

**TOWN OF ARLINGTON  
MASSACHUSETTS**  
Purchasing Department

**REQUEST FOR PROPOSALS  
#23-44**

The Town of Arlington, acting through its Park & Recreation Commission, is seeking proposals from qualified individuals and firms to provide:

**LANDSCAPE ARCHITECTURAL DESIGN SERVICES  
MENOTOMY ROCKS PARK PLAYGROUND/PICNIC AREA & PARALLEL PARK**

The work includes final design through construction administration. The budget for this project, including design and construction, is \$1,000,000.

Proposals must be submitted no later than **4:00 p.m., Friday, July 28, 2023**, to Joseph Connelly, Director, Arlington Recreation Department, 422 Summer St, Arlington, MA 02474, or electronically via email to [jconnelly@town.arlington.ma.us](mailto:jconnelly@town.arlington.ma.us).

The Town of Arlington reserves the right to cancel any request for proposals and/or to reject in whole or in part any and all proposals when it is deemed in the best interest of the Town to do so.

Questions or requests for clarification regarding this RFP should be addressed to Mary Ellen De Natale, Purchasing Agent for the Town of Arlington, at [mdenatale@town.arlington.ma.us](mailto:mdenatale@town.arlington.ma.us), and should be submitted no later than 4:00 p.m. on Friday, July 21, 2023. Any addenda to this Request for Proposals will be posted to the Town's website at [www.arlingtonma.gov/purchasing](http://www.arlingtonma.gov/purchasing).

TOWN OF ARLINGTON

Sanford Pooler  
Town Manager

## Request for Proposals

### #23-44

#### Landscape Architectural Design Services – Menotomy Rocks Park Playground/Picnic Area & Parallel Park

The Town of Arlington, acting through its Park and Recreation Commission, is seeking proposals from qualified landscape architects to provide final design and construction administration services for Menotomy Rocks Park Playground/Picnic Area and Parallel Park. The project will utilize accessibility best practice design and include all required ADA improvements. The available budget for design and construction is **\$1,000,000**.

Proposals are due no later than 4:00 p.m. on **Friday, July 28, 2023**, at the Arlington Recreation Department, 422 Summer Street, Arlington, MA 02474, or electronically via an email to [jconnelly@town.arlington.ma.us](mailto:jconnelly@town.arlington.ma.us).

Descriptions of the selected sites, along with conceptual plans and budgets, can be found in the attached March 2021 “Field and Playground Feasibility Study” prepared for the Town of Arlington by Stantec Planning & Landscape Architecture.

This project is being funded in part by the **American Rescue Plan Act** of 2021 (ARPA) and as such is bound by all applicable provisions of the Supplemental Conditions attached hereto.

### Scope of Services

The Scope of Services for this project includes:

- Site observations and review of existing documents provided by the Town.
- Any necessary survey work (a separate price proposal must be submitted for this work).
- Preparation of illustrative site plans of potential site improvements and alternatives during design and all other phases of the project.
- Narrative description of proposed improvements describing the anticipated design and construction, including detail about play equipment.
- Detailed cost estimate from preliminary design to final design (each phase);
- Estimated construction schedule for final project.
- Regular meetings with representatives of the Park and Recreation Commission (three minimum), public hearings (two minimum for each project), and meetings with all other permitting agencies such as Historical Commission and Disability Commission as needed (two minimum).
- Creation, distribution, and tabulation for town wide survey.
- Preparation and presentation of the final design phase to the Park and Recreation Commission for approval, including 3-D renderings.
- Preparation of construction documents, bid documents and supporting bid materials and services, including assistance with the bid opening and bidder evaluations/selection.
- Construction oversight and final inspection.

## **Proposed Schedule**

- Issue RFP for Design Services – July 14, 2023
- Questions/Requests for Clarification – July 21, 2023, 4:00 p.m.
- Design Services Proposals Due – July 28, 2023, 4:00 p.m.
- Notice to Proceed – August 2023
- Complete Menotomy Rocks Park Design – February 2024
- Complete Parallel Park Design – June 2024
- Bid Menotomy Rocks Park Project – February/March 2024
- Bid Parallel Park Project – August 2024
- Construction Administration – as dictated by individual project schedule

## **Proposal Submission Requirements**

The response to this RFP can be in letter form and should include the following information:

- Relevant Experience
- Project Team
- Approach – Project and Community Input
- Proposed Detailed Schedule
- Fee Proposal
- Separate Fee Proposal for necessary Survey Work
- Signed Certificate of Non-Collusion and Tax Compliance Certification (attached)

## **Selection Criteria**

The selection criteria will include the firm's demonstrated ability to produce the work within the time frame set forth by the Park and Recreation Commission, the quality of the written proposal and approach to completing the project, experience with similar projects, and the proposed fee. The Park and Recreation Commission will conduct an interview prior to the final selection; the quality of the interview and the answers to any questions will be considered in the selection process.

**CERTIFICATE OF NON-COLLUSION**

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

---

Signature of individual submitting bid or proposal

---

Name of business

**THIS NON-COLLUSION FORM MUST BE SIGNED AND  
SUBMITTED WITH THE BID OR PROPOSAL**

**TAX COMPLIANCE CERTIFICATION**

Pursuant to M.G.L. c. 62C, §49A, the undersigned, acting on behalf of the Contractor, certifies under the penalties of perjury that the Contractor is in compliance with all laws of the Commonwealth of Massachusetts relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

---

Signature of Individual submitting bid or proposal

---

Name of business



## Supplemental Conditions

### INTRODUCTION

Notice: The Contract / Agreement to which this addendum is attached is made using federal assistance provided to the Town of Arlington ("Town" or "Owner"). The following contractual provisions are hereby incorporated into the Contract. In the event of any conflict between the below provisions and other provisions of this Contract / Agreement, the provisions in this Addendum shall control. In the event of any inconsistency between the Davis-Bacon Wage Rates and any prevailing wage rates published by the Commonwealth of Massachusetts and applicable to this Contract / Agreement, the higher of the two wages shall apply.

### BREACH OF CONTRACTUAL AGREEMENT: ADMINISTRATIVE CONTRACTUAL, AND LEGAL REMEDIES; SANCTIONS AND PENALTIES

It is hereby understood and mutually agreed, by and between the Contractor and the Owner, that the date of beginning and the time for completion of the work to be done hereunder are ESSENTIAL CONDITIONS of the Contract; and it is further mutually understood and agreed that the work embraced in this Contract shall be commenced on a date to be specified in the "Notice to Proceed".

The Contractor agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will ensure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the Owner, that the time for the completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

If the said Contractor shall neglect, fail or refuse to complete the work within the time herein specified, or any extension thereof granted by the Owner, then the Contractor does hereby agree, as a partial consideration for the awarding of this Contract, to pay the Owner the amount specified in the Contract, not as a penalty but as liquidated damages for such Breach of Contract as hereinafter set forth, for each and every calendar day the Contractor shall be in default after the time stipulated in the Contract for completing the work.

The said amount of liquidated damages is fixed and agreed upon by and between the Contractor and the Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would sustain in such event and said amount shall be retained from time to time by the Owner from current periodic estimates.

It is further agreed that time is of the essence of each and every portion of this Contract and of any specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the Contract as additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this Contract. Provided, that the Contractor shall not be charged with liquidated damages or any excess cost when the Owner determines that the Contractor is without fault and the Contractor's reasons for the time extensions are acceptable to the Owner; provided further, that the Contractor shall not be charged with liquidated damages or an excess cost when the delay in completion of the work is due to:

- A. Any preference, priority or allocation order duly issued by the government;
- B. Unforeseeable cause beyond the control and without fault or negligence of the Contractor, including, but not restricted to, acts of God or the public enemy, acts of the Owner, acts of

another Contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and severe weather; OR

- C. Any delays of subcontractors or suppliers occasioned by any of the causes specified in subsections (a) and (b) of this article.

Provided further, that the Contractor shall within ten (10) days from the beginning of such delay, unless the Owner shall grant a further period of time prior to the date of final settlement of the Contract, notify the Owner, in writing, of the causes of the delay, who shall ascertain the facts and extent of the delay and notify the Contractor within a reasonable time of its decision in the matter. The amount of liquidated damages for this project shall be Five Hundred Dollars (\$100.00) per consecutive calendar day.

#### **TERMINATION FOR CAUSE AND CONVENIENCE**

Where Contract exceeds \$10,000.00, the Owner may terminate this Contract by providing the Contractor and the Surety with ten (10) days written notice specifying the reasons for termination, as outlined below:

- A. Violation of any of the provisions of this Contract by the Contractor or any of their subcontractors;
- B. A determination by the Owner that the Contractor has engaged in fraud, waste, mismanagement, misuse of funds, or criminal activity with any funds provided by this Contract;
- C. Failure of the Contractor, for any reason, to fulfill in a timely and proper manner their obligations under this Contract, including compliance with applicable Federal, State and/or local law or regulations, and such procedures or guidelines as may be established.

In the event of any such termination, the Surety shall have the right to take over and perform the Contract; provided, however, that if the Surety does not commence performance within ten (10) days from the date of the mailing to such Surety of notice of termination, the Owner may take over the work and prosecute the same to completion at the expense of the Contractor, and the Contractor and their Surety shall be liable to the Owner for any excess cost occasioned by the Owner thereby, and in such event the Owner may take possession of and utilize in completing the work such materials, appliances and plants as may be on the site of the work and necessary therefore.

If the Owner determines that a continuation of work on the project would endanger the life, health or safety of those working or living at or near the project site, or that immediate action is necessary to protect public funds and/or property, the Owner may suspend work or terminate this agreement by providing notice to the Contractor in the form of a telegram, mailgram, hand-carried letter, or other appropriate written means.

In addition, notwithstanding anything to the contrary in the Contract, the Owner may also terminate this Contract for its conveniences, including due to the lack of sufficient funds to complete the work. In such event, the Owner shall provide written notice of termination to the Contractor, and the Contractor shall thereupon cease all work other than work that is required to make the work and surrounding property safe, and the Owner shall pay the Contractor for all work performed in accordance with the terms of the Contract up to the date of the Contract, provided the Contractor shall not be entitled to any termination (or similar) damages or other costs and expenses that may be associated with a termination for convenience.

#### **EQUAL EMPLOYMENT CLAUSE**

During the performance of this Contract, the Contractor agrees as follows:

- A. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are

treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to, the following:

1. Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
  2. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- B. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- C. The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.
- D. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- E. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- F. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- G. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- H. The Contractor will include the portion of the sentence immediately preceding paragraph (A) and the provisions of paragraphs (A) through (H) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as

a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

#### **CLEAN AIR ACT**

Contractor shall comply with all applicable standards, order regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Contractor further acknowledges and understands that Contractor shall be required to report any violations of said acts to the Federal awarding agency and the Regional Office of the Environmental Protection Agency.

#### **CONTRACT WORK HOURS AND SAFETY STANDARDS ACT (40 U.S.C. § 3701-3708)**

Where the Contract: (1) is awarded for a sum exceeding \$100,000; and (2) will involve the employment of mechanics or laborers, the Contractor shall comply with the Contract Work Hours and Safety Standards Act, 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5).

Pursuant to 40 U.S.C 3702 of the Contract Work Hours and Safety Standards Act, Contractor shall be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 shall apply to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

#### **DEBARMENT AND SUSPENSION (EXECUTIVE ORDERS 12549 AND 12689)**

Contractor certifies that neither Contractor nor any employer or subcontractor is a party listed on the government wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

#### **BYRD ANTI-LOBBYING; COPELAND "ANTI-KICKBACK" ACT (40 U.S.C. § 3145)**

##### **A. BYRD ANTI-LOBBYING AMENDMENT**

Contractor certifies that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Contractor further understands and acknowledges that it shall disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures shall be forwarded from tier to tier up to the non-Federal award.

##### **B. COPELAND "ANTI-KICKBACK" ACT**

Contractor acknowledges and understands that the awarding of this contract is conditioned upon Contractor's compliance with the Federal Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each Contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise

entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

C. BYRD ANTI-LOBBYING AMENDMENT: REQUIRED CERTIFICATION FOR AWARDS EXCEEDING \$100,000

The undersigned certifies, to the best of their knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all contractors shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Bidder certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the bidding party understands and agrees that the provisions of 31 U.S.C. Ch. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

---

Signature of Contractor's authorized official \_\_\_\_\_ Date \_\_\_\_\_

---

Name (printed) \_\_\_\_\_

---

Date (printed) \_\_\_\_\_

**PROCUREMENT OF RECOVERED MATERIALS (2 C.F.R. § 200.323)**

Contractor acknowledges and understands that, in performing the work specified under this contract, Contractor shall be required to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that

contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

**PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT (2 C.F.R. § 200.216);**

Contractor certifies that it shall not procure or obtain equipment, services, or systems that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115–232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

- i. For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);
- ii. Telecommunications or video surveillance services provided by such entities or using such equipment;
- iii. Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

**DOMESTIC PREFERENCES FOR PROCUREMENTS (2 C.F.R. § 200.322)**

- A. As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.
- B. For purposes of this section:
  1. “Produced in the United States” means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
  2. “Manufactured products” means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.





MARCH 2021

# The Town of Arlington Field and Playground Feasibility Study

Prepared for the Town of Arlington, Massachusetts  
By Stantec Planning & Landscape Architecture P.C.







# **Table of Contents**

**0 // Site Assessment/Purpose & Project Goals**

**1 // Spy Pond Playground**

**2 // Hurd Field**

**3 // Robbins Farm Hill Slide Replacement**

**4 // Robbins Farm Playground Renovation**

**5 // Menotomy Rocks Park Playground**

**6 // Poets Corner Field & Playground**

**7 // McClennan Skateboard Park**

**8 // Scannell Field & Adjacent Park Area**

**9 // Crosby Tennis Courts**

**10 // Parmenter Playground & Other Site Improvements**

**11 // Parallel Park**

**12 // Turkey Hill**

**13 // Thorndike Off-Leash Area**

**14 // Appendices**

**Appendix A - Full Soil Analysis**



**Site  
Assessment  
Purpose  
& Project  
Goals**





# Site Assessment Purpose & Project Goals

The Town of Arlington hired Stantec to conduct a feasibility study that would provide the existing conditions assessment of thirteen selected athletic fields and playgrounds through out the Town and include their potential recommended improvements. The purpose of this study was to secure funding for the Town's Fiscal Years 2022-2026 (FY 22-26) Capital Plan. The conceptual plans of the improvements were focused on enhancing the sites' ADA accessibility, user safety and function, and overall aesthetics.

For each field and playground location, the report first outlines a visual and physical assessment, documenting their condition based on information gathered during site visits. The visual assessment involved identifying the most prevalent grading issues, safety concerns, evaluating the existing fencing systems, taking note of the drainage patterns and possible subsurface settlement, clearance dimensions, condition of the natural grass and soil, and any other noticeable issues within or bordering the sites. The site amenities such as the seating, walkways, drainage, utilities and site furnishings were evaluated within this assessment. Please note that for the assessment for Robbins Farm Hill Slide and Robbins Farm Playground Renovation, the assessment is repeated as it covers both projects.

During the site visits for the fields, a preliminary evaluation of the existing soils was observed. This consisted of the top 14" of soil. To better understand the soil properties, samples were taken and sent to a soil testing laboratory for additional testing (Refer to Appendix A - Full Soil Analysis). These tests include particle size, organic matter content, and infiltration rate. Deeper soil testing may be needed to determine if drainage problems are caused by deeper layers of poorly draining soil.

Next, recommendations are provided for improvements/renovations and priorities based on the results of the assessment. These recommendations have an associated Estimate of Probable Costs which outlines those improvements.

The adjacent map indicates the locations of the fields and playgrounds that were reviewed as part of this study.

## Aerial Legend

1. Spy Pond Playground - Playground renovation
2. Hurd Field - Baseball/Softball field renovation with walking path
3. Robbins Farm Playground & Hill Slide Replacement - Playground renovation and replacement of hill slides
4. Menotomy Rocks Park Playground - Playground renovation
5. Poets Corner Field & Playground - Field renovation looking at potential turf field, playground renovation, and other site improvements
6. McClennan Skateboard Park - Upgrades to existing skateboard park
7. Scannell Field & Adjacent Park Area - Youth baseball / softball field renovations, and other site improvements and additions.
8. Crosby Tennis Courts - Renovation of existing four Tennis Courts
9. Parmenter Playground & Other Site Improvements - Playground renovation, basketball court renovation, and other site improvements
10. Parallel Park - Playground renovation, basketball court renovation, and other site improvements
11. Turkey Hill - Access to Turkey Hill Trails
12. Thorndike Off Leash Area - Improvements to the Off Leash Area (Dog Park)



# **Spy Pond Playground**







## Assessment Notes

- Emphasis should be placed on play for **younger children**.
- Art and culture is prominent in this area of Arlington.
- History of ice industry at Spy Pond could be considered in updates.
- A **nature theme** is preferred.
- Site is **ecologically sensitive** and any work will need Conservation Commissions' involvement in improvements.
- Existing **footprint will remain**.

## Photo Legend

1. General Overview: Spy Pond Playground is located within the broader, linear Spy Pond Park. The approximate 9,500 sf fenced playground includes wood fiber surfacing, swings, two play structures, one bench, and other playground equipment.
2. Accessibility: ADA accessibility is lacking due to wood fiber material throughout. There is one entrance gate to fenced in playground. Some parking is available adjacent to site.
3. Furnishings: Limited seating options for inside playground fence.
4. Edges: Playground is bounded by approximate 4' fence that seems to be in good condition.
5. Character: Natural elements surrounding playground evoke desire for natural palette in updated design character.
6. Vegetation: Healthy tree canopy provides shade for some areas of playground.





**ACCESS POINT**

**IMPROVE ADA ACCESSIBILITY**

Use rubber safety surface paths to connect play equipment and entrance for a more inclusive play experience

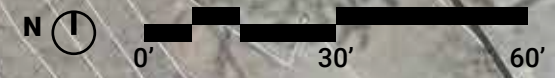
**NATURE THEME**

This playground is surrounded by natural elements and this should be carried throughout updated design.

**MAINTAIN FOOTPRINT**  
Keep footprint and fence line.

**ADD BENCHES**  
Only one bench currently within playground fence line.

APPROXIMATE LIMIT OF WORK



# Conditions Assessment

## Spy Pond Playground





# Precedents

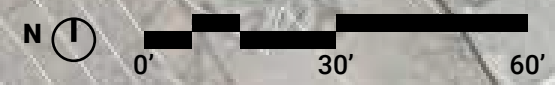
## Spy Pond Playground





# Conceptual Masterplan

## Spy Pond Playground



# Opinion of Probable Project Costs:



226 Causeway Street  
Boston, MA 02114

PROJECT: Arlington Field and Playground Feasibility Study  
 PROJ #: 210801854  
 STATUS: Conceptual Design  
 DATE: 2/9/2021

**NOTE:**

Due to the inflationary and unpredictable construction climate, this opinion of probable costs may not represent the actual cost of construction.

## Spy Pond Playground

Item #	Item/Remarks	Notes	Total	Unit	Unit Cost	Cost	Subtotal
<b>ITEMIZED OPINION OF PROBABLE CONSTRUCTION COSTS</b>							
<b>00001</b>	<b>Site Preparation and Demolition / Earthwork</b>						<b>\$35,063.00</b>
1	Mobilization		1	ALLOW	\$10,000.00	\$10,000.00	
2	Remove and Dispose Playground Equipment, Furnishing(s) and Footings		1	ALLOW	\$10,000.00	\$10,000.00	
3	Remove and Dispose Safety Surfacing		8,313	SF	\$1.00	\$8,313.00	
4	Remove and Dispose CLF fabric		1	ALLOW	\$1,000.00	\$1,000.00	
5	Construction Fence		500	LF	\$5.00	\$2,500.00	
6	Tree Protection Fence		50	LF	\$5.00	\$250.00	
7	Erosion and Sedimentation Control		1	ALLOW	\$3,000.00	\$3,000.00	
	<b>Subtotal</b>					<b>\$35,063.00</b>	
<b>00002</b>	<b>Playground Improvements</b>						<b>\$318,685</b>
1	Entrance Conc. Paving		31	SY	\$150.00	\$4,650.00	
2	Tot Lot Play Equipment - Assumes some artistic/custom features		1	ALLOW	\$155,000.00	\$155,000.00	
3	Natural Play Elements (stone, wood stumps, etc.)		1	ALLOW	\$22,000.00	\$22,000.00	
4	12" Depth Wood Fiber Safety Surface (85% of play area)		7,066	SF	\$4.00	\$28,264.20	
5	Rubber Safety Surface (15% of play area)		1,247	SF	\$30.00	\$37,408.50	
6	Benches on Conc. Pad		3	SF	\$2,500.00	\$7,500.00	
7	4' Black CLF Fabric		1,247	LF	\$45.00	\$56,112.75	
8	CLF Post Painting		1	ALLOW	\$5,000.00	\$5,000.00	
9	Loaming & Seeding disturbed areas		500	SF	\$1.50	\$750.00	
10	Deciduous Trees		2	EA	\$1,000.00	\$2,000.00	
	<b>Subtotal</b>					<b>\$318,685.45</b>	
	<b>Subtotal:</b>						<b>\$353,748</b>
	<b>4% General Conditions</b>						<b>\$14,150</b>
	<b>8% Contractors Overhead and Profit</b>						<b>\$28,300</b>
	<b>4% Price Escalation for FY '22</b>						<b>\$14,150</b>
	<b>CONSTRUCTION SUBTOTAL:</b>						<b>\$410,348</b>
<b>00003</b>	<b>Consulting Costs</b>						<b>\$39,500.00</b>
1	Design & Construction Administration		1	ALLOW	\$39,500.00	\$39,500.00	
2	Survey		1	ALLOW	\$0.00	\$0.00	
3	Permitting		1	ALLOW	\$0.00	\$0.00	
	<b>Subtotal</b>					<b>\$39,500.00</b>	
	<b>DESIGN &amp; CONSTRUCTION SUBTOTAL:</b>						<b>\$449,848</b>
	<b>10% Construction Contingency</b>						<b>\$44,984.80</b>
	<b>TOTAL OPINION OF PROBABLE PROJECT COSTS</b>						<b>\$494,832.80</b>

# Cost Estimate

## Spy Pond Playground





**Hurd  
Baseball/  
Softball Field**







## Photo Legend

- 1. General Overview:** Hurd Field is located to the south of the Arlington Reservoir. The area included in the limit of work studied is approximately 150,000 sf which includes a natural grass
- 2. Accessibility:** There is no ADA accessibility or a formal pathway to the field. There is sufficient parking at the entrance to the field. The Minuteman Commuter Bikeway along the field perimeter making easy access from bike users and runners.
- 3. Furnishings:** Bleachers are on site in poor condition, team areas are in poor condition, drinking fountain is poor condition and not accessible. A Port-a-potty is on site, but not accessible.
- 4. Edges:** The field has a surround by vegetation and a 6' chain link fence around 3 of its edges. The chain link fence in poor condition, with vegetation growing in it. There is a chain link backstop for the baseball and softball fields in poor condition.
- 5. Character:** The surrounding landscape suggests connecting to the natural quality of the site. It is sandwiched in between the Minuteman Commuter Bikeway and the pathway around the Reservoir.
- 6. Vegetation and Drainage:** Vegetation and Drainage: The field highly compacted. Topsoil ranged from 3"-6". The field had many undulations, but there no clear indication how the field pitches for stormwater drainage. Poor draining soils, lab results show low amounts of medium and coarse sand content and infiltration rate at 0.8 inches per hour. The topsoil had an overall low sand content, high silt content, and high clay content, which is one of the reasons for the high compaction and low infiltration rate.

## Existing Field Dimensions

Southern Baseball Field:

Left Field: 265'

Right Field: 265'

Northern Baseball Field:

Left Field: 150'

Right Field: 150'

Soccer Fields:

120' x 180'





**POPULAR OFF LEASH DOG AREA**

**4-5' GRASS BERM**  
*Causes ponding of storm water between berm and right field foul ball line*

**FIELD IN POOR CONDITION**  
*Undulating grading and weeds are present throughout infield.*

**FIELD IN POOR CONDITION**  
*Regrading required to improve drainage. No irrigation currently and site has a history of flooding.*

**FENCE IN POOR CONDITION**  
*Vegetation growing in fence. Crumbling concrete wall at base of fence.*

**POROUS PARKING LOT**  
*First porous parking lot in town. Does not require any improvements.*

**DANGEROUS LIP ALONG EDGE OF INFIELD/OUTFIELD**

**POTENTIAL CONNECTION FROM BIKE PATH TO RESERVOIR**

# Conditions Assessment

Hurd Baseball/Softball Field







# Precedents

Hurd Baseball/Softball Field





spectator plaza

receptacles  
 spectator seating  
 backstop  
 field lighting

field lighting

team area

baseball field

bullpen/  
 batting cage

fitness station area  
 +/-3-4'  
 above field

base of berm

asphalt 'loop path'

foul pole 263'

bench on concrete pad

asphalt 'loop path'

bench on concrete pad

restripe as needed

reset edge

new fence along property line

fitness equipment zone

planting signifies entry

base of berm

add accessible parking space

bike parking

foul pole 218'

bench, typ.

overlook

receptacles

chain link fence with safety netting

existing parking area

shade structure over portable toilet; future by others

spectator berm

youth soccer field  
 135' x 210'

youth soccer field  
 135' x 210'

soccer field  
 210' x 300'



# Conceptual Masterplan

## Hurd Baseball/Softball Field



# Opinion of Probable Project Costs:



226 Causeway Street  
Boston, MA 02114

PROJECT: Arlington Field and Playground Feasibility Study  
PROJ #: 210801854  
STATUS: Conceptual Design  
DATE: 2/9/2021

**NOTE:**

Due to the inflationary and unpredictable construction climate, this opinion of probable costs may not represent the actual cost of construction.

## Hurd Field

Item #	Item/Remarks	Notes	Total	Unit	Unit Cost	Cost	Subtotal
<b>ITEMIZED OPINION OF PROBABLE CONSTRUCTION COSTS</b>							
<b>00001</b>	<b>Site Preparation and Demolition / Earthwork</b>						<b>\$106,478.00</b>
1	Mobilization		1	ALLOW	\$10,000.00	\$10,000.00	
2	Remove and Dispose Backstops, Bleachers, Fence Fabric, Furnishing(s) and Footings		1	ALLOW	\$15,000.00	\$15,000.00	
3	Remove and Dispose Infield Mix		178	CY	\$12.00	\$2,133.33	
4	Remove and Dispose Existing Light Poles and Associated Electrical System		1	ALLOW	\$10,000.00	\$10,000.00	
5	Remove and Dispose Existing Storage Building		1	ALLOW	\$3,000.00	\$3,000.00	
6	Construction Fence		300	LF	\$5.00	\$1,500.00	
7	Tree Protection Fence		50	LF	\$5.00	\$250.00	
8	Erosion and Sedimentation Control		1,650	LF	\$6.00	\$9,900.00	
9	SWPPP		1	ALLOW	\$2,000.00	\$2,000.00	
10	Strip and Stockpile Existing Topsoil (assume 8")		2,516	CY	\$12.00	\$30,194.67	
11	Rough Grade Site		150,000	SF	\$0.15	\$22,500.00	
	<b>Subtotal</b>					<b>\$106,478.00</b>	
<b>00002</b>	<b>Natural Grass Athletic Field</b>						<b>\$471,859</b>
1	Screen Topsoil (assume 8" total)		2,171	CY	\$10.00	\$21,712.96	
2	Dispose of Tailings From Screening (10% of screened topsoil)		217	CY	\$15.00	\$3,256.94	
3	Sand Amendment (assume 2")		541	CY	\$49.00	\$26,518.98	
4	Respread Amended Topsoil (assume 10" total)		2,700	CY	\$10.00	\$26,995.37	
5	Soil Amend to Prevent Decompaction		100	TON	\$500.00	\$50,000.00	
6	Fine Grade Field Surface		87,500	SF	\$0.20	\$17,500.00	
7	Kentucky Blue Grass Sod Blend (sand blend)		87,500	SF	\$1.75	\$153,125.00	
8	Natural Grass Maintenance (Grow In)		87,500	SF	\$0.30	\$26,250.00	
9	Irrigation System		87,500	SF	\$1.20	\$105,000.00	
10	Infield Mix		11,000	SF	\$3.00	\$33,000.00	
11	Pitching Mound Fortification		1	LS	\$8,500.00	\$8,500.00	
	<b>Subtotal</b>					<b>\$471,859.26</b>	
<b>00003</b>	<b>Athletic Equipment</b>						<b>\$35,000</b>
1	Team Benches at Team Areas (includes concrete pad)		6	EA	\$3,000.00	\$18,000.00	
2	Pitchers Rubber and Bases		1	SET	\$1,000.00	\$1,000.00	
3	Foul Poles		1	SET	\$6,000.00	\$6,000.00	
4	Storage Shed (10'x10')		1	EA	\$10,000.00	\$10,000.00	
	<b>Subtotal</b>					<b>\$35,000.00</b>	
<b>00004</b>	<b>Fencing and Netting</b>						<b>\$120,800</b>
1	6' Chain Link Fence at Team Areas		200	LF	\$65.00	\$13,000.00	
2	10' Chain Link Fence Fabric Along East Property Line		450	LF	\$70.00	\$31,500.00	
3	CLF Post Painting Along East Property Line		1	ALLOW	\$6,500.00	\$6,500.00	
4	Chain Link Fence Backstop		1	LS	\$45,000.00	\$45,000.00	
5	20' Ball Netting with Integrated 4' Chain Link Fence Along Walkway on East Side		160	LF	\$155.00	\$24,800.00	
	<b>Subtotal</b>					<b>\$120,800.00</b>	
<b>00005</b>	<b>Site Improvements</b>						<b>\$233,855</b>
1	Entrance Plaza (concrete)		600	SF	\$10.00	\$6,000.00	
2	Loaming & Seeding disturbed areas		36,250	SF	\$1.50	\$54,375.00	
3	Paving						
	Bit. Conc. Paving - 8' wide		15,435	SF	\$8.00	\$123,480.00	
4	Site Furnishings						
	Benches on Concrete Pad		5	EA	\$2,500.00	\$12,500.00	
	Bike Rack		1	EA	\$6,000.00	\$6,000.00	
	Trash Receptacles		2	EA	\$6,000.00	\$12,000.00	
5	Spectator Seating (3 row bleachers)		3	EA	\$6,500.00	\$19,500.00	
	<b>Subtotal</b>					<b>\$233,855.00</b>	

<b>00006</b>	<b>Site Utilities</b>						<b>\$110,000</b>
1	Connect to Existing Water Lines		1	EA	\$3,500.00	\$3,500.00	
2	New Water Lines 2" (copper)		50	LF	\$140.00	\$7,000.00	
3	Drainage Manhole		4	EA	\$5,000.00	\$20,000.00	
4	Area Drains/Cleanouts		6	EA	\$1,000.00	\$6,000.00	
5	6" HDPE Pipe		300	LF	\$35.00	\$10,500.00	
6	8" HDPE Pipe		1,400	LF	\$40.00	\$56,000.00	
7	Drywell		1	EA	\$7,000.00	\$7,000.00	
	<b>Subtotal</b>					<b>\$110,000.00</b>	
	<b>Subtotal:</b>						<b>\$1,077,992</b>
	<b>4% General Conditions</b>						<b>\$43,120</b>
	<b>8% Contractors Overhead and Profit</b>						<b>\$86,239</b>
	<b>4% Price Escalation for FY '22</b>						<b>\$43,120</b>
	<b>CONSTRUCTION SUBTOTAL:</b>						<b>\$1,250,471</b>
<b>00007</b>	<b>Consulting Costs</b>						<b>\$173,000.00</b>
1	Design & Construction Administration		1	ALLOW	\$160,000.00	\$160,000.00	
2	Survey		1	ALLOW	\$13,000.00	\$13,000.00	
3	Permitting		1	ALLOW	\$0.00	\$0.00	
	<b>Subtotal</b>					<b>\$173,000.00</b>	
	<b>DESIGN &amp; CONSTRUCTION SUBTOTAL:</b>						<b>\$1,423,471</b>
	<b>10% Construction Contingency</b>						<b>\$125,047</b>
	<b>TOTAL OPINION OF PROBABLE PROJECT COSTS</b>						<b>\$1,548,518</b>
<b>00008</b>	<b>ALTERNATE #1 : Fitness Area</b>						<b>\$135,000</b>
1	Fitness Equipment		1	ALLOW	\$60,000.00	\$60,000.00	
2	Rubber Safety Surface at Fitness Area		2,500	SF	\$30.00	\$75,000.00	
	<b>Subtotal</b>					<b>\$135,000.00</b>	
<b>00009</b>	<b>ALTERNATE #2 : Batting Cage / Bull Pen</b>						<b>\$28,000</b>
1	Combination Batting Cage at Bull Pen		1	LS	\$20,000.00	\$20,000.00	
2	Synthetic Turf for Bullpen		1	ALLOW	\$8,000.00	\$8,000.00	
	<b>Subtotal</b>					<b>\$28,000.00</b>	
<b>00010</b>	<b>ALTERNATE #3 : Sports Lighting System</b>						<b>\$765,000</b>
1	Sports Lighting System						
	Sports lighting pole foundations		9	EA	\$10,000.00	\$90,000.00	
	Sports lighting poles and wiring - Musco LED 9 pole (70 max f.c.)		1	LS	\$600,000.00	\$600,000.00	
	Electrical conduit and hand holes		1	LS	\$50,000.00	\$50,000.00	
	Electrical upgrades (transformer and pad)		1	EA	\$25,000.00	\$25,000.00	
	<b>Subtotal</b>					<b>\$765,000.00</b>	
<b>00011</b>	<b>ALTERNATE #4 : Plantings</b>						<b>\$40,000</b>
1	Deciduous Trees		25	EA	\$1,000.00	\$25,000.00	
2	Shrub and Perennial Planting		1	ALLOW	\$15,000.00	\$15,000.00	
	<b>Subtotal</b>					<b>\$40,000.00</b>	
<b>00012</b>	<b>ALTERNATE #5 : Porous Bit. Conc. Paving - Upgrade</b>						<b>\$185,220</b>
1	Paving						
	Porous Bit. Conc. Paving - 8' wide (replace line item in entirety)		15,435	SF	\$12.00	\$185,220.00	
	<b>Subtotal</b>					<b>\$185,220.00</b>	



**Robbins Farm  
Hill Slide  
Replacement**







## Assessment Notes

- Improvements to **ADA accessibility** are necessary to and from play equipment and access points. A hybrid use of safety surface materials is preferred (rubber for accessibility and high wear areas, wood fiber for others).
- Play should be for **all ages**
- Requirements of **improved slide** include general **safety, temperature control, low long-term maintenance,** and a durable material.
- Current **farm theme** should be maintained in updates
- No sandboxes
- Anticipated funding schedule: Slide for FY22 and the playground for FY24 (Playground replacement should be same footprint and should be planned as a phase 2 of the slides project).
- Park is more of a destination than a neighborhood park.
- Picnic tables and benches to be DuMor recycled plastic
- Picnic tables are currently permitted often for birthday parties.

## Photo Legend

1. General Overview: Robbins Farm Playground and Hill Slide is approximately 39,100 sf and is located within the broader, Robbins Farm Park. The major attraction here is the hill slide. The playground has two play structures, slides, and other various play elements on wood fiber surfacing.
2. Accessibility: ADA accessibility is lacking due to wood fiber material throughout. The playground is easily accessible from the school across the street as well as some parallel parking along the street.
3. Furnishings: Plenty of seating options between the benches around the playground and picnic tables. First priority is to update slide. Current plastic material is causing maintenance and safety issues.
4. Edges: One physical boundary exists on the street side of the playground, while the rest is open to the rest of the park.
5. Character: Farm character is prevalent throughout park and playground and should be maintained through improvements.
6. Vegetation: Some beautiful existing trees create a nice canopy that provides shade for some areas of playground. Other spots could benefit from increased sun protection.



**PRIORITY FY '22: HILL SLIDE**

Replacement of plastic hill slides with durable slide material. Metal or concrete could be good options. If metal, use powder-coated or shade panels over slide to protect from heat.

**ACCESS POINTS**

**PRIORITY FY '24: PLAYGROUND**

Update playground features within same footprint as existing aimed for all ages

**CLIMBING MAY REPLACE STAIRS**

Wooden stairs need replacement. Climbing structures/features as a way to move up the hill are a great alternative for a more fun and engaging play experience.

**ADD SHADE TREES**

Add shade trees as needed to extend hours of use and provide cool areas to rest

**ACCESSIBLE CONNECTIONS TO PICNIC TABLES**

Link a portion of existing tables to an accessible walk. Add accessible tables along path.

**IMPROVE ADA ACCESSIBILITY**

Use rubber safety surface paths to connect play equipment and entrances for a more inclusive play experience. Rubber mats will be used at high traffic areas.

APPROXIMATE LIMIT OF WORK

EASTERN AVENUE





# Precedents

Robbins Farm Hill Slide Replacement

overhead 'duck bar'

curved slide

rubber climbing slope

multi-stem honeylocusts  
(dappled shade all summer-fall)

reinforced rubber/  
underlayment

# Conceptual Masterplan

## Robbins Farm Hill Slide Replacement



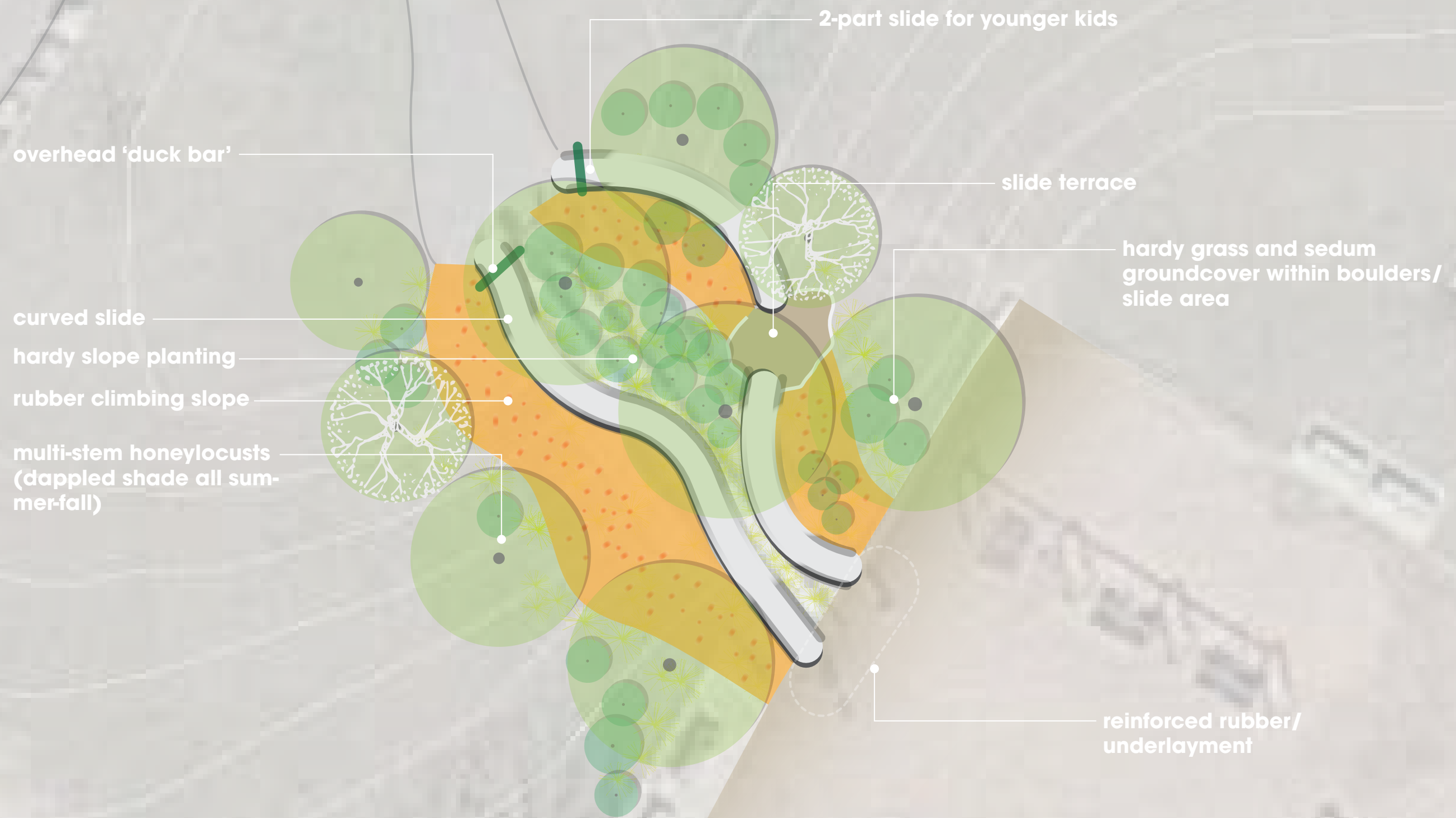




# Precedents

Robbins Farm Hill Slide Replacement





overhead 'duck bar'

2-part slide for younger kids

slide terrace

hardy grass and sedum  
groundcover within boulders/  
slide area

curved slide

hardy slope planting

rubber climbing slope

multi-stem honeylocusts  
(dappled shade all summer-fall)

reinforced rubber/  
underlayment

# Conceptual Masterplan - Add Alternate

## Robbins Farm Hill Slide Replacement





# Opinion of Probable Project Costs:



226 Causeway Street  
Boston, MA 02114

PROJECT:	Arlington Field and Playground Feasibility Study
PROJ #:	210801854
STATUS:	Conceptual Design
DATE:	2/9/2021

**NOTE:**

Due to the inflationary and unpredictable construction climate, this opinion of probable costs may not represent the actual cost of construction.

## Robbins Farm Hill Slide

Item #	Item/Remarks	Notes	Total	Unit	Unit Cost	Cost	Subtotal
<b>ITEMIZED OPINION OF PROBABLE CONSTRUCTION COSTS</b>							
<b>00001</b>	<b>Site Preparation and Demolition / Earthwork</b>						<b>\$22,200.00</b>
1	Mobilization		1	ALLOW	\$6,000.00	\$6,000.00	
2	Remove and Dispose Embankment Slides & adjacent features/pavement		1	ALLOW	\$12,000.00	\$12,000.00	
3	Construction Fence		200	LF	\$5.00	\$1,000.00	
4	Tree Protection Fence		40	LF	\$5.00	\$200.00	
5	Erosion and Sedimentation Control		1	ALLOW	\$3,000.00	\$3,000.00	
	<b>Subtotal</b>					<b>\$22,200.00</b>	
<b>00002</b>	<b>Embankment Slide</b>						<b>\$92,938</b>
1	Metal Embankment Slides (one 16' slide)		1	ALLOW	\$48,000.00	\$48,000.00	
2	Earthwork (regrading slope)		1	ALLOW	\$15,000.00	\$15,000.00	
3	Paving Repair		1	ALLOW	\$3,500.00	\$3,500.00	
4	12" Depth Wood Fiber Safety Surface		50	SF	\$10.00	\$500.00	
5	Rubber Safety Surface		175	SF	\$30.00	\$5,250.00	
6	Wall Repair		1	ALLOW	\$2,500.00	\$2,500.00	
7	Hillside climbing path (Rubber Safety Surface w/ handholds)		425	SF	\$37.50	\$15,937.50	
8	Loaming & Seeding disturbed areas		1,500	SF	\$1.50	\$2,250.00	
	<b>Subtotal</b>					<b>\$92,937.50</b>	
	<b>Subtotal:</b>						<b>\$115,138</b>
	<b>4% General Conditions</b>						<b>\$4,606</b>
	<b>8% Contractors Overhead and Profit</b>						<b>\$9,211</b>
	<b>4% Price Escalation for FY '22</b>						<b>\$4,606</b>
	<b>CONSTRUCTION SUBTOTAL:</b>						<b>\$133,560</b>
<b>00003</b>	<b>Consulting Costs</b>						<b>\$23,000.00</b>
1	Design & Construction Administration		1	ALLOW	\$19,500.00	\$19,500.00	
2	Survey		1	ALLOW	\$3,500.00	\$3,500.00	
3	Permitting		1	ALLOW	\$0.00	\$0.00	
	<b>Subtotal</b>					<b>\$23,000.00</b>	
	<b>DESIGN &amp; CONSTRUCTION SUBTOTAL:</b>						<b>\$156,560</b>
	<b>10% Construction Contingency</b>						<b>\$13,356</b>
	<b>TOTAL OPINION OF PROBABLE PROJECT COSTS</b>						<b>\$169,915</b>
<b>00004</b>	<b>ALTERNATE #1 : Second Embankment Slide</b>						<b>\$65,250</b>
1	Metal Embankment Slides (two 8' slides)		1	ALLOW	\$48,000.00	\$48,000.00	
2	Earthwork (regrading slope)		1	ALLOW	\$5,000.00	\$5,000.00	
3	Planting Improvements		1	ALLOW	\$7,000.00	\$7,000.00	
4	Rubber Safety Surface		175	SF	\$30.00	\$5,250.00	
	<b>Subtotal</b>					<b>\$65,250.00</b>	
<b>00005</b>	<b>ALTERNATE #2 : Plantings</b>						<b>\$16,000</b>
1	Deciduous Trees		7	EA	\$1,000.00	\$7,000.00	
2	Hardy Groundcover		1	ALLOW	\$9,000.00	\$9,000.00	
	<b>Subtotal</b>					<b>\$16,000.00</b>	

# Cost Estimate

## Robbins Farm Hill Slide Replacement



A large, bold, orange number '4' is positioned on the left side of the page, partially overlapping the text. The number is stylized with a thick stroke and a slight shadow effect.

# **Robbins Farm Playground Renovation**





## Assessment Notes

- Improvements to **ADA accessibility** are necessary to and from play equipment and access points. A hybrid use of safety surface materials is preferred (rubber for accessibility and high wear areas, wood fiber for others).
- Play should be for **all ages**
- Requirements of **improved slide** include general **safety, temperature control, low long-term maintenance,** and a durable material.
- Current **farm theme** should be maintained in updates
- No sandboxes
- Anticipated funding schedule: Slide for FY22 and the playground for FY24 (Playground replacement should be same footprint and should be planned as a phase 2 of the slides project).
- Park is more of a destination than a neighborhood park.
- Picnic tables and benches to be DuMor recycled plastic
- Picnic tables are currently permitted often for birthday parties.

## Photo Legend

1. General Overview: Robbins Farm Playground and Hill Slide is approximately 39,100 sf and is located within the broader, Robbins Farm Park. The major attraction here is the hill slide. The playground has two play structures, slides, and other various play elements on wood fiber surfacing.
2. Accessibility: ADA accessibility is lacking due to wood fiber material throughout. The playground is easily accessible from the school across the street as well as some parallel parking along the street.
3. Furnishings: Plenty of seating options between the benches around the playground and picnic tables. First priority is to update slide. Current plastic material is causing maintenance and safety issues.
4. Edges: One physical boundary exists on the street side of the playground, while the rest is open to the rest of the park.
5. Character: Farm character is prevalent throughout park and playground and should be maintained through improvements.
6. Vegetation: Some beautiful existing trees create a nice canopy that provides shade for some areas of playground. Other spots could benefit from increased sun protection.



**PRIORITY FY '22: HILL SLIDE**

Replacement of plastic hill slides with durable slide material. Metal or concrete could be good options. If metal, use powder-coated or shade panels over slide to protect from heat.

**ACCESS POINTS**

**PRIORITY FY '24: PLAYGROUND**

Update playground features within same footprint as existing aimed for all ages

**CLIMBING MAY REPLACE STAIRS**

Wooden stairs need replacement. Climbing structures/features as a way to move up the hill are a great alternative for a more fun and engaging play experience.

**ADD SHADE TREES**

Add shade trees as needed to extend hours of use and provide cool areas to rest

**ACCESSIBLE CONNECTIONS TO PICNIC TABLES**

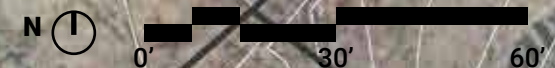
Link a portion of existing tables to an accessible walk. Add accessible tables along path.

**IMPROVE ADA ACCESSIBILITY**

Use rubber safety surface paths to connect play equipment and entrances for a more inclusive play experience. Rubber mats will be used at high traffic areas.

APPROXIMATE LIMIT OF WORK

EASTERN AVENUE







# Precedents

Robbins Farm Playground Renovation



- entry sign
- existing stone (material tie-in)
- resurface or replace existing asphalt path as needed
- boulder seats
- instructions sign
- multi-stem 'forest' (dappled shade all summer-fall)

- new asphalt walk
- berms planted with hardy groundcover
- overhead 'duck' bar
- two-part slide for younger kids
- slide terrace
- hardy grass and sedum groundcover within boulder and slide areas

- curved slide
- reinforced rubber underlayment
- benches skewed to view action at slide
- trike track on asphalt path
- recycle, trash, on-site compost

- newly seeded lawn, typ.
- asphalt path
- stroller parking zones
- rubber safety surface
- safety mulch

EASTERN AVENUE



- potential meadow/gardens expansion area
- on-site compost

# Conceptual Masterplan

## Robbins Farm Playground Renovation







# Opinion of Probable Project Costs:



226 Causeway Street  
Boston, MA 02114

PROJECT:	Arlington Field and Playground Feasibility Study
PROJ #:	210801854
STATUS:	Conceptual Design
DATE:	2/9/2021

**NOTE:**  
Due to the inflationary and unpredictable construction climate, this opinion of probable costs may not represent the actual cost of construction.

## Robbins Farm Playground

Item #	Item/Remarks	Notes	Total	Unit	Unit Cost	Cost	Subtotal
<b>ITEMIZED OPINION OF PROBABLE CONSTRUCTION COSTS</b>							
<b>00001</b>	<b>Site Preparation and Demolition / Earthwork</b>						<b>\$42,400.00</b>
1	Mobilization		1	ALLOW	\$10,000.00	\$10,000.00	
2	Remove and Dispose Playground Equipment, Furnishing(s) and Footings		1	ALLOW	\$15,000.00	\$15,000.00	
3	Remove and Dispose Safety Surfacing		12,900	SF	\$1.00	\$12,900.00	
4	Construction Fence		500	LF	\$5.00	\$2,500.00	
5	Tree Protection Fence		100	LF	\$5.00	\$500.00	
6	Erosion and Sedimentation Control		1	ALLOW	\$1,500.00	\$1,500.00	
	<b>Subtotal</b>					<b>\$42,400.00</b>	
<b>00002</b>	<b>Playground Improvements</b>						<b>\$496,650</b>
1	Entrance Conc. Paving		168	SY	\$150.00	\$25,200.00	
2	Tot Lot Play Equipment		1	ALLOW	\$255,000.00	\$255,000.00	
3	Natural Play Elements (stone, wood stumps, etc.)		1	ALLOW	\$25,000.00	\$25,000.00	
4	12" Depth Wood Fiber Safety Surface (85%)		10,250	SF	\$10.00	\$102,500.00	
5	Rubber Safety Surface (15%)		1,800	SF	\$30.00	\$54,000.00	
6	Picnic Tables (w/ conc. pad)		2	EA	\$4,500.00	\$9,000.00	
7	Bit. Conc. Paving		1,650	SF	\$8.00	\$13,200.00	
8	Loaming & Seeding disturbed areas		8,500	SF	\$1.50	\$12,750.00	
	<b>Subtotal</b>					<b>\$496,650.00</b>	
	<b>Subtotal:</b>						<b>\$539,050</b>
	<b>4% General Conditions</b>						<b>\$21,562</b>
	<b>8% Contractors Overhead and Profit</b>						<b>\$43,124</b>
	<b>6% Price Escalation for FY '24</b>						<b>\$21,562</b>
	<b>CONSTRUCTION SUBTOTAL:</b>						<b>\$625,298</b>
<b>00003</b>	<b>Consulting Costs</b>						<b>\$75,000.00</b>
1	Design & Construction Administration		1	ALLOW	\$70,500.00	\$70,500.00	
2	Survey		1	ALLOW	\$4,500.00	\$4,500.00	
3	Permitting		0	ALLOW	\$0.00	\$0.00	
	<b>Subtotal</b>					<b>\$75,000.00</b>	
	<b>DESIGN &amp; CONSTRUCTION SUBTOTAL:</b>						<b>\$700,298</b>
	<b>10% Construction Contingency</b>						<b>\$62,530</b>
	<b>TOTAL OPINION OF PROBABLE PROJECT COSTS</b>						<b>\$762,828</b>
<b>00004</b>	<b>ALTERNATE #1 : Site Furnishings</b>						<b>\$53,000</b>
1	Benches (w/ conc. pad)		6	EA	\$2,500.00	\$15,000.00	
2	Trash Receptacles		1	EA	\$1,000.00	\$1,000.00	
3	Signage		1	ALLOW	\$3,500.00	\$3,500.00	
4	Pavement markings		1	ALLOW	\$6,500.00	\$6,500.00	
5	Additional Picnic Tables (w/ conc. pad)		6	EA	\$4,500.00	\$27,000.00	
	<b>Subtotal</b>					<b>\$53,000.00</b>	
<b>00005</b>	<b>ALTERNATE #2 : Plantings</b>						<b>\$33,250</b>
1	Deciduous Trees		19	EA	\$1,000.00	\$19,000.00	
2	Fruit Trees		13	EA	\$750.00	\$9,750.00	
3	Pollinator meadow		1	ALLOW	\$4,500.00	\$4,500.00	
	<b>Subtotal</b>					<b>\$33,250.00</b>	

# Cost Estimate

## Robbins Farm Playground Renovation



A large, stylized orange number '5' is positioned on the left side of the page, partially overlapping the text. The number is solid orange with a black circular cutout at its base.

# **Menotomy Rocks Park Playground**





## Assessment Notes

- Improvements to **ADA accessibility** are necessary to and from play equipment and access points. A hybrid use of safety surface materials is preferred (rubber for accessibility and high wear areas, wood fiber for others).
- Playground needs to become **more visible** and easier to find when in the general park.
- A large bank of swings might be desirable.
- Playground footprint can change, can become condensed.
- Potential future improvements to wayfinding signage along paths in rest of park.
- Creation of picnic grove may be desirable.
- Maintain simple **nature theme**.
- Focused on **play for K-5**.

## Photo Legend

1. General Overview: Menotomy Rocks Playground is tucked far within Menotomy Rocks Park. It's current footprint is about 475 sf and includes a play structure, swings, two picnic table, and a community created log play area 'Log Henge'.
2. Accessibility: ADA accessibility is lacking due to mulch material throughout. The playground is difficult to find within the larger park and the pathway to it is in bad condition.
3. Furnishings: Only two picnic tables and one bench are in the play area.
4. Edges: The playground is tucked into a wooded area with 3 sides bounded by existing forest trees. One side is open to an irrigated field.
5. Character: The wooded nature of the park and playground are a popular theme to elevate in an updated design.
6. Vegetation and Drainage: Existing evergreen and deciduous trees create nice shade. The pine grove leaves a soft carpet of needles in the picnic table area. There is a steep slope adjacent to the entry path that is causing erosion issues.



**PLAYGROUND VISIBILITY**

Playground is tucked away far from the main park path and is difficult to see and find.

**POSSIBLE EXPANSION**

Playground can be expanded or relocated into more open area to be visible from main pathway. This would need input from Friends Group.

**'LOG HENGE'**

'Log Henge' is very popular amongst current users. This offers an opportunity to highlight and possibly expand on this idea throughout the playground.

**ACCESS POINTS**

Path to playground needs improvement where erosion has occurred from adjacent steep slope.

**EROSION CONTROL**

Steep wooded slope drainage needs to be addressed in updated design.

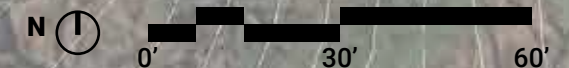
**IMPROVE PLAY ACCESSIBILITY**

Use rubber safety surface paths to connect play equipment and entrances for a more inclusive play experience. Rubber mats will be used at high traffic areas.

**WOODS/NATURE PLAY CONNECTION**

Abutting wooded area lends itself nice to incorporating play in nature to man-made play.

**Conditions Assessment**  
Menotomy Rocks Park Playground







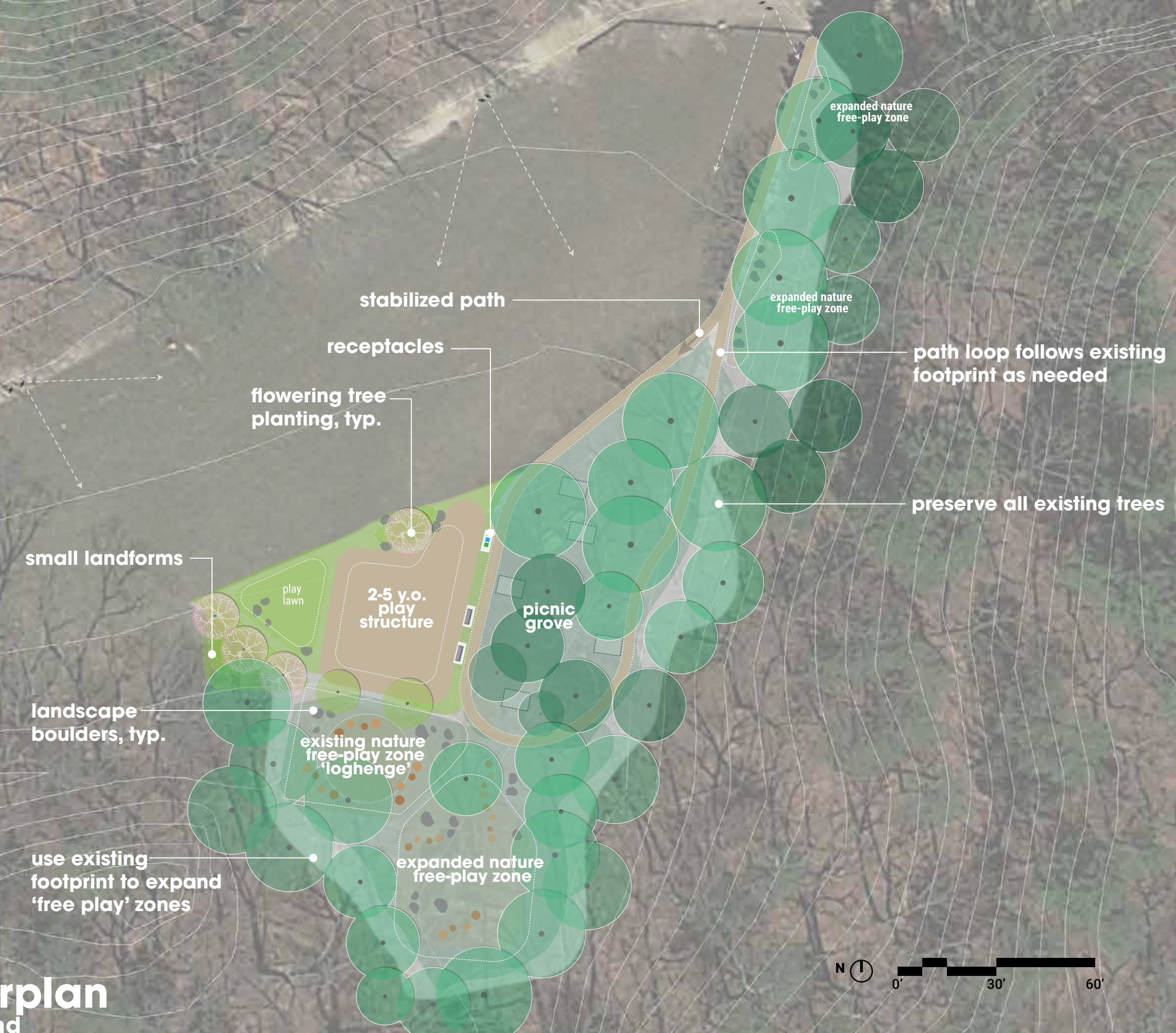
# Precedents

## Menotomy Rocks Park Playground



# Conceptual Masterplan

## Menotomy Rocks Park Playground









# Opinion of Probable Project Costs:



226 Causeway Street  
Boston, MA 02114

PROJECT: Arlington Field and Playground Feasibility Study  
PROJ #: 210801854  
STATUS: Conceptual Design  
DATE: 2/9/2021

**NOTE:**

Due to the inflationary and unpredictable construction climate, this opinion of probable costs may not represent the actual cost of construction.

## Menotomy Rocks Park Playground

Item #	Item/Remarks	Notes	Total	Unit	Unit Cost	Cost	Subtotal
<b>ITEMIZED OPINION OF PROBABLE CONSTRUCTION COSTS</b>							
<b>00001</b>	<b>Site Preparation and Demolition / Earthwork</b>						<b>\$26,915.00</b>
1	Mobilization		1	ALLOW	\$10,000.00	\$10,000.00	
2	Remove and Dispose Playground Equipment, Furnishing(s) and Footings		1	ALLOW	\$10,000.00	\$10,000.00	
3	Remove and Dispose Safety Surfacing		2,465	SF	\$1.00	\$2,465.00	
4	Remove and Dispose Stabilized Stone Path		1,200	SF	\$1.00	\$1,200.00	
5	Construction Fence		200	LF	\$5.00	\$1,000.00	
6	Tree Protection Fence		150	LF	\$5.00	\$750.00	
7	Erosion and Sedimentation Control		1	ALLOW	\$1,500.00	\$1,500.00	
	<b>Subtotal</b>					<b>\$26,915.00</b>	
<b>00002</b>	<b>Park Improvements</b>						<b>\$143,300</b>
1	Tot Lot Play Equipment		1	ALLOW	\$80,000.00	\$80,000.00	
2	Natural Play Elements (stone, wood stumps, etc.)		1	ALLOW	\$25,000.00	\$25,000.00	
3	12" Depth Wood Fiber Safety Surface		1,875	SF	\$10.00	\$18,750.00	
4	Rubberized Porous Access Pathway		1,625	SF	\$10.00	\$16,250.00	
5	Loaming & Seeding disturbed areas		2,200	SF	\$1.50	\$3,300.00	
	<b>Subtotal</b>					<b>\$143,300.00</b>	
	<b>Subtotal:</b>						<b>\$170,215</b>
	<b>4% General Conditions</b>						<b>\$6,809</b>
	<b>8% Contractors Overhead and Profit</b>						<b>\$13,617</b>
	<b>6% Price Escalation for FY '24</b>						<b>\$10,213</b>
	<b>CONSTRUCTION SUBTOTAL:</b>						<b>\$200,854</b>
<b>00003</b>	<b>Consulting Costs</b>						<b>\$28,000.00</b>
1	Design & Construction Administration		1	ALLOW	\$24,500.00	\$24,500.00	
2	Survey		1	ALLOW	\$3,500.00	\$3,500.00	
3	Permitting		0	ALLOW	\$0.00	\$0.00	
	<b>Subtotal</b>					<b>\$28,000.00</b>	
	<b>DESIGN &amp; CONSTRUCTION SUBTOTAL:</b>						<b>\$228,854</b>
	<b>10% Construction Contingency</b>						<b>\$20,085</b>
	<b>TOTAL OPINION OF PROBABLE PROJECT COSTS</b>						<b>\$248,939</b>

<b>00004</b>	<b>ALTERNATE #1 : Plantings</b>						<b>\$6,000</b>
1	Deciduous Trees		6	EA	\$1,000.00	\$6,000.00	
	<b>Subtotal</b>					<b>\$6,000.00</b>	

<b>00005</b>	<b>ALTERNATE #2 : Site Furnishings</b>						<b>\$30,000</b>
1	Picnic Tables (w/ conc. pad)		5	EA	\$4,500.00	\$22,500.00	
2	Benches (w/ conc. pad)		2	EA	\$2,500.00	\$5,000.00	
3	Trash Receptacles		1	EA	\$1,000.00	\$1,000.00	
4	Signage		1	ALLOW	\$1,500.00	\$1,500.00	
	<b>Subtotal</b>					<b>\$30,000.00</b>	

# Cost Estimate

## Menotomy Rocks Park Playground

An orange abstract graphic consisting of a large, irregular shape with a circular cutout on the left side, partially overlapping the text.

# Poets Corner Field & Playground







## Photo Legend

- 1. General Overview:** Poets Corner Field and Playground is located to north of Route 2. The area included in the limit of work studied is approximately 165,000 sf which includes a natural grass multipurpose field, basketball courts, and a playground.
- 2. Accessibility:** There is a paved path from Shelley Road to the playground and basketball courts. There is no ADA accessibility to the field. There is limited on street parking.
- 3. Furnishings:** There are benches by the playground, but no spectator seating for baseball field or basketball. The team areas are in poor condition and are not accessible. A Port-a-potty is on site, but not accessible. A footprint for batting cages are visible, but the netting was not up at the time of study.
- 4. Edges:** The triangular shaped site has a road to the south that abuts Route 2 and a road on the west side which provides access to the houses overlooking the field and playground. The east side has a parking lot and heavily wooded area that is not part of the property. There are no fences except for the baseball team areas and backstop.
- 5. Character:** The site is surrounded by a neighborhood, wooded area, and highway, but the site does not have much character connecting to these assets. It does appear to be used by middle school aged children.
- 6. Vegetation and Drainage:** The field is compacted. Topsoil ranged from 4"-6". The field had many undulations, but there is no clear indication how the field pitches for stormwater drainage. Poor draining soils, lab results show low amounts of medium and coarse sand content and infiltration rate at 1.6 inches per hour. The topsoil had an overall low sand content, high silt content, and high clay content, which is one of the reasons for the high compaction.

## Existing Field Dimensions

Left Field: 200'  
Right Field: 230'



**PLAYGROUND CONDITION** .....

*Playground should be removed and relocated to allow for better layout of other site elements.*

**BASKETBALL COURT CONDITION** .....

*Basketball court will need to be replaced.*

**FENCING AND BACKSTOP CONDITION** .....

*All fencing and backstop is deteriorating. Will need to be removed and replaced.*

**FIELD CONDITION** .....

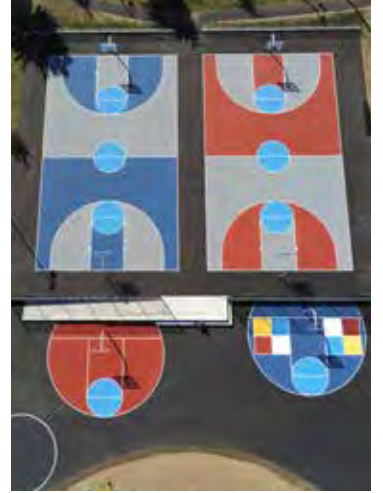
*Outfield has many depressions and high spots making for dangerous playing conditions*

# Conditions Assessment

## Poets Corner Field & Playground







# Precedents

## Poets Corner Field & Playground





bike entry/exits

rubber path

dirt path for bikes

pedestrian entry, bike parking

excess fill used in bike trails

accessible parking area for 1-2 cars

bike trails

parking areas along road

seasonally mowed pollinator meadow

all-ages playground

fitness zone along path, typ.

nature play

bench, typ.

200' foul pole

plaza

field lighting, typ.

trike track

preserve all existing trees, typ.

screen planting as needed

picnic lawn

half court

synthetic turf

obstacle course/parkour area

bike parking

potential stormwater gardens

pedestrian entry

fitness zone along path, typ.

baseball

bike trail entry/exit route

backstop

youth soccer

tree planting, typ.

3-row bleacher, typ.

team area, typ.  
field lighting, typ.

282' foul pole

bullpen  
repaint existing fence

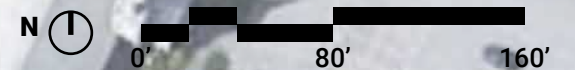
flowering tree planting, typ.

preserve all existing trees, typ.

existing bus stop

# Conceptual Masterplan

## Poets Corner Field & Playground





# Opinion of Probable Project Costs:



226 Causeway Street  
Boston, MA 02114

PROJECT:	Arlington Field and Playground Feasibility Study
PROJ #:	210801854
STATUS:	Conceptual Design
DATE:	2/9/2021

**NOTE:**  
Due to the inflationary and unpredictable construction climate, this opinion of probable costs may not represent the actual cost of construction.

## Poets Corner Field & Playground

Item #	Item/Remarks	Notes	Total	Unit	Unit Cost	Cost	Subtotal
<b>ITEMIZED OPINION OF PROBABLE CONSTRUCTION COSTS</b>							
<b>00001</b>	<b>Site Preparation and Demolition / Earthwork</b>						<b>\$118,701.11</b>
1	Mobilization		1	ALLOW	\$10,000.00	\$10,000.00	
2	Remove and Dispose Backstops, Fence Fabric, Batting Cages, Furnishing(s) and Footings		1	ALLOW	\$8,000.00	\$8,000.00	
3	Remove and Dispose Infield Mix		83	CY	\$12.00	\$1,000.00	
4	Remove and Dispose Playground Equipment, Furnishing(s) and Footings		1	ALLOW	\$10,000.00	\$10,000.00	
5	Remove and Dispose Basketball Court, Hoops, and Footings		1	ALLOW	\$5,000.00	\$5,000.00	
6	Construction Fence		2,100	LF	\$5.00	\$10,500.00	
7	Tree Protection Fence		300	LF	\$5.00	\$1,500.00	
8	Erosion and Sedimentation Control		2,100	LF	\$6.00	\$12,600.00	
9	SWPPP		1	ALLOW	\$2,000.00	\$2,000.00	
10	Strip and Stockpile Existing Topsoil (assume 8")		2,779	CY	\$12.00	\$33,351.11	
11	Rough Grade Site		165,000	SF	\$0.15	\$24,750.00	
	<b>Subtotal</b>					<b>\$118,701.11</b>	
<b>00002</b>	<b>Synthetic Turf Field</b>						<b>\$1,284,706</b>
1	Fine grading subgrade		78,500	SF	\$0.15	\$11,775.00	
2	Infilled synthetic turf						
	Geotextile fabric at subgrade (settlement and separation)		78,500	SF	\$1.00	\$78,500.00	
	24" crushed stone drainage layer (depth for separation of cap)		5,815	CY	\$65.00	\$377,962.96	
	Geotextile fabric at field subgrade (separation)		78,500	SF	\$1.00	\$78,500.00	
	8" crushed stone drainage layer (including drainage pipe)		1,948	CY	\$65.00	\$126,617.59	
	Finishing stone layer		78,500	SF	\$0.20	\$15,700.00	
	Laser grade finishing stone layer		78,500	SF	\$0.20	\$15,700.00	
	Synthetic turf carpet and infill	(4)	78,500	SF	\$4.75	\$372,875.00	
	Resilient underlayment - 23mm thick		78,500	SF	\$1.95	\$153,075.00	
	Concrete turf anchor at field perimeter		1,200	LF	\$45.00	\$54,000.00	
	<b>Subtotal</b>					<b>\$1,284,705.56</b>	
<b>00003</b>	<b>Athletic Equipment</b>						<b>\$25,000</b>
1	Team Benches at Team Areas (includes concrete pad)		6	EA	\$3,000.00	\$18,000.00	
2	Pitchers Rubber and Bases		1	SET	\$1,000.00	\$1,000.00	
3	Foul Poles		1	SET	\$6,000.00	\$6,000.00	
	<b>Subtotal</b>					<b>\$25,000.00</b>	
<b>00004</b>	<b>Fencing and Netting</b>						<b>\$58,000</b>
1	6' Chain Link Fence at Team Areas		200	LF	\$65.00	\$13,000.00	
2	Chain Link Fence Backstop		1	LS	\$45,000.00	\$45,000.00	
	<b>Subtotal</b>					<b>\$58,000.00</b>	
<b>00005</b>	<b>Site Improvements</b>						<b>\$626,900</b>
1	Loaming & Seeding disturbed areas		40,000	SF	\$1.50	\$60,000.00	
2	Paving						
	Bit. Conc. Paving Walkway		15,400	SF	\$8.00	\$123,200.00	
3	Bit. Conc. Bball Court		2,800	SF	\$8.00	\$22,400.00	
4	Court Surfacing		2,800	SF	\$2.00	\$5,600.00	
5	Basketball Goal		1	EA	\$6,200.00	\$6,200.00	
6	All Ages Play Equipment		1	ALLOW	\$250,000.00	\$250,000.00	
7	12" Depth Wood Fiber Safety Surface (85%)		9,500	SF	\$10.00	\$95,000.00	
8	Rubber Safety Surface (15%)		1,500	SF	\$30.00	\$45,000.00	
9	Spectator Seating (3 row bleachers)		3	EA	\$6,500.00	\$19,500.00	
	<b>Subtotal</b>					<b>\$626,900.00</b>	

# Cost Estimate

## Poets Corner Field & Playground




<b>00006</b>	<b>Site Utilities</b>						<b>\$120,700</b>
1	Connect to Existing Water Lines		1	EA	\$3,500.00	\$3,500.00	
2	New Water Lines 2" (copper)		80	LF	\$140.00	\$11,200.00	
3	Drainage Manhole		4	EA	\$5,000.00	\$20,000.00	
4	Area Drains/Cleanouts		5	EA	\$1,000.00	\$5,000.00	
5	6" HDPE Pipe		400	LF	\$35.00	\$14,000.00	
6	8" HDPE Pipe		1,500	LF	\$40.00	\$60,000.00	
7	Drywell		1	EA	\$7,000.00	\$7,000.00	
	<b>Subtotal</b>					<b>\$120,700.00</b>	
	<b>Subtotal:</b>						<b>\$2,234,007</b>
	<b>4% General Conditions</b>						<b>\$89,360</b>
	<b>8% Contractors Overhead and Profit</b>						<b>\$178,721</b>
	<b>6% Price Escalation for FY '24</b>						<b>\$134,040</b>
	<b>CONSTRUCTION SUBTOTAL:</b>						<b>\$2,636,128</b>
<b>00007</b>	<b>Consulting Costs</b>						<b>\$218,000.00</b>
1	Design & Construction Administration		1	ALLOW	\$200,000.00	\$200,000.00	
2	Survey		1	ALLOW	\$8,000.00	\$8,000.00	
3	Permitting		1	ALLOW	\$10,000.00	\$10,000.00	
	<b>Subtotal</b>					<b>\$218,000.00</b>	
	<b>DESIGN &amp; CONSTRUCTION SUBTOTAL:</b>						<b>\$2,854,128</b>
	<b>10% Construction Contingency</b>						<b>\$263,613</b>
	<b>TOTAL OPINION OF PROBABLE PROJECT COSTS</b>						<b>\$3,117,741</b>

<b>00008</b>	<b>ALTERNATE #1 : Site Furnishings</b>						<b>\$30,500</b>
1	Site Furnishings						
	Benches on Concrete Pad		5	EA	\$2,500.00	\$12,500.00	
	Bike Rack		1	EA	\$6,000.00	\$6,000.00	
	Trash Receptacles		2	EA	\$6,000.00	\$12,000.00	
	<b>Subtotal</b>					<b>\$30,500.00</b>	

<b>00009</b>	<b>ALTERNATE #2 : Obstacle Course Area</b>						<b>\$130,000</b>
1	Obstacle Course Area		1	ALLOW	\$130,000.00	\$130,000.00	
	<b>Subtotal</b>					<b>\$130,000.00</b>	

<b>00010</b>	<b>ALTERNATE #3 : Bike Tracks</b>						<b>\$407,500</b>
1	Flat Trike Track		3,000	SF	\$15.00	\$45,000.00	
2	Dirt Pump Track/Bike Trails		14,500	SF	\$25.00	\$362,500.00	
	<b>Subtotal</b>					<b>\$407,500.00</b>	

<b>00011</b>	<b>ALTERNATE #4 : Plantings</b>						<b>\$45,000</b>
1	Deciduous Trees		30	EA	\$1,000.00	\$30,000.00	
2	Perennial Planting		1	ALLOW	\$15,000.00	\$15,000.00	
	<b>Subtotal</b>					<b>\$45,000.00</b>	

An orange graphic element consisting of a horizontal bar that transitions into a diagonal bar pointing downwards and to the right.

# **McClennan Skateboard Park**







## Photo Legend

- 1. General Overview:** McClennan Skateboard Park is located to the adjacent to the McClennan Park fields and parking lot. The area included in the limit of work studied is approximately 42,000 sf which includes the existing skatepark and additional natural grass areas of the site. This study does not include the playground or fields.
- 2. Accessibility:** There is an ADA accessible walkway to enter the skatepark. Boulders were placed to separate the skatepark and playground, which reduces accessibility. There is sufficient parking at the entrance to the park.
- 3. Furnishings:** There are no benches around the skatepark, there is a bike rack located outside of the fenced area. A Port-a-potty is on site, but not accessible.
- 4. Edges:** There is a perimeter walking path around the entire park. A 4' chain link fence surrounds the skatepark on 3 sides, leaving the northern section open. The fence is peeling and in fair to poor condition.
- 5. Character:** There is a colored concrete design flowing from the playground to the skatepark. Boulders were placed and added fencing to prevent skateboards from rolling into the playground and to help reduce little children running into the skatepark. The colored concrete design suggests a connection to the water.
- 6. Vegetation and Drainage:** Various shade and specimen tree species surround the skatepark that produce leaf litter.





**CONCRETE**  
*The concrete is cracking and failing in multiple areas.*

**MOVABLE RAMPS AND RAILS**  
*Ramps and rails are in poor condition*

**SLOPE**  
*Northern Slope of the skate park allows for opportunity for skate park features to mimic topography*

**GRANITE BLOCKS**  
*Set along edges to separate circulation*

# Conditions Assessment

McClennan Skateboard Park





# Precedents

## McClennan Skateboard Park





new asphalt path  
concrete 'flex' tiered seating

plaza area  
concrete 'flex' tiered seating

new loam and seed

new shade tree planting, typ.

existing asphalt path

new asphalt path

picnic grove

advanced pump track

landscape area 'separate' play areas and age groups

skate park

boulder stones strategically placed to 'separate' play areas and age groups

trash/recycling/compost receptacles

expand bike parking

planting separates and signifies entry

jr. pump track

trike track

concrete 'flex' tiered seating

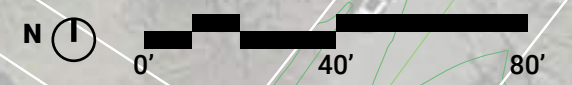
signage helps separate age-restrictions/skill-level

parents' plaza

bench, typ.

# Conceptual Masterplan

McClennan Skateboard Park





# Opinion of Probable Project Costs:



226 Causeway Street  
Boston, MA 02114

PROJECT: Arlington Field and Playground Feasibility Study  
 PROJ #: 210801854  
 STATUS: Conceptual Design  
 DATE: 2/9/2021

**NOTE:**  
 Due to the inflationary and unpredictable construction climate, this opinion of probable costs may not represent the actual cost of construction.

## McClennan Skate Board Park

Item #	Item/Remarks	Notes	Total	Unit	Unit Cost	Cost	Subtotal
<b>ITEMIZED OPINION OF PROBABLE CONSTRUCTION COSTS</b>							
<b>00001</b>	<b>Site Preparation and Demolition / Earthwork</b>						<b>\$49,150.00</b>
1	Mobilization		1	ALLOW	\$6,000.00	\$6,000.00	
2	Remove and Dispose Existing Skatepark Pavement and Features		1	ALLOW	\$20,000.00	\$20,000.00	
3	Construction Fence		1,030	LF	\$5.00	\$5,150.00	
4	Tree Removal		1	LS	\$2,000.00	\$2,000.00	
5	Tree Protection Fence		200	LF	\$5.00	\$1,000.00	
6	Erosion and Sedimentation Control		1	ALLOW	\$3,000.00	\$3,000.00	
7	Strip and Stockpile Existing Topsoil (assume 8")		375	CY	\$12.00	\$4,500.00	
8	Rough Grade Site		50,000	SF	\$0.15	\$7,500.00	
	<b>Subtotal</b>					<b>\$49,150.00</b>	
<b>00002</b>	<b>Skate Park</b>						<b>\$498,000</b>
1	Skatepark		8,300	SF	\$60.00	\$498,000.00	
	<b>Subtotal</b>					<b>\$498,000.00</b>	
<b>00003</b>	<b>Site Improvements</b>						<b>\$47,350</b>
1	Paving						
	Bit. Conc. Paving		1,700	SF	\$8.00	\$13,600.00	
2	Loaming & Seeding disturbed areas		22,500	SF	\$1.50	\$33,750.00	
	<b>Subtotal</b>					<b>\$47,350.00</b>	
	<b>Subtotal:</b>						<b>\$594,500</b>
	<b>4% General Conditions</b>						<b>\$23,780</b>
	<b>8% Contractors Overhead and Profit</b>						<b>\$47,560</b>
	<b>6% Price Escalation for FY '24</b>						<b>\$35,670</b>
	<b>CONSTRUCTION SUBTOTAL:</b>						<b>\$701,510</b>
<b>00003</b>	<b>Consulting Costs</b>						<b>\$127,000.00</b>
1	Design & Construction Administration		1	ALLOW	\$120,000.00	\$120,000.00	
2	Survey		1	ALLOW	\$7,000.00	\$7,000.00	
3	Permitting		1	ALLOW	\$0.00	\$0.00	
	<b>Subtotal</b>					<b>\$127,000.00</b>	
	<b>DESIGN &amp; CONSTRUCTION SUBTOTAL:</b>						<b>\$828,510</b>
	<b>10% Construction Contingency</b>						<b>\$70,151</b>
	<b>TOTAL OPINION OF PROBABLE PROJECT COSTS</b>						<b>\$898,661</b>



00001	ALTERNATE #1 : Site Furnishings							\$25,500
1	Site Furnishings							
	Benches on Concrete Pad		3	EA	\$2,500.00	\$7,500.00		
	Bike Rack		1	EA	\$6,000.00	\$6,000.00		
	Trash Receptacles		2	EA	\$6,000.00	\$12,000.00		
	<b>Subtotal</b>							<b>\$25,500.00</b>

00002	ALTERNATE #2 : Skatepark Flow Bowl							\$150,000
1	Skatepark Flow Bowl		2,500	SF	\$60.00	\$150,000.00		
	<b>Subtotal</b>							<b>\$150,000.00</b>

00003	ALTERNATE #3 : Bike Pump Tracks							\$515,000
1	Trike Track		2,000	SF	\$40.00	\$80,000.00		
2	Junior Pump Track		3,000	SF	\$45.00	\$135,000.00		
3	Advanced Pump Track		6,000	SF	\$50.00	\$300,000.00		
	<b>Subtotal</b>							<b>\$515,000.00</b>

00004	ALTERNATE #4 : Plantings							\$13,000
1	Deciduous Trees		8	EA	\$1,000.00	\$8,000.00		
2	Perennial Planting		1	ALLOW	\$5,000.00	\$5,000.00		
	<b>Subtotal</b>							<b>\$13,000.00</b>



**Scannell  
Field &  
Adjacent  
Park Area**







## Photo Legend

- 1. General Overview:** Scannell Field is located to the north east of Spy Pond. The area included in the limit of work studied is approximately 85,500 sf which includes a natural grass baseball field, open grass / landscaped areas with a Bio retention basin that collects runoff from the field.
- 2. Accessibility:** There is no ADA accessibility or a formal pathway to the field. There is limited parking at the entry loop. The Minuteman Commuter Bikeway along the field perimeter making easy access from bike users and runners.
- 3. Furnishings:** Bleachers on site in good condition, team areas are in poor condition, drinking fountain is relatively new, but poor location for accessibility. A Port-a-potty is on site, but not accessible.
- 4. Edges:** The field has a 4' high perimeter chain link fence in poor condition, with 6' chain link fence
- 5. Character:** The surrounding landscape suggests connecting to the natural quality of the site. Historical ice house foundation is exposed.
- 6. Vegetation and Drainage:** The field has medium compaction in certain player position areas and along the edge of the infield/outfield, typical of a baseball field. Topsoil ranged from 12"-16". Poor draining soils, lab results show low amounts of medium and coarse sand content and infiltration rate at 0.2 inches per hour. The high fine sand content would be one of the reasons for the high compaction and low infiltration rate.

## Existing Field Dimensions

Left Field: 200'

Right Field: 200'

Center Field: 200'



**BIO RETENTION BASIN** .....

Site has a bio retention basin with a drainage swale leading to it.

**PORT-A-POTTY**

Port-A-Potty on site needs to be moved to an accessible location.

**NO ADA ACCESSIBILITY**

**EXISTING BLEACHERS**

In good conditions

**BIO SWALE ALONG OUTFIELD EDGE** .....

No other visible drainage structures around or within field perimeter

**BACKSTOP AND FENCING**

Poor condition, will need to be replaced.

**TEAM AREAS**

Poor condition, No ADA accessibility, will need to be replaced.

**POTABLE WATER**

Needs improvements.

**POOR FIELD GRADING** .....

Majority of outfield is undulating. Field will need to be re-graded

**UNDER UTILIZED GRASS SPACE**

Potential for Historical references to Ice House Foundation



# Conditions Assessment

## Scannell Field & Adjacent Park Area

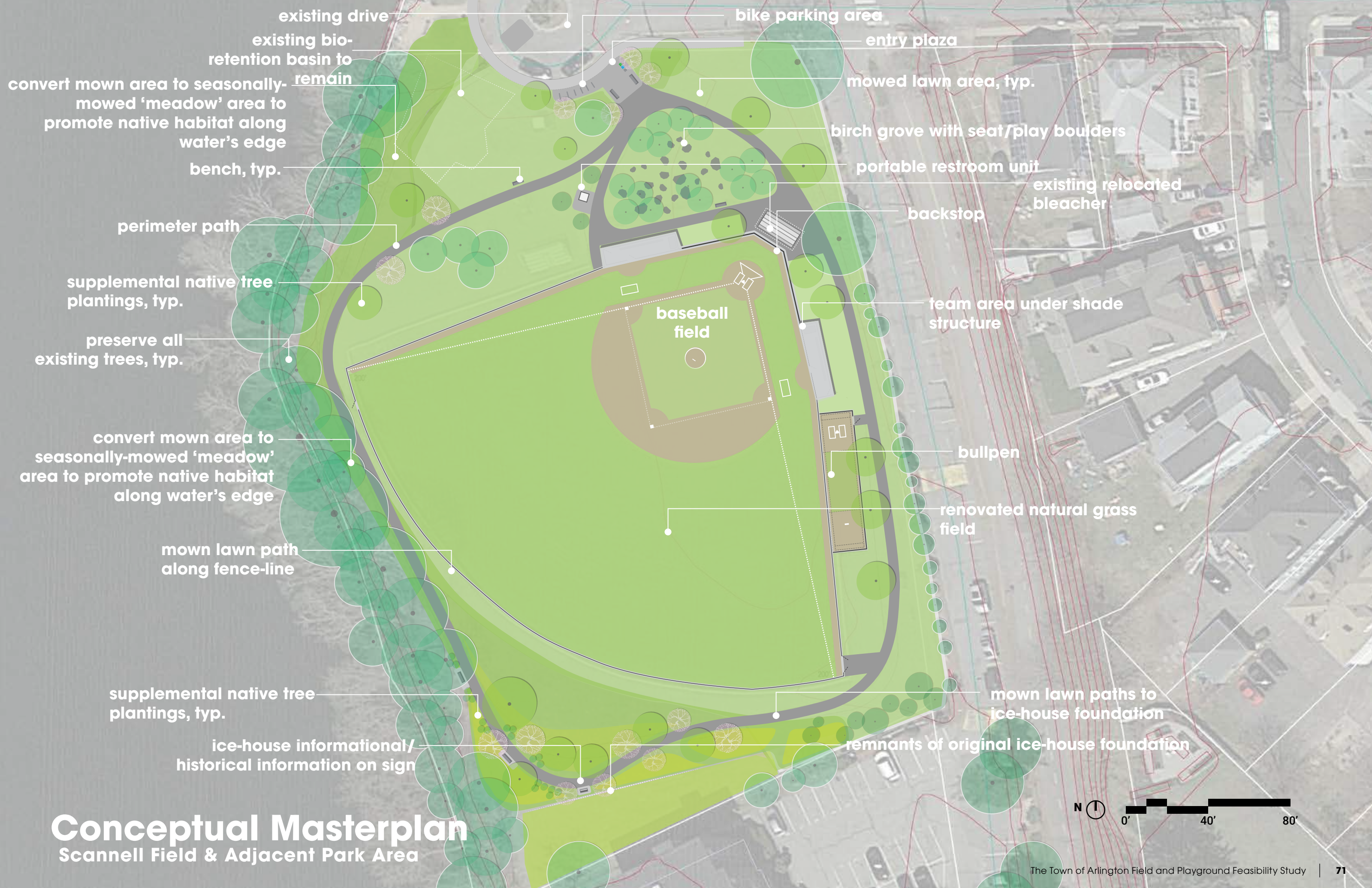




# Precedents

Scannell Field & Adjacent Park Area





existing drive  
 existing bio-retention basin to remain  
 convert mown area to seasonally-mowed 'meadow' area to promote native habitat along water's edge  
 bench, typ.

bike parking area  
 entry plaza  
 mowed lawn area, typ.  
 birch grove with seat/play boulders  
 portable restroom unit

existing relocated bleacher

perimeter path  
 supplemental native tree plantings, typ.  
 preserve all existing trees, typ.

backstop

team area under shade structure

convert mown area to seasonally-mowed 'meadow' area to promote native habitat along water's edge

bullpen

renovated natural grass field

mown lawn path along fence-line

supplemental native tree plantings, typ.

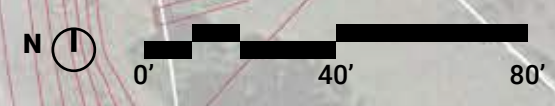
mown lawn paths to ice-house foundation

ice-house informational/historical information on sign

remnants of original ice-house foundation

# Conceptual Masterplan

## Scannell Field & Adjacent Park Area





# Opinion of Probable Project Costs:



226 Causeway Street  
Boston, MA 02114

PROJECT: Arlington Field and Playground Feasibility Study  
 PROJ #: 210801854  
 STATUS: Conceptual Design  
 DATE: 2/9/2021

**NOTE:**  
 Due to the inflationary and unpredictable construction climate, this opinion of probable costs may not represent the actual cost of construction.

## Scannell Field and Adjacent Site

Item #	Item/Remarks	Notes	Total	Unit	Unit Cost	Cost	Subtotal
<b>ITEMIZED OPINION OF PROBABLE CONSTRUCTION COSTS</b>							
<b>00001</b>	<b>Site Preparation and Demolition / Earthwork</b>						<b>\$87,263.67</b>
1	Mobilization		1	ALLOW	\$10,000.00	\$10,000.00	
2	Remove and Dispose Backstop, Fence Fabric, Furnishing(s) and Footings		1	ALLOW	\$15,000.00	\$15,000.00	
3	Remove and Dispose Infield Mix		178	CY	\$12.00	\$2,133.33	
4	Construction Fence		200	LF	\$5.00	\$1,000.00	
5	Tree Protection Fence		300	LF	\$5.00	\$1,500.00	
6	Erosion and Sedimentation Control		700	LF	\$6.00	\$4,200.00	
7	SWPPP		1	ALLOW	\$2,000.00	\$2,000.00	
8	Strip and Stockpile Existing Topsoil (assume 10")		3,117	CY	\$12.00	\$37,405.33	
9	Rough Grade Site		93,500	SF	\$0.15	\$14,025.00	
	<b>Subtotal</b>					<b>\$87,263.67</b>	
<b>00002</b>	<b>Natural Grass Athletic Field</b>						<b>\$224,923</b>
1	Screen Topsoil (assume 10" total)		1,076	CY	\$10.00	\$10,759.26	
2	Dispose of Tailings From Screening (10% of screened topsoil)		108	CY	\$15.00	\$1,613.89	
3	Sand Amendment (assume 2")		216	CY	\$49.00	\$10,607.59	
4	Respread Amended Topsoil (assume 12" total)		1,309	CY	\$10.00	\$13,092.59	
5	Soil Amend to Prevent Decomposition		100	TON	\$500.00	\$50,000.00	
6	Fine Grade Field Surface		38,000	SF	\$0.20	\$7,600.00	
7	Kentucky Blue Grass Sod Blend (sand blend)		35,000	SF	\$1.75	\$61,250.00	
8	Natural Grass Maintenance (Grow In)		35,000	SF	\$0.30	\$10,500.00	
9	Irrigation System		35,000	SF	\$1.20	\$42,000.00	
10	Infield Mix		3,000	SF	\$3.00	\$9,000.00	
11	Pitching Mound Fortification		1	LS	\$8,500.00	\$8,500.00	
	<b>Subtotal</b>					<b>\$224,923.33</b>	
<b>00003</b>	<b>Athletic Equipment</b>						<b>\$25,000</b>
1	Team Benches at Team Areas (includes concrete pad)		6	EA	\$3,000.00	\$18,000.00	
2	Pitchers Rubber and Bases		1	SET	\$1,000.00	\$1,000.00	
3	Foul Poles		1	SET	\$6,000.00	\$6,000.00	
	<b>Subtotal</b>					<b>\$25,000.00</b>	
<b>00004</b>	<b>Fencing and Netting</b>						<b>\$91,000</b>
1	6' Chain Link Fence at Team Areas		200	LF	\$65.00	\$13,000.00	
2	4' Chain Link Fence at Field Perimeter		600	LF	\$55.00	\$33,000.00	
4	Chain Link Fence Backstop		1	LS	\$45,000.00	\$45,000.00	
	<b>Subtotal</b>					<b>\$91,000.00</b>	
<b>00005</b>	<b>Site Improvements</b>						<b>\$75,400</b>
1	Entrance Plaza (concrete)		350	SF	\$10.00	\$3,500.00	
2	Loaming & Seeding /Meadow Seed Disturbed Areas		33,000	SF	\$1.50	\$49,500.00	
3	Paving						
	Bit. Conc. Paving - 6' wide		2,800	SF	\$8.00	\$22,400.00	
	<b>Subtotal</b>					<b>\$75,400.00</b>	



<b>00006</b>	<b>Site Utilities</b>						<b>\$65,000</b>
3	Drainage Manhole		3	EA	\$5,000.00	\$15,000.00	
4	Area Drains/Cleanouts		4	EA	\$1,000.00	\$4,000.00	
5	6" HDPE Pipe		200	LF	\$35.00	\$7,000.00	
6	8" HDPE Pipe		800	LF	\$40.00	\$32,000.00	
7	Drywell		1	EA	\$7,000.00	\$7,000.00	
	<b>Subtotal</b>					<b>\$65,000.00</b>	
	<b>Subtotal:</b>						<b>\$568,587</b>
	<b>4% General Conditions</b>						<b>\$22,743</b>
	<b>8% Contractors Overhead and Profit</b>						<b>\$45,487</b>
	<b>4% Price Escalation for FY '24</b>						<b>\$22,743</b>
	<b>CONSTRUCTION SUBTOTAL:</b>						<b>\$659,561</b>
<b>00007</b>	<b>Consulting Costs</b>						<b>\$100,000.00</b>
1	Design & Construction Administration		1	ALLOW	\$80,000.00	\$80,000.00	
2	Survey		1	ALLOW	\$10,000.00	\$10,000.00	
3	Permitting		1	ALLOW	\$10,000.00	\$10,000.00	
	<b>Subtotal</b>					<b>\$100,000.00</b>	
	<b>DESIGN &amp; CONSTRUCTION SUBTOTAL:</b>						<b>\$759,561</b>
	<b>10% Construction Contingency</b>						<b>\$65,956</b>
	<b>TOTAL OPINION OF PROBABLE PROJECT COSTS</b>						<b>\$825,517</b>

<b>00008</b>	<b>ALTERNATE #1 : Site Furnishings</b>						<b>\$22,500</b>
1	Site Furnishings						
	Benches on Concrete Pad		6	EA	\$2,500.00	\$15,000.00	
	Bike Rack		6	EA	\$500.00	\$3,000.00	
	Trash Receptacles		1	EA	\$1,000.00	\$1,000.00	
	Interpretive Signage		1	ALLOW	\$3,500.00	\$3,500.00	
	<b>Subtotal</b>					<b>\$22,500.00</b>	

<b>00009</b>	<b>ALTERNATE #2 : Plantings</b>						<b>\$47,500</b>
1	Deciduous Trees		1	ALLOW	\$30,000.00	\$30,000.00	
2	Perennial Planting		1	ALLOW	\$5,000.00	\$5,000.00	
3	Landscape Boulders		1	ALLOW	\$7,500.00	\$7,500.00	
4	Meadow Grow-In Maintenance (2 yrs)		1	ALLOW	\$5,000.00	\$5,000.00	
	<b>Subtotal</b>					<b>\$47,500.00</b>	

<b>00010</b>	<b>ALTERNATE #3 : Shade Structure at Team Areas (Dugout)</b>						<b>\$50,000</b>
1	Shade Structure for Each Team Area		2	EA	\$25,000.00	\$50,000.00	
	<b>Subtotal</b>					<b>\$50,000.00</b>	

<b>00010</b>	<b>ALTERNATE #4 : Batting Cage / Bull Pen</b>						<b>\$28,000</b>
1	Combination Batting Cage at Bull Pen		1	LS	\$20,000.00	\$20,000.00	
2	Synthetic Turf for Bullpen		1	ALLOW	\$8,000.00	\$8,000.00	
	<b>Subtotal</b>					<b>\$28,000.00</b>	

<b>00011</b>	<b>ALTERNATE #5 : Perimeter Loop Path Paving</b>						<b>\$41,600</b>
1	Paving						
	Porous Bit. Conc. Paving - 6' wide		5,200	SF	\$8.00	\$41,600.00	
	<b>Subtotal</b>					<b>\$41,600.00</b>	

<b>00012</b>	<b>ALTERNATE #6 : Porous Bit. Conc. Paving - Upgrade</b>						<b>\$96,000</b>
1	Paving						
	Porous Bit. Conc. Paving - 6' wide (replace pavement line items in entirety)		8,000	SF	\$12.00	\$96,000.00	
	<b>Subtotal</b>					<b>\$96,000.00</b>	



# Crosby Tennis Courts



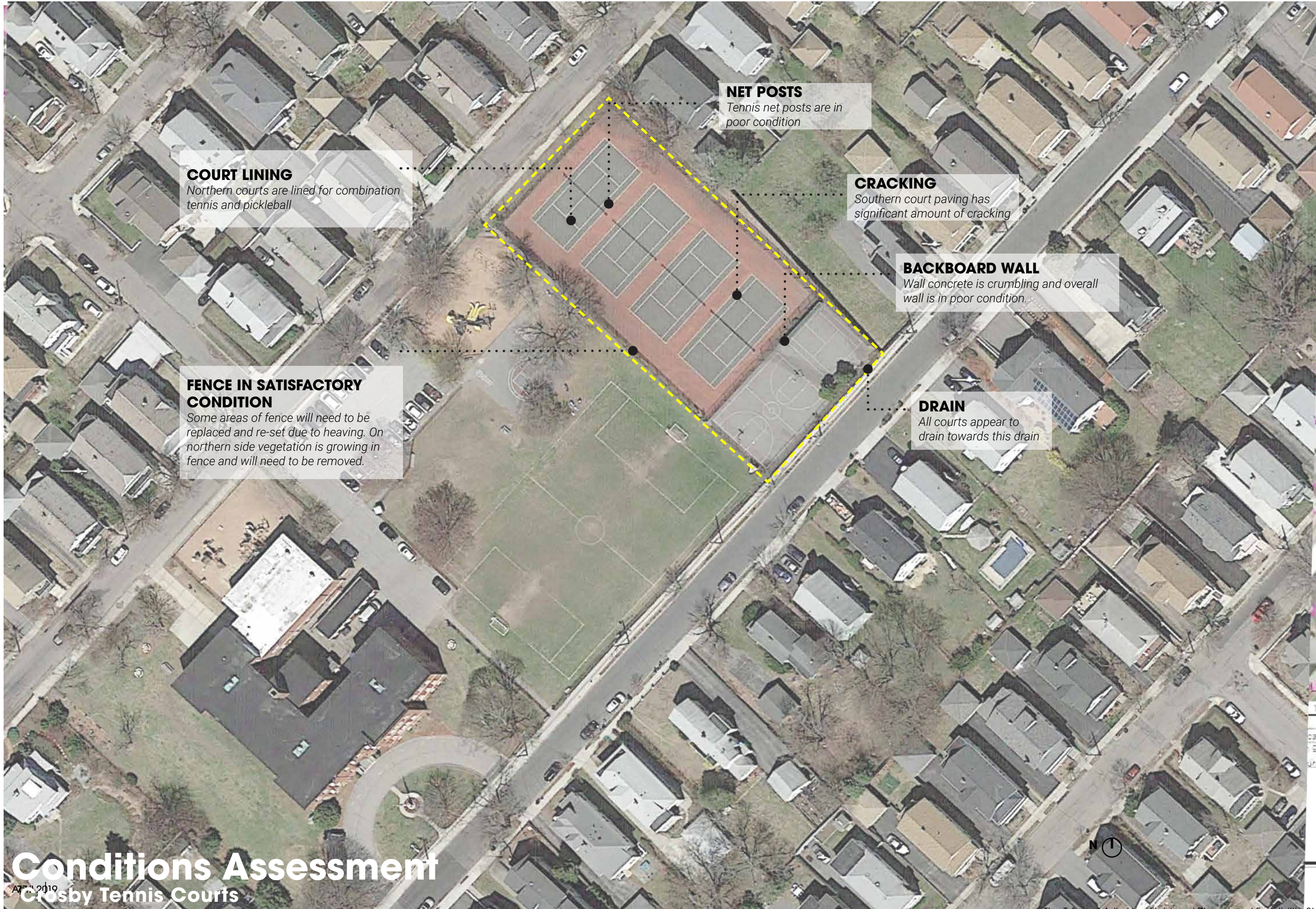




## Photo Legend

- 1. General Overview:** Crosby Tennis Courts are located to the north east of the field and playground at Crosby Park. The area included in the limit of work studied is approximately 38,000 sf which includes a 4 tennis courts, a basketball court and a skills areas for tennis.
- 2. Accessibility:** There is an ADA accessible path from Oxford Street to the tennis courts. There is no ADA accessible path from Winter Street. There is street parking along both streets.
- 3. Furnishings:** There were benches and a drinking fountain along the path accessible.
- 4. Edges:** The courts are surround by a street on the northwest and southeast sides. Two houses abut the northern edge, and the south edge is connected to the playground and field within the park. The courts have a perimeter fence that is in satisfactory condition, however there is vegetation growing in it on the northern end.
- 5. Character:** The courts serve their function and seem to maximize the space provided in general, so there is little to work with on character within the limit of the study.
- 6. Vegetation and Drainage:** The courts seem to drain from the north west to the south east. There was one catch basin observed that appears to collect all of the stormwater runoff from the courts. There are several trees along the playground side of the tennis courts, as well as the street side and adjacent houses





**COURT LINING**

Northern courts are lined for combination tennis and pickleball

**NET POSTS**

Tennis net posts are in poor condition

**CRACKING**

Southern court paving has significant amount of cracking

**BACKBOARD WALL**

Wall concrete is crumbling and overall wall is in poor condition.

**FENCE IN SATISFACTORY CONDITION**

Some areas of fence will need to be replaced and re-set due to heaving. On northern side vegetation is growing in fence and will need to be removed.

**DRAIN**

All courts appear to drain towards this drain

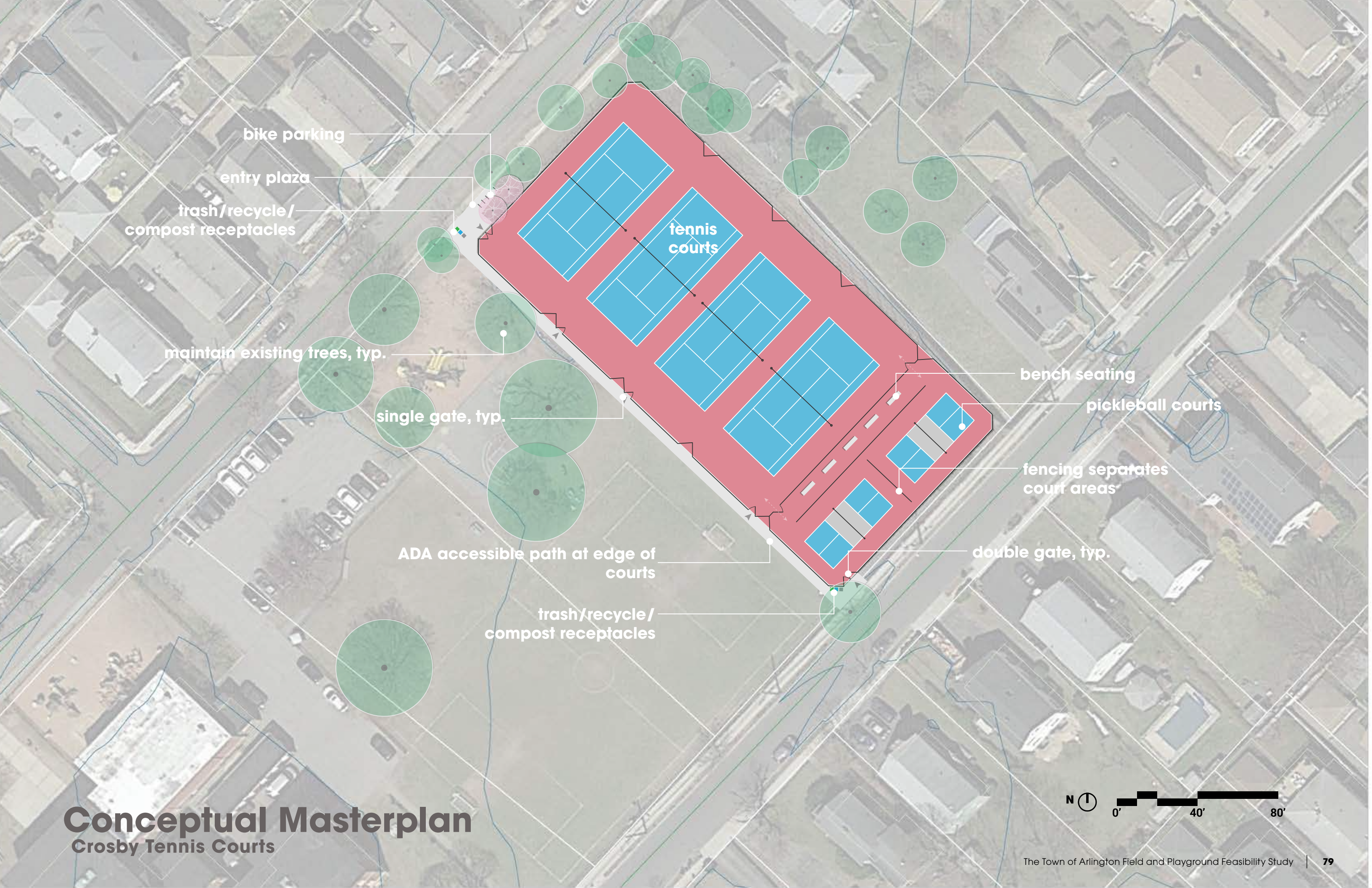




# Precedents

Crosby Tennis Courts





bike parking

entry plaza

trash/recycle/  
compost receptacles

maintain existing trees, typ.

single gate, typ.

ADA accessible path at edge of  
courts

trash/recycle/  
compost receptacles

tennis  
courts

bench seating

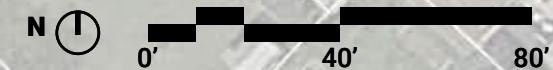
pickleball courts

fencing separates  
court areas

double gate, typ.

# Conceptual Masterplan

## Crosby Tennis Courts









# Opinion of Probable Project Costs:



226 Causeway Street  
Boston, MA 02114

PROJECT:	Arlington Field and Playground Feasibility Study
PROJ #:	210801854
STATUS:	Conceptual Design
DATE:	2/9/2021

**NOTE:**

Due to the inflationary and unpredictable construction climate, this opinion of probable costs may not represent the actual cost of construction.

## Crosby Tennis Courts

Item #	Item/Remarks	Notes	Total	Unit	Unit Cost	Cost	Subtotal
<b>ITEMIZED OPINION OF PROBABLE CONSTRUCTION COSTS</b>							
<b>00001</b>	<b>Site Preparation and Demolition / Earthwork</b>						<b>\$52,300.00</b>
1	Mobilization		1	ALLOW	\$6,000.00	\$6,000.00	
2	Pulverize in Place Existing Tennis Court Pavement		32,000	SF	\$1.00	\$32,000.00	
2	Remove and Dispose of Existing Fencing		1	ALLOW	\$2,000.00	\$2,000.00	
3	Construction Fence		800	LF	\$5.00	\$4,000.00	
4	Tree Protection Fence		100	LF	\$5.00	\$500.00	
5	Erosion and Sedimentation Control		1	ALLOW	\$3,000.00	\$3,000.00	
6	General Earthwork						
	Rough grade site		32,000	SF	\$0.15	\$4,800.00	
	<b>Subtotal</b>					<b>\$52,300.00</b>	
<b>00002</b>	<b>Tennis and Pickleball Court</b>						<b>\$275,022.22</b>
1	Fine Grade Subgrade		32,000	SF	\$0.15	\$4,800.00	
2	Tennis Court (Asphalt)	1	3556	SY	\$76.00	\$270,222.22	
	<b>Subtotal</b>					<b>\$275,022.22</b>	
<b>00003</b>	<b>Site Improvements</b>						<b>\$15,900.00</b>
1	Paving						
	Bit. Conc. Paving		1,800	SF	\$8.00	\$14,400.00	
2	Loam and Seed Disturbed Areas		1000	SF	\$1.50	\$1,500.00	
	<b>Subtotal</b>					<b>\$15,900.00</b>	
	<b>Subtotal:</b>						<b>\$343,222</b>
	<b>4% General Conditions</b>						<b>\$13,729</b>
	<b>8% Contractors Overhead and Profit</b>						<b>\$27,458</b>
	<b>6% Price Escalation for FY '24</b>						<b>\$20,593</b>
	<b>CONSTRUCTION SUBTOTAL:</b>						<b>\$405,002</b>
<b>00004</b>	<b>Consulting Costs</b>						<b>\$65,000.00</b>
1	Design & Construction Administration		1	ALLOW	\$60,000.00	\$60,000.00	
2	Survey		1	ALLOW	\$5,000.00	\$5,000.00	
3	Permitting		0	ALLOW	\$0.00	\$0.00	
	<b>Subtotal</b>					<b>\$65,000.00</b>	
	<b>DESIGN &amp; CONSTRUCTION SUBTOTAL:</b>						<b>\$470,002</b>
	<b>10% Construction Contingency</b>						<b>\$40,500</b>
	<b>TOTAL OPINION OF PROBABLE PROJECT COSTS</b>						<b>\$510,502</b>

<b>00005</b>	<b>ALTERNATE #1 : Post-Tensioned Concrete</b>	(5)					<b>\$410,133</b>
1	Fine Grade Subgrade	(4)	32,000	SF	\$0.15	\$4,800.00	
2	Tennis Court (Post-Tensioned Concrete)		3556	SY	\$114.00	\$405,333.33	
	<b>Subtotal</b>					<b>\$410,133.33</b>	

<b>00006</b>	<b>ALTERNATE #2 : Site Furnishings</b>	(5)					<b>\$30,500</b>
1	Site Furnishings						
	Benches on Concrete Pad		5	EA	\$2,500.00	\$12,500.00	
	Bike Rack		1	EA	\$6,000.00	\$6,000.00	
	Trash Receptacles		2	EA	\$6,000.00	\$12,000.00	
	<b>Subtotal</b>					<b>\$30,500.00</b>	

**Assumptions / Comments / Potential Alternates:**

- Includes bituminous concrete system, tennis posts and netting, 10' fencing, court surfacing, and line striping.
- Assumes current tennis court base will be pulverized in place and used as new base.
- General earthwork does not include additional cost of unsuitable material excavation and replacement (if encountered).
- Includes post-tensioned concrete system, tennis posts and netting, 10' fencing, court surfacing, and line striping.
- This cost to replace line item 0002

# Cost Estimate

## Crosby Tennis Courts

A large, bold, orange number '10' is positioned on the left side of the page, partially overlapping the text. The '1' is a vertical bar, and the '0' is a large circle.

# **Parmenter Playground & Courts**







## Assessment Notes

- Improvements to **ADA accessibility** are necessary to and from play equipment and access points. A hybrid use of safety surface materials is preferred (rubber for accessibility and high wear areas, wood fiber for others).
- Site needs an **entire playground redesign** offers an opportunity to really get **creative**.
- Existing **retaining walls** have cracks need to be addressed.
- Arlington has record drawings.
- As building use changes, so does use and frequency of playground.
- Maintain storage shed(s).
- Gets a lot of use from adjacent neighborhood.
- Would like half-court basketball and 4-square.
- Asphalt area does not need to be fully retained.
- Focus **play for younger children**.
- A good example of a pocket park to look at is Hibbert Playground

## Photo Legend

1. General Overview: Parmenter Playground is located next to the Arlington Children's Center; the use of this abutting building is ever-changing. This approximate 2,025 sf site has significant grade change that has been addressed with retaining walls, stairs, and ramps. The play area includes one main play structure and some tire climbing elements. There is a large expanse of 'hot top' asphalt used as play courts and currently outdoor learning facilities.
2. Accessibility: ADA accessibility is lacking due to mulch material and wood edging throughout. Existing ramps connect playground with courts. Parking for the playground is unclear.
3. Furnishings: Two benches and planter edges are possibilities for current seating. There is a storage shed on asphalt area.
4. Edges: The playground is fenced on all sides. Retaining walls enclose one side of the asphalt area and drop off on the other side. Cracks need to be addressed.
5. Character: Current theme is not as evident as most of the other playgrounds in this report. School use and elevation change are the major existing characteristics.
6. Vegetation: Edge trees and healthy planter trees provide adequate shade for playground, while asphalt is in need of more sun protection.



**ACCESS POINTS**

Accessible entrances and associated parking along street needs to be considered as part of the conceptual design

**IMPROVE PLAY ACCESSIBILITY**

Use rubber safety surface paths to connect play equipment and entrances for a more inclusive play experience. Rubber mats will be used at high traffic areas.

**SHRINK ASPHALT AREA**

Asphalt area does not need to be fully retained.

**CONNECTED TO ADJOINING PLAY AREA**

**MAINTAIN STORAGE SHEDS**

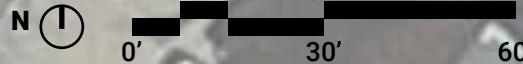
**RETAINING WALLS**

Cracking at repaired areas may indicate a structural issue. Additional investigation may be needed.

APPROXIMATE LIMIT OF WORK

ACADEMY STREET

IRVING STREET



**Conditions Assessment**  
Parmenter Playground & Courts





# Precedents

## Parmer Playground & Courts



remove rotting timbers, regrade and landscape with groundcover and shade-loving bushes/perennials

recycle, compost, trash receptacles, typ.

concrete entry plaza

specimen tree in theater

logs in landscape area, typ.

remove rotting timbers, regrade and replace as needed with 'reclaimed' landscape boulders/stones

remove rotting timbers, regrade and replace with groundcover

remove crumbling wall, regrade and landscape with groundcover

logs in groundcover slopes

maintain all existing trees

mounted 'side' tables  
mounted tables and chairs

boulder seat/retaining wall  
rubber path, typ.  
bench, typ.

remove rotting timbers, regrade and replace as needed with 'reclaimed' landscape boulders/stones

resurface asphalt area

painted lines on asphalt, typ.  
painted loop joins 'play points'

trike track

recycle, compost, trash receptacles, typ.

rain garden at low point

bench, typ.



remove crumbling wall, regrade and landscape with groundcover

# Conceptual Masterplan

## Parmenter Playground & Courts







# Opinion of Probable Project Costs:



226 Causeway Street  
Boston, MA 02114

PROJECT: Arlington Field and Playground Feasibility Study  
PROJ #: 210801854  
STATUS: Conceptual Design  
DATE: 2/9/2021

**NOTE:**


Due to the inflationary and unpredictable construction climate, this opinion of probable costs may not represent the actual cost of construction.

## Parmenter Playground & Other Site Improvements

Item #	Item/Remarks	Notes	Total	Unit	Unit Cost	Cost	Subtotal
<b>ITEMIZED OPINION OF PROBABLE CONSTRUCTION COSTS</b>							
<b>00001</b>	<b>Site Preparation and Demolition / Earthwork</b>						<b>\$63,037.50</b>
1	Mobilization		1	ALLOW	\$10,000.00	\$10,000.00	
2	Remove and Dispose Playground Equipment, Furnishing(s) and Footings		1	ALLOW	\$12,000.00	\$12,000.00	
3	Remove and Dispose Safety Surfacing		4,625	SF	\$1.00	\$4,625.00	
4	Remove and Dispose pavement (full depth)		4,850	SF	\$2.25	\$10,912.50	
5	Wall demolition - wood timber		1	ALLOW	\$12,000.00	\$12,000.00	
6	Common Fill		300	CY	\$30.00	\$9,000.00	
7	Earthwork		0	ALLOW	\$15,000.00	\$0.00	
8	Construction Fence		100	LF	\$5.00	\$500.00	
9	Tree Protection Fence		500	LF	\$5.00	\$2,500.00	
10	Erosion and Sedimentation Control		1	ALLOW	\$1,500.00	\$1,500.00	
	<b>Subtotal</b>					<b>\$63,037.50</b>	
<b>00002</b>	<b>Park Improvements</b>						<b>\$385,063</b>
1	Concrete Paving (entry plaza)		150	SF	\$11.00	\$1,650.00	
2	Tot Lot Play Equipment		1	ALLOW	\$125,000.00	\$125,000.00	
3	Natural Play Elements (wood stumps, etc.)		1	ALLOW	\$15,000.00	\$15,000.00	
4	Stone: Boulders & Stacked Stone Slopes		1,275	SF	\$100.00	\$127,500.00	
5	Paving Repair		1	ALLOW	\$3,500.00	\$3,500.00	
6	Mill and Overlay		9,400	SF	\$3.00	\$28,200.00	
7	Bit. Conc. Paving		250	SF	\$8.00	\$2,000.00	
8	Pavement markings		1	ALLOW	\$12,000.00	\$12,000.00	
9	12" Depth Wood Fiber Safety Surface		3,100	SF	\$10.00	\$31,000.00	
10	Rubber Safety Surface		1,000	SF	\$30.00	\$30,000.00	
11	Wall Repair		1	ALLOW	\$2,500.00	\$2,500.00	
12	Loam		115	CY	\$30.00	\$3,450.00	
13	Loaming & Seeding disturbed areas		2,175	SF	\$1.50	\$3,262.50	
	<b>Subtotal</b>					<b>\$385,062.50</b>	
	<b>Subtotal:</b>						<b>\$448,100</b>
	<b>4% General Conditions</b>						<b>\$17,924</b>
	<b>8% Contractors Overhead and Profit</b>						<b>\$35,848</b>
	<b>6% Price Escalation for FY '24</b>						<b>\$26,886</b>
	<b>CONSTRUCTION SUBTOTAL:</b>						<b>\$528,758</b>
<b>00003</b>	<b>Consulting Costs</b>						<b>\$65,000.00</b>
1	Design & Construction Administration		1	ALLOW	\$60,000.00	\$60,000.00	
2	Survey		1	ALLOW	\$5,000.00	\$5,000.00	
	<b>Subtotal</b>					<b>\$65,000.00</b>	
	<b>DESIGN &amp; CONSTRUCTION SUBTOTAL:</b>						<b>\$593,758</b>
	<b>10% Construction Contingency</b>						<b>\$52,876</b>
	<b>TOTAL OPINION OF PROBABLE PROJECT COSTS</b>						<b>\$646,634</b>
<b>00004</b>	<b>ALTERNATE #1 : Plantings</b>						<b>\$35,600</b>
1	Deciduous Trees		14	EA	\$1,000.00	\$14,000.00	
2	Hardy Groundcover		720	EA	\$30.00	\$21,600.00	
	<b>Subtotal</b>					<b>\$35,600.00</b>	
<b>00005</b>	<b>ALTERNATE #2 : Site Furnishings</b>						<b>\$35,500</b>
1	Cafe Tables (w/ conc. pad)		4	SF	\$3,500.00	\$14,000.00	
2	Benches (w/ conc. pad)		6	EA	\$2,500.00	\$15,000.00	
3	Trash Receptacles		2	EA	\$2,500.00	\$5,000.00	
4	Signage		1	ALLOW	\$1,500.00	\$1,500.00	
	<b>Subtotal</b>					<b>\$35,500.00</b>	

# Cost Estimate

## Parmenter Playground & Courts



# **Parallel Park Playground & Courts**







## Photo Legend

- 1. General Overview:** Parallel Park is located at the corner of Mystic Valley Parkway, Medford Street, and Parallel Street. The area included in the limit of work studied is approximately 50,000 sf which includes a playground at the top of a continuous slope down to the basketball court.
- 2. Accessibility:** There is an ADA accessible path from Parallel Street on the south end of the site, but does not continue beyond the playground. The basketball court is not ADA accessible. There is street parking along Parallel Street.
- 3. Furnishings:** There are picnic tables, benches and a drinking fountain, but they are not all ADA accessible. Playground equipment is outdated. There are additional larger toys that appear to be brought in by neighborhood users.
- 4. Edges:** The park is surrounded by a street on the northwest and south sides. Two houses abut the eastern edge. The park has a perimeter fence that is in poor condition.
- 5. Character:** The park is situated in a densely populated area which can serve as a popular meeting place for neighborhood use.
- 6. Vegetation and Drainage:** The park has mature existing trees that serve as a good shade canopy during summer months. There is a slope starting at the high point of the park at Parallel Street and is a continues down the entire park down to the basketball court. There is a drainage structure within the basketball court to catch the surface runoff from the court.



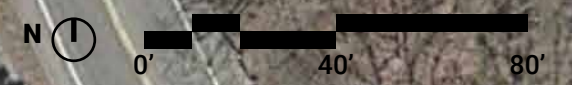
**ENTRANCE IMPROVEMENTS**  
*More formal entrance is desired*

**POOR ACCESS ACROSS SITE**  
*Improve connections from South side of site to North Side*

**ADA ACCESS NEEDED**  
*Site does not have ADA access throughout all program elements*

# Conditions Assessment

## Parallel Park Playground & Courts







# Precedents

## Parallel Park Playground & Courts





'replacement'  
sycamore trees

buffer

court gathering area

sycamore protection zone,  
native shady groundcover

spectator lawn

basketball  
court

main lawn

spectator lawn

seasonally mowed meadow

wave lawn

bench, typ.

picnic grove

2-5 y.o. play  
structure

fitness zone

swings

5-12 y.o. play  
structure

game lawn

pavilion

0-2 y.o. play  
structure

picnic lawn

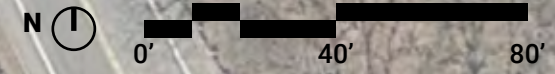
seasonally mowed  
understory, typ.

nature free-play

stabilized stone-dust  
aggregate path

# Conceptual Masterplan

Parallel Park Playground & Courts









# Opinion of Probable Project Costs:



226 Causeway Street  
Boston, MA 02114

PROJECT: Arlington Field and Playground Feasibility Study  
PROJ #: 210801854  
STATUS: Conceptual Design  
DATE: 2/9/2021

**NOTE:**

Due to the inflationary and unpredictable construction climate, this opinion of probable costs may not represent the actual cost of construction.

## Parallel Park

Item #	Item/Remarks	Notes	Total	Unit	Unit Cost	Cost	Subtotal
<b>ITEMIZED OPINION OF PROBABLE CONSTRUCTION COSTS</b>							
<b>00001</b>	<b>Site Preparation and Demolition / Earthwork</b>						<b>\$71,875.00</b>
1	Mobilization		1	ALLOW	\$10,000.00	\$10,000.00	
2	Remove and Dispose Existing Play Features		1	ALLOW	\$10,000.00	\$10,000.00	
3	Remove and Dispose Safety Surfacing		5,250	SF	\$1.00	\$5,250.00	
4	Remove and Dispose pavement (full depth)		7,500	SF	\$2.25	\$16,875.00	
5	Earthwork		1	ALLOW	\$25,000.00	\$25,000.00	
6	Construction Fence		450	LF	\$5.00	\$2,250.00	
7	Tree Protection Fence		500	LF	\$5.00	\$2,500.00	
8	Erosion and Sedimentation Control		0	ALLOW	\$3,000.00	\$0.00	
	<b>Subtotal</b>					<b>\$71,875.00</b>	
<b>00002</b>	<b>Park Improvements</b>						<b>\$459,075</b>
1	Play Equipment		1	ALLOW	\$250,000.00	\$250,000.00	
2	Natural Play Elements		1	ALLOW	\$25,000.00	\$25,000.00	
3	Entry Improvements		1	ALLOW	\$8,000.00	\$8,000.00	
4	12" Depth Wood Fiber Safety Surface		8,500	SF	\$4.00	\$34,000.00	
5	Rubber Safety Surface		1,500	SF	\$30.00	\$45,000.00	
6	Bit. Conc. Pathway		3,950	SF	\$8.00	\$31,600.00	
7	Bit. Conc. Bball Court		2,500	SF	\$8.00	\$20,000.00	
8	Basketball Goal		1	EA	\$6,200.00	\$6,200.00	
9	Court Surfacing		2,500	SF	\$2.00	\$5,000.00	
10	Loaming & Seeding disturbed areas		22,850	SF	\$1.50	\$34,275.00	
	<b>Subtotal</b>					<b>\$459,075.00</b>	
	<b>Subtotal:</b>						<b>\$530,950</b>
	<b>4% General Conditions</b>						<b>\$21,238</b>
	<b>8% Contractors Overhead and Profit</b>						<b>\$42,476</b>
	<b>6% Price Escalation for FY '24</b>						<b>\$31,857</b>
	<b>CONSTRUCTION SUBTOTAL:</b>						<b>\$626,521</b>
<b>00003</b>	<b>Consulting Costs</b>						<b>\$87,500.00</b>
1	Design & Construction Administration		1	ALLOW	\$83,000.00	\$83,000.00	
2	Survey		1	ALLOW	\$3,500.00	\$4,500.00	
	<b>Subtotal</b>					<b>\$87,500.00</b>	
	<b>DESIGN &amp; CONSTRUCTION SUBTOTAL:</b>						<b>\$714,021</b>
	<b>10% Construction Contingency</b>						<b>\$62,652</b>
	<b>TOTAL OPINION OF PROBABLE PROJECT COSTS</b>						<b>\$776,673</b>

<b>00004</b>	<b>ALTERNATE #1 : Exercise Equipment</b>						<b>\$65,000</b>
1	Exercise Equipment		1	ALLOW	\$65,000.00	\$65,000.00	
	<b>Subtotal</b>					<b>\$65,000.00</b>	

<b>00005</b>	<b>ALTERNATE #1 : Site Furnishings</b>						<b>\$55,500</b>
1	Site Furnishings						
2	Picnic Tables		5	EA	\$3,000.00	\$15,000.00	
	Benches on Concrete Pad		9	EA	\$2,500.00	\$22,500.00	
	Bike Rack		1	EA	\$6,000.00	\$6,000.00	
	Trash Receptacles		2	EA	\$6,000.00	\$12,000.00	
	<b>Subtotal</b>					<b>\$55,500.00</b>	

<b>00006</b>	<b>ALTERNATE #4 : Plantings</b>						<b>\$50,320</b>
1	Deciduous Trees		30	EA	\$1,000.00	\$30,000.00	
2	Meadow		2,660	SF	\$2.00	\$5,320.00	
3	Hardy Groundcover		500	EA	\$30.00	\$15,000.00	
	<b>Subtotal</b>					<b>\$50,320.00</b>	

# Cost Estimate

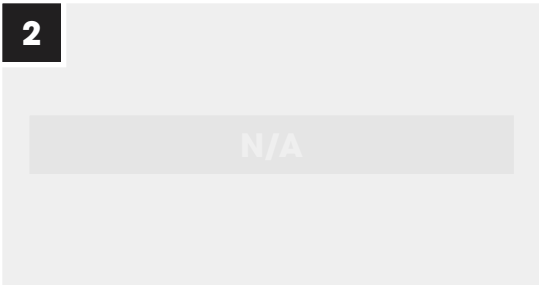
## Parallel Park Playground & Courts



# Turkey Hill Access Areas







## Assessment Notes

- Need clear access points identified so public is aware of the trail system
- Trail improvement and vegetation management work that may be needed was outside the scope of this analysis.

## Photo Legend

- 1. General Overview:** Turkey Hill is an approximately 3,800 sf unofficial nature trail area with steep grade change. There is a water tower at the end of Dodge Street at the top of the hill and residents along all boundaries at the bottom.
- 2. Forest Street Right of Way:** No trail entrance was observed at this location during our site visit. It may be worth further investigation to determine the feasibility/desireability to add/improve a trail head here.
- 3. Washington Street:** This location has the greatest potential for entrance signage with the greatest visibility to the surrounding neighborhood, but pedestrian access is somewhat limited by the absence of sidewalks.
- 4. End of Gay Street:** Quiet dead-end street with an old existing sign that is not clearly visible from the street.
- 5. End of Carl Road:** Current stairs would need to be assessed and possibly rebuilt and signage added. Retaining wall on neighboring house would give good buffer for parking on this dead end.
- 6. Brand Street at Paper Street:** Quiet street with no existing signage.



**ENTRANCE IMPROVEMENTS**

Work areas at each entrance will be limited to signage improvements.

**ACCESS POINT:  
WASHINGTON STREET**

**ACCESS POINT:  
FOREST STREET  
RIGHT OF WAY**

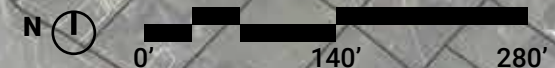
**ACCESS POINT:  
END OF GAY STREET**

**ACCESS POINT:  
BRAND STREET AT PAPER STREET**

**ACCESS POINT:  
END OF CARL ROAD**

# Conditions Assessment

Turkey Hill Access Areas



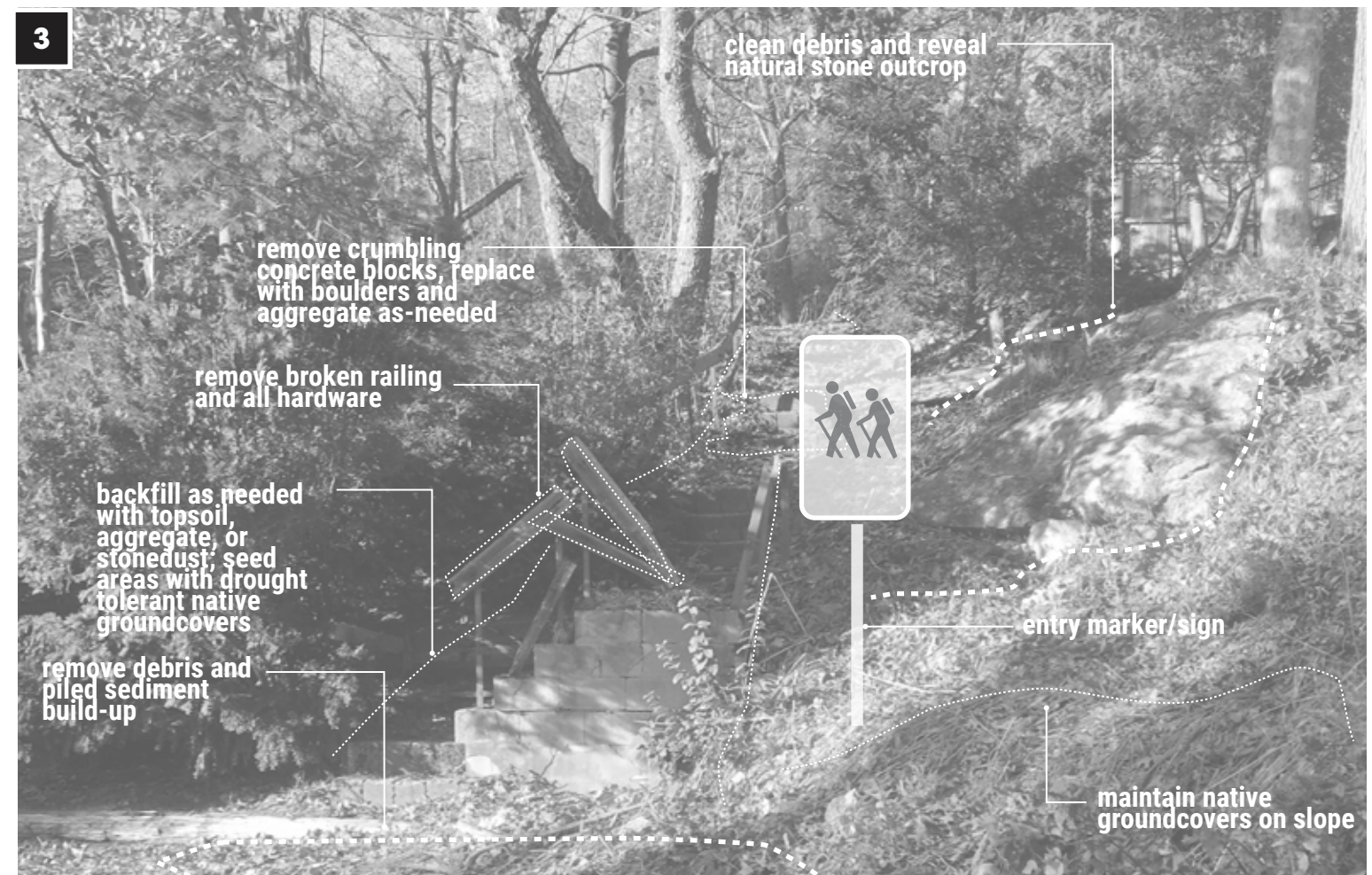
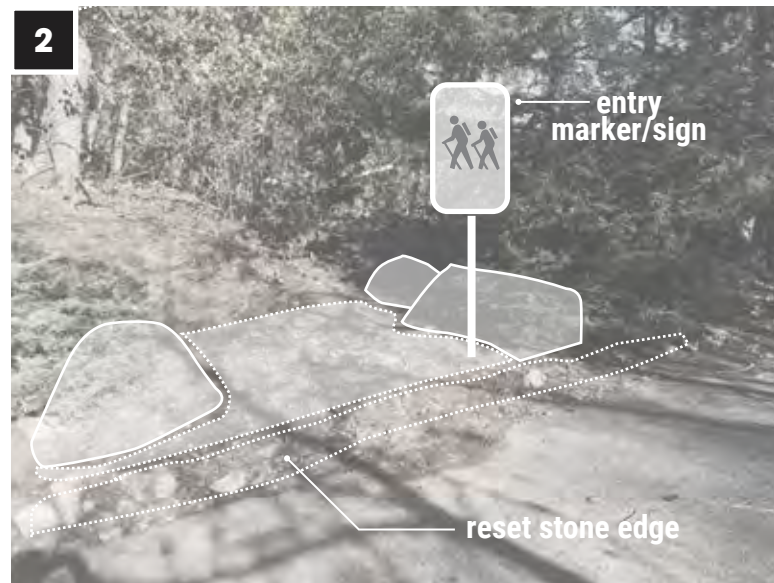
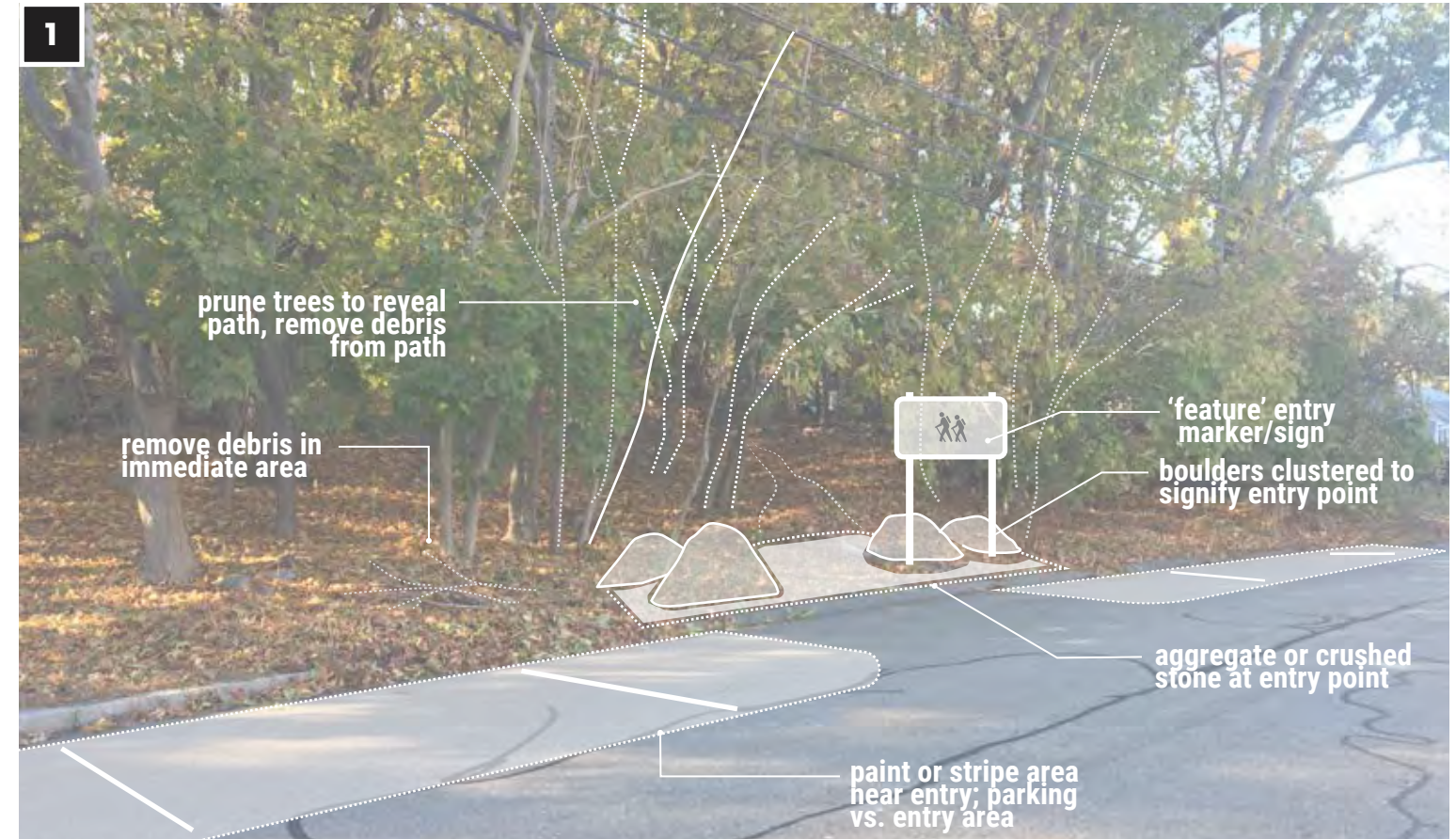
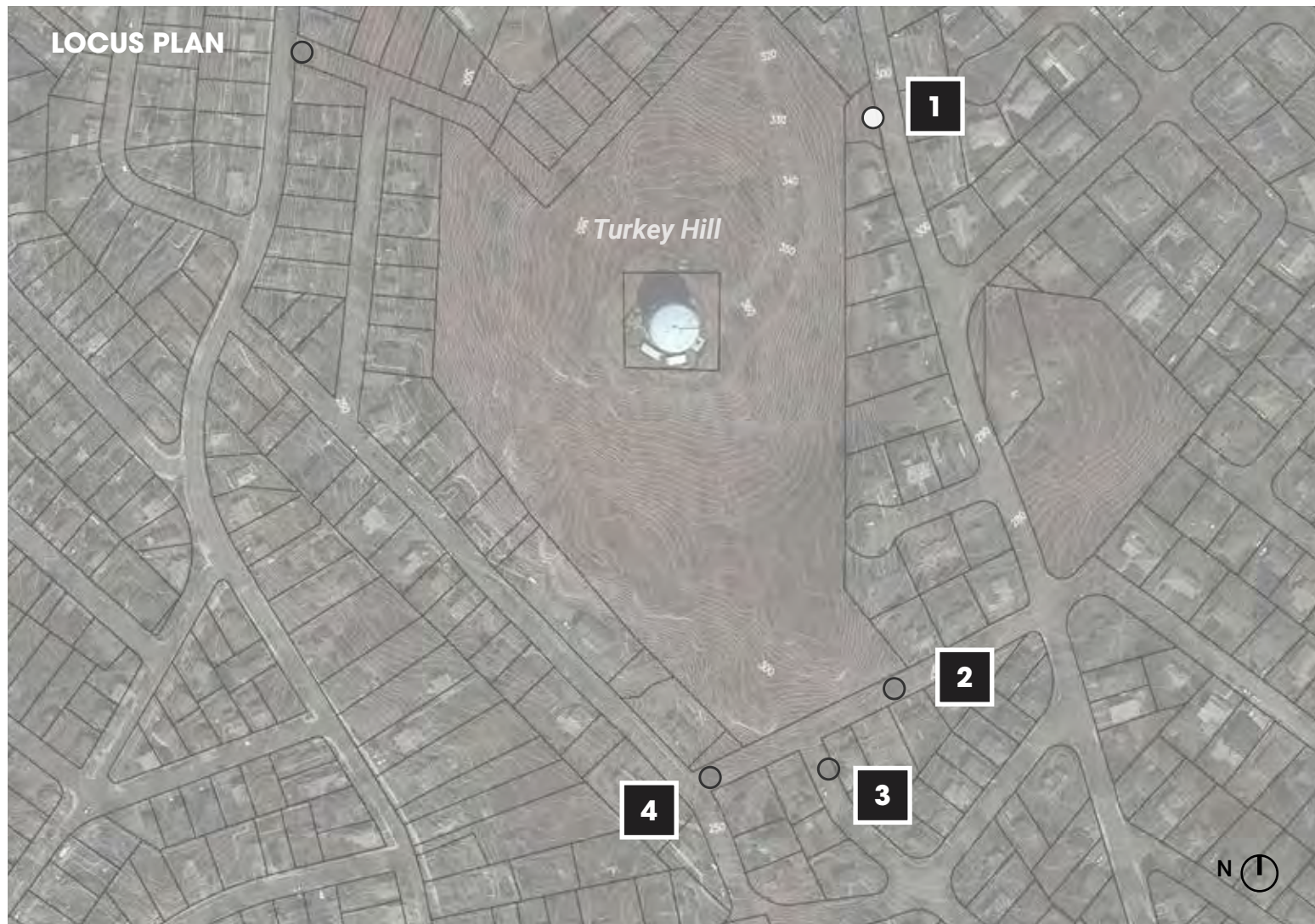




# Precedents

## Turkey Hill Access Areas





# Conceptual Masterplan/Sketches

## Turkey Hill Access Areas







# Opinion of Probable Project Costs:



PROJECT: Arlington Field and Playground Feasibility Study  
 PROJ #: 210801854  
 STATUS: Conceptual Design  
 DATE: 2/9/2021

226 Causeway Street  
 Boston, MA 02114

**NOTE:**  
 Due to the inflationary and unpredictable construction climate, this opinion of probable costs may not represent the actual cost of construction.

## Turkey Hill

Item #	Item/Remarks	Notes	Total	Unit	Unit Cost	Cost	Subtotal
<b>ITEMIZED OPINION OF PROBABLE CONSTRUCTION COSTS</b>							
<b>00001</b>	<b>Site Preparation and Demolition / Earthwork</b>						<b>\$1,500.00</b>
1	Mobilization		1	ALLOW	\$1,000.00	\$1,000.00	
2	Demolition ( removal of existing signage and any clearing for signage installation)		1	ALLOW	\$500.00	\$500.00	
	<b>Subtotal</b>					<b>\$1,500.00</b>	
<b>00002</b>	<b>Sign Improvements</b>						<b>\$14,000</b>
1	Washington Street Entrance Signage		1	ALLOW	\$2,500.00	\$2,500.00	
2	Gay Street Signage		1	ALLOW	\$750.00	\$750.00	
3	Brand Street Signage		1	ALLOW	\$750.00	\$750.00	
4	Carl Road Signage & Stair Improvements		1	ALLOW	\$10,000.00	\$10,000.00	
	<b>Subtotal</b>					<b>\$14,000.00</b>	
	<b>Subtotal:</b>						<b>\$15,500</b>
	<b>4% General Conditions</b>						<b>\$620</b>
	<b>8% Contractors Overhead and Profit</b>						<b>\$1,240</b>
	<b>6% Price Escalation for FY '24</b>						<b>\$930</b>
	<b>CONSTRUCTION SUBTOTAL:</b>						<b>\$18,290</b>
<b>00003</b>	<b>Consulting Costs</b>						<b>\$4,500.00</b>
1	Design & Construction Administration		1	ALLOW	\$4,500.00	\$4,500.00	
	<b>Subtotal</b>					<b>\$4,500.00</b>	
	<b>DESIGN &amp; CONSTRUCTION SUBTOTAL:</b>						<b>\$22,790</b>
	<b>10% Construction Contingency</b>						<b>\$1,829</b>
	<b>TOTAL OPINION OF PROBABLE PROJECT COSTS</b>						<b>\$24,619</b>

# Cost Estimate

## Turkey Hill Access Areas

A large, stylized orange graphic element that resembles the number '13' is positioned on the left side of the page. The '1' is a vertical bar, and the '3' is a large, rounded shape with a central cutout. The text 'Thorndike Off-Leash Area' is overlaid on this graphic.

# **Thorndike Off-Leash Area**







## Assessment Notes

- Busy dog park requires an **expansion** of the footprint, possibly into the adjoining field.
- Issue with **rice stone migrating** out of dog park needs to be considered.
- Improvements to **ADA accessibility** are necessary to and from access points and benches. Current stabilized stone dust **paths** have been causing maintenance issues such as pooling.
- Conservation Commission was heavily involved in initial build because of wetland adjacency.
- Keep shade trees and add more if feasible.
- Big rocks under center tree fall out often and get mixed into rice stone (constant maintenance issue).
- Arlington has a study by the Institute for Human Centered Design to look at.
- Retaining edge for stone is not sufficient, about 18,000 sf of rice stone needs to be replaced every year.

## Photo Legend

- 1. General Overview:** Thorndike dog park is approximately 17,900 sf and located along the Minuteman Bikeway and next to Thorndike Field. There is a 'Small Dog' area and 'All Dog' area.
- 2. Accessibility:** ADA accessibility is lacking due to rice stone surfacing. Stabilized stone dust paths with wood or composite edging was put in for access to two benches. This is a destination park opposed to neighborhood park. Accessible from driving and parking in adjacent lots or biking or walking along bikeway.
- 3. Furnishings:** Seating options around tree are the most popular gathering spot, but aren't ADA accessible.
- 4. Edges:** The dog park is fenced on all sides. Thorndike Field borders one side, while the bikeway the other. The back boundary is heavily planted and creates a barrier to Route 2.
- 5. Traffic:** Dog park gets very busy on weekends. There was an issue with traffic flow in and out of the 2-gate entry/exit vestibules. These were changed to one-ways with signage and has improved the busy flow times.
- 6. Materials:** High water table is causing rice stone to migrate away from edges. Irrigation helps the cleanliness and dust control of the rice stone. Dogs rip up weed fabric under stone and it gets removed in pieces (doesn't seem necessary with dog urine).



**POSSIBLE EXPANSION**

Dog Park can be expanded into field as long as there is still player warm up space. Can potentially combine small and all dog area and move new small dog area on field side

**ADD SHADE TREES WHERE POSSIBLE**

Add supplemental shade trees where possible to increase canopy coverage and/or replace legacy trees.

**ACCESS POINTS**

Improve accessibility at entrances/exits for ease of traffic flow. Maintain one-way flow.

**PATHWAY IMPROVEMENTS**

Paths need new material such as flexible. Stabilized stone dust puddles and edges need to be replaced often.

**ADD MORE ACCESSIBLE BENCHES**

These will need pathways to access benches if main surface material will continue to be rice stone

**NEW RETAINING EDGE**

Current edge is not retaining rice stone. Need to look into other options of material and/or edging.

**FENCE LINE**

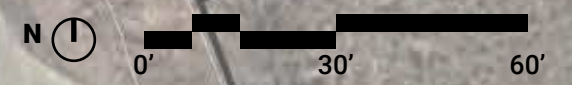
APPROXIMATE LIMIT OF WORK

MINUTEMAN BIKEWAY

WETLANDS

ROUTE 2

**Conditions Assessment**  
Thorndike Off-Lease Area



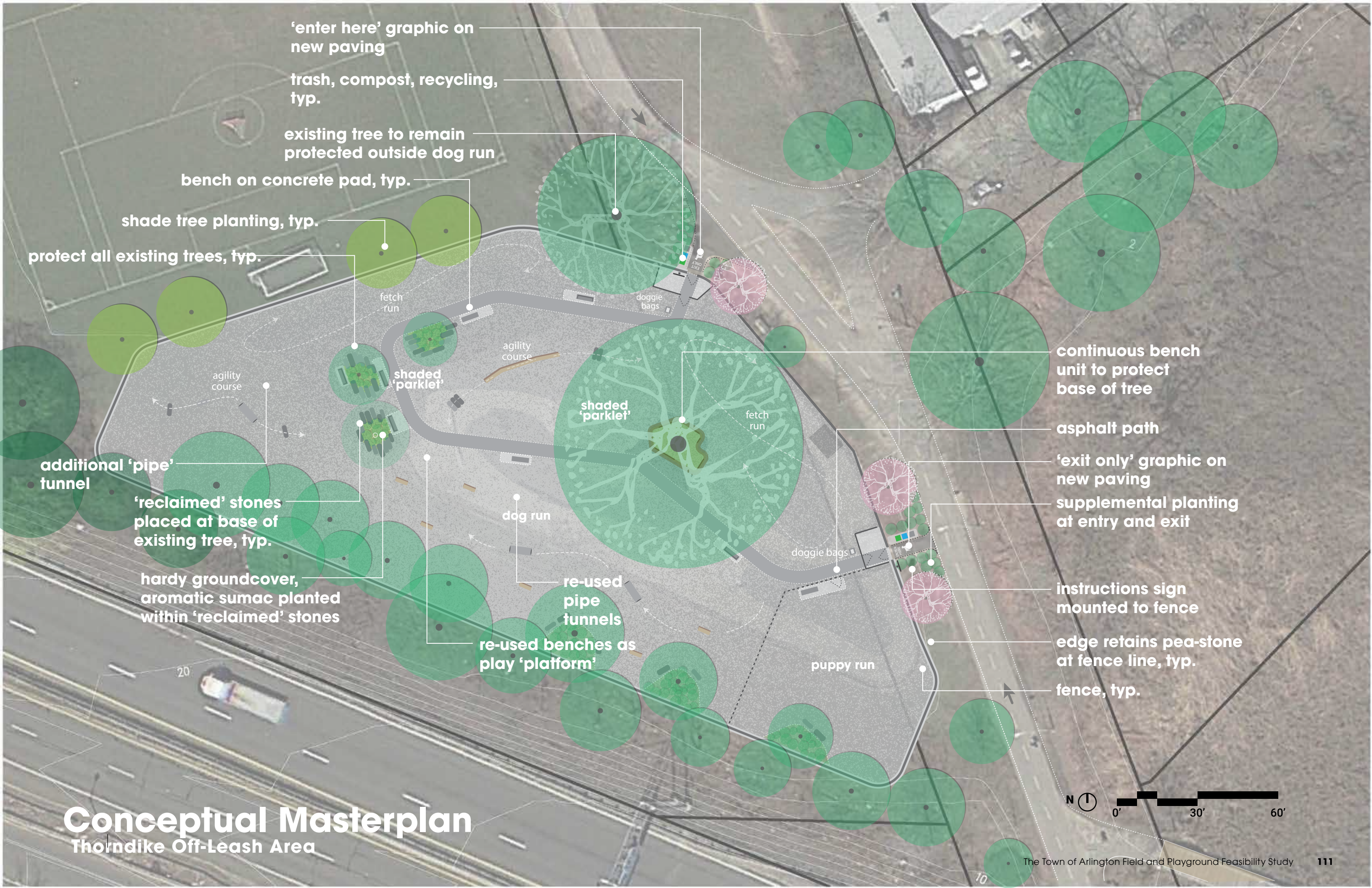




# Precedents

Thorndike Off-Leash Area





'enter here' graphic on new paving

trash, compost, recycling, typ.

existing tree to remain protected outside dog run

bench on concrete pad, typ.

shade tree planting, typ.

protect all existing trees, typ.

fetch run

doggie bags

agility course

shaded parklet

shaded parklet

fetch run

additional 'pipe' tunnel

'reclaimed' stones placed at base of existing tree, typ.

hardy groundcover, aromatic sumac planted within 'reclaimed' stones

dog run

re-used pipe tunnels

re-used benches as play 'platform'

doggie bags

puppy run

continuous bench unit to protect base of tree

asphalt path

'exit only' graphic on new paving

supplemental planting at entry and exit

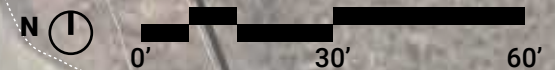
instructions sign mounted to fence

edge retains pea-stone at fence line, typ.

fence, typ.

# Conceptual Masterplan

Thorndike Off-Leash Area









# Opinion of Probable Project Costs:



PROJECT: Arlington Field and Playground Feasibility Study  
 PROJ #: 210801854  
 STATUS: Conceptual Design  
 DATE: 2/9/2021

226 Causeway Street  
 Boston, MA 02114

**NOTE:**

Due to the inflationary and unpredictable construction climate, this opinion of probable costs may not represent the actual cost of construction.

## Thorndike Off Leash Area

Item #	Item/Remarks	Notes	Total	Unit	Unit Cost	Cost	Subtotal
<b>ITEMIZED OPINION OF PROBABLE CONSTRUCTION COSTS</b>							
<b>00001</b>	<b>Site Preparation and Demolition / Earthwork</b>						<b>\$32,250.00</b>
1	Mobilization		1	ALLOW	\$10,000.00	\$10,000.00	
2	Remove and Dispose fabric under stone, pathways, etc.		1	ALLOW	\$5,000.00	\$5,000.00	
3	Remove and Stockpile benches		1	ALLOW	\$1,500.00	\$1,500.00	
4	Remove and Dispose CLF		1	ALLOW	\$3,500.00	\$3,500.00	
5	Remove and Stockpile CLF fabric only		1	ALLOW	\$2,500.00	\$2,500.00	
6	Strip and Dispose Existing Sod & Topsoil (assume 8")		400	CY	12.00	\$4,800.00	
7	Construction Fence		650	LF	\$5.00	\$3,250.00	
8	Tree Protection Fence		100	LF	\$5.00	\$500.00	
9	Erosion and Sedimentation Control		200	LF	\$6.00	\$1,200.00	
	<b>Subtotal</b>					<b>\$32,250.00</b>	
<b>00002</b>	<b>Dog Park</b>						<b>\$137,718</b>
1	Agility Course Materials		1	ALLOW	\$25,000.00	\$25,000.00	
2	Rice stone - 6" depth (16,000 sf)		296	CY	\$75.00	\$22,200.00	
3	Drainage Stone - 4" depth (16,000 sf)		197	CY	\$40.00	\$7,880.00	
4	Rice stone top dressing (over existing footprint)		15,775	SF	\$0.50	\$7,887.50	
5	Rubberized porous path surface		2,500	SF	\$10.00	\$25,000.00	
6	CLF - 4'		375	LF	\$55.00	\$20,625.00	
7	CLF fabric & painting of posts		375	LF	\$15.00	\$5,625.00	
8	Concrete Retaining Curb (entire perimeter)		750	LF	\$15.00	\$11,250.00	
9	Boulders (for new tree protection)		1	ALLOW	\$10,000.00	\$10,000.00	
10	Loaming & Seeding disturbed areas		1,500	SF	1.50	\$2,250.00	
	<b>Subtotal</b>					<b>\$137,717.50</b>	
	<b>Subtotal:</b>						<b>\$169,968</b>
	<b>4% General Conditions</b>						<b>\$6,799</b>
	<b>8% Contractors Overhead and Profit</b>						<b>\$13,597</b>
	<b>6% Price Escalation for FY '24</b>						<b>\$10,198</b>
	<b>CONSTRUCTION SUBTOTAL:</b>						<b>\$200,562</b>
<b>00003</b>	<b>Consulting Costs</b>						<b>\$27,500.00</b>
1	Design & Construction Administration		1	ALLOW	\$24,000.00	\$24,000.00	
2	Survey		1	ALLOW	\$3,500.00	\$3,500.00	
3	Permitting		0	ALLOW	\$0.00	\$0.00	
	<b>Subtotal</b>					<b>\$27,500.00</b>	
	<b>DESIGN &amp; CONSTRUCTION SUBTOTAL:</b>						<b>\$228,062</b>
	<b>10% Construction Contingency</b>						<b>\$20,056</b>
	<b>TOTAL OPINION OF PROBABLE PROJECT COSTS</b>						<b>\$248,118</b>

<b>00004</b>	<b>ALTERNATE #1 : Plantings</b>						<b>\$10,990</b>
1	Hardy Perennials		133	EA	\$30.00	\$3,990.00	
2	Deciduous Trees		7	EA	\$1,000.00	\$7,000.00	
	<b>Subtotal</b>					<b>\$10,990.00</b>	

<b>00005</b>	<b>ALTERNATE #2 : Site Furnishings</b>						<b>\$21,750</b>
1	Bench w. conc. pad		7	EA	\$2,250.00	\$15,750.00	
2	Trash Receptacles		2	EA	\$1,500.00	\$3,000.00	
3	Signage & Dog Bag Dispensers		1	ALLOW	\$3,000.00	\$3,000.00	
	<b>Subtotal</b>					<b>\$21,750.00</b>	

# Cost Estimate

## Thorndike Off-Leash Area



# Appendices





# Appendix A

## Full Soils Analysis







**MATERIALS TEST REPORT FOR**  
Arlington

Turf & Soil Diagnostics

REPORT TO: Stantec Consulting  
Josh Atkinson  
226 Causeway Street, 6th Floor  
Boston, MA 02114

DATE RECEIVED: Oct-26-2020  
REPORT DATE: Nov-03-2020  
CONDITION OF SAMPLE: Normal

**PARTICLE SIZE (ASTM F1632)**

Lab ID#	Sample Name	Gravel %			Soil Separate* %			Sieve Size / Sand Fraction Sand Particle Diameter % Retained				
		1/4" 6.3 mm	No. 5 4.0 mm	No. 10 2.0 mm	Sand	Silt	Clay	No. 18 V. Coarse 1.0 mm	No. 35 Coarse 0.50 mm	No. 60 Medium 0.25 mm	No. 140 Fine 0.10 mm	No. 270 V. Fine 0.05 mm
46403-1	Hurd Field	0.0	0.8	1.5	51.7	37.9	10.4	5.1	10.0	13.3	13.6	9.7
46403-2	Poets Corner Field	0.2	1.4	2.2	58.0	30.8	11.2	5.6	13.6	16.5	14.6	7.8
46403-3	Scannell Field	1.6	1.9	2.1	66.3	26.5	7.2	3.8	7.0	14.2	24.3	17.0

**pH / ORGANIC MATTER / TEXTURAL CLASS**

Lab ID#	Sample Name					pH <sup>1</sup>	% Organic Matter <sup>2</sup> Dry Weight	Textural Class
46403-1	Hurd Field					4.5	8.31	Loam
46403-2	Poets Corner Field					4.3	11.79	Sandy Loam
46403-3	Scannell Field					5.7	3.81	Sandy Loam

\*ASTM F1632 Method B

<sup>1</sup>ASTM D4972, method A, CaCl<sub>2</sub>, 25 g sample used

<sup>2</sup>ASTM F1647 Method A

Data reported using USDA definitions of soil classification

Samples were tested as received and comments pertain only to the samples shown.

This report may not be reproduced except in full without written permission from Turf & Soil Diagnostics, Inc.

Samples were received with a transmittal letter.

Reviewed by \_\_\_\_\_  
Digitally signed by Duane Otto  
Date: 2020.11.03 12:16:48 -0500





Turf & Soil Diagnostics

**MATERIALS TEST REPORT FOR  
Arlington**



**REPORT TO:** Stantec Consulting  
Josh Atkinson  
226 Causeway Street, 6th Floor  
Boston, MA 02114

**DATE RECEIVED:** Oct-26-2020  
**DATE REPORTED:** Nov-3-2020  
**CONDITION OF SAMPLE:** Normal

**PHYSICAL PROPERTIES\***

Lab ID#	Sample Name	Particle Density** g/cc	Infiltration Rate in/hr	Bulk Density g/cc	Total Pore Space %
46403-1	Hurd Field	2.54	0.8	1.12	55.9
46403-2	Poets Corner Field	2.42	1.6	0.94	61.4
46403-3	Scannell Field	2.66	0.2	1.40	47.4

Tension (cm)	Hurd Field			Poets Corner Field			Scannell Field		
	Capillary Porosity %	Non-Capillary Porosity %	Degree of Saturation %	Capillary Porosity %	Non-Capillary Porosity %	Degree of Saturation %	Capillary Porosity %	Non-Capillary Porosity %	Degree of Saturation %
0	55.9	0.0	100.0	61.4	0.0	100.0	47.4	0.0	100.0
30	54.9	1.1	98.1	58.1	3.3	94.6	46.2	1.2	97.5
40	52.0	3.9	93.0	54.1	7.3	88.2	44.7	2.6	94.5
60	49.0	6.9	87.6	50.2	11.2	81.8	42.7	4.7	90.2

\*ASTM F1815 with water release. Saturated Hydraulic Conductivity (K-SAT) with compaction energy reduced to 5.75 ft lb/sq inch. Field infiltration rates may be lower, if soil is more heavily compacted than lab test conditions.

\*\*ASTM D5550

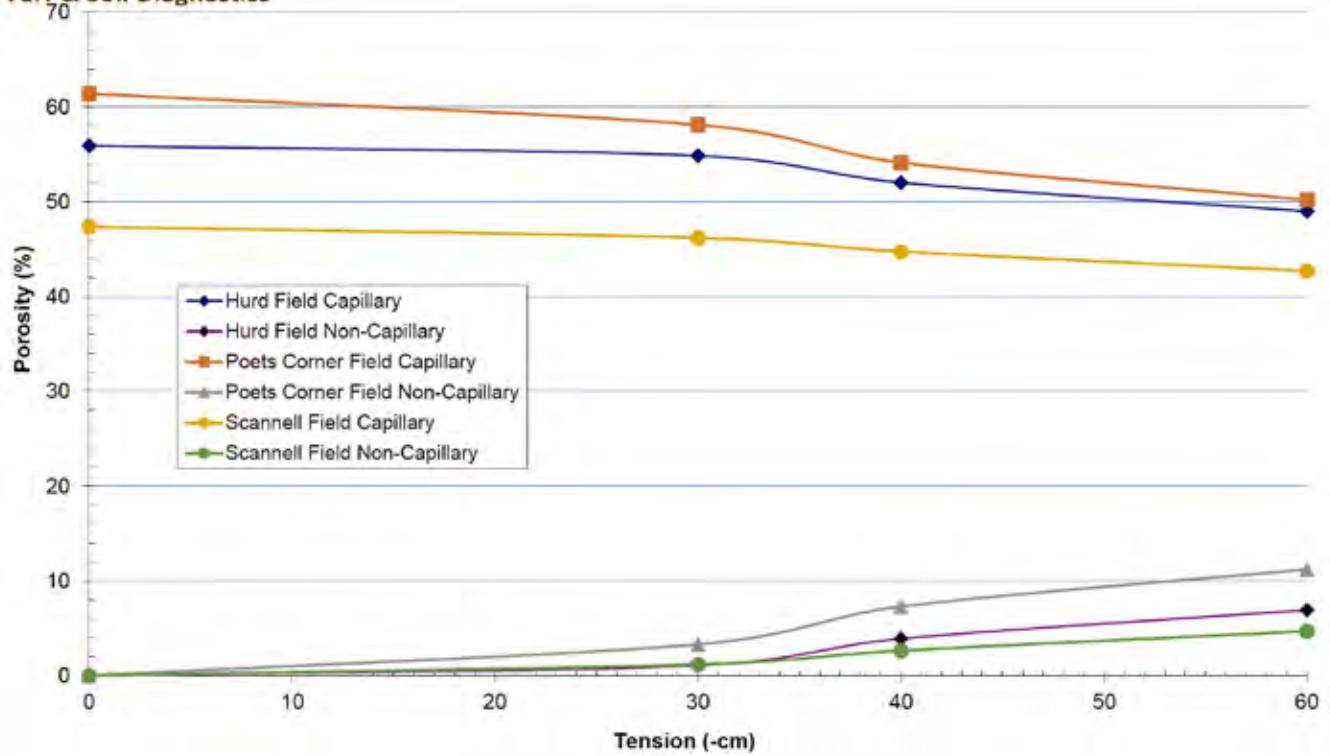
Samples were tested as received and comments pertain only to the samples shown.  
This report may not be reproduced in part, but only in full.  
Samples were received with a transmittal letter.

Reviewed by Duane Otto  
Digitally signed by Duane Otto  
Date: 2020.11.03 12:16:43 -0500'



# Arlington Water Release Curve File #46403

## Turf & Soil Diagnostics







**Turf & Soil Diagnostics**

November 3, 2020

Stantec Consulting  
Arlington  
TSD File #46403

Enclosed are the laboratory results of the soil samples from Hurd Field, Poets Corner Field, and Scannell Field. Nutrient testing was performed by Waypoint Laboratories and these results are attached with fertilizer recommendations.

The Hurd Field sample is classified as loam per the USDA textural classification scheme. The Poets Corner Field and Scannell Field samples are classified as sandy loam. These types of soils typically provide good nutrient and water retention.

The pH values are lower than desired for most turfgrass. The organic matter contents of the Hurd Field and Poets Corner Field samples are higher than typically desired for turfgrass. The organic matter content of the Scannell Field sample is acceptable as it is within the 3-5% range typically recommended for turfgrass.

The performance results indicate the three soils have very low infiltration rates. Internal drainage should not be expected and surface drainage through proper slopes will likely be required to remove excess water.

Total porosity is comprised of air-filled (aeration) and water-filled (capillary) pore space. Aeration porosity is made up of relatively large pores that conduct water under saturated conditions. When drained, they are filled with air providing the oxygen necessary for root growth. Capillary porosity is made up of small pores that hold water against the force of gravity, retaining much of it for plant use.

As requested, a water release study was conducted on these samples to assess performance. The water release study was performed at 30 to 60 cm tensions. The 30 cm test results are at the tension tested for USGA greens. At all tested tensions, the samples have high capillary porosity and low aeration porosity.

If the soil is used as is, care should be taken during any renovation or construction work to prevent excessive compaction. The soil shouldn't be handled when wet. Equipment with low ground pressure is recommended for the placement and grading of the soil.

Please let us know if you have any questions or are in need of further assistance. Samples are generally kept on the premises for 45 days after report date. Thank you for using Turf & Soil Diagnostics, Inc.

Duane Otto

Digitally signed by Duane Otto  
Date: 2020.11.03  
12:16:36 -0500

Duane K. Otto  
Vice President

Page 4 of 4

## SOIL ANALYSIS

Client : Turf & Soil Diagnostics - NY 35 King Street Trumansburg NY 14886	Grower : Stantec 46403	Report No: 20-303-0579 Cust No: 40751 Date Printed: 10/30/2020 Date Received : 10/29/2020 PO: Page : 1 of 1
--	------------------------------	--

Lab No: 06133

Field:

Sample ID: Hurd

Test	Method	Results	SOIL TEST RATINGS					Calculated Cation Exchange Capacity
			Very Low	Low	Medium	Optimum	Very High	
Soil pH	1:1	5.0						8.8 meq/100g
Buffer pH	SMP	6.57						%Saturation
Phosphorus (P)	M3	132 ppm						%sat meq
Potassium (K)	M3	142 ppm						K 4.1 0.4
Calcium (Ca)	M3	728 ppm						Ca 41.4 3.6
Magnesium (Mg)	M3	135 ppm						Mg 12.8 1.1
Sulfur (S)	M3	29 ppm						H 40.9 3.6
Boron (B)	M3	0.5 ppm						Na 0.7 0.1
Copper (Cu)	M3	4.2 ppm						
Iron (Fe)	M3	196 ppm						K/Mg Ratio: 0.32
Manganese (Mn)	M3	11 ppm						Ca/Mg Ratio: 3.23
Zinc (Zn)	M3	7.0 ppm						
Sodium (Na)	M3	15 ppm						
Soluble Salts								
Organic Matter	LOI	7.3% ENR 146						
Nitrate Nitrogen								

## SOIL FERTILITY GUIDELINES

Crop : Athletic Field

Yield Goal : 0

Rec Units:

LB/1000 SF

(lbs)	LIME	(tons)	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Mg	S	B	Cu	Mn	Zn	Fe
98			3.5	0	3.0	0	0	0	0	0.05	0	0
Crop :										Rec Units:		

Comments :

### Athletic Field

Limestone application is targeted to bring soil pH to 6.2.

- Apply the amount of lime recommended in first page to raise pH
- For existing lawns, lime applications should NOT exceed 50 pounds per 1000 sq. feet per application. Split and apply every 4 to 6 month until the recommended amount is completed.

The amount of fertilizer recommended in the first page is the total amount needed for the entire growing season. Split into 3-4 applications to keep the athletic field green and prevent fertilizer loss. Custom blend is best to meet exactly the requirement, if this is impossible, the above specific fertilizer application is a general guideline, if the specified grades can not be found, replace with fertilizer having similar N:P:K ratio. The best time to apply fertilizer for cool season grass (bluegrass, fescue, ryegrass) is in the fall when grass is growing. For the Mid-Atlantic and the Midwest region the best time to apply fertilizer is from early September to early November. For Northeast region the time is from mid August to October. Fall application should start as soon as the day time high temperature is below 80-85F, apply with the interval of one month. If you start late in the Fall, apply the remaining in the Fall of next year. Spring application can start as soon as the grass starts to grow in April. In the case of exceptional warm Spring, or the grass look pale, the application can be made earlier.



**SOIL ANALYSIS**

Client : Turf & Soil Diagnostics - NY 35 King Street Trumansburg NY 14886	Grower : Stantec 46403	Report No: 20-303-0581 Cust No: 40751 Date Printed: 10/30/2020 Date Received : 10/29/2020 PO: Page : 1 of 1
--	------------------------------	--

Lab No: 06136

Field:

Sample ID: Scannell

Test	Method	Results	SOIL TEST RATINGS					Calculated Cation Exchange Capacity
			Very Low	Low	Medium	Optimum	Very High	
Soil pH	1:1	5.9						8.3 meq/100g
Buffer pH	SMP	6.79						%Saturation
Phosphorus (P)	M3	102 ppm						%sat meq
Potassium (K)	M3	84 ppm						K 2.6 0.2
Calcium (Ca)	M3	1080 ppm						Ca 65.1 5.4
Magnesium (Mg)	M3	134 ppm						Mg 13.5 1.1
Sulfur (S)	M3	18 ppm						H 16.9 1.4
Boron (B)	M3	0.4 ppm						Na 1.9 0.2
Copper (Cu)	M3	3.5 ppm						
Iron (Fe)	M3	162 ppm						K/Mg Ratio: 0.19 <input type="checkbox"/>
Manganese (Mn)	M3	12 ppm						Ca/Mg Ratio: 4.82 <input type="checkbox"/>
Zinc (Zn)	M3	4.2 ppm						
Sodium (Na)	M3	36 ppm						
Soluble Salts								
Organic Matter	LOI	2.9% ENR 77						
Nitrate Nitrogen								

**SOIL FERTILITY GUIDELINES**

Crop : Athletic Field

Yield Goal : 0

Rec Units:

LB/1000 SF

(lbs)	LIME	(tons)	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Mg	S	B	Cu	Mn	Zn	Fe
30			3.5	0	5.0	0	0.38	0	0	0.05	0	0
Crop :										Rec Units:		

Comments :

**Athletic Field**

Limestone application is targeted to bring soil pH to 6.2.

- Apply the amount of lime recommended in first page to raise pH

The amount of fertilizer recommended in the first page is the total amount needed for the entire growing season. Split into 3-4 applications to keep the athletic field green and prevent fertilizer loss. Custom blend is best to meet exactly the requirement, if this is impossible, the above specific fertilizer application is a general guideline, if the specified grades can not be found, replace with fertilizer having similar N:P:K ratio. The best time to apply fertilizer for cool season grass (bluegrass, fescue, ryegrass) is in the fall when grass is growing. For the Mid-Atlantic and the Midwest region the best time to apply fertilizer is from early September to early November. For Northeast region the time is from mid August to October. Fall application should start as soon as the day time high temperature is below 80-85F, apply with the interval of one month. If you start late in the Fall, apply the remaining in the Fall of next year. Spring application can start as soon as the grass starts to grow in April. In the case of exceptional warm Spring, or the grass look pale, the application can be made earlier.

**SOIL ANALYSIS**

Client : Turf & Soil Diagnostics - NY 35 King Street Trumansburg NY 14886	Grower : Stantec 46403	Report No: 20-303-0580 Cust No: 40751 Date Printed: 10/30/2020 Date Received : 10/29/2020 PO: Page : 1 of 1
--	------------------------------	--

Lab No: 06135

Field:

Sample ID: Poets

Test	Method	Results	SOIL TEST RATINGS					Calculated Cation Exchange Capacity		
			Very Low	Low	Medium	Optimum	Very High	%sat	meq	
Soil pH	1:1	4.7						<b>10.0 meq/100g</b>		
Buffer pH	SMP	6.43						<b>%Saturation</b>		
Phosphorus (P)	M3	82 ppm						K	4.0	0.4
Potassium (K)	M3	156 ppm						Ca	37.8	3.8
Calcium (Ca)	M3	755 ppm						Mg	7.3	0.7
Magnesium (Mg)	M3	87 ppm						H	50.0	5.0
Sulfur (S)	M3	36 ppm						Na	0.8	0.1
Boron (B)	M3	0.8 ppm						<b>K/Mg Ratio: 0.55</b>		
Copper (Cu)	M3	5.4 ppm						<b>Ca/Mg Ratio: 5.18</b>		
Iron (Fe)	M3	308 ppm								
Manganese (Mn)	M3	32 ppm								
Zinc (Zn)	M3	19.4 ppm								
Sodium (Na)	M3	18 ppm								
Soluble Salts										
Organic Matter	LOI	9.6% ENR 150								
Nitrate Nitrogen										

**SOIL FERTILITY GUIDELINES**

Crop : Athletic Field

Yield Goal : 0

Rec Units:

LB/1000 SF

(lbs)	LIME	(tons)	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Mg	S	B	Cu	Mn	Zn	Fe
137			3.5	0.5	2.0	0	0	0	0	0	0	0
<b>Crop :</b>												<b>Rec Units:</b>

Comments :

**Athletic Field**

Limestone application is targeted to bring soil pH to 6.2.

- Apply dolomitic lime to raise pH and improve the magnesium level.
- Apply the amount of lime recommended in first page to raise pH
- For existing lawns, lime applications should NOT exceed 50 pounds per 1000 sq. feet per application. Split and apply every 4 to 6 month until the recommended amount is completed.

The amount of fertilizer recommended in the first page is the total amount needed for the entire growing season. Split into 3-4 applications to keep the athletic field green and prevent fertilizer loss. Custom blend is best to meet exactly the requirement, if this is impossible, the above specific fertilizer application is a general guideline, if the specified grades can not be found, replace with fertilizer having similar N:P:K ratio. The best time to apply fertilizer for cool season grass (bluegrass, fescue, ryegrass) is in the fall when grass is growing. For the Mid-Atlantic and the Midwest region the best time to apply fertilizer is from early September to early November. For Northeast region the time is from mid August to October. Fall application should start as soon as the day time high temperature is below 80-85F, apply with the interval of one month. If you start late in the Fall, apply the remaining in the Fall of next year. Spring application can start as soon as the grass starts to grow in April. In the case of exceptional warm Spring, or the grass look pale, the application can be made earlier.







[stantec.com](http://stantec.com)



**Design with Community in Mind**