

TOWN OWNED FACILITY INVENTORY AND RELEVANT PROCEDURES

1.0 PARKS AND OPEN SPACE

The Town of Wilmington Department of Public Works is responsible for the care and maintenance of all outdoor town property including parks, playing fields, open space, passive recreational areas, town building grounds, cemetery grounds, and school grounds. A representative inventory of these areas is included below.

Parks and Maintained Open Space Inventory

Type of Structure / Field	Location	Description	Number	Type of Construction
Football Fields	Alumni Field (HS)	Main Football Field	1	Synthetic Turf
	High School	Practice field / softball	1	Natural Turf
	Town Hall (Palmer Park)	Pop Warner Football	1	Natural Turf
	<i>Yentiles</i>	Multi-purpose	1	Synthetic Turf
Soccer Fields	Shawsheen School	soccer	7	Natural Turf
	Alumni Field (HS)	soccer / multi purpose	1	Synthetic Turf
	Woburn Street	soccer	1	Natural Turf
	North Intermediate	soccer	1	Natural Turf
	Whitefield School	soccer-practice	1	Natural Turf
	<i>Yentiles Multi-purpose Field</i>	Multi-purpose	1	Synthetic Turf
Baseball Fields	Boutwell School	little league	1	Natural Turf
	North Intermediate	little league/baseball	2	Natural Turf
	Middle School	baseball	1	Natural Turf
	Town Hall (Palmer Park)	little league	2	Natural Turf
	Rotary Park	little league	1	Natural Turf
	High School	baseball	1	Natural Turf
T-Ball Fields	Boutwell School	Youth T-Ball	2	Natural Turf
Softball Fields	High School	softball	1	Natural Turf
	Town Hall	softball	2	Natural Turf
	Town Park (Main Street)	softball	1	Natural Turf
	West Intermediate	softball	1	Natural Turf
Lacrosse Fields*	Alumni Field (HS)	Multi-purpose	1	Synthetic Turf
	Woburn Street	lacrosse (youth / HS)	2	Natural Turf
	<i>Yentiles Multi-purpose Field</i>	Multi-purpose	1	Synthetic Turf
Tennis Courts	High School	tennis	4	Tennis Top Asphalt
	North Intermediate	tennis	3	Tennis Top Asphalt
	Woburn Street	tennis	2	Tennis Top Asphalt
	Shawsheen School	tennis	2	Tennis Top Asphalt
	Wildwood	tennis	2	Tennis Top Asphalt
	Boutwell School	tennis	3	Tennis Top Asphalt
	High School	basketball	1	Tennis Top Asphalt

Outdoor Basketball Courts	Woburn Street	basketball	1	Tennis Top Asphalt
	Boutwell School	basketball	1	Tennis Top Asphalt
	Shawsheen School	basketball	1	Tennis Top Asphalt
	Town Hall	basketball	1	Asphalt
	Wildwood	basketball	1	Tennis Top Asphalt
	North Intermediate	basketball	1	Tennis Top Asphalt
	<i>Yentiles</i>	basketball	2	Tennis Top Asphalt
Pickleball	Wildwood School	pickleball - no nets	2	Tennis Top Asphalt
	Woburn Street School	pickleball - inlay	4	Tennis Top Asphalt
	Town Hall	pickleball - full courts	3	Tennis Top Asphalt
Street / Roller Hockey	Shawsheen School	street hockey/tennis	1	Tennis Top Asphalt
	<i>Yentiles</i>	street / roller hockey	1	Tennis Top Asphalt
Playgrounds	Rotary Park	Playgrounds	1	Precast Steel / Plastic
	Boutwell School	Playgrounds	1	Precast Steel / Plastic
	Silver Lake	Playgrounds	1	Precast Steel / Plastic
	North Intermediate	Playgrounds	1	Precast Steel / Plastic
	Town Hall (Glen Road)	Playgrounds	1	Precast Steel / Plastic
	Shawsheen School	Playgrounds	1	Precast Steel / Plastic
	Woburn Street	Playgrounds	1	Precast Steel / Plastic
	Murray Hill	Playgrounds	1	Precast Steel / Plastic
	Wildwood School	Playgrounds	1	Precast Steel / Plastic
	<i>Yentiles</i>	Playgrounds	1	Precast Steel / Plastic
Skate Park	Shawsheen School	Skateboard Ramps	1	Steel / Hardened Rubber
School Grounds (excludes parking lots)	High School	Outdoor Grounds	1	Grass / Concrete
	Middle School	Outdoor Grounds	1	Grass / Concrete
	West Intermediate	Outdoor Grounds	1	Grass / Concrete
	North Intermediate	Outdoor Grounds	1	Grass / Concrete
	Shawsheen School	Outdoor Grounds	1	Grass / Concrete
	Woburn Street	Outdoor Grounds	1	Grass / Concrete
	Boutwell School	Outdoor Grounds	1	Grass / Concrete
	Wildwood School	Outdoor Grounds	1	Grass / Concrete
Town Building Grounds (excludes parking lots)	Town Hall	Outdoor Grounds	1	Grass / Concrete
	Senior Center	Outdoor Grounds	1	Grass / Concrete
	Public Buildings	Outdoor Grounds	1	Grass / Concrete
	DPW / Water	Outdoor Grounds	2	Grass / Concrete
	Veterans Services	Outdoor Grounds	1	Grass / Concrete
	Food Pantry	Outdoor Grounds	1	Grass / Concrete
	Public Safety Building	Outdoor Grounds	1	Grass / Concrete
	Town Museum	Outdoor Grounds	1	Grass / Concrete
	Library	Outdoor Grounds	1	Grass / Concrete
OTHER PARKS	Dog Park	Dog Park	1	Sand / Grass
	Rotary Park Open Space	Open Space Park	1	Natural Grass / Concrete
	Fullerton's Park & Fish Pier	Open Space Park	1	Natural Grass
	Silver Lake Beach Area	Open Space Park	1	Sand / Biorentention Gardens
	Silver Lake Grass - Route 38	Open Space Park	1	Natural Grass

Town Common & Swain	Open Space Park	1	Natural Grass / Concrete
Ice Rink - Rotary Park	Ice Rink	1	liner / wall kit
Yentiles - Passive Rec	Open Space Park	1	Grass / Concrete / Asphalt

1.1 PROPER USE, STORAGE, AND DISPOSAL OF PESTICIDES AND FERTILIZERS

The Department of Public Works is committed to using pesticides (defined to include herbicides and insecticides) and fertilizers in an environmentally responsible manner and per manufacturer's labelled instructions.

Guidelines for the proper handling of pesticides are presented in the DPW's "Draft Comprehensive Employee Safety Guidelines", which have been approved by the Assistant Town Manager / Director of Human Resources and Town Counsel and are dated February 12, 2020. This document has been prepared by DPW management in conjunction with the worker's union safety sub-committee and the Town of Wilmington Safety Committee. The guidelines are currently awaiting final approval by the Town Manager and have been delayed due to COVID-19 related obligations.

The guidelines presented in the document contain provisions for the use, storage, and disposal of pesticides and fertilizers:

From "Comprehensive Employee Safety Guidelines", section 11.3:

Any employee working with, transporting, mixing, or applying insecticide, pesticide, or herbicide shall be licensed by the Massachusetts Department of Agricultural Resources. All safety requirements shall be followed. All use, storage, and disposal shall conform to the following: The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), MGL Ch132B, and the Department of Agricultural Resources pesticide regulations 333 CMR. Secondary containment shall be used when storing pesticides long term, and materials shall be stored indoors in locked or secured areas. Spill kits shall be made readily available to all users.

From "Comprehensive Employee Safety Guidelines", section 11.4:

Fertilizer use shall comply with Massachusetts Plant Nutrient Regulations 330CMR31. All fertilizers shall be stored indoors. Only the amount of fertilizer planned for immediate distribution (within 3 weeks' timeframe) shall be ordered and temporarily stored, and long term storage of bulk quantity fertilizers is prohibited. Fertilizer shall be transported in sealed bags and shall only be opened at the distribution site.

Furthermore, the Department has an approved 5-year Vegetation Management Plan on file with the Massachusetts Department of Agricultural Resources for calendar years 2020-2024 to comply with Rights of Way vegetation management 333CMR11.00. The plan also contains provisions for the use and storage of herbicides, as well as a remedial plan to address spills

and related accidents. The approved VMP has strict guidelines on the use of herbicides within sensitive areas as defined in 333 CMR 11. This plan can be viewed on the town's website at <https://www.wilmingtonma.gov/highway-division/vegetation-management> or on the Massachusetts Department of Agriculture's (MDAR) website at <https://www.mass.gov/service-details/rights-of-way-vegetation-management-vmps-yops-and-notices>.

1.2 FERTILIZER QUANTITY CONTROL AND TURFCARE BMPS

Per state regulation, all fertilizers shall be used in accordance with the allowed and applicable rates set forth by the manufacturer's label.

The Department of Public Works shall adhere to guidelines set forth in 330CMR31, "Plant Nutrient Application Requirements for Agricultural Land and Non-Agricultural Turf and Lawns". These state regulations provide the guidance for limits of Nitrogen and phosphorus and also require record keeping for professional applications of fertilizers.

Specifically, the Department of Public Works shall comply with:

330CMR31.05: "Limitations on the Application of Phosphorus Containing Fertilizer; Requirements for the Application of Plant Nutrients and Phosphorus Containing Fertilizer to Non-agricultural Turf and Lawns"

This regulation sets limits on when phosphorus containing fertilizers can be used, specifically requiring soils tests to justify a deficiency or when a new lawn is being established or renovated. It also prohibits the use of nutrients on frozen or snow covered ground, saturated soils, within a zone 1 of a public water supply well, within 20 feet of surface waters, and on impervious areas without provisions to immediately clean up any material left on such surfaces.

330CMR31.06: "Soil Testing for the Application of Plant Nutrients, Including Phosphorus Containing Fertilizer, to Non-agricultural Turf and Lawns"

This regulation sets forth the requirements of soil tests for nutrient plans, including their expiration term of 3 years and parameters must conform to UMASS Guidelines.

330CMR31.07: "Record Keeping Requirements for Applications of Plant Nutrients or Phosphorus Containing Fertilizer to Non-agricultural Turf and Lawns"

This regulation sets forth the requirements of record keeping for nutrient applications. Below is an example of current record keeping performed by the Wilmington DPW in conjunction with the Department's Turf Management Plan

2017 Middle School

3.12 Acres 136,000.00 sq.ft. Spray Tank Capacity: 0 gal Spray Coverage: 0.00 sq.ft. Dilution Rate: 0.00 Gal/M Number of Sprays: 0.00

4/11/17	Cultural Practice Aerification	Core aerate, overseed bare areas with 50-50						
Product	Package	lb/M	Total Case/Bag	Per Load	n/M	p/M	k/M	Purpose
Touchdown 50/50 Mix	1 Lb	1.10	150.00	Lb				Aggressive, Wear Tolerant, and Fast Germinating Bluegrasses combined with Fast Germinating, disease resistant, dark colored ryegrass
4/18/17	Granular Application	Apply to dry mown turf and water in or apply before moderate rainfall						
Product	Package	lb/M	Total Case/Bag	Per Load	n/M	p/M	k/M	Purpose
Country Club 29-0-10 SGN 195	50 Lb	3.68	10.00	Bag	1.07	0.00	0.37	Slow release Nitrogen and Potassium Fertility
6/6/17	Granular Application	Apply Sili Cal before 16-1-5 and water in 1/2" or apply before moderate rainfall						
Product	Package	lb/M	Total Case/Bag	Per Load	n/M	p/M	k/M	Purpose
Sili-Cal SS SG	50 Lb	20.22	55.00	Bag				Calcium Silicate Buffers sodium, increases wear tolerance, ball roll, playability
Replenish 16-0-5 SG	50 Lb	6.25	17.00	Bag	1.00	0.00	0.31	Carbon based bridge product for soil biology building with Ammonium Sulfate and Methlyn Urea.

Nitrogen use on athletic fields and grassed areas maintained by the Town of Wilmington shall not exceed the limits set forth in 330CMR31 by *UMASS Guidelines* or 2-4 lbs per 1,000 sf annually (see following table).

Table 6. Typical nitrogen fertilizer rate ranges for common cool-season lawn grasses.				
	Kentucky bluegrass	Perennial ryegrass	Tall fescue	Fine fescues
Fertility level	med - high	med - high	med - high	low - med
Lbs. N per 1000 sq ft per season	2 - 4	2 - 4	2 - 4	0 - 2

Source: *UMASS Extension BEST MANAGEMENT PRACTICES FOR SOIL & NUTRIENT MANAGEMENT IN TURF SYSTEMS*

Cultural best practices which will improve overall turf health and limit the amount of fertilizers required for proper and safe athletic turf playing surfaces shall be exercised appropriately. Best practices shall include:

- Keeping mowing blades sharp to lessen damage to lawn and prevent the false appearance of browning due to lack of nutrients.
- Focusing on potassium and soil pH to maximize drought tolerance and resilience to disease
- Keeping mowing heights relatively high to encourage dense turf growth and the choking out of unwanted weed species, depending on the turf height requirements of the particular sport or activity. This in turn leads to longer root systems and greater potential for plants to absorb nutrients.
- Mulching grass clippings to allow for up to a 25% reduction of the required amount of nitrogen required for the particular field or maintained grassed area.

- Increasing mowing frequency which will allow: smaller sized clippings to promote quicker decomposition, an improved organic layer which slows nitrogen leaching and helps degrade any residual pesticides, less clumping which can lead to point source discharges of nitrogen rich runoff, and improved overall turf health which in turn requires less fertilizers.
- The consideration of drought resistance plants and alternative land coverings in lieu of turf in areas where regular turf is not necessary (rain garden areas, non-athletic surfaces, etc.). This will reduce the amount of fertilizers required for maintenance and also reduce required mowings, minimizing fuel usage and carbon footprint.

1.3 PESTICIDE QUANTITY CONTROL AND BMPS

Per state regulation, all pesticides shall be used in accordance with the allowed and applicable rates set forth by the manufacturer's label. Pesticides shall only be used and transported by employees licensed by the Department of Agricultural Resources. The use of Restricted Use Pesticides (RUPs) shall be restricted to those employees with the proper certified category license.

Per state regulation, all pesticide use shall be documented appropriately and the Department shall comply with audits conducted by the Massachusetts Department of Agricultural Resources when requested. All users shall maintain their license at the job site and shall comply with all applicable state regulations governing the use, record keeping, protective equipment, storage, disposal and transport of the product being applied.

Pesticide use records shall be maintained by both the employer and the employee for a period of three years, unless otherwise recommended by the Massachusetts Department of Agricultural Resources.

Pesticides shall only be used when the tolerance level specific to each location has been reached. The Department acknowledges that most turf and natural areas contain pests, and some can be tolerated without use of pesticides as long as the goals of the field or open space can still be attainable without considerable damage or detriment.

Cultural best practices which will improve overall turf health and limit the amount of pesticides and herbicides required for proper and safe athletic turf playing surfaces shall be exercised appropriately. Best practices shall include:

- Keeping mowing blades sharp to lessen damage to lawn and prevent the false appearance of browning due to insect damage.
- Focusing on potassium and soil pH to maximize drought tolerance and resilience to pest susceptibility and conditions favorable to weed growth.

- Keeping mowing heights relatively high to encourage dense turf growth and the choking out of unwanted weed species, such as crabgrass.
- Encouraging cultural practices such as soil aeration to improve soil biology and reduce compaction-loving species such as crabgrass and broadleaf weed species.

1.4 WASTE PROTOCOLS AND PROCEDURES

The Parks and Grounds Division of the Department of Public Works maintains over 60 acres of town owned parks, recreational areas, and building grounds, including trash management within these areas. Most of the town's heavily used park areas have trash barrels which are emptied at least 3 times per week as part of the daily duties of the Parks & Grounds division.

There are three heavily utilized parks in town which are officially designated as "Carry In – Carry Out":

- Yentile Farm Recreational Facility
- Silver Lake Town Beach
- Wilmington Dog Park.

All three parks contain specific signage of the carry in – carry out policy. Since the program was first piloted at Silver Lake Town Beach, the town experienced a major reduction in wind-blown trash and litter, from overflowing or tipped barrels. Litter patrols are still performed at these parks but workers are reporting an overall reduction of time required to clean the parks and noticeable improvements to general cleanliness.

The Wilmington Dog Park is the only town owned park that does not prohibit dog walking. As the park was built in 2015, the park has been closely monitored since this time for the need to provide pet waste containers. Since then, it has been the Department's experience that even though other parks prohibit dogs, waste containers become full of pet waste and sometimes tip over or become full during unmanned times, encouraging users to leave pet waste piled next to the container. These concentrated amounts of waste lead to pollutant point sources in areas intended to be cleaner with the use of barrels. The carry-in / carry-out policy established at the Town's Dog Park puts the maintenance of the park with the users with the consequence of closing the park if the policy is not adhered to. As this policy has become widely accepted after the initial break-in phase has lapsed, the Town of Wilmington has chosen to continue this policy but provide ongoing monitoring during regular litter patrols, including input from the town's Animal Control Officer who provides daily visits to the park.

1.5 PROCEDURES TO DETER UNWANTED ANIMALS

Stormwater quality issues due to unwanted animals congregating in parks and open space areas are usually limited to waterfowl and geese within the Town of Wilmington. The Town's

Animal Control Officer has established a protocol of responding to such reports and deploying one of two means of non-lethal control:

- Deployment of a predator decoy (coyote or other) to a playing field or open space area
- Deployment of a radio controlled vehicle which helps scare flocks of waterfowl away from a certain area.

Both methods have proven successful to keep waterfowl away and prevent their droppings from becoming a prevalent problem in park areas and near waterbodies. Since the Animal Control Officer is currently a full time and year round funded position, control methods are consistent and have allowed the town to avoid chemical repellants, traps, or otherwise potentially harmful alternative solutions.

1.6 MONITORING OF POOR VEGETATIVE COVER AND NATURAL BUFFERS

Natural buffers provide simple and organic means of intercepting runoff pollutants and litter from entering waterbodies and natural resource areas. The Department of Public Works provides ongoing monitoring during regular litter pickups, trash barrel pickups, and grass mowing activities to ensure these natural buffers are cleaned and free of litter. The Department regularly employs 14 summer help staff between the months of June and September to help with this effort. Part of this group is designated as the "Stream Team" and has the responsibility of restoring waterways and cleaning vegetative buffer strips along town owned water bodies such as Silver Lake and Rotary Pond, in addition to ensuring critical drainage ways are kept open within the town's MS4.

Reports of areas which are in need of more intense maintenance are given to divisional supervisors for consideration and inclusion in mechanical control programs. This may include mowing or trimming using mechanical brush cutters or boom mounted mowers. Areas near vegetative strips that do not need to be regularly mowed are allowed to grow longer to help slow area runoff and provide mechanical filtering of unwanted litter and first-flush runoff particulates prior to entering area waterbodies.