

DRAFT

Huber Heights Recreation Activity Center Master Plan



Huber Heights, Ohio

April 29, 2011



Brandstetter Carroll Inc.
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Huber Heights Recreation Activity Center Huber Heights, Ohio

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April 29, 2011

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Huber Heights Recreation Activity Center Huber Heights, Ohio

Executive Summary

Introduction

The citizens of Huber Heights have a unique opportunity to use Tax Increment Financing resulting from recent development in the I-70/Routes 201 and 202 corridor to fund community improvements within the area. The potential use of the funds that is being considered in this study is to develop a Community Park adjacent to the Huber Heights YMCA and Sinclair Community College located at the corner of Shull Road at Brandt Pike. This park will fill a need for a Community Park in the northern area of the City of Huber Heights and will complement the passive recreation activities available at Carriage Hill Metro Park. The development of this park will also serve as a stimulus to attract home buyers and businesses to the area and therefore allow the overall community to grow in keeping with the City motto "Come Grow With Us" and "Your Community of Choice".

Need for the Recreation Activity Center

In 2010, the City of Huber Heights contracted with the Center for Urban and Public Affairs (CUPA) at Wright State University to conduct a random telephone survey of 600 residents to assess resident perceptions of parks and recreation in Huber Heights as well as waste collection and water softening. The data collection took place between August and October 2010. Some of the responses that are pertinent to the development of the Recreation Activity Center are summarized here:

Respondents were asked to express what improvements need to be made to parks to make them increase their use of the parks and the most cited improvements included:

- Develop more walking trails
- Add more restrooms
- Better playground equipment
- Create a concert venue
- Increased patrol/safety.

Additional amenities they would like to see added to Huber Heights over the next 5-20 years:

- Pool/water park
- Nicer restaurants
- Hospital or medical center
- More activities for kids and teens
- Concert venue.

Respondents were asked open-ended questions to identify amenities they would like to see added to Huber Heights parks. The most frequently cited activity was a pool/water park. Others included concerts, bike trails, and more play equipment.

Respondents were asked to identify amenities they would like to see added to Huber Heights parks that they have seen in other communities and the responses included:

- Swimming pool / water park / recreation center
- Playground equipment
- Picnic shelters
- Better restrooms

Master Plan Format

The Master Plan report includes the following sections:

- Introduction.

- Site Analysis to discuss the characteristics of the site that impact the design.
- Aquatic Facility Needs Analysis to identify the estimated annual attendance and peak hour projection.
- Aquatic Facility Programming and Design which describes the proposed features of the facility.
- Aquatic Center Capital and

Operating Costs to identify the construction and operating costs and potential annual revenue.

- Development Program for the park which discusses the proposed features of the park.
- Concept Plans for the park to show the three initial Concept Plans and an evaluation of each.
- Recreation Activity Center Final Master Plan with a discussion of the design, opinion of probable project cost, phasing, operating costs and potential programming.

Aquatic Facility

Based upon the analysis of the market area presented in this report, the proposed Family Aquatic Center could have up to 87,000 visits per summer and 1,322 at the peak hour. The Aquatic Center is recommended to include:



- Total water surface of 18,000 square feet.
- Main pool with ten lanes by six lanes with a diving well.
- A lazy river of 530' length.
- Two water slides.
- Sprayground.
- Shallow water area with zero depth entry, family slide, wading pool area, and water play elements.
- Poolhouse
- Shade structures.
- Filter building.
- Grass beach area.

The Family Aquatic Center should recover all of its annual operating costs through gate receipts, lessons and rentals.

Park Features

The proposed park will include the following elements:

- Rectangular playing fields.
- Large all-access playground.
- Picnic shelters.
- Amphitheater for concerts, plays, and performances.
- Paved walking trails
- Restrooms.






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 Dayton Cincinnati Cleveland

FINAL MASTER PLAN

HUBER HEIGHTS
 Recreation Activity Center



Facility Features

1. Zero Depth Entry
2. Activity Area with Interactive Play Features
3. Separate Wading Pool
4. Lazy River - 530 L.F.
5. Lap Swimming Lanes (6) 25M Lanes
6. Diving Boards
7. Water Slides
8. Sprayground
9. Shade Umbrellas (6) 20' Diameter
10. Concessions
11. Bathhouse
12. Filter Building
13. Parking
14. Grass Beach

Table of Contents

I.	Introduction	1
A.	Introduction	1
B.	Master Plan Format	2
C.	Need for the Park	2
II.	Site Analysis	7
A.	Existing Conditions	7
B.	Soils	7
C.	Utilities	9
III.	Aquatic Needs Analysis	11
A.	Demographic Characteristics	11
B.	Case Studies	13
IV.	Programming and Design	20
A.	Recommended Facility Requirements	20
B.	Design Commentary	21
V.	Aquatic Center Capital and Operating Costs	27
A.	Introduction	27
B.	Project Cost Estimate	27
C.	Operating Costs – Outdoor Aquatic Center	27
D.	Operating Revenues – Outdoor Aquatic Center	28
E.	Conclusions	28
VI.	Development Program	29
A.	General Site Considerations	29
B.	Multi-Purpose Rectangular Fields	29
C.	Playgrounds	30
D.	Picnic Areas and Shelters	30
E.	Restrooms	31
F.	Amphitheater	31
G.	Walks/Paths/Trails	32
H.	Wetland Area and Boardwalk	33
I.	Architecture Style/Patterns	33

Table of Contents

VII. Concept Plans	35
A. Common Elements within Concepts	35
B. Concept Plan 'Option 1	35
C. Concept Plan 'Option 2'	39
D. Concept Plans 'Option 3'	42
VIII. Recreation Activity Center Master Plan	45
A. Preliminary Master Plan Description	45
B. Final Master Plan	45
C. Recommended Phasing	49
D. Opinion of Probable Project Cost	49
E. Potential Park Operating Costs	49
F. Potential Programming	49

A. Introduction

The citizens of Huber Heights have a unique opportunity to use Tax Increment Financing resulting from recent development in the I-70/Routes 201 and 202 corridor to fund community improvements within the area. The potential use of the funds that is being considered in this study is to develop a Community Park adjacent to the Huber Heights YMCA and Sinclair Community College located at the corner of Shull Road at Brandt Pike. This park will fill a need for a Community Park in the northern area of the City of Huber Heights and will complement the passive recreation activities available at Carriage Hill Metro Park. The development of this park will also serve as a stimulus to attract home buyers and businesses to the area and therefore allow the overall community to grow in keeping with the City motto “Come Grow With Us” and “Your Community of Choice”.



B. Master Plan Format

This Master Plan document begins with an introduction of the project followed by the summary of the needs for the facility as indicated in the Community Survey that was recently completed. Section I-Introduction is followed by a summary of the Site Analysis in Section II. This is followed by several sections relating to the Aquatic Center Feasibility Study including discussions of the Aquatic Facility Needs Analysis (Section III). Section IV outlines the proposed program and design features for the aquatic facility, and Section V identifies the projected capital and operating costs for the aquatic facility. Section VI provides a discussion and examples of the proposed features of the park. This is followed by Section VII which outlines the three Alternative Concept Plans and then Section VIII, which discusses the progression into the Preliminary and Final Master Plan.

C. Need for the Park

1. Parks and Recreation Survey

In 2010, the City of Huber Heights contracted with the Center for Urban and Public Affairs (CUPA) at Wright State University to conduct a random telephone survey of 600 residents to assess resident perceptions of parks and recreation in Huber Heights as well as waste collection and water softening. The data collection took place between August and October 2010. The following are summaries of some of the questions that are pertinent to the development of the Recreation Activity Center.

- a. 66% were satisfied and 26% very satisfied with Huber Heights as a place to live.
- b. 63.6% were satisfied and 22.1% very satisfied with the City of Huber Heights park system
- c. 73.5% feel that the presence of parks increases property values.
- d. 93% either strongly agree (21%) or agree (72.4%) that parks add to the overall appearance/beautification of the city.
- e. 94.5% either agree or strongly agree that they feel safe in Huber Heights parks.
- f. 86.9% either strongly agree (15.3%) or agree (71.6%) that Huber Heights parks are a good value for the taxes that are paid.
- g. 71.8% have used a Huber Heights City Park in the last 12 months.

- h. The parks that the respondents have visited in the past 12 months include:
- Thomas Cloud Park 87.1%
 - Shullgate Park 36.9%
 - Community Park 18.4%
 - Rip Rap Park 13.0%
 - Gary Sherman Park 11.5%
 - Cottonwood Park 11.4%
 - Belle Plain Park 5.1%
- i. Nearly all (93.7%) indicated they strongly agree or agree that Huber Heights parks are well-kept and presentable.
- j. Activities that the park users have done in the parks include:
- Walking/jogging and exercise 83.8%
 - Playgrounds 60.3%
 - Eat lunch or picnic 43.0%
 - Sports activities 42.5%
 - Relax and read 34.0%
- k. 58.9% indicated that it is very important (33.0%) or important (25.9%) for the City to have a municipal swimming pool.
- l. Respondents were asked to express what improvements need to be made to parks to make them increase their use of the parks and the most cited improvements included:
- Develop more walking trails
 - Add more restrooms
 - Better playground equipment
 - Create a concert venue
 - Increased patrol/safety.
- m. Additional amenities they would like to see added to Huber Heights over the next 5-20 years:
- Pool/water park
 - Nicer restaurants
 - Hospital or medical center

- More activities for kids and teens
- Concert venue.
- n. Respondents were asked open-ended questions to identify amenities they would like to see added to Huber Heights parks. The most frequently cited activity was a pool/water park. Others included concerts, bike trails, and more play equipment.
- o. Respondents were asked to identify amenities they would like to see added to Huber Heights parks that they have seen in other communities and the responses included:
 - Swimming pool/water park/recreation center
 - Playground equipment
 - Picnic shelters
 - Better restrooms
- p. The respondents indicated the following programs they would utilize:

▪ Festivals	87.2%
▪ Concerts	80.8%
▪ Art in the Parks	66.2%
▪ Halloween activities	48.3%
▪ Easter Egg Hunts	40.2%
▪ Sports camps	39.5%
▪ Summer camps	35.8%
▪ Bike rodeos	29.2%
- q. 68.1% indicated that more programs are needed for senior citizens.
- r. 78.7% indicated that more activities are needed for teens. Activities that were cited include: a skate park; special interest classes; concerts; or a teen center.

In summary, these survey responses indicate a clear need for park improvements and identify the type of facilities, programs, and amenities desired by Huber Heights residents. For more information and detail about the survey, please review a full copy of the report.

2. Initial City Council Discussion

On March 2, 2011, the Consulting Team met with City Council to discuss various aspects of the project. Steve Stanley, Executive Director of the Montgomery County Transportation Improvement District, discussed the details of how the

Tax Increment Financing (TIF) would work for this project. This was followed by a slide presentation of potential park features.

3. Park and Recreation Board

The Consulting Team met with the Park and Recreation Board on March 17, 2011 to discuss the potential features for the Recreation Activity Center. Josh Sullenberger prepared a list of potential elements and the Park and Recreation Board Members were to place the items in rank order to provide some direction to the Consulting Team as they prepare the Master Plan. The following table summarizes the findings.

Facility	Total Points	Rank
Aquatic Center	8	1
Concessions	30	2
Amphitheater	35	3
Picnic Shelters	39	4
Walking Path / Fitness Trails	39	4
Accessible Playgrounds	40	6
Dog Park	48	7
Athletic Fields	49	8
Other Suggestions		
Skateboard Park		
Pond/Water Park for dogs		
Athletic Courts (Basketball and Tennis Courts)		
Batting Cage		

From this exercise, it is very clear that the Aquatic Center is by far the main priority and was the number one choice of all Park and Recreation Board Members that participated. Concessions that would serve the aquatic center and the park were a distant second place. An amphitheater was close behind and then picnic shelters and walking paths/fitness trail were tied for 4th place. Accessible playground was very close behind. Lower on the list were the dog park and athletic fields.

4. Schedule

With the very clear direction that an aquatic facility is a very strongly desired facility and the capacity of the TIF funding that is available, the City decided to pursue the Activity Center development with the goal to have the aquatic facility operational for the summer of 2012. This will be the driving factor to the schedule and will require that all parties work very efficiently to that end. Some land acquisition will need to take place to make full use of the site adjacent to the YMCA and the appropriate City staff and consultants are working to accomplish

that. Another goal is to have the Draft of this Master Plan completed by Mid May followed immediately by development of detailed construction documents. During May, various permitting, regulatory and agency review procedures will begin. The construction will be phased to allow the major site work, earthwork, and major utilities to begin as early as possible, followed by the aquatic facility construction package, then the aquatic facility general site and building package, and finally the park facilities package.

A Site Analysis summary was prepared to provide supporting information for the Master Plan. The following summary highlights the existing conditions and development issues that may impact the Master Plan for the project.

A. Existing Conditions

The future Huber Heights Recreation Activity Center is proposed on two parcels of property located at the intersection of Brandt Pike and Shull Road in Montgomery County Ohio, just south of the Miami County line. The Simms property is 15.972 acres and is located off of the main entrance on Grusenmeyer Way. This property has served as active farmland for the past 50 years, supporting wheat and corn crops. The City of Huber Heights owns the other property that wraps around the Simms lot to the north, west, and south. The City owned property, including the YMCA, totals roughly 29.6 acres.

At the time of the initial site visit, the Simms property was recently harvested cropland. The surface was tilled and exposed. The City's property to the south was an open field with lush grass. Scrub plant material is apparent to the east of the main entrance and wraps around the Simms property to the north becoming more dense woodland the further north you go. Dry Lick Creek runs just beyond the property line to the north and crosses under Brandt Pike. Presently, construction is ongoing on Brandt Pike to create a culvert for the stream. A wooded riparian area extends from the creek into the north east corner of the site.

Residences along Deer Bend Drive are screened with minimal scrub plant material. Most of the homes currently have private fences with gates that open up to the Simms property. A thin line of scrub plant material also separates the harvested cropland from the open field, which is currently used for soccer. A large, healthy tree serves as a focal point among the passive grass field. Potential access points to the site are off of Grusenmeyer Way and Shull Road.

Existing elements on the site include: the Huber Heights YMCA and Sinclair Community College building; an existing playground with mulch chips and a shelter, which are located behind the YMCA; one large soccer field; one medium soccer field; and two small youth soccer fields.

B. Soils

The properties for the future home of the Huber Heights Recreation Activity Center are comprised of eight main soils which are described below in detail.

1. Bs (Brookston Silty Clay Loam) – Nearly level
 - a. Dark, very poorly drained soils that can be found in nearly level and depressional areas at the heads of waterways in rolling landscapes and in broad, level stretches on the till plains.

II. Site Analysis

- b. Seasonal wetness and moderately slow permeability are limitations for many nonfarm uses.
- 2. CeB (Celina Silt Loam) – 2 to 6 percent slopes
 - a. Consists of moderately well-drained soils and can be found on low, undulating ridges on the till plains and is downslope from the well-drained Miamian soils in rolling areas.
 - b. Slope and moderately slow permeability are limitations for non-farm uses.
- 3. CoA (Corwin Silt Loam) – 0 to 2 percent slopes
 - a. Soil is found in small, isolated spots that generally are less than 10 acres in size and occur on the till plain throughout the county.
 - b. Moderately slow permeability is a limitation for some nonfarm uses.
- 4. Md (Medway Silt Loam) – Nearly level
 - a. Dark-colored, moderately well-drained soils that formed in recent alluvium. They are nearly level and lie on flood plains in fairly long, relatively narrow areas.
 - b. Medway soils are subject to periodic flooding.
- 5. MIB (Miamian Silt Loam) – 0 to 2 percent slopes
 - a. Soil is in narrow strips of rolling areas where nearby steep slopes provide good lateral drainage. It can also be found on broad till plains, where it is underlain by fractured limestone bedrock or other porous material.
 - b. Miamian soils have a medium available moisture capacity and moderately slow permeability.
- 6. MIB2 (Miamian Silt Loam) – 2 to 6 percent slopes
 - a. Soil is in large, irregularly shaped areas of undulating moraines and in smaller spots on the undulating till plains.
 - b. Moderately slow permeability and slope are limitations for non-farm uses.
- 7. MIC2 (Miamian Silt Loam) – 6 to 12 percent slopes
 - a. Soil is in strips along drainage ways on the moraines and dissected till plains.
 - b. Slope and moderately slow permeability are limitations to many non-farm uses.

8. MnD3 (Miamian Clay Loam) – 12 to 18 percent slopes
 - a. Soil is found in strips along the small streams on the moraines and stream-dissected till plains.
 - b. Slope and severe erosion are the dominant limitations for non-farm uses.

C. Utilities

1. Sanitary Sewer – existing 15” sanitary sewer line on the west side of Brandt. A new 12” sanitary sewer line will be running along the northern property line proceeding in a southeast direction and will connect to the 15” sanitary sewer line at the point just south of the new creek culvert.
2. Water Lines – existing 12” water line on the west side of Brandt Pike. The new water line will originate from the Brandt Pike location and will proceed west along the northern side of Grusenmeyer Way and generally follow the main access road and reconnect at an existing water line location on Charlesgate Road in essence creating a water line loop.
3. Electric Supply – The main overhead lines are located along the northern side of Shull Road, as well as the western side of Brandt Pike. Power is also available at abutting subdivisions.
4. Storm Drainage – The site generally has a centrally located high point on the western edge. Primary drainage patterns flow towards the northeastern lower areas (creak) on the northern half of the site, and in a southeastern direction towards Shull Road for the southern half of the site. General drainage is conveyed by existing storm structures and drainage lines to an existing storm water detention basin.
5. The west central portion of the site is characterized by having the most gentle grade, ranging from 1-2%. Average slope in a north easterly and south easterly direction averages about 3%-4%.
6. A detailed topographic survey is recommended to better understand the drainage patterns and to plan for future drainage and grading improvements.

II. Site Analysis



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Architects, Engineers, Planners
Lansing, Chicago, Cleveland

HUBER HEIGHTS
Recreation Activity Center - Site Analysis

III. Aquatic Needs Analysis

A. Demographic Characteristics

When exploring the needs for an outdoor recreational aquatic facility, it is important to examine demographic trends, since the need for such recreational services is driven by public demand. For this reason, a demographic and income profile is generated for the study area based on data from the U.S. Bureau of the Census and projections prepared by ESRI business Analyst.

For the purpose of this study, the Consultant recommends using demographic information organized around two geographic boundaries in the City of Huber Heights, Ohio. The population characteristics within a 0-3 mile radius from the existing YMCA are analyzed. This type of organization is recommended when participation of an outdoor aquatic facility is generated primarily by the community, but will also attract users outside the limits of Huber Heights, Ohio. However, since the City population is similar to the 3 mile radius population, the Consultant recommends that the City demographics characteristics be used.

Per Capita Income is shown to reflect the yearly income per person if the combined total income was divided equally within the community. When compared to the national average, it can be used as a tool to assist in determining projected community participation and revenue.

Population for the Study Area is as follows:

	0-3 miles	City Only
2000	37,456	38,212
2010	37,328	37,099
2015 (Projected)	36,652	36,270

Per Capita Income - Huber Heights, Ohio:

	0-3 miles	City Only
2000	\$21,455	\$20,951
2010	\$26,655	\$26,212
2015 (Projected)	\$29,204	\$28,805

Per Capita Income - National Average:

2000	\$21,587
2010	\$26,739
2015 (Projected)	\$30,241

III. Aquatic Needs Analysis

Attendance Projections

Attendance projections for outdoor recreational swimming facilities focus on both the Estimated Annual Attendance and Peak Hour Attendance. The Estimated Annual Attendance is valuable in order to forecast potential revenue in a season and the Peak Hour Attendance forecasts help to develop a program for design considerations and facility requirements. It is recommended that projected census information be used to determine the community participation for a future facility.

The Consultant calculates attendance projections using methodologies recognized by National Recreation and Parks Association, the American Alliance of Health, Physical Education, Recreation and Dance as well as empirical data, as collected by Brandstetter Carroll Inc.

Projected Population (2015):

City only 36,270

Average Daily and Annual Attendance:

The average daily attendance of an outdoor recreational swimming facility is generally recognized to be 3% of the population. When planning the number of days in a swimming season, an estimated annual attendance can be figured as follows:

City only	36,270 x	3% =	1,088
Average people per day			1,088

Days in a swim season	80
People per day	1,088
People per swim season	87,040

Peak Hour Attendance:

Peak Hour Attendance is considered to be the maximum number of patrons using the facility at any one time. This is a very useful tool for both the Owner and Consultant when planning for and designing a new facility to accommodate a full occupant load. Two methodologies are used, but the average between the two will provide the best forecast when determining peak hour attendance.

Methodology 1

Methodology 1 determines that 40% of the estimated annual attendance would participate during a peak month. Peak month can be defined as a month during the swim season where the attendance would be at its highest. By taking the average weekly attendance from that month, it can be estimated that 25% of the patrons during that week would attend the pool on any one day to determine a peak daily attendance. An example of this is a pool having the highest daily attendance on a sunny, 90 degree Saturday afternoon, in lieu of an overcast Wednesday afternoon earlier that week. The

III. Aquatic Needs Analysis

peak hour is suggesting that 60% of the total attendance will be using the facility at any one time during that peak day.

Annual attendance:	87,040
Peak Month @ 40%:	34,816
Weekly Average during Peak Month:	8,704
Peak Day @ 25%:	2,176
Peak Hour @ 60%:	1,305 people

Methodology 2

City only	36,270 x	33%	11,969
	11,969 x	11.2%	<u>1,340</u>

Total: 1,340 people

Average between methodologies

Methodology 1:	1,305 people
Methodology 2:	<u>1,340 people</u>

Average: 1,322 people during Peak Hour

Since the Huber Heights Aquatic Center is adjacent to the YMCA, some of the demand for competition and instructional swimming can be satisfied by the existing indoor pool. If the attendance justifies additional capacity, the Consultant recommends that the initial phase have room for future expansion.

B. Case Studies

In order to check the methodology against existing similar facilities, BCI has examined four case study cities, which are similar to Huber Heights, Ohio. These case studies are as follows:

1. Bowling Green, Kentucky

In 2000, the City of Bowling Green completed the Russell Sims Aquatic Center, which is the largest municipal facility in Kentucky, and possibly the region. Bowling Green, Kentucky is also the home of Western Kentucky University with approximately 18,700 students. It includes an activity pool with interactive water features, a 50-meter competition pool with diving, waterslides, a sprayground and related features. This facility serves the aquatic needs of Bowling Green, and is one of two facilities in the City. For the



III. Aquatic Needs Analysis

purposes of this report, data from 2002 has been used, at which time there was an average income per person of \$6.50. In 2003, the City raised the user fees to approximately \$8.50 per person (including entrance fee and concessions) and they experienced a drop in attendance. Due to the regional nature of Bowling Green, it was decided to examine population “donuts” based upon specified distances from the site.

a. Population

0-2	Miles	19,937
2-5	Miles	42,479
5-10	Miles	26,109
10-20	Miles	48,556

b. Attendance Per Day

0-2	Miles	19,937 x 3.0%	598
2-5	Miles	42,479 x 1%	425
5-10	Miles	26,109 x 0.3%	78
10-20	Miles	48,556 x .05%	24
			<hr/> 1,125

1,125 people x 80	90,000 people per season
2002 actual attendance =	68,800 people per season (76.4%)

Using the same methodology, the actual annual attendance was 76.4% of the forecast attendance. However, it must be noted that the City of Bowling Green operates two aquatic centers, the Russell Sims Aquatic Center and the TC Cherry Pool.

c. Peak Hour Attendance

Methodology 1

Total Annual Attendance	90,000
Peak Month @ 30%	27,000
Average Weekly During Peak Month	6,750
Peak Day @ 25% of Week	1,688
Peak Hour @ 60%	1,013

Methodology 2

Peak Hour Calculation

0-2 Miles	19,937 people	x	33% =	6,579
	6,579 people	x	11.2% =	737
2-5 Miles	42,479 people	x	12% =	5,097
	5,097 people	x	11.2% =	571
5-10 Miles	26,109 people	x	4% =	1,044
	1,044 people	x	11.2% =	117

III. Aquatic Needs Analysis

$$\begin{array}{rclcl} 10\text{-}20 \text{ Miles} & 48,556 \text{ people} & \times & 0.5\% & = & 243 \\ & 243 \text{ people} & \times & 11.2\% & = & \underline{27} \\ \text{Total Peak Hour} & & & & & 1,452 \end{array}$$

Average of Methodology 1 & 2

Peak Hour Estimate	1,233
Peak Hour Actual	1,500 (122%)

The actual peak hour attendance is 122% of the estimated peak hour attendance. It indicates a high demand on individual days and might reflect specific aquatic programming.

2. City of Heath, Ohio

The City of Heath, Ohio is located approximately 30 miles to the east of Columbus, Ohio. The City has a population of approximately 8,500 people. This facility normally experiences operating surpluses of nearly \$200,000 per year.



a. Population

0-2 Miles	23,019
2-5 Miles	43,282
5-10 Miles	37,898

b. Attendance Per Day

0-2 Miles	17,617	x	3%	529 people
2-5 Miles	49,299	x	1%	493 people
5-10 Miles	37,133	x	0.3%	111 people
10-20 Miles	48,161	x	0.05%	<u>24 people</u>
				1,157

1,157 people x 80 days/season	92,558 people per season
2009 actual attendance	125,000 (135%)

The actual attendance for 2009 was 135% of what would have been forecast using the annual attendance methodologies.

III. Aquatic Needs Analysis

c. Peak Hour Attendance

Methodology 1

Total Annual Attendance	92,560
Peak Month @ 30%	27,768
Average Weekly During Peak Month	6,942
Peak Day @ 25% of Week	1,736
Peak Hour @ 60%	1,041

Methodology 2

Peak Hour Calculation

0-2 Miles	17,617	people x =	33%		5,814
	5,814	people x =	11.2%	651	
2-5 Miles	49,299	people x =	12%		5,916
	5,916	people x =	11.2%	663	
5-10 Miles	37,133	people x =	4%		1,485
	1,485	people x =	11.2%	166	
10-20 Miles	48,161	people x =	0.5%		241
	241	people x =	11.2%	27	
Total Peak Hour					1,507

Average of Methodology 1 & 2

Peak Hour Estimate Average	1,274
Peak Hour Actual	1,380 (108%)

3. Tipp City, Ohio

Tipp City, Ohio is located approximately 20 miles to the north of Dayton, Ohio on Interstate 75. The City population is 9,500 people. Since Troy, Ohio is located just 5 miles from Tipp City, the Consultant recommended that the effective service area did not go beyond a 5 mile radius of Tipp City.



a. Population

0-2 Miles	8,292
2-5 Miles	17,943
Total Population	26,235

III. Aquatic Needs Analysis

b. Attendance Per Day (2009 Season)

0-2 Miles	8,292 x 3.0% =	249 People
2-5 Miles	17,943 x 2.5% =	449 People
Total		698 People

698 people x 80 days/season = 55,840 people per season
6 year average actual attendance = 51,468 (92%)

c. Peak Hour Attendance

Methodology 1

Total Annual Attendance	55,840
Peak Month @ 30%	16,752
Average Weekly During Peak Month	4,188
Peak Day @ 25% of Week	1,047
Peak Hour @ 60%	628

Methodology 2

Peak Hour Calculation

0-2 Miles	8,292 people	x	33% =	2,736
	2,736 people	x	11.2% =	306
2-5 Miles	17,943 people	x	28% =	5,024
	5,024 people	x	11.2% =	563
Total Peak Hour				869

Average Methodology 1 & 2

Peak Hour Estimate	749
Peak Hour Actual	796 (106%)

The peak hour actual attendance is 106% of the estimate based upon methodologies #1 and #2. It indicates a high demand on the individual days and might reflect specific aquatic programming.

4. Richmond, Kentucky

In 2008, the City of Richmond completed the Paradise Cove Aquatic Center. Paradise Cove houses an 8 lane lap pool with two 1 meter diving boards, a play pool with zero depth entry and numerous play features, including four slides. Two slides stand 40 feet tall; one is a straight chute and one is a spiral. There is a family slide and a colorful 'butterfly' slide for younger



III. Aquatic Needs Analysis

children. This facility serves the aquatic needs of Richmond, and is one of two facilities in the City.

a. Population 2010

0-3 Miles	21,268
Richmond	9,185
Madison	50,013
Total Study Area	80,466

b. Attendance Per Day

0-3 miles	21,268 x 3.0%	638
Richmond (balance)	9,185 x 1.0%	92
Madison (balance)	50,013 x 0.3%	150
		<u>880 People per day</u>
880 people x 83 days/season =		73,040 people per season
2010 actual attendance =		56,499 people per season (77%)

Using the same methodology, the actual annual attendance was 77% of the forecast attendance. It should be noted that the pool saw higher attendance numbers in 2008 (77,058) and 2009 (66,948) because they stayed open for a longer period. However, despite lower admissions, the total pool income was significantly higher in 2010 because of a \$1 increase on daily admissions and a \$.25 increase in concession prices as well as saving on pool expenses due to operating with the shorter pool season. On average, the first three years' attendance was 92% of the forecast.

c. Peak Hour Attendance

Methodology 1

Total Annual Attendance	73,040
Peak Month @ 30%	21,912
Average Weekly During Peak Month	5,478
Peak Day @ 25% of Week	1,370
Peak Hour @ 60%	822

Methodology 2

Peak Hour Calculation

0-3 Miles	21,268 x 33%=	7,018
	7,018 x 11.2%=	786 people

III. Aquatic Needs Analysis

Richmond	$9,185 \times 6\% =$	551	
	$551 \times 11.2\% =$		62 people
Madison	$50,013 \times .4\% =$	200	
	$200 \times 11.2\% =$		<u>23</u> people
Total			871 people
Average of Methodology 1 & 2			847 people
Actual Peak Hour (Estimate)			700 people (83% of forecast)

IV. Programming and Design

The program for pool facilities is based upon the peak hour population. The facility standards for water surface area are based upon the Ohio Revised Code. However, this statute assumes that all of the patrons are in the water at any one time. In reality, at most, half of the patrons are in the water. This fact gives the Consultant the flexibility to recommend a lesser amount of water surface area in the case of budget constraints.

A. Recommended Facility Requirements

Peak Hour Attendance:	900	People
Recommended Pool Surface Area: (20 s.f. /person)	18,000	Sq. Ft.
Pool Deck and Grass Beach: (3x pool area)	54,000	Sq. Ft.
Poolhouse: (15% of peak hour @ 25 s.f. /person)	3,375	Sq. Ft.
Toilet Facilities: (1 for every 75 people)	12	Toilets
Lavatories: (1 for every 150 people)	6	Sinks
Filter Building: (10% of pool area)	1,800	Sq. Ft.
Drinking Fountain: (1 for every 1,000)	1	
Concessions: (30% of peak hour)	300	People
Serving Outlets: (75 per hour/window)	4	Windows
Shade Recommendations: (10% of peak hour attendance @ 25 s.f. /person)	2,250	Sq. Ft.
Sprayground: (10% of peak hour attendance @ 20 s.f. /person)	1,800	Sq. Ft.
Sprayground Features: (1 feature for every 150 s.f. of pad)	12	Features

Note: The Design Team may want to revisit and verify the facility requirements during Preliminary Design.

IV. Programming and Design

Parking:

Program (1 space for every 4 people during peak hour)	225	Spaces
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B. Design Commentary

As discussed in the Facility Program Section, the Consultant developed a program for a new outdoor aquatic facility based on the data compiled during the Demographic and Needs Analysis. The Design Recommendations utilizes this data, and additional information received from City staff and Administration during individual meetings relative to specific needs and requirements of the community of Huber Heights, Ohio. The Design Recommendations are as follows:

1. Main Pool

The Consultant recommends a single activity / competition pool with approximately 18,000 square feet of surface area containing approximately 450,000 gallons of water. The activity area portion will be approximately 5,000 square feet with an average depth of 2'-6". It will have a wide zero-depth entry with either a single large interactive play unit or multiple smaller play features. The interactive play features are not specifically identified in this study, but can include a wide range of features from small climbable slides and sprays for toddlers to multi-level interactive play units for older kids.

The pool will have a segregated area within the same body of water that will provide a safe and less intimidating play area for toddlers and their parents. The separation wall between this area and the main pool will allow parents to view the adjacent activity area to monitor siblings and friends nearby.

There is an open play area within the activity area with an average depth of 3'-0" that can be used for learn-to-swim and other recreational programs. The competition swimming area is approximately 6,300 square feet and will have (10) 25-meter lap lanes and (6) transverse 25-yard lap lanes. All starting blocks will have a depth of 5'-0" and 4'-0" at the opposing end for flip-turns. The pool will include a 1,400 square foot catch area that is approximately 3'-6" deep for the large water slide. A diving hopper is also provided for both 1-meter and 3-meter diving boards. This area is approximately 2,000 square feet and has a water depth of approximately 13'-0". Programming would allow the diving area to remain open while having at least (4) 25-meter lap lanes open for recreational lap swimming.

2. Lazy River

The Consultant recommends the inclusion of a Lazy River in this facility. The Lazy River is approximately 530 linear feet in length and is 8'-0" in width and surrounds a center island accessible by a decorative bridge that crosses over the river. The water depth is approximately 3'-0" and would contain approximately

IV. Programming and Design

80,000 gallons. A Lazy River can serve as two functions; as a slow flowing current patrons can use to leisurely float along riding inner tubes, or as a type of therapy pool that can be used for resistance walking during facility programming. The Lazy River would have a zero-depth entry and storage posts to place the inner tubes while not in use. The center island would have an area of approximately 6,700 square feet that can be used as additional deck area with lounge chairs.

3. Poolhouse

The poolhouse building will be used as a control point for patrons entering and exiting the facility and as a restroom / changing facility. The Consultant recommends a 3,375 square foot poolhouse for the new facility.

A typical poolhouse includes the following:

- a. Men's and women's restrooms, with toilets, showers and sinks. Since it has been a recent trend that patrons wear their swim suits to the pool, the changing areas would not be excessive, but would include benches.
- b. Family restroom to include a toilet, shower, sink and changing area. The function of this restroom is for the parent with a younger child of the opposite sex to use a toilet facility together.
- c. Lifeguard room for the use of lifeguards during break periods. The lifeguard area will have lockers, men's and women's restrooms with showers, and a first-aid area.
- d. Private pool manager's office, with a window directly viewing the pool area.
- e. Concessions room to serve both pool and park patrons. Four service windows are recommended for this facility. One of these windows may be dedicated to the park, outside the facility. A designated eating area with picnic tables is recommended on both the pool and park side. The concession stand is designed for the sale and distribution of pre-packaged foods such as nachos, hot pretzels, pre-cooked pizza, ice cream, fountain drinks, and similar type products. A pantry should be included to provide storage for concessions.
- f. A party room to host pool parties. This room would be reserved and rented to provide an additional source of income.
- g. General storage should also be provided for facility equipment and off-season storage.

The design of the poolhouse is not specifically identified in this study, but it is recommended the building be constructed of masonry and pre-engineered wood trusses providing a sloped roof. The building will only be used during the

IV. Programming and Design

swimming season and would not be heated. The Consultant recommends the design of the building include provisions to winterize all plumbing fixtures and utilities.

4. Water Slides

The Consultant recommends the installation of a multiple looping water slide flume and a speed flume off of a single tower. The tower platform would be approximately 25 – 30 feet in height and both flumes would exit into a designated area of the main pool. The looping flume would be approximately 200 feet in length and the speed flume would be approximately 50 feet in length with a steep slope into the water. A smaller water slide is recommended for a smaller age group in the shallow water area. This slide is typically referred to as the Family Slide. The flume is approximately 8'-0" wide, 20'-0" in length and 5'-0" in height. Its intent is for multiple people to slide down together into approximately 2'-0" of water.

5. Sprayground

The Consultant recommends a 1,800 square foot sprayground. Spraygrounds have become a popular element in newer aquatic facilities. They offer an alternative play element for patrons during pool break periods and operate without the use of a lifeguard because there is no standing water. The water features would vary based on the requirements of the users; smaller sprays for toddlers and larger above ground units for older kids located in separate zones. The Consultant recommends the sprayground be fenced to provide partial separation from the pool facility. Access to the sprayground would be controlled by two points, one from the pool entrance and one from a park entrance. The gates from the park would be closed and the gates to the pool would be open during the pool season and vice versa during the off-season. This would allow the sprayground to be used during warmer days when the pool would be closed during the off-season.

6. Shade Structures

The Consultant recommends abundant shade for this facility. Extended sun exposure is a concern and it is important that ample shade is provided. There are two types of shade structures recommended; (4) pavilions and (6) large umbrellas. The first type of shade structures would be pavilions, approximately 16'-0" x 20'-0" each, and located around the pool perimeter fence. The second type of shade structure would be umbrella type sun control devices provided at the pool deck near the water's edge. These umbrellas are approximately 20'-0" in diameter, can be opened and closed by pool personnel, and can be removed and stored during the off-season.

7. Filter Building

The Consultant recommends a 1,800 square foot Filter Building. The Filter Building would house the pool filtration equipment, such as filter tanks, pumps

IV. Programming and Design

and chlorine. A separate storage room would be provided in the Filter Building to store items such as lap lane reels, starting blocks and other pool equipment.

8. Pool Deck and Grass Beach Areas

The Consultant typically recommends that the concrete pool deck and grass beach area be 3 times the area of the water surface area. For this facility, the Consultant recommends approximately 54,000 square feet of concrete deck space and grass beach area. The concrete deck would include proper drainage around the pool to avoid any ponding water.

9. Pool Perimeter Fence

The Consultant recommends approximately 1,100 linear feet of pool perimeter fencing. The fence would be 6'-0" high and be decorative aluminum. It would include 10'-0" wide gates for the use of maintenance and emergency access directly off of the parking lot.

10. Parking and Traffic

The Consultant suggests the facility will require 225 parking spaces during the peak hour of the day. The existing park currently has approximately 500 off-site parking spaces. It is recommended that additional parking be provided for the pool to avoid possible parking conflicts in the park while other events take place during the pool season.



Facility Features

1. Zero Depth Entry
2. Activity Area with Interactive Play Features
3. Separate Wading Pool
4. Lazy River - 530 L.F.
5. Lap Swimming Lanes (6) 25M Lanes
6. Diving Boards
7. Water Slides
8. Sprayground
9. Shade Umbrellas (6) 20' Diameter
10. Concessions
11. Bathhouse
12. Filter Building
13. Parking
14. Grass Beach

IV. Programming and Design



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Lexington Cincinnati Cleveland

Huber Heights Recreation Activity Center
Huber Heights, Ohio

V. Aquatic Center Capital and Operating Costs

A. Introduction

This section contains an estimate of construction costs for the Outdoor Aquatic Facility. It also includes an estimate of operating costs as well as operating revenues. The operating costs are based upon average unit prices in the State of Ohio for similar facilities. The Ohio average of 20 facilities is 62 cents per gallon. For the Huber Heights Outdoor Aquatic Facility, the Consultant recommends using 78 cents per gallon of pool water as a base budget, which allows more for fluctuation from year-to-year. The details of the budget are also included, but the Consultant recommends that final budget line items such as salaries and gate charges be determined by City Council prior to opening. The Consultant also recommends that the line items in this budget be examined in more detail at the time of implementation. The operating revenues are based upon average revenues in the State of Ohio. A review of Per Capita Income data shows that the Huber Heights community can support user fees that are consistent around the State of Ohio.

B. Project Cost Estimate

Main Pool Structure	\$453,600
Lazy River Structure	\$245,000
Bathhouse	\$720,000
Filter Building	\$200,000
Shade Structures	\$108,000
Concrete Decks	\$350,000
Pool Filtration Systems	\$275,000
Pool Play Features & Equipment	\$530,000
Site Amenities	\$200,000
Site Infrastructure (Pool Area Only)	\$400,000
Construction Sub-Total	\$3,481,600
Estimate Contingency & Allowances (10%)	\$350,000
Construction Total	\$3,831,600

C. Operating Costs – Outdoor Aquatic Center

Personnel	
Pool Manager	
1 on duty x 70 hrs/wk x 13 wks x \$12/hr	\$10,920
Assistant Managers	
1 on duty x 70 hrs/wk x 13 wks x \$10/hr	\$9,100
Lifeguards	
63 hrs/wk x 13 wks x 13 guards on duty at one time x \$9.00/hr	\$95,823

V. Aquatic Center Capital and Operating Costs

WSI Instruction/Guards

12 hrs/wk x 13 wks x 3 staff x \$9/hr \$4,212

Staff/Attendants (Concession, Engry, etc.)

63 hrs per wk x 13 wks x 6 staff x \$8.00/hr \$39,312

Administrative Costs/Maintenance (Including PERS and WC) \$38,560

Utilities \$43,200

Concession Supplies \$35,800

Chemicals \$38,200

Miscellaneous Expenses \$34,000

Total \$349,127

Rounded @ \$350,000

Cost/Gallon \$0.78

D. Operating Revenues – Outdoor Aquatic Center

1. Family Passes 450 @ \$200 \$90,000

2. Individual Passes (Adult) 300 @ \$85 \$25,500

3. Individual Passes (Youth) 150 @ \$60 \$9,000

4. Daily Admission

a. 14,800 @ \$4 (Adult) \$59,200

b. 35,200 @ \$2 (Children) \$70,400

5. Concessions \$114,000

6. Learn-to-Swim 860 @ \$40 \$34,400

7. Rentals 40 @ \$300 \$12,000

Total \$414,500

Rounded @ \$415,000

Income Per Person \$4.83

Operating Surplus \$70,000

E. Conclusions

The Outdoor Aquatic Center will generally recover all of its annual operating expenses through gate receipts. While the projected income per visit is approximately \$4.83 per person, the Huber Heights community could increase rates by another \$1.00 per visit. This would keep Huber Heights revenue rates within the acceptable range of other Ohio cities. It has been the experience of this Consultant that attendance does not begin to decline until the cost per visit exceeds \$8.00.

VI. Development Program

The following is the program of development for the potential park facilities to be located at the future Huber Heights Recreation Activity Center. The potential facilities list is based upon the needs that were identified in the community survey in 2010. The facility criteria, user groups and other pertinent information are listed for the major types of facilities requested. These criteria are the basis of the next phase, which is the development of alternative concept plans for the site.

A. General Site Considerations

This section includes overall philosophies and guidelines that pertain to the entire development of the park.

The entire park should be well signed and landscaped to provide a very positive image for the community, since the park is highly visible with road frontage on two sides and a key location near the Huber Heights YMCA and Sinclair Community College satellite campus.



Shared use path

B. Multi-Purpose Rectangular Fields

1. Fields should be designed to be used for soccer and other activities requiring rectangular fields.
2. Fields should be designed in as large and flat of an area possible to allow for rotating the fields and changing the sizes of fields as needed by the athletic organizations and various age groups. The specific age groups requiring fields and peak age groups change regularly and this arrangement would provide for maximum flexibility.
3. Soccer and other rectangular game fields should be located in close proximity to restrooms, and picnic/shade shelters.
4. At least one field size should be at least 60 yards by 120 yards.
5. The surface should be a high quality natural sports turf. Sod is preferred over seeding grass for a quicker and more consistent turf. Proper sod or seedbed preparation is key to long term quality turf.
6. Ideal sun orientation is north to south or angled slightly east of north.
7. Provide 50 car parking spaces per field.
8. Provide storage for maintenance and organization use.
9. The maximum slope is one and one half percent from side to side.

C. Playgrounds

1. A variety of experiences should be provided throughout the playgrounds. It is also recommended to use safe and durable materials such as plastic components, plastic coated steel decks, steel posts, and similar materials. The overall design of the playground in each area should meet the Consumer Product Safety Commission Guidelines. Proper safety surfacing should be provided under all equipment. Handicap accessibility is a major issue, which must be considered in the design of each playground.
2. It is recommended that a larger and very creative all-access playground be developed since the park will have the infrastructure to handle larger groups of people. This park will have the capacity to attract regional populations.
3. All playgrounds must meet minimum ADA requirements, but a higher level of universal access is desired at this park.
4. The use of poured-in-place rubber safety surfacing is most desirable to allow for a high level of accessibility.



Playground with seating area, Millennium Park, Danville, Kentucky



Example of an all-access playground, Hadleys Playground, Dulles, Virginia



Activity Center Park, Centerville-Washington Park District, Ohio



D. Picnic Areas and Shelters

1. Picnic areas are best if developed in a natural setting. Community Parks provide better opportunities for the development of large shelters that can be reserved by groups. The shelters could be used for company picnics, family reunions, church

VI. Development Program

outings, and team gatherings etc. These group rental facilities are best if developed in conjunction with a playground, walking paths, and open fields for games. Shelters should be located in close proximity to parking and restrooms. Shelters that are most frequented are those that are located in wooded areas or that overlook water bodies.

2. It would also be appropriate to develop picnic shelters and facilities in the vicinity of athletic fields. Families often spend many hours at the athletic fields on game days and this provides a place to get out of the sun and a facility for the teams to meet. They would also provide gathering areas for camps.
3. The architectural style could be drawn from the YMCA. This would include brick faced columns on the shelters and restroom buildings, and a standing seam, blue metal roof. Another option would be to mimic shelter styles used at other City of Huber Heights parks.



Shelter compatible with Huber Heights YMCA architecture; Clippard Park, Colerain Township, Ohio



Shelter compatible with Huber Heights YMCA architecture; Colerain Park, Colerain Township, Ohio

E. Restrooms

Restrooms are typically identified as a high priority to improve the quality of a park. Ideally these would include running water, flush toilets, and sinks for hand washing. Typically, they would be developed of masonry materials, be easy to clean, and would be designed to withstand heavy use and frequent cleaning. Restrooms were one of the top priorities for park improvements in the community survey.

F. Amphitheater

1. An amphitheater with covered stage should be developed to allow for a variety of performance types such as music groups, plays, speakers, pageants, movies, etc.
2. Supported by restrooms and a storage area.
3. Spectator areas could be a large open area or a sloped bowl area.

VI. Development Program

4. The size of the stage and seating capacity should be determined by the type of performances that will be planned and the anticipated audience sizes.
5. The stage should be oriented in a north-south direction to avoid the low evening setting sun in either the performers' or spectators' eyes.
6. The photographs below indicate some typical types of successful amphitheaters and bandstands that have been used in other communities.



Band Shell Example

G. Walks/Paths/Trails

1. A main element of the Master Plan will be a paved perimeter shared-use path that should be a minimum of 8' wide to accommodate bikers, walkers, joggers, strollers, wheelchairs, and roller blades. This path can also serve as a maintenance and emergency access road.
2. The new paths will be expected to receive a great deal of use, primarily for walking and jogging.
3. Paths for bicycles should be developed to the standards published in the AASHTO Guide for the Development of Bicycle Facilities, 1999.
4. Interior paved paths should be designed to provide access to various facilities in the park. Slopes should be less than 5% to accommodate persons of all abilities.

VI. Development Program

5. Install signage with mile markers throughout the park.
6. Install fitness stations along the path.



Shared-use path, Winton Woods, Hamilton County, Ohio

H. Wetland Area and Boardwalk

This property provides a great opportunity to interpret and illustrate the nature of wetlands and its inhabitants. A wetland habitat would be developed in the center of the large open area where the soils are currently saturated and where a storm water detention area is needed. A boardwalk and platform could be built over the wetland for educational purposes. A perimeter path should also be developed to provide access to the edges of the wetland area and to provide an additional area for walking.



Interpretive boardwalk



Example wildflower meadow

I. Architecture Style/Patterns

The buildings and structures on the site should all have similar characteristics and materials to form a family of design elements. Illustrations include some examples of structures at a park site which all have similar materials, roof lines, textures, and colors. It is recommended that a color and material palette be chosen for the Huber Heights Recreation Activity Center early in the design process to determine a theme for all elements in the park. The Huber Heights YMCA is the most prominent building in the area. The red brick exterior walls and blue standing seam metal roof style with blue accents could be chosen to create the standard for the remainder of the park. Photos below are park structures at other parks that are similar in character to the Activity Center and would work well at the future park.

VI. Development Program



Huber Heights YMCA



Huber Heights YMCA sign example



Example rectangle picnic shelter, Colerain Township, Ohio



Example of large picnic shelter, Beech Acres Park, Anderson Township, Ohio



Example restroom building, Beech Acres Park, Anderson Township, Ohio

VII. Concept Plans

The following are general observations and comparisons of the three preliminary concept plans that were presented. For each of the plans, the text describes the proposed features, pros and cons.

A. Common Elements within Concepts

The following elements are common to all of the Concept Plans.

1. The architecture chosen for all concepts complements that of the existing YMCA building, shelter, and playground currently located in the southeast corner of the site.
2. Each plan indicates the potential to revise the current cul-de-sac and expand parking to the north.
3. The area north of the main entrance along Brandt Pike is heavily wooded. This provides a good opportunity for storm water detention. The area would be similar in nature to that of the YMCA's detention located at the corner of Brandt Pike and Shull road.
4. To the southwest of the YMCA, all three concepts propose to keep the arrangement of the existing youth soccer fields. These fields are roughly 60' x 150' in size.
5. All three concepts show an additional entrance off of Shull Road on the far west side of the property. It is suggested that the entrance have one drive into the park and two exit lanes out of the park: one for turning left and another for turning right.
6. Mounding and landscaping is proposed to block some of the noise and provide privacy to those homes located west of the site. Many of the residences along Deer Bend Drive already have access to the park through their property fences.
7. A perimeter loop trail is incorporated into all the concepts with connecting interior trails and walks. There is potential for connection to the new property development north of the site from the perimeter trail.

B. Concept Plan 'Option 1'

1. Description
 - a. Concept Plan 'Option 1' maximizes the potential for future expansion of the YMCA. In addition, the following improvements are recommended:
 - b. The aquatic facility would be located in the northwest corner of the park. The facility would have a lap pool, lazy river, water slides, large shallow water area with zero depth entry and some water spray activities, sprayground, wading pool, and a large concessions area with tables and umbrellas among other features. A large poolhouse would be located at the entrance and would provide changing rooms, restrooms, and a place for pool admissions.

VII. Concept Plans

- c. The existing soccer fields would be reoriented, and two additional large multi-purpose fields would be located adjacent to the existing fields, allowing additional capacity for soccer programs. The soccer area would also be improved with the addition of a picnic shelter and large playground. A new entrance drive off of Shull Road would allow easy access to the fields.
 - d. Two additional playgrounds would be located towards the center of the park. At least one of the playgrounds would be a large all-access playground for children of varying needs. The playground areas would be accompanied by large picnic shelters.
 - e. Parking would be provided among three new parking lots. One parking area would be located off the cul-de-sac at the end of the main entrance drive, which would provide parking mainly for the amphitheater. The other two parking areas would be designed around the aquatic facility and would serve as a parking area for the soccer fields, playgrounds, and aquatic facility.
 - f. A perimeter paved walking trail could be accessed off of any of the three parking lots. Connector trails and walks would allow access to all of the park's amenities.
 - g. An amphitheater would be tucked into the landscape on the eastern side of the park. The wetlands and wooded area would provide a beautiful backdrop for small concerts and events held there.
 - h. Two separate storm water detention areas would be defined. The first being located along Brandt Pike near the main park entrance and the other in the far northeast corner of the site. The northern detention area would serve as a more passive area with wetlands and a boardwalk for educational purposes.
 - i. A small dog park was also proposed north of the aquatic facility. It would be equipped with at least two separate gated areas for different size dogs, and a shelter.
2. Pros
- a. This option maximizes the potential for future expansion of the YMCA and Sinclair Community College.
 - b. The rearrangement of the existing soccer fields allows for the additional proposed fields to be consolidated in one general area.
 - c. The noise concern from the amphitheater is address by locating the amphitheater towards the north east corner of the park with the woodland as a backdrop.

VII. Concept Plans

- d. The storm water detention and boardwalk area provides a passive and natural focal point with many educational opportunities.
 - e. This plan results in the greatest number of parking spaces located in three separate parking lots. Additional immediate parking for the athletic fields would be located off of the new entrance drive on the western edge of the property.
- 3. Cons
 - a. There is not much open space to add additional park elements in the future.
 - b. The dog park location may be too small to accommodate the suggested amenities.

VII. Concept Plans

Option 1



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LEXINGTON CINCINNATI CLEVELAND

Huber Heights Recreation Activity Center

City of Huber Heights, Ohio

C. Concept Plan 'Option 2'

1. Description

- a. Option 2 assumes the south west side of the property, where the athletic fields are located, be minimally altered.
- b. In this option, the aquatic facility is centrally located along the western half of the property. The facility would have a lap pool, lazy river, water slides, large shallow water area with zero depth entry and some water spray activities, sprayground, wading pool, and a large concessions area with tables and umbrellas among other features. A poolhouse would be located at the entrance and would provide changing rooms, restrooms, and a place for pool admissions.
- c. Plenty of close access parking is provided for the aquatic facility. An additional large parking lot is located south of the facility that would also serve the existing athletic fields.
- d. Two additional athletic fields are located in the northwest corner of the property. One is a large field and the other is a medium to small field. A shelter is located nearby, just off the parking lot.
- e. A large dog park is suggested to be located between the playground and amphitheater, with the back edge sharing the tree line. Fencing would separate the dog park into 2-3 areas for different sized dogs. There would also be a central shelter.
- f. An amphitheater is located centrally on the northern edge of the property. A perimeter loop trail passes along the back edge.
- g. A large all-access playground and shelter is located just south of the smaller more secluded parking lot. It would feature play equipment for children of all ages and/or disabilities.
- h. Two additional shelters are located in the open space between the aquatic facility and the playground.
- i. Storm water detention is confined in four separate areas. One is located just off the main entrance, with two others located north of the aquatic facility. One is tucked away in the nook of the perimeter trail behind the large athletic field, and the other is located between the amphitheater and north 'banana' parking lot. The fourth detention area is shown just south of the small existing soccer fields along Shull road.

2. Pros

- a. A small separate parking lot is provided mainly for the playground, dog park, and shelter use.

- b. The dog park is situated against a tree line which creates a more private feel along the back edge. Most dogs also tend to favor walking through or near woodland.
 - c. Connector trails and walks can be picked up from all site amenities and parking areas.
 - d. A significant amount of mounding is shown on the interior of the loop trail near the aquatic facility. This will help shield views and noise from the residences to the west and also those walking along the west side of the perimeter trail.
3. Cons
- a. This plan does not provide an open field area.
 - b. The storm water detention in this option is scattered into four separate areas throughout the park. Two of these areas are located in close proximity to athletic fields, which could cause problems with stray balls.
 - c. No shelters are proposed on the southern half of the property. Some type of structure would be important for those watching practice or games on the existing athletic fields.
 - d. Amphitheater users would have to share parking with the aquatic facility during the daytime hours.

VII. Concept Plans

Option 2



Brandstetter Carroll Inc.
ARCHITECTS ENGINEERS PLANNERS
LEXINGTON CINCINNATI CLEVELAND

Huber Heights Recreation Activity Center

City of Huber Heights, Ohio

D. Concept Plans 'Option 3'

1. Description

- a. Option 3 pushes the aquatic facility and other heavily used activities, towards the interior of the site, leaving the exterior to be as passive as possible.
- b. This plan illustrates the aquatic facility being located directly behind the YMCA, working in close proximity to the existing shelter and playground. The facility would have a lap pool, lazy river, water slides, large shallow water area with zero depth entry and some water spray activities, sprayground, wading pool, and a large concessions area with tables and umbrellas among other features. A poolhouse would be located at the entrance and would provide changing rooms, restrooms, and a place for pool admissions.
- c. The two existing soccer fields off of Shull Road are to be preserved. Two additional large soccer fields are to be located north of the aquatic facility.
- d. One large central all-access playground and shelter is situated just off the existing Sinclair parking lot. Two additional smaller playgrounds are also proposed for this concept. One is located inside the aquatic facility and another parallel to the large all-access playground, but closer to the main entrance drive.
- e. Parking for this concept is focused mainly in the south west corner with a smaller, more private lot for the entrance playground and shelters, and another more linear lot for the athletic fields and large all-access playground. The existing Sinclair parking lot could also be used for amphitheater events.
- f. A perimeter loop trail winds around the various site amenities with connector trails and walks allowing various options to reach a particular site amenity.
- g. A large dog park is just north of the additional soccer fields. It would have at least two separate fenced in areas for different size dogs, and a central shelter. Two additional shelters are shown between the dog park and the athletic fields.
- h. The amphitheater is centrally located on the site and can be accessed from a number of different trails. An open field is located directly behind the amphitheater which provides a nice backdrop and space for large events.
- i. Storm water detention is separated into three locations on this concept. One is located off of Brandt Pike, and the other along Shull Road. The third, just north of the small parking lot would be developed into a

VII. Concept Plans

detention/wetland area, with the potential for boardwalks and educational activities.

2. Pros

- a. A lot of close proximity parking to all three of the playgrounds. The two playgrounds outside of the aquatic facility also have several large shade structures nearby.
- b. This concept offers the greatest distance between the aquatic facility and the residences to the west. As drawn, the parking serves as a barrier between the two.
- c. The amphitheater is located a good distance away from the homeowners, and mounding is proposed to alleviate some of the noise disturbance that may occur.

3. Cons

- a. The majority of parking is located to the southeast of the aquatic center; therefore leaving little convenient parking for the other site amenities.
- b. There is little to no room for future expansion of the YMCA and Sinclair Community College, which would most likely occur at the rear of the existing building.
- c. Parking creates an eyesore for the residences directly west of the aquatic facility. Currently, there is no mounding or landscaping planned to soften the view. The only mounding proposed on this concept is west of the two large athletic fields.
- d. No shelters or shade structures are shown on the south side of the property. Shade umbrellas will be located within the aquatic facility, however nothing is provided on the exterior of the facility for those who are watching practice or playing on the athletic fields.

VII. Concept Plans

Option 3



Brandstetter Carroll Inc.
ARCHITECTS ENGINEERS PLANNERS
LEXINGTON CINCINNATI CLEVELAND

Huber Heights Recreation Activity Center

City of Huber Heights, Ohio

VIII. Recreation Activity Center Master Plan

Following discussion of the concepts and the selection of Option 1, the Preliminary Master Plan was developed to include the addition of parking along the new access drive off of Shull Road, and the rearranging of athletic fields south of the aquatic facility.

A. Preliminary Master Plan Description

1. The Preliminary Master Plan utilized the items presented in 'Option 1', which was the clear preference among those in attendance at the Planning Commission meeting. Specific areas were altered based on the comments presented and several program elements were added. The site program includes an aquatic facility, two large multi-purpose athletic fields, an amphitheater, two large playgrounds, two storm water detention areas, one with wetlands and a boardwalk, two large picnic shelters, six smaller picnic shelters, and landscape mounding. Paved accessible trails and walks link all of these facilities and will accommodate all users and provide maintenance access for the park.
2. One major change is the rearranging of the athletic fields. In Option 1, the existing athletic fields were left at their original orientation. In the revised plan, the athletic fields were reoriented, allowing for larger fields to be designed, and a better usage of this space. Additional parking was also added along the new entrance drive off of Shull Road. This will allow close access parking for those utilizing the athletic fields.

B. Final Master Plan

Once the Preliminary Master Plan was prepared, a further review of the design was conducted with consideration to phasing, programming, funding, etc. The result is the attached Final Master Plan. The main changes from the Preliminary Master Plan include the following:

1. The dog park was removed from the plan due to inadequate space. Ideally, there would be three gated areas of one acre each for dogs of all sizes and a central shelter. On the final plan the three areas would be too constrained to function as they should.
2. One of the playgrounds was removed and the other was relocated to the nook of a trail just south of the aquatic center entrance. The playground was modified to incorporate two separate areas: one for children 5 to 12 years of age, and another for children 2 to 5 years of age. A swing set was also included.
3. Two restrooms were also incorporated into the plan. One restroom facility is located just off the trail north of the athletic fields, and the other is located between the amphitheater and the playground. The restroom central to the amphitheater and playground will be larger to accommodate crowds at performances and allow space for storage.

VIII. Recreation Activity Center Master Plan

4. Originally the large shelter directly west of the wetlands and boardwalk area was to have a loop trail off of the main trail. In the revised design, the perimeter trail was modified to hug the parking lot more and in response, the shelter is now connected by a small concrete plaza and walk.

VIII. Recreation Activity Center Master Plan



 Brandstetter Carroll Inc.
Architects Engineers Planners
Designers Consultants

FINAL MASTER PLAN

HUBER HEIGHTS
Recreation Activity Center

VIII. Recreation Activity Center Master Plan

C. Recommended Project Staging

The strong desire by the City to have the aquatic facility open for the 2012 season is the critical force driving the aggressive schedule. Therefore, the Project Team including the City, YMCA, Transportation Improvement District, Brandstetter Carroll Inc. and its consultants, and 201 Corridor Management, LLC must work together in a very expeditious and highly coordinated manner. The Team has developed a schedule that allows for phased development and contracting of the project.

Four construction packages are planned. The first contract is scheduled to begin in July and will include the major utilities, and mass earthwork. The second package would begin in September and include the pool construction. Package 3 would begin in fall 2011 and include the general aquatic facility site and building package. The final package includes the park facilities and would begin as funding allows.

D. Opinion of Probable Project Cost

The Opinion of Probable Project Cost for the Master Plan is included at the end of this section. These costs are based on the preliminary design and Master Plan and therefore, are subject to change as more site information is available and the design is refined. Overall, the Opinion of Cost identifies a total construction cost of just over \$7.8 million, including a 5% contingency for unknown conditions and 10% for the Contractor's general conditions such as insurance, bonds, testing, construction management, and overhead costs. The Owner costs for design, engineering, bidding, printing, testing, etc. adds an additional 12% to the total for a total project cost of just under \$8.8 million.

The next steps in the process will be to refine the design with the latest review comments and a more accurate topographic survey and utility information which will allow the opinion of cost to be more accurate. Other steps will be for the City leadership to determine how much the City can afford to construct in Phase One and to work with the Consultant to coordinate the park features that will be developed within the allocated budget.

E. Potential Park Operating Costs

The City of Huber Heights currently maintains 236 acres of parks with a budget of approximately \$460,000 per year. This averages to \$1,944 per acre. The Consultant has performed benchmarking surveys of dozens of communities throughout Ohio which indicated an average of approximately \$2,000 per acre per year. The \$1,944 per acre for Huber Heights parks is in line. The new park will encompass 24.9 acres, but the aquatic facility costs are included in the operating costs for the aquatic facility. Therefore, the 2.25 acres of the Aquatic Center should be reduced from the total acreage, leaving a total of 22.65 of new park land to be maintained. This does not include the wooded area adjacent to the creek and north of the park site since the development does not encroach into this area and it should only need minimal maintenance. Using the \$2,000 per acre figure results in a total new operations cost of \$45,300 per year for the Recreation Activity Center.

VIII. Recreation Activity Center Master Plan

1. Athletic Fields
 - a. Skills camps
 - b. Soccer leagues, practices and camps
 - c. Lacrosse leagues, practices and camps
 - d. Ultimate Frisbee
 - e. Other rectangle field sports
 - f. Open field play, kite flying, Frisbee, etc.
2. Aquatic Center
 - a. Learn to swim – Various ages and abilities
 - b. Swim competitions
 - c. Diving competitions
 - d. Water aerobics and exercise
 - e. Birthday parties – (Party room in the Pool House or at a shelter)
 - f. Lifeguard training
 - g. Kayak/Scuba classes
 - h. Movies at the pool
 - i. Special events, Hawaiian luaus, pirate days, mermaid and Viking days, discount days, etc.
 - j. Teen nights
 - k. Party nights
 - l. Dog day at year end
3. Amphitheater
 - a. Concerts – Individuals, small groups, orchestra
 - b. Plays
 - c. Speakers/lectures
 - d. Movies (Cost approximately \$700/year for a license and \$300-400 per movie)
 - e. Weddings
 - f. Magic shows
 - g. Shakespeare in the Park
 - h. Teen nights
 - i. Rental for religious services

VIII. Recreation Activity Center Master Plan

A good general budget for a summer concert and movie series is about \$10,000 per summer. This is based upon the budget for similar facilities which include concerts, plays, magic shows, etc. at an average cost for the performers of \$400 to \$500 per event.

4. General Park, Shelters, and Playgrounds
 - a. Summer camps
 - b. Shelter rental (Current rental charges are \$25 per shelter – these should include electric, grills, and water fountains nearby. The City could possibly charge more at this park and more for a larger shelter)
 - c. Events such as Easter Egg Hunts and Fall Harvest Festivals
 - d. Family days
 - e. Community picnics
 - f. Fitness camps/days/programs
 - g. Walking clubs
 - h. Outdoor environmental education
 - i. Coordinate on events scheduled at Carriage Hill Metro Park

VIII. Recreation Activity Center Master Plan

**OPINION OF PROBABLE COST - CONCEPT DEVELOPMENT
HUBER HEIGHTS RECREATION ACTIVITY CENTER
CITY OF HUBER HEIGHTS, OHIO
PROJECT NO. 11039**

BRANDSTETTER CARROLL INC.

May 4, 2011

ARCHITECTS ENGINEERS PLANNERS

Total Project

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT	SUBTOTAL
1	General Conditions (Cost indicated at bottom)					
	All items specific to Division 1 such as the following:					
	Permits					
	Insurance and Bonds					
	Submittals					
	Administration					
	General Labor/Cleanup					
	Dumpsters					
	Site Maintenance					
	Dewatering					
	Temporary Facilities					
	Testing and Inspections					
	Construction Signage					
	Construction Fence					
	Final Cleaning					
2	Existing Conditions					
	Demolition	1	LS	\$15,000.00	\$15,000	
3	Electrical					
	General Service and Distribution	1	LS	\$175,000.00	\$175,000	
	Roadway and Parking Lot Lighting	1	LS	\$90,000.00	\$90,000	
4	Earthwork, Erosion and Sediment Control					
	Erosion Control Silt Fencing	2,900	LF	\$2.10	\$6,090	
	Silt Checks and Settling Ponds	1	LS	\$3,500.00	\$3,500	
	Curb Inlet Protection	1	LS	\$500.00	\$500	
	Site Clearing	1	LS	\$5,000.00	\$5,000	
	Topsoil Stripping	5,000	CY	\$1.20	\$6,000	
	General Site Earthwork (Includes Detention Basins, Screening Berms, Parking Lots, Roadway, Trails)	20,000	CY	\$7.00	\$140,000	
	General Earthwork for Aquatic Facility (Leveling Site)	9,400	CY	\$7.00	\$65,800	
	Topsoil Placement and Spreading 4"	5,000	CY	\$5.00	\$25,000	
5	Aquatic Facility					
		1	LS	\$3,831,600.00	\$3,831,600	
6	Site Improvements					
	Concrete Curb and Gutter	5,785	L.F.	\$16.00	\$92,560	
	Concrete Header Curb	72	LF	\$15.00	\$1,080	
	Concrete Pavement (Sidewalk and Pads)	2,000	SY	\$54.00	\$108,000	
	Vehicular Asphalt Pavement (Incl. Base)	18,288	SY	\$23.00	\$420,624	
	Asphalt Pavement for Trails (Incl. Base)	5,780	SY	\$20.00	\$115,600	
	Striping	4,600	LF	\$1.00	\$4,600	
	Amphitheater (Terraced Seating for 300 Capacity)	1	LS	\$400,000.00	\$400,000	
	Restroom/ Storage Facility	1	LS	\$150,000.00	\$150,000	
	Small Restroom	1	LS	\$60,000.00	\$60,000	
	Drinking Fountain w/ Hose Bib and Drainage Pit	4	Ea.	\$3,500.00	\$14,000	
	Playgrounds (Incl. Rubber Safety Surface, Curbing, Concrete Pad, Shelter, Benches, Restroom)	1	LS	\$280,000.00	\$280,000	
	Large Shelter 20'x40' (Includes Conc. Pad, Grill, Decorative Column Surround)	2	Ea.	\$58,000.00	\$116,000	
	Small Shelter 20'x20' (Includes Conc. Pad, Grill, Decorative Column Surround)	5	Ea.	\$25,000.00	\$125,000	
	Detention/Wetlands Area (Grading, Plantings, Boardwalk)	1	LS	\$45,000.00	\$45,000	
	Seed and Mulch	16	ACRE	\$2,800.00	\$44,800	
	Sod	4,535	SY	\$3.50	\$15,873	
	Landscape Plantings	1	LS	\$100,000.00	\$100,000	
	Privacy Fencing	600	LF	\$20.00	\$12,000	

VIII. Recreation Activity Center Master Plan

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	Total Project	
					AMOUNT	SUBTOTAL
7	Utilities					\$298,900
	Storm Sewer Lines	1,500	LF	\$45.00	\$67,500	
	Storm Sewer Structures (catch basins, curb inlets, etc.)	20	EA	\$1,500.00	\$30,000	
	Sanitary Sewer Piping	1,200	LF	\$50.00	\$60,000	
	Sanitary Sewer Manholes	4	EA	\$1,500.00	\$6,000	
	Gas Distribution Piping	1,200	LF	\$22.00	\$26,400	
	Secondary Water Distribution Piping	1,200	LF	\$20.00	\$24,000	
	8" Water Main	1,700	LF	\$50.00	\$85,000	
	Subtotal					\$6,767,527
	Contingency @ 5%					\$338,376
	Subtotal Construction Cost					\$7,105,903
	General Conditions 10% (See #1 above)					\$710,590
	Total Construction Cost					\$7,816,493
	Owner's Costs (Legal, Advertising, Bidding, Testing, Permits, Geotech, etc. at 4%)					\$312,660
	Design and Engineering at 8%					\$625,319
	Resident Inspection					\$22,500
	Total Project Cost					\$8,776,972