Another interesting aquatic geologic feature is the flow of cold, clean groundwater into Indian Head Brook from gravelly uplands, especially in the Gorwin Drive neighborhood. This results in the brook's ability to support a state-documented cold-water fishery (e.g., native brook trout, *Salvelinus fontinalis*), a condition that is increasingly rare, and thus valuable in southern New England.

Stone features are of basically three types. On is small, glacial boulders that have in many parts of town been built into classic "stone walls" during the long-past agricultural era. Secondly, a number of larger "glacial erratic" granite boulders have altered surfaces that bear the marks of having been "quarried", i.e., laboriously cut into rectangular pieces by hand tools during the 16-17 and 1800s; such stones were essential for the foundations of buildings before the invention if concrete. Collections of such altered boulders can be seen at Veterans Memorial Town Forest, near the Camp Kiwanee gatehouse, and at Rocky Run Conservation Area. A third type of interesting visual stone is the dramatic exposure of true bedrock – dark, igneous, and fine grained- at Rocky Run. This forms cliff-like features along Indian Head River, unlike the other landscape in Hanson, and represents the uplifted edge of the solid floor of the Narragansett Basin. This basin extends southwesterly from this area to Rhode Island and is roughly defined by the Taunton River watershed. Except for this small but striking feature, most of the basin's

bedrock in Hanson is deeply buried by the previously mentioned sand, gravel, glacial till, and mucky swamp deposits or surface water.

Hanson's topography is relatively low and level and is part of the great glacial outwash plain of southeastern Massachusetts. Hanson's topography ranges in elevations from a high of 160 feet at Rye Hill on the Whitman Town Line and 153 feet for Bonney Hill, a glacial drumlin, in the center of town, down to 25 feet on the shores of Indian Head River at the northeast corner of Town. Most of the Town lies below 100 feet in elevation. There are similar hills in the northwest and southwest parts of Town, including a few eskers. Large, flat, low wetland areas provide varied wildlife habitat that supports biodiversity.

Soils

Due to differences in substrate types, vegetation types, groundwater conditions, microclimate, and land-use history, Hanson has a rich mosaic of soils (see Hanson General Soil Map). Several named soil types are present and their characteristics further differ according to topographic slope.

Soils are an important physical characteristic to consider when determining the type and level of development a community can sustain. Soil type is a major determinant of characteristics such as drainage, degrees of flooding and frost action, susceptability to erosion and septic suitability. Proper interpretation of various soil types is an intergral part of land use planning.

Extensive areas of wet hydric soils characterize this Town. Hydric soils and soils with seasonally high water tables have been used for pastureland or conservation. Some of the latter soils also contain a restrictive hard layer that tends to prevent water from percolating downward. Most hydric soils in Hanson are mucks, especially Freetown and Swansea. Most soils with seasonally high water tables are loamy sand (e.g. Deerfield) or fine sandy loam (e.g. Merrimac). Seasonal high water table soils with a restrictive layer are overwhelmingly fine sandy loams, mostly of the Montauk and Paxton soil types.

Freetown, Swansea and Berryland soils are all mapped within low-lying depression areas and are associated with swamps and freshwater wetlands. All three soils have a seasonal high-water table at or near the surface for most of the year and are often ponded for long durations. Freetown soils consist of very deep organic material ranging from 51 inches to more than 20 feet in thickness. Swansea soils consist of organic material, 16 to 51 inches thick, underlain by fluvial material. Scarboro soils consist of organic material less than 16 inches thick, underlain by fluvial deposits.

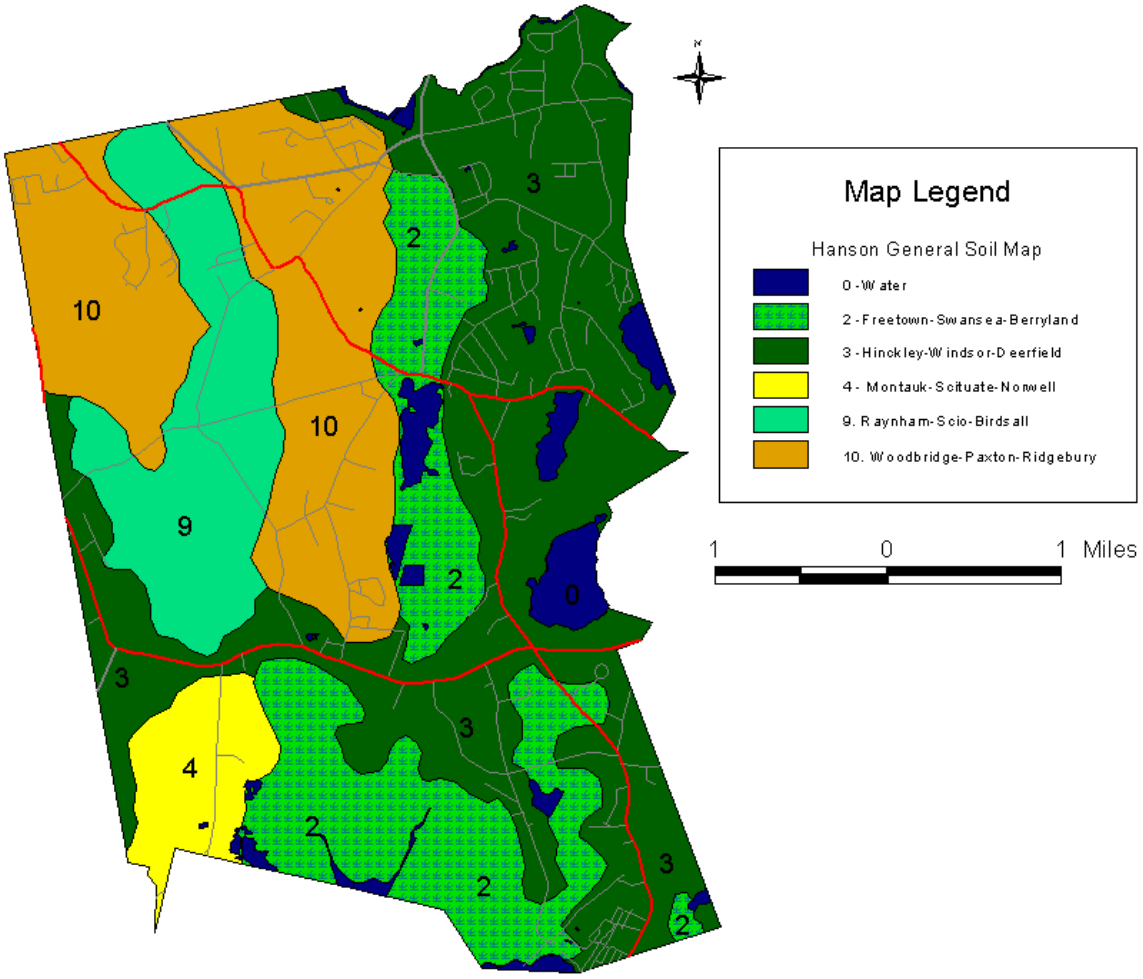
Minor soils in this map unit are excessively drained Carver and Hinckley soils, moderately well drained Birchwood and Deerfield soils, and poorly drained Mattapoisett and Pipestone soils. Very poorly drained Berryland and Brockton soils are also included in this map unit.

Hinckley- Windsor- Deerfield: Very deep, nearly level to steep, excessively to moderately well drained soils formed in glacial fluvial deposits on outwash plains, deltas, kames, and ice contact deposits. Hinckley soils are very gravelly, excessively drained, soils on kames, eskers, moraines, and heads of outwash plains.

Windsor soils are sandy, excessively drained, soils on deltas and along the southern end of outwash plains (distal part).

Deerfield soils are moderately well drained soils on lower elevations and in swales of outwash plains and deltas. Deerfield soils have an apparent seasonal high-water table between 1.5 and 4 feet and require mounded septic systems. These soils occur in areas of aquifer recharge and caution should be taken to protect the aquifer. These soils are well suited for woodland productivity, they are also well suited for cropland; irrigation is required for optimal growth.

Figure 19: Hanson General Soils Map



Montauk-Scituate-Norwell: Very deep, gently sloping to steep well drained to poorly drained soils formed in sandy loam material underlain by dense glacial till derived primarily from granitic materials on uplands, drumlins, and ground moraines.

Montauk soils are well drained soils convex top and side slopes of hills. Montauk soils have a perched, seasonal high-water table approximately 2.5 to 5 feet below the surface.

Scituate soils are moderately well drained soils on foot slopes and gently sloping hillsides. Scituate soils have a perched, seasonal high-water table about 1.5 to 4 feet below the surface. Norwell soils are poorly drained soils on concave slopes along drainage ways and depressions. Norwell soils have a perched, seasonal high-water table about 0.5 to 1.5 feet below the surface.

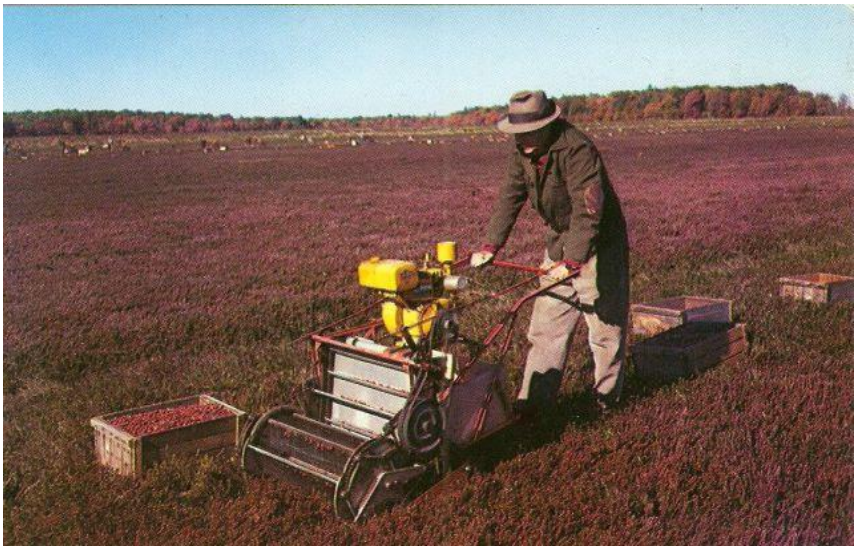
Most areas of this map unit are in woodland and mixed residential and industrial development. Some areas are used for cropland. Montauk and Scituate soils are well suited for woodland productivity and cropland; Norwell soils are poorly suited for woodland and cropland due to wetness. These soils are poorly suited to use as sites for septic tank absorption fields because the slowly permeable dense substratum which does not readily absorb the effluent. Subsurface drainage is also a problem with these soils; the firm substratum causes a perched seasonal high-water table.

The lacustrine (lake bottom) soils often coincide with modern wetlands and can range from sand to fine silt to muck, with significant limitations for septic systems. Thus the 1999 land use map shows these areas as still largely open.

The extensive areas of glacial till are quite varied, combining reasonably well-drained sandy loams with relatively impermeable underlying frangipanes, and occasional very tight clay lenses. At the same time tills are often found in north-south running drumlins rising above the less buildable wetlands, and are sites of early roads and development like that along Hanson's High Street (Bonney Hill). This pattern is shown on even the earliest land use maps.

Due to the large areas of wetlands and soils that drain poorly, most residential development in Hanson is taking place along existing major roads. At this time, all areas of Hanson have on-site sewage disposal.

Landscape Character



This is a view of the former largest cranberry bog in the world, now known as the Burrage Pond Wildlife Management Area

An integrated network of large natural areas or patches, large agricultural areas, major wildlife corridors, water bodies and adjacent land, and certain unique features and microenvironments contribute to Hanson's special character. For the purpose of this plan, large natural areas are defined as patches of relatively natural vegetation that are intact and wide enough to provide a large interior area of forest or wetland (i.e., remote from edge effects and anthropogenic influences). The distance between these patches is less than the dispersal distance of key species, allowing for genetic dispersal between populations. These patches maintain many combinations of natural habitat conditions in proximity for species requiring two or more habitats. The size of the patch is sufficient to support large-home-range vertebrates and many interior species, to protect an aquifer and/or headwaters network of small streams, and for most natural disturbances to affect only a portion of the patch.

Hanson can be described as a semi-rural town with strong ties to its agricultural history. Prime agricultural soils in areas of Hanson have provided fertile ground for farmers for centuries. Hanson's long agricultural history defines much of the character of the community. Many of the prime agricultural soils have already been built on, however there are still areas of prime agricultural soil that remain underdeveloped and should be protected. The large amounts of wetlands in Hanson encouraged a shift from poultry to cranberry cultivation in the late 19th century. All four key elements needed for cranberries can be found in Hanson: acidic peat soils, coarse sand, a constant water supply and a long frost-free growing season. Many cranberry bogs, especially smaller ones, are now retired from production. At least one upland bog has been filled and incorporated into a residential development (Donna Drive). Despite

wetlands regulations, development often occurs right up to the gravelly edges of bogs. Cranberry bogs create some of the beautiful scenic views that many people associate with Hanson and should be protected for their aesthetic and environmental qualities.

Nearly half of Hanson is forested, dotted with ten ponds ranging from 121 acres in size (Indian Head Pond) to 15 acres in size (Factory Pond). The larger ponds are used for fishing, boating, and other forms of recreation, and contribute to the Town's identity and special vistas.

Hanson boasts several unique cultural and recreational resources that contribute to the Town's landscape character. The rustic 62-acre Camp Kiwanee and the regional Bay Circuit Trail and Greenway are discussed in further detail in Section F. Scenic Resources.

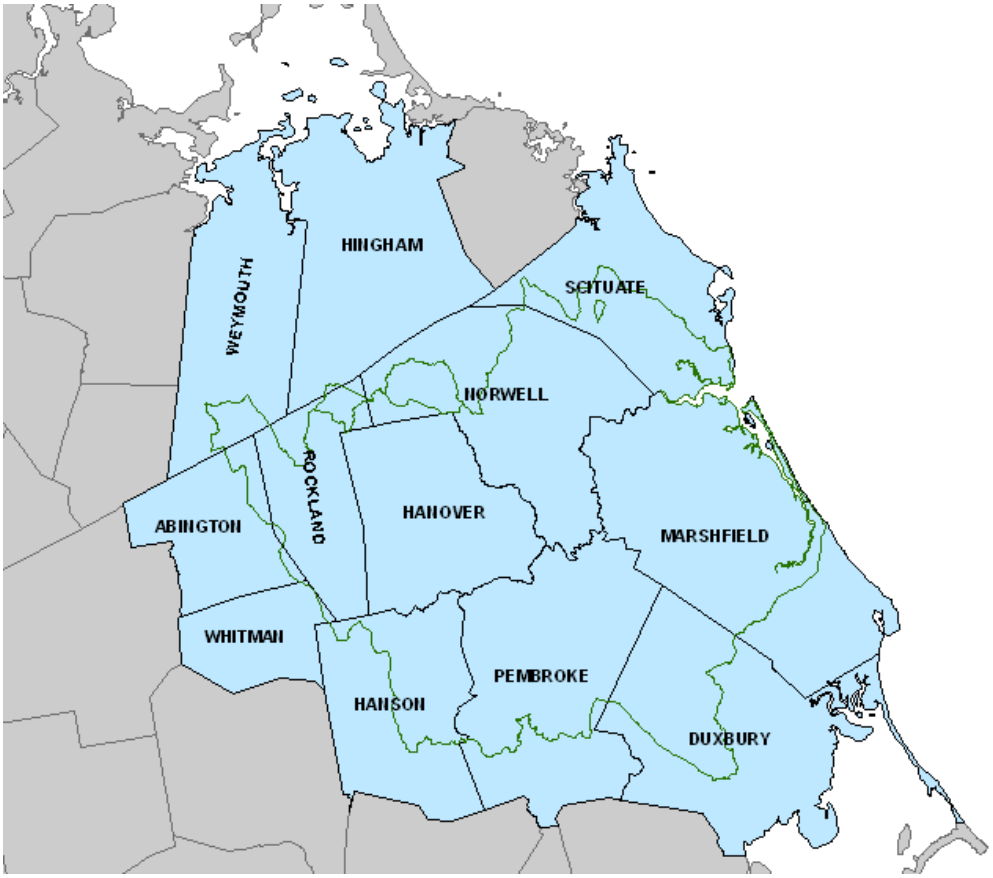
Water Resources

There are five types of water features of importance: (1) watersheds; (2) surface water; (3) aquifer recharge areas; (4) flood hazard areas; and, (5) wetlands.

Watersheds:

Figure 20: Taunton River Watershed

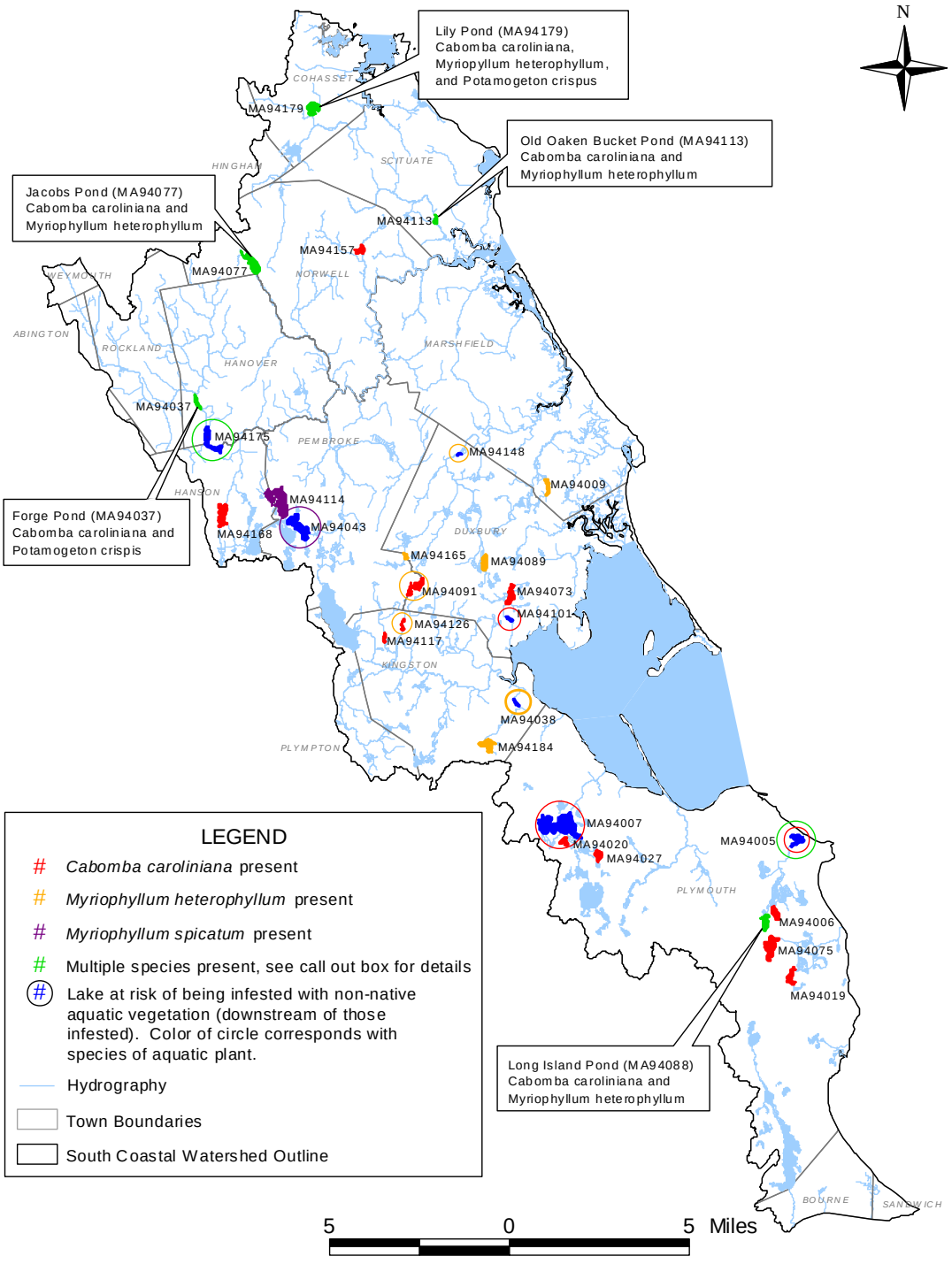
Figure 21: North River Watershed



The Town of Hanson lies within two major surface watersheds: The North River and the Taunton River watersheds. There are approximately 4,600 acres in the northeast section of town which are contained in the North River watershed. Indian Head Brook serves as the only major surface drainage way in this area, flowing north from Indian Head Pond through Wampatuck Pond and Little Cedar Swamp into the Indian Head (or Drinkwater) River. Indian Head Brook has numerous intermittent and permanent tributary water courses which drain its watershed. The watershed contains many swampy areas with ridges of high ground. The Indian Head River flows in an east-west direction, ultimately tying into the North River. Most of the Indian Head River and all the North River can be canoed.

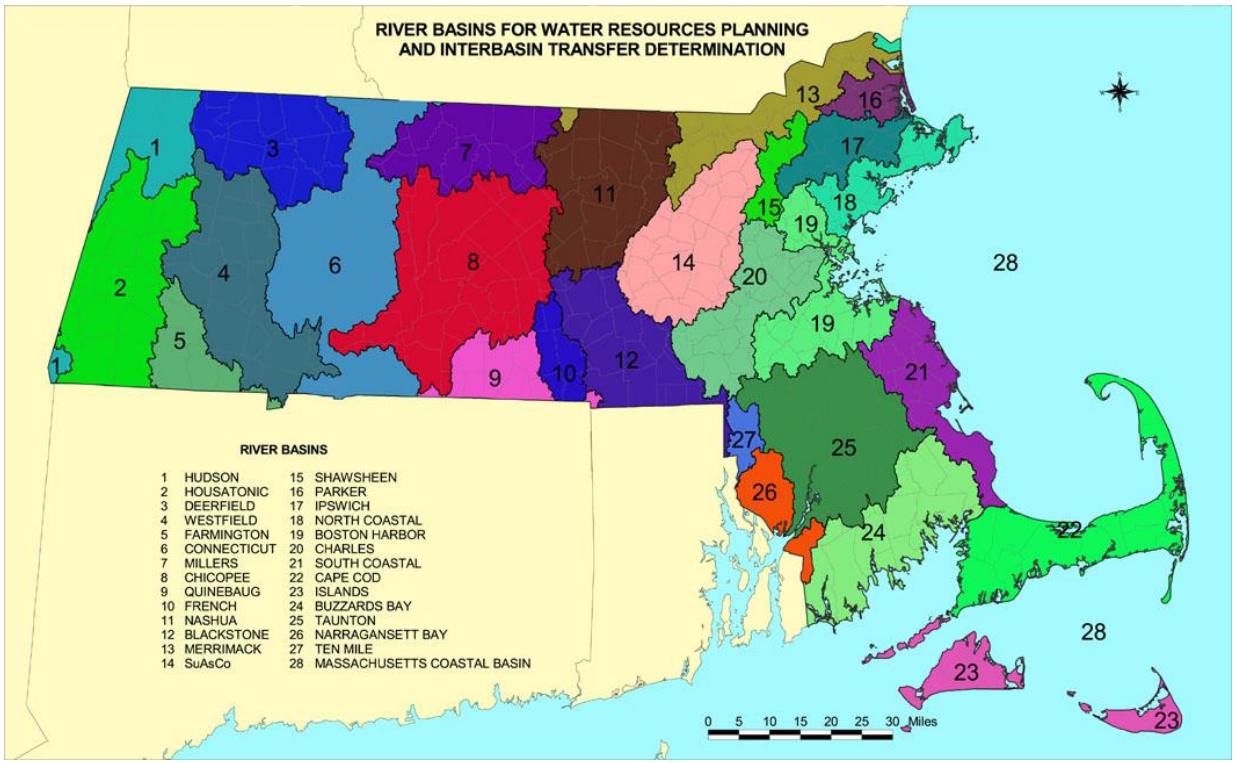
Hanson also contains approximately 5,700 acres of the Taunton River drainage area within its border, including the Great Cedar Swamp. The major surface drainage ways in this area are the Shumatuscacant River and Poor Meadow Brook. The Shumatuscacant River flows south from Whitman into Poor Meadow Brook, which is a tributary of the Satucket River. For additional information regarding water resources, refer to Map 5 located in the Appendix C.

Figure 22: Impaired Water Bodies



Impaired water bodies in the Taunton Watershed - South Shore Coastal Watersheds Lakes – presence of non-native aquatic macrophytes (water bodies downstream from these lakes are at risk for non-native aquatic macrophyte infestation).

Figure 23: Massachusetts River Basins



Stormwater discharge and other aspects of development in Hanson affect the quantity and quality of water in streams, ponds, wetlands, and the ground. Open Space in Hanson is a major controller of both water quality and quantity, which in turn are important determinants of habitat quality, biodiversity, natural processes, and recreation. The location of the Town within the watersheds has implications both for water quality beyond town borders and for those water flowing in from the sources discussed above.

The Source Water Assessment Program (SWAP) established under the federal Safe Drinking Water Act, requires every state to inventory land uses within the recharge areas of all public water supplies; assess the susceptibility of drinking water resources to contamination for these land uses; and publicize the results to provide support for improved protection. The top five potential threats to public water sources in the state that were identified through SWAP are:

1. Residential lawn care/gardening.
2. Residential septic systems and cesspools.
3. Residential fuel oil storage.
4. Stormwater discharge; and
5. State-regulated underground storage tanks.

The Massachusetts Department of Environmental Protection has fulfilled this federal requirement, and a detailed report is maintained for public at the Hanson Water Department.

The Town of Hanson has taken significant measures to minimize the amount of pollution and sediment that drains from impervious surfaces into the stormwater system. The Town submits annual reports in accordance with EPA National Pollutant Discharge Elimination System (NPDES) permit issued to the town. Additional measures that should be considered include: the design and implementation of Low Impact Development (LID) techniques to minimize the amount of impervious material; construction improvements and upgrades to existing stormwater infrastructure, such as deep sump basins and infiltrating catch-basins; the institution of house-keeping programs to minimize sediment accumulation, including annual catch-basin cleaning and street sweeping; and , increasing the number of household hazardous waste and unwanted pharmaceutical/personal care product collection events.

As the amount of impermeable surfaces increase, typically groundwater recharge is reduced, the water table drops, pond levels go down, wetlands shrink, streams become smaller, and vernal pools dry out sooner, all tending to cause significant ecological loss for Hanson.

A palette of well-known techniques for homeowners that can greatly reduce stormwater system runoff:

- Drains from roofs and driveways can be directed to surface depressions, vegetated swales, underground cisterns, aboveground rain barrels, water gardens, and more, in all cases to prevent roof water runoff from reaching road drains.
- Cisterns and rain barrels can be used for watering gardens and even for certain indoor uses.
- Homes with groundwater wells should be expected and required to conserve water just as everyone else does (no lush green lawns during droughts), since pumping groundwater out during dry periods can quickly degrade nearby streams, ponds and vernal pools.
- Strategic planting of native shrubs and trees on grassy or bare slopes reduces surface runoff.
- Homeowners can replace hard surfaces such as patios, driveways, sidewalks and parking lots with porous materials and surfaces.

National Flood Insurance Program: Flood Hazard Mapping

The FEMA Flood Map Service Center (MSC) is the official public source for flood hazard information produced in support of the National Flood Insurance Program (NFIP). Use the MSC to find your official flood map, access a range of other flood hazard products, and take advantage of tools for better understanding flood risk.

FEMA flood maps are continually updated through a variety of processes. You can find these maps at the FEMA website. https://www.fema.gov/national-flood-insurance-program-flood-hazard-mapping

Through FEMA's flood hazard mapping program, Risk Mapping, Assessment and Planning, FEMA identifies flood hazards, assesses flood risks and partners with states and communities to provide accurate flood hazard and risk data to guide them to mitigation actions. Flood hazard mapping is an important part of the National Flood Insurance Program (NFIP), as it is the basis of the NFIP regulations and flood insurance requirements. FEMA maintains and updates data through Flood Insurance Rate Maps (FIRMs) and risk assessments. FIRMs include statistical information such as data for river flow, storm tides, hydrologic/hydraulic analyses and rainfall and topographic surveys.

Flood zone designations may be established or revised when new and more accurate information becomes available because of a FEMA funded restudy or because the community makes the information available to FEMA. Several factors influence the frequency with which flood maps may be updated, such as the extent of new development and the completion of flood control projects.

How to View and Obtain Flood Maps

The FEMA Flood Map Service Center (MSC) is the official online location to find all flood hazard mapping products created under the National Flood Insurance Program (NFIP), including your communities flood map, called a Flood Insurance Rate Map (FIRM). It can be found at https://fema.gov/portal

Effective FIRMs and any amendments or revisions that apply to them may be accessed through the site's Address Search, in addition to the full range of products accessible through the Search All Products function. All MSC products and services are available at no cost.

How do I read a flood map?

The primary feature of flood maps are flood zones, which are geographic areas that FEMA has defined according to varying levels of flood risk and type of flooding. These zones are depicted on the published Flood Insurance Rate Map or Flood Hazard Boundary Map (FHBM). For step-by-step instructions on how to read a flood map, you may view the How to Read a Flood Insurance Rate Map Tutorial.

Where can I find flood zone definitions?

For definitions of Flood Zones, visit the Flood Zones webpage on the FEMA website.

Figure 24: FIRM Maps Legend

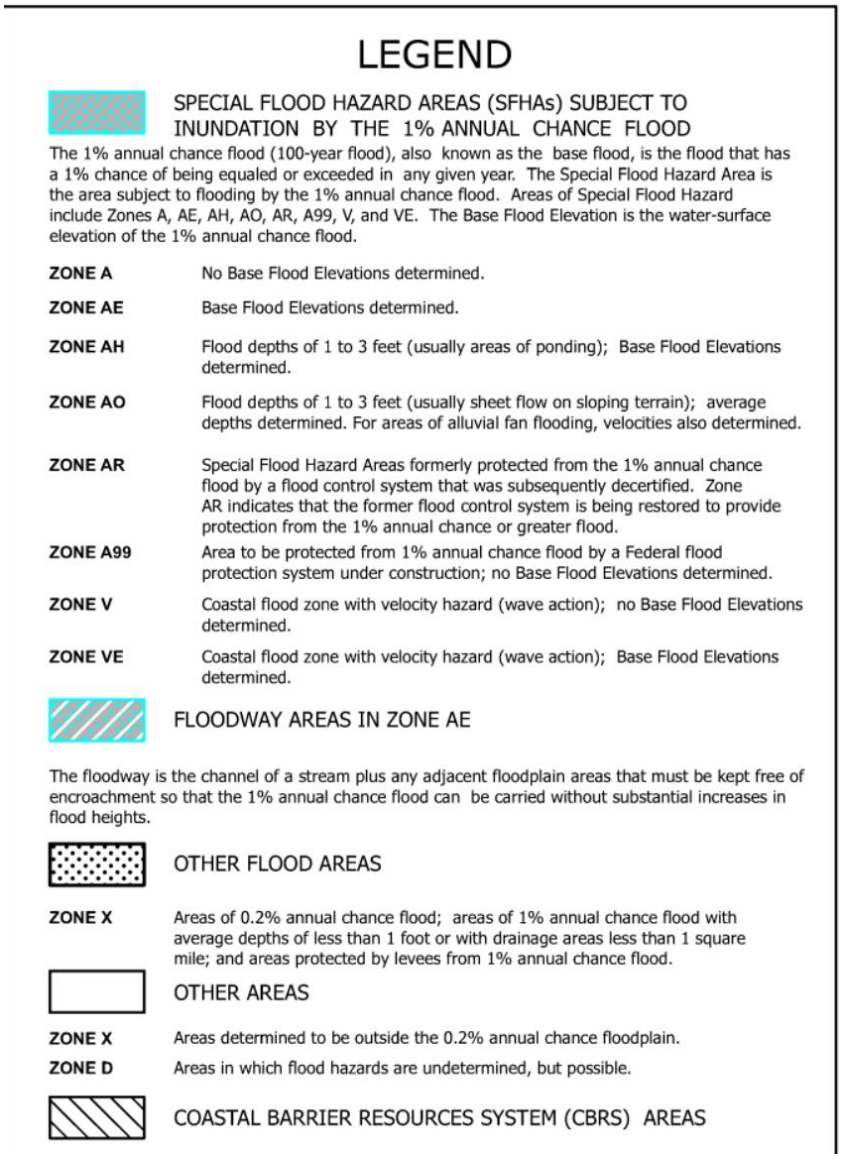
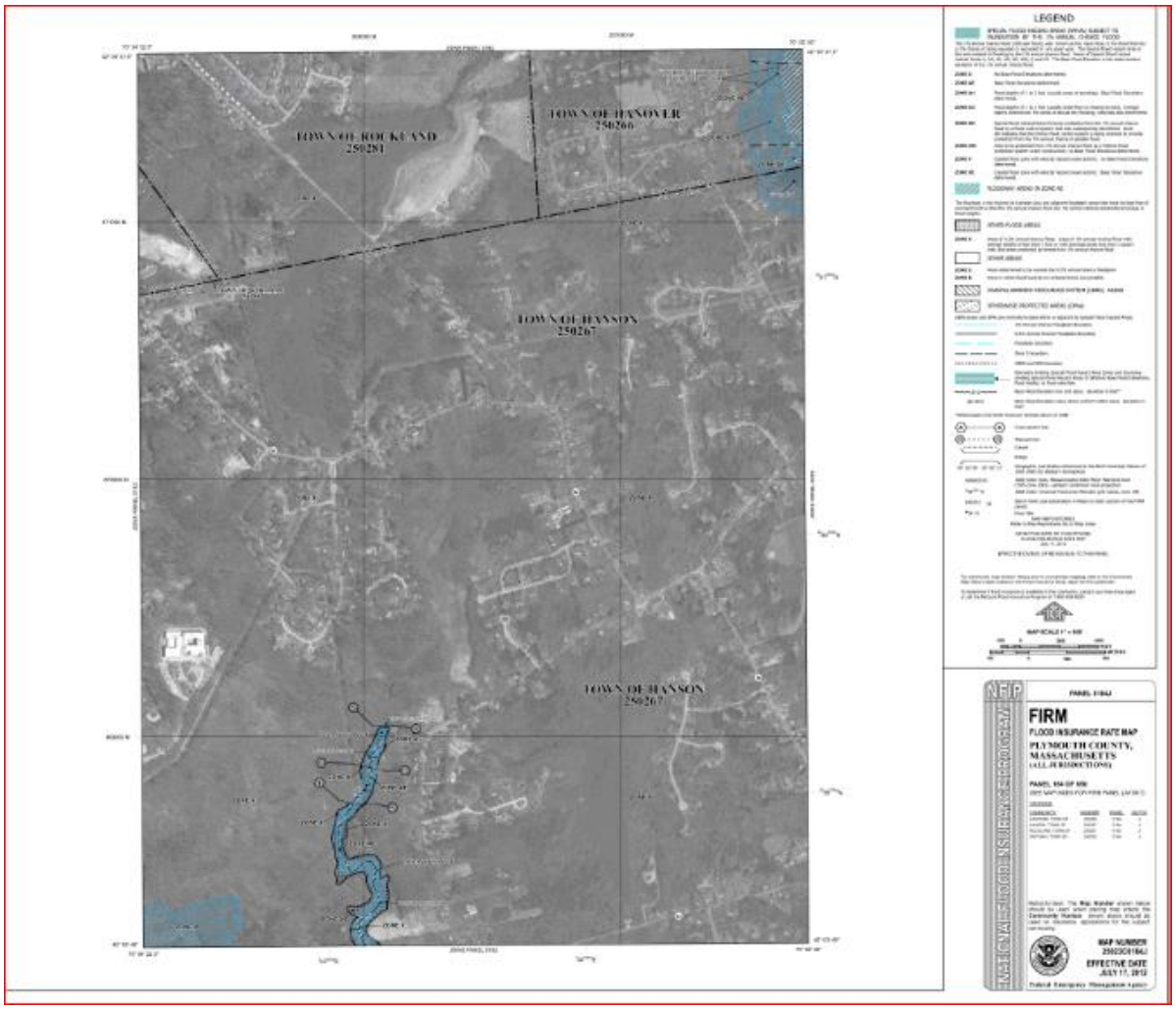


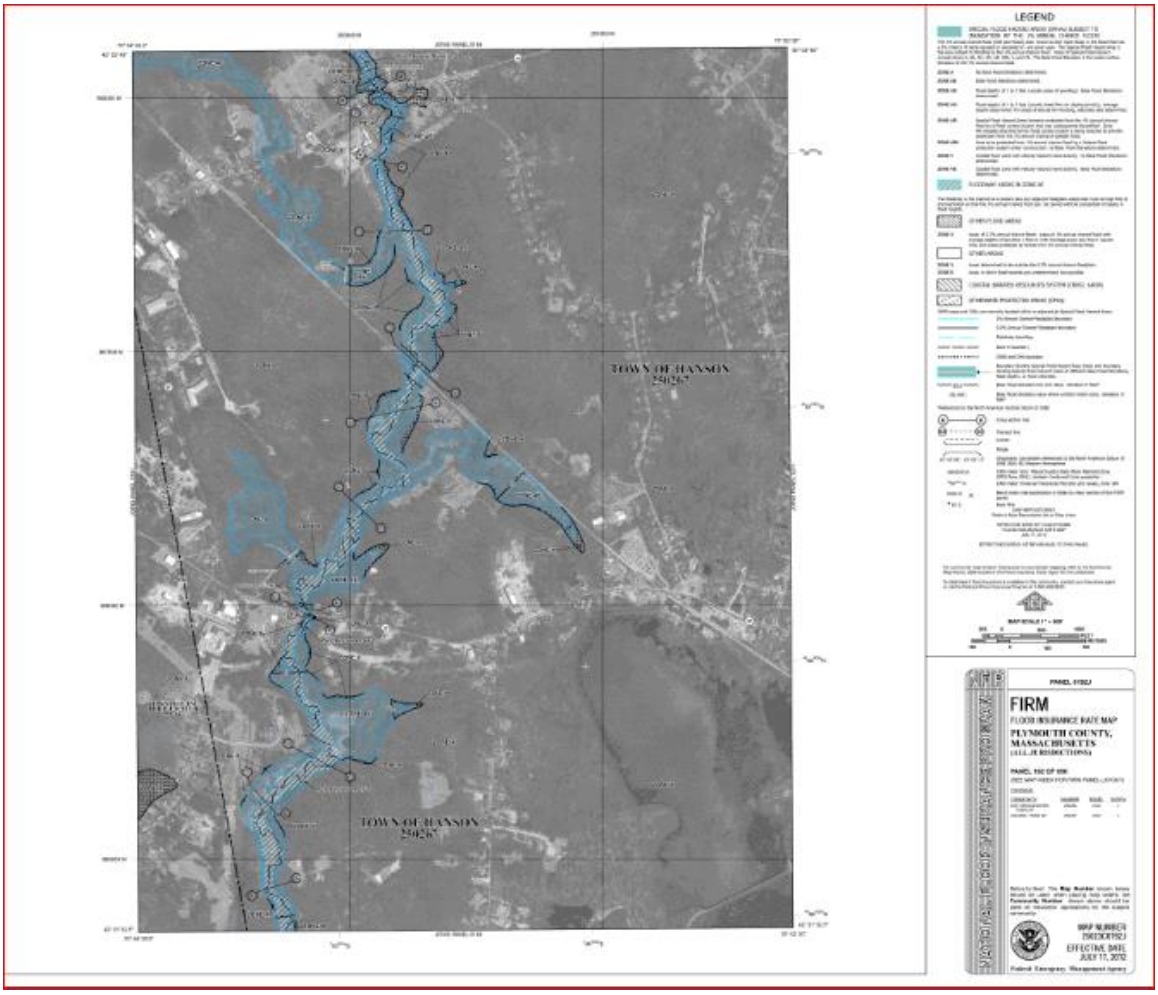
Figure 25: FIRM Map 25023C0184J



Panel 25023C0184J

The surface water features shown are Brett's Brook and wetlands along Shumatuscacant River. The shaded area of Brett's Brook commences at former location of dam for Cushing's Mill Pond; dam and pond no longer exist. No road crossings or other areas of potential erosion are on this panel.

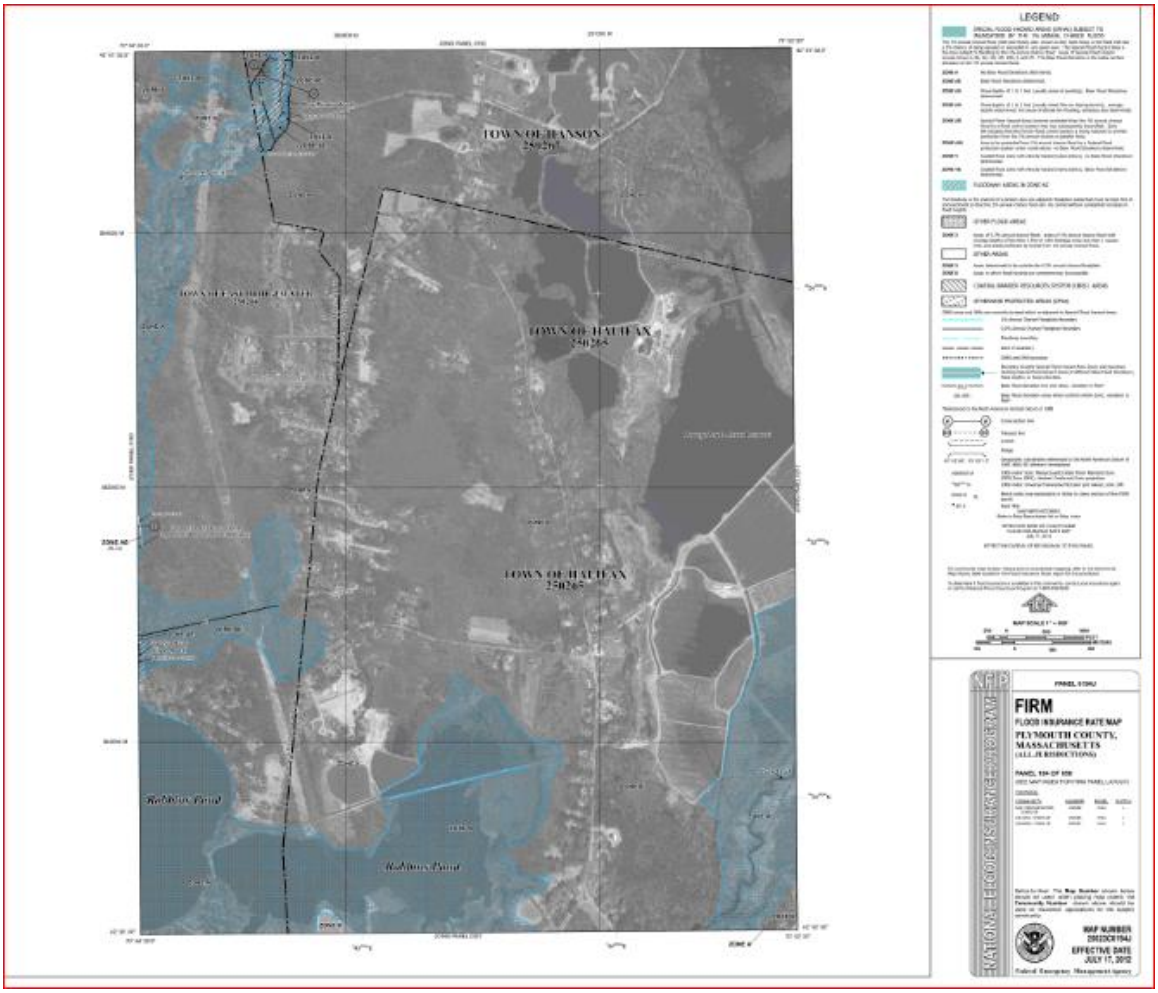
Figure 26: FIRM Map 25023C0192J



Panel 25023C0192J

Shows confluence of Shumatuscacant and Brett's Brook, forming Poor Meadow Brook. Also shown is corridor of Great Cedar Swamp Brook. Further wetlands in the Crystal Spring Wellfield are shown. Five road or railroad stream crossings are shown. Brett's Brook at West Washington Street; Shumatuscacant River at West Washington Street; Poor Meadow Brook at MBTA railroad crossing and at Main Street; Jacobsen's Spring Brook crossing at Crystal Spring wellfield road. There are no dams remaining in this area. Significant natural flood control is achieved in this area through heavily forested riparian zones; most of which are protected as conservation or water supply areas. Note: Great Cedar Swamp Brook receives much of the stormwater from the Hanson MBTA parking lot and nearby industrial/business district.

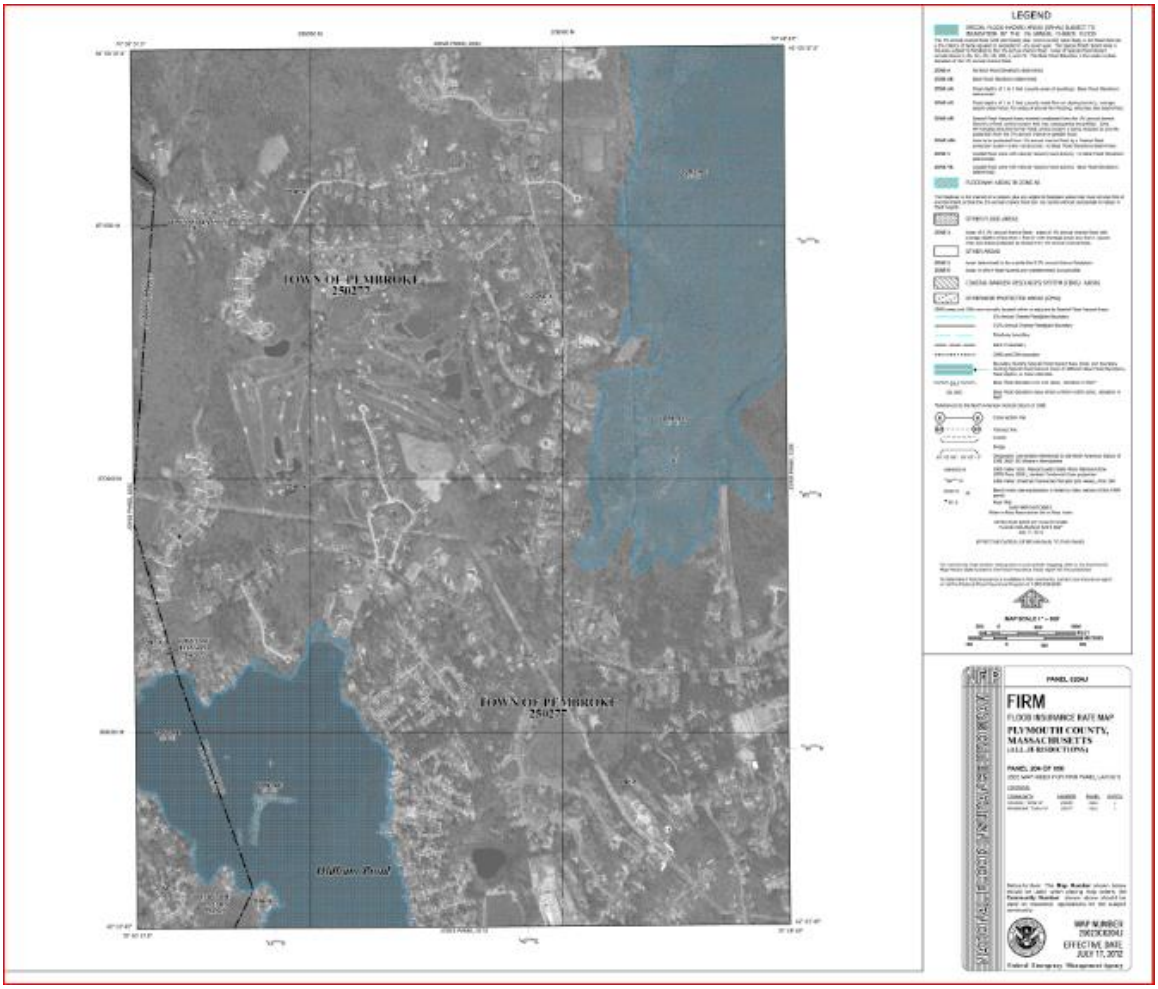
Figure 27: FIRM Map 25023C0194J



Panel 25023C0194J

Primary surface water feature in the FEMA shaded area is the lower most portion of Poor Meadow Brook. No Hanson road crossings or dams exist on this panel. As indicated for panel 0192J extensive areas of mature riparian forest prevent erosion in Hanson, and this continues downstream into East Bridgewater.

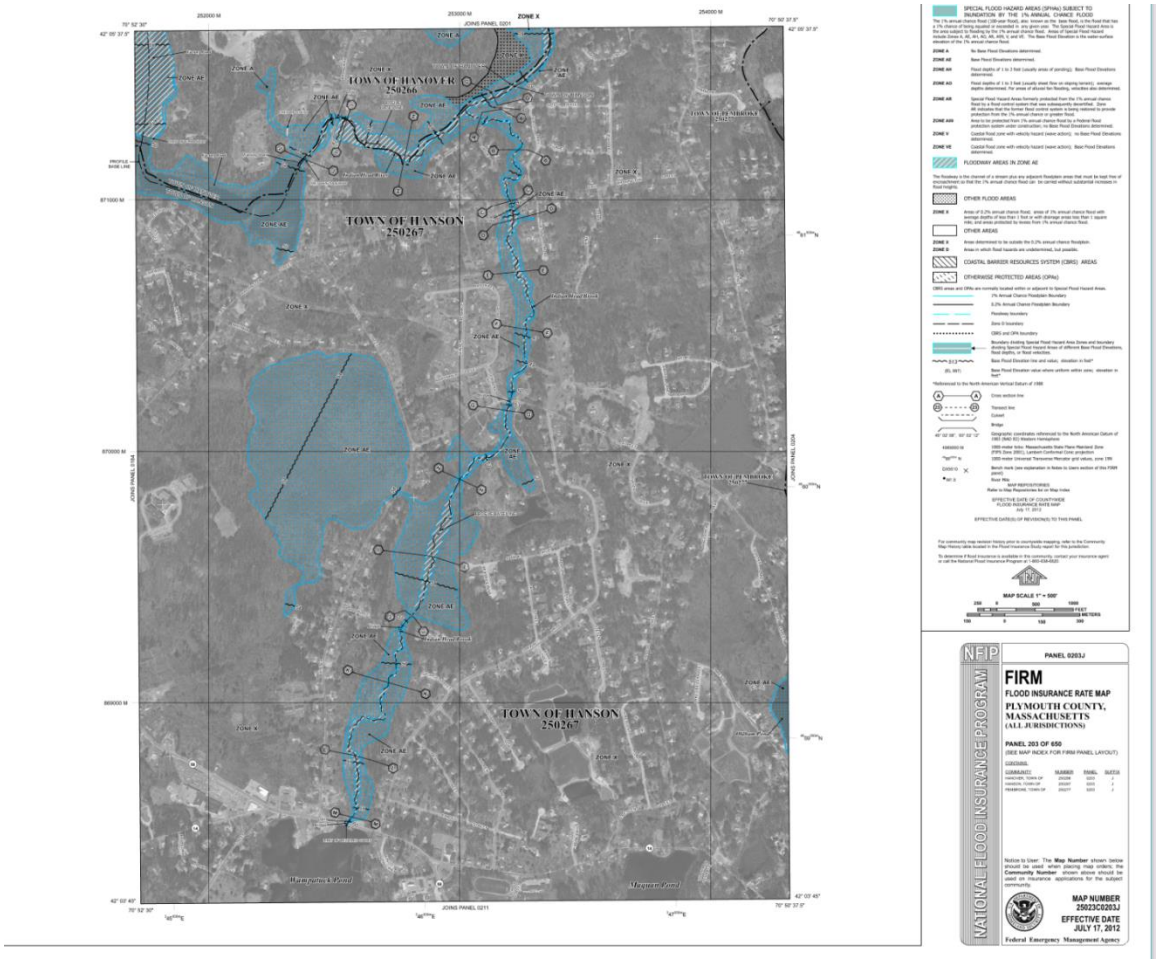
Figure 28: FIRM Map 25023C0204J



Panel 25023C0204J

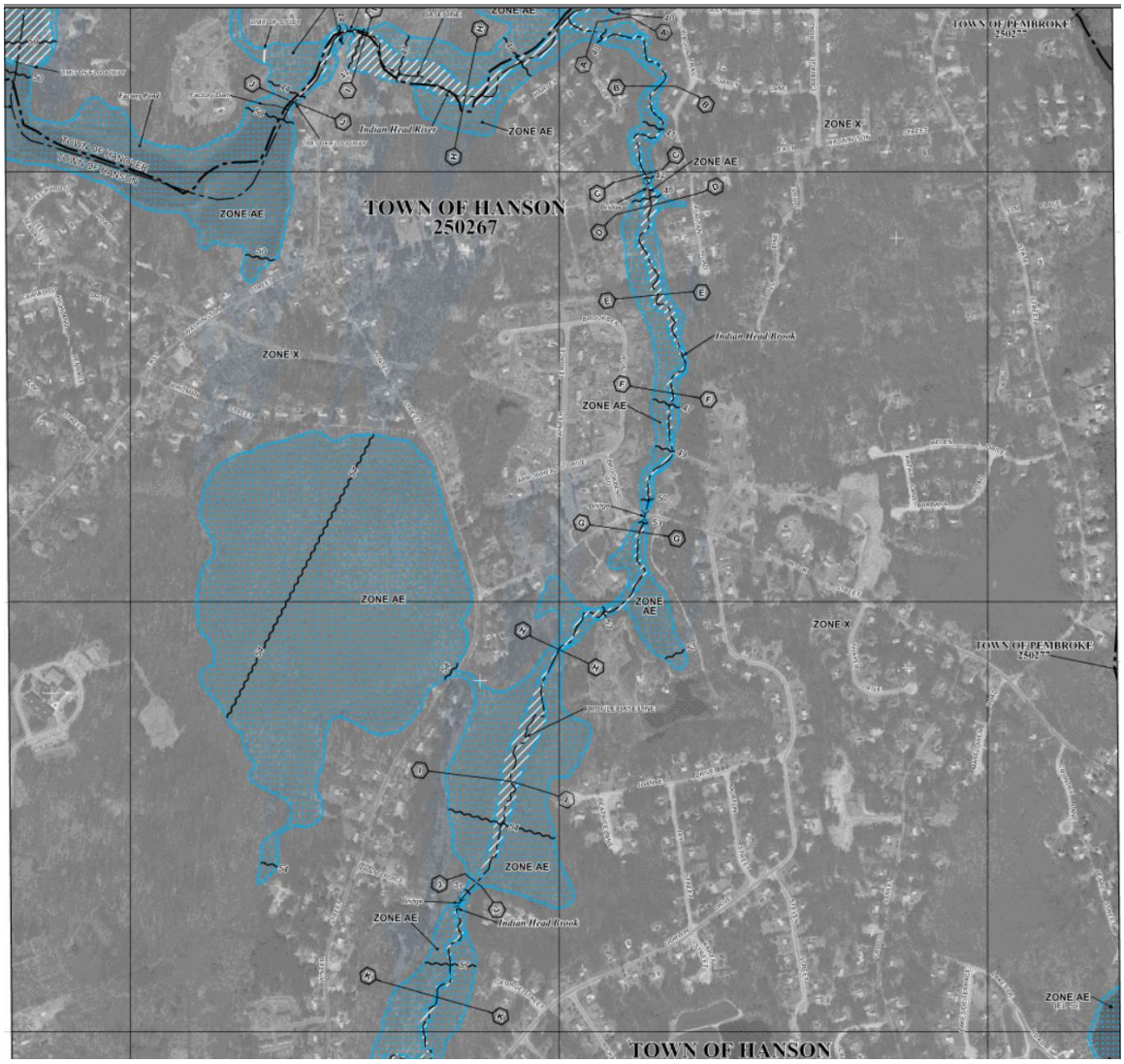
The primary surface water feature in this panel is the Hanson portion of Oldham Pond. Flood risk here is low because this pond is fed only by surface runoff and minor streams, but shoreline development is heavy; such that small increases in pond levels could impact existing residential development.

Figure 29: FIRM Map 25023C0203J



Panel 25023C0203J

This FIRM map shows the footprint of Little Cedar Swamp, the profile baseline of the Indian Head Brook Corridor from Wampatuck Pond to the confluence of the Drinkwater River. There are 5 named wetland features – given the low gradient of these areas the risk of erosion is low. There is a recently repaired dam at Factory Pond. In terms of flood hazard keeping this dam in good repair is important. This also shows the Wampatuck Pond dam which needs to be kept in good repair and thus prevent erosion along the Indian Head Brook. There are six road crossings of streams, two of which are at or below existing dams. Drinkwater River at Winter Street; Indian Head Brook at Liberty Street, Pratts Place, Brook Street, East Washington Street, and Little Cedar Swamp/Barkers Brook at Winter Street. Note: This area receives 100 percent of the stormwater from Hanson's largest paved area (Shaw's Plaza). Existing heavy forest cover, some of which is protected as conservation land, needs to be maintained.


TOWN OF HANSON
250267
ZONE AE
ZONE X
Indian Head River
Indian Head Brook
TOWN OF PEMBROKE
250277
TOWN OF HANSON

Surface Water

Primary recreational uses of water resources include canoeing, boating, and fishing in ponds. Swimming is popular at Maquan Pond and canoeing and boating is popular on Indian Head, Maquan and Wampatuck ponds. Ice skating most often occurs on Wampatuck Pond. Essentially all areas adjoining surface water bodies provide recreational value for walking and enjoying nature, although not all these areas have public access. To maintain recreational opportunities and preserve water quality it is important to protect the land adjacent to surface water. Protecting and enhancing certain water bodies is a focus of the town.

Ponds are a critical part of Hanson's open space and recreational resources on a regional, town, and neighborhood level. On a regional level, Indian Head Pond, a "Great Pond" is a key shared resource for Hanson and Pembroke. Both towns must cooperate with the State in protecting and managing this high-value resource which draws visitors from the region.

Hanson contains 9 ponds totaling 371 acres in surface area that provide the Town with approximately 10 miles of shoreline. The larger ponds are used for fishing, boating, and other forms of recreation. None of the ponds are used exclusively for a public water supply, although since the 1960s the Monponsett Ponds (and Oldham and Furnace Ponds in Pembroke) have been seasonally diverted to Silver Lake and are major components of Brockton's water supply.

In addition to outright purchase of land, the Town should consider other tools, including conservation restrictions and shoreline zoning. Particularly where ponds can provide neighborhood outdoor recreation, private fundraising and Community Preservation Act funds for acquisition is possible, perhaps in conjunction with a land trust. Municipal land by ponds may contain some undeveloped land that should be managed for conservation values until needed for town services, thus maintaining both conservation value and long-term land-use flexibility.

In order to raise awareness about surface water resources among residents, an educational wetlands brochure, "*Living with Wetlands, A Guide to Wetland Protection Laws in Hanson,"* was created for distribution to all residents and provided to all real estate agents in 2017. It highlights the key regulatory provisions and the importance and values of buffers adjacent to wetlands.

The following description of the ponds in Hanson is based on field work and map investigations performed by the Natural Resources Technical Team of the U.S.D.A. Soil Conservation Service. Updated resource use information from the Old Colony Planning Council's Land/Use/Water Quality Issues 208 report for Hanson was also used.

Figure 30: Boat Ramp on Indian Head Pond

Looking to the southeast from the Boat Ramp on Indian Head Pond

Indian Head Pond (Great Pond)

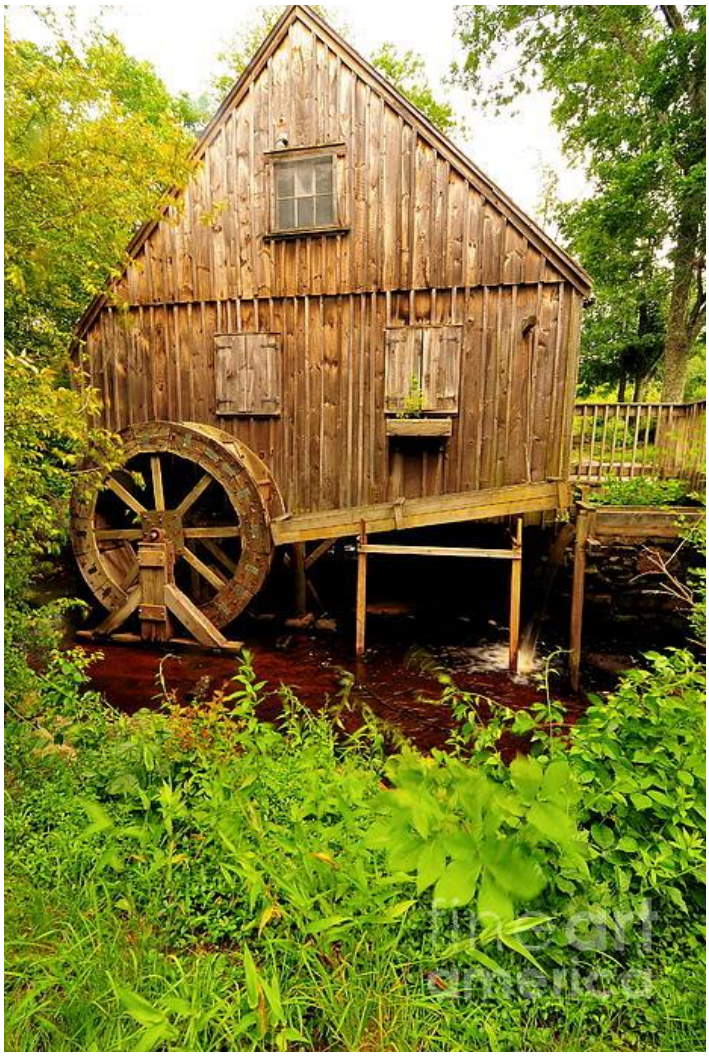
Indian Head Pond is 119 acres in area and located on the Hanson-Pembroke town line at an elevation of 68 feet. The shoreline has an increasing number of residences and is accessible to the public through the Alton J. Smith Reserve "Smitty's Bog" Wetlands Restoration Project site. The maximum depth of Indian Head Pond is seven feet and the mean depth is five feet. The pond gives rise to Indian Head Brook and serves as a reservoir for several cranberry bogs. Boating is the primary recreation activity on the pond. There is a narrow, unpaved public boat launch called the Marcus Urann Fisherman's Landing which was created in the 1960's. As boats and trailers have become larger, boaters have expanded the boat launch area to another piece of shoreline which is town Conservation land but prohibited by federal USDA deed from allowing vehicles. It is unclear if this access point is on town-owned land, and town boards are actively seeking resolution to this issue.

Indian Head Pond is listed in Category 2 of the 2002 Integrated List of Waters (MassDEP 2003a). This segment supported some uses (*Secondary Contact Recreation and Aesthetics)* and was not assessed for the others. In 1996 MassDEP conducted a synoptic survey of Indian Head Pond. No non-native aquatic or wetland plants were observed (Appendix C, Table C-1).

This lake is in the North River watershed. The brook which flows from Maquan Pond is the only tributary besides some wetland drainage. Otherwise, the lake is precipitation and groundwater-fed. The outlet is Indian Head Brook, which flows through the Main Street bogs to Wampatuck Pond. The lake is a Great Pond, and public access is required. Access from Hanson is via the Fisherman's Landing ramp, off Indian Head Street; there does not appear to be any other public access point in Hanson. The lake is used primarily for fishing and boating.

The eastern shore is the border between Hanson and Pembroke; residences on that shore are in Pembroke, but the entire lake is in Hanson. There is no public access from the Pembroke side. The lake is probably eutrophic; it is not tested or monitored to our knowledge. Potential conflict could arise over management of the lake, as Hanson Boards and Commissions have no jurisdiction in Pembroke.

Figure 31: Nathaniel Thomas Mill



Cranberry agriculture is still ongoing next to the pond on the Hanson side, and water is drawn from and returned to the lake. If this cranberry operation ceases, the bogs should be allowed to return to a natural state. If not, a tail-water recovery system should be installed and maintained. A ground water withdrawal permit exists for a company that trucks water away, e.g. for swimming pools.

Water rights belong to the Town via the Nathaniel Thomas Mill below Wampatuck Pond. Water was previously withdrawn and returned to the lake by Edgewood Bogs, now retired from cranberry production and being restored as wetlands under the USDA "Wetland Reserve Program," as the Alton J. Smith Reserve (Smitty's Bog Conservation Area).

Oldham Pond (Great Pond)

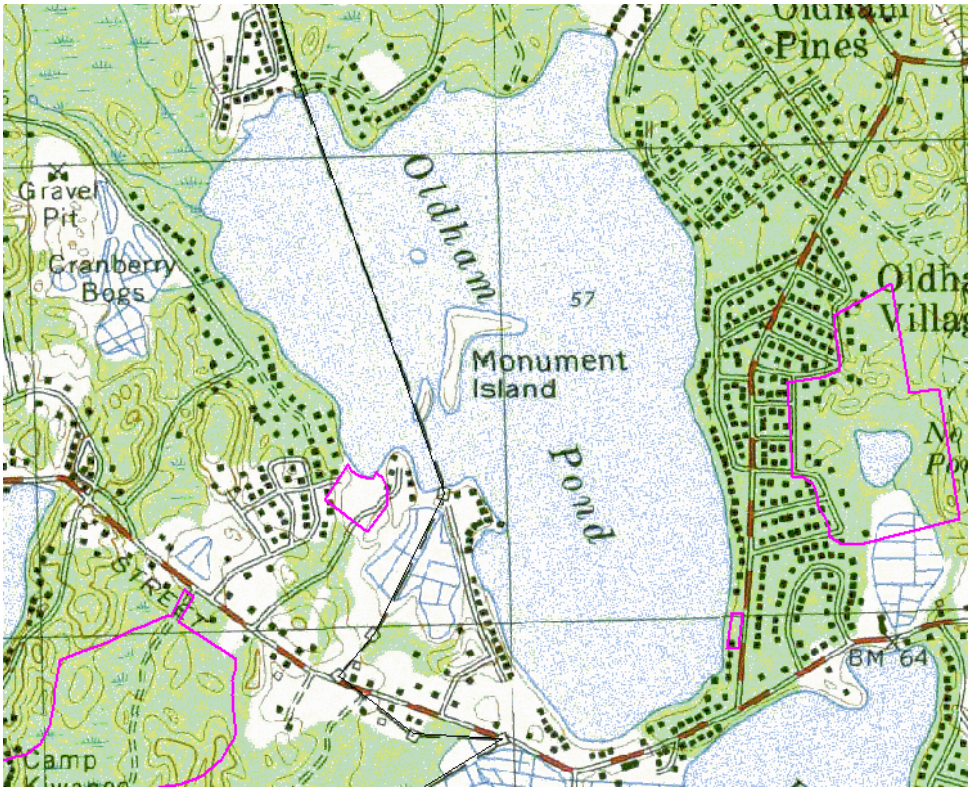
Oldham Pond is a 235-acre natural pond located in the towns of Pembroke and Hanson. Approximately 44 of Oldham Pond's 235 acres lie within the Town of Hanson. Oldham Pond receives water from Spring Brook, cranberry bogs and wetland areas and serves as the headwaters of Herring Brook; its outflow drains into Furnace Pond which is located immediately to the south. The Pond's 2.8 miles of shoreline is heavily developed with houses and a summer camp. The pond has three wooded islands, the largest of which is known as Monument Island, and numerous rocky shoals. Except for the islands and rocky shoal areas, much of the pond is uniform in depth with an average depth of ten feet and a maximum depth of 15 feet. The pond has a nominal elevation of 57 feet. The pond is used for boating, swimming, water-skiing, fishing, and skating activities. Boat access to Oldham Pond is provided by a town of Pembroke ramp located next to the town beach off Wampatuck Street, which is located to the north of Route 14 (Matakeesett Street) and Furnace Pond. Unofficial access is made in Hanson at the end of Arlene Street, through private property. This property has recently been sold and public access removed with the installation of a fence.

Figure 32: Oldham Pond

Oldham Pond is a natural Great Pond and under the Colonial Ordinances of 1641-1647 which allows anglers to pass over unimproved land on foot to gain access to the pond.

This water body is a public water supply (tributary to Furnace Pond MA94043). Oldham Pond is listed in Category 4c of the 2002 Integrated List of Waters due to impairment from exotic species (MassDEP 2003a). A MA DCR Lakes & Ponds Program grant was awarded in FY2000 to the Town of Pembroke for a study of the potential sources of phosphorous and recommendations for BMPs. This was an implementation action of the 1993 Diagnostic & Feasibility Study performed by BayState Environmental Consultants (BEC 1993). The results of the investigation suggested high total phosphorus concentrations (CEI 2000).

Figure 33: Magenta Polygons Denote Town Owned Property

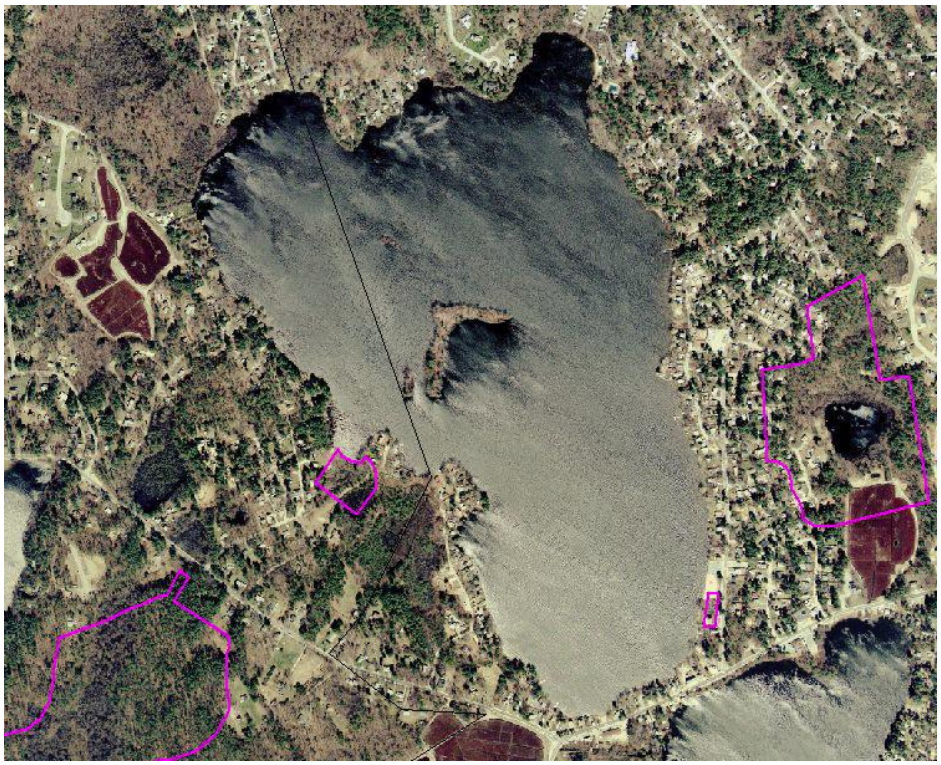


A second project was also implemented to remove sediment and another stormwater pollution (Appendix F, Project 01-19/319). The 1996 MassDEP synoptic survey found sparse surface plant cover throughout the pond that included the non-native wetland species *Lythrum salicaria* (Appendix C, Table C-1). Historic records indicate the pond was infested with *M. spicatum* (BEC 1993) so the *Aquatic Life Uses* is assessed as impaired.

There were no closures/postings during the 2002 or 2003 bathing beach seasons at the Pembroke town bathing beach and therefore the *Primary and Secondary Contact Recreational* uses are assessed as support (MDPH 2003 and MDPH 2004b). Camp Pembroke is authorized (MA0027006 issued in March 1981) to discharge a flow of 0.004 MGD (average monthly) of treated sanitary wastewater to Oldham Pond. The permit requires discharge limits for BODs, TSS, settle able solids, chlorine, fecal and total coliform

bacteria. EPA is currently investigating alternative wastewater treatment operations in place of a surface water discharge (Malone 2005).

Figure 34: Oldham Pond, 2001



Oldham Pond 2001 Aerial Photo MassGIS

Magenta polygons denote town owned property

Figure 35: Oldham Pond Today

The lake has no major tributaries. A small brook, known as Spring Brook and fed by wetlands west of the lake, is perennial. There are several small streams draining wetlands at the northwest and north of the lake, and which are fed by storm water. These streams are intermittent, depending on the amount of rainfall. The lake is largely groundwater-fed.

The lake has a small outlet stream connecting it to Furnace Pond in Pembroke, via a culvert under Mattakeesett Street. Because of this connection, Oldham Pond is a tributary to a public water supply; water is diverted from Furnace Pond periodically to Silver Lake as part of the city of Brockton water supply. In addition, Oldham Pond is habitat for an endangered species, the Eastern Pond Mussel, and surrounding wetlands are habitat to at least one endangered species. Cranberry agriculture does not impact this lake, as cranberry production in the adjacent bogs has been discontinued.

The lake is eutrophic and is frequently plagued by algae blooms and/or nuisance plants. Most of the watershed of the lake is developed, and the ages and density of septic systems are a concern. Since 2006, the lake has been tested and monitored by the Pembroke Watershed Association, which has sponsored and/or funded several treatments, including algaecide (2011 – 12) and alum (2013 – 15).

At Pembroke's initiative, a joint Pembroke-Hanson Oldham Pond Committee was formed 2-3 years ago to determine what Hanson can do to help remediate this lake. A proposal to install a storm-water BMP at the end of Arlene Street was funded in 2012, but the BMP has not been installed, as the proposed

location is private property. The committee has ceased to meet. Hanson residents interested in Oldham Pond might consider joining the Pembroke Watershed Association.

Figure 36: Maquan Pond, circa 1928

Maquan Pond (Great Pond)

Maquan Pond is a 45-acre natural pond located in Hanson just south of Route 14 and east of Route 58. The pond has an average depth of 12 feet and a maximum depth of 18 feet. The pond has a connection at the southern end to Indian Head Pond through a system comprising a corrugated pipe culvert inlet, natural stream bed system and an old cranberry bog enterprise now owned by the Town of Hanson. The pond has two youth camps, one of which is town-owned and operated, and a public swimming beach on the southeastern shore. The shoreline is generally high, wooded, and settled. The pond has 1.4 miles of shoreline which are somewhat developed with residences. The pond is generally clear with a sand and gravel bottom with silt in deeper areas and coves. The lake is used primarily for swimming, boating, and fishing during the summer months.

Maquan Pond is listed in Category 2 of the 2002 Integrated List of Waters (MassDEP 2003a). This segment supported some uses (*Secondary Contact Recreation and Aesthetics)* and was not assessed for the others. The Camp Kiwanee bathing beach had no closures/postings during either the 2002 or 2003 bathing beach seasons (MDPH 2003 and MDPH 2004b), so the *Primary and Secondary Contact Recreational* uses are assessed as support. No objectionable conditions were noted during the DWM 1996 synoptic survey.

This lake is in the North River watershed. It has no tributaries, although small wetland areas drain to it. Indian Head Brook begins as a small outlet existing and flowing at the Hanson town beach (Cranberry Cove) and flowing to Indian Head Pond via the Alton J. Smith Reserve "Smitty's Bog" Conservation Area (formerly Edgewood Bogs) when there is high water.

Figure 37: Maquan Pond, circa 1930s

The lake is a Great Pond; access is provided adjacent to the Town beach (Cranberry Cove).

The lake is becoming impaired but is not yet eutrophic. It contains areas of nuisance plants during the growing season, however. E. coli testing is performed by the Board of Health at Cranberry Cove. Algae counts are made during the swimming season. There is no other testing or monitoring to our knowledge.

Complaints about the water level have been received from abutters in the past; an accurate water level gauge is in the process of being engineered and installed. Water level is largely controlled by groundwater and precipitation. Previously, high water level was supposedly caused by a filled outlet pipe, due to sand intrusion from the Town beach. A small outlet jetty was installed in 2015 to reduce sand intrusion. A more natural outlet should be constructed away from Cranberry Cove. The town should consider restoring the outlet to a more natural condition.

Figure 38: Fern Island, Wampatuck Pond

View of Fern Island looking north - the Hanson Town Hall is shown on the lower left side of photo

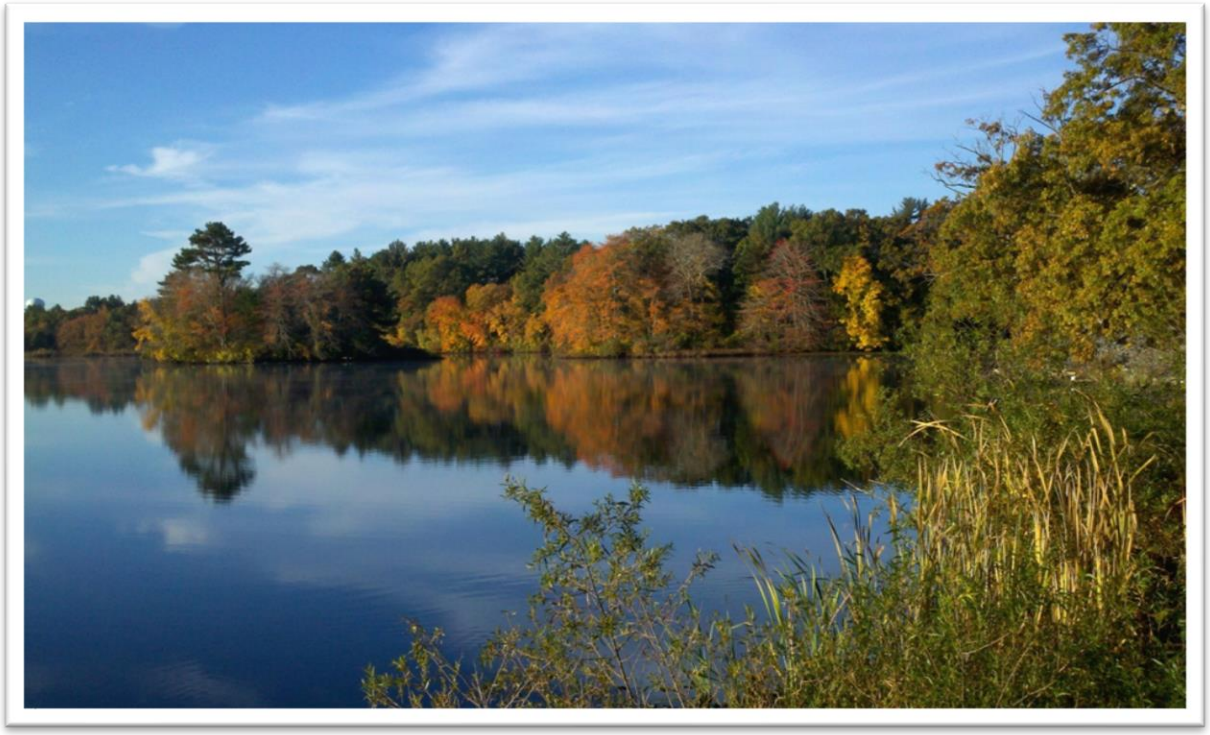
Wampatuck Pond (Great Pond/Town Hall Pond)

Wampatuck Pond, a man-made pond 63 acres in area lies just south of Route 58 in the center of town and provides the beautiful back drop for Hanson Town Hall. The shoreline is owned by public and quasi-public organizations and offers a concrete public boat launch that accommodates both hand-carried and small power boats with parking for 3 trailers and 6 cars on Rt. 58. Camp Wampatuck, a former youth camp, has been replaced by a residential subdivision, "Kings Landing", of 7 homes. The Hanson Town Forest is located adjacent to this subdivision on the east side. The former Plymouth County Hospital site has a small sliver of frontage on the west side of the pond, and Fern Hill cemetery located off High Street also borders the pond. The pond is used extensively for boating and fishing but is unsuitable for swimming.

Wampatuck Pond is listed in Category 5 of the 2002 Integrated List of Waters due to impairment from noxious aquatic plants (MassDEP 2003a). A MA DCR Lakes & Ponds Program grant was awarded in FY1998 for the Town of Hanson to control shoreline erosion by installing stormwater infiltration basins at the adjacent parking.

The 1996 MassDEP synoptic survey took an estimated Secchi Disk reading of <1.2 m and found a bright green algae bloom and sparse plant cover throughout the pond. During the non-point field inspection, there was no trash, but there was evidence of shoreline erosion (GeoSyntec 2002).

Figure 39: Wampatuck Pond looking south



Photographs by Laurie Muncy

Figure 40: Wampatuck Pond, Hanson, MA

In 2001 MassDEP surveyed the pond for the purpose of Total Maximum Daily Load (TMDL) development. Wampatuck Pond is a highly colored, shallow water body fed by cranberry bogs and wetlands. The surface water discharge from the former County Hospital, noted on topographic maps as upstream from Wampatuck Pond, ceased over 15 years ago (Gould 2005b).

In-lake total phosphorus and chlorophyll a concentration was high, and algae blooms were noted during each survey. Super-saturation occurred during two of the three surveys during the summer of 2001. The non-native aquatic macrophyte *Cabomba caroliniana* was also documented. Because of the presence of a non-native aquatic macrophytes, elevated total phosphorus and chlorophyll a, oxygen saturation and excess algal growth, the *Aquatic Life Use* is assessed as impaired. All the four Secchi disk depth measurements violated the bathing beach guidance of four feet. Because of the persistent and excessive algal blooms and poor transparency, the *Primary and Secondary Contact Recreational and Aesthetics* uses are assessed as impaired. Specialty crop productions (i.e. cranberry bog operations) are one source of nutrient-related impairments.

Figure 41: Wampatuck Pond Algae Blooms

Blue Green Algae Cyanobacteria Bloom

This lake is in the North River watershed. It is an impoundment formed by the dam for the mill. Indian Head Brook is the inlet tributary. The brook is also the outlet, at the dam on Liberty Street. The lake is probably eutrophic, as it suffers from algae blooms in the growing season. It is not tested or monitored to our knowledge, although DEP personnel have identified several problematic species of cryophyte (blue-green bacteria).

The public has access via the Town Hall parking lot and the boat ramp behind the Town Hall. The lake is used primarily for boating and fishing; it is not suitable for swimming.

The lake is very shallow, except on the eastern edge where the stream formerly ran. The Town of Hanson probably owns the land under the lake, although a deed search would be required to confirm this. If it were feasible to improve the ponds water sediment quality (e.g. suitable for alewife habitat) then it would be desirable to install a fish ladder.

Factory Pond

Factory Pond is a 51acre impoundment located on the Indian Head River at Winter Street at an elevation of 48 feet. The Factory Pond is in the North River watershed, on the border between Hanson and Hanover. It is an impoundment of the Drinkwater River formed by a dam near Winter Street behind the Country Ski shop (a former mill site).

Figure 42: Factory Pond Dam, prior to repair work

Photo by Rebecca Nehiley

Figure 43: Factory Pond Dam, during repair work

Figure 44: Factory Pond Dam, left embankment reconstruction

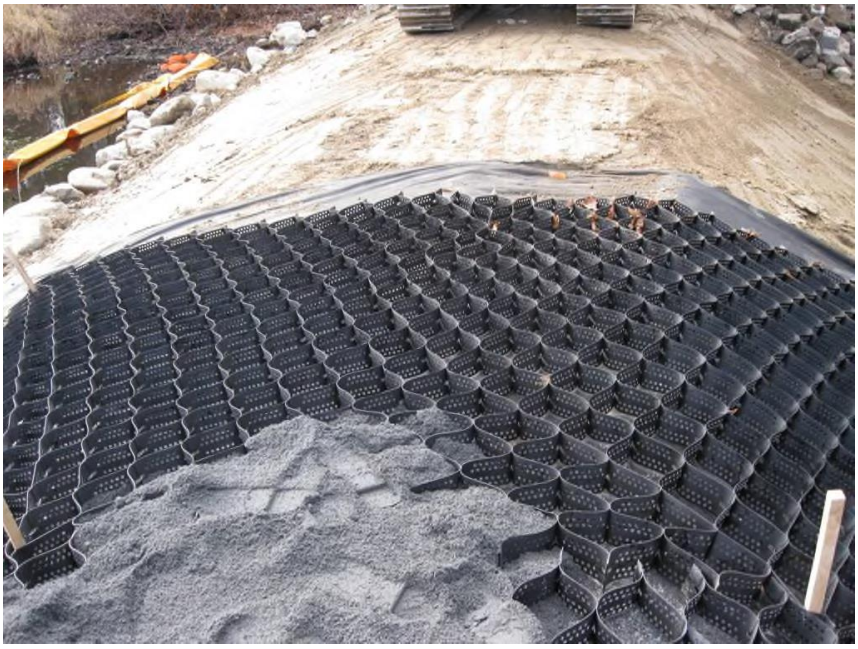


Figure 45: Dam crest from left abutment, 2015

Dam Crest from left abutment Construction Completed 2015

The site was formerly the location for a mill and had potential for a variety of recreational uses. The Commonwealth has issued a warning of extremely high mercury levels in the Pond and the Town has posted no fishing or swimming warnings. The pond's margins consist of residential, wooded and swamp areas.

The Factory Pond dam is jointly owned by the Towns of Hanson and Hanover Conservation Commissions. In 2016, the dam was repaired in accordance with an order from the Office of Dam Safety. Hanover and Hanson equally provided the necessary funding to successfully complete the project. The dam is now considered in full compliance.

There is no public access to the lake from the Hanson side, except by abutters and walkers, and by portage. Conservation land (The "Norcross Property") on King Street could provide access from the Hanson side for canoeing and kayaking if a pathway were built. The main access point currently is via a walkway from Waterford Drive on the Hanover side.

The lake sediment is polluted by mercury and heavy metals, and the lake and adjoining land on the Hanover side is highly contaminated by historic uses. The lake is posted to warn people not to eat the fish. More studies by DEP are ongoing.

Factory Pond is listed in Category 5 of the 2001 Integrated List of Waters due to impairment from metals (MassDEP 2003a). DWM conducted fish toxics monitoring in 1993 that resulted in a site-specific advisory by MDPH due to elevated levels of mercury (MDPH 2004a). The Former Nationals Fireworks, Inc. waste site is considered the likely source of mercury. The DWM 1996 synoptic survey found sparse plant cover including the non-native wetland species, *Lythrum salicaria* (Appendix C, Table C1). During the non-point field inspection, there was trash and evidence of shoreline erosion (Geosyntic 2002).

Figure 46: Burrage Pond Wildlife Management Area in winter

Photo by Rob MacDonald

Burrage Pond

Burrage Pond is a man-made pond, 202 acres in area, which is located on the Hanson/Halifax town line at an elevation of 57 feet. The pond was formally utilized for cranberry irrigation and its shoreline has wooded and swamp areas. It is owned and managed by the Mass. Dept. of Fish and Game.

This pond is in the Taunton River watershed on the border between Hanson and Halifax. It appears to be a man-made impoundment/reservoir of water in the Great Cedar Swamp formed by excavation in the days of cranberry agriculture. "Upper Burrage Pond" is in Hanson, while the "Lower Burrage Pond" is in Halifax. However, the entire area of the reservoirs and the surrounding swamp are owned and managed by the Mass. Dept. of Fish and Game. There do not appear to be any flowing inlets or outlet, and the pond may be entirely groundwater controlled. Public access is via walking. The area is state wildlife management area, which allows fishing, hunting, and trapping, as well as hiking and bicycling. The ponds trophic status is unknown but is probably moderately good.

Figure 47: Burrage Pond Wildlife Management Area Sandhill Cranes

Photo by Rob MacDonald

Chandler Mill Pond

Chandler Mill Pond, located on the Hanson/Pembroke town line, is a man-made 6-acre pond, with a maximum depth of five feet. Located at an elevation of 57 feet, this water body is not used for recreation, though its location on Stetson Brook makes it part of the historic Wampanoag Canoe Passage. It is surrounded by wooded and swamp areas as well as a major railway.

This pond is in the Taunton River watershed, on the border between Hanson and Pembroke. It is located east of the Cranland airport. Inlet tributaries are in Pembroke, and the outlet is Stetson Brook, which flows to Monponsett Pond East Lake in Halifax. The pond is an impoundment of Stetson Brook formed by a dam at the MBTA tracks. Ownership of the dam is unclear but may be a cranberry company. There is no public access. Cranberry agriculture uses this pond. If cranberry agriculture use is discontinued, this dam should be breached. The trophic status is unknown, and the pond is not tested or monitored to our knowledge.

Monponsett Pond (Great Pond)

Located on the Hanson/Halifax town line at an elevation of 52 feet, Monponsett Pond is a 528-acre natural water body. It has a maximum depth of 13 feet and an average depth of 9 feet. The pond is also used for boating, swimming, water-skiing, fishing, and skating. Residences, cranberry bogs, woods, and swamp areas exist on the shoreline. A study of Monponsett Pond revealed an increasing count of bacteria caused mainly from overflow and, income cases, direct discharge of sewage from bordering residential properties.

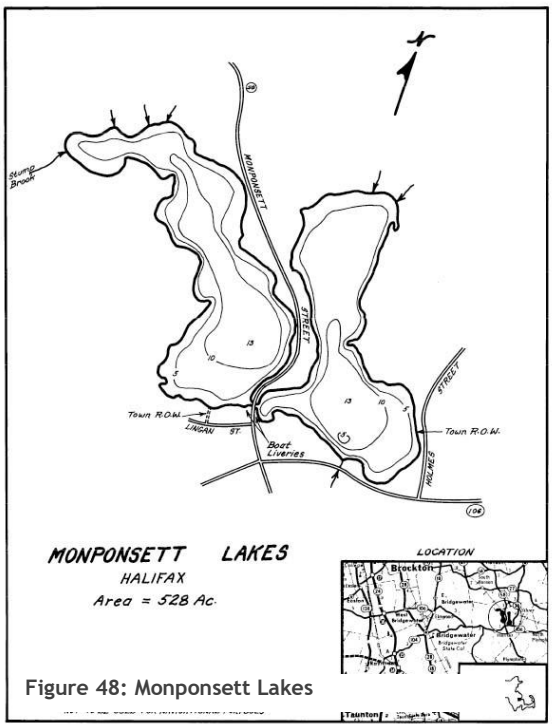


Figure 48: Monponsett Lakes

This lake, on the border of Hanson and Halifax, is in the Taunton River watershed; major tributaries are White Oak Brook (in Hanson), and Stetson Brook (originating in Pembroke). It is a public water supply, because water is periodically diverted to Silver Lake for the City of Brockton water supply.

It is a Great Pond, and access is via Halifax, at the State boat ramp on Monponsett Street. However, there is a "beach" on Ocean Ave that is monitored by the Hanson BOH for E. coli. The Mass. Dept. of Public Health and/or DEP have made algae counts throughout the summers of 2014 and 15. The lake is used for fishing, boating, and swimming.

The Halifax Town beach is on both West and East Lake; in recent years, the beaches have been periodically closed to swimmers due to high algae counts (Cyanobacteria – see additional photos on page 41).

This lake is eutrophic, perhaps hyper-eutrophic. The Monponsett Watershed Association was formed in 2012 in Halifax to address concerns with the lake condition. To date, most of their discussion has centered on the Brockton Water Department's use and control of East and West Monponsett Pond via a dam at the Stump Brook outlet and diversions of water to Silver Lake in Kingston. The Town of Halifax has treated the lake with alum in 2013-15.

The Monponsett area in Hanson and Halifax is a great challenge to environmental protection of the water resources in that area, including the lake, due to the density and ages of septic systems. In addition, there is cranberry agriculture on Stetson Brook (see Chandler Mill Pond, below), and White Oak Brook, and in Halifax on the southwest of West Lake. The bogs in Halifax draw water from West Lake and return some of it to the lake.

Figure 49: West Lake Monponsett

Figure 50: Algae Cyanobacteria blooms West Lake Monponsett Pond

Figure 51: Cyanobacteria blooms on West Lake - see left side of photo

Algae (Cyanobacteria) blooms West Lake Monponsett Pond

Reservoir

Locally known as "White Oak Reservoir", this is a man-made, 14-acre water body located just south of the intersection of Pleasant Street and South Street at an elevation of 60 feet. It is an impoundment of White Oak Brook. This cranberry bog irrigation pond is adjacent to a major roadway and is bordered by swamp areas.

Aquifer Recharge Areas and Water Supply

On July 6, 1990, the MA Department of Environmental Protection (DEP) promulgated revisions to its drinking water regulations. In response to the Drinking Water Regulations 310 CMR 22.21 for new sources, the Town of Hanson has progressively moved forward to develop new wells and delineate new aquifer and well protection districts. In August 2002, the Board of Water Commissioners imposed a ban on all new connections to the water system. This slowed new development until new wells could be developed. The ban was lifted in October 2005.

Wetlands and Streams

Wetlands are protected by federal, state, and local laws. Filling and draining wetlands, altering the soil, cutting vegetation, and developing land within 100 feet of wetlands or within 200 feet of a perennial stream are regulated and require approval from the Hanson Conservation Commission.

To better protect its wetlands and water resources, Hanson passed a Wetlands By-law in 1987 which was updated in 1989. Regulations were added in 2009 and these regulations were updated in 2014. The purpose of the By-law is to protect the wetlands, related water resources, and adjoining land areas in the Town of Hanson by controlling activities deemed by the Hanson Conservation Commission likely to have a significant or cumulative effect upon wetland values, including but not limited to the following: public or private water supply, groundwater, flood control, erosion and sedimentation control, storm damage prevention, water pollution control, fisheries, wildlife habitat, recreation, aesthetics, and agricultural values (collectively, the "wetland values" protected by this By-law).

Except as permitted by the Hanson Conservation Commission, no person shall remove, fill, dredge, build upon, or alter the following resource areas:

1. Within 100 feet of any freshwater wetland, marsh, wet meadow, bog, or swamp.
2. Within 100 feet of any bank, lake, river, pond, stream:
3. Any land under said waters.
4. Within 100 feet of any land subject to flooding or inundation by groundwater or surface water.

To help provide both long-term and improved protection of these valuable resources, the Wetlands By-law codified a 50-foot No Disturb Zone policy that the Commission has implemented since 2009, provided 100-foot protection to Certified Vernal Pools, and instituted an ability to impose fines. The Wetlands By-law, in conjunction with the River's Protection Act, results in the preservation of valuable corridors in the Town that link some of the larger natural areas. The Commission continues to enforce a 50-foot No Build Zone policy to better protect wetland resources.

Water protection corridors include the water resource itself, as well as the associated strips of natural vegetation around ponds and along both sides of rivers and streams. Trees and shrubs normally dominate these corridors in this region. These corridors provide several resources; clean water for drinking, swimming, and fishing; fallen logs and branches for critical fish habitat, shade to maintain cool water temperatures in summer, and leaf litter as a base of aquatic food webs. Water protection corridors help absorb stormwater and chemical runoff (fertilizers, pesticides, septic seepage, chlorine from pools, and other inorganic and toxic substances). The corridors also help reduce soil erosion, the slope and frequency of flooding, sedimentation, and loss of bottom fish habitat. They also serve as wildlife corridors.

Hanson is endowed not only with a rich and historical heritage, but also with a wealth of habitats. Rivers, many ponds, brooks, meadows, bogs, swamps, marshes, deciduous-coniferous woodlands, open sandplains, fields, hills, ledges, and acidic as well as some circumneutral soils.

Hanson contains many large swampy areas which may be extensively covered by water during the winter and spring months. During periods of excessive runoff, the swampy areas play an important role in flood prevention, acting as detention basins. Most of the streams in town have shallow, flat bottoms, composed of sand, gravel, or mud. Stream bank erosion appears to be minor throughout the area.

The Great Cedar Swamp constitutes an especially important resource for Hanson. Its water storage capacity acts to reduce flood potential and release runoff slowly. This area sustains a wide variety of wildlife, and groundwater along its margins has been identified as a future drinking water supply if needed and if iron and manganese removal is feasible. It flows south into Burrage and Monponsett Ponds in Halifax, and is bordered on the north by Main Street, on the east by Pleasant Street, and on the west by Elm Street.

Vegetation

The plant cover of any landscape is one of the most important landscape characteristics of any environment, providing benefits such as soil stabilization, water quality protection, and habitat for countless wildlife species. Vegetation may often provide a buffer zone between otherwise incompatible land uses, as well as supporting its own set of recreational opportunities such as walking, wildlife viewing, and providing open space for young people to enjoy and appreciate nature. Hanson contains a rich variety of habitats such as woodlands, wetlands, fields, bogs, and orchards, collectively host a rich diversity of plant species commonly found throughout southeastern Massachusetts, including several uncommon species typically associated with Atlantic white cedar swamps.

Forests

There are five major forest communities represented in the town: oak, white pine, red maple, white pine/oak, and white pine/ red maple. In addition, the town supports pockets of Atlantic white cedar, and patches of American beech, black birch, and American holly occur where appropriate soil and other conditions exist.

- The oak forest consists of 80 percent oak species and is found primarily on sandy soils. The primary species are scarlet, black, and white oaks.

- The white pine/oak forest is at least 70 percent white pine and oak, with one or the other usually predominating. Other species such as pitch pine in a few locations, red maple and other hardwoods and woody shrubs may often be associated with this forest type. This forest generally grows where the soil is well-drained, or even on some excessively drained soils.
- The pine forests consist of at least 80 percent white pine. White pine is usually found in small, relatively pure stands that often contain at least a few marketable trees. White pine prefers to grow on well-drained or excessively drained soils.
- The pine/maple forest is typically at least 70 percent white pine and red maple with either species potentially dominating. This forest association prefers to grow on muck or other low, poorly drained, or wet soils.
- The maple forest is predominantly pure red maple and is nearly always found growing on muck and other low, poorly drained, or wet soils.

Hanson also has a large amount of open space that can be classified as wetland, and vegetation in these areas typically includes cattails, and other emergent species such as bulrush, water willow, water lily, and arrowhead, as well as a wide variety of grasses and sedges, button bush, several species of willow, cranberries, sundews, and several species of wild orchids.

Invasive species are also found in the Hanson forest. Oriental Bittersweet, glossy buckthorn, black locust, bush honeysuckle, are invasive species that negatively impact the quality of the forest and its ability to support wildlife, they degrade habitat and biodiversity. Other invasive species include multi-flora rose, autumn olive, and burning bush.

Public Shade Trees

The Town of Hanson Rules and Regulations of the Planning Board Governing the Subdivision of Land Section 7.9 requires street trees not less than twelve (12) feet in height and of a species approved by the Board shall be planted on each side of every street, three trees per lot, in the subdivision wherever in the opinion of the Planning Board existing woodlands or suitable individuals are not retained. Trees shall be located outside the exterior street lines and at such distance there from and at such spacing as the Board shall specify. Willows will not be permitted. All street trees shall be guaranteed until the road is accepted.

The Town Tree Warden manages street trees, or trees within the streetscape, and within recreational and public spaces. It is envisioned that a certain number of trees be planted annually from a mix of preferred species (generally native) to help diversify the native population.

Fisheries and Wildlife

Figure 52: Osprey, photo by Rob MacDonald

Hanson's wildlife consists of a robust variety of mammals, reptiles, amphibians, birds, fish, and invertebrates. A number of these organisms are species that have adapted to an increasingly suburban environment. Obvious examples of this phenomenon include gray and red squirrels, Eastern chipmunks, woodchucks, coyotes, white-tailed deer, wild turkeys, Cooper's hawks, and a large variety of songbirds; 85+ species of which annually breed in the community. In addition to the mammals listed above other species regularly occurring in town are opossum, raccoon, striped skunk, red and gray fox, mink, long-tailed weasel, fisher, river otter, muskrat, southern flying squirrel, Eastern cottontail, and several species of mice and shrews.

Old fields and other early succession habitats support a diverse variety of species, some of which are seriously declining in New England as these ephemeral habitats gradually succeed to forests. Typical of these habitats are cottontail rabbits, ruffed grouse, and ring-necked pheasants in areas where they are periodically released for hunting. Songbirds frequenting such habitats include Eastern bluebird, brown thrasher, blue-winged and prairie warblers, Eastern Towhee, and field sparrow. Among the more important and wide-spread predators in Hanson are coyote, red fox, Cooper's, red-shouldered, and red-tailed hawks, and Eastern screech and great horned owls. Fish eating birds such as ospreys and bald eagles are being sighted with increasing frequency near large water bodies.

Over the years, Hanson's residents have secured large tracts of open space which serve as habitat for many species of wildlife and which are used for wildlife compatible outdoor recreation. Because of the extent and diversity of wildlife habitat, wildlife is abundant, and populations are healthy.

White-tailed deer numbers are high in many parts of Town, as are numbers of many of the state's most adaptable mammals including coyotes, raccoons, and beaver. Where deer populations are high, some residents enjoy viewing them. Other residents bristle at the damage to ornamental plantings and the

increase in tick-borne diseases, and concerns over impacts to forest health from excessive deer browse on native flora.

Biologists recommend holding deer population numbers at 8-10 per square mile and seek to manage deer numbers through hunting. Deer hunting opportunities in Hanson are abundant although limited by the 500-foot setback regulation. Wild canids – coyote, red fox, and grey fox – are well established in Hanson and travel extensively in open space, through yards, and along roads. Family packs of coyotes have been reported by residents.

Fishers, relatively large, dark-colored members of the weasel family, are widespread in Hanson. The abundance of large white pine trees for denning and the large number of squirrels for food may contribute to their success. Other weasel family members present in Hanson are mink and long-tailed and short-tailed weasels.

The eastern cottontail rabbit population fluctuates considerably. Raccoons are frequently seen, as are opossum and striped skunk; all these species have adapted well to the suburban landscape found in Hanson. Beaver are at home in many wetlands and ponds. If their food supply runs out, they will leave and return when it is back up.

Figure 53: Burrage Wildlife Management Area Osprey

Osprey Photos by Rob MacDonald

Mature forest areas provide habitat for fisher, wild turkey, and white-tailed deer; however, these species have also become well-adapted to survive in fragmented suburban areas as well. Low-lying wetlands and pond habitats provide nesting and feeding areas for Canada Geese, Mallards, American black ducks, wood ducks, and a great variety of other migratory waterfowl during appropriate seasons. Cranberry bogs and their reservoirs and Atlantic white cedar swamps offer habitat for somewhat reclusive mammals such as the snowshoe hare (introduced, but probably no longer surviving in Hanson), muskrat (reservoirs), river otter, and mink. Many species of turtles (e.g., painted, spotted, musk, snapping), and several species of frogs, salamanders and snakes are relatively common in appropriate habitats.

Hanson ponds are home to many fish species such as Largemouth Bass, Chain Pickerel, Yellow Perch, Calico Bass, Bluegill, White Perch, Brown Bullhead (Hornpout), Pumpkinseed Sunfish, and Golden Shiner. However, Hanson may have the opportunity to someday reintroduce anadromous fish to its waterways. This type of fish lives most of its life cycle in saltwater but makes its way upstream to annually spawn in freshwater. The Indian Head Brook is a tributary to the Indian Head River, which is unique in that it provides one of the few American Shad sport fisheries in coastal Massachusetts. Most of the fishery occurs below the West Elm Street dam in Hanover on the Pembroke line, but a fish-way at that location passes shad as well as river herring, and a population has been established in the upper river. A deteriorated dam at Cross Street in Hanover (which becomes State Street in Hanson) prevents further upstream movement, but if it were removed, fish could feasibly swim up the Indian Head Brook in Hanson to Wampatuck Pond to spawn.

Hanson does have one thriving catadromous fish species, which lives in an opposite manner; the American Eel lives most of its life in fresh water but migrates annually to spawn in the ocean. This species can survive and move on land to avoid dams and other impoundments. Eel can be found in most of Hanson's ponds and streams.

Wildlife Corridors

Hanson is fortunate to have several medium- to large-sized blocks of quality wildlife habitat. Some are upland, but the largest areas are dominated by wetlands that are connected by natural brooks and streams. These waterways and their margins form corridors between major swamps (Great Cedar Swamp in South Hanson, Little Cedar Swamp in North Hanson) and other natural areas that are strung like green beads all along Hanson's major streams. The overall result is a network of linked habitats that enable larger mammalian species, including White Tail Deer, Red Fox, Gray Fox, Eastern Coyote, Muskrat, Mink, Fisher, Otter, and Beaver, to establish viable home territories and travel considerable distances as they feed, seek mates, or disperse to new territories. One specimen of the state's growing moose population was recently spotted in Raynham, just 15 miles way, leading some observers to speculate that in the future Hanson's wildlife corridors may be traveled by this species as well. Photos have been taken of black bear tracks in the snow, no doubt from a young individual animal seeking a home territory.

Wild Turkey and other non-mammal species, especially turtles, frogs, and salamanders during the spring breeding season, also depend on these travel routes. Live sightings, tracks and (sadly) road kills show that these wildlife corridors cross highways where waterways intersect Route 27 (Main Street), Route 14 (West Washington Street, County Road, and Maquan Street), Route 58 (Whitman, Liberty, Indian Head and Monponsett Streets), and other paved roads. As the Town continues to develop, it will be increasingly important to make land use choices that protect the rich biodiversity that currently exists in Hanson. For more information on Corridors and Greenways, see Section 7.

The Massachusetts Natural Heritage & Endangered Species Program and The Nature Conservancy's Massachusetts Program developed *BioMap2* in 2010 as a conservation plan to protect the state's biodiversity. *BioMap2* is designed to guide strategic biodiversity conservation in Massachusetts over the next decade by focusing land protection and stewardship on the areas that are most critical for ensuring the long-term persistence of rare and other native species and their habitats, exemplary natural communities, and a diversity of ecosystems.

Components of *BioMap2:* ***BioMap2*** **Core Habitat** (see Appendix for BioMap 2 Core Habitat) identifies specific areas necessary to promote the long-term persistence of rare species, other Species of Conservation Concern, exemplary natural communities, and intact ecosystems. *BioMap2* **Critical Natural Landscape** was created to identify and prioritize intact landscapes in Massachusetts that are better able to support ecological processes and disturbance regimes, and a wide array of species and habitats over long time frames. *BioMap2* uses specific data and sophisticated mapping and analysis tools to spatially define each of these components, calling on the latest research and understanding of species biology, conservation biology, and landscape ecology.

Wetland Cores: *BioMap2* includes a statewide assessment of the most intact wetlands in Massachusetts. This analysis identified the least disturbed wetlands within undeveloped landscapes – those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are mostly likely to support critical wetland functions (i.e. natural hydrologic conditions, diverse plant, and animal habitats, etc.) and are most likely to maintain these functions into the future. High-quality wetlands were identified using an assessment of Ecological Integrity. This analysis combined individual wetland types (e.g., shrub swamps, forested wetlands, marshes, bogs) into contiguous wetland complexes, selecting only those greater than 10 acres to prioritize long-term ecological function. Wetlands larger than 10 acres account for about 303,000 acres in Massachusetts.

Achieving Strategic Conservation with *BioMap2:* In *BioMap2*, the Core Habitat and Critical Natural Landscape are complementary and overlapping and were delineated based on separate criteria. Each represents a different scale of biodiversity in Massachusetts, yet the protection of both is important to conserve the full suite of biodiversity in the state.

Wetland Core Habitats in *BioMap2* represent the areas in which land protection and stewardship will contribute most significantly to the conservation of specific elements of biodiversity.

Upland Buffers of Wetland Cores, if protected, will help minimize impacts from development on natural wetland systems, allow connectivity among habitats and provide area for natural processes which result in a wider diversity of habitats and species. Both land protection and stewardship may be necessary to protect the biodiversity represented by the *BioMap2* Wetland Cores and their Upland Buffers. For example, invasive species control may be necessary to maintain the integrity of the biodiversity of the Wetland Core, while land protection may be necessary to prevent land clearing and runoff from the adjacent Upland Buffers into the Wetland Cores.

Species of Conservation Concern, Priority and Exemplary Natural Communities, and Other Elements of Biodiversity in Hanson

Mussels

Tidewater Mucket, (*Leptodea ochracea*), SC

Eastern Pondmussel, (*Ligumia nasuta*), SC

Insects

Damselflies

New England Bluet, (*Enallagma laterale*), Non-listed SWAP species

Dragonflies

Spine-crowned Clubtail, (*Gomphus abbreviatus*), SC

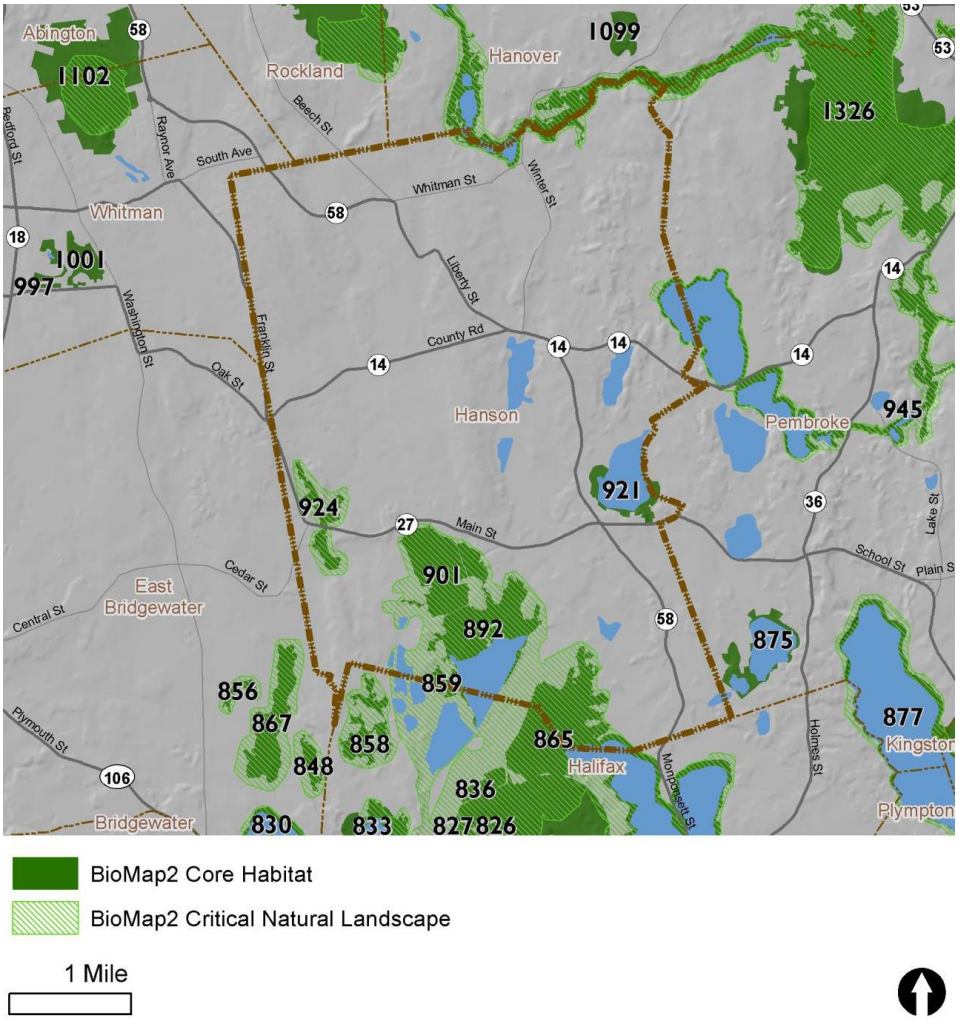
Umber Shadowdragon, (*Neurocordulia obsoleta*), SC

Fishes

Bridle Shiner, (*Notropis bifrenatus*), SC

SC = Special Concern

Figure 54: BioMap2 Core Habitat



Elements of *BioMap2* Cores

This section lists all elements of *BioMap2* Cores that fall *entirely or partially* within Hanson. The elements listed here may not occur within the bounds of Hanson.

Core 859 Wetland Core

Core 865

Wetland Core

Aquatic Core

Species of Conservation Concern

Eastern Pondmussel *Ligumia nasuta* SC

Tidewater Mucket *Leptodea ochracea* SC

Umber Shadowdragon *Neurocordulia obsoleta* SC

Eastern Hognose Snake *Heterodon platirhinos* Non-listed SWAP

Eastern Pondmussel Ligumia nasuta SC

Core 892

Wetland Core

Core 901

Wetland Core

Core 921

Species of Conservation Concern

New England Bluet *Enallagma laterale* Non-listed SWAP

Core 924

Aquatic Core

Species of Conservation Concern

Bridle Shiner *Notropis bifrenatus* SC

Core Habitat Summaries

Core 859

A 26-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant, and animal habitats, etc.) and are most likely to maintain these functions into the future.

Core 865

A 1,596-acre Core Habitat featuring Wetland Core, Aquatic Core, and Species of Conservation Concern.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant, and animal habitats, etc.) and are most likely to maintain these functions into the future. The 648-acre Wetland Core is among the largest 20 percent of Wetland Cores statewide and in this ecoregion.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

Eastern Pond mussels, large freshwater mussels, are most abundant in southeastern Massachusetts. They inhabit streams, rivers, and small to large lakes and ponds; they show no preference for substrate, depth, or flow conditions. As sedentary filter feeders they are vulnerable to the alterations of water bodies.

In Massachusetts, the Tidewater Mucket, a freshwater mussel, prefers natural coastal freshwater ponds of several acres in size with clear, clean water and sandy substrates. It almost always occurs near the seacoast.

Tidewater Mucket Leptodea ochracea SC

Umber Shadow dragons are dragonflies that are found on lakes with rocky shores and medium to large rivers that have relatively little aquatic vegetation. Shadow dragons fly only at dusk when they feed and mate in a frenzy of activity.

Eastern Hognose Snakes are shy, slow-moving, thick-bodied snakes that specialize in feeding on toads, although they eat other amphibians or other small animals as well. They require sandy soils in their habitat; both wooded and open habitats are known.

Core 892

A 306-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant, and animal habitats, etc.) and are most likely to maintain these functions into the future.

The 306-acre Wetland Core is among the largest 20 percent of Wetland Cores statewide and in this ecoregion.

Core 901

A 165-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant, and animal habitats, etc.) and are most likely to maintain these functions into the future.

The 165-acre Wetland Core is among the largest 20 percent of Wetland Cores statewide.

Core 921

A 121-acre Core Habitat featuring a Species of Conservation Concern.

New England Bluets are damselflies whose habitat includes coastal plain ponds, open water in swamps, and other ponds and lakes. It occurs only in the northeastern United States and is most common from eastern Massachusetts into Connecticut.

Figure 55: New England Bluet

Core 924

A 56-acre Core Habitat featuring Aquatic Core and a Species of Conservation Concern.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

Bridle Shiners are small (<5 cm) minnows that are found in clear water in slack areas of streams and rivers and are also found in lakes and ponds.

Rare Species

Conservationists, naturalists, students, and other interested citizens have inventoried hundreds of species of plants, animals and birds found in Town. According to the Massachusetts Natural Heritage and Endangered Species Program, the only endangered state-listed species known to be found in Hanson is the Spine-Crowned Clubtail dragonfly/damselfly. However, there are several species listed as Special Concern: New England Bluet Damselfly, Bridle Shiner (a fish), Wood Turtle, Eastern Box Turtle, and the Plymouth Gentian (a flower). The Spotted Turtle was removed from the list of "Species of Special Concern" in 2007.

Figure 56: Damselfly

Figure 57: Spotted Turtle

Vernal Pools

Vernal pools are temporary bodies of fresh water that provide critical habitat for many vertebrate and invertebrate wildlife species. "Vernal" means spring, and indeed, many vernal pools are filled by spring rains and snowmelt, only to dry up during the hot, dry months of summer. However, many vernal pools are filled by the rains of autumn and may persist throughout the winter. Vernal pools are quite often exceedingly small and shallow; vernal pools that support rich communities of vertebrate and invertebrate animals may measure only a few yards across. However, vernal pools of several acres occur throughout Massachusetts.

Vernal pools constitute a unique and increasingly vulnerable type of wetland. Vernal pools are inhabited by many species of wildlife, some of which are totally dependent on vernal pools for their survival. Vernal pools do not support fish because they dry out annually or at least periodically. Some may contain water year-round but are free of fish because of significant drawdowns that result in extremely low dissolved oxygen levels.

A vernal pool is defined as a depression in the land with no inlet or outlet where water is confined and persists at least during the spring and early summer of most years, where there are no fish, and where various species depend for all or part of their life cycles. Some species such as wood frog, spotted salamander, and fairy shrimp are considered obligate vernal pool species, meaning that they cannot survive without vernal pools. Nine vernal pools in Hanson have been officially certified by the Natural Heritage and Endangered Species Program, and efforts are underway to certify more. This certification will ensure the protection of these pools and appropriate buffer areas in perpetuity.

Figure 58: Certified Vernal Pools

ID Number	Location	Date Certified
3457	22 Industrial Blvd	06/29/2004
4312	123 Phillips St	09/08/2006
4313	185 Phillips St	09/08/2006
4818	Valley Forge	08/07/2008
5008	Catherine Road	01/22/2009
5009	Crooker Place	01/22/2009
5010	Elm St	01/22/2009
6637	Webster Billings	09/14/2011
6638	Webster Billings	09/14/2011

The Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00), the Massachusetts Surface Water Quality Standards (314 CMR 4.00) used to administer section 401 of the federal Clean Water Act, the Massachusetts Environmental Code: Title 5, and the Forest Cutting Practices Act regulations all provide protection to vernal pools that have been officially certified. The regulations for both the Wetlands Protection Act and Forest Cutting Practices Act also provide protection to vernal pools that

have not been certified if their occurrence is adequately documented during permit review. Protection under any of these laws requires the following:

1. The vernal pool occurs in an area subject to the jurisdiction of the regulations; and
2. The activities proposed are regulated.

The Massachusetts Wetlands Protection Act regulations protect certified vernal pools up to 100 feet beyond the boundary of the pool (referred to as the "vernal pool habitat"), by preventing alterations which would result in the reduction of the wildlife habitat value of the certified pool. A certified pool is not automatically protected by these regulations, though. Certified vernal pools must occur within a resource area that comes under the jurisdiction of the Act before they receive protection. Similarly, the 100 feet around the vernal pool must also fall within a resource area, and not in non-jurisdictional upland or the buffer zone of a resource area to be protected under the Act.

Environmental Challenges

1. *Climate Change*

Global climate models indicate a high likelihood of changes in New England in the decades immediately ahead in the form of hotter summers, warmer winters, rising sea levels and sea water temperatures, more frequent flooding, and change in precipitation patterns both in frequency and intensity. These climatic changes are having effects upon natural and human communities across the state (Rao, 2011).

Changes in precipitation, winter snowpack and snowfall, and extreme storm events have increased base and average stream and river flows in many parts of New England (Climate Action Tool, a). Increased intensity of rain events can increase the delivery of excess nutrients and pollutants to downstream and coastal habitats. Fluctuations in rainfall seasonally have effects upon stream and river flow volume and can affect groundwater and aquifer recharge, and the frequency and severity of flooding events (Rao, 2011).

Temperature changes are leading to a shifting of seasons. Spring is arriving earlier, and fall is changing later, resulting in longer summers and milder winters. This has far reaching implications on plant and wildlife as species have adapted to rely on climatic signals for almost every aspect of their survival in Massachusetts including migration, hibernation and emergence, reproduction, and development (Climate Action Tool, b).

Impacts of climate change on humans include health and safety issues, and disruption to infrastructure and natural systems we all depend upon.

Climate projections point towards these changes continuing to increase for the foreseeable future. Implementing strategies for adapting to and mitigating these changes are integral to the longevity and sustainability of Hanson. Strategies often can achieve multiple benefits, offering adaptive and mitigation values, such as aggregation and protection of large parcels of core critical habitat or creating open spaces where surface and stormwater can be directed and allowed to infiltrate. Suggested actions in the seven-year action plan (see Section 9) aim to help Hanson adapt to and mitigate climate change whenever possible.

2. *Agriculture*

Though beneficial in many ways, agriculture presents its own challenges when viewed in the context of impacts to local wildlife, habitats, and water resources. Conventional farming methods can lead to soil erosion and often require high amounts of pesticide and nitrates, both leading causes of groundwater contamination. Inefficient irrigation systems can affect water security. Fences fragment habitat and can be dangerous for certain species. Livestock have the potential to over-graze and impact water supply through fecal waste if not effectively managed. Fortunately, Hanson farms are managed responsibly to minimize negative impacts on the environment.

3. *Erosion*

Given the town's moderate slopes and prevalent tight glacial till soils, erosion is not a major problem in Hanson. Construction sites or areas of disturbed and exposed soil can be prone to minimal erosion.

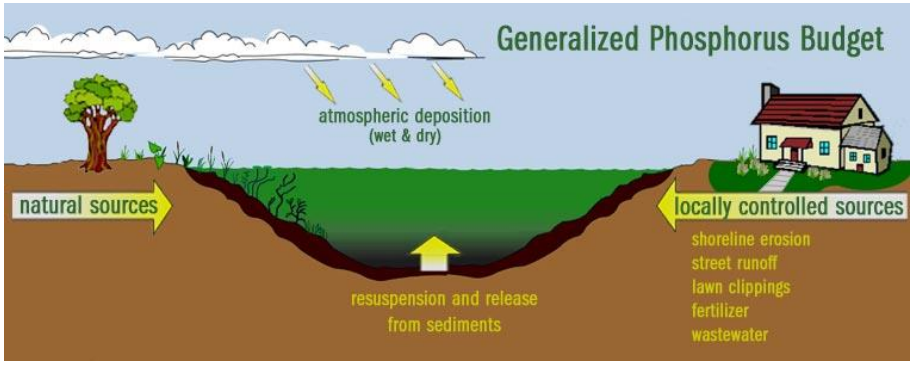
4. *Sedimentation*

Sedimentation is caused by the deposition of particles that have been eroded by wind or water. Sediment that is deposited in a waterbody can cause high turbidity, loss of depth, and cover fish spawning areas. Often this deposition of soil materials adds excess nutrients to the water body, leading to eutrophication and algal blooms (MassDEP, NPS manual).

Improperly managed agricultural activities may impact surface water by contributing nutrients, pesticides, sediment, and bacteria, or by altering stream flow. Fertilizer and pesticide use, tillage, irrigation, and tile drainage can affect water quality and hydrology. Improper fertilizer management can contribute nutrients from excessive use of either commercial fertilizer or manure, improper application methods or timing, or inadequate BMPs to minimize leaching or runoff. Nitrogen moves easily as nitrate, dissolved in surface water runoff, drain-tile flow, or seepage to ground water. Phosphorus is generally bound to soil particles and may be carried to surface water through erosion or in solution. Nutrients cause excessive plant and algae growth in lakes and ponds.

The Oldham, Monponsett and Wampatuck ponds all suffer from algae blooms partly from sedimentation. Monponsett Pond, located in the towns of Halifax and Hanson, Massachusetts, is a significant ecological, historical, and recreational resource as well as an important supplementary water supply for the nearby City of Brockton. The 528-acre pond is bisected by Route 58, which splits the water body into two basins – East and West – directly connected by a small culvert in the Southern portion of the pond. Both basins are highly developed with residential homes and receive inputs from a suburban watershed.

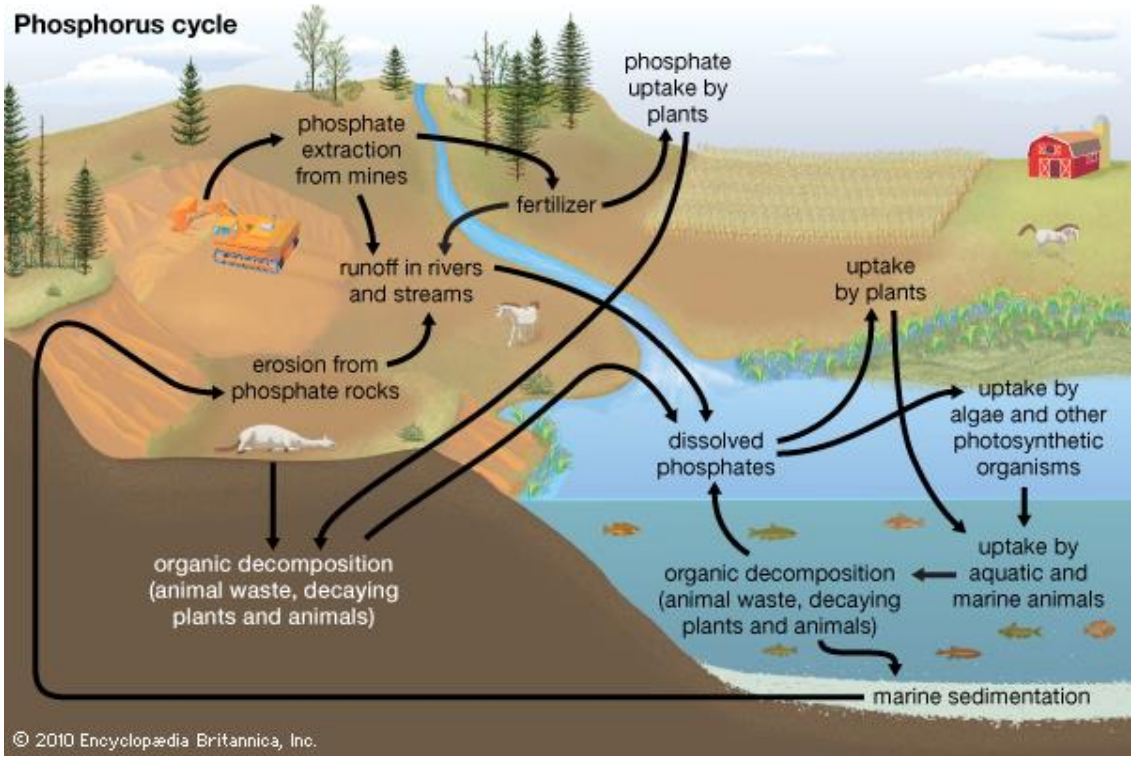
Figure 59: Generalized Phosphorus Budget



Monponsett Pond has been heavily impacted using its waters and watershed, and both basins have been placed on the Massachusetts Integrated List of Waters (303(d) list). Since 2010, the Eastern basin has been categorized as a 4c water body for presence of exotic species and a Total Maximum Daily Load (TMDL) was published in 2007 for high concentrations of mercury. The Western basin appears on the 2010 303(d) list as a category 5 water body for nutrients, noxious aquatic plants, turbidity, and exotic species.

Excess sedimentation is a storage point and a creator of phosphorous. Phosphorous is a main element for undesirable algae growth. Both basins have also been subject to extensive nuisance algae blooms (specifically cyanobacteria – blue/green algae) for many years. During recent summers, these blooms prompted the frequent closure of the Western basin to swimming and boating. Algae testing has been carried out by both the Massachusetts Department of Public Health (MADPH) and Massachusetts Department of Environmental Protection (MADEP) throughout the summer months. MADPH also conducted analysis of water quality, including total phosphorus. These results show a definite correlation between concentration of total phosphorus and total cell count in the Western basin throughout the summer.

Figure 60: The Phosphorus Cycle



5. *Chronic Flooding*

Hanson has experienced occasional flooding in low lying areas after a major rain event and flooding poses a significant threat in poorly drained areas.

As the sea level rises and more intense rainfall events are projected for Massachusetts flooding may become a more regular event and that the extent of these events may exceed current trends. Protecting areas that can mitigate flooding through absorption and ground infiltration and minimizing the development of more impermeable surfaces throughout Hanson, will help reduce the threat of flooding.

6. *Forest and Development Impact*

One of our major challenges to our Forest is the further development of land both for residential uses and, recently, for solar farms. Large parcels forested land is destroyed to install solar panels. This practice will greatly impact our forestry land. Other challenges include the spread of invasive species of plants and insects resulting in the loss of forest components.

7. *Invasive Species*

Exotic non-native invasive plant and insect species have become a great concern for the Town of Hanson. These species threaten the overall and long-term health of many of Hanson's rich natural habitats because they outcompete native species for precious resources and, in extreme cases, eliminate native species from those habitat areas. On a priority basis, site by site, we are attempting to eliminate the invasive species. Of greatest concern are those invasive species that reside in some of the town's water bodies. These species degrade the ecological health of these systems and limit recreational use. Hobomock Pond is occasionally closed for recreation to an abundance of the aquatic plant hydrilla (*Hydrilla ssp).* Efforts to eradicate the persistent weed have lasted for years with varying degrees of success. Other problematic aquatic and riparian species include common reed (*Phragmites australis),* purple loosestrife (*Lythrum salicaria)* fanwort (*Cambomba spp)* and veriable milifoil (*Myriophyllum heterophyllum)* (Glover, 2012).

8. *Ground and Surface Water Pollution*

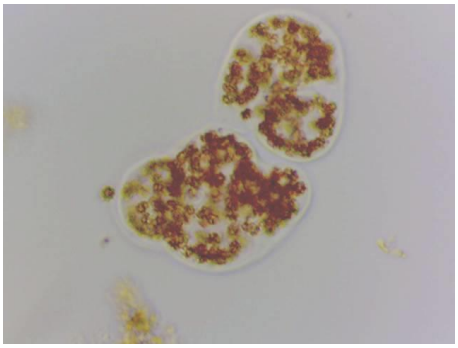
Perhaps Hanson's biggest environmental challenge is negative impact to surface and ground water resources. Many contributors to the problem are not unique to Hanson; lawn fertilizer run off, cranberry/farm runoff, and failing septic system leaching fields are a problem in many communities. Evidence of water quality degradation can be plainly seen in a massive algal bloom every summer at the Wampatuck Pond at Town Hall and problems are suspected in Maquan Pond as well.

In fact, five water bodies in Hanson are listed on the 2006 MA Department of Environmental Protection "*Category 5 Waters: Waters Requiring a TMDL."* Section 303 (d) of the Federal Clean Water Act and the EPA's Water Quality Planning and Management Regulations (40 CRD Part 130) require states to develop "Total Maximum Daily Loads (TMDLs) for waterbodies that are not meeting designated uses under technology-based controls. The TMDL process establishes allowable loads of pollutants that a water body can receive and still meet the designated use.

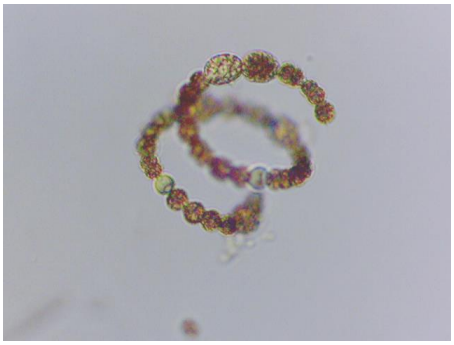
In Hanson, these water bodies are:

1. ***Factory Pond*** for heavy metal contamination
2. ***Indian Head River*** for metals, nutrients, and organic enrichment / low dissolved oxygen
3. ***Wampatuck Pond**** for nutrients, organic enrichment / low dissolved oxygen, noxious aquatic plants, and turbidity
4. ***Monponsett Pond**** for nutrients, noxious aquatic plants, and turbidity
5. ***Shumatuscacant River*** for siltation, organic enrichment / low dissolved oxygen, other habitat alterations and pathogens

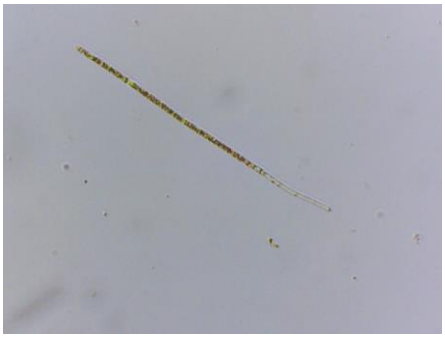
**Wampatuck Pond and Monponsett Pond both have been found to have exotic species which can contribute to environmental degradation if left unchecked.*



Microcystis wesenbergii



Anabaena spiroides



Aphanizomenon flos-aquae

Bacteria Photos provided by Dr. George Zoto MassDEP

Figure 61: Shumatussacant River at West Washington Street

Hanson's waterways also receive negative contributions from neighboring towns. Poor Meadow Brook is downstream of the Ridder Golf Course in East Bridgewater. The Drinkwater River, Indian Head River and Factory Pond are all impacted by the Rockland wastewater treatment plant. Heavy metal contamination is a problem in some areas from the military munitions manufacturing that occurred over the years in West Hanover. All these issues result in the need to create regional watershed-wide solutions that improve all water resources.

9. Off-Road Vehicle Use

The unregulated use of Off-Road Vehicles (ORVs) in Hanson causes aesthetic and noise problems as well as negative impacts to sensitive resources. People come from all over the region to use ORVs in the Burrage Pond Wildlife Management Area, even though use is prohibited. Enforcement is attempted by the MA Environmental Police, whose regional office is located within the BPWMA. But deep tire marks can be seen in trails in various other town-owned properties where unregulated use occurs, and steep hillsides have been severely eroded to the point where they will not recover. At a Special Town Meeting held in October 2016, the town voted to amend Hanson General By-law, Article 3-8 by adding a new Section 7 as follows:

"All-terrain vehicles on Town property"

1. *No person shall operate a motorized all-terrain vehicle, snow mobile, dirt bike or other similar motorized off-road utility vehicles as may be defined under G.L. c. 90B on any Town-owned property without the express written permission of the Board of Selectmen.*
2. *Fines for violations of this bylaw shall be $100 for the first offense and $300 for each additional offense. The Selectmen or their designee shall have the authority to issue fines via non-criminal disposition. Fines shall be in addition to any available equitable means of enforcement.*

10. Wetlands and Watershed Awareness

To better appreciate our natural resources, we need to understand their function and purpose. Often, people do not understand how wetlands and water resources work to their own personal and municipal potential benefit. The Conservation Commission consistently encounters a lack of public understanding of the important role that wetlands play in protecting ground water supplies, controlling pollution, providing wildlife habitat and flood control. Thankfully, chronic flooding and sedimentation are not significant problems in town due to the existence of so many healthy wetlands and bogs. It is the hope and expectation that with some public education about these issues there will be a greater motivation to protect our natural resources at the region, town, and backyard level.

11. Landfills, Hazardous Waste Sites, and Blighted Areas

Hanson's transfer station on Franklin Street is sited on an old landfill that is up gradient from the town's major drinking water wellfield, but there appears to be sufficient distance and groundwater monitoring to ensure no negative environmental impact to date. There are no known hazardous waste sites, although occasional leaking underground tanks have been discovered (and dealt with appropriately). There is a privately held 52-acre parcel on Route 27 that was the original Ocean Spray Cranberries headquarters until 1974. Unfortunately, on the developed portion of this site there are dilapidated buildings and much solid waste. Waste, debris, and trash also exist on part of the "back acreage". This property is of interest to both the town and the Commonwealth of Massachusetts due to its proximity to the MBTA Commuter Rail station and its long-shared border with the Burrage Pond Wildlife Management Area. These factors present some interesting possible options for developing future recreational opportunities and public access to open space.

12. Environmental Equity

Environmental equity refers to the distribution of open space and recreational opportunities throughout the Town of Hanson. Hanson has several parks and open spaces providing a variety of activities.

Currently, a new multigenerational park is being proposed for the Plymouth County Hospital Site. The Town has contracted with an engineering firm and have received conceptual plans. The Town will be presenting the plans to the selectmen and to the public. If approved, the Town will be looking for funding sources to build Phase 1 of the park. This new park will alleviate a Moderate need of Open Space and recreational opportunities to the center part of the Town. However, there is still an area designated as Monponsett, located in the southeast corner of Hanson, that is seemingly crowded and lacking in open space. Monponsett was built by speculators when leisure time and the rail were becoming more prevalent. Monponsett was originally intended to by summer only occupancy. Like many small cottage communities, Monponsett has become a year-round community. This causes many issues for the area, one being the lack of open space.

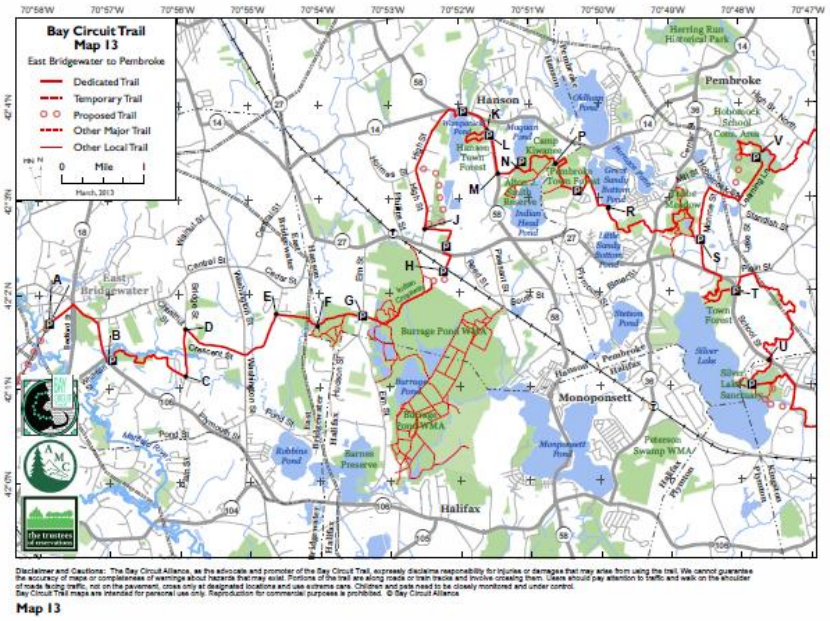
Scenic Resources and Unique Environments

Hanson is a scenic, wooded community with variable landscapes that include ponds, rocky outcrops, bogs, and fields. The Open Space and Recreation Committee have identified four special areas to highlight as they are particularly unique for aesthetic, environmental or cultural reasons. In addition to these, Map 4 depicts several other valuable open space properties that are currently unprotected.

Bay Circuit Trail and Greenway

The Bay Circuit Trail is a permanent recreation trail and greenway corridor that extends through 34 towns in Eastern Massachusetts and links the parks and open spaces surrounding metropolitan Boston. It was conceptualized in 1929 as an 'outer emerald necklace' and has become a reality as more communities add trails to the total length. The main trail extends from Kingston Bay, Kingston, on the south to Plum Island, Newburyport, on the north. More than 200 miles of multi-use, passive recreational trail have now been dedicated, thanks to the contributions of hundreds of volunteers in 37 cooperating towns. The Bay Circuit Alliance is a partnership of organizations and individuals, public and private, with much guidance from the Appalachian Mountain Club.

Figure 62: Bay Circuit Trail Map

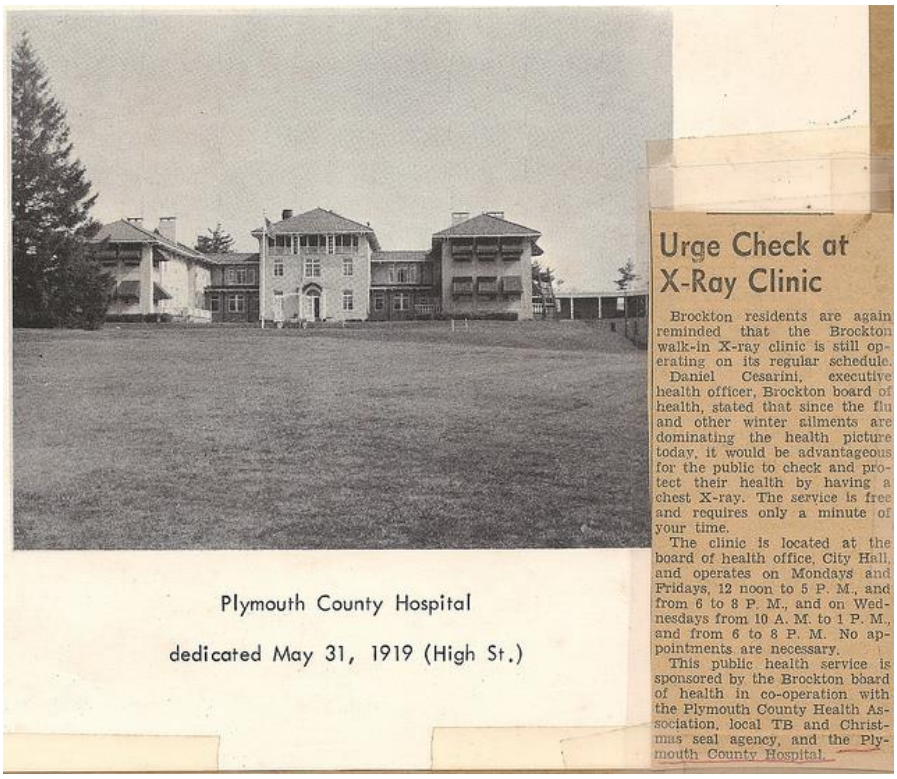


Hanson and Pembroke joined the Bay Circuit Trail in June 2006 with the addition of 15 miles of trail. In 2007, the Trails Committee obtained a grant from REI to install informational kiosks at each of the trail heads in Hanson. In the fall of 2012, The Appalachian Mountain Club and the Trustees of Reservations, two of Massachusetts' largest and oldest conservation organizations, began working together with the Bay Circuit Alliance in the completion, enhancement, and long-term protection of the recreational trail and greenway.

Plymouth County Hospital

In 1999, Plymouth County divested itself of several properties which it could no longer maintain. The 56-acre Plymouth County Hospital property on High Street was one such site and is in the center of Hanson. The hospital was originally built for tuberculosis patients, but over time offered more general care. Unfortunately, after purchasing it the town lacked funds to properly maintain the historic Spanish-style building and it was subject to much vandalism and several fires.

Figure 63: Plymouth County Hospital News Article


Plymouth County Hospital

dedicated May 31, 1919 (High St.)

Urge Check at X-Ray Clinic

Brockton residents are again reminded that the Brockton walk-in X-ray clinic is still operating on its regular schedule.

Daniel Cesarini, executive health officer, Brockton board of health, stated that since the flu and other winter ailments are dominating the health picture today, it would be advantageous for the public to check and protect their health by having a chest X-ray. The service is free and requires only a minute of your time.

The clinic is located at the board of health office, City Hall, and operates on Mondays and Fridays, 12 noon to 5 P. M., and from 6 to 8 P. M., and on Wednesdays from 10 A. M. to 1 P. M., and from 6 to 8 P. M. No appointments are necessary.

This public health service is sponsored by the Brockton board of health in co-operation with the Plymouth County Health Association, local TB and Christmas seal agency, and the Plymouth County Hospital.

Despite a desire to see the building and property redeveloped, attempts to do so were unsuccessful. Recently, a 5-member Final Plymouth County Hospital Reuse Committee was formed and has since been working on a plan of action for the property. There are numerous existing trails throughout the property (mostly old roads in various states of disrepair) that can be improved to create connections for the Bay Circuit Trail, and there are opportunities to develop new recreational assets as well. It is the town's hope that the site will become a vibrant center for sustainable development and passive recreation for all ages. As of early 2017, the former hospital is in the process of being torn down. The next section describes how the town anticipates the incorporation of more detailed plans for this property into the overall Open Space and Recreation Plan.

Figure 64: Resident Children at Play, Plymouth County Hospital

Figure 65: Plymouth County Hospital

Plymouth County Hospital Open Space and Recreation Planning

This section serves to incorporate specific planning information regarding the Town-owned 55-acre former Plymouth County Hospital campus into the *2017 Open Space and Recreation Plan* (OSRP).

BACKGROUND

Since 2016 the current *Final Plymouth County Hospital Re-use Committee* has been working to develop recommendations for the Board of Selectmen and the Town for each area of this property. Thanks to the efforts of an earlier committee, in 2008 the property was officially subdivided into three (3) parcels: the southernmost Parcel 1 (approx. 8 acres), the central Parcel 2 (approx. 22 acres), and the northernmost Parcel 3 (approx. 25 acres). This three-parcel approach facilitates the current planning activities. Additional help is provided by the 2016 OSRP Questionnaire results and a 2016 Community Preservation forum, both of which indicate significant public interest in assuring that natural resource protection and passive recreation are included among the site's "final use" priorities.

As of January 2017, Priority #1 is underway: Demolishing and removing the obsolete buildings from Parcel 1 and Parcel 2. This clears the way for Priority #2: ***Planning of a municipal park.*** In July 2017 demolition of the old hospital and obsolete buildings was completed.

MUNICIPAL PARK PLANS

Town funds have been dedicated for the planning of a park that would be located mostly on Parcel 2, and possibly a portion of Parcel 1.

Elements under early consideration include:

- Large mowed green lawn or "common" suitable for informal recreation
- Gathering space for community functions (e.g., farmer's market, fairs, etc.)
- Walking trails, linked to other trails on adjacent protected open space
- Connections to nearby open space along regional (200-mile) Bay Circuit Trail and Greenway
- Benches, picnic tables, bandstand
- Retention of mature shade trees and planting of new ones
- Low-maintenance playground
- Educational signage interpreting site's cultural and natural history
- Inclusion of Bonney House historic heritage area
- Fencing for existing Community Garden, and information on how gardeners may participate

DETAILED PARK PLANS

The town has contracted with a qualified provider of services for Public Park, open space, and passive recreational planning. The product of that effort is anticipated by the end of 2017, and is hereby incorporated – either physically, or by reference if large volume so dictates – into this *2017 Hanson Open Space and Recreation Plan*.

Burrage Pond Wildlife Management Area

Figure 66: Stump Brook at Burrage Pond Wildlife Management Area

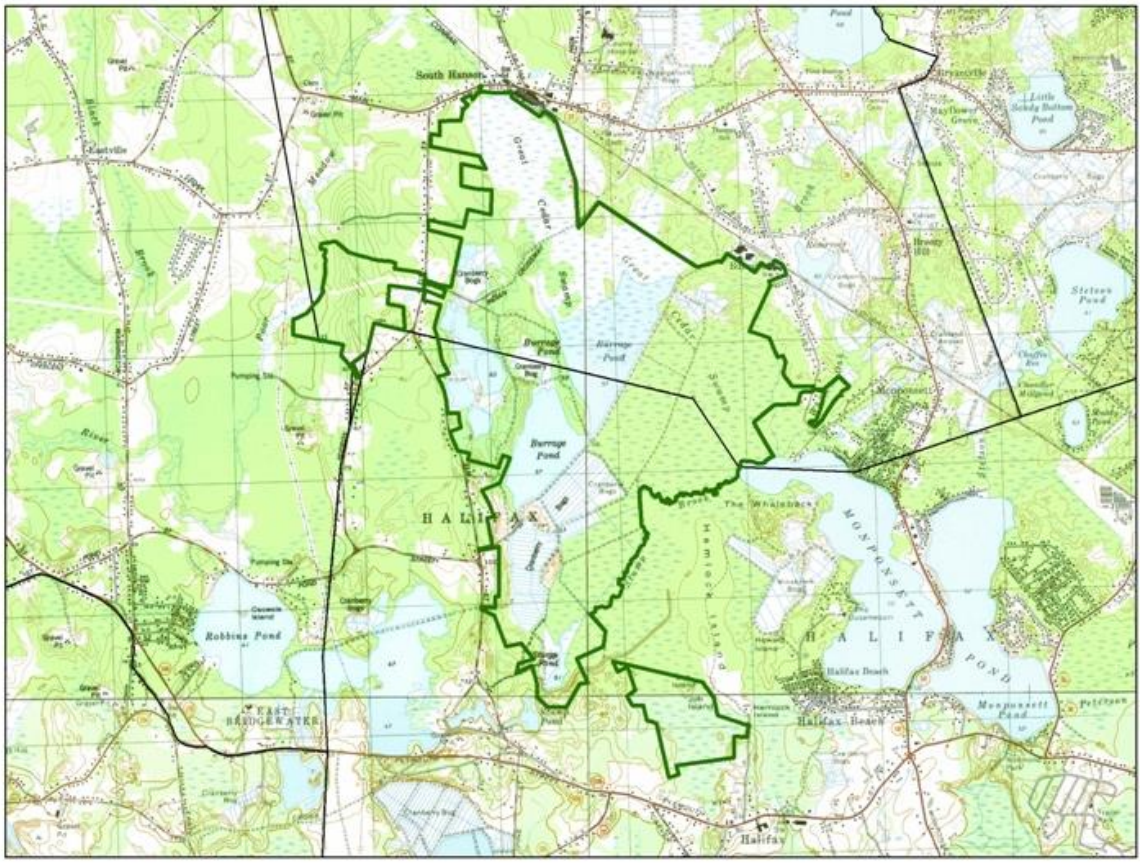
Photo by Rob MacDonald

The Burrage Pond Wildlife Management Area (WMA) is over 2,014 acres of open water, marsh, Atlantic white cedar and red maple swamps and former cranberry bogs located on the border of Hanson and Halifax, Massachusetts managed by the Mass. Dept. of Fish and Game. The majority was purchased in 2002 by the Mass. Dept. of Fish and Game from the Northland Cranberry Company. The area is managed for fisheries and wildlife habitats and open space.

Burrage Pond is composed of roughly 470 acres of open water, 475 acres of emergent marsh, 900 acres of forested swamp, containing 280 acres of uplands, 303 acres of former cranberry bog, and 20 acres of active cranberry bog. The area is accessible through the main parking area at Hawks Avenue in Hanson, on the east side of Elm Street across from the Town of Hanson's Smith-Nawazelski Conservation Area and at several roadside pull-offs on the east side of Elm Street about 0.3 miles south of the intersection with Hudson Street in Hanson. The regional headquarters for the Massachusetts Environmental Police is also located on the Burrage Pond WMA.

The WMA is inland from both the Duxbury Bay and North and South River Marsh, and has been an important site for breeding, feeding, and migrating waterfowl, wading birds, neo-tropical migrants, and other wildlife for many years. Burrage Pond provides breeding habitat for the American black duck, mallard, American wood duck, hooded merganser, and Canada goose, as well as the Sora rail.

Figure 67: Burrage Pond WMA



The WMA was part of a former cranberry bog operation dating back to the 1920s with just over 300 acres of bogs that have been out of production since 2002, when the Division acquired most of the property.

The area was known historically as the Great Cedar Swamp and consisted of a variety of natural wetland habitats including Atlantic white cedar and red maple swamp and extensive emergent marshes. The outlet from Monponsett Pond, known as Stump Brook or Herring Brook, was dammed for waterpower and created an artificial pond called Stump Pond. In this area in 1905, industrialist Albert C. Burrage started digging peat for fuel, and succeeding owners later developed cranberry bogs. The area was purchased by the United Cape Cod Cranberry Company from Hanson Cedar Company in 1931 and called it "Bog 18". The area was later bought by Cumberland Farms, Inc. who developed some of the wetlands into more cranberry bogs between 1977 and 1990. These actions resulted in an enforcement action by the U.S. Environmental Protection Agency. The current USGS topographic maps still show wetlands in some areas that were developed into cranberry bogs. The property was eventually purchased by Northland Cranberry Company.

Fishing, hiking, horseback riding and bird watching (including an active Osprey nest) are popular along old cranberry bog roads. The local landmark called "Two Mile Dike" runs alongside what was formerly one of the world's largest cranberry bogs. The historic "Indian Crossway" section of the Bay Circuit Trail connects Crooker Place and Elm Street, providing wide natural vistas.

Since 2002, the Division has commenced managing water levels in the former bogs, coupled with some seeding, invasive exotic plant control and minor strategic grading and filling, to restore the former bogs back to a mosaic of emergent wetland habitats for the benefit of waterfowl and other important wildlife species.

Upper and Lower Burrage Ponds offer excellent warm water shoreline fishing from the main dike. The fish populations of Upper and Lower Burrage Ponds were sampled in June of 2003 and contained bluegill, yellow perch, largemouth bass, pumpkinseed sunfish, chain pickerel, golden shiner, black crappie, brown bullhead, and white perch.

Figure 68: Burrage Pond Sandhill Cranes

Photo by Rob MacDonald

Camp Kiwanee

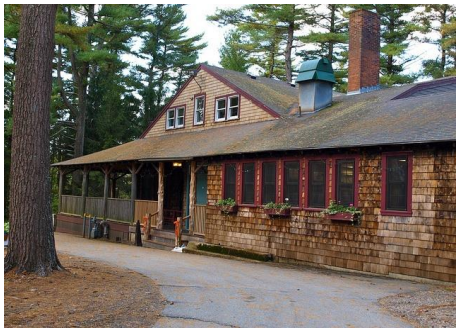
Figure 69: Camp Kiwanee Lodge

View from Camp Kiwanee Lodge

Entrance Road Camp Kiwanee

One of Hanson's most treasured features is Camp Kiwanee, the town's Open Space "Crown Jewel". This 64-acre parcel boasts an historic and charming tree-lined entrance, leading to the two-story "Needles Lodge" that sits along a glacial ridge with commanding views of Maquan Pond. The Camp is also home to a softball field, cabins for rent, and Cranberry Cove which is used for the town's long-standing summer swim program. The Lodge is rented out for various functions including weddings, parties, and corporate events. In 2005, the Hanson Recreation Department created a Camp Kiwanee Master Plan which lists various immediate, five-year, and ten-year goals to improve and preserve the Camp. Some of these are reflected in this Plan and are so noted; for further details please refer to the Camp Kiwanee Master Plan. In 2005, Camp Kiwanee was the first site in Hanson to be listed in the National Register of Historic Places.

Figure 70: Needles Lodge at Camp Kiwanee



Major Characteristic or Unusual Geologic Features and Special Landscape Features

1. Aquatic Feature

   Maquan Pons, in one of Hanson's most treasured aquatic features. It is a surface water pond, which has "remarkably soft water" (quoting 1830 map surveyor notes). Recent studies by Professor William Hagar of UMass Boston confirm that acid rain events are very poorly buffered due to the pond's relative purity.

   In contrast, Indian Head Pond, located downstream, has a higher mineral content, such that the same 1830 surveyor notes "[bog] iron ore of high quality was formerly taken from this pond." Indeed, in many locales the groundwater seeping to the surface is coated with reddish-brown oxide (rust) or a bluish-black metallic sheen of manganese oxide, or both; these discolorations are often mistaken for pollution by uninformed observers.

   Another unique aquatic geologic feature in Hanson is the flow of cold, clean groundwater into Indian Head Brook from gravelly uplands, especially in the Gorwin Drive neighborhood. This results in the brook's ability to support a state-documented cold-water fishery (e.g., native brook trout, *Salvelinus fontinalis)*. Such cold-water habitats are increasingly rare, and thus valuable, in southern New England.

2. Geologic Features

   Throughout Hanson you will find some unique stone features. Located at the Veterans Memorial Town Forest, near the Camp Kiwanee gatehouse, and at Rocky Run Conservation there are larger "glacial erratic" granite boulders which bear signs of human "quarrying", i.e., being laboriously cut into rectangular pieces by hand tools. Such stones were essential for the foundations of buildings before the use of concrete. Also located at Rocky Run is the dramatic exposure of true bedrock – dark, igneous, and fine-grained. This forms a cliff-like feature along Indian Head River, unlike any other landscape in Hanson, and represents the uplifted edge of the solid floor of the Narragansett Basin. This basin extends from the Hanson area southwesterly to Rhode Island and is roughly defined by the Taunton River watershed. Except for this small but striking feature, most of the basin's bedrock in Hanson is deeply buried by the previously mentioned sand, gravel, glacial till, and mucky swamp deposits or surface water.

SECTION 5. INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST

Benefits of Outdoor Recreation and Open Space Protection

There are countless benefits for protecting land for outdoor recreation and open space. Open spaces provide the needed habitat for mammals, birds, insects, and seeds to survive. Open spaces offer environmental education opportunities. Exploring natural places gives us spiritual renewal, feelings of well-being, and a sense of harmony with the broader community. Parks and open space improve our physical and psychological health, strengthen our communities, and make our neighborhoods more attractive places to live and work. Trees help to mitigate the effects climate change by capturing carbon dioxide and reducing household energy use. Open spaces make our community more dynamic and create a sense of place. Without the availability of open spaces throughout Town, residents would not have the ability to get outside to recreate, whether it be for a hike in the woods or to toss around a football. Protected Open Space improves the quality of life of the Town's residents.

Hanson's long history of conservation planning has led to permanent protection of over 1,765.185 acres of its land area, including forests, farmland, and wetlands. Much of the remaining land has either been developed or is held by town, state, or federal government agencies, and is therefore not facing an immediate threat of development. Hanson residents might question the value of an Open Space and Recreation Plan when so much is already protected. However, there are still critical parcels that remain at risk for development, including farmland and critical habitat for endangered species.

Open space generally refers to an un-built or undeveloped area with some form of protection against future development. For the purposes of an Open Space and Recreation Plan, open space refers to a relatively continuous area of public or private lands without buildings or highways that holds significant value either for conservation or recreation. To provide a functional network of natural, cultural, and recreational resources for a town's future, protection of key open space properties is important.

Open space comes in varied forms, especially farmland, playing fields, parks, and other types such as golf courses and gravel pits. In Hanson, town-owned open space is either conservation land, municipal land, or public-school land. The first is permanently protected and is managed for conservation values such as wildlife habitat, groundwater, and aquatic ecosystems. Municipal land is managed for various town purposes which may change over time and may include areas held for potential future needs. Town municipal land may include natural areas managed for, but not protected for, conservation value.

Most conservation land is in a natural state (i.e., not planted or intensively managed), and is protected against development in perpetuity. Conservation lands may be permanently protected through fee-simple ownership or through a conservation restriction (CR). Conservation and other public and private lands may be further restricted under an agricultural preservation restriction (APR), to preserve farmland use in perpetuity. Temporary protection may be through current use programs (Ch. 61, Ch. 61A, and Ch. 61B). In Hanson, 400 acres of agricultural land is protected to some degree under Chapter 61A.

The term "open space" can refer to a wide range of land uses from school ball fields to conservation land held specifically for wildlife management. This section identifies lands in Hanson that are protected in perpetuity, as well as lands that contribute to the town's open space and recreational resources but are not protected as such because their use can change. Please see Map 6 and the "Lands of Conservation and Recreation Interest" spreadsheet for more detail.

To this Plan, the term "protected lands" refers to land that is permanently committed for conservation. On the municipal level, lands that have been acquired through the Conservation Commission or Water Department for conservation purposes are protected under Article 97 of the Constitution of the Commonwealth of

Massachusetts. In 1972, the Massachusetts legislature and electorate voted to add Article 97 to our state's Constitution. This amendment guarantees residents right to a clean environment by providing that "the people shall have the right to clean air and water, freedom from excessive and unnecessary noise, and the natural, scenic, historic, and esthetic qualities of their environment." Lands and easements taken or acquired for such purposes shall not be used for other purposes or otherwise disposed of except by laws enacted by a two-thirds vote taken by yeas and nays, of each branch of the general court." These public lands include both state-owned lands and municipal lands acquired for conservation or recreation purposes.

In addition to the legislative two-thirds vote, municipal conservation or recreation commissions must approve the conversion, as well as the town meeting or city council. Once the votes have been taken, the municipality must find land of equal value and utility to dedicate to conservation or recreation in its place.

Parcels held by a federal conservation agency are also held under Article 97. These lands include:

- Town-owned land held in fee simple by a municipality for natural resource protection (Article 97).
- Town-owned historical land with an historical restriction held in perpetuity.
- State-owned conservation land. (Article 97).
- Private Land Trust-owned land held outright or with permanent deed restrictions or Conservation Restrictions held in perpetuity.

- Private lands that have enrolled in the state's Agricultural Preservation Restriction Program (APR).

The term "unprotected lands" refers to properties that currently hold some conservation or recreational interest but are not protected as such in perpetuity and could be developed for another purpose. These lands include:

- Town owned land not protected under Article 97, such as lands held by the Board of Selectmen. School athletic fields are valuable as open space now but may be needed in the future to accommodate buildings or other uses.

- Private lands that restrict land use for limited time under the MA General Law Chapter 61 Program. This program restricts land use to forestry, agricultural/horticultural or recreational uses under Chapter 61, 61A and 61B, respectively. Parcels must be at least 5 contiguous acres in size to qualify for the agriculture or recreation programs, or at least 10 acres for forestry. Landowners who choose to enroll their land in this program do so in exchange for a reduction in property taxes. If the landowner wishes to sell the property, the town must be given the right of first refusal. These lands are considered 'unprotected' because land could be sold to a party that is willing to pay the back taxes on the property and thus remove the parcel from the Chapter 61 program. These lands are vulnerable to development and should be considered high priority for protection.

Chapter 61 – Forestry – applies to land growing forest products, including wood, timber, Christmas trees, and other products produced by forest vegetation. Landowners receive a property tax reduction in exchange for a commitment to keep their land undeveloped and to manage it for forest products. Chapter 61 is a good fit for landowners interested in actively managing their forestland.

The Chapter 61 program requires a minimum of 10 acres in active forest management. Some or all a landowner's eligible land may be placed in the program. The landowner needs to exclude their residence, other structures, and any land used in connection with those buildings. The structures and excluded land continue to be taxed at the full assessment.

In addition to meeting the minimum acreage requirement, land enrolled in the Chapter 61 program must be managed under a 10-year forest management plan approved by a state service forester. The Massachusetts Department of Conservation and Recreation recommends that landowners hire a licensed private forester to develop the plan. The forest management plan is reviewed and approved by a state service forester.

Chapter 61A – Agriculture- applies to land growing agriculture or horticultural products, including fruits, vegetables, ornamental shrubs, timber, animals, and maple syrup. Chapter 61A is a good fit for landowners engaged in agriculture on their land. The Chapter 61A program requires a minimum of five

acres that has been in agricultural use for at least 2 years before applying. Some or all a landowner's eligible land may be placed in the program. The landowner needs to exclude their residence, other structures, and any land occupied by a dwelling or extensively used for family living.

In addition to meeting the minimum acreage requirement, the landowner must demonstrate annual agricultural product sales of at least $500 for the first 5 acres and $5 for every additional productive agriculture acre or $0.50 for every additional productive forestland acre.

If the enrolled land is sold for or converted to a non-chapter use within 10 years from the date it is acquired or the earliest date of the uninterrupted use in agriculture, then the landowner is responsible for either rollback taxes or conveyance taxes, whichever is greater.

Chapter 61B – Open Space and Recreation- applies to land in open space and/or recreation. The Chapter 61B program requires a minimum of 5 acres in an eligible land use. Some or all a landowner's eligible land may be placed in the program. The landowner needs to exclude their residence, other structures, and any land used in connection with those buildings.

Open Space – Land maintained in a substantially natural, wild, or open condition; land maintained in a landscaped or pasture condition; or managed forest under an approved 10-year forest management plan. Public access is not required for this category of land use.

Recreation - Land that is available for recreational purposes – so long as they do not significantly interfere with the environmental benefits of the land – which include hiking, camping, nature study and observation, boating, golfing, noncommercial youth soccer, horseback riding, hunting, fishing, skiing, swimming, picnicking, private noncommercial flying, hang gliding, archery and target shooting, and commercial horseback riding and equine boarding. It may not be used for horse racing, dog racing, or any sport normally undertaken in a stadium, gymnasium, or similar structure. Land under this category must be open either to the public or to members of a nonprofit organization, though the landowner may charge a fee for this service.

First refusal option in Chapter 61 – All Chapter 61 programs give the town a first refusal option (sometimes referred to as the right of first refusal) that is triggered if the land use is converted to a non-chapter use (e.g., residential, commercial, or industrial) while enrolled in the program or within one year of withdrawal from the program.

The Conservation Commission and the Open Space Committee will work together to draft a procedure for exercising first refusal option on Chapter 61, 61A or 61B land. This policy will serve as a guide to all municipal staff, boards and residents outlining general steps to be followed when landowners in town intend to convert or sell their Chapter 61, 61A or 61B land and coordinate local review. In order to verify exact rights and responsibilities under this program, determine completeness of notification and co-

ordinate the gathering of information and recommendations from various committees, organizations and individuals regarding the notification to determine whether or not there seems to be interest in exercising the town's right of first refusal or assigning it to an appropriate organization or land trust.

Given the high cost of protecting open space through purchase, as well and the Town's tradition of proactive land use planning and regulation, it is appropriate and fair for the Town to use available regulatory and legal tools to protect open space. Most of these are well-developed and understood programs such as the Zoning Act and Planning Regulations. The state wetlands protections act continues to be an effective tool for protecting critical habitat in Hanson, where a large percentage of the Town is classified as wetlands under the jurisdiction of this Act. The Rivers Protection Act created a 200-foot corridor around all perennial rivers and streams, which is largely protected as open space, subject to various exceptions.

The following pages look closely at the open space lands in Town, which are divided into private, public, and non-profit lands. Priority parcels for protection were identified using several criteria, including water resources, rare species habitat, prime farmland, existing built areas, existing trails, historic districts, and other culturally important sites.

Public and Non-Profit Parcels

Most of the best-known conservation land in the community is the land that is publicly owned and accessible. The Town owns over 2,548 acres managed by various entities including the Board of Selectmen, the Water Department, the Recreation Department, the Hanson Public Schools and the Massachusetts Department of Fish and Game. Of these 2,548 acres, approximately 1,314 acres are considered permanently protected by either a Conservation Restriction or Article 97 designation. Significant open space holdings include the Smith-Nawazelski Conservation Area at 101 acres, Poor Meadow Brook Confluence Protection Project at 115 acres and the Alton J. Smith Reserve (Smitty's Bog) containing 103 acres of land.

These areas provide valuable habitat for wildlife and are components of larger landscape blocks and wildlife corridors. These are also highly valued by residents for their many passive recreation opportunities including hiking, birding, cross-country skiing, and wildlife viewing.

The Americans with Disabilities Act requires that Hanson continue to address ADA Access issues, as evidenced by continued improvements at Camp Kiwanee. The ADA coordinator is the Hanson Town Administrator and Appendix C contains Information pertaining to the Administration of the Americans with Disabilities Act. The Town of Hanson has issued an RFP for assistance with drafting an ADA Transition Plan. The scope of this Self-Assessment is to identify and assess programmatic and physical barriers to persons with disabilities. The project work encompasses identifying barriers and current non-compliance with Title II of the ADA as it applies to municipal programs, services, policies, and procedures and an audit of all municipally-controlled buildings, facilities, and recreational sites open to public access to determine the extent of the architectural barriers present at each facility. Identify the barriers that can be removed and develop cost estimates for the work necessary to implement readily achievable barrier removal. The project will also identify the barriers that are not feasible to remove due to structural, cost, or historic preservation purposes where program access can be accomplished without the removal of physical barriers.

Table 3: Public and Non-Profit Owned Open Space Parcels

Publicly & Non-Profit Owned Open Space	Acres	% of Total Land Area in Hanson (9,202 acres total)
Town owned – Hanson Conservation Commission	440.041	4.8%
Town Owned – Water Department	93.94	1.0%
Town Owned – Recreation	84.99	0.9%
Town Owned – Municipal land without buildings	359.352	3.9%
Town Owned – Municipal land with buildings	29.19	0.3%
Public Schools	179.21	1.9%
Commonwealth of Mass – protected by Article 97	982.03	10.7%
Plymouth County Land	11.12	0.1%
Non-profit Organizations	36.32	0.4%
Land permanently protected by ownership or CR	331.994	3.6%
• ***Smith Nawazelski CA***	101	1.1%
• ***Poor Meadow Brook Greenway***	11.22	0.1%
• ***Poor Meadow Brook Confluence Protection Project***	114.954	1.2%
• ***Alton J. Smith Reserve***	103.47	1.1%
• ***Nathaniel Thomas Mill***	1.35	0.0%
Total publicly owned open space	1,765.185	19.18%

This section provides a descriptive inventory of public conservation and recreation resources including federal, state, municipal, and non-profit conservation lands.

H = Hiking

PR = Passive Recreation

B = Boating

F = Fishing

OS = Open Space

TOWN OWNED – HANSON CONSERVATION COMMISSION

Table 4: Town Owned Conservation Properties

Link	Map	Parcel	Care Custody	Acres	LUC	Owner	Conservation	Protection Article 97	Rec Potential	Grant
MCL-1	7	45	YES	12.020	9320	CONS	PLEASANT ST	DEED CONS		NA
MCL-2	3	21	NO	0.320	9320	CONS	WOODBINE AVE EXT	ATM 3/1/71 ART 33	H, PR	NA
MCL-3	101	5D	NO	0.830	9320	CONS	FOREST TRAIL	NOT PROTECTED	H, PR	NA
MCL-4	102	4	YES	4.750	9320	CONS	WHITMAN ST	DEED CONS		NA
MCL-5	104	83	YES	10.430	9320	CONS	STATE ST - SHORTALL	DEED CONS		NA
MCL-6	105	1	YES	4.200	9320	CONS	BILLINGS-WEBSTER C. A. WEBB HODER	DEED CONS	H, PR	NA
MCL-7	15	69	YES	1.000	9320	CONS	PLEASANT ST	DEED CONS		NA
MCL-8	15	70	YES	4.270	9320	CONS	PLEASANT ST	ATM 3/1/71 STM 6/28/65		NA
MCL-9	20	111	YES	111.38	9320	CONS	SMITH NAWAZELSKI	DEED CONS	H, PR	NA
MCL-10	31	11	YES	0.690	9320	CONS	MONPONSETT ST	DEED CONS		NA
MCL-11	31	11	YES	1.780	9320	CONS	BAY STATE CIR	DEED CONS		NA
MCL-12	31	11	YES	4.270	9320	CONS	BAY STATE CIR	DEED CONS		NA
MCL-13	31	11	YES	1.130	9320	CONS	MONPONSETT ST	DEED CONS		NA
MCL-14	32	30	NO	12.170	9320	CONS	SANDY LANE ACRES HALIFAX	VERNAL POOL WETLANDS		NA
MCL-15	33	9	YES	5.190	9300	CONS	INDIAN CROOKER PL	STM 10/07/2013	H, PR	NA
MCL-16	43	54	YES	5.440	9320	CONS	THUOTT OFF MAIN ST	DEED		NA
MCL-17	44	3	YES	15.820	9320	CONS	MAIN ST	DEED ATM 05/19/86		NA
MCL-18	44	6	YES	9.760	9320	CONS	MAIN ST	DEED		NA
MCL-19	44	8	YES	2.340	9320	CONS	POOR MEADOW BROOK	DEED ATM 03/01/71	H, PR	NA
MCL-20	50	1	NO	1.630	9320	CONS	DUNHAM	DEED TOH		NA
MCL-21	50	2	NO	3.500	9320	CONS	DUNHAM	DEED TOH		NA
MCL-22	50	3	YES	3.400	9320	CONS	DAVID & LUCY CLEMONS	DEED 03/01/71	H, PR	NA
MCL-23	51	1	YES	3.750	9320	CONS	POOR MEADOW BROOK	DEED 05/30/85	H, PR	CPA

MCL024	51	8	YES	11.20	9320	CONS	SCOTT PETERSON	WATER DPT		CPA
MCL-25	53	1	YES	0.360	9320	CONS	FISHERMANS LANDING	DEED CONS	B, F	NA
MCL-26	53	2	YES	103.47	9320	CONS	SMITTY'S BOG	DEED CONS	H, PR	NA
MCL-27	57	8	YES	7.400	9320	CONS	CAROLYN READY	DEED ATM 5/3-5/1999	H, PR	NA

Link	Map	Parcel	Care Custody	Acres	LUC	Owner	Conservation	Protection Article 97	Rec Potential	Grant
MCL-29	63	5	YES	2.520	9320	CONS	COMBINED W TOWN FOREST	DEED CONS	H, PR	NA
MCL-30	66	2	YES	34.975	9320	CONS	POOR MEADOW BROOK	DEED CONS	H	CPA
MCL-31	66	5	YES	30.589	9320	CONS	POOR MEADOW BROOK	DEED CONS	H	CPA, LAND
MCL-32	67	7	YES	15.85	9320	CONS	POOR MEADOW BROOK	DEED CONS	DIRT RD	CPA, LAND
MCL-33	69	3H	YES	1.760	9320	CONS	PINE GROVE AVE FALLON PT RD	DEED CONS	H, PR	NA
MCL-34	70	27B	YES	3.120	9320	CONS	MAQUAN ST & BIRCH ST	DEED CONS	H, PR	NA
MCL-35	71	11	YES	35.640	9320	CONS	TOWN FOREST	STM 2014	Forestry	Forest Act
MCL-36	80	1Z	YES	6.400	9320	CONS	OFF RICHARD ROAD	DEED CONS		NA
MCL-37	81	1Z	YES	14.150	9320	CONS	MERYL CONST - INDIAN HEAD	DEED CONS		NA
MCL-38	81	241A	YES	0.360	9320	CONS	NORTH OF THOMAS MILL ABUTS GORWIN	DEED CONS		NA
MCL-39	81	33B	YES	21.970	9320	CONS	WINTER ST & PRATT PLACE/ MCL-AUGHLIN	DEED CONS		NA
MCL-40	81	8	YES	1.35	9320	CONS	THOMAS MILL	DEED - CR	Historic	CPA
MCL-41	83	3B	YES	54.010	9320	CONS	BRIAN GAFFEY C. A. STM 05/03/04 ART 40	DEED CONS	H, PR	NA
MCL-42	88	55	YES	0.540	9320	CONS	BECKETT ST	DEED CONS		NA
MCL-43	88	8	YES	0.630	9320	CONS	BROOK ST	DEED CONS		NA
MCL-44	89	1Z	YES	34.480	9320	CONS	REAR WINTER ST	DEED CONS		NA
MCL-45	89	86A	YES	4.100	9320	CONS	OFF GORWIN DRIVE (BRENTWOOD) ROBIN	DEED CONS		NA

Link	Map	Parcel	Care Custody	Acres	LUC	Owner	Conservation	Protection Article 97	Rec Potential	Grant
MCL-46	90	40A	YES	0.200	9320	CONS	0 WINTER ST WENZ PROPERTY	DEED CON		NA
MCL-47	92	23	YES	8.180	9320	CONS	BRIAN GAFFEY C. A. STM 05/03/04 ART 40	DEED CONS	H, PR	NA
MCL-48	96	12	YES	7.640	9320	CONS	EY PERRY TRUST DONATION STATE ST	DEED CONS		NA
MCL-49	98	18	NO	12.320	9320	CONS	WALLACE HOUSE/DUTTON/LYMAN	NOT DEEDED CON COM		NA
MCL-50	105	2	YES	4.190	9320	CONS	BILLINGS-WEBSTER C. A.	DEED CONS	H, PR	NA
MCL-51	105	5	YES	10.100	9320	CONS	BILLINGS-WEBSTER C. A.	DEED CONS	H, PR	NA
MCL-52	106	6	YES	6.200	9320	CONS	WINTER ST -EGAN, JOHN - O'NEIL, EDMUND	DEED CONS		NA
MCL-53	106	12	NO	4.640	9320	CONS	WINTER ST	NOT DEEDED CONS		NA
MCL-54	107	5	YES	3.710	9320	CONS	WHOLBROOK CONST	DEED CONS	H, PR	NA
MCL-55	108	10	YES	0.380	9320	CONS	SPRING ST -BREZNIAK & ROSS	DEED CONS		NA
MCL-56	109	5	NO	7.230	9320	CONS	WHITMAN ST - JOHNSON	NOT DEEDED CONS		NA
MCL-57	110	28	YES	12.600	9320	CONS	STEARNS, PATRICIA	NOT DEEDED CONS		NA
MCL-58	112	14	YES	47.130	9320	CONS	BILLINGS-WEBSTER C. A.	DEED CONS	H, PR	NA
MCL-59	113	1	YES	7.250	9320	CONS	HOLBROOK CONST BEHIND HARVEY CRL	DEED CONS		NA
MCL-60	113	8	YES	0.460	9320	CONS	BILLINGS-WEBSTER C. A. REAR PURITAN	DEED CONS	H, PR	NA
MCL-61	114	9A	YES	0.150	9320	CONS	FACTORY POND DAM	DEED CONS	H, PR	NA
MCL-62	115	2A	YES	4.800	9320	CONS	NORCROSS KING	DEED CONS	H, PR	NA
MCL-63	119	19	YES	2.520	9320	CONS	ROCKY RUN	DEED CONS	H, PR	NA

TOWN OWNED – HANSON CONSERVATION COMMISSION

Link	Map	Parcel	Care Custody	Acres	LUC	Owner	Conservation	Protection Article 97	Rec Potential	Grant
MCL-64	119	121	YES	1.090	9320	CONS	ADAMS CIRCLE - LOTS 12, 14, 21	DEED CONS	H, PR	NA
MCL-65	120	4	YES	0.950	9320	CONS	SLEIGH DRIVE	DEED CONS	H, PR	NA
MCL-66	120	112	YES	0.840	9320	CONS	ADAMS CIRCLE - LOTS 12, 14, 21	DEED CONS	H, PR	NA
MCL-67	120	114	YES	0.740	9320	CONS	ADAMS CIRCLE LOT 114	DEED CONS	H, PR	NA
UM-14	2	372		0.591	9300	CONS	UNION PARK UPTON STS	DEED CONS		NA
		TOTAL	**ACRES**	**440.041**						

TOWN OWNED WATER DEPARTMENT

Table 5: Town Owned Water Department Properties

Link	Map	Parcel	Acres	LUC	Ownership		Article 97	Rec Potential	Grant
WD-1	3	1	1.040	9710	HANSON TOWN	WATER DEPT			**NA**
WD-2	3	5	29.460	9710	HANSON TOWN	WATER DEPT			**NA**
WD-3	45	12A	61.880	9710	HANSON TOWN	WELL SITE			**NA**
WD-4	67	17	1.560	9710	HANSON TOWN	WATER DEPT			**NA**
WD-1	3	1	1.040	9710	HANSON TOWN	WATER DEPT			**NA**
	TOTAL	**ACRES**	**93.940**						

HANSON MUNICIPAL RECREATION LAND

Table 6: Hanson Municipal Recreation Lands

Link	Map	Parcel	Acres	LUC	Ownership	Location	Rec Potential	Grant
MRL-1	2	1	1.190	9030	HANSON TOWN	HANCOCK ST PLAY	Playground	N/A
MRL-2	40	24	1.190	9300	HANSON TOWN	GIRLS SOFTBALL FIELD	Softball, recreation	N/A
MRL-3	41	7	9.810	9310	HANSON TOWN	MEMORIAL FIELD	baseball	N/A
MRL-4	54	9	67.800	9310	HANSON TOWN	CAMP KIWANEE	H, PR, scenic vista	N/A
MRL-5	61	1B	5.000	9310	HANSON TOWN	CRANBERRY COVE	Swimming cove	N/A
	TOTAL	**ACRES**	**84.990**					

TOWN OWNED UNPROTECTED MUNICIPAL LAND WITHOUT BUILDINGS

Table 7: Unprotected Municipal Land without Buildings

Link	Map	Parcel	Acres	LUC	Ownership	Location	Rec Potential	Grant
UM-1	1	967	0.010	9300	HANSON TOWN	GOLD ST	N/A	N/A
UM-2	1	1165	0.125	9300	HANSON TOWN	CEDAR ST	N/A	N/A
UM-3	1	1841	0.110	9300	HANSON TOWN	LONG AV	N/A	N/A
UM-4	2	6	0.190	9300	HANSON TOWN	LEON CT	N/A	N/A
UM-5	2	6B	0.170	9300	HANSON TOWN	LEON CT	N/A	N/A
UM-6	2	10	0.170	9300	HANSON TOWN	LEON CT	N/A	N/A
UM-7	2	33	0.110	9300	HANSON TOWN	LEON CT/FERRIS ST	N/A	N/A
UM-8	2	90B	0.000	9300	HANSON TOWN	MILFORD ST	N/A	N/A
	2	208	0.098	9300	HANSON TOWN	UNION PARK ST	N/A	N/A
	TOTAL	**ACRES**	**84.990**					

TOWN OWNED UNPROTECTED MUNICIPAL LAND WITHOUT BUILDINGS

Table 8: Town Owned Unprotected Municipal Land without Buildings

Link	Map	Parcel	Acres	LUC	Ownership	Location	Rec Potential	Grant
UM-9	2	185	0.035	9300	HANSON TOWN	WALTHAM ST	N/A	N/A
UM-10	2	276	0.190	9300	HANSON TOWN	UNION PARK ST	N/A	N/A
UM-11	2	318	0.084	9300	HANSON TOWN	UPTON ST	N/A	N/A
UM-12	2	352	0.000	9300	HANSON TOWN	UPTON/UNION PARK ST	N/A	N/A
UM-13	2	368	0.110	9300	HANSON TOWN	UPTON ST	N/A	N/A
UM-15	2	622	0.010	9300	HANSON TOWN	MILFORD/WALTHAM STS	N/A	N/A
UM-16	2	658	0.100	9300	HANSON TOWN	HANCOCK ST	Possible Trail	N/A
UM-17	2	672	0.106	9300	HANSON TOWN	HARLEM ST	Possible Trail	N/A
UM-18	2	766	0.180	9300	HANSON TOWN	HANCOCK ST	Possible Playground	N/A
UM-19	2	819	0.190	9300	HANSON TOWN	FRENCH ST/PARK RD	Possible Playground	N/A
UM-20	2	832	0.050	9300	HANSON TOWN	HANCOCK ST	N/A	N/A
UM-21	2	942	0.040	9300	HANSON TOWN	OCEAN AVE/HANSON CT	Lakeshore Access	N/A
UM-22	2	1013	0.090	9300	HANSON TOWN	DEPOT ST	Wildlife Habitat	N/A
UM-23	3	2	0.520	9300	HANSON TOWN	RIGHT OF WAY	Street	N/A
UM-24	3	32	0.320	9300	HANSON TOWN	WOODBINE AVE EXT	Trail/Wildlife	N/A
UM-25	3	8	0.140	9300	HANSON TOWN	EMORY ST	Trail/Wildlife	N/A
UM-26	3	33	0.050	9300	HANSON TOWN	OCEAN AVE	Trail/Wildlife	N/A
UM-27	3	35	0.710	9300	HANSON TOWN	OCEAN AVE	Lakeshore Access	N/A
UM-28	3	43	0.000	9300	HANSON TOWN	OCEAN AVE	Lakeshore Access	N/A
UM-29	3	46	0.228	9300	HANSON TOWN	OCEAN AVE	Lakeshore Access	N/A
UM-30	6	21	0.100	9300	HANSON TOWN	FRENCH ST	N/A	N/A
UM-31	6	2070	0.290	9300	HANSON TOWN	RIDGE ST	Possible Wildlife	N/A
UM-32	6	2066	0.340	9300	HANSON TOWN	RIDGE ST	Trail/Wildlife Pond	N/A
	6	2068	0.044	9300	HANSON TOWN	RIDGE ST	Possible Wildlife	N/A
UM-33	7	15A	0.030	9300	HANSON TOWN	WOODBINE AVE	N/A	N/A
UM-34	7	15B	0.030	9300	HANSON TOWN	WOODBINE/FERRIS STS	N/A	N/A
UM-35	7	22	0.160	9300	HANSON TOWN	WOODBINE AVE	N/A	N/A

Link	Map	Parcel	Acres	LUC	Ownership	Location	Rec Potential	Grant
UM-36	7	25	0.750	9300	HANSON TOWN	WOODBINE AVE	Possible Trail	N/A
UM-37	7	39	8.940	9300	HANSON TOWN	SANTOS CT	Possible Trail	N/A
UM-38	7	53	0.360	9300	HANSON TOWN	SANTOS CT	Possible Wildlife	N/A
UM-39	7	54	0.830	9300	HANSON TOWN	WOODBINE AVE	N/A	N/A
UM-40	7	55	0.180	9300	HANSON TOWN	FERRIS ST	N/A	N/A
UM-41	7	1634	0.164	9310	HANSON TOWN	MONPONSETT ST	N/A	N/A
UM-42	14	1712	0.060	9300	HANSON TOWN	BRIGGS ST	N/A	N/A
	15	9	0.138	9300	HANSON TOWN	BAKER ST	N/A	N/A
UM-43	20	4	0.030	9300	HANSON TOWN	ELM ST	N/A	N/A
UM-44	23	65	0.960	9300	HANSON TOWN	SOUTH ST	N/A	N/A
UM-45	23	60	0.110	9300	HANSON TOWN	SOUTH ST	Wildlife	N/A
UM-46	24	67	0.320	9300	HANSON TOWN	REED ST	N/A	N/A
UM-47	24	66A	0.060	9300	HANSON TOWN	PINE ST	N/A	N/A
UM-48	27	2	7.730	9300	HANSON TOWN	ELM ST	N/A	N/A
UM-49	34	11	0.020	9300	HANSON TOWN	MONROE CEMETERY	N/A	N/A
UM-50	39	6	0.110	9300	HANSON TOWN	HANSON TOMB	N/A	N/A
UM-51	39	11	0.060	9300	HANSON TOWN	MAIN ST	N/A	N/A
UM-52	39	33	0.040	9300	HANSON TOWN	MAIN ST	Pond Shore	N/A
	40	24	1.190	9300	HANSON TOWN	MAIN ST	N/A	N/A
UM-53	40	50	0.070	9300	HANSON TOWN	MAIN ST	N/A	N/A
UM-54	42	27	0.990	9300	HANSON TOWN	HIGH ST	N/A	N/A
UM-55	45	9A	3.920	9300	HANSON TOWN	FRANKLIN ST	N/A	N/A
UM-56	45	13	1.040	9300	HANSON TOWN	OFF MAIN ST	River Access	N/A
UM-57	45	11	0.430	9300	HANSON TOWN	HOBART CEMETERY	N/A	N/A

TOWN OWNED UNPROTECTED MUNICIPAL LAND WITHOUT BUILDINGS

Link	Map	Parcel	Acres	LUC	Ownership	Location	Rec Potential	Grant
UM-58	49	1A	15.520	9300	HANSON TOWN	HIGH ST	Park, OS, Trails	N/A
UM-59	50	101	2.730	9300	HANSON HOUSING AU	PHILLIPS ST	Wildlife, Trails	N/A
UM-60	52	17	3.190	9300	HANSON TOWN	INDUSTRIAL BLV	Well Protection, Trails	N/A
UM-61	67	2A	0.810	9300	HANSON TOWN	W. WASHINGTON ST	Trails, Wildlife	N/A
UM-62	67	15A	0.200	9300	HANSON TOWN	W. WASHINGTON ST	Trails/Wildlife	N/A
UM-63	67	17	148.86	9300	HANSON TOWN	FRANKLIN ST	River Access	N/A
UM-64	67	17	7.170	9300	HANSON TOWN	W. WASHINGTON ST	Well Protection	N/A
UM-65	69	6C	0.180	9300	HANSON TOWN	FALLONS PNT	Trails/Wildlife	N/A
UM-66	70	25	0.750	9300	HANSON TOWN	MAQUAN ST	N/A	N/A
UM-67	71	12B	1.390	9330	HANSON TOWN	SCHOOL LOT	N/A	N/A
UM-68	71	12C	0.870	9330	HANSON TOWN	SCHOOL LOT	Open Space	N/A
UM-69	72	7	0.240	9300	HANSON TOWN	TOMB LOT	Pond Acc./Trail	N/A
UM-70	72	6	0.250	9300	OLD CEMETERY POTTERS FIELD	HIGH STREET	Walking, hiking	N/A
UM-71	73	1	12.110	9300	FERN HILL CEMETERY CORPORATION	FERN HILL CEMETARY	Stream Access, Wildlife, OS, Water Trail	N/A
UM-72	73	2A	7.280	9300	FERN HILL CEMETARY CORP	FERN HILL CEMETARY	N/A	N/A
UM-73	77	3	0.210	9880	BEAR MEADOW RECLAMATION DIST	FRANKLIN ST	N/A	N/A
UM-74	79	2B	0.130	9300	HANSON TOWN	LAKESIDE RD	Currently Historic Cemetery	N/A
UM-75	79	38	0.300	9300	HANSON TOWN	ROLLERCOASTER RD	N/A	N/A
UM-76	81	11	0.020	9300	HANSON TOWN	PERRY TOMB	Trail, Wildlife, OS	N/A
UM-77	81	3A	0.010	9300	HANSON TOWN	LIBERTY ST	N/A	N/A
UM-78	83	4	0.480	9300	HANSON TOWN INHABITANTS	HISTORICAL SITE	N/A	N/A
UM-79	88	74	0.360	9300	HANSON TOWN	PEARL ST	Trail Access	N/A
UM-80	88	81B	0.110	9300	HANSON TOWN	SILVER ST		N/A

Link	Map	Parcel	Acres	LUC	Ownership	Location	Rec Potential	Grant
UM-81	89	21D	0.470	9300	HANSON TOWN	GORWIN DR	N/A	N/A
UM-82	89	27D	1.010	9300	HANSON TOWN	JAY ST		N/A
UM-83	91	12	0.990	9330	HANSON TOWN	LIBERTY ST	Trails	N/A
UM-84	92	9	0.380	9300	HANSON TOWN	W. WASHINGTON ST	Well Protection, Trails	N/A
UM-85	98	10	11.670	9300	HANSON TOWN	WINTER ST	Trails, Wildlife	N/A
UM-86	98	11	2.350	9300	HANSON TOWN	WINTER ST	Trails	N/A
UM-87	98	15	34.780	9300	HANSON TOWN	WINTER/WHITMAN ST	Trails	N/A
UM-88	105	19	1.900	9300	HANSON TOWN	BROOK BEND RD	Trails	N/A
UM-89	105	12E	1.000	9300	HANSON TOWN	BROOK ST	N/A	N/A
UM-90	105	6	0.150	9300	HANSON TOWN	BROOK ST	Riverfront	N/A
UM-91	106	46	13.120	9300	HANSON TOWN	BROOK BEND RD	Trails	N/A
UM-92	106	7	0.280	9300	HANSON TOWN	WHITMAN ST	Trails	N/A
UM-93	106	10	10.720	9300	HANSON TOWN	WHITMAN ST	Trails	N/A
UM-94	107	5	0.720	9300	HANSON TOWN	LEXINGTON ST	Trails	N/A
UM-95	108	19	0.420	9300	HANSON TOWN	SPRING ST		N/A
UM-96	109	7B	0.700	9300	HANSON TOWN	WHITMAN ST	N/A	N/A
UM-97	119	122	2.080	9300	HANSON TOWN	ADAMS CIRCLE	Trails	N/A
UM-98	122	1A	0.010	9300	HANSON TOWN	STATE ST	Riverfront	N/A
UM-103	49	1	5.490	9310	HANSON TOWN	HIGH ST	Park/Trails	N/A
UM-104	49	1	34.080	9310	HANSON TOWN	HIGH ST	Park/Trails	N/A
UM-105	69	29	0.120	9310	HANSON TOWN	OAK ST	N/A	N/A
TOTAL ACRES			**359.35**					

TOWN OWNED UNPROTECTED MUNICIPAL LAND WITH BUILDINGS

Table 9: Town-Owned Unprotected Municipal Land with Buildings

Link	Map	Parcel	Acres	LUC	Ownership	Location	Rec Potential	Grant
UM-99	33	17D	1.200	9310	HANSON TOWN	HISTORICAL BLDG		NA
UM-100	34	10	3.940	9350	HANSON TOWN	POLICE STATION		NA
UM-101	40	24	4.960	9300	HANSON HOUSING	HOUSING AUTH		NA
UM-102	43	37	0.070	9350	HANSON TOWN	FIRE DEPT HOUSE #2		NA
UM-106	71	11A	6.500	9310	HANSON TOWN	PUBLIC WORKS BLDG		NA
UM-107	71	11A	0.480	9310	HANSON TOWN	HANSON YOUTH SP		NA
UM-109	71	14	3.000	9310	HANSON TOWN	LIBRARY/SENIOR CEN		NA
UM-111	81	1	3.130	9310	HANSON TOWN	TOWN HALL		NA
UM-112	81	15	5.910	9350	HANSON TOWN	CENTRAL FIRE ST		NA
TOTAL ACRES			**29.190**					

PUBLIC SCHOOLS UNPROTECTED MUNICIPAL LAND

Table 10: Public Schools Unprotected Municipal Land

Link	Map	Parcel	Acres	LUC	Ownership	Location	Rec Potential	Grant
UM-108	71	12A	10.000	9340	HANSON TOWN	INDIAN HEAD SCH	Playground	NA
UM-110	71	14A	17.800	9340	HANSON TOWN	MAQUAN SCHOOL	Playground	NA
UM-113	86	2	68.090	9890	WHITMAN-HANSON	SCHOOL DIST	Rec fields	NA
UM-114	91	26	83.320	9340	HANSON TOWN	MIDDLE SCHOOL	Rec fields	NA
	TOTAL	**ACRES**	**179.210**					

COMMONWEALTH OF MASSACHUSETTS LAND – ARTICLE 97

Table 11: Commonwealth of Massachusetts Land Article 97

Link	Map	Parcel	Acres	LUC	Ownership	Location	Rec Potential	Art 97
MA-1	2	38	854.310	9110	COMMONWEALTH OF MASS	PLEASANT ST		ART 97
MA-2	19	2	115.000	9110	COMMONWEALTH OF MASS	ELM ST		ART 97
MA-4	20	2E	3.000	9110	COMMONWEALTH OF MASS	ELM ST		ART 97
MA-5	35	5	9.720	9110	COMMONWEALTH OF MASS	ELM ST		ART 97
	TOTAL	**ACRES**	**982.030**					

PLYMOUTH COUNTY LAND

Table 12: Plymouth County Land

Link	Map	Parcel	Acre	LUC	Ownership	Location	Rec Potential	Grant
PC-1	52	17	1.000	9920	PLYMOUTH COUNTY INHABITANTS	INDUSTRIAL		
PC-2	119	9A	7.600	9320	PLYMOUTH COUNTY INHABITANTS	STATE ST		
PC-3	122	1	2.520	9320	PLYMOUTH COUNTY INHABITANTS	STATE ST		
TOTAL ACRES			**11.12**					

NON-PROFIT ORGANIZATIONS LAND

Table 13: Non-Profit Organizations Land

Link	Map	Parcel	Acres	LUC	Ownership	Location	Rec Potential	Grant
NPO-6	40	32	1.000	9590	CARDINAL CUSHING CEN	SYDNEY LN		
NPO-1	41	11	0.500	9540	AMERICAN LEGION POST	ROBINSON ST		
NPO-2	59	17	1.790	9570	NEW ENGLAND VILLAGES	COMMERCIAL WA		
NPO-3	62	2	9.120	9580	RAINBOW CAMP	INDIAN HEAD ST		
NPO-4	62	6	9.410	9580	RAINBOW CAMP OF MASS	INDIAN HEAD ST		
NPO-5	90	3	14.500	9500	THE WILDLANDS TRUST	WINTER ST		
TOTAL ACRES			**36.32**					

LAND PERMANENTLY PROTECTED BY CR – ARTICLE 97

Table 14: Land Permanently Protected by CR - Article 97

Link	Map	Parcel	Acres	LUC	Owner	Location	Protection	Rec Potential	Art 97
MCL-9	20	1	101	9320	CONS	ELM ST	Division Fish and Game		ART 97
MCL-24	51	8	11.22	9300	CONS	MAIN ST	Wildlands CR #3 ST 2010	Hiking	ART 97
MCL-26	53	2	103.47	9320	CONS	INDIAN HEAD ST	Deed CONS	Hiking	ART 97
MCL-28	58	1	33.54	9320	CONS	FRANKLIN ST	Deed CONS Wildlands CR	Hiking	ART 97
MCL-30	66	2	34.97	9320	CONS	HOLMES ST	Deed CONS Wildlands CR	Hiking	ART 97
MCL-31	66	5	30.58	9320	CONS	W. WASHINGTON	Deed CONS Wildlands CR	Hiking	ART 97
MCL-32	67	7	15.85	9320	CONS	W. WASHINGTON	Deed CONS Wildlands CR	Hiking	ART 97
MCL-40	81	8	1.35	9320	CONS	LIBERTY ST	Deed CONS Wildlands CR		ART 97
TOTAL ACRES			**331.99**						

UNPROTECTED PRIVATE LANDS

Table 15: Unprotected Private Lands

Unprotected land <1 acre – 3 acres	63.243	0.7%
Unprotected land 3 acres – 5 acres	111.254	1.2%
Unprotected land 5 acres – 10 acres	188.837	2.1%
Unprotected land 10 acres or greater	608.768	6.6%
Total unprotected land	972.102	10.6%

TEMPORARILY PROTECTED PRIVATE LANDS IN CHAPTER 61

Table 16: Temporarily Protected Private Lands in Chapter 61 Forestry

Link	Map	Parcel	Acres	LUC	Ownership	Location
CH61-F1	36	8C	23.600	160	BRINE THOMAS P & LILLY	ELM ST
CH61-F2	36	8F	4.000	1300	BRINE THOMAS P & LILLY	ELM ST
CH61-F3	56	5	11.000	6010	RE DANIEL E	HIGH ST
CH61-F4	60	2	13.100	6010	SIMPSON MAE A	MAQUAN ST
CH61-F5	76	6	77.671	6010	DEAN DAVID	W. WASHINGTON
CH61-F6	86	1B	25.570	160	KINGSTON MARK	FRANKLIN ST
CH61-F7	112	7	4.610	6010	ROBERTS E RENEE	E. WASHINGTON ST
	TOTAL	**ACRES**	**159.551**			

Table 17: Temporarily Protected Private Lands in Chapter 61A Agriculture

Link	Map	Parcel	Acres	LUC	Ownership	Location
CH61-A1	1	1108	101.000	3170	SMJ CRANBERRY ASSOC	BOG off Monponsett St
CH61-A2	2	4	18.120	1320	THORP GARY S	HANCOCK ST SPOFFORD
CH61-A3	6	20	2.440	7100	SMJ CRANBERRY ASSOC	MONPONSETT ST
CH61-A4	6	1112	69.190	3170	SMJ CRANBERRY ASSOC	MONPONSETT ST
CH61-A5	14	1110	34.580	7100	SMJ CRANBERRY ASSOC	MONPONSETT ST
CH61-A6	20	1A	8.094	7120	DMITRUK JOAN	ELM ST
CH61-A7	22	2	18.380	7100	MORSE BROTHERS INC	SOUTH/UNION STS
CH61-A8	23	31	97.350	7100	MORSE BROTHERS INC	BOG
	37	3	2.160	710	LIPINSKI-MCDONALD	FRANKLIN ST
	41	1F	72.970	730	ADGA REALTY LLC	MAIN/ROBINSON ST
CH61-A9	47	1	5.140	370	BOYLE, KEITH	INDIAN HEAD ST
CH61-A10	60	3A	4.320	9800	TOWN OF PEMBROKE	MAQUAN ST
CH61-A11	67	6A	8.568	3900	ALEXANDER STEVEN D	FRANKLIN ST
CH61-A12	100	28A	2.400	7190	WYMAN L M TR WYMAN	TAVERN WAYE
CH61-A13	100	29A	19.219	7170	WYMAN LESTER M	TAVERN WAYE
CH61-A14	101	6A	11.710	7170	WYMAN LESTER M	SPRING ST
	TOTAL	**ACRES**	**475.641**			

TEMPORARILY PROTECTED PRIVATE LANDS IN CHAPTER 61B RECREATION

Table 18: Temporarily Protected Private Lands in Chapter 61B Recreation

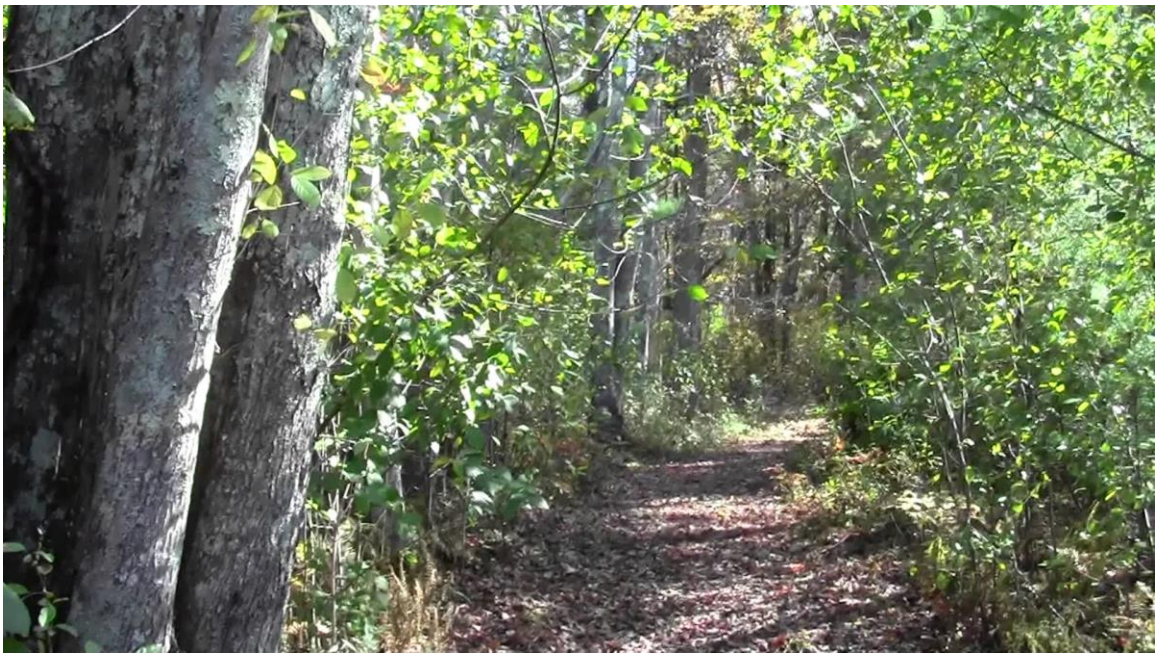
Link	Map	Parcel	Acres	LUC	Ownership	Location
61R1	14	1	10.200	8030	KRAVITZ, STANLEY	SOUTH ST
61R2	28	5	97.279	3890	HANSON ROD & GUN CLUB	DAVIS RD
61R3	33	17C	35.190	3700	HANSON ATHLETIC ASSOC	REED ST
61R4	54	49	132.730	810	GREAT CEDAR CATTLE	INDIAN HEAD ST
61R5	57	11A	65.930	8030	BANUK GARY J & BARBARA	HOLMES ST
61R6	65	5	17.790	8030	FIRST CONG CHURCH	HOLMES ST
61R7	89	3	9.953	8030	ROBBINS, MICHAEL	BEATRICE LN
61R8	98	12	8.970	1320	HOGAN RALPH M & LOUISE	WINTER ST
	TOTAL	**ACRES**	**378.042**			

Municipal

There are sixty-five parcels held either by the Hanson Conservation Commission or protected under other Conservation Restrictions. These parcels total 781 acres and range in size from less than an acre to 111 acres. ***This is an increase of 278 acres from the 2008 Open Space and Recreation Plan.***

Smith-Nawazelski Conservation Area

One of the largest protected properties is the Smith-Nawazelski Conservation Area which has a state-held Conservation Restriction (CR). The reason for this CR is that in 2002, the Mass. Dept. of Fish and Game acquired 1,600 acres from Northland Cranberry in Hanson and Halifax to create the 1,800-acre Burrage Pond Wildlife Management Area owned by the Commonwealth. The property had been classified Chapter 61A, and the towns argued that they were due rollback taxes due to a change in use. Hanson was owed $250,000 and this was originally to be paid through transfer of a portion of the property with frontage on Hawks Avenue after that property had been cleared of refuse. The town and DFG ultimately concluded that the sale of a CR on the town-owned property now known as the Smith-Nawazelski Conservation Area would be a simpler means of paying the roll back taxes due, and would also ensure that this property would remain as open space.



The Premises, known as the "Smith-Nawazelski Conservation Area" consist of approximately 101 acres of gently sloping land, of which 90 acres are upland and eleven (11) acres are forested wetland (primarily red maple swamp) between Poor Meadow Brook and Elm Street. Approximately four (4) acres of the Premises are currently under agriculture, with two (2) acres used for crops such as corn or pumpkins and a separate two (2) acre field being used for hay. It has some 1,500 feet of frontage on Poor Meadow Brook and a network of walking trails, including a critical like in the Bay Circuit Trail in Southeastern Massachusetts. The Bay Circuit Trail extends onto the Burrage Pond WMA.

Smith-Nawazelski Poor Meadow Brook – Bay Circuit Trail

Photo by Rob MacDonald

The Premises provide upland forest, stream and forested wetland habitat for native wildlife and plant communities, including many species of native plants, lichens, mammals, birds, fish, reptiles, amphibians, and invertebrates. The upland forest consists of mixed hardwoods and conifers interspersed with wooded swamps. The forest provides habitat for many game and non-game species including whitetail deer, wild turkey, grouse, and songbirds. The stream and wetlands provide habitat for fish, waterfowl, otter, mink, and other riparian species. Poor Meadow Brook is habitat for Long's Bitter-cress (*Cardamine longii,* Endangered*)* and Pale Green Orchis (*Platanthera flava var. herbiola,* Threatened).

Smith-Nawazelski Poor Meadow Brook Boardwalk – Bay Circuit Trail

Photos by Rob MacDonald

Smith-Nawazelski Poor Meadow Brook Boardwalk – Bay Circuit Trail

Photos by Rob MacDonald

The town acquired the land for conservation and water supply protection in 1989 from Ms. Ellen Stillman. Ms. Stillman retained a 10-acre lot with frontage on Elm Street, and a 30-foot-wide access easement across the southern edge of the property to reach her land in East Bridgewater.

Because the property was acquired for conservation and water supply protection purposes, it is subject to Article 97, and the transfer of an interest in the property required approval of both houses of the legislature. At a Special Town Meeting on October 1, 2007, the Board of Selectmen was authorized to seek legislative approval to grant a conservation restriction to the Mass. Dept. of Fish and Game.

Approval was received (Chapter 165 of the Acts and Resolves of 2008), and the Consensual Order of Taking of Conservation Easement AKA Conservation Restriction was recorded on July 1, 2008.

The Conservation Restriction will assure that the premises will be retained predominantly in its natural scenic and open condition for fish and wildlife conservation, native habitat protection, public recreation, protection of scenic views, and other conservation uses. Preservation of the Premises, by reducing or prohibiting alterations to the natural character thereof, will protect and enhance the area's scenic and open space attributes and the passive recreational, human enjoyment, and ecological value of this conservation open space.

Poor Meadow Brook Greenway

The Water Department has four parcels totaling 94 acres for drinking water protection and wells. At a Special Town Meeting held on October 4, 2010, the Town of Hanson voted to acquire, for Conservation Purposes under Chapter 44B, using Community Preservation funds, the deed in the property north of Main Street and east of the Town's Commerce Park known as the Poor Meadow Brook Greenway CPA property, consisting of 11.2 acres of open land identified as Map 51, Lot 8, said land was to be managed by the Hanson Water Commission. This property is protected through a Conservation Restriction held by Wildlands Trust, Inc.

This project gave the Town a cost-effective opportunity to acquire a parcel that helps to protect a public water supply. The Town's acquisition of this property helps to protect the integrity of the adjacent Crystal Spring Well Field, which supplies drinking water for the Town. This property is situated just upstream of the Town of Hanson's Crystal Well Field, and is located entirely within and partially within, respectively, a Zone II Wellhead Protection Acre and a Medium Yield Aquifer Area as identified by the Commonwealth of Massachusetts. This property is publicly accessible for passive, non-motorized recreational activities, to include hiking, nature study, and cross-country skiing, fishing, and canoeing and kayaking.

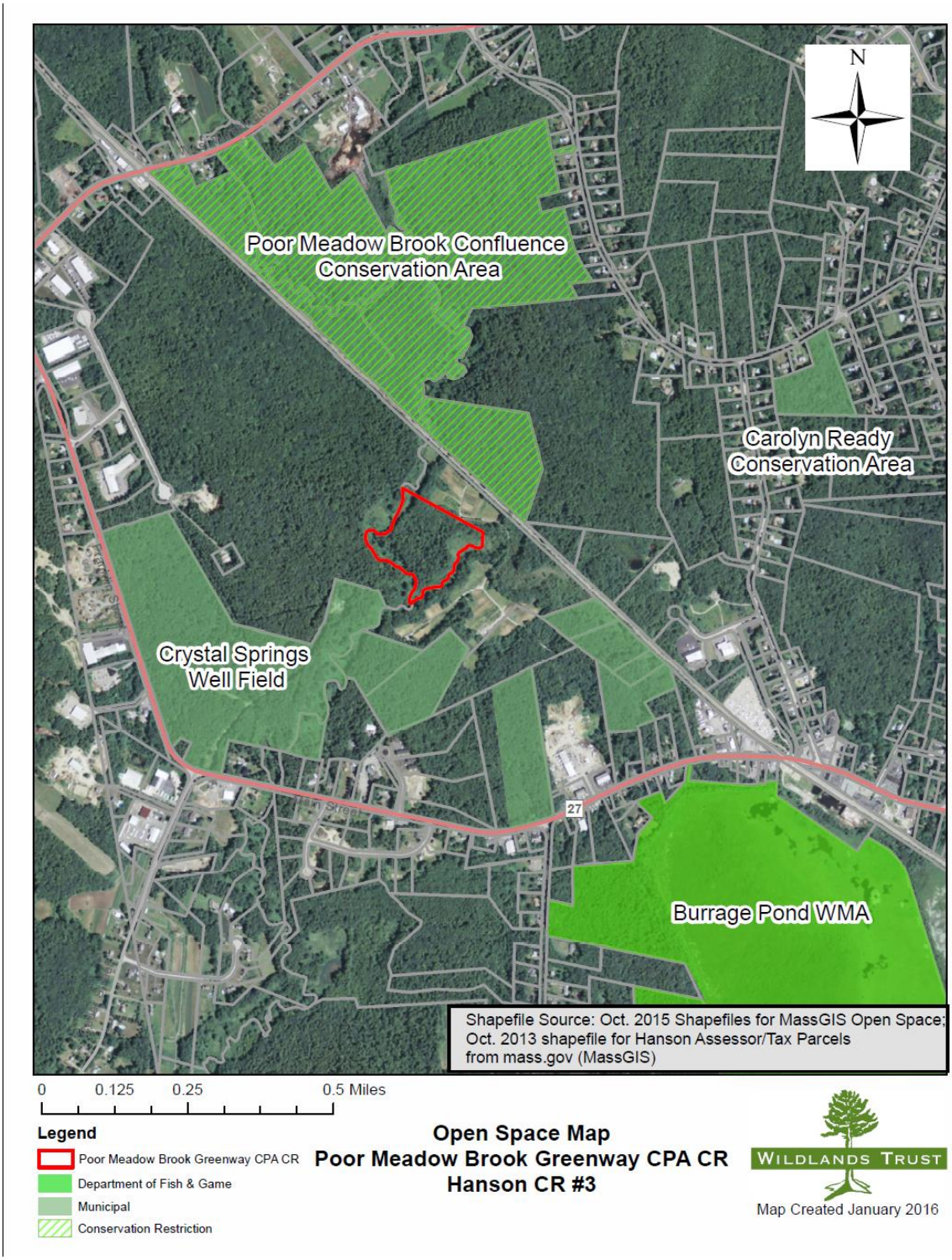
This property is part of an area along the Poor Meadow Brook corridor in which the Town of Hanson has multiple holdings, including several parcels under the care and custody of the Hanson Conservation Commission, and the rear portion of the Town's Commerce Park hold and will effectively expand the assemblage of publicly owned conservation land in southwest Hanson and help to protect wildlife habitat and hydrological resources. Collectively, these holdings total over 200 acres. This property also helps expand the Poor Meadow Brook Greenway, identified in the Town of Hanson's 2008 Open Space and Recreation Plan as a priority. This property is situated approximately one-quarter mile upstream of an area designated by the Commonwealth of Massachusetts Natural Heritage and Endangered Species Program ("NHESP") as "Priority Habitat of Rare Species PH #1069" and "BioMap 2 Core Habitat Aquatic Core".

Poor Meadow Brook Confluence Protection Project

During FY2014, the town of Hanson, through the Conservation Commission and the Open Space Committee, were the successful recipients of Hanson Community Preservation Funds and a state LAND Grant for the acquisition and permanent preservation of 115 acres of woodland, floodplain, and riparian frontage along three important waterways in southwest Hanson, the Shumatuscacant River, Brett's Brook, and Poor Meadow Brook. It is also within a Massachusetts DEP-designated Zone II Water Supply Area and is partially within a zone of contribution for the Town's Crystal Spring Drinking Water Well located approximately one-quarter mile downstream.

The property is located off the south side of West Washington Street (State Route 14) and the west side of Holmes Street in predominantly rural northwest Hanson. Its West Washington Street frontage is sizable enough for a trailhead parking area.

Figure 71: Open Space Map Poor Meadow Brook Greenway



This project serves to create an outstanding nature reserve in an area historically underserved by conservation efforts, protect land within a Zone II Aquifer Protection Area, protect an extensive riparian area, enable public access for a wide range of passive recreational pursuits, protect habitat for at least one potential vernal pool, preserve land identified as important for regional climate change adaptation, and help advance the vision of creating the Poor Meadow Brook Greenway, an established priority in Hanson's current Open Space and Recreation Plan. This property was one of the largest remaining unprotected properties in Hanson still under private ownership.

Figure 72: Poor Meadow Brook at the Railroad Bridge

Poor Meadow Brook, at the railroad bridge, at a point about 3,000 feet southeast of West Washington Street

This property includes extensive riparian areas and Shumatuscacant River, Brett's Brook, and Poor Meadow Brook. The latter waterway begins on the property, at the confluence of the Shumatuscacant River and Brett's Brook. Poor Meadow Brook is an important tributary of the Taunton River. This extensive and largely undisturbed riparian area provides good habitat for a wide range of species that require un-fragmented areas for their nesting and reproduction needs. The Stone property includes at least one NHESP-designated Potential Vernal Pool.

The project creates significant new opportunities for land and water-based recreation, particularly water-based recreation in Hanson, and therefore satisfies a community need for locally based recreational opportunities. The project enables public access to the Poor Meadow Brook system for a range of water-

Figure 73: Alton J. Smith Reserve (Smitty's Bog)

based recreational pursuits, including kayaking, canoeing, and fishing. The Stone Property's West Washington Street frontage now has a trailhead parking area that enables access to the Shumatuscacant River, and eventually Poor Meadow Brook. At present, there are few sites to access this river system in Hanson.

This property is closely proximate to multiple town-owned conservation properties and the Crystal Spring Well, and on a larger landscape level serves as the northern anchor of an expanding wildlife corridor in Hanson that extends southerly to the Massachusetts Division of Fish and Game's 2000+ acre Burrage Pond Wildlife Management Area. This property is protected with a Conservation Restriction held by the Wildlands Trust, Inc. The acquisition of the Stone property also advances the goal of expanding the Poor Meadow Brook Greenway, a priority in the Town of Hanson's previous Open Space and Recreation Plan.

Rocky Run Conservation Area

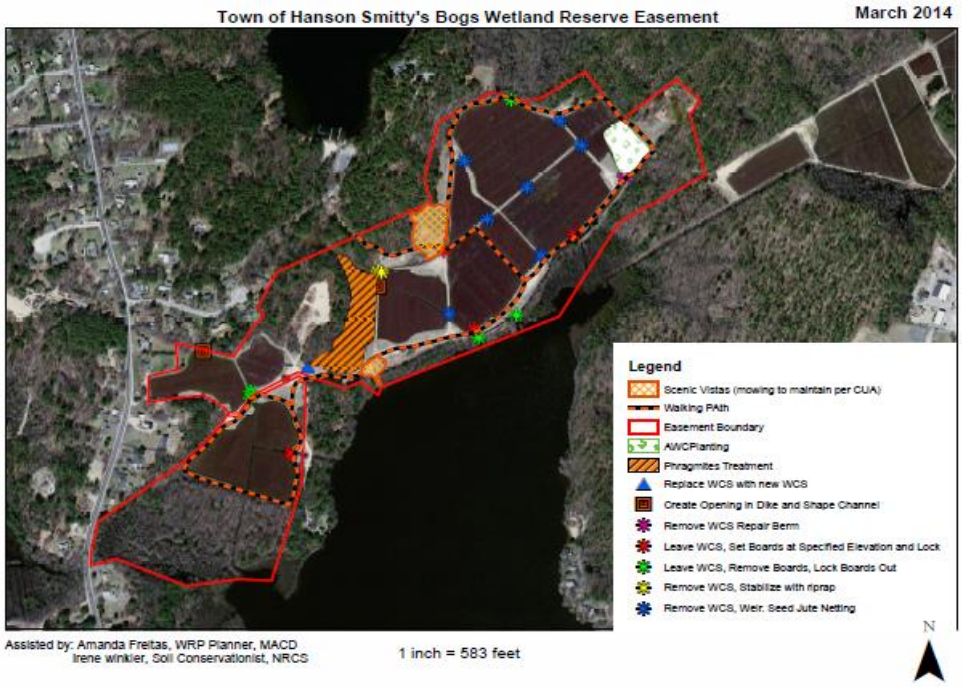
Figure 74: Rocky Run Conservation Area

The Rocky Run Conservation Area comprises several parcels totaling 19 acres where Hanson, Hanover, and Pembroke meet. This protected area at the confluence of Rocky Run Brook and Indian Head River is the furthest upstream section of the state-designated North River Scenic Corridor. Downstream from waterfalls at several historic mill sites, hardwood forest transitions to the cool, moist shade of an impressive hemlock grove. Here at the lowest elevation in Hanson, only 25 feet above sea level, bedrock exposed by post-glacial erosion forms a dramatic cliff-like setting, unlike any other location in Hanson.

Alton J. Smith Reserve (Smitty's Bog)

Straddling the headwaters stretch of Indian Head Brook, the bog's attractive four-season vista greatly enhances the local streetscape for drivers and pedestrians along Route 58. From a hilltop along its shared boundary with Camp Kiwanee, there is an excellent view across this property to Indian Head Pond, where the town-owned fisherman's landing can be reached from Indian Head Street via deeded easement access through the bog roads.

Figure 75: Smitty's Bogs Wetland Reserve Easement



This103.4-acre cranberry bog property located on Indian Head Street (Assessors Map 53 Lot 2), and purchased by the Town in 2010 for $1.00 under the USDA's Wetland Reserve Program is a productive resource that also provides scenic and conservation value. A deeded agricultural restriction is held on the property by the USDA with the underlying fee (the land) being owned and managed by the Town. The Town is charged with implementing the Wetland Restoration Plan of Operations (WRPO) the removal of water control structures (the removal and/or opening up of water control structures to restore open flow), Herbaceous Weed Control (mechanical/chemical control of Phragmites), Critical Area Planting (seeding of native grasses in areas disturbed by removal of water control structures as well as within the Town's designated scenic vistas) and Tree and Shrub Establishment (planting of Atlantic White Cedars) at the easterly side of Indian Head Street, Hanson, MA. The cost of the restoration is to be paid by the Federal Government.

Nathaniel Thomas Mill

Figure 76: Nathaniel Thomas Mill Pre-1900s

Original Nathaniel Thomas Mill – Photo taken Pre-1900s

The Nathaniel Thomas Mill (1.3 acres), Map 81, Lot 8**,** purchase was completed in December 2010 with Community Preservation funds as per vote at Special Town Meeting October 5, 2009 for open space, historic preservation, and recreation purposes.

- Stakeholders Working Agreement for the Mill drafted in April 2011
- Landscaping and Vegetation Management Plan drafted in March 2012
- Revolving Fund established at Special Town Meeting of October 7, 2013 for the ongoing maintenance of the Mill, the beautification of the building and grounds and any necessary repairs to the Mill. Funds are generated through rental fees of the Mill itself.

Conservation Restriction placed on the Mill property in 2016 is held by the Wildlands Trust, Inc. Initial Baseline Documentation audit visit completed January 2016 by CR holder.

Veterans Memorial Town Forest

In 1938 Hanson became one of more than 130 Massachusetts communities to establish a Town Forest under the auspices of the Town Forest Act of 1913, for the purposes of wildlife, recreation, and forestry. Later, in the 1950s and 1960s, new state laws created Conservation Commissions which expanded on those same purposes and allowed for Conservation Commissions to assume responsibility for Town Forests. For fifty years Hanson has maintained both a Town Forest Committee and a Conservation Commission. Often the same people belonged to both groups simultaneously. Through a 1972 state grant, the Conservation Commission obtained a parcel of land (Assessors Map 63, Parcel 5) adjacent to the Town Forest, thus enlarging it by 2.52 acres and necessitating dual management of the overall area.

At a Special Town Meeting, held on May 5, 2014, the citizens of the Town of Hanson voted to place the Hanson Veterans Memorial Town Forest, Assessors Map 71, Parcel 11, under the care and custody of the Town of Hanson Conservation Commission and re-affirmed the action of the 1938 Hanson Town Meeting, Article 19, which set it aside for wildlife, recreation and forestry. The town of Hanson reduced the duplication of effort and simplified the management of this natural resource by enabling the Conservation Commission to care for both parcels as one single management unit.

The Forest's 35 acres, along with 2 acres of adjacent Conservation land, protect almost half of the green vista along the Wampatuck Pond shoreline as seen behind Town Hall. Tall pines, beeches, oaks, and birches dominate a biologically diverse landscape. Quiet woods, shrub meadows and wetlands provide passive recreation with the Bay Circuit Trail and other walking trails, rustic wood benches and two primitive campsites that are used by scout groups and others. The Stewardship Plan calls for selective harvesting of overcrowded trees to improve long-term forest health, to increase areas of early succession habitat, and to provide modest revenue for the town.

Webster-Billings Conservation Area

Webster-Billings Trail Path

The Webster-Billings Conservation Area is approximately 62+ acres in size, located behind the house lots off East Washington, State and Brook Streets on parcels known as Map 105, Lots 1, 2 and 5 and Map 112, Lot 14.

Much of the Property (nearly 55 acres) is upland and covered with a mixture of mature mixed oak and White Pine trees. The remaining lowland areas, which tend to be seasonally wet, are forested with Red Maple and other hardwoods such as Yellow Birch and Beech. The lay of the land is gently rolling in nature and because of the myriad of pathways, lends itself to hiking and passive recreation. Two vernal pools, an important and unique breeding habitat for small amphibians such as salamanders and frogs, have recently been certified.

The Property has four main access points, two of which are located off East Washington Street at the ends of Old Pine Drive and Puritan Avenue. The other access points include an easement at the end of a cul-de-sac on Williams Way off Brook Street with frontage on State Street. The western portion of the Property abuts the Indian Head Brook, a tributary of the *North River*, the first protected scenic and recreational river in the State of Massachusetts. The potential of a fourth access point exists off State Street but because of an abundance of wetlands in this area, the construction of a boardwalk would be necessary to protect fragile vegetation areas.

The Property was acquired by the Town of Hanson through eminent domain on April 9th, 1973 by two thirds vote at Town Meeting under Article 5 for conservation purposes. Acting under the provisions of M.G.L. Ch. 40, §14, John C. Webster III completed the Order dated February 25, 1975 and the owner, Webb-Hoder Building Association, Inc., was awarded $75,000.

At the Special Town Meeting of November 15, 1978 under Article 1, the Town appropriated additional monies for the taking of the parcel in the amount of $175,000 under M.G.L. Ch. 44, §7(3) and a sum of $45,000 was transferred from surplus revenue to satisfy a court judgment in connection with the acquisition.

The area was previously known as the Hoder Property denoting the name of the owner/developer from which it was taken by eminent domain. The present name of the parcel was proposed and accepted by vote at the May 2009 Town Meeting to recognize three individuals that are conservation-minded, have made many civic contributions and are well respected throughout the Community. Ms. Susan K. Webster drafted the article for the town warrant and was greatly responsible for the Town Meeting vote that accepted the parcel for Open Space and Conservation. Mr. & Mrs. Dana and Norma Billings, two longtime, Hanson residents were suggested by Phil Clemons, Chairman of the Open Space Committee, as being "leaders and parents that taught their own children and grandchildren to respect and protect our natural resources". In addition, Mr. Billings was a past member and Chairman of the Conservation Commission.

Mr. Allan Clemons, a lifelong Hanson resident and town historian, believed that historically, the Property was part of a farm that belonged to the Josselyn family who lived at the corner of State and East Washington Streets. It was then, as it is now, by and large a wooded lot and was used in years past mainly for firewood and timber. The existing pathways were likely cleared for access to and as a means of escape from the Property if there was a forest fire.

In early 1981, John W. Delano, RLS, surveyed the property bounds based on the deed referenced in bk. 4050, pg.'s 355 & 356 and a plan drawn by Pilgrim Land Surveyors dated October 22, 1970. Mr. Delano prepared a plan called "The Webb-Hoder Lot" dated November 24, 1982 and concrete bounds were set in the same month.

Also, in 1982, Mr. Philip Benjamin, a forester for the company of Springer Environmental Services, Inc. was hired to prepare a forestry management plan for the Property. He set up a pilot fuel-wood project which was subsequently carried out over a period of two years. In December of 1991, Mr. Benjamin was re-hired to oversee the thinning and sale of 16 acres of a White Pine harvest. Under this program, the Conservation Commission was paid a portion of the profits. The income that was generated from the

sale of the timber amounted to a modest sum of $1,070.00 which was deposited into the Conservation Fund. Mr. Benjamin continued to monitor the White Pinecone development during the summer of 1992 for natural regeneration.

Brian M. Gaffey Conservation Area

The Brian M. Gaffey Conservation Area (BMGCA) contains 62.58 acres of area located on parcels known as Map 83, Lot 3B and Map 92, Lot 23. The Property is situated between County Road (Route 14) and West Washington Street and has two main access points. A strip of land located between 225 and 243 County Road and another strip of land between 59 and 83 West Washington Street. Both areas are clearly marked with green and white Conservation signs. Parking is available at the Town-owned Thomas Hall site off West Washington directly across from the Property. The Thomas Hall burned down several years ago leaving an empty, grassed lot. There is a third potential access point between 93 and 141 West Washington Street, but it is visibly swampland.

The larger (54.5 acres) of the two parcels, Map 83 Lot 3B was donated to the Town of Hanson on September 13th, 2001 by E. Kenneth Gray and Mark A. Tedeschi of Hanson County Road Associates, LLC on a deed recorded in Book 20562, Pages 348-350. It was officially accepted by members of the Conservation Commission and the Board of Selectmen on September 18, 2001. A utility company has deeded access to the Property on this parcel. During the August 21, 2001 meeting of the Conservation Commission, the members voted to honor and name the Property after longtime Conservation member Brian M. Gaffey, who had passed away that year, for his many years of dedication to protection of open space.

The smaller parcel (8.18 acres) was acquired by the Town through a taking for non-payment of taxes and recorded in Tax Title Book 13500, Page 36. A final land court judgment was handed down on October 14, 1999 and recorded in Book 17950, Page 345. At the Special Town Meeting of May 3, 2004, the parcel was transferred to the care, custody, management, and control of the Conservation Commission. Joined, the Property is now perpetually protected open space extending from County Road to West Washington Street and allowing the potential for parking and additional access.

A good portion of the Property is wetland (estimated at 50% to 60%) with an abundance of fragile vegetation areas at all the viable entry points, gaining access to the Property is difficult at this time. However, the Property has frontage which has potential for access along West Washington Street directly opposite the historic Thomas Hall site. The Thomas Hall site is town-owned (21,200 SF, Assessor's Map 92, Lot 9) that could be integrated into the Property. The Hall was built in the 1880's and prior to suspiciously burning down in the 1980's was used variously as a library, school, venue for dances, concerts, and plays, and as a polling place. The property is in an excellent location to provide a trailhead

access point to the Property, with space for parking and an information kiosk (maps & historic information) in a neighborhood "pocket park".

The historic "Major's Purchase Stone" boundary point is near the eastern edge of the Property, just off Gray Lane. This one-half acre town-owned site (Assessor's Map 83, Parcel 4-1) could also be integrated into the Property. It was formally indicated by an engraved stone marker (which the Historical Commission wishes to restore) as the northwest limit of a large land parcel purchased by Major Josiah Winslow in 1662 from Josias Wampatuck, a Native American. Preceding actual settlement by some thirty years, this site was the first formal boundary of European settlement anywhere in the town of Hanson. The Alden Way/Gray Lane development unfortunately caused the site to become landlocked between two house lots.

Private Parcels

Privately Owned open space in Hanson includes lands in Chapter 61, 61A, and 61B tax programs, and other properties under private ownership with some level of protection either through a CR or other means of protection. Town, Land Trust and CR lands form the largest intact natural area in Town.

Chapter 61, 61A, and 61B lands, which are afforded temporary protection if they are maintained for forestry, agriculture, and recreation respectively, constitute 11% of the land in Town. This figure could be increased as the Town has right of first refusal should any of these properties become available while enrolled in the program and for one year thereafter. The Town should continue to prioritize protection of these lands as they become available, especially when doing so will support town-wide conservation objectives including rare species habitat, agricultural land protection, or sensitive water resources.

There are seven Chapter 61 (Forestry) designations in Hanson ranging in size from 4 to 26 acres totaling almost 160 acres. There are fifteen Chapter 61A (Agriculture) designations ranging in size from 2 to 101 acres and totaling 408.11 acres. Seven of these are cranberry bogs (328.08 acres). There are eight Chapter 61B (Recreation) designations ranging in size from eight acres to 133 acres totaling 378 acres. All told, the town has the right of first refusal on over 938 acres of land currently held in the Chapter 61 program.

Figure 77: Privately-Owned Open Space

Privately Owned Open Space	Acres	Percentage of Total Land Area in Hanson (9,202 acres total)
Chapter Lands		
Temporarily Protected Under Chapter 61Land Forestry	159.551	1.7%
Temporarily Protected Under Chapter 61A	475.641	5.2%
Temporarily Protected Under Chapter 61B	378.042	4.1%
Total Temporarily Protected Chapter lands	1,013.234 acres	11.01%
Additional Land Permanently Protected by Conservation Restriction or Article 97	**Acres**	**Percentage of Total Land Area in Hanson (9,202 acres total)**
Town Owned Municipal Land under Conservation Commission	440.041	4.8%
Permanently protected by CR or Article 97 Lands	331.994	3.6%
Commonwealth of Massachusetts Land protected by Article 97	982.03	10.7%
Plymouth County Land	11.12	0.1%
Total Permanently Protected Lands	1,765.185 acres	19.18%
Total Temporarily and Permanently Protected Land in Hanson	2,778.419 acres	30.19%

There are numerous large undeveloped private parcels that could be considered for future open space protection through Conservation Restrictions or outright purchase. In general, large, undeveloped parcels of land provide greater environmental benefit than smaller ones by providing intact wildlife habitats that are not fragmented, and by maintaining a healthy watershed. There are eighteen privately held parcels between one and three acres in size totaling almost 39 acres. There are twenty-eight privately held parcels between 3 and 5 acres in size, with a combined area of 104.94 acres. There are twenty-six parcels between 5 and 10 acres in size, and depending on their location and environmental attributes, could be considered valuable for open space protection. These parcel total 188.84 acres in area. There are twenty-six parcels of ten acres or greater with a combined area of 608.77 acres. The total amount of unprotected private lands of one acre or more is 941 acres.

Other Areas and Parcels

There are five Parks and Recreation parcels, the Hancock Street Playground, the ball fields on Main Street and Robinson Street and Camp Kiwanee Cranberry Cove recreation areas.

In addition, there are ninety-six town owned parcels containing 318 acres that are undeveloped and without buildings, not held in Conservation, and are thus 'unprotected'. Most of these are small, but there are eleven parcels over five acres, the largest is over 148 acres. The four Town-owned parcels containing the former Plymouth County Hospital Property total 56 acres. Unsuccessful Articles of the 2008 and 2012 Fall Special Town Meetings failed to put some of this area under Conservation jurisdiction.

There are seventeen parcels of unprotected private lands containing three acres or less in area which combined amount to 38.83 acres in total. There are twenty-eight parcels of unprotected private lands between three to five acres in size which combined amount to 105-acres total. There are twenty-six parcels of unprotected private lands which contain an area of between five and ten acres each, which combined total 188.83 acres. There is a total of twenty-six parcels of unprotected private lands that contain 10 or more acres each for a total combined acreage of 608.76 acres. The total combined area of all unprotected private lands within the town of Hanson is 941 acres.

State and Non-Profit Organizations

Six parcels of the Commonwealth of Massachusetts' Burrage Pond Wildlife Management Area cover 968 acres in South Hanson. There are three parcels owned by Plymouth County totaling 12 acres. Two of these are along the Indian Head River and constitute part of the Hanson Rocky Run Conservation Area. As mentioned above, the state holds a CR on the Smith-Nawazelski property.

There are five non-profit landowners in Hanson. The Wildlands Trust, Inc. owns the 15-acre Hunt Preserve, and The Rainbow Camp of Massachusetts holds 18 acres. The Hunt Preserve is protected in perpetuity, but the Rainbow Camp deserves close attention due to its Maquan Pond frontage and proximity to Camp Kiwanee.

SECTION 6. COMMUNITY VISION

Description of Process

The Open Space and Recreation Planning Team hosted three Visioning Sessions to review this updated Plan. The first was held on June 22, 2016 specifically for relevant board and committee members and was attended by representatives from a variety of town boards and commissions including the Water Board, Assessors, Board of Appeals, Trails Committee, Board of Selectmen, Planning Board and representatives from Wildlands Trust and the Massachusetts Department of Fish and Game. Several town employees attended including the Town Planner/Conservation Agent, Board of Health Agent and Town Assessor.

In May of 2016, the Open Space and Recreation survey was distributed to 1100 residents as a colored paper insert in the local paper, the Hanson Express. The survey was also distributed at the Annual Town Meeting held in May 2016, at Town Hall and the library/senior center. The response was good with 145 completed surveys returned, 49 of those surveys were from the 287 citizens present at the Annual Town Meeting held in May, resulting in a return rate of nearly 17 percent. A total of 96 surveys were returned from the insert of the Hanson Express resulting in a return rate of nearly 9 percent.

The Open Space Committee hosted a second Visioning Session for the public on July 18, 2016 with 14 people attending and August 1, 2016 with 8 people attending. These visioning sessions were held to review the survey responses resulting in productive conversations.

Survey respondents were asked questions regarding their age, attendance at town meetings, voting status and questions related to their current and future uses of open space properties. Most respondents indicated that they chose to reside in Hanson due to the quiet, safe, and rural character and the affordability of their homes.

When polled regarding their desires for future initiatives, citizens encouraged the Town to focus on its already rich resources in trail networks and to make these more accessible through trail maps and guides, but also to consider extending sidewalks and developing rail trails, which provide safe passage without direct conflict with vehicular traffic. This response mirrors the results of the SCORP survey of public officials conducted in 2012. The public officials surveyed for the SCORP were asked what activities they felt would show an increase in popularity in their communities over the next five years. Trails and multi-use fields were the two types of facilities that officials said "require more resources" – 57.9 percent and 49.5 percent, respectively. Other high-ranking activities, are, in decreasing rank order, playgrounds,

baseball fields, community gardens, picnic areas, and freshwater swimming areas (from 37.9% down to 31.6%) – see SCORP http://www.mass.gov/eea/docs/eea/dcs/scorp-2012-final.pdf

According to the SCORP, the need for more trails, especially those closer to where people live was most frequently mentioned as a real need across the state. The residents of Hanson are fortunate that the town has an extensive trail network.

Citizens also opted for initiatives which would promote outdoor activities, such as gardening, farming, and choices for more open green space for athletics, both formal regulation games and informal spaces.

In their spare time, some people enjoy hiking, canoeing, or long-distance bicycle riding. Still others find satisfaction in walking along roads or gardening or landscape painting. Hanson is fortunate to have resources that can support a wide range of recreational interests and many programs that help people of all ages keep physically active and engaged.

The survey asked residents about their current use of open space properties and the respondents were encouraged to choose more than one option, if applicable. Most respondents indicated that they use open space parcels for walking, the number one choice with 115 responses, followed by canoe/kayak (46 responses), and fishing/swimming (35 responses each).

The survey asked what is needed to increase use of open space. The respondents indicated that marked trails (69%) and detailed trail maps and bike paths (47%) were the highest responses, with accessible parking areas (33%) and improved canoe/kayak access (32%). Trail activities, including hiking, walking, jogging, nature study, bicycling, horseback riding, and cross-country skiing, continue to be extremely popular at the state, regional and local levels. To meet the requests of the respondents, the Conservation Commission worked with local resident and summer intern **Emily Murad** to create trail maps for the Veterans Memorial Forest, the Last Meadows, and the Smitty's Bog trail system. Copies of these trail maps are included in Appendix I.

The survey asked, "Should Hanson acquire open space?" A resounding eighty percent of the responses indicated in the affirmative. The following question asked what should guide which open space parcels to protect. Of the returned surveys, 122 respondents selected drinking water as the most important reason to select an open space parcel. This was followed closely by protection of ponds and shorelines (106 responses), hiking trails and forest/woodlands received an equal number of responses (88), stream corridors (84) and wetland/wildlife habitats (81). Many respondents chose more than one answer.

The survey asked respondents what their favorite scenic vistas are, 47 respondents chose Wampatuck Pond and 32 selected Camp Kiwanee while Burrage WMA followed closely behind with 31 residents.

As the Town assesses lands for potential playing fields, it is critical to carefully evaluate the resource protection values associated with those lands. To identify those valuable natural and agricultural areas that would be unsuitable for such activities and, conversely, to guide planners to areas where playing fields would be appropriate and easily accessed and where they would enhance the community.

The protected open space of Hanson provides highly varied recreational opportunities. Outdoor recreation can include active pursuits such as hiking, canoeing or bicycle riding, or more passive activities such as wildlife viewing, photography, and quiet association of the scenic corners or hidden treasures in Town.

The survey asked if there are specific properties in Hanson that the respondents think should be protected. The survey responses indicate that Plymouth County Hospital Grounds was selected by 23 residents with Camp Kiwanee chosen by 17 respondents.

Also, local, neighborhood open space resources provide opportunities for nature-based recreation, affording easily accessible wildlife viewing, nature education, and opportunities for frequent, personal, quiet connection to the natural areas of Hanson. For a town of its size and population, Hanson provides a broad range of outdoor recreational opportunities.

Of the 145 returned surveys, 33 residents (22% of responses) provided contact information and indicated their willingness to volunteer with maintaining open space properties.

Prior to these recent sessions, the town has held numerous public meetings that provided the basis for existing Plans.

Statement of Open Space and Recreation Goals

After synthesizing existing Open Space and Recreation Goals in conjunction with other current planning initiatives, the Planning Team has determined that the overall vision of the community has remained unchanged for the past 15 years: to retain a semi-rural, attractive community that values its residents and quality of life. Thus, the goals stated in previous plans are still relevant, but have been redefined to more acutely focus efforts to preserve Hanson's community character:

Goal 1: Preserve and Enhance Hanson's Rural Character and Scenic Quality

Residents want to preserve the rural character of Hanson.

Goal 2: Protect Hanson's Water Resources and Biodiversity

Residents want to protect water resources and biodiversity. Factors relevant to water resources include quality, availability/supply, and safety. Concern for biodiversity includes protecting wildlife habitat, connecting migration corridors, and managing invasive species.

Goal 3: Improve Connectivity of and access to recreational resources

Residents want schools, parks, and residential neighborhoods to be connected to natural areas through a network of improved trails and sidewalks. These goals will allow residents to engage more with the natural resources in Hanson and thereby become better stewards of the land. Providing pedestrian and bike routes that connect amenities will allow for less car dependence and help reduce the Town's carbon footprint. Updating and distributing a town-wide trail map will ensure that all residents are aware of the trails and can use them.

Goal 4: Protect Agricultural Land including fields, meadows, and orchards

Residents want to protect farmland in Hanson not only because of its scenic and historical importance, but also because of their desire to produce food locally.

Goal 5: Improve collaboration and management.

Many of the goals and objectives identified in the 2009 Open Space and Recreation Plan address management and collaboration issues for the goals listed above. Residents want town officials to collaborate with other town departments, strengthen relationships and share planning strategies with regional partners, and increase efforts to secure funding for implementation of the specific action items and other objectives outlined in this plan.

SECTION 7. ANALYSIS OF NEEDS

Summary of Resource Protection Needs

Water Resources:

When asked what factors should determine which open space should be protected, survey respondents chose "**drinking water protection**" and "**pond and shoreline protection**" as the #1 and #2 factors, respectively. Eighty percent of those surveyed agreed that Hanson should actively try to acquire and protect more open space. The expansion of the Aquifer Protection District will help protect water supply from polluting activities, but the town should remain vigilant for any opportunities that arise to permanently protect parcels within that zone.

Hanson has several large ponds that are enjoyed for their scenic and recreational value. However, nutrient inputs are putting the ponds at risk, as evidenced by Wampatuck Pond in the late summer. Algal blooms are becoming more intense by the year. These ponds would benefit from a water sampling program to identify specific inputs, and related public outreach programs to help curb backyard fertilizer runoff where appropriate.

Protection of land around groundwater wells is important for maintaining both the quantity and quality of groundwater. Designated aquifer-recharge areas for the wells are protected under the state's Department of Environmental Protection Zone 1 and Zone 2 regulations. These zones encompass a large amount of land in which certain activities are regulated to minimize pollution.

Greenways

A greenway may be defined as protected open space corridors that link diverse natural resources, historic sites, recreational trails, and/or waterways. Greenways are especially important when providing continuous wildlife habitat, but also provide cohesion and connectivity for people as well. The Bay Circuit Trail and Greenway is an excellent example of a large-scale, regional Greenway that incorporates all the features listed above. The need for the creation and maintenance of Greenways is mentioned in previous Hanson Open Space Plans and is highlighted in 2006 "*Massachusetts Outdoors*" Statewide Comprehensive Outdoor Recreation Plan. Hanson has several emerging Greenways in town, and all of them have connections with neighboring towns:

Indian Head Greenway

The IHG extends through the center of town, through the Plymouth County Hospital site, Town Forest, Fern Hill Cemetery, Town Hall Park, and conservation lands along Indian Head Brook to the Hanson/Hanover town line. This is a prime example of a Greenway that has great potential to be developed on a regional level with South Hanover and Northwest Pembroke. Several large Chapter 61 parcels are found in this Greenway.

Poor Meadow Brook Greenway

The PMBG links the town-owned Smith-Nawazelski Conservation Area with other parcels in the western and northwestern parts of town. This is another great example of a regional Greenway, linking Hanson to Whitman. This Greenway could include a connection to the property of the Whitman-Hanson Regional High School, providing opportunities for environmental education and recreation.

Brett's Brook Greenway

The BBG links Poor Meadow Brook Corridor with lands further east and north. The Brian Gaffey Conservation Area is found in the headwaters and links to the Historic "Major's Purchase" property that marks the northwest corner of the 1660's land purchase of the early settlers. Several large, unprotected parcels dominate the downstream area of this possible Greenway.

White Oak Brook Greenway

The WOBG extends through wetlands on the Hanson/Pembroke Town Line along Union Street. These wetlands were converted to cranberry bogs but are now reverting back to natural wetlands through a legal settlement in the early 1980's between Cumberland Farms, the U.S. Department of Justice, and the EPA.

Stetson Brook Greenway

The SBG is a potential Greenway that passes through the extreme southeast corner of town connecting Stetson's Pond in Pembroke with Chandler Mill Pond, and Monponsett Pond in Hanson and Halifax. It is especially important as it is part of the Historic Wampanoag Canoe Passage, the Native American water trail that connects Massachusetts and Narragansett Bays. This regional, historic connectivity should be valued and protected.

Bay Circuit Trail and Greenway

The Hanson portion of the Bay Circuit Trail and Greenway is now complete, but there are many areas that could be improved upon to get users off roads and into the woods. For the purposes of a discussion

about Greenways, there are two potential 'spurs' of the BCT that should be noted here. The first is a connection between Little Cedar Swamp and the Indian Head River Greenway. All the parcels in the swamp with frontage on Winter Street are in private ownership; the town should aim to protect frontage parcels to allow for wildlife corridors.

The second spur would link Great Cedar Swamp to the Shumatuscacant River along Poor Meadow Brook and land belonging to the Water Department. This would provide a greenbelt between Hanson's significant open spaces and those in Whitman and Abington.

Summary of Community Needs

1. Improved Trail Amenities

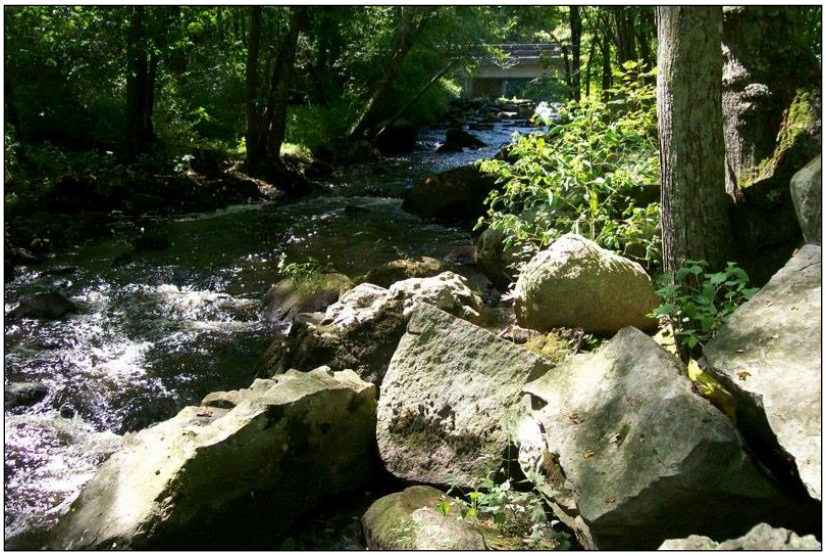
Hanson is actively working towards having a connected set of trails through its open space and recreation areas. Studies have shown that people that recreate in parks and open spaces with trail amenities tend to participate in endeavors that require a higher level of physical activity (SCORP). Furthermore, parks and open spaces with trails, paved or unpaved, and wooded areas are more likely to be used for physical activity than those that do not (SCORP). While Hanson is actively creating new trails to add to its trail system it is lacking in signage for many of those existing trails. When asked on the survey, "Would you use Open Space and Recreation facilities more if we had the following" the top two answers were "more marked trails" and "detailed trail maps".

Townspeople are in fact using open space already, but there are numerous locations that are significantly underutilized, and there is a desire to find them. Without proper signage, people worry that they are trespassing even if the land is publicly owned. Nearly all the town-owned conservation land needs signage, but the top locations that should be given the highest priority include:

- The *Webster-Billings Conservation Area* has no signage at all but is a 64-acre parcel with a primitive trail network already in place. Two possible locations for signage could be on Old Pine Drive and on State Street.
- The *Brian Gaffey Conservation Area* is a 57-acre parcel with frontage on West Washington Street. Signage could be installed on the town-owned site of the former Thomas Hall.
- *Rocky Run* on State Street at the Hanover Town Line.
- *Norcross Property* on King Street at the Hanover Town Line. This property links into an extensive Hanover trail network and borders the Drinkwater River.

In addition to the signs, respondents also seek improved trail access and parking, as well as benches and boardwalks. By adding such amenities to our trail system more of the underserved populations will be able to use them.

Figure 78: Indian Head River in the Rocky Run Conservation Area



Indian Head River in the Rocky Run Conservation Area

2. Bike Paths and Sidewalks

When asked what the priorities should be for new or improved recreational facilities, the top choice was "bike trails". In fact, the creation and/or use of bike paths ranked high in all the questions on the survey. Also, while respondents were not prompted with a choice of "sidewalks" in any of the survey questions, those who chose to hand-write in any remarks nearly always mentioned the need and desire for sidewalks in town, and the issue was also raised in the public meeting. The interest in both sidewalks and bike paths is significant enough to warrant the application of a Project Need Form to MASSDOT for reconstruction of Route 14 Maquan Street from Indian Head Street to the Pembroke Town Line including installation of a shared use path for bicycle and pedestrian modes of transportation. There is also interest in the submission of a Project Need Form to reconstruct Main Street including Franklin Street to the Whitman Town Line to further accommodate bicycle and pedestrian accommodations and improvement of the roadway.

3. Swimming

The Town of Hanson owns and operates successful programs for swimming lessons, swim team, boating and canoeing during the summer season. However, the facilities and waterfront are in dire need of refurbishment, specifically Cranberry Cove at Camp Kiwanee.

4. Management Needs

Modify the Recreation Commission

Hanson's recreation programs have traditionally been managed by numerous small special-interest volunteer groups and committees, with little coordination at the town level. This system has been somewhat successful but there has been a steady push for consolidation by some members in town dating back to the 2004 Master Plan and espoused by the Capital Improvement Committee and the Finance Committee. The goal is to create an expanded Town Recreation Commission (either elected or appointed) that would oversee all town recreation programs, not just those at Camp Kiwanee. This will improve communication, streamline programming, and focus resources where most needed. At the Special Town Meeting held in October 2016, the town voted to transfer a sum of money from the Recreation Enterprise Fund Retained Earnings to fund the position of Recreation Director for the period of January 1, 2017 to June 30, 2017.

Land Acquisition Approach

The Conservation Commission has historically protected property in a reactive manner by responding to opportunities as they arise, often scrambling for the time, money, consensus, and leadership needed to secure a deal. This has been successful with some properties, but the town has also lost out on several significant Chapter 61 properties due to a lack of preparedness and funding sources. Now that Hanson has passed the Community Preservation Act, and will soon have a new state-approved Open Space and Recreation Plan, the town will be in a much better position to both react to opportunities when they arise and seek out new opportunities as well.

To assist with this endeavor, the Conservation Commission will use a "Conservation Scorecard" to help prioritize land conservation. This scorecard was developed by the Manomet Center for Conservation Services and can be downloaded at http://communitymapper.org/ (a copy can be found in the Appendix). The scorecard prioritizes lands for acquisition by comparing attributes and qualities of a parcel in question to those of an ideal conservation parcel and provides an assessment of the relative conservation value. This value should be used in conjunction with social considerations such as aesthetics, cultural significance, and/or cost to help the town prioritize a parcel's significance to the town.

Potential Change of Use

The Conservation Commission would like to see a portion of the Plymouth County Hospital property conveyed into Conservation. During 2016 members of the Conservation Commission and the Final Plymouth County Hospital Reuse Committee held extensive meetings to present a more specific plan for the entire property which will include a large dedicated parcel of approximately 25 acres to be transferred to the Care and Custody of Conservation.

The Town is also considering the relocation of the existing Highway Department facilities from Indian Head Street to a former industrial property located on Hawks Avenue. This will expand use opportunities for the construction of playground facilities to accommodate families using the existing adjacent ball fields.

Implications of the Statewide Comprehensive Outdoor Recreation Plan

The Massachusetts Statewide Comprehensive Outdoor Recreation Plan (SCORP) is a document provided by the state government that discusses common needs, goals, preferences, and histories of outdoor and recreational spaces across the varied regions of the Commonwealth. Using information provided by the SCORP, communities statewide will be guided to make informed decisions regarding the types of outdoor and recreational spaces that are most needed, most population, and may reap possible grants and funding from the state level. Communities that have an updated SCORP of their own are eligible to receive grants from the Land and Water Conservation Fund to improve upon or create recreational projects.

The SCORP also holds communities accountable for providing recreational and outdoor activities that provide specifically for the town's population. Hanson's population, as identified in the 2019 Housing Production Plan, appears to be aging in place and therefore will need recreational opportunities specifically designed for them. Hanson must consider accessibility and disability issues, as many of the trials and paths that are popular in town will no longer meet the needs and desires of an aging population. SCORP suggests gardening and swimming are more popular than walking or biking in households with disabled residents, and with a growing population of residents who may develop disabilities, a shift in recreational focus to improve swimming and gardening opportunities in town would better follow SCORP guidelines. These are among the many examples SCORP can be used to effectively plan and fund Hanson's recreational future.

The SCORP is broken down into five major chapters, the first chapter identifies the benefits of outdoor recreation and open space protection, funding for outdoor recreation projects, the statewide comprehensive outdoor recreation plan and planning on a local level. The second chapter of the SCORP provides an overview of Massachusetts including geography, population trends, development impacts and economic trends, as well as a history of preferred and popular outdoor recreation activities across the region.

Chapter 3 reviews the outdoor recreation supply for Massachusetts including public, private, and non-profit landowners. Chapter 4 reviews the outdoor recreation demand as well as the recreation needs survey results.

The goals and objectives of the 2017 SCORP and how Hanson goals interplay with them are listed below:

Goal 1: Access for Underserved Populations

The SCORP finds that people with disabilities may face a greater challenge than most if facilities are not designed with their needs in mind or programming is not accessible to them. Having a disability should not prevent someone from using a park or open space. As cited within the SCORP, 11.7 percent of Massachusetts residents report to have a disability and Hanson's number is a little bit lower than the state percentage at 10.1 percent but still significant.

The SCORP identified the following objectives:

1. Support the acquisition of land and development of new open spaces in areas that lack existing or useable open spaces.
2. Develop parks and open spaces that offer amenities that go above and beyond ADA requirements for people with disabilities.
3. Consider the needs of underserved demographic groups, senior citizens, and teenagers, in park and open space designs.
4. Encourage establishment of programming endowments.

Community gardens and trails are often cited as recreation that is more accessible to people of all ages and abilities. Currently, Hanson has community gardens located at the Plymouth County Hospital site where designs for a new park are being proposed. As part of the proposed park construction, the parking area serving the community gardens is to be repaired as it is not in the best shape. The Community Gardens also need some updating. Once these things are done the Community Gardens should be a recreation opportunity available to all ages and abilities. Also, the proposed park at the same site will have amenities for all ages and abilities.

Goal 2. Support the Statewide Trails Initiative

Trails are important for several different reasons. They connect communities. They provide a non-vehicular mode of transit. They improve public health by giving people an active way to get where they are going. They can increase the value of homes and businesses by making an area a more desirable place to live or work.

Trails are also the second most requested recreational amenity by survey respondents. The phone survey found that 50.3 percent of people wanted new or improved hiking trails; paved multi-use trails, such as rail trails; unpaved, multi-use trails, such as mountain bike trails. The same activities were also expected to show a continuing increase in popularity over the next five years.

The SCORP identified the following objectives:

1. Support the acquisition of land and development of new open spaces that can provide a trail network.
2. Fill in the gaps of existing trail networks.
3. Ensure that any existing or new trails are fully accessible to people with disabilities.

This SCORP goal directly aligns with Hanson's third outlined goal of Improving Its Connectivity of and Access to Recreational Resources. The Town of Hanson currently has applied for a MassTrails Grant to install the new trail at the Plymouth County Hospital site on High Street. This trail will be part of the proposed park and will connect the park to the existing trail system within Hanson. One of the identified community needs is to improve signage of the existing trails and possibly to add some benches and amenities to make the trails useable to a larger group of people.

Goal 3. Increase the Availability of Water-based Recreation

Protecting water resources serves multiple purposes. It provides people a place to recreate. It protects a habitat for plant and animal species that depend on its water quality. It helps to protect our drinking water supplies. When asked what services our state and local parks and open spaces provide, other than outdoor recreation, the top three answers were: protecting wildlife, improving quality of life, and protecting drinking water supplies. Water-based recreation was the number one most requested amenity by phone survey respondents when asked what three new or improved facilities should be developed in state parks. Fifty-eight percent requested some type of water amenity, including beaches; outdoor swimming pools or spray parks, fresh or saltwater swimming areas and motor boating or sailing areas.

The SCORP identified the following objectives:

1. Support the acquisition of land that will provide for water-based recreation.
2. Support the acquisition of land that will increase drinking water supply.
3. Develop water-based recreation facilities, including swimming areas, spray parks, boating facilities, fishing areas, etc.

Hanson has water recreation at Cranberry Cove within Camp Kiwanee. The beach does need some updating and attention. In the spring of 2020, Hanson will be conducting an ADA Self-Evaluation and Transition plan in which we will be looking closely at all the programs and policies surrounding the water recreation at Cranberry Cove. This will help ensure that the water recreation is open to as many residents as possible regardless of age and abilities.

Goal 4. Support the Creation and Renovation of Neighborhood Parks.

To get more people outside, facilities and amenities should be developed close to where people reside. This can be accomplished through the development of new and the improvement of existing, neighborhood parks. Parks and open spaces provide places for communities to gather, whether it be a family or neighborhood get together. Respondents to the phone survey were interested in improvements to neighborhood parks, such as dog parks, playgrounds, and picnic areas. Playgrounds and off-leash dog parks were the second and fifty most requested improvement, respectively, in community facilities. Community gardens, nature playgrounds, and spray parks were also desired at high rates.

The SCORP identified the following objectives:

1. Promote the acquisition and development of neighborhood parks where none currently exist.
2. Develop amenities supported by neighborhood parks, such as playgrounds, off-leash dog parks, and community gardens.
3. Work with community development organizations to improve walking access to local parks.

According to an analysis performed by TPL's ParkServe ®, most Hanson's residents have equitable access to parks with high income individuals having the greatest access to parks, as well as adults between the ages of 20-64. Low income individuals have the least access to parks. See the Appendix for the full ParkServe ® analysis. According to ParkServe ®, there are a few locations in Hanson that are in moderate need of a park, where residents in these locations are not served. However, these locations are in fully developed areas that are not necessarily appropriate for new parks. The areas identified in moderate need can be found in a map in Appendix H. Overall, Hanson's park system is serving most of its residents, significantly higher than the national average. Many different groups in society struggle to be included in parks and recreation spaces, so it is important that Hanson's parks provide active, healthy, and engaged recreational opportunities for all users.

Hanson's Plymouth County Reuse Committee is in the process of designing a new park to be located at the old Plymouth County Hospital site off High Street. The proposed park will be a multi-generational park and address needs for infants through seniors as well as for people with disabilities. The preliminary conceptual designs of the future park propose the following features: playground, basketball court, amphitheater, walking trails, some paved, some not, and even a dog park. The park design shall be completed and approved in 2020.

The goals outlined in this report hope to create inclusive recreational spaces that provide for all of Hanson's population, despite individual location, age, disability, or another factor. These spaces particularly include recreational opportunities on conservation lands and preserved open spaces, which is in line with achieving Hanson's goal of Preserving and Enhancing Hanson's Rural Character and Scenic Quality.

SECTION 8. GOALS, OBJECTIVES AND ACCOMPLISHMENTS

To realize a community vision of maintaining a serene, green, and aesthetically pleasing town with convenient access to recreational areas and facilities for all ages, the 2009 Open Space Committee Planning Group had stated six primary goals with the following objectives:

Goal 1. Preserve and Enhance Hanson's Rural Character and Scenic Quality

1.A Acquire Land or Conservation Restrictions to Permanently Protect Open Space

- Acquired 115 acres, now known as Poor Meadow Brook Conservation Area
- Acquired 101 acres, now known as "Alton J. Smith Preserve (aka Smitty's Bog)
- Designated 103 acres of the Smith-Nawazelski Conservation Area (SNCA) as officially under the Care & Custody of the Conservation Commission
- Further protected the Smith-Nawazelski Conservation Area (SNCA) via state Dept. of Fish and Game Conservation Restriction
- Protected the Veterans Memorial Town Forest (33 acres) by officially designating as under the Care and Custody of the Conservation Commission
- Protected five acres on Crooker Place, now known as the "Indian Crossing Conservation Area"
- Facilitated three parcels being placed into Chapter 61A status – 31 acres, 9 acres, 8 acres for a total of 48 acres

1.B Promote Hanson's Cultural Heritage

1.C Plan for Appropriate Residential Growth

Goal 2. Expand and Improve Recreational Opportunities

2A. Provide a Linked System of Open Space, Trails and Greenways, including the Plymouth County Hospital site.

2B. Improve the Management of Hanson Recreation Programs

2C. Improve Public Access to Passive Recreation Information and Parks

2D. Maintain an Adequate Number of Playing Fields to Meet Town Needs

- Third ball field created at the Botieri Field Complex

2E. Repurpose Highway Department site for Recreation

Goal 3. Protect Natural Resources and Biodiversity

3A. Protect Existing and Future Ground Water Supplies

3B. Protect Surface Waters from Eutrophication and Contaminants

3C. Protect and Preserve Important and Unique Wildlife Habitats

3D. Create/Enhance Environmental Education Programs

Goal 4. Protect and Enhance Conservation Lands

4A. Create Town Conservation Land Management Plan

4B. Create Sight Specific Management Plans

4C. Verify Protection Records

Goal 5. Implement Camp Kiwanee Master Plan

5A. Implement Camp Kiwanee Restoration Projects

5B. Improve Camp Kiwanee Recreation Facilities

Goal 6. Monitor OSRP Action Plan Progress

6A. Keep OSRP Actions on Track

SECTION 9. SEVEN-YEAR ACTION PLAN

Reviewing Accomplishments of 2009 OSRP

Since the last Open Space Plan was approved by the state in 2008, much has been accomplished. A Parks and Fields Commission have been established to focus solely on those needs and have been continually active in achieving its goals in a short time. Major rehabilitation of the Hancock Street fields and the Memorial Fields complex over the past 10 years has provided the town with adequate fields to meet recreation needs. To better coordinate programs, the Parks and Fields Commission has rehabilitated the old police station on Indian Head Street to provide office and meeting space for Hanson Youth Sports.

The Community Preservation Act was passed on May 17, 2008 with a 1.5 percent surcharge rate. This translates into an annual cost of $47.78 a year to the average homeowner in Hanson, for a total of $180,000 to be deposited to a Community Preservation Fund. The Community Preservation Coalition estimates that Hanson should receive a roughly 1.5 percent match from the state in 2016, adding an additional $45,000 to create a Community Preservation Fund balance of $882,758 for FY2016. A 9-member Community Preservation Committee has been appointed and is soliciting proposals from the community.

The Open Space and Recreation Plan was approved in December 2008 and extended in 2010 from December 2013 to December 2015. Several accomplishments were achieved in 2009.

- The Town voted to purchase the historic Thomas Mill and the land transfer has been completed.
- Town ownership of the Marcus Urann Fisherman's Landing on Indian Head Pond has been confirmed.
- Installation of signs on Conservation Land is continuing.
- Management Plans for two Conservation properties have been completed.
- The Conservation Commission has established a "Face Book Page" to communicate about Open Space Issues and Wildlife sightings.
- A New Ball Field has been completed on Indian Head Street.
- Softball Fields have been constructed at the Middle School.

In terms of Open Space & Recreation spending of CPA funds, the Town of Hanson has spent the following:

- CPA funds were provided to the Open Space Committee to acquire 115 acres of open space (referred to as the Harris Stone property) located off West Washington Street. This property abuts several parcels of town-owned land adjacent to the Crystal Springs and is surrounded by wetlands making it uneconomical for development. As a result of the town voting to spend $46,620 in CPA funds on this project, the town was able to apply for and was awarded a Massachusetts LAND Grant for the remaining $82,880 needed to purchase this piece of property.

- CPA funds in the amount of $18,500 was used to acquire the Poor Meadow Brook property, consisting of 11.2+ acres of open land that is adjacent to the town's Crystal Spring water resources as well as several other pieces of town-owned property.

- CPA funding in the amount of $74,000 was used to purchase Thomas Mill and the adjacent property. This property is a historic replica of the original mill that sat on this site. The Mill is available for rent by the public.

- CPA provided $90,000 to refurbish several of the town-owned baseball fields at the Botieri complex to bring them up to National Little League standards, to clean-up and fix the parking lot adjacent to the Botieri complex/Town Forest and to survey the Town Forest located next to the Botieri complex. This project was a joint submission by the Hanson Little League and the Hanson Town Forest Committee. Its completion will provide the citizens of Hanson with easy access to the Town Forest and the Botieri complex and ensure that our baseball fields meet the required standards.

Funding Sources

Federal:

- EPA Watershed Protection Grants
- US Fish and Wildlife Wetlands Conservation

Commonwealth of Massachusetts:

- DCR Recreational Trails Program
- DCS Land and Water Conservation Fund
- DEP 319 Nonpoint Source Grants
- DEP 604b Water Quality Management Planning Grants
- DEP Aquifer Land Acquisition Grants
- DEP Clean Water State Revolving (SRF) Loan Program
- DFG Landowner Incentive Program
- DFG Riverways Program Grants
- DFG Riverways Stream Team Implementation Awards
- EEA Drinking Water Supply Protection Grants
- EEA Federal Land and Water Conservation Fund
- EEA LAND - Local Acquisition for Natural Diversity Program
- EEA Massachusetts Environmental Trust Grants
- EEA Wetlands Restoration Program Grants for Priority Projects

Town:

- CPA Funding
- Staff Time
- Town Budget
- Senior Tax Relief

Private and Other Resources:

- Land Donations
- Foundation Grants
- Fundraising Events
- Volunteers

SEVEN-YEAR ACTION PLAN

Process to Identify Priorities for the 7-Year Action Plan

The parcel inventory was used to determine the permanently protected land in Hanson. Unprotected parcels within any large natural areas, large agricultural areas, or wildlife and water corridors in the 2009 OSRP were areas of conservation and recreation interest.

To further prioritize parcels, those lands identified as priorities in the 2009 OSRP were compared with the 2017 draft map. Lands of conservation and recreation interest made up of unprotected land within the large natural and agricultural areas and corridors are identified as "Lands of Conservation Interest".

If further prioritization of the identified properties of conservation and recreation interest were desired, a point system could be created for ranking properties according to certain criteria. For example, a property could be awarded points for the number of sites in its proximity, a point for chapter land, a point for prime agricultural soils, etc. Points could be summed for each parcel and properties with a high number of points would be ranked as having higher importance for protection. Also, points should be awarded for a site which includes one or more Natural Communities identified as rare or uncommon by the state.

Below are the major processes and patterns of open space, natural resources, and recreation in the region that affect Hanson, as well as those of Hanson that affect the region. The patterns and processes discussed below were used to identify or rank lands with highest conservation value.

Large vegetation areas, including wetlands

1. Serve as habitats and dispersal sources for species with large home ranges.
2. Serve as habitats and dispersal sources of rare interior species.
3. Protect groundwater and provide clean water for well systems, as well as streams, rivers, and ponds; and
4. Serve as sponges that reduce or prevent downstream flooding.

Major water-protection corridors along streams, rivers, and ponds

1. Reduce erosion, sedimentation, mineral nutrient, and other chemical input effects on water bodies.

2. Provide shade, logs/branches, and leaf litter as food and habitat for aquatic organisms including fish.
3. Serve as wildlife corridors for terrestrial resident and migratory fauna; and
4. Serve as recreational corridors for canoeists, kayakers, and boaters.

Major wildlife corridors away from a water body

1. Serve as movement routes for key animals, including bear, deer, fisher, rare amphibians, and many other faunae, either between large vegetation areas or as a dispersal route from a large vegetation area.

Special sites (small habitats) containing rare species

1. Serve as population sources of individuals dispersing to surrounding areas; and
2. Protect against loss of species and biodiversity.

Walking trails, including trail networks, away from roads

1. Provide recreational routes, often connecting large vegetation areas to neighborhoods, for residents to experience and appreciate nature; and

Agricultural land

1. In large patches may support rare grassland birds, such as upland sandpipers and grasshopper sparrows.
2. Many small or large patches may support populations of other grassland species such as bobolinks and eastern meadowlarks, as well as other wildlife that extensively use open areas such as turkey and deer.
3. Provides a diversity of recreational experience in a landscape of woods and residential areas; and
4. May result in greater erosion, sedimentation, nutrient runoff (from fertilizers), and pesticide runoff to streams, rivers, and ponds.

Residential land

1. Has a high diversity of common and non-native plants and micro-environmental conditions that support a high diversity of edge species, such as Carolina wrens, American robins, and catbirds.
2. Has a high density of animals that benefit from food provided by people, e.g., raccoons, gray squirrels, deer, house sparrows, and blue jays.
3. Is a source of human, invasive exotic plant, dog, and cat effects that can degrade ecological conditions of surrounding natural areas.
4. Tends to act as a barrier that cuts.

This seven-year action plan provides specific actions Hanson can take for each open space and recreation goal and objective. The action plan identifies key areas for protection, trail improvements, mechanisms for protecting farmland, and strategies for working with neighboring towns. By implementing these actions, Hanson will increase the connectivity of its natural areas, improve its rich ecological diversity, clean its waterways, protect tis farmland, and begin planning for climate change mitigation and adaptation.

This plan builds on the broad perspective and analysis of the 2009 *Open Space and Recreation Plan,* while incorporating current Town needs and resident feedback. All recommendations are addressed to the Town of Hanson, as well as to the broader community. Most are also addressed to one or more organizations or agencies as potential collaborators. Successful implementation of these actions will require cooperation and sustained effort from all parties. In addition to collaboration, successful implementation of the following goals, objectives, and actions will depend upon funding and appropriation. Most initiatives will be accomplished with the use of Town funds, either within the operating budget or as capital projects, and will rely highly on volunteer participation. When additional funds are needed, applications will be submitted to the Community Preservation Committee for Community Preservation funds.

Highest priority is given to actions proposed to be completed in years 1-3. The goals should be reviewed annually, updated, and reevaluated to ensure consistency and relevancy with current goals and objectives. An action map is included and followed by other action items.

Additional criteria that could be used to prioritize the identified lands of conservation and recreation interest include:

- Presence of prime or statewide importance agricultural soils.
- Proximity to identified areas of conservation interest.
- Land that could be used for trails or to connect trails; and
- Current Use Program Lands (Chapter 61, 61A, and 61B).

Agricultural Preservation Restriction (APR)

APR is a state funded preservation tool that seeks to protect agriculturally productive land through permanent deed restriction. Towns can apply for, and sometimes match, state funds to purchase the restriction which limits use to maintain agricultural potential.

Transfer of Development Rights (TDR)

TDR is a development tool that restricts growth in certain areas (sending districts) by transferring the development rights for those areas to more suitable locations (receiving districts). In this way, open space, agricultural land, sensitive habitats, and areas with some form of recreational potential may become permanently protected by focusing growth in urban centers, areas near public transportation lines, or underutilized properties in town. For example, development rights might be transferred to areas within one-half mile of commuter rail stations. This would foster workability in town and a decreased dependence on automobiles, thereby reducing carbon emissions in the town. In this way, important open space land is protected, economic growth and development can continue, and climate change issues are also addressed.

Acronyms of organizations potentially responsible for implementing action items:

HANSON		GOVERNMENT	
AC	Agricultural Committee	DEP	Department of Environmental Protection
ADA	ADA Coordinator	DOC	Mass Dept. of Corrections
TRC	Trails Committee	DCR	Mass. Dept. of Conservation and Recreation
BOA	Board of Assessors	EOEEA	Executive Office of Energy and Environmental Affairs
BOS	Board of Selectmen	DOT	Mass Dept. of Transportation
HCC	Hanson Cemetery Committee	NHESP	Natural Heritage of Endangered Species Program
CPC	Community Preservation Committee	NRCS	Natural Resources Conservation Service

Transfer of development rights on a broader scale requires significant investment in community outreach and education to understand and agree upon the value of the land to be protected, the extent of development possible and the increased development potential of the land receiving the development rights. Hanson has frequently found simpler and easier solutions to protect land that is valued for open space, agriculture, historic preservation, or recreation purposes.

Agricultural Overlay District

An agricultural overlay district essentially limits development in areas deemed agriculturally important through the assessment of certain key characteristics including availability of prime agricultural soils, proximity to major blocks of farmland, the size of the parcel, the degree of development, and other risk factors. If a special Agricultural Overlay District were created, then the regulations of the underlying residential district would be modified by stricter controls and/or the provision of additional development options for use of the property.

Goal 1: Preserve and Enhance Hanson's Rural Character and Scenic Quality

Table 19: Goal 1 Protect Hanson's Large Natural Areas and Major Wildlife Corridors

Protect Hanson's large natural areas and major wildlife corridors	Responsible Party	Potential Funding Source	Timeline
Acquire land or conservation restrictions on parcels that are strategic to the Bay Circuit Trail, contiguous with existing open space, have unique environmental features, or buffer sensitive resources.	**BOS, CPC, CC, TRC, BCT, OSC**	**CPA, Conservation Funds**	**Ongoing**
Promote private land stewardship by distributing information and encouraging landowners to pursue Chapter 61 designations, conservation restrictions, and Agricultural Preservation Restriction programs	**BOS, CPC, CC, PB, ZBA, OSC**	**General Fund**	**Ongoing**
Evaluate the need for wildlife connectivity for the proposed Maquan Street improvement project	**BOS, PB, CC, OSC, DEP, DOT, NHESP**	**CC Funds**	**Ongoing**

BOS = BOARD OF SELECTMEN

CPC = COMMUNITY PRESERVATION COMMITTEE

CC = CONSERVATION COMMISSION

TRC = THE RECREATION COMMIT

BCT = BAY CIRCUIT TRAIL

OSC = OPEN SPACE COMMITTEE

PB – PLANNING BAORD

ZBA = ZONING BOARD OF APPEALS

Goal 2: Protect Hanson's Water Resources and Biodiversity

Manage quantity and quality of groundwater and surface water to protect the town's water resources	Responsible Party	Potential Funding Sources	Timeline
Systematically study lands surrounding ponds and rivers to identify threats to water quality and actions to be taken to improve these conditions.	CC, HPW, PB, ZBA, DEP	Conservation Funds, CPC, State Environmental Bond Earmarks	2017-2024
Protect Existing and Future Ground Water Supplies	BOS, TA, CC, PB, HD, WC	General Fund, EEA grants, Conservation Funds	2017-2024
Promote town-wide water saving techniques	BOS, CC, HD,	WC budget	2020-ongoing
Evaluate limiting watering to odd or even days	HD	WC budget	2020-ongoing
Promote handheld hoses for watering instead of sprinkler systems and discourage use of yard irrigation systems	HD, WC	WC budget	2020-ongoing
Explore grant programs and public education to implement a rain barrel program in town	BOS, TA, BOH, CC, OSC, WC, HD	WC budget	Ongoing
Encourage residents to convert to low-flush toilets through education	BOH, WC	WC budget	Ongoing
Increase public education about detrimental effects of fertilizer runoff in streams and other anthropogenic impacts to streams, rivers, ponds, and wetlands	HD, CC, BOH	BOH	2018-ongoing
Protect and monitor Hanson's streams, rivers, ponds, and wetlands	CC, OSC	DEP GRANTS	ONGOING
Develop Maquan Pond management plan, monitor Maquan Pond water levels	CC, BOS, TA, REC	DEP GRANTS	ONGOING
Monitor wildlife and biodiversity to establish baselines and measure change over time and protect key habitats that are not under permanent protection.	NHESP, TTOR	State Funds, General Fund, Conservation Funds	2020-ongoing
Prioritize remaining parcels along waterways for protection when they become available	BOS, TA, PB, CC, OSC, HD, WC	CPC, DCS grants, Conservation Funds, private grants	Ongoing
Revise zoning bylaws to further protect open space in town, Access zoning revisions based in part on the open space framework to align zoning with current understanding of natural resources.	BOS, TA, PB, ZBA, CC	General Fund	2021-2024

Goal 3: Improve Connectivity of and Access to Recreational Resources

Table 20: Goal 3 Improve Connectivity of and Access to Recreational Resources

Continue developing the local/regional trail network for transportation and nature-based recreation	**Responsible Party**	**Potential Funding Sources**	**Timeline**
Provide online information to share trails and knowledge about natural and recreational programs in Hanson	CC, OSC	Conservation Funds	Ongoing
Provide trail maps at informational kiosks	CC, OSC	Conservation Funds	2017-Ongoing
Complete proposed trail connections and further assess potential new ones to improve accessibility of recreational resources	BOS, TA, PB, REC, OSC, CC	Conservation Funds, Mass Trails Grants, CPC funds	2017-Ongoing
Establish and enhance open spaces in and around the town, connected where feasible to town trail systems and public transportation, to improve walkability of the community	BOS, TA, PB, ZBA, HD	General Funds, Mass Trails	Ongoing
Install signs, parking, and trail markers where appropriate	HD, CC, OSC	CPC, Conservation Funds	2018-Ongoing
Secure public access to existing trails when opportunities arise, such as when subdivisions are proposed	BOS, TA, PB, ZBA, OSC	General Fund, CPC, Conservation Funds	Ongoing
Study and plan for bicycle use in Hanson	BOS, TA, PB, ZBA	General Fund	Conservation Funds
Continue rerouting regional Bay Circuit Trail off town roads, and better link with other trails to enhance safety & experience	BCT. OSC	**Mass Trails Grants, CPC funds**	**Ongoing**
Determine and map safest cycling routes through town, provide maps in printed and on-line format	PB, HD	CDBG Grant, General Fund	2024
Install signs to facilitate navigation and safety for cyclists	BOS, TA, HD		Ongoing
Provide neighborhood-oriented opportunities for recreation and gardening by creating informal playing fields, expanding community gardens locations, maintaining improving existing playgrounds	BOS, TA, PB, HD, CC, OSC	Parc Grants; EOEEA	2017-2024
Evaluate town lands for creation of informal playing fields	BOS, TA, REC, PB, OSC	General Funds	2021-2024
Evaluate town lands for creation of additional community gardens	BOS, TA, OSC	General Funds	Ongoing
Improve universal access to open space resources	BOS, TA, OSC, CC	DEP Grants	2019-2024
Evaluate town trails for use by other power-driven mobility devices	BOS, TA, CC, OSC	General Fund	2020-2024
Evaluate possible town-owned locations for creation of parks	BOS, TA, PB, CC, OSC	General Fund	2021-2024
Consider a dog park to assist in the control of dogs in public areas	BOS, TA, OSC, PB, ZBA	CPA, Dog Park Grant	Ongoing

Goal 4: Protect Agricultural Land Including Fields, Meadows, and Orchards

Table 21: Goal 4 Protect Agricultural Land Including Fields, Meadows, and Orchards

Prioritize agricultural land to protect based on threat of development, proximity to other farmland, lot size, and overlap with other OSRP goals, water availability, and prime agriculture soils.	**Responsible Party**	**Potential Funding Sources**	**Timeline**
Create a database of Chapter 61A lands	PB, CC	Conservation Funds	2018-2024
Develop evaluation system to prioritize Chapter 61A lands for acquisitions	PB, CC, OSC, AC	Conservation Funds	2020-2022
Evaluate Chapter 61A lands and reassess annually	PB, CC, AC	General Fund	Ongoing
Create database of all agricultural land in Hanson	PB, CC, AC	Conservation Funds	In Progress
Promote zoning changes to protect agricultural land including agricultural overlay districts and transfer of development rights	BOS, TA, PB, ZBA, CC, OSC, AC	General Fund	Ongoing
Evaluate creation of Agricultural Overlay Districts	BOS, TA, PB, ZBA, CC, OSC, AC	General Fund	Ongoing
Evaluate appropriateness of Transfer of Development Rights to protect agricultural lands	BOS, TA, PB, ZBA, CC, OSC, AG	General Fund	Ongoing
Promote large-lot zoning in areas with prime agricultural soil to protect from being subdivided	BOS, TA, PB, ZBA, CC, OSC, AC	General Fund	Ongoing
Promote conservation programs that protect farmland such as Agricultural Preservation Restrictions	BOS, TA, PB, ZBA, CC, OSC, AC	Conservation Funds	Ongoing
Encourage farmers to place their lands under an Agricultural Preservation Restriction	BOS, TA, PB, ZBA, OSC, CC, AC	Conservation Funds	Ongoing
Apply for Community Preservation Act funds to acquire agricultural lands as they become available	BOS, TA, PB, CC, OSC, AC	Conservation Funds, DCS grants	Ongoing
Support farmers and local food in Hanson	BOS, TA, PB, ZBA, CC, OSC, AC		Ongoing
Provide information on farm programs, regulations, and best agricultural practices to the local farming community	TA, PB, ZBA, CC, AC	Board of Health Budget. Conservation Funds	2020-Ongoing

Goal 5: Improve Collaboration and Management

Table 22: Goal 5 Improve Collaboration and Management

Incorporate the OSRP in town and community decision making.	Responsible Party	Potential Funding Sources	Timeline
Town should host meeting of interested persons in the fall to review progress on the OSRP	OSC	General Fund	Ongoing
Town should consider creating new staff position to oversee open space and recreation planning. Responsible for tracking and implementing OSRP actions, communication between departments and committees, writing grant proposals and researching other funding opportunities, and facilitating public outreach and education opportunities related to OSRP.	BOS, TM, Finance Com	General Fund	2020-2022
One member of each town committee should be designated to be informed about open space issues and opportunities.	BOS, TA, PB, ZBA, BOH, CC, AC	General Fund	2021-Ongoing
Think regionally and work collaboratively with neighboring towns.	BOS, TA, PB, ZBA, CC, OSC, AC	General Fund	2021-Ongoing
Meet bi-annually with conservation professionals from surrounding towns to discuss regional land protection efforts	BOS, TA, PB, ZBA, CC, OSC, AC	General Fund	2021-Ongoing
Continue to partner with land trusts, government entitles, and individuals to make full use of available government funds and programs to acquire and/or protect important land parcels.	BOS, TA, CC, OSC, AC, CPC	Conservation Funds	Ongoing
Manage all town-owned land consistent with open space objectives.	BOS, TA, PB, ZBA, CC	General Funds, Conservation Funds	Ongoing
Develop Land Management Plans for town conservation lands based on inventory and evaluation of each property to provide thoughtful stewardship and to protect the land's values.	BOS, TA, PB, ZBA, CC, OSC, AC	CPC, Conservation Funds	2020-2024
Evaluate municipal lands for conservation and recreation interests.	BOS, TA, PB, ZBA, CC	General Fund, Conservation Funds	2017-Ongoing
Continue to develop Baseline Documentation Reports for town CR lands	CC, OSC	General Fund	2017-Ongoing
Secure funding and partner with other entities for open space land protection	BOS, TA, PB, CC, OSC, AC	CPC, NGOs, DCS grants	By Project
Evaluate increase in CPA funds to 3%	CPC, BOS, OSC	N/A	2022
Develop an invasive species management site on the town's website	CC	Conservation Fund	2022
Encourage residents to participate in stewardship of their unique natural resources.	BOS, CC, OSC	Conservation Fund	2020-Ongoing

Practical Ways for All Landowners to Improve Land in Hanson

To preserve and enhance open space, natural resources, and recreation in Hanson, as well as address existing environmental problems and enhance stewardship and care of the resources in each neighborhood, an illustrative array of ideas follows. These are suggestions for individual residents on private land, for the Town in managing conservation and municipal land, for federal and state land agencies, and for organizations managing their lands.

Species and habitats

1. Learn to identify the plant communities, vernal pools, and other aquatic habitats in town, and protect scarce ones. Loss of a scarce natural resource is an impoverishment of the town's rich resource base.
2. Do not remove plants or animals rare in town (or in the state) and avoid damage to their habitat. Loss of individuals of a rare species may lead to its disappearance and pose difficulty for its reestablishment in an ever-changing area.
3. Maintain small piles of brush and branches near yards or buildings as appropriate. Such brush piles provide useful cover for many wildlife species. However, do not place them in natural habitats, which would alter natural ecosystem food webs.
4. Retain dead standing trees, dead branches on trees, and fallen logs so long as they do not pose hazards to safety or property damage. Dead wood provides important habitat for numerous species, including woodpeckers, flying squirrels, chickadees, wrens, and salamanders, as well as for beetles and other valuable insect foods for wildlife.
5. Plant only or mainly native species, and if non-native (exotic) species are used, rigorously avoid invasive species that spread into natural habitats. This helps protect native species in natural conservation areas against in invasions of exotic plants. Common buckthorn, Asiatic bittersweet, Norway maple, glossy buckthorn, Japanese barberry, Japanese knotweed, multiflora rose, purple loosestrife, winged euonymus, and shrub honeysuckles are among the prominent exotic species in Hanson.
6. Remove invasive species where permitted (not within 100ft of a wetland) and appropriate, but in the process, retain a relatively continuous vegetation cover for wildlife.
7. Work with local and regional nurseries to eliminate known invasive species from their inventories, this should reduce the number of such future plantings in yards.
8. Identify and protect dog-free natural areas. Wildlife tend to be inhibited by the presence of urine scent-marking dogs.
9. On appropriate large open areas, uses management approaches that enhance grassland birds and other open-country species.

Human Activities

1. Do not remove or loosen historical or archaeological objects, e.g., from a stonewall or cellar hole on conservation land. These represent Hanson's heritage over generations and are often of historical and scientific interest.
2. Identify and mark some trails that are appropriate, and inappropriate, for mountain biking and/or equestrian use. Also mark walking trails to avoid especially sensitive natural areas. This should reduce soil erosion and damage to natural vegetation.
3. Walk or bicycle for short trips (typical ½-mile walk = 10 minutes; typical bike ride 1 mile = 6 min.; brisk walk 1 mile = 15 min). This decreases vehicle noise and emissions, benefiting people, water, and wildlife.
4. Acquire and use small fuel-efficient vehicles within town. This reduces noise, emissions, road deterioration and chemical pollution, and can reduce the area of driveways and parking lots required, as well as benefiting water and wildlife.
5. Reduce the area of mowed lawn and the frequency of mowing. This will decrease the amount of gasoline, oil and emissions. It also reduces noise, both the deafening and the incessant background types. Electric and rechargeable battery mowers produce minimal noise and local air pollution. Motor less mowers have zero emissions, do not cause a noise disturbance, and provide good exercise. Plant a meadow instead of lawn where possible.
6. Rake leaves: leaf blowers are significant polluters of both hydrocarbon emissions and noise. Raking provides some exercise and nature appreciation.
7. Establish a diversity of flowers and plants in lawns and gardens by reducing the use of water, fertilizer, and pesticide, and by mowing, mulching,

Materials

1. Avoid or minimize the use of fertilizers containing phosphorus or nitrogen. These elements tend to infiltrate through groundwater or wash directly into streams and ponds, causing eutrophication blooms of algae with disruptions of natural food webs and fish populations.
2. Avoid or minimize the use of insecticides and other pesticides. Almost all insects, including grubs, ants, and larvae perform important ecological roles in both natural and lawn/garden ecosystems.
3. Prevent hazardous wastes, including gasoline, oil, paints, stains, and chlorine, from reaching the soil and water. They are toxic to native organisms and may move in the groundwater to wells and drinking water, as well as to aquatic ecosystems with fish.
4. Take steps to reduce incoming junk mail, bags, and packaging material. This means there is less to be hauled away and less reaches the town's roadsides, streams, and natural ecosystems.
5. List all outputs, e.g., solid waste, chemicals, noise, light, and vehicles, from a property or business, and attempt to reduce each. This should lessen effects on neighbors, the community, and surrounding natural ecosystems.
6. Mulch or leave grass clippings on lawn and, where appropriate, recycle leaves and branches on site and compost vegetable scraps. This provides mulch or fertilizer for gardens, enhances soil, benefits wildlife, and reduces costs to the town.

Water

1. Maintain a relatively wide strip of natural vegetation, especially woody cover, along streams, rivers, and ponds. This provides shade and branches/logs for fish and other aquatic organisms, and reduces erosion, sedimentation, and chemical substance inputs to maintain water quality.
2. Minimize the watering of lawns, gardens, and outdoor plants. In Hanson's lush climate, lawns rarely require supplements to rain; even in droughts one soaking per week normally keeps a good green lawn.
3. Watering of lawns, gardens, and outdoor plants should be done late in the day (if a noticeable fungus problem occurs, early morning watering may help, though excessive watering may be the cause). During the heat of the day in the growing season, much of the water is evapo-transpired, and hence wasted.
4. Private well-water use should be minimized. Most of Hanson's public water supply comes from rainfall and groundwater, the same source as most private well water. Removal of groundwater during dry periods may result in well water shortages and a premature drying out of streams and wetlands, with associated ecological degradation. Residents are in a groundwater "bathtub" together and are neighbors in a town together, so lawn-watering practices and restrictions that protect water supplies apply to neighbors with public or private water supply alike.
5. Learn where groundwater flows within and from a property, and where stormwater drains and pipes lead. These are key steps in decreasing impacts on aquatic ecosystems and fish.
6. Minimize the use of road salt on driveways and roads. This helps protect against contamination of groundwater, wells, vernal pools, and other surface water.
7. Minimize the use of sand on driveways and roads. Some is washed through pipes or directly into streams, which alters stream-flows and smooths out stream bottoms, thus reducing habitat for fish, valuable aquatic insects, and plants.
8. Disconnect roads from water bodies such as streams and ponds where appropriate. Instead of having water flows carried directly and rapidly from road to stream- or pond-side, causing many negative hydrological and ecological effects, break up the route so that water percolates as much as possible into the ground.

Green Roof

What is it?	Planting vegetation on a roof so that rain can be taken up by plants instead of running off. There are many types of green roofs and they can serve as additional recreation space or simply a stormwater storage area.
Cost	• $10-30/ft^2 [1, 2] • Becomes up to 50% cheaper by the square foot as the square footage exceeds 10,000 feet [3]
Runoff	Reduces runoff by 30-86%. [4]
Additional benefits	• A 5,000 ft^2 green roof sequesters 170 lbs of carbon/yr [2] • Reduces heating and cooling costs for buildings by $6-8/ft^2 [2, 3] • Can extend life expectancies of roofs by more than double [1, 2, 3]
But what about...	**Maintenance** on green roofs entails general weeding and debris removal, but since they're watered by stormwater, which has nutrients, they usually don't need any fertilizer or irrigation.

Boston, MA: John W. McCormack US Post Office and Courthouse. This 9,654 ft^2 green roof sits atop the EPA Region 1 Headquarters on a historic 1933 building.

A small, slanted green roof in Craftsbury, VT.

5 Tips for A Successful LID Project

1. Preserve the **natural vegetation** as much as possible and use native species that will need less maintenance
2. Keep **slopes** gentle to avoid erosion
3. Make sure the **subsurface** is highly permeable—this may mean installing a constructed subsurface
4. Get the **community** involved!
5. Visible, simple, and easily understood projects are those that will be **loved** and successful!

An example of 60-gallon rain barrels. Some communities in MA offer a rain barrel program that offers significant discounts to residents.

Rain Barrel & Cistern

What is it?	A structure to store rooftop runoff and reuse it for landscaping and other non-potable uses. There are many different styles, including an above ground 50 gallon barrel or a below ground several hundred or thousand gallon cistern.
Cost	• Average 50 gallon rain barrel costs around $100 • Cisterns can be more expensive, depending on the size
Runoff	At scale, cisterns can store 100% of rooftop runoff except in extreme storms.
Additional benefits	• A one-inch rainstorm generates 623 gallons of stormwater per 1,000 square foot of roof that can be collected • Water can be used to landscape in hot summer months, saving water costs
But what about...	**Installation** is a cinch – simply attach a downspout elbow to divert rainwater from your lawn or driveway into the barrel. When you're ready to harvest the water, just attach a hose and go! Above ground cisterns can be just as easy, though below ground cisterns require more work for siting and installation.

Rain Garden

What is it?	A depression in the ground to filter stormwater that is filled with highly permeable subsurface and water-loving vegetation. May have an engineered overflow drain system as well.
Cost	• Costs about $2-12/ft^2 [5] • Costs about $200/yr in labor for maintenance [6, 7]
Runoff	Reduces runoff by 90%. [8]
Additional benefits	• Reduces pollutants, including Nitrogen, Phosphorus, metals, and TSS by 65-90% [8] • Improves aesthetics
But what about...	**Ownership and maintenance** can be held by the individual residential property owners, homeowners' associations, or by local public works. If outside entities need to be on private property to maintain bioretention such as rain gardens, be sure to include this in deeds so that homeowners understand what is their responsibility and what is the municipality's.

This rain garden in Devens, MA gathers runoff from a curb-less road and sidewalk to infiltrate stormwater back into the ground while also offering beautiful home landscaping. Rain gardens can be made in any size and shape to fit your location.

Permeable Pavement

What is it?	Permeable, or porous, pavement or concrete allows water to infiltrate the driving surface to reduce stormwater runoff, eliminate puddles, and increase groundwater recharge.
Cost	Costs range from $10-12ft^2 installed. [7]
Runoff	Can infiltrate as much as 70-80% of annual rainfall.
Additional benefits	• Reduces the amount of land needed for stormwater management • Reduced flood risk may increase property value by 2-5% [2] • Massachusetts communities typically spend over $100,000 annually on salting. [9] Areas with permeable pavement can reduce salt use by as much as 75%, leading to enormous cost savings [10] and reduced salt pollution
But what about...	**Winter weather** is no trouble for permeable pavement. In fact, studies at the University of NH Stormwater Center have found that before icing, precipitation melts into the ground and unsalted porous pavement offers a shorter stopping distance than salted traditional pavement. This improves safety and can reduce salting by 75%, saving money as well.

Low Impact Design: Less Pavement, More Savings

Stormwater Wetland

What is it?	A type of detention basin where runoff is diverted into an engineered, shallow wetland area to temporarily store water. Must be used with another BMP that filters sediment. Smaller, pocket wetlands fed only by stormwater can be used when less space is available.
Cost	• Costs range from $25,000-30,000 per acre of impervious area treated [6, 7] • $1,500-2,000/yr in labor for maintenance and vegetation control [6, 7]
Runoff	Can infiltrate 100% of peak flow when built to size.
Additional benefits	• Total Suspended Solids (TSS) - 80% with pretreatment [8] • Reduces pollutants, including Nitrogen (20-55%), Phosphorus (40-60%), metals (up to 85%), and pathogens (up to 75%) [8]
But what about...	**Building near natural wetlands** is regulated under the Wetlands Protection Act. However, constructed stormwater wetlands are not so strictly regulated and additional permits are not required for ongoing maintenance.

By reducing the amount of pavement, communities are not only reducing their impervious surface and allowing more space for stormwater infiltration, but also realizing a huge cost savings. Traditional paving costs about $6ft^2. Reducing just a short two-mile road from 28' wide to 20' equates to a savings of over $500,000. Less pavement also means reduced maintenance costs, including plowing, salting, and sweeping.

Narrower Roads

What is it & benefits	Designing and installing 10' or 12' lanes on neighborhood roads reduces the amount of impervious surface and enhances the land's ability to infiltrate water and pollutants.
But what about...	**Safety** should always be a top concern, which is why narrow roads are a smart idea. Studies have shown that 10' lanes are as safe as – if not safer than – wider lanes.[11] When roads are narrower, drivers go slower, pay closer attention to the road, and have fewer accidents. Street-lined trees that provide a shaded lane and homes closer to the roadways also enhance these safety benefits.

Alternative Cul-de-sacs

What is it & benefits	Instead of having a wide road with a large paved circle at the end, the circle can be vegetated to increase infiltration. Alternatively, the road could make a loop and be enclosed with vegetated area that's perfect for community spaces.
But what about...	**Emergency vehicles** and plow trucks need space to turn around, which narrower roads and alternative cul-de-sac options still provide. National Fire Protection Association requires a 20' wide passage for fire trucks.[12] However, communities have met this requirement in innovative ways. Some homes in Devens, MA have rear garages on 12' of pavement bordered by 8' of grass pavers on the side. This structure is still heavy weight bearing and the combined 20' roadway was accepted by the local fire department.[13]

Shared Driveway

What is it & benefits	Instead of each home having a separate driveway from the street, shared driveways that then split to each home offer access to homeowners while still reducing impervious surfaces and increasing stormwater infiltration.
But what about...	**Marketable** homes with shared driveways don't deter potential buyers. In fact, homes in Concord and Plymouth with shared driveways and parking still brought high value and sold quickly – including during the 2008 recession. [14, 15]

Other Bioretention Systems

Rain gardens and stormwater wetlands are just two types of bioretention systems, which allows the landscape to filter pollutants and infiltrate stormwater into the ground. These systems give excess water a place to go, and reduce flooding and infrastructure damage.

Other systems include vegetated parking lot medians, roadside swales or "country drainage," and curb cuts, which take stormwater from streets and filter it into a roadside rain garden or tree box.

This parking lot in Narragansett, RI shows traditional asphalt on the left, where puddles have formed, and permeable pavement on the right, where it has soaked through.

This insert shows a University of NH parking lot one hour after plowing. The inset photo shows a close up of the permeable pavement section of the lot at the same time.

This stormwater wetland in Leominster uses the land's natural capacity to filter and infiltrate water.

Conservation Design

Balancing Growth & Character

As our communities grow and develop, it's important to consider the cultural and aesthetic value of the landscape. Cutting down forests and substituting expansive lawns without any mature trees sacrifices the classic charm of New England, and reduces our ability to enjoy foliage in the fall, shade in the summer, and privacy, recreation, and walkable neighborhoods all year long.

Conservation design (CD) can offer all of these benefits along with the valuable free ecosystem services described in Fact Sheet #1 while meeting communities' development needs. Building homes closer together and preserving adjacent land for shared use creates attractive, cohesive communities where neighbors know one another and have recreational and aesthetic benefits right outside their doorstep. CD also improves property values while decreasing building costs and protecting water resources.

What is Conservation Design?

Conservation design looks at the existing characteristics in a landscape and works to protect the most important aspects during development—whether it's a historic rock wall, a scenic overlook, or a critical habitat area. In these cases, when a developer purchases a land parcel for a subdivision, they typically put at least 50% of the land into permanent protection.[1] Then a land trust, conservation commission, or other relevant group receives the protected land and its benefits without having to purchase the land themselves.

This type of development allows communities to grow while also preserving local natural resources and sense of character – at no additional cost to the community.

This fact sheet reviews how to create a conservation design and explores examples of successes and challenges communities have faced in implementing this type of design.

What are Green Infrastructure (GI) and Low Impact Development (LID)?

Green Infrastructure (GI) includes both natural features such as forests and wetlands as well as engineered landscapes that mimic these natural processes like a rain garden.

Low Impact Development (LID) works to preserve the natural landscape and minimize impervious surfaces to keep stormwater close to the source and use it as a resource rather than a waste product.

Together, LID and GI not only manage stormwater and improve groundwater supplies, but also offer many free ecosystem services including cleaner air and water, flood control, shade and energy savings, recreational opportunities, and enhanced property values and quality of life.

Preserving our existing GI is our first line of defense against climate impacts such as increased storm frequency and intensities as well as achieving long-term cost savings.

A classic New England village look at the Cottages on Green in East Greenwich, RI

Mass Audubon
Protecting the Nature of Massachusetts

SHAPING the Future of YOUR COMMUNITY

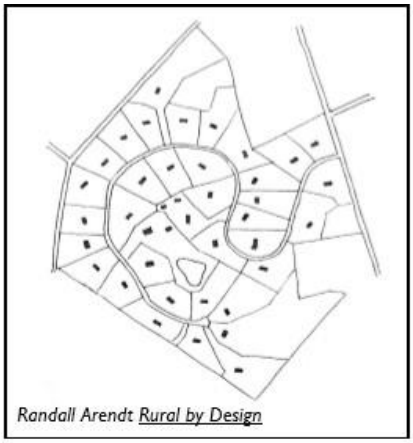
Conservation design follows a 4-part process:[1]

1. Calculate the traditional amount of allowed lots (not including unsuitable building areas, such as wetlands and steep slopes)

2. Identify significant natural, cultural, or historic features such as critical habitat, scenic views, or historic buildings

3. Concentrate development away from these features through flexible requirements to achieve a similar amount of lots (or more, if a density bonus is offered)

4. Preserve permanently at least half of the land, whether for natural, agricultural, or forest use — and give it to appropriate conservation commission/land trust/etc.



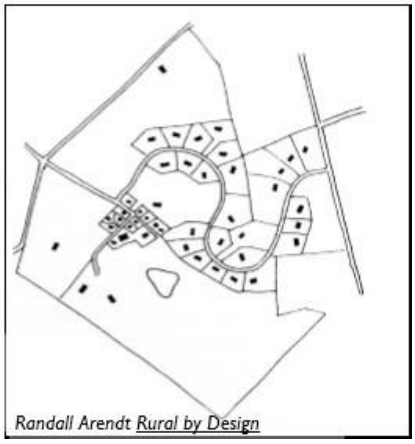
Randall Arendt Rural by Design

Conventional "By-Right" Design
38 units on 3+ acre lots
No open space and no preservation of rural character

Avoid Fragmentation and Enhance Value

Many communities have already discovered the negative effects of unplanned development and losing many of the benefits from intact green infrastructure—from the classic New England village feel to reduced habitat and increased stormwater management burdens. Between 2005 and 2013, Ayer, MA ranked highest in the state for total development per square mile at a rate of 15 acres per square mile, and 9 acres per square mile of natural land converted to development.[2]

In comparison, on the following page are three developments in Massachusetts that have successfully implemented conservation design and LID practices.



Randall Arendt Rural by Design

Conservation Design
46 units, varied sizes:
26 one-acre lots, 16-unit village, 4 units on farms
68% open space and rural character preserved

Below: An aerial view of Pingry Hill in Ayer before development (left) and after (right). This large lot design fragmented the landscape. Conservation design clusters homes closer together and protects a larger, more contiguous portion of the existing landscape with less roadways and other impervious surfaces.


The Pinehills

Pinehills – Plymouth, MA[4]

The Pinehills is a 3,174 acre New England village style development in Plymouth, MA that preserved over 2,000 acres. The remaining third of the property is peppered with a variety of homes including townhomes, condos, and single family – all of which are densely developed but in a quaint style that retains New England's classic character by preserving the natural landscape and mature trees surrounding the homes.

Developers also preserved Old Sandwich Road, the oldest unpaved public way in continuous use in the country, and instead created new, narrow roadways that follow the contour of the existing land. They incorporated numerous LID and green infrastructure elements into the built areas, including bioswales and rain gardens to handle on-site stormwater management. Additionally, The Pinehills incorporated 10 miles of walking trails that residents use to reach the mixed-use town center.

By working with the land, the developers not only saved money on clearing, grading, and piping, but also created over $1 billion in new assessed property value for the town of Plymouth since 2001 while residents enjoy increased aesthetics, community health, and historic charm.

$2,500/ acre — Savings in clearing and grading costs for conservation design. Not developing the entire parcel means not paying to clear and grade the land.[6] Save land, save money.

47% — Savings on energy bills for residents in CDs. Trees cool homes with shade in the summer and warm homes by insulating and blocking wind in the winter.[7]

1/4 acre lots — Increasing development to this density offers significant cost savings for municipalities, especially rural ones. Condensing homes means fewer roadways and reduced construction and maintenance costs.[8]

$250,000/ mile — Savings by narrowing a road from 28' to 20'.[9] When the entire road is shortened for condensed development instead of sprawling, that savings grows to the millions.

30% — Property value increase of CDs over traditional subdivisions due to walkability, beautiful views, accessibility to recreation, and neighborhood feel.[10, 11] Added perk: they also sell about 50% faster.[10]

$4,500/ acre — Savings on maintenance each year using native grasses and natural landscaping instead of traditional turf. Installation savings are from $4000-8000/acre.[12] Added perks: increased curb appeal and improved stormwater retention.

Engineered + Nature Based Systems = Successful Solutions

Preserving the existing capacity of the natural land is the absolute best bang for your buck in terms of reducing stormwater and improving community character. However, it's not always possible to preserve large areas of land, especially in urban settings. When communities need to grow, they can incorporate smart growth techniques and layouts like those discussed in Fact Sheet #2 that ensure engineered systems and nature-based solutions work together.

Engineered systems include underground piping, outfalls, and catch basins to intercept and transport stormwater. Nature-based solutions include Low Impact Development (LID) best management practices such as rain gardens and vegetated filter strips. Together, these systems offer a comprehensive approach to managing stormwater in a way that's smart for your budget and your community character.

Minimizing Imperviousness with BMPs

Bioretention strips filter parking lot runoff

Best Management Practices (BMPs) can be installed in both new and redevelopment. Any time land will be disturbed, find ways to minimize impervious surfaces and keep stormwater at its source. Soil and vegetation break down pollutants and infiltrate water—whether by the side of a road or from rooftops. By slowing the rate of runoff, these BMPs also reduce flooding and associated financial and health-related costs.

Trees and other plants also offer additional benefits such as air quality protection, improved aesthetics, reduced energy use, and cost savings.

LID Site Design: Less Pavement, More Savings

By reducing the amount of pavement, communities are not only reducing their impervious surface and allowing more space for stormwater infiltration, but also realizing a huge cost savings. Traditional paving costs about $6ft^2. Reducing just a short two-mile road from 28' wide to 20' equates to a savings of over $500,000. Less pavement also means reduced maintenance costs, including plowing, salting, and sweeping.

Narrower Roads

What is it & benefits	Designing and installing 10' or 12' lanes on neighborhood roads reduces the amount of impervious surface and enhances the land's ability to infiltrate water and pollutants.
But what about...	**Safety** should always be a top concern, which is why narrow roads are a smart idea. Studies have shown that 10' lanes are as safe as – if not safer than – wider lanes.[11] When roads are narrower, drivers go slower, pay closer attention to the road, and have fewer accidents. Street-lined trees that provide a shaded lane and homes closer to the roadways also enhance these safety benefits.

This narrow road in Devens, MA easily fits two lanes of traffic and offers room for a vegetated buffer, sidewalk, and street trees.

Alternative Cul-de-sacs

What is it & benefits	Instead of having a wide road with a large paved circle at the end, the circle can be vegetated to increase infiltration. Alternatively, the road could make a loop and be enclosed with vegetated area that's perfect for community spaces.
But what about...	**Emergency vehicles** and plow trucks need space to turn around, which narrower roads and alternative cul-de-sac options still provide. National Fire Protection Association requires a 20' wide passage for fire trucks.[12] However, communities have met this requirement in innovative ways. Some homes in Devens, MA have rear garages on 12' of pavement bordered by 8' of grass pavers on the side. This structure is still heavy weight bearing and the combined 20' roadway was accepted by the local fire department.[13]

Cyburbia

An alternative cul-de-sac design that allows for recreational space as well as a place to improve stormwater infiltration.

Shared Driveway

What is it & benefits	Instead of each home having a separate driveway from the street, shared driveways that then split to each home offer access to homeowners while still reducing impervious surfaces and increasing stormwater infiltration.
But what about...	**Marketable** homes with shared driveways don't deter potential buyers. In fact, homes in Concord and Plymouth with shared driveways and parking still brought high value and sold quickly – including during the 2008 recession.[14, 15]

This shared driveway in the Pinehills in Plymouth, MA provides easy access to garages, plenty of parking, and less impervious surface. Retention of mature trees also offers privacy.

Gravel Wetland


Massachusetts Watershed Coalition

Benefits ✓ | Cost effective $ | Curb appeal | Habitat creation | Nutrient reduction N P | Increased awareness | Groundwater recharge | Flood control

Water flows through a series of cells with plants and saturated soils where microbes break down nutrients and other pollutants. The gravel wetland is installed with pretreatment BMPs to capture stormwater sediments.

- Costs about $25,000-30,000 per acre of impervious area treated [4,5]
- Costs about $1,500-2,000/yr in labor for maintenance and vegetation control [4,5]
- 80% TSS removal credit with adequate pretreatment [6]
- Varied % removal of nutrients, metals & pathogens [6]

Bioretention


Massachusetts Watershed Coalition

Benefits ✓ | Cost effective $ | Curb appeal | Habitat creation | Nutrient reduction N P | Increased awareness | Groundwater recharge | Flood control

Soil and native plants filter and reduce stormwater contaminants – including up to 90% of metals – allowing the purified water to soak into the ground and replenish the groundwater that sustains streamflow during dry times. Examples include tree filters, bioswales, and rain gardens.

Tree Filter
- Costs about $20,000-25,000 [4,5]
- Costs about $200/yr in labor for maintenance [4,5]
- Presumed to remove 80% TSS [6]

Bioswale
- Costs about $20,000/acre impervious area treated
- Costs about $300-500/yr in labor for maintenance (varies by size of swale)[4,5]
- 70% TSS removal credit with adequate pretreatment [6]

Rain Garden
- Costs about $2-12/ft^2 [3]
- Costs about $200/yr in labor for maintenance [4,5]
- Reduces runoff by up to 90% [3]
- Reduces pollutants, including N, P, metals, and TSS by 65-90% [3]

Making Regulations Reflect Priorities

Local conservation lands and green infrastructure are important assets for the citizens of Hanson, and include environmental, economic, health, and social benefits. However, many plans and land use regulations unintentionally encourage sprawling development that comes with many costs. Whether it's an outdated open spaces plan that doesn't prioritize conservation needs or bylaws that require large lots, wide roads, and big water intensive lawns, there are lots of opportunities to revise regulations and guide development in a more sustainable direction.

It is important to periodically review and update local plans and rules to determine how they work together, and whether they encourage or discourage smart growth. By analyzing and updating local plans and land use rules such as zoning, subdivision rules and regulations, site plan review, and stormwater regulations, the Town of Hanson can ensure that development is consistent with local goals and values.

Master plans, open space plans, and land use regulations should coordinate with one another to reflect the goals of the citizens of Hanson. Together, these create local priorities for both development and conservation, and define the Town's future character and economy. To prioritize and encourage sustainable growth, the local regulations must be consistent with one another to achieve the desired goals.

For instance, if a stormwater bylaw required Low Impact Development (LID) standards, but zoning requires large lots with strict dimensional standards and the subdivision regulations require wide streets and curbing running along throughout – there isn't much LIC that can be done. The rules essentially require a developer to clear and grade all available upland and create extensive impervious surfaces with centralized, piped stormwater drainage. If Hanson had a modern Master Plan that identifies sustainable development with LID and land protection as goals, but local regulations do not allow that type of development to happen, the plan will never be achieved.

Low Impact Development techniques are broad in range and design and should be incorporated within a variety of local bylaws and regulation, including the Zoning Bylaws, the Subdivision Rules and Regulations, the Site Plan Review Regulations, in addition to any Stormwater or LID Bylaw.

When it comes to allowing low impact and conservation development, coordination among local boards is key. By working together, the community can ensure the permit application and review requirements are clear to developers and bylaws do not conflict with one another when one encourages a practice, but another makes it difficult. Through interdepartmental cooperation, communities can create an efficient system that reduces the burden on local officials, lets developers understand exactly what the community is looking for, and encourages projects that prioritize local character and natural assets.

Planning Document	What does it do?	What should I look for?	How do I change it?
Master Plan (MP)	Comprehensive guiding document that sets **community goals**	• **Current**, reflects changing priorities? • Prioritizes **sustainable development?** • Defines specific measures to retain local **community character** & values?	Planning Board often with assistance of a special Master Planning Committee
Open Space and Recreation Plan (OSRP)	Identifies local **natural** resource and recreation priorities and plans for protection and management	• **Current**, reflects current parcel status, priorities? • Allows variety of OS uses: recreation, conservation? • Considers **land and water** resources? • Consider **local context** of existing OS?	Conservation Commission, often with assistance of a special OS Committee. Must meet state guidelines
Zoning Bylaw/ Ordinance	Determines how parcels may be used and sets **dimensional requirements**	• Focuses development near **existing infrastructure**, away from natural resources? • Allows **flexible dimensional requirements?** • Prioritizes protection of **natural features?** • **Limits clearing/grading,** impervious areas? • Requires **LID** features?	Adoption and revision requires approval through Town Meeting (TM) or City Council
Open Space Residential Design (OSRD)	Type of conservation development that maximizes **protection of natural resources**	• Allowed **by right** (not by special permit)? • Requires ≥ **50% of open space** protection on a parcel? • References **priority areas** from local MP/OSRP? • **Connects OS** within and on adjoining parcels? • Allow **flexible dimensional** requirements? • Requires **LID** features?	Adoption/revision requires approval through TM/City Council
Site Plan Review	Reviews **development design** for consistency with local standards	• **Limits clearing/grading,** impervious areas? • Requires **LID** features? • Allows easy **siting of LID** features, including near roadways and in parking islands?	Adoption requires approval through TM/City Council
Stormwater or LID Bylaw	**Reduces stormwater pollution** and/or specifically encourages LID	• Requires **LID** features? • **Discourages curbing** and limits impervious areas? • Prohibits **topsoil removal?** • **Limits clearing/grading?**	Adoption requires approval through TM/City Council
Subdivision Rules and Regulations	Govern **how a parcel of land is subdivided** in a development	• **Limits clearing/grading?** • Requires protection of **existing landscape?** • **Limits impervious** areas? • Requires **revegetation with native plants?** • Requires **LID?** • Allows **narrow roads**, no curbing?	Planning Board has administrative authority

SECTION 10. PUBLIC COMMENTS

Old Colony Planning Council Regional Planning Agency

Hanson Board of Selectmen

Department of Fish and Game

Hanson Water Department

Hanson Conservation Commission

Hanson Planning Board

Hanson Highway Department

The Wildlands Trust

OLD COLONY PLANNING COUNCIL

Christine M. Joy
President
70 School Street
Brockton, MA 02301-4097

Mary V. Waldron
Executive Director
Telephone: (508) 583-1833
Fax: (508) 559-8768
Email: mwaldron@ocpcrpa.org
Website: www.ocpcrpa.org

February 28, 2020

Mr. Phil Clemons
Chair, Conservation Commission
Hanson Town Hall
542 Liberty Street
Hanson, MA 02341

Re: Open Space and Recreation Plan

Dear Mr. Clemons:

On behalf of Old Colony Planning Council, I would like to take this opportunity to provide written support of the Town of Hanson's 2017 Open Space and Recreation Plan.

We have reviewed the plan and found that it covers all the topics called for under the Open Space and Recreation Plan Requirements, and does so with a balance between the specific and general appropriate to a community the size of Hanson.

In all, the Plan is an impressive document, developing and outlining a necessary and ambitious program. The Council wishes the town good luck in implementing the plan, and we offer our assistance with some of the many proposed projects and programs.

Sincerely,

Mary Waldron
Executive Director

Commonwealth of Massachusetts
Department of Fish and Game
251 Causeway Street, Suite 400
Boston, Massachusetts 02114
(617) 626-1500
fax (617) 626-1505

Charles D. Baker
Governor
Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary
George N. Peterson, Jr.
Commissioner
Mary-Lee King
Deputy Commissioner

January 13, 2017

Town of Hanson
Open Space Committee
and Conservation Commission
542 Liberty Str.
Hanson, MA 02341

Re: 2016 Town of Hanson Open Sapce and Recreation Plan

Dear Open Space Committee and Cons. Commission:

I am writing, on behalf of the of Mass. Dept. of Fish and Game, to express our support for your 2016 Open Space and Recreation Plan. Thank you to the Open Space Committee, Conservation Commission and town staff for taking the time to prepare this 2016 plan, which is an update of several previous related planning efforts.

I am impressed with the thoroughness of this plan, with its attention to detail on many topics, including water quality and stream corridors in town. The plan also provides much information about rare and endangered species such as box turtles, and critical habitats. In particualr, we appreciate the Town making one of its 6 main goals for the plan that of protecting biodiversity, water and habitats.

On many occasions over the past 15 years, the Dept. of Fish and Game has had the pleasure to work closely with the Town of Hanson on projects which further conservation and passive recreation.

Thank you for the opportunity to express our support for your efforts and for this plan.

Sincerely,

Joan Pierce
Land Agent
Mass. Dept. of Fish and Game/SE District

Robert F. Brown Jr
Highway Surveyor
781-293-2822
rbrown@hanson-ma.gov

TOWN OF HANSON

Office of the

HIGHWAY SURVEYOR

797 Indian Head Street
Hanson, MA 02341

January 23, 2017

Conservation Commission
Hanson Town Hall
542 Liberty Street
Hanson, MA 02341

Re: 2016 Open Space and Recreation Plan

Dear Board Members:

This letter is in support of open space and recreation for the Town of Hanson. Hanson contains many "Gems", Green Corridors that should be protected. Many scenic pathways and other walking areas can be found here. Hanson should try to preserve these areas. The town should also look to protect the aquifer that contains the wells for the much of the community's water supply. I also support the Water Departments desire and need for a secondary water source.

As far as additional space being acquired as green space, I believe careful consideration should be given to all aspects of the decision. The Town should weigh residential, industrial, commercial and agricultural needs as well. We should be able to find a balance which will benefit all Residents and Business owners "Taxpayers" to the Town. A strong tax base is required to ensure the continued strength of the town's infrastructures and institutions. It is also necessary to provide education, employment opportunity, safety, convenience and a state of well being to its residents.

I would also like to thank the Conservation Commission as well as the Conservation Agent Laurie Muncy for their continued support and hard work in regards to storm water management. The Conservation Commission and the Highway Department have worked together effectively in establishing the By-Law for the aforementioned.

Sincerely,

Robert F. Brown Jr.

Robert F. Brown Jr.
Highway Surveyor

Town of Hanson

Board of Selectmen

542 Liberty Street
Hanson, Massachusetts 02341
(781) 293-2131 FAX (781) 294-0884
www.hanson-ma.gov

December 21, 2016

Mr. Philip Clemons, Chairman
Hanson Conservation Commission
542 Liberty Street
Hanson, Massachusetts 02341

Re: Open Space Plan

Dear Mr. Clemons:

Please be advised that the Board of Selectmen voted unanimously on December 20, 2016 to accept the 2016 Open Space Plan and to support its goals and objectives to acquire and maintain open space within our community consistent with the wishes of the residents.

The Board of Selectmen wishes to extend its sincere appreciation to the members of the Conservation Commission, the Open Space Committee and Conservation Agent Laura Muncy for their months of diligent work and efforts in preparing the Hanson Open Space and Recreation Plan.

Thank you for all the time and energy everyone has spent in crafting this document.

Very truly yours,

Michael McCue
Town Administrator

MWM/mem

Town of Hanson
Board of Water Commissioners

1073 W. Washington Street
Hanson, Massachusetts 02341
(781) 447-1200 FAX (781) 447-1206

Donald H. Howard, Chairman
Mary Lou Sutter, Vice Chair
Andrew Sargent, Clerk
Michael Chernicki, Member
Gilbert Amado, Member

Richard Muncey
Water Superintendent
chip.hwd@comcast.net

December 28, 2016

Conservation Commission
Hanson Town Hall
542 Liberty Street
Hanson, MA 02341

RE: 2016 Open Space & Recreation Plan

Dear Board Members:

I am writing this letter to "support" your intent of the Open Space & Recreation Plan.

I feel it is very important for the Town not only to preserve open space for recreation; but also it's vital to the water department's interest for future water development and the continued protection of our watershed areas.

As you know, there is an abundance of "protected" open space surrounding the town's current drinking water supply off Main Street which is extremely critical as this is the town's only source at this time.

The town is in the process of searching for another water source in an area considered open space which is currently in the control of the Conservation Commission off Old Pine Drive. Hopefully this land will prove to be another viable drinking water source for the town. I would like to take this opportunity to thank the Conservation Board for their support on this endeavor.

Sincerely,

Richard D. Muncey
Water Superintendent

WILDLANDS TRUST

Wildlands Trust, Inc. | 675 Long Pond Road | Plymouth, MA 02360
Phone: 774-343-3123 | Fax: 774-343-3124 | www.wildlandstrust.org

January 27, 2017

Laurie Muncy
Town Planner/Conservation Agent
Town of Hanson
542 Liberty St.
Hanson, MA 02341

RE: Updated 2017 Town of Hanson Open Space and Recreation Plan

Dear Ms. Muncy:

The Wildlands Trust is pleased to support the Town of Hanson's 2017 update of its Open Space and Recreation Plan.

The plan is well-researched, conceived, and presented, and it is evident that significant attention was afforded to not just obtaining community input, but ensuring that the final plan is reflective of this feedback. It is gratifying to see that so many respondents to the Open Space survey afforded a high priority to land preservation, and to safeguarding Hanson's surface and drinking water resources. It is to be hoped that this support will manifest itself for future land preservation projects.

The plan provides a detailed blueprint to guide Hanson's open space and recreation planning and preservation efforts over the next seven years. This is vital, as the Town is at a critical juncture in its efforts to preserve its natural resource base and enhance recreational opportunities. The day looms when Hanson and most communities in Southeastern Massachusetts will be fully built out, and there will be no more opportunities to preserve land for the range of values identified in the plan. While that build-out date may not necessarily coincide with the conclusion of the plan's seven-year term, it is nonetheless critical that the Town pursue every opportunity during that time frame to implement the plan's preservation vision.

We have enjoyed working with the Town over the past several years to help facilitate the acquisitions of two important properties along the Poor Meadow Brook corridor, including what is now the 115-acre Poor Meadow Brook Confluence reserve, and assisting the Town in implementing the Community

WILDLANDS TRUST
Wildlands Trust, Inc. | 675 Long Pond Road | Plymouth, MA 02360
Phone 774-343-5121 | Fax: 774-343-5124 | www.wildlandstrust.org

Preservation Act by holding Conservation Restrictions on these and other properties acquired with CPA funds.

With the CPA and an approved open space plan in place, Hanson is ideally positioned to work with Wildlands Trust and other partners toward yet more land protection projects over the next seven years. We congratulate all who contributed their time and efforts to updating the plan—well done!

Sincerely,

Karen Grey
Executive Director

Enc.

Town of Hanson
office of
Planning Board
542 Liberty Street
Hanson, Massachusetts 02341

Phone (781) 293-9035
Fax (781) 294-0279

February 13, 2017

Open Space Committee
Hanson Town Hall
542 Liberty Street
Hanson, MA 02341

Dear Open Space Committee Members:

At their regularly scheduled meeting of the Planning Board, the Board voted to endorse the Open Space and Recreation Plan for the Town of Hanson as prepared by the Hanson Open Space Committee with the assistance of Laurie Muncy, Town Planner.

The Town of Hanson has always looked to the future in the protection of its open space lands and implementation of diverse recreational uses. As stated in the Hanson Open Space and Recreation Plan, there are three primary goals that address the open space and recreational needs of the town which are preservation and enhancement of Hanson's rural character and scenic quality, and the expansion and improvement of recreational opportunities and the protection of natural resources and biodiversity.

The proposed plan presents us with the opportunity and challenge to protect and enhance our natural resources as a community. The Town of Hanson is aware of the importance of preservation of our environment for future generations. Furthermore, all of the goals presented in the Open Space and Recreation Plan are of equal value concerning our future as a town.

The Hanson Planning Board wishes to thank you for all your time and energy expended on this project which delineates our future path.

Sincerely,

Joseph Weeks
Chairman

HANSON CONSERVATION COMMISSION
TOWN HALL, 542 LIBERTY STREET
HANSON, MASSACHUSETTS 02341

February 14, 2017

Town of Hanson
Open Space Committee
542 Liberty Street
Hanson, MA 02341

RE: Hanson Open Space & Recreation Plan 2016

Dear Members of the Open Space Committee:

After careful review, the Town of Hanson's Conservation Commission enthusiastically approves and endorses the 2017 Hanson Open Space & Recreation Plan.

Please accept our thanks for producing an exceptional final product. We also want to express our appreciation for your many months of hard work on behalf of the Town of Hanson as well as for the knowledge and expertise that your team brought to the table.

The strategies of the Action Plan will provide an excellent framework for achieving the goals and objectives identified in the plan, particularly open space management and related conservation purposes. Much has been accomplished and we look forward to implementing the Plan as well as the concerns and expectations of our townspeople outlined in the questionnaire.

Sincerely,

Paul Andruk, Vice Chairman
Conservation Commission

PHONE: 781-294-4119 **FAX: 781- 294-0884** **WEBSITE: WWW.HANSON-MA.GOV**

SECTION 11. REFERENCES

Anderson, Kathleen S. and Petersen, Wayne R. "Burrage Pond Wildlife Management Area, Hanson/Halifax." *Bird Observer* Vol. 32, No. 3 (2004): 153-160.

Bay Circuit Trail website: www.baycircuit.org

Community Development Plan for the Town of Hanson. Old Colony Planning Council, 2004.

Community Mapper website: http://communitymapper.org/

Land/Use/Water Quality Issues 208 Report. Old Colony Planning Council.

http://www.smithsonianmag.com/arts-culture/this-man-made-the-first-canned-cranberry-sauce-180947862/

Massachusetts Department of Agricultural Resources website: http://www.mass.gov/agr/programs/index.htm

Massachusetts Division of Conservation Services. *Massachusetts Outdoors - the Statewide Comprehensive Outdoor Recreation Plan*, 2006.

Massachusetts Department of Environmental Protection. *Category 5 Waters: Waters Requiring a TMDL*, 2006.

Massachusetts Department of Environmental Protection. *Source Water Assessment and Protection (SWAP) Report for Hanson Water Department*, 2003.

Massachusetts Division of Watershed Management Watershed Planning Program. *Massachusetts Year 2006 Integrated List of Waters*, 2006.

Massachusetts Historical Commission. *State Register of Historical Places*, 2001.

2001. Petersen, Wayne R. Personal correspondence, summer-fall 2008.

Massachusetts Wildlife. A. "Massachusetts Wildlife Climate Action Tool." *Changes in Hydrology Massachusetts Wildlife Climate Action Tool.* N.p., n.d. http://climateactionatool.org/content/learning-about-climate-change. Accessed 15 Mar. 2017.

Massachusetts Wildlife b. "Massachusetts Wildlife Climate Action Tool" *Change in timing of seasons Massachusetts Wildlife Climate Action Tool.* N.p., n.d. Web. 15 Mar. 2017.

The Constitution of the Commonwealth of Massachusetts, Article 97.

Town of Hanson Annual Report, 2007.

Town of Hanson Drinking Water Quality Report, 2007.

Town of Hanson Master Plan, 2008.

Town of Hanson Open Space and Recreation Plan, 1996-2001.

Town of Hanson Recreation Department Master Plan / Camp Kiwanee Restoration Project, 2005.

Town of Norwell Open Space and Recreation Plan, 2005-2010.

United States Census Bureau, *Various data sets from Census 2000*.

Vandana Rao, ed. *Massachusetts CLIMATE CHANGE ADAPTATION REPORT. Reg. N.p.:* Executive Office of Energy and Environmental Affairs and the Adaption Advisory Committee, 2011. Print.

Watershed Action Alliance. *South Coastal Watershed Action Plan*, 2006.

http://nesoil.com/plymouth/gsm/hanson.htm **General Soil Map, Town of Hanson, Massachusetts** *November 2002*

http://censusviewer.com/county/MA/Plymouth Population of Plymouth County, Massachusetts Census 2010 and 2000 Interactive Map

http://www.zip-codes.com/city/MA-Plymouth-2010-census.asp

http://www.zip-codes.com/zip-code/02341/zip-code-02341-census-comparison.asp

http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml Profile of General Demographic Characteristics: 2000 Census Summary File 1

http://www.areavibes.com/hanson-ma/employment

South Shore Coastal Watersheds 2001 Water Quality Assessment Report

Massachusetts Year 2012 Integrated List of Waters, Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs, http://www.mass.gov/dep/water/resources/tmdls.htm

http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-ponds/dfwmaqua.pdf

Bicycle and Pedestrian Connectivity Study

Old Colony Planning Council January 2013

SECTION 12. APPENDICES

A. Questionnaire, Powerpoint Presentation of Survey Responses

B. Maps

a. Map 1 Regional Context
b. Map 2 Zoning Map
c. Map 3 Soils and Surficial Geology
d. Map 4 Unique Features
e. Map 5 Water Resources
f. Map 6 Open Space

C. ADA Administrative Information

D. Conservation Scorecard

E. Taxpayer's Guide to Classification and Taxation of Chapter 61 Lands

F. BioMap2 Core Habitat

G. ParkServe ® Report

H. Trail Maps

APPENDIX A: COMMUNITY SURVEY

Hanson Open Space Committee
Hanson Town Hall
542 Liberty Street
Hanson MA 02341

Thank you for your help
Please return promptly

Please Add Postage for Mail Return
OR
Return to
Conservation Office at Town Hall
OR
Use Questionnaire Drop Box
at the Town Library

Hanson Conservation Commission
Hanson Town Hall
542 Liberty Street
Hanson MA 02341

PLEASE JOIN US!
Open Space & Recreation
PUBLIC VISIONING SESSION
Wednesday March 5, 2008 7:30 PM
Hanson Middle School Auditorium

fold closed along dshed lines

TOWN OF Hanson 2008 OPEN SPACE & RECREATION QUESTIONNAIRE

The Town of Hanson is updating its Open Space and Recreation Plan. Massachusetts requires that towns have approved Open Space and Recreation Plans before State Funds for the Acquisition of Open Space can be received. This survey is being conducted as part of the update in order to understand the needs and concerns of the citizens of Hanson regarding Open Space and Recreational Facilities.
Thank you for your response.

Number in household? Children: ____ under 6 yrs. ____ 6-12 yrs. ____ 13-18 yrs.

Total: ____ Adults: ____18-50 yrs. ____ over 50 yrs.

How Long have you been a resident of Hanson? ____ # of years

Are you a registered Hanson voter? ____Yes ____ No

Do you attend Town Meetings? ____ Always ____ Sometimes ____Never

Why did you move to Hanson? __ born here/family ties __ work/commute location __ quiet/safe rural character
__ historic charm __ real estate affordability __ school system __ other:_____

Are you aware of the Tax Benefits for giving land or granting Conservation Restrictions? ___ Yes __ No
(For further information, contact the Open Space Committee)

How do you use Town-Owned Open Space and Recreation Land? (check all that apply)

__ walking __ jogging __ sail or motor boating __ canoeing/kayaking
__ swimming __ xcountry skiing __ skateboarding __ nature appreciation
__ bird-watching __ bicycling __ photography __ organized sports
__ picnics __ hunting __ fishing __ organized/educational children's programs
__ horseback riding __ pickup games __ other: _____

Would you use Open Space more if we had the following? (check all that apply)

__ more marked trails __ improved access/parking __ improved canoe/kayak access
__ bicycle paths __ detailed trail maps __ handicap access
__ boardwalks __ benches __other:_____

Should Hanson actively try to acquire and protect more Open Space? _____ Yes ____No

What should guide which Open Space to protect?	Priority:	High	Medium	Low
passive recreation potential (hiking, etc.)		___	___	___
creation of continuous trail linkages		___	___	___
outdoor education potential near schools		___	___	___
active recreation potential (ball fields, etc.)		___	___	___
protection of drinking water supply		___	___	___
protection of scenic views (vistas)		___	___	___
protection of forest and woodlands		___	___	___
protection of ponds and shorelines		___	___	___
protection of stream corridors		___	___	___
protection of wetland habitats		___	___	___
protection of wildlife corridors		___	___	___
protection of farmland/open fields/meadows		___	___	___
protection of cranberry bogs		___	___	___
protection of historic places		___	___	___

What are your favorite Scenic Vistas in Hanson?

Name and/or location: _____

Name and/or location: _____

Name and/or location: _____

Are there specific properties in Hanson that you think should be protected?

Name and/or location: _____

Name and/or location: _____

Name and/or location: _____

What are your priorities for new or improved Recreational Facilities?

	High	Medium	Low	where?
parking	___	___	___	_____
handicap access	___	___	___	_____
boating access	___	___	___	_____
paved bike trails	___	___	___	_____
tot-lot/playground	___	___	___	_____
tennis courts	___	___	___	_____
athletic fields/courts	___	___	___	_____
other: _____	___	___	___	_____

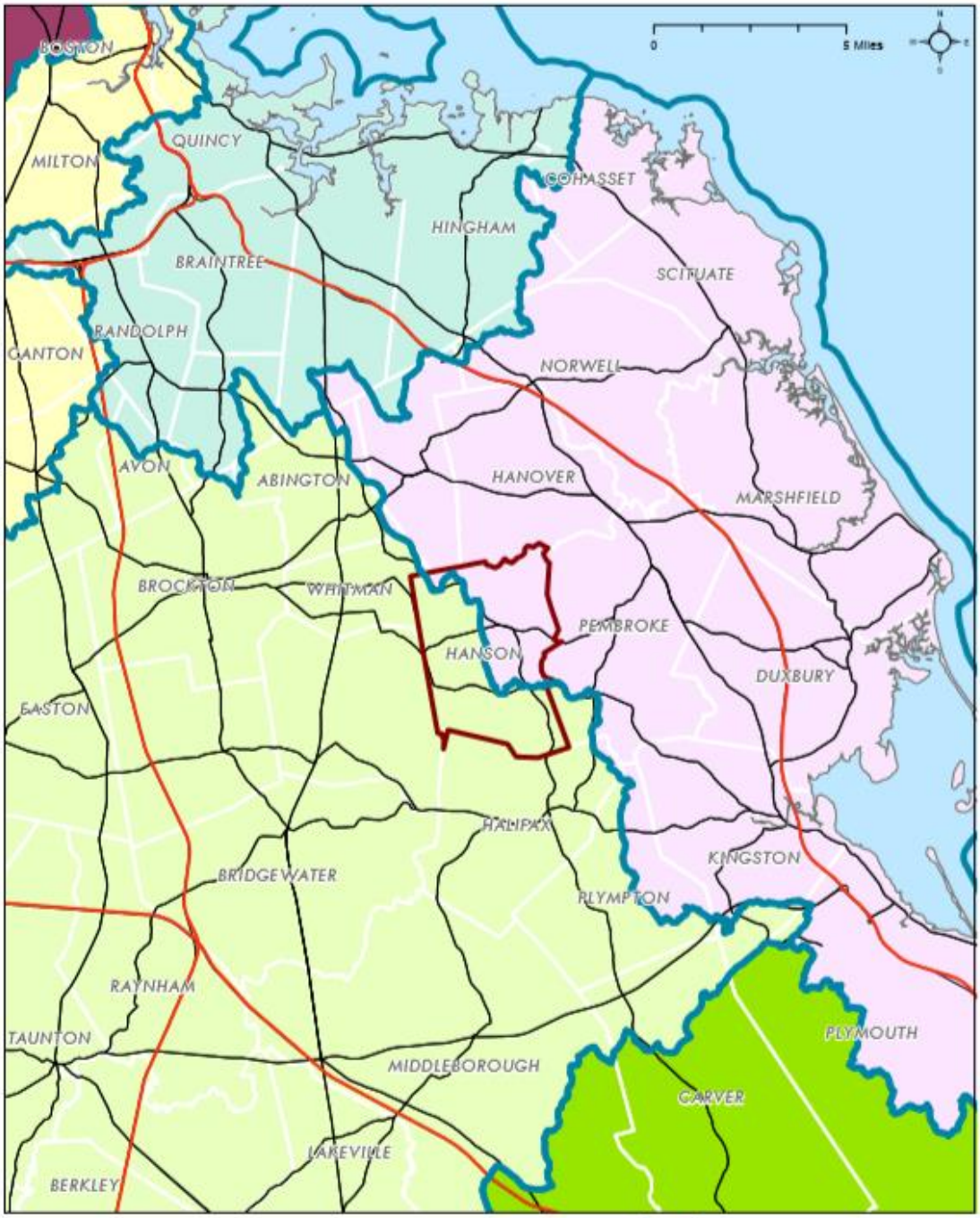
Please list additional activities of interest:
(indoor crafts, table tennis, shuffleboard, billiards, strength training, community garden, hockey, yoga, etc.)

Other Comments:

APPENDIX B: MAPS

Maps

a. Map 1 Regional Context
b. Map 2 Zoning Map
c. Map 3 Soils and Surficial Geology
d. Map 4 Unique Features
e. Map 5 Water Resources
f. Map 6 Open Space



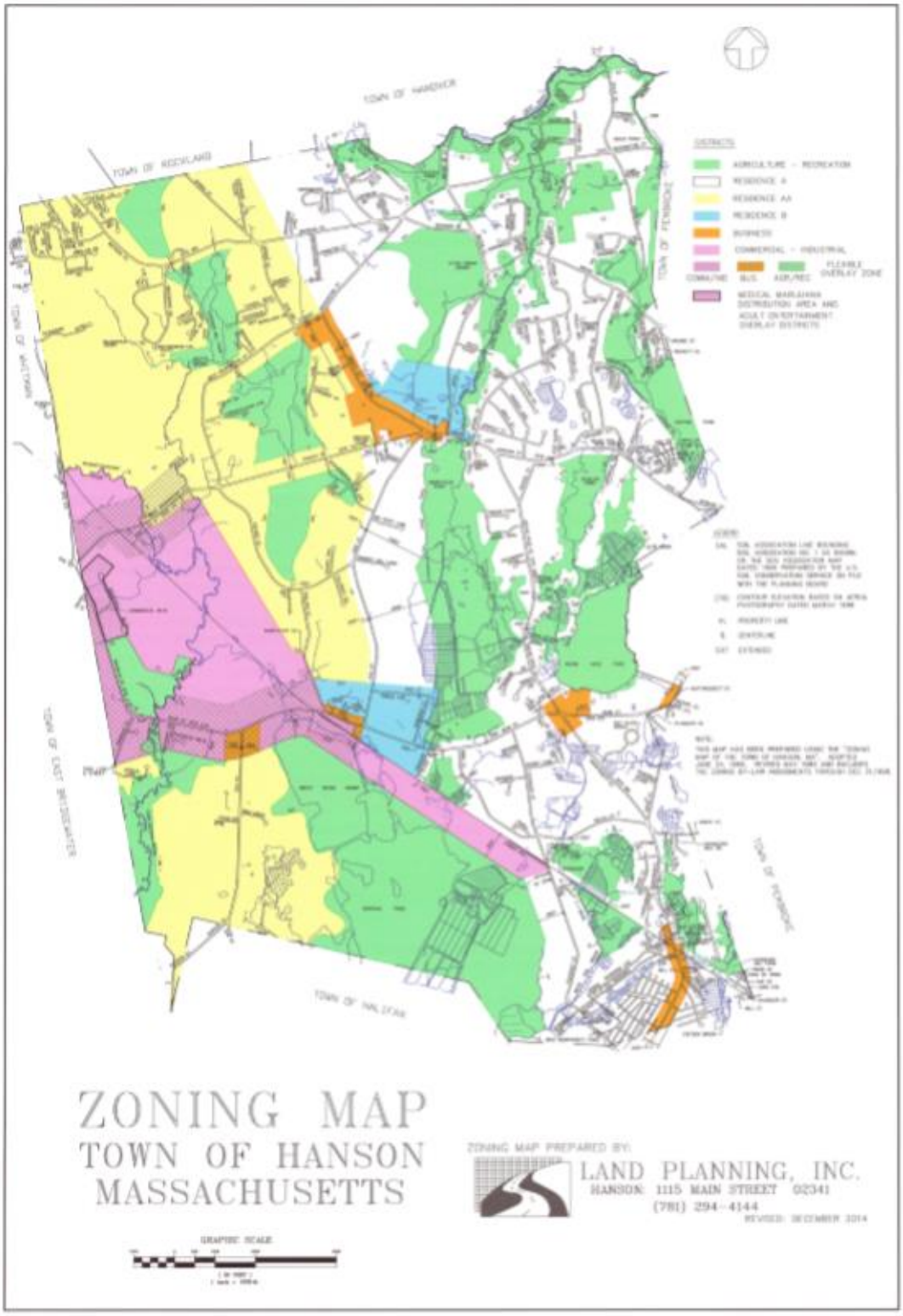
MAP 1

Regional Context

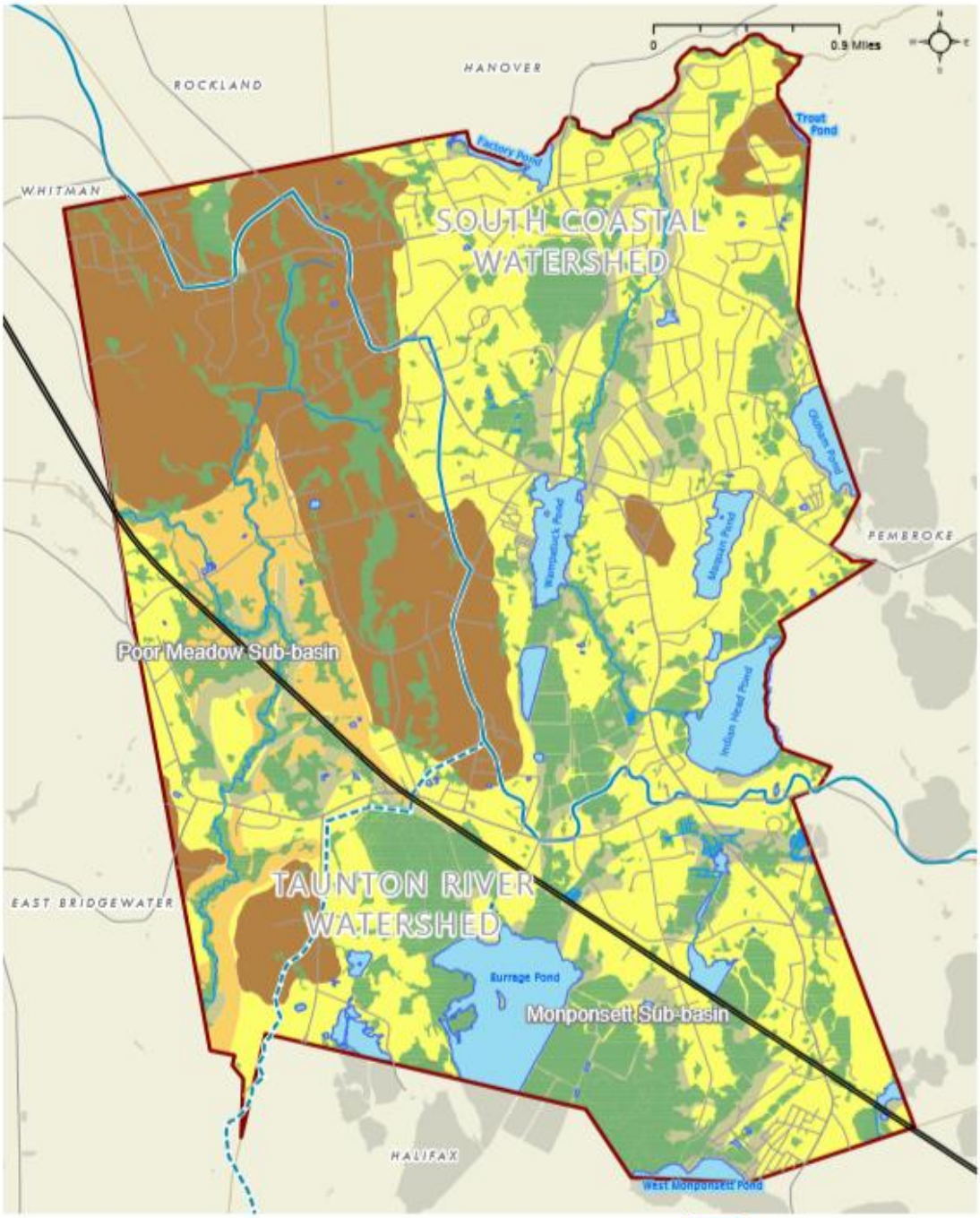
Town of Hanson
Open Space and Recreation Plan
2017

Created for the Town of Hanson by
Old Colony Planning Council
Data Sources: Massachusetts Department of
Transportation, Office of Geographic Information (MassGIS)

- Watershed Boundaries
- Interstate/State Highways
- Major Routes
- Buzzards Bay Watershed
- Charles River Watershed
- Neponset River Watershed
- South Coastal Watershed
- Taunton River Watershed
- Weir River Watershed



ZONING MAP
TOWN OF HANSON
MASSACHUSETTS



MAP 3

Soils and Surficial Geology

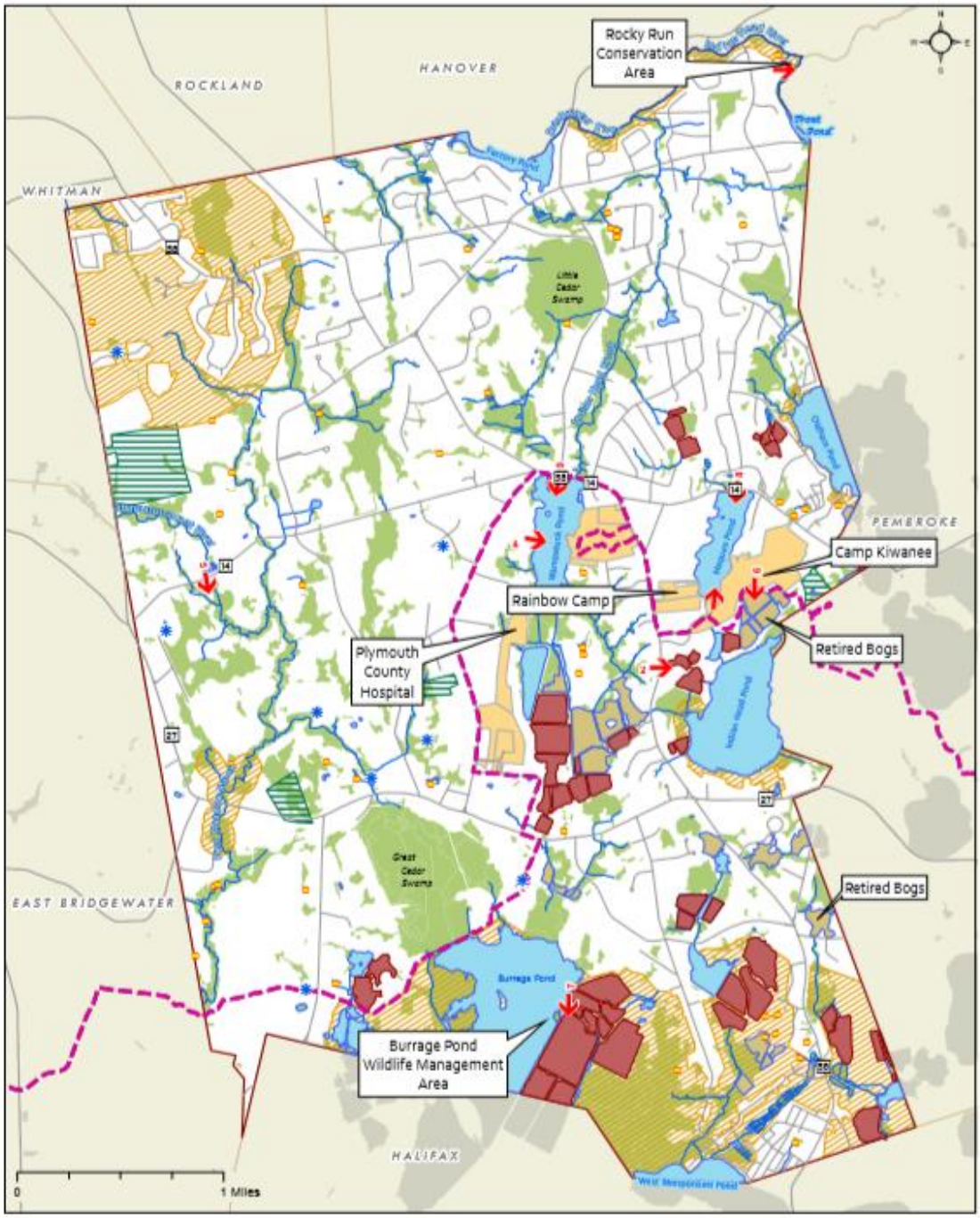
Town of Hanson
Open Space and Recreation Plan
2017

Created for the Town of Hanson by
Old Colony Planning Council
Data Sources: Massachusetts Department of Transportation, Office of Geographic Information (MassGIS)

Watershed Boundaries
Sub-Basin Boundary
Lakes and Ponds
Wetlands

Surficial Geology

Sand and Gravel
Till or Bedrock
Fine-Grained Deposits
Floodplain Alluvium



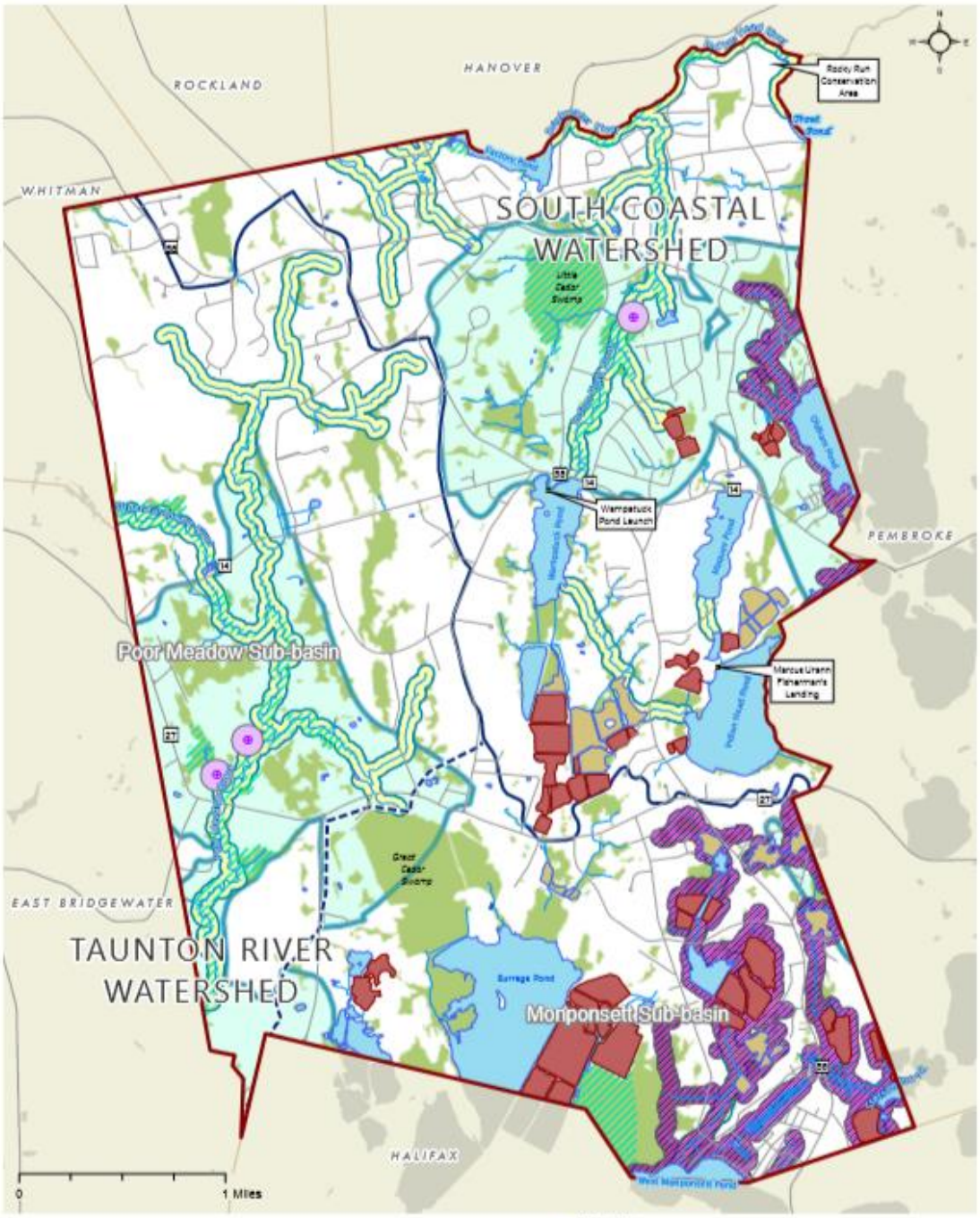
MAP 4

Unique Features

Town of Hanson
Open Space and Recreation Plan
2017

Created for the Town of Hanson by
Old Colony Planning Council
Data Sources: Massachusetts Department of Transportation, Office of Geographic Information (MassGIS), Department of Environmental Protection

- NHESP Certified Vernal Pools
- Potential Vernal Pools
- Scenic Vistas
- Bay Circuit Trail
- Unique Unprotected Area
- Lakes and Ponds
- Cranberry Bog
- Retired Cranberry Bog
- NHESP Priority Habitats of Rare Species
- Forest Stewardship Program Properties
- Wetlands



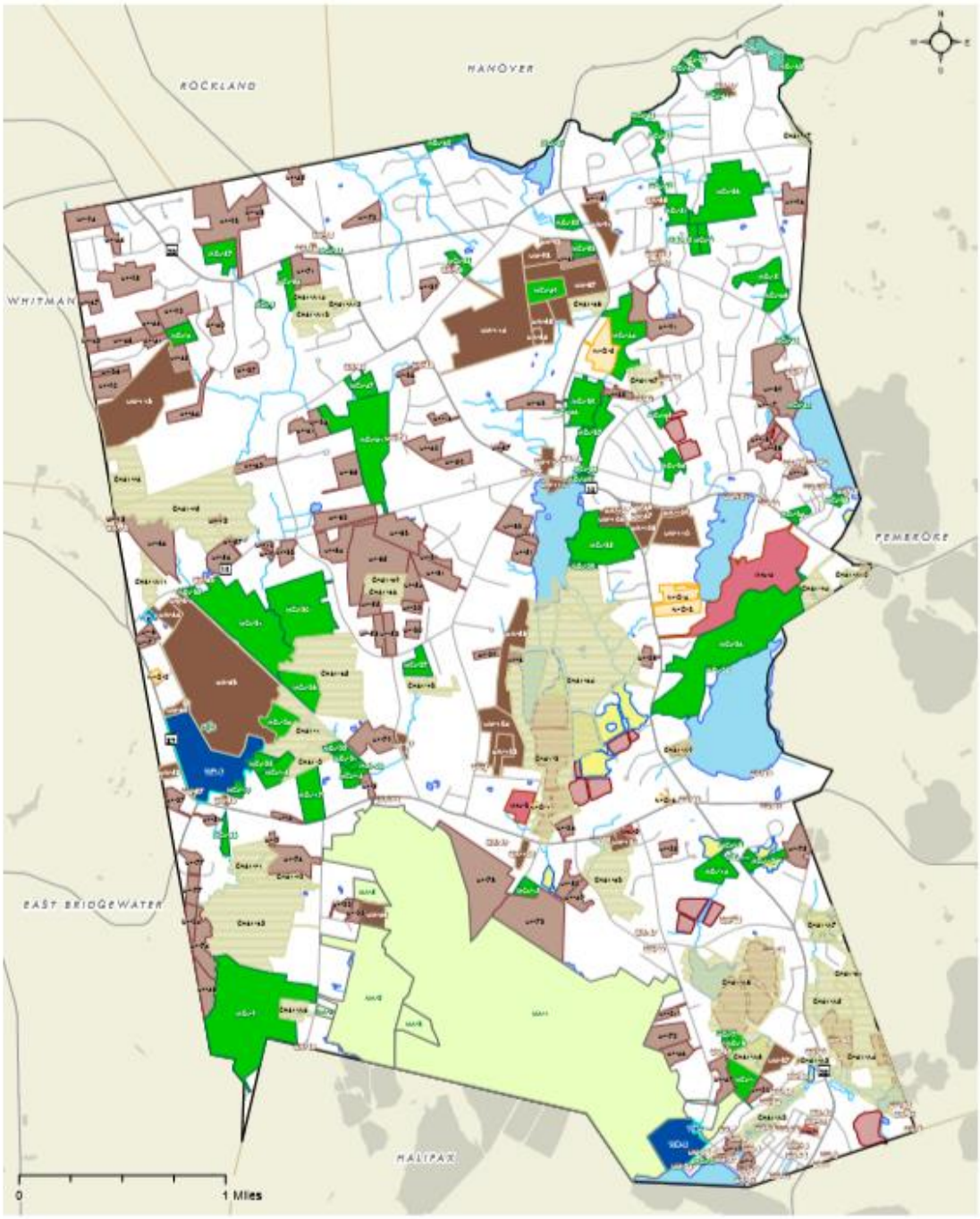
MAP 5

Water Resources

Town of Hanson
Open Space and Recreation Plan
2017

Created for the Town of Hanson by
Old Colony Planning Council
Data Sources: Massachusetts Department of Transportation, Office of Geographic Information (MassGIS)

- Boat Ramps
- Public Water Supplies with 400-foot Buffer
- Lakes and Ponds
- Cranberry Bog
- Abandoned Cranberry Bog
- Watershed Boundaries
- Sub-Basin Boundary
- Surface Water Protection Areas: Zone A
- FEMA Q3 Flood Zones
- 200-Foot River Protection Buffer
- Wetlands
- Zone 2-Contribution Area to Public Water Supply Well



MAP 6

Open Space

Town of Hanson
Open Space and Recreation Plan
2017

Created for the Town of Hanson by
Old Colony Planning Council.
Data Sources: Massachusetts Department of
Transportation, Office of Geographic Information (MassGIS)

Protected Open Space

- Chapter 61 Land
- Commonwealth of Massachusetts Land
- Protected Municipal Conservation Land
- Municipal Recreation Land
- Non-Profit Organizations
- Plymouth County Land
- Water Department Land

Unprotected Land

- Private Land
- Municipal Land

APPENDIX C: ADA SELF EVALUATION

Hanson's ADA Self-Evaluation for Handicap Access

The three parts of the required, self-evaluation provide an outline of how accessible the Town's conservation and recreation properties and programs are to people with disabilities. Shortcomings are identified, and the importance of making comfortable and safe properties, trails, and programs for handicapped residents and visitors is highlighted.

Administrative Requirements

See attached documentation with this appendix regarding the designation of an ADA Coordinator, the Town of Hanson's procedures, and public notification requirements.'

Program Accessibility

The information set forth below provides an inventory and transition plan, as needed, for the buildings, recreation facilities and equipment, programs, and services under the jurisdiction of the Conservation Commission or Recreation Department. This information has been prepared and reviewed with the assistance of the Town's ADA Coordinator, Conservation Agent, Recreation Department Director, and members of the Trails Committee. Facilities were evaluated based upon the facility inventory form provided in the Open Space Recreation Planner's Workbook provided by the State.

People with disabilities have access to a wide range of recreational opportunities in Hanson

With few exceptions, this inventory does not discuss private recreation facilities or state and/or federal lands, which together the recreation Town.

The Hanson Conservation Commission and Open Space Committee make every effort to accommodate people with disabilities, physically and programmatically. The Section 504 Self Evaluation of Hanson's recreation and conservation land indicates that relatively few accommodations exist to provide full access to these areas for people with disabilities. The evaluation results are shown along with a transition plan for corrective action, if any.

This 2019 ADA Self Evaluation consists of the following sections:

A Self-evaluation of the 2 town-owned recreation buildings and 9 recreational resources inventoried are:

1. ***Recreational Buildings***: Camp Kiwanee, Nathaniel Thomas Mill.

2. ***Recreational Field Areas***: Ballfields, Cranberry Cove, Hancock Street Playground.
3. ***Conservation Lands***: Smitty's Bog, Poor Meadow Brook Greenway, Poor Meadow Brook Confluence, Rocky Run Conservation Area, Veterans Memorial Town Forest, Smith-Nawazelski Conservation Area,

504 Administrative Requirements

The Town of Hanson has created the Town Administrator Special Act. Section k of that Act states that the Town Administrator shall serve as the Town's American with Disabilities Act (ADA) Director and Affirmative Action Office and administer the Town's affirmative action program. The Act states that the Town Administrator shall report directly to and be supervised by the Board of Selectmen. The town of Hanson has a full time Town Administrator. John Stanbrook is the current Town Administrator and Town 504 Coordinator. Hanson employment opportunities are always advertised without discrimination as to age, sex, marital status, race, color, creed, handicap, veteran status, or political affiliation.

Trails

Trails on Town-owned conservation land were not evaluated individually, because none of Hanson's conservation trails meet ADA requirements. Hanson is comprised primarily of wetlands combined with steep slopes, making ADA compliance on all trail systems unachievable, though there are areas where it would be feasible to provide ADA compliant trails. Most conservation land provides basic unimproved parking on dirt, if any parking is provided at all, but again, improvements could be made at areas where ADA compliant trails are installed.

The building of trails to be accessible for not only people traveling in wheelchairs but people with all types of disabilities ("All Persons Trails") is gaming traction in Massachusetts. The Massachusetts Audubon Society, for example, has engaged the services of an accessibility consultant to install 12. All Persons Trails with multisensory elements on its wildlife sanctuaries. The State Department of Conservation and Recreation has recently installed one in Watertown and the Riverfront Park and Braille Trail (Shea, 2016). In fact, the Massachusetts Audubon Society has just released an Accessible Trails Manual, a comprehensive guideline manual for developing and sustaining an accessible interpreted trail. As Hanson moves forward with trail development in the future, opportunities for All Persons Trails will be explored.

The Rehabilitation Act of 1973 mandates that "no qualified handicapped person shall, on the basis of handicap, be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program Of activity that receives Federal financial assistance." A number of references on designing and building accessible trails can be found at the US Forest Service website: http://www.fs.fed.us/recreation/programs/accessibility/, which includes the 85 page guidelines followed by the Massachusetts Department of Conservation and Recreation

Some of the more salient requirements for accessible trails are:

- Benches to provide resting places
- Wheelchair compatible parking
- Wheelchair compatible trail surfaces ("firm and stable")
- Normal trail width of 36 feet with minimum trail width of 32 feet
- 6'8" minimum head clearance
- Trail slopes not exceeding 1 foot in 20 feet for any distance, 10% slope (1 in 10) allowed for up to 30-foot distances ● Cross-slope maximums of 5%
- Trail obstacles less than 2" high
- No barriers (e.g., curbs or steps) to get to the trail

It should be noted that the Massachusetts Department of Conservation and Recreation classifies 5 different levels of trails, from Class 1 (minimally improved wilderness trails) up to Class 5 (two lane, hardened surface, no obstacles, less than 8% grade). Class 4 and Class 5 may both be accessible.

Opportunities for Accessible Trails

The greatest opportunity for an accessible trail in Hanson is the Edgewood (Smitty's Bog) trail. With some foresight and diligence, it is possible for the entire stretch to be made ADA compliant. Hanson also has an approved conceptual plan for the former Plymouth County Hospital the project in entirely will be ADA compliant. Hanson has a few conservation meadows to provide an environment for flora and fauna that prefer this sort of landscape. Meadows are also locations for dog walkers. The ground is often irregular, with rocks and holes. If the ground can flood, in summer the grasses can be quite high and in winter the fields are often covered by snow and ice. All these factors make it difficult to make meadows accessible. Nevertheless, most Hanson trails are currently dirt and grass; so, they would need to be leveled, smoothed, and covered with a like stone dust, as per the State's guidelines. Hanson has also received a grant to establish an ADA Transition Plan. Hanson is in the process of completing the plan. Which should give Hanson ideas to make it possible for all ages and abilities to have use of the recreational areas.

Facility Name	Alton J. Smith Reserve (Smitty's Bog)
Owner/Manager	Town of Hanson Conservation Commission
Location	Map 53 Lot 1 and 2 Route 58
Acreage	103.4
Activity	Former cranberry bog, passive recreation, fishing and small craft boating.
Site Amenities	Scenic and conservation values. Four season vista. Small boat launch area. Informal uses may include fishing in the pond from the shore or the boat launch. Walking paths surround former cranberry bogs. USDA Wetland Reserve Program wetland restoration project.
Transition Plan	None
2019 Assessment	The property is visible, but not well marked from the street. There are a few designated handicapped parking spaces but surface is dirt, gravel and uneven. No parking stalls are marked. There are no port-o-johns. There is a lack of accessible surfacing, walking paths are not handicapped accessible. No emergency telephone is provided. The boat ramp is accessed by unimproved slopes.
Corrective Action	The parking area and path should be paved or made more hard-packed. There should be a handicapped accessible path to any proposed picnic areas, and tables should be handicapped accessible. Acceptable surfacing materials include, concrete, asphalt, crushed stone, packed soil and soil stabilizer. The only pathways are loose gravel or sand, which is not considered an accessible surface. Directional signate to primary uses.
Schedule Change	A long-term goal would include fine grading and compaction of the existing boat ramp to improve the eroding gravel and adding an accessible ORAR leading down to the boat ramp from the parking area. Construct lined, accessible parking spaces with a defined pathway from the parking area to the boat ramp.

Facility Name	Botieri Fields
Owner/Manager	
Location	Indian Head Street
Acreage	62.58
Activity	Recreation
Site Amenities	Three sports fields and a parking lot
Transition Plan	
2019 Assessment	Accessible parking, accessible route, service window
Corrective Action	Regrade and restripe the existing parking lot, signs and access isle, provide accessible route, lower the service window counter
Estimated Cost of Action	$22,300

Facility Name	Brian Gaffey Conservation Area
Owner/Manager	Conservation Commission
Location	Map 83 Lot 3B and Map 92 Lot 23 between County Road and West Washington St.
Acreage	62.58
Activity	Passive recreation
Site Amenities	Protected open space, hiking trails, large portion of site is wetlands habitat.
Transition Plan	
2019 Assessment	Parking available off-site at town-owned Thomas Hall property across the street. Signage could be installed on the town-owned site of the former Thomas Hall. This historic “Major’s Purchase Stone” boundary point is near the eastern edge of the property, off Gray lane, and could be integrated into the Property.
Corrective Action	The Thomas Hall site is in an excellent location to provide a trailhead access point to the Property, with space for parking and an information kiosk in a neighborhood “pocket park”.
Schedule Change	None

Facility Name	Camp Kiwanee
Owner/Manager	Recreation Commission
Location	Assessors Map 54 Lot 9
Acreage	67.80 Acres
Site Amenities	Needles Lodge Rental Facility, cabins, swimming pond, beach
Transition Plan	See 2005 Camp Kiwanee Master Plan and atached report
2020 Assessment	There are designated handicapped parking spaces. Path/entrance is hard packed with good ability to get around area. There are few pcinic tables which would be handicapped accessible
Corrective Action	Pave entrance/paths or make hard-packed. Create accessible route, replace threshold, bathroom upgrades, accessible route, enlarge door openings,
Estimated Cost of Action	$68,600

Facility Name	Cranberry Cove
Owner/Manager	Recreation Commission
Location	Assessors Map 61 Lot 1B
Acreage	5
Activity	Swimming Lessons
Site Amenities	Swimming Pool
Transition Plan	See attached report
2020 Assessment	Parking area and path is gravel and uneven, not very handicapped accessible. There are no designated handicapped parking spaces. The picnic area is not handicapped accessible.
Corrective Action	The parking area and path should be paved or made more hard-packed. Add designated handicapped designated parking areas.
Estimated Cost of Action	$9,700

Facility Name	Girls Softball Field
Owner/Manager	Parks and Recreation
Location	Assessors Map 40 Parcel 24
Acreage	1.19
Activity	Ball field
Site Amenities	
Transition Plan	See attached Report
2020 Assessment	Parking area and path is gravel and uneven, not very handicapped accessible. There are no designated handicapped parking spaces.
Corrective Action	The parking area and path should be paved or made more hard-packed. Add designated handicapped designated parking areas.
Estimated Cost of Action	$8,500

Facility Name	Hancock Street Playground
Owner/Manager	
Location	Assessors Map 2 Parcel 1
Acreage	1.19
Activity	Basketball court and baseball field, there is no playground
Site Amenities	There is no parking on site, no accessible pathways
Transition Plan	See attached Report
2020 Assessment	There are no designated handicapped parking spaces. There are no port-o-johns.
Corrective Action	Provide accessible route
Estimated Cost of Action	$5,000

Facility Name	Memorial Field
Owner/Manager	Parks and Recreation
Location	Assessors Map 41 Lot 7
Acreage	9.81
Activity	Baseball Field
Site Amenities	Baseball Field
Transition Plan	See attached Report
2017 Assessment	Gravel driveway and parking surface uneven, no handicapped access to fields. There are no designated handicapped parking spaces. There are no trash cans or port-o-johns.
Corrective Action	Accessible parking, accessible route
Estimated Cost of Action	$9,850

Facility Name	Nathaniel Thomas Mill
Owner/Manager	Town of Hanson
Location	Map 81 Lot 8
Acreage	1.3
Activity	Scenic,
Site Amenities	CR Restriction held by Wildlands Trust. Facility is rented out to community groups.
Transition Plan	See attached Report
2017 Assessment	Paved parking lot with handicapped spaces. There are no bathroom facilities,
Corrective Action	Accessible parking, accessible route, entry door threshold
Estimated Cost of Action	23,250

Facility Name	Norcross Property on King Street
Owner/Manager	Conservation Commission
Location	At Hanover Town Line Map 115 Lot 2A
Acreage	4.8
Activity	Passive recreation, access to Factory Pond
Site Amenities	Protected open space, hiking trails, large portion of site is wetlands habitat. Links to an extensive Hanover Trail network and borders the Drinkwater River. This property offers the only town access to "Factory Pond". Provides access to Drinkwater River.
Transition Plan	
2019 Assessment	Parking available off-site at town-owned Thomas Hall property across the street. Signage could be installed on the town-owned site of the former Thomas Hall.
Corrective Action	
Schedule Change	None

Facility Name	Poor Meadow Brook Confluence Protection
Owner/Manager	Conservation Commission
Location	South side of West Washington St and west of Holmes St
Acreage	115
Activity	Passive recreation
Site Amenities	Nature reserve, Zone II Aquifer Protection Area, public access to Poor Meadow Brook for water-based recreational pursuits.
Transition Plan	
2019 Assessment	Property is close to multiple town-owned conservation properties and the Crystal Spring Well. Protected by a CR held by Wildlands Trust. There are no designated handicapped parking spaces. There are no port-o-johns.
Corrective Action	Pave entrance/paths or make hard-packed.
Schedule Change	None

Facility Name	Poor Meadow Brook Greenway
Owner/Manager	Water Department
Location	Map 51 Lot 1
Acreage	11.2
Activity	Wellhead protection, passive recreation, hiking
Site Amenities	Wellhead
Transition Plan	
2017 Assessment	There are no designated handicapped parking spaces. There are no port-o-johns.
Corrective Action	Pave entrance/paths or make hard-packed.
Schedule Change	None

Facility Name	Rocky Run Conservation Area
Owner/Manager	
Location	Map 119, Lot 19 - Confluence of Rocky Run Brook and Indian Head River
Acreage	19
Activity	Hiking, passive recreation
Site Amenities	Confluence of Rocky Run Brook and Indian Head River, dramatic post-glacial erosion with exposed bedrock.
Transition Plan	
2019 Assessment	There are no designated handicapped parking spaces. There are no port-o-johns.
Corrective Action	Pave entrance/paths or make hard-packed.
Schedule Change	An option for short-term improvements to address the accessible parking space would include paving one space with room for an isle and add line striping indicating that handicap space. Access from the accessible isle to the ORAR is required. Long-term options include providing a larger paved area for a designated parking lot, paving a path from the parking to the restroom facility and creating an ORAR where picnic tables can be accessed from.

Facility Name	Smith-Nawazelski Conservation Area
Owner/Manager	Conservation Commission
Location	Map 83 Lot 3B and Map 92 Lot 23
Acreage	101
Activity	Passive recreation, Bay Circuit Trail
Site Amenities	Protected open space, hiking trails, large portion of site is wetlands habitat. CR held by Mass. Dept of Fish & Game, boardwalk
Transition Plan	
2019 Assessment	Parking available off-site at town-owned Thomas Hall property across the street. Directional signage from street to primary uses: NONE. Signage could be installed on the town-owned site of the former Thomas Hall. There are no outdoor recreation access routes (ORAR) wihtin the entire site. There are no ADA compliant restroom facilities or port-o-johns available. There is no emergency telephone or communication equipment.
Corrective Action	The parking area and path should be paved or made more hard-packed. In order for a pathway to be considered an ORAR, the surfacing has to be accessible. Acceptable surfacing material include concrete, asphalt, and crushed stone, packed soil and soil stabilizer. The installation of ADA compliant port-o-johns should be considered. Use of kiosk at entrance could be used to supply trail maps or other information relative to the site.
Schedule Change	It is recommended to provide ADA compliant portable restroom and provide an ORAR to the compliant restroom. An option for short-term improvements to address the accessible parking space woul dinclude paving one space with room for an isle and add line striping indicating that handicap space. Access from the accessible isle to the ORAR is required. Long-term options include providing a larger paved area for a designated parking lot, paving a path from the parking to the restroom facility and creating an ORAR where picnic tables can be accessed from.

Facility Name	Veterans Memorial Town Forest
Owner/Manager	Town of Hanson Conservation Commission
Location	Map 71 Parcel 11 and Map 63 Parcel 5
Acreage	37
Activity	Passive recreation, hiking, scenic, wildlife, forestry
Site Amenities	Wampatuck Pond shoreline, Bay Circuit Trail, rustic wood benches, two primitive campsites used by Boy Scouts. Unimproved walking/hiking trails.
Transition Plan	Selected harvesting of overcrowded trees to improve forest health.
2019 Assessment	There are no designated handicapped parking spaces, surface is gravel and uneven and not handicapped accessible. There are no port-o-johns. Walking paths are not handicapped accessible. One kiosk at entrance.
Corrective Action	The parking area and path should be paved or made more hard-packed. In order for a pathway to be considered an ORAR, the surfacing has to be accessible. Acceptable surfacing material include concrete, asphalt, and crushed stone, packed soil and soil stabilizer. The installation of ADA compliant port-o-johns should be considered. Use of kiosk at entrance could be used to supply trail maps or other information relative to the site.
Schedule Change	

Facility Name	Webster Billings Conservation Area
Owner/Manager	Town of Hanson Conservation Commission
Location	Map 105 Lots 1, 2, 5 Map 112, Lot 14
Acreage	62+
Activity	Passive recreation, hiking, nature
Site Amenities	Abuts the Indian Head Brook, two vernal pools
Transition Plan	
2019 Assessment	There are no designated handicapped parking spaces. The walking trail is unimproved, uneven and not suitable for handicapped persons. There is a lack of accessible surfacing, walking paths are not handicapped accessible. No emergency telephone is provided. The parcel is not well marked from the street.There are no port-o-johns on site. The Webster Billings Conservation Area has no signage at all and contains a primitive trail network. There are no outdoor recreation access routes (ORAR) within the entire site.
Corrective Action	The parking area and path should be paved or made more hard-packed. Space constraints on the street may preclude delineating ADA compliant parking. The installation of ADA compliant port-o-johns should be considered. Two possible locations for signage could be on Old Pine Drive and also on State Street. A potential fourth access point exists off of State Street but because of the abundance of wetlands, the construction of a boardwalk would be necessary to protect fragile vegetation. In order for a pathway to be considered an ORAR, the surfaceing has to be accessible. Acceptable surfacing materials include, concrete, asphalt, crushed stone, packed soil and soil stabilizer. The only pathways are loose gravel or sand, which is not considered an accessible surface.
Schedule Change	

Activities: Wetlands, Preservation and Rehabilitation, Hiking, Baseball, Agricultural, Conservation, Watershed Protection, Wetland Protection, Trail Access to Pond, Nature Study, Open Space, Community Gardens, Cross-country Skiing

Corrective Actions: Improve Trail System, provide handicapped accessible outhouses,

Barriers to Access: Gravel Driveway or parking area, No Paved Parking, Limited Parking, Unimproved Trails, Not easily accessible, no accessible path, Narrow Trails, Stone walls, Steep Access, No handicapped Access, signage, bathrooms not handicapped accessible, chain across trailhead making access impossible for wheelchairs, trails not wheelchair accessible, trails not paved, no signage marking where there is public access.

Facility Inventory **LOCATION:** Smithy's Bog

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities	Tables & Benches	Located adjacent to accessible paths
		Access to Open Spaces N/A
		Back and Arm Rests
		Adequate number
	Grills	Height of Cooking Surface
		Located adjacent to accessible paths
	Trash Cans	Located adjacent to accessible paths N/A
	Picnic Shelters	Located adjacent to accessible paths
		Located near accessible water fountains, trash can, restroom, parking, etc. N/A
Trails		Surface material gravel, grass
		Dimensions
		Rails N
		Signage (for visually impaired)
Swimming Facilities	Pools	Entrance
		Location from accessible parking
		Safety features i.e. warning for visually impaired N/A
	Beaches	Location from accessible path into water
		Handrails
		Location from accessible parking N/A
		Shade provided
Play Areas (tot lots)	All Play Equipment i.e. swings, slides	Same experience provided to all N/A
	Access Routes	Located adjacent to accessible paths
		Enough space between equipment for wheelchair
Game Areas: *ballfield *basketball *tennis	Access Routes	Located adjacent to accessible paths
		Berm cuts onto courts N/A
	Equipment	Height
		Dimensions
		Spectator Seating
Boat Docks	Access Routes	Located adjacent to accessible paths NO
		Handrails NO
Fishing Facilities	Access Routes	Located adjacent to accessible paths NO
		Handrails NO
	Equipment	Arm Rests N/A NO
		Bait Shelves N/A NO
		Handrails N/A
		Fish Cleaning Tables N/A
Programming	Are special programs at your facilities accessible?	Learn-to-Swim N/A
		Guided Hikes
		Interpretive Programs
Services and Technical Assistance	Information available in alternative formats i.e. for visually impaired NO	
	Process to request interpretive services (i.e. sign language interpreter) for meetings N/A	

LOCATION

PARKING			
Total Spaces		*Required Accessible Spaces*	
Up to 25		1 space	
26-50		2 spaces	
51-75		3 spaces	
76-100		4 spaces	
101-150		5 spaces	
151-200		6 spaces	
201-300		7 spaces	
301-400		8 spaces	
401-500		9 spaces	
Specification for Accessible Spaces	*Yes*	*No*	*Comments/Transition Notes*
Accessible space located closest to accessible entrance		X	
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		X	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle		X	
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		X	
Sign with international symbol of accessibility at each space or pair of spaces		✓	
Sign minimum 5 ft, maximum 8 ft to top of sign		✓	
Surface evenly paved or hard-packed (no cracks)		✓	
Surface slope less than 1:20, 5%	✓		
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present	N/A		See Report
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow	N/A		
RAMPS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Slope Maximum 1:12			
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			
Handrails at 34" and 19" from ramp surface			N/A
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1¼" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		✓	See Report
Disembarking area at accessible entrance		✓	
Surface evenly paved or hard-packed		✓	
No ponding of water			
Path of Travel			
Path does not require the use of stairs	✓		
Path is stable, firm and s lip resistant		✓	
3 ft wide minimum	✓		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	✓		
Continuous common surface, no changes in level greater than ½ inch		✓	
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane	✓		
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"		N/A	
Curb on the pathway must have curb cuts at drives, parking and drop-offs		N/A	
Entrances			N/A
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and *not* be the service entrance			
Level space extending 5 ft. from the door, interior and exterior of entrance doors			
Minimum 32" clear width opening (i.e. 36" door with standard hinge)			
At least 18" clear floor area on latch, pull side of door			
Door handle no higher than 48" and operable with a closed fist			
Vestibule is 4 ft plus the width of the door swinging into the space			
Entrance(s) on a level that makes elevators accessible			
Door mats less than ½" thick are securely fastened			
Door mats more than ½" thick are recessed			
Grates in path of travel have openings of ½" maximum			
Signs at non-accessible entrance(s) indicate direction to accessible entrance			
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted			

NOTES

LOCATION

STAIRS and DOORS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stairs			N/A
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1¼" and 1½"			
1½" clearance between wall and handrail			
Doors			N/A
Minimum 32" clear opening			
At least 18" clear floor space on pull side of door			
Closing speed minimum 3 seconds to within 3" of the latch			
Maximum pressure 5 pounds interior doors			
Threshold maximum ½" high, beveled on both sides			
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)			
Hardware minimum 36", maximum 48" above the floor			
Clear, level floor space extends out 5 ft from both sides of the door			
Door adjacent to revolving door is accessible and unlocked			
Doors opening into hazardous area have hardware that is knurled or roughened			

NOTES

LOCATION

RESTROOMS – also see Doors and Vestibules			
Specification	*Yes*	*No*	*Comments/Transition Notes*
5 ft turning space measured 12" from the floor			
At least one Sink:			N/A
Clear floor space of 30" by 48" to allow a forward approach			
Mounted without pedestal or legs, height 34" to top of rim			
Extends at least 22" from the wall			
Open knee space a minimum 19" deep, 30" width, and 27" high			
Cover exposed pipes with insulation			
Faucets operable with closed fist (lever or spring activated handle)			
At least one Stall:			N/A
Accessible to person using wheelchair at 60" wide by 72" deep			
Stall door is 36" wide			
Stall door swings out			
Stall door is self closing			
Stall door has a pull latch			
Lock on stall door is operable with a closed fist, and 32" above the floor			
Coat hook is 54" high			
Toilet			N/A
18" from center to nearest side wall			
42" minimum clear space from center to farthest wall or fixture			
Top of seat 17"-19" above the floor			
Grab Bars			
On back and side wall closest to toilet			
1¼" diameter			
1½" clearance to wall			
Located 30" above and parallel to the floor			
Acid-etched or roughened surface			
42" long			
Fixtures			N/A
Toilet paper dispenser is 24" above floor			
One mirror set a maximum 38" to bottom (if tilted, 42")			
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor			

NOTES

LOCATION

FLOORS, DRINKING FOUNTAINS, TELEPHONES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Floors			
Non-slip surface			
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored			N/A
Corridor width minimum is 3 ft			
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor			
Drinking Fountains			N/A
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones			
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Switches, Controls and Signs			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach			N/A
Electrical outlets centered no lower than 18" above the floor			
Warning signals must be visual as well as audible			
Signs			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers a t least 1¼" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION

SWIMMING POOLS – accessibility can be via ramp, lifting device, or transfer area			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION

PICNICKING			
Specification	*Yes*	*No*	*Comments/Transition Notes*
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access			
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.			
Top of table no higher than 32" above ground			
Surface of the clear ground space under and around the table must be stable, firma nd slip-resistant, and evenly graded with a maximum slope of 2% in all directions			
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter			

CRANBERRY COVE

AUDITED ON: MARCH 27, 2020

The site consists of an unpaved parking lot and a trailhead along Camp Kiwanee Road. There are two designated accessible parking spaces provided.

CRANBERRY COVE				
#	Barrier Statement	Photo	Proposed Mitigation	Cost
6.	**Accessible Parking** The designated accessible parking is provided lacks striping, a stable, firm and slip resistant surface. The signs are mounted <60" AFF to the bottom of the sign, @ 21".		Pave and stripe a portion of the parking lot to add accessible parking spaces (including at least one van space), as well as the associated access aisles. Unit Cost: $1,500 per space or aisle Quantity: 3 (2 spaces + 1 aisle) Reinstall the signs at 60" min. AFF, measured to the bottom of the sign, including a van accessible sign. Unit Cost: $100 ea. Quantity: 2	$4,700
7.	**Accessible Route** The trail is not located on an accessible route. *KMA was not able to audit the elements past the locked gate. They will be audited on a future date.*	 	Provide an accessible route. Additional study required. Unit Cost: $5,000 Quantity: 1	$5,000
TOTAL FOR CRANBERRY COVE:				$9,700

Facility Inventory **LOCATION:** Cranberry Cove

ACTIVITY	EQUIPMENT	NOTES	
Picnic Facilities N/A	Tables & Benches	Located adjacent to accessible paths	
		Access to Open Spaces	
		Back and Arm Rests	
		Adequate number	
	Grills	Height of Cooking Surface	
		Located adjacent to accessible paths	
	Trash Cans	Located adjacent to accessible paths	
	Picnic Shelters	Located adjacent to accessible paths	
		Located near accessible water fountains, trash can, restroom, parking, etc.	
Trails		Surface material	No
		Dimensions	Yes
		Rails	No
		Signage (for visually impaired)	No
Swimming Facilities N/A	Pools	Entrance	
		Location from accessible parking	
		Safety features i.e. warning for visually impaired	
	Beaches	Location from accessible path into water	
		Handrails	
		Location from accessible parking	
		Shade provided	
Play Areas (tot lots) N/A	All Play Equipment i.e. swings, slides	Same experience provided to all	
	Access Routes	Located adjacent to accessible paths	
		Enough space between equipment for wheelchair	
Game Areas: *ballfield *basketball *tennis N/A	Access Routes	Located adjacent to accessible paths	
		Berm cuts onto courts	
	Equipment	Height	
		Dimensions	
		Spectator Seating	
Boat Docks N/A	Access Routes	Located adjacent to accessible paths	
		Handrails	
Fishing Facilities N/A	Access Routes	Located adjacent to accessible paths	
		Handrails	
	Equipment	Arm Rests	
		Bait Shelves	
		Handrails	
		Fish Cleaning Tables	
Programming N/A	Are special programs at your facilities accessible?	Learn-to-Swim	
		Guided Hikes	
		Interpretive Programs	
Services and Technical Assistance N/A	Information available in alternative formats i.e. for visually impaired		
	Process to request interpretive services (i.e. sign language interpreter) for meetings		

LOCATION

PARKING			
Total Spaces		*Required Accessible Spaces*	
Up to 25		1 space	
26-50		2 spaces	
51-75		3 spaces	
76-100		4 spaces	
101-150		5 spaces	
151-200		6 spaces	
201-300		7 spaces	
301-400		8 spaces	
401-500		9 spaces	
Specification for Accessible Spaces	*Yes*	*No*	*Comments/Transition Notes*
Accessible space located closest to accessible entrance		No	There is no striping on the dirt ground although a sign in provided.
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		No	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle		No	
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		No	
Sign with international symbol of accessibility at each space or pair of spaces	Yes		
Sign minimum 5 ft, maximum 8 ft to top of sign		No	
Surface evenly paved or hard-packed (no cracks)		No	
Surface slope less than 1:20, 5%		No	
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present		No	
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow		No	
RAMPS N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Slope Maximum 1:12			
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			
Handrails at 34" and 19" from ramp surface			
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1¼" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		No	There is a dirt and grass walkway into the site.
Disembarking area at accessible entrance N/A			
Surface evenly paved or hard-packed		No	
No ponding of water		No	
Path of Travel			
Path does not require the use of stairs	Yes		
Path is stable, firm and s lip resistant		No	
3 ft wide minimum	Yes		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	Yes		
Continuous common surface, no changes in level greater than ½ inch	Yes		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane N/A			
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80" N/A			
Curb on the pathway must have curb cuts at drives, parking and drop-offs N/A			
Entrances N/A			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and *not* be the service entrance			
Level space extending 5 ft. from the door, interior and exterior of entrance doors			
Minimum 32" clear width opening (i.e. 36" door with standard hinge)			
At least 18" clear floor area on latch, pull side of door			
Door handle no higher than 48" and operable with a closed fist			
Vestibule is 4 ft plus the width of the door swinging into the space			
Entrance(s) on a level that makes elevators accessible			
Door mats less than ½" thick are securely fastened			
Door mats more than ½" thick are recessed			
Grates in path of travel have openings of ½" maximum			
Signs at non-accessible entrance(s) indicate direction to accessible entrance			
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted			

NOTES

LOCATION

STAIRS and DOORS N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stairs			
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1¼" and 1½"			
1½" clearance between wall and handrail			
Doors			
Minimum 32" clear opening			
At least 18" clear floor space on pull side of door			
Closing speed minimum 3 seconds to within 3" of the latch			
Maximum pressure 5 pounds interior doors			
Threshold maximum ¼" high, beveled on both sides			
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)			
Hardware minimum 36", maximum 48" above the floor			
Clear, level floor space extends out 5 ft from both sides of the door			
Door adjacent to revolving door is accessible and unlocked			
Doors opening into hazardous area have hardware that is knurled or roughened			

NOTES

LOCATION

RESTROOMS – also see Doors and Vestibules N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
5 ft turning space measured 12" from the floor			
At least one Sink:			
Clear floor space of 30" by 48" to allow a forward approach			
Mounted without pedestal or legs, height 34" to top of rim			
Extends at least 22" from the wall			
Open knee space a minimum 19" deep, 30" width, and 27" high			
Cover exposed pipes with insulation			
Faucets operable with closed fist (lever or spring activated handle)			
At least one Stall:			
Accessible to person using wheelchair at 60" wide by 72" deep			
Stall door is 36" wide			
Stall door swings out			
Stall door is self closing			
Stall door has a pull latch			
Lock on stall door is operable with a closed fist, and 32" above the floor			
Coat hook is 54" high			
Toilet			
18" from center to nearest side wall			
42" minimum clear space from center to farthest wall or fixture			
Top of seat 17"-19" above the floor			
Grab Bars			
On back and side wall closest to toilet			
1¼" diameter			
1½" clearance to wall			
Located 30" above and parallel to the floor			
Acid-etched or roughened surface			
42" long			
Fixtures			
Toilet paper dispenser is 24" above floor			
One mirror set a maximum 38" to bottom (if tilted, 42")			
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor			

NOTES

LOCATION

FLOORS, DRINKING FOUNTAINS, TELEPHONES N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Floors			
Non-slip surface			
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored			
Corridor width minimum is 3 ft			
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor			
Drinking Fountains			
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones			
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Switches, Controls and Signs			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach			
Electrical outlets centered no lower than 18" above the floor			
Warning signals must be visual as well as audible			
Signs			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers a t least 1¼" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION

SWIMMING POOLS – accessibility can be via ramp, lifting device, or transfer area N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION

PICNICKING N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access			
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.			
Top of table no higher than 32" above ground			
Surface of the clear ground space under and around the table must be stable, firma nd slip-resistant, and evenly graded with a maximum slope of 2% in all directions			
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter			

GIRLS SOFTBALL FIELD

AUDITED ON: MARCH 27, 2020

The site consists of an open green space located on Main Street, adjacent to the Thomas School. The site contains a softball field. KMA did not observe any designated accessible parking spaces serving the field. There is an unpaved parking area in front of the green space. There is no accessible route to the softball field.

GIRLS SOFTBALL FIELD				
#	Barrier Statement	Photo	Proposed Mitigation	Cost
2.	**Accessible Parking** The parking surface is not stable, firm, and slip resistant. Designated accessible parking is not provided.		Pave and stripe a portion of the parking lot to add accessible parking spaces (including at least one van space), as well as the associated access aisles. Unit Cost: $1,500 per space or aisle Est. Quantity: 2 (1 space + 1 aisle)	$3,000
3.	**Accessible Route** The field and bleachers are not located on an accessible route. A wheelchair space is not provided at the bleachers.	 	Provide an accessible route. Additional study required. Unit Cost: $5,000 Quantity: 1 Provide an accessible space on an accessible route next to the bleachers. Unit Cost: $25/SF Est. Quantity: 20 SF	$5,500
TOTAL FOR GIRLS SOFTBALL FIELD:				$8,500

Facility Inventory **LOCATION:** Girls Softball Field

ACTIVITY	EQUIPMENT	NOTES	
Picnic Facilities N/A	Tables & Benches	Located adjacent to accessible paths	
		Access to Open Spaces	
		Back and Arm Rests	
		Adequate number	
	Grills	Height of Cooking Surface	
		Located adjacent to accessible paths	
	Trash Cans	Located adjacent to accessible paths	
	Picnic Shelters	Located adjacent to accessible paths	
		Located near accessible water fountains, trash can, restroom, parking, etc.	
Trails N/A		Surface material	
		Dimensions	
		Rails	
		Signage (for visually impaired)	
Swimming Facilities N/A	Pools	Entrance	
		Location from accessible parking	
		Safety features i.e. warning for visually impaired	
	Beaches	Location from accessible path into water	
		Handrails	
		Location from accessible parking	
		Shade provided	
Play Areas (tot lots) N/A	All Play Equipment i.e. swings, slides	Same experience provided to all	
	Access Routes	Located adjacent to accessible paths	
		Enough space between equipment for wheelchair	
Game Areas: *ballfield *basketball *tennis	Access Routes	Located adjacent to accessible paths	No
		Berm cuts onto courts	No
	Equipment	Height	N/A
		Dimensions	N/A
		Spectator Seating	No
Boat Docks N/A	Access Routes	Located adjacent to accessible paths	
		Handrails	
Fishing Facilities N/A	Access Routes	Located adjacent to accessible paths	
		Handrails	
	Equipment	Arm Rests	
		Bait Shelves	
		Handrails	
		Fish Cleaning Tables	
Programming N/A	Are special programs at your facilities accessible?	Learn-to-Swim	
		Guided Hikes	
		Interpretive Programs	
Services and Technical Assistance N/A	Information available in alternative formats i.e. for visually impaired		
	Process to request interpretive services (i.e. sign language interpreter) for meetings		

LOCATION

PARKING			
Total Spaces		*Required Accessible Spaces*	
Up to 25		1 space	
26-50		2 spaces	
51-75		3 spaces	
76-100		4 spaces	
101-150		5 spaces	
151-200		6 spaces	
201-300		7 spaces	
301-400		8 spaces	
401-500		9 spaces	
Specification for Accessible Spaces	*Yes*	*No*	*Comments/Transition Notes*
Accessible space located closest to accessible entrance		No	Designated accessible parking is not provided.
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		No	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle		No	
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		No	
Sign with international symbol of accessibility at each space or pair of spaces		No	
Sign minimum 5 ft, maximum 8 ft to top of sign		No	
Surface evenly paved or hard-packed (no cracks)		No	
Surface slope less than 1:20, 5%		No	
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present		No	
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow		No	
RAMPS N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Slope Maximum 1:12			
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			
Handrails at 34" and 19" from ramp surface			
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1¼" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		No	There is a dirt and grass walkway into the site.
Disembarking area at accessible entrance		No	
Surface evenly paved or hard-packed		No	
No ponding of water		No	
Path of Travel			
Path does not require the use of stairs	Yes		
Path is stable, firm and s lip resistant		No	
3 ft wide minimum	Yes		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	Yes		
Continuous common surface, no changes in level greater than ½ inch	Yes		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane N/A			
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80" N/A			
Curb on the pathway must have curb cuts at drives, parking and drop-offs		No	
Entrances N/A			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and not be the service entrance			
Level space extending 5 ft. from the door, interior and exterior of entrance doors			
Minimum 32" clear width opening (i.e. 36" door with standard hinge)			
At least 18" clear floor area on latch, pull side of door			
Door handle no higher than 48" and operable with a closed fist			
Vestibule is 4 ft plus the width of the door swinging into the space			
Entrance(s) on a level that makes elevators accessible			
Door mats less than ½" thick are securely fastened			
Door mats more than ½" thick are recessed			
Grates in path of travel have openings of ½" maximum			
Signs at non-accessible entrance(s) indicate direction to accessible entrance			
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted			

NOTES

LOCATION

STAIRS and DOORS N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stairs			
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1¼" and 1½"			
1½" clearance between wall and handrail			
Doors			
Minimum 32" clear opening			
At least 18" clear floor space on pull side of door			
Closing speed minimum 3 seconds to within 3" of the latch			
Maximum pressure 5 pounds interior doors			
Threshold maximum ½" high, beveled on both sides			
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)			
Hardware minimum 36", maximum 48" above the floor			
Clear, level floor space extends out 5 ft from both sides of the door			
Door adjacent to revolving door is accessible and unlocked			
Doors opening into hazardous area have hardware that is knurled or roughened			

NOTES

LOCATION

RESTROOMS – also see Doors and Vestibules	N/A		
Specification	*Yes*	*No*	*Comments/Transition Notes*
5 ft turning space measured 12" from the floor			
At least one Sink:			
Clear floor space of 30" by 48" to allow a forward approach			
Mounted without pedestal or legs, height 34" to top of rim			
Extends at least 22" from the wall			
Open knee space a minimum 19" deep, 30" width, and 27" high			
Cover exposed pipes with insulation			
Faucets operable with closed fist (lever or spring activated handle)			
At least one Stall:			
Accessible to person using wheelchair at 60" wide by 72" deep			
Stall door is 36" wide			
Stall door swings out			
Stall door is self closing			
Stall door has a pull latch			
Lock on stall door is operable with a closed fist, and 32" above the floor			
Coat hook is 54" high			
Toilet			
18" from center to nearest side wall			
42" minimum clear space from center to farthest wall or fixture			
Top of seat 17"-19" above the floor			
Grab Bars			
On back and side wall closest to toilet			
1¼" diameter			
1½" clearance to wall			
Located 30" above and parallel to the floor			
Acid-etched or roughened surface			
42" long			
Fixtures			
Toilet paper dispenser is 24" above floor			
One mirror set a maximum 38" to bottom (if tilted, 42")			
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor			

NOTES

LOCATION

FLOORS, DRINKING FOUNTAINS, TELEPHONES N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Floors			
Non-slip surface			
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored			
Corridor width minimum is 3 ft			
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor			
Drinking Fountains			
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones			
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Switches, Controls and Signs			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach			
Electrical outlets centered no lower than 18" above the floor			
Warning signals must be visual as well as audible			
Signs			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers a t least 1¼" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION

SWIMMING POOLS – accessibility can be via ramp, lifting device, or transfer area N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION

PICNICKING N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access			
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.			
Top of table no higher than 32" above ground			
Surface of the clear ground space under and around the table must be stable, firma nd slip-resistant, and evenly graded with a maximum slope of 2% in all directions			
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter			

HANCOCK STREET PLAYGROUND & PARK

AUDITED ON: MARCH 27, 2020

The site is a basketball court and baseball field located at the intersection of Hancock Street and Union Park Street. A playground was not observed at this site. The only available parking is along the public streets. There are no accessible routes provided within the site.

HANCOCK STREET PLAYGROUND & PARK				
#	Barrier Statement	Photo	Proposed Mitigation	Cost
1.	**Accessible Route** The fields are not located on an accessible route.	 	Provide an accessible route. Additional study required. Unit Cost: $5,000 Quantity: 1	$5,000
TOTAL FOR HANCOCK STREET PLAYGROUND & PARK:				$5,000

Facility Inventory **LOCATION:** Hancock Street Playground & Park

ACTIVITY	EQUIPMENT	NOTES	
Picnic Facilities N/A	Tables & Benches	Located adjacent to accessible paths	
		Access to Open Spaces	
		Back and Arm Rests	
		Adequate number	
	Grills	Height of Cooking Surface	
		Located adjacent to accessible paths	
	Trash Cans	Located adjacent to accessible paths	
	Picnic Shelters	Located adjacent to accessible paths	
		Located near accessible water fountains, trash can, restroom, parking, etc.	
Trails N/A		Surface material	
		Dimensions	
		Rails	
		Signage (for visually impaired)	
Swimming Facilities N/A	Pools	Entrance	
		Location from accessible parking	
		Safety features i.e. warning for visually impaired	
	Beaches	Location from accessible path into water	
		Handrails	
		Location from accessible parking	
		Shade provided	
Play Areas (tot lots) N/A	All Play Equipment i.e. swings, slides	Same experience provided to all	
	Access Routes	Located adjacent to accessible paths	
		Enough space between equipment for wheelchair	
Game Areas: *ballfield *basketball *tennis	Access Routes	Located adjacent to accessible paths	No
		Berm cuts onto courts	No
	Equipment	Height	N/A
		Dimensions	N/A
		Spectator Seating	No
Boat Docks N/A	Access Routes	Located adjacent to accessible paths	
		Handrails	
Fishing Facilities N/A	Access Routes	Located adjacent to accessible paths	
		Handrails	
	Equipment	Arm Rests	
		Bait Shelves	
		Handrails	
		Fish Cleaning Tables	
Programming N/A	Are special programs at your facilities accessible?	Learn-to-Swim	
		Guided Hikes	
		Interpretive Programs	
Services and Technical Assistance N/A	Information available in alternative formats i.e. for visually impaired		
	Process to request interpretive services (i.e. sign language interpreter) for meetings		

LOCATION

PARKING N/A			
Total Spaces		*Required Accessible Spaces*	
Up to 25		1 space	
26-50		2 spaces	
51-75		3 spaces	
76-100		4 spaces	
101-150		5 spaces	
151-200		6 spaces	
201-300		7 spaces	
301-400		8 spaces	
401-500		9 spaces	
Specification for Accessible Spaces	*Yes*	*No*	*Comments/Transition Notes*
Accessible space located closest to accessible entrance			
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.			
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle			
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.			
Sign with international symbol of accessibility at each space or pair of spaces			
Sign minimum 5 ft, maximum 8 ft to top of sign			
Surface evenly paved or hard-packed (no cracks)			
Surface slope less than 1:20, 5%			
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present			
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow			
RAMPS N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Slope Maximum 1:12			
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			
Handrails at 34" and 19" from ramp surface			
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1¼" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		No	There is a dirt walkway off the street into the site.
Disembarking area at accessible entrance		No	
Surface evenly paved or hard-packed		No	
No ponding of water		No	
Path of Travel			
Path does not require the use of stairs			
Path is stable, firm and s lip resistant		No	
3 ft wide minimum	Yes		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	Yes		
Continuous common surface, no changes in level greater than ½ inch	Yes		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane N/A			
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80" N/A			
Curb on the pathway must have curb cuts at drives, parking and drop-offs		No	
Entrances N/A			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and *not* be the service entrance			
Level space extending 5 ft. from the door, interior and exterior of entrance doors			
Minimum 32" clear width opening (i.e. 36" door with standard hinge)			
At least 18" clear floor area on latch, pull side of door			
Door handle no higher than 48" and operable with a closed fist			
Vestibule is 4 ft plus the width of the door swinging into the space			
Entrance(s) on a level that makes elevators accessible			
Door mats less than ½" thick are securely fastened			
Door mats more than ½" thick are recessed			
Grates in path of travel have openings of ½" maximum			
Signs at non-accessible entrance(s) indicate direction to accessible entrance			
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted			

NOTES

LOCATION

STAIRS and DOORS N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stairs			
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1¼" and 1½"			
1½" clearance between wall and handrail			
Doors			
Minimum 32" clear opening			
At least 18" clear floor space on pull side of door			
Closing speed minimum 3 seconds to within 3" of the latch			
Maximum pressure 5 pounds interior doors			
Threshold maximum ½" high, beveled on both sides			
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)			
Hardware minimum 36", maximum 48" above the floor			
Clear, level floor space extends out 5 ft from both sides of the door			
Door adjacent to revolving door is accessible and unlocked			
Doors opening into hazardous area have hardware that is knurled or roughened			

NOTES

LOCATION

RESTROOMS – also see Doors and Vestibules	N/A		
Specification	*Yes*	*No*	*Comments/Transition Notes*
5 ft turning space measured 12" from the floor			
At least one Sink:			
Clear floor space of 30" by 48" to allow a forward approach			
Mounted without pedestal or legs, height 34" to top of rim			
Extends at least 22" from the wall			
Open knee space a minimum 19" deep, 30" width, and 27" high			
Cover exposed pipes with insulation			
Faucets operable with closed fist (lever or spring activated handle)			
At least one Stall:			
Accessible to person using wheelchair at 60" wide by 72" deep			
Stall door is 36" wide			
Stall door swings out			
Stall door is self closing			
Stall door has a pull latch			
Lock on stall door is operable with a closed fist, and 32" above the floor			
Coat hook is 54" high			
Toilet			
18" from center to nearest side wall			
42" minimum clear space from center to farthest wall or fixture			
Top of seat 17"-19" above the floor			
Grab Bars			
On back and side wall closest to toilet			
1¼" diameter			
1½" clearance to wall			
Located 30" above and parallel to the floor			
Acid-etched or roughened surface			
42" long			
Fixtures			
Toilet paper dispenser is 24" above floor			
One mirror set a maximum 38" to bottom (if tilted, 42")			
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor			

NOTES

LOCATION

FLOORS, DRINKING FOUNTAINS, TELEPHONES N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Floors			
Non-slip surface			
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored			
Corridor width minimum is 3 ft			
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor			
Drinking Fountains			
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones			
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Switches, Controls and Signs			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach			
Electrical outlets centered no lower than 18" above the floor			
Warning signals must be visual as well as audible			
Signs			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers a t least 1¼" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION

SWIMMING POOLS – accessibility can be via ramp, lifting device, or transfer area N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION

PICNICKING N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access			
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.			
Top of table no higher than 32" above ground			
Surface of the clear ground space under and around the table must be stable, firma nd slip-resistant, and evenly graded with a maximum slope of 2% in all directions			
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter			

Facility Inventory **LOCATION:** Brian Gaffney Cons Area

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities	Tables & Benches	Located adjacent to accessible paths
		Access to Open Spaces
		Back and Arm Rests
		Adequate number
	Grills	Height of Cooking Surface N/A
		Located adjacent to accessible paths
	Trash Cans	Located adjacent to accessible paths
	Picnic Shelters	Located adjacent to accessible paths
		Located near accessible water fountains, trash can, restroom, parking, etc.
Trails		Surface material DIRT + ROCKS
		Dimensions 3'
		Rails NO
		Signage (for visually impaired) NO
Swimming Facilities	Pools	Entrance
		Location from accessible parking
		Safety features i.e. warning for visually impaired
	Beaches	Location from accessible path into water N/A
		Handrails
		Location from accessible parking
		Shade provided
Play Areas (tot lots)	All Play Equipment i.e. swings, slides	Same experience provided to all
	Access Routes	Located adjacent to accessible paths N/A
		Enough space between equipment for wheelchair
Game Areas: *ballfield *basketball *tennis	Access Routes	Located adjacent to accessible paths
		Berm cuts onto courts
	Equipment	Height
		Dimensions
		Spectator Seating
Boat Docks	Access Routes	Located adjacent to accessible paths
		Handrails
Fishing Facilities	Access Routes	Located adjacent to accessible paths
		Handrails
	Equipment	Arm Rests N/A
		Bait Shelves
		Handrails
		Fish Cleaning Tables
Programming	Are special programs at your facilities accessible?	Learn-to-Swim
		Guided Hikes N/A
		Interpretive Programs
Services and Technical Assistance	Information available in alternative formats i.e. for visually impaired NO	
	Process to request interpretive services (i.e. sign language interpreter) for meetings N/A	

LOCATION

PARKING			
Total Spaces		*Required Accessible Spaces*	
Up to 25		1 space	
26-50		2 spaces	
51-75		3 spaces	
76-100		4 spaces	
101-150		5 spaces	
151-200		6 spaces	
201-300		7 spaces	
301-400		8 spaces	
401-500		9 spaces	
Specification for Accessible Spaces	*Yes*	*No*	*Comments/Transition Notes*
Accessible space located closest to accessible entrance		✓	
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		X	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle		X	
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		X	
Sign with international symbol of accessibility at each space or pair of spaces		X	NO SIGNS
Sign minimum 5 ft, maximum 8 ft to top of sign		X	
Surface evenly paved or hard-packed (no cracks)		X	
Surface slope less than 1:20, 5%	X		
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present		X	
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow		X	
RAMPS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Slope Maximum 1:12			N/A
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			
Handrails at 34" and 19" from ramp surface			
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1¼" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		X	
Disembarking area at accessible entrance		X	
Surface evenly paved or hard-packed		X	
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs		X	
Path is stable, firm and s lip resistant		X	
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	X		
Continuous common surface, no changes in level greater than ½ inch		X	
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane	X		
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"		X	
Curb on the pathway must have curb cuts at drives, parking and drop-offs			
Entrances			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and *not* be the service entrance		X	
Level space extending 5 ft. from the door, interior and exterior of entrance doors		X	
Minimum 32" clear width opening (i.e. 36" door with standard hinge)			
At least 18" clear floor area on latch, pull side of door			
Door handle no higher than 48" and operable with a closed fist			
Vestibule is 4 ft plus the width of the door swinging into the space			
Entrance(s) on a level that makes elevators accessible			
Door mats less than ½" thick are securely fastened			
Door mats more than ½" thick are recessed			
Grates in path of travel have openings of ½" maximum			
Signs at non-accessible entrance(s) indicate direction to accessible entrance			
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted			

NOTES

LOCATION

STAIRS and DOORS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stairs			
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			N/A
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1¼" and 1½"			
1½" clearance between wall and handrail			
Doors			
Minimum 32" clear opening			
At least 18" clear floor space on pull side of door			
Closing speed minimum 3 seconds to within 3" of the latch			
Maximum pressure 5 pounds interior doors			
Threshold maximum ½" high, beveled on both sides			N/A
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)			
Hardware minimum 36", maximum 48" above the floor			
Clear, level floor space extends out 5 ft from both sides of the door			
Door adjacent to revolving door is accessible and unlocked			
Doors opening into hazardous area have hardware that is knurled or roughened			

NOTES

LOCATION

RESTROOMS – also see Doors and Vestibules			
Specification	*Yes*	*No*	*Comments/Transition Notes*
5 ft turning space measured 12" from the floor			
At least one Sink:			
Clear floor space of 30" by 48" to allow a forward approach			
Mounted without pedestal or legs, height 34" to top of rim			N/A
Extends at least 22" from the wall			
Open knee space a minimum 19" deep, 30" width, and 27" high			
Cover exposed pipes with insulation			
Faucets operable with closed fist (lever or spring activated handle)			
At least one Stall:			
Accessible to person using wheelchair at 60" wide by 72" deep			
Stall door is 36" wide			
Stall door swings out			
Stall door is self closing			N/A
Stall door has a pull latch			
Lock on stall door is operable with a closed fist, and 32" above the floor			
Coat hook is 54" high			
Toilet			
18" from center to nearest side wall			
42" minimum clear space from center to farthest wall or fixture			
Top of seat 17"-19" above the floor			
Grab Bars			
On back and side wall closest to toilet			
1¼" diameter			
1½" clearance to wall			N/A
Located 30" above and parallel to the floor			
Acid-etched or roughened surface			
42" long			
Fixtures			
Toilet paper dispenser is 24" above floor			
One mirror set a maximum 38" to bottom (if tilted, 42")			
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor			

NOTES

LOCATION

FLOORS, DRINKING FOUNTAINS, TELEPHONES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Floors			
Non-slip surface			
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored			
Corridor width minimum is 3 ft			N/A
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor			
Drinking Fountains			
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones			N/A
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Switches, Controls and Signs			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach			
Electrical outlets centered no lower than 18" above the floor			N/A
Warning signals must be visual as well as audible			
Signs			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers a t least 1¼" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION

SWIMMING POOLS – accessibility can be via ramp, lifting device, or transfer area			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			N/A
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			N/A
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION

PICNICKING			
Specification	*Yes*	*No*	*Comments/Transition Notes*
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access			N/A
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.			
Top of table no higher than 32" above ground			
Surface of the clear ground space under and around the table must be stable, firma nd slip-resistant, and evenly graded with a maximum slope of 2% in all directions			
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter			

KIWANEE CAMP

AUDITED ON: MARCH 27, 2020

The site consists of various camping lodges located at the end of Camp Kiwanee Road. No designated accessible parking spaces were provided. No accessible route from the parking area to the cabins is provided.

CAMP KIWANEE				
#	Barrier Statement	Photo	Proposed Mitigation	Cost
8.	**Accessible Parking** The parking surface is not stable, firm, and slip resistant. The sign is mounted <60" AFF to the bottom of the sign, @ 53".		Pave and stripe a portion of the parking lot to add accessible parking spaces (including at least one van space), as well as the associated access aisles. Unit Cost: $1,500 per space or aisle Est. Quantity: 2 (1 space + 1 aisle) Reinstall the signs at 60" min. AFF, measured to the bottom of the sign, including a van accessible sign. Unit Cost: $100 ea. Quantity: 1	$3,100
9.	**Accessible Route** The ramp is <36" wide, @ 30". The ramp has running slopes >8.3%, @ 14.8%. The ramp lacks the required handrail extensions.		Rebuild the ramp. Unit Cost: $15,000 ea. Quantity: 1	$15,000
10.	**Entry Door** The threshold is >0.25" AFF and lacks a 1:2 bevel.		Replace the threshold. Unit Cost: $250 ea. Quantity: 1	$250
11.	**Toilet Rooms (2)** The mirrors >40" AFF, @ 45-48". The toilet centerlines are not 16"-18" from the side wall, @ 19". Toilet paper dispenser >9" from the front edge of the toilet, @ 12". The toilet lacks a rear grab bar. The side grab bar extends <54" from the rear wall, @ 52.5". The coat hooks are mounted >48" AFF.	 	Lower the mirror. Unit Cost: $50 ea. Quantity: 2 Reposition the toilet. Unit Cost: $1,500 ea. Quantity: 2 Relocate the toilet paper dispenser. Unit Cost: $50 ea. Quantity: 2 Install a 36" min. rear grab bar, located 6" from the interior corner of the wall. Unit Cost: $50 ea. Quantity: 2 Install a 42" min. side grab bar, located 12" from the interior corner of the wall. Unit Cost: $50 ea. Quantity: 2 Install a coat hook mounted no higher than 48" AFF. Unit Cost: $50 ea. Quantity: 2	$3,500
12.	**Event Space** An accessible route is not provided to the stage due to stairs.		Provide an accessible route to the stage. Additional study required. Unit Cost: $1,000 Quantity: 1	$1,000

13.	**Outdoor Deck** The door provides <32" clear width. The threshold is >0.5" AFF.		Enlarge the door opening and install a new door. Unit Cost: $5,000 ea. Quantity: 1 Replace the threshold. Unit Cost: $250 ea. Quantity: 1	$5,250
14.	**Interior Door** The door provides <32" clear width. The threshold lacks a 1:2 bevel.		Enlarge the door opening and install a new door. Unit Cost: $5,000 ea. Quantity: 1 Replace the threshold. Unit Cost: $250 ea. Quantity: 1	$5,250

15.	**Bridal Cottage** The cottage is not located on an accessible route. The entrance door, bedroom door, and the toilet room door provide <32" clear width, @ 29". The threshold is > 0.25" AFF and lacks a 1:2 bevel. The bathing room lacks the required footprint and accessible elements.	  	Provide an accessible route. Additional study required. Unit Cost: $5,000 Quantity: 1 Enlarge the door opening and install a new door. Unit Cost: $5,000 ea. Quantity: 3 Replace the threshold. Unit Cost: $250 ea. Quantity: 1 Further design study required. Unit Cost: $5,000 ea. Quantity: 1	$25,250
16.	**Cabins** The cabins and toilet rooms are not located on an accessible route.		Provide an accessible route. Additional study required. Unit Cost: $5,000 Est. Quantity: 2	$10,000

17.	**Toilet Rooms** KMA was not able to access the toilet rooms and will review them at a later date.		NA	NA
TOTAL FOR CAMP KIWANEE:				$68,600

Facility Inventory **LOCATION:** Camp Kiwanee

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities	Tables & Benches	Located adjacent to accessible paths NO
		Access to Open Spaces
		Back and Arm Rests
		Adequate number
	Grills	Height of Cooking Surface N/A
		Located adjacent to accessible paths
	Trash Cans	Located adjacent to accessible paths
	Picnic Shelters	Located adjacent to accessible paths NO
		Located near accessible water fountains, trash can, restroom, parking, etc. NO
Trails		Surface material
		Dimensions
		Rails NO
		Signage (for visually impaired) NO
Swimming Facilities	Pools	Entrance
		Location from accessible parking N/A
		Safety features i.e. warning for visually impaired
	Beaches	Location from accessible path into water
		Handrails NO
		Location from accessible parking
		Shade provided
Play Areas (tot lots)	All Play Equipment i.e. swings, slides	Same experience provided to all N/A
	Access Routes	Located adjacent to accessible paths
		Enough space between equipment for wheelchair
Game Areas: *ballfield *basketball *tennis	Access Routes	Located adjacent to accessible paths
		Berm cuts onto courts N/A
	Equipment	Height
		Dimensions
		Spectator Seating
Boat Docks	Access Routes	Located adjacent to accessible paths N/A
		Handrails
Fishing Facilities	Access Routes	Located adjacent to accessible paths
		Handrails
	Equipment	Arm Rests N/A
		Bait Shelves
		Handrails
		Fish Cleaning Tables
Programming	Are special programs at your facilities accessible?	Learn-to-Swim N/A
		Guided Hikes
		Interpretive Programs
Services and Technical Assistance	Information available in alternative formats i.e. for visually impaired NO	
	Process to request interpretive services (i.e. sign language interpreter) for meetings N/A	

- see cranberry cove report

LOCATION

PARKING			
Total Spaces		*Required Accessible Spaces*	
Up to 25		1 space	
26-50		2 spaces	
51-75		3 spaces	
76-100		4 spaces	
101-150		5 spaces	
151-200		6 spaces	
201-300		7 spaces	
301-400		8 spaces	
401-500		9 spaces	
Specification for Accessible Spaces	*Yes*	*No*	*Comments/Transition Notes*
Accessible space located closest to accessible entrance	X		
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.	X		
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle	X		
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	X		
Sign with international symbol of accessibility at each space or pair of spaces	X		
Sign minimum 5 ft, maximum 8 ft to top of sign		X	
Surface evenly paved or hard-packed (no cracks)		X	
Surface slope less than 1:20, 5%	X		
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present	X		
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow	X		
RAMPS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Slope Maximum 1:12		X	
Minimum width 4 ft between handrails		X	
Handrails on both sides if ramp is longer than 6 ft	X		
Handrails at 34" and 19" from ramp surface	X		
Handrails extend 12" beyond top and bottom		X	
Handgrip oval or round			
Handgrip smooth surface	X		
Handgrip diameter between 1¼" and 2"	X		
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction	X		

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	X		
Disembarking area at accessible entrance	X		
Surface evenly paved or hard-packed	X		
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs	X		
Path is stable, firm and s lip resistant		X	
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	X		
Continuous common surface, no changes in level greater than ½ inch	X		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane	X		
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"	X		
Curb on the pathway must have curb cuts at drives, parking and drop-offs	X		
Entrances			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and *not* be the service entrance	X		
Level space extending 5 ft. from the door, interior and exterior of entrance doors	X		
Minimum 32" clear width opening (i.e. 36" door with standard hinge)	X		
At least 18" clear floor area on latch, pull side of door	X		
Door handle no higher than 48" and operable with a closed fist	X		
Vestibule is 4 ft plus the width of the door swinging into the space	X		
Entrance(s) on a level that makes elevators accessible		N/A	
Door mats less than ½" thick are securely fastened		N/A	
Door mats more than ½" thick are recessed			
Grates in path of travel have openings of ½" maximum		N/A	
Signs at non-accessible entrance(s) indicate direction to accessible entrance		N/A	
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted	X		

NOTES

LOCATION

STAIRS and DOORS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stairs			
No open risers	✓		
Nosings not projecting	✓		
Treads no less than 11" wide	✓		
Handrails on both sides	✓		
Handrails 34"-38" above tread	✓		
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)	✓		
Handgrip oval or round	✓		
Handgrip has a smooth surface	✓		
Handgrip diameter between 1¼" and 1½"	✓		
1½" clearance between wall and handrail	✓		
Doors			
Minimum 32" clear opening		X	
At least 18" clear floor space on pull side of door	X		
Closing speed minimum 3 seconds to within 3" of the latch	X		
Maximum pressure 5 pounds interior doors	X		
Threshold maximum ½" high, beveled on both sides		X	
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)	X		
Hardware minimum 36", maximum 48" above the floor	X		
Clear, level floor space extends out 5 ft from both sides of the door	X		
Door adjacent to revolving door is accessible and unlocked	X		
Doors opening into hazardous area have hardware that is knurled or roughened	X		

NOTES

LOCATION

RESTROOMS – also see Doors and Vestibules			
Specification	*Yes*	*No*	*Comments/Transition Notes*
5 ft turning space measured 12" from the floor			
At least one Sink:			
Clear floor space of 30" by 48" to allow a forward approach			
Mounted without pedestal or legs, height 34" to top of rim			See report
Extends at least 22" from the wall			
Open knee space a minimum 19" deep, 30" width, and 27" high			
Cover exposed pipes with insulation			
Faucets operable with closed fist (lever or spring activated handle)			
At least one Stall:			
Accessible to person using wheelchair at 60" wide by 72" deep	X		
Stall door is 36" wide	X		
Stall door swings out	X		
Stall door is self closing		X	
Stall door has a pull latch	X		
Lock on stall door is operable with a closed fist, and 32" above the floor	X		
Coat hook is 54" high		X	
Toilet			
18" from center to nearest side wall		X	
42" minimum clear space from center to farthest wall or fixture	X		
Top of seat 17"-19" above the floor	X		
Grab Bars			
On back and side wall closest to toilet		X	
1¼" diameter	X		
1½" clearance to wall	X		
Located 30" above and parallel to the floor	X		
Acid-etched or roughened surface	X		
42" long	X		
Fixtures			
Toilet paper dispenser is 24" above floor	X		
One mirror set a maximum 38" to bottom (if tilted, 42")		X	
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor	X		

NOTES

LOCATION

FLOORS, DRINKING FOUNTAINS, TELEPHONES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Floors			
Non-slip surface	✓		
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored		N/A	
Corridor width minimum is 3 ft	✓		
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor	✓		
Drinking Fountains			N/A
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones	N/A		
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Switches, Controls and Signs			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach	X		
Electrical outlets centered no lower than 18" above the floor	X		
Warning signals must be visual as well as audible	X		
Signs			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers a t least 1¼" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION

SWIMMING POOLS – accessibility can be via ramp, lifting device, or transfer area			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			N/A
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			N/A
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION

PICNICKING			
Specification	*Yes*	*No*	*Comments/Transition Notes*
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access	X		
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.	X		
Top of table no higher than 32" above ground	X		
Surface of the clear ground space under and around the table must be stable, firma nd slip-resistant, and evenly graded with a maximum slope of 2% in all directions		X	
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter	X		

Facility Inventory **LOCATION:** Poor Meadow Brook + Greenery

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities	Tables & Benches	Located adjacent to accessible paths ✓
		Access to Open Spaces
		Back and Arm Rests
		Adequate number
	Grills	Height of Cooking Surface N/A
		Located adjacent to accessible paths
	Trash Cans	Located adjacent to accessible paths
	Picnic Shelters	Located adjacent to accessible paths
		Located near accessible water fountains, trash can, restroom, parking, etc.
Trails		Surface material
		Dimensions N/A
		Rails
		Signage (for visually impaired)
Swimming Facilities	Pools	Entrance
		Location from accessible parking N/A
		Safety features i.e. warning for visually impaired
	Beaches	Location from accessible path into water
		Handrails
		Location from accessible parking
		Shade provided
Play Areas (tot lots)	All Play Equipment i.e. swings, slides	Same experience provided to all
	Access Routes	Located adjacent to accessible paths N/A
		Enough space between equipment for wheelchair
Game Areas: *ballfield *basketball *tennis	Access Routes	Located adjacent to accessible paths
		Berm cuts onto courts
	Equipment	Height N/A
		Dimensions
		Spectator Seating
Boat Docks	Access Routes	Located adjacent to accessible paths
		Handrails N/A
Fishing Facilities	Access Routes	Located adjacent to accessible paths
		Handrails
	Equipment	Arm Rests
		Bait Shelves N/A
		Handrails
		Fish Cleaning Tables
Programming	Are special programs at your facilities accessible?	Learn-to-Swim
		Guided Hikes
		Interpretive Programs
Services and Technical Assistance	Information available in alternative formats i.e. for visually impaired	NO
	Process to request interpretive services (i.e. sign language interpreter) for meetings	N/A

LOCATION

PARKING			
Total Spaces		*Required Accessible Spaces*	
Up to 25		1 space	
26-50		2 spaces	
51-75		3 spaces	
76-100		4 spaces	
101-150		5 spaces	
151-200		6 spaces	
201-300		7 spaces	
301-400		8 spaces	
401-500		9 spaces	
Specification for Accessible Spaces	*Yes*	*No*	*Comments/Transition Notes*
Accessible space located closest to accessible entrance		X	
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		X	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle		X	
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	X	X	
Sign with international symbol of accessibility at each space or pair of spaces		X	
Sign minimum 5 ft, maximum 8 ft to top of sign		X	
Surface evenly paved or hard-packed (no cracks)		X	
Surface slope less than 1:20, 5%	X		
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present		X	
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow		X	
RAMPS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Slope Maximum 1:12			N/A
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			
Handrails at 34" and 19" from ramp surface			
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1¼" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		X	
Disembarking area at accessible entrance		X	
Surface evenly paved or hard-packed		X	
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs	X		
Path is stable, firm and s lip resistant		X	
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	X		
Continuous common surface, no changes in level greater than ½ inch		X	
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane		X	
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"	N/A		
Curb on the pathway must have curb cuts at drives, parking and drop-offs	N/A		
Entrances			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and *not* be the service entrance			
Level space extending 5 ft. from the door, interior and exterior of entrance doors			
Minimum 32" clear width opening (i.e. 36" door with standard hinge)			
At least 18" clear floor area on latch, pull side of door			
Door handle no higher than 48" and operable with a closed fist			
Vestibule is 4 ft plus the width of the door swinging into the space			
Entrance(s) on a level that makes elevators accessible			
Door mats less than ½" thick are securely fastened			
Door mats more than ½" thick are recessed			
Grates in path of travel have openings of ½" maximum			
Signs at non-accessible entrance(s) indicate direction to accessible entrance			
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted			

NOTES

LOCATION N/A

STAIRS and DOORS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stairs			
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1¼" and 1½"			
1½" clearance between wall and handrail			
Doors N/A			
Minimum 32" clear opening			
At least 18" clear floor space on pull side of door			
Closing speed minimum 3 seconds to within 3" of the latch			
Maximum pressure 5 pounds interior doors			
Threshold maximum ½" high, beveled on both sides			
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)			
Hardware minimum 36", maximum 48" above the floor			
Clear, level floor space extends out 5 ft from both sides of the door			
Door adjacent to revolving door is accessible and unlocked			
Doors opening into hazardous area have hardware that is knurled or roughened			

NOTES

LOCATION N/A

RESTROOMS – also see Doors and Vestibules			
Specification	*Yes*	*No*	*Comments/Transition Notes*
5 ft turning space measured 12" from the floor			
At least one Sink:			
Clear floor space of 30" by 48" to allow a forward approach			
Mounted without pedestal or legs, height 34" to top of rim			
Extends at least 22" from the wall			
Open knee space a minimum 19" deep, 30" width, and 27" high			
Cover exposed pipes with insulation			
Faucets operable with closed fist (lever or spring activated handle)			
At least one Stall: N/A			
Accessible to person using wheelchair at 60" wide by 72" deep			
Stall door is 36" wide			
Stall door swings out			
Stall door is self closing			
Stall door has a pull latch			
Lock on stall door is operable with a closed fist, and 32" above the floor			
Coat hook is 54" high			
Toilet N/A			
18" from center to nearest side wall			
42" minimum clear space from center to farthest wall or fixture			
Top of seat 17"-19" above the floor			
Grab Bars			
On back and side wall closest to toilet			
1¼" diameter			
1½" clearance to wall			
Located 30" above and parallel to the floor			
Acid-etched or roughened surface			
42" long			
Fixtures			
Toilet paper dispenser is 24" above floor			
One mirror set a maximum 38" to bottom (if tilted, 42")			
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor			

NOTES

LOCATION N/A

FLOORS, DRINKING FOUNTAINS, TELEPHONES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Floors			
Non-slip surface			
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored			
Corridor width minimum is 3 ft			
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor			
Drinking Fountains N/A			
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones			
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Switches, Controls and Signs N/A			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach			
Electrical outlets centered no lower than 18" above the floor			
Warning signals must be visual as well as audible			
Signs			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers a t least 1¼" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION N/A

SWIMMING POOLS – accessibility can be via ramp, lifting device, or transfer area			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION N/A

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION N/A

PICNICKING			
Specification	*Yes*	*No*	*Comments/Transition Notes*
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access			
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.			
Top of table no higher than 32" above ground			
Surface of the clear ground space under and around the table must be stable, firma nd slip-resistant, and evenly graded with a maximum slope of 2% in all directions			
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter			

MEMORIAL FIELD

AUDITED ON: MARCH 27, 2020

The site consists of an unpaved parking lot, a placard, and a baseball field along Robinson Street. One designated accessible parking space is provided. No accessible routes from the parking are provided.

MEMORIAL FIELD				
#	Barrier Statement	Photo	Proposed Mitigation	Cost
4.	**Accessible Parking** The designated accessible parking provided lacks striping, and a stable, firm and slip resistant surface. The signs are mounted <60" AFF to the bottom of the sign.		Pave and stripe a portion of the parking lot to add accessible parking spaces (including at least one van space), as well as the associated access aisles. Unit Cost: $1,500 per space or aisle Est. Quantity: 2 (1 space + 1 aisle) Reinstall the sign at 60" min. AFF, measured to the bottom of the sign, including a van accessible sign. Unit Cost: $100 ea. Quantity: 1	$3,100
5.	**Accessible Route** The route to the placard has a step >.24", @ 4", and has running slopes >5%, @ up to 8.9%. The baseball field, the bleachers, and the placard walkway are not located on an accessible route. A wheelchair space is not provided at the bleachers.	 	Rebuild/regrade the walkway to the placard. Unit Cost: $25/SF Est. Quantity: 50 SF Provide an accessible route. Additional study required. Unit Cost: $5,000 Quantity: 1 Provide an accessible space on an accessible route next to the bleachers. Unit Cost: $25/SF Est. Quantity: 20 SF	$6,750
TOTAL FOR MEMORIAL FIELD:				$9,850

Facility Inventory **LOCATION:** Memorial Field

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities N/A	Tables & Benches	Located adjacent to accessible paths
		Access to Open Spaces
		Back and Arm Rests
		Adequate number
	Grills	Height of Cooking Surface
		Located adjacent to accessible paths
	Trash Cans	Located adjacent to accessible paths
	Picnic Shelters	Located adjacent to accessible paths
		Located near accessible water fountains, trash can, restroom, parking, etc.
Trails N/A		Surface material
		Dimensions
		Rails
		Signage (for visually impaired)
Swimming Facilities N/A	Pools	Entrance
		Location from accessible parking
		Safety features i.e. warning for visually impaired
	Beaches	Location from accessible path into water
		Handrails
		Location from accessible parking
		Shade provided
Play Areas (tot lots) N/A	All Play Equipment i.e. swings, slides	Same experience provided to all
	Access Routes	Located adjacent to accessible paths
		Enough space between equipment for wheelchair
Game Areas: *ballfield *basketball *tennis	Access Routes	Located adjacent to accessible paths No
		Berm cuts onto courts No
	Equipment	Height N/A
		Dimensions N/A
		Spectator Seating No
Boat Docks N/A	Access Routes	Located adjacent to accessible paths
		Handrails
Fishing Facilities N/A	Access Routes	Located adjacent to accessible paths
		Handrails
	Equipment	Arm Rests
		Bait Shelves
		Handrails
		Fish Cleaning Tables
Programming N/A	Are special programs at your facilities accessible?	Learn-to-Swim
		Guided Hikes
		Interpretive Programs
Services and Technical Assistance N/A	Information available in alternative formats i.e. for visually impaired NO	
	Process to request interpretive services (i.e. sign language interpreter) for meetings N/A	

LOCATION

PARKING			
Total Spaces		*Required Accessible Spaces*	
Up to 25		1 space	
26-50		2 spaces	
51-75		3 spaces	
76-100		4 spaces	
101-150		5 spaces	
151-200		6 spaces	
201-300		7 spaces	
301-400		8 spaces	
401-500		9 spaces	
Specification for Accessible Spaces	*Yes*	*No*	*Comments/Transition Notes*
Accessible space located closest to accessible entrance		No	There is no striping on the dirt ground although a sign in provided.
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		No	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle		No	
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		No	
Sign with international symbol of accessibility at each space or pair of spaces	Yes		
Sign minimum 5 ft, maximum 8 ft to top of sign		No	
Surface evenly paved or hard-packed (no cracks)		No	
Surface slope less than 1:20, 5%		No	
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present		No	
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow		No	
RAMPS N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Slope Maximum 1:12			
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			
Handrails at 34" and 19" from ramp surface			
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1¼" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		No	There is a dirt and grass walkway into the site.
Disembarking area at accessible entrance N/A			
Surface evenly paved or hard-packed		No	
No ponding of water		No	
Path of Travel			
Path does not require the use of stairs	Yes		
Path is stable, firm and s lip resistant		No	
3 ft wide minimum	Yes		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).		No	
Continuous common surface, no changes in level greater than ½ inch		No	
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane N/A			
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80" N/A			
Curb on the pathway must have curb cuts at drives, parking and drop-offs		No	
Entrances			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and not be the service entrance			
Level space extending 5 ft. from the door, interior and exterior of entrance doors			
Minimum 32" clear width opening (i.e. 36" door with standard hinge)			
At least 18" clear floor area on latch, pull side of door			
Door handle no higher than 48" and operable with a closed fist			
Vestibule is 4 ft plus the width of the door swinging into the space			
Entrance(s) on a level that makes elevators accessible			
Door mats less than ½" thick are securely fastened			
Door mats more than ½" thick are recessed			
Grates in path of travel have openings of ½" maximum			
Signs at non-accessible entrance(s) indicate direction to accessible entrance			
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted			

NOTES

LOCATION

STAIRS and DOORS N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stairs			
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1¼" and 1½"			
1½" clearance between wall and handrail			
Doors			
Minimum 32" clear opening			
At least 18" clear floor space on pull side of door			
Closing speed minimum 3 seconds to within 3" of the latch			
Maximum pressure 5 pounds interior doors			
Threshold maximum ½" high, beveled on both sides			
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)			
Hardware minimum 36", maximum 48" above the floor			
Clear, level floor space extends out 5 ft from both sides of the door			
Door adjacent to revolving door is accessible and unlocked			
Doors opening into hazardous area have hardware that is knurled or roughened			

NOTES

LOCATION

RESTROOMS – also see Doors and Vestibules	N/A		
Specification	*Yes*	*No*	*Comments/Transition Notes*
5 ft turning space measured 12" from the floor			
At least one Sink:			
Clear floor space of 30" by 48" to allow a forward approach			
Mounted without pedestal or legs, height 34" to top of rim			
Extends at least 22" from the wall			
Open knee space a minimum 19" deep, 30" width, and 27" high			
Cover exposed pipes with insulation			
Faucets operable with closed fist (lever or spring activated handle)			
At least one Stall:			
Accessible to person using wheelchair at 60" wide by 72" deep			
Stall door is 36" wide			
Stall door swings out			
Stall door is self closing			
Stall door has a pull latch			
Lock on stall door is operable with a closed fist, and 32" above the floor			
Coat hook is 54" high			
Toilet			
18" from center to nearest side wall			
42" minimum clear space from center to farthest wall or fixture			
Top of seat 17"-19" above the floor			
Grab Bars			
On back and side wall closest to toilet			
1¼" diameter			
1½" clearance to wall			
Located 30" above and parallel to the floor			
Acid-etched or roughened surface			
42" long			
Fixtures			
Toilet paper dispenser is 24" above floor			
One mirror set a maximum 38" to bottom (if tilted, 42")			
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor			

NOTES

LOCATION

FLOORS, DRINKING FOUNTAINS, TELEPHONES N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Floors			
Non-slip surface			
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored			
Corridor width minimum is 3 ft			
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor			
Drinking Fountains			
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones			
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Switches, Controls and Signs			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach			
Electrical outlets centered no lower than 18" above the floor			
Warning signals must be visual as well as audible			
Signs			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers a t least 1¼" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION

SWIMMING POOLS – accessibility can be via ramp, lifting device, or transfer area N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION

PICNICKING N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access			
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.			
Top of table no higher than 32" above ground			
Surface of the clear ground space under and around the table must be stable, firma nd slip-resistant, and evenly graded with a maximum slope of 2% in all directions			
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter			

NATHANIEL THOMAS MILL

AUDITED ON: MAY 04, 2020

The Nathaniel Thomas Mill is located along Liberty Street across from Wampatuck Pond. The site consists of one building with a gravel parking lot that serves the building. Accessible parking and routes are not provided.

NATHANIEL THOMAS MILL				
#	*Barrier Statement*	*Photo*	*Proposed Mitigation*	*Cost*
1.	**Accessible Parking** Designated accessible parking is not provided. The parking surface is not stable, firm, and slip resistant.		Pave and stripe a portion of the parking lot to add accessible parking spaces (including at least one van space), as well as the associated access aisles. Unit Cost: $1,500 per space or aisle Est. Quantity: 2 (1 space + 1 aisle)	$3,000
2.	**Accessible Route** The building is not located on an accessible route due to the gravel surface. The entry door is not located on an accessible route due to steps.		Provide an accessible route. Additional study required. Unit Cost: $5,000 Quantity: 1 Build a ramp. Unit Cost: $15,000 ea. Quantity: 1	$20,000
3.	**Main Entry Door** The threshold is > 0.5" AFF, @ 1.5".		Replace the threshold. Unit Cost: $250 ea. Quantity: 1	$250
TOTAL FOR NATHANIEL THOMAS MILL:				**$23,250**

Facility Inventory **LOCATION:** Nathaniel Thomas Mill

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities	Tables & Benches	Located adjacent to accessible paths
		Access to Open Spaces
		Back and Arm Rests
		Adequate number
	Grills	Height of Cooking Surface N/A
		Located adjacent to accessible paths
	Trash Cans	Located adjacent to accessible paths
	Picnic Shelters	Located adjacent to accessible paths
		Located near accessible water fountains, trash can, restroom, parking, etc.
Trails		Surface material
		Dimensions
		Rails N/A
		Signage (for visually impaired)
Swimming Facilities	Pools	Entrance
		Location from accessible parking
		Safety features i.e. warning for visually impaired
	Beaches	Location from accessible path into water
		Handrails N/A
		Location from accessible parking
		Shade provided
Play Areas (tot lots)	All Play Equipment i.e. swings, slides	Same experience provided to all N/A
	Access Routes	Located adjacent to accessible paths
		Enough space between equipment for wheelchair
Game Areas: *ballfield *basketball *tennis	Access Routes	Located adjacent to accessible paths
		Berm cuts onto courts
	Equipment	Height N/A
		Dimensions
		Spectator Seating
Boat Docks	Access Routes	Located adjacent to accessible paths
		Handrails N/A
Fishing Facilities	Access Routes	Located adjacent to accessible paths
		Handrails
	Equipment	Arm Rests
		Bait Shelves N/A
		Handrails
		Fish Cleaning Tables
Programming	Are special programs at your facilities accessible?	Learn-to-Swim
		Guided Hikes N/A
		Interpretive Programs
Services and Technical Assistance	Information available in alternative formats i.e. for visually impaired	NO
	Process to request interpretive services (i.e. sign language interpreter) for meetings	N/A

LOCATION

PARKING			
Total Spaces		*Required Accessible Spaces*	
Up to 25		1 space	
26-50		2 spaces	
51-75		3 spaces	
76-100		4 spaces	
101-150		5 spaces	
151-200		6 spaces	
201-300		7 spaces	
301-400		8 spaces	
401-500		9 spaces	
Specification for Accessible Spaces	*Yes*	*No*	*Comments/Transition Notes*
Accessible space located closest to accessible entrance		X	
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.	X		
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle	X		
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	X		
Sign with international symbol of accessibility at each space or pair of spaces		X	
Sign minimum 5 ft, maximum 8 ft to top of sign		X	
Surface evenly paved or hard-packed (no cracks)		X	
Surface slope less than 1:20, 5%	X		
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present	X		
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow	X		
RAMPS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Slope Maximum 1:12			
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			
Handrails at 34" and 19" from ramp surface			
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1¼" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		X	
Disembarking area at accessible entrance		X	
Surface evenly paved or hard-packed		X	
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs	X		
Path is stable, firm and s lip resistant		X	
3 ft wide minimum			
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).			
Continuous common surface, no changes in level greater than ½ inch			
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane			
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"			
Curb on the pathway must have curb cuts at drives, parking and drop-offs			
Entrances			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and not be the service entrance		X	
Level space extending 5 ft. from the door, interior and exterior of entrance doors	X		
Minimum 32" clear width opening (i.e. 36" door with standard hinge)	X		
At least 18" clear floor area on latch, pull side of door	X		
Door handle no higher than 48" and operable with a closed fist	X		
Vestibule is 4 ft plus the width of the door swinging into the space			
Entrance(s) on a level that makes elevators accessible	N/A		
Door mats less than ½" thick are securely fastened	N/A		
Door mats more than ½" thick are recessed			
Grates in path of travel have openings of ½" maximum	N/A		
Signs at non-accessible entrance(s) indicate direction to accessible entrance			
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted	N/A		

NOTES

LOCATION

STAIRS and DOORS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stairs	N/A		
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1¼" and 1½"			
1½" clearance between wall and handrail			
Doors			
Minimum 32" clear opening	X		
At least 18" clear floor space on pull side of door	X		
Closing speed minimum 3 seconds to within 3" of the latch	X		
Maximum pressure 5 pounds interior doors	X		
Threshold maximum ½" high, beveled on both sides		X	
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)			
Hardware minimum 36", maximum 48" above the floor	X		
Clear, level floor space extends out 5 ft from both sides of the door	X		
Door adjacent to revolving door is accessible and unlocked	N/A		
Doors opening into hazardous area have hardware that is knurled or roughened	N/A		

NOTES

LOCATION

RESTROOMS – also see Doors and Vestibules			
Specification	*Yes*	*No*	*Comments/Transition Notes*
5 ft turning space measured 12" from the floor			
At least one Sink:			
Clear floor space of 30" by 48" to allow a forward approach			
Mounted without pedestal or legs, height 34" to top of rim			
Extends at least 22" from the wall			
Open knee space a minimum 19" deep, 30" width, and 27" high			
Cover exposed pipes with insulation			
Faucets operable with closed fist (lever or spring activated handle)			
At least one Stall:			
Accessible to person using wheelchair at 60" wide by 72" deep			
Stall door is 36" wide			
Stall door swings out			
Stall door is self closing			
Stall door has a pull latch			
Lock on stall door is operable with a closed fist, and 32" above the floor			
Coat hook is 54" high			
Toilet			
18" from center to nearest side wall			
42" minimum clear space from center to farthest wall or fixture			
Top of seat 17"-19" above the floor			
Grab Bars			
On back and side wall closest to toilet			
1¼" diameter			
1½" clearance to wall			
Located 30" above and parallel to the floor			
Acid-etched or roughened surface			
42" long			
Fixtures			
Toilet paper dispenser is 24" above floor			
One mirror set a maximum 38" to bottom (if tilted, 42")			
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor			

NOTES

LOCATION

FLOORS, DRINKING FOUNTAINS, TELEPHONES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Floors			
Non-slip surface			
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored			
Corridor width minimum is 3 ft			
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor			
Drinking Fountains			
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones			
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Switches, Controls and Signs			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach			
Electrical outlets centered no lower than 18" above the floor			
Warning signals must be visual as well as audible			
Signs			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers a t least 1¼" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION

SWIMMING POOLS – accessibility can be via ramp, lifting device, or transfer area			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION

PICNICKING			
Specification	*Yes*	*No*	*Comments/Transition Notes*
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access			
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.			
Top of table no higher than 32" above ground			
Surface of the clear ground space under and around the table must be stable, firma nd slip-resistant, and evenly graded with a maximum slope of 2% in all directions			
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter			

Facility Inventory **LOCATION:** Norcross Property

ACTIVITY	EQUIPMENT	NOTES	
Picnic Facilities	Tables & Benches	Located adjacent to accessible paths	
		Access to Open Spaces	
		Back and Arm Rests	
		Adequate number	N/A
	Grills	Height of Cooking Surface	
		Located adjacent to accessible paths	
	Trash Cans	Located adjacent to accessible paths	
	Picnic Shelters	Located adjacent to accessible paths	
		Located near accessible water fountains, trash can, restroom, parking, etc.	
Trails		Surface material	
		Dimensions	
		Rails	
		Signage (for visually impaired)	
Swimming Facilities	Pools	Entrance	
		Location from accessible parking	
		Safety features i.e. warning for visually impaired	
	Beaches	Location from accessible path into water	
		Handrails	N/A
		Location from accessible parking	
		Shade provided	
Play Areas (tot lots)	All Play Equipment i.e. swings, slides	Same experience provided to all	
	Access Routes	Located adjacent to accessible paths	N/A
		Enough space between equipment for wheelchair	
Game Areas: *ballfield *basketball *tennis	Access Routes	Located adjacent to accessible paths	
		Berm cuts onto courts	
	Equipment	Height	N/A
		Dimensions	
		Spectator Seating	
Boat Docks	Access Routes	Located adjacent to accessible paths	N/A
		Handrails	
Fishing Facilities	Access Routes	Located adjacent to accessible paths	
		Handrails	
	Equipment	Arm Rests	
		Bait Shelves	N/A
		Handrails	
		Fish Cleaning Tables	
Programming	Are special programs at your facilities accessible?	Learn-to-Swim	
		Guided Hikes	N/A
		Interpretive Programs	
Services and Technical Assistance	Information available in alternative formats i.e. for visually impaired		No
	Process to request interpretive services (i.e. sign language interpreter) for meetings		N/A

LOCATION

PARKING			
Total Spaces		*Required Accessible Spaces*	
Up to 25		1 space	
26-50		2 spaces	
51-75		3 spaces	
76-100		4 spaces	
101-150		5 spaces	
151-200		6 spaces	
201-300		7 spaces	
301-400		8 spaces	
401-500		9 spaces	
Specification for Accessible Spaces	*Yes*	*No*	*Comments/Transition Notes*
Accessible space located closest to accessible entrance		X	
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		X	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle	X		
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	X		
Sign with international symbol of accessibility at each space or pair of spaces		X	
Sign minimum 5 ft, maximum 8 ft to top of sign		X	
Surface evenly paved or hard-packed (no cracks)		X	
Surface slope less than 1:20, 5%	X		
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present		X	
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow		N/A	
RAMPS			
Specification	*Yes*	*No*	*Comments/Transition Notes* N/A
Slope Maximum 1:12			
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			
Handrails at 34" and 19" from ramp surface			
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1¼" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance			
Disembarking area at accessible entrance			
Surface evenly paved or hard-packed			
No ponding of water			
Path of Travel			
Path does not require the use of stairs			
Path is stable, firm and s lip resistant			
3 ft wide minimum			
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).			
Continuous common surface, no changes in level greater than ½ inch			
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane			
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"			
Curb on the pathway must have curb cuts at drives, parking and drop-offs			
Entrances			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and not be the service entrance			
Level space extending 5 ft. from the door, interior and exterior of entrance doors			
Minimum 32" clear width opening (i.e. 36" door with standard hinge)			
At least 18" clear floor area on latch, pull side of door			
Door handle no higher than 48" and operable with a closed fist			
Vestibule is 4 ft plus the width of the door swinging into the space			
Entrance(s) on a level that makes elevators accessible			
Door mats less than ½" thick are securely fastened			
Door mats more than ½" thick are recessed			
Grates in path of travel have openings of ½" maximum			
Signs at non-accessible entrance(s) indicate direction to accessible entrance			
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted			

NOTES

LOCATION N/A

STAIRS and DOORS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stairs			
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1¼" and 1½"			
1½" clearance between wall and handrail			
Doors N/A			
Minimum 32" clear opening			
At least 18" clear floor space on pull side of door			
Closing speed minimum 3 seconds to within 3" of the latch			
Maximum pressure 5 pounds interior doors			
Threshold maximum ½" high, beveled on both sides			
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)			
Hardware minimum 36", maximum 48" above the floor			
Clear, level floor space extends out 5 ft from both sides of the door			
Door adjacent to revolving door is accessible and unlocked			
Doors opening into hazardous area have hardware that is knurled or roughened			

NOTES

LOCATION N/A

RESTROOMS – also see Doors and Vestibules			
Specification	*Yes*	*No*	*Comments/Transition Notes*
5 ft turning space measured 12" from the floor			
At least one Sink:			
Clear floor space of 30" by 48" to allow a forward approach			
Mounted without pedestal or legs, height 34" to top of rim			
Extends at least 22" from the wall			
Open knee space a minimum 19" deep, 30" width, and 27" high			
Cover exposed pipes with insulation			
Faucets operable with closed fist (lever or spring activated handle)			
At least one Stall: N/A			
Accessible to person using wheelchair at 60" wide by 72" deep			
Stall door is 36" wide			
Stall door swings out			
Stall door is self closing			
Stall door has a pull latch			
Lock on stall door is operable with a closed fist, and 32" above the floor			
Coat hook is 54" high			
Toilet N/A			
18" from center to nearest side wall			
42" minimum clear space from center to farthest wall or fixture			
Top of seat 17"-19" above the floor			
Grab Bars			
On back and side wall closest to toilet			
1¼" diameter			
1½" clearance to wall			
Located 30" above and parallel to the floor			
Acid-etched or roughened surface			
42" long			
Fixtures			
Toilet paper dispenser is 24" above floor			
One mirror set a maximum 38" to bottom (if tilted, 42")			
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor			

NOTES

LOCATION N/A

FLOORS, DRINKING FOUNTAINS, TELEPHONES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Floors			
Non-slip surface			
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored			
Corridor width minimum is 3 ft			
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor			
Drinking Fountains N/A			
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones			
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Switches, Controls and Signs			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach			
Electrical outlets centered no lower than 18" above the floor			
Warning signals must be visual as well as audible			
Signs			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers a t least 1¼" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION N/A

SWIMMING POOLS – accessibility can be via ramp, lifting device, or transfer area			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION N/A

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION N/A

PICNICKING			
Specification	*Yes*	*No*	*Comments/Transition Notes*
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access			
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.			
Top of table no higher than 32" above ground			
Surface of the clear ground space under and around the table must be stable, firma nd slip-resistant, and evenly graded with a maximum slope of 2% in all directions			
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter			

Facility Inventory **LOCATION:** Smith Nawazelski Cons. Area

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities	Tables & Benches	Located adjacent to accessible paths
		Access to Open Spaces
		Back and Arm Rests
		Adequate number N/A
	Grills	Height of Cooking Surface
		Located adjacent to accessible paths
	Trash Cans	Located adjacent to accessible paths
	Picnic Shelters	Located adjacent to accessible paths
		Located near accessible water fountains, trash can, restroom, parking, etc.
Trails		Surface material dirt + grass
		Dimensions 3' +
		Rails NO
		Signage (for visually impaired) NO
Swimming Facilities	Pools	Entrance
		Location from accessible parking
		Safety features i.e. warning for visually impaired
	Beaches	Location from accessible path into water
		Handrails N/A
		Location from accessible parking
		Shade provided
Play Areas (tot lots)	All Play Equipment i.e. swings, slides	Same experience provided to all
	Access Routes	Located adjacent to accessible paths
		Enough space between equipment for wheelchair N/A
Game Areas: *ballfield *basketball *tennis	Access Routes	Located adjacent to accessible paths
		Berm cuts onto courts
	Equipment	Height
		Dimensions N/A
		Spectator Seating
Boat Docks	Access Routes	Located adjacent to accessible paths
		Handrails N/A
Fishing Facilities	Access Routes	Located adjacent to accessible paths
		Handrails
	Equipment	Arm Rests
		Bait Shelves N/A
		Handrails
		Fish Cleaning Tables
Programming	Are special programs at your facilities accessible?	Learn-to-Swim
		Guided Hikes N/A
		Interpretive Programs
Services and Technical Assistance	Information available in alternative formats i.e. for visually impaired ND	
	Process to request interpretive services (i.e. sign language interpreter) for meetings NO	

LOCATION

PARKING			
Total Spaces		*Required Accessible Spaces*	
Up to 25		1 space	
26-50		2 spaces	
51-75		3 spaces	
76-100		4 spaces	
101-150		5 spaces	
151-200		6 spaces	
201-300		7 spaces	
301-400		8 spaces	
401-500		9 spaces	
Specification for Accessible Spaces	*Yes*	*No*	*Comments/Transition Notes*
Accessible space located closest to accessible entrance		X	
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		X	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle		X	See report
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		X	
Sign with international symbol of accessibility at each space or pair of spaces		X	
Sign minimum 5 ft, maximum 8 ft to top of sign		N/A	
Surface evenly paved or hard-packed (no cracks)		NO	
Surface slope less than 1:20, 5%	X		
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present	N/A		
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow	N/A		
RAMPS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Slope Maximum 1:12			
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			N/A
Handrails at 34" and 19" from ramp surface			
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1¼" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		X	
Disembarking area at accessible entrance		X	
Surface evenly paved or hard-packed		X	
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs	X		
Path is stable, firm and s lip resistant		X	
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	X		
Continuous common surface, no changes in level greater than ½ inch		X	
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane	X		
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"	N/A		
Curb on the pathway must have curb cuts at drives, parking and drop-offs	N/A		N/A
Entrances			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and *not* be the service entrance			
Level space extending 5 ft. from the door, interior and exterior of entrance doors			
Minimum 32" clear width opening (i.e. 36" door with standard hinge)			
At least 18" clear floor area on latch, pull side of door			
Door handle no higher than 48" and operable with a closed fist			
Vestibule is 4 ft plus the width of the door swinging into the space			
Entrance(s) on a level that makes elevators accessible			
Door mats less than ½" thick are securely fastened			
Door mats more than ½" thick are recessed			
Grates in path of travel have openings of ½" maximum			
Signs at non-accessible entrance(s) indicate direction to accessible entrance			
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted			

NOTES

LOCATION N/A

STAIRS and DOORS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stairs			
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1¼" and 1½"			
1½" clearance between wall and handrail			
Doors N/A			
Minimum 32" clear opening			
At least 18" clear floor space on pull side of door			
Closing speed minimum 3 seconds to within 3" of the latch			
Maximum pressure 5 pounds interior doors			
Threshold maximum ½" high, beveled on both sides			
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)			
Hardware minimum 36", maximum 48" above the floor			
Clear, level floor space extends out 5 ft from both sides of the door			
Door adjacent to revolving door is accessible and unlocked			
Doors opening into hazardous area have hardware that is knurled or roughened			

NOTES

LOCATION N/A

RESTROOMS – also see Doors and Vestibules			
Specification	*Yes*	*No*	*Comments/Transition Notes*
5 ft turning space measured 12" from the floor			
At least one Sink:			
Clear floor space of 30" by 48" to allow a forward approach			
Mounted without pedestal or legs, height 34" to top of rim			
Extends at least 22" from the wall			
Open knee space a minimum 19" deep, 30" width, and 27" high			
Cover exposed pipes with insulation			
Faucets operable with closed fist (lever or spring activated handle)			
At least one Stall:			
Accessible to person using wheelchair at 60" wide by 72" deep			
Stall door is 36" wide			
Stall door swings out			
Stall door is self closing			
Stall door has a pull latch			
Lock on stall door is operable with a closed fist, and 32" above the floor			
Coat hook is 54" high			
Toilet			
18" from center to nearest side wall			
42" minimum clear space from center to farthest wall or fixture			
Top of seat 17"-19" above the floor			
Grab Bars			
On back and side wall closest to toilet			
1¼" diameter			
1½" clearance to wall			
Located 30" above and parallel to the floor			
Acid-etched or roughened surface			
42" long			
Fixtures			
Toilet paper dispenser is 24" above floor			
One mirror set a maximum 38" to bottom (if tilted, 42")			
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor			

NOTES

LOCATION N/A

FLOORS, DRINKING FOUNTAINS, TELEPHONES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Floors			
Non-slip surface			
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored			
Corridor width minimum is 3 ft			
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor			
Drinking Fountains N/A			
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones			
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Switches, Controls and Signs N/A			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach			
Electrical outlets centered no lower than 18" above the floor			
Warning signals must be visual as well as audible			
Signs			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers a t least 1¼" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION N/A

SWIMMING POOLS – accessibility can be via ramp, lifting device, or transfer area			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION N/A

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION N/A

PICNICKING			
Specification	*Yes*	*No*	*Comments/Transition Notes*
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access			
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.			
Top of table no higher than 32" above ground			
Surface of the clear ground space under and around the table must be stable, firma nd slip-resistant, and evenly graded with a maximum slope of 2% in all directions			
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter			

Facility Inventory **LOCATION:** Rocky Run

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities	Tables & Benches	Located adjacent to accessible paths
		Access to Open Spaces
		Back and Arm Rests
		Adequate number
	Grills	Height of Cooking Surface
		Located adjacent to accessible paths
	Trash Cans	Located adjacent to accessible paths
	Picnic Shelters	Located adjacent to accessible paths
		Located near accessible water fountains, trash can, restroom, parking, etc.
Trails		Surface material dirt, grass, stone
		Dimensions 3' +
		Rails NO
		Signage (for visually impaired) NO
Swimming Facilities	Pools	Entrance
		Location from accessible parking
		Safety features i.e. warning for visually impaired
	Beaches	Location from accessible path into water
		Handrails
		Location from accessible parking
		Shade provided
Play Areas (tot lots)	All Play Equipment i.e. swings, slides	Same experience provided to all
	Access Routes	Located adjacent to accessible paths
		Enough space between equipment for wheelchair
Game Areas: *ballfield *basketball *tennis	Access Routes	Located adjacent to accessible paths
		Berm cuts onto courts
	Equipment	Height
		Dimensions
		Spectator Seating
Boat Docks	Access Routes	Located adjacent to accessible paths
		Handrails
Fishing Facilities	Access Routes	Located adjacent to accessible paths
		Handrails
	Equipment	Arm Rests
		Bait Shelves
		Handrails
		Fish Cleaning Tables
Programming	Are special programs at your facilities accessible?	Learn-to-Swim
		Guided Hikes
		Interpretive Programs
Services and Technical Assistance	Information available in alternative formats i.e. for visually impaired	NO
	Process to request interpretive services (i.e. sign language interpreter) for meetings	NO

N/A

LOCATION

PARKING			
Total Spaces		*Required Accessible Spaces*	
Up to 25		1 space	
26-50		2 spaces	
51-75		3 spaces	
76-100		4 spaces	
101-150		5 spaces	
151-200		6 spaces	
201-300		7 spaces	
301-400		8 spaces	
401-500		9 spaces	
Specification for Accessible Spaces	*Yes*	*No*	*Comments/Transition Notes*
Accessible space located closest to accessible entrance		X	
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		X	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle		X	
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		X	
Sign with international symbol of accessibility at each space or pair of spaces		X	
Sign minimum 5 ft, maximum 8 ft to top of sign		X	
Surface evenly paved or hard-packed (no cracks)		X	
Surface slope less than 1:20, 5%	X		
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present	N/A		
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow	N/A		
RAMPS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Slope Maximum 1:12			N/A
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			
Handrails at 34" and 19" from ramp surface			
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1¼" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		X	
Disembarking area at accessible entrance		X	
Surface evenly paved or hard-packed		X	
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs		X	
Path is stable, firm and s lip resistant		X	
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).		X	
Continuous common surface, no changes in level greater than ½ inch		X	
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane	X		
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"		N/A	
Curb on the pathway must have curb cuts at drives, parking and drop-offs	N/A		
Entrances			N/A
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and not be the service entrance			N/A
Level space extending 5 ft. from the door, interior and exterior of entrance doors			
Minimum 32" clear width opening (i.e. 36" door with standard hinge)			
At least 18" clear floor area on latch, pull side of door			
Door handle no higher than 48" and operable with a closed fist			
Vestibule is 4 ft plus the width of the door swinging into the space			
Entrance(s) on a level that makes elevators accessible			
Door mats less than ½" thick are securely fastened			
Door mats more than ½" thick are recessed			
Grates in path of travel have openings of ½" maximum			
Signs at non-accessible entrance(s) indicate direction to accessible entrance			
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted			

NOTES

LOCATION N/A

STAIRS and DOORS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stairs			N/A
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1¼" and 1½"			
1½" clearance between wall and handrail			
Doors			N/A
Minimum 32" clear opening			
At least 18" clear floor space on pull side of door			
Closing speed minimum 3 seconds to within 3" of the latch			
Maximum pressure 5 pounds interior doors			
Threshold maximum ½" high, beveled on both sides			
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)			
Hardware minimum 36", maximum 48" above the floor			
Clear, level floor space extends out 5 ft from both sides of the door			
Door adjacent to revolving door is accessible and unlocked			
Doors opening into hazardous area have hardware that is knurled or roughened			

NOTES

LOCATION

N/A

RESTROOMS – also see Doors and Vestibules			
Specification	*Yes*	*No*	*Comments/Transition Notes*
5 ft turning space measured 12" from the floor			
At least one Sink:			
Clear floor space of 30" by 48" to allow a forward approach			
Mounted without pedestal or legs, height 34" to top of rim			
Extends at least 22" from the wall			
Open knee space a minimum 19" deep, 30" width, and 27" high			
Cover exposed pipes with insulation			
Faucets operable with closed fist (lever or spring activated handle)			
At least one Stall:			
Accessible to person using wheelchair at 60" wide by 72" deep			
Stall door is 36" wide			
Stall door swings out			
Stall door is self closing			
Stall door has a pull latch			
Lock on stall door is operable with a closed fist, and 32" above the floor			
Coat hook is 54" high			
Toilet			
18" from center to nearest side wall			
42" minimum clear space from center to farthest wall or fixture			
Top of seat 17"-19" above the floor			
Grab Bars			
On back and side wall closest to toilet			
1¼" diameter			
1½" clearance to wall			
Located 30" above and parallel to the floor			
Acid-etched or roughened surface			
42" long			
Fixtures			
Toilet paper dispenser is 24" above floor			
One mirror set a maximum 38" to bottom (if tilted, 42")			
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor			

N/A

N/A

N/A

NOTES

LOCATION N/A

FLOORS, DRINKING FOUNTAINS, TELEPHONES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Floors			N/A
Non-slip surface			
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored			
Corridor width minimum is 3 ft			
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor			
Drinking Fountains			N/A
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones			
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Switches, Controls and Signs			N/A
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach			
Electrical outlets centered no lower than 18" above the floor			
Warning signals must be visual as well as audible			
Signs			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers a t least 1¼" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION N/A

SWIMMING POOLS – accessibility can be via ramp, lifting device, or transfer area			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION N/A

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION N/A

PICNICKING			
Specification	*Yes*	*No*	*Comments/Transition Notes*
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access			
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.			
Top of table no higher than 32" above ground			
Surface of the clear ground space under and around the table must be stable, firma nd slip-resistant, and evenly graded with a maximum slope of 2% in all directions			
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter			

Facility Inventory **LOCATION:** Webster Billings Cons

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities	Tables & Benches	Located adjacent to accessible paths
		Access to Open Spaces
		Back and Arm Rests
		Adequate number
	Grills	Height of Cooking Surface
		Located adjacent to accessible paths
	Trash Cans	Located adjacent to accessible paths
	Picnic Shelters	Located adjacent to accessible paths
		Located near accessible water fountains, trash can, restroom, parking, etc.
Trails		Surface material dirt, grass
		Dimensions varies
		Rails NO
		Signage (for visually impaired) NO
Swimming Facilities	Pools	Entrance
		Location from accessible parking
		Safety features i.e. warning for visually impaired
	Beaches	Location from accessible path into water
		Handrails
		Location from accessible parking
		Shade provided
Play Areas (tot lots)	All Play Equipment i.e. swings, slides	Same experience provided to all
	Access Routes	Located adjacent to accessible paths
		Enough space between equipment for wheelchair
Game Areas: *ballfield *basketball *tennis	Access Routes	Located adjacent to accessible paths
		Berm cuts onto courts
	Equipment	Height
		Dimensions
		Spectator Seating
Boat Docks	Access Routes	Located adjacent to accessible paths
		Handrails
Fishing Facilities	Access Routes	Located adjacent to accessible paths
		Handrails
	Equipment	Arm Rests
		Bait Shelves
		Handrails
		Fish Cleaning Tables
Programming	Are special programs at your facilities accessible?	Learn-to-Swim
		Guided Hikes
		Interpretive Programs
Services and Technical Assistance	Information available in alternative formats i.e. for visually impaired	NO
	Process to request interpretive services (i.e. sign language interpreter) for meetings	NO

LOCATION

PARKING

Total Spaces	*Required Accessible Spaces*
Up to 25	1 space
26-50	2 spaces
51-75	3 spaces
76-100	4 spaces
101-150	5 spaces
151-200	6 spaces
201-300	7 spaces
301-400	8 spaces
401-500	9 spaces

Specification for Accessible Spaces	*Yes*	*No*	*Comments/Transition Notes*
Accessible space located closest to accessible entrance		X	
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		X	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle		X	
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		X	
Sign with international symbol of accessibility at each space or pair of spaces		X	
Sign minimum 5 ft, maximum 8 ft to top of sign		X	
Surface evenly paved or hard-packed (no cracks)		X	
Surface slope less than 1:20, 5%	X		
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present		X	
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow		X	

RAMPS

Specification	*Yes*	*No*	*Comments/Transition Notes*
Slope Maximum 1:12			N/A
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			
Handrails at 34" and 19" from ramp surface			
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1¼" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		X	
Disembarking area at accessible entrance		X	
Surface evenly paved or hard-packed		X	
No ponding of water		X	
Path of Travel			
Path does not require the use of stairs	X		
Path is stable, firm and s lip resistant		X	
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).		X	
Continuous common surface, no changes in level greater than ½ inch	\	X	
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane		X	
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"	X		
Curb on the pathway must have curb cuts at drives, parking and drop-offs	N/A		N/A
Entrances			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and *not* be the service entrance			
Level space extending 5 ft. from the door, interior and exterior of entrance doors			
Minimum 32" clear width opening (i.e. 36" door with standard hinge)			
At least 18" clear floor area on latch, pull side of door			
Door handle no higher than 48" and operable with a closed fist			
Vestibule is 4 ft plus the width of the door swinging into the space			
Entrance(s) on a level that makes elevators accessible			
Door mats less than ½" thick are securely fastened			
Door mats more than ½" thick are recessed			
Grates in path of travel have openings of ½" maximum			
Signs at non-accessible entrance(s) indicate direction to accessible entrance			
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted			

NOTES

LOCATION N/A

STAIRS and DOORS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stairs			
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1¼" and 1½"			
1½" clearance between wall and handrail			
Doors N/A			
Minimum 32" clear opening			
At least 18" clear floor space on pull side of door			
Closing speed minimum 3 seconds to within 3" of the latch			
Maximum pressure 5 pounds interior doors			
Threshold maximum ½" high, beveled on both sides			
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)			
Hardware minimum 36", maximum 48" above the floor			
Clear, level floor space extends out 5 ft from both sides of the door			
Door adjacent to revolving door is accessible and unlocked			
Doors opening into hazardous area have hardware that is knurled or roughened			

NOTES

LOCATION N/A

RESTROOMS – also see Doors and Vestibules			
Specification	*Yes*	*No*	*Comments/Transition Notes*
5 ft turning space measured 12" from the floor			
At least one Sink:			
Clear floor space of 30" by 48" to allow a forward approach			
Mounted without pedestal or legs, height 34" to top of rim			
Extends at least 22" from the wall			
Open knee space a minimum 19" deep, 30" width, and 27" high			
Cover exposed pipes with insulation			
Faucets operable with closed fist (lever or spring activated handle)			
At least one Stall: N/A			
Accessible to person using wheelchair at 60" wide by 72" deep			
Stall door is 36" wide			
Stall door swings out			
Stall door is self closing			
Stall door has a pull latch			
Lock on stall door is operable with a closed fist, and 32" above the floor			
Coat hook is 54" high			
Toilet N/A			
18" from center to nearest side wall			
42" minimum clear space from center to farthest wall or fixture			
Top of seat 17"-19" above the floor			
Grab Bars			
On back and side wall closest to toilet			
1¼" diameter			
1½" clearance to wall			
Located 30" above and parallel to the floor			
Acid-etched or roughened surface			
42" long			
Fixtures N/A			
Toilet paper dispenser is 24" above floor			
One mirror set a maximum 38" to bottom (if tilted, 42")			
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor			

NOTES

LOCATION N/A

FLOORS, DRINKING FOUNTAINS, TELEPHONES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Floors			
Non-slip surface			
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored			
Corridor width minimum is 3 ft			
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor			
Drinking Fountains N/A			
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones			
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Switches, Controls and Signs N/A			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach			
Electrical outlets centered no lower than 18" above the floor			
Warning signals must be visual as well as audible			
Signs			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers a t least 1¼" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION N/A

SWIMMING POOLS – accessibility can be via ramp, lifting device, or transfer area			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION N/A

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION N/A

PICNICKING			
Specification	*Yes*	*No*	*Comments/Transition Notes*
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access			
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.			
Top of table no higher than 32" above ground			
Surface of the clear ground space under and around the table must be stable, firma nd slip-resistant, and evenly graded with a maximum slope of 2% in all directions			
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter			

Facility Inventory **LOCATION:** Veterans Memorial Town Forest

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities	Tables & Benches	Located adjacent to accessible paths: yes
		Access to Open Spaces: yes
		Back and Arm Rests: NO
		Adequate number: yes
	Grills	Height of Cooking Surface
		Located adjacent to accessible paths: N/A
	Trash Cans	Located adjacent to accessible paths: N/A
	Picnic Shelters	Located adjacent to accessible paths
		Located near accessible water fountains, trash can, restroom, parking, etc.
Trails		Surface material: dirt, gravel, grass
		Dimensions: 3+
		Rails: NO
		Signage (for visually impaired): NO
Swimming Facilities	Pools	Entrance: N/A
		Location from accessible parking
		Safety features i.e. warning for visually impaired
	Beaches	Location from accessible path into water
		Handrails
		Location from accessible parking
		Shade provided
Play Areas (tot lots)	All Play Equipment i.e. swings, slides	Same experience provided to all: N/A
	Access Routes	Located adjacent to accessible paths
		Enough space between equipment for wheelchair
Game Areas: *ballfield *basketball *tennis N/A	Access Routes	Located adjacent to accessible paths
		Berm cuts onto courts: N/A
	Equipment	Height
		Dimensions
		Spectator Seating
Boat Docks	Access Routes	Located adjacent to accessible paths: N/A
		Handrails
Fishing Facilities	Access Routes	Located adjacent to accessible paths: N6
		Handrails: NO
	Equipment	Arm Rests: NO
		Bait Shelves: NO
		Handrails: NO
		Fish Cleaning Tables: NO
Programming	Are special programs at your facilities accessible?	Learn-to-Swim: N/A
		Guided Hikes: N/A
		Interpretive Programs: N/A
Services and Technical Assistance	Information available in alternative formats i.e. for visually impaired: NO	
	Process to request interpretive services (i.e. sign language interpreter) for meetings: N/A	

LOCATION

PARKING			
Total Spaces		*Required Accessible Spaces*	
Up to 25		1 space	
26-50		2 spaces	
51-75		3 spaces	
76-100		4 spaces	
101-150		5 spaces	
151-200		6 spaces	
201-300		7 spaces	
301-400		8 spaces	
401-500		9 spaces	
Specification for Accessible Spaces	*Yes*	*No*	*Comments/Transition Notes*
Accessible space located closest to accessible entrance		X	
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		X	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle		X	
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		X	
Sign with international symbol of accessibility at each space or pair of spaces		X	
Sign minimum 5 ft, maximum 8 ft to top of sign		X	
Surface evenly paved or hard-packed (no cracks)		X	
Surface slope less than 1:20, 5%	X		
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present	N/A		
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow	N/A		
RAMPS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Slope Maximum 1:12			N/A
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			
Handrails at 34" and 19" from ramp surface			
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1¼" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		X	
Disembarking area at accessible entrance		X	
Surface evenly paved or hard-packed		X	
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs	X		
Path is stable, firm and s lip resistant		X	
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	X		
Continuous common surface, no changes in level greater than ½ inch		X	
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane		X	
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"		X	
Curb on the pathway must have curb cuts at drives, parking and drop-offs		N/A	
Entrances			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and *not* be the service entrance			N/A
Level space extending 5 ft. from the door, interior and exterior of entrance doors			
Minimum 32" clear width opening (i.e. 36" door with standard hinge)			
At least 18" clear floor area on latch, pull side of door			
Door handle no higher than 48" and operable with a closed fist			
Vestibule is 4 ft plus the width of the door swinging into the space			
Entrance(s) on a level that makes elevators accessible			
Door mats less than ½" thick are securely fastened			
Door mats more than ½" thick are recessed			
Grates in path of travel have openings of ½" maximum			
Signs at non-accessible entrance(s) indicate direction to accessible entrance			
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted			

NOTES

LOCATION

STAIRS and DOORS			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stairs			N/A
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1¼" and 1½"			
1½" clearance between wall and handrail			
Doors			N/A
Minimum 32" clear opening			
At least 18" clear floor space on pull side of door			
Closing speed minimum 3 seconds to within 3" of the latch			
Maximum pressure 5 pounds interior doors			
Threshold maximum ½" high, beveled on both sides			
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)			
Hardware minimum 36", maximum 48" above the floor			
Clear, level floor space extends out 5 ft from both sides of the door			
Door adjacent to revolving door is accessible and unlocked			
Doors opening into hazardous area have hardware that is knurled or roughened			

NOTES

LOCATION

RESTROOMS – also see Doors and Vestibules			
Specification	*Yes*	*No*	*Comments/Transition Notes*
5 ft turning space measured 12" from the floor			
At least one Sink:			N/A
Clear floor space of 30" by 48" to allow a forward approach			
Mounted without pedestal or legs, height 34" to top of rim			
Extends at least 22" from the wall			
Open knee space a minimum 19" deep, 30" width, and 27" high			
Cover exposed pipes with insulation			
Faucets operable with closed fist (lever or spring activated handle)			
At least one Stall:			N/A
Accessible to person using wheelchair at 60" wide by 72" deep			
Stall door is 36" wide			
Stall door swings out			
Stall door is self closing			
Stall door has a pull latch			
Lock on stall door is operable with a closed fist, and 32" above the floor			
Coat hook is 54" high			
Toilet			N/A
18" from center to nearest side wall			
42" minimum clear space from center to farthest wall or fixture			
Top of seat 17"-19" above the floor			
Grab Bars			
On back and side wall closest to toilet			
1¼" diameter			
1½" clearance to wall			
Located 30" above and parallel to the floor			
Acid-etched or roughened surface			
42" long			
Fixtures			
Toilet paper dispenser is 24" above floor			
One mirror set a maximum 38" to bottom (if tilted, 42")			
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor			

NOTES

LOCATION

FLOORS, DRINKING FOUNTAINS, TELEPHONES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Floors			N/A
Non-slip surface			
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored			
Corridor width minimum is 3 ft			
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor			
Drinking Fountains			N/A
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones			
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES			N
Specification	*Yes*	*No*	*Comments/Transition Notes*
Switches, Controls and Signs			N/A
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach			
Electrical outlets centered no lower than 18" above the floor			
Warning signals must be visual as well as audible			
Signs			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers a t least 1¼" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION N/A

SWIMMING POOLS – accessibility can be via ramp, lifting device, or transfer area			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION N/A

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION N/A

PICNICKING			
Specification	*Yes*	*No*	*Comments/Transition Notes*
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access			
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.			
Top of table no higher than 32" above ground			
Surface of the clear ground space under and around the table must be stable, firma nd slip-resistant, and evenly graded with a maximum slope of 2% in all directions			
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter			

BOTIERI FIELDS

AUDITED ON: MARCH 27, 2020

The site consists of three sports fields and a parking lot on Indian head Street. Designated accessible parking spaces are provided. There are no accessible routes to the fields.

BOTIERI FIELDS				
#	Barrier Statement	Photo	Proposed Mitigation	Cost
18.	**Accessible Parking** The designated accessible parking spaces and their associated access aisles have slopes >2%, @ up to 7.3%. The width of the access aisles is <60" wide, @ 24". The bottom edge of the sign is mounted <60" AFF, @ 45".		Regrade and restripe the existing parking spaces lot to add accessible parking spaces (including at least one van space), as well as their associated signs and access aisles. Unit Cost: $1,500 per space or aisle Est. Quantity: 5 (3 spaces + 2 aisles) Reinstall the signs at 60" min. AFF, measured to the bottom of the sign, including a van accessible sign. Unit Cost: $100 ea. Quantity: 3	$7,800
19.	**Accessible Route** The fields, the bleachers, and the service window are not located on an accessible route. A wheelchair space is not provided at the bleachers. *KMA was not able to audit the other structures on site. It will be audited on a future date.*	 	Provide an accessible route. Additional study required. Unit Cost: $10,000 Quantity: 1 Provide an accessible space on an accessible route next to the bleachers. Unit Cost: $25/SF Quantity: 60 SF (3 fields)	$11,500
20.	**Service Window** The service window and the counter are >36" AFF, @ up to 43".		Lower the service window counter to maximum 36" AFF. Unit Cost: $3,000 Quantity: 1	$3,000
TOTAL FOR BOTIERI FIELDS:				$22,300

Facility Inventory **LOCATION:** Botieri Fields

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities	Tables & Benches	Located adjacent to accessible paths — No
		Access to Open Spaces — No
		Back and Arm Rests — No
		Adequate number — No
	Grills N/A	Height of Cooking Surface
		Located adjacent to accessible paths
	Trash Cans N/A	Located adjacent to accessible paths
	Picnic Shelters N/A	Located adjacent to accessible paths
		Located near accessible water fountains, trash can, restroom, parking, etc.
Trails N/A		Surface material
		Dimensions
		Rails
		Signage (for visually impaired)
Swimming Facilities N/A	Pools	Entrance
		Location from accessible parking
		Safety features i.e. warning for visually impaired
	Beaches	Location from accessible path into water
		Handrails
		Location from accessible parking
		Shade provided
Play Areas (tot lots) N/A	All Play Equipment i.e. swings, slides	Same experience provided to all
	Access Routes	Located adjacent to accessible paths
		Enough space between equipment for wheelchair
Game Areas: *ballfield *basketball *tennis	Access Routes	Located adjacent to accessible paths — No
		Berm cuts onto courts — No
	Equipment	Height — N/A
		Dimensions — N/A
		Spectator Seating — No
Boat Docks N/A	Access Routes	Located adjacent to accessible paths
		Handrails
Fishing Facilities N/A	Access Routes	Located adjacent to accessible paths
		Handrails
	Equipment	Arm Rests
		Bait Shelves
		Handrails
		Fish Cleaning Tables
Programming N/A	Are special programs at your facilities accessible?	Learn-to-Swim
		Guided Hikes
		Interpretive Programs
Services and Technical Assistance N/A	Information available in alternative formats i.e. for visually impaired	NO
	Process to request interpretive services (i.e. sign language interpreter) for meetings	NO

LOCATION

PARKING			
Total Spaces		*Required Accessible Spaces*	
Up to 25		1 space	
26-50		2 spaces	
51-75		3 spaces	
76-100		4 spaces	
101-150		5 spaces	
151-200		6 spaces	
201-300		7 spaces	
301-400		8 spaces	
401-500		9 spaces	
Specification for Accessible Spaces	*Yes*	*No*	*Comments/Transition Notes*
Accessible space located closest to accessible entrance		No	
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		No	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle	Yes		
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		No	
Sign with international symbol of accessibility at each space or pair of spaces		No	
Sign minimum 5 ft, maximum 8 ft to top of sign		No	
Surface evenly paved or hard-packed (no cracks)		No	
Surface slope less than 1:20, 5%		No	
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present		No	
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow		No	
RAMPS	N/A		
Specification	*Yes*	*No*	*Comments/Transition Notes*
Slope Maximum 1:12			
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			
Handrails at 34" and 19" from ramp surface			
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1¼" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		No	There is a dirt and grass walkway into the site.
Disembarking area at accessible entrance			
Surface evenly paved or hard-packed		No	
No ponding of water		No	
Path of Travel			
Path does not require the use of stairs		No	
Path is stable, firm and s lip resistant		No	
3 ft wide minimum	Yes		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).		No	
Continuous common surface, no changes in level greater than ½ inch		No	
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane N/A			
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80" N/A			
Curb on the pathway must have curb cuts at drives, parking and drop-offs		No	
Entrances N/A			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and *not* be the service entrance			
Level space extending 5 ft. from the door, interior and exterior of entrance doors			
Minimum 32" clear width opening (i.e. 36" door with standard hinge)			
At least 18" clear floor area on latch, pull side of door			
Door handle no higher than 48" and operable with a closed fist			
Vestibule is 4 ft plus the width of the door swinging into the space			
Entrance(s) on a level that makes elevators accessible			
Door mats less than ½" thick are securely fastened			
Door mats more than ½" thick are recessed			
Grates in path of travel have openings of ½" maximum			
Signs at non-accessible entrance(s) indicate direction to accessible entrance			
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted			

NOTES

LOCATION

STAIRS and DOORS N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stairs			
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1¼" and 1½"			
1½" clearance between wall and handrail			
Doors			
Minimum 32" clear opening			
At least 18" clear floor space on pull side of door			
Closing speed minimum 3 seconds to within 3" of the latch			
Maximum pressure 5 pounds interior doors			
Threshold maximum ½" high, beveled on both sides			
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)			
Hardware minimum 36", maximum 48" above the floor			
Clear, level floor space extends out 5 ft from both sides of the door			
Door adjacent to revolving door is accessible and unlocked			
Doors opening into hazardous area have hardware that is knurled or roughened			

NOTES

LOCATION

RESTROOMS – also see Doors and Vestibules N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
5 ft turning space measured 12" from the floor			
At least one Sink:			
Clear floor space of 30" by 48" to allow a forward approach			
Mounted without pedestal or legs, height 34" to top of rim			
Extends at least 22" from the wall			
Open knee space a minimum 19" deep, 30" width, and 27" high			
Cover exposed pipes with insulation			
Faucets operable with closed fist (lever or spring activated handle)			
At least one Stall:			
Accessible to person using wheelchair at 60" wide by 72" deep			
Stall door is 36" wide			
Stall door swings out			
Stall door is self closing			
Stall door has a pull latch			
Lock on stall door is operable with a closed fist, and 32" above the floor			
Coat hook is 54" high			
Toilet			
18" from center to nearest side wall			
42" minimum clear space from center to farthest wall or fixture			
Top of seat 17"-19" above the floor			
Grab Bars			
On back and side wall closest to toilet			
1¼" diameter			
1½" clearance to wall			
Located 30" above and parallel to the floor			
Acid-etched or roughened surface			
42" long			
Fixtures			
Toilet paper dispenser is 24" above floor			
One mirror set a maximum 38" to bottom (if tilted, 42")			
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor			

NOTES

LOCATION

FLOORS, DRINKING FOUNTAINS, TELEPHONES N/A			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Floors			
Non-slip surface			
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored			
Corridor width minimum is 3 ft			
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor			
Drinking Fountains			
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones			
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES			
Specification	*Yes*	*No*	*Comments/Transition Notes*
Switches, Controls and Signs			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach			
Electrical outlets centered no lower than 18" above the floor			
Warning signals must be visual as well as audible			
Signs			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers a t least 1¼" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION

SWIMMING POOLS – accessibility can be via ramp, lifting device, or transfer area			N/A
Specification	*Yes*	*No*	*Comments/Transition Notes*
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use			N/A
Specification	*Yes*	*No*	*Comments/Transition Notes*
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION

PICNICKING			
Specification	*Yes*	*No*	*Comments/Transition Notes*
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access		No	
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.		No	
Top of table no higher than 32" above ground			
Surface of the clear ground space under and around the table must be stable, firma nd slip-resistant, and evenly graded with a maximum slope of 2% in all directions		No	
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter		No	

Town of Hanson

OFFICE OF TOWN CLERK
542 LIBERTY STREET
HANSON, MASSACHUSETTS 02341

Town Clerk
Elizabeth Sloan, CMC, CMMC
Assistant Town Clerk
Jean Kelly
781-293-2772 Fax 781-294-0884

Special Town Meeting
October 3, 2016

ARTICLE 23: To see if the Town will vote to accept Massachusetts General Law, Chapter 40, Section 8J or take any other action in relation thereto.

Proposed by the Board of Selectmen

Explanation: This statute establishes a Commission on Disabilities which consists of at least five but not more than nine members as appointed by the Board of Selectmen to address federal and state disability laws.

Finance Committee refers to Town Meeting.

Motion: Bruce Young
Second: Don Howard

VOTED Aye, voice to adopt Massachusetts General Law, Chapter 40, Section 8J.

A true copy of the vote, Attest:

Elizabeth Sloan, CMC, CMMC
Town Clerk

COMMISSION ON DISABILITIES
Established - October 3, 2016
Special Town Meeting
Article 23

ARTICLE 23: To see if the Town will vote to accept Massachusetts General Law, Chapter 40, Section 8J or take any other action in relation thereto.

Proposed by the Board of Selectmen

Explanation: This statute establishes a Commission on Disabilities which consists of at least five but not more than nine members as appointed by the Board of Selectmen to address federal and state disability laws.

Finance Committee refers to Town Meeting.

Motion: Bruce Young
Second: Don Howard

VOTED Aye, voice to adopt Massachusetts General Law, Chapter 40, Section 8J.

****

Mass. General Law Chapter 40

Section 8J: Disability commission; powers and duties; members; terms

Section 8J. A city which accepts the provisions of this section by vote of its city council, subject to the provisions of its charter, or a town which accepts the provisions of this section at an annual or special town meeting, may establish a commission on disability, hereinafter called the commission, to cause the full integration and participation of people with disabilities in such city or town. Such commission shall (1) research local problems of people with disabilities; (2) advise and assist municipal officials and employees in ensuring compliance with state and federal laws and regulations that affect people with disabilities; (3) coordinate or carry out programs designed to meet the problems of people with disabilities in coordination with programs of the Massachusetts office on disability; (4) review and make recommendations about policies, procedures, services, activities and facilities of departments, boards and agencies of said city or town as they affect people with disabilities; (5) provide information, referrals, guidance and technical assistance to individuals, public agencies, businesses and organizations in all matters pertaining to disability; (6) coordinate activities of other local groups organized for similar purposes.

Said commission shall keep records of its meetings and actions and shall file an annual report which shall be printed in the city or town annual report and shall have at least ten meetings annually.

[Third paragraph effective until July 1, 2016. For text effective July 1, 2016, see below.]

Said commission shall consist of not less than five nor more than nine members. In cities, the members shall be appointed by the mayor, subject to the provisions of the city charter except that in cities having a Plan D or Plan E form of government said appointments shall be by the city manager, subject to the provisions of the charter, and in towns they shall be appointed by the selectmen, except towns having a town manager form of government, in which towns appointments shall be made by the town manager, subject to the approval of the selectmen and except towns having a town council form of government, the town manager. A majority of said commission members shall consist of people with disabilities, one member shall be a member of the immediate family of a person with a disability and one member of said commission shall be either an elected or appointed official of that city or town. The terms of the first members of said commission shall be for one, two or three years, and so arranged that the term of one-third of the members expires each year, and their successor shall be appointed for terms of three years each. Any member of said commission may, after a public hearing, if so requested, be removed for cause by the appointing authority. A vacancy occurring otherwise than by expiration of a term shall be filled for the unexpired term in the same manner as an original appointment. The chairperson and other officers shall be chosen by a majority vote of said commission members.

[Third paragraph as amended by 2016, 133, Sec. 46 effective July 1, 2016. See 2016, 133, Sec. 203. For text effective until July 1, 2016, see above.]

Said commission shall consist of not less than 5 and not more than 13 members. In cities, the members shall be appointed by the mayor, subject to the provisions of the city charter except that in cities having a Plan D or Plan E form of government said appointments shall be by the city manager, subject to the provisions of the charter, and in towns they shall be appointed by the selectmen, except towns having a town manager form of government, in which towns appointments shall be made by the town manager, subject to the approval of the selectmen and except towns having a town council form of government, the town manager. A majority of said commission members shall consist of people with disabilities, one member shall be a member of the immediate family of a person with a disability and one member of said commission shall be either an elected or appointed official of that city or town. The terms of the first members of said commission shall be for one, two or three years, and so arranged that the term of one-third of the members expires each year, and their successor shall be appointed for terms of three years each. Any member of said commission may, after a public hearing, if so requested, be removed for cause by the appointing authority. A vacancy occurring otherwise than by expiration of a term shall be filled for the unexpired term in the same manner as an original appointment. The chairperson and other officers shall be chosen by a majority vote of said commission members.

Said commission may receive gifts of property, both real and personal, in the name of the city or town, subject to the approval of the city council in a city or the board of selectmen in a town, such gifts to be managed and controlled by said commission for the purposes of this section.

Town of Hanson

HANSON, MASSACHUSETTS 02341

AMERICANS WITH DISABILITIES ACT COMMITTEE

GRIEVANCE PROCEDURE

The following Grievance Procedure was established by the Americans With Disabilities Act Committee to meet the requirements of the American With Disabilities Act. It may be used by anyone who wishes to file a complaint alleging discrimination on the basis of disability in employment practices and policies or the provision of services, activities, programs and benefits by the Town of Hanson.

The complaint should be in writing and contain information about the alleged discrimination such as name, address, and telephone number. Reasonable accommodations, such as personal interviews or a tape recording of the complaint, will be made available for persons with disabilities who are unable to submit a written complaint.

The complaint should be submitted by the griever and/or his/her designee as soon as possible but no later than sixty (60) days after the alleged violation to the department head in authority, and to the ADA Coordinator stating where the violations are alleged to have occurred.

Within fifteen (15) calendar days after receipt of the complaint, the ADA Coordinator will meet with the complainant to discuss the complaint and possible resolutions. Within fifteen (15)calendar days after the complainant meeting, the ADA Coordinator will respond in writing, and whereas appropriate, in a format accessible to the complainant, such as audiotape. The response will explain the position of the Town of Hanson and offer options for substantive resolutions of the complaint.

If the response by the ADA Coordinator does not satisfactorily resolve the issue, the complainant and/or his/her designee may appeal the decision of the ADA Coordinator within fifteen (15) calendar days after receipt of the response to the Board of Selectmen or their designee.

Within fifteen (15) calendar days after receipt of the appeal, the Board of Selectmen or their designee will meet with the complainant to discuss the compaint and possible resolutions. Within fifteen (15) calendar days after this meeting with the Board of Selectmen or their designee will respond in writing, and whereas appropriate, in a format accessible to the complainant, such as audiotape, with a final resolution to the complaint.

Upon completion of the Grievance Procedure, all records in connection with the grievance shall be delivered to and maintained by the ADA Coordinator.

Town of Hanson

Board of Selectmen

542 Liberty Street
Hanson, Massachusetts 02341
(781) 293-2131 FAX (781) 294-0884
www.hanson-ma.gov

December 18, 2019

Mr. Michael Dumont,
Assistant Director for
Administration and Finance
One Ashburton Place
Boston, MA 02114

Re: ADA Improvement Grant

Dear Mr. Dumont:

The Town of Hanson is very pleased to have been provisionally awarded the ADA Improvement grant in the amount of $38,775.00. Pursuant to Mr. Karl Bryan's e-mail of Monday, December 16, 2019, enclosed please find the signed documents for the above entitled grant. Kindly forward a copy of the fully executed contract once it has been signed by your agency.

If you have any questions, please do not hesitate to contact me. Happy Holidays.

Yours truly,

Meredith Marini,
Town Administrator

Enc.

cc: D. Pettey

CONSERVATION COMMISSION PROPERTIES

Link	Map	Parcel	Acres	Conservation Name	Public Access Y/N or Landlocked (L)	Site Amenities	Transition Plan Corrective Action Y/N
MCL-1	7	45	12.02	PLEASANT ST	N		N
MCL-2	3	21	0.320	WOODBINE AVE EXT	N		N
MCL-3	101	5D	0.830	FOREST TRAIL	Y		N
MCL-4	102	4	4.750	WHITMAN ST	L		N
MCL-5	104	83	10.43	STATE ST - SHORTALL	N		N
MCL-6	105	1	4.200	BILLINGS-WEBSTER WEBB	Y	TRAILS, HIKING	N
MCL-7	15	69	1.000	PLEASANT ST	N		N
MCL-8	15	70	4.270	PLEASANT ST	N		N
MCL-9	20	111	111.38	SMITH NAWAZELSKI	6 SPACES	HIKING	N
MCL-10	31	11	0.690	MONPONSETT ST	N		N
MCL-11	31	11	1.780	BAY STATE CIR	N		N
MCL-12	31	11	4.270	BAY STATE CIR	N		N
MCL-13	31	11	1.130	MONPONSETT ST	N		N
MCL-14	32	30	12.17	SANDY LANE ACRES HALIFAX	Y		N
MCL-15	33	9	5.190	INDIAN CROOKER PL		HIKING	N
MCL-16	43	54	5.440	THUOTT OFF MAIN ST	L		N
MCL-17	44	3	15.82	MAIN ST	Y		N
MCL-18	44	6	9.760	MAIN ST	L		N
MCL-19	44	8	2.340	POOR MEADOW BROOK	N	HIKING	N
MCL-20	50	1	1.630	DUNHAM	L		N
MCL-21	50	2	3.500	DUNHAM	L		N
MCL-22	50	3	3.400	DAVID & LUCY CLEMONS	L		N
MCL-23	51	1	3.750	POOR MEADOW BROOK	L	TRAILS,	N
MCL-24	51	8	11.20	SCOTT PETERSON		TRAILS	N

MCL-25	53	1	0.360	FISHERMANS LANDING	LANDING	WATER SPORTS	N
MCL-26	53	2	103.47	SMITTY'S BOG	LANDING	TRAILS, HIKING	N
MCL-27	57	8	7.400	CAROLYN READY C. A. HOLMES ST	Y	TRAILS	N
MCL-28	58	1	33.54	POOR MEADOW BROOK CONFLUENCE	VIA TOWN FOREST	TRAILS, HIKING	N
MCL-29	63	5	2.520	COMBINED WITH TOWN FOREST		TRAILS, HIKING	N
MCL-30	66	2	34.975	POOR MEADOW BROOK		TRAILS, HIKING	N
MCL-31	66	5	30.589	POOR MEADOW BROOK		TRAILS, HIKING	N
MCL-32	67	7	15.85	POOR MEADOW BROOK	DIRT ROAD	TRAILS, HIKING	N
MCL-33	69	3H	1.760	PINE GROVE AVE FALLON PT RD	Y		N
MCL-34	70	27B	3.120	MAQUAN ST & BIRCH	Y	SCENIC	N
MCL-35	71	11	35.640	TOWN FOREST	Y	TRAILS, HIKING	N
MCL-36	80	1Z	6.400	OFF RICHARD ROAD	N		N
MCL-37	81	1Z	14.150	MERYL - INDIAN HEAD	N		N
MCL-38	81	241A	0.360	NORTH OF THOMAS MILL ABUTS GORWIN	N		N

Link	Map	Parcel	Acres	Conservation	Public Access Y/N or Landlocked (L)	Site Amenities	Transition Plan Corrective Action Y/N
MCL-39	81	33B	21.970	WINTER ST & PRATT PLACE/ MCL-AUGHLIN	Y		N
MCL-40	81	8	1.35	THOMAS MILL	Y	SCENIC VISTA	N
MCL-41	83	3B	54.010	BRIAN GAFFEY C. A. STM 05/03/04 ART 40	Y	TRAILS, HIKING	N

MCL-42	88	55	0.540	BECKETT ST	N		N
MCL-43	88	8	0.630	BROOK ST	N		N
MCL-44	89	1Z	34.480	REAR WINTER ST	Y		N
MCL-45	89	86A	4.100	OFF GORWIN DRIVE (BRENTWOOD) ROBIN	Y		N
MCL-46	90	40A	0.200	0 WINTER ST WENZ PROPERTY	Y		N
MCL-47	92	23	8.180	BRIAN GAFFEY C. A. STM 05/03/04 ART 40	Y	TRAILS, HIKING	N
MCL-48	96	12	7.640	EY PERRY TRUST DONATION STATE ST	Y		N
MCL-49	98	18	12.320	WALLACE HOUSE/DUTTON/LYMAN	L		N
MCL-50	105	2	4.190	BILLINGS-WEBSTER C. A.	Y	TRAILS, HIKING	N
MCL-51	105	5	10.100	BILLINGS-WEBSTER C. A.	Y	TRAILS, HIKING	N
MCL-52	106	6	6.200	WINTER ST -EGAN, JOHN - O'NEIL, EDMUND	N		N
MCL-53	106	12	4.640	WINTER ST	N		N
MCL-54	107	5	3.710	WHOLBROOK CONST	Y		N
MCL-55	108	10	0.380	SPRING ST -BREZNIAK & ROSS	Y		N
MCL-56	109	5	7.230	WHITMAN ST - JOHNSON	Y		N
MCL-57	110	28	12.600	STEARNS, PATRICIA			N
MCL-58	112	14	47.130	BILLINGS-WEBSTER C. A.	Y	TRAILS, HIKING	N
MCL-59	113	1	7.250	HOLBROOK CONST BEHIND HARVEY CRL	N	TRAILS, HIKING	N
MCL-60	113	8	0.460	BILLINGS-WEBSTER C. A. REAR PURITAN	N	TRAILS, HIKING	N
MCL-61	114	9A	0.150	FACTORY POND DAM	N	SCENIC	N
MCL-62	115	2A	4.800	NORCROSS KING	Y	TRAILS	N

MCL-63	119	19	2.520	ROCKY RUN	VIA COUNTY LAND	TRAILS, HIKING	N
MCL-64	119	121	1.090	ADAMS CIRCLE - LOTS 12, 14, 21	Y	HIKING	N
MCL-65	120	4	0.950	SLEIGH DRIVE	N		N
MCL-66	120	112	0.84	ADAMS CIRCLE	Y	HIKING	N
MCL-67	120	114	0.74	ADAMS CIRCLE	Y	HIKING	N

Chapter 41 of the Acts of 2006

AN ACT ESTABLISHING A TOWN ADMINISTRATOR IN THE TOWN OF HANSON.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same as follows:

SECTION 1. There shall be an administrative officer in the town of Hanson known as the town administrator. The town administrator, reporting directly to and supervised by the board of selectmen, shall be the chief administrative and operating officer of the town of Hanson. The town administrator shall not set town policy but shall ensure that there is appropriate coordination in the implementation of town policy, working with the board of selectmen and all elected and appointed boards and commissions.

The town administrator shall supervise, manage and coordinate the day-to-day activities of all town departments and employees under the jurisdiction of the board of selectmen and coordinate all activities of these town departments with the activities of other departments under the jurisdiction of other elected town officials, boards and commissions.

SECTION 2. The town administrator shall be appointed by the board of selectmen solely on the basis of executive and administrative qualifications and experience. The town administrator shall be a person especially suited by a combination of education, training and professional experience to perform the duties of the office. The town administrator shall not have served in elective office in the town's government for at least 12 months before the appointment. The town administrator shall devote fulltime to the office and shall not hold any other public office, elective or appointive, nor engage in any other business or occupation during the term, unless that other service is approved in advance by vote of the board of selectmen. The office of town administrator shall not be subject to the personnel by-law, and the board of selectmen shall fix compensation for the office within the amount appropriated by the town. The board of selectmen may enter into a contract with the town administrator setting forth the terms and conditions of the town administrator's employment.

SECTION 3. The town administrator shall be responsible to the board of selectmen, and shall be accountable to the board, for the efficient and orderly conduct of the departments, offices, and functions placed in the charge of the town administrator by this act and for the proper execution of the following powers and duties:-

(a) Oversee the efficient administration of all offices and departments appointed by the board of selectmen and report on any matters requiring the board's attention;

(b) Attend all regular or special board of selectmen meetings, unless requested or allowed to be excused, and have the right to speak but not vote;

(c) Attend all sessions, annual and special, of town meeting and be prepared to answer all questions concerning warrant articles that are directed to the town administrator and which relate to matters under the general supervision of the town administrator;

(d) Implement town meeting votes regarding articles under the control of the board of selectmen and provide written progress reports quarterly to the board of selectmen as to the

status of implementation of all prior town meeting votes;

(e) Under the direction of the chair of the board of selectmen, prepare and distribute agendas for board of selectmen meetings;

(f) Work in conjunction with the chair of the board of selectmen and with town counsel regarding any litigation or other legal matters in which the town has an interest, act as liaison between town counsel and the board of selectmen and affected town departments or officials, review and approve new requests, other than board of selectmen requests, for use of town counsel on new matters, and provide the board of selectmen with monthly status reports on legal issues and concerns;

(g) Serve as the personnel director of the town, responsible for the administration of all personnel matters, including personnel by-laws and all personnel policies and regulations that the board of selectmen may adopt. This shall include the enforcement of personnel policies, rules and regulations and managing personnel costs, including salaries, benefits, overtime, and use of town-owned vehicles for employees under the jurisdiction of the board of selectmen;

(h) Recommend the appointment or removal, subject to the civil service law where applicable, of the following positions to the following appointing authorities:

(1) Town accountant, board of selectmen

(2) Treasurer/collector, board of selectmen

(3) Building commissioner, board of selectmen

(4) Animal control officer, board of selectmen

(5) Veterans agent, board of selectmen

(6) Burial agent, board of selectmen

(7) Director of elder affairs, board of selectmen

(8) Camp Kiwanee caretaker, recreation commission

(9) Conservation agent, conservation commission

(10) Assessor/appraiser, board of assessors

(11) Inspector of animals, board of health

(12) Librarian, library trustees

(13) Planner, planning board

(14) Health agent, board of health

(15) Water superintendent, water commission

(16) Administrative and clerical employees in the offices and departments under the jurisdiction of the board of selectmen and town administrator;

(i) Recommend appointments or removals based on merit or fitness alone. All recommendations are subject to an affirmative vote of the relevant body as the appointing body;

(j) Evaluate, at least annually, the job performance of all town officers and department heads after seeking input and recommendation from the relevant body and any appointive committee served by those officers and department heads. Evaluations will be reviewed with the town officer, town administrator and a representative selected by the relevant body;

(k) Serve as the town's Americans with Disabilities Act director and affirmative action officer, and administer the town's affirmative action program;

(l) Exercise a general day-to-day supervision over all town agencies consistent with the policy and direction of the relevant body;

(m) Fix the compensation of all town officers and employees within the limits established by existing appropriations and adopted policies and procedures;

(n) Administer all applicable general or special laws, all applicable by-laws, and all applicable regulations and implement all goals and policies established by the board of selectmen;

(o) Be responsible for keeping full and complete records of the administrative activities of the town, and render a full report to the board of selectmen at the end of each fiscal year and otherwise as the board may require;

(p) Keep the board of selectmen informed as to the financial condition and needs of the town and make recommendations to the board of selectmen that the board considers to be necessary or expedient;

(q) Have access to all town books and records necessary for the performance of the duties of the office;

(r) Keep a full and complete inventory of all property of the town, both real and personal;

(s) Serve as the chief procurement officer responsible for purchasing all supplies, materials and equipment for all departments and activities of the town, excluding schools;

(t) Serve as arbiter of grievances and chief union negotiator for all collective bargaining agreements under the jurisdiction of the board of selectmen, but the board of selectmen shall provide guidelines, advice, and direction to the town administrator;

(u) Facilitate crisis intervention in emergency situations working with the key administrators in town including the chair of the board of selectmen, police chief, fire chief, highway surveyor, water superintendent, superintendent of schools and town counsel;

(v) Establish and maintain positive community relations with community organizations and groups and with individual citizens;

(w) Receive and act on questions and complaints filed with the board of selectmen or the town administrator and report back to the board of selectmen regarding resolution of complaints or questions;

(x) Prepare press releases for the board of selectmen, or its designee, for review and approval as directed;

(y) Prepare written reports for the board of selectmen on outstanding matters from time to time as directed; and

(z) Perform any other duties required by the by-laws or votes of the town meeting or the board of selectmen.

SECTION 4. The town administrator shall have the following budgetary powers and responsibilities:-

(a) Prepare, assemble and present annually to the board of selectmen for its review, approval and recommendation to the finance committee, detailed budgetary estimates of the amounts necessary for the administration of all town boards, officers, committees and departments, for the ensuing fiscal year, including both capital and expense items, with the exception of the water and school departments;

(b) Insure that complete and full records of the financial activity of the town are maintained in accordance with state and federal laws and town by-laws, and render monthly reports to the board of selectmen; and

(c) Seek out, prepare, coordinate, and file applications for state and federal grants.

SECTION 5. During a temporary absence, the town administrator shall designate by letter filed with the board of selectmen, a qualified administrative employee or officer to exercise the powers and perform the duties of town administrator. If the town administrator fails to do so, or the person appointed fails to serve to the satisfaction of the board of selectmen, the board of selectmen may appoint a qualified administrative employee or officer to so serve. In the event of suspension of the town administrator or a vacancy in the office, the board of selectmen shall appoint an acting town administrator.

Approved March 15, 2006 .

Return to:
List of Laws passed in 2006 Session
General Court home page, or
Commonwealth of Massachusetts home page.

Town of Hanson

HANSON, MASSACHUSETTS 02341

AMERICANS WITH DISABILITIES ACT COMMITTEE

GRIEVANCE PROCEDURE

The following Grievance Procedure was established by the Americans With Disabilities Act Committee to meet the requirements of the American With Disabilities Act. It may be used by anyone who wishes to file a complaint alleging discrimination on the basis of disability in employment practices and policies or the provision of services, activities, programs and benefits by the Town of Hanson.

The complaint should be in writing and contain information about the alleged discrimination such as name, address, and telephone number. Reasonable accommodations, such as personal interviews or a tape recording of the complaint, will be made available for persons with disabilities who are unable to submit a written complaint.

The complaint should be submitted by the griever and/or his/her designee as soon as possible but no later than sixty (60) days after the alleged violation to the department head in authority, and to the ADA Coordinator stating where the violations are alleged to have occurred.

Within fifteen (15) calendar days after receipt of the complaint, the ADA Coordinator will meet with the complainant to discuss the complaint and possible resolutions. Within fifteen (15)calendar days after the complainant meeting, the ADA Coordinator will respond in writing, and whereas appropriate, in a format accessible to the complainant, such as audiotape. The response will explain the position of the Town of Hanson and offer options for substantive resolutions of the complaint.

If the response by the ADA Coordinator does not satisfactorily resolve the issue, the complainant and/or his/her designee may appeal the decision of the ADA Coordinator within fifteen (15) calendar days after receipt of the response to the Board of Selectmen or their designee.

Within fifteen (15) calendar days after receipt of the appeal, the Board of Selectmen or their designee will meet with the complainant to discuss the compaint and possible resolutions. Within fifteen (15) calendar days after this meeting with the Board of Selectmen or their designee will respond in writing, and whereas appropriate, in a format accessible to the complainant, such as audiotape, with a final resolution to the complaint.

Upon completion of the Grievance Procedure, all records in connection with the grievance shall be delivered to and maintained by the ADA Coordinator.

Appendix D: CONSERVATION SCORECARD

Conservation Scorecard

A Tool for Prioritizing Land Conservation

Developed by Manomet Center for Conservation Sciences

In Southeastern Massachusetts, the need to protect open space and to set aside land for conservation is far greater than the funds available. Because of this, acquisition efforts must focus on protecting the most important parcels of land. From a conservation perspective, this means protecting those lands with the greatest ecological value. But how can we identify these lands?

This Conservation Scorecard prioritizes lands for acquisition by providing a single value for each parcel evaluated. It does so by comparing the attributes and qualities of your parcel to those of an ideal conservation parcel. The evaluation process integrates ecological information developed specifically for this Scorecard with existing ecological and regulatory information, to provide an assessment of the ***relative conservation value*** of any parcel of land in the region. This Conservation Value may be used in conjunction with social considerations (e.g., aesthetics, cultural significance, cost) or by itself to prioritize open space acquisition.

This Scorecard was developed specifically to provide land trusts, open space and recreation committees, community preservation committees, conservation commissions, regional planners, and foundations that support land acquisition with an objective, science-based tool for prioritizing land acquisition. This Scorecard may also assist Smart Growth efforts by identifying those parcels most appropriate for development (i.e., those with low conservation values.)

How to Use This Scorecard. You will need one copy of the Scorecard for each parcel being assessed, and access to the Internet. In addition, we strongly recommend that you visit each parcel and review your municipality's planning documents. Although neither the site visit nor familiarity with planning documents is necessary to complete the Scorecard, your parcel will likely receive a lower Conservation Value than if you visit the site and review the appropriate documents.

For each of the Scorecard's 18 questions you will see two or more possible answers, information on what map layers (if any) provide you the information needed to answer the question, and a point value for each possible answer. Much of the information that you need to answer these questions is provided for you on the Conservation Scorecard thematic map on ConservationMapper (www.conservationmapper.org.) In a few instances you will benefit from site-specific information not available on ConservationMapper. For these questions the Scorecard assumes worst-case conditions until you provide additional information.

Begin by answering question 1 A. Knowing your parcel's size, find the correct answer to the question, identify the number of points associated with that answer, and enter the resulting value in the corresponding "Score" box. For example, if you are buying a 14 acre parcel, your answer to this question is worth 5 points, and you would write the number 5 in the "Score" box.

To answer most other questions you will need to use the "Conservation Scorecard Viewer" feature on ConservationMapper. First, zoom in to the location of the parcel being assessed. Next, display the information needed to answer the question by checking the "Visible" box(es) associated with the question that you wish to answer, then click the "Refresh" button. The information needed to answer your question is now displayed. For example, to obtain the information needed to answer question 3 B, you would check the boxes next to the two layers that are labeled 3 B, then click the "Refresh" button. The map now displays both the 100 and 200 foot wetland and waterway buffers near your parcel. Use this information to answer question 3 B.

Continue in this manner until you have answered all of the questions.

Need Help? Manomet provides no-cost assistance with the use of this Scorecard. Call us at (508) 224-6521

LANDSCAPE

FACTORS

1. The size, shape, and location of a parcel of land affect its conservation value. Neighboring parcels of open space, and their proximity and connection to your parcel, also influence the conservation value of your parcel. Because of this, you must consider the parcel as part of a broader landscape.

The following three questions address your parcel from a landscape context. The first two questions each deal with size, the size of your parcel and the size of the undeveloped patch of land in which your parcel occurs. The third question deals with the concept of "*Landscape Integrity*." Landscape Integrity considers a variety of factors, including the shape of your parcel, distance to the nearest protected conservation lands, and the number and type of connections between your parcel and protected conservation lands.

Measurement	Map Layer	Answer	Points	Score
A. What is the size of the parcel being considered for purchase?	N/A	> 100 acres 10–100 acres 1–<10 acres <1 acre	10 5 2 1	
B. What is the size of the patch of undeveloped land (i.e., land with natural vegetation) in which the parcel occurs?	1B	> 100 acres 10–100 acres 1–<10 acres <1 acre or not indicated on map	3 2 1 0	
C. What is the Landscape Integrity Value for the area in which your parcel occurs?	1C	High Medium Low Not indicated on map	20 10 5 0	
			Subtotal	

VEGETATION

2. The preservation of biodiversity is best accomplished by preserving multiple, intact examples of every natural community type (i.e., recurring groupings of plants.) For this reason, a parcel's conservation value is greatly influenced by its vegetation. Parcels that contain rare natural communities, vegetation classes not protected or under-protected in current conservation lands, lack invasive species, and require no stewardship provide the greatest benefit to conservation. The following questions assess the conservation value of vegetation on your parcel.

Measurement	Map Layer	Answer	Points	Score
A. Are any of the vegetation classes on the parcel under-represented in existing conservation lands?	2A	Yes No	6 0	
B. What is the rank of the rarest (i.e., lowest numbered) natural community present on the parcel? *(From field visit.)*	N/A	S1 S2 S3 S4 or S5*	6 5 4 1	
C. How many classes of <u>natural</u> vegetation occur on the parcel? *(From ConservationMapper or field visit.)*	2C	3 or more 2 1 0 (only human altered vegetation)	3 2 1 -10	
D. Does the parcel require stewardship to be restored to a natural, undisturbed condition? If so, are funds and labor currently available? *(From field visit)*	N/A	No – Parcel is currently in natural, undisturbed condition Yes – $ and labor available Yes – $ and labor not available*	5 0 -5	
E. What is the abundance of invasive plants on the parcel? *(From field visit)*	N/A	None Single Plant Single Patch or Evenly Sparse Multiple Patches Dense Throughout*	3 2 1 0 -5	
			Subtotal	

* Use this answer for your score unless you have visited the parcel.

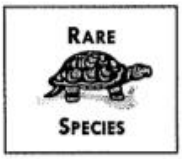
To learn more about Manomet Center for Conservation Sciences, please visit us at www.manomet.org.

3. Water is critical for the maintenance of aquatic communities. Land use practices that interrupt the flow of surface waters or prevent the recharge of groundwater are harmful to aquatic communities. In contrast, land use that promotes groundwater recharge and maintains surface water quality is beneficial to aquatic communities.

The following questions consider the relationship between your parcel and aquatic plant and wildlife habitat. Parcels that contribute to the protection of surface and ground waters are considered to be of greater conservation value than those that do not.

Measurement	Map Layer	Answer	Points	Score
A. Has the area beneath the parcel been identified as an aquifer?	3A	Yes No	6 0	
B. Does the parcel provide a natural vegetated buffer to a stream, river, pond, or lake? If so, what is the extent of the buffer?	3B	Yes – 200 or more feet Yes – 100– <200 feet Yes – Less than 100 feet No	6 3 1 0	
C. Do one or more vernal pools occur in the parcel?	3C	Yes – Certified vernal pool Yes – Potential vernal pool No	2 1 0	
D. Does the parcel provide a contiguous, natural vegetated buffer to a vernal pool? If so, what is the extent of the buffer?	3D	Yes – 100 or more feet Yes – Less than 100 feet No	2 1 0	
		Subtotal		

Note: A low score in the Aquatic Resources category does not automatically mean that your parcel is of low conservation value. Even high-quality upland sites may score low in this category. Parcels that score high in all other categories should be considered for purchase.



4. There are 448 plants and animals officially listed as endangered, threatened, or a species of special concern in Massachusetts. Although currently protected open space may provide habitat for one or more of these rare species, it is not sufficient for their conservation. Acquisition of additional properties that contain rare species habitat is necessary for the survival of these species in Massachusetts.

The following questions address the presence, or potential presence, of rare species on your parcel. Parcels with known occurrences of rare species are considered to be of high conservation value, and should receive priority for protection.

Measurement	Map Layer	Answer	Points	Score
A. Is your parcel located in BioMap habitat, **or** has Natural Heritage verified the presence of a terrestrial, State-listed species since the release of BioMap?	4A	Yes – Core Habitat Yes – Supporting Landscape Yes – Recently verified rare species No	6 3 2 0	
B. Is your parcel located in or near Living Waters habitat, **or** has Natural Heritage verified the presence of an aquatic, State-listed species since the release of Living Waters?	4B	Yes – Core Habitat Yes – Adjacent to, or immediately upstream of, core habitat Yes – Recently verified rare species Yes – Critical Supporting Watershed No	6 3 2 1 0	
C. Does your parcel occur within an area designated as "Priority Habitat of Rare Species" by the Massachusetts Natural Heritage and Endangered Species Program?	4C	Yes No	3 0	
		Subtotal		

LEGAL PROTECTION

5. The conservation value of your parcel may be enhanced by legal protection afforded it, and/or to its surroundings. Parcels that occur in areas already designated as environmentally sensitive or important to conservation may be subject to increased regulation, or increased availability of funds for acquisition and stewardship. The legal protection that you place on your parcel will determine if the parcel remains in conservation, or if it will be converted to another land use at some future time. Parcels that occur in one or more regulatory overlays and those with multiple layers of legal protection are of higher conservation value.

Measurement	Map Layer	Answer	Points	Score
A. Does your parcel occur within the political boundaries of an environmental regulatory overlay (e.g., Area of Critical Environmental Concern, wellhead protection area, etc.?) This includes all federal, state, regional, local, and privately designated areas.	5A (in part)	Yes No	1 point for each "Yes" answer, up to a maximum of 3 points	
B. What type of legal protection will your parcel have after purchase? The following terms are used to answer this question. A97 = Article 97 interest, other than CR* CR = Conservation restriction Fee = Fee simple ownership by town or land trust	N/A	2 or more CRs, or A97 with 1 or more CRs Either A97 or CR Fee only	5 3 1	
			Subtotal	

* Article 97 of the Amendments to the Massachusetts Constitution includes CRs.

POTENTIAL FOR DEVELOPMENT

6. Once purchased, conservation land may be protected from the direct impacts of development but not the indirect impacts. Development of areas adjacent to protected lands decreases the conservation value of those protected lands. Because of this, you need to consider if the land surrounding your parcel is likely to be developed. In general, parcels in areas in which development is unlikely maintain their ecological value longer than parcels in areas where development is encouraged. One indicator of the likelihood, and type, of future development is the designated land use, as identified in your towns planning documents.

Measurement	Map Layer	Answer	Points	Score
A. Does the parcel occur within an area designated as "lands that are most suitable for development" in your municipality's Community Development Plan, or an area zoned for commercial or dense residential development in your municipality's Master Plan?	N/A	No No plans exist Yes*	5 0 -5	
			Subtotal	

* Use this answer for your score unless you have reviewed planning documents.

Parcel Name:_____ **Date Evaluated:**_____

Conservation Value	Scorecard Category	Total Points Possible	Sub-total Value
The conservation value of your parcel is the sum of your six sub-totals. The higher the conservation value, the greater that parcel's contribution to conservation. Remember, this is a relative value that is to be used to compare multiple parcels being considered for acquisition.	1. Landscape Factors	33	
	2. Vegetation	23	
	3. Aquatic Resources	16	
	4. Rare Species	15	
	5. Legal Protection	8	
	6. Potential for Development	5	
	Total	100	

A quick rule of thumb for interpreting your score!
(Based on pilot studies)

0-20 Little to no conservation value
20-40 Poor to moderate conservation value
40-60 Moderate to good conservation value
60-80 Good to excellent conservation value
80-100 Outstanding conservation value (Only pristine, ideal parcels fall into this range.)

Scorecard revised July 06

Appendix E: CHAPTER 61 LANDS

"Taxpayer's Guide to Classification and Taxation of Forest Land in Massachusetts"

CHAPTER 61

INTRODUCTION

The forest land classification program under Massachusetts General Laws Chapter 61 is designed to encourage the preservation and enhancement of the Commonwealth's forests. It offers significant local tax benefits to property owners willing to make a long term commitment to forestry. In exchange for these benefits, the city or town in which the land is located is given the right to recover some of the tax benefits afforded the owner when the land is removed from classification and an option to purchase the property should the land be sold or used for non-forestry uses.

QUALIFICATIONS

A Parcel must consist of at least 10 contiguous acres of land under the same ownership and be managed under a 10 year management plan approved and certified by the State Forester in order to qualify for and retain classification as forest land under Chapter 61.

Buildings and other structures located on the parcel, as well as the land on which they are located and any accessory land, do not qualify for classification and continue to be assessed a regular local property tax.

APPLICATIONS

For a parcel to be classified as forest land under Chapter 61, the property owner must submit a written application to the State Forester **before July 1 or the year before the start of the fiscal year*** for which taxation as classified land is sought.

The application must be made in accordance with all rules and regulations established by the State Forester. The State Forester will certify whether the parcel qualifies as forest land and is being managed under an approved 10 year forest management plan.

The owner must then submit **before September 1** of the same year a written application for classification to the Board of Assessors of the city or town in which the parcel is located. The application must include the State Forester's certification and a copy of the approved forest management plan. It must also be accompanied by payment of a products tax equal to 8% of the stumpage value of all forest products cut during the 2 years prior to classification, as determined by the State Forester.

Classification of the parcel as forest land will be effective as of January 1, and taxation of the parcel under Chapter 61 will begin on the following July, which is the start of the next fiscal year. The parcel will remain classified as forest land provided the owner files with the assessors a new certification by the State Forester and an approved forest management plan every 10 years, and the land otherwise continues to qualify under Chapter 61.

*The fiscal year of cities and towns begins July 1 and ends the following June 30.

LIEN

Once an application for classification is approved, the local assessors records a statement at the Registry of Deeds indicating that the parcel has been classified as forest land under Chapter 61. That statement will constitute a lien on the parcel for all taxes due under Chapter 61. The owner must pay all fees charged by the Registry for recording or releasing the lien.

APPEALS

If the local assessors refuse to classify land certified by the State Forester, the owner may file and appeal with the State Forester. Appeals must be made in writing and must be filed with the State Forester, with a copy to the assessors, by December 1. The State forester must notify the assessors and the owner of his decision by March 1 of the following year. The assessors and the owner may appeal that decision by notifying the State forester by April 15. The appeal will be heard by a three person regional panel convened by the State Forester by May 15. The assessors and owner will be notified of the decision within 10 days after the conclusion of the hearing. The panel's decision may be appealed to the Superior Court or the Appellate Tax Board. This appeal must be filed within 45 days of receiving notice of the panel's decision. All notifications under this appeal procedure whether by the owner, assessors or State Forester, must be made by certified mail.

In addition, the State Forester may remove the land from classification if he believes it is not being managed according to the approved management plan or does not otherwise qualify for classification.

ANNUAL RETURN

The owner must file a return with the local assessors each year, by May 1, that states the amount of forest products cut from the parcel during the prior calendar year. The assessors will notify the owner annually by April 1 of this filing obligation and provide a return to complete. A penalty of $5 is charged for each day the return is overdue.

ANNUAL TAXATION

Under Chapter 61, the owner still pays an annual property tax to the city or town in which the classified land is located. However, the tax is based on the commercial property tax rate for the fiscal year applied to 5% of the fair market value of the land, with a minimum value of $10 per acre, rather than its fair market value as would be the case if the land were not classified. The owner must also pay a products tax annually based on 8% of the stumpage value of the forest products cut from the parcel during the prior calendar year.

The products tax is due on October 1 of each year, or 30 days after the annual tax bill is mailed, whichever is later. The land tax is due in the same number of installments and at the same time as other local property tax payments in the city or town. Interest is charged on any overdue products or land taxes at the same rate applicable to overdue local property taxes.

ABATEMENTS

The owner may contest the annual land or products tax by applying to the local assessors for an abatement. Applications for abatement must be made in writing on an approved form and must be filed with the assessors within 60 days of the date the owner is notified of the tax. If the owner disagrees with the

assessors' decision, or the assessors do not act on the application, the owner may appeal to the Appellate Tax Board within 30 days of the date the owner was notified of the assessors' decision, or 3 months from the date the abatement application was filed, whichever is later. The assessors cannot grant any abatement if the owner does not comply with all application deadlines and procedures.

MUNICIPAL OPTION TO PURCHASE

The city or town has an option to purchase any classified land whenever the owner plans to sell or convert it to a residential, commercial or industrial use. The owner must notify by certified mail the mayor and city council or the selectmen, assessors, planning board and conservation commission of the city or town of any intention to sell or convert the land for those uses. If the owner plans to sell the land, the city or town has the right to match a bona fide offer to purchase it. If the owner plans to convert it, the city of town has the right to purchase it at its fair market value, which is determined by an impartial appraisal. The city or town may also assign its option to a non-profit conservation organization. The owner cannot sell or convert the land until at least 120 days after the mailing of the required notices or until the owner has been notified in writing that the option will not be exercised, whichever is earlier.

This option is not available to the city or town and the notice requirement does not apply if the forest land certification is simply discontinued, or the owner plans to build a residence for his or her use, or the use of his or her parent, grandparent, child, grandchild, brother or sister, the surviving spouse of any of those relatives, or an employee working full time in the forest use of the parcel.

WITHDRAWAL TAX

The owner must pay a withdrawal penalty tax whenever any land is withdrawn or removed from classification, whether or not that land is subject to the purchase option and notice requirement.

The withdrawal tax is imposed for those years since the last certification by the State Forester under Chapter 61 or the immediately preceding 5 years, whichever period is longer. If the land is voluntarily withdrawn at the end of a certification period, the tax is the difference between the amount the owner would have paid in annual property taxes on the land if it had been taxed at its fair market value during the withdrawal penalty period and the amount of both the land and products taxes he or she paid under Chapter 61 during the same time. If the land is removed or withdrawn from classification for another reason or at another time, the tax is the difference between the amount the owner would have paid in annual property taxes on the land it if had been taxed at its fair market value during the withdrawal period and the amount of only the land taxes he or she paid under Chapter 61 during the same time. Interest at the same rate applicable to overdue state taxes is also added to the withdrawal tax.

Chapter 61 information presented here is from the
Massachusetts Department of Revenue
Division of Local Services
Property Tax Bureau's
"Taxpayer's Guide to
Classification and Taxation
of Forest Land in Massachusetts"
Brochure dated October 1997

"Taxpayer's Guide to Classification and Taxation of Agricultural/Horticultural Land in Massachusetts"

CHAPTER 61A

INTRODUCTION

The agricultural and horticultural land classification program under Massachusetts General Laws Chapter 61A is designed to encourage the preservation of the Commonwealth's valuable farmland and promote active agricultural and horticultural land use. It offers significant local tax benefits to property owners willing to make a long term commitment to farming. In exchange for these benefits, the city or town in which the land is located is given the right to recover some of the tax benefits afforded the owner when the land is removed from classification and an option to purchase the property should the land be sold or used for any other purpose than to continue raising farm products.

QUALIFICATIONS

Property must consist of at least 5 contiguous acres of land under the same ownership and be "actively devoted" to agricultural or horticultural land use under Chapter 61A.

Land is used for agricultural or horticultural purposes if it is used primarily and directly to raise or grow the following for sale in the regular course of business:

1. Animals, including, but not limited to dairy cattle, beef cattle, poultry, sheep, swine, horses, ponies, mules, goats, bees and fur-bearing animals, or products derived from the animals.
2. Fruits, vegetables, berries, nuts and other foods for human consumption, feed for animals, tobacco, flowers, sod, trees, nursery or greenhouse products.
3. Forest products under a forest management plan approved by the State Forester.

Land is also used for agricultural and horticultural purposes if it is used primarily and directly in a manner related to the production of the animals or crops and that use is necessary and incidental to the actual production or preparation of the animals or crops for market.

For the land to be considered "actively devoted" to a farm use, it must have been farmed for the two fiscal years prior to the year of classification and must have produced a certain amount of sales. The minimum gross sales requirement is $500 for the first 5 acres of productive land. That amount is increased by $5 for each additional acre of productive land being classified, unless the additional acreage is woodland or wetland. In that case, the amount is increased by only $.50 for each additional acre.

The minimum gross sales requirement for land being used to cultivate or raise a farm product that takes more than one season to produce its first harvest is satisfied if the land is being used in a manner intended to produce those sales within the product development period set by the Farmland Valuation Advisory Commission* for the particular crop or animal.

Buildings and other structures located on the parcel, as well as any land on which a residence is located or regularly used for residential purposes, do not qualify for classification and continue to be assessed a regular local property tax.

*The Farmland Valuation Advisory Commission is a state board made up of a representative from the Department of Food and Agriculture, Department of Revenue, University of Massachusetts College of Food and Natural Resources, Executive Office of Communities and Development and a local Board of Assessors.

APPLICATIONS

For a property to be classified as agricultural or horticultural land under Chapter 61A, the property owner must submit a written application to the Board of Assessors of the city or town in which the land is located by **October 1 of the year before the start of the fiscal year*** for which taxation as classified land is sought. If the city or town is undergoing a revaluation for that fiscal year, the application deadline is extended until 30 days after the date the year's tax bills with the new values are mailed.

The assessors must approve or disapprove the application for classification within 3 months of the filing date. If they do not act within that time, the application is considered approved. The assessors must notify the owner by certified mail whether the application has been approved or disapproved within 10 days of their decision. Classification and taxation of the land as agricultural or horticultural land under Chapter 61A will begin on the following July 1, which is the start of the next fiscal year.

The owner must file a separate application by October 1 (or extended deadline if applicable) each year for classification of the land to continue into the next fiscal year. The land cannot be classified as agricultural or horticultural if the owner does not comply with all application deadlines and procedures.

*The fiscal year of cities and towns begins July 1 and ends the following June 30.

LIEN

Once an initial application for classification is approved, the local assessors records a statement a the Registry of Deeds indicating that the property has been classified as agricultural or horticultural land under Chapter 61A. That statement will constitute a lien on the land for all taxes due under Chapter 61A. The owner must pay all fees charged by the Registry for recording or releasing the lien.

ANNUAL TAXATION

Under Chapter 61A, the owner stills pays an annual property tax to the city or town in which the classified land is located. However, the tax is based on the commercial tax rate for the fiscal year applied to the value of the land for agricultural or horticultural purposes, rather than its fair market value as would be the case if the land were not classified. The value of the land for agricultural or horticultural purposes is determined by the assessors based on the range of values published annually by the Farmland Valuation Advisory commission, as well as their own appraisal knowledge, judgment and experience.

The property tax is due in the same number of installments and at the same time as other local property tax payments in the city or town. Interest is charged on any overdue taxes at the same rate applicable to overdue local property taxes.

MUNICIPAL OPTION TO PURCHASE

The city or town has an option to purchase any classified land whenever the owner plans to sell or convert it to a residential, commercial or industrial use. The owner must notify by certified mail the mayor and city

council or the selectmen, assessors, planning board and conservation commission of the city or town of any intention to sell or convert the land for those uses. If the owner plans to sell the land, the city or town has the right to match a bona fide offer to purchase it. If the owner plans to convert it, the city or town has the right to purchase it at its fair market value, which is determined by an impartial appraisal. The city or town may also assign its option to a non-profit conservation organization. The owner cannot sell or convert the land until at least 120 days after the mailing of the required notices or until the owner has been notified in writing that the option will not be exercised, whichever is earlier.

This option is not available to the city or town and the notice requirement does not apply if the agricultural or horticultural use is simply discontinued, or the owner plans to build a residence for his or her use, or the use of his or her parent, grandparent, child, grandchild, brother or sister, the surviving spouse of any of those relatives, or an employee working full time in the agricultural or horticultural use of the land.

PENALTY TAX

The owner must pay one of two alternative penalty taxes whenever any of the land is no longer "actively devoted" to agricultural or horticultural purposes, whether or not that land is subject to the purchase option and notice requirement.

The owner must pay a roll-back tax for a 5 year period if the use of the land changes to a non-qualifying use. If the change of use occurs when the land is classified, the tax is imposed for the current fiscal year and the 4 prior years. If the land is not classified at that time, the tax is imposed for the 5 prior years. In either case, the roll-back tax is the difference between the amount the owner would have paid in annual property taxes on the land if it had been taxed at its fair market value and the amount of taxes he or she paid under Chapter 61A during the same time.

However, the owner must pay the alternative conveyance tax instead if the land is sold for a non-qualifying use within 10 years of the date the owner acquired it, or the earliest date of its uninterrupted use by that owner for agricultural or horticultural purposes, whichever is earlier, or is converted to a non-qualifying use within 10 years of the date the owner acquired it, and the conveyance tax is greater than the roll-back tax that would be due. The conveyance tax is based on the conveyance tax rate applied to the sales price of the land, or if converted, to the fair market value of the land as determined by the assessors. The conveyance tax rate is 10% if the land is sold or converted within the first year of ownership, 9% if sold or converted within the second year, and so on with the rate declining each year by one percentage point until it is 1% in the 10th year of ownership.

APPEALS AND ABATEMENTS

The owner may contest decisions made by the local assessors to disapprove all or part of an application for classification by applying for a modification of the decision. The owner may also contest the annual property tax or any penalty tax assessed under Chapter 61A by applying for an abatement.

Applications to modify a decision or abate a tax must be made in writing and must be filed with the assessors within 60 days of the date the owner is notified of the decision or tax. If the owner disagrees with the assessors' decision, or the assessors do not act on the application, the owner may appeal to the Appellate Tax Board within 30 days of the date the owner was notified of the assessors' decision, or 3 months from the date the abatement application was filed, whichever is later. If the appeal concerns an annual property tax, it must be paid for the owner to maintain the appeal. The assessors cannot modify any decision or grant any

abatement if the owner does not comply with all application deadlines and procedures.

Chapter 61A information presented here is from the
Massachusetts Department of Revenue
Division of Local Services
Property Tax Bureau's
"Taxpayer's Guide to
Classification and Taxation
of Agricultural/Horticultural Land in Massachusetts"
Brochure dated October 1997

"Taxpayer's Guide to Chapter 61" "Taxpayer's Guide to Chapter 61B"

For more information, contact the Property Tax Bureau at (617) 626-2300, or, visit Massachusetts General Laws web site for the complete text of Chapters 61, 61A, and 61B:

M.G.L. Chapter 61
M.G.L. Chapter 61A
M.G.L. Chapter 61B

"Taxpayer's Guide to Classification and Taxation of Recreational Land in Massachusetts"

CHAPTER 61B

INTRODUCTION

The recreational land classification program under Massachusetts General Laws Chapter 61B is designed to encourage the preservation of the Commonwealth's open space and promote recreational land uses. It offers significant local tax benefits to property owners willing to make a long term commitment to preserving land in an undeveloped condition or for use for outdoor activities. In exchange for these benefits, the city or town in which the land is located is given the right to recover some of the tax benefits afforded the owner when the land is removed from classification and an option to purchase the property should the land be sold or used for any other purpose other than to maintain it as open space or for recreational use.

QUALIFICATIONS

Property must consist of at least 5 contiguous acres of land under the same ownership in order to qualify for and retain classification as recreational land under Chapter 61B. The land must fall into one of the following two categories to qualify:

1. It must be maintained in a substantially natural, wild or open condition or must be maintained in a landscaped condition permitting the preservation of wildlife and natural resources. It does not have to be open to the public, but can be held as private, undeveloped, open space land.
2. It must be used for certain recreational purposes and must be open to the public or members of a non-profit organization.

Recreational purposes include land used primarily for any of the following outdoor activities, so long as they do not materially interfere with the environmental benefits of the land: hiking, camping, nature study and observation, boating, golfing, horseback riding, hunting, fishing, skiing, swimming, picnicking, private non-commercial flying, hang gliding, archery and target shooting.

Buildings and other structures located on the land, as well as any land on which a residence is located or regularly used for residential purposes, do not qualify for classification and continue to be assessed a regular local property tax.

APPLICATIONS

For a property to be classified as recreational land under Chapter 61B, the property owner must submit a written application to the Board of Assessors of the city or town in which the land is located by **October 1 of the year before the start of the fiscal year*** for which taxation as classified land is sought. If the city or town is undergoing a revaluation for that fiscal year, the application deadline is extended until 30 days after the date the year's tax bills with the new values are mailed.

The assessors must approve or disapprove the application for classification within 3 months of the filing date. If they do not act within that time, the application is considered disapproved. The assessors must notify the owner by certified mail whether the application has been approved or disapproved within 10 days of their decision. Classification and taxation of the land as recreational land under Chapter 61B will begin on the following July 1, which is the start of the next fiscal year.

The owner must file a separate application by October 1 (or extended deadline if applicable) each year for classification of the land to continue into the next fiscal year. The land cannot be classified as recreational

land if the owner does not comply with all application deadlines and procedures.

*The fiscal year of cities and towns begins July 1 and ends the following June 30.

LIEN

Once an initial application for classification is approved, the local assessors records a statement at the Registry of Deeds indicating that the property has been classified as recreational land under Chapter 61B. That statement will constitute a lien on the land for all taxes due under Chapter 61B.

ANNUAL TAXATION

Under Chapter 61B, the owner stills pays an annual property tax to the city or town in which the classified land is located. However, the tax is based on the commercial tax rate for the fiscal year applied to the value of the land for recreational purposes, rather than its fair market value as would be the case if the land were not classified. The value of the land for recreational purposes is determined annually by the assessors and cannot exceed 24% of the fair market value of the land.

The property tax is due in the same number of installments and at the same time as other local property tax payments in the city or town. Interest is charged on any overdue taxes at the same rate applicable to overdue local property taxes.

MUNICIPAL OPTION TO PURCHASE

The city or town has an option to purchase any classified land whenever the owner plans to sell or convert it to a residential, commercial or industrial use. The owner must notify by certified mail the mayor and city council or the selectmen, assessors, planning board and conservation commission of the city or town of any intention to sell or convert the land for those uses. If the owner plans to sell the land, the city or town has the right to match a bona fide offer to purchase it. If the owner plans to convert it, the city of town has the right to purchase it at its fair market value, which is determined by an impartial appraisal. The city or town may also assign its option to a non-profit conservation organization. The owner cannot sell or convert the land until at least 120 days after the mailing of the required notices or until the owner has been notified in writing that the option will not be exercised, whichever is earlier.

This option is not available to the city or town and the notice requirement does not apply if the recreational use is simply discontinued, or the owner plans to build a residence for his or her use, or the use of his or her parent, grandparent, child, grandchild, brother or sister, the surviving spouse of any of those relatives, or an employee working full time in the recreational use of the land.

PENALTY TAX

The owner must pay one of two alternative penalty taxes whenever any of the land is no longer maintained as open space or used for recreational purposes, whether or not that land is subject to the purchase option and notice requirement.

The owner must pay a roll-back tax for a 10 year period if the use of the land changes to a non-qualifying use. If the change of use occurs when the land is classified, the tax is imposed for the current fiscal year and the 9 prior years. If the land is not classified at that time, the tax is imposed for the 10 prior years. In either case, the roll-back tax is the difference between the amount the owner would have paid in annual property taxes on the land if it had been taxed at its fair market value and the amount of taxes he or she paid under Chapter 61B during the same time.

However, the owner must pay the alternative conveyance tax instead if the land is sold for or converted to a

non-qualifying use within 10 years of the beginning of the fiscal year it was first classified and the conveyance tax is greater than the roll-back tax that would be due. The conveyance tax is based on the conveyance tax rate applied to the sales price of the land, or if converted, to the fair market value of the land as determined by the assessors. The conveyance tax rate is 10% if the land is sold or converted within the first 5 years of classification and 5% if sold or converted within the 6th through 10th year of classification.

APPEALS AND ABATEMENTS

The owner may contest decisions made by the local assessors to disapprove all or part of an application for classification by applying for a modification of the decision. The owner may also contest the annual property tax or any penalty tax assessed under Chapter 61B by applying for an abatement.

Applications to modify a decision or abate a tax must be made in writing and must be filed with the assessors within 60 days of the date the owner is notified of the decision or tax. If the owner disagrees with the assessors' decision, or the assessors do not act on the application, the owner may appeal to the Appellate Tax Board within 30 days of the date the owner was notified of the assessors' decision, or 3 months from the date the abatement application was filed, whichever is later. If the appeal concerns an annual property tax, it must be paid for the owner to maintain the appeal. The assessors cannot modify any decision or grant any abatement if the owner does not comply with all application deadlines and procedures.

Chapter 61B information presented here is from the
Massachusetts Department of Revenue
Division of Local Services
Property Tax Bureau's
"Taxpayer's Guide to
Classification and Taxation
of Recreational Land in Massachusetts"
Brochure dated October 1997

"Taxpayer's Guide to Chapter 61" "Taxpayer's Guide to Chapter 61A"

For more information, contact the Property Tax Bureau at (617) 626-2300, or, visit Massachusetts General Laws web site for the complete text of Chapters 61, 61A, and 61B:

M.G.L. Chapter 61
M.G.L. Chapter 61A
M.G.L. Chapter 61B

Appendix F: BIOMAP2 CORE HABITAT

BioMap2
Conserving the Biodiversity of Massachusetts in a Changing World

Town Overview

Hanson lies within the Bristol Lowland/Narragansett Lowland Ecoregion, an area of flat, gently rolling plains. Forests are mostly central hardwoods and some elm-ash-red maple and red and white pine. There are numerous wetlands, some cropland/pasture, and many cranberry bogs. Many rivers drain this area.

Hanson at a Glance

- Total Area: 10,069 acres (15.7 square miles)
- Human Population in 2010: 10,209
- Open space protected in perpetuity: 1,562 acres, or 15.5% percent of total area*
- *BioMap2* Core Habitat: 981 acres
- *BioMap2* Core Habitat Protected: 606 acres or 61.7%
- *BioMap2* Critical Natural Landscape: 1,413 acres
- *BioMap2* Critical Natural Landscape Protected: 958 acres or 67.8%.

***BioMap2* Components**

Core Habitat

- 4 Wetland Cores
- 3 Aquatic Cores
- 5 Species of Conservation Concern Cores**
  - 1 fish, 3 insects, 2 mussels,

Critical Natural Landscape

- 1 Landscape Block
- 1 Wetland Core Buffer
- 3 Aquatic Core Buffers

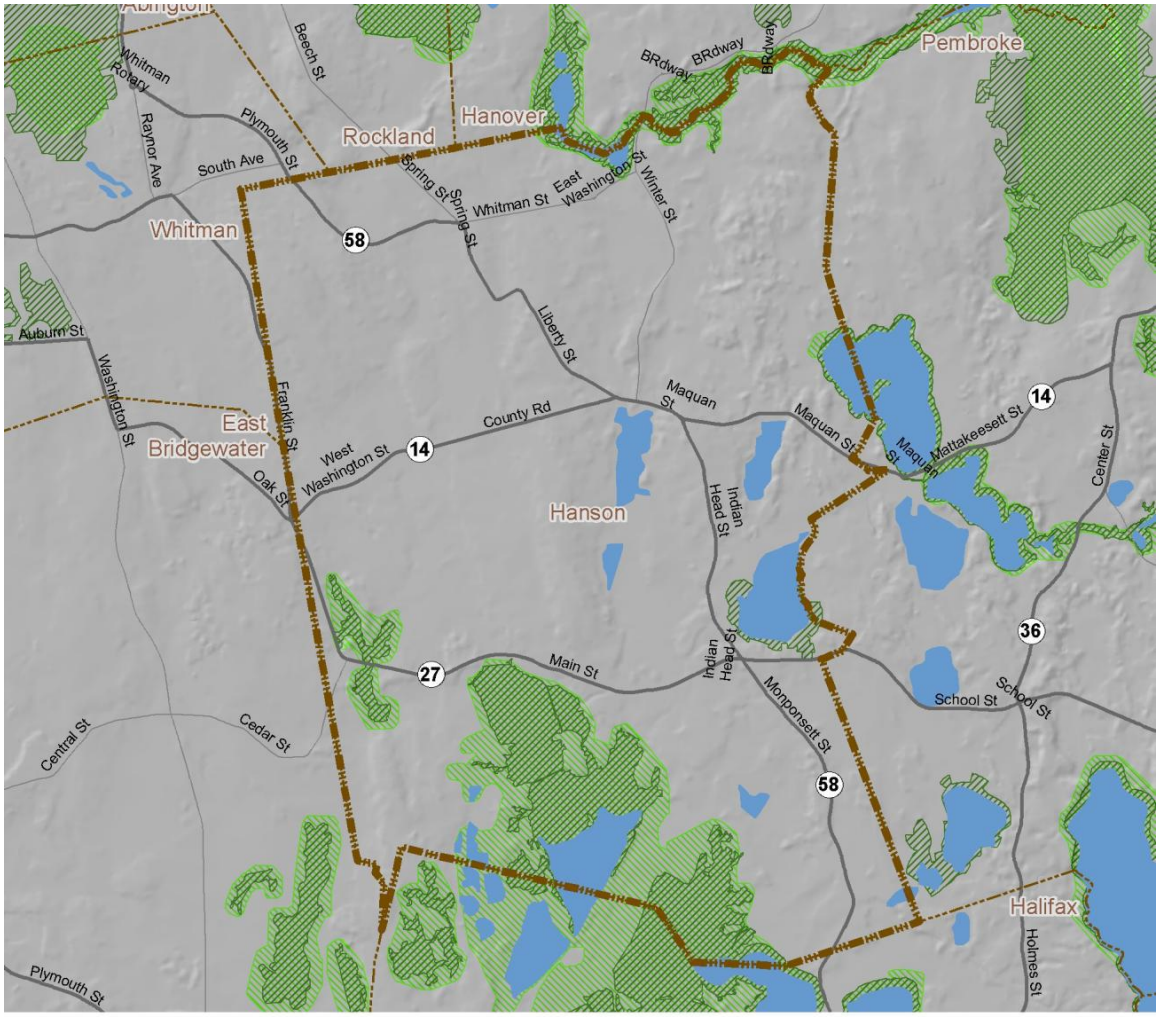
* Calculated using MassGIS data layer "Protected and Recreational Open Space—March, 2012".

** See next pages for complete list of species, natural communities and other biodiversity elements.

Natural Heritage & Endangered Species Program

Massachusetts Division of Fisheries and Wildlife
1 Rabbit Hill Road, Westborough, MA 01581
phone: 508-389-6360 fax: 508-389-7890

For more information on rare species and natural communities, please see our fact sheets online at www.mass.gov/nhesp.



BioMap2 Core Habitat

BioMap2 Critical Natural Landscape

1 Mile

Appendix G: PARKSERVE REPORT

ParkServe®

The Trust for Public Land

September 30, 2019 Page 1 of 2

Project Areas

Hanson, MA - City Level Report

All statistical results are aggregated for the listed project areas and their service areas. Service areas are based on 10-minute (1/2 mile) walk times from project access points defined for each project area and based upon the walkable network.

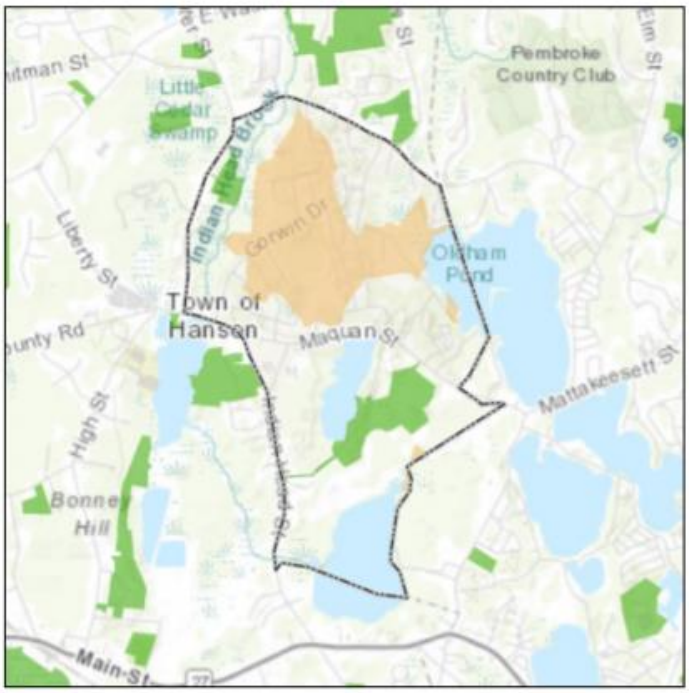
City Statistics	Current
City: Hanson, MA	
Park Acres	79
Total Population	2,172
Served Population	1,577
Percent Served	72.6%

Legend

- City Boundary
- Parks

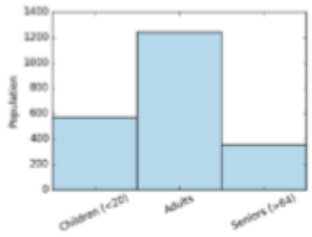
Park Need

- High
- Moderate To High
- Moderate



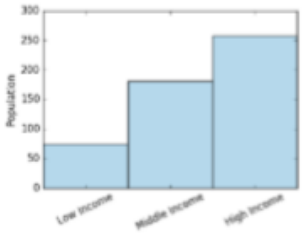
Population	Served
Total Population	1,577

Age	Served
Children (less than age 20)	573
Adults (age 20 to age 64)	1,244
Seniors (age 65 and up)	354



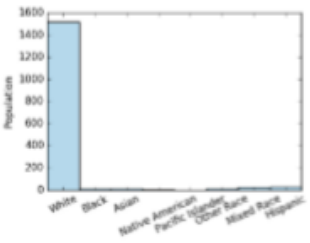
Household Income	Served
Low income	74
Middle income	181
High income	258

(Generated From Regional Median Incomes)



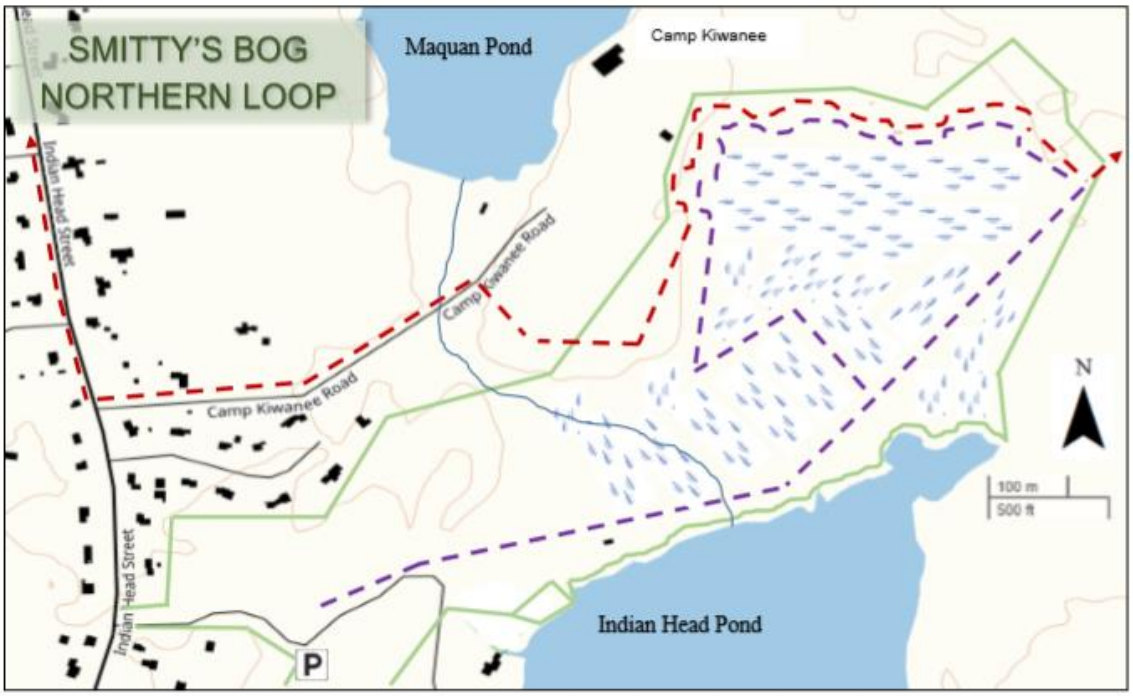
Race/Ethnicity	Served
White	1,517
Black	12
Asian	14
Native American	1
Pacific Islander	0
Other Race	11
Mixed Race	22
Hispanic*	28

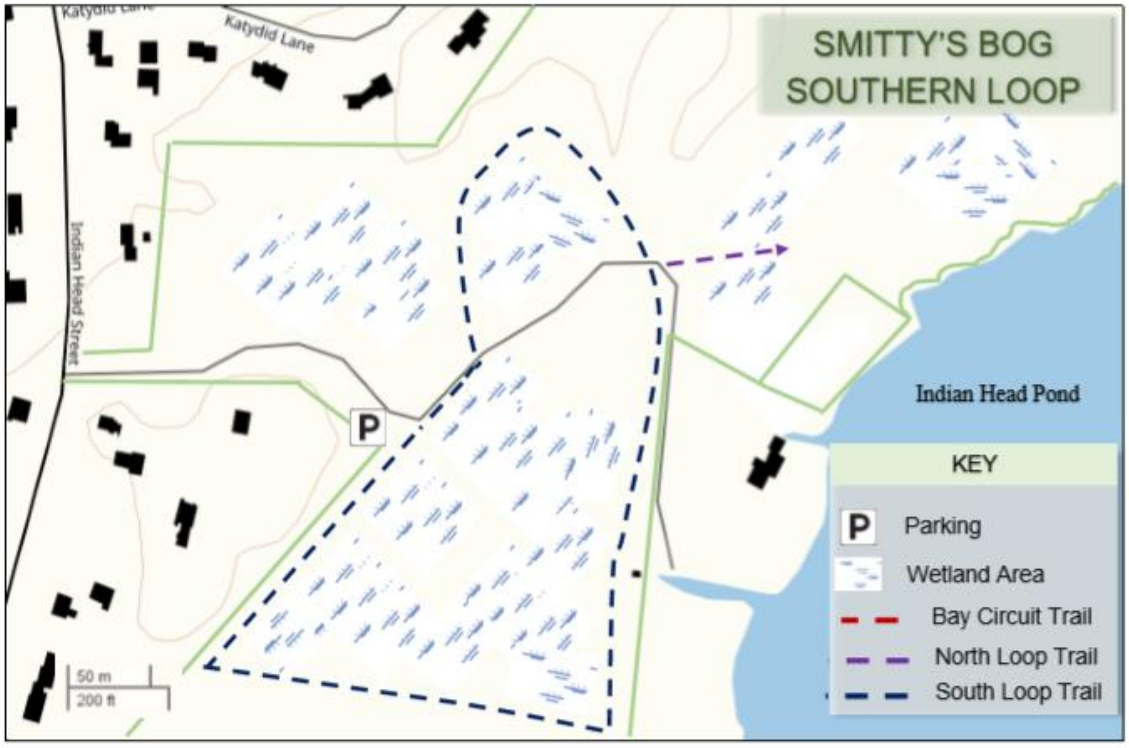
* U.S. Census captures Hispanic Origin separate from race

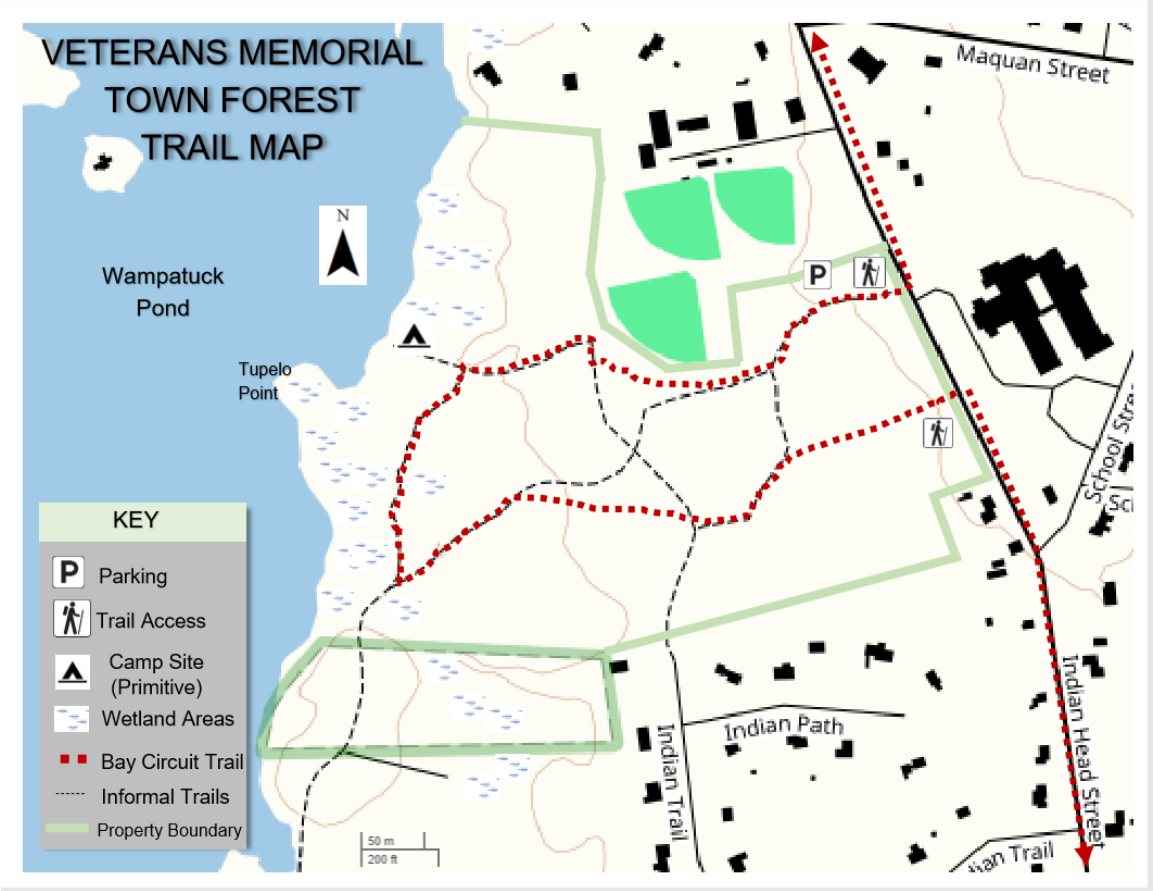


Demographic information is derived from ESRI 2018 Demographic Forecast Block Groups data.

APPENDIX H: TRAIL MAPS


SMITTY'S BOG
NORTHERN LOOP
Maquan Pond
Camp Kiwanee
Indian Head Street
Camp Kiwanee Road
Camp Kiwanee Road
Indian Head Street
N
100 m
500 ft
Indian Head Pond
P


Katydid Lane
Katydid Lane
SMITTY'S BOG
SOUTHERN LOOP
Indian Head Street
Indian Head Pond
P
KEY
P Parking
Wetland Area
Bay Circuit Trail
North Loop Trail
South Loop Trail
50 m
200 ft


VETERANS MEMORIAL
TOWN FOREST
TRAIL MAP
N
Wampatuck
Pond
Tupelo
Point
Maquan Street
P
School Str
Indian Path
Indian Trail
Indian Head Street
KEY
Parking
Trail Access
Camp Site
(Primitive)
Wetland Areas
Bay Circuit Trail
Informal Trails
Property Boundary
50 m
200 ft

Where is the Hanson Veterans Memorial Town Forest?

- 35 acres between Indian Head Street and Wampatuck Pond
- Park at the Botieri Baseball Fields on Indian Head Street

What will you see and hear?

- Bluebirds and Tree Swallows around nest boxes in fields
- Bird songs (in season) - Cardinal, Oven Bird, Bluejay, Chickadee, Warblers, Crow, and more!
- Monarch Butterfly larvae on Milkweed plants
- Wampatuck Pond shoreline views
- White Pine groves – listen to the wind in the trees!
- White Tailed Deer and their tracks

Black Capped Chickadee (*Poecile atricapillus*)

Lady Slipper (*Cypripedioideae*)

History of the site:

- 1800s – Town Poor Farm
- 1910 – Town "Infirmary"
- 1938 – Town Forest established, under Town Forest Committee
- 1960s – Highway and police department facilities built, baseball fields established
- 1999 – Became part of Bay Circuit Trail and Greenway
- 2015 – Boundaries surveyed and land conveyed to Conservation Commission

Watch out for:

- Poison ivy
- Briers and sharp thorns
- Mosquitos and ticks (long sleeves and repellent recommended!)
- Rough/wet walking surfaces (sturdy footwear recommended!)

These trails are part of Hanson's town-wide trail network. They provide healthy, low cost, close to home passive recreation for residents and visitors of all ages. We hope you enjoy them! Please share any questions or concerns with the Conservation Commission office at the Town Hall or by phone at 781- 294 – 4119.

If you are interested in volunteering to help maintain this beautiful property, please contact the Conservation Commission.

Hanson Trails

Connecting People & Places

VETERANS MEMORIAL TOWN FOREST

Trail Map

July 2017

TOWN OF HANSON
CONSERVATION COMMISSION

Where is Smitty's Bog?

- Parking just off Indian Head Street
- 103 acres between Camp Kiwanee and Indian Head Pond

What will you see and hear?

- Views across retired cranberry bogs, being restored to natural wetlands
- Wading birds and water fowl – Great Blue Herons, Egrets, Mallard Ducks, and more!
- Raptors – Osprey, Northern Harrier, and other hawks
- Song Birds – Red Winged Black Bird, Song Sparrow, and more!
- Cranberries, Water Lilies, Atlantic White Cedar, Pickerel Weed
- Butterflies, Dragonflies, Damselflies – e.g. New England Bluet (endangered!)
- Muskrat, White Tailed Deer, Snapping Turtle

Muskrat (*Odatra zibethicus*)

American White Water Lily (*Nymphaea odorata)*

History of the site:

- 1800s – Cedar / Red Maple swamp
- 1900s – Cleared and developed into cranberry bogs
- 1963 – Marcus L. Urann boating access created
- 2011 – Conveyed to Hanson Conservation Commission
- 2012 - Federal Wetlands Reserve Program commences plan to restore wetlands

Watch out for:

- Poison ivy
- Mosquitos and ticks (long sleeves and repellent recommended!)
- Deep ditches, water control structures (do not climb on!)
- Uneven walking surfaces (sturdy footwear recommended!)
- Snapping turtles (do not approach!)

These trails are part of Hanson's town-wide trail network. They provide healthy, low cost, and close to home passive recreation for residents and visitors of all ages. We hope you enjoy them! Please share any questions or concerns with the Conservation Commission office at the Town Hall or by phone at 781- 294 – 4119.

If you are interested in volunteering to help maintain this beautiful property, please contact the Conservation Commission.

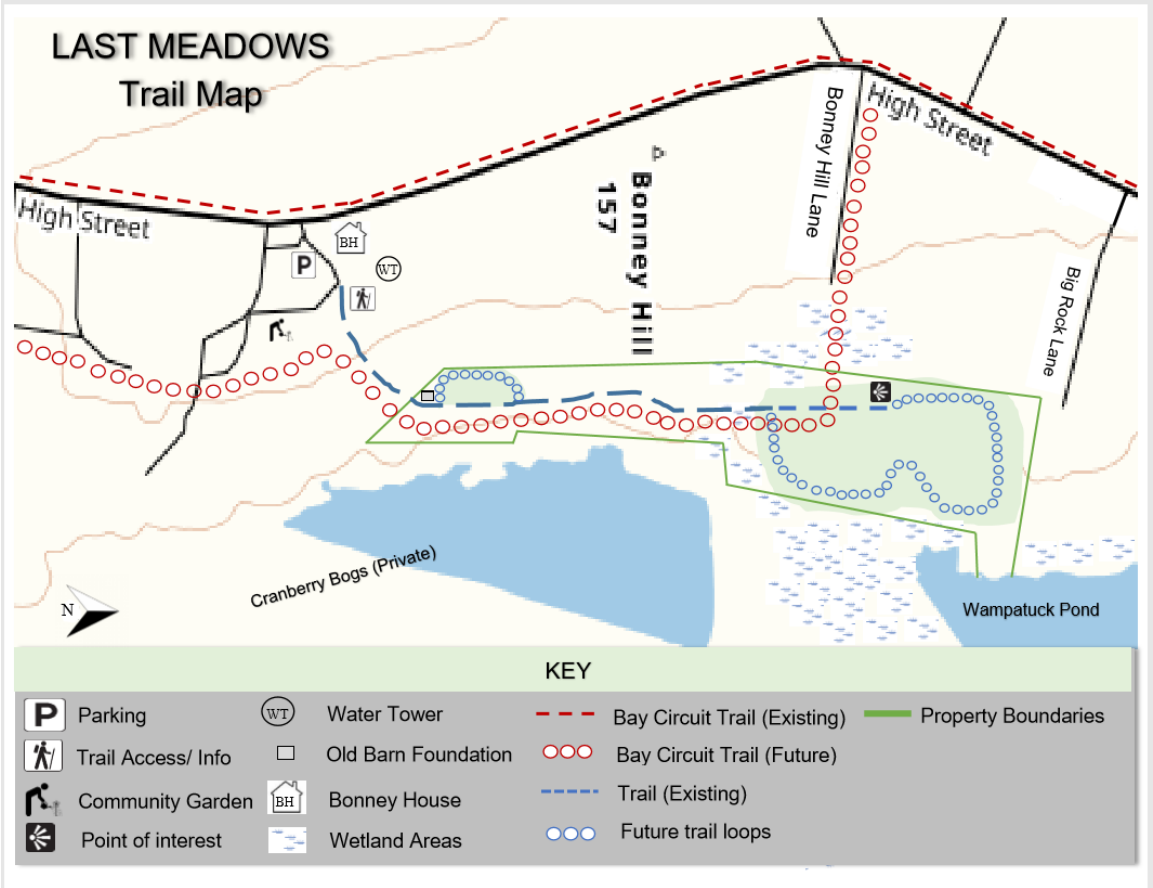
Hanson Trails

Connecting People & Places

ALTON J SMITH RESERVE
"SMITTY'S BOG"
Trail Map
July 2017

Great Blue Heron (*Area herodias)*

TOWN OF HANSON CONSERVATION COMMISSION

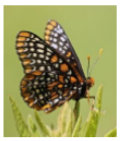

LAST MEADOWS
Trail Map
High Street
High Street
Bonney Hill Lane
Bonney Hill
157
Big Rock Lane
P
BH
WT
Cranberry Bogs (Private)
Wampatuck Pond
N
KEY
Parking
Trail Access/ Info
Community Garden
Point of interest
Water Tower
Old Barn Foundation
Bonney House
Wetland Areas
Bay Circuit Trail (Existing)
Bay Circuit Trail (Future)
Trail (Existing)
Future trail loops
Property Boundaries

Where is The Last Meadows Open Space Area?

- Park between Bonney House and Food Pantry at 228 High Street
- Go downhill past water tower
- Follow old paved road east, then north to forest and meadow areas

What will you see and hear?

- Views across open meadows
- Diverse wildlife habitats - field, shrub, forest, wetlands
- Field loving birds – Tree Swallows, Hawks, and Common Yellowthroat, Goldfinch
- Butterflies – Monarch, Baltimore Checkerspot, and more!
- White Tailed Deer



Baltimore Checkerspot
(*Euphydryas phaeton)*

Common Yellowthroat
(*Geothlypis trichas*)

History of the site:

- 1700's -1800's – Forest cleared for hillside farm fields
- 1919- Plymouth County Hospital established, including farm operations
- 1999 – 2008 – Town purchased PCH property, defined 25 acre parcel for open space

Watch out for:

- Poison ivy
- Briers and sharp thorns
- Mosquitos and ticks (long sleeves and repellent recommended!)
- Rough/wet walking surfaces (sturdy footwear recommended!)
- Visitors use property at own risk.

These trails are part of Hanson's town-wide trail network. They provide healthy, low cost, and close to home recreation for residents and visitors of all ages. We hope you enjoy them! Please share any questions or concerns with the Conservation Commission office at the Town Hall or by phone at 781- 294 – 4119.

If you are interested in volunteering to help maintain this beautiful property, please contact the Conservation Commission.

Hanson Trails
Connecting People & Places

THE LAST MEADOWS OPEN SPACE AREA

Trail Map
July 2017

Monarch Butterfly
(*Danaus plexippus*)