2018 WAYLAND TOWN-WIDE RECREATION FACILITIES STRATEGIC PLAN





WAYLAND RECREATION DEPARTMENT AND RECREATION COMMISSION

January 2018



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TABLE OF CONTENTS

1.	Executive Summary	4
2.	Introduction	5
3.	Assessment of Critical NeedsA. Overuse of Natural Turf FieldsB. Water Sourcing Strategies for Irrigation Systems	6 6 7
4.	Identification of Sites for Recreation Facility Improvements A. Recommended Recreation Facility Capital Improvements	9 9
5.	 Recreation Facility Improvement Initiatives In Process A. Recommended Recreation Facility Capital Improvements Alpine Field Baseball, Multi-use Field and Playground Cow Common Trail Improvements Claypit Baseball and Multi-use Field Riverview Baseball and Playground Middle School Softball and Multi-use Field Greenways Multi-use Field Children's Way Playground 	9 10 11 19 18 23 27 31 35
6.	10-Year Capital Plan and Project Timelines	38

7. Appendix



Working on behalf of the Town of Wayland Recreation Department and Recreation Commission, Weston & Sampson is providing this **2018 Wayland Town-wide Recreation Facilities Strategic Plan**. This **Strategic Plan** is the culmination and advancement of previous efforts, including the 2016 Open Space and Recreation Plan Update; its focus is on recommendations for critical passive and active recreation facility improvements, putting forth a comprehensive approach and timeline for implementation.

The Strategic Plan contains four main areas of consideration:

- A. Assessment of Critical Needs
- B. Identification of Sites for Recreation Improvements
- C. Recreation Facility Improvement Initiatives in Process
- D. Recommended Recreation Facility Capital Improvements

To thoroughly assess critical needs, five specific tasks were undertaken:

- 1. The Town's investment in numerous studies and reports generated over the past decade was leveraged with data updated as needed;
- 2. Field usage information was synthesized to help both address and prioritize needs;
- 3. The outcomes from previous robust public engagement processes were considered;
- 4. On-site facility assessments were made; and
- 5. Gaps in service were identified.

Communications with the Town of Wayland Recreation Department and Recreation Commission throughout this process were the keystone of this 2018 Wayland Town-wide Recreation Facilities Strategic **Plan** undertaking. We wish to express our appreciation.

We invite you to review the larger document that follows, and to actively participate in the endeavor to provide improved recreation opportunities for all residents of the Town of Wayland.



2. INTRODUCTION

The Town of Wayland, through its Recreation Department and Recreation Commission, builds upon the 2016 Open Space and Recreation Plan Update process with the following **2018 Wayland Town-wide Recreation Facilities Strategic Plan**. This Strategic Plan establishes a specific approach and timeline for implementing critical recreation facility improvements, both passive and active. The properties being considered include parks, schoolyards, conservation lands, other town properties, and certain other lands that might be suitable for recreation purposes.

While the Recreation Department and Recreation Commission have led the strategic planning effort, the strategies set forth below will directly benefit the School Department, Conservation Commission, Department of Public Works, other departments, committees, commissions, and Wayland residents.

The following two charts identify the various properties being considered.

Active Recreation Properties:

TOWN PARK PROPERTIES	TOWN SCHOOL PROPERTIES
Alpine Field	Wayland High School
Riverview Field	Wayland Middle School
Cochituate Field	Claypit Hill School
Hannah Williams Playground	Loker School
Town Beach	Happy Hollow School
Oxbow Meadows	
Loker Conservation + Recreation Area	

Passive Recreation Properties:

TOWN CONSERVATION LANDS
Trout Brook
Upper Mill Brook
Lower Mill Brook
Rowan Hill
Pine Brook
Reeves Hill
Greenways
Turkey Hill
Wayland Hills
Cow Common
Dudley Brook
Lower Snake Brook
Pod Meadow
Heard Farm
Sedge Meadow
Castle Hill



3. ASSESSMENT OF CRITICAL NEEDS

This Strategic Plan document leverages the significant amount of information compiled through numerous master plans and feasibility studies Wayland has developed in the recent past. This information includes the following:

2017 Wayland High School Master Plan 2017 Wayland Real Asset Committee Long-Term 2016 Wayland Open Space and Recreation Plan Update 2014 Wayland Town-Wide and School Athletic Fields Master Plan – Executive Summary 2010 Wayland School Athletic Fields Master Plan 2010 Wayland Town-Wide Athletic Fields Master Plan Other relevant reports, studies and documents

The intent is to utilize the information contained in these documents, with data being updated as appropriate.

The assessment and prioritization of needs was derived from the synthesis of field usage data (i.e., the 2010 Athletic Fields Master Plans and 2017 department data). Other efforts incorporated a robust public engagement process (i.e., the 2016 Wayland Open Space and Recreation Plan) while working with the Recreation Department and Recreation Commission. Collectively, these documents identified town needs based on what was heard and what was observed; gaps in service were identified as well.

Based on the information provided above, in on-site facility assessments, and during conversations with the Recreation Department and Recreation Commission, the following list identifies **critical** issues related to active recreation facilities and open spaces in Wayland:

- A shortage of playing fields leads to overuse, less-than-desirable playing conditions, and scheduling frustrations throughout the system.
- Several play structures are aging and approaching the end of their lifecycle.
- The play surfacing at playgrounds does not provide reliable ADA compliance. Comprised of engineered wood fiber mulch, this surfacing is highly dependent on sufficient maintenance; if not maintained, a playground's accessibility is reduced.
- Accessibility to and inclusivity are limited due to the shortage of intension pathways and inconsistent ADA compliant surfacing of facilities and amenities.

3.a. OVERUSE OF NATURAL TURF FIELDS

The majority of fields in Wayland are significantly overutilized when compared to the recommended maximum industry average for natural turf fields, as highlighted on the following chart. This overuse is a leading factor in the deteriorating conditions at several properties. The industry standard range for recommended hours of usage is between 400 and 600 hours per year for higher-performing, constructed natural turf fields. This recommended range identifies the typical limits while still being able to maintain a viable stand of grass. It is important to note that turf viability is highly dependent on the quality of maintenance provided.

The following table compares the hours of field usage in 2014 and 2017 against the middle range of recommended hours of usage for higher-performing natural turf fields.



Wayland Recreation Field Usage Statistics 2017										
Existing Facility	2014 hours	2017 Hours ¹	Recommended Hours							
Middle School										
Back Soccer	414.2	1004	500							
Front LAX	1217	918	500							
Baseball	178.6	769.5	500							
Softball	190.6	497	500							
Wayland High School										
Field Hockey	105	939	500							
JV Football/Practice	331.8	1101	500							
Wet Field	577.8	1166	500							
Bennet	549.6	1039	500							
Varsity Baseball	543.4	1245	500							
JV Baseball	510.8	1011	500							
Softball	443.6	1065	500							
Synthetic Turf	unknown	2151	n/a							
Alpine										
Soccer	1540.8	873.5	500							
Town Building ²										
Baseball	232.6	573	500							
Soccer	1693.8	635.5	500							
Claypit ³										
Field 1	628	846	500							
Field 2	628	846	500							
Field 3	628	846	500							
Field 4	628	846	500							
Field 5	628	846	500							
Field 6	628	846	500							
Field 7	628	846	500							
Softball	210	260	500							
Cochituate										
Softball 1	691.4	1435	500							
Softball 2	699.4	1435	500							
Happy Hollow										
Softball	33	287	500							
Riverview										
Baseball	245.2	556	500							

Note:

- 1. **RED** indicates a natural turf field was used beyond the recommended 400-600 hours per year range.
- 2. The hourly usage reflected above deducts known reservations that went unused.
- 3. Town Building soccer field was under renovation in the Fall of 2017.
- 4. The hours for the Claypit School site is the average of all 7 rectangular fields, typically reserved as one site.

3.b. WATER SOURCING STRATEGIES FOR IRRIGATION SYSTEMS

Irrigation systems are critical to maintaining a high quality natural turf field and good playing conditions, particularly during the drier summer months of July and August. In Wayland, both the deteriorating conditions of grass fields and the amount of overuse is exacerbated by the lack of irrigation systems. If a natural turf field continues to be used during hot, dry periods (without sufficient watering), significant damage to the turf may result. Whenever fields in Wayland are renovated, it is important that the budget includes sufficient amounts for investigating the appropriate water source, and designing and installing the irrigation system. Design fees for these systems can range between \$10,000 and \$15,000 depending on the size and complexity of the system.



Determining the best strategy for sourcing water for irrigation is site specific and depends on several variables. Important factors to be considered include available infrastructure, subsurface conditions, water needs, level of maintenance, and appropriate capital investment. For example, some higher quality natural grass fields are designed with a very high sand content and an extensive drainage system. Since they are designed to drain very rapidly, these fields require a very stringent watering schedule, which has the potential to result in higher irrigation costs. Consequently, if watering is missed during hot, dry periods, significant damage to the natural grass turf may result. This damage may require additional expenses to restore the turf.

There are three primary water source options in Wayland: 1) tapping a nearby water main to provide potable water; 2) drilling a well and pumping groundwater; and 3) using a storm water catchment and storage system to re-use captured water through a pump system. Most sites would likely require a combination of these approaches. Each type of water source will bring different system needs, as well as regulations that need to be followed. Additionally, proper water pressure is essential to the operation of the irrigation system; athletic field sprinkler heads usually operate best at 60 to 80 pounds per square inch.

In summary,

 <u>Tapping a water main</u>. If a water main is nearby, this is often the simplest solution for sourcing water. Since this source provides potable water, no filtering is needed prior to being applied on the field. The static water pressure will be from the town's water main. If testing reveals insufficient water pressure, options to increase pressure include increasing the number of irrigation heads and "zones" (a grouping of irrigation heads that run at the same time), or installing a booster pump. A booster pump is frequently more expensive than adding additional heads and zones. A concern with this system is that it is subject to the direct cost of the water being supplied.

Costs of tapping a water main can range from \$5,000 to \$15,000 (not including other features required in the irrigation system).

2) <u>Drilling a well</u>. A well provides an on-site water source, but the viability and cost implications are subject to subsurface conditions and the depth required to reach the groundwater table. Irrigation wells often pump water to a storage system to help alleviate the shortage of water during droughts. Depending on the quality of water being pumped, a filtering system may be required to clean the water prior to being applied on the field. A concern with this system is that it draws from the same low water source during drought conditions. Therefore, a back-up source is usually recommended.

Costs of investigating and drilling an irrigation well can range from \$5,000 to \$40,000, with a subsurface storage system ranging from \$15,000 to \$200,000 depending on the volume of storage desired (not including other features required in the irrigation system).

3) <u>Storm water catchment and re-use</u>. Catching storm water and storing it underground typically relies on collecting rainwater from a roof or parking lot. In Wayland, this type of system is more feasible near schools which have a sizable roof and/or parking area. These systems require a heavier-duty filtering system due to the prevalence of dirt, debris, chemicals, oils, and animal waste found in parking lots and on roofs. A concern with this system is that it tends to "run dry" by late summer and does not get replenished during drought conditions. Therefore, a back-up source is usually recommended.



Costs of storm water catchment systems (including subsurface storage) can vary greatly depending on existing infrastructure, and can range from \$25,000 to \$250,000 depending on how the water is being collected and the volume of storage desired (not including other features required in the irrigation system).

Using a combination of these water source options might be the most appropriate depending on the specifics of the site, the performance desired, and the budget available.

Maintenance on irrigation systems is a must. Irrigation heads need to be cleaned to ensure proper watering patterns are maintained for uniformity. Valves and filters will need to be checked for debris. Annual winterization is required. Depending on water sources and equipment, more frequent maintenance may be required.

4. IDENTIFICATION OF SITES FOR RECREATION IMPROVEMENTS

In order to address the shortage of fields (multi-purpose, baseball, and softball) given the limited number of suitable properties currently available and the prevalence of environmentally sensitive areas, the Town of Wayland needs to be creative with its improvements. This includes taking advantage of properties with a designation for active recreation, relocating/reorienting existing facilities to maximize field footprints or add new footprints where possible, and pursuing sites adjacent to conservation properties to incorporate passive recreation improvements. The Recreation Commission and Recreation Department are also seeking to identify conservation properties to implement targeted improvements (trail heads, trails, signage, etc.) to improve the passive recreation pursuits of Wayland residents.

Additionally, the town needs to address the aging equipment of its playgrounds town-wide before conditions become unsafe. This strategic plan report identifies the playgrounds most in need and not located on school property.

5. RECREATION FACILITY IMPROVEMENT INITIATIVES IN PROCESS

Currently, the town has momentum addressing some of its recreation needs; several projects are currently in various stages of design and/or construction including:

- Wayland High School Field Improvements
- Loker Conservation and Recreation
- Oxbow Meadows
- Town Building Field

Understanding the status of these projects, including the timing of when these improved assets would be back in operation, is essential to evaluating the town's critical needs and outlining future recreation facility capital improvements.

At the end of 2017, the town initiated the design process for improvements to existing assets at the high school and for a new multi-purpose rectangular field at Loker Conservation and Recreation. Construction on these two sites is expected to begin in 2018 and be completed in 2019. Oxbow Meadows is set for construction to commence in 2018 pending some administrative efforts between the town and adjacent neighbors. The construction of Town Building Field was completed in the fall of 2017 and will be back in operation in 2018 after the spring grow-in period.

See Appendix for plans of improvement initiatives in process.



5.a. RECOMMENDED RECREATION FACILITY CAPITAL IMPROVEMENTS

The sites recommended for improvement provide the most relief from the overuse of existing facilities and alleviate deteriorating conditions at recreation properties where user safety could become a concern. The individual sites, below, are in chronological order of implementation as outlined in the 10-Year Capital Plan at the end of this section.



ALPINE FIELD BASEBALL, MULTI-USE FIELD AND PLAYGROUND

Basic Site Description

This property is located on Alpine Road near a residential area and abuts the heavily wooded Castle Hill Conservation Area. A linear parking lot is situated near the playground and the rectangular field, and is beginning to show wear. No spaces have a designation. An ADA handicap accessible asphalt pathway leads to the playground, but the brick threshold does not meet code. The playaround features a 2-5 play structure and a 5-12 play structure; both elements were installed in 1999.



A four-foot height galvanized chain link fence forms the perimeter of the playground, which is covered with wood mulch contained by plastic Tuff Timber edging. A picnic area with three tables is situated in a small grove of trees adjacent to the playground area. A porta-potty and trash and recycling receptacles are located nearby.

A rectangular field measuring 330' x 210' has striping and goals for soccer; it appears to be in fair condition, although grading is somewhat irregular. In-ground irrigation boxes are present. The field has two aluminum team benches and spectator bleachers, all in good condition; however, they are not ADA accessible.

A little league baseball field exists along Alpine Road and appears to get little use. It shares its outfield with the rectangular field and has a chain link backstop in fair to poor condition. Behind the backstop is an ADA accessible drinking fountain in good condition.

A trailhead for Castle Hill Conservation Area is located on the northeast side of the property.







Recommendations Summary

- Clear and regrade a portion of the wooded edge to the east and south side of the property.
- Reconstruct the little league infield.
- Replace backstop and team bench areas.
- Rotate multi-use rectangular field to create two (2) 195' x 330' field footprints.
- Install a new irrigation system with booster pump.
- Construct a paved, ADA-compliant perimeter pathway loop that also connects to the bleachers, seating areas, and trail head.
- Renovate and restripe existing parking area, and include handicap-designated parking spaces.
- Add a parking lot providing 54 additional parking spaces.
- Add a new sign marking the Castle Hill Conservation Area entrance, an information kiosk at trail head, and provide targeted trail improvements.
- Add a new picnic area near the entrance and playground.
- Renovate playground with new equipment and poured-in-place safety surfacing.
- Create a new property entrance with attractive signage, planting, and a fieldstone wall.

Preliminary Budget Considerations



	aft Cost Estimate					
	/land, MA					
201	18	Quantity	Unit	Unit Price	Total	
	Baseball and Rectangular Field - Natural Turf			0		
	Site Prep (protection of elements to remain, etc.)	1	LS	\$5,000	\$5,000	
	Temporary Construction Fence	695		\$6	\$4,170	
	Remove and Dispose Backstop	1		\$500	\$500	
	Erosion Control Device - Straw Wattles	1000		\$5	\$5,000	
	Strip & Stockpile Topsoil (6" depth) Miscellaneous Demolition	2925	CY LS	\$8 \$10,000	\$23,400 \$10,000	
	Rough Grading (170000 sf)	18900	farmen far	\$10,000	\$56,700	
	Fine Grading (170000 sf)	18900		\$2 \$2	\$37,800	
	Structural Drainage Stone (18" depth)	3700		\$40	\$148,000	
	Catch Basin	2	EA	\$6,500	\$13,000	
	Drain Manhole	1	· · · · · · · · · · · · · · · · · · ·	\$6,500	\$6,500	
	12" HDPE Drain Pipe	240		\$35	\$8,400	
	8" Collector Drain Pipe	1650		\$30	\$49,500	
	Nyloplast Drain Inlets	8		\$2,200	\$17,600	
	Irrigation (including booster pump)	1		\$125,000	\$125,000	
	Infield Mix Reatzone Mix (8" depth)	150 3060	furner	\$60 \$65	\$9,000	
	Rootzone Mix (8" depth) Seed at Field	13800		\$65	\$198,900 \$6,900	
	Player Benches	2	furnantinter	\$1,500	\$3,000	
	CIP Concrete at Player Benches	75	famanafa	\$65	\$4,875	
	BVCL Fence at Player Benches (6-ft height)	80		\$55	\$4,400	
	Backstop (15-ft height	1	haman ha	\$25,000	\$25,000	
	Drinking Fountain w/ Bottle Filler	1		\$6,000	\$6,000	
	Trash Receptacle	2	EA	\$1,200	\$2,400	
	Subtotal					\$771,04
	Loop Path and Entry					
_	Fine Grading	9225	SY	\$2	\$18,450	
	Full-depth Asphalt Paving (3" depth) (3440 sf)	175	TON	\$180	\$31,500	
	Gravel Borrow Base at Asphalt Path (8" depth) (3340 sf)	225		\$35	\$7,875	
	Concrete Pavement Entry Area	45		\$85	\$3,825	
	Gravel Borrow Base at Entry Area (8" depth)	10		\$35	\$350	
	Fieldstone Wall	25	LF	\$220	\$5,500	
	Signage Subtotal	1	LS	\$5,000	\$5,000	\$72,50
.	Parking Lot					
•	Clearing and Grubbing	1	LS	\$7,500	\$7,500	
	Full-depth Asphalt Paving (4" depth) (16,700)		TON	\$180	\$55,980	
	Gravel Borrow Base at Asphalt Path (8" depth) (16700 sf)	408	CY	\$35	\$14,280	
	Granite Curb	680		\$35	\$23,800	
	Full-depth Asphalt Paving (3" depth) (16,700)		TON	\$180	\$6,300	
	Striping Subtotal	1	LS	\$1,000	\$1,000	\$108,86
						
•	Trailhead + Trail Improvements			<u>۴</u> ۲ 000	¢5 000	
	Information Kiosk Signage	1		\$5,000 \$2,500	\$5,000 \$2,500	
	Trail Improvements	1		\$2,500	\$8,000	
	Subtotal			<i>40,000</i>	ψ0,000	\$15,50
						÷.0,00
	GRAND TOTAL					\$967,90
	15% Bonds, Insurance, Overhead, Profit					\$145,18
	10% Contingency		ļļ			\$96,79
	Design & Engineering Costs		┝			\$120,98
				GRA	ND TOTAL	\$1.330.86
•	Playground Play Equipment	1	LS	\$125,000	\$125,000	
	Miscellaneous Demolition	1	den ser se	\$125,000	\$125,000	
	Rough Grading (3800 sf)	425		\$2,500	\$1,275	
_	Fine Grading (3800 sf)	425	furman	\$2 \$2	\$850	
	PIP Surfacing w/ 4" Rubber and 8" Base	3300		\$25	\$82,500	
	Concrete Pavement (4" depth)	60		\$85	\$5,100	
	Gravel Borrow Base	15	h ó-	\$35	\$525	
	Benches	4		\$1,800	\$7,200	
	Picnic Tables	2		\$2,500	\$5,000	
	Bike Racks	2	EA	\$900	\$1,800	A
	Subtotal					\$231,75
	15% Bonds, Insurance, Overhead, Profit	1	1			\$34,76
				1		\$72.17
	10% Contingency Design & Engineering Costs					\$23,17 \$45,00



	Quantity	Unit	Unit Price	Total	
Baseball: Limited Renovations					
Site Prep (protection of elements to remain, etc.)	1	LS	\$5,000	\$5,000	
Construction Entrance Pad	1	LS	\$5,000	\$5,000	
Temporary Construction Fence	632	LF	\$6	\$3,792	
Remove and Dispose Backstop	1	LS	\$500	\$500	
Erosion Control Device - Straw Wattles	200	LF	\$5	\$1,000	
Strip & Dispose Infield Topsoil (10" depth)	250	CY	\$8	\$2,000	
Tree Pruning	1	LS	\$5,000	\$5,000	
Fine Grading	1000	SY	\$4	\$4,000	
Infield Mix	75	CY	\$60	\$4,500	
Loam at Infield (8" depth)	100	CY	\$30	\$3,000	
Light Compaction Prior to Sodding	3900	SF	\$1	\$3,900	
Sod at Infield (includes sod, installation, fine grading, grow-in, fertilization, aeration)	3100	SF	\$2	\$6,200	
Loam and Seed Disturbed Areas	1	LS	\$2,500	\$2,500	
Player Benches	2	EA	\$2,000	\$4,000	
CIP Concrete at Player Benches	55	SY	\$65	\$3,575	
BVCL Fence at Player Benches (6-ft height)	80	LF	\$65	\$5,200	
Backstop (15-ft height	1	LS	\$25,000	\$25,000	
Foul Pole	2	EA	\$3,000	\$6,000	
Field Accessories (bases, etc.)	1	EA	\$3,000	\$3,000	
Subtotal					\$93,167
GRAND TOTAL					\$93,16
15% Bonds, Insurance, Overhead, Profit					\$13,97
10% Contingency					\$9,31
Design & Engineering Costs					\$12,00
			GI	RAND TOTAL	\$128,45

Rectangular Field In-Place Renovation					
Site Prep (protection of elements to remain, etc.)	1	LS	\$5,000	\$5,000	
Construction Entrance Pad	1	LS	\$5,000	\$5,000	
Temporary Construction Fence	1250	LF	\$6	\$7,500	
Erosion Control Device - Straw Wattles	850	LF	\$5	\$4,250	
Skim & Dispose Existing Turf	9150	SY	\$8	\$73,200	
Miscellaneous Demolition (including existing irrigation system)	1	LS	\$2,500	\$2,500	
Push Up and Stockpile Loam (10" depth)	2500	CY	\$8	\$20,000	
Soil Amendments (2" depth)	510	CY	\$32	\$16,320	
Blecavation (10" - 12" depth)	9150	SY	\$4	\$36,600	
Fine Grading	9150	SY	\$1	\$9,150	
Light Compaction Prior to Seeding	9150	SY	\$1	\$9,150	
Seeding	9150	SY	\$1	\$9,150	
Automatic Irrigation System (piping, wiring, controls, valves, etc.) (No booster pump)	82250	SF	\$0.65	\$53,463	
Backflow Preventer	1	LS	\$7,000.00	\$7,000	
Subtotal					\$258,283
GRAND TOTAL					\$258,283
15% Bonds, Insurance, Overhead, Profit 10% Contingency					\$38,742 \$25,828
Design & Engineering Costs					\$35,000
					φ35,000
			GI	RAND TOTAL	\$357,853



COW COMMON TRAIL IMPROVEMENTS

Basic Site Description

This property is located off Old Sudbury Road and opposite the North Cemetery. The gravel parking lot is in poor condition. This 65-acre site is a series of open fields and meadows filled with historical and archaeological value. Trails run along the edges of the fields. A lower field with its own entrance, cart path, and gardeners-only parking is home to the Community Gardens. A trail runs along the Sudbury River marsh and returns on boardwalks through a wooded Red Maple swamp to a



small field adjacent to Bow Road. From there, the trail crosses the Community Garden cart path and continues to the main Parking area.







Recommendations Summary

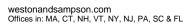
- Renovate entry drives and both parking lot areas adjacent to Old Sudbury Road with compacted crush stone and handicap-designated spaces.
- Formalize trail head and renovate information kiosk.
- Add stabilized crushed stone pathway.
- Add stabilized trail surfacing (or flexi-pave) where necessary.
- Provide targeted trail improvements.

Preliminary Budget Considerations

Weston & Sampson

Improvements to Cow Common					
Draft Cost Estimate					
Wayland, MA					
2018					
	Quantity	Unit	Unit Price	Total	
1. Path/Trail + Improvements					
Rough Grading (3500 sf)	390	SY	\$3	\$1,170	
Fine Grading (13400 sf)	1490	SY	\$2	\$2,980	
Stabilized Stonedust (4" depth)	1890	SY	\$20	\$37,800	
Loam and Seeding	1	LS	\$750	\$750	
Signage	1	LS	\$1,000	\$1,000	
Subtotal					\$43,700
1. Parking Areas					
Fine Grading (7000 sf)	775	SY	\$2	\$1,550	
Compacted Gravel Surfacing (8" depth) (7000 sf)	170	CY	\$35	\$5,950	
Signage	1	LS	\$1,000	\$1,000	
Subtotal					\$8,500
GRAND TOTAL					\$52,200
15% Bonds, Insurance, Overhead, Profit					\$7,830
10% Contingency					\$5,220
Design & Engineering Costs					\$20,000
			GR	AND TOTAL	\$85,250







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CLAYPIT BASEBALL AND MULTI-USE FIELD

Basic Site Description

The recreational facilities at the school are accessed from Adams Lane and are surrounded by the edges of residential wooded properties. Parking is available at the school; it accommodates 95 vehicles, including four handicapdesignated spaces. This property contains seven rectangular fields striped for soccer. All the fields appear to be recently slice-seeded, with turf in fair condition except for areas of wear in front of the goals. Grading at the fields is satisfactory, though some irregularities were noted.



Two softball diamonds have 60' infields, stone dust along the baselines, and 10' backstops. In between the two diamonds is a rectangular turf field for soccer. A basketball court measuring 94' x 50' has an asphalt surface showing signs of wear and aging. Fencing in fair condition forms the perimeter on two sides. The posts and goals are in good condition.

A 2-5 play area contains wood mulch surfacing, a small play structure in fair condition, two tire swings, two swing bays with belts, an independent climbing structure, and a large sand box. Three metal picnic tables are located near the play area. A 5-12 play area contains wood mulch surfacing, a large play structure (installed in 1997 with three ADA accessible features) in fair condition, four tire swings, and three swing bays (with five belts and one handicap seat). One picnic table in poor condition is located near the play area.







Recommendations Summary

- Reconstruct the little league infield.
- Replace backstop and team bench areas.
- Clear and regrade a portion of the wooded area at the northeast corner of the property.
- Expand the multi-use rectangular field to 240' x 360'.
- Renovate turf areas with root zone mix.
- Add bleachers and seating area with accessible pathway.

Preliminary Budget Considerations

Weston & Sampson

aft C	Cost Estimate					
iylan	id, MA					
18						
_		Quantity	Unit	Unit Price	Total	
	aseball Field			Az 000	A- - - - - - - - - -	
-	ite Prep (protection of elements to remain, etc.)	1	LS	\$5,000	\$5,000	
	emporary Construction Fence	500		\$6	\$3,000	
	emove and Dispose Backstop trip & Stockpile Topsoil (6" depth)	1	LS CY	\$500 \$8	\$500 \$5.000	
	liscellaneous Demolition	745	LS	۵۵ \$5.000	\$5,960 \$5,000	
	ine Grading (47500 sf)	5275		\$3,000	\$10,550	
	tructural Drainage Stone (8" depth)	1170		\$40	\$46,800	
_	atch Basin	1170	EA	\$6,500	\$6,500	
	rain Manhole	1	EA	\$6,500	\$6,500	
_	2" HDPE Drain Pipe	250		\$35	\$8,750	
-	" Collector Drain Pipe	780		\$30	\$23,400	
	vloplast Drain Inlets	5		\$2,200	\$11,000	
	field Mix	65		\$60	\$3,900	
	ootzone Mix (8" depth)	1000		\$65	\$65,000	
_	eed at Field	4472		\$1	\$2,236	
_	oul Pole	2	EA	\$4,000	\$8,000	
PI	layer Benches	2	EA	\$1,500	\$3,000	
С	IP Concrete at Player Benches	75	SY	\$65	\$4,875	
B	VCL Fence at Player Benches (6-ft height)	60	LF	\$55	\$3,300	
B	ackstop (15-ft height)	1	LS	\$25,000	\$25,000	
Tr	rash Receptacle	1	EA	\$1,200	\$1,200	
S	ubtotal					\$249,
S	pectator Path and Bleachers					
	rading	1	LS	\$750	\$750	
	ull-depth Asphalt Paving (3" depth) (750 sf)	14		\$180	\$2,520	
	ravel Borrow Base at Asphalt Path (8" depth) (750 sf)	18		\$35	\$630	
_	oncrete Pavement at Bleachers	22	SY	\$85	\$1,870	
	ravel Borrow Base at Bleachers (8" depth)	5		\$35	\$175	
_	leachers	1	EA	\$5,000	\$5,000	¢40.
3	ubtotal					\$10,9
G	RAND TOTAL					\$260,
-	5% Bonds, Insurance, Overhead, Profit					\$39,
	0% Contingency					\$26,
	esign & Engineering Costs					\$35,
						φοο,
				GRA	ND TOTAL	\$360,
R	ectangular Field					
	ite Prep (protection of elements to remain, etc.)	1	LS	\$5,000	\$5,000	
-	emporary Construction Fence	600	LF	\$6	\$3,600	
_	lear and Grub Wooded Edge (10650 sf)	1		\$10,000	\$10,000	
_	trip & Stockpile Topsoil (6" depth)	1440	-	\$8	\$11,520	
	ough Grading (90250 sf)	10000		\$3	\$30,000	
	ine Grading (90250 sf)	10000		\$2	\$20,000	
_	tructural Drainage Stone (8" depth)	1425		\$40	\$57,000	
	atch Basin	1	EA	\$6,500	\$6,500	
	2" HDPE Drain Pipe	200	LF	\$35	\$7,000	
-	Collector Drain Pipe	950	LF	\$30	\$28,500	
	yloplast Drain Inlets	4	EA	\$2,200	\$8,800	
	ootzone Mix (8" depth)	2230 10000	CY SY	\$65 \$1	\$144,950 \$5,000	
R	eed at Field	10000	31	\$1	\$5,000	\$227
Re Se						\$337,
Re Se	ubtotal					
Ro Se Se						
Ro So So G	RAND TOTAL					
Ro So So Gi 15	RAND TOTAL 5% Bonds, Insurance, Overhead, Profit					\$50,
Ro So So G 15 10	RAND TOTAL					\$337, \$50,0 \$33, \$45,0





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RIVERVIEW BASEBALL AND PLAYGROUND

Basic Site Description

property is located This on Riverview Avenue in a residential area and is adjacent to the Wayland Rod & Gun Club. A parking lot with a wooden guardrail is situated at the end of the road. A small playground installed in 2013 has wood mulch surfacing throughout, and contains one swing bay (with two belts and one bucket) and a group spinner element. A number of large trees surrounds the play area, and provides good canopy coverage and ample shade. An informal parking area is located adjacent to the playground.



The turf at the little league baseball field is in poor to fair condition. It appears to have been recently slice seeded; however, the grading of the field is inconsistent, with low and high spots visible throughout. The infield mix is in fair condition, but the edge at the outfield is worn. Both the chain link fence around the field and the backstop are in fair condition, though the wooden team benches are warping and are in poor to fair condition. There is one three-row aluminum bleacher in fair condition. An ADA accessible water fountain in fair condition is located behind the backstop.







Recommendations Summary

- Reconstruct the little league infield.
- Renovate the remaining turf with root zone mix.
- Replace outfield fence and backstop to little league regulation standards.
- Reconstruct and expand the parking lot with handicap-designated spaces.
- Construct an ADA-complaint pathway connecting the parking lot to playground, bleachers, and field.
- Renovate playground with new equipment, poured-in-place rubber surfacing, and picnic area.
- Construct a small parking area near the playground.

Preliminary Budget Considerations

Weston & Sampson

	brovements to Riverview Field					
-	rland, MA					
201						
		Quantity	Unit	Unit Price	Total	
•	Baseball Field					
	Temporary Construction Fence	300	LF	\$6	\$1,800	
	Remove and Dispose Backstop and benches	1	LS	\$1,000	\$1,000	
	Erosion Control Device - Straw Wattles	500		\$5	\$2,500	
	Strip & Stockpile Topsoil (6" depth)	740		\$8	\$5,920	
	Fine Grading (45400 sf)	5044	formaniananaf	\$2	\$10,089	
	Infield Mix	65		\$60	\$3,900	
	Rootzone Mix (8" depth)	1120	farmenter	\$65	\$72,800	
	Seed at Field	5044		\$1	\$2,522	
	Foul Pole	2	§	\$4,000	\$8,000	
	Player Benches	2	EA	\$1,500	\$3,000	
	CIP Concrete at Player Benches and Behind Backstop	140 340		\$65 \$50	\$9,100 \$17,000	
	BVCL Fence at Outfield (4-ft height)	· · · · · · · · · · · · · · · · · · ·		\$50	\$17,000	
	BVCL Fence at Player Benches (6-ft height) Backstop (15-ft height	80	LF	\$25,000	\$4,400 \$25,000	
	CIP Concrete at Portable Toilet (100 sf)	11	÷	\$25,000 \$65	\$25,000 \$722	
	Drinking Fountain w/ Bottle Filler	11	EA	\$6,000	\$722	
	Trash Receptacle	1	;;	\$0,000	\$0,000	
	Subtotal			φ1,200	ψ1,200	\$174,95
						ψ17 4 ,95
2.	Path and Parking Lot					
•	Rough Grading (7000 sf)	775	SY	\$3	\$2,325	
	Fine Grading (7000 sf)	775	şununung	\$3 \$2	\$1,550	
	Full-depth Asphalt Paving (3" depth) (1800 sf)		TON	\$180	\$6,300	
	Gravel Borrow Base as Asphalt Path (8" depth) (1800 sf)	45		\$35	\$1,575	
	Loam and Seeding	1		\$750	\$750	
	Signage	1	÷{	\$2,000	\$2,000	
	Full-depth Asphalt Paving (4" depth) (2200)		TON	\$180	\$7,200	
	Gravel Borrow Base as Asphalt Path (8" depth) (2200 sf)	54	<u> </u>	\$35	\$1,890	
	Granite Curb	120	LF	\$35	\$4,200	
	Striping	1	LS	\$500	\$500	
	Subtotal					\$28,29
	GRAND TOTAL					\$203,24
	15% Bonds, Insurance, Overhead, Profit					\$30,48
	10% Contingency					\$20,32
	Design & Engineering Costs					\$30,00
						φ00,00
				GR	AND TOTAL	\$284,05
-	Playground and Parking					
•	Play Equipment	1	LS	\$115,000	\$115,000	
	Miscellaneous Demolition	1	f======f	\$2,500	\$2,500	
	Rough Grading (8300 sf)	925		\$3	\$2,775	
	Fine Grading (8300 sf)	925		\$3 \$2	\$1,850	
	PIP Surfacing w/ 4" Rubber and 8" Base (2440 sf)	2240	faran an a	\$25	\$56,000	
	Concrete Pavement (4" depth)	80	francis	\$85	\$6,800	
	Gravel Borrow Base	20		\$35	\$700	
	Benches	3		\$1,800	\$5,400	
	Picnic Tables	3	***************************************	\$2,500	\$7,500	
	Bike Racks	1	÷	\$900	\$900	
	Subtotal					\$199,42
	15% Bonds, Insurance, Overhead, Profit					\$29,91
	10% Contingency					\$19,94
	Design & Engineering Costs					\$30,00





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MIDDLE SCHOOL SOFTBALL AND MULTI-USE FIELD

Basic Site Description

An access drive beside the middle school provides access to the recreation facilities. Informal parking is located along the third base line of the softball field. The infield mix of the softball field is in fair condition, but the outfield is in poor to fair condition. Grading of the outfield is irregular with a noticeable slope in left field. The outfield also serves as part of a rectangular field that measures 288' x 144'; it is striped for soccer and lacrosse.



The baseball field is in good condition in terms of layout, grading, infield mix, and outfield. The outfield also serves as part of the rectangular field described above; however, the fence and backstop are in poor to fair condition, with signs of corrosion. Protective netting (30' height) along the third base line is in fair condition. The team benches are in fair condition, but showing signs of wear.

A soccer field located to the south measures 325' x 185', and is in fair condition. The field appears to be well graded with a center crowned pitch.

Four small basketball court areas are located next to the school. The asphalt surfacing is in poor condition. The posts and goals are in fair condition.







Recommendations Summary

- Reconstruct the softball infield.
- Replace backstop and team bench areas.
- Renovate turf of both softball outfield and multi-use rectangular field with root zone mix.
- Install a new irrigation system with a booster pump to provide full turf coverage.
- Add bleachers and team benches.
- Reconstruct and expand the parking lot.

Preliminary Budget Considerations

Weston & Sampson

aft Cost Estimate					
yland, MA					
18					
	Quantity	Unit	Unit Price	Total	
Baseball and Rectangular Field - Natural Turf					
Site Prep (protection of elements to remain, etc.)	1	LS	\$5,000	\$5,000	
Temporary Construction Fence	1500	LF	\$6	\$9,000	
Erosion Control Device - Straw Wattles	1500	LF	\$5	\$7,500	
Miscellaneous Demolition	1	LS	\$15,000	\$15,000	
Rough Grading (162500 sf)	18000	SY	\$3	\$54,000	
Fine Grading (162500 sf)	18000	SY	\$2	\$36,000	
Structural Drainage Stone (18" depth)	3400	CY	\$40	\$136,000	
Catch Basin	2	EA	\$6,500	\$13,000	
Drain Manhole	1	EA	\$6,500	\$6,500	
12" HDPE Drain Pipe	250	LF	\$35	\$8,750	
8" Collector Drain Pipe	1500	LF	\$30	\$45,000	
Nyloplast Drain Inlets	8	EA	\$2,200	\$17,600	
Irrigation (including booster pump)	1	LS	\$125,000	\$125,000	
Infield Mix	150	CY	\$60	\$9,000	
Rootzone Mix (8" depth)	3060	CY	\$65	\$198,900	
Seed at Field	13800	SY	\$1	\$6,900	
Player Benches	2	EA	\$1,500	\$3,000	
CIP Concrete at Player Benches	75	SY	\$65	\$4,875	
BVCL Fence at Player Benches (6-ft height)	80	LF	\$55	\$4,400	
Backstop (15-ft height)	1	LS	\$25,000	\$25,000	
Drinking Fountain w/ Bottle Filler	1	EA	\$6,000	\$6,000	
Trash Receptacle	2	EA	\$1,200	\$2,400	
Subtotal					\$738,82
GRAND TOTAL					\$738,82
15% Bonds, Insurance, Overhead, Profit					\$110,82
10% Contingency					\$73,8
Design & Engineering Costs					\$100,0
			GRA	AND TOTAL	\$1,023,5





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GREENWAYS MULTI-USE FIELD

Basic Site Description

This is one of the larger properties of open space in Wayland. A parcel, approximately 10 acres within the larger Greenways Conservation property, is designated for active recreation purposes; however, a large part of this parcel contains dense woods. Parking is at the end of Green Way. Trails lead in two directions from the parking area. One, where the kiosk is located, runs to the Main Fields through a wooded area; the other runs through a different wooded area to the SVT-



owned North Field adjacent to the Sandy Burr Golf Course. There are worn vehicle tracks, indicating periodic use, leading from Green Way down to the upland area by the Sudbury River. Taken together, this 98-acre area encompasses several large open fields, wet meadows, the banks of the Sudbury River, and upland areas. The trails are mostly flat, with the exception of a few on municipal land to the south.







Recommendations Summary

- Limit field improvements to the existing open field area as to not disturb the wooded area.
- Improved entrance and pedestrian/vehicular access at the end of Green Way.
- Add crushed stone access drive and parking lot with handicap-designated parking at the open field area located to the east towards the Sudbury River (generally following the existing vehicle tracks).
- Add crushed stone pedestrian pathway from Green Way to the spectator seating area and on to the trails near adjacent to the Sudbury River.
- Construct a 240' x 360' multi-use field.
- Install spectator bleachers and team benches.
- Improved trail heads with information kiosks.
- Trail improvements.

Preliminary Budget Considerations



	provements to Greenways Field					
	aft Cost Estimate					
	yland, MA					
20	18	Quantity	Unit	Unit Price	Total	
1.	Rectangular Field	quantity			Total	
•••	Site Prep (protection of elements to remain, etc.)	1	LS	\$20,000	\$20,000	
	Temporary Construction Fence	800		\$6	\$4,800	
	Erosion Control Device - Straw Wattles	1000		\$5	\$5.000	
	Strip & Remove Topsoil (12" depth)	3660		\$15	\$54.900	
	Miscellaneous Demolition	1	LS	\$15,000	\$15,000	
	Rough Grading (98800 sf)	11000		\$15,000	\$44.000	
	Fine Grading (98800 sf)	11000		\$3	\$33,000	
	New Rootzone Mix (12" depth)	3660		\$75	\$274,500	
	Seed at Field	11000			\$11.000	
_	Player Benches	2		\$1,500	\$11,000	
-	Spectator Bleachers	1	สาวารการการสาว	\$5,000	\$5,000	
	Trash Receptacle	2	lanan an	\$1,200	\$3,000	
	Subtotal	Z	EA	\$1,200	\$2,400	¢ 470 CO(
	Sudtotal					\$472,600
3.	Access Drive, Parking Lot and Path					
э.	Site Prep and Clearing and Grubbing	1	LS	\$45,000	\$45,000	
	Rough Grading (27800 sf)	3100	donaan aan aan ah	<u>\$45,000</u> \$4	\$45,000	
	Fine Grading (34700 sf)	3900	Second Se	\$3	\$12,400	
	Improved Entrance		fanna fa	\$40,000	\$40,000	
-	Compacted Gravel Surfacing at Drive (8" depth) (27900 sf)	680	şş.	\$35	\$23,800	
	Compacted Gravel Surfacing at Path (6" depth) (6800 sf)	125		\$35	\$4.375	
	Subtotal	125		φ υυ	\$4,373	\$137,275
						ψ137,273
4.	Trailhead + Trail Improvements					
	Information Kiosk	2	LS	\$5,000	\$10.000	
	Signage	1		\$5,000	\$5,000	
	Trail Improvements	1	LS	\$30,000	\$30,000	
	Subtotal				· · · · · ·	\$45,000
	GRAND TOTAL					\$654,875
	15% Bonds, Insurance, Overhead, Profit					\$98,231
	20% Contingency					\$130,975
	Design & Engineering Costs					\$100,000
				00/	AND TOTAL	\$984,081
				GRA	AND TOTAL	\$904,U81





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CHILDREN'S WAY PLAYGROUND

Basic Site Description

This playground is located on the Town Building property, and is accessed by crossing the vehicular drive leading to the parking lot in the back. The play area contains wood mulch surfacing; a small 2-5 play structure in fair condition but beginning to show age and deterioration; a small canopy structure; one balance beam; two swing bays; a see-saw; one climber; and a small wooden storage shed. The perimeter fencing of the play area is in poor-to-fair condition.









Recommendations Summary

- Renovate playground with mini trike loop, new equipment. and poured-in-place surfacing.
- Relocate storage shed.
- Install new perimeter black vinyl chain link fencing.
- Add a new perimeter sidewalk.

Preliminary Budget Considerations

Draft (Cost Estimate					
/aylar	nd, MA					
018						
		Quantity	Unit	Unit Price	Total	
. P	Playground and Parking					
P	Play Equipment	1	LS	\$100,000	\$100,000	
N	Iiscellaneous Demolition	1	LS	\$2,500	\$2,500	
	ine Grading (6200 sf)	700	SY	\$2	\$1,400	
P	PIP Surfacing w/ 4" Rubber and 8" Base (3660 sf)	3660	SF	\$25	\$91,500	
	Concrete Pavement (4" depth) (175 sf)	20	SY	\$85	\$1,700	
F	ull-depth Asphalt Paving (4" depth) (2080 sf)	58	TON	\$180	\$10,440	
G	Gravel Borrow Base @ pavement (2250 sf)	55	CY	\$35	\$1,925	
8	" Perforated Drainage Pipe	100	LF	\$30	\$3,000	
	" Solid HDPE Drainage Pipe	40	LF	\$30	\$1,200	
С	Catch Basin	1	LS	\$6,500	\$6,500	
S	Subsurface Stormwater Chambers	1	LS	\$9,600	\$9,600	
	Granite Curb (sand play)	55	-§§	\$35	\$1,925	
	Senches	2	-ff	\$1.800	\$3,600	
P	Picnic Tables	1	EA	\$2,500	\$2,500	
S	Subtotal					\$237,79
1	5% Bonds, Insurance, Overhead, Profit					\$35,66
1	0% Contingency					\$23,77
	Design & Engineering Costs					\$25,00
-						····· · · · · · · · · ·
				GRA	ND TOTAL	\$322,23
	Playground and Parking					
	Play Equipment	1	LS	\$100,000	\$100,000	
N	liscellaneous Demolition	1	LS	\$2,500	\$2,500	
F	ine Grading (6200 sf)	700	SY	\$2	\$1,400	
	ngineered Wood Mulch (12" depth) (3660 sf)	135		\$60	\$8,100	
C	Concrete Pavement (4" depth) (175 sf)	20	SY	\$85	\$1,700	
	ull-depth Asphalt Paving (4" depth) (2080 sf)	58	TON	\$180	\$10,440	
	Gravel Borrow Base @ pavement (2250 sf)	55		\$35	\$1,925	
G	Granite Curb (sand play)	55	LF	\$35	\$1,925	
В	Benches	2	EA	\$1,800	\$3,600	
Ρ	Picnic Tables	1	EA	\$2,500	\$2,500	
S	Subtotal					\$134,09
1	5% Bonds, Insurance, Overhead, Profit					\$20,11
1	0% Contingency					\$13,40
D	Design & Engineering Costs					\$25,00
_				GRA	ND TOTAL	\$192,61



5. 10-YEAR CAPITAL PLAN AND PROJECT TIMELINES

The following chart represents a road map for implementing improvements over the next ten years (FY2018 through FY 2028). The recommended improvements range from large capital-intensive projects to targeted improvements that could be implemented in-house by the Town's Department of Public Works.

		Wayland	Recreation ⁻	Wayland Recreation Ten Year Capital Expenditure Plan (in 000's)	ital Expendit	ure Plan (in C	(s,00				
Recommended Improvements	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Town Building Field	\$235										
Oxbow Field	\$425										
High School (construction)		\$6,650									
Loker Recreation (construction)		\$3,100									
Alpine Feasibility Study			\$35								
Alpine Field Baseball (design)				\$12							
Alpine Field Baseball (construction)				\$120							
Alpine Field Rectangular (design)					\$35						
Alpine Field Rectangular (construction)					\$325						
Happy Hollow Baseball (in-house)			\$25								
Loker School Baseball (in-house)			\$25								
Cow Common					\$85						
Claypit Baseball (design)				\$35							
Claypit Baseball (construction)					\$330						
Claypit Field (design)					\$45						
Claypit Field (construction)						\$422					
Riverview (design)					\$60						
Riverview (construction)						\$565					
Middle School (design)							\$100				
Middle School (construction)							\$1,025				
Greenways (design)								\$100			
Greenways (construction)									\$660		
Alpine Playground (design)								\$45			
Alpine Playground (construction)								\$290			
Children's Way Playground										\$325	
Land Acquisition (TBD)											\$500

7. APPENDIX





