Parks & Recreation Facility Feasibility Study

Neighborhood Multipurpose Facility at Douglass Park

for the

City of Manhattan, Kansas

June 30, 2016
June 30, 2016

Members of the City Commission
City Hall
1101 Poyntz Avenue
Manhattan, KS 66502

Project: Neighborhood Multipurpose Facility at Douglass Park  Project #15.08-01

Members of the Commission:

Enclosed please find information developed by our design team during the Neighborhood Multipurpose Facility at Douglass Park Planning Study to address needs identified as one of three proposed facilities for the City of Manhattan.

The components of the study include a synopsis statement describing the process conducted, decisions made, and results determined. Schematic building plans and façade elevations are included describing spatial requirements to address needs identified by a Citizen’s Steering Committee, City staff from the Community Development, Parks & Recreation, and Administration Departments, and the City Commission.

In addition, a preliminary estimate of probable construction cost is shown for budgeting purposes. All meeting minutes, consultant information, and substantiating material are included in the appendix that identifies the processes that were followed to arrive at an approved concept as well as the project overview section from the Facility Feasibility Study report.

The opportunity to provide this information is certainly appreciated and we look forward to assisting with this project as you move forward.

For the Design Team,

Bruce McMillan AIA
BEM/dw
Contents

- Synopsis Statement
- Concept Design
- Budget Analysis
- Environmental Review
- Appendix
  - Priority 1: Neighborhood Multipurpose Facility at Douglass Park from the Parks & Recreation Facility Feasibility Study
  - Environmental Report Substantiating Documentation
  - City of Manhattan – Provided Douglass Park History Timeline
  - Meeting Minutes
SYNOPSIS STATEMENT
PARKS & RECREATION FACILITY FEASIBILITY STUDY
NEIGHBORHOOD MULTIPURPOSE FACILITY AT DOUGLASS PARK

The City of Manhattan, Kansas Community Development Department has identified that a neighborhood recreation center, to potentially be located in Douglass Park at 10th and Yuma St., will enhance the opportunities for youth and adult court use and provide an additional venue for neighborhood activities and support. The Neighborhood Multipurpose Facility proposed for Douglass Park has been developed in conjunction with Community Multipurpose Facilities being considered for sites in the northeast and northwest portions of Manhattan. The Douglass Park site is centrally located in the south portion of the city and would allow access to a community center within walking or biking distance of the center of town.

In this regard, as part of the Feasibility Study conducted for the City’s Parks & Recreation Department and City Commission, the project illustrated herein was developed as part of the three building, Priority 1, component of the Parks & Recreation Facility Feasibility Study completed in April, 2016. The program for the building was developed with the participation of a steering committee composed of over twenty local citizens representing various user groups, members of the City Commission, City staff, and a design team composed of architects, engineers, site planners, and cost/benefit analysis specialists.

Over the course of approximately 60 days beginning in February, 2016 meetings were conducted by the design team with the steering committee, City staff, City Commission and local USD383 School District representatives. All provided significant input regarding the necessity of this facility and its companion projects to meet unmet needs in the community.

The Douglass Park location, being positioned in south central Manhattan, was chosen as it balances the potential location of two additional neighborhood multipurpose facilities anticipated to be located adjacent to the local school district’s (USD 383) middle schools. Eisenhower and Anthony Middle Schools are located in the northeast and northwest portions of the City. As a Priority 1 facility, it would accommodate scheduled and drop-in use by citizens interested in court activities (basketball, volleyball, etc.).

Existing facilities adjacent to the site include a former U.S.O. building that has been retained and refurbished for limited drop in recreation activities and a former grade school currently used for meetings, tutoring activities, and exercise classes. A new community center functioning as proposed is seen to further meet existing needs for recreational and community activities. The information on this project was provided to the Manhattan City Commission and Parks & Recreation Advisory Board in April, 2016. Consensus was reached regarding the need for the facility at that time and support for moving forward with the project for Community Development Block Grant funding was endorsed.

As the concept plans illustrate, the base building for an approximately 21,000 sq. ft. building comprises a single full-size court running east/west and two non-regulation-size north/south cross courts. Restroom/locker rooms are provided as is a staff office with visual control of the court area and lobby. A multi-use room is included to allow neighborhood residents to schedule meetings, classes or other activities. Mechanical, electrical, storage, and a family restroom are shown adjacent to a large lobby. The possibility exists to incorporate an elevator to access an elevated walking/jogging track as an alternate consideration. Should this option be implemented, the main floor court size reduces to approximately 19,000 sq. ft.
This building design, as addressed by the community-based Steering Committee, identifies the necessary functions, components, and needs for this facility. The elevator, elevated track, and exit stairs from the track level would be incorporated into a potential alternate to the proposed budget and cost estimate.

Site amenities include being adjacent to playground equipment in Douglass Park and the existing Douglass Center for other activities. Adequate parking is available as either on-street or both on-street and on-site.

The concept design for this building shown herein is anticipated to be a pre-engineered steel structure with panel siding and masonry accents. Interior finishes would be scheduled as liner panels on exterior court space walls, athletic flooring surface in the court area, interior masonry partitions, and standard vinyl floor coverings, painted walls, heating/air conditioning, and electrical and plumbing.

It is noted herein that Davis Bacon Wage Rates have been used to estimate cost. A budget sheet for the scope of work identified is included. It should also be noted that the estimate is shown in 2016 dollars and that it is likely that amounts may vary from this report due to material costs, time scheduled for implementation and other factors that may influence the final project.

Review by representatives of the City of Manhattan, Kansas is appreciated and our firm and consultants are available to further discuss the project as required. We appreciate the opportunity to assist in developing this project to meet unmet needs in the community.
CONCEPTUAL SITE PLAN (SHOWING TWO FLOOR CONFIGURATION W/ POTENTIAL EXPANDED PARKING) (21,250 SF)

NEIGHBORHOOD MULTIPURPOSE FACILITY AT DOUGLASS PARK

07 JUNE 2016

SCALE: 1" = 42'-0" (1:500)
CONCEPTUAL FLOOR PLAN (BASE CONCEPT: ONE LEVEL)
NEIGHBORHOOD MULTIPURPOSE FACILITY AT DOUGLASS PARK
(19,850 SF TOTAL BUILDING)
30 JUNE 2016

NOTE: WITHOUT THE ELEVATED TRACK, THE COURT SPACE AND ON-GRADE TRACK REQUIRE A LARGER FOOT PRINT
VESTIBULE 215 SF
MULTI-
PURPOSE 1,180 SF
STAFF 400 SF
ELEC 210 SF
MECH 200 SF
LOBBY 460 SF
COURTS 11,750 SF
WOMEN 410 SF
MEN 410 SF
JAN 75 SF
STOR 350 SF
STAIR #1
STAIR #2
STOR
STAFF

CONCEPTUAL FLOOR PLAN - (ALT. CONCEPT: GROUND LEVEL)
NEIGHBORHOOD MULTIPURPOSE FACILITY AT DOUGLASS PARK
30 JUNE 2016

SCALE: 1/16" = 1'- 0"

(LOWER LEVEL = 17,250 SF;
21,250 SF TOTAL BUILDING)
CONCEPTUAL FLOOR PLAN - (ALT. CONCEPT: UPPER LEVEL)
NEIGHBORHOOD MULTIPURPOSE FACILITY AT DOUGLASS PARK

(UPPER LEVEL = 4,000 SF;
21,250 SF TOTAL BUILDING)

30 JUNE 2016

SCALE: 1/16" = 1'-0"
# Neighborhood Multipurpose Facility at Douglass Park

## Estimate of Probable Construction Cost – Base Project

Alternate Options Are Shown Separately

### General Requirements

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Permit (No Charge – City Facility)</td>
<td>$374,000.00</td>
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<tr>
<td>Bonds &amp; Insurance, Mobilization</td>
<td></td>
</tr>
<tr>
<td>Temporary Construction Fencing &amp; Dumpster Service</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal $374,000.00

### Site Work

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>Site Demolition</td>
<td>$40,000.00</td>
</tr>
<tr>
<td>(40) Parking Stalls at 10th Street (20) &amp; Yuma Street (20)</td>
<td>$124,000.00</td>
</tr>
<tr>
<td>(12) Existing Stalls south of Douglass Annex</td>
<td>$53,000.00</td>
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<tr>
<td>Existing Site Fence Removal &amp; Relocation</td>
<td>$5,000.00</td>
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<tr>
<td>Site Utilities</td>
<td>$21,000.00</td>
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<tr>
<td>Miscellaneous Pavement</td>
<td>$60,000.00</td>
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<tr>
<td>Landscaping (est. $30,000.00 – by Owner)</td>
<td></td>
</tr>
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Subtotal $303,000.00

### Facility Construction

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Footings, Foundations, &amp; Concrete Slab</td>
<td>$275,650.00</td>
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<tr>
<td>Pre-engineered Building Package</td>
<td>$516,100.00</td>
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<tr>
<td>Interior Masonry Partitions</td>
<td>$271,350.00</td>
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<tr>
<td>Miscellaneous Structural Steel</td>
<td>$84,500.00</td>
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<tr>
<td>Rough &amp; Interior Carpentry, Millwork</td>
<td>$20,840.00</td>
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<tr>
<td>Insulation &amp; Weatherization</td>
<td>$32,550.00</td>
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<tr>
<td>Doors &amp; Hardware, Glass &amp; Glazing, &amp; Storefront Systems</td>
<td>$43,400.00</td>
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<tr>
<td>Acoustical Ceilings, Painting, &amp; Flooring</td>
<td>$298,000.00</td>
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<tr>
<td>Bleachers &amp; Equipment (Goals, Nets, etc.)</td>
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<tr>
<td>Restroom Fixtures &amp; Accessories, Lockers</td>
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Subtotal $1,622,160.00

### MEP

<table>
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<tr>
<th>Description</th>
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<tbody>
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<td>Fire Suppression System</td>
<td>$81,000.00</td>
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<tr>
<td>Plumbing</td>
<td>$119,300.00</td>
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<tr>
<td>HVAC</td>
<td>$495,700.00</td>
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<tr>
<td>Electrical Components</td>
<td>$411,500.00</td>
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</tbody>
</table>

Subtotal (includes General Contractor mark-up) $1,107,500.00

Subtotal All Categories: Base Project $3,406,660.00

10% Contingency $340,660.00

**Estimated Base Project Total Construction Cost** $3,747,326.00

Estimated A/E Fees (7.5%) $281,050.00

**Total Estimated Base Project Probable Cost** $4,028,376.00 ($203.00/ SF)

### Alternate Considerations

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>Elevated Track, Elevator, &amp; Stair Towers</td>
<td>$440,000.00</td>
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<tr>
<td>MEP Associated w/ Elevated Track, Elevator, &amp; Stair Towers</td>
<td>$60,000.00</td>
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<tr>
<td>Site Demolition &amp; Additional Parking</td>
<td>$257,000.00</td>
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</tbody>
</table>

Subtotal $757,000.00

Subtotal: Base Project & Alternate $4,163,660.00

10% Contingency $416,366.00

**Estimated Project Total Construction Cost** $4,580,026.00

Estimated A/E Fees (7.25%) $332,050.00

**Total Estimated Base Project & Alternate Probable Cost** $4,912,076.00 ($231.00/ SF)
Neighborhood Multipurpose Facility at Douglass Park

Project Overview
The preliminary program, based on Steering Committee recommendations, consists of space for 2 multi-sport courts, an elevated walking/running track, a multipurpose community room, an appropriately scaled lobby, hospitality space, staff office area, restrooms with lockers and changing space, storage, and miscellaneous building support spaces. This approximately 25,000 square-foot facility is shown to be located on the south portion of Douglass Park, at the corner of 10th Street and Fort Riley Boulevard.

Existing Douglass Park amenities include: Douglass Community Center & Annex, outdoor lighted court space, and playground. Given that these are located on the north side of the site, adjacent to Yuma Street, the proposed new facility would logically be sited in the open green space on the south side of the site. This would preserve the existing park amenities and provide a buffer for the park from the noise generated by traffic on Fort Riley Boulevard.

The exterior aesthetic for the neighborhood multipurpose facility at Douglass Park should be designed so that it is appropriate for a neighborhood facility, while respecting the nature of the existing Douglass Center and the neighborhood it is intended to serve. Thoughtful use of stone veneer accents is recommended, along with careful consideration of scale, in order to create a welcoming atmosphere upon arrival.

An alternative option is shown containing a 16,000 square foot, single 94’-0” regulation size multi-sport court with two cross courts surrounded by a walking/running track at floor level. This alternate is included to allow for possible funding limits from a Community Development Block Grant. Available CDBG funding is approximately +/- $3 million.

Pros & Cons
2 Multi-Use Courts
Pros:
• Facility entry is inward focused, addressing the neighborhood it serves
• Overhead electrical that currently bisects the site would be buried
• Opportunity for Douglass Park/Douglass Center signage on the new facility
• Existing Douglass Park amenities would remain intact
• Provides maximum possible equity with facilities at middle school sites
2 Multi-Use Courts | Cons:
- Proximity of building to Fort Riley Boulevard & 10th Street
- Limited available land for parking
- Space constraints in the north-south direction
- Height will be out of scale with adjacent structures
- Several mature trees would need to be removed
- Loss of a large amount of green space
- Southern border of the park would be closed off to views
- No flexibility of building positioning in the east-west direction
- Construction would likely disrupt park activities with lack of space for staging
- The 2 court facility would likely require additional funding beyond the budgeted CDBG Grant.

1 Multi-Use Court | Cons:
- Proximity of building to Fort Riley Blvd. and 10th Street
- Limited available land for parking
- Space constraints in the north-south direction
- Height will be out of scale with adjacent structures

1 Multi-Use Court | Pros:
- Facility entry is inward focused, addressing the neighborhood it serves
- More open green space would remain along Fort Riley Boulevard
- Southern border of the park would remain partially open to views
- Several mature trees could remain, if desirable

Structural Requirements
The ground level floor will utilize a concrete slab-on-grade floor system. The foundation system for the building will be as recommended in the geotechnical engineering report which has not yet been
developed. As this was previously the site of the Douglass Park Pool that was removed and site fill installed, the report will need to address conditions created when the site modifications occurred. However, it is anticipated that the foundation system will consist of shallow footings bearing on native soils or engineered fill soils at a depth of 36 inches to 48 inches below the perimeter final grade elevations.

The roof structure for all areas of the building will utilize steel beam and joist framing which will support metal roof deck. At the court portion of the building area, there will not be any ceilings and an acoustical metal roof deck will be used. At the entry lobby, multi-purpose room, and support areas, ceiling systems will typically be used along with standard, non-acoustical metal roof deck. The court portion of the building area will have 25 feet clear from the floor to the bottom of the roof structure, which will create an approximately 31.5 feet to 32 feet tall volume within the space below the metal roof deck. The court area will likely require approximately 34 feet to 36 feet tall exterior walls to create the noted interior clear heights. The elevated walking or running track around the perimeter of the court area will utilize a concrete slab on metal form deck supported by steel beam framing. The outside perimeter framing for the elevated track will be supported by the perimeter walls. The inside perimeter framing for the elevated track will be supported by steel hangers from the roof structure. A lower volume and roof level will be utilized at the entry lobby, multipurpose room, and support areas for the building. The roof deck for the lower roof level areas will likely be around 15 feet to 16 feet above the floor level which will probably require approximately 18 feet tall exterior walls. Steel framed screen walls supported by the roof structure will be constructed above the roof levels to provide visual screening for the roof level mechanical units and equipment.

At the high volume court area, plant fabricated precast concrete wall panels or site-cast tilt-up concrete wall panels would likely provide the most economical option for the perimeter walls. However, reinforced masonry block walls would also be an acceptable option. Precast concrete wall panels, tilt-up concrete walls panels, or reinforced masonry block walls would also be good options for the perimeter walls of the lower volume support areas. The exterior perimeter walls for the high volume and lower volume areas would be used to support the roof structure and the elevated track. The exterior perimeter walls would also provide lateral stability for the building and would provide resistance for the lateral wind loads and seismic forces. With either the precast concrete wall panel, tilt-up concrete wall panels, or masonry block wall options, rigid insulation could be installed on the outside face of the wall with masonry veneer, architectural metal wall panels, or other exterior finish systems selected for the exterior architectural finish on the exterior facade of the building.

**Mechanical, Electrical, & Plumbing Components**

The following components are recommended for this facility and included in all cost estimates.

**HVAC:**
- Packaged, single zone, natural gas-fired rooftop heating & air conditioning units equipped with full mechanical ventilation capability to condition all spaces

![Conceptual Floor Plan](image-url)
Parking Opportunities
The site presents parking challenges that could be addressed by providing 90 degree or angled parking along 10th Street. This scenario provides 20 parking stalls, including the two accessible spaces. Further options could include expanding into the utility easement or adjacent Breadbasket parking lot.

Operations
The following addresses the general operations considerations at the Douglass Park site, both middle school sites, and the indoor pools. The operations analysis represents a conservative approach to estimating expenses and revenues and was completed based on the best information available and a basic understanding of the projects. This pro-forma does not imply any particular operator but

Electrical:
• Dedicated 3-phase, underground electrical service to building, single meter
• LED lighting
• Addressable fire alarm system
• General power for all areas
• Empty data/phone boxes & conduits to accessible ceilings
• Power & control circuitry for powered goals & nets
• Sound system with zoned public address throughout
• Electrical provisions for scoreboard system & other audio/visual systems
• LED parking lot lighting (cost is included in parking lot cost)
• New LED, wall-mounted exterior lighting will be provided at the building entrances

Plumbing:
• Dedicated sewer, water, & natural gas services to building, single meter
• On-demand, natural gas-fired water heater(s)

• Sewer & water piping to building fixtures
• Natural gas piping to rooftop units & water heaters
• Automatic flush valves & faucets
• Roof drainage & overflow roof drainage systems

Fire Protection:
• Dedicated fire protection service to building
• Wet fire sprinkler system serving all building areas

Parking Opportunities
The site presents parking challenges that could be addressed by providing 90 degree or angled parking along 10th Street. This scenario provides 20 parking stalls, including the two accessible spaces. Further options could include expanding into the utility easement or adjacent Breadbasket parking lot.

Operations
The following addresses the general operations considerations at the Douglass Park site, both middle school sites, and the indoor pools. The operations analysis represents a conservative approach to estimating expenses and revenues and was completed based on the best information available and a basic understanding of the projects. This pro-forma does not imply any particular operator but
Projected Operating Costs of Douglass Park Concept Facility

<table>
<thead>
<tr>
<th>Staffing</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time</td>
<td>$0</td>
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<tr>
<td>Part-Time</td>
<td>$72,543</td>
</tr>
</tbody>
</table>

| Utilities           | $56,100|
| Water/Sewer         | $4,000 |
| Employee Services   | $0     |
| Communication       | $1,800 |
| Contract Services   | $5,000 |
| Training/Conference | $1,500 |
| Rental Equipment    | $0     |
| Advertising/Promotion| $0      |
| Bank Charges        | $500   |
| Trash               | $1,820 |
| Insurance           | $10,000|
| Other               | $1,500 |

<table>
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<tr>
<th>Administrative</th>
<th>Cost</th>
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<tr>
<td>Office Supplies</td>
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<tr>
<td>Pro-Shop</td>
<td>$0</td>
</tr>
<tr>
<td>Janitorial</td>
<td>$6,000</td>
</tr>
<tr>
<td>Rec Program Supplies</td>
<td>$1,500</td>
</tr>
<tr>
<td>Uniforms</td>
<td>$500</td>
</tr>
<tr>
<td>Printing</td>
<td>$1,000</td>
</tr>
<tr>
<td>Maint./Repair</td>
<td>$2,000</td>
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<tr>
<td>Pool Chemicals</td>
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<tr>
<td>Dues/Subscription/Licenses</td>
<td>$250</td>
</tr>
<tr>
<td>Misc.</td>
<td>$500</td>
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| Capital Replacement  | $10,000|

Total Expenses $179,013 annually

Revenue

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Potential Income</th>
</tr>
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<tbody>
<tr>
<td>Daily Admissions</td>
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<tr>
<td>Annual Passes</td>
<td>$0</td>
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<td>Rentals</td>
<td>$5,600</td>
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<td>General Programs</td>
<td>$0</td>
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<tr>
<td>Fitness Programs</td>
<td>$0</td>
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<tr>
<td>Sports Programs</td>
<td>$25,700</td>
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<tr>
<td>Aquatic Programs</td>
<td>N/A</td>
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<tr>
<td>Pro-Shop</td>
<td>$0</td>
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<tr>
<td>Special Events</td>
<td>$500</td>
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<tr>
<td>Concessions/Vending</td>
<td>$1,500</td>
</tr>
<tr>
<td>Birthday Parties</td>
<td>$0</td>
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</tbody>
</table>

Total Revenue $33,300 annually

Difference ($145,713) annually

Projected Operating Costs of Douglass Park Concept Facility

Estimated Construction Cost

$5.1 - $5.6 million [2 Courts]
$3.3 - $3.7 million [1 Court]

rather an estimate of operating costs and revenues for stand-alone facilities. Fees and charges utilized for this study reflect a philosophy designed to meet a reasonable cost recovery rate and future operations cost and are subject to review, change, and approval by the City of Manhattan. There is no guarantee that the expense and revenue projections outlined in the operations analysis will be met as there are many variables that affect such estimates that either cannot be accurately measured or are subject to change during the actual budgetary process or partnership.

**Expenditures**

Expenditures have been formulated on the costs that were designated by Ballard*King and Associates to be included in the operating budget for each facility option. The figures are based on the size of the center, the specific components of the facility, and the hours of operation. All expenses were calculated to the high side and the actual cost may be less based on the final design, operational philosophy, and programming considerations adopted by the City.

**Revenue**

Revenue projections were formulated from information on the specific components for each facility option and the demographics of the service area as well as comparing them to national statistics, other similar facilities and the competition for recreation services in the area. Actual figures will vary based on the size and make-up of the components selected during final design, market stratification, philosophy of operation, fees and charges policy, and priority of use. All revenues were calculated conservatively as a result.