

APPLICATION FOR COMMUNITY PRESERVATION FUNDING

Submit to Community Preservation Committee
c/o Community Preservation Coordinator
Hanover Town Hall
550 Hanover Street, Hanover, MA 02339
Tel: 781-826-7730 Fax: 781-826-5950

The application deadline is November 18, 2009 at 4pm.

Name of Applicant¹ Town of Hanover . Parks and Recreation Committee

Name of Co-Applicant, if Applicable _____

Contact Name Victor J. Diniak, DPW Superintendent

Mailing Address 40 Pond Street City Hanover State MA Zip 02339

Daytime Phone 781-826-3189 Email vdiniak@hanoverdpw.org

Name of Proposal King Street Recreation Complex . Phase II Construction Activities

Address of Proposal (or assessor's parcel id) Assessors Map 67 Lot 001

CPA Category (circle all that apply):

Open space

Historic preservation

Affordable Housing

Recreation

CPA Funding Requested \$1,600,000.00

Total Cost of Proposed Project \$1,600,000.00

If project is expected to continue over more than one year or if bonding the project is anticipated detail the cost of project on the following chart (explanation may be attached on a separate sheet.)

Fiscal Year	CPC Funds Requested	Total Cost	Other Funding Sources
2011	\$1,600,000.00	\$1,600,000.00	N/A
2012			
2013			
2014			
Total	\$1,600,000.00	\$1,600,000.00	

PROJECT DESCRIPTION: Attach answers to the following questions. Applications will be returned as incomplete if all requested information is not provided. Include supporting materials as necessary.

King Street Recreation Complex – Phase II Construction Activities

1. **Goals:** What are the goals of the proposed project?

Completion of the King Street Recreation Complex

The Town of Hanover purchased the cornfield on King Street adjacent to Forge Pond and subsequently authorized \$2.5 million from the Community Preservation Fund to design and construct the first phase of the King Street Recreation Complex. The Town's recreation master plan conceived this complex as a series of baseball fields, softball fields, soccer/lacrosse fields, walking trails, and open space providing passive and active recreation facilities for people of all ages. Located adjacent to conservation land and Forge Pond, the project provides a unique opportunity to integrate a modern day recreation complex into existing open space to provide a variety of recreational opportunities.

The designers and landscape architects, working closely with Public Works and Parks and Recreation staff, refined the conceptual plan for the facility into what the design team proudly describes as a park with recreation features. Walking trails, open space, and new gardens and trees were blended with the structured baseball, softball, and soccer/lacrosse fields as well as the infrastructure needed to support such a facility. The facility connects to trails and conservation land to the north, west, and southeast, and provides future access to the western shore of Forge Pond while respecting the character of the surrounding neighborhood.

Design of the project focused on understanding the existing conditions such as soils, topography, groundwater, and wetlands and developing basic plans for the permitting and construction of the entire facility, despite the fact that the budget didn't support full construction. The design of the park is such that it provides sufficient infrastructure to support activities that will contribute to the long term maintenance of the facility in a self sustaining manner. Fields have been sized and arranged with adequate on-site parking to support not only normal Town recreation activities such as the programs of the Hanover Youth Athletic Association but also revenue generating tournaments and the Parks and Recreation summer camp program.

The first phase of the project, which is currently under construction, includes three soccer/lacrosse fields, a paved access road, parking for close to 300 cars, utilities (electric, water, cable/telephone), walking trails, a proposed pole barn style of pavilion with bathrooms, a small office and concessions, a picnic area, and a toddler playground similar to the one on B. Everett Hall field. The first phase of construction includes all of the necessary roadway and parking area drainage to comply with state storm water policy. Playing fields have drainage and irrigation to support a healthy grass layer capable of standing up to heavy use.

The second phase of the project, if funded, will be the completion of three little league baseball fields with a small associated parking area and the completion of three softball fields and additional walking trails. When completed, the complex will have approximately a mile of walking trails.

2. **Community Need:** Why is this project needed? Does it address needs identified in existing Town plans?

This project expands the Town's portfolio of structured and unstructured recreation facilities to meet the current and projected needs of the Town's residents. The need for the project was well documented in the Town's recreation master plan. The conceptual design for the park was based upon needs identified by the master plan. While the project has been scaled back slightly to conform with wetlands on the site, the designers remained true to the spirit of the Recreation Master Plan and as such it meets the goals of that plan.

The work proposed for phase II will build upon the work that has been completed to date. In addition to fulfilling the identified needs, the well planned out infrastructure will help alleviate problems that are developing at the Town's other recreation complexes as the Town's recreation programs have grown.

3. **Community Support:** What is the nature and level of support for this project? Include letters of support and any petitions.

General community support for the project has been overwhelming. The Parks and Recreation Committee has tried to provide something for everyone in this design. While it will take two years for the grass to mature to the point where organized athletic programs can be held, the walking trails should become available sometime in 2010. The goal in building the infrastructure and walking trails early in the project has been to provide immediate access to the passive recreation activities provided by the walking trails on the adjacent Conservation properties and to open the community's eyes to the possibility of the site. The general contractor's accelerated schedule in constructing the main facilities of phase I has generate excitement within the community.

4. **Timeline:** What is the schedule for project implementation, including a timeline for all critical milestones?

Upon the securing of funding, the design team will perform additional engineering, expected to take approximately 4 weeks, to package the remaining work into a biddable document with the hopes of advertising the work shortly after the May 2010 Town Meeting. The current recession has presented the Town with an extremely favorable construction environment.

Permits for construction of phase II of this project are already in hand. Based on the progress made in phase I, we anticipate that the major site work for phase II could be completed in the summer of 2010 in time for an early fall planting of grass. Due to logistics, the baseball fields would likely be constructed first, followed by the softball fields. The installation of fencing for the baseball and softball complexes would likely occur in the fall of 2010, around the same time as the planting of grass. Public Works personnel would cut in infields a year later, saving significant money. The phase II facilities would most likely open for play in the spring of 2012.

If approved, the Parks and Recreation Committee expects that preliminary work such as tree clearing could begin using the DPW's annual contracts while general contract documents were finalized with construction beginning shortly after July 1, 2010.

5. **Credentials:** How will the experience of the applicant contribute to the success of this project?

The work would most likely be completed by outside contractors under the supervision of senior public works managers. DPW managers have successfully managed projects of similar scope over their careers with the DPW, including the current phase I construction activities.

6. **Success Factors:** How will the success of this project be measured? Be as specific as possible.

The success of the project will be measured by the many programs that will take place at the facility for years to come in addition to the immeasurable use of the facility by those seeking passive recreation and a connection with nature. It has been a stated goal of the Parks and Recreation Committee and Board of Public Works that the King Street

Recreation Complex be a multi-generational facility. The work that has been done to date has positioned the Town to see this goal become a reality. Without additional funds, the project will grind to a halt with the completion of the phase I work unless an alternate source of funds is identified. While the work that has been completed to date will come on line once grass is fully established, it will take years to complete the project with private fundraising. A generation of children will miss out on the opportunity to utilize these fields as they grow up. The project will likely be more expensive to complete as time moves on as prices increase and nature reclaims the undeveloped areas.

7. **Budget:** What is the total budget for the project and how will CPA funds be spent? All items of expenditure must be clearly identified. Distinguish between hard and soft costs and contingencies. (NOTE: CPA funds may NOT be used for maintenance.)

The current budget request is \$1,600,000.

8. **Other Funding:** What additional funding sources are available, committed, or under consideration? Include commitment letters, if available, and describe any other attempts to secure funding for this project.

Other sources of potential funding include the Town's General Fund, Capital Projects Fund, and private donations. The General Fund or Capital Projects Fund are not likely sources of alternate funding given the town's competing financial needs. Private funding is a possibility, although it is unlikely to come in at a pace needed to complete more than one field at a time. Completing multiple fields is a key component of being able to partially market the facility to provide for future operation and maintenance.

9. **Maintenance:** If ongoing maintenance is required for your project, how will it be funded?

The current plan for on-going maintenance will be to perform such maintenance using revenues generated by Parks and Recreation programs. Maintenance is expected to be performed by Public Works personnel. While it is a large facility, the facility landscaping has been designed to minimize the amount of hand trimming that will be necessary and as such we expect a great deal of work should be possible with large mowers and other automated equipment.

ADDITIONAL INFORMATION: Provide the following additional information, as applicable.

10. Documentation that you have control over the site, such as Purchase and Sale Agreement, option, or deed.

According to the Assessor's records the facility is currently owned by the Town

11. For projects that include construction or rehabilitation, include the existing and proposed site plan, floor plans, elevations, and any other drawings as necessary to visually describe the proposal.

Please see attached GIS document

12. Evidence that the project is in compliance with the zoning ordinance, Architectural Access Board Regulations, or any other laws or regulations. Or, if zoning relief is required, specify what relief is needed and when an application will be made to the Town for zoning review.

Not applicable

13. Evidence that the appropriate Town Boards and Commissions have approved the project (for example, proposed new uses on Parks & Recreation land requires approval from the Parks and Recreation Committee)

The project is currently under construction with an Order of Conditions authorized by the Conservation Commission and a special use permit granted by the Zoning Board of Appeals (ZBA). The ZBA's decision has been appealed by one abutter, but we expect the outstanding issues with this abutter will be resolved shortly as we continue our negotiations with the abutter.

14. Evidence that the proposed site is free of hazardous materials or that there is a plan for remediation in place.

We cannot provide such evidence at this time. Construction activities to date have identified only an area of buried stumps associated with the use of the field as a farm, but these stumps are more of a nuisance than a hazard. These stumps were identified during the project design and have been accounted for in the phase I activities. The phase II construction will take place on drier land. Based on the numerous test pits we have performed to characterize soil conditions, we expect to find no additional surprises as we undertake the phase II construction.

15. Evidence that appropriate professional standards will be followed if construction, restoration or rehabilitation is proposed.

The work has been designed and stamped by a Registered Professional Engineer in accordance with generally accepted engineering standards.

16. Information indicating how this project can be used to achieve additional community benefits.

While the focus of this project is to add to the Town's portfolio of active and passive recreational opportunities, the project significantly contributes to and enhances the Town's open space. The site itself, when it is completed, will be a destination relatively free of structures adjacent to vast areas of undeveloped conservation land. The construction of an access road and parking area 2,000 feet off of a country road (King Street) has opened up this space for the enjoyment of residents of all ages. The field and adjacent conservation land have always been there – access to parcels, however, has been only for the hearty. The organized recreation spaces have been deliberately placed deep into the site and the stone wall adjacent to King Street with its associated vegetation has been preserved to maintain the overall beauty of the site.

Through its construction, the Parks and Recreation and Public Works staff have shown the project to colleagues in other communities. The reaction has been universally one of amazement that the Town of Hanover has such an opportunity. The project is truly a gem and will be a source of pride for the community for years to come.

NOTE: If the requested funds are for a real estate acquisition, an independent appraisal will be required which the applicant will be required to fund. No funding decisions will be made without an independent appraisal.

The application deadline is November 18, 2009 at 4pm.

Appendix A

Excerpts from 2007/2008 Recreation Master Plan

Pages 28-29 Description of general undeveloped site conditions

Pages 36-40 Master Plan Narrative Descriptions of Potential Improvements

Pages 58-62 King Street Property – specific conceptual plan



Town of Hanover
Massachusetts
**PARKS & RECREATION
MASTER PLAN**

2007/2008

Hanover Parks & Recreation
the benefits are endless...



Aerial Images of Study Properties



Weston & Sampson
When it's essential...it's Weston & Sampson.

King Street Property

A recent acquisition by the Town, the King Street property is a 74.47-acre site, with 34.38-acres under the jurisdiction of the Open Space Committee and 40.17-acres under the jurisdiction of the Hanover Parks and Recreation Committee. The area of the site under the jurisdiction of the Parks and Recreation Committee is mainly comprised of open fields that have been historically farmed. Located on King Street in the southwestern portion of town, the site contains attractive natural features (woodlands, wetlands, wildlife and gently rolling terrain). Forge Pond abuts the property to the east and a cranberry bog is located nearby to the northwest.

Facilities and Amenities Provided

At present, no formal recreation programs are offered at the property and there are no facilities. Informal nature trails and connections to other open space resources are provided at various places at the perimeter of the site with linkages to part of the Hanover Greenway and to the nearby cranberry bog.

Topography

The previously farmed section of the site is gently sloping with about a 10' topographic change from the southwest to the northeast at Forge Pond. There are significant topographic changes along the banks of Forge Pond. Undeveloped woodland areas located to the western side of the site contains more dramatic topographic changes, with several small knolls apparent toward interior areas.



Environmental Conditions

The property contains woodlands and wetlands to the west on land that falls mainly under the control of the Open Space Committee. There are also several lower lying, chronically wet areas on the Parks and Recreation Committee portion of the property, however these have not been officially delineated as wetlands as of the date of this report. Development of certain sections of the property will require a wetlands permit from the town's Conservation Commission. Based on initial reviews of available resource material, it appears that no NHESP Priority Habitats are designated within the property.



The Master Plan

Narrative Descriptions of Potential Improvements



General Themes for Improvement

The master planning effort provided a unique opportunity to assess the Town of Hanover's major park, recreation, open space and athletic facility properties for the purposes of developing a series of thoughtful and achievable enhancements that will provide benefits to all members of the community.

In undertaking the planning process and in developing the concept plans, a number of basic, recurring (from site to site) improvement themes became apparent. Included below is a summary of these basic improvement themes, to be implemented potentially at all or most properties as capital improvements are planned and constructed.

Pathways, Trails & Picnic Areas - The preferred master plans call for incorporating new (and upgrading where applicable) pathways, trails and picnic areas at all park locations. These types of passive recreational amenities provide opportunities for enjoyment by residents of all ages, backgrounds and abilities and they compliment the traditional active recreational facilities at a given property. At most sites, pathways could be constructed in a manner that is ADA compliant due to the typically gentle terrains that prevail. Pathways (especially pathways that form a loop around the perimeter of a property) often become one of the most appreciated park amenities and become attractive for walking, jogging, roller blading and biking. The distances of potential new paths around the particular sites vary, however measured markers could be installed to facilitate an individual exercise regimen. The following recommendations are set forth in order to provide user benefits and convenience, and environmental stewardship in conjunction with the installation of new paths and trails.

- Place benches for rest, for interaction at logical social gathering points along pathways and trails, and within other peaceful and attractive settings.
- Install interpretive signage to describe a site's unique environmental, cultural and/or historical characteristics.
- Provide tree plantings to lend greater shade to the pedestrian corridors, to provide enhanced wildlife habitat and to improve overall site aesthetics.
- Provide picnic areas where desired and applicable





New play structures at Park Hill Park, Fitchburg, MA and new swings at Roosevelt Playground - Framingham, MA (right) (Weston & Sampson)

Children's Playgrounds - The user survey process identified the need for Children's playgrounds at each of the properties and correspondingly the preferred master plans call for new or relocated playgrounds. Playgrounds provide a destination for neighborhood children and their parents and as such often become hubs of community life. Playgrounds also provide outlets for the siblings of children involved in other recreational activities (like a baseball, soccer or lacrosse game) at the same property. General recommendations for the proposed play areas at each of the park locations include:

- Installation of new, attractive and exciting play equipment and swing sets for use by various children's age groups
- Installation of new and/or expanded playground infrastructure including edging, surfacing and utilities
- Installation of seating, signage and other furnishings
- Installation of tree planting, landscaping and shade shelters/picnic areas



Photo courtesy of Landscape Structures -Evos™ system which is both physically and mentally more challenging than traditional play structures.

The play areas that are geared for younger children should be enclosed with attractive fence treatments. Safety surfacing must be a combination of poured-in-place rubberized surfacing, in critical fall and landing zones, and an engineered wood fiber for the rest of the playground areas. The new play areas must be compliant with all ADA requirements and with all current safety regulations. In addition to new play equipment, all required utility infrastructure (drainage, sub drainage, water service etc.) must be in place and new site furnishings that include park benches, drinking fountains, signage, trash receptacles, tree planting and related landscaping should be included.

Access and Linkages - Provide new and improved opportunities to access the public properties (by foot or by car), provide convenient and appropriately scaled parking amenities and reduce conflicts between pedestrians and drivers. Provide logical, ADA compliant linkages between various site features and facilities within a given park/school/open space property.

The preferred master plans identify a series of improvements that focus on the primary park entrances and the parking areas near the core of each property. Primary recommendations include the following:

- Potential development of new park entrances. Reconfiguring of drives and parking areas to allow for clearer travel patterns, more clearly defined parking spaces, more efficient use of the space overall and an increase in the quantity of parking spaces.
- Complete reconstruction of the parking areas to include new pavements or porous surfaces, low impact approach to storm drainage, curbing and edges and striping in order to provide ADA compliance and eliminate any badly deteriorated and difficult to maintain existing conditions.
- Installation of traffic calming measures to slow vehicular traffic and to provide for safe movement throughout the area by pedestrians. Measures might include speed bumps, “tabled” (raised) crossings, special surface textures and colors to delineate areas of pedestrian use and traffic related signage.
- Establishment of pedestrian connections from all reconstructed parking areas to provide safe, convenient and ADA compliant access to all major park facilities and park areas.



Pedestrian and maintenance circulation at Princeton Soccer Fields - Princeton, MA (Weston & Sampson)

Support Buildings – Potential locations of park support buildings are indicated on most of the preferred master plans. Support buildings would contain at least restroom and storage accommodations. Where appropriate, slightly larger structures might contain a concession room or office/meeting space. Refer to additional discussion pertaining to the issues surrounding the development of park support buildings that is contained in the Needs Assessment section of this document.



Leary Field, new full size baseball field - Waltham, MA (Weston & Sampson)

Athletic Fields and Courts - The master planning process identified the need for providing new and refurbished athletic facilities (fields, diamonds, courts...) in order to better support the myriad of sports programs that operate within the community. At present, based on participation rates for various activities, there are simply too few fields to accommodate the sheer number of users. The resulting problem is two fold in that certain programs cannot be adequately served and the desired field conditions cannot be maintained due to heavy programming and use. ***This situation is expected to worsen when field facilities go off line in conjunction with a major reconstruction project at Hanover High School.*** To this end, the preferred master plans:

- Recognizes the desire of community members to provide sports facilities that are first-class, that are attractive and that can be maintained with reasonable ease in a manner that fits the Town's (and league's) abilities to operate and maintain such facilities.
- Identifies the need to develop facilities that are properly oriented, properly designed and that contain appropriate setbacks and buffers to ensure user safety.
- Recognizes surrounding land use context and recognizes the need to be a good neighbor by developing safe, attractive park and recreation amenities that respect the needs of abutter property owners.
- Provides perimeter fencing and appropriate gates to enclose the facilities, limit access, control use and to help maintain high quality court, turf and infield surfaces.



New basketball facilities at Sandy Pond Beach, Ayer, MA (left), Bartley-Nolan Playground, Fitchburg, MA (center), Park Hill Park – Fitchburg, MA (left) (Weston & Sampson)

Informal Playing Fields – Within all communities there is always a need for informal play fields for pick up games, less formal practices, kite flying, Frisbee tossing etc. The proposed master plans address these needs as space allows. Also, when not programmed, some fields can be used for open play. The Parks and Recreation Committee may want to limit this use, however, due to the need to occasionally rest the fields.



Basic Park Aesthetics and Inherent Natural Qualities - The preferred master plans identify improvements that help to protect, preserve and enhance the aesthetics and inherent natural qualities and features of a given property and that improve sustainability. Recommendations that focus on improving the overall aesthetics of the park properties include the basic elements listed below. Note that these types of improvements can be implemented as funds become available within certain geographic sections of the parks. It is important to establish a standard that becomes easily recognizable as the Hanover Parks and Recreation “look” or theme for improved overall park aesthetics and for making potential repair, replacement or expansion of a particular facility or feature easier.

- Enhance all park and recreation property edges through the installation of new fencing, tree plantings and associated landscaping.
- Remove, replace and/or otherwise upgrade all interior park fence lines and systems to replace deteriorated systems and to make use of more visually appealing alternatives.

- Enhance and upgrade the settings surrounding buildings and play areas.
- Undertake park-wide planting and vegetation management programs to include the removal of invasive or diseased tree and shrub species, pruning of desirable species and installation of new plantings to lend shade, better define spaces within a park, improve park aesthetics and enhance wildlife habitat.
- Install information and interpretive signage park-wide. Establish a consistent theme that becomes easily recognizable as the Hanover Parks and Recreation motif.
- Install additional site furnishings (benches, picnic tables, shade shelters, trash receptacles, bike racks and the like) park-wide to offer new conveniences to park patrons and to improve park aesthetics.



Utility Upgrades - As capital projects are planned and implemented, it will be important to confirm requirements for utility infrastructure upgrades to ensure that existing systems are replaced in a timely fashion and in a manner that does not disturb recent park improvements, or will not disturb future improvements. Several primary considerations in this regard include:

- Provide wells (where feasible) for new or refurbished bathrooms, concessions and potential field irrigation systems.
- Improve stormwater management systems in order to replace deteriorated facilities and in order to develop stormwater management techniques that are environmentally friendly and appropriate within the context of the particular park setting. In general, new systems should be designed to disperse stormwater within a site and to return stormwater to the soils located below, in lieu of directing untreated runoff to nearby wetlands, roadways or parking areas.
- Provide septic/leach field systems at each property for wastewater disposal.
- Remove overhead electric services to below ground in order to improve site aesthetics and to comply with the requirements of various granting agencies.

The preferred master plans that are contained on the following pages identify the proposed configuration of all site features at each property. It is important to note that the vast majority of recommendations suggest the refinement, enhancement or refurbishment of existing facilities within the properties. However, the plans also recommend the development of a modest level of new facilities and amenities that would provide new or expanded opportunities for public use and enjoyment. Importantly, the potential development of extensive new recreational amenities at the new King Street property creates new opportunities to eliminate problems and conflicts at the other parks and recreation properties.

It is also important to note that the Hanover Parks and Recreation Committee endorsed the preferred master plans and associated scope of improvements through a comprehensive and collaborative design and review meeting process. In addition, the public at large contributed to the development of the plans by offering their advice at several well-attended hearings. The narratives are intended to support the preferred master plans, which graphically depict the basic scope of improvements and which have been included immediately following the respective narratives. The preferred master plans and related descriptions are organized by site, beginning with Briggs Field.

King Street Property

The recently acquired King Street property, formerly known as the Cervelli property, provides the Town with its second largest overall open space and recreational property. The site currently consists of wooded wetland areas with trails and open fields that have historically been farmed. The site provides the Town with a large, already cleared and relatively flat open area, ideal for the development of recreational fields. The preferred plan identifies the opportunity for development of the site into Hanover's premier park and recreation destination. Although at quick glance the plan reads as if it is primarily an athletic complex, the large rectangular fields will ultimately read and appear to passersby as open green grassland. Baseball and softball fields, requiring significant runs of fencing, are kept to the perimeter of the property and buffered by the drive and plantings. This is recommended to maximize the extent of contiguous green space. The entrance drive is also strategically located so that one's first impression of the park is that of open green space with trees interspersed. The park entry experience is greatly enhanced by a "great lawn". The great lawn will allow for open play, small concerts and other less formal activities and also help to reinforce and establish the park-like atmosphere. This element also gives the park a significant identification from King Street. The major elements of the preferred master plan are further described in the sections below.



The preferred plan identifies a balance of passive and active recreational amenities that would complement the unique environmental qualities of the site (cranberry bogs, Forge Pond, woodlands, wetlands...). A meandering, loop drive provides for a progression of views to those traveling to various destinations within the property.

Access, Circulation and Parking

Vehicular Access to the Property and Parking

It became apparent during the master planning process that a destination facility of this nature would require an access drive that provides safe, convenient and aesthetically pleasing connections to all major facilities. It is simply not practical to walk long distances to active recreation venues where there is a need to transport a significant amount of equipment. Accommodations in the form of park drives and parking areas are also necessary for park maintenance vehicles and buses delivering children to the various athletic venues and activities. Parking areas must also serve as trailheads for those traveling to the site to enjoy the sites' extensive system of nature trails. As the plan indicates, vehicular drives and parking areas are kept to the edge of the property in order to minimize conflicts between pedestrians and drivers and to maximize the extent of contiguous green space within the park. The preferred master plan recommends a minimal, meandering park-like access drive in the tradition of Frederick Law Olmstead, the famed landscape architect and designer of such notable properties as Central Park in New York and Franklin Park in Boston. To this end, drives are shown weaving through the site. Pedestrian walks and tree-lined edges along the park drives will reinforce the park qualities and atmosphere. With the exception of the large parking area near the softball and multi-use field complex, small-scale, destination specific parking areas are interspersed throughout the site providing access to all park amenities. This will allow ADA access to the facilities as well as provide reasonably convenient parking for park patrons.

In each of the parking areas the vehicular movement would be 2-way and circular. This would allow for a vehicle to enter and exit easily and safely, particularly if no parking space were found. This configuration also allows for easy drop-off and pick up. ADA compliant handicap parking spaces would be provided. Pathway linkages would provide safe and convenient pedestrian access to all adjacent facilities.



For maintenance and emergency vehicles, curb openings and service drive connections are provided near the proposed park support buildings at the field complexes.

Amenities are desired to be park-like with appropriate styles of lighting, signage, fencing and gates, pedestrian connections and landscaping. Utility systems will be installed including storm drainage, electrical and telephone/cable systems. Electrical and telephone systems, in particular, must be placed below ground throughout the park limits in order to be eligible for Division of Conservation Services funding.

If extensive lighting systems cannot be afforded at the time of park drive and parking area installations, empty conduit systems should be placed, with the wiring systems to be pulled through, and above ground features (light fixtures, posts and bases) installed at a later date as funding becomes available. If nighttime use is not planned for either the short or long-term, then

the installation of the underground components for a park road lighting system should be forgone.

Pedestrian Access and Circulation

Incorporating pedestrian pathways and trails throughout the park is an important and intrinsic part of the preferred master plan. Connections to the existing adjacent Hanover Greenway will enhance the character of the park and its connection to the Hanover community. The system of pedestrian ways throughout the park will double as access to the facilities and exercise and jogging trails. It is recommended that trailheads be established and well designated; connecting the developed portion of the park with the abutting assigned open space, and integrating the two and creating a well articulated sense of place.

Park Facilities

Courts

In order to meet Hanover's very significant field needs, opportunities for the development or renovation of tennis, basketball and street hockey courts have been pursued at other park and open space properties in order to focus on the development of fields at the King Street property. In addition, court facilities provide opportunities for both informal neighborhood use and more formal use by youth organizations. Other park and open space properties are more centrally located within the community and therefore more conducive to functioning as neighborhood playgrounds. The King Street property is more remote and therefore more difficult to access by neighborhood residents and the youth of the community either on foot or by bike. In addition, a balance needed to be achieved at the King Street property, where surplus areas (beyond the limits of fields) are preserved generally as open space and not paved for the purposes of providing courts. This allows the park development to better complement the character and quality of other significant wetlands and woodlands.

Playgrounds



The preferred plan recommends the placement of at least two multi-use, multi-event children's playgrounds at locations central to the core activities of the facility. As described in the General Themes for Improvement section, the play areas would provide activity for siblings and children of park patrons participating in other activities. As proposed at the other parks, structures would include new equipment and amenities that support age appropriate activities for children up to 12 years of age. The new playground would include safety surfacing, drainage, edging, perimeter pathways and seating areas, park benches, fencing at the perimeter of the tot's area and landscaping. If funding allows, it is recommended that smaller mini, play areas be located near each facility such that a parent can allow one sibling to play while the other is participating in an athletic event.

Fields

The new King Street facility provides the Town with the opportunity for a major multi-field athletic complex in a rural area that has very few residential abutters. The preferred master plan identifies the recommendation to provide one contiguous open field in the center of the property. Within this area, several rectangular fields can be laid out. For example, the preceding image of the plan shows three lacrosse/football fields and one large soccer field. Various configurations can be laid out to accommodate different sports or activities depending on the season. This area could also be used as a large fair ground or event tent area.



The preferred master plan identifies a full size (90-foot base paths) baseball field at the property. This field would replace the current field at Myrtle Street and accommodate the need for another full size field in Town. This type of facility can also be rented to local leagues and regional teams for practice.

A complete three-field softball facility is proposed in the northwest corner of the site providing the Town with the much-needed parks and recreation softball facility. Three new Little League fields are proposed to be located along the western wooded border to complement the three fields at Calvin J. Ellis Field. These facilities would include all ancillary facilities including bleachers, player's dugouts, batting cages, backstops, foul poles and the like.



New Park Support Buildings

A proposed new community building would meet the much-needed requirements expressed in the survey. This would support various community activities and programs and would include a pavilion as part of the building structure. The building would support concessions, storage, restrooms, and other uses for park patrons and the public. Two separate park support buildings, in fairly close proximity to the fields would facilitate regular sports activities and programs.



Overall Park Aesthetics and Landscape/Environmental Enhancements

The preferred master plan addresses the need for locating the various park program elements in a configuration that preserves the aesthetic character of this large area. The proposed configuration encourages an open layout with fenced elements and fields located toward the periphery that frees up the central area creating an open expansive green space. This also provides for locating circulation and walking trails along the periphery. This approach of locating the divergent program spaces on the landscape succeeds in delineating active and passive recreational uses and minimizes use conflicts. The logistics of overall drainage and stormwater management within the site would be studied and tailored to best fit the site's environment while accommodating optimum drainage patterns for the fields and ancillary spaces.

Appendix B

Figures

Rendered architectural drawing of the site

GIS overlay of proposed improvements over the aerial pictures of the site

Cost Estimate – using Mass Highway unit costs

Cost Estimate – using Phase I local unit costs

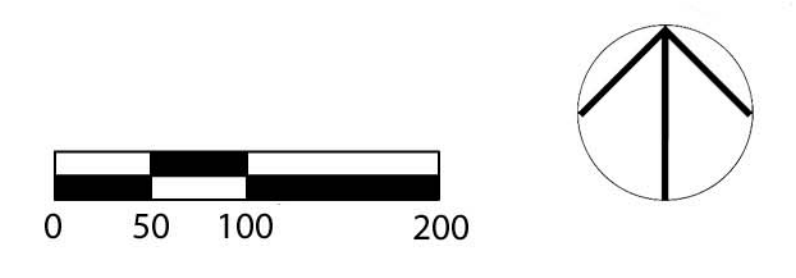


PARKING	
ENTRY LOT	67
LONG FIELD LOT	34
LITTLE LEAGUE LOT	42
PICNIC LOT	33
SOFTBALL LOT	14
TRAIL HEAD LOT	15
NORTH LOT	91
TOTAL PARKING	296

KING STREET RECREATION COMPLEX
 HANOVER, MASSACHUSETTS
 MASTER PLAN REVISION
 26 JANUARY 2009

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Phase IIB

Phase IIA

59-003

59-002

59-001

67-001

67-002

67-005

59-027

59-026

59-021

59-032

59-024

60-147

60-088

60-026

60-028

60-029

60-009

59-009

59-004

60-008

59-005

60-007

60-005

59-023

60-006

60-004

60-003

60-002

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60-114

60-117

60-085

60-086

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60-146

60-150

60-120

60-096

60-056

60-055

60-057

60-058

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60-066

60-045

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60-014

60-003

60-023

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67-026

68-068

67-016

67-015

67-003

67-014

68-044

67-023

67-013

67-012

68-008

68-009

68-000

68-066

68-008

68-009

King Street Recreation Complex

Little League & Softball Fields Cost Estimate - (Mass Highway Unit Costs)

References

A. RS Means 2006 - Heavy Construction Cost Data

B. MHD 03/2008 - 03/2009 - Weighted Bid Prices (All Districts)

Item No.	Item Description	Quantity	Units	Unit Cost	Subtotal	Reference	Notes
1	<u>Mobilization, Bonds, Insurance</u>	1	LS	\$40,000	\$40,000	EPG Judgement	Take as 3% of total.
2	<u>Site Preparation</u>						
	A. Misc. Clearing	5.0	ACRE	\$10,000.00	\$50,000	MHD Item 101	
	B. Erosion Control Barriers	1,000	LF	\$3.50	\$3,500	Allowance	
	Site Preparation Subtotal =				\$53,500		
3	<u>Little League Field Area</u>						3 fields, Roadway, Stormwater BMP, Parking & Walkways
	A. Earth Excavation (18" at fields)	6,941	CY	\$10.00	\$69,410		124,929 sf
	B. 12" Sand Borrow (at fields only)	5,552	CY	\$24.50	\$136,024	MHD Item 154	124,929 sf x 12" x 1.2(in place)
	C. Screen Topsoil From Stockpile (for fields)	2,776	CY	\$4.50	\$12,492	From Lopes' Bid for Phase A	Vibrating screen, mix w/manure, peat, cond.
	D. Topsoil-Rehandle & Spread (at fields)	2,776	CY	\$20.00	\$55,520	MHD Item 752	
	E. Hydroseeding (3 fields)	13,881	SY	\$2.00	\$27,762	MHD Item 765	
	F. Earth Excavation (12" at road & parking areas)	1,453	CY	\$10.00	\$14,530		39,210 sf
	G. 12" Recycled Material for Subbase (at road & pkgng)	4,357	SY	\$3.50	\$15,250	MHD Item 403	Provided by Town
	H. CB Structures	1	EA	\$2,100.00	\$2,100		
	I. 12" RCP Pipe	47	LF	\$50.05	\$2,352	MHD Item 234.12	
	J. Earth Excavation (6" at walkways)	695	CY	\$10.00	\$6,950		37,550 sf
	K. 3" Recycled Material for Subbase (at walkways)	4,172	SY	\$3.50	\$14,602	MHD Item 403	
	L. 3" Stone Dust (at walkways)	417	CY	\$28.00	\$11,676		37,550 sf x 3" x 1.2 (in place)
	M. Earth Excavation (6" at outside areas)	3,995	CY	\$10.00	\$39,950		215,730 sf
	N. Screen Topsoil From Stockpile (for outside areas)	3,995	CY	\$4.50	\$17,978	From Lopes' Bid for Phase A	Vibrating screen, mix w/manure, peat, cond.
	O. Topsoil-Rehandle & Spread (at outside areas)	3,995	CY	\$20.00	\$79,900	MHD Item 752	
	P. Hydroseeding (outside areas)	23,970	SY	\$2.00	\$47,940	MHD Item 765	
	Q. Constructed Wetland Areas	4,486	SF	\$2.60	\$11,664		4,486 sf
	R. Grading for Swales	3,336	SY	\$3.50	\$11,676	MHD Item 170	3,024 sf
	S. Baseball Backstops	3	EA	\$7,800.00	\$23,400		
	T. Rip Rap Areas	10	CY	\$42.00	\$420		Allowance. Only 40 sf
	U. 4" Infield Mix	200	CY	\$30.00	\$6,000		AA Will price quote + \$5/cy for install. Area = 4,000
	V. fencing	3,000	LF	\$35.00	\$105,000		s.f. x 1.2 in place x 3 fields. Approx 60 cy per field
	Little League Field Area Subtotal =				\$712,594.95		
4	<u>Softball Field Area</u>						3 fields, parking, walkways
	A. Earth Excavation (18" at fields)	8,350	CY	\$10.00	\$83,500		150,294 sf
	B. 12" Sand Borrow (at fields only)	6,680	CY	\$24.50	\$163,660	MHD Item 154	150,294 sf x 12" x 1.2(in place)
	C. Screen Topsoil From Stockpile (for fields)	3,340	CY	\$4.50	\$15,030	From Lopes' Bid for Phase A	Vibrating screen, mix w/manure, peat, cond.
	D. Topsoil-Rehandle & Spread (at fields)	3,340	CY	\$20.00	\$66,800	MHD Item 752	
	E. Hydroseeding (3 fields)	16,700	SY	\$2.00	\$33,400	MHD Item 765	
	F. Earth Excavation (12" at road & pkgng areas)	450	CY	\$10.00	\$4,500		12,156 sf
	G. 12" Recycled Material for Subbase (at road & pkgng)	1,351	SY	\$3.50	\$4,729	MHD Item 403	Provided by Town
	H. Earth Excavation (6" at walkways)	335	CY	\$10.00	\$3,350		18,110 sf
	I. 3" Recycled Material for Subbase (at walkways)	2,012	SY	\$3.50	\$7,042	MHD Item 403	
	J. 3" Stone Dust (at walkways)	200	CY	\$28.00	\$5,600		18,110 sf x 3" x 1.2 (in place)
	K. Earth Excavation (6" at outside areas)	1,914	CY	\$10.00	\$19,140		103,376 sf

King Street Recreation Complex

Little League & Softball Fields Cost Estimate - (Mass Highway Unit Costs)

References

A. RS Means 2006 - Heavy Construction Cost Data

B. MHD 03/2008 - 03/2009 - Weighted Bid Prices (All Districts)

Item No.	Item Description	Quantity	Units	Unit Cost	Subtotal	Reference	Notes
	L. Screen Topsoil From Stockpile (for outside areas)	1,914	CY	\$4.50	\$8,613	From Lopes' Bid for Phase A	Vibrating screen, mix w/manure, peat, cond.
	M. Topsoil-Rehandle & Spread (at outside areas)	1,914	CY	\$20.00	\$38,280	MHD Item 752	
	N. Baseball Backstops	3	EA	\$7,800.00	\$23,400		
	O. Hydroseeding (outside areas)	11,486	SY	\$2.00	\$22,972	MHD Item 765	
	U. 4" Infield Mix	300	CY	\$30.00	\$9,000		AA Will Price quote + \$5/cy for install. Area = 6,000
	V. fencing	4,000	LF	\$35.00	\$140,000		s.f. x 1.2 in place x 3 fields. Approx 90 cy per field
	Softball Field Area Subtotal =				\$649,015.50		
5	<u>2.5' Wide Interceptor Trenches</u>						
	A. 6" Perforated Piping	5,000	LF	\$31.50	\$157,500		
	B. 8" Perforated Piping	0	LF	\$31.50	\$0		
	C. 3/4" Pea Stone	2,500	CY	\$42.00	\$105,000	MHD Item 156.5	Assume Avg Depth of 4', width of trench is 2.5'
	D. Sand Borrow	900	CY	\$24.50	\$22,050	MHD Item 154	Assume 2,000' of underdrains not under fields
	E. Geotextile Filter Fabric	8,700	SY	\$3.85	\$33,495	MHD Item 698.2	13' Perimeter x 5,000' long x 1.2 overlap = 78,000 sf
	F. Earth Excavation for Interconnecting Trenches (2 total)	0	CY	\$10.00	\$0		
	G. 3/4" Pea Stone for Interconnecting Trenches	0	CY	\$42.00	\$0	MHD Item 156.5	
	2.5' Wide Interceptor Trenches Subtotal =				\$318,045		
	Estimated Construction Cost =				\$1,773,155		Assuming Town buys all materials (approximately 30% savings).
	Contingency (10%) =				\$177,316		
	Engineering, Permitting, Bidding, Construction Admin. =				\$125,000		
	Total Estimated Cost =				\$2,075,471		

King Street Recreation Complex

Little League & Softball Fields Cost Estimate - (Phase I Local Unit Costs)

References

A. RS Means 2006 - Heavy Construction Cost Data

B. MHD 03/2008 - 03/2009 - Weighted Bid Prices (All Districts)

Item No.	Item Description	Quantity	Units	Unit Cost	Subtotal	Reference	Notes
1	<u>Mobilization, Bonds, Insurance</u>	1	LS	\$26,000	\$26,000	EPG Judgement	Take as 3% of total.
2	<u>Site Preparation</u>						
	A. Misc. Clearing	5.0	ACRE	\$7,000.00	\$35,000	Lopes Bid Item #3	
	B. Erosion Control Barriers	1,000	LF	\$3.50	\$3,500	Town Bid	
	Site Preparation Subtotal =				\$38,500		
3	<u>Little League Field Area</u>						3 fields, Roadway, Stormwater BMP, Parking & Walkways
	A. Earth Excavation (18" at fields)	6,941	CY	\$4.00	\$27,764	Lopes Bid Item #8	124,929 sf
	B. 12" Sand Borrow (at fields only)	5,552	CY	\$16.70	\$92,718	Lopes Bid Item #9 + Town Bid	124,929 sf x 12" x 1.2(in place)
	C. Screen Topsoil From Stockpile (for fields)	2,776	CY	\$4.50	\$12,492	Lopes Bid Item #5	Vibrating screen, mix w/manure, peat, cond.
	D. Topsoil-Rehandle & Spread (at fields)	2,776	CY	\$1.20	\$3,331	Lopes Bid Item #7	
	E. Hydroseeding (3 fields)	13,881	SY	\$2.00	\$27,762	MHD Item 765	
	F. Earth Excavation (12" at road & parking areas)	1,453	CY	\$4.00	\$5,812	Lopes Bid Item #8	39,210 sf
	G. 12" Recycled Material for Subbase (at road & pkgng)	1,743	CY	\$16.88	\$29,422	Lopes Bid Item #10 + Town Bid	1,452 cy x 1.2 in place = 1,743 cy
	H. CB Structures	1	EA	\$2,100.00	\$2,100		
	I. 12" RCP Pipe	47	LF	\$50.05	\$2,352	MHD Item 234.12	
	J. Earth Excavation (6" at walkways)	695	CY	\$4.00	\$2,780	Lopes Bid Item #8	37,550 sf
	K. 3" Recycled Material for Subbase (at walkways)	418	CY	\$16.88	\$7,056	Lopes Bid Item #10 + Town Bid	348 cy x 1.2 in place = 418 cy
	L. 3" Stone Dust (at walkways)	418	CY	\$30.89	\$12,912	Lopes Bid Item #11 + Town Bid	37,550 sf x 3" x 1.2 (in place)
	M. Earth Excavation (6" at outside areas)	3,995	CY	\$4.00	\$15,980	Lopes Bid Item #8	215,730 sf
	N. Screen Topsoil From Stockpile (for outside areas)	3,995	CY	\$4.50	\$17,978	Lopes Bid Item #5	Vibrating screen, mix w/manure, peat, cond.
	O. Topsoil-Rehandle & Spread (at outside areas)	3,995	CY	\$1.20	\$4,794	Lopes Bid Item #7	
	P. Hydroseeding (outside areas)	23,970	SY	\$2.00	\$47,940	MHD Item 765	
	Q. Constructed Wetland Areas	4,486	SF	\$2.60	\$11,664		4,486 sf
	R. Grading for Swales	3,336	SY	\$3.50	\$11,676	MHD Item 170	3,024 sf
	S. Baseball Backstops	3	EA	\$7,800.00	\$23,400		
	T. Rip Rap Areas	10	CY	\$42.00	\$420		Allowance. Only 40 sf
	U. 4" Infield Mix	200	CY	\$30.00	\$6,000		AA Will price quote + \$5/cy for install. Area = 4,000
	V. fencing	3,000	LF	\$35.00	\$105,000		s.f. x 1.2 in place x 3 fields. Approx 60 cy per field
	Little League Field Area Subtotal =				\$471,352.75		
4	<u>Softball Field Area</u>						3 fields, parking, walkways
	A. Earth Excavation (18" at fields)	8,350	CY	\$4.00	\$33,400	Lopes Bit Item #8	150,294 sf
	B. 12" Sand Borrow (at fields only)	6,680	CY	\$16.70	\$111,556	Lopes Bid Item #9 + Town Bid	150,294 sf x 12" x 1.2(in place)
	C. Screen Topsoil From Stockpile (for fields)	3,340	CY	\$4.50	\$15,030	Lopes Bid Item #5	Vibrating screen, mix w/manure, peat, cond.
	D. Topsoil-Rehandle & Spread (at fields)	3,340	CY	\$1.20	\$4,008	Lopes Bid Item #7	
	E. Hydroseeding (3 fields)	16,700	SY	\$2.00	\$33,400	MHD Item 765	
	F. Earth Excavation (12" at road & pkgng areas)	450	CY	\$4.00	\$1,800	Lopes Bit Item #8	12,156 sf
	G. 12" Recycled Material for Subbase (at road & pkgng)	540	CY	\$16.88	\$9,115	Lopes Bid Item #10 + Town Bid	450 cy x 1.2 in place = 540 cy
	H. Earth Excavation (6" at walkways)	335	CY	\$4.00	\$1,340	Lopes Bit Item #8	18,110 sf
	I. 3" Recycled Material for Subbase (at walkways)	200	CY	\$16.88	\$3,376	Lopes Bid Item #10 + Town Bid	
	J. 3" Stone Dust (at walkways)	200	CY	\$30.89	\$6,178	Lopes Bid Item #11 + Town Bid	18,110 sf x 3" x 1.2 (in place)

King Street Recreation Complex

Little League & Softball Fields Cost Estimate - (Phase I Local Unit Costs)

References

A. RS Means 2006 - Heavy Construction Cost Data

B. MHD 03/2008 - 03/2009 - Weighted Bid Prices (All Districts)

Item No.	Item Description	Quantity	Units	Unit Cost	Subtotal	Reference	Notes
	K. Earth Excavation (6" at outside areas)	1,914	CY	\$4.00	\$7,656	Lopes Bit Item #8	103,376 sf
	L. Screen Topsoil From Stockpile (for outside areas)	1,914	CY	\$4.50	\$8,613	Lopes Bid Item #5	Vibrating screen, mix w/manure, peat, cond.
	M. Topsoil-Rehandle & Spread (at outside areas)	1,914	CY	\$1.20	\$2,297	Lopes Bid Item #7	
	N. Baseball Backstops	3	EA	\$7,800.00	\$23,400		
	O. Hydroseeding (outside areas)	11,486	SY	\$2.00	\$22,972	MHD Item 765	
	U. 4" Infield Mix	300	CY	\$30.00	\$9,000		AA Will Price quote + \$5/cy for install. Area = 6,000
	V. fencing	4,000	LF	\$35.00	\$140,000		s.f. x 1.2 in place x 3 fields. Approx 90 cy per field

Softball Field Area Subtotal = \$433,141.00

5 2.5' Wide Interceptor Trenches

A. 6" Perforated Piping	5,000	LF	\$1.97	\$9,850	Town Bid (material only)	
B. 8" Perforated Piping	0	LF	\$31.50	\$0		
C. 3/4" Pea Stone	2,500	CY	\$23.48	\$58,700	Town Bid (material only)	Assume avg depth of 4', width of trench is 2.5'
D. Sand Borrow	900	CY	\$12.95	\$11,655	Town Bid (material only)	Assume 2,000' of underdrains not under fields
E. Geotextile Filter Fabric	8,700	SY	\$0.48	\$4,176	Town Bid (material only)	13' Perimeter x 5,000' long x 1.2 overlap = 78,000 sf
F. Earth Excavation for Interconnecting Trenches (2 total)	0	CY	\$10.00	\$0		
G. 3/4" Pea Stone for Interconnecting Trenches	0	CY	\$42.00	\$0	MHD Item 156.5	
H. Cost per linear foot of trench for Installation	5,000	LF	\$10.00	\$50,000	Lopes Bid Item #14	Lump sum bid was \$50,000 for 5,000 lf of trenches. Cost per linear foot is \$10

2.5' Wide Interceptor Trenches Subtotal = \$134,381

Estimated Construction Cost = \$1,103,375

Contingency (10%) = \$110,337

Engineering, Permitting, Bidding, Construction Admin. = \$125,000

Total Estimated Cost = \$1,338,712

Assuming Town buys all materials (approximately 30% savings).