

Prepared for:
City of Champaign

In partnership with:
Champaign Park District



Prepared by Hitchcock Design Group in association with
RAPPS Engineering, Ltd.

May 2, 2008



Acknowledgements

Bruce Knight

*Planning Director, City of
Champaign*

Mishauno Woggon

Planner, City of Champaign

Eleanor Blackmon

*Assistant City Engineer, City of
Champaign*

Bobbie Herakovich

*Executive Director, Champaign
Park District*

Terri Gibble

*Project Planner, Champaign
Park District*

Gerald Schweighart

Mayor

Gina Jackson

Council Member - District 1

Michael La Due

Council Member - District 2

Vic McIntosh

Council Member - District 3

Marci Dodds

Council Member - District 4

Ken Pirok

Council Member - District 5

Thomas Bruno

Council Member - At Large

Deborah Frank Feinen

Council Member - At Large

Karen Foster

Council Member - At Large

Barbara Kuhl

Park Board President

Jane Solon

Park Board Vice President

Newton Dodds

Park Board Commissioner

Alvin Griggs

Park Board Commissioner

Joseph Petry

Park Board Commissioner



Contents

- 1 Executive Summary
- 4 Master Plan
- 6 Implementation Strategy
- 7 Background Information

Executive Summary

Purpose

The Landfill Reuse Study is a key step in assisting the City of Champaign and the Champaign Park District to determine the best recreational uses for the site and develop a great resource for the Community. The enclosed master plan represents the collective vision developed by the City, Park District, community, consultant team, and other stakeholders as a result of this process. The full development of this plan is anticipated to be accomplished over many years with the assistance of grant funding, private partnerships, and a strategic phased approach. As this development unfolds, the Master Plan will serve as a valuable tool to guide the City and Park District in their decision making and implementation along the way.

Background & History (provided by City of Champaign)

The Former Champaign Municipal Landfill is a 90 acre site located on the north side of Route 150/ Bloomington Road between Champaign and Mahomet. From post World War II to 1975, it was operated as a municipal solid waste landfill. Attempts to formally close the landfill in the 1980's were not successful due to the presence of leachate seepage and inadequate cover. As a result, a remedial investigation was performed in the early 1990's and a Closure Plan finalized in 1997.

Three phases of remedial cover work were completed by the City of Champaign in 1998, 2000 and 2002. The work was part of the Closure Plan and cost \$2.4 million. All three phases of the closure work were similar; the work was performed in three geographic phases to spread out the cost. The Phase I work was on the north third of the landfill. The Phase II work was on the middle section of the landfill except the area around the model airplane field, and the Phase II work was on the south section of the landfill and around the model airplane field.

The remedial cover work consisted of stripping existing topsoil, reconditioning the existing cover material and supplementing the cover thickness to a minimum of two feet, placing at least six inches of topsoil, and seeding with native plant material. Cover thickness was increased where necessary to provide

positive drainage off the site. Much of the clay cover material was obtained from the Boneyard Creek Healey Street Detention Basin project. Other work under the contract consisted of installation of passive gas vents to vent residual methane and improvements to the landfill's drainage ditches and storm sewer.

The site's closure application is currently under review by the Illinois Environmental Protection Agency. The City monitors groundwater quality by testing onsite wells on a quarterly and annual basis, as required by the IEPA. There have been no indications of landfill leakage.

In July 2006, as part of the Council Goal "Our Community has a High Quality of Life—People Enjoy Living Here" the City Council identified a strategy to "Work with the Champaign Park District to Convert the Old Landfill to a Community Park." As a result of this strategy, the City of Champaign and the Champaign Park District agreed to enter into an intergovernmental agreement to split the cost of developing a master plan for converting this site to a community park.

On July 25, 2007 a joint meeting was held, at which time the two bodies discussed the possible development of a master plan for reuse of the site of the former municipal landfill as a community park. Concerns were expressed about whether the process to close the former landfill had completely eliminated environmental hazards associated with the site, ensuring the safety of future users of the park. It was noted that this landfill has been monitored for some time and no environmental issues have been observed, that the site had never been used for disposal of hazardous materials so serious problems were unlikely in the future, and that ongoing monitoring would continue to protect against potential hazards in the future. City Council directed staff to develop a master plan for a community park at the site. Hitchcock Design Group was selected to complete the landfill reuse park plan. In October 2007, an Intergovernmental Agreement was approved between the City and the Park District to develop the reuse plan was approved by City Council as well the contract with Hitchcock to develop the former landfill into a park.

Executive Summary

The site is currently being used by the Champaign County Radio Control Club as a model airplane park and by the Champaign Police Department's Police Canine Program.

Why a Park?

The Champaign Landfill provides a unique opportunity for recreation that may be challenging to find in other areas of the community. The site is 90 acres of open space with a diversity of topography that creates opportunities for many different types of recreation. These site conditions have led to the successful use of the site for a radio controlled aircraft field over the past several years.

The site is surrounded by agricultural uses making it ideal for certain types of recreation that may not be suitable adjacent to residential lots. Access to the site already exists along Route 150 with a gravel drive extending into over two-thirds of the site, and the adjacency of I-74 to the north provides meaningful visibility for uses that are meant to be of regional significance. A regional bike trail is planned along Route 150 providing a future connection and destination point between Mahomet and Champaign.

Much of the site is currently covered in native vegetation for purposes of soil and erosion control, and minimizing the more intense maintenance that is required for turf grass. This cover has established habitat creating an ideal setting for wildlife and nature observation and education. Landfill sites also encompass certain restrictions such as not penetrating the cap with underground structures, storm water storage limitations, and the need for monitoring wells and methane vents. Where it may be challenging or unfeasible for other uses due to these restrictions, certain recreational uses are able to accommodate these needs.

The reuse of the landfill for recreation enhances the overall quality of life for the residents of Champaign while supporting the principles of smart growth and sustainable development in its reuse of a "brown field" rather than development of other open space or agricultural land.

Lastly, landfill sites have been redeveloped into recreational parks successfully for decades. The following is an excerpt from the article "From Dumps to Destinations" developed by The Center for City Park Excellence and available on the Trust for Public Land website.

"No one has tabulated all the parks and public recreational sites created on old landfills. There are certainly more than 250, and there may well be more than 1,000. They range from the famous, such as Flushing Meadow in New York (site of two World's Fairs) and the appropriately named Mt. Trashmore in Virginia Beach, to relatively obscure inner-city basketball and tennis courts, suburban golf courses, and soccer fields. One converted landfill in Berkeley is home to an international kite festival; another in Albuquerque hosts a celebration of hot-air balloons. It would be an overstatement to say that some of the nation's best urban parks have been created from landfills, or even that capped landfills automatically make terrific parks. But in a time of severe urban space and resource constraints, closed landfills present excellent new park sites for three reasons — size, location and cost. Communities from coast to coast have been jumping at the chance to convert them."

Harnik, Peter, et al. From Dumps to Destinations: The Conversion of Landfills to Parks. Places, Volume 18.1, 2006.

Executive Summary (continued)

Project Approach & Goals

The project started with a detailed research and analysis study to understand the sites topography, hydrology, existing features, adjacent land uses, and local development requirements. Along with input from City staff, RAPPS Engineering was included on the Hitchcock Design Group consultant team to provide insight on development restrictions and opportunities regarding the site's landfill status.

A series of steps were then taken to reach out to the community and solicit input including development of a project website for project updates and input via email, a community workshop followed by a design presentation, and interviews with special interest organizations. Project goals and design program were then established based on the input received and an understanding of the site constraints and opportunities. Those were as follows:

Goals:

- Maintain integrity of the landfill site
- Minimize environmental and site impacts
- Preserve view to the south
- Meet recreational needs of the community
- Provide for both daily public use and scheduled regional events
- Utilize best management practices for storm water management and site development

Design Program:

- Naturalized prairie and wildlife habitat
- Wildlife/nature observation and education
- Mixed-use trail and connection to planned regional trail
- Picnic areas
- Model Airplane field and fly space
- Frisbee-Golf
- Large Gathering/Event space
- BMX Track and skills park
- Canine training / dog park
- Sled hill
- Play area

Organization

The concept is based on utilizing existing facilities to maintain current uses and infrastructure where feasible. Some of these facilities include the radio controlled air field, K-9 training area, and roadway. Amenities are located to best maintain the existing topography and hydrology, and work around the wellheads and vents. The core gathering and amenity space is located at the highpoint of the site to take advantage of the view south and is centrally located to each of the primary uses for convenient access. Family oriented passive uses, including the picnic area, disc golf, children's playground, and observation/sled hill are grouped on the east side to be used in conjunction with each other. The more active uses, including the BMX track and skills course are located at the north end to provide a greater buffer from adjacent uses and allow the more passive uses to be placed further from I-74.

Primary Amenities

The K-9 training area and dog park are located to the south to maintain a natural landscaped buffer from the other uses and are enclosed by an ornamental fence to control access and allow dogs to be off leash. This area will have a mixture of mown lawn space, native landscaping, and modular equipment to provide a diversity of experiences for both the public dog park use and scheduled police K-9 training requirements.

The disc golf links style course has 18 holes ranging from PAR 3 to PAR 5 providing a variety of difficulty for both the casual player and regional events. The course is spread out over approximately 18 acres of the site with over 20 feet of grade change from beginning to end to provide additional interest and challenges.

Just north of the disc golf is the primary picnic area centralized among the parking, playground, observation hill, and disc golf to allow these facilities to work together with convenient access to one another. This area will include open turf for casual play and picnicking, small open-air shelters for shade, and supporting amenities such as, benches, tables, and trash receptacles. Due to the restrictions of the landfill, shelters, fencing, and similar facilities will need to be designed with shallow spread footings.

Master Plan (continued)

This same restriction creates a challenge for traditional modular play equipment. For this reason the playground will be more of a nature oriented space with garden features, sculptural pieces, earth mounds, stepping stones, and other natural features to provide play experiences that invite children to climb, balance, run, jump, and explore.

The observation hill will become the highest point on the site with an overlook area to explore the views, trellis for shade, and interpretive signs that describe the past and present of the surrounding views and Kaskaskia watershed. While the site naturally slopes down from north to south, the hill will be graded with its longer slope on the north side away from primary sun exposure to maximize opportunities for sledding in the winter.

The BMX track and skills course is located along the northern boundary of the site due to compatibility of adjacent uses (i.e. Interstate 74). High sculpted berms provide buffers (visual and audible) between adjacent land uses within the site, casual turf areas for spectators, as well as creating a more intimate and controlled space. Grandstands along eastern side of BMX track provide spectators with a conventional form of seating. The mountain bike skills course is located adjacent to BMX track to allow these complementary facilities to be used together.

The model airfield remains in its current location to maintain a large fly zone, utilize the existing field facilities, and minimize conflict with other uses. The native landscape is enhanced to further define this space and the fly zone.

Native perennials and grasses make up the primary landscape throughout the site helping to stabilize soils, reduce maintenance and chemical use associated with large turf areas, provide habitat, filter storm water, and define the recreational spaces within the site. The northwest corner builds upon this use with additional trails to explore the native landscape, observation areas for birding and wildlife viewing, and interpretive signs to support these activities. Trees and shrubs are used conservatively due to the landfill restrictions.

Circulation

The existing entry location is planned to be maintained to provide maximum site distance along Route 150. A site distance study is required to confirm the most appropriate location. Road widening is anticipated to provide turn lanes into the park from each direction. The existing main drive alignment is maintained where possible to minimize impact to the landfill with adjustments where needed to avoid conflicts between proposed parking and the well heads and vents. Smaller parking lots are located adjacent to the K-9 training/dog park area and model air field for convenient access with the primary parking lot centered among the primary facilities to the north. A multi-use trail is planned throughout the site to provide internal access between facilities and connect to the planned regional trail along Route 150. The system is approximately 3 miles of trails that will provide for a diversity of uses such as jogging, biking, and cross country skiing.

Other Opportunities

The landfill site also offers a potential opportunity to capture some of the methane gases being released on site as an alternative energy source. This application will require further study as the City and Park District move forward with the Master Plan. In addition to methane re-use, other strategies for sustainable design should be considered in the development of the park including: solar energy, use of recycled and renewable materials, minimizing site disturbance during construction, and capture of rain water for reuse on site.

Implementation Strategy

It is expected that the implementation of the full Master Plan will be phased in over many years in order to obtain funding assistance from other sources. There are two primary strategies anticipated to obtain funding for development. The first strategy is to pursue grants in connection with public funding. The primary grants available for these types of public projects typically focus on recreational amenities and conservation development such as habitat improvement. The second strategy is to develop private partnerships with potential user groups to construct some of the more costly recreational facilities and supporting infrastructure. While no particular strategy has been adopted at this time, it is anticipated that a combination of these methods will be needed to fund and phase construction of the new uses.

The Park District expects the first development project on the site to begin in 7 to 10 years. This project is part of Champaign Park District's Long Range Plan for park development and the District has previously identified other park projects and associated funding for the next 6 years. Funding for this project will likely not be available until these other projects are completed.

The landfill site will continue to be owned by the City. The City would continue to maintain responsibility for the landfill to accomplish conversion to a park, the City would enter into an intergovernmental agreement allowing the Park District the site control it needs in order to apply and receive grants to develop the park as the plan outlines. It is also necessary to establish the relative roles and responsibilities of the two bodies and their staff prior to development of the park regarding the landfill as well as future recreational uses. The City will continue to own the site and be responsible for any post-closure activities associated with the landfill.

As implementation moves forward there are some key challenges that will need to be further reviewed and addressed. Prior to the first development phase, an IDOT traffic study will be conducted for the site's proposed access point on Route 150/Bloomington Road. Some of the other challenges include: determining how vertical elements such as fencing, lighting, and shelters will be footed without penetrating the landfill cap; aligning the improvements to avoid or minimize the need to relocate well heads and vents; and working closely with the IEPA for approval on the proposed improvements and development methods.

Background Summary

Needs Assessment

In January 2008, stakeholders and potential user groups were contacted and invited to participate in stakeholder interviews conducted by Hitchcock Design Group. Those interviewed included several members of Park District Staff, a representative of the Police Canine Training Program, a representative from the Model Airplane Club, a representative from the disc golf association, a representative from a local archery club and the Champaign County Forest Preserve District. Notes from the interviews are detailed in the Appendix.

The first community input public meeting on the Landfill Reuse Park Plan was held on January 8, 2008 from 6-7 p.m. at the Springer Center in downtown Champaign. City and Park District staff were on hand to assist Hitchcock Design Group lead the meeting.

The purpose of this event was to introduce the community to the Landfill Reuse Park Plan and to gather ideas from residents on future uses they would like to see if the site is converted to a park. Approximately 15 residents attended the meeting. Active use ideas generated included: model airplane park, shooting range, frisbee golf course, BMX bicycle track, skateboard park, golf driving range and dog training site. Passive use ideas produced by residents included: prairie areas, wildlife habitat, pedestrian/bicycle mixed-use trail, bird watching, interpretative trail.

A second community input meeting was held on March 19, 2008 at the Champaign Public Library. The purpose of this meeting was to present the conceptual park design proposal to the community and to seek input from residents on the proposed design.

Remove this page and replace with 11x17 plans

Background Information: Existing Site Photographs



James F. Fielding memorial pavilion and Champaign County Radio Control Club (CCRCC) air field and storage shed (looking northwest).



Model aircraft air field (looking southwest).



Native prairie plantings and Interstate 74 (looking north).



Established native prairie plantings (looking northeast).

Background Information: Existing Site Photographs



Existing storage structure - currently used by the Champaign County Radio Control Club (looking southeast).



Existing poplar tree test plot (looking west-northwest).



Existing gravel maintenance drive - not used by the public (looking south)



Drainage ditch along south-east side of property line (looking south).

Background Information: Existing Site Photographs



Situational training grounds, with abandoned vehicles, used by local law enforcement agencies for K9 training program (looking east).



Canine obstacle course along Route 150, used by local law enforcement agencies for K9 training programs (looking southeast).



Entrance/exit to site looking east along Route 150.



Entrance/exit to site looking west along Route 150.

Background Information



**Hitchcock
Design Group**

Creating Better Places®

COMMUNITY WORKSHOP SUMMARY

Date: January 8, 2008

RE: Landfill Reuse Park Plan

Project #: 04-0633-004-01-06

# of Votes	ACTIVITIES
------------	------------

Passive

- | | |
|---|---|
| 4 | Prairie Areas |
| 3 | Wildlife Habitat |
| 2 | Mixed use trail for pedestrian / bicycles along restored prairie - maybe hook in a bike path to the site |
| 1 | Garden Plots |
| 1 | A few picnic tables surrounded by prairie restoration - the sun rising in the morning and people eating breakfast |
| 1 | Rest stop for regional bike trail - or trail head for rides |
| | Native Studies |
| | Picnic Area - one of highest points in area - great view |
| | Bird Watching |
| | Interpretive Trail - species ID and description |
| | Fire pits / barbecues |
| | Lovers Lane |
| | Open area with unobstructed view |
| | Viewing - south vista, stars? Is it dark enough? |
| | Trails |
| | Kite flying |

Active

- | | |
|---|--|
| 8 | Model aviation site |
| 4 | Shooting range indoors / outside |
| 4 | Snowshoe / Cross country skiing |
| 1 | Archery |
| 1 | Frisbee golf |
| 1 | Uses not currently available elsewhere |
| | Skating Rink |
| | Golf Driving Range |
| | BMX / Skatepark |
| | 4 wheeler trails |
| | Dog training site |
| | Cross country skiing |
| | Frisbee golf site |
| | Cross country skiing |
| | Model fly 9:00 to dusk |
| | Model plane watching - viewing again |
| | Model airplane |
| | RC airplane park |
| | Driver training site |
| | Radio control car and truck track |
| | Paintball |
| | Snowmobile trails |

Facilities

- | |
|-------------------------------|
| Restrooms and weather shelter |
| Paved runways |
| Parking |
| Safety zones |
| Security |

Not Encouraged

- | | |
|---|--|
| 2 | No Golf Course - Active Uses |
| | No "Built" Environment |
| | Minimal Public use in fly zone |
| | No Golf course - not compatible with location near interstate and sustainability / water usage |

Background Information



**Hitchcock
Design Group**

Creating Better Places®

Memorandum

Date: March 18, 2008
RE: Landfill Reuse Study
Project No.: 04-0633-004-01-03

Hitchcock Design Group interviewed special interest groups to obtain additional input on the potential program for the project site. Those groups represented the following interests:

- Champaign County Forest Preserve District
- Trap shooting and archery
- Police canine training
- Village of Mahomet
- Radio Control Club
- Soil and Water Conservation District
- BMX club
- Disc golf
- Champaign Park District

The key points and recommendations from these groups collectively included:

- Interest in seeing BMX and/or mountain bike facilities
- Interest in seeing a disc golf course
- Plan for a regional trail connection along Route 150
- Interest in seeing a trail system inside the park
- Maintain current native landscaping and consider additional best management practices for development
- Trap shooting and gun range may not be realistic for this site, but archery could be a comparable use
- Canine training facility works well in current location and is scheduled lightly enough to accommodate public use as a dog park
- Existing radio controlled airplane facility is well used. Fly zone is kept to the west side of the entry drive.
- Partnership opportunities exist for many of the recommended facilities such as BMX, disc golf, radio controlled airplane facility.

Background Information



Hitchcock
Design Group

Creating Better Places®

Memorandum

Date: February 21, 2008
To: Reseeding Tomorrow Project Team
From: Andrea Lawrence, Hitchcock Design Group (HDG)
RE: Champaign Landfill Reuse Plan – BMX Course
Project No.: 04-0633-004-01-06

Below you will find information from a retired course designer and racer (Tom Wahl) as shared with me via a response to a question I had posted on www.bikeforums.net.

First and foremost, you want a smooth, dry surface. Drainage is very important. While it's possible to race on mud if necessary, it's dangerous and it damages the track.

I've never seen any kind of wear indicating construction, but it's not a bad idea.

Our local track has it's main banked turns paved, which actually works out pretty well. Being an old guy they scared...me to start.

In general you want the track to flow downhill if possible. The starting gate should be raised probably 15 feet or so above the main surface, and the first and second stretches usually have a couple of jumps. most tracks I've raced have a small jump right at the gate, but some may have a larger jump. There's usually a larger flat top jump second, then a turn around. Second stretch may have a double coming out of the turn, then another decent jump before the second turn. The third stretch seems to usually be the rythem section, which is a series of smaller jumps that can be manualled or jumped depending on the skills of the rider. Then there's usually either a turnaround for a fairly flat section, or a 90 degree turn that brings you up around the back side of the first turn.

They all vary. One of the nicest I've ever ridden is in DeSoto, TX: [Link](#)

Our local track is also nice: [link](#)

I would suggest getting in touch with either (or both) the [ABA](#) and [NBL](#) depending on which league is active in your area. You'll want to be on the local race schedule and I'm sure they will help you with getting a track started, including design information.

Localities can really benefit from having a world class track, don't be afraid to go big. Ask the folks in DeSoto.

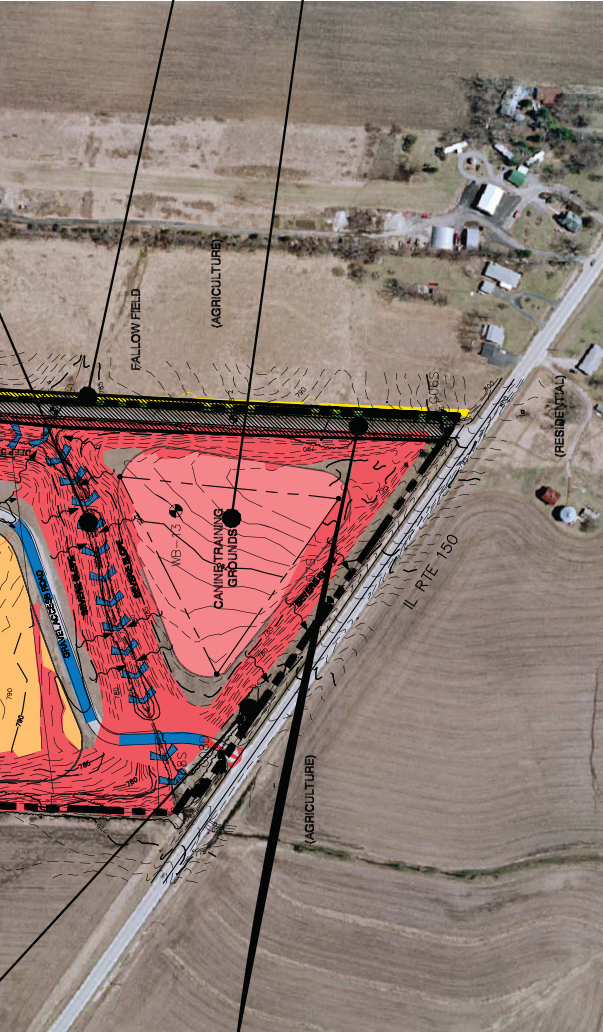




OVERHEAD UTILITY LINES

CANINE TRAINING COURSE

- Chained course
- Used by local police department



PERMANENT LIMIT OF WASTE MATERIAL

offroad. 40 MPH speed limit



- Slope greater than 6%
- Native plant's plantings
- Managed turf
- Areas in use by local Police Department
- Tree Plot
- Vehicular circulation



PREPARED FOR
City of Champaign

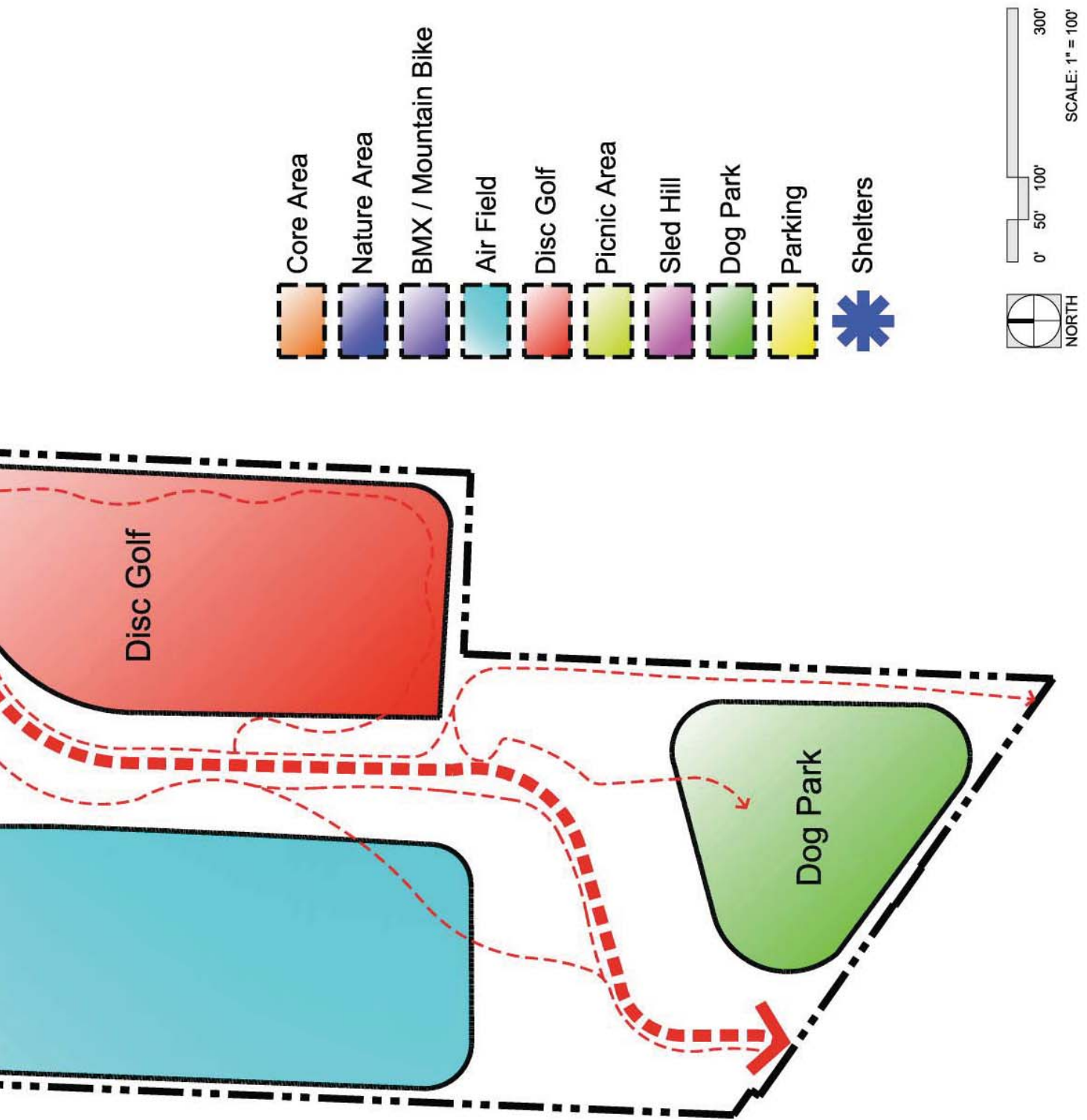
Landfill Reuse Park Plan

Site Analysis

Champaign, Illinois

Hitchcock Design Group
 Creating Better Places™
 IN ASSOCIATION WITH
 RAPP'S ENGINEERING
 1000 North University Avenue
 Champaign, IL 61820
 © 2008, Hitchcock Design Group, Inc.

Site Analysis



- Entry plaza with integrated recognition/monumental paving inset
- Parking area with approximately 40 spaces
- Unobstructed fly zone with mown turf field, native prairie plantings and vertical plant elements for limits of fly

Multi-use Trail System

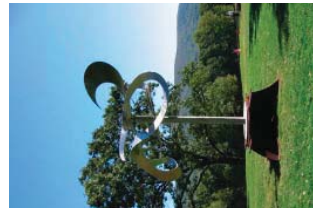
- Approximately 2.75 miles of 10-foot wide multi-use surface
- Interpretive signage
- Connections to planned regional trail along Route 150

Dog Park

- Native prairie plantings
- Shade shelter and support facilities
- Land bridge over drainage swale
- Parking with approximately 30 spaces
- Obstacle course for both public and municipal use
- Course elements coincide with K-9 training program
- 6 foot tall perimeter fencing



Landfill Reuse Park Plan
Schematic Design
Champaign, Illinois



PREPARED FOR
City of Champaign

IN ASSOCIATION WITH
Champaign Park District