



Town of Winchester's Athletic Fields Master Plan

Winchester, Massachusetts
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Prepared for:

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TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	Three components of the study.....	2
1.2	Stakeholder Involvement.....	3
1.3	Facility Introduction.....	4
1.3.1	Field Inventory.....	4
1.4	Current Participants Using Winchester Fields.....	6
2.0	EXISTING CONDITIONS ANALYSIS.....	7
2.1	Site Operator/Maintenance Survey.....	8
2.2	Site Summaries.....	9
3.0	ANALYSIS OF CAPACITY AND DEMAND.....	22
3.1	Capacity.....	22
3.2	Field Demand.....	24
3.3	Comparison of Capacity to Demand.....	25
3.4	Load.....	26
3.5	Using Synthetic Turf to Meet Field Demand.....	28
3.6	Use of Lighting to Meet Field Demand.....	28
4.0	RECOMMENDED IMPROVEMENTS.....	29
4.1	Maintenance and Management Recommendations.....	29
4.1.1	Capacity.....	29
4.1.2	Scheduling.....	29
4.1.3	Unmet Demand.....	30
4.1.4	Natural Grass Field Sustainability.....	30
4.2	Facility Improvements.....	31
4.2.1	Parking, Vehicular, and Pedestrian Circulation.....	31
4.2.2	Tennis and Basketball Facilities.....	31
4.2.3	Recommended Site Improvement Plans and Estimated Costs Summary.....	32
5.0	PLAN COST SUMMARY AND PRIORITY LIST.....	43
6.0	ATHLETIC FIELD TURF AND INFIELD SITE IMPROVEMENTS.....	45

6.1	Athletic Field Turf Restoration	45
6.1.1	Description.....	45
6.1.2	Submittals	46
6.1.3	Materials	46
6.1.4	Construction Methods	47
6.2	Athletic Field Reconstruction	48
6.2.1	Standard Reconstruction.....	48
6.2.2	Total Drainage Reconstruction	49
6.3	Infield Renovation	49
7.0	TRENDS FOR ATHLETIC FACILITIES AND PROGRAMS.....	50
7.1	New Types of Facilities/Programs	50
7.1.1	Mini-Pitches.....	50
7.2	Seasonal Ice skating/Hockey Rinks.....	50
7.2.1	Technology	51
8.0	SUMMARY.....	52

LIST OF TABLES

Table 1-1	Facility Inventory	5
Table 1-2	Participant Inventory.....	6
Table 3-1	Normal Municipal Turf Quality Goal for Public Facility.....	22
Table 3-2	Field Inventory at Each Facility.....	23
Table 3-3	Synthetic Field Capacity Breakdown.....	24
Table 3-4	Existing Field Capacity in Hours per Week	24
Table 3-5	2018 Field Demand by Sport in Hours per Week.....	25
Table 3-6	Current Field Balance.....	26
Table 3-7	Projected Field Balance.....	27
Table 3-8	Construction Cost and Cost per Hour Comparison.....	28
Table 5-1	Parks Improvements Summary Estimate	43
Table 5-2	Conceptual Schedule of Values.....	44
Table 6-1	Seed Mixture Specifications.....	46
Table 6-2	Soil Topdressing Specifications.....	47

LIST OF APPENDICES

Site Inventory and AnalysisAppendix A

Sample Field Evaluation ChecklistAppendix B

Staff Survey Data OverviewAppendix C

Field Capacity and Demand Analysis..... Appendix D

Budgets and Recommendations for Proposed Improvements, Leonard Design, 2016..... Appendix E

Public School Facilities Master Plan, Section 3.0 Enrollments, Flansburgh, 2017 Appendix F

Recommended Improvements.....Appendix G

Opinion of Probable Construction Costs Appendix H

1.0 INTRODUCTION

The Town of Winchester is a northern suburb of Boston, Massachusetts offering a robust recreational and athletics program for its vibrant and growing population of approximately 23,000 people. The sports programs are supported by athletics facilities located at 12 public sites, including town parks and school grounds as well as one private soccer facility. The community's 7,000+* participants range from 4-year-olds in soccer to adults playing men's and women's softball. Sports activities are offered at recreational, competitive, and scholastic levels and range from traditional sports such as soccer, football, baseball, softball, field hockey, and lacrosse to burgeoning programs such as ultimate frisbee and archery.

The athletic fields are utilized for three seasons with peak usage in the fall and spring, typical of New England communities, with reduced activity during the summer months. The tradition of dedicated fall and spring sports (i.e., fall soccer and spring baseball) is losing traction across the northeast as most youth sports are trending toward three-season play. The result of this trend is competition between sports to attract and retain players, the overuse of multipurpose fields, and additional stress on public facilities as well as maintenance staff. Due to limited real estate, increased field usage, and increased participation in sports, field conditions are suffering, and communities are either turning toward the use of synthetic turf or acceptance of lower quality, natural grass fields. Sports fields have become an option to increase field programming but often times comes with neighborhood opposition.



The demand for Winchester's fields exceeds the capacity at certain times of the year. This has caused excessive wear and has contributed to the premature deterioration of several fields. This is particularly evident at the town's older facilities that have not benefited from capital reconstruction in the past several decades. Consequently, the town faces escalating maintenance costs with fewer personnel available to meet the demand of creating and maintaining safe playing fields.

The Public Works and Parks and Recreation Departments recognize the dilemma of having too many teams wanting to use too few fields, particularly in the spring and fall seasons. They also recognize that inclement weather conditions effect both the quality and availability of fields, frequently resulting in damage to the fields or cancellation/rescheduling of games. In order to better understand the problem, the town commissioned Milone & MacBroom, Inc. (MMI) to conduct a study of its 12 public field facilities to evaluate their condition and their capacity to withstand the town's flourishing sports programs.

Note: * Indicates participant numbers in 2018 and should be considered approximate.

Existing Facilities:

- *Ambrose Field*
- *Ciarcia Field*
- *Connolly Field**
- *Ginn Field*
- *Leonard Field*
- *Lynch School Field*
- *Manchester Field*
- *McDonald Field*
- *Mt. Parkhurst Field*
- *Mullen Field*
- *Muraco Field*
- *V.O. Field*
- *West Side/Nutile Field*

The preparation of this Fields Master Plan will serve to guide decisions related to programming, maintenance, scheduling, and capital improvements for the short term, mid term, and long term. While an understanding of sports field design, safety, and construction cost is necessary, focus has been placed on the planning and programming of each facility in order to maximize the efficiency of the existing assets in the Town of Winchester.

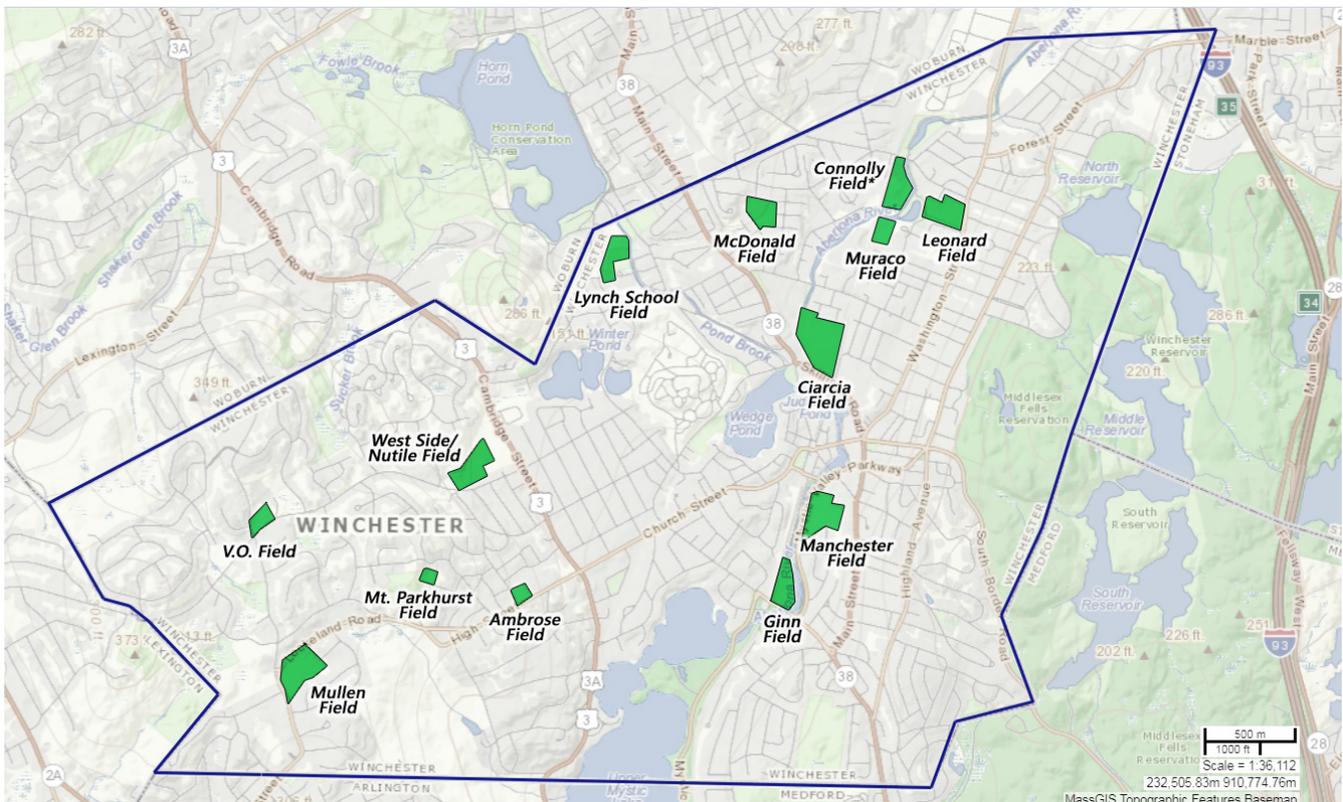


Figure 1.0 – Map of the existing field facilities included in this study

Note: * Indicates the privately owned and operated Community Park Fields, which was under construction at the time of site visits and observations.

1.1 Three components of the study

1. Existing Conditions Analysis – The first is an analysis of the existing conditions at each facility, which includes field observations, documenting the conditions using existing aerial maps,

operator and athletic director survey, and other available data and preparing graphic illustrations of the findings. See Section 2.0 and Appendices A to C.

2. Use Demand Analysis – A demand analysis to better understand the athletic programs using the fields, including the number of teams, number of practices, number of games, and times when the facilities are needed (see Appendix D). Also included in this analysis is understanding the town's future population growth and the possible impacts of field availability and condition (see Appendix E, Flansburgh's 2017 *Public School Facilities Master Plan Enrollment Overview*) and understanding previous improvements plans (see Appendix F, Leonard Design Group's *Budgets and Recommendations for Proposed Improvements*). This analysis is based on the information provided by the sports programs, Parks and Recreation Department, Department of Public Works (DPW), and schools. See Section 3.0 and Appendices D to F.



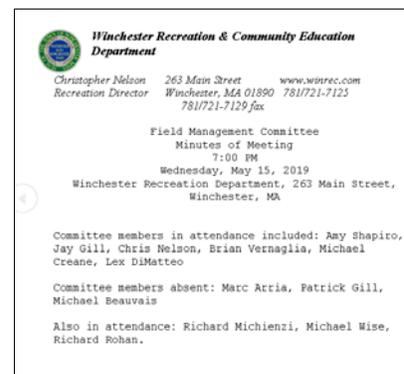
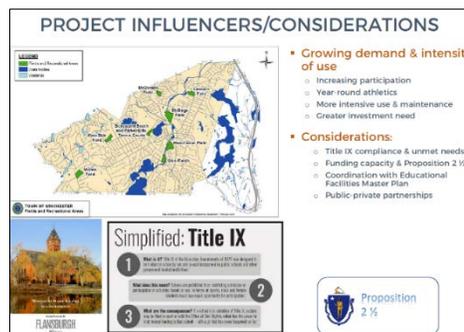
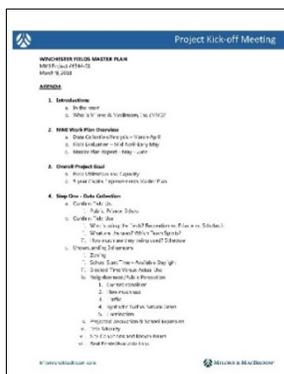
Figure 1.1 – Field/Facility Assessments
DPW officer shows MMI around
Leonard Field facility

3. Recommendations – Recommendations for improving the facilities, including graphic illustrations, improvements, and budgets. See Section 4.0 and Appendices G and H.

1.2 Stakeholder Involvement

A stakeholder/advisory group was formed by the town, which included town staff and representatives from the user groups of the facilities to be studied.

Throughout the analysis phase, meetings were held with the stakeholder group to gain insight into the needs, challenges, and desires of the community. The field use and demand information were gathered from the athletic programs and organizations that currently use the town's parks and school fields on a regular basis in an attempt to accurately depict the use and issues at each site. Conceptual site master plans were developed and refined through detailed discussions with the stakeholder group. Conceptual "Order of Magnitude" opinions of construction cost were developed for each site. These costs, combined with the needs assessment, provide guidance on an implementation strategy of the town. For more in-depth information, refer to the attached concept site plans. (See section 4.2.3.)



1.3 Facility Introduction

Key facts about the fields:

1. The town has a total of 31 athletic fields, which includes seven artificial turf fields to meet the demand of almost 600 athletic teams per year.
2. Almost half of these fields are either located at schools or are used by schools for daily physical education, recess, sports programs, or summer day camps.
3. Sporting events are programmed on each of the athletic field venues during two separate seasons, Season 1 - spring and Season 2 – fall, with limited use during the summer. See more information in Section 3.0.
4. More than half of the diamond fields are multipurpose by means of field overlays in the outfield areas (i.e., soccer field using a baseball outfield).
5. The field overlays effectively reduce the capacity of each base field to support its primary sport by having to share time and space with another sport simultaneously (example, Ciarcia Field, three synthetic turf fields can only be used one at a time, thus reducing the capacity to 1/3).

1.3.1 Field Inventory

Fields were sorted by shape, use, and size into the following categories:

- Rectangle vs. diamond
- Field overlays
- Single use
- Large vs. small
- Synthetic vs. natural
- Illuminated/lighted

One could assume by simple tabulation of all fields that Winchester has the following total number of fields at their disposal:

Natural grass fields:

- 8 large rectangles
- 9 small rectangles
- 3 large diamonds
- 11 small diamonds

31

Total

Synthetic turf fields:

- 3 large rectangles
- 2 small rectangles
- 1 large diamond
- 1 small diamond

7

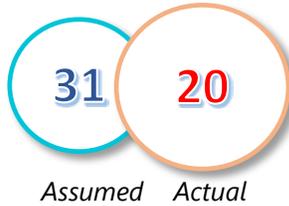
Total



However, when dual uses and field overlay conflicts are fully understood, the actual number of available fields drops significantly.

Natural grass fields:

- 7 large rectangles
- 6 small rectangles
- 1 large diamond
- 7 small diamonds



Synthetic turf fields:

- 1.83 large rectangles
- 1 small rectangle
- .33 large diamond
- .33 small diamond



Figure 1.2 – Example overlapping multiuse field overlay

**TABLE 1-1
Facility Inventory**

Field Name	Field inventory				Park Amenities							Parking (approx.)	
	Rectangular		Diamond		Tennis	Playground	Basketball	Track & field	Restrooms/ Concessions	Field Lighting	Trails/ Walking	Off-Street	On-Street
	Large	Small	Large	Small									
Ambrose School Field		1		1								57	
Ciarcia Field	2		1	1						1		145	
Connolly Field	1	2								1	1	120	
Ginn Field	1		1	2		1	1		1	1	1	42	
Leonard Field	1	2		1	2	1	1		1		1	16	25
Lynch School Field	1	2	1			2						68	21
Manchester Field	2						4	1		1		53	62
McDonald Field	1	1	1	1	1	1	1		1			4	32
Mt. Parkhurst Field		1		1		1						30	15
Mullen Field	1	4*		2		1						99	
Muraco School Field		1				2	1				1	92	21
V.O. School Field		1				2	1					105	
West Side/Nutlie Field				4		1			1	1		92	
TOTAL	10	15	4	13	3	12	8	1	4	5	4	923	176

Notes: * denotes smaller fields striped in larger field

Field sizes: Large Rectangle = > 255' field length

Large Diamond = 90' length infield

Small Rectangle = < 255' field length

Small Diamond = 75' length infield and under

1.4 Current Participants Using Winchester Fields

**TABLE 1-2
Participant Inventory**

Athletic Organization	Approximate Participants/Year	Total Number of Teams/Year
Winchester High School Athletes	765	25
Winchester Recreation Dept.	500	26
Sachem Youth Baseball	795	106
Sachem Youth Softball	355	22
FAN Softball/Temple	290	18
Soccer - Spring	1765	151
Soccer - Fall	1835	155
Winchester Girls Lacrosse	177	7
Winchester Boys Lacrosse	410	13
Pop Warner	40	2
Middle School Football	40	2
Child and Adult Flag Football	520	50
Winchester Youth Field Hockey	165	11
Ultimate Frisbee	25	1
TOTAL	7,685	589

Note: Numbers are approximate based on information gathered from athletic directors



Winchester Field Participants

- Winchester High School Athletes 550 participants
- Winchester Recreation Dept. 1000+ participants
- SYBS 1000 participants
- Winchester Youth Soccer 1500 participants
- Winchester Girls Lacrosse 70 participants
- Winchester Boys Lacrosse 400 participants
- Pop Warner 120 participants
- Middle School Football 100 participants
- Adult Men’s Soccer 30 participants
- Adult Women’s Soccer 30 participants
- Adult Men’s Baseball/Softball 75 participants
- FAN Softball 90 participants
- Winchester Youth Field Hockey 120 participants

Figure 1.3 – The town-provided field participant estimates



2.0 EXISTING CONDITIONS ANALYSIS

MMI professionals visited each of the athletic facilities in May 2018 to observe and record the existing conditions. The focus of the facilities assessment was on features such as turf condition, site drainage, compaction, Americans with Disabilities Act (ADA) accessibility compliance, orientation, and site safety. Base maps were prepared for each site using existing aerial photography available in the public domain. In addition, features such as floodplains, wetlands, and other features were obtained from published information. In some instances, construction plans for newer facilities were provided by the town. A standardized checklist was used along with digital photography to document observations. A sample checklist is appended in this report in Appendix B for reference. A digital survey was developed by MMI and distributed to town officials, athletic directors, and coaches to help gain insight into the values and additional needs that may not have been observed through site inspections. Field observations and survey results were then transferred onto annotated aerial photos of each site for a visual summary of the site inventory. See Appendix A.



Figure 2.0 – Collage of site assessment photographs, mapping, and standardized checklists

2.1 Site Operator/Maintenance Survey

The development of this master plan relied heavily upon the expertise and knowledge of staff who oversee the facilities; these are the people in the trenches who understand the community and the parks system better than anyone else. Additional valuable information was also provided by other local organizations such as the High School Athletic Department, coaches, and the various athletics associations throughout town that manage organized athletics and understand the scheduling, seasonal use, and demand for active recreation facilities.

A digital survey was created to gather information from as many users of the facilities as possible. This helped gain insight into the values and additional needs of the community that we could not see by site observations.

This section includes a summary of the results that we received. The full survey results and additional notes pertaining to each facility can be seen in Appendix C.

Are there any improvements you would like to see in the parks or fields that your organization uses? Comments below:

- *Better maintenance*
- *Ginn needs help*
- *Lighting*
- *We need to make these fields safer with more level ground*
- *Primarily conditions*
- *We desperately need an ice rink*
- *All fields have poor turf due to overuse and maintenance issues*
- *More fields with lights so the adults can use the fields too. Right now, it's almost exclusively children.*

1. *Using the following scale, how would you rate scheduling problems due to field capacity?*

Rarely encounter issues	Occasional issues, but can handle internally	Becoming more problematic due to growth in participation and demand	Ongoing problem, need more space to meet needs
0	1	4	4

2. *Since 2006, Winchester's school enrollment has increased by 17%. Correspondingly, how would you best describe growth in participation in your sports teams over the past five years?*

Overall, 33% indicated participation has remained consistent, 22% have seen an increase in participants without adding new teams, and 44% have added new teams and programs.

	Remained consistent	Participation increase, no new teams	Added teams
Baseball/Softball/T-Ball	1	1	2
Football	1	1	
Field Hockey		1	1
Lacrosse (Boys and Girls)		2	1
Soccer (Boys and Girls)	1	1	1
Ultimate Frisbee		1	
Other		1	1

2.2 Site Summaries

This section provides a brief summary of the existing features and uses for each site evaluated. For more specific information for each site, including condition of site features and survey results, refer to the corresponding site inventory and analysis graphics in Appendix A.

Ambrose Field *High Street*

This school athletic facility has approximately 1.5 field acres located to the southwest of Ambrose Elementary School and is bordered by residential property on all sides. Amenities include irrigation and school playground.

Users Groups: Elementary school use, parks and recreation, softball and t-ball, and soccer

Vehicular Circulation: Paved parking lots east of school and on-street parking to the west and south of field

Pedestrian Circulation: No easy access to field from parking lots. Must walk down steep slope or take extensive ramps to get to baseball diamond.

Accessibility: A long, sloped, accessible route that connects the playground to the fields appears to be compliant. However, the path ends and does not provide an accessible route connecting to team bench areas.

Athletic Facilities: One 60' softball field, one multipurpose field overlay

- 1.) *Softball*.....Overall, in fair condition, low spots in player area where flooding occurs. Uneven surface in outfield, fencing and player benches in good condition.
- 2.) *Multipurpose*....In poor condition, turf worn at goal areas, weedy and compacted, and uneven surface in some areas.



Ciarcia Field

Ciarcia Street

This newly renovated ±6.25-acre park site bordered by commercial and residential property to the west, residential to the north, railroad tracks and the high school to the west, and commercial to the south. Amenities include irrigation, lighting, large parking lot, trail connection, and artificial turf. Adjacent to Winchester High School.



User Groups: WHS Sports such as soccer, lacrosse, field hockey, and baseball

Vehicular Circulation: Small gravel parking lot north of park with long access drive; off-street parking bordering park to the south

Pedestrian Circulation: New pathway connecting to most athletic facilities and to existing paths

Accessibility: All paths and spectator bleachers will be accessible once constructed, accessible parking spaces, no accessible route connecting two western multipurpose fields is proposed.

Athletic Facilities: One 60' baseball synthetic field, one 90' baseball synthetic (illuminated), one multipurpose synthetic field – outfield overlay, two multipurpose fields

- 1.) *Synthetic Turf Multipurpose Field*...Under construction during field inspection (field overlays reduce scheduling efficiency)
- 2.) *Synthetic Turf Baseball 90'*.....Under construction during field inspection
- 3.) *Synthetic Turf Baseball 60'*.....Under construction during field inspection
- 4.) *Multipurpose Field 1*..... Under construction during field inspection
- 5.) *Multipurpose Field 2*..... In poor condition at time of inspection, all weeds and no grass, uneven playing surface, rocky topsoil



Connolly Field

Cross Street

This ±8.7-acre proposed park will be fully developed and connect nearby parks and fields into a continuous green space along the banks of the Aberjona River. Amenities will include a field house building with indoor fields, meeting rooms, and training areas as well as lighted artificial turf fields, natural grass field with irrigation, and trail connection.



User Groups: Winchester Soccer Club

Vehicular Circulation: Access road off Cross Street with large off-street parking lot

Pedestrian Circulation: (Under construction during time of field observations)

Accessibility: (Under construction during time of field observations)

Athletic Facilities: Two large multiuse artificial turf fields, one smaller multi-use field, indoor fields

- 1.) "Field 1".....Condition unknown (under construction during time of field observations)
- 2.) "Field 2".....Condition unknown (under construction during time of field observations)
- 3.) "Ryan Connolly Field".....Condition unknown (under construction during time of field observations)



*Images from the Town of Winchester and SFC New England

Ginn Field

Bacon Street

This ±3.6-acre park is fully developed with extremely limited options for field expansion. It is bordered by train tracks and a bike trail to the west and the Aberjona River and associated floodplains to the east. Amenities include irrigation (half of the fields), a small restroom, two temporary storage facilities, and a large playground.



Users Groups: WHS softball, Winchester Boys LAX, SYBS, fan softball, Winchester Soccer Club, Pop Warner, Middle School football

Vehicular Circulation: Small gravel parking lot north of park with long access drive, off-street parking bordering park to the south

Pedestrian Circulation: New trail addition along west side of park connects to Tri-County Bikeway.

Accessibility: Accessible route from parking to playground and Ginn Lights field's spectator area and dugouts. No accessible route connecting two southern fields.

Athletic Facilities: Two 60' softball fields, one 90' softball field (illuminated), one multipurpose field (outfield overlay)

- 1.) *Ginn Lights Softball*....In good condition, needs foul line striped, some lights are out. Covered dugouts in poor condition.
- 2.) *Ginn Tracks Softball*....In poor condition, weeds in clay, poorly defined turf edge at outfield.
- 3.) *Ginn River Softball*.....In fair/poor condition, drainage issues and floods at every rain event, slope creates barrier to access field, backstop fence panels need replacing, poor turf edge of infield and outfield
- 4.) *Multipurpose Field*..... In fair condition, very compacted, pitted turf and weedy, only half of field is irrigated
- 5.) *Basketball Court*.....In good condition (newly renovated), signs of use as access road, erosion from catch basin overflow to north and access road to south



Leonard Field *Washington Street*

This ±4.5-acre park site with significant grade changes on all sides shares property with the old swimming beach and abandoned bathhouse. Amenities include irrigation (all fields), playground, basketball court, two tennis courts, and trail connections.

Users Groups: Winchester Girls LAX, Winchester youth soccer, WHS boys and girls soccer, WHS field hockey, Winchester Soccer Club



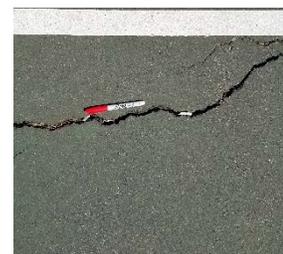
Vehicular Circulation: Very small unpaved parking lot with mostly on-street parking along Washington Street

Pedestrian Circulation: One entry walk along the north side of the park that connects Washington Street to the playground and a new connection to the Tri-County Bikeway and Muraco School

Accessibility: No compliant accessible route into the park from parking areas or from trail connection. Paved accessible path connects most park elements except fields.

Athletic Facilities: Two multipurpose fields, one soccer field, two tennis courts, one basketball court, one small backstop for neighborhood use (outfield overlay)

- 1.) *Multipurpose 1*.....In fair condition, uneven wavy surface
- 2.) *Multipurpose 2*.....In poor condition, turf worn at goal areas, very compacted, uneven wavy surface, soggy along western edge
- 3.) *Soccer Field*.....In fair condition, turf worn at goal areas, some compaction, drainage issues along southern edge
- 4.) *Basketball Court*....In fair to poor condition with many large cracks
- 5.) *Tennis Courts*.....In fair condition with small cracks and broken nets
- 6.) *Softball*.....Neighborhood/pickup use only



Lynch Field *Brantwood Road*

This school athletic facility has approximately 7.5 field acres located to the north of Lynch Elementary School, bordered to the west by steep slopes and residential properties, and to the east by Horn Pond Brook and associated floodplains. Amenities include irrigation and school playground.



Users Groups: Elementary school use, WHS soccer and baseball, WMS baseball, SYBS, Winchester Youth Soccer League, Winchester Soccer Club, WHS field hockey

Vehicular Circulation: Two paved parking lots and some on-street parking, maintenance access road at parking entrance off Royal Street

Pedestrian Circulation: One main entry walk from north parking lot but ends at entrance to fields

Accessibility: One accessible paved path to athletic fields from parking areas or school, no accessible route to baseball backstop nor rectangle fields

Athletic Facilities: Two multipurpose fields 120' x 180', one multipurpose field 180' x 300' outfield overlay, one baseball field

- 1.) *Multipurpose 1 & 2*.....In poor condition, weedy and sparse turf, uneven wavy surface, very compact soils with small puddles present during inspection
- 2.) *Multipurpose 3*.....In fair condition, turf worn at goal areas, some compaction, and extra field space to east in good condition with no signs of overuse
- 3.) *Baseball*.....In fair/good condition with newer large backstop, fencing, and player benches. Field has poor orientation resulting in game postponement until sun sets below tree line to the west.



Manchester Field

Main Street

This school athletic facility has approximately 7.9 field acres and is located to the west of McCall Middle School. It is bordered to the west by Mystic Valley Parkway, to the east by a steep slope, and to the south by residential property. Amenities include irrigation, lighting, Knowlton Stadium, track and field event facilities, artificial turf, basketball courts, and a skate park.



User Groups: Middle School, WHS boys and girls LAX, girls youth LAX, Winchester Youth Soccer Club, Parks and Recreation track, Winchester Soccer Club, WHS football, Pop Warner

Vehicular Circulation: Two paved parking lots, maintenance access road at parking entrance, on-street parking along Manchester Road

Pedestrian Circulation: Two main entry walks connect the north parking lot to the fields and the south entry gate, one walk from east parking lot into the stadium, no path to basketball courts.

Accessibility: Both entry walks appear to be accessible, accessible route to the stadium is along the west side of the school from the north parking lot.

Athletic Facilities: One 200 x 360' artificial turf field with grandstand bleachers (illuminated, lined for different field sizes), one track and field with interior 200 x 345' football field, four basketball courts

- 1.) *Football Field*.....In good condition, irrigated but grass worn at goal areas, surrounding track showing wear, underdrainage system at south end of field and track. Field uniformity could benefit from a track edge drain and regrading.
- 2.) *Multipurpose Turf*... In poor condition, drainage issues along northeast corner slopes, lights in good condition, 4' perimeter fence needs replacement with Type IIB fused and bonded fencing, ball safety netting is in need of repair.
- 3.) *Basketball*.....In fair condition with a minor bumps in asphalt.
- 4.) *Running Track* Rubberized track surface is delaminating and in poor condition and needs repair/replacement. Town should review warranty.



McDonald Field *Loring Avenue*

This ±4.1-acre park site is fully developed and bordered by residential property on all sides. Amenities include irrigation (all fields), playground, basketball court, tennis court, and restroom facilities.

User Groups: WHS baseball and softball, SYBS, WHS soccer, Winchester Soccer Club

Vehicular Circulation: Two small paved parking lots but mostly on-street parallel parking, maintenance access across from Kirk Road

Pedestrian Circulation: A short paved access between courts and playground is the only pathway.

Accessibility: Very limited – Two parking spaces provided but only short accessible pathway to playground and courts, no accessible route to fields.

Athletic Facilities: Two multipurpose fields (outfield overlay), one 90' baseball field, one 60' baseball field, one basketball court, one tennis court



- 1.) *Multipurpose 1*....In fair/good condition, some weeds but good slope and even playing surface.
Weedy/poor turf areas appear to be inundated by ants/insects.
- 2.) *Multipurpose 2*....In good condition, some weeds but good slope and even playing surface.
- 3.) *Baseball 90'*.....In fair condition, field and clay well taken care of, fence in fair condition. No ball safety netting along third base line to protect on-street cars from foul balls.
- 4.) *Baseball 60'*.....In fair condition, field and clay well taken care of, player areas have drainage issues, benches behind backstop that need to be extended.
- 5.) *Basketball*.....In fair/poor condition with multiple cracks in need of repair, fencing in fair condition
- 6.) *Tennis Courts*.....In good condition, newly renovated



Mt. Parkhurst Field *Samoset Street*

This ±1-acre field is located to the west of the Parkhurst School Administration Building. It is surrounded by residential property on all sides and Mt. Parkhurst wooded area to the west. Additional amenities include a playground.



User Groups: Parks and Recreation Super Soccer, archery, SYBS

Vehicular Circulation: Paved parking lot west of administration building, on-street parking surrounds west and south of field

Pedestrian Circulation: No pathways. A noncompliant staircase near the playground connects up to the ball field.

Accessibility: No accessible route from parking lot or connecting athletic elements, no handrail on stairs

Athletic Facilities: One 60' softball field, one 90' X 140' multipurpose field – outfield overlay

- 1.) *Softball*.....In poor condition, infield drainage issues, turf in poor condition, weedy and poorly defined turf edge at outfield, fencing in poor condition and not long enough for player protection, player benches in very poor condition, not enough clearance from overgrown vegetation
- 2.) *Multipurpose*.....In poor condition, turf sparse, weedy, and compacted, uneven wavy surface, no fence along top of slope for stray balls, numerous hazards in play surface (rocks, boulders, ledge, catch basins)



Mullen Field

Ridge Street

This ±3.5-acre park site is surrounded by residential property on all sides. Amenities include irrigation (all fields), large parking lot, playground, and sledding hill. Buried stumps in the grass play areas were reported.

User Groups: SYBS, Winchester Youth Soccer League, Winchester Soccer Club

Vehicular Circulation: Large paved parking lot and no on-street parking, maintenance access at northwest corner of parking, parking not adequate

Pedestrian Circulation: No pathways except for a sidewalk at parking lot

Accessibility: No accessible route to fields and spectator bleachers. Limited accessible parking, bleachers not to code.

Athletic Facilities: One 70' baseball field, one 60' baseball field, one large multipurpose field (broken into smaller fields for large soccer events)

- 1.) *Multipurpose 1*....In fair/poor condition, thin turf condition, weedy and uneven surface, shows signs of overuse and wear at goals
- 2.) *Baseball 75'*.....In fair condition, drainage issues in clay, player benches in poor condition, fence panels warping
- 3.) *Baseball 60'*.....In fair condition overall, drainage issues in clay, poorly defined turf edge at outfield, fence in fair condition



Muraco Field

Bates Road

This school athletic facility has approximately 2.6 field acres located to the northwest of Muraco Elementary School, bordered to the west by railroad tracks, to the north by the Aberjona River and associated floodplains. Amenities include school playground and trail access.



User Groups: Elementary school use, Winchester Youth Soccer League, Winchester Soccer Club, Winchester girls LAX, WHS Ultimate Frisbee

Vehicular Circulation: Main paved parking lot to southeast of school, on-street parallel parking and drop off on Tufts Drive to the north

Pedestrian Circulation: No defined pathways to field

Accessibility: No accessible route

Athletic Facilities: One 130' x 250' multipurpose field

1.) Multipurpose.....In very poor condition, large portion of bare soil at goal areas, weedy and compacted, uneven playing surface and excessive longitudinal slope



V.O. Field *Johnson Road*

This school athletic facility has approximately 1 field acre located to the south of Vinson-Owen Elementary School, surrounded by residential property. Amenities include school playgrounds and a half basketball court.

User Groups: Elementary school use, Parks & Recreation, SYBS, Winchester boys lacrosse

Vehicular Circulation: Paved parking lot and drop-off loop east of school, on-street parking surrounds west and south of field



Pedestrian Circulation: Concrete pathways surround field and connect to school and playgrounds.

Accessibility: Pathways appear to be accessible and level to fields.

Athletic Facilities: One multipurpose field 100' x 185'

1.) *Multipurpose.....*In poor condition, turf weedy and compacted, rocky soil, uneven surface in some areas, fence is good condition. Field served as a construction staging area during school renovations and was not decompacted properly.



West Side/Nutile Field *Johnson Road*

This ±4.1-acre park site is fully developed and bordered by steep forested slopes to north and west, commercial property to the east, and residential to the south. Amenities include restroom/concession building, irrigation, field lighting, batting cages, and a playground.



User Groups: SYBS (Sachem Youth Baseball and Softball)

Vehicular Circulation: Access road with parking on edges, mainly gravel with 12' protection fence

Pedestrian Circulation: No pathways except a short paved access between parking and restroom/concession building, narrow maintenance access pathways between fences

Accessibility: One dedicated parking space but not located near accessible pathway to restroom/concession building, spectator bleachers not compliant, no accessible route between fields.

Athletic Facilities: Two 60' softball fields, one 70' baseball field, one 60' baseball field

- 1.) "Field A".....In good condition, newly sodded, field and clay well taken care of, fence in good condition.
- 2.) "Field B".....In fair condition, poorly defined turf edge at infield and outfield, backstop and dugout fencing in fair condition, batting cages in fair condition.
- 3.) "Field C".....Nutile Stadium field in good to excellent condition, press box and dugout buildings need routine maintenance but are in good condition, illuminated, limited spectator area and narrow pathways.
- 4.) "Field D".....In fair/poor condition, poorly defined turf edge at infield and outfield, backstop and dugout fencing in poor condition, very limited outfield turf between infield and fence between Field C.



3.0 ANALYSIS OF CAPACITY AND DEMAND

Winchester Parks and Recreation, in conjunction with athletic organizations that use the town's athletic facilities, provided information regarding field usage. The general information provided included the number of teams by age group, the number of players per team, the length of time for practices and games, the number of practices and games per week, the length of season, and where practices and games take place. In addition, some programs provided information regarding the projected growth in participation. The 2017 Flansburgh plan provided a 10-year enrollment projection that was used as a basis for some of the future demand. Data was compiled in order to identify the "load" on each field and to determine the adequacy of the number of fields that the town currently has to meet today's demand and consider the future.

3.1 Capacity

Simply counting the number of fields is not an accurate measurement of field capacity. Several other factors are considered and identified below. See Appendix D for detailed analysis charts.

- Weekly Amount of Play.** A well-maintained natural grass field is an ideal surface for most sports to play on. However, not all fields can be categorized as well maintained, primarily due to their inability to be rested, particularly in a municipal setting. Furthermore, restrictions on the use of pesticides, herbicides, and certain fertilizers on school properties makes it difficult and near impossible to sustain an adequate stand of grass, based on usage. Proper maintenance including irrigation, fertilizer, aeration, topdressing, and other cultural practices may not be enough if the fields are not constructed properly or if root zone soil structure has been compromised. As a result, common industry practice is that play on natural grass should be limited to 15 to 20 hours per week. The consequence of overuse is that the turf deteriorates, compaction increases, weeds supplant the turf, and a field eventually becomes unsafe for play.

**TABLE 3-1
Normal Municipal Turf Quality Goal for Public Facility**

North Carolina State University Expected Field Condition Based on Hours of Field Use				
Condition	Hrs Per Year		Hrs Per Week	
	Min	Max	Min	Max
Sustained Good Field Conditions	0	200	0	8
Good Field Conditions with some Thinning of Turf and Localized Wear Areas	400	600	15	23
Fair Field Conditions; Expect Significant Thinning and Wear	800	1000	31	38
Poor Field Conditions with Significant Turf Losss, Field Surface Damage, and Increased Potential for Athlete Injury	1000		38	

- *Single Purpose Versus Multipurpose.* A significant factor in the analysis of capacity is whether or not the outfield of a diamond field is utilized for sports other than baseball or softball including football, soccer, field hockey, and lacrosse. With a field overlay, multiple sports are competing for the same real estate, thus limiting its use for a dedicated sport and putting additional stresses on the turf.
- *Time When Events Occur.* A third consideration in the capacity analysis is when the field is available for use. Most recreational events occur after school or at the end of the workday during the week and heavily on the weekends. Therefore, the number of available hours is generally limited to the late afternoon and evening, which is further limited by the daylight. Obviously, a properly illuminated field will extend the time available for use to some extent and may be counter intuitive if the fields are already being overused during standard daylight hours. However, as a practical matter, youth recreational sports generally end play by dusk.
- *Event Units.* The time it may take for a practice or game in one sport may differ from another sport. For example, a soccer game may take between 1 to 2 hours depending on the age group of the team. A football game generally takes longer. Similarly, practice time varies depending on the availability of fields, time of day, and the time desired by the coaching staff.

Table 3-2 below lists the 12 + 1* fields in Winchester that are the subject of the capacity study and illustrates the number of available rectangle and diamond fields with field overlays accounted for. Field overlays reduce the amount of fields that can be played on simultaneously (example, Ciarcia Field, three synthetic turf fields can only be used one at a time, so it reduces the capacity to 1/3). The chart distinguishes between natural grass and synthetic turf fields.

TABLE 3-2
Field Inventory at Each Facility

Field	Field Inventory							
	Natural Grass				Synthetic Turf			
	Rectangular		Diamond		Rectangular		Diamond	
	Large	Small	Large	Small	Large	Small	Large	Small
Ambrose School Field		0.5		0.5				
Ciarcia Field	2				0.33		0.33	0.33
Connolly Field*					0.5	1		
Ginn Field	0.6		0.4	1				
Leonard Field	1	2						
Lynch School Field	0.6	1	0.4					
Manchester Field	1				1			
McDonald Field	0.33		0.33	0.33				
Mt. Parkhurst/Pisgah Field	0.5			0.5				
Mullen Field	0.5		1	1				
Muraco School Field		1						
V.O. School Field		1						
West Side/Nutile Field				4				
TOTAL FIELDS	6.53	5.5	2.13	7.33	1.83	1	0.33	0.33

Note: * Indicates the privately owned and operated Community Park Fields, which was under construction at the time of site visits and observations.

Table 3-3 below calculates the synthetic turf field capacity by multiplying the field inventory by the available hours per week. Field inventory reflects field overlays. Each synthetic turf field has sports field lighting; however, this is restricted by current town ordinance.

**TABLE 3-3
Synthetic Field Capacity Breakdown**

Field	Available Synthetic Turf Field Hours Per Week								
	Field Inventory				*Available Hrs./Week	Field Capacity in Hours*			
	Rectangle		Diamond			Rectangle		Diamond	
	Large	Small	Large	Small		Large	Small	Large	Small
Manchester Field	1				53	53			
Ciarcia Field	0.33		0.33	0.33	62	21		21	21
Connolly Field	0.5	1			63	32	63		
TOTAL HOURS	1.83	1	0.33	0.33	Av=59.3	106	63	21	21

*Available hours reflects current restrictions on field lighting. Varies per field.

Using the number of natural grass fields shown in Table 3-2 multiplied by 15 hours of use per field per week, and adding the total number of available synthetic turf hours, Winchester has the following number of field hours available on a weekly basis:

**TABLE 3-4
Existing Field Capacity in Hours per Week**

Field Type	Available Field Hours			
	Rectangle		Diamond	
	Large	Small	Large	Small
Natural at 15 hours/field	98	83	32	110
Synthetic – See Table 3.2	106	63	21	21
TOTAL CAPACITY	204	146	53	131

3.2 Field Demand

Field demand is measured by the number of event hours that an athletic program uses the available fields. The greater the number of participants results in a greater the number of teams and results in the greater number of event hours there will be for that sport. Youth sports are trending toward small-sided games and perhaps clinic-style coaching where full age groups are brought to a single location to train, sharing a single large field. The demand analysis considered each sport's current methodology (small sided, clinic, traditional) and the size of the field utilized. In general, small rectangle fields are utilized for 7v7 play, and smaller sided and large rectangle fields are utilized for 9v9 and larger sided. In Winchester, the demand has been derived from the information provided by the town's athletic programs and Parks and Recreation Department and reflect actual game and practice duration per age group/team.

A full breakdown of teams by sport and their specific usage is included in Appendix D. Table 3-5 below summarizes field demand by sport and season:

**TABLE 3-5
2018 Field Demand by Sport in Hours per Week**

Sport	Spring					Fall					Year
	Rectangle		Diamond		Hrs/Wk Total	Rectangle		Diamond		Hrs/Wk Total	Total Hours
	Large	Small	Large	Small		Large	Small	Large	Small		
Archery	1	0	0	0	1	1	0	0	0	1	2
Field Hockey	0	0	0	0	0	42	2	0	0	44	44
Football	0	0	0	0	0	48	14	0	0	62	62
Lacrosse	102	20	0	0	122	4	0	0	0	4	126
Soccer	132	62	0	0	194	195	66	0	0	261	455
Track and Field	19	0	0	0	19	0	0	0	0	0	19
Ultimate Frisbee	10	0	0	0	10	0	0	0	0	0	10
PE/Recess	7	44	0	0	7	7	44	0	0	51	58
Baseball	0	0	50	141	191	0	0	0	0	0	191
Softball	0	0	8	56	64	0	0	5	0	5	69
2018 Total	270	126	58	197	608	296	125	5	0	428	1036

Note: This analysis does not account for pickup sports.

3.3 Comparison of Capacity to Demand

When the data from Tables 3-3 and 3-4 are compared, it becomes evident that the available number of fields barely meets the demand for field time. What is not taken into account in the analysis are intangibles such as inclement weather, which can affect both schedule and the health of the field, and special events such as tournament events or, in the case of where the field is located at a school, special activities and outdoor recess. More specifically:

- Although some fields such as the demand for diamond fields matches the spring season and the field availability, this does not take into account projected growth for any of the programs, and thus, is not the best assumption to make.

3.4 Load

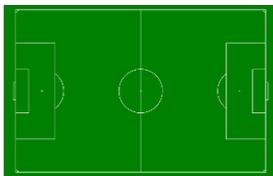
The following table summarizes the current balance between current field capacity, current demand, the actual use (load), and the net surplus or deficit by number of fields (based on field type).

**TABLE 3-6
Current Field Balance**

	CAPACITY HOURS/WEEK	DEMAND HOURS/WEEK	LOAD HOURS/WEEK	BALANCE HOURS/WEEK
LARGE RECTANGLE	204	271	+67	-4 deficit
SMALL RECTANGLE	146	125	-20	+1 surplus
LARGE DIAMOND	53	58	+5	-1 deficit
SMALL DIAMOND	131	197	+66	-4 deficit

Note: green = sufficient, orange = insufficient

So what is Winchester's IMMEDIATE field need? Note: green = surplus, orange = deficit



Large rectangle fields
Need for four additional fields

4



Large diamond fields
Surplus of one field

1

Small rectangle Fields
Need for one additional field

1

Small diamond fields
Need for four additional fields

4

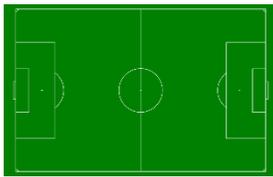
The following table combines the current demands and availability with the future protected needs of the community to provide a "protected field balance" scenario.

**TABLE 3-7
Projected Field Balance**

	CAPACITY HOURS/WEEK	DEMAND HOURS/WEEK	15% POP. INCREASE	LOAD HOURS/WEEK	BALANCE HOURS/WEEK
LARGE RECTANGLE	204	271	312	+108	-7 deficit
SMALL RECTANGLE	146	125	144	-1	+0 n/a
LARGE DIAMOND	53	58	67	+14	-1 deficit
SMALL DIAMOND	131	197	227	+96	-6 deficit

Note: green = sufficient, orange = insufficient

So what is Winchester's *PROJECTED field need*? Note: green = surplus, orange = deficit



Large rectangle fields
Need for seven additional fields

7



Large diamond fields
Need for one additional field

1

Small rectangle fields
Balanced – meets needs

0

Small diamond fields
Need for six additional fields

6

3.5 Using Synthetic Turf to Meet Field Demand

Using synthetic turf instead of natural grass is one approach to meeting the demand for athletic fields when usable land area or space is at a premium. The principal advantage of synthetic turf is its ability to be used in a variety of weather conditions and for longer periods of time with no rest or recovery time needed to maintain turf quality. Further, if the synthetic turf field is located at a school, it can be used for physical education programming.

While synthetic turf has a higher capital cost the maintenance costs are quite low in comparison to what is required for natural grass. Consideration should be given to the following:

**TABLE 3-8
Construction Cost and Cost per Hour Comparison**

	Natural Grass	Synthetic Turf
Construction/Maintenance		
Initial Construction	\$500,000	\$900,00
Maintenance (10 years)	\$250,00	\$60,000
Turf Replacement		\$800,000
Total Cost	\$750,000	\$1,760,000
Hours of use per year		
15 hrs/wk x 37 wks x 10 yrs	5,550	
60 hrs/wk x 42 wks x 10 yrs		25,200
Cost per hour of use	\$135	\$70

3.6 Use of Lighting to Meet Field Demand

It should be understood that field lights can be essential in maximizing the number of hours a field can be used. Careful consideration for neighboring property and limited lighting schedules should be assessed per location. In the case of Winchester where there is a demonstrated need for additional field time, with significant future growth projected, synthetic turf is a legitimate option for those sites where lighting already exists or can be installed as part of the park reconstruction program.

Lighting can be provided on natural turf fields, but increasing the amount of time and amount of players on the field diminishes the overall turf health and quality of the field. Lighting should be carefully considered when not proposed with synthetic turf fields options.

4.0 RECOMMENDED IMPROVEMENTS

There is no straightforward answer to the question of "What is the minimum number of fields required for Winchester?" Unfortunately, there are no mathematical formulas and no longer a national standard for determining the number of fields needed based on population density, further complicating the analysis, (see more in Sections 4.1.1 through 4.1.3). All sports seasons have become longer in duration, and many sports are now multiseason, thus making the once popular "overlapping outfield uses" unachievable. We are almost to the point at which each sport now requires a dedicated facility.

The field use and capacity analysis demonstrated that there are several considerations for improving field utilization. This analysis and the recommendations have attempted to create a balance between objective and subjective factors based on Winchester's needs and our professional experience and opinions.

4.1 Maintenance and Management Recommendations

As Winchester continues to grow and the demands on existing fields increase, these proposed plans or any future sports field improvements should be reviewed to their impact on the town's and the public school district-wide long-term goals.

4.1.1 Capacity

The spatial capacity of existing field facilities needs to continue to be considered in the planning for organized athletic programs since Winchester's athletic facilities are shared by multiple sports each season. A concentrated effort should be made to avoid, where feasible, the use of shared outfield spaces.

Moving forward, organizations and the Parks and Recreation Department must collaborate in decision-making regarding the introduction of new activities that need to be accommodated by the outdoor athletic facilities. The required field space for sports programming must also be considered within the context of field space availability to avoid overcrowding or incompatible uses.

4.1.2 Scheduling

Due to the very high demand for field space, Winchester should have full control of scheduling for its facilities. Steps need to be taken to improve coordination with user organizations to ensure that their needs are met and the facilities are not overscheduled. The department may want to consider establishing a preseason coordination policy for the organizations that the program use of the facilities and a regular method of communication with partner organizations. The town should also consider fully utilizing the tools available with using an online recreation management software service to improve efficiency and services.

4.1.3 Unmet Demand

Current scheduling of field facilities includes overlaying activities and/or the use of suboptimal field space. As noted previously, the spatial capacity of the facilities should inform which activities are compatible and how many activities can safely be accommodated within a given time period.

The field use analysis suggests that the town should consider developing new or expanding existing multiuse field space to address unmet demand. It should be noted that the introduction of new or expanded programs, such as the flag football or ultimate frisbee, may increase the projected demand beyond what is shown in this report.

4.1.4 Natural Grass Field Sustainability

Ensuring a sustainable and resilient natural athletic field requires effectively managing the levels of use and maintenance. Scheduling and considerations for capacity must go hand in hand with regular maintenance and field rehabilitation efforts, including rest periods.

Hours of weekly field use currently fall within the recommended standards, but activity should continue to be monitored to prevent overuse. With a few exceptions, athletic fields are irrigated through the growing season, which improves the health and resiliency of playing fields. The town and its partner organizations should consider developing an aeration and overseeding program for all athletic facilities (see Section 6.0 for more information).

KEY MANAGEMENT GOALS FOR NATURAL GRASS FIELDS:

- *Maintain a dense turf cover with enough vigor to recover from damage from play.*
- *Control field use to avoid overuse.*
- *Factor in sufficient field rest such as the rotation and temporary closing of fields.*
- *Include soil aeration and overseeding in addition to mowing, fertilization, and irrigation.*
- *Provide regular, deep irrigation of the fields.*
- *Restrict use when turf and soil are extremely wet to limit compaction and root damage.*

Excerpted from Management of Natural Turf Sports Field by Bradley S. Parks and James A. Murphy. 2014 Rutgers University Turfgrass Proceedings of the GREEN EXPO Turf and Landscape Conference

4.2 Facility Improvements

The primary goals for each park's master plan are as follows:

- Improve safety
- Improve universal accessibility
- Increase field availability
- Improve field conditions
- Continue to support Winchester's parks

Upon completion of the analysis phase, MMI created the recommended improvement graphics for each facility. Each plan depicts site improvements selected based on the existing conditions analysis and from comments/discussions, town official stakeholders, and the athletic organizations.

4.2.1 Parking, Vehicular, and Pedestrian Circulation

It is apparent that most parks do not have enough parking. The survey results also indicate a lack of parking as a major issue that many of the athletic directors see as a problem at their playing fields. Also, several of the facilities lack safe and accessible pedestrian routes between the parking areas and the field spaces. This report does not make recommendations to significantly improve the parking, vehicular, and pedestrian circulation.



Figure 4.0 – Small parking lot at Leonard Field



Figure 4.1 – Parallel parking at McDonald Field

4.2.2 Tennis and Basketball Facilities

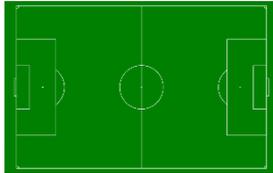
While this report focuses on athletic fields, recommendations include the improvement or repair of some of the tennis and basketball courts where necessary.

4.2.3 Recommended Site Improvement Plans and Estimated Costs Summary

This section provides a summary of the proposed improvements and features for each site evaluated, taking into account the field demand immediate needs and stakeholders needs.

From Section 3.3:

Winchester's IMMEDIATE field need? Note: green = surplus, orange = deficit



Large rectangle fields

Need for four additional fields

- Ambrose
- Ginn Field (artificial)
- Manchester (artificial)
- Muraco



Large diamond fields

Surplus of one field



Small rectangle fields

Need for one additional field

- Users of a small rectangle can use the interior of a large field



Small diamond fields

Need for four additional fields

- Lynch
- Ginn (two artificial)



HIGH PRIORITY PROJECTS:

Ginn Field

- Lighted, rectangle synthetic turf field striped for soccer/multiuse, and two 200' baseball diamonds
- Improved parking and circulation

Leonard Field

- Renovate existing fields to improve drainage and health of turf
- Repair tennis court surface

Manchester Field

- Lighted, rectangle multiuse field inside existing track
- Replacing existing artificial turf at Knowlton Stadium

Mullen Field

- Renovate existing fields to improve compaction and health of turf

LOW PRIORITY PROJECTS:

Ambrose School Field

- Large soccer/multiuse field
- Retaining walls

Ciarcia Field

- Large soccer/multiuse field
- Batting cages

Lynch School Field

- Reorient large baseball diamond
- Add small softball field and dedicate to diamond use only

McDonald Field

- Repair tennis court surface

Muraco School Field

- Large rectangle synthetic turf field
- Five fenced tennis courts
- Adjust bus parking and sidewalk

Ambrose Field

High Street

COST ESTIMATE	
Short-term Improvements	\$ 3,000
Long-term Improvements	\$ 490,000
Total (with fees and contingency)	\$715,000

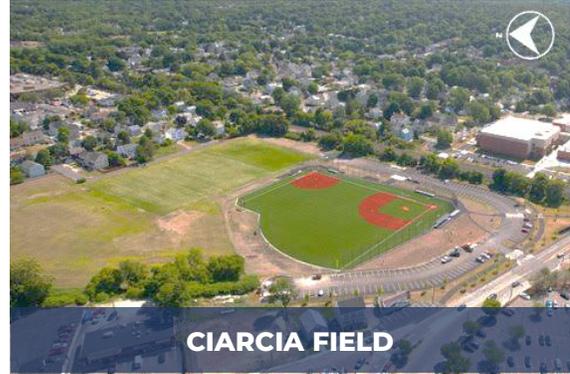


- Remove existing softball field and multiuse field. Replace with 300' x 175' soccer/multiuse field.
- Add retaining walls along High Street and add retaining wall to the existing wall.
- Add Sportsfield netting along northeast of the field.
- May require reconfiguring the sidewalk along High Street
- Reinstall irrigation for new field.

Ciarcia Field

Skillings Street

COST ESTIMATE	
Mid-term Improvements	\$ 436,000
Total (with fees and contingency)	\$ 630,000



- Existing newly installed fields to remain.
- Remove multiuse field 5 and reorient to add large rectangle multiuse field.
- Add proposed batting cage.
- Maintain swale as desired.

Ginn Field

Bacon Street

COST ESTIMATE	
Short-term Improvements	\$ 97,000
Long-term Improvements	\$ 1,965,000
Total (with fees and contingency)	\$ 2,970,000



- Remove all existing ball fields and dugouts and replace with large artificial turf striped with two baseball fields and a 350' x 185' soccer/multiuse field.
- Add a connector road to additional parking lot and adjust existing sidewalk to playground area.
- Add accessible plaza from parking to field.
- Restore lighting at field 1 and add new poles at field 2.
- Repair basketball court surface.
- Add dugouts to baseball field 1.
- May require new retaining wall.

Leonard Field *Washington Street*

COST ESTIMATE	
Short-term Improvements	\$ 121,000
Mid-term Improvements	\$ 305,000
Long-term Improvements	\$ 690,000
Total (with fees and contingency)	\$ 1,610,000



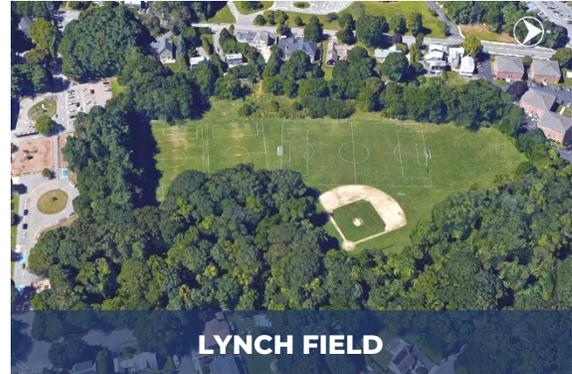
This plan is conceptual in nature and has been developed for informational purposes. This plan is subject to all applicable regulatory approvals, final plans may vary significantly from this layout.

- Renovate existing fields to improve drainage and health of turf.
- Restore irrigation system.
- Restripe fields with existing layout.
- Repair tennis courts surface.

Lynch Field

Brantwood Road

COST ESTIMATE	
Short-term Improvements	\$ 10,000
Mid-term Improvements	\$ 290,000
Long-term Improvements	\$ 810,000
Total (with fees and contingency)	\$ 1,600,000



- Remove existing baseball diamond with poor orientation. Clear vegetation where needed.
- Add a small softball field and a large baseball field.
- Reinstall as much backstop fencing and benches as possible to large baseball field
- Reinstall irrigation.
- Dedicate to diamond field use.

Manchester Field

Main Street

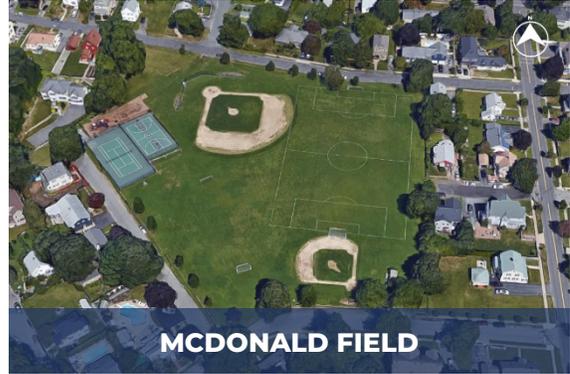
COST ESTIMATE	
Short-term Improvements	\$ 1,060,000
Long-term Improvements	\$ 1,092,000
Total (with fees and contingency)	\$ 3,100,000



- Remove existing track football field and replace with artificial turf.
- Add lighting to gain additional use hours.
- Maximize use through scheduling.
- Add multiuse striping like the existing Knowlton Stadium artificial turf field.
- Replace existing worn artificial turf at Knowlton Stadium.

McDonald Field *Loring Avenue*

COST ESTIMATE	
Short-term Improvements	\$ 22,000
Total (with fees and contingency)	\$ 35,000



The plan is conceptual in nature and has been developed for informational purposes. This plan is subject to all applicable regulatory approvals, final plans may vary significantly from this layout.

- Layout stays the same.
- Increase both baseball field 1 diamond and multiuse field 1 rectangle use through scheduling.
- Remove ant infestation.
- Repair tennis court surface.

Mullen Field

Ridge Street

COST ESTIMATE	
Long-term Improvements	\$ 672,000
Total (with fees and contingency)	\$ 970,000



- Renovate existing fields to improve compaction and health of turf.
- Restore irrigation system.
- Restripe multiuse field with existing layout.

Muraco Field

Bates Road

COST ESTIMATE	
Short-term Improvements	\$ 4,000
Mid-term Improvements	\$ 775,000
Long-term Improvements	\$ 480,000
Total (with fees and contingency)	\$ 1,815,000

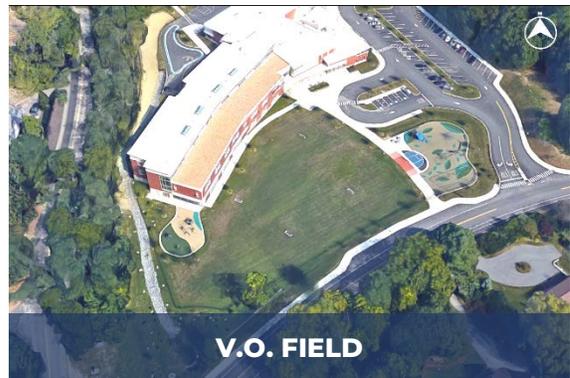


- Remove existing small field and convert to large artificial turf 340' x 200' multiuse field.
- Adjust bus parking loop and sidewalks to school and trail connection.
- Remove existing vegetation as needed and add five tennis courts.

Mt. Parkhurst Field *Samoset Street*
No recommended improvements at this time.



V.O. Field *Johnson Road*
No recommended improvements at this time.



West Side/ Nutile Field *Johnson Road*
No recommended improvements at this time.



5.0 PLAN COST SUMMARY AND PRIORITY LIST

The following tables summarizes the more detailed opinions of construction costs included in Appendix H. The parks have been prioritized based on discussions with town officials and the recognized need for improvements due to safety concerns, to improve field conditions, and to increase field availability.

TABLE 5-1

Parks Improvements Summary Estimate

Priority	Park Facility	TOTAL PROJECT COST (including design fees)
L	Ambrose School Field	\$ 715,000.00
H	Ginn Field	\$ 2,970,000.00
H	Leonard Field	\$ 1,610,000.00
L	Lynch School Field	\$ 1,600,000.00
H	Manchester Field	\$ 3,100,000.00
L	McDonald Field	\$ 35,000.00
H	Mullen Field	\$ 970,000.00
L	Muraco School Field	\$ 1,815,000.00
L	Skillings Field	\$ 630,000.00
	Total Park Improvements	\$ 13,445,000.00

General Notes:

1. The above quantities are assumed and are based upon a conceptual master plan.
2. Estimated costs are based on projected 2019 pricing. Improvements budgeted for following years should be adjusted appropriately.
3. Priorities determined by Town of Winchester.

Priority Legend:

- L** = Low priority
M = Medium priority
H = High priority

TABLE 5-2

Conceptual Schedule of Values

	ITEM/DESCRIPTION	UNIT	UNIT PRICE
	Mobilization & Removals Contingency	SF	\$ 2.00
	Renovate Ex. Fields (reverse tine tiller with culti-packer, top-dress & over-seed)	SF	\$ 10.00
	New Irrigation (no supply or pressure upgrades)	SF	\$ 0.40
	Field Lighting per Pole (no significant electrical upgrades to service)	EA	\$ 75,000.00
	New dugouts (Precast concrete)	EA	\$ 40,000.00
	New Synthetic Turf Soccer or Baseball (incl. drainage, standard infill, fencing)	SF	\$ 18.00
	New Synthetic Turf Soccer or Baseball (incl. drainage, alternate infill, fencing)	SF	\$ 20.00
	New Natural Grass Fields (regrade, loam, seed & fencing)	SF	\$ 5.00
	Sodded field add	SF	\$ 0.70
	New HMA Tennis Court (including fencing)	EA	\$ 75,000.00
	New Post-tensioned Concrete Tennis (including fencing)	EA	\$ 100,000.00
	New HMA Basketball Court	EA	\$ 50,000.00
	New Court Lighting per Pole (no significant electrical upgrades to service)	EA	\$ 25,000.00
	New/Renovated Parking Area (limited drainage improvements)	SF	\$ 15.00
	New Concrete Sidewalk	SF	\$ 10.00
	New Retaining Wall	FF	\$ 60.00
	Outdoor Ice Rink (temporary walls, no refrigeration)	EA	\$ 50,000.00
	Total Park Improvements		\$ 415,141.10

Note: These cost opinions have been developed to assist in the guidance of budgeting and implementation planning for the desired improvements. All costs should be considered conceptual in nature with the understanding that final design quantities and costs may vary from numbers shown in this study. These costs are based upon schematic-level drawings and quantities of work developed for this study only. Costs per task have been developed utilizing a compilation of items and recently bid and constructed similar athletic field projects within the New England region.

6.0 ATHLETIC FIELD TURF AND INFIELD SITE IMPROVEMENTS

A majority of the athletic facilities studied require restorative or reconstruction efforts to improve the playing surfaces. A typical investigation prior to any improvement efforts should include the following:

- Examination of the soil and drainage conditions
- Test pits should be dug to expose the soil profile and allow for in-situ testing.
- Permeability testing should be conducted in several locations.
- Soil samples taken for laboratory testing and analysis of chemical and physical characteristics
- Evaluation of playing surface

The above services should be conducted under the supervision of a landscape architect, engineer, and agronomist. Once the above services are complete, a recommendation must be made as to whether to restore or reconstruct the athletic facility.

There are three main methods to improve natural turf playing fields. The least invasive and usually least expensive option is to restore the existing turf (see Section 6.1 for methods used). The second and third methods require reconstruction (see Section 6.2 for both methods and requirements).

6.1 Athletic Field Turf Restoration

Typically, turf restoration requires aerating, topdressing, overseeding, and fertilization of the athletic field. The following is a sample construction specification for turf renovation activities that should be used as a general guide for work performed. This guide will need to be modified for specific facility conditions.

6.1.1 Description

The work under this item shall consist of furnishing all materials, labor, and equipment to perform aeration, topdressing, overseeding, amending, and watering all areas of specified athletic field per the schedule provided herein. The work shall also include maintaining the turf per these specifications or per the direction of the landscape architect as turf conditions change.

CAUTION! The existing irrigation lines may be at a shallow depth. It shall be the contractor's responsibility to locate and mark all irrigation heads and lines. Any damage to the system as a result of this work shall become the sole responsibility of the contractor, and they will be required to immediately perform satisfactory repairs at no additional cost to the owner.

6.1.2 Submittals

Submit sample, product literature, and guarantees in accordance with the specifications for the following:

- Seed: The seed delivered to the site must be fully labeled according to the seed laws and regulations of the Commonwealth of Massachusetts. A letter from the seed supplier is to accompany the seed mixture delivered to the site certifying that the seed in the bags is the cultivars listed on the label. The seed mixture is to be inspected by the owner prior to its acceptance.
- Fertilizer: Submit for approval manufacturer's label or literature of product being used.
- Topdressing: Submit for approval manufacturer's label or literature of product being used along with product sample.

6.1.3 Materials

The materials for this work shall conform to the requirements listed below.

- Seed Mixture:

**TABLE 6-1
Seed Mixture Specifications**

	% By Weight	% Min. Purity	% Min. Germination
Limousine Kentucky Bluegrass	25	98	80
Princeton 105 Kentucky Bluegrass	25	98	80
Accent II Ryegrass	25	98	90
Cutter Perennial Rygrass*	25	97	90

Note: (*) Denotes high endophyte
Overseeding rate: 6 lbs/1,000 SF

The seed mixture is to have no noxious weeds or other crop seeds. Other cultivars of Kentucky bluegrass or perennial ryegrass may be substituted for the above-listed cultivars with the approval of the owner; however, substitutes for the Kentucky bluegrass cultivars must show good wear tolerance based on the *National Kentucky Bluegrass Test – 2000, National Turfgrass Evaluation Program, Progress Report 2003, NTEP No. 04-6*. Substitutes for perennial ryegrass must remain at 50% by weight in the mixture.

- Fertilizer: Apply 15-15-15 fertilizer at a rate of 295 pounds per acre
- Topdressing: Apply sand meeting the following specification:

**TABLE 6-2
Soil Topdressing Specifications**

	Allowable Range Particle Size (mm)	By Weight
Fine Gravel	2.00-3.40	Not more than 10% of the particles will fall within these two fractions, of which no more than 3% will be fine gravel.
Very Course Sand	1.00-2.00	
Coarse Sand	0.50-1.00	At least 60% particles in these two fractions.
Medium Sand	0.25-0.50	
Fine Sand	0.15-0.25	20% maximum
*Very Fine Sand	0.05-0.15	5% maximum
*Silt	0.002-0.05	
*Clay	< 0.002	3% maximum

Note: * Very fine sand, silt, and clay should not exceed 10% of total.

6.1.4 Construction Methods

- a. Sow 100 pounds per acre of the perennial ryegrass-Kentucky bluegrass seed mixture specified above.
- b. Core aerify two times over the field with a core aerifier having tines spaced at 3" to 3.5" on center with a coring depth of 3" or greater.
- c. Sow another 100 pounds per acre of seed mixture.
- d. Pulverize the soil cores and work the pulverized soil cores into the turf using a steel mat.
- e. Sow 60 pounds per acre of seed mixture using a slit seeder.
- f. Topdress with sand at 1 cubic yard per 1,000 square feet.
- g. Apply the 15-15-15 fertilizer on the treated field.

Four aeration/overseeding treatments shall be performed in year one. One aeration/overseeding shall be performed following the completion of the fall athletic season if temperature and weather conditions permit.

- Cleanup: Cleanup will be required after each overseeding operation. Cleanup shall include the removal of all debris resulting from the seeding operation.
- Warranties and Certificates: The contractor shall supply the landscape architect with all warranties or certificates, or both, furnished with the seed mixture, fertilizer, and topdressing prior to use of the material, prior to application.
- Ongoing Maintenance: The contractor shall maintain the fields and their surroundings from the contract start date, following the program outlined below, for the season.
- Irrigation: Irrigate all seeded areas daily with 1/4 inch of water per day using three sets to keep the surface moist and to maintain soil moisture at or near field capacity so that the seedbed does not dry out. The amount of water per day and the number

of sets may be adjusted at the request of owner. The irrigation schedule shall further be adjusted after the seedling plants are well established. The quantity of water used per day shall be recorded and reported daily to the owner for the first 3 weeks from seeding and weekly thereafter. The contractor shall be responsible for fully operating the irrigation system continuously, as necessary for the season.

- Mowing: The field and its surroundings shall be mowed with a reel mower set at a mowing height in which the clip of the reel matches the mowing height when the mow height to be achieved is 1.5" or less. The reel blades and bed knife shall be kept sharp and evenly matched to provide a clean cut. The blades are to be kept sharp. The mower shall be operated within the speed range recommended by the manufacturer. The fields shall be mowed at 5-day intervals.

NOTE – Additional mowing of the field prior to each sporting event is required.

- Fertilization: Apply a second application of fertilizer approximately 4 to 5 weeks after seeding.
- Rolling: Roll the field on occasion to smooth the playing surface using a roller that has a minimum width of 8 feet.
- Weed Control: The contractor will be responsible for the control of weeds that ingress into the field areas during the maintenance period. The need for and extent of treating weeds shall be determined by the owner. The use of herbicides or other methods of control will be determined per site and on the weed species present. Herbicide treatments must be applied by an applicator with a pesticide license issued by the Commonwealth of Massachusetts.
- Maintenance Log: The contractor shall maintain a maintenance log identifying all water uses as outlined in the Irrigation section above, dates of each mowing, dates at which fertilizer treatments were applied, and any weed treatments. The log shall be submitted to the owner biweekly.

6.2 Athletic Field Reconstruction

Field reconstruction will be more costly than restoration but may be necessary to correct issues with large areas of improper grades, poor drainage, or poor soil conditions. Reconstruction should also be considered in areas with continuous maintenance issues. The two main methods are as follows:

6.2.1 **Standard Reconstruction**

Method used when a field is severely overused or has planarity issues that affect the level playing field. Construction will typically include the following:

- Remove existing sod
- Strip and stockpile existing topsoil
- Remove irrigation system (if applicable)
- Subsoil regraded to meet the desired cross pitch

- Reinstall irrigation system
- Topsoil screened, amended, and replaced
- New sod installed or seed established according to methods used for turf restoration in Section 6.1

6.2.2 Total Drainage Reconstruction

Method used when a field has major drainage issues. Construction will typically include the following:

- Remove existing sod
- Strip and stockpile existing topsoil
- Remove irrigation system (if applicable)
- Excavate subsoil and add underdrains
- Backfill with stone and sand
- Regraded to meet the desired cross pitch
- Reinstall irrigation system (must install new because a sand-based system will require regular irrigation)
- Topsoil screened, amended, and replaced
- New sod installed or seed established according to methods used for turf restoration in Section 6.1

6.3 Infield Renovation

A number of the baseball and softball facilities are in need of renovations to the skinned infields to correct issues including low spots, compaction, and drainage. A typical infield restoration will include the following:

- Strip existing infield material to full depth.
- Remove all stones over ½ inch in diameter and all other deleterious material from existing infield material.
- Stockpile suitable material. Use extreme care not to comingle infield mix with subbase material or topsoil.
- Incorporate approved supplemental infield mix as required and blend together with existing material.
- Slope subgrade as needed to meet desired grades. Prior to placement of any material, the contractor shall notify the owner and landscape architect in order to conduct a field meeting to determine the necessary grades within the infield.
- Incorporate infield conditioner "Truface Pro League®" or approved equal at proportion/ratio as directed by the manufacturer.
- Spread reconditioned infield material to appropriate grades. Spread the material in two lifts and hand roll each lift to the proper thickness. After rolling the first layer, the surface shall be lightly scarified with a rake prior to applying the second layer. The contractor shall return a minimum depth of 4" of material as measured after rolling both lifts.
- Roll infield with a 1-ton roller.
- Slowly drag the infield with a mat drag. Perform this operation twice.
- Rake field edges to remove any loose material from turf.

7.0 TRENDS FOR ATHLETIC FACILITIES AND PROGRAMS

Moving into the future, the Parks and Recreation Department will need to continue to remain current and shift its services to respond to community needs. As part of this study, we referenced predicted trends noted by industry leaders, including the National Parks and Recreation Association (NRPA) and the Aspen Institute.

7.1 New Types of Facilities/Programs

The increasing public-private partnerships and corporate sponsorship of community parks and recreation have introduced innovative locations and new types of facilities. Public and private partnerships supplement limited agency budgets and offer an opportunity for nonprofits, organizations, and corporations to work with municipalities to enhance parks and recreation opportunities within the communities they serve.

7.1.1 Mini-Pitches

For an example of public and private partnerships, the City of New York partnered with Adidas, the NYC Football Club, and U.S. Soccer Foundation to create 50 new "safe places to play." The program transformed abandoned hard courts and empty schoolyards to "mini-pitches," small, customized areas suitable for soccer programs and pickup games.



Figure 7.0 – Example Mini Pitch, courtesy of minipitch.com

7.2 Seasonal Ice skating/Hockey Rinks

Seasonal outdoor ice skating venues can be an attractive winter use for northern climate communities. There are more and more premanufactured, temporary side panel and liner systems available on the market every year, with material costs ranging from several thousand dollars to tens of thousands of dollars. Many of these temporary systems can be set up and broken down by municipal public works, park and recreations, or volunteer community groups. The biggest challenges facing these systems are (1) finding a flat enough area in the late fall, winter, and early spring months that is not used for other sports or will not be damaged by a large rectangular impervious, extremely heavy surface for 3 to 4 months of the year. When considering the site of this area to be flat, a slope of 1% of grade change over 50 feet of parking

areas would result in 6 inches more water or ice on the far end. Thus, a flat area that is suitable for ice may need to be graded or excavated to avoid extreme depths of water on one side versus the other. The best options for installation of these temporary ice skating facilities are underutilized parking, hard court areas, or synthetic turf with surfaces of asphalt, concrete, synthetic turf, or even gravel. Several of these areas that may be up for consideration in the Town of Winchester could be the Ciarcia Field parking lot or artificial turf, Manchester Field after artificial field is installed, and the Mullen Field parking lot. Areas of natural grass play fields are not recommended for this use as they can be damaged and overcompacted by the weight of the water and ice, and the vegetation can be easily killed if the covering (liner) is left on for as little as 1 or 2 days of warmer fall or spring weather. Cost can also vary wildly when considering a seasonal rink. Although a "fill the tub with water and wait for freezing temperatures approach" is the most feasible option, it definitely is not the most dependable. If the rink is dependent on Mother Nature, the erratic weather cycles of a New England winter may cause the rink to only be useable for a few weeks each winter. To avoid the inconsistent temperatures that occur in this environment, a permanent or temporary use of seasonal refrigeration could be considered. These systems can either be completely removable or partially removable in the summer months. These systems come with overall installation costs that range from several hundred thousand dollars up to \$1 million dollars. Electricity and operations costs can vary significantly and should be factored into the overall decision of any type of seasonal skating facility.



Figure 7.1 – Example of seasonal ice rink (not recommended on natural turf grass), courtesy of Elio Gugliotti, Citizen's News



Figure 7.2 – Example of seasonal ice rink on natural diamond infield, courtesy of Green Township, Pennsylvania

7.2.1 Technology

Technology is an increasingly important means of communication, administration, and registration. Utilizing the full extent of existing or new recreation and facilities management technology is increasingly embraced by agencies to streamline operations and to improve scheduling and customer service.

8.0 SUMMARY

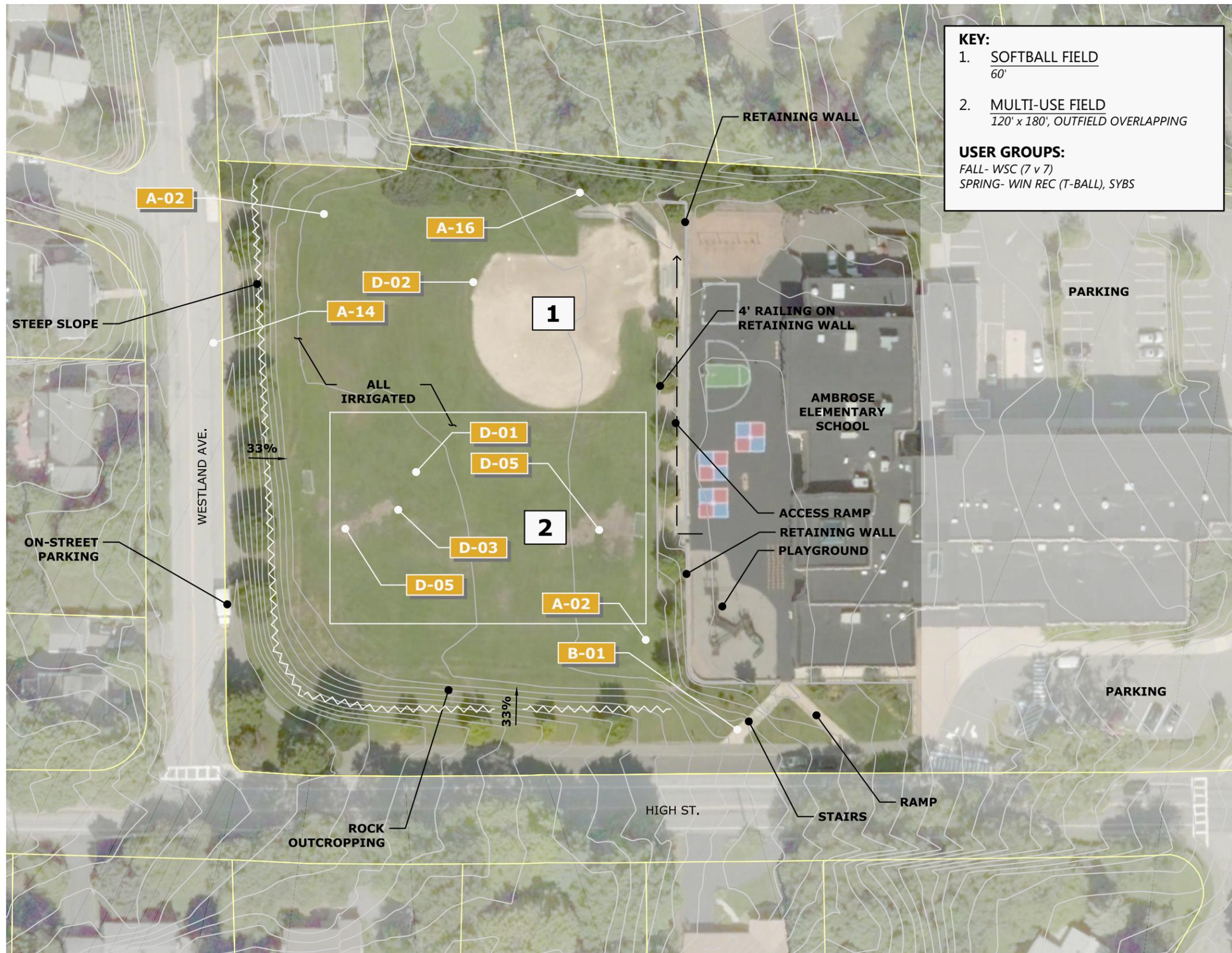
This Athletic Fields Master Plan is intended to document the rationale for and to inform and guide capital planning and investment in the community's Athletic Facilities. The recommendations outline short-, mid-, and long-term visions to guide the care and development of facilities and programs so that they meet the needs of the community now and well into the future. Please reference the Appendices for additional details, including site plans, cost estimates, and study data.

6344-01-m3119-rpt

APPENDIX A

SITE INVENTORY AND ANALYSIS

Drawing: \PROJECTS\6344-01-DEVELOPMENT\SITE-ANALYSIS\DWG Layout_T02A



KEY:
 1. SOFTBALL FIELD
 60'
 2. MULTI-USE FIELD
 120' x 180', OUTFIELD OVERLAPPING

USER GROUPS:
 FALL- WSC (7 v 7)
 SPRING- WIN REC (T-BALL), SYBS

REFERENCE NOTES SCHEDULE:

SYMBOL	GENERAL SITE DESCRIPTION
A-02	Drainage Issue
A-14	Park Entry Undefined
A-16	Vegetation Overgrown
SYMBOL	ACCESSIBILITY DESCRIPTION
B-01	No Pedestrian Connection
SYMBOL	FIELD TURF DESCRIPTION
D-01	Weedy and Compacted Turf
D-02	Lip at Infield / Outfield Interface
D-03	Inconsistent Grades
D-05	Bare Turf Area

ADDITIONAL NOTES:

The retaining wall fence is too short to keep many stray balls in the multi-use area.

Users must walk down steep, grassy slopes or take extensive ramps down to the playground and back up to get to the play fields.

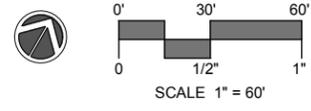
No restroom or storage facilities.

Athletic organizations rated the overall field conditions as average (20%) to poor (20%), 60% reported n/a.

Athletic organizations rated parking and traffic issues as the following: busy but no major impacts (25%), occasionally busy (25%), and often congested (50%).

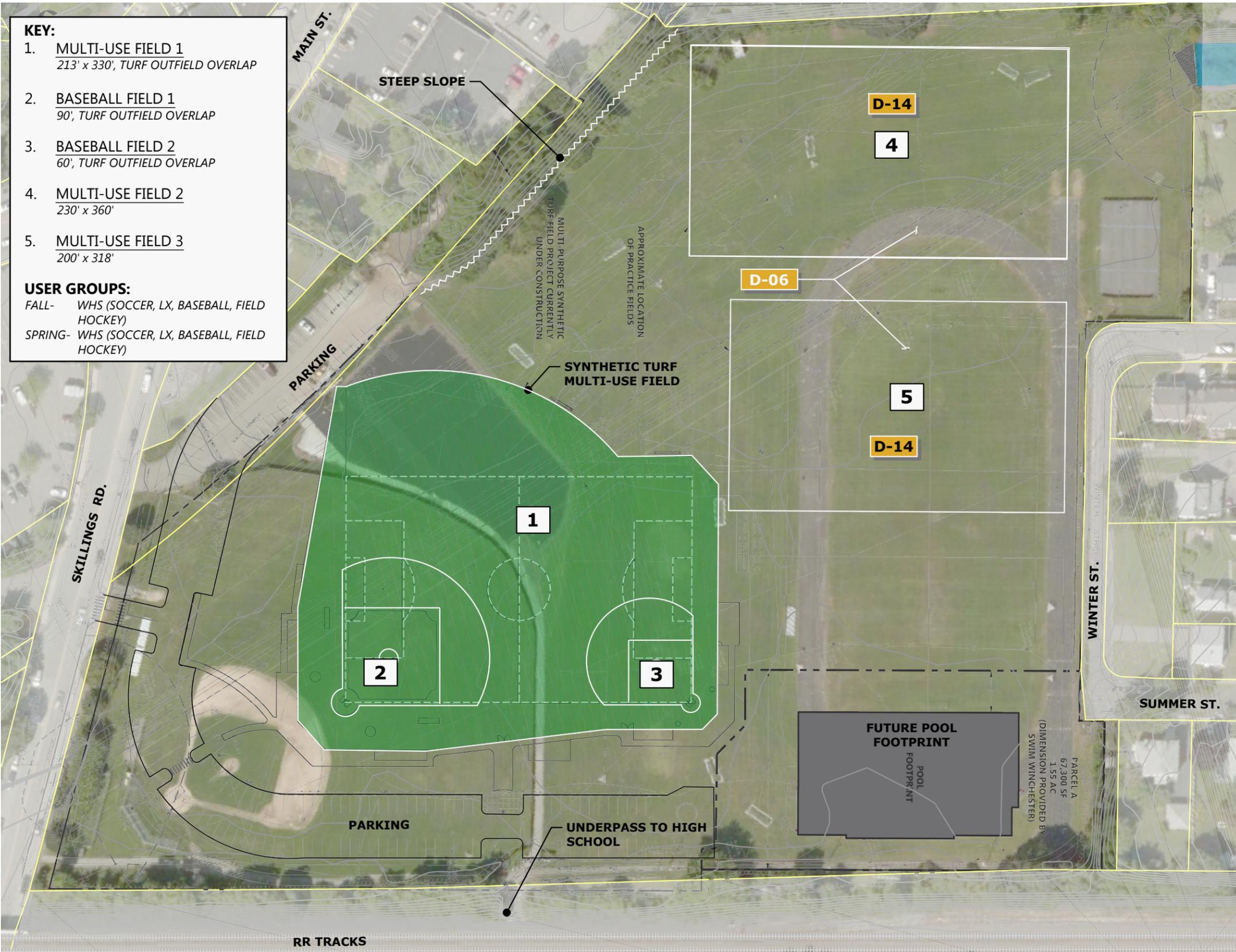
100% of the athletic organizations surveyed stated lighting is not needed.

SITE INVENTORY AND ANALYSIS- AMBROSE FIELD
 WINCHESTER SPORTS FIELDS MASTER PLAN



Plotted by: CARLYN On this date: Wed, 2019 May 29 - 9:00pm

Drawing: V:\DESIGN\6344-01-DE-CAD SITE-CIARCIA - BDMG Layout Task



- KEY:**
1. MULTI-USE FIELD 1
213' x 330', TURF OUTFIELD OVERLAP
 2. BASEBALL FIELD 1
90', TURF OUTFIELD OVERLAP
 3. BASEBALL FIELD 2
60', TURF OUTFIELD OVERLAP
 4. MULTI-USE FIELD 2
230' x 360'
 5. MULTI-USE FIELD 3
200' x 318'
- USER GROUPS:**
- FALL- WHS (SOCCER, LX, BASEBALL, FIELD HOCKEY)
- SPRING- WHS (SOCCER, LX, BASEBALL, FIELD HOCKEY)

REFERENCE NOTES SCHEDULE:

SYMBOL	FIELD TURF DESCRIPTION
D-06	Excessive Weed Growth
D-14	Field Reconstruction Required

ADDITIONAL NOTES:

Newly constructed site improvements shown on old aerial image per Town of Winchester's site layout plan from 1/2/2017. Fields were under construction during site observations.

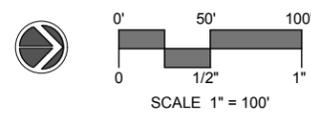
Multi-use fields are all weeds and rocky exposed soil.

Athletic organizations rated the overall field conditions as excellent (50%) to good (16.7%). 33.3% responded n/a.

Athletic organizations rated parking and traffic issues as the following: no issues (20%), busy but no impacts (40%), occasionally busy (20%), and often congested (20%)

Site lacks restroom/ concession/ storage building.

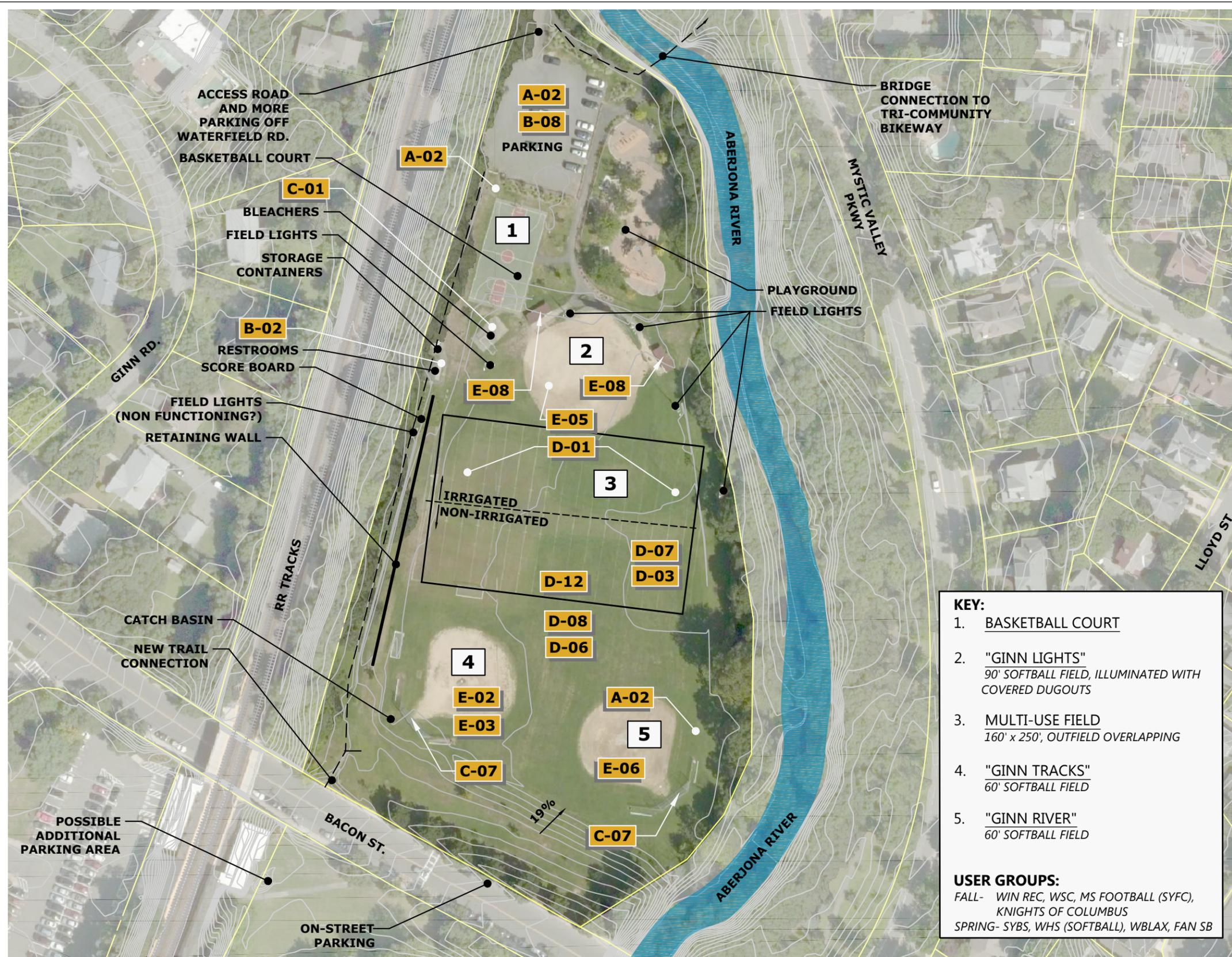
SITE INVENTORY AND ANALYSIS- CIARCIA FIELD
WINCHESTER SPORTS FIELDS MASTER PLAN



Plotted by: CAG/JP On this date: Wed, 2019 May 29 - 8:00pm

Drawing: V:\DESIGN\6344-01-DC\CD SITE-GINN-REV.DWG Layout: Title

Plotted by: C:\hp On this date: Wed, 2019 May 29 - 8:00am



REFERENCE NOTES SCHEDULE:	
SYMBOL	GENERAL SITE DESCRIPTION
A-02	Drainage Issue
ACCESSIBILITY DESCRIPTION	
B-02	No ADA Compliant Route
B-08	Surface Not ADA Compliant
GENERAL ATHLETIC FIELD DESCRIPTION	
C-01	Damaged / Non Code Compliant Bleacher
C-07	Fencing in Need of Minor Repairs
FIELD TURF DESCRIPTION	
D-01	Weedy and Compacted Turf
D-03	Inconsistent Grades
D-06	Excessive Weed Growth
D-07	Turf needs Restoration
D-08	Turf in Poor Condition
D-12	Add Irrigation System
INFIELD DESCRIPTION	
E-02	Infield needs Grooming
E-03	Weedy / Irregular Edge
E-05	Reconstruct Mound
E-06	Infield requires grading/ drainage
E-08	Dugout Damage

KEY:

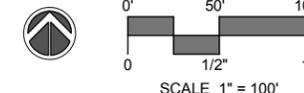
- BASKETBALL COURT**
- "GINN LIGHTS"**
90' SOFTBALL FIELD, ILLUMINATED WITH COVERED DUGOUTS
- MULTI-USE FIELD**
160' x 250', OUTFIELD OVERLAPPING
- "GINN TRACKS"**
60' SOFTBALL FIELD
- "GINN RIVER"**
60' SOFTBALL FIELD

USER GROUPS:
 FALL- WIN REC, WSC, MS FOOTBALL (SYFC), KNIGHTS OF COLUMBUS
 SPRING- SYBS, WHS (SOFTBALL), WBLAX, FAN SB

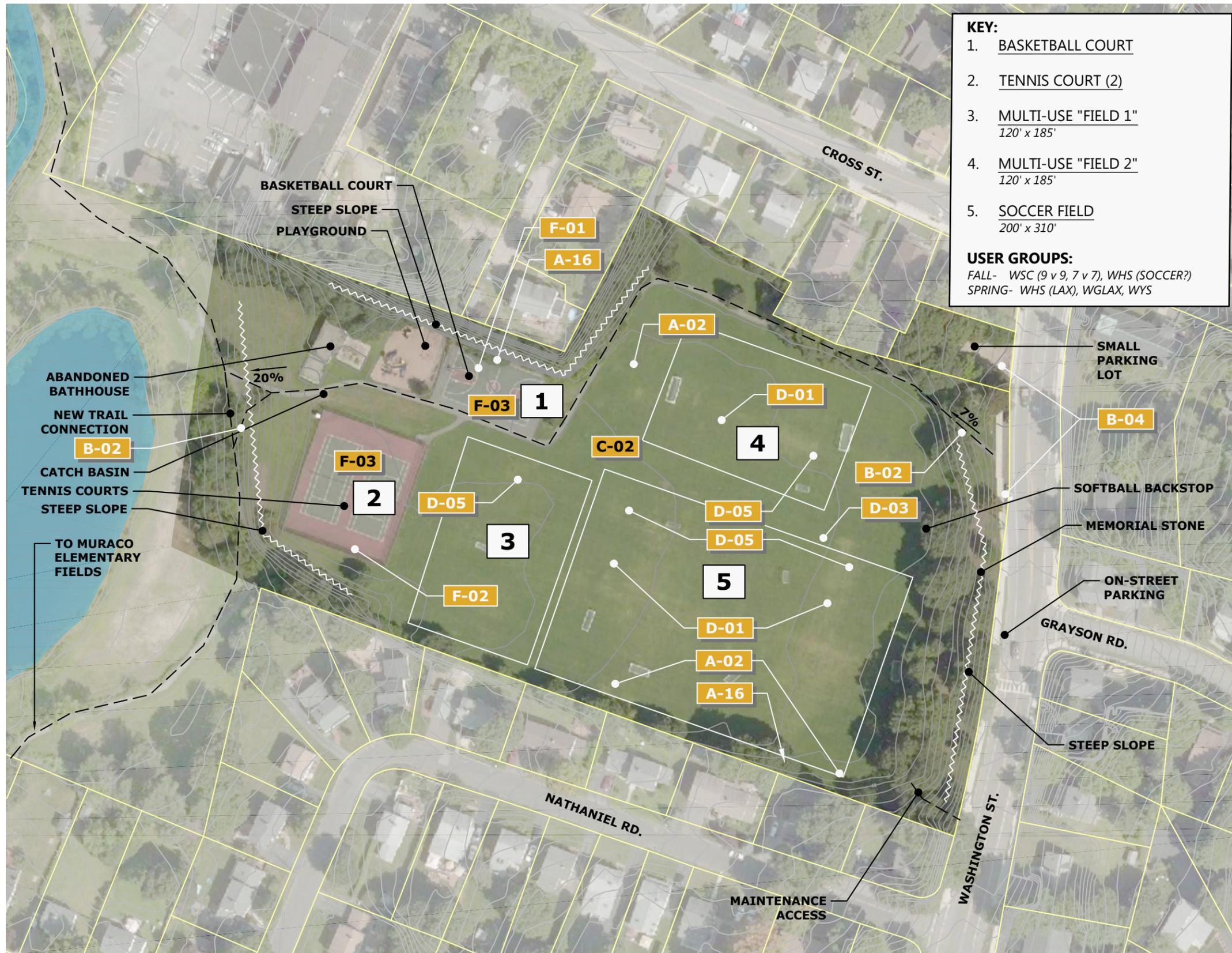
ADDITIONAL NOTES:
 Irrigation boxes exposed and damaged.
 Lighted multi-use field is being overused creating bare and damaged turf areas throughout center of field.
 Maintenance vehicle traffic has compacted turf area near storage and restroom area.
 Parking area material is rough and may not be an ADA traversable surface, lack of ADA parking spaces.
 Basketball court has steep crown along the division line.
 Parking entrance of Waterfield Rd. gets very congested.
 Athletic organizations rated the overall field conditions as average (50%) to poor (25%)
 Athletic organizations rated parking and traffic issues as the following: busy but no major impacts (44%), occasionally busy (22%), and often congested (33%)
 50% of athletic organizations surveyed, stated additional lighting is needed to accommodate additional field time. 50% reported the existing is sufficient.

SITE INVENTORY AND ANALYSIS- GINN FIELD

WINCHESTER SPORTS FIELDS MASTER PLAN



Drawing: V:\DESIGN\6344-01-DC\CD\SITE-LEONARD-REV.DWG Layout: Taha



KEY:

- BASKETBALL COURT
- TENNIS COURT (2)
- MULTI-USE "FIELD 1"
120' x 185'
- MULTI-USE "FIELD 2"
120' x 185'
- SOCCER FIELD
200' x 310'

USER GROUPS:
 FALL- WSC (9 v 9, 7 v 7), WHS (SOCCER?)
 SPRING- WHS (LAX), WGLAX, WYS

REFERENCE NOTES SCHEDULE:

SYMBOL	GENERAL SITE DESCRIPTION
A-02	Drainage Issue
A-16	Vegetation Overgrown
SYMBOL	ACCESSIBILITY DESCRIPTION
B-02	No ADA Compliant Route
B-04	No ADA Parking
SYMBOL	GENERAL ATHLETIC FIELD DESCRIPTION
C-02	Lack of Spectator Seating
SYMBOL	FIELD TURF DESCRIPTION
D-01	Weedy and Compacted Turf
D-03	Inconsistent Grades
D-05	Bare Turf Area
SYMBOL	SPORT COURT DESCRIPTION
F-01	Playing Surface in Poor Condition
F-02	Nets/ Hoops In Need of Repair
F-03	Surface Needs Repairs

ADDITIONAL NOTES:

Lack of parking is a major issue.

Abandoned bathhouse hazard needs to be removed until a suitable replacement can be installed.

Site lacks restroom/ concession/ storage building.

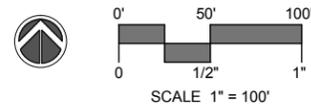
Vegetation overgrowth on the south side of field 3 causes the turf to be thin and hard to establish healthy grass.

Athletic organizations rated the overall field conditions as good (16.6%) average (16.6%) to poor (33.3%)

Athletic organizations rated parking and traffic issues as the following: occasionally busy (50%), and often congested with problems (50%)

60% of athletic organizations surveyed, stated additional lighting is needed but may not be supported, 20% report it is need to accommodate additional field time, 20% report its not needed.

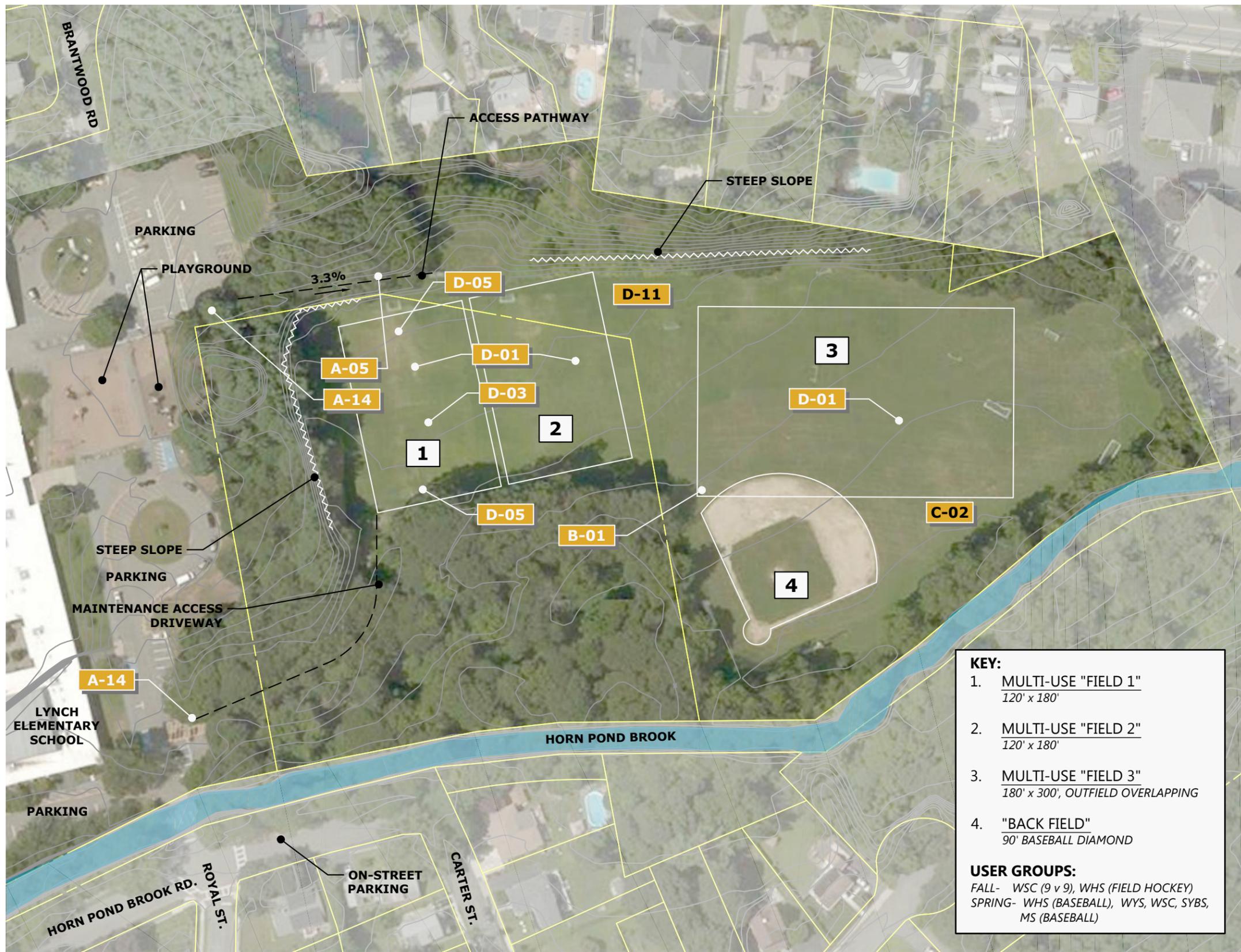
SITE INVENTORY AND ANALYSIS- LEONARD FIELD
WINCHESTER SPORTS FIELDS MASTER PLAN



Printed by: CARRUP On this date: Wed, 2019 May 29 - 8:00pm

Drawing: V:\DESIGN\6344-01-DC\CD\SITE-LYNCH-FIELD-REV.DWG Layout: 10/24

Plotted by: C&R/P On this date: Wed, 2019 May 29 - 8:00am



KEY:

- MULTI-USE "FIELD 1"
120' x 180'
- MULTI-USE "FIELD 2"
120' x 180'
- MULTI-USE "FIELD 3"
180' x 300', OUTFIELD OVERLAPPING
- "BACK FIELD"
90' BASEBALL DIAMOND

USER GROUPS:
 FALL- WSC (9 v 9), WHS (FIELD HOCKEY)
 SPRING- WHS (BASEBALL), WYS, WSC, SYBS, MS (BASEBALL)

REFERENCE NOTES SCHEDULE:

SYMBOL	GENERAL SITE DESCRIPTION
A-05	Pavement in Poor Condition
A-14	Park Entry Undefined
SYMBOL	ACCESSIBILITY DESCRIPTION
B-01	No Pedestrian Connection
SYMBOL	GENERAL ATHLETIC FIELD DESCRIPTION
C-02	Lack of Spectator Seating
SYMBOL	FIELD TURF DESCRIPTION
D-01	Weedy and Compacted Turf
D-03	Inconsistent Grades
D-05	Bare Turf Area
D-11	Check Irrigation System Function

ADDITIONAL NOTES:

Potential school expansion could reduce the field space, but expansion into forested space west of baseball field is possible on this site.

Fields could be easily reconfigured to use the good condition turf at the east field and allow for an alternative small multi-use field to be added to allow potential restoration or rest of the turf on multi-use field 1.

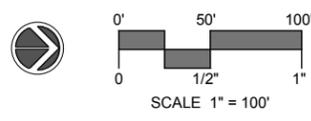
Site lacks restroom/ concession/ storage building.

Athletic organizations rated the overall field conditions as good (16.6%) average (33.3%) to poor (33.3%)

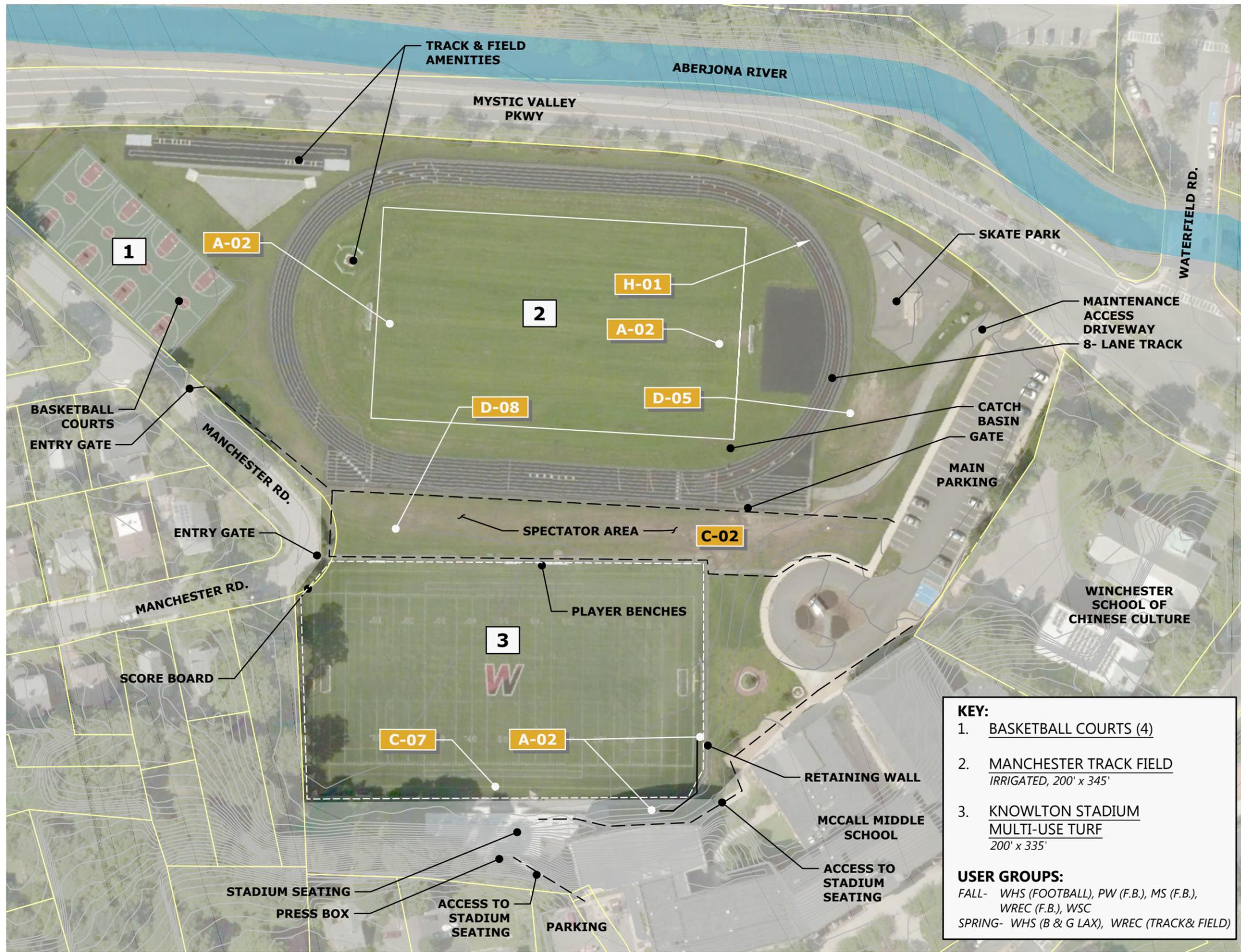
Athletic organizations rated parking and traffic issues as the following: busy busy but no conflicts (40%), occasionally busy (20%), and often congested (20%)

40% of athletic organizations surveyed, stated additional lighting is needed to accommodate additional field time, 60% report its not needed.

SITE INVENTORY AND ANALYSIS- LYNCH FIELD
WINCHESTER SPORTS FIELDS MASTER PLAN



Drawing: \PROJECTS\6344-01-DEVELOPMENT\6344-01-DEVELOPMENT-SITE-MANCHESTER-REVIEWS Layout_Toba



REFERENCE NOTES SCHEDULE:

SYMBOL	GENERAL SITE DESCRIPTION
A-02	Drainage Issue
SYMBOL	GENERAL ATHLETIC FIELD DESCRIPTION
C-02	Lack of Spectator Seating
C-07	Fencing in Need of Minor Repairs
SYMBOL	FIELD TURF DESCRIPTION
D-05	Bare Turf Area
D-08	Turf in Poor Condition
SYMBOL	TRACK & FIELD DESCRIPTION
H-01	Surface in Poor Condition

KEY:

- BASKETBALL COURTS (4)
- MANCHESTER TRACK FIELD
IRRIGATED, 200' x 345'
- KNOWLTON STADIUM
MULTI-USE TURF
200' x 335'

USER GROUPS:

FALL- WHS (FOOTBALL), PW (F.B.), MS (F.B.), WREC (F.B.), WSC

SPRING- WHS (B & G LAX), WREC (TRACK & FIELD)

ADDITIONAL NOTES:

Site lacks restroom/ concession/ storage building. Future improvements include these.

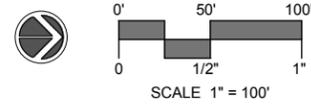
Drainage issues in the track field goals areas due to compaction. Drainage issues at the retaining wall cause runoff onto trail around stadium turf field.

Athletic organizations rated the overall field conditions as excellent (28.6%), good (42.9%), to poor (14.3%)

Athletic organizations rated parking and traffic issues as the following: busy busy but no conflicts (55.6%), and often congested (33.4%)

Almost 90% of athletic organizations surveyed, stated additional lighting is needed to accommodate additional field time.

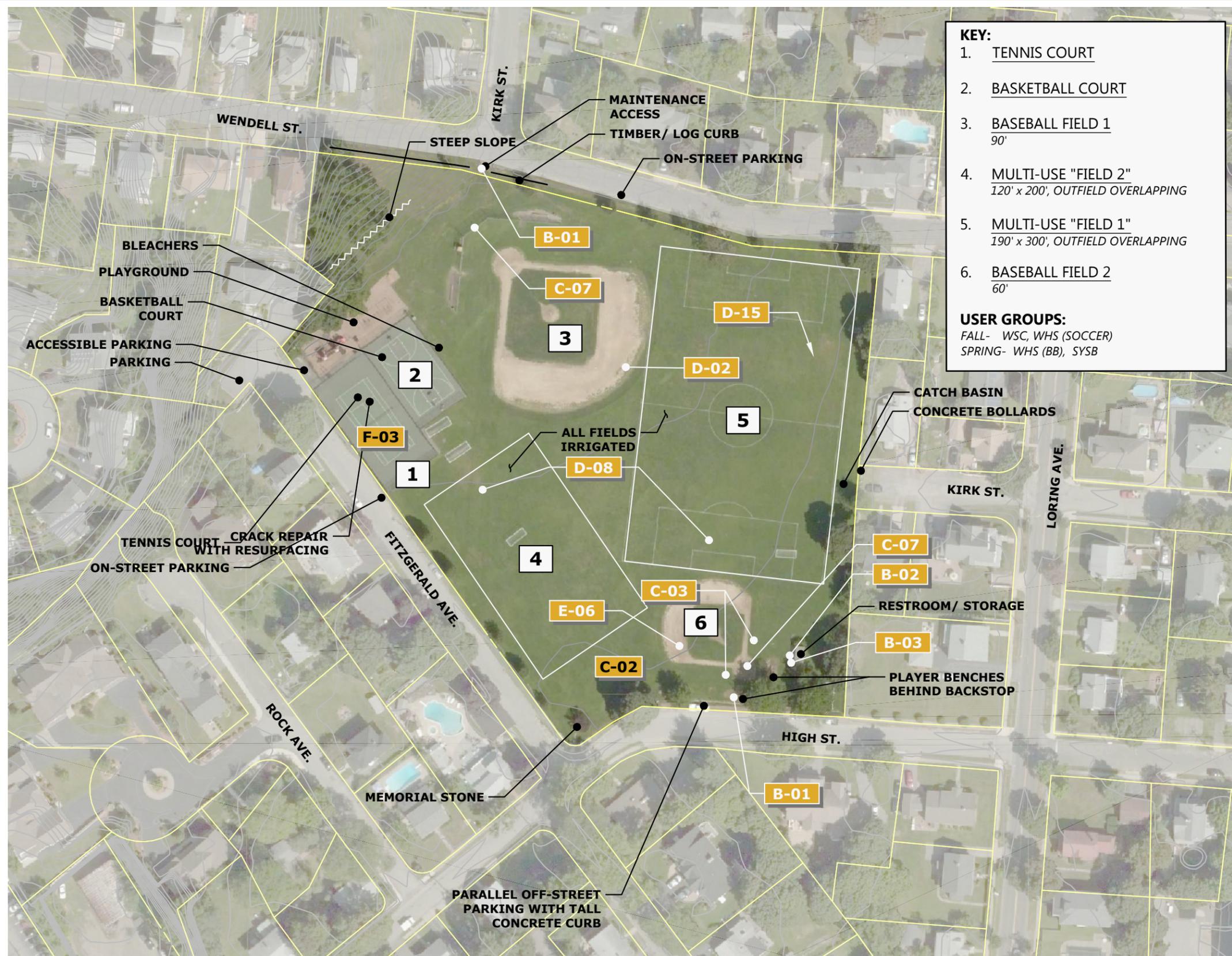
SITE INVENTORY AND ANALYSIS- MANCHESTER FIELD
WINCHESTER SPORTS FIELDS MASTER PLAN



Plotted by: C&R/JP On this date: Wed, 2019 May 29 - 8:00pm

Drawing: V:\DESIGN\6344-01-DC\CD\SITE-MCDONALD-REVISED Layout.dwg Date:

Plotted by: CRL/JP On this date: Wed, 2019 May 29 - 8:00pm



KEY:

- TENNIS COURT
- BASKETBALL COURT
- BASEBALL FIELD 1
90'
- MULTI-USE "FIELD 2"
120' x 200', OUTFIELD OVERLAPPING
- MULTI-USE "FIELD 1"
190' x 300', OUTFIELD OVERLAPPING
- BASEBALL FIELD 2
60'

USER GROUPS:
FALL- WSC, WHS (SOCCER)
SPRING- WHS (BB), SYSB

REFERENCE NOTES SCHEDULE:

SYMBOL	ACCESSIBILITY DESCRIPTION
B-01	No Pedestrian Connection
B-02	No ADA Compliant Route
B-03	Door Threshold Not Compliant
SYMBOL	GENERAL ATHLETIC FIELD DESCRIPTION
C-02	Lack of Spectator Seating
C-03	Lack of Protective Fence / Fence Topper
C-07	Fencing in Need of Minor Repairs
SYMBOL	FIELD TURF DESCRIPTION
D-02	Lip at Infield / Outfield Interface
D-08	Turf in Poor Condition
D-15	Insect Infestation
SYMBOL	INFIELD DESCRIPTION
E-06	Infield requires grading/ drainage
SYMBOL	SPORT COURT DESCRIPTION
F-03	Surface Needs Repairs

ADDITIONAL NOTES:

Some pitting at goal areas.

Ant infestation in Field 1.

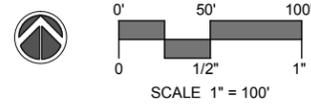
At Field 3, foul balls can cause a safety hazard despite 10' fencing around basketball and tennis courts.

Athletic organizations rated the overall field conditions as good (16.6%) average (33.3%) to poor (33.3%)

Athletic organizations rated parking and traffic issues as the following: busy busy not no conflicts (40%), occasionally busy (20%), and often congested (20%)

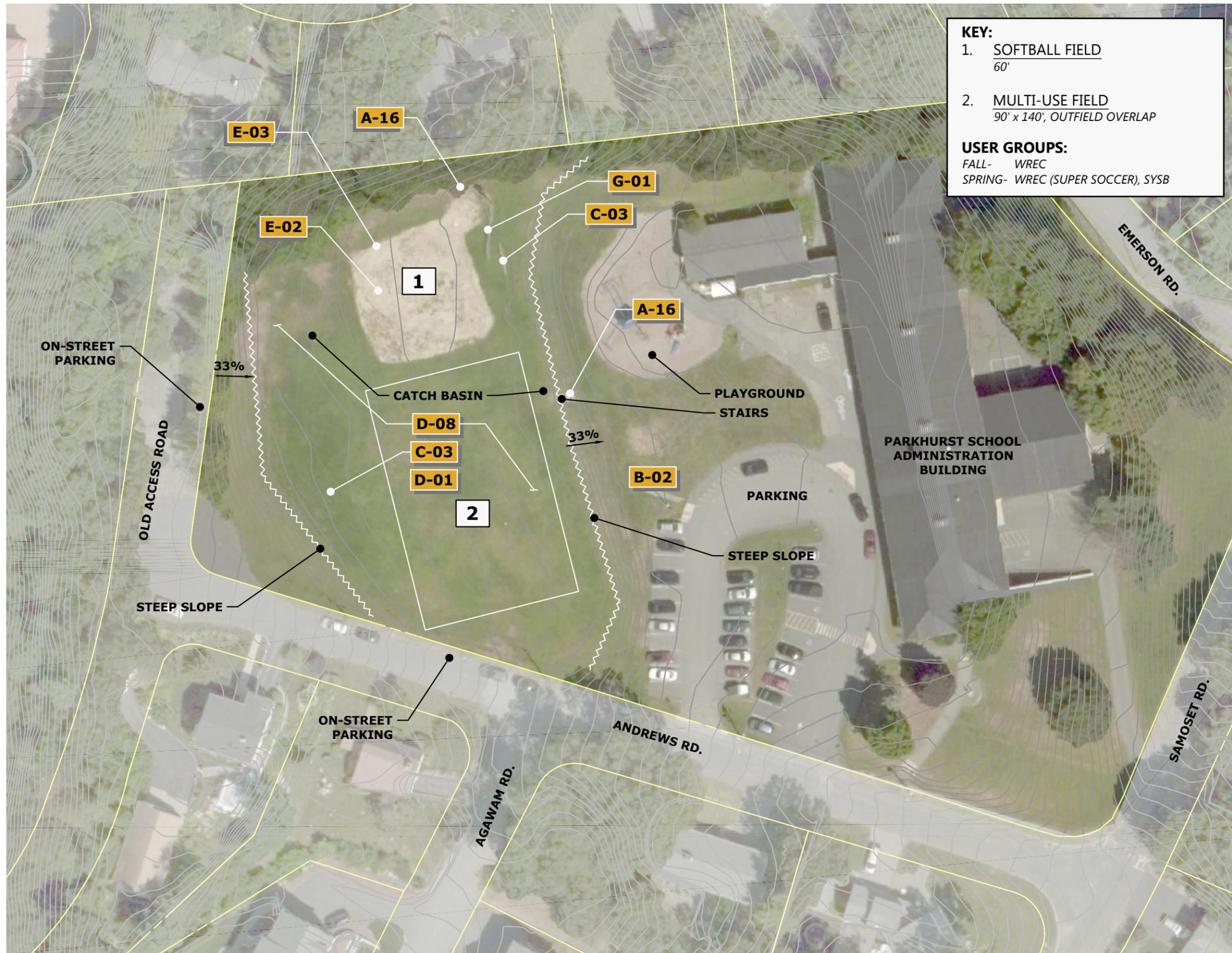
25% of athletic organizations surveyed, stated additional lighting is needed but not supported by neighbors. 75% reported lighting is not needed.

SITE INVENTORY AND ANALYSIS- MCDONALD FIELD
WINCHESTER SPORTS FIELDS MASTER PLAN



Drawing: V:\DESIGN\6344-01-DC\CD\CD SITE-PROG\H.DWG Layout Title

Plotted by: CRL/JP On this date: Wed, 2019 May 29 - 8:00am



KEY:

- SOFTBALL FIELD**
60'
- MULTI-USE FIELD**
90' x 140', OUTFIELD OVERLAP

USER GROUPS:
 FALL- WREC
 SPRING- WREC (SUPER SOCCER), SYSB

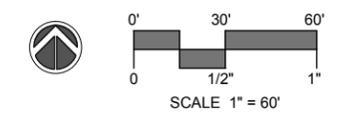
REFERENCE NOTES SCHEDULE:

SYMBOL	GENERAL SITE DESCRIPTION
A-16	Vegetation Overgrown
SYMBOL	ACCESSIBILITY DESCRIPTION
B-02	No ADA Compliant Route
SYMBOL	GENERAL ATHLETIC FIELD DESCRIPTION
C-03	Lack of Protective Fence / Fence Topper
SYMBOL	FIELD TURF DESCRIPTION
D-01	Weedy and Compacted Turf
D-08	Turf in Poor Condition
SYMBOL	INFIELD DESCRIPTION
E-02	Infield needs Grooming
E-03	Weedy / Irregular Edge
SYMBOL	BUILDING FACILITIES DESCRIPTION
G-01	In Need of Repair - See Additional Notes

ADDITIONAL NOTES:

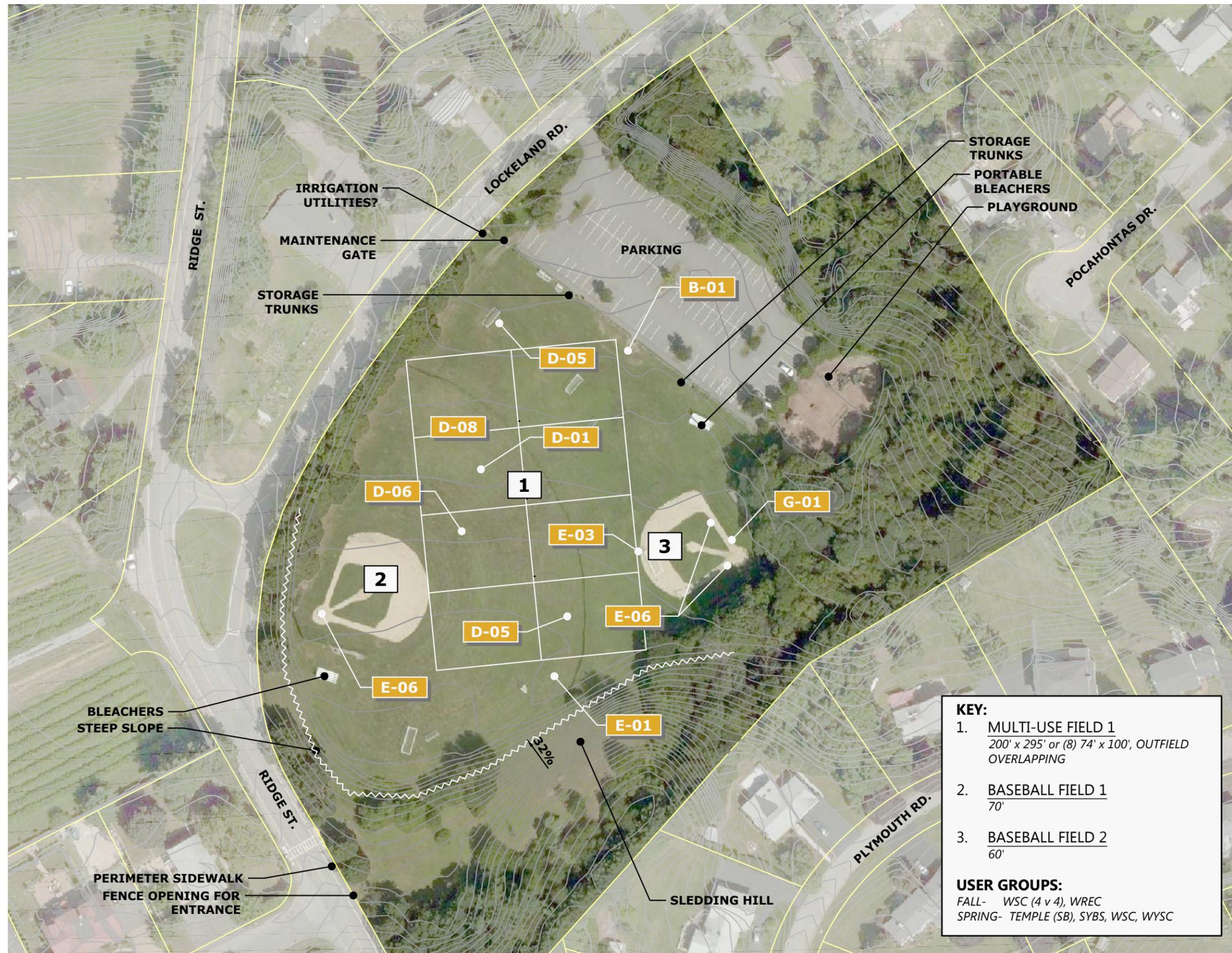
- The steep slope to the east of the field allows stray balls from the fields to fall down into the parking and playground areas.
- Site lacks restroom/ concession/ storage building.
- Users must walk down steep, grassy slopes or take steps up from the parking lots to get to the play fields.
- Player benches have no fence protection and are damaged (C-03, G-01).
- The catch basin in the outfield poses a tripping hazard and is marked by an orange cone.
- Athletic organizations rated the overall field conditions as poor (20%). 80% responded n/a.
- Athletic organizations rated parking and traffic issues as the following: no issues (25%), occasionally busy (25%), and often congested (25%)
- 100% of the athletic organizations surveyed stated lighting is not needed.

SITE INVENTORY AND ANALYSIS- MT. PARKHURST FIELD
WINCHESTER SPORTS FIELDS MASTER PLAN



Drawing: \PROJECTS\6344-01-DEVELOPMENT\MULLEN-FIELD\REVISED Layout.dwg

Plotted by: C&R/P On this date: Wed, 2019 May 29 - 8:00am



REFERENCE NOTES SCHEDULE:

SYMBOL	ACCESSIBILITY DESCRIPTION
B-01	No Pedestrian Connection
SYMBOL	FIELD TURF DESCRIPTION
D-01	Weedy and Compacted Turf
D-05	Bare Turf Area
D-06	Excessive Weed Growth
D-08	Turf in Poor Condition
SYMBOL	INFIELD DESCRIPTION
E-01	Low Spots Need Infill
E-03	Weedy / Irregular Edge
E-06	Infield requires grading/ drainage
SYMBOL	BUILDING FACILITIES DESCRIPTION
G-01	In Need of Repair - See Additional Notes

KEY:

- MULTI-USE FIELD 1**
200' x 295' or (8) 74' x 100', OUTFIELD OVERLAPPING
- BASEBALL FIELD 1**
70'
- BASEBALL FIELD 2**
60'

USER GROUPS:
 FALL- WSC (4 v 4), WREC
 SPRING- TEMPLE (SB), SYBS, WSC, WYSC

ADDITIONAL NOTES:

Lack of gate at maintenance entrance allows direct vehicle access to fields.

Soccer field is being overused creating bare and damaged turf areas mainly at goals.

All turf is weedy, compacted, pitted, and has inconsistent grades. Buried stumps cause very uneven settlement.

Site lacks restroom/ concession/ storage building.

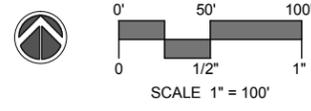
Player benches need repair (G-01).

Athletic organizations rated the overall field conditions as average (40%) to poor (20%).

Athletic organizations rated parking and traffic issues as the following: busy but no conflicts (25%) and often congested with problems (75%).

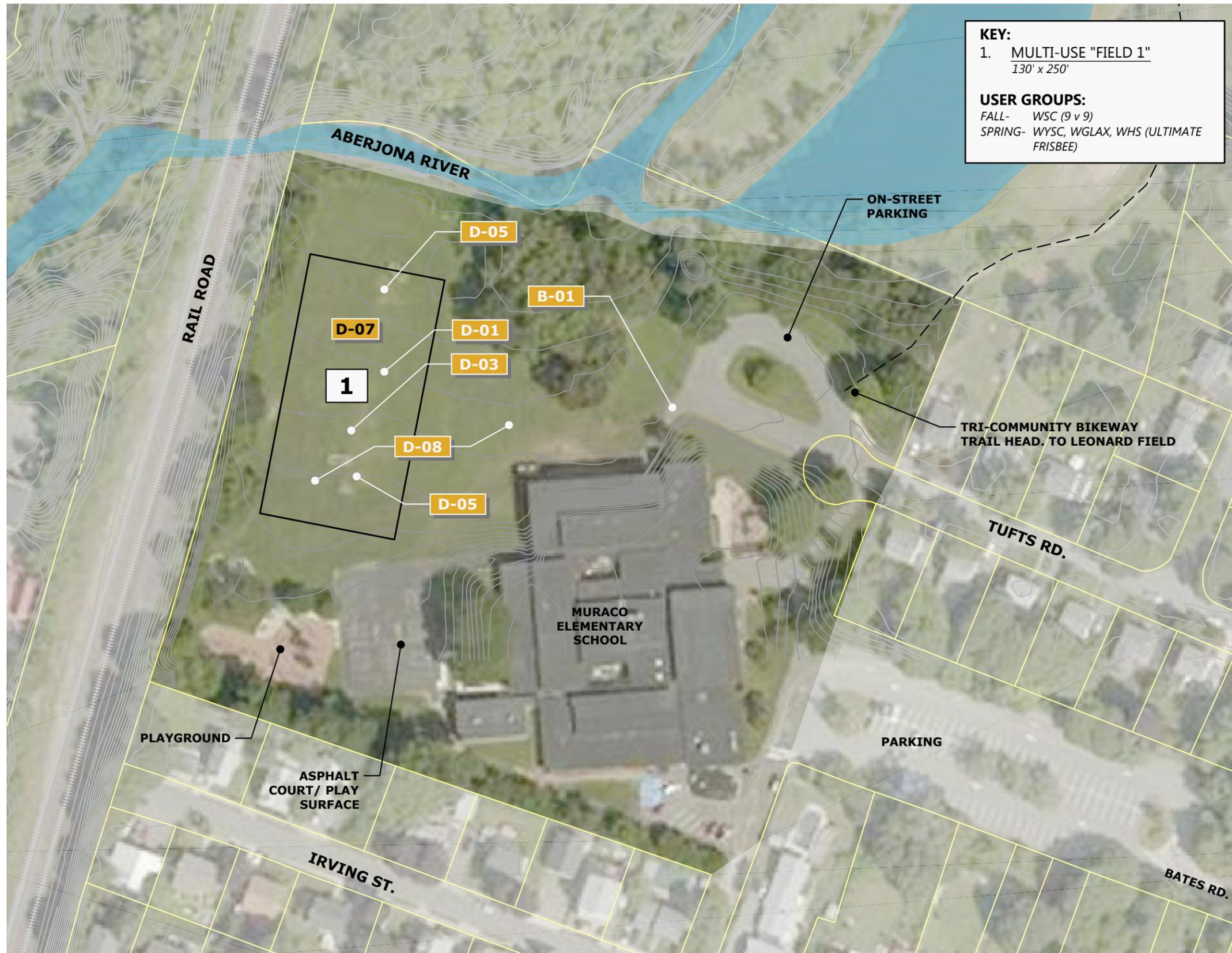
20% of athletic organizations surveyed, stated additional lighting is needed but not supported by neighbors. 80% reported lighting is not needed.

SITE INVENTORY AND ANALYSIS- MULLEN FIELD
WINCHESTER SPORTS FIELDS MASTER PLAN



Drawing: \A\DESIGN\6344-01-DEVELOP\SITE-MURACO-REVISED-REVISED Layout Table

Plotted by: C&R/P On this date: Wed, 2019 May 29 - 8:00pm



KEY:
 1. MULTI-USE "FIELD 1"
 130' x 250'

USER GROUPS:
 FALL- WSC (9 v 9)
 SPRING- WYSC, WGLAX, WHS (ULTIMATE FRISBEE)

REFERENCE NOTES SCHEDULE:

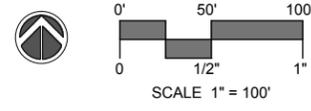
ACCESSIBILITY DESCRIPTION	
SYMBOL	DESCRIPTION
B-01	No Pedestrian Connection

FIELD TURF DESCRIPTION	
SYMBOL	DESCRIPTION
D-01	Weedy and Compacted Turf
D-03	Inconsistent Grades
D-05	Bare Turf Area
D-07	Turf needs Restoration
D-08	Turf in Poor Condition

ADDITIONAL NOTES:

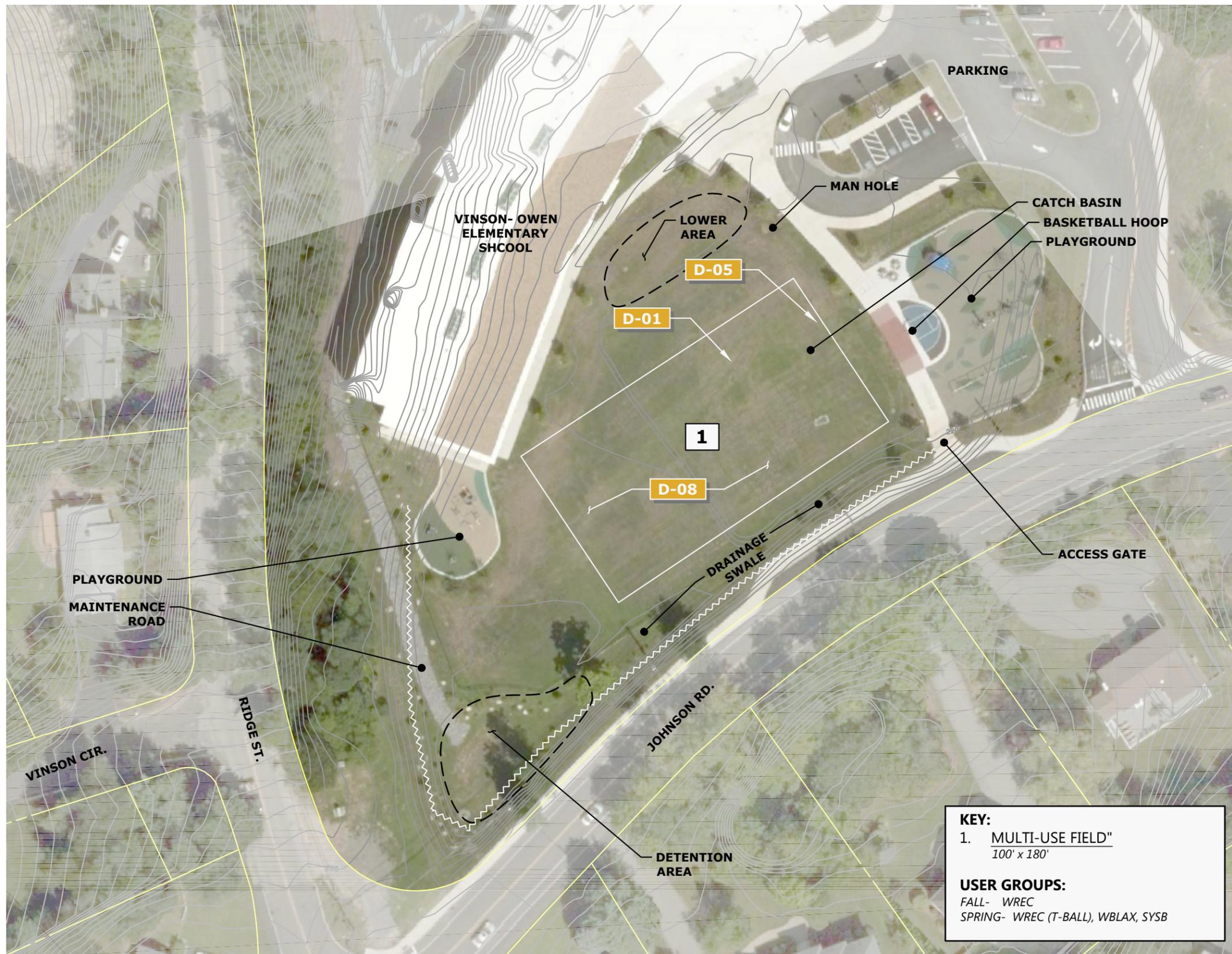
- Site lacks restroom/ concession/ storage building.
- Field has some expansion capability into the wooded path to the northeast.
- Athletic organizations rated the overall field conditions as poor (60%).
- Athletic organizations rated parking and traffic issues as the following: occasionally busy (20%), and often congested with problems (20%).
- 100% of the athletic organizations surveyed stated lighting is not needed.

SITE INVENTORY AND ANALYSIS- MURACO FIELD
 WINCHESTER SPORTS FIELDS MASTER PLAN



Drawing: V:\DESIGN\6344-01-DC\CD\SITE-V.O.DWG Layout Title

Plotted by: CADLUP On this date: Wed, 2019 May 29 - 8:00am



REFERENCE NOTES SCHEDULE:

SYMBOL	FIELD TURF DESCRIPTION
D-01	Weedy and Compacted Turf
D-05	Bare Turf Area
D-08	Turf in Poor Condition

KEY:
 1. MULTI-USE FIELD"
 100' x 180'

USER GROUPS:
 FALL- WREC
 SPRING- WREC (T-BALL), WBLAX, SYSB

ADDITIONAL NOTES:

Field lacks irrigation.

Field was a construction staging area during constructing and therefore, over-compacted the soil, making grass difficult to establish.

Stray balls roll into detention areas.

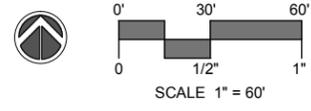
Field is being overused creating bare and damaged turf areas throughout center of field.

Athletic organizations rated the overall field conditions as average (40%). 60% responded n/a.

Athletic organizations rated parking and traffic issues as the following: no issues (20%), occasionally busy (20%), and often congested (20%)

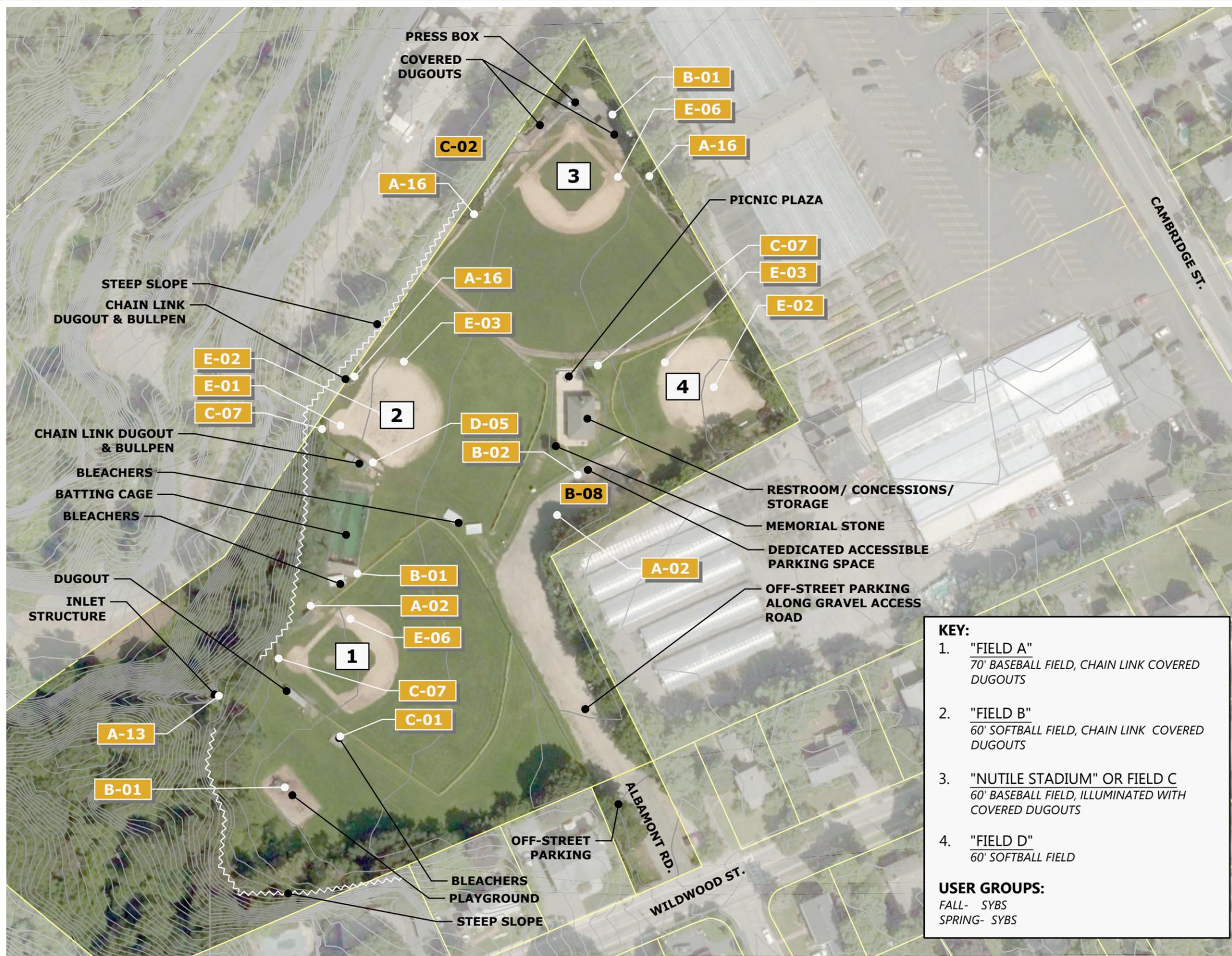
20% of athletic organizations surveyed, stated additional lighting is needed to accommodate additional field time. 80% reported lighting is not needed.

SITE INVENTORY AND ANALYSIS- V.O. FIELD
WINCHESTER SPORTS FIELDS MASTER PLAN



Drawing: V:\DESIGN\6344-01-DC\CD\SITE-WEST SIDE\TITLE-DWG Layout Table

Plotted by: CRL/JP On this date: Wed, 2019 May 29 - 8:00am



KEY:

- "FIELD A"
70' BASEBALL FIELD, CHAIN LINK COVERED DUGOUTS
- "FIELD B"
60' SOFTBALL FIELD, CHAIN LINK COVERED DUGOUTS
- "NUTILE STADIUM" OR FIELD C
60' BASEBALL FIELD, ILLUMINATED WITH COVERED DUGOUTS
- "FIELD D"
60' SOFTBALL FIELD

USER GROUPS:
FALL- SYBS
SPRING- SYBS

REFERENCE NOTES SCHEDULE:	
SYMBOL	GENERAL SITE DESCRIPTION
A-02	Drainage Issue
A-13	No Railing on Wall
A-16	Vegetation Overgrown
SYMBOL	ACCESSIBILITY DESCRIPTION
B-01	No Pedestrian Connection
B-02	No ADA Compliant Route
B-08	Surface Not ADA Compliant
SYMBOL	GENERAL ATHLETIC FIELD DESCRIPTION
C-01	Damaged / Non Code Compliant Bleacher
C-02	Lack of Spectator Seating
C-07	Fencing in Need of Minor Repairs
SYMBOL	FIELD TURF DESCRIPTION
D-05	Bare Turf Area
SYMBOL	INFIELD DESCRIPTION
E-01	Low Spots Need Infill
E-02	Infield needs Grooming
E-03	Weedy / Irregular Edge
E-06	Infield requires grading/ drainage

ADDITIONAL NOTES:

Very narrow foot paths between outfield fences and behind fences.

All spectator benches are non-compliant.

Field C's dugouts have peeling paint and exposed utility box.

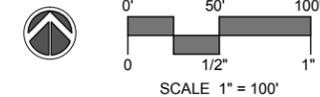
Designated accessible parking spaces are not connected to accessible pathway and are on non-compliant surface.

Athletic organizations rated the overall field conditions as excellent (40%). 60% responded n/a.

Athletic organizations rated parking and traffic issues as occasionally busy (25%) and often congested (75%)

100% of respondents, stated additional lighting is needed to accommodate additional field time.

SITE INVENTORY AND ANALYSIS- WEST SIDE FIELD/NUTILE WINCHESTER SPORTS FIELDS MASTER PLAN



APPENDIX B

SAMPLE FIELD EVALUATION CHECKLIST

**FACILITY CONDITION ASSESSMENT CHECKLIST
WINCHESTER, MA
MMI #6344-01**



5 - NEW - New or like-new condition; no issues to report; no expected failures; Plan 8 to 10 years
 4 - GOOD - Good condition no reported issues or concerns; consider replacement 6 to 8 years.
 3 - FAIR - Average wear for age; not new but no issues to report; replace within 4 to 6 years.
 2 - POOR - Worn from use - end of expected life cycle. Replace within 2 to 4 years when funds are available.
 1 - CRITICAL - Extremely worn or damaged; replace in next 2 years.

Evaluation Considerations

Age of Component

Expected Service Life

Maintenance Records

Visual Inspection Condition

Name _____

Address _____

Survey Date _____

Surveyor _____

SITE FACILITIES

CONDITION

5 4 3 2 1 n/a

COMMENTS/RECOMMENDED ACTION

	5	4	3	2	1	n/a	
Playground Areas							
Irrigation							
Scoreboards							
Dugouts (Condition & Safety)							
Athletic Tracks							
Concessions & Restrooms							
Tennis Courts							
Basketball Courts							
PE Equipment Storage Areas							
Pavilion							
Bleachers							
Dumpster (Apron, Pad, Enclosure)							

**FACILITY CONDITION ASSESSMENT CHECKLIST
WINCHESTER, MA
MMI #6344-01**



5 - NEW - New or like-new condition; no issues to report; no expected failures; Plan 8 to 10 years
 4 - GOOD - Good condition no reported issues or concerns; consider replacement 6 to 8 years.
 3 - FAIR - Average wear for age; not new but no issues to report; replace within 4 to 6 years.
 2 - POOR - Worn from use - end of expected life cycle. Replace within 2 to 4 years when funds are available.
 1 - CRITICAL - Extremely worn or damaged; replace immediately

Evaluation Considerations

- Age of Component
- Expected Service Life
- Maintenance Records
- Visual Inspection Condition

Name _____
 Address _____
 Survey Date _____
 Surveyor _____

ATHLETIC FIELDS (Baseball/Softball)
(circle one or write-in)

CONDITION
 5 4 3 2 1 n/a

COMMENTS/RECOMMENDED ACTION

	5	4	3	2	1	n/a	
Skinned Infield							
Pitcher's Mound							
Turf Areas							
Bases/Base Path							
Fencing							
Lighting							
Bleachers/Benches							
General							

**FACILITY CONDITION ASSESSMENT CHECKLIST
WINCHESTER, MA
MMI #6344-01**



- 5 - NEW - New or like-new condition; no issues to report; no expected failures; Plan 8 to 10 years
- 4 - GOOD - Good condition no reported issues or concerns; consider replacement 6 to 8 years.
- 3 - FAIR - Average wear for age; not new but no issues to report; replace within 4 to 6 years.
- 2 - POOR - Worn from use - end of expected life cycle. Replace within 2 to 4 years when funds are available.
- 1 - CRITICAL - Extremely worn or damaged; replace immediately

Evaluation Considerations

Age of Component

Expected Service Life

Maintenance Records

Visual Inspection Condition

Name _____

Address _____

Survey Date _____

Surveyor _____

**ATHLETIC FIELD (circle one or write-in)
(Football/Soccer/Lacrosse/Multipurpose)**

CONDITION					
5	4	3	2	1	n/a

COMMENTS/RECOMMENDED ACTION

Turf/Playing Surface							
Goals and Posts							
Out of Bounds/Transition Areas							
Fencing							
Bleachers							
Lighting							
General							

APPENDIX C

STAFF SURVEY DATA OVERVIEW



Athletic Organization Survey Results

WINCHESTER FIELDS MASTER PLAN

MMI Project #6344-01

June 12, 2018

1. Which sports organizations are you affiliated with?

Youth Field Hockey	WYL	Winchester Girl's Lacrosse	Baseball/Softball	Town
Winchester Soccer Club	Winchester Pop Warner	Winchester FAN Men's Softball	High School Athletic Program	Field Management
Youth Hockey	SYBS			

Note: some respondents listed multiple activities

2. Which field sports activities and age groups does your program organize?

	Age 4 and Under	Ages 5 to 9	Ages 10 to 12	Ages 13 to 15	Ages 16 to 18	Over 18	Total
Baseball		1	2	2	2		3
Softball		2	1	2	2	1	4
T-Ball		1					1
Football		1	1	1	1		2
Field Hockey		1	1	2	1		2
Lacrosse		1	2	3	1		3
Soccer	1	2	2	2	2		3
Ultimate Frisbee				1	1		1
Other		1	1	1	1		2
Total	1	10	10	14	11	1	21

2 respondents did not answer this question

Other:

- Hockey & cheer/pop warner
- Track and Field



Athletic Organization Survey Results

WINCHESTER FIELDS MASTER PLAN

MMI Project #6344-01

June 12, 2018

3. How many teams does your organization have per age group?

	Age 4 and Under	Ages 5 to 9	Ages 10 to 12	Ages 13 to 15	Ages 16 to 18	Over 18	Total
Baseball/Softball/T-Ball		8	14	9	4	12	47
Football		1	1	2	1		5
Field Hockey		3	4	6	1		14
Lacrosse		7	8	10	2		27
Girls Lacrosse			1	4			5
Soccer	10	61	30	16	4		121
Ultimate Frisbee					2		2
Track & Field					2		2
Total	10	80	58	47	16	12	223

2 respondents did not answer this question

Notes:

- High School respondent listed 27 teams; further clarification is needed to determine a breakdown of number of teams per sport. The response indicated the following sports, with ages 13 to 18. Items in *(italics)* list the number of teams according to the School's website. In the table above, if freshmen or JV teams were indicated on the website, they have been included with Ages 13 to 15, otherwise the numbers are included with Ages 16 to 18.
 - Baseball (*3 boys*)
 - Softball (*2 girls*)
 - Football (*2 boys*)
 - Field Hockey (*3 girls*)
 - Lacrosse (*3 boys, 3 girls*)
 - Soccer (*3 boys, 3 girls*)
 - Ultimate Frisbee (*1 boys, 1 girls*)
 - Track and Field (*1 boys, 1 girls*)



Athletic Organization Survey Results

WINCHESTER FIELDS MASTER PLAN

MMI Project #6344-01

June 12, 2018

- One respondent listed involvement with Winchester Youth Soccer, Youth Hockey, Sybs and Pop Warner; it is unclear if their responses are duplicative of others listing the same organization in a single response per sport. Consequently, these numbers are not included in the table above.
 - The respondent listed 7 teams for ages 5-9, and 5 teams for ages 10-12, for baseball, softball, soccer, hockey, and cheer/pop warner.

4. What is your average team size per age group?

	Age 4 and Under	Ages 5 to 9	Ages 10 to 12	Ages 13 to 15	Ages 16 to 18	Over 18
Baseball/Softball/T-Ball		12	15	13	14	17
<i>Range</i>			13-16	6-20	2-25	
Football		20	20	20	25	
Field Hockey				20	25	
Lacrosse (Boys and Girls)		10	28	22	25	
<i>Range</i>			16-40	16-30		
Soccer (Boys and Girls)	10	12	16	19	18	
<i>Range</i>			15-16	18-20	11-25	
Ultimate Frisbee				20	25	
Other		12*	16*	20**	25**	

3 respondents did not answer this question

* Sport not specified

** Track & Field

5. Do your teams of the following ages just compete among other teams in Winchester, or do they also travel for games? (2 respondents did not answer this question)

By age group, it appears that most groups Ages 4 to 9 only play locally, and groups above Age 10 travel.

Comments:

- There is no formal league, but we arrange games with neighboring towns. We often can't get any turf time so cannot host the games at our field. (*Adult softball*)
- 13-15 travel in spring and summer all others travel summer only (*Baseball/softball*)



Athletic Organization Survey Results

WINCHESTER FIELDS MASTER PLAN

MMI Project #6344-01

June 12, 2018

6. Since 2006, Winchester's school enrollment has increased by 17%. Correspondingly, how would you best describe growth in participation in your sports teams over the past five years?

Overall, 33% indicated participation has remained consistent, 22% have seen an increase in participants without adding new teams, and 44% have added new teams and programs.

	Remained Consistent	Participation Increase, No New Teams	Added Teams
Baseball/Softball/T-Ball	1	1	2
Football	1	1	
Field Hockey		1	1
Lacrosse (Boys and Girls)		2	1
Soccer (Boys and Girls)	1	1	1
Ultimate Frisbee		1	
Other		1	1

2 respondents did not answer this question

Comments:

- A couple (*Youth Field Hockey*)
- We have gone from 4 teams to 12, and if there were more fields with lights, I'm certain I could have 20+ teams. Lots of guys would like to play, but can't get in. (*Adult softball*)

7. Projections indicate school enrollment may increase by 15% in the next 10 years. To the best of your knowledge, what level in growth in participation do you anticipate for your organization over the next five to ten years?

Overall, 33% indicated participation is expected to remain consistent, and 66% expect to add new teams and programs.

	Remain Consistent	Participation Increase, No New Teams	Add Teams
Baseball/Softball/T-Ball	1		3
Football	1		1
Field Hockey			2
Lacrosse (Boys and Girls)			3
Soccer (Boys and Girls)	1		2
Ultimate Frisbee			1
Other			2

2 respondents did not answer this question



Athletic Organization Survey Results

WINCHESTER FIELDS MASTER PLAN

MMI Project #6344-01

June 12, 2018

Comments:

- Youth field hockey has drawn more interest as people branch out from the club sports of soccer and lacrosse. People are excited to have an in town alternative to soccer and the field hockey program at the high school is fantastic so the youth program is a feeder for that.
- I think the as the programs get bigger we will need to find more space for them to take place. (Soccer)
- We will increase if there is field space, otherwise we will remain the same and some people won't get to play. (Adult softball)
- More likely to add levels, not programs. (High school; sport not specified)

8. If you anticipate participation growth, how many additional teams per age group do you anticipate will be needed?

	Age 4 and Under	Ages 5 to 9	Ages 10 to 12	Ages 13 to 15	Ages 16 to 18	Over 18
Baseball/Softball/T-Ball	4	6	5	2	2	2
Football				2		
Field Hockey		1	2	4		
Lacrosse (Boys and Girls)		2	1	1		
Soccer (Boys and Girls)	4	5	3	5	2	2
Ultimate Frisbee				2		

4 respondents did not answer this question

9. Which fields does your organization primarily use?

	Baseball/Softball/T-Ball	Football	Field Hockey	Lacrosse	Soccer	Ultimate Frisbee	Total
Ambrose							0
Ginn	4	2	1	2	2	1	12
Leonard	2	1	1	2	3	1	10
Lynch School	2	1	2	1	2	1	9
Manchester	3	2	2	3	3	1	14
McDonald	2	1	1	1	2	1	8
Mullen	2				2		4



Athletic Organization Survey Results

WINCHESTER FIELDS MASTER PLAN

MMI Project #6344-01

June 12, 2018

	Baseball/ Softball/T- Ball	Football	Field Hockey	Lacrosse	Soccer	Ultimate Frisbee	Total
Muraco	2	1	1	1	2	1	8
Pigsah							
Skillings	2	1	1	2	2	1	9
Vinsen Owen				1			1
West Side/ Nutile	3				1		4
Winchester Rec. Center							
Winchester Soccer Club					1		1
Total	22	9	9	13	20	7	80

1 respondent did not answer this question

Comments:

- Field hockey is played on turf, but time on the turf is so hard to get so we only get a couple of sessions on the turf. We end up on Lynch field which is a terrible field for field hockey.
- Knowlton Stadium. (*Track and Field*)

10. Collectively, how many practices per week does your organization have per age group?

	Age 4 and Under	Ages 5 to 9	Ages 10 to 12	Ages 13 to 15	Ages 16 to 18	Over 18
Baseball/Softball/T- Ball	1	1	4	9	11	5
Football		3	3	5	6	
Field Hockey		1	2	7	6	
Lacrosse (Boys and Girls)*		2	42	127	6	
Soccer (Boys and Girls)	2	3	4	10	11	5
Ultimate Frisbee				5	6	

1 respondent did not answer this question

* An apparent erroneous response for girls lacrosse may have skewed results for Ages 10-12 and 13-15



Athletic Organization Survey Results

WINCHESTER FIELDS MASTER PLAN

MMI Project #6344-01

June 12, 2018

11. Collectively, how many games per week does your organization have per age group?

	Age 4 and Under	Ages 5 to 9	Ages 10 to 12	Ages 13 to 15	Ages 16 to 18	Over 18
Baseball/Softball/T-Ball	1	3	5	7	7	8
Football		1	1	3	3	
Field Hockey		1	1	4	3	
Lacrosse (Boys and Girls)*		1	1	8	3	
Soccer (Boys and Girls)	1	1	3	6	6	2
Ultimate Frisbee				3	3	

1 respondent did not answer this question

12. In hours, how long is a typical practice session per age group (in hours)?

	Age 4 and Under	Ages 5 to 9	Ages 10 to 12	Ages 13 to 15	Ages 16 to 18	Over 18
Baseball/Softball/T-Ball	1	1	1-1.5	1.5-2	2-2.5	0-2.5
Football		2	2	2	2.5	
Field Hockey		1	2	2	2.5	
Lacrosse (Boys and Girls)*		1	1-1.5	1.5-2	2.5	
Soccer (Boys and Girls)	1	1-1.25	1-1.25	1.25-2	2-2.5	2.5
Ultimate Frisbee				2	2.5	

1 respondent did not answer this question

13. In hours, how long is a typical game per age group (in hours)?

	Age 4 and Under	Ages 5 to 9	Ages 10 to 12	Ages 13 to 15	Ages 16 to 18	Over 18
Baseball/Softball/T-Ball	.5	.5-1.25	1-1.5	1.5-2	1.5-2	1.5-2
Football		2	2	1.5	2	
Field Hockey		1	1	1-1.5	2	



Athletic Organization Survey Results

WINCHESTER FIELDS MASTER PLAN

MMI Project #6344-01

June 12, 2018

	Age 4 and Under	Ages 5 to 9	Ages 10 to 12	Ages 13 to 15	Ages 16 to 18	Over 18
Lacrosse (Boys and Girls)*		1	1.5	1.25-1.5	2	
Soccer (Boys and Girls)		.5-1	1	1.25-1.5	1-2	2
Ultimate Frisbee				1.5	2	

1 respondent did not answer this question

14. Using the following scale, how would you rate scheduling problems due to field capacity?

Rarely Encounter Issues	Occasional Issues, but Can Handle Internally	Becoming More Problematic Due to Growth in Participation and Demand	Ongoing Problem, Need More Space to Meet Needs
0	1	4	4

1 respondent did not answer this question

15. Is it necessary for teams to use game fields for practices, or are there other suitable options for practices (such as sharing fields during practices, using other locations for practices, etc.)? *1*

respondent did not answer this question

- The key for field hockey is being on the turf. We could share field space if necessary.
- We already share fields for some grades.
- Game field is preferred for practice.
- Both
- Games field for practices when games are not scheduled. Otherwise teams can sometimes share space on other fields
- The latter
- All fields are used for both purposes. Multiple teams practice together on the same field.
- We don't really practice, just a way to get out of the house, meet new people and socialize a bit.
- We need to use games fields for practices.

16. For the following fields, is it acceptable to overlay multi-use fields over the skinned infields?

	Practices Only	Practices and Games	Games Only	Not Applicable
Ambrose Field	1	1	1	2
Ginn Field	3	2	1	1



Athletic Organization Survey Results

WINCHESTER FIELDS MASTER PLAN

MMI Project #6344-01

June 12, 2018

	Practices Only	Practices and Games	Games Only	Not Applicable
Leonard Field	1	1	0	4
Lynch School Field	1	3	0	1
Manchester Field	1	1	1	4
McDonald Field	1	2	0	2
Mullen Field	1	2	0	1
Muraco Field	1	1	0	3
Pigsah Field	1	0	1	3
Skillings Field	1	2	1	1
V. O. Field	1	0	1	3
West Side/Nuttle Field	1	1	1	2

1 respondent did not answer this question

Comments:

- I don't really know what this means.

17. How would you rate the current condition of the fields your organization uses?

	Not Applicable	Excellent	Good	Average	Poor
Ambrose Field	60.00%	0.00%	0.00%	20.00%	20.00%
Ginn Field	12.50%	0.00%	12.50%	50.00%	25.00%
Leonard Field	33.33%	0.00%	16.67%	16.67%	33.33%
Lynch School Field	16.67%	0.00%	16.67%	33.33%	33.33%
Manchester Field	14.29%	28.57%	42.86%	0.00%	14.29%
McDonald Field	20.00%	20.00%	0.00%	60.00%	0.00%
Mullen Field	40.00%	0.00%	0.00%	40.00%	20.00%
Muraco Field	40.00%	0.00%	0.00%	0.00%	60.00%
Pigsah Field	80.00%	0.00%	0.00%	0.00%	20.00%
Skillings Field	33.33%	50.00%	16.67%	0.00%	0.00%
V.O. Field	60.00%	0.00%	0.00%	40.00%	0.00%
West Side/Nutle Field	60.00%	40.00%	0.00%	0.00%	0.00%
Winchester Rec. Center	80.00%	0.00%	0.00%	0.00%	20.00%
Winchester Soccer Club/Community Park	60.00%	40.00%	0.00%	0.00%	0.00%

1 respondent did not answer this question

Comments:



Athletic Organization Survey Results

WINCHESTER FIELDS MASTER PLAN

MMI Project #6344-01

June 12, 2018

- Pretty rough in the outfield, in July it's so bad a softball bounces like a football when it hits the ground. Baselines are rarely if ever painted. Restrooms are clean, that's nice. (reference to Ginn Field)

18. How much are the fields used?

	Underutilized	Appropriate	Close to Capacity	Overused, Needs more space	Other (please comment below)
Ambrose Field	0.00%	33.33%	33.33%	33.33%	0.00%
Ginn Field	0.00%	25.00%	37.50%	37.50%	0.00%
Leonard Field	0.00%	0.00%	16.67%	66.67%	16.67%
Lynch School Field	0.00%	20.00%	60.00%	20.00%	0.00%
Manchester Field	0.00%	11.11%	11.11%	66.67%	11.11%
McDonald Field	0.00%	40.00%	20.00%	40.00%	0.00%
Mullen Field	0.00%	25.00%	25.00%	50.00%	0.00%
Muraco Field	25.00%	25.00%	0.00%	25.00%	25.00%
Pigsah Field	25.00%	25.00%	0.00%	25.00%	25.00%
Skillings Field	25.00%	25.00%	0.00%	50.00%	0.00%
V.O. Field	0.00%	40.00%	20.00%	20.00%	20.00%
West Side/Nutile Field	0.00%	25.00%	25.00%	50.00%	0.00%
Winchester Rec. Center	25.00%	25.00%	0.00%	25.00%	25.00%
Winchester Soccer Club/Community Park	0.00%	0.00%	50.00%	25.00%	25.00%

1 respondent did not answer this question

Comments:

- Comment for other indicates the respondent doesn't use the fields.

19. How would you rate parking and traffic problems with use of the following fields?

	No issues	Busy, but no major impacts to surrounding neighborhood	Occasionally busy, with impacts to surrounding neighborhood (street parking, traffic volumes)	Often congested, and causes problems	Other (please comment below)
Ambrose Field	0.00%	25.00%	25.00%	50.00%	0.00%
Ginn Field	0.00%	44.44%	22.22%	33.33%	0.00%
Leonard Field	0.00%	0.00%	50.00%	50.00%	0.00%



Athletic Organization Survey Results

WINCHESTER FIELDS MASTER PLAN

MMI Project #6344-01

June 12, 2018

	No issues	Busy, but no major impacts to surrounding neighborhood	Occasionally busy, with impacts to surrounding neighborhood (street parking, traffic volumes)	Often congested, and causes problems	Other (please comment below)
Lynch School Field	0.00%	40.00%	20.00%	20.00%	20.00%
Manchester Field	0.00%	55.56%	0.00%	33.33%	11.11%
McDonald Field	0.00%	0.00%	40.00%	60.00%	0.00%
Mullen Field	0.00%	25.00%	0.00%	75.00%	0.00%
Muraco Field	40.00%	0.00%	20.00%	20.00%	20.00%
Pigsah Field	25.00%	0.00%	25.00%	25.00%	25.00%
Skillings Field	20.00%	40.00%	20.00%	20.00%	0.00%
V.O. Field	40.00%	0.00%	20.00%	20.00%	20.00%
West Side/Nutile Field	0.00%	0.00%	25.00%	75.00%	0.00%
Winchester Rec. Center	25.00%	25.00%	0.00%	25.00%	25.00%
Winchester Soccer Club/Community Park	0.00%	50.00%	0.00%	25.00%	25.00%

1 respondent did not answer this question

Comments:

- Comment for other indicates the respondent doesn't use the fields.

20. Is lighting necessary and appropriate at the following fields?

	Not needed	Existing is sufficient	Needed in order to accommodate additional field time	Needed, but may not be supported by neighbors	Other (please comment below)
Ambrose Field	100.00%	0.00%	0.00%	0.00%	0.00%
Ginn Field	0.00%	50.00%	50.00%	0.00%	0.00%
Leonard Field	20.00%	0.00%	20.00%	60.00%	0.00%
Lynch School Field	60.00%	0.00%	40.00%	0.00%	0.00%
Manchester Field	0.00%	11.11%	88.89%	0.00%	0.00%
McDonald Field	75.00%	0.00%	0.00%	25.00%	0.00%
Mullen Field	80.00%	0.00%	20.00%	0.00%	0.00%
Muraco Field	100.00%	0.00%	0.00%	0.00%	0.00%
Pigsah Field	100.00%	0.00%	0.00%	0.00%	0.00%
Skillings Field	0.00%	0.00%	80.00%	20.00%	0.00%
V.O. Field	80.00%	0.00%	20.00%	0.00%	0.00%
West Side/Nutile Field	0.00%	0.00%	100.00%	0.00%	0.00%



Athletic Organization Survey Results

WINCHESTER FIELDS MASTER PLAN

MMI Project #6344-01

June 12, 2018

	Not needed	Existing is sufficient	Needed in order to accommodate additional field time	Needed, but may not be supported by neighbors	Other (please comment below)
Winchester Rec. Center	75.00%	0.00%	0.00%	0.00%	25.00%
Winchester Soccer Club/Community Park	0.00%	50.00%	0.00%	25.00%	25.00%

1 respondent did not answer this question

Comments:

- Comment for other indicates the respondent doesn't use the fields.

21. What issues do you know of, or suspect, on the following fields?

	Turf quality	Compaction	Drainage	Flooding	Field Orientation	Planarity	Slope	Equipment	Other
Ambrose Field	2	2	1	0	1	0	1	0	0
Ginn Field	4	5	5	6	2	0	1	0	0
Leonard Field	3	2	4	1	2	1	2	0	0
Lynch School Field	0	1	3	2	2	1	2	1	0
Manchester Field	3	2	2	1	1	0	0	0	0
McDonald Field	1	2	0	0	2	0	1	0	0
Mullen Field	1	2	1	0	0	0	1	1	0
Muraco Field	2	2	2	1	2	2	2	1	0
Pigsah Field	2	1	0	0	1	0	1	0	0
Skillings Field	0	0	0	0	0	0	0	0	1
V.O. Field	1	1	1	1	1	0	1	0	0
West Side/Nutile Field	0	0	2	1	1	0	0	0	1
Winchester Rec. Center	1	1	0	0	1	1	1	0	1
Winchester Soccer Club/Community Park	0	0	0	0	0	0	0	0	1

1 respondent did not answer this question

Comments:

- Nutile field overgrowth mess just off the field



Athletic Organization Survey Results

WINCHESTER FIELDS MASTER PLAN

MMI Project #6344-01

June 12, 2018

- In the Manchester Field row, we are referring to Manchester Track. The references to Field Orientation at Muraco and Lynch have to do with possibly expanding the fields by clearing adjacent wooded areas.
- I don't know.

22. Where applicable, please indicate if your organization uses on-site buildings at the following fields.

	Restrooms	Porta-Potties	Concessions	Storage/Maintenance	Not Applicable	Other or facilities needed
Ambrose Field	0	1	0	0	3	0
Ginn Field	5	0	0	2	2	0
Leonard Field	0	1	0	0	5	0
Lynch School Field	0	2	0	0	2	1
Manchester Field	4	0	1	2	4	1
McDonald Field	2	0	0	1	2	0
Mullen Field	0	2	0	1	2	0
Muraco Field	0	1	0	1	2	1
Pigsah Field	0	1	0	0	2	1
Skillings Field	1	0	0	1	2	2
V.O. Field	0	1	0	0	2	1
West Side/Nutile Field	2	0	2	2	2	0
Winchester Rec. Center	0	0	0	0	2	1
Winchester Soccer Club/Community Park	1	1	0	1	2	1

1 respondent did not answer this question

Comments:

- Other fields we don't use or are in need of something

23. Are there any improvements you would like to see in the parks or fields your organization uses?

- Better maintenance
- Ginn needs help
- Lighting
- We need to make these fields safer with more level ground
- Primarily conditions



Athletic Organization Survey Results

WINCHESTER FIELDS MASTER PLAN

MMI Project #6344-01

June 12, 2018

- We desperately need an ice rink
- All fields have poor turf due to overuse and maintenance issues
- More fields with lights so the adults can use the fields too. Right now, it's almost exclusively children.

APPENDIX D

FIELD CAPACITY AND DEMAND ANALYSIS

WINCHESTER FIELD MASTER PLAN- FIELD INVENTORY AND CAPACITY

FIELD INVENTORY- EXISTING

Site	Maximum Capacity								Overlap	Shared Use Capacity							
	Natural Grass				Synthetic					Natural				Synthetic			
	Rectangular		Diamond		Rectangular		Diamond			Rectangular		Diamond		Rectangular		Diamond	
	Large	Small	Large	Small	Large	Small	Large	Small		Large	Small	Large	Small	Large	Small	Large	Small
Ambrose Field		1		1					•					1			
Ginn Field	1		1	2					•								2
Leonard Field	1	3								1	1						
Lynch School Field	1	2	1						• ON LARGE			1	1				
Manchester Field	1				1									2			
McDonald Field	1		1	1					•	0.5		0.5					
Pisgah/Parkhurst Field		1		1					•								
Mullen Playfield	1			2					•	0.5			1				
Muraco Field		1								1							
Ciarcia Field	2				1		1	1		2				0.33		0.33	0.33
V.O. Field		1									1						
West Side/ Nutile Field				4									4				
Win. Community Park					1	2								0.5	1		
Total	8	9	3	11	3	2	1	1	0	5	2	1.5	6	3.83	1	0.33	2.33

FIELD CAPACITY- EXISTING

Minimum Available Field Hours (Good condition) - Fall					VS.	Maximum Available Field Hours (Good condition) - Fall				
Rectangular		Diamond		Rectangular		Diamond				
Large	Small	Large	Small	Large		Small	Large	Small		
Natural - 15 Hrs/Field	120	135	146.5	165		Natural - 15 Hrs/Field	184	207	464	30
Synthetic - See Program Schedule	177	62	62	62		Synthetic - See Program Schedule	147	62	62	62
Total Capacity	297	197	209	227		Total Capacity	331	269	526	92
Existing demand	290	81	5	0		Existing demand	290	81	5	0
Defecit/Surplus	7	116	204	227		Defecit/Surplus	41	188	521	92

Minimum Available Field Hours (Good condition)- Spring					VS.	Minimum Available Field Hours (Good condition)- Spring				
Rectangular		Diamond		Rectangular		Diamond				
Large	Small	Large	Small	Large		Small	Large	Small		
Natural - 15 Hrs/Field	75	30	23	90		Natural - 15 Hrs/Field	115	46	35	138
Synthetic - See Program Schedule	192	63	21	184		Synthetic - See Program Schedule	181	62	21	21
Total Capacity	267	93	43	274		Total Capacity	296	108	55	159
Existing demand	264	82	58	197		Existing demand	264	82	58	197
Defecit/Surplus	4	11	-15	77		Defecit/Surplus	32	26	-3	-38

Maximum Available Field Hours (Fair condition) - Spring				
Rectangular		Diamond		
Large	Small	Large	Small	
Natural - 30 Hrs/Field	150	60	45	180
Synthetic - See Program Schedule	181	62	21	21
Total Capacity	331	122	66	201
Existing demand	264	82	58	197
Defecit/Surplus	67	40	8	4

Reference: Condition/ Hours Use				
North Carolina State University				
Expected Field Condition Based on Hours of Field Use				
Condition	Hrs Per Year		Hrs Per Week	
	Min	Max	Min	Max
Sustained Good Field Conditions	0	200	0	8
Good Field Conditions with some Thinning of Turf and Localized Wear Areas	400	600	15	23
Fair Field Conditions; Expect Significant Thinning and Wear	800	1000	31	38
Poor Field Conditions with Significant Turf Loss, Field Surface Damage, and Increased Potential for Athlete Injury	1000		38	

WINCHESTER FIELD MASTER PLAN- FIELD INVENTORY AND CAPACITY

FIELD INVENTORY - PROJECTED

Site	Maximum Capacity								Overlap	Shared Use Capacity							
	Natural Grass				Synthetic					Natural				Synthetic			
	Rectangular		Diamond		Rectangular		Diamond			Rectangular		Diamond		Rectangular		Diamond	
	Large	Small	Large	Small	Large	Small	Large	Small		Large	Small	Large	Small	Large	Small	Large	Small
Ambrose Field		1		1					•					1			
Ginn Field	1		1	2					•								2
Leonard Field	1	3									1			1			
Lynch School Field	1	2	1						• ON LARGE				1	1			
Manchester Field	1				1									2			
McDonald Field	1		1	1					•	0.5		0.5					
Pisgah/Parkhurst Field		1		1					•								
Mullen Playfield	1			2					•	0.5		1					
Muraco Field		1								1							
Ciarcia Field	2				1		1	1		2				0.33		0.33	0.33
V.O. Field		1									1						
West Side/ Nutile Field				4									4				
Win. Community Park					1	2								0.5	1		
Total	8	9	3	11	3	2	1	1	0	4	2	0.5	6	5.83	1	0.33	2.33

FIELD CAPACITY - EXISTING

Minimum Available Field Hours (Good condition) - Fall					VS.	Maximum Available Field Hours (Good condition) - Fall				
Rectangular		Diamond				Rectangular		Diamond		
Large	Small	Large	Small	Large		Small	Large	Small	Large	Small
						0				
Natural - 15 Hrs/Field	120	135	146.5	165		184	207	651.745	30	
Synthetic - See Program Schedule	147	62	62	62		147	62	62	62	
Total Capacity	267	197	209	227		331	269	714	92	
Existing demand	290	81	5	0		290	81	5	0	
Defecit/Surplus	-23	116	204	227		41	188	709	92	

Minimum Available Field Hours (Good condition)- Spring				
Rectangular		Diamond		
Large	Small	Large	Small	
Natural - 15 Hrs/Field	60	30	8	90
Synthetic - See Program Schedule	243	63	71	184
Total Capacity	303	93	78	274
Existing demand	304	94	66.7	254.15
Defecit/Surplus	0	-1	11	20

Minimum Available Field Hours (Good condition)- Spring				
Rectangular		Diamond		
Large	Small	Large	Small	
Natural - 15 Hrs/Field	92	46	12	138
Synthetic - See Program Schedule	181	62	21	21
Total Capacity	273	108	32	159
Existing demand	264	82	58	197
Defecit/Surplus	9	26	-26	-38

Maximum Available Field Hours (Fair condition) - Spring				
Rectangular		Diamond		
Large	Small	Large	Small	
Natural - 15 Hrs/Field	120	60	15	180
Synthetic - See Program Schedule	181	62	21	21
Total Capacity	301	122	36	201
Existing demand	264	82	58	197
Defecit/Surplus	37	40	-22	4

Reference: Condition/ Hours Use				
North Carolina State University Expected Field Condition Based on Hours of Field Use				
Condition	Hrs Per Year		Hrs Per Week	
	Min	Max	Min	Max
Sustained Good Field Conditions	0	200	0	8
Good Field Conditions with some Thinning of Turf and Localized Wear Areas	400	600	15	23
Fair Field Conditions; Expect Significant Thinning and Wear	800	1000	31	38
Poor Field Conditions with Significant Turf Losses, Field Surface Damage, and Increased Potential for Athlete Injury	1000		38	

WINCHESTER FIELD MASTER PLAN- EXISTING SCHEDULED FIELD HOURS

FALL HOURS

Field	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Total	Recommended Hours	Over Use/ Under Use Hours
Ambrose Field	3.5	3.5	3.5	3.5	3.5	12		29.5	15	14.5
Ginn Lights	6	6	6	6	6	12	7	49	15	34
Ginn River	6	6	6	6	6	12	7	49	15	34
Ginn Tracks*	6	6	6	6	6	12	7	49	15	34
Leonard Field	3.5	3.5	3.5	3.5	3.5	10.5	9.5	37.5	15	22.5
Lynch Front Field	3.5	3.5	3.5	3.5	3.5	10.5	9.5	37.5	15	22.5
Lynch Rear Field	3.5	3.5	3.5	3.5	3.5	10.5	9.5	37.5	15	22.5
Manchester Track	3	3	3	3	3	5	4.5	24.5	15	9.5
Manchester Turf*	6	6	6	6	6	12.5	10.5	53	15	38
McDonald Field	4	4	4	4	4	10.5	8.5	39	15	24
Parkhurst/ Pigsah Field	2	2	2	2	2	6	0	16	15	1
Mullen Field	9.5	9.5	9.5	9.5	9.5	10.5	0	58	15	43
Muraco Field	3	3	3	3	3	10.5	0	25.5	15	10.5
Ciarcia Field*	7	7	7	7	7	13.5	13.5	62	15	47
V.O. Field		2		2			4	8	15	-7
West Side/ Nutile Field A	2.5	2.5	2.5	2.5	2.5	10.5	8	31	15	16
West Side/ Nutile Field B	2.5	2.5	2.5	2.5	2.5	10.5	8	31	15	16
West Side/ Nutile Field C	2.5	2.5	2.5	2.5	2.5	10.5	8	31	15	16
West Side/ Nutile Field D	4	4	4	4	4	12	8	40	15	25
Connolly Field*	7	7	7	7	7	14	14	63	15	48

771

471

SPRING HOURS 4/1-6/28

Field	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Total	Recommended Use	Over Use/ Under Use Hours
Ambrose Field	3	3	3	3	3	12	10	37	15	22
Ginn Lights	8	8	8	8	5	10	10	57	15	42
Ginn River	8	8	8	8	5	10	10	57	15	42
Ginn Tracks	8	8	8	8	5	10	10	57	15	42
Leonard Field	5	5	5	5	5	12	11	48	15	33
Lynch Front Field	5	5	5	5	5	12	12	49	15	34
Lynch Rear Field	5	5	5	5	5	10	10	45	15	30
Manchester Track	5	5	5	5	5	12	12	49	15	34
Manchester Turf*	6	6	6	6	6	12.5	10.5	53	15	38
McDonald Field	5	5	5	5	5	12	10	47	15	32
Parkhurst/ Pigsah Field	5	6	3	3	3	12	10	42	15	27
Mullen Field	8	8	8	8	11	12	11	66	15	51
Muraco Field	4	4	4	4	4	12	12	44	15	29
Ciarcia Field	7	7	7	7	7	13.5	13.5	62	15	47
V.O. Field	4	5	3	5	4	12	10	43	15	28
West Side/ Nutile Field A	3	3	3	3	3	12	10	37	15	22
West Side/ Nutile Field B	3	3	3	3	3	12	10	37	15	22
West Side/ Nutile Field C	3	3	3	3	3	12	10	37	15	22
West Side/ Nutile Field	3	3	3	3	3	12	10	37	15	22
Connolly Field*	7	7	7	7	7	14	14	63	15	48

967

619

KEY:

- Sustained Good Field Conditions
- Good Field Conditions w/ Thinning & Localized Wear
- Fair Field Conditions; Expect Significant Thinning & Wear
- Poor Field Conditions w/ Significant Turf Loss, Field Surface Damage, & Increased Risk for Injury

APPENDIX E

BUDGETS AND RECOMMENDATIONS FOR PROPOSED IMPROVEMENTS
LEONARD DESIGN, 2016

Leonard Design Associates

*Site
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Architecture*

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To: Jay Gill, Winchester DPW
Chris Nelson, Winchester Recreation Department

From: Andrew Leonard
Leonard Design Associates

Date: April 18, 2016

RE: Budgets and Recommendations for Proposed Improvements

DRAFT

The attached budgets and plans set forth the results of investigation into the potential cost of renovations at **McDonald, Leonard, Ginn, Lynch, West Side and Mullen Fields**.

These budget projections are based on similar recent projects, assumed levels of intensity of development, area takeoffs from the town GIS database, and generally applied unit costs. We have contacted contractors and suppliers that are experienced with public work and have worked in the Town of Winchester in the past to develop unit costs and current pricing.

Construction costs have escalated ahead of the general inflation rate in recent years. Costs of construction involving steel and concrete have risen rapidly and we are also seeing increased cost in the disposal of construction debris, especially in old bituminous concrete, which is now treated as a hazardous waste.

A few general notes on the estimates:

- I have carried a separate line item for General Conditions for Construction, calculated at 5% of the total construction cost. This covers such items that are needed on every project such as mobilization, construction fence, bond, disposal, etc.
- I have assumed that the projects would be designed as a standard landscape architectural project, with full design services. Suggested design fees are based on the project budget and the types of services required. Where a large-budget item, such as the turf field replacement at Manchester, would not require intensive design services, the percentage fee is adjusted appropriately.
- Where new or updated topo survey would be needed to pick up recent renovations or other changes, a cost has been included.

After discussion with you, the general scope of work included for each facility is summarized below:

Manchester Field: Located at the Winchester Middle School, Manchester Field was recently renovated to include a turf football field and new track. The area also includes basketball courts and a skate/bike park. The town wishes to make the following improvements:

- Convert the grass field inside the track to an artificial turf field.
- Add a new rest room/concession stand building between the parking lot/turnaround and the football field.
- Related pathway and accessibility improvements.

Winchester Fields Renovation Budgets
 April 18, 2016
 Page 2

We have assumed that utilities are available in the adjacent field and driveway, and that only relatively short runs will be needed to hook up the building. Additionally, a temporary access bridge will be needed to gain access to the turf field without damaging the track.

Leonard Field: Renovated in 2003-2004, the field has experienced continual drainage problems, primarily on the southern (lower) half of the field. These problems mainly manifest themselves in the early spring season and after heavy rain events throughout the year. The field surface is actually in good shape, with little settling, although the turf is sparse in places and could use renovation. The main problem is that the field is fairly flat, with a 1% or less cross-slope. In addition, the entire field drains in one direction. While this allows for maximum flexibility in orienting and rotating fields, it contributes to the drainage difficulty.

A cost-effective renovation is proposed that will help to alleviate the drainage problems. The primary aid is to install a finger-drain system, such as the 'Multi-Flow' product. (See information attached to this report.) This system would be installed across the lower 2/3 of the field and in areas of continual drainage problems, and can be located almost entirely between the existing irrigation pipe runs. This system would be hooked up to the existing catch basin located in the SW corner of the field. In addition, a french drain would be installed along the east perimeter, at the base of the slope leading to Washington Street, to intercept any runoff coming off the hill. An estimate for turf renovation for the entire field is also included.

Since the installation of the playground, the bark mulch play surface has deteriorated to the point that it is not functioning as designed. Erosion from the north side of the play ground has resulted in gravel and soil spilling onto the playground. The play equipment installed at the time no longer meets new and current playground standards. Other accessibility issues need to be addressed with parking, access, paths and site furnishings. Additionally, the tennis and basketball play surfaces have experienced some cracking and need repair and/or renovation. Also to be considered is demolition of the old bathhouse and installation of an accessible restroom facility. The costs proposed assume that the existing utilities near the bathhouse will be able to be repurposed for the new building. A need to extend utilities out to any adjacent street would be extremely expensive because of the distance required. A proposed scope of work is:

- Install Finger Drain system over lower 2/3 of field.
- Install perimeter French Drain.
- Connect to existing drainage structures.
- Adjust irrigation system as required.
- Renovate turf (top-dress, aerate, slice-seed and fertilize).
- Demolish existing restroom building.
- Install new restroom building, connect to existing utilities.
- Repair cracks/renovate tennis and basketball court surfaces.
- New basketball backboards.
- Repair existing wall, install erosion control on hill next to play area.
- New playground edging, rubberized asphalt play surface.
- Replace 50% of benches with accessible benches meeting ADA standards.
- Regrade and repave upper 30' of path from Washington Street with ADA ramp, install railings.
- Mark out 2 handicap parking spaces, paint surface and provide signage on Washington Street.
- Construct handicap curb ramp at parking spaces.

McDonald Field/Playground: The existing playground at McDonald Field has numerous safety and access issues and needs to be replaced. While some of the existing equipment could be salvaged, it would be more cost effective to design and install a new playground that meets current standards.

Winchester Fields Renovation Budgets
 April 18, 2016
 Page 3

As with Leonard Field, access and parking need to be addressed. While two handicap parking spaces have been established near the playground, improved marking and signage is needed, as well as paths and accessible benches for the field and baseball diamonds. Accessible parking spaces and access should be added adjacent to the restroom facility. Additionally, minor repair and refurbishment of the tennis and basketball courts and fencing is needed. A proposed scope of work is:

- Repair cracks/renovate tennis and basketball court surfaces.
- New basketball backboards.
- Design and install new playground structures and swings that meet current standards.
- New playground edging, rubberized asphalt play surface.
- Replace team benches, add accessible benches meeting ADA standards at both diamonds.
- Improve handicap parking spaces, paint surface and provide better signage.
- Install paving and signage for accessible parking space near restroom.
- Provide accessible pathways connecting all elements.

Ginn Field: While the entire field is subject to inundation when the Aberjona River overflows (although hopefully this will be less often with the new improvements to the channel), there are persistent drainage issues on the lower ½ of the field closest to the river. A similar solution to Leonard Field is proposed, using finger drains and a perimeter french drain. An allowance for renovating the outfield and a new irrigation system is included. In addition, installation of additional lights to cover the entire field is included as a separate line item.

The gravel parking lot does not provide truly accessible parking spaces. Improved paving, marking and signage is needed, as well as paths and accessible benches for the field and baseball diamonds. A proposed scope of work is:

- Install Finger Drain system on lower ½ of field.
- Install French Drain along upper wall.
- New dry-well with overflow.
- Renovate turf (aerate, top-dress, slice-seed and fertilize).
- Update irrigation system to cover entire field.
- Extend lighting to cover entire field.
- Replace team benches, add accessible benches meeting ADA standards at both diamonds.
- Add pathways from Mystic Valley Parkway around both sides of field. (Upper path to be 8' wide as part of future bikeway).

West Side/Nutile Field: As with Leonard and McDonald Fields, access and parking need to be addressed. Handicap parking spaces and signage should be established serving the playground and the restroom/concession building. Paths and accessible benches are required for the baseball fields and facilities. New backstops are needed at fields 'A' and 'B'. The playground is in need of minor refurbishment and new edging and safety surface. A proposed scope of work is:

- Update playground structures and swings to meet current standards.
- New playground edging, rubberized asphalt play surface.
- Replace team benches, add accessible benches meeting ADA standards at baseball diamonds.
- Replace backstops at fields 'A' and 'B'.
- Add accessible bleacher at each field.
- Install paving and signage for accessible parking spaces.
- Provide accessible pathways connecting all elements.

Winchester Fields Renovation Budgets

April 18, 2016

Page 4

Lynch School Field: With the installation of a full baseball diamond, the existing soccer field is no longer large enough to accommodate a full 11 v 11 facility. While wide enough, it is only about 80 yards long. It is proposed to clear some of the wooded area between the fields and the school grounds to allow for extension of the soccer field to 120 yards. Paths and accessible benches are required for the baseball field and facilities.

The town owns a wooded parcel adjacent to the Well Field area, located across the Horn Pond Brook. The area is bisected by the Horn Pond Bike Path. The area located East of the path contains of about 3.5 acres of gently sloping ground that could be developed for park and recreation use. A grass field is proposed that could be used for 11v11 soccer or lacrosse. The area would need considerable access improvements. In order to provide parking for various activities, and to avoid disruption to the surrounding residential neighborhood, an accessible route should be developed from the Lynch School parking area. This would entail a wetland crossing and bridge at the Horn Pond Brook. A proposed scope of work for the area would consist of:

- Clear 25 yards of woods (10-15 yards would remain) between existing field and school grounds.
- Strip topsoil, cut bank back, remove excess material, re-grade subbase.
- Amend and/or supply, spread new topsoil, sod field.
- Extend existing irrigation system
- Install perimeter French drain on north side at base of slope.
- Add finger drain system for lower ½ of field.
- Regrade existing path and extend to baseball field.
- Add accessible benches and paving at field
- Add accessible bleacher at field.
- Install paving and signage for accessible parking spaces.
- Extend path system across Horn Pond Brook, construct bridge.
- Clear 2 acres of woods.
- Strip topsoil, remove excess material, re-grade subbase.
- Amend and/or supply, spread new topsoil, sod field.
- Install new irrigation system with water an electric from adjacent streets.

Mullen Field: This field was originally constructed on a fill site. An unknown amount of stumps and other debris are thought to have been buried here. The field has continually been subject to settling, creating uneven areas in the outfields. The two baseball infields appear to have been fairly stable. Most of the settling has occurred in the area closest to the parking lot and Lockeland Road, with little or none observed toward the base of the sled hill. When the baseball infields were rebuilt in 2004-2005, the outfield surface was not renovated with the exception of some turf renovation and some minor filling to correct a few low spots.

In the ensuing years, the town has continued to correct any settling on a seasonal basis. A permanent correction could prove rather expensive, since it would probably consist of removal of unsuitable subbase materials over an unknown area and to an unknown depth and the installation of new stable materials, geo-grid, and replacement of the turf surfaces and irrigation.

The difficulty in proposing a cost to remediate the settling condition is lack of knowledge of the type, depth and extent of the fill materials beneath the surface layers. We are proposing that the town engage a consultant experienced in this type of soils analysis and sports field construction to conduct a series of test pits to ascertain the subsurface conditions, and propose a variety of remediation solutions. Such a study would cost in the vicinity of \$5,000.00, if the town were to provide backhoe services and would replace the turf after the holes are dug and evaluated. The cost of testing would be lowered if the town can supply the services of a backhoe (large, with 14-15' reach) and operator, and can repair the damage to the fields. The study will recommend improvements, but will not estimate costs. You would have to contact site contractors, using the recommendations, to get costs to create a

Winchester Fields Renovation Budgets

April 18, 2016

Page 5

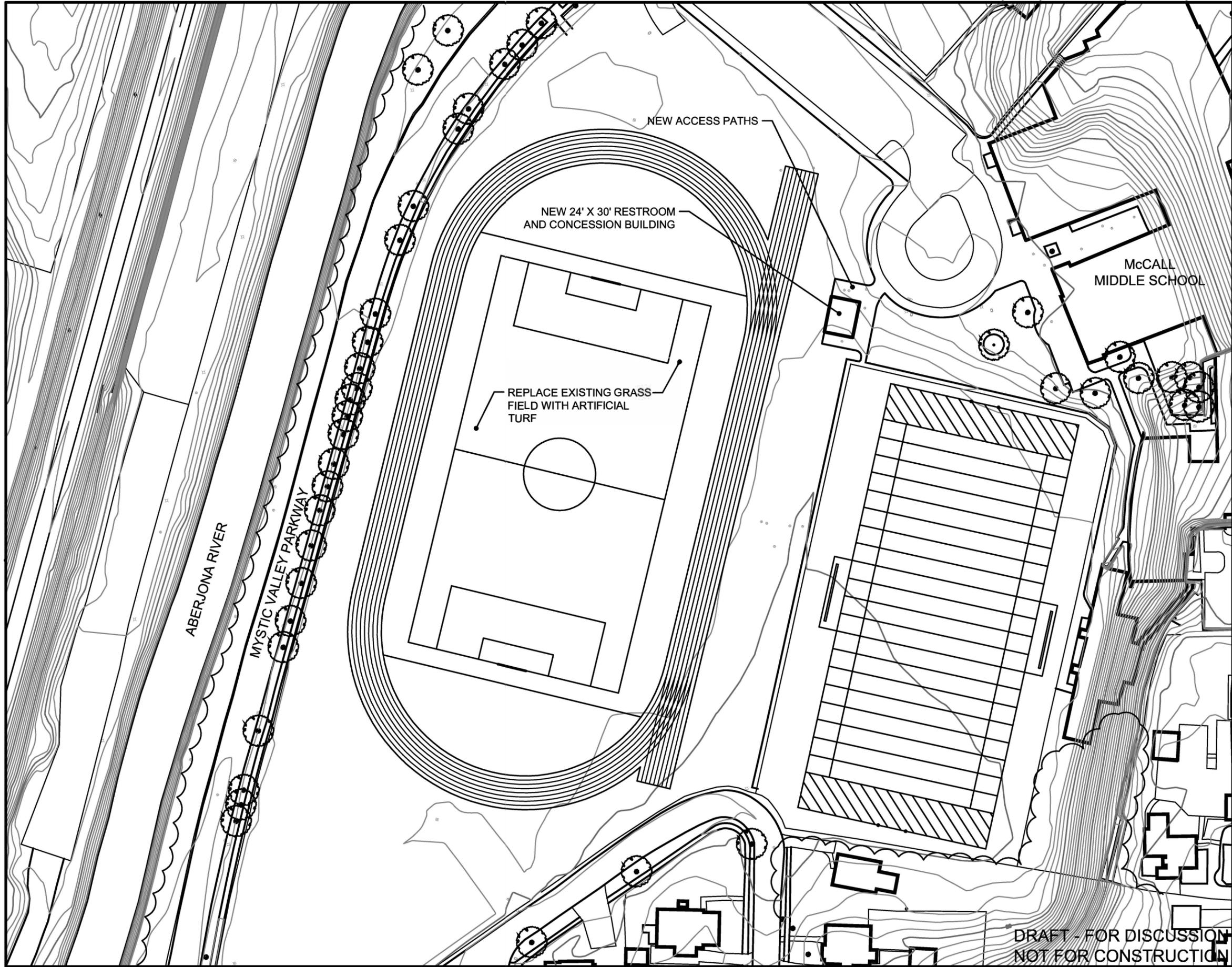
complete budget.

Once the study is complete, accessibility improvements similar to Nutile should be considered for the field area.

Appendix: The following companies provided information and costing for elements of this report:

- General Site Renovation and Landscaping: Heimlich Landscaping, Woburn
- Irrigation: Heimlich Landscaping, Woburn
- Filled Artificial Turf Surfaces: Field Turf, Portland, ME
- Precast Concrete Buildings: Shea Concrete, Wilmington, MA; United Concrete Products, Yalesville, CT.
- Site Furnishings and Bleachers: M.E. O'Brien and Sons, Medfield; Premier Park and Play, Newton, MA
- Tennis and Basketball Court Repair: Cape and Island Tennis and Track
- Fencing: Carli Fence, Medford
- Sports Field lighting: Musco Lighting, Boston
- Engineering Costs: Gala-Simons, Lexington; Pine and Swallow, Groton, LEC Environmental.
- Survey Costs: Lanata and Associates, Arlington; Medford Engineering and Survey, Medford.

MANCHESTER FIELD		4/18/2016
Budget Cost Estimate		
<u>ITEM</u>	<u>BUDGET COST</u>	<u>NOTES</u>
<u>1. Track Area</u>		
Temporary access bridge	\$ 5,000	
Strip sod and topsoil, remove from site	\$ 45,000	includes demo irrig. System
Grade subgrade	\$ 20,000	
Field Turf System	\$ 850,000	70 x 120 field, \$11/sf, complete system
Drainage	\$ 10,000	connect to existing system
Perimeter grading, topsoil, sod	\$ 10,000	allowance
Subtotal:	\$ 940,000	
<u>2. Concession/restroom building</u>		
Site Preparation	\$ 12,000	
Concession/Restroom Building	\$ 275,000	24' x 30' prefab concrete
Drainage	\$ 15,000	
Septic	\$ 20,000	
Water	\$ 10,000	
Electric/Communications	\$ 10,000	
Walks/access	\$ 15,000	includes allowance for repairing existing drives
Subtotal:	\$ 357,000	
Total Items:	\$ 1,297,000	
Survey	\$ 2,500	
General Conditions @ 5%	\$ 64,850	
Design @ 5%:	\$ 64,850	
Contingency @ 10%:	\$ 64,850	
Subtotal of All Items	\$ 1,429,200	



DRAFT - FOR DISCUSSION
NOT FOR CONSTRUCTION

L1

FIELD RENOVATIONS
Winchester, MA

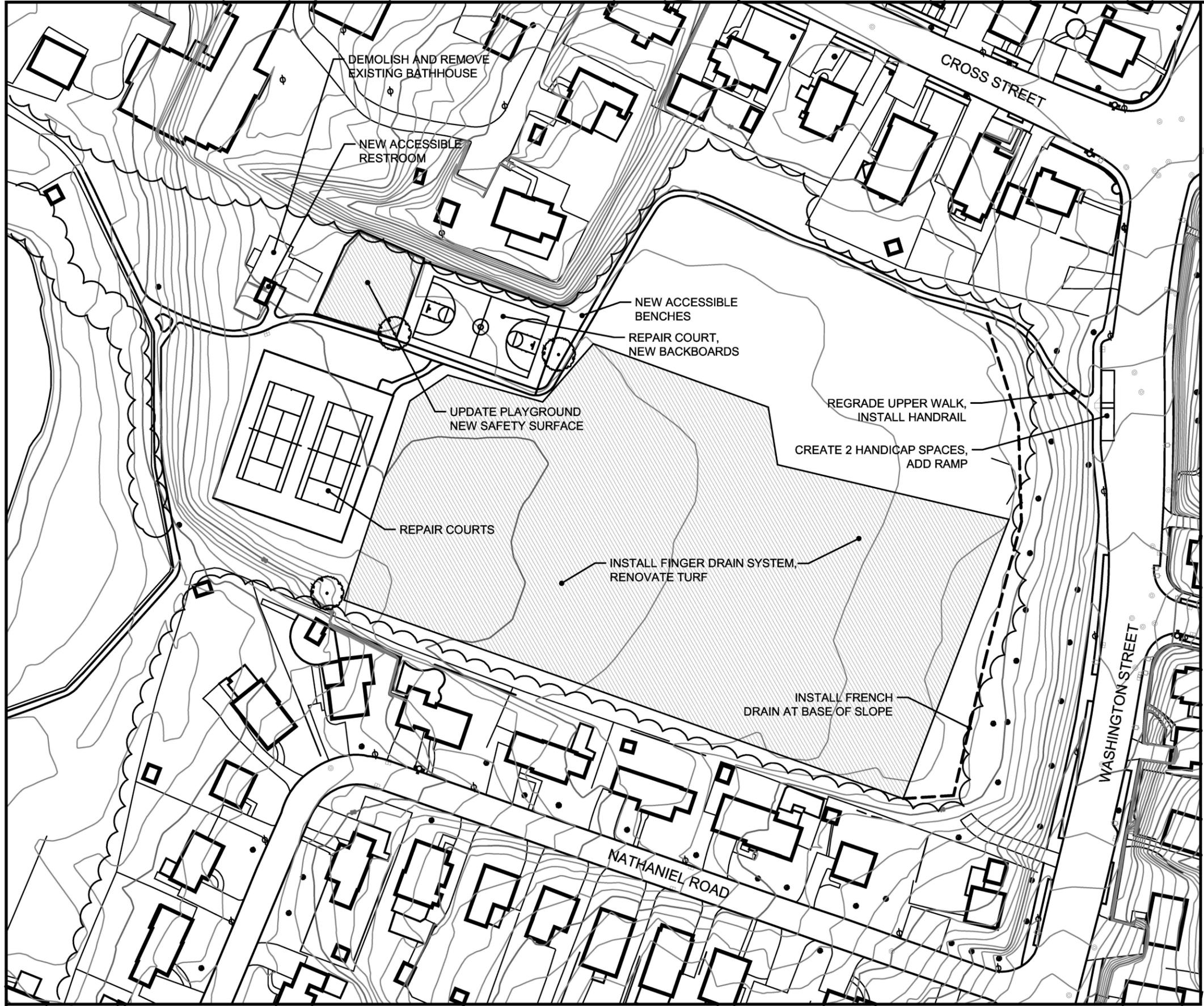
Scale: 1" = 80' April 18, 2016

**MANCHESTER
FIELD**

**Leonard
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LEONARD FIELD		4/18/2016
Budget Cost Estimate		
<u>ITEM</u>	<u>BUDGET COST</u>	<u>NOTES</u>
<u>1. Grass Field Drainage Improvements</u>		
Finger drain system	\$ 135,000	approx. 3/5 of field
Perimeter french drains	\$ 12,000	along bottom of slope from street
Drainage connections	\$ 24,000	pipng to connect drains to existing drywell
Renovate Turf Area	\$ 40,000	aerate, slice seed and fertilize
Adjust irrigation as needed	\$ 8,000	allowance
Subtotal:	\$ 219,000	
<u>2. Playground Improvements</u>		
New rubberized surface	\$ 65,000	includes accessible ramp from path
Erosion control	\$ 13,000	improvements to wall, drainage, slope
Play area edging	\$ 5,000	
Play equipment update	\$ 16,000	allowance based on similar projects
Accessible benches/tables	\$ 12,000	2 of each
Subtotal	\$ 111,000	
<u>3. Basketball/Tennis Renovation</u>		
Repair cracks	\$ 18,000	
New color coat	\$ 36,000	
Repair fences	\$ 4,000	minor repairs and adjustments
New backboards	\$ 1,600	backboards only
Subtotal	\$ 59,600	
<u>4. Concession/restroom building</u>		
Demo existing building, slabs	\$ 12,500	
Concession/Restroom Building	\$ 85,000	sim to McDonald Field, 1 male, 1 female restroom
Drainage	\$ 8,000	
Septic	\$ 8,000	
Water	\$ 9,000	
Electric/Communications	\$ 8,000	
Walks/access	\$ 8,500	
Subtotal:	\$ 139,000	
<u>5 Accessibility Improvements</u>		
Signage/parking spaces	\$ 5,000	includes curb ramp at Washington Street
Adjust ramp	\$ 12,000	railings and regrade portion at Washington Street
Accessible benches	\$ 12,500	replace 50% benches, expand paving
Subtotal	\$ 29,500	
Subtotal of All Items:	\$ 558,100	
General Conditions @ 5%	\$ 27,905	
Design @ 8%:	\$ 44,648	
Contingency @ 10%:	\$ 55,810	
Total:	\$ 686,463	



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Associates

LEONARD FIELD

FIELD RENOVATIONS
Winchester, MA

Scale: 1" = 80' April 18, 2016

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L2

McDONALD FIELD/PLAYGROUND		4/18/2016
Budget Cost Estimate		
<u>ITEM</u>	<u>BUDGET COST</u>	<u>NOTES</u>
1. Main Field Improvements		
New backstop	\$ 28,000	
New benches/accessible bench	\$ 5,600	
Paving at dugouts	\$ 5,000	
Accessible bleacher	\$ 9,000	
Storage building	\$ 8,000	
Subtotal:	\$ 55,600	
2. Playground Improvements		
Demo existing	\$ 6,500	
New play structure, swings	\$ 70,000	Similar in size to existing
New rubberized surface	\$ 75,000	
Play area edging	\$ 6,000	
Drainage	\$ 20,000	Allowance
Accessible benches/tables	\$ 12,000	
Subtotal	\$ 189,500	
3. Basketball/Tennis Renovation		
Repair cracks	\$ 6,000	\$24/l.f.
Reseal surfaces	\$ 23,400	Sealing and color-coat
Repair fences	\$ 4,500	One new gate, repairs
New backboards	\$ 1,600	Backboard only, existing posts OK
Subtotal	\$ 35,500	
4. Accessibility Improvements		
Signage/parking spaces	\$ 12,000	Recoat existing, new at rest rooms, signage
Path to ballfield	\$ 14,000	
Paving at benches, bleachers	\$ 6,500	
Accessible benches	\$ 56,000	
Subtotal	\$ 88,500	
Subtotal Construction:	\$ 369,100	
Survey	\$ 2,500	
General Conditions @ 5%	\$ 18,455	
Design @ 08%:	\$ 29,528	
Contingency @ 10%:	\$ 36,910	
Total:	\$ 456,493	



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**McDONALD
PLAYGROUND**

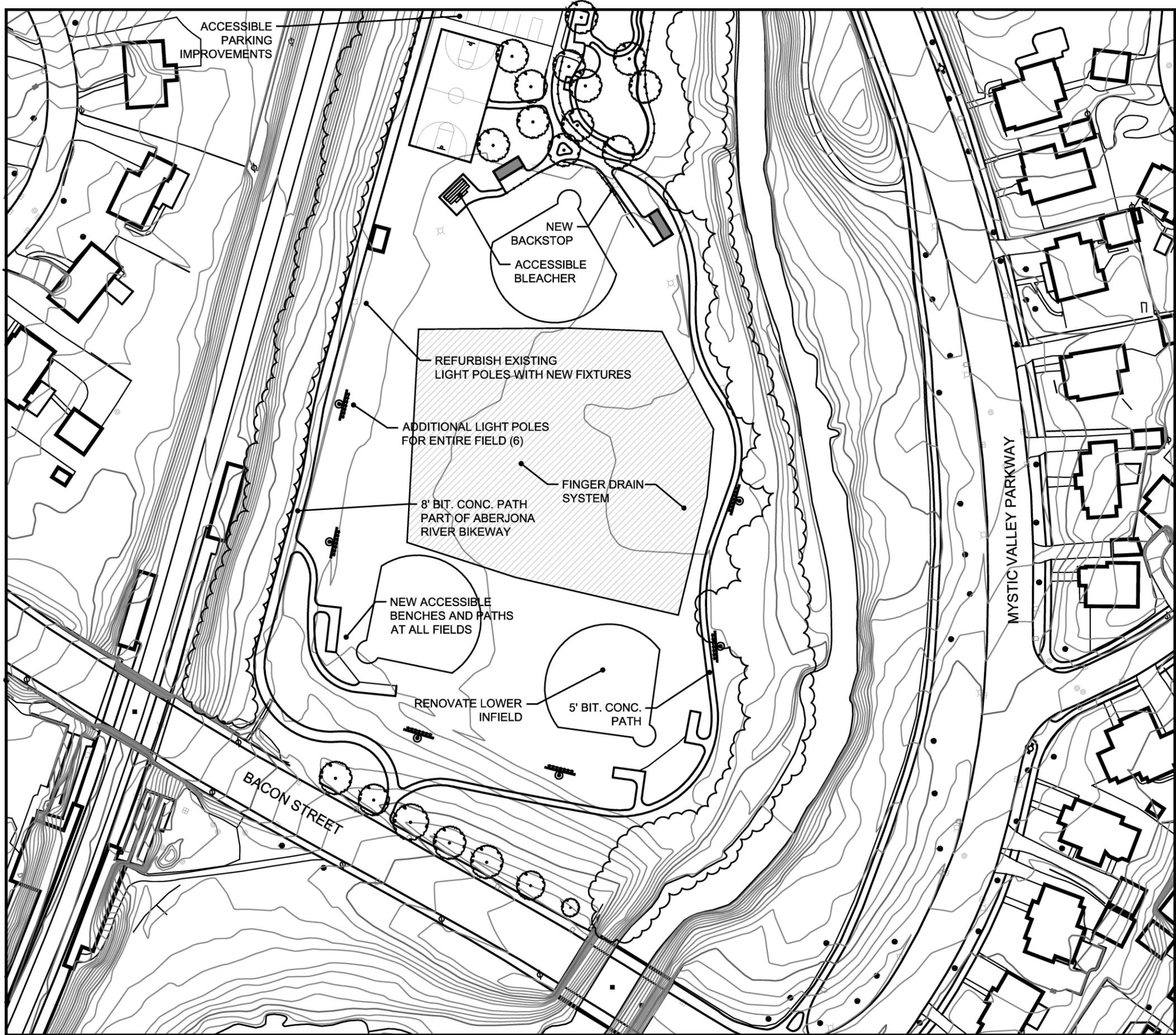
FIELD RENOVATIONS
Winchester, MA

Scale: 1" = 80' April 18, 2016

L3

DRAFT - FOR DISCUSSION
NOT FOR CONSTRUCTION

GINN SOFTBALL FIELDS		4/182016
Budget Cost Estimate		
<u>ITEM</u>	<u>BUDGET COST</u>	<u>NOTES</u>
<u>1. Grass Field Area</u>		
Finger drain system	\$ 52,000	2/3 of field
Perimeter french drains	\$ 23,500	intercept runoff at upper edges of field
Drywell, overflow	\$ 25,000	allowance
Irrigation improvements	\$ 42,000	new system for field
Turf improvements/renovation	\$ 24,000	aeration, fertilization, topdressing
Subtotal:	\$ 166,500	
<u>2. Main Softball Field Area</u>		
Renovate backstop	\$ 28,000	
New benches	\$ 6,000	
Paving at dugouts, bleachers	\$ 11,000	
New accessible bleachers (2)	\$ 18,000	
Subtotal:	\$ 63,000	
<u>3. Side Softball Field Area</u>		
Strip infield	\$ 2,500	
Regrade	\$ 4,000	
New infield	\$ 11,000	
Sod	\$ 6,000	
Team benches for both infields	\$ 11,200	
Subtotal:	\$ 34,700	
<u>4. Extend Lighting</u>		
Extend lighting to cover rest of field	\$ 305,000	LED system
Electric connections	\$ 15,000	
Subtotal:	\$ 320,000	
<u>5 Accessibility Improvements</u>		
Signage/parking spaces	\$ 6,000	bit. conc paving for 3 spaces
Bike path on upper side (8')	\$ 32,000	
Pedestrian path next to river (5')	\$ 22,000	
Accessible benches (2)	\$ 4,000	
Subtotal:	\$ 64,000	
Subtotal of All Items:	\$ 648,200	
Survey		
Design @ 5%:	\$ 32,410	
General Conditions @ 5%	\$ 32,410	
Contingency @ 10%:	\$ 64,820	
Total:	\$ 777,840	



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GINN FIELD

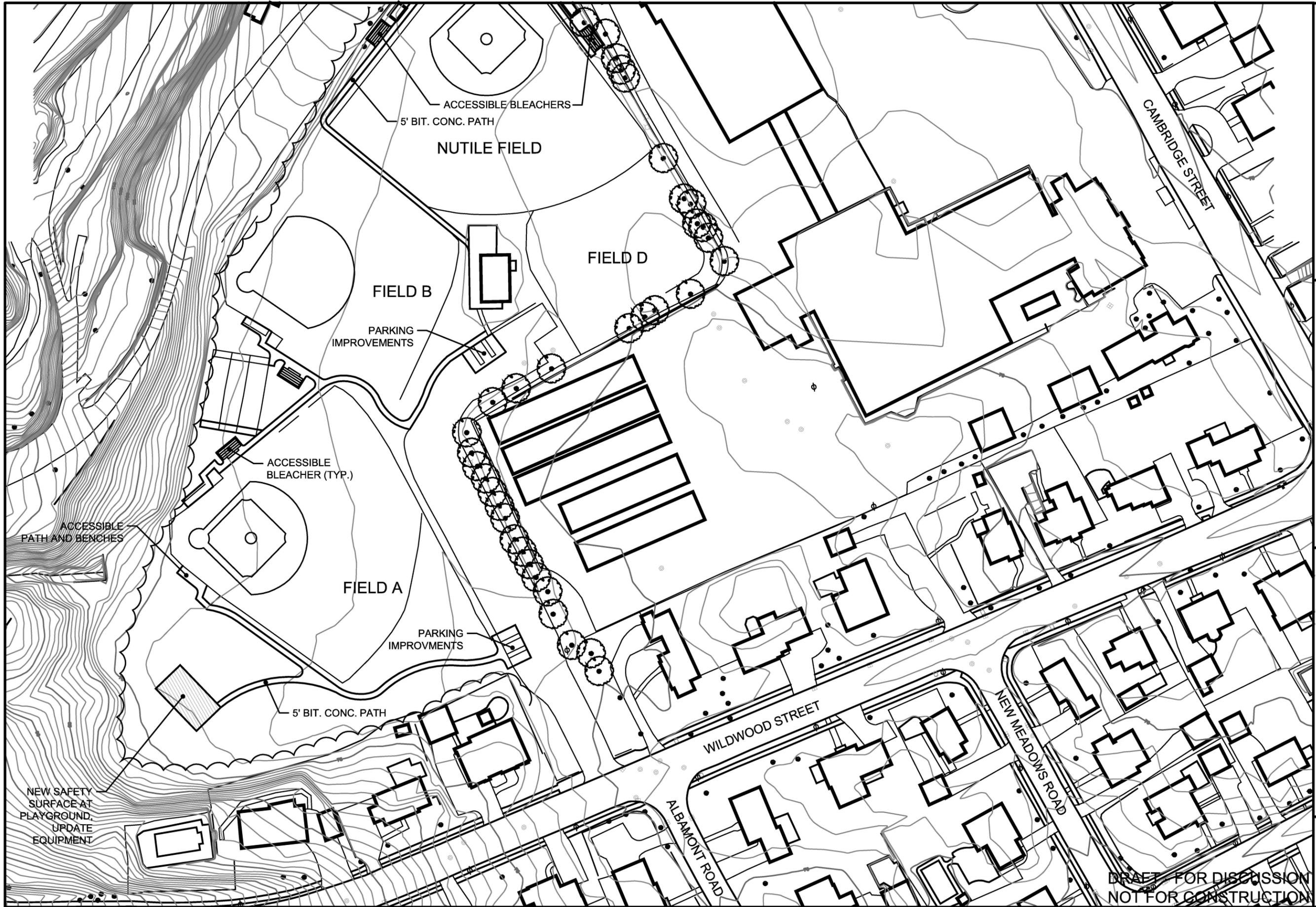
FIELD RENOVATIONS
 Winchester, MA

Scale: 1" = 80'
 April 18, 2016

L4

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 NOT FOR CONSTRUCTION

WEST END/NUTILE FIELDS		3/25/2016
Budget Cost Estimate		
<u>ITEM</u>	<u>BUDGET COST</u>	<u>NOTES</u>
1. Field A		
New backstop	\$ 22,000	
New benches/accessible bench	\$ 5,600	
Accessible bleacher	\$ 9,000	
Paving at dugouts	\$ 5,000	
Subtotal:	\$ 41,600	
2. Field B		
New backstop	\$ 22,000	
New benches/accessible bench	\$ 5,600	
Accessible bleacher	\$ 9,000	
Paving at dugouts	\$ 5,000	
Subtotal:	\$ 41,600	
3. Playground Improvements		
Site preparation/remove existing surface	\$ 4,500	
New rubberized surface	\$ 31,000	
Play area edging	\$ 2,500	
Play equipment update	\$ 16,000	based on similar projects
Accessible benches/table	\$ 8,000	2 benches, 1 table
Subtotal	\$ 62,000	
4. Accessibility Improvements		
Signage/parking spaces	\$ 12,000	bit. conc paving for 3 spaces
New bit. conc. path to Playground	\$ 9,000	connect parking to Mystic Valley Parkway
New bit. conc. path to ball fields	\$ 31,000	
Accessible bleachers (2)	\$ 18,000	
Accessible benches (2)	\$ 4,000	
Clean-up, seed edges	\$ 6,000	
Subtotal:	\$ 80,000	
Subtotal of All Items:	\$ 225,200	
Survey		
Design @ 10%:	\$ 22,520	
General Conditions @ 5%	\$ 11,260	
Contingency @ 10%:	\$ 22,520	
Total:	\$ 281,500	



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**WEST SIDE
NUTILE FIELD**

FIELD RENOVATIONS
Winchester, MA

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L5

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NOT FOR CONSTRUCTION

LYNCH SCHOOL/WELL FIELD		4/18/2016
Budget Cost Estimate		
<u>ITEM</u>	<u>BUDGET COST</u>	<u>NOTES</u>
1. Expand existing field		
Clear woodland area	\$ 15,000	
Excavate and remove fill	\$ 40,000	
Grading	\$ 6,500	
Topsoil	\$ 6,000	Strip, screen re-spread
Sod surface	\$ 11,000	
Extend existing irrigation	\$ 9,000	
Subtotal	\$ 87,500	
2. Renovate existing field		
Aerate, topdress, slice seed	\$ 16,000	
Drainage	\$ 35,000	Finger drains for lower 1/2, includes new area
Drywell/recharge	\$ 19,000	
Subtotal	\$ 70,000	
3. New field east of pond path		
Site preparation/erosion control	\$ 13,500	includes temporary roadway, access
Clear woodland area	\$ 35,000	
Grading	\$ 22,000	
Screen and re-spread topsoil	\$ 36,000	
Sod surface	\$ 48,000	
Bit. conc. walk access	\$ 40,000	
Drainage	\$ 48,000	
Bridge/boardwalk over stream	\$ 35,000	
Irrigation	\$ 47,000	
Electric connection	\$ 10,000	
Water connection	\$ 12,000	
Subtotal	\$ 346,500	
4. Accessibility Improvements		
Signage/parking spaces	\$ 4,500	color coat, signage
Grading/extend ramp	\$ 8,500	
Path to ballfield	\$ 17,000	
Paving at benches	\$ 6,500	
Accessible benches	\$ 5,600	
Accessible bleacher	\$ 9,000	
Subtotal	\$ 51,100	
Subtotal Construction	\$ 555,100	
Survey:	\$ 7,500	
Wetlands Consultant	\$ 4,000	
Soil Testing	\$ 2,000	
Design at 10%	\$ 55,510	
General Conditions @ 5%	\$ 27,755	
Contingency @ 10%:	\$ 55,510	
Total:	\$ 707,375	



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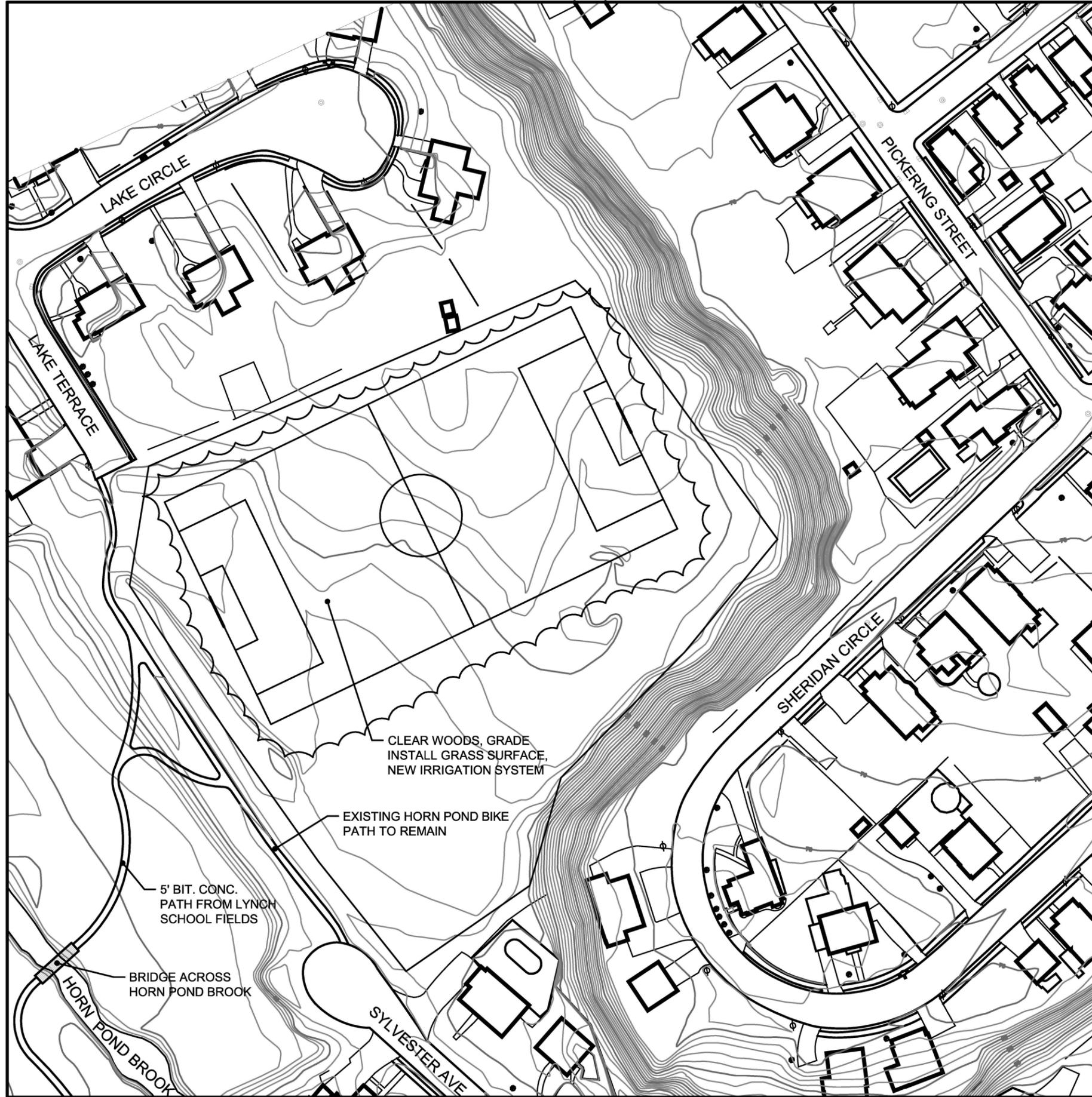
**LYNCH SCHOOL
WELL FIELDS**

FIELD RENOVATIONS
Winchester, MA

Scale: 1" = 80' April 18, 2016

L6a

DRAFT FOR DISCUSSION
NOT FOR CONSTRUCTION



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NOT FOR CONSTRUCTION

L6b

OLRA STUDIES
Winchester, MA

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**LYNCH SCHOOL
WOODS**

**Leonard
Design
Associates**

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Mullen Field		4/18/2016
Budget Cost Estimate		
<u>ITEM</u>	<u>BUDGET COST</u>	<u>NOTES</u>
<u>1. Soil - Subsidence Remediation Study</u>		
Soil remediation study	\$ 4,700	Pine and Swallow proposal
Excavation and replacment	\$ 2,000	Could be done by DPW
Total	\$ 6,700	



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NOT FOR CONSTRUCTION

L8

FIELD RENOVATIONS
Winchester, MA
Scale: 1" = 80' April 18, 2016

MULLEN FIELD

**Leonard
Design
Associates**

*Site Planning/
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APPENDIX F

PUBLIC SCHOOL FACILITIES MASTER PLAN
SECTION 3.0 ENROLLMENTS
FLANSBURGH, 2017

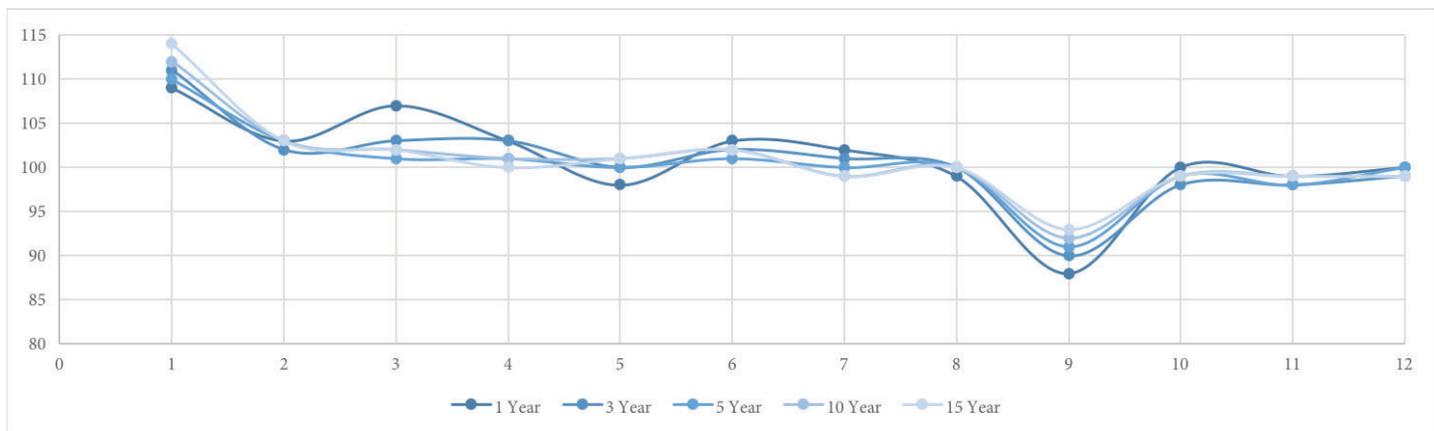
WINCHESTER PUBLIC SCHOOLS																	
Fifteen Year Enrollment History & Five/Ten Year Projections																	
Prepared: October 15, 2015																	
Census Projection Model for Kindergarten Projections																	
Year	K	1	2	3	4	5	6	7	8	9	10	11	12	Total	9-12	6-8	K-5
2001-02	243	285	268	277	280	280	311	270	258	230	227	229	220	3378	906	839	1633
2002-03	252	282	301	268	276	285	285	308	274	239	227	231	220	3448	917	867	1664
2003-04	274	298	286	311	266	281	282	278	308	272	233	213	222	3524	940	868	1716
2004-05	270	326	300	286	302	262	290	279	280	305	267	234	205	3606	1011	849	1746
2005-06	307	306	336	313	288	311	267	295	282	264	294	264	234	3761	1056	844	1861
2006-07	289	349	314	346	310	294	315	266	294	275	266	296	258	3872	1095	875	1902
2007-08	259	324	357	318	345	309	309	309	271	282	276	266	277	3902	1101	889	1912
2008-09	314	310	331	364	320	356	318	306	315	264	280	270	267	4015	1081	939	1995
2009-10	298	368	335	345	381	324	368	308	310	280	256	270	266	4109	1072	986	2051
2010-11	345	336	371	352	330	379	325	361	307	274	282	255	279	4196	1090	993	2113
2011-12	331	378	351	372	351	337	374	316	357	284	275	274	259	4259	1092	1047	2120
2012-13	303	352	389	342	367	352	339	378	318	330	282	278	277	4307	1167	1035	2105
2013-14	324	338	358	391	354	371	359	335	377	392	319	271	268	4357	1150	1071	2136
2014-15	318	361	342	367	398	354	373	365	335	336	282	316	275	4422	1209	1073	2140
2015-16	328	347	373	365	377	391	363	381	362	294	335	279	315	4510	1223	1106	2181

1 Year Rate	109%	103%	107%	103%	98%	103%	102%	99%	88%	100%	99%	100%
3 Year Rate	111%	102%	103%	103%	100%	102%	101%	100%	90%	98%	98%	99%
5 Year Rate	110%	103%	101%	101%	100%	101%	100%	100%	91%	98%	98%	100%
10 Year Rate	112%	103%	102%	101%	101%	102%	99%	100%	92%	99%	99%	99%
15 Year Rate	114%	103%	102%	100%	101%	102%	99%	100%	93%	99%	99%	99%

Year	K	1	2	3	4	5	6	7	8	9	10	11	12	Total	9-12	6-8	K-5
2016-17	328	363	354	385	375	376	398	366	380	324	287	328	277	4541	1216	1143	2181
2017-18	325	363	371	366	395	374	383	401	365	340	317	281	326	4606	1264	1148	2194
2018-19	325	360	371	383	375	395	380	386	400	327	332	310	279	4622	1248	1166	2208
2019-20	325	360	367	383	393	375	401	384	384	358	319	325	308	4682	1310	1169	2202
2020-21	325	360	367	379	393	392	381	405	382	344	350	313	323	4714	1330	1168	2216
2021-22	325	360	367	379	389	392	399	384	403	342	336	343	310	4730	1332	1186	2212
2022-23	325	360	367	379	389	388	399	402	383	361	334	330	340	4758	1365	1184	2209
2023-24	325	360	367	379	389	388	395	402	401	343	353	328	327	4757	1350	1198	2209
2024-25	325	360	367	379	389	388	395	398	401	359	335	346	325	4768	1365	1194	2209
2025-26	325	360	367	379	389	388	395	398	397	359	350	328	343	4780	1381	1190	2209
Average	325	360	367	379	388	386	392	393	390	346	331	323	316	4696	1316	1175	2205
Inc./Dec.	-3	13	-6	14	11	-5	29	12	28	52	-4	44	1	186	93	69	24

Section 3 | Enrollment Projections

WINCHESTER PUBLIC SCHOOLS Fifteen Year Enrollment History & Five/Ten Year Projections Prepared: October 15, 2015 Census Projection Model for Kindergarten Projections													
Year	1	2	3	4	5	6	7	8	9	10	11	12	Avg.
2001-02													
2002-03	116%	106%	100%	100%	102%	102%	99%	101%	93%	99%	102%	96%	2.07%
2003-04	118%	101%	103%	99%	102%	99%	98%	100%	99%	97%	94%	96%	2.20%
2004-05	119%	101%	100%	97%	98%	103%	99%	101%	99%	98%	100%	96%	2.33%
2005-06	113%	103%	104%	101%	103%	102%	102%	101%	94%	96%	99%	100%	4.30%
2006-07	114%	103%	103%	99%	102%	101%	100%	100%	98%	101%	101%	98%	2.95%
2007-08	112%	102%	101%	100%	100%	105%	98%	102%	96%	100%	100%	94%	0.77%
2008-09	120%	102%	102%	101%	103%	103%	99%	102%	97%	99%	98%	100%	2.90%
2009-10	117%	108%	104%	105%	101%	103%	97%	101%	89%	97%	96%	99%	2.34%
2010-11	113%	101%	105%	96%	99%	100%	98%	100%	88%	101%	100%	103%	2.12%
2011-12	110%	104%	100%	100%	102%	99%	97%	99%	93%	100%	97%	102%	1.50%
2012-13	106%	103%	97%	99%	100%	101%	101%	101%	92%	99%	101%	101%	1.13%
2013-14	112%	102%	101%	104%	101%	102%	99%	100%	92%	97%	96%	96%	1.16%
2014-15	111%	101%	103%	102%	100%	101%	102%	100%	89%	97%	99%	101%	1.49%
2015-16	109%	103%	107%	103%	98%	103%	102%	99%	88%	100%	99%	100%	1.99%
1 Year	109%	103%	107%	103%	98%	103%	102%	99%	88%	100%	99%	100%	1.99%
3 Years	111%	102%	103%	103%	100%	102%	101%	100%	90%	98%	98%	99%	1.55%
5 Years	110%	103%	101%	101%	100%	101%	100%	100%	91%	99%	98%	100%	1.45%
10 Years	112%	103%	102%	101%	101%	102%	99%	100%	92%	99%	99%	99%	1.84%
15 Years	114%	103%	102%	100%	101%	102%	99%	100%	93%	99%	99%	99%	2.09%



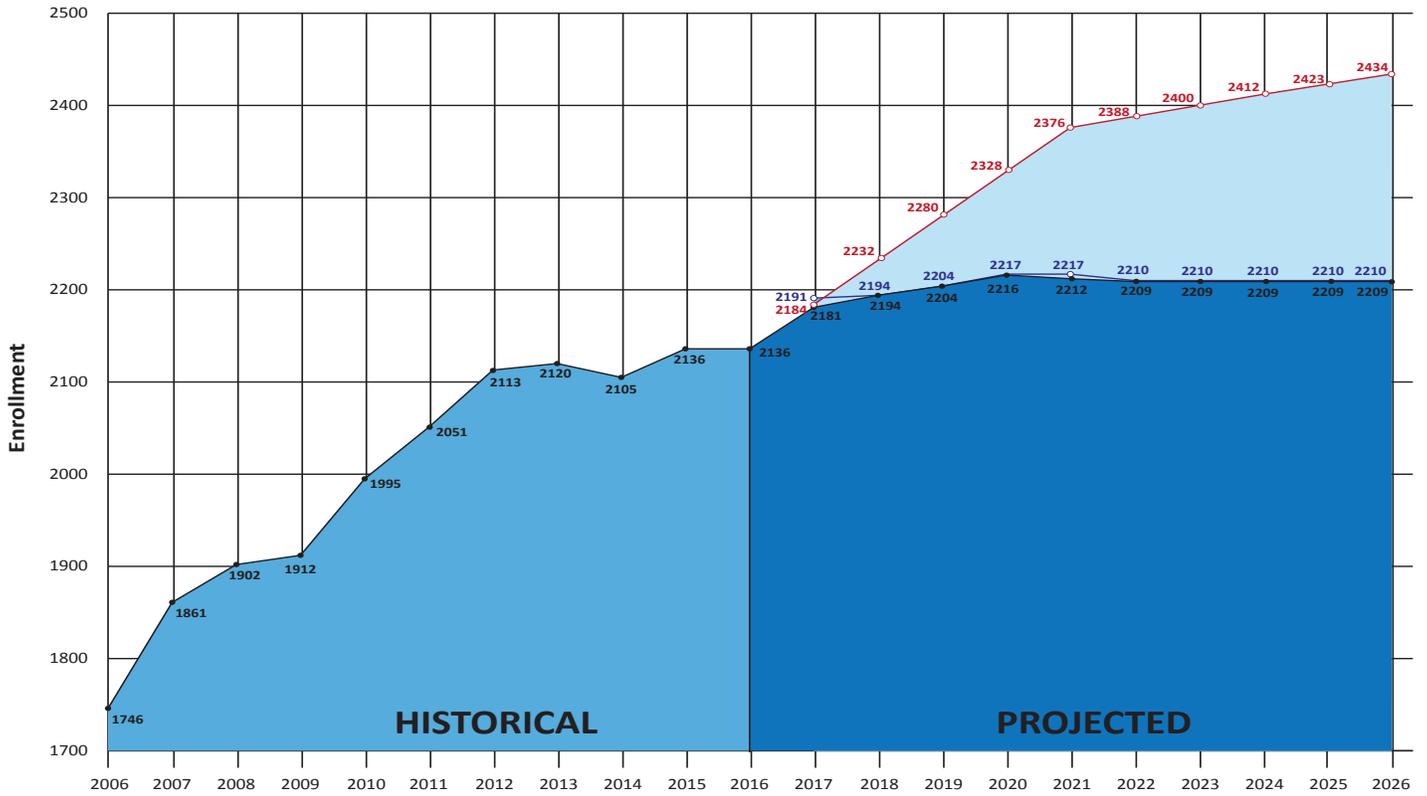
WINCHESTER PUBLIC SCHOOLS DISTRICT ENROLLMENT

Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	SP	Oth.	Tot.
Winchester Public	5	3	1	1	1	1	2	10	2	4	4	10	10	3	6	0	63
Lincoln Elem.	0	75	64	75	71	49	76	0	0	0	0	0	0	0	0	0	410
Lynch Elem.	89	76	86	63	87	72	76	0	0	0	0	0	0	0	0	0	549
Vison-Owen	0	48	64	67	87	82	74	0	0	0	0	0	0	0	0	0	422
Muraco Elem.	0	63	58	65	68	70	80	0	0	0	0	0	0	0	0	0	404
Ambrose Elem.	0	50	69	82	77	84	78	0	0	0	0	0	0	0	0	0	440
McCall Middle	0	0	0	0	0	0	0	387	365	382	0	0	0	0	0	0	1134
Winchester High	0	0	0	0	0	0	0	0	0	0	359	297	333	277	0	0	1266
Totals	94	315	342	353	391	358	386	397	367	386	363	307	343	280	6	0	4688

PREK	Existing 5 Classrooms at 94 students (FTE = 89) Proposed 5 Classrooms at 96 students (FTE=80)
GRADES K-5	Existing 106 classrooms at 2,136 students at 110 sections Currently 110 sections - 106 classrooms = 4 classrooms needed Proposed 113 classrooms at 2,217 students at 113 sections 2,717 proposed - 2,139 existing = 78 students at 3 classrooms Grades K-5 classroom needs = 113 proposed - 106 current = 7 classrooms needed
GRADES 6-8	Existing 52 classrooms at 1,150 students Proposed 56 classrooms at 1,232 students 56 proposed classrooms - 52 existing classrooms = 4 classrooms required
GRADES 9-12	Existing 1,292 students Proposed 1,370 students *New high school designed for 1,370 students

Section 3 | Enrollment Projections

Grades K-5 Ten Year Projected Enrollments

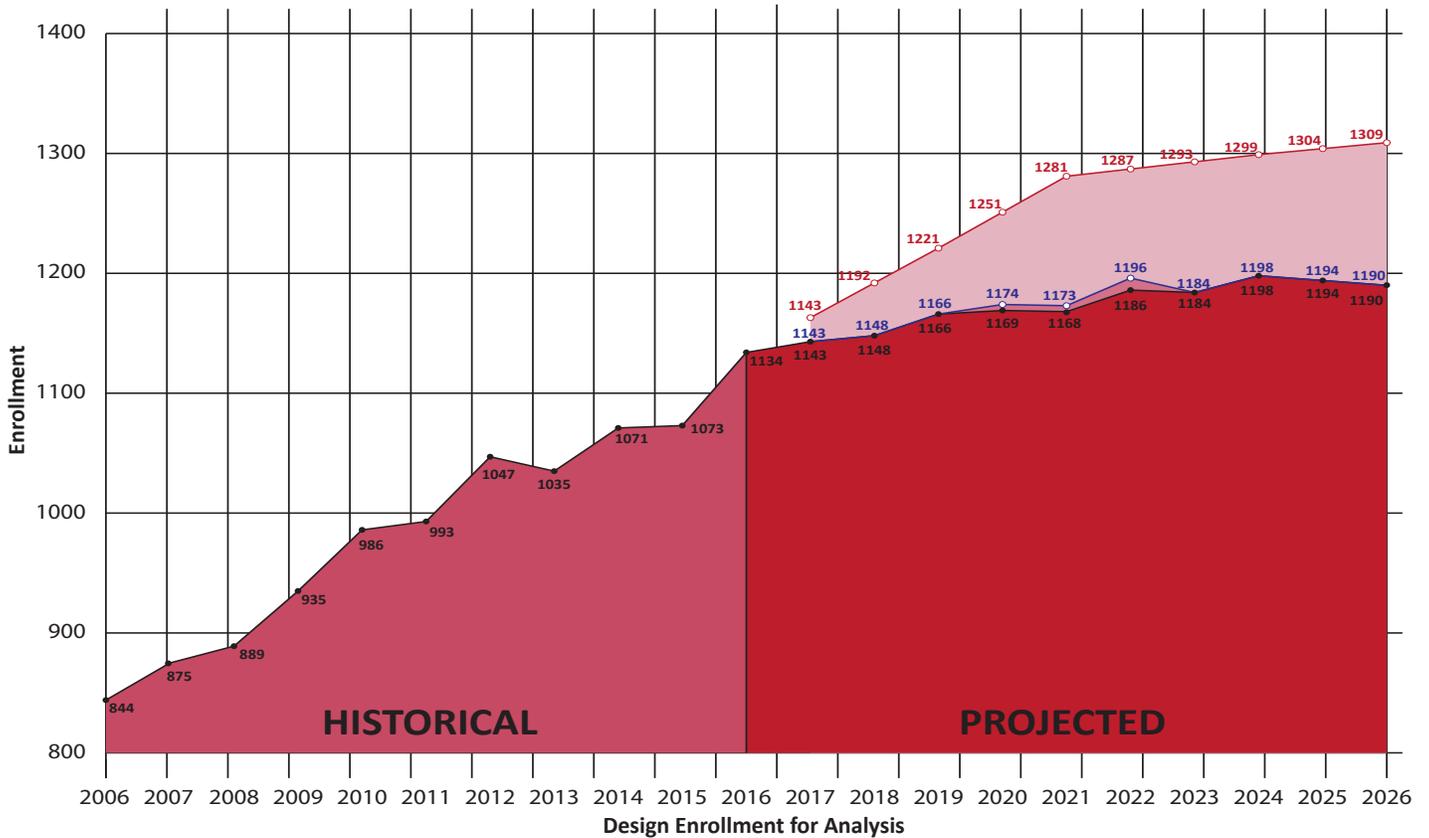


Design Enrollment for Analysis

2021-2022 School Year at 2,217 Elementary School Students

School Year	School Department	Growth with Developments School Dept. Numbers (2007)	Growth with Developments New Projected Numbers (2017)
2006	1746	-	-
2007	1861	-	-
2008	1902	-	-
2009	1912	-	-
2010	1995	-	-
2011	2051	-	-
2012	2113	-	-
2013	2120	-	-
2014	2105	-	-
2015	2136	-	-
2016	2136	-	-
2017	2181	2191	2184
2018	2194	2194	2232
2019	2204	2204	2280
2020	2216	2217	2328
2021	2212	2217	2376
2022	2209	2210	2388
2023	2209	2210	2400
2024	2209	2210	2412
2025	2209	2210	2423
2026	2209	2210	2434

Grades 6-8 Ten Year Projected Enrollments

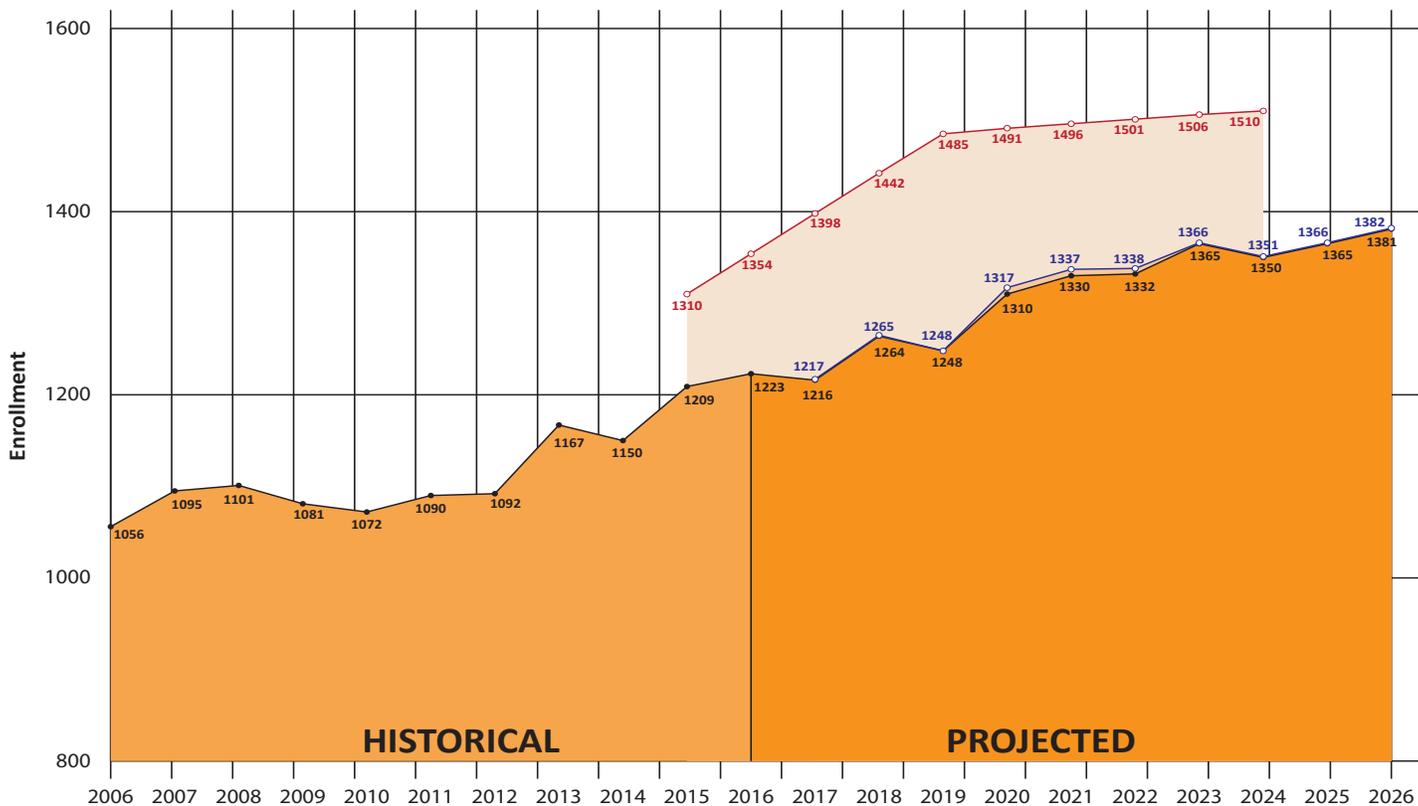


2021-2022 School Year at 1,196 Middle School Students

School Year	School Department	Growth with Developments School Dept. Numbers (2007)	Growth with Developments New Projected Numbers (2017)
2006	844	-	-
2007	875	-	-
2008	889	-	-
2009	935	-	-
2010	986	-	-
2011	993	-	-
2012	1047	-	-
2013	1035	-	-
2014	1071	-	-
2015	1073	-	-
2016	1134	-	-
2017	1143	1143	1163
2018	1148	1148	1192
2019	1166	1166	1221
2020	1169	1174	1251
2021	1168	1173	1281
2022	1186	1196	1287
2023	1184	1184	1293
2024	1198	1198	1299
2025	1194	1194	1304
2026	1190	1190	1309

Section 3 | Enrollment Projections

Grades 9-12 Ten Year Projected Enrollments



Design Enrollment for Analysis
2025-2026 School Year at 1,381 High School Students

School Year	School Department	Growth with Developments School Dept. Numbers (2007)	Growth with Developments New Projected Numbers (2017)
2006	1056	-	-
2007	1095	-	-
2008	1101	-	-
2009	1081	-	-
2010	1072	-	-
2011	1090	-	-
2012	1092	-	-
2013	1167	-	-
2014	1150	-	-
2015	1209	-	1310
2016	1223	-	1354
2017	1216	1217	1398
2018	1264	1265	1442
2019	1248	1248	1485
2020	1310	1317	1491
2021	1330	1337	1496
2022	1332	1338	1501
2023	1365	1366	1506
2024	1350	1351	1510
2025	1365	1366	-
2026	1381	1382	-

APPENDIX G
RECOMMENDED IMPROVEMENTS

Drawing: V:\DESIGN\6344-01-DC\CAD SITE-AMBR0SE\DWG Layout_T02.rvt



This plan is conceptual in nature and has been developed for informational purposes, this plan is subject to all applicable regulatory approvals, final plans may vary significantly from this layout.

EXISTING FIELD KEY:

NOT TO SCALE



SITE SUMMARY:

ADDRESS 27 HIGH ST.
FIELD SIZE ± 1.4 AC

- USERS GROUPS:
- ELEM. SCHOOL USE
 - PARKS AND REC. SOFTBALL AND T-BALL

FACILITIES & FEATURES:

1. (1) 60' softball field
2. (1) multi-use field- outfield overlap

COST ESTIMATE:

SHORT-TERM IMPROVEMENTS=	\$3,000
LONG-TERM IMPROVEMENTS=	\$490,000
<hr style="border-top: 1px dashed black;"/>	
TOTAL PROJECT COST=	\$715,000
<small>(based on 2018-2019 construction costs)</small>	
See Appendix H	

ADDITIONAL NOTES:

Remove existing softball field and multi-use field. Replace with 300' x 175' soccer/ multi-use field.

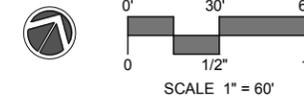
Add retaining walls along High Street and add retaining wall to the existing.

Add Sportsfield netting along northeast of the field.

May require reconfiguring the sidewalk along High Street.

Reinstall irrigation for new field.

RECOMMENDED IMPROVEMENTS- AMBROSE FIELD
WINCHESTER SPORTS FIELDS MASTER PLAN



Plotted by: CARLYP On this date: Wed, 2019 May 29 - 2:16pm

Drawing: V:\DESIGN\634-01-DC-CAD SITE-CARCA - BDMG Layout Tab8



This plan is conceptual in nature and has been developed for informational purposes. this plan is subject to all applicable regulatory approvals, final plans may vary significantly from this layout.

EXISTING FIELD KEY: NOT TO SCALE



SITE SUMMARY:

ADDRESS *SKILLINGS ST.*
 LOT SIZE ± 6.25 AC

USERS GROUPS:
 • WHS (SOCCER, LAX, BASEBALL, FIELD HOCKEY)

- FACILITIES & FEATURES:
1. (1) multi-use synthetic field -outfield overlap
 2. (1) 90' baseball synthetic (illuminated)
 3. (1) 60' baseball synthetic field
 - 4-5. (2) multi-use fields

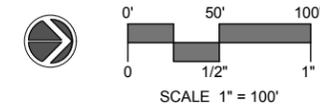
COST ESTIMATE:

MID-TERM IMPROVEMENTS=	\$436,000
<hr style="border-top: 1px dashed black;"/>	
TOTAL PROJECT COST=	\$630,000
<small>(based on 2018-2019 construction costs)</small>	
<small>See Appendix H</small>	

ADDITIONAL NOTES:

- Existing newly installed fields to remain.
- Remove multi-use field 5 and re-orient to add large rectangle multi-use field
- Add proposed batting cage.
- Maintain swale as desired.

RECOMMENDED IMPROVEMENTS- CIARCIA FIELD
WINCHESTER SPORTS FIELDS MASTER PLAN



Plotted by: CADLUP On this date: Wed, 2019 May 29 - 2:17pm

Drawing: V:\DESIGN\6344-01-DC\CD SITE-GINN-REV\DWG Layout_T04B



This plan is conceptual in nature and has been developed for informational purposes. this plan is subject to all applicable regulatory approvals, final plans may vary significantly from this layout.

EXISTING FIELD KEY:

NOT TO SCALE



SITE SUMMARY:

ADDRESS BACON ST.
LOT SIZE ± 3.6 AC

EXISTING FACILITIES & FEATURES:

1. (1) Basketball court
2. (1) 90' softball field (illuminated)
3. (1) multi-use field (outfield overlap)
- 4-5. (2) 60' softball fields

USERS GROUPS:

- WIN REC
- WIN. SOCCER CLUB
- MIDDLE SCHOOL F.B (SYFC)
- KNIGHTS OF COLUMBUS, SYBS,
- WHS (SOFTBALL),
- WIN. BPOYD LAX,
- FAN SOFT BALL

COST ESTIMATE:

SHORT-TERM IMPROVEMENTS=	\$97,000
LONG-TERM IMPROVEMENTS=	\$1,198,000
<hr style="border-top: 1px dashed black;"/>	
TOTAL PROJECT COST=	\$2,970,000
(based on 2018-2019 construction costs)	
See Appendix H	

ADDITIONAL NOTES:

Remove all existing ball fields and dugouts and replace with large artificial turf striped with 2 baseball fields and multi-use/ soccer field.

Add a connector road to additional parking lot and adjust existing sidewalk to playground area.

Add accessible plaza from parking to field.

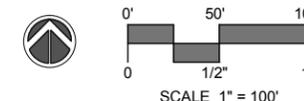
Restore lighting at field 1 and add new poles at field 2.

Repair basketball court surface.

Add dugouts to baseball field 1.

May require new retaining wall.

RECOMMENDED IMPROVEMENTS- GINN FIELD
WINCHESTER SPORTS FIELDS MASTER PLAN



Plotted by: C&R/P On this date: Wed, 2019 May 29 - 2:17pm

Drawing: V:\DESIGN\6344-01-DC\CD\SITE-LEONARD-REV\DWG_Layout_TAB18



This plan is conceptual in nature and has been developed for informational purposes. this plan is subject to all applicable regulatory approvals, final plans may vary significantly from this layout.

EXISTING FIELD KEY:

NOT TO SCALE



SITE SUMMARY:

ADDRESS WASHINGTON ST.
FIELD SIZE ± 4.5 AC

- USERS GROUPS:
- WIN. SOC. CLUB
 - WHS (SOCCER)
 - WHS (LAX),
 - WIN. GIRLS LAX,
 - WIN. YOUTH SOCCER

FACILITIES & FEATURES:

1. (1) basketball court
2. (2) tennis courts
- 3.-4. (2) multi-use fields
5. (1) soccer field

COST ESTIMATE:

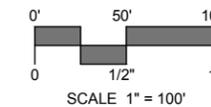
SHORT-TERM IMPROVEMENTS=	\$121,000
MID-TERM IMPROVEMENTS=	\$305,000
LONG-TERM IMPROVEMENTS=	\$690,000

TOTAL PROJECT COST= \$1,610,000
(based on 2018-2019 construction costs)
See Appendix H

ADDITIONAL NOTES:

- Renovate existing fields to improve drainage and health of turf.
- Restore irrigation system.
- Re-stripe fields with desired layout.
- Repair tennis courts surface.

RECOMMENDED IMPROVEMENTS- LEONARD FIELD
WINCHESTER SPORTS FIELDS MASTER PLAN



Plotted by: CRL/JP On this date: Wed, 2019 May 29 - 2:17pm

Drawing: \PROJECTS\6344-01-DC\CD\SITE-LYNCH-REVIEWS-REVIEWS Layout Table



This plan is conceptual in nature and has been developed for informational purposes. this plan is subject to all applicable regulatory approvals, final plans may vary significantly from this layout.

EXISTING FIELD KEY: NOT TO SCALE



SITE SUMMARY:

ADDRESS	10 BRANTWOOD RD.	USERS GROUPS:
FIELD SIZE	± 7.2 AC	<ul style="list-style-type: none"> • WIN. SOC. CLUB • WHS (FIELD HOCKEY) • WHS (BASEBALL) • WIN. YOUTH SOC. • SYBS • MIDDLE SCHOOL (BASEBALL)
FACILITIES & FEATURES:		
1.-2.	(2) multi-use fields (120' x 180')	
3.	(1) multi-use field (180' x 300') -outfield overlap	
4.	(1) baseball field	

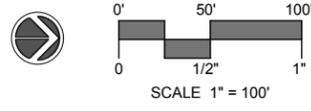
COST ESTIMATE:

SHORT-TERM IMPROVEMENTS=	\$10,000
MID-TERM IMPROVEMENTS=	\$290,000
LONG-TERM IMPROVEMENTS=	\$810,000
<hr style="border-top: 1px dashed black;"/>	
TOTAL PROJECT COST=	\$1,600,000
(based on 2018-2019 construction costs)	
See Appendix H	

ADDITIONAL NOTES:

- Remove existing baseball diamond with poor orientation. Clear vegetation where needed.
- Add a small softball field and a large baseball field.
- Re-install as much backstop fencing and benches as possible to large baseball field.
- Reinstall irrigation.
- Dedicated to diamond field use.

RECOMMENDED IMPROVEMENTS- LYNCH FIELD
WINCHESTER SPORTS FIELDS MASTER PLAN



Plotted by: C&RUP On this date: Wed, 2019 May 29 - 2:17pm

Drawing: V:\DESIGN\6344-01-DC\CD\SITE-MCDONALD-REPAIRING Layout Page 8



This plan is conceptual in nature and has been developed for informational purposes. this plan is subject to all applicable regulatory approvals, final plans may vary significantly from this layout.

EXISTING FIELD KEY: NOT TO SCALE



SITE SUMMARY:

ADDRESS *LORING AVE*
 LOT SIZE ± 4.1 AC

USERS GROUPS:
 • WIN. SOCCER CLUB
 • WHS (BB)
 • SYSB

- FACILITIES & FEATURES:
1. (1) tennis court
 2. (1) basketball court
 3. (1) 90' baseball field
 - 4.-5. (2) multi-use fields-outfield overlap
 6. (1) 60' baseball field

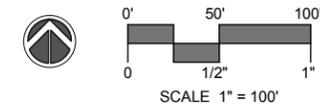
COST ESTIMATE:

SHORT-TERM IMPROVEMENTS=	\$22,000
<hr style="border-top: 1px dashed black;"/>	
TOTAL PROJECT COST=	\$35,000
<small>(based on 2018-2019 construction costs)</small>	
<small>See Appendix H</small>	

ADDITIONAL NOTES:

- Layout stays the same.
- Increase both baseball field 1 diamond and multi-use field 1 rectangle use through scheduling.
- Repair tennis court surface.

RECOMMENDED IMPROVEMENTS- MCDONALD FIELD
WINCHESTER SPORTS FIELDS MASTER PLAN



Plotted by: CARLUP On this date: Wed, 2019 May 29 - 2:17pm

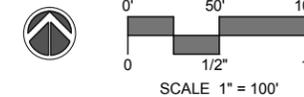
Drawing: \PROJECTS\6344-01-DEVELOPMENT\MULLEN-FIELD-REVENUE-Layout.dwg 1/28/19



This plan is conceptual in nature and has been developed for informational purposes. This plan is subject to all applicable regulatory approvals, final plans may vary significantly from this layout.

RECOMMENDED IMPROVEMENTS- MULLEN FIELD

WINCHESTER SPORTS FIELDS MASTER PLAN



EXISTING FIELD KEY:

NOT TO SCALE



SITE SUMMARY:

- | | | |
|----------|--------------|--|
| ADDRESS | RIDGE STREET | USERS GROUPS: |
| LOT SIZE | ± 3.5 AC | <ul style="list-style-type: none"> • WIN. SOCCER CLUB • WIN. REC • TEMPLE (SB) • SYBS • WIN. YOUTH SOCCER |
- FACILITIES & FEATURES:
1. (1) large multi-use field (broken into smaller fields for large soccer events)
 2. (1) 70' baseball field
 3. (1) 60' baseball field

COST ESTIMATE:

LONG-TERM IMPROVEMENTS=	\$672,000

TOTAL PROJECT COST=	\$970,000
<small>(based on 2018-2019 construction costs)</small>	
See Appendix H	

ADDITIONAL NOTES:

- Renovate existing fields to improve compaction and health of turf.
- Restore irrigation system.
- Re-stripe multi-use field with existing layout.

Plotted by: C&R/P On this date: Wed, 2019 May 29 - 2:18pm

Drawing: \PROJECTS\6344-01-DEVELOPMENT\MURACO-FIELD-REVISED-Layout_T01B

Plotted by: CAD/RJP On this date: Wed, 2019 May 29 - 2:18pm



This plan is conceptual in nature and has been developed for informational purposes. this plan is subject to all applicable regulatory approvals, final plans may vary significantly from this layout.

EXISTING FIELD KEY: NOT TO SCALE



SITE SUMMARY:

ADDRESS	BATES RD.	USERS GROUPS:
LOT SIZE	± 2.6 AC	<ul style="list-style-type: none"> • WIN. SOCCER CLUB • WIN. YOUTH SOCCER • WIN. GIRLS LAX • WHS (ULTIMATE FRISBEE)
FACILITIES & FEATURES:		
1. (1) 130' x 250' multi-use field		

COST ESTIMATE:

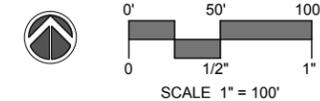
SHORT-TERM IMPROVEMENTS=	\$4,000
MID-TERM IMPROVEMENTS=	\$775,000
LONG-TERM IMPROVEMENTS=	\$480,000

TOTAL PROJECT COST=	\$1,815,000
(based on 2018-2019 construction costs)	
See Appendix H	

ADDITIONAL NOTES:

- Remove existing small field and convert to large artificial turf 340' x 200' multi-use field.
- Adjust bus parking loop and sidewalks to school and trail connection.
- Remove existing vegetation as needed and add 5 tennis courts.

RECOMMENDED IMPROVEMENTS- MURACO FIELD
WINCHESTER SPORTS FIELDS MASTER PLAN



APPENDIX H

OPINION OF PROBABLE CONSTRUCTION COSTS

Winchester Sports Fields Master Plan
Winchester, Massachusetts
Prepared For: Town of Winchester
MMI # 6344-01



PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
MAY 2019

Parks Improvements Summary Estimate

Priority	Park Facility	TOTAL PROJECT COST (including design fees)
L	Ambrose School Field	\$ 715,000.00
H	Ginn Field	\$ 2,970,000.00
H	Leonard Field	\$ 1,610,000.00
L	Lynch School Field	\$ 1,600,000.00
H	Manchester Field	\$ 3,100,000.00
L	McDonald Field	\$ 35,000.00
H	Mullen Field	\$ 970,000.00
L	Muraco School Field	\$ 1,815,000.00
L	Skillings Field	\$ 630,000.00
	Total Park Improvements	\$ 13,445,000.00

General Notes:

1. The above quantities are assumed, and are based upon a conceptual master plan.
2. Estimated costs are based on projected 2019 pricing. Improvements budgeted for following years should be adjusted appropriately.
3. Priorities determined by Town

Priority Legend:

H = High

M = Medium

L = Low

Winchester Sports Fields Master Plan
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PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
MAY 2019

Conceptual Schedule of Values

	ITEM/DESCRIPTION	UNIT	UNIT PRICE
	Mobilization & Removals Contingency	SF	\$ 2.00
	Renovate Ex. Fields (reverse tine tiller with culti-packer, top-dress & over-seed)	SF	\$ 10.00
	New Irrigation (no supply or pressure upgrades)	SF	\$ 0.40
	Field Lighting per Pole (no significant electrical upgrades to service)	EA	\$ 75,000.00
	New dugouts (Precast concrete)	EA	\$ 40,000.00
	New Synthetic Turf Soccer or Baseball (incl. drainage, standard infill, fencing)	SF	\$ 18.00
	New Synthetic Turf Soccer or Baseball (incl. drainage, alternate infill, fencing)	SF	\$ 20.00
	New Natural Grass Fields (regrade, loam, seed & fencing)	SF	\$ 5.00
	Sodded field add	SF	\$ 0.70
	New HMA Tennis Court (including fencing)	EA	\$ 75,000.00
	New Post-tensioned Concrete Tennis (including fencing)	EA	\$ 100,000.00
	New HMA Basketball Court	EA	\$ 50,000.00
	New Court Lighting per Pole (no significant electrical upgrades to service)	EA	\$ 25,000.00
	New/Renovated Parking Area (limited drainage improvements)	SF	\$ 15.00
	New Concrete Sidewalk	SF	\$ 10.00
	New Retaining Wall	FF	\$ 60.00
	Outdoor Ice Rink (temporary walls, no refrigeration)	EA	\$ 50,000.00
	Total Park Improvements		\$ 415,141.10

Note: These cost opinions have been developed to assist in the guidance of budgeting and implementation planning for the desired improvements. All cost should be considered conceptual in nature with the understanding that final design quantities and costs may vary from numbers shown in this study. These costs are based upon schematic level drawings and quantities of work developed for this study only. Costs per task have been developed utilizing a compilation of items and recently bid and constructed similar athletic field projects within the New England Region.

Winchester Sports Fields Master Plan
 Winchester, Massachusetts
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 MMI # 6344-01



**PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
 MAY 2019**

Ambrose School Field

	ITEM/DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
SHORT-TERM IMPROVEMENTS					
Athletic Field Improvements					
	Short-Term- Renovate Ex. Fields	SF	60,000	\$ 0.05	\$ 3,000.00
	Subtotal				\$ 3,000.00
LONG-TERM IMPROVEMENTS					
General Site Improvements					
	Mobilization & Removals Contingency	SF	60,000	\$ 2.00	\$ 120,000.00
	Sports Field Netting	LS	1	\$ 2,000.00	\$ 2,000.00
	Subtotal				\$ 122,000.00
Athletic Field Improvements					
	Long-Term- New Natural Grass Field	SF	52,500	\$ 4.00	\$ 210,000.00
	Long-Term- New Retaining Walls	FF	2,295	\$ 60.00	\$ 138,000.00
	Long-Term- Additional Grading	LS	1	\$ 20,000.00	\$ 20,000.00
	New Irrigation (no supply or pressure upgrades)	SF	52,500	\$ 0.40	\$ 21,000.00
	Subtotal				\$ 368,000.00
	CONSTRUCTION COST				\$ 493,000.00
	Contingency (20% rounded)				\$ 99,000.00
	TOTAL CONSTRUCTION COST				\$ 592,000.00
	Survey, Design & Engineering, Construction Admin. & Inspection (20% rounded)				\$ 119,000.00
	TOTAL PROJECT COST (rounded)				\$ 715,000.00

General Notes:

1. The above quantities are assumed, and are based upon a conceptual master plan.
2. Estimated costs are based on projected 2018-2019 pricing. Improvements budgeted for following years should be adjusted appropriately.
3. Estimated cost for Renovated Existing Fields includes reverse tine tiller with culti-packer, top-dress & over-seed.
4. Estimated cost for New Natural Grass Fields includes regrade, loam, seed & fencing.

Winchester Sports Fields Master Plan
 Winchester, Massachusetts
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 MMI # 6344-01



PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
 MAY 2019

Ciarcia Field

	ITEM/DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
MID-TERM IMPROVEMENTS					
General Site Improvements					
	Mobilization & Removals Contingency	SF	68,000	\$ 2.00	\$ 136,000.00
	Batting Cage	LS	1	\$ 30,000.00	\$ 30,000.00
	Subtotal				\$ 136,000.00
Athletic Field Improvements					
	Mid-Term- New Natural Grass Field	SF	68,000	\$ 4.00	\$ 272,000.00
	New Irrigation (no supply or pressure upgrades)	SF	68,000	\$ 0.40	\$ 28,000.00
	Subtotal				\$ 300,000.00
	CONSTRUCTION COST				\$ 436,000.00
	Contingency (20% rounded)				\$ 88,000.00
	TOTAL CONSTRUCTION COST				\$ 524,000.00
	Survey, Design & Engineering, Construction Admin. & Inspection (20% rounded)				\$ 105,000.00
	TOTAL PROJECT COST (rounded)				\$ 630,000.00

General Notes:

1. The above quantities are assumed, and are based upon a conceptual master plan.
2. Estimated costs are based on projected 2018-2019 pricing. Improvements budgeted for following years should be adjusted appropriately.
3. Estimated cost for New Natural Grass Fields includes regrade, loam, seed & fencing.

Winchester Sports Fields Master Plan
 Winchester, Massachusetts
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 MMI # 6344-01



PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
 MAY 2019

Ginn Field

	ITEM/DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
SHORT-TERM IMPROVEMENTS					
Athletic Field Improvements					
	Short-Term- Renovate Ex. Fields	SF	111,884	\$ 0.05	\$ 6,000.00
	Basketball Court (Crack repair w/ resurface)	SF	5,250	\$ 3.00	\$ 16,000.00
	Restore 1 inoperable light pole	LS	1	\$ 75,000.00	\$ 75,000.00
	Subtotal				\$ 97,000.00
LONG-TERM IMPROVEMENTS					
General Site Improvements					
	Mobilization & Removals Contingency	SF	124,695	\$ 2.00	\$ 250,000.00
	New Concrete Sidewalk	SF	3,700	\$ 10.00	\$ 37,000.00
	Field Lighting (includes pole)	EA	4	\$ 75,000.00	\$ 300,000.00
	Parking Lot Expansion (limited drainage improvements)	SF	12000	\$ 15.00	\$ 180,000.00
	Subtotal				\$ 767,000.00
Athletic Field Improvements					
	Synthetic Field - Baseball/ Softball with Soccer overlay (standard infill)	SF	100,000	\$ 11.00	\$ 1,100,000.00
	Baseball Dugouts (Concrete Precast)	EA	2	\$ 40,000.00	\$ 80,000.00
	Long-Term- New Retaining Walls	FF	295	\$ 60.00	\$ 18,000.00
	Subtotal				\$ 1,198,000.00
	CONSTRUCTION COST				\$ 2,062,000.00
	Contingency (20% rounded)				\$ 413,000.00
	TOTAL CONSTRUCTION COST				\$ 2,475,000.00
	Survey, Design & Engineering, Construction Admin. & Inspection (20% rounded)				\$ 495,000.00
	TOTAL PROJECT COST (rounded)				\$ 2,970,000.00

General Notes:

1. The above quantities are assumed, and are based upon a conceptual master plan.
2. Estimated costs are based on projected 2018-2019 pricing. Improvements budgeted for following years should be adjusted appropriately.
3. Estimated cost for Renovated Existing Fields includes reverse tine tiller with culti-packer, top-dress & over-seed.
4. Estimated cost for New Natural Grass Fields includes regrade, loam, seed & fencing.
5. Field lighting includes no significant electrical upgrades to service.

Winchester Sports Fields Master Plan
 Winchester, Massachusetts
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 MMI # 6344-01



PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
 MAY 2019

Leonard Field

	ITEM/DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
SHORT-TERM IMPROVEMENTS					
Athletic Field Improvements					
	Short-Term- Renovate Ex. Fields	SF	155,400	\$ 0.05	\$ 8,000.00
	Basketball Court (Crack repair w/ resurface)	SF	12,385	\$ 3.00	\$ 38,000.00
	Subtotal				\$ 121,000.00
MID-TERM IMPROVEMENTS					
General Site Improvements					
	Mobilization & Removals Contingency	SF	2,385	\$ 2.00	\$ 5,000.00
	New Natural Grass Field at Low spots	SF	50,000	\$ 4.00	\$ 200,000.00
	New Stone and Sand Field Setting Bed (drainage)	SF	50,000	\$ 2.00	\$ 100,000.00
	Subtotal				\$ 305,000.00
LONG-TERM IMPROVEMENTS					
General Site Improvements					
	Mobilization & Removals Contingency	SF	2,385	\$ 2.00	\$ 5,000.00
	Subtotal				\$ 5,000.00
Athletic Field Improvements					
	Long-Term- New Natural Grass Field	SF	155,400	\$ 4.00	\$ 622,000.00
	New Irrigation (no supply or pressure upgrades)	SF	155,400	\$ 0.40	\$ 63,000.00
	Subtotal				\$ 685,000.00
	CONSTRUCTION COST				\$ 1,116,000.00
	Contingency (20% rounded)				\$ 224,000.00
	TOTAL CONSTRUCTION COST				\$ 1,340,000.00
	Survey, Design & Engineering, Construction Admin. & Inspection (20% rounded)				\$ 268,000.00
	TOTAL PROJECT COST (rounded)				\$ 1,610,000.00

General Notes:

1. The above quantities are assumed, and are based upon a conceptual master plan.
2. Estimated costs are based on projected 2018-2019 pricing. Improvements budgeted for following years should be adjusted appropriately.
3. Estimated cost for Renovated Existing Fields includes reverse tine tiller with culti-packer, top-dress & over-seed.
4. Estimated cost for New Natural Grass Fields includes regrade, loam, seed & fencing.

Winchester Sports Fields Master Plan
 Winchester, Massachusetts
 Prepared For: Town of Winchester
 MMI # 6344-01



PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
 MAY 2019

Lynch School Field

	ITEM/DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
SHORT-TERM IMPROVEMENTS					
Athletic Field Improvements					
	Short-Term- Renovate Ex. Fields	SF	188,000	\$ 0.05	\$ 10,000.00
	Subtotal				\$ 10,000.00
MID-TERM IMPROVEMENTS					
General Site Improvements					
	Mobilization & Removals Contingency	SF	50,000	\$ 2.00	\$ 100,000.00
	New Natural Grass Field (Softball)	SF	43,000	\$ 4.00	\$ 172,000.00
	New Irrigation (no supply or pressure upgrades)	SF	43,000	\$ 0.40	\$ 18,000.00
	Subtotal				\$ 290,000.00
LONG-TERM IMPROVEMENTS					
General Site Improvements					
	Mobilization & Removals Contingency	SF	130,000	\$ 2.00	\$ 260,000.00
	Subtotal				\$ 260,000.00
Athletic Field Improvements					
	Long-Term- New Natural Grass Field (Baseball)	SF	125,000	\$ 4.00	\$ 500,000.00
	New Irrigation (no supply or pressure upgrades)	SF	125,000	\$ 0.40	\$ 50,000.00
	Subtotal				\$ 550,000.00
	CONSTRUCTION COST				\$ 1,110,000.00
	Contingency (20% rounded)				\$ 222,000.00
	TOTAL CONSTRUCTION COST				\$ 1,332,000.00
	Survey, Design & Engineering, Construction Admin. & Inspection (20% rounded)				\$ 267,000.00
	TOTAL PROJECT COST (rounded)				\$ 1,600,000.00

General Notes:

1. The above quantities are assumed, and are based upon a conceptual master plan.
2. Estimated costs are based on projected 2018-2019 pricing. Improvements budgeted for following years should be adjusted appropriately.
3. Estimated cost for Renovated Existing Fields includes reverse tine tiller with culti-packer, top-dress & over-seed.
4. Estimated cost for New Natural Grass Fields includes regrade, loam, seed & fencing.

Winchester Sports Fields Master Plan
 Winchester, Massachusetts
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 MMI # 6344-01



PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
 MAY 2019

Manchester Field

	ITEM/DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
SHORT-TERM IMPROVEMENTS					
Athletic Field Improvements					
	Mobilization & Removals Contingency	SF	70,000	\$ 2.00	\$ 140,000.00
	Synthetic Field - Multi-use Field (standard infill)	SF	70,000	\$ 11.00	\$ 770,000.00
	Field Lighting (includes pole)	EA	2	\$ 75,000.00	\$ 150,000.00
	Subtotal				\$ 1,060,000.00
MID-TERM IMPROVEMENTS					
Athletic Field Improvements					
	Mobilization & Removals Contingency	SF	84,000	\$ 2.00	\$ 168,000.00
	Synthetic Field - Multi-use Field (standard infill)	SF	84,000	\$ 11.00	\$ 924,000.00
	Subtotal				\$ 1,092,000.00
	CONSTRUCTION COST				\$ 2,152,000.00
	Contingency (20% rounded)				\$ 431,000.00
	TOTAL CONSTRUCTION COST				\$ 2,583,000.00
	Survey, Design & Engineering, Construction Admin. & Inspection (20% rounded)				\$ 517,000.00
	TOTAL PROJECT COST (rounded)				\$ 3,100,000.00

General Notes:

1. The above quantities are assumed, and are based upon a conceptual master plan.
2. Estimated costs are based on projected 2018-2019 pricing. Improvements budgeted for following years should be
3. Estimated cost for field lighting assumes adequate electrical service is in close proximity to field.
4. Estimated cost for Synthetic Turf Field includes drainage, standard infill, and fencing.

Winchester Sports Fields Master Plan
 Winchester, Massachusetts
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 MMI # 6344-01



PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
 MAY 2019

McDonald Field

	ITEM/DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
SHORT-TERM IMPROVEMENTS					
Athletic Field Improvements					
	Tennis Court (Crack repair w/ resurface)	SF	7,275	\$ 3.00	\$ 22,000.00
	Subtotal				\$ 22,000.00
	CONSTRUCTION COST				\$ 22,000.00
	Contingency (20% rounded)				\$ 5,000.00
	TOTAL CONSTRUCTION COST				\$ 27,000.00
	Survey, Design & Engineering, Construction Admin. & Inspection (20% rounded)				\$ 6,000.00
	TOTAL PROJECT COST (rounded)				\$ 35,000.00

General Notes:

1. The above quantities are assumed, and are based upon a conceptual master plan.
2. Estimated costs are based on projected 2018-2019 pricing. Improvements budgeted for following years should be adjusted appropriately.
3. Estimated cost for field lighting assumes adequate electrical service is in close proximity to field.
4. Estimated cost for Synthetic Turf Field includes drainage, standard infill, and fencing.

Winchester Sports Fields Master Plan
 Winchester, Massachusetts
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 MMI # 6344-01



PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
 MAY 2019

Mullen Field

	ITEM/DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
LONG-TERM IMPROVEMENTS					
General Site Improvements					
	Mobilization & Removals Contingency	SF	104,800	\$ 2.00	\$ 210,000.00
	Subtotal				\$ 210,000.00
Athletic Field Improvements					
	Long-Term- New Natural Grass Field	SF	104,800	\$ 4.00	\$ 420,000.00
	New Irrigation (no supply or pressure upgrades)	SF	104,800	\$ 0.40	\$ 42,000.00
	Subtotal				\$ 462,000.00
	CONSTRUCTION COST				\$ 672,000.00
	Contingency (20% rounded)				\$ 135,000.00
	TOTAL CONSTRUCTION COST				\$ 807,000.00
	Survey, Design & Engineering, Construction Admin. & Inspection (20% rounded)				\$ 162,000.00
	TOTAL PROJECT COST (rounded)				\$ 970,000.00

General Notes:

1. The above quantities are assumed, and are based upon a conceptual master plan.
2. Estimated costs are based on projected 2018-2019 pricing. Improvements budgeted for following years should be adjusted appropriately.
3. Estimated cost for New Natural Grass Fields includes regrade, loam, seed & fencing.

Winchester Sports Fields Master Plan
 Winchester, Massachusetts
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 MMI # 6344-01



PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
 MAY 2019

Muraco School Field

	ITEM/DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
SHORT-TERM IMPROVEMENTS					
Athletic Field Improvements					
	Short-Term- Renovate Ex. Fields	SF	68,000	\$ 0.05	\$ 4,000.00
	Subtotal				\$ 4,000.00
MID-TERM IMPROVEMENTS					
General Site Improvements					
	Mobilization & Removals Contingency	SF	2,385	\$ 2.00	\$ 5,000.00
	Synthetic Field - Multi-use Field (standard infill)	SF	70,000	\$ 11.00	\$ 770,000.00
	Subtotal				\$ 775,000.00
LONG-TERM IMPROVEMENTS					
General Site Improvements					
	Mobilization & Removals Contingency	SF	56,800	\$ 2.00	\$ 114,000.00
	Subtotal				\$ 114,000.00
Athletic Improvements					
	Tennis Courts (HMA 2 court, including fencing)	LS	3	\$ 75,000.00	\$ 188,000.00
	New Concrete Sidewalk	SF	5,000	\$ 10.00	\$ 50,000.00
	Bus Loop Adjustment	SF	8500	\$ 15.00	\$ 128,000.00
	Subtotal				\$ 366,000.00
	CONSTRUCTION COST				\$ 1,259,000.00
	Contingency (20% rounded)				\$ 252,000.00
	TOTAL CONSTRUCTION COST				\$ 1,511,000.00
	Survey, Design & Engineering, Construction Admin. & Inspection (20% rounded)				\$ 303,000.00
	TOTAL PROJECT COST (rounded)				\$ 1,815,000.00

General Notes:

1. The above quantities are assumed, and are based upon a conceptual master plan.
2. Estimated costs are based on projected 2018-2019 pricing. Improvements budgeted for following years should be adjusted appropriately.
3. Estimated cost for field lighting assumes adequate electrical service is in close proximity to field.

