

Costs Climb for Replacing Parks Displaced by New Yankee Stadium

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SUMMARY

IN THE SUMMER OF 2005, THE NEW YORK YANKEES and New York City officials jointly announced plans to build a new stadium next door to the original Yankee Stadium on land occupied by two city parks, Macombs Dam Park and John Mullaly Park. The city pledged to provide new recreational facilities of equal or greater fair market value to those displaced by the new stadium and the garage facilities. The city committed to paying for the necessary replacements as part of its support for the new stadium.

Since the plans were announced, the costs of these projects have risen significantly. The cost of all the projects related to the stadium agreement—including some projects added after the initial announcement—now totals nearly \$195 million, an increase of 67 percent. For just the projects in the original plan, the cost is now almost \$165 million, a 42 percent increase.

IBO finds that the \$78.6 million total increase in Yankee Stadium-related parks projects are attributable to a number of different factors.

- Revised designs of some of the original projects as well as the addition of some new projects that the Bloomberg Administration has put under the umbrella of the stadium agreement have added \$30.0 million to the cost.
- Unanticipated clean-up of hazardous waste materials and environmental remediation accounted for \$7.6 million of the increase, and additional site work and safety increased costs by \$10.9 million.
- Construction inflation beyond that assumed by the city accounted for \$7.6 million of the increase, while delays in construction added \$6.2 million.

The factors driving the remaining \$16.3 million cost increase are not yet clear because there are portions of the project still out for bids. Therefore, estimates detailing these individual parts of the project are not yet available.

BACKGROUND

The new Yankee Stadium is being constructed one block north of the existing stadium at East 161st Street and River Avenue in the Bronx, formerly the site of Macombs Dam Park and a portion of John Mullaly Park. The parks were demolished in order to make way for the new stadium and garage facilities, consisting of three new parking garages and two rehabilitated ones. These new facilities will occupy a total of 25.31 acres, 22.42 of which were previously used as parkland.

In New York State, parkland can only be “alienated”—have its designation as parkland removed—with the approval of the state Legislature and such acts typically require that a similar amount of parkland nearby of equal or greater value must be built to replace the lost parkland.¹ Macombs Dam Park and a portion of the John Mullaly Park are being replaced with eight smaller parks, which range in size from 0.3 to 9.88 acres.

The city does not count 2.89 acres of the new stadium site, roughly the area south of East 161st Street, west of Jerome Avenue and north of a ramp from the Major Deegan Expressway, towards the preexisting parkland. Although this parcel of land was a natural turf field back in the 1960s, it was paved in the 1970s and used as a parking lot during the baseball season. At other times, especially during the off-season, the lot was open and used as a baseball field by the community. Because the lot was not designated as a recreational facility, it was not included by the city in the park acreage that needed to be replaced.

Under the original plan, the replacement parks were to comprise 24.56 acres, according to the Department of Parks and Recreation (DPR). Following increases in the size of the replacement parks and the addition of new facilities to the plan, the new and upgraded parkland and recreation facilities will now occupy 32.11 acres. This acreage will be located within both existing parkland and newly mapped parkland, as well as open public space that is not designated as parkland.

EXISTING AND REPLACEMENT FACILITIES

Recreational facilities that had existed at the old Macombs Dam Park and were removed as part of new stadium construction included two little league baseball fields (with 90-foot infields), two ball fields with a shared outfield, a little league baseball field (with a 60-foot infield), a softball field, a soccer field surrounded by a 400-meter track and bleachers, 24 handball courts, and two basketball courts. Additionally, 16 tennis courts (14 of which were covered and usable in winter and during adverse weather) and eight handball courts were removed from John Mullaly Park.

The city has stated that most of these facilities will be replaced with new facilities of equal or greater fair market value.

The new 9.65 acre Heritage Field will be located at the current site of the stadium and include three natural turf ball fields. Ruppert Plaza, a walkway that runs adjacent to the current stadium, will serve as a pedestrian promenade on 1.13 acres of new parkland located between Heritage Field and the new Macombs Dam Park.

The new Macombs Dam Park, situated on East 161st Street between Jerome Avenue and the existing stadium, will include both “passive” recreational areas, open spaces used for activities such as sitting and strolling, and active recreational areas, used for sports and exercise activities. This 7.33 acre park will sit atop Garage A and house a 400-meter athletic track encircling an artificial turf football/soccer field, fitness equipment, bleachers, and basketball and handball courts.

The River Avenue Pocket Parks, situated on 0.68 acre located on both sides of East 157th Street, will include benches and paved landscape, a children’s play area, and a skate park.

Waterfront Park, the largest replacement park at 9.88 acres will include 16 tennis courts, 12 of which will be covered during the winter, and a seasonal ice rink. Other amenities will include passive park space, viewing platforms, a picnic area, and a beach. The former Bronx Terminal Market Building J (the Power House Building) will be rehabilitated and serve as the tennis/ice rink house as well as provide space for the parks department. There will be a 0.71 acre esplanade extending from the northern portion of the park along the waterfront and heading east towards the Major Deegan Expressway. The addition of Pier 4—originally included as part of the adjacent Bronx Terminal Market Project—to the Waterfront Park will expand waterfront access.

The city has also installed two ball fields at P.S. 29 and the West Bronx Recreation Center. Originally planned as temporary improvements to offset the loss of other fields during construction, the city now intends to make these improvements permanent. Additionally, the city spent \$2.0 million to upgrade facilities in the areas of Mullaly park that remained after the new stadium was constructed.² The improvements to Mullaly park were not originally part of the cost of the replacement parks.

In sum, the replacement facilities will include a 400-meter athletic track with a soccer/football field and stands, five ball fields, 16 tennis courts (12 covered during the winter months), four basketball courts, eight handball courts, a skateboard park, a seasonal ice rink, and a recreational center. These facilities will

occupy 32.11 acres of permanent recreational facilities, parkland, and open space.

COST OF THE REPLACEMENT PARKS

While the stadium is being financed by the Yankees, with city and state subsidies, including access to tax-exempt financing, the replacement parks are being paid for by the city. According to the original 2005 estimate, the cost of the replacement parks was projected to be \$116.1 million. Since then, the cost of the original replacement parks has increased by 42 percent to \$164.7 million, and the addition of new projects to the plan has lifted the cost by \$30.0 million to \$194.7 million.

Macombs Dam Park. The design for the new Macombs Dam Park, located on top of Garage A, has been modified slightly. Two of the tennis courts in the original plan have been replaced by two basketball courts. All other recreational facilities remain according to the initial plan. The current projected cost for the park is \$35.3 million, 20 percent more than the original estimate of \$29.4 million.

Heritage Field, Ruppert Plaza, and Old Stadium Demolition. The costs for Heritage Field, including demolition of the old Yankee Stadium, and Ruppert Plaza increased significantly. The Ruppert Plaza project has not changed in scope, while Heritage Field acreage has increased by 0.75 acre. In the original estimate, full demolition of Yankee Stadium and construction of the two parks were going to cost \$12.7 million and \$19.4 million respectively.

The combined total cost for Heritage Field, Ruppert Plaza, and stadium demolition are now \$72.2 million, a 125 percent increase. IBO did not analyze the increases in the cost of the individual components because DPR did not release the current estimates since the bidding process on these projects remains open.

Waterfront Park. The Waterfront Park will house 16 tennis courts, a seasonal ice rink, and a 0.71 acre esplanade. The project was expanded to include renovation of Building J. This facility will be used as a tennis house, concessionaire, space for DPR, and other yet to be determined uses. Additional waterfront access will be available on Pier 4. Under the revised scope with additional site preparation and environmental remediation, the Waterfront Park will cost \$63.9 million, an 86 percent increase from the original estimate of \$34.4 million.

River Avenue Pocket Parks. The River Avenue Pocket Parks occupy 0.68 of an acre and will include a children's playground, skateboard park, and an area with fitness equipment. At \$3.1 million, the construction cost for these parks has not increased.

HOW \$96 MILLION BECAME \$116 MILLION

Some will remember the original cost for the Yankee Stadium replacement parks as \$95.5 million, not the \$116.1 million that IBO uses in this report. Why did the initial estimate change by more than \$20 million? While it is not possible to reconcile the two estimates exactly, a few of the factors that contributed to the increase are discussed below.

The \$95.5 million estimate was from the conceptual designs used to develop the replacement parks proposal included in the Draft Environmental Impact Statement (DEIS). The DEIS included both a proposal and an alternative proposal. The nearly \$96 million estimate was for the proposal based on conceptual designs while the \$116.1 million was for the actual plan the city pursued (closer to the alternative) and based on more refined designs and cost estimates.

One specific change between the DEIS proposal and the plan the city ultimately developed concerns the number and costs of replacement trees. The DEIS proposal included \$2.0 million for streetscapes, while the \$116.1 million plan included \$14.8 million for a much larger tree planting program.

Additionally, the \$96 million estimate was in 2004 dollars and did not make any adjustment for inflation, while the \$116 million was updated to reflect 2005 dollars and anticipated construction inflation of 6 percent a year.

Additional Recreational Facilities. The two newly installed baseball/softball fields at P.S. 29 and the West Bronx Recreation Center added \$5.5 million to the overall cost of the project. The two artificial turf fields and the recreation center have increased the acreage by 1.06 and 2.08 acres, respectively. Upgrades to facilities at the existing Mullaly park cost more than \$6 million, of which \$2 million was part of the original replacement parks project.

Trees. Due to construction of the new stadium, 377 mature trees have been lost. Under the project plan, the city will plant 8,000 new trees as replacements; so far, approximately 45 percent of these have been planted. Waterfront Park will receive about 255 new trees, while 170 new trees will be planted at Macombs Dam Park. The remaining trees will be at Heritage Field, in concentric circles radiating outward from the new Yankee Stadium, and elsewhere in the South Bronx. The original cost for tree planting was \$14.8 million. While the current cost is \$11.2 million, the total cost of the trees has not decreased. Instead, the parks department has transferred the difference, \$3.6 million, to the budgets for the Waterfront and Macombs Dam parks for the trees being planted at those locations.

Yankee Stadium Replacement Parks & Recreational Facilities

Dollars in millions

	Size (acres)	Replacement Facilities	Original Estimate	Current Estimate
Preexisting Parkland and Recreational Facilities				
Macombs Dam Park				
(Northern part)	11.2	Track, soccer field and ballfield		
(Southern part)	7.33	Ballfields, basketball and handball		
(South/East part)	2.89*	Parking/Asphalt ballfield		
Macombs Dam Park Subtotal	18.53			
John Mullaly Park	3.89	Tennis and hanball courts		
Preexisting Acreage Total	22.42			
Replacement/Additional Parks & Recreational Facilities				
New Macombs Dams Park (on Garage A)		400m athletic track, artificial turf football/soccer field, fitness equipment area, 4 basketball and 8 handball courts.		
	7.33		\$29.4	\$33.1
Improved Rooftop Waterproofing (Scope Addition)				\$2.2
Subtotal				\$35.3
Macombs Dam Park Interim Track and Field			\$2.3	\$1.5
Open Space around Garage B	0.3	Public passive open space		
Heritage Field and Rupert Plaza				
Yankee Stadium Demolition		Complete demolition	\$12.7	
Heritage Field**	8.9	Three natural turf fields and field event stations	\$15.0	
Ruppert Plaza	1.13	Passive park with an alley of trees	\$4.4	**
Subtotal			\$32.1	\$69.7
Increase Field Size (Scope Addition)	0.75	Additional 0.75 acre parcel for Heritage Field		\$2.5
Subtotal	10.78			\$72.2
Waterfront Park and Esplanade		16 tennis courts, seasonal ice rink, passive park space, picnic area (5.11 acres). 0.71 acre esplanade. Renovation of Building J as tennis house and other unspecified services (0.4 acre).		
	6.22	Building J Green & Historic Building Requirements	\$34.4	\$46.1
Building J Interior (Scope Addition)				\$4.0
Pier 4 (Scope Addition)	3.66	Addition of Pier 4 to Waterfront Park		\$13.8
Subtotal	9.88			\$63.9
River Avenue Pocket Parks	0.68	Passive park/civic space with children's play area, Skateboard Park and fitness equipment	\$3.1	\$3.1
Tree Replacement Program		Tree Replacement Program***	\$14.8	\$11.2
P.S. 29 and West Bronx Recreation Center (Scope Addition)	3.14	Two synthetic ball fields and a recreation center (permanent amenities)		\$5.5
Mullaly Park Upgrades (Scope Addition)				\$2.0
ORIGINAL PLAN PARKS AND RECREATIONAL FACILITIES	24.56		\$116.1	\$164.7
NET GAIN (LOSS)	2.14			
Scope Additions	7.55			\$30.0
GRAND TOTAL PARKS AND RECREATIONAL FACILITIES	32.11		\$116.1	\$194.7
NET GAIN (LOSS)	9.69			

SOURCES: IBO; Department of Parks and Recreation.

NOTES: * Not counted towards Total Acreage **Heritage Field original estimate included the cost of Ruppert Plaza *** 8,000 trees to be planted in total. Funding for 255 trees at Waterfront Park and 170 trees at Macombs Dam Park (total cost of \$3.6 million) transferred to individual park budgets.

WHAT IS DRIVING THE COST INCREASE?

While the scope of the Yankees Stadium replacement parks has changed significantly since the initial proposal, adding \$30.0 million to the cost of the parks (38 percent of the total increase), those changes do not fully explain the 67 percent increase in the cost of the project. Other factors that IBO considered include higher than planned increases in the cost of construction, environmental remediation, construction delay, and additional site work and safety monitoring. More than a fifth of the increase in costs, \$16.3 million, remains to be explained. With bidding still open on the Heritage Field contracts, DPR has not released estimates of the increases in cost and change in scope associated with those projects. Because the Heritage Field project is being bid as multiple contracts, until contracts are awarded, it is not possible to estimate the cost increase associated with individual components of the larger project. DPR argues that release of such estimates prior to or during bidding could influence the bid levels.

Further, IBO's estimate for local construction inflation is based on a national index and may understate actual inflation during the past couple of years, thereby underestimating the effect of construction inflation on project costs.

Scope Enhancements. Revised designs that resulted in additional construction at the park locations and additional projects increased costs by \$30.0 million. Changes in scope accounted for 38 percent of the total increase in project costs. Waterfront

Park had the largest share of those costs, \$17.8 million, of which \$13.8 million was for the addition of Pier 4 and \$4 million was for interior work on Building J (including meeting green building and historic preservation requirements). Improved rooftop waterproofing at Macombs Dam Park and the cost of developing an additional 0.75 acres of land at Heritage Field added \$2.2 million and \$2.5 million, respectively. The two ball fields at P.S. 29 and the West Bronx Recreation Center added \$5.5 million to the cost while upgrades to facilities at John Mullaly Park cost \$2.0 million.

Site Work and Safety. Spending for additional site work and safety added \$10.9 million to the cost of the project and accounted for 14 percent of the increase since 2005. The site work at Waterfront Park, which included the construction of work platforms, bulkhead sheeting, and drainage, cost an additional \$8.2 million. Increased oversight and safety monitoring for stadium demolition added \$2.7 million to the cost.

Environmental Remediation. Additional costs for environmental remediation increased the price of the replacement parks by \$7.6 million. Environmental remediation at the Waterfront Park, which included the removal of buried oil tanks, and the clean-up of hazardous waste, cost \$4.6 million. Based on preliminary tests, environmental remediation associated with demolition of the old Yankee Stadium is projected to cost \$3.0 million.

Construction Inflation. The New York City construction market saw rapid cost growth from 2005 to 2008. Although many factors had been driving construction cost inflation, the most apparent is simply excess demand. Public and private demand for materials, labor, and construction services (design, construction, and management, etc.) increased more rapidly than supply. Published reports also indicate that to the extent that New York City, as well as other public-sector entities, is perceived as a difficult client, potential bidders are reluctant to bid on city contracts, and many observers believe that those who do bid include a premium for working with the city.

DPR's original estimate of \$116.1 million (in 2005 dollars) anticipated rising construction costs of 6 percent per year. For the U.S. as a whole, construction inflation between 2005 and 2008 averaged 9.1 percent per year and may well have been higher in New York City. IBO adjusted the estimates to reflect national construction cost increases between 2005 and 2008 and in future years based on growth in the last four quarter.³ IBO estimates that higher than anticipated construction inflation explains \$7.6 million of the increased cost of the project.

Factors Behind the Construction Cost Growth	
<i>Dollars in millions</i>	
Original DPR Estimate (in 2005 dollars)	\$116.1
Explained Increases	
Change in Scope	
Waterfront Park	\$17.8
Macombs Dam Park	2.2
Heritage Field	2.5
Additional Recreational Facilities	7.5
Subtotal Change in Scope	\$30.0
Additional Site Work and Safety	10.9
Environmental Remediation	7.6
Construction Inflation	7.6
Construction Delay	6.2
Subtotal Explained	\$62.3
Current DPR Estimate	\$194.7
Remaining Increase	\$16.3
SOURCES: IBO; Department of Parks and Recreation.	
NOTES: Construction inflation estimate is for inflation above and beyond the 6 percent a year assumed by the parks department. Estimates for construction inflation and construction delay made using the Rider Levett Bucknall National Construction Index for 2005 to 2008.	

Increases due to construction inflation and construction delay (discussed below) are general estimates based on inflation trends and total project costs. These estimates cannot be added to the original cost and scope additions to arrive at current estimates.

Construction Delay. The replacement parks project was expected to be completed by December 2010, within three years of the anticipated groundbreaking. According to the current construction schedule the parks will not be completed until the fall of 2011, with construction at almost every park and recreational facility delayed. IBO estimates that construction delays raised the cost by \$6.3 million. In a period of rising construction costs, delays generally increase the cost of completing a project; however, some of that increase could be offset if the recession causes the costs of construction labor and materials to decline.

Remaining Increases. After accounting for general construction inflation, environmental remediation, expanded site preparation, changes to project design, and construction delay, 21 percent of the increase, \$16.3 million, remains to be explained.

A large part of the remaining increase appears to be for increased costs at Heritage Field and Ruppert Plaza. IBO's estimates for construction inflation, additional environmental remediation, construction delay, and cost increases resulting from an increase in

the size of the park accounted for 31 percent of the \$40.1 million increase at Heritage Field and Ruppert Plaza. Some remaining factors driving cost increases at those parks will presumably emerge once the bidding process for these parts of the project is completed and more detailed estimates are available.

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ENDNOTES

¹In addition to New York State requirements, the area of Macombs Dam Park below the footprint of the new Yankee Stadium was also protected from conversion (the federal equivalent to alienation) under the terms of a federal Land and Water Conservation Fund ("LWCF") grant awarded to the Parks Department in the 1970s. It was therefore also necessary to obtain the approval of the National Park Service through the provision of replacement parkland of equal or greater value to the parcel covered by the LWCF grant. The replacement parkland provided to satisfy New York State requirements was also sufficient to cover the federal requirements.

²The total cost of Mullaly park renovations exceed \$6 million, \$2 million of which is attributed to the Yankee Stadium Redevelopment Project while the remaining costs are attributed to the Department of Environmental Protection mitigation funds for construction of the Croton Water Filtration Plant in Van Cortlandt Park.

³DPR accounted for construction inflation of 6 percent per year to the estimated midpoint of the contract; this methodology is the standard approach to accounting for inflation in construction costs. In order to apply actual, rather than projected inflation costs, IBO deflated the costs by 6 percent per year, from the midpoint (using DPR's dates) to 2005. IBO then adjusted for inflation to the midpoint, using the Rider Levett Bucknall's National Construction Index. For inflation past October 2008 (the most recent actual data available), IBO forecast construction inflation at 1.4 percent per quarter (based on the trend from the last year). The difference between IBO's inflation-adjusted costs and DPR's 2005 estimate is the increase from unanticipated construction inflation.

Unlike inflation from 2005 through 2008, which exceeded DPR's estimate of 6 percent per year, IBO's estimate for construction inflation from October 2008 through 2011 is below 6 percent per year. This estimate is based on actual growth from October 2007 to October 2008 and assumes a slowdown in the construction market related to the current economic situation.

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