This document provides a summary of the work done to date on the Byram Park Master Plan / Pool Project, to support the capital request in the Town’s FY 15/16 budget. Information is provided on the park background, the various design concepts created since the project began, as well as information about estimated costs and project schedule.

**PARK BACKGROUND**

Byram Park has been providing the residents of the Town with a multi recreational park beginning in 1920’s. The park is unique in that it contains multiple active, passive and marine activity areas.

In 1974, Byram Park expanded by 5.2 acres with the purchase of the Rosenwald property which was on the east side of the original park.
The Rosenwald house called “The Anchorage” sat atop the rock escarpment on Ritch Avenue and was demolished in the early 1980’s after the Town bought the property. The Rosenwald estate’s private swimming pool, constructed in the 1920’s, remained and was converted to a public pool in 1976. This pool is now nearing its 85th year of operation and has developed a non-repairable leak in its concrete floor and its design does not meet current building, health, or ADA accessibility codes.

Byram Pool circa 1934

The eastern portion of Byram Park, which includes the Rosenwald property, is the site of the public beach and existing pool. There are currently five buildings that support this area of the park with lockers, concession, and restrooms. The restroom facilities currently in place in that area can support park occupancy of 575 people. At their discretion, Parks & Recreation (P&R) controls the level of park occupancy by admittance through the beach/pool gate. The existing pool can only hold 40 people. P&R has instituted a 45 minute turn over policy to allow the pool to be used on a first come, first served basis every open hour.

The total existing park has parking spaces for 226 cars which includes the old quarry area where boat trailers are parked in the winter. As the Park has developed since its opening in the 1920’s, parking has always been a limiting factor. P&R has used a number of management techniques to control the number of vehicles entering the park through scheduling or limiting events to a maximum occupancy.

FIRST DESIGN CONCEPT DEVELOPMENT

In 2008, a gift was approved by the RTM to start development of a replacement pool in Byram Park and a volunteer committee comprised of concerned citizens, P&R, Public Works, and the Junior League was formed. The Junior League expressed an interest in forming a public/private partnership with the Town to help fund the new pool’s construction. It was also realized early on that the pool replacement would require upgrades to the existing facilities and parking areas. Thus the project became more of a master plan to improve Byram Park – not merely a pool replacement project, given the inadequacy of the existing pool.
Initially a topographical survey of the eastern portion of the park was undertaken to provide the Committee with the information needed to begin the master planning effort. The Committee created a plan that included a competitive/recreational pool with a diving well that was over 10,000 square feet in pool surface area and had projected pool occupancy of 400 persons. The parking lot was expanded to loop the vehicle access through the lot thus creating more parking spaces. This feature changed the focus of the inner park entry away from the beach allowing restoration of sand dunes to separate the beach from parking. The existing restroom, locker and concession buildings would be replaced in total with two large new structures. After several years of development, this plan had an estimated construction cost of $14,000,000.

As previously stated, this first design created a very large main pool and while it met the needs of every possible user group it did not take into account the impact an increased pool size and occupancy would have on the park infrastructure, i.e.; parking, sanitary sewer, flood zone placement, etc.

Any proposed construction in the park would have to be designed to meet a number of Planning & Zoning issues to gain approval. Additionally, the Sewer Division was concerned that any increase in park facilities connected to the Town sewer system could affect existing capacity in the Town’s west side pumping stations. As a result of all these concerns, this design concept was determined to be too large and too costly for this location.

SECOND DESIGN CONCEPT DEVELOPMENT

In late 2011, a second design effort began, with the task of reducing the size of the first plan, taking into consideration the park infrastructure, and minimizing the overall construction budget. The Committee needed to revisit the following questions:

- What function would the new pool serve, recreational, competitive or both?
- What size pool would be needed to fit the function?
- How would the new pool fit into the park?
- How many people would the new pool accommodate?
The answers to the above questions would directly affect the design and cost of the final product. Also, public pools are regulated by the State Department of Health which has standards that dictate how many users can access a pool based on its surface square footage. Hence, a pool with a larger square footage will accommodate more swimmers. This number, in turn, affects the number of restrooms, life guards, parking spaces, operating expenses, etc. A $100,000 appropriation was approved in the FY11/12 budget to assist in this phase of the project. A $45,000 gift was received from the Parks & Recreation Foundation to offset this appropriation.

It was clear by April 2012 that design limitations had to be placed on the pool size to meet the parking and sewer concerns in Byram Park. In addition, FEMA introduced new flood maps in July 2012 that modified coastal flood zones, impacting design and construction options along the shore line beginning in July 2013.

During the Committee’s discussions regarding pool function, it was determined the new pool should be recreational with the ability to be used for instruction and training. Without the competition requirement, the need for diving was eliminated.

In analyzing Parks & Recreation’s user count data of the existing beach/pool, it was concluded that a 300 person limit for both the beach and pool would satisfy the parking and sewer concerns. This limit, in turn, greatly reduced the pool surface area and associated structures. Rather than two large structures, as originally proposed, the second concept included one large structure to house lockers, restrooms, and concession; a small separate building to house the pool filters; and a separate park entry structure. These actions would reduce the construction estimate, resolve the Sewer Divisions concerns, and better align planned additional parking with the park function.

DPW contracted with Aquatics Group, a division of Weston & Sampson consulting engineers that specializes in the design of public pools to provide design services. The Committee toured public pools to get a sense of how other Towns have handled the design and functionality aspects of their pools.

Using the 300 person limitation, Aquatics Group was tasked with developing the shapes and features of a preliminary pool design. State Health Department Regulations govern the design of public pools and there is a set square foot requirement for each swimmer. The new proposed pool would be 6,878 square feet of water surface area (250 person capacity) with a zero entry* for accessibility. This pool was reduced in size from the first proposed design of over 10,000 square feet. This new pool will have a maximum depth of 5.5 feet and can accommodate exercise lap swimming, senior aerobics and plus general recreational swimming.

*A zero entry allows people to walk directly into the pool without the use of stairs or a ladder. The pool depth starts at zero and slopes gently to the maximum pool depth of 5'-5”.
Along with the main pool, a small kiddy pool with a surface area of 400 square feet was included along with a splash pad at 1,000 square feet. The kiddy pool has a maximum depth of 18” and is designed for 20 small children. The splash pad or spray deck is comprised of surface mounted water spray devices that allow children to enjoy aquatics without standing in water and can accommodate 40 persons. All the pools described above would be fully ADA compliant and each would have separate filtering equipment for sanitary purposes. If a personal accident should occur in the pool, State Health regulations require the pool to be vacated for a minimum of 12 hours. By having pools with separate filters, the others can remain in operation should one be affected by such an accident.

To support the pools and the beach, a single building accommodates restrooms, showers and changing rooms, all of which are required by the State Health code. This plan has total pool/beach occupancy of 310 persons. (Note: the 310 person occupancy figure is based on using actual square footages from the proposed pool design.)

**PLAN DEVELOPMENT AND REVIEW SCHEDULE**

A $200,000 appropriation was approved in the FY13/14 budget to develop this second design concept to a point that it could be submitted to P&Z for site plan approval. In order to submit a site plan to P&Z, approximately 30% completion of the construction drawings is needed. A major project milestone was achieved in March 2014, when the engineering firm reported that the proposed design could be accommodated outside of the FEMA wave velocity zone (the “VE” zone). This allowed the project design to continue to move forward. A second appropriation of $200,000 was approved in FY14/15 capital budget to complete the construction drawings (30% to 100%) once the project gained full site plan approval from P&Z. The Junior League of Greenwich gifted a total of $40,000 ($20,000 per year) towards the cost of the design to offset the Town’s appropriation.
The following presents the plan’s progress through to final site plan approval.

- July 2014: The Board of Selectmen voted to move the Municipal Improvement request on to P&Z and concurrently the 30% project drawings, which were complete, were submitted to P&Z for Preliminary Site Plan approval.
- September 2014: Both the Municipal Improvement and the Preliminary Site Plan for the project were approved by P&Z.
- October & November 2014: The project was further reviewed by the Town’s Architectural Review Committee at meetings prior to being submitted for final site plan approval by P&Z.
- December 9, 2014: At the P&Z meeting for the project’s final site plan approval, the Commission was reluctant to reduce the beach/pool occupancy to 310. A compromise was reached by using the occupancy created by the inclusion of the toilets in the two changing rooms which were added to separate small children from being exposed to the adult shower/changing areas. The inclusion of these restrooms raised the potential combined beach/pool occupancy to 500 people. While the pool would remain at occupancy of 310, an additional 190 people could access the beach and concession at the discretion of P&R. As this value is still below the estimated maximum under today’s configuration, it satisfies DPW sewer requirements.

On December 9, 2014, the entire park/pool project plan which included the three pools, new buildings, demolition of existing pool and beach buildings, increased parking to 255 spaces and beach/pool occupancy of 500 (310 pool) was approved by Planning & Zoning.

While the project was progressing through P&Z in the fall of 2014, DPW completed the requested environmental soil testing and a preliminary construction estimate based on the 30% complete design drawings.
Arsenic was the only contamination found in the area of the proposed pool construction. After completing a Phase I, II & III Environmental Assessment as well as a Human Health Risk Assessment, the remediation required to properly clean the park covers an area of 120,000 square feet to a depth of approximately 16 inches.

ESTIMATED COST REVIEW AND PROJECT SCHEDULE

In 2009, the construction estimate carried by DPW in the 20 year capital plan was $6.5M which was a “back of the envelope” estimate developed when the project was first initiated, before the first design concept was even developed. As noted earlier in this document, the initial 10,000 square foot proposed pool was estimated at $14M. After it was determined that this plan was not a good fit for the site, the capital plan amount was increased to $7.5M in late 2013. This adjustment was made prior to the second design concept development.

The construction estimate that accompanied the FY15/16 capital request to build the P&Z approved plan with a main pool at 6,800 square feet was $11,232,000 (reduced by the BET to $9.5M with conditions) and was the maximum value that is expected to undertake and complete this project. This includes the remediation of the arsenic contamination, construction of the three pools, main pool, filter and entry buildings, expanded parking lot construction, beach and sand dune restoration, utility installation, landscaping, fencing, etc.

When the drawings of the pool were submitted to P&Z in September 2014, DPW began re-estimating the project based on this information and included the soil remediation in the estimate.

1. Arsenic Soil Remediation $1,267,000
2. Pool Construction & Filters $2,316,800
3. Site Construction* $6,210,000
4. Construction Administration** $240,000
5. Contingency $1,279,000
6. Environmental Soil Testing*** $40,000

$11,352,824 - Reduced by the BET (Feb. 2015) to $9,500,000

- *Site Construction Includes excavation, new utilities, retaining wall, 3 new buildings, parking lot expansion, demolition of old structures & pool, landscaping, fencing, paths, etc.
- **Construction Administration cost includes site supervision for both soil remediation and project construction.
- ***Environmental Soil Testing was completed in 2014 using project design funds. These funds need to be restored to complete the project design to 100%.

It is important to note that the Junior League of Greenwich has committed to privately raise the funds to install the three pools and the filtering equipment at a target funding level of $2.5M. This is the work outlined in Item 2 in the above cost estimate.
This estimate was included in the Town budget cycle in order to keep the project on schedule. The construction is expected to take 18 months without weather delays and not including the soil remediation. If the remediation is completed by November 2015, the new pool could be open in time for the 2017 summer season if the funding for construction is part of this year’s budget. Without construction funds in this year’s budget, 5 to 6 months of construction time would be lost and the pool would not be ready until 2018. This would amount to three (3) years without a public pool.

PUBLIC POOLS TOURED

The Committee visited several public pools in both Connecticut and New York during the development of the project. These sites include:

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Pools</th>
<th>Surface Area</th>
<th>Occupancy</th>
<th>Year Constructed</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scarsdale, NY</td>
<td>4</td>
<td>18,225</td>
<td>1,000</td>
<td>1969</td>
<td>Heated Pools</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Operational May-Sept</td>
</tr>
<tr>
<td>New Canaan</td>
<td>2</td>
<td>12,275</td>
<td>550</td>
<td>2001</td>
<td>No provision for non-swimmers</td>
</tr>
<tr>
<td>&quot;Waveny&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Operational May-Sept</td>
</tr>
<tr>
<td>Bedford, NY</td>
<td>2</td>
<td>5,400</td>
<td>160</td>
<td>1980</td>
<td>Un-Heated</td>
</tr>
<tr>
<td>&quot;Village&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Operational May-Sept</td>
</tr>
<tr>
<td>Bedford, NY</td>
<td>2</td>
<td>7,882</td>
<td>199</td>
<td>1980</td>
<td>Un-Heated</td>
</tr>
<tr>
<td>&quot;Bedford Hills&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Operational May-Sept</td>
</tr>
<tr>
<td>Bedford, NY</td>
<td>2</td>
<td>7,400</td>
<td>199</td>
<td>1980</td>
<td>Un-Heated</td>
</tr>
<tr>
<td>&quot;Katonah&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Operational May-Sept</td>
</tr>
<tr>
<td>Westport, CT</td>
<td>3</td>
<td>6,215</td>
<td>500</td>
<td>1997</td>
<td>Un-Heated</td>
</tr>
<tr>
<td>&quot;Longshore Pool&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Operational May-Sept</td>
</tr>
<tr>
<td>Harrison, NY</td>
<td>3</td>
<td>8,907</td>
<td>573</td>
<td>2009</td>
<td>Un-Heated</td>
</tr>
<tr>
<td>&quot;Passidomo Park&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Operational May-Sept</td>
</tr>
<tr>
<td>Mount Pleasant Pool</td>
<td>4</td>
<td>11,222</td>
<td>620</td>
<td>1996</td>
<td>Un-Heated</td>
</tr>
<tr>
<td>Valhalla, NY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Operational May-Sept</td>
</tr>
</tbody>
</table>