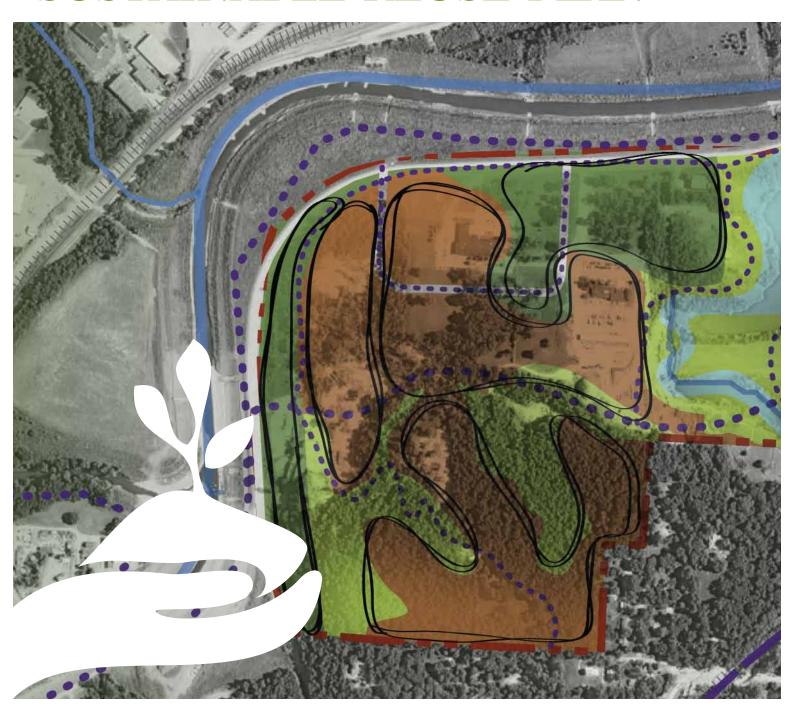
THE MUNICIPAL FARM

# SUSTAINABLE REUSE PLAN



#### IN REMEMBRANCE OF KATHY SALISBURY

The project team and Steering Committee would like to acknowledge the contributions of Kathy Salisbury in the development of this plan and other endeavors that have made the Eastwood Hills neighborhood a better place. Kathy passed away before the plan was completed, but her hard work, diligent review and thoughtful input as a member of the Steering Committee are embodied in the recommendations of this plan.



# 2012 MUNICIPAL AREAWIDE BROWNFIELD SUSTAINABLE REUSE PLAN

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and creativity in the
hopes of building a
better community.

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## INTRODUCTION

The Municipal Farm site is a historic and environmental landmark in Kansas City. A variety of reasons have led to underutilization of the site, including some areas which may be brownfield sites (sites complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminate). Today, the site is home to a diverse array of features, including waterways, wetlands, wooded areas, dramatic topography and scattered development. This plan provides a path to revitalize the city-owned property at Municipal Farm and the surrounding Eastwood Hills Neighborhood through an inspiring and attainable vision. This vision, and the strategies that back it up, set the stage for assessment and cleanup of known and potential brownfields, restoration of the site's natural resources, and proactive, sustainable development that embraces research, innovation, and recreation.

By thinking holistically and working to integrate and strengthen the natural, economic, and social systems, Municipal Farm has the potential to be a model 21st century development. There are opportunities to connect to the Blue River, bring trails into the neighborhood and promote wetland education. Urban agriculture can provide economic opportunity for neighborhood residents, forge economic connections to the wider metropolitan area, and provide a healthy and sustainable source of food for Kansas City residents. There is potential for expansion of the Eastwood Hills neighborhood in new residential areas. Habitat restoration areas can infuse ecological health into the site. Research institutions and new commercial enterprises that embrace and embody next-generation integrated thinking can thrive, and Municipal Farm can be reanimated as a healthy example of what is possible through careful consideration and deliberate action. Driven by an ambitious vision, deep analysis, and realistic recommendations, this plan charts a path forward for the Municipal Farm site.

Municipal Farm is a 441 acre site owned by the City of Kansas City, Missouri. The property sits within the Eastwood Hills Neighborhood, and is located at the intersection of many neighborhood and regional assets. The Eastwood Hills community cares about the future development of the

# EPA Brownfield Assistance Pilot Project

The Municipal Farm Sustainable Reuse Plan is a pilot project for the EPA's area-wide planning approach to community brownfield challenges. This approach recognizes that revitalization of the area surrounding the brownfield site(s) is critical to the successful reuse of the property. The area-wide planning approach will enhance EPA's core brownfields assistance programs by encouraging continued meaningful involvement in a locally-driven planning process that will result in a strategy for making brownfields site assessment, cleanup and/or redevelopment decisions for the future. The pilot program will help further community-based partnership efforts within underserved or economically disadvantaged neighborhoods by confronting local environmental and public health challenges related to brownfields, while creating a planning framework to advance economic development and job creation.

site; neighborhood residents played a key role in the planning process and are interested in supporting effective implementation. The site's special rural character creates a unique setting within its urban surroundings. Celebrated features of the metropolitan region, including the Blue River and the Truman Sports Complex, are adjacent to the site. The Rock Island Corridor, identified for future commuter rail and regional trail networks, is located between the site and the sports complex. It is critical that future development integrate into the neighborhood in a compatible way and interact with surrounding land uses to create synergies among these many assets.

#### History

The Municipal Farm site has a long history with over one hundred years of activity. In 1911 the city constructed the main Municipal Farm building as workhouse for prisoners to grow crops. The founders of Municipal Farm viewed the program as rehabilitative and believed that it gave valuable skills to the inmates. The farm operated from 1912 until the 1960s and provided fresh produce and crops for the region.

The City used prison labor to construct a tuberculosis hospital on the Municipal Farm site as well. The hospital opened on Christmas Day, 1915. Potential brownfield concerns at the site of the former hospital landfill are addressed in the Area-wide Brownfield Plan (a companion document to this plan). The City also created cemeteries (potters field) for victims of tuberculosis, prisoners, and the poor who could not pay for their own burial sites. The cemeteries were active from 1907 to 1965. The oldest cemetery, east of I-435, was closed in 1934. The second cemetery, located west of I-435, accepted burials from 1934-1964 and was racially segregated. The grave markers have washed away, but efforts are underway to identify the graves and delineate the cemetery boundaries.

More recently, the Municipal Farm site has been home to a correctional facility, a National Guard facility, and police facilities, including a shooting range, bomb detonation area, canine training area, and a helicopter pad. The correctional facility was demolished, and agriculture returned to the site in 2010 in the form of community gardens near the site of the former correctional facility.

Potential brownfield concerns in some of these areas are addressed in the Area-wide Brownfield plan. Future activities on the Municipal Farm site will honor the site's history, including the thousands of individuals buried here, while continuing the legacy of this land's productive capacity and ability to create sustenance for the surrounding region.













## HOW TO USE THIS PLAN

THE MUNICIPAL FARM SUSTAINABLE REUSE PLAN IS THE CITY OF KANSAS CITY'S ROAD MAP FOR THE FUTURE GROWTH AND DEVELOPMENT OF THE MUNICIPAL FARM SITE. THIS PLAN IS CONSISTENT WITH AND ENCAPSULATES THE CONCEPTS AND GOALS OF EXISTING PLANS FOR THE PLAN AREA AND ITS SURROUNDING CONTEXT. THE SUSTAINABLE REUSE PLAN WILL BE A DECISION MAKING GUIDE FOR THE CITY AND WILL DIRECT KANSAS CITY'S LONG TERM POLICIES. IT IS ALSO A GUIDE FOR THE ENTIRE COMMUNITY, INCLUDING INDIVIDUALS AND FAMILIES, BUSINESSES, AND NON-PROFIT ORGANIZATIONS.

#### SECTIONS OF THE PLAN

#### Vision and Guiding Principles

The community defined the vision and guiding principles early in the planning process. These statements about the desired future of the Municipal Farm site drove all plan recommendations.

#### **Analysis**

The analysis chapter takes a comprehensive view of the Municipal Farm site. This section explores the amount of development and activity that the site can support within its natural limits, or its "carrying capacity," and summarizes the impact of existing plans on this work.

#### Integrated Development Strategy

The development strategy emerges from the analysis and applies to all areas of the site. The strategy recommendations are overarching guidelines for developing the Municipal Farm site sustainably.

#### Conceptual Land Use Plan

The conceptual land use plan illustrates the most sustainable pattern of uses for developing the Municipal Farm area. This chapter dives into 21 specific areas within the site and designates the most sustainable uses for these areas based on the analysis.

#### Plan Forward

While the integrated development strategy and the conceptual land use plan focus on the long term development for Municipal Farm, the plan forward provides steps and resources to move the plan into implementation. This chapter identifies the most critical next step actions and connects them to potential partners and funding, targets priority areas where activity may catalyze development for the site as a whole, identifies potential projects that align with the vision and guiding principles, and provides a framework for phasing that illustrates sequencing relationships between all components of the plan forward.





#### SUPPORTING DOCUMENTS

#### Infrastructure, Transportation, Economic Development and Agriculture Analysis

These systems were issues particularly important to assess when considering future development of the Municipal Farm site. This companion document represents an evolving collaborative process, as it documents a point in the planning process where the transportation, infrastructure, and economic analysis informed the Conceptual Land Use Plan. The Conceptual Land Use Plan then informed the final Sustainable Reuse Plan. Analysis in this report provides a level of detail beyond what is available in the Sustainable Reuse Plan, and may be used as a reference for deeper understanding of site conditions during plan implementation.

#### Area Wide Brownfield Plan (AWBP)

This companion document integrates regulatory framework, environmental justice issues, and community input to determine when, where and how Brownfield assessment information about Municipal Farm properties and other area sites is collected and used to facilitate the sustainable reuse and development of the area.

#### Municipal Farm Cemetery Boundaries Delineation Project

Efforts to identify the potters field boundaries are currently underway. The *Municipal Farm Cemetery Boundaries*Delineation Project should be referenced to verify location and further research on the potters fields.

#### Blue River Greenway Phase II Plan

This planning document creates a foundation to develop detailed habitat restoration plans and provides recommendations to incorporate recreational features related to habitat restoration. The planning area is the west half of the Municipal Farm property and an additional 62 acres of City-owned land at the Brush Creek/ Blue River confluence. The project team worked closely with the Municipal Farm project team to coordinate overlapping analysis and recommendations. An overview of the Blue River Greenway Phase II document is found in the appendix of the Sustainable Reuse Plan.

# KEYS TO A SUCCESSFUL PLAN

#### TRUE COMMUNITY VISION

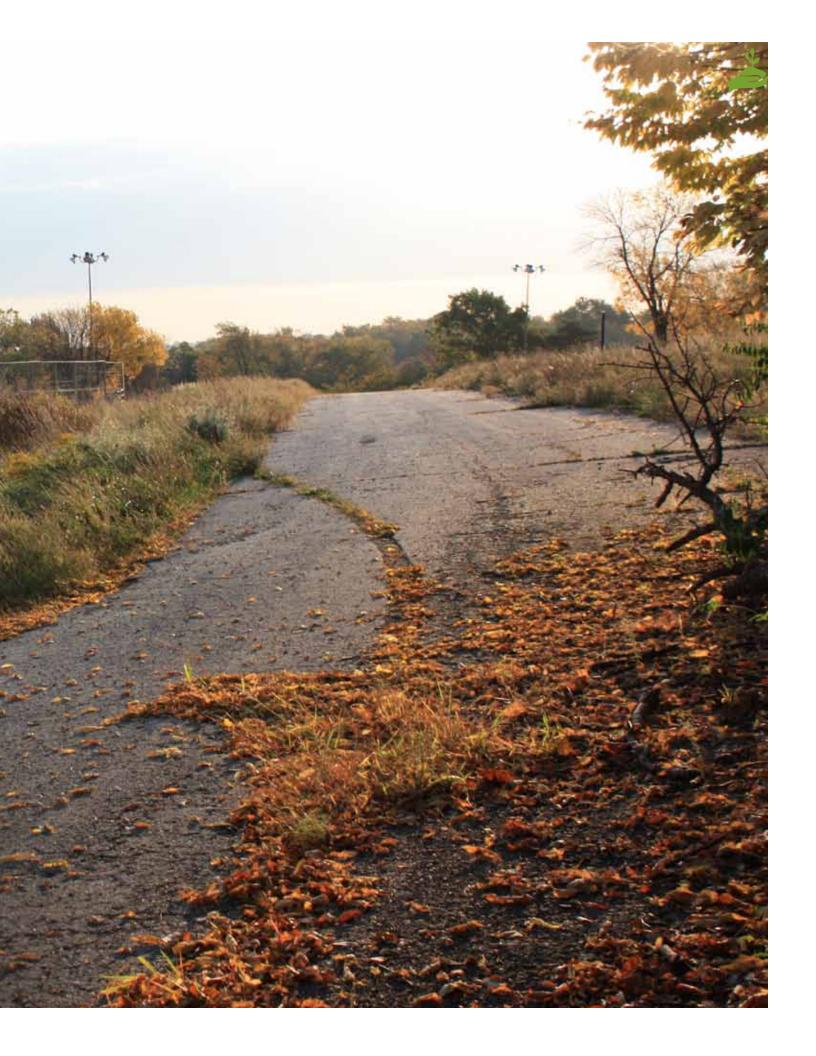
To successfully direct long-term growth and development of Municipal Farm, the vision must come from the community. The residents who participated in meetings are the source for the ideas that direct the Municipal Farm Sustainable Reuse Plan.

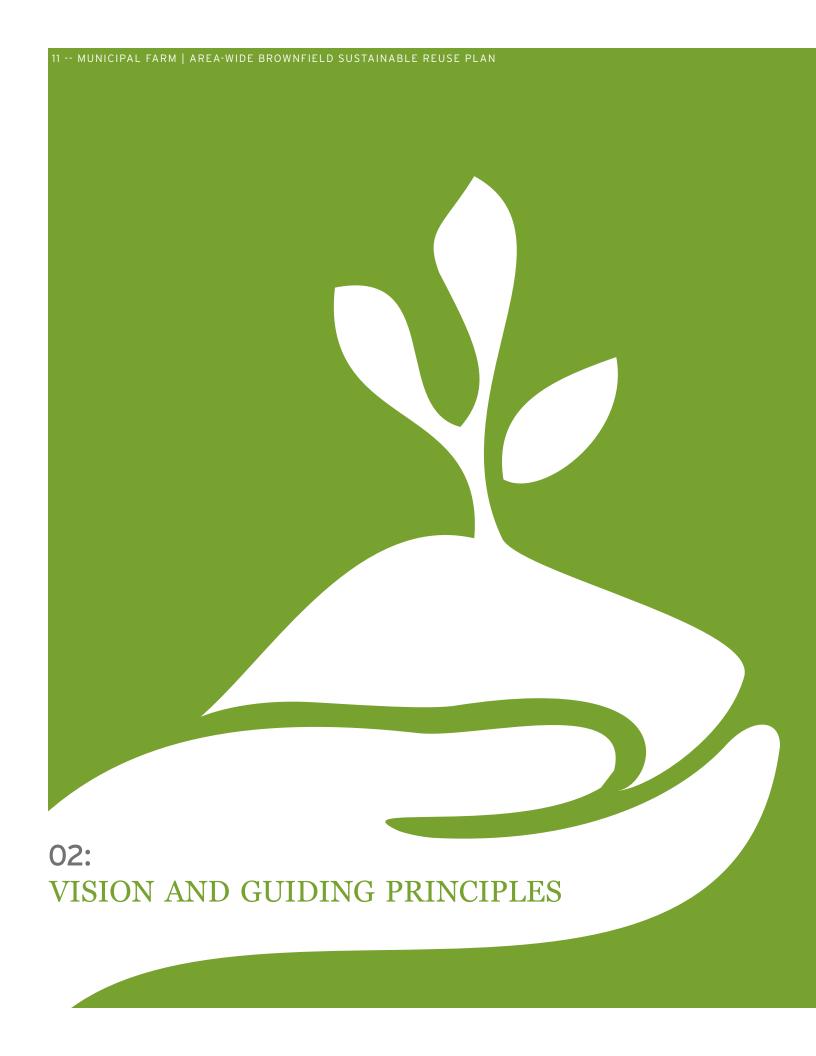
#### INTEGRATED DECISION MAKING AND ACTION

The future of Municipal Farm depends on hundreds of overlapping decisions from local government, civic organizations, the private sector, and others. By integrating these decisions, opportunities will emerge to coordinate efforts in support of a common vision. Thinking about the long-term, potential partners and possible resources when designing policies and projects maximizes the impact of these decisions.

#### A STRATEGY FOR THE FUTURE

The Sustainable Reuse Plan includes a strategic set of recommendations. These recommendations are visionary, yet realistic, far-reaching, yet implementable. By taking into account the community's vision, stakeholder priorities, and the capacity of local government, the Municipal Farm Sustainable Reuse plan will guide the future development of this area to achieve the community vision.











## WHAT WE HEARD

THE SUSTAINABLE REUSE PLAN INVOLVED A ROBUST COMMUNITY ENGAGEMENT PROCESS, RESULTING IN A VISION AND GUIDING PRINCIPLES FOR FUTURE DEVELOPMENT OF THE MUNICIPAL FARM SITE.

#### **Public Meetings**

The community came together in two public meetings and an open house. The dialogue established at these events led to recommendations in the sustainable reuse plan and strategies to move the plan into action.

During the first public meeting, the community created the vision for the future of Municipal Farm and addressed neighborhood issues pertaining to the site. Attendees gave input on opportunities, constraints, and possible land uses for future site development. During the second public meeting, the community vetted the vision and the guiding principles and gave feedback on the draft land use plan. This feedback informed the final Conceptual Land Use Plan.

Members of the Eastwood Hills neighborhood emphasized the need for compatibility with future land uses on the Municipal Farm site. We heard the desire for a strong, positive connection between the site and its surrounding neighborhoods and the opportunity to interact with the site through recreational and educational uses. The preservation and restoration of the site's natural character was an important value expressed by the community. Safe, multi-modal transportation opportunities were also a priority for neighborhood residents. Finally, the neighborhood called for future land uses to celebrate and honor the site's history.







#### Implementation Workshop

In support of the Sustainable Reuse Plan, the Environmental Protection Agency (EPA) provided technical assistance regarding the implementation of Kansas City's vision for the Municipal Farms site. EPA's technical assistance contractor, SRA International, helped organize an facilitate an implementation workshop.

The purpose of the workshop was to leverage the collective expertise of key stakeholders with influence, knowledge of resources for, and expertise related to Sustainable Reuse Plan recommendations, including public agencies, citizens and businesses. The audience participated in facilitated discussion focused on four priority development areas, identifying partners and resources to help these sites catalyze development on Municipal Farm. The results of this workshop are included in the Plan Forward.

#### Steering and Technical Committee

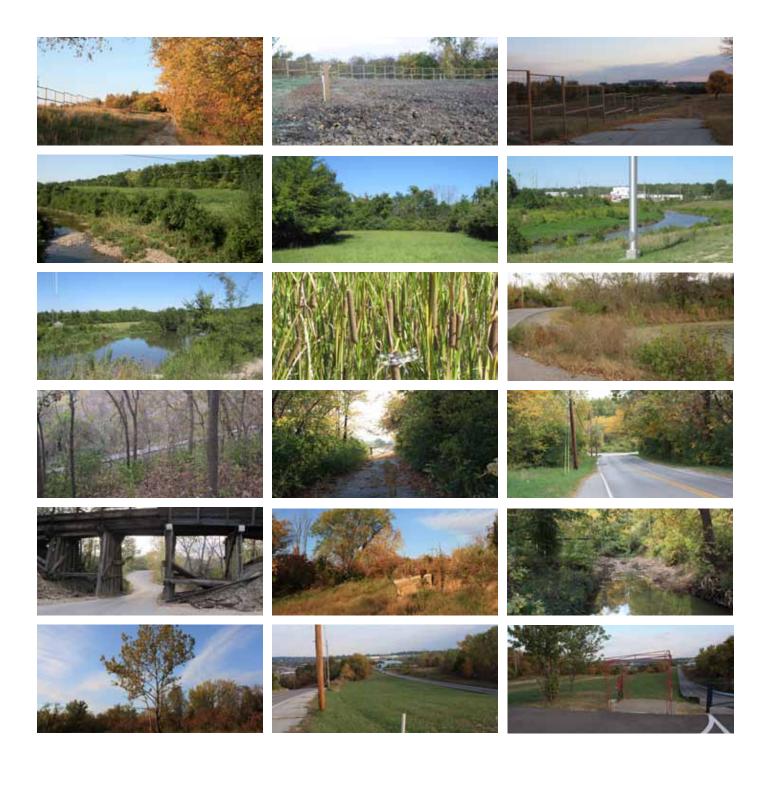
A steering and technical committee composed of citizens, city officials, city staff and area stakeholders provided rigorous feedback to guide plan recommendations. The planning team met with committee members as a group and individually to gather expert advice, ensure the feasibility of land use recommendations and alignment of the vision, principles, and plan recommendations with regional goals.

#### Website: municipalfarmkc.com

In addition to public meetings, a project website provided an ongoing venue to inform the public and gather feedback on project activities. This website kept residents up-to-date with documents, presentations, and events.







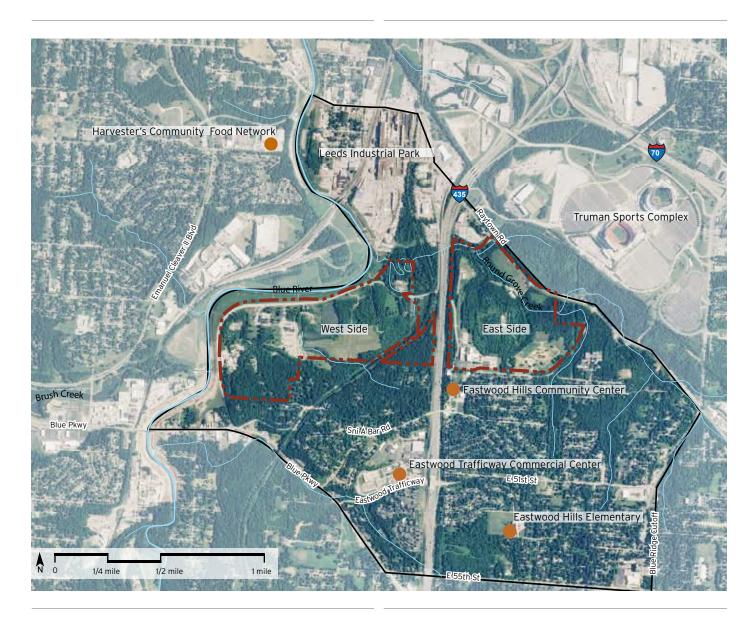
# VISION AND GUIDING PRINCIPLES

The vision statement emerged through dialogue with community members and the steering committee. It reflects an understanding of the site's history, existing conditions, and the surrounding neighborhood's desire for positive interactions with the site.

BENEFICIAL RELATIONSHIPS
BETWEEN THIS UNIQUE PLACE
AND ITS SURROUNDINGS THAT
CELEBRATE THE SITE'S HISTORY,
RESTORE AND ENHANCE THE
NATURAL ENVIRONMENT,
STRENGTHEN THE ECONOMY,
AND CREATE OPPORTUNITIES
FOR LEARNING AND RECREATION







#### FIGURE 3-1| MUNICIPAL FARM SITE

Municipal Farm consists of 441 acres of city owned property on both sides of I-435. The site is within the Eastwood Hills Neighborhood, and is neighbored by diverse ecosystems (the blue river, flood plain, and heavy woods), transportation networks (I-435, railroad, and local roads), and land uses (industrial, residential, commercial, and Truman Sports Complex).





### CARRYING CAPACITY ANALYSIS

CARRYING CAPACITY ANALYSIS IS A FRAMEWORK FOR DEFINING SUSTAINABLE DEVELOPMENT WITHIN THE SITE'S NATURAL RESOURCE LIMITS. RECOMMENDATIONS EMERGE FROM THE CARRYING CAPACITY ANALYSIS THAT FOCUS ON THE REGENERATION OF NATURAL, ECONOMIC, AND SOCIAL SYSTEMS. THIS METHOD OF DEFINING WHAT THE SITE CAN SUPPORT WITHIN NATURAL LIMITS AND USING NATURE TO DIRECT DEVELOPMENT PATTERNS IS A MODEL FOR SUSTAINABLE 21ST CENTURY DEVELOPMENT. LESSONS FROM THE IMPLEMENTATION OF THIS PLAN CAN INFORM OTHER SIMILAR ASPIRATIONS ON LOCAL, REGIONAL, AND NATIONAL LEVELS.

#### KEY FINDINGS

The Municipal farm site has changed dramatically over the last two decades (past and existing uses are mapped in Figure 3-2). Some of these uses have known or potential brownfield concerns which need further environmental investigation (see the Area Wide Brownfield Plan for detailed information on brownfields). The Municipal Farm Sustainable Reuse Plan is intended to catalyze reinvestment across the area and in the brownfield sites that will benefit the wellbeing of people, the prosperity of the neighborhood and region, and the natural systems of the site and its surrounding area.

#### Existing Plans Summary

Plan recommendations are grounded in an understanding of past analysis and planning efforts. The Municipal Farm Sustainable Reuse Plan was itself a recommendation of both the Eastwood Hills Neighborhood Plan and Eastgate Land Use Plan. Additional information from these plans that addresses and overlaps the Municipal Farm site is included in this section. The following plans were incorporated into the analysis and recommendations for the Municipal Farm site:

- Eastwood Hills Neighborhood Plan (2005)
- Eastgate Land Use and Development Plan (2001)
- AURI Master Plan Framework (2002)
- Blue River Greenway Study (2012)
- Stream Asset Inventory (2003)
- MetroGreen (updated 2002)

- SmartMoves Regional Transit Vision (2008)
- Smart Moves Commuter Corridors Alternatives Analysis (2012)
- KC Trails Plan (2008)
- KC Major Streets Plan (2010)

#### Eastwood Hills Neighborhood Plan

The Municipal Farm site is located within the Eastwood Hills neighborhood. Prior land uses have negatively impacted the neighborhood, affecting its ability to thrive. It is critical that future development of the site integrate into the neighborhood in a compatible way, and that plans for Municipal Farm align with the Eastwood Hills Neighborhood Plan (EHNP). Recommendations from the EHNP that have been incorporated include:

- Preserve natural assets and provide neighborhood access to natural amenities
- Improve infrastructure, in particular storm/sanitary systems, waterlines, and drainage improvements
- · Increase community involvement
- Provide traffic calming measures, increased walkability, and multi-modal transportation opportunities
- Spur economic development that encourages neighborhood cooperation with area businesses and institutions and provides neighborhood amenities
- Provide housing that is compatible with existing land use patterns

#### Eastgate Land Use and Development Plan

The Eastgate Land Use and Development Plan recommended mixed-use, nodal development, the integration of open space and recreational opportunities, and increased multi-modal transportation access, which could be implemented through the development of the Municipal Farm site. The Eastgate plan identified a need to address interjurisdictional transportation and development issues between Kansas City, Raytown, and Lee's Summit. The Municipal Farm site is located just west of the Rock Island Corridor, which was determined by the Smart Moves Alternatives Analysis as a future corridor for commuter rail transit and as a regional trail connection through MARC's Metro Green Plan. This location may indicate development opportunities with regional connections.

#### Stream Asset Inventory

Kansas City, Missouri conducted a Stream Asset Inventory to better understand, protect and incorporate Kansas City's natural resources into development and stormwater management. Key recommendations of the Round Grove Creek Stream Asset Inventory that apply to Municipal Farm include:

- Implement stormwater Best Management Practices, stream buffers and setbacks
- Set the standard for watershed stewardship through public education and involvement
- · Increase community involvement
- Provide traffic calming measures, increased walkability, and multi-modal transportation opportunities
- Make conservation of existing natural areas a high priority
- Provide housing that is compatible with existing land use patterns
- Encourage cluster development as an alternative to large-lot development

#### Natural Character

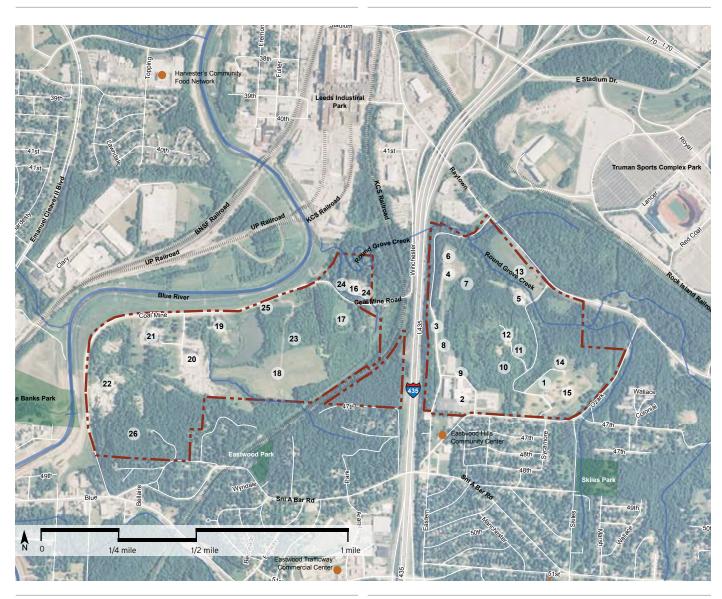
The natural character of the site is not only a feature enjoyed by the neighborhood, but also plays a critical role in regional water quality, soil health, and biodiversity. Unexpected consequences of previous uses, including brownfield contamination, have impacted the site negatively. Invasive vegetation has reduced biodiversity, affecting wildlife habitat and stream health. The vulnerable natural features of the site also present an important opportunity: open space, wetlands, hydric soil, healthy stretches of Round Grove creek, and the Blue River floodplain offer a place to recharge and store groundwater, improve water quality, enhance riparian vegetation, and create habitat. The concentration of these features, the size of the site, and its location within the Blue River Watershed highlight the regional importance of its ecosystems.

#### Historical and Urban Agriculture Key Findings

One of the Guiding Principles of this plan is to celebrate and honor the site's history. Through the community engagement process, the planning team identified two major components that could be highlighted through the redevelopment process. The first is the presence of multiple potters fields on the site (Figure 3-2). Paupers, tuberculosis patients, and murder victims were buried in a cemetery located just north of the National Guard Armory between 1907 and 1934. A second cemetery operated near the police firing range on Coal Mine road until the 1960s. The Eastwood Hills Neighborhood Plan recommends that these potters fields be located and preserved. The city has already started to move this recommendation forward by commissioning a project to identify the cemetery boundaries.

The second major historical aspect highlighted by the community engagement process was the site's previous agricultural use. The site operated as a Municipallyowned farm from 1911 through the 1940s, including animal husbandry and crop agriculture. Site analysis identified existing conditions and opportunities to honor this history with a new generation of agricultural use. The topography of the east side of the site, combined with naturally poor soils that have been compacted and disturbed by previous uses, make crop agriculture an unlikely use without ongoing soil remediation. These efforts are taking place in the newly installed community garden. The east side also bears potential for an aggregation and processing facility for local producers, if access issues are addressed. The western portion of the site is more level, and soil quality and fertility are likely





#### FIGURE 3-2 | PAST AND EXISTING USES

#### West Side

#### Existing Uses

- 16. Kansas City, MO Police Firing Range
- 17. Kansas City, MO Police Bomb Detonation Field
- 18. Communication Towers Field
- 19. Round Grove Creek Lift Station
- 20. Kansas City, MO Streets & Traffic Operations
- 21. Kansas City, MO Public Works

#### Past Uses

- 22. former LaFarge Concrete Batch Plant
- 23. former Municipal Farm Crop Land
- 24. Potters Field
- 25. ARMCO Fill
- 26. former Botsford Quarry

#### East Side

#### Existing Uses

- 1. Community Garden
- 2. Missouri National Guard Armory
- 3. Soap Box Derby
- 4. Kansas City Police Helicopter &
- K-O Training Facility
- 5. Animal Shelter

#### Past Uses

- 6. former Tuberculosis Hospital
- 7. former Tuberculosis Hospital Dump Site
- 8. Potters Field
- 9. former Woman's Reformatory
- 10. former Agricultural Use Area
- 11. former Police Kennel
- 12. former Municipal Farm/ Health Emergency Hazmat Site (HEHS)
- 13. Round Grove Creek Landfill
- 14. former Men's Reformatory
- 15. former Municipal Correctional Institution (MCI)

better than the eastern side. Urban crop agriculture is a potential use for this site, though the floodplain and the existing communications towers present challenges which may be prohibitive. The Urban Agriculture Analysis Report contains specific analysis and recommendations for agricultural use of areas within the site.

#### Access Key Findings

Development of Municipal Farm faces unique access challenges. Although it is less than four miles (as the crow files) from the Country Club Plaza, the site feels more isolated: railroads, waterways, and hilly topography cut it off from the surrounding populated areas of the City. A limited access interchange at I-435 and a choke point on Coal Mine road at the railroad underpass will require creative measures to improve access. Legacy paved roads in the interior of the eastern site are generally in disrepair and need updates to create safe local access. Although access challenges exist, some very unique opportunities to improve connectivity also exist. The Smart Moves Commuter Corridors Alternatives Analysis calls for a potential future commuter rail stop along the Rock Island Corridor near Municipal Farm, presenting potential for future transit access to the site. In addition, the 441 acres of land presents an opportunity to develop residential, employment, and amenity-focused land uses which complement each other in terms of reducing the frequency and length of automobile trips internally and in the surrounding area. Complementary land uses not only improve traffic flow but also greatly improve pedestrian and bicycle connectivity. Despite a challenging set of access issues, opportunities exist to improve the site's connectivity to its surroundings, while not compromising its special rural character.

#### Infrastructure Key Findings

Infrastructure on the site provides adequate service to existing land uses, however future development will require upgrades. The west side of the site has sanitary sewer access, due in part to the presence of the Round Grove lift station. The extent of sanitary infrastructure on the east side is adequate, though the condition of some areas is questionable and should be tested for leaks and blockage. Water supply on the west side is very limited; no major lines exist west of I-435. Water supply on the east side can accommodate future development, though the location

of lines may induce some constraints, and lines should be pressure tested for leaks. Stormwater runoff flows mostly into open ditches on the west side; enclosed curb inlets on Coal Mine road flow directly into the Blue River. Round Grove Creek collects most of the east side's runoff through overland flow, some concentrated into open ditches. Erosion prevention and stormwater management practices will be critical to maintain the health of ecosystems on site. Power supply is spotty throughout the site, and the west side has no access to natural gas facilities. The rural character and aging infrastructure on site positions future development to utilize green infrastructure, natural waste water treatment, and renewable energy in a cost effective manner.

#### **Economic Development Key Findings**

The current economic climate presents unique development challenges to overcome. The primary reasons for this are a struggling housing market, lack of consumer confidence, high unemployment, and lack of access to capital. While the regional economies are relatively stable, the city continues to struggle with shrinking revenue. In the short term, development on the Municipal Farm site will likely require public subsidies; the private sector will not be able to drive economic development on this site.

A public-private partnership would give economic development plans the best chance to catalyze success. It is possible that entrepreneurs and financial institutions will be willing to develop the Municipal Farms site in time. The sluggish growth of city revenues prevents the City from adding as much infrastructure funding as is needed city-wide, yet key infrastructure updates will be a necessary precondition for successful economic development. Aligning land use recommendations with federal and state spending, such as energy conservation, sustainability, technology and research, and eco-friendly related projects will increase likelihood of funding.

#### Brownfield Key Findings

There are numerous Brownfield concerns on the Municipal Farm site. However, the concerns do not appear to be atypical or constraining of the future intended uses. Data is lacking to adequately define most concerns, but the limited existing data and experience with similar sites, suggests that many of these concerns may turn



out to be only hypothetical and not confirmed by actual site assessment results, and that confirmed unacceptable impacts may be relatively minor and can be managed with conventional resources, existing Brownfield programs and proven re-development strategies.

Prior investigations have been conducted on portions of the Municipal Farm Site; however, these investigations are only on small portions/sub-areas of the larger site. The information provided in the previous investigations includes a wide range of information ranging from Limited Phase II Environmental Site Assessment (Phase II) sampling data to underground storage tank (UST) closure reports to evaluation of the former mine. The previous investigations information, although very useful, needs to be supplemented to the extent possible with more Brownfield site-specific and detailed information with respect to both current and past uses of the Municipal Farm sub-areas. Previous investigations include the following:

- Phase I and Phase II Assessments and soil sampling at the Community Garden sub-area.
- Phase I Site Characterization Report, Remedial Action Plan, Corrective Action Plan and Deed Restriction at the HEHS sub-area.
- Asbestos and Lead Investigation Report for the Missouri National Guard Armory sub-area.
- An Underground Development Investigation of the Bottsford Mine sub-area.
- Two real estate appraisals, an environmental survey and a Blue River Control Project report for the Concrete Batch Plant sub-area.
- Kansas City Stream Inventory Report for Round Grove Creek on the East Site Area.
- Soil sampling has been conducted at two locations on the West Site Area as part of a Blue River background soil study.
- Soil sampling was reportedly conducted at the ARMCO Fill Placement sub-area.
- The KCMO Public Works facilities subarea and the KCMO Patrol Support Unit sub-area currently have USTs.

- UST Closure reports for the Missouri National Guard Armory sub-area, the KCMO Police Patrol Support sub-area, the Municipal Corrections Institute (MCI) sub-area, the KCMO Public Works facilities subarea, and the Concrete Batch Plant sub-area.
- The MCI sub-area, the KCMO Public Works facilities sub-area, the Concrete Batch Plant sub-area were reported as leaking underground storage tank (LUST) sites.

Twenty-six (26) Brownfield Areas and two (2) Non-Brownfield Areas of Concern have been identified for the entire Municipal Farm Site.

#### Further Research

More in depth inventory and analysis in each of these subjects can be referenced in two companion documents: the Infrastructure, Transportation, Economic Development and Agriculture Analysis and the Area-wide Brownfield Plan. The Infrastructure, Transportation, Economic Development and Agriculture Analysis digs in to the details of the infrastructure, transportation, economic, and urban agriculture inventory and analysis. The Area Wide Brownfield Plan (AWBP) integrates regulatory framework, environmental justice issues, and community input to determine when, where and how Brownfield assessment information about Municipal Farm properties and other area sites is collected and used to facilitate the sustainable reuse and development of the area.

Efforts to identify the potters field boundaries are currently underway. The *Municipal Farm Cemetery Boundaries*Delineation Project should be referenced to verify location and further research on the potters fields.

The Blue River Greenway Phase II plan is another valuable resource that is currently underway. The planning area is the west half of the Municipal Farm property and an additional 62 acres of City-owned land at the Brush Creek/Blue River confluence. The plan focuses on short-term and long-term habitat restoration recommendations. Although analysis and recommendations are coordinated with the work presented in the Sustainable Reuse Plan, the Blue River Greenway Phase II plan goes in to more detail about the type, extent, and locations of beneficial and cost-effective ecosystem restoration.



# INTEGRATED DEVELOPMENT STRATEGY

CONVERSATIONS WITH THE COMMUNITY, SITE ANALYSIS, AND ASSESSMENT OF EXISTING PLANS LED TO A SET OF RECOMMENDATIONS THAT WILL CREATE REGENERATIVE RELATIONSHIPS BETWEEN THE NATURAL, SOCIAL, AND ECONOMIC SYSTEMS ON THE SITE. THESE STRATEGIES ARE EXPLAINED IN GREATER DETAIL IN THE FOLOWING PAGES.

- Concentrate more intense development within sustainable design areas while focusing on habitat restoration within restorative design areas
- O2 Promote land uses that work together to create a comprehensive system
- O3 Create sustainable economic development strategies that reflect the unique vision for Municipal Farm
- O4 Invest in innovative technologies to upgrade utilities, emphasizing green infrastructure and renewable energy



1 1 - 1	Improve connectedness through multi-modal
	transportation strategies

Position Municipal Farm as a key link within a regional trail network

O7 Leverage brownfield sites as an opportunity to catalyze cleanup and investment

#### RECOMMENDATION 01:

# CONCENTRATE MORE INTENSE DEVELOPMENT WITHIN SUSTAINABLE DESIGN AREAS WHILE FOCUSING ON HABITAT RESTORATION WITHIN RESTORATIVE DESIGN AREAS

The plan divides the Municipal Farm site into two major areas: restorative design areas and sustainable design areas (Figure 4-1). Building development should be concentrated within the sustainable design areas while low impact site design and habitat restoration should embody the restorative design areas.

The restorative design areas include the most environmentally sensitive features, which play critical roles in the health of ecosystems on and around the site. These include flood-prone areas, slopes greater than fifteen percent, and stream buffers. Land uses within the Restorative Design Area should focus on open space uses, recreation, and productive landscapes. Any development that occurs in restorative design areas should be low impact design among other best practices, meaning impervious surfaces are minimized and the development works within natural systems to manage stormwater as close to its source as possible.

Land in the sustainable design area is less vulnerable to ecosystem degradation and therefore can accommodate permanent structures within the parameters of the site's natural resource limit. The conceptual land use plan concentrates development in the sustainable design areas and clusters development best utilizing this land. When it comes to sewer, water, roads, and utilities, a compact form results in fewer pipes and poles and less asphalt and concrete per unit of housing. Density also creates an economy of scale that translates into lower installation costs for developers and lower operational costs for municipalities. Transportation savings are a big benefit of concentrating people and jobs into a smaller geographic area. Creating density in sustainable design areas while restricting buildings in the restorative design areas will boost the economy and maintain ample open space for recreation and ecosystem services. With less than half of the 441-acre site being suitable for buildings, Municipal Farm is situated to provide a compact, dense built environment that is close to nature, providing a connection to the natural world.

The City of Kansas City Water Services Department anticipates modification of FEMA floodplain maps in 2017. Potential modifications to the Blue River floodplain could impact potential development areas, and should be considered as implementation activities for Municipal Farm progress.



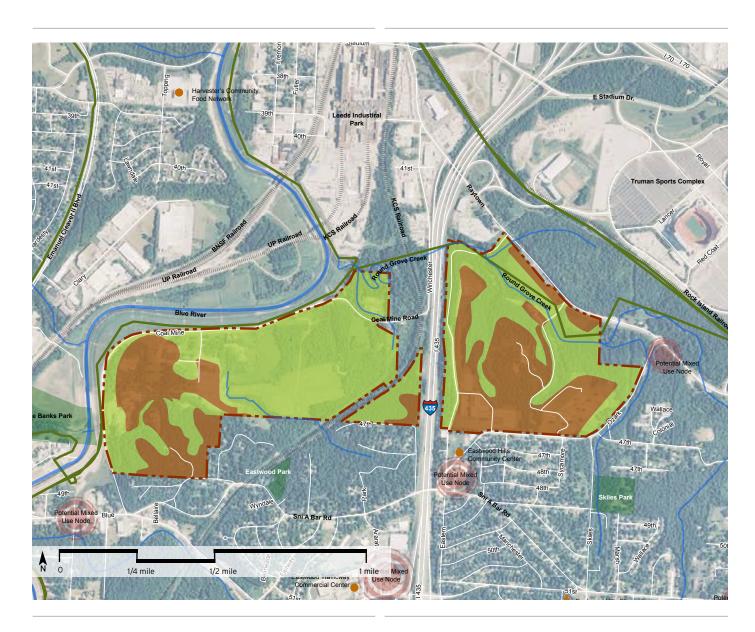


FIGURE 4-1| SUSTAINABLE DESIGN AREA AND RESTORATIVE DESIGN AREA

sustainable design area restorative design area

The Restorative Design Area includes the most environmentally sensitive features, which play critical roles in the health of ecosystems on and around the site. Land within the Sustainable Design Area is less vulnerable to ecosystem degradation, and therefore accommodates permanent structures within the parameters of the site's natural resource limit.

#### RECOMMENDATION 02:

## PROMOTE LAND USES THAT WORK TOGETHER TO CREATE A COMPREHENSIVE SYSTEM

As the landowner of the Municipal Farm site, the City of Kanasas City has a unique opportunity to proactively pursue a comprehensive approach to development. Rather than reactively responding to individual project proposals, development should be implemented through a proactive, sustainable systems approach. Individual development projects should not operate in isolation, but should work together to create a system that performs better, cooperatively stewarding natural resources, maximizing the utility of site features and providing a stronger match for the community's needs. Due to mutually supportive functions among development projects, the site as a whole should be more sustainable, more economically productive, and more livable for those who use it. The land use system in Figure 4-2 illustrates five components, grounded in the guiding principles of this plan, that should be included in any future land use scenario.

**Economic Growth:** This component builds economic strength through the creation of jobs, the production of goods and services, and research which supports new understanding and produces revenue.

**Livability + Recreation:** Uses within this component create health, well-being, and contribute to a vibrant, active lifestyle for people within and surrounding the site.

**Environmental Resilience:** This component remediates previous environmental damage, restores and enhances natural assets, protects sensitive environmental areas, and uses healthy ecosystems as a resource.

Efficiency + Resource Reuse: Development projects relate to this component by demonstrating the highest levels of resource efficiency. The byproducts of one use become the necessary inputs of another. Built

structures are supported by on-site energy production and stormwater management. Uses provide amenities for the surrounding community.

Innovation: Building and landscape design, technologies and materials, waste management, production practices, byproduct reuse, integration of uses, restoration of natural systems, and research activities on site contribute new models of 21st century living that demonstrate development and inspire other local, regional, and national efforts.

This systems approach should take place at multiple scales. At every scale of development, planning and development projects should maximize economic growth, livability and recreation, environmental resilience, efficiency and resource reuse, and innovation.

Because of the site's history, setting, and site factors, the property may be particularly well positioned for development that creates a land use system catalyzed by research, food systems, and/or sustainable business (see grey call-out boxes on page 36). The integration of urban agriculture in the redevelopment of the Municipal Farm in the Eastwood Hills neighborhood has the potential to produce social, environmental, and economic benefits. It can also serve to reconnect today's residents to an important historic function of the site-food production. Converting portions of the land back to sustainable food production and having a new generation of farmers become stewards of this land could be a powerful statement about responsible land and resource management and about the value our city places on environmental health.





FIGURE 4-2 | LAND USE SYSTEM

Individual development projects within the site should incorporate multiple components of a comprehensive land use system. These "parts" of the whole should not operate in isolation but should be multifaceted components which contribute to the overall system

Food system uses on the site, whether food production, an aggregation facility, processing and distribution facility, or a farm business incubator and educational facility, provide a possible scenario for implementation of the land use system. Uses should (a) integrate effectively with other proposed uses and generate synergies among such uses, (b) contribute to sustainable community economic development, and (c) foster ecological restoration, diversity, health, and learning. This integrated approach to development will require proactive strategies to seek out synergistic development and potential partners.

#### POTENTIAL FOR RESEARCH

The Municipal Farm site lends itself to projects and businesses that rely on new innovation and entrepreneurship activities, particularly in the area of green technologies. With first, second, and now third-generation clean technologies bringing significant contributions in the area, green energy venture capital firms are capitalizing on the industry's growth while entrepreneurs are taking advantage of the opportunity to commercialize technologies and solutions. Advances in this area will not only help the economy but also reduce greenhouse gas emissions and minimize resource depletion. The need for infrastructure upgrades to support future development on the site presents an opportunity for innovative technologies that offset costs of development projects. The unique concentration of natural resources on the site presents an opportunity to integrate these technologies with restoration activities.









#### GAINING TRACTION WITH FOOD SYSTEMS

The historic use that gives this site its name could be celebrated through the proactive development of a food system hub at Municipal Farm. Significant momentum is moving forward food system initiatives at the local, regional, and national levels. A working group of the Greater Kansas City Food Policy Coalition is pursuing a feasibility assessment to determine the location for an aggregation, processing, and distribution facility to serve local producers in the Kansas City region. The Food Hub would provide a venue to meet the demand for institutional purchasing of local foods in the region, and would help address food deserts in Kansas City, including the Eastwood Hills neighborhood. Private foundation and federal dollars are increasingly directed toward these efforts.











#### SUSTAINABLE BUSINESS

Industries like energy, manufacturing, and technology are increasingly looking for ways to make their processes cleaner and reduce the environmental impact of their products. Potential development on the Municipal Farm site could tap into the significant business and industry in the region. Many key industries such as advanced energy, biosciences, contact/data centers, distribution, financial services, manufacturing, and corporate headquarters may have an interest in both the sustainable and restorative design areas. A proactive systems approach presents an opportunity to develop and operate green industry facilities with sustainable technologies that harness on-site power production, reuse industry byproducts, reclaim water and manage stormwater runoff on site.









RECOMMENDATION 03:

# CREATE SUSTAINABLE ECONOMIC DEVELOPMENT STRATEGIES THAT REFLECT THE UNIQUE VISION FOR MUNICIPAL FARM

PURSUE SUSTAINABLE ECONOMIC DEVELOPMENT Current nationwide economic challenge is to navigate away from the boom-and-bust cycles of the recent past toward more sustainable economic and fiscal growth. The Municipal Farm site presents a unique opportunity to model new economic development strategies for our local and regional economy as well as for the nation. These strategies include forming public private partnerships, aligning potential uses for the site with federal and state spending priorities, targeting growing industries, and planning for a diversity of residential types.

Finally, new development types must be done in harmony with natural systems, taking advantage of site resources and responsibly dealing with site impacts. Relying on site water, energy, production, and other best practices reduces the potential for failure and insulates the area from long-term resource shortages and expensive infrastructure maintenance costs.

#### CREATE PUBLIC-PRIVATE PARTNERSHIPS

The overall economy continues to struggle, making it unlikely that the public or private sectors can develop the Municipal Farm site alone. Potential projects discussed in the Plan Forward section of this document would benefit from a well-conceived and properly managed public-private partnership. Through this agreement, the skills and assets of each sector (public and private) are shared in delivering a service or facility for the use of the general public. In addition to the sharing of resources, each party shares in the risks and rewards of a given venture without disproportionately burdening either side. With a strong public partner like the City, the proper incentive structure, and with a climate based on trust and mutual respect, many of the catalysts projects listed in the Plan Forward could successfully take flight.

ALIGN THE PLAN WITH FEDERAL AND STATE PRIORITIES Aligning the Municipal Farm sustainable reuse plan with state and federal spending priorities will give momentum to potential projects. Energy conservation, sustainability, technology and research, and eco-friendly institutions are all sectors of the economy that are receiving heavy investment. Innovation and entrepreneurship in green technologies are also driven by public subsidies. The Municipal Farm site lends itself to projects and businesses that rely heavily on new innovation and entrepreneurship activities, particularly in the area of green technologies. Specific sites which bear potential to catalyze development are listed in the Plan Forward.

#### PLAN FOR CHANGING MARKET DEMANDS

As demographics continue to trend toward smaller households, different types of residential developments are needed. Mixed income multifamily residential development is one of the few sectors in residential real estate that has shown signs of growth in Kansas City. Planning for development that includes multifamily housing will give the Municipal Farm Sustainable Reuse Plan the best chance of success. Per the Eastwood Hills Neighborhood Plan, housing development should be compatible with the size, scale and character of existing neighborhood housing.

The economy is evolving, and the Conceptual Land Use plan should align with industries that are showing strength. The energy, education, health services, and transportation sectors show strong employment growth in Kansas City. The construction and utilities sectors also show employment growth. Destination commercial, industrial development and most residential developments are not likely to occur in the short term. The Municipal Farm Sustainable Reuse Plan include both projects that can happen in the short term and long term development goals that will achieve the overall vision.



#### FIND A CHAMPION

Senior public officials must be willing to be actively involved in supporting the concept of public private partnerships and taking a leadership role in the development of each given partnership. Once a partnership has been established, the City of Kansas City must remain actively involved in the project or program. On-going monitoring of the performance of the partnership is important in assuring its success. The city of Kansas City Missouri should assign a senior member of the administration to oversee the development of the Municipal Farm site.

Community members who participated in the planning process, or who are interested in the implementation of plan recommendations, can also serve as a Champion to spearhead sustainable development projects.



RECOMMENDATION 04:

# INVEST IN INNOVATIVE TECHNOLOGIES TO UPGRADE UTILITIES, EMPHASIZING GREEN INFRASTRUCTURE AND RENEWABLE ENERGY

Development on the municipal farm site will require significant infrastructure upgrades. Investing in innovative infrastructure technologies can support the types of uses planned for municipal farm and make development on the site much more sustainable. The city should explore the following strategies for upgrading Municipal Farm's infrastructure.

The Municipal Farm site was selected through a competitive process to participate in the EPA Re-Powering America's Land initiative. The program will evaluate the feasibility for solar or biomass power generation on the site. Power created through on-site production could support future development as well as land uses in surrounding areas. A feasibility assessment

PURSUE ON-SITE POWER PRODUCTION

should evaluate the potential for on-site power

production and future power needs.

Development on the Municipal Farm site will require upgrades to the existing energy infrastructure. On the west side, a line along Coal Mine Road provides power to KCMO Public Works facility, Round Grove Creek Lift station, the communication towers, and the KCPD firing range. Future development can tie in to the feeder line as interior improvements are made. Existing power lines on the east side are primarily located along Eastern Avenue and Ozark Road. Future development on the interior of the east side will require new main lines that tap into Eastern Avenue and Ozark Road. The existing power lines should be evaluated to determine if they provide adequate power for future power needs.

In addition to interior power lines, future development should pursue on-site power production. Rooftop mounted solar photovoltaic panels are an increasingly effective technology with low maintenance. Solar panels qualify for KCP&L's \$2/watt solar rebate, federal tax credits, and would earn credits for some overproduction. Solar thermal is an option for heating water, but wind speeds in this area are not adequate to make wind energy production economical.

INVEST IN WATER RECLAMATION AND REUSE Existing sanitary sewer lines on the west side are located along Coal Mine Road. Secondary lines feeding the KCMO Public Works facility and Round Grove Creek lift station tie in to the main trunk line along Coal Mine Road which heads northwest across the Blue River. Except for the area south of the railroad tracks, future sanitary lines on the west side can tie into major trunk lines located along Coal Mine Road. Because the neighborhood to the south operates with septic tanks, the Municipal Farm area south of the railroad tracks could use a natural waste water treatment system. On the east side of Municipal Farm, future development can easily assess sanitary sewer lines from all the areas. The Animal Shelter, National Guard Armory, and the KCPD Patrol support unit currently have working sanitary lines. However, most of the lines are old and made of vitrified clay pipe. Future development can likely use the lines, but they should be tested for leaks and blockage or potentially tie in to a

The aging sewer infrastructure, and in some places the lack of sewer infrastructure, is an opportunity to invest in innovative and green technologies demonstrating water reclamation and reuse. Natural waste water reclamation could treat 100% of the waste water generated on site in a sustainable way that treats water as a precious resource, reclaims water using zero chemicals, uses low energy, and provides educational opportunities to individuals, groups, and the larger region.

natural wastewater treatment facility.



## IMPLEMENT SUSTAINABLE STORMWATER MANAGEMENT

The size of the Municipal farm, the presence of wetlands, and proximity to the Blue River make the site is a key node for watershed management, water quality, and groundwater recharge. Land development in both Sustainable Design and Restorative Design areas should preserve and restore (where appropriate) natural landscape features, minimizing imperviousness to create functional and appealing site drainage that treats rainwater as a precious resource rather than a waste product. Because there are almost no existing stormwater lines on either side of the site, there is a unique opportunity to incorporate new technologies for sustainable stormwater management. Development should involve stormwater management best practices, stream buffers and setbacks, and restoration of riparian vegetation.

#### UPGRADE WATER SUPPLY

In the west side, there is a dead end 6-inch line near the LaFarge site and a water line that feeds the Kansas City Public Works Facility. This line is most likely too small to serve as a main line for new development. Assessing future water demand will be important to know if upgrades on a water main or aggressive rainwater harvesting are required on the west side. On the east side, water lines run along Raytown Road (12-inch and 54-inch ductile iron pipe), Ozark (12-inch ductile iron pipe), and the north-south abandoned road (6-inch cast iron pipe). These lines can be used for future development, but should be tested for leaks and flow requirement. Also rainwater is increasingly being used as a potable water supply and should be fully investigated at Municipal Farm.

#### UPGRADE NATURAL GAS SUPPLY

Missouri Gas Energy has no facilities located on the west side. If future development requires gas, upgrades will be needed.

#### UPGRADE COMMUNICATION SERVICE

On the west side, AT&T has lines located along Coal Mine Road that serve the KCMO Public Works facility. Future interior lines should tie into existing At&T telephone lines along Coal Mine Road.

On the east side, At&T has telephone lines along Raytown Road (buried copper and fiber lines), Ozark Road (buried copper and fiber line), and Eastern Avenue (fiber optic line with aerial lines feeding the National Guard Armory and the helicopter pad). Future development will need new Interior lines to provide communication service to future development.





#### RECOMMENDATION 05:

## IMPROVE CONNECTEDNESS THROUGH MULTI-MODAL TRANSPORTATION STRATEGIES

DEVELOPMENT ON MUNICIPAL FARM SHOULD LEVERAGE SUPPORT FOR A FUTURE COMMUTER RAIL STATION

MARC's Smart Moves regional transit plan has identified the Rock Island Corridor, which runs between the Municipal Farm site and the Truman Sports Complex, as an important future commuter transit corridor. Preliminary plans have located a rail stop at Truman Sports complex, within a quarter-mile of the northern portion of the Municipal Farm site. Should commuter rail be implemented along the Rock Island Corridor, a pedestrian connection to the potential commuter rail station is important for making the larger connection between the Municipal Farm site and the rest of the metropolitan area. Fairly dense residential development is the land-use most supportive of a commuter rail station, as well as a trail corridor.

DIRECT HIGH VOLUMES OF AUTOMOBILE TRAFFIC TO RAYTOWN ROAD AND EASTWOOD TRAFFICWAY On the east side of Municipal Farm, Raytown Road will handle high volumes of automobile traffic with only minor, secondary, or local access focused on Ozark Road and Eastern Avenue. Future destination-type land uses requiring high volumes should locate in close proximity to Raytown Road. The major obstacle to this recommendation is the fact that the I-435/Raytown Road interchange only serves movements to and from the south. While the proximity to the Stadium Drive and I-70 interchanges would make the creation of a full-access interchange difficult, the possibility of providing better access from the north, through braided ramps, collector-distributor roads, or some other means should be explored. Without this change, the viability of "destination-oriented" land-uses on the east side is limited. Land-uses might need to fall in the more intense ranges of the Conceptual Land Use Plan to justify such an expense.

On the west side of I-435, Eastwood Trafficway/Route 350 will handle high volumes of automobile traffic with Winchester Road/Raytown Road as secondary access. The underpass at the Kansas City Southern Railroad creates an unsafe choke point for traffic; widening of this underpass is one option to increase safe access for local and regional traffic. Considering these conditions, future destination-type land uses are best suited for the very western portion of the site.

CREATE A COMPREHENSIVE NETWORK OF STREETSCAPE INFRASTRUCTURE PROMOTING SAFE AND ACCESSIBLE PEDESTRIAN AND BICYCLE CIRCULATION

All uses of the site should incorporate sidewalks and bike lanes and these should connect to sidewalks on Raytown Road, Ozark Road, Eastern, and Coal Mine/Winchester Road. In addition, the Bike KC plan (currently being vetted and updated) has envisioned bicycle routes on Sni-A-Bar Road and Raytown Road. Coupled with the trail opportunities described above, this system would provide east-west and north-south connectivity for bicyclists to both local and regional destinations. Implementing sidewalks and bicycle lanes encourage people to live an active lifestyle in their neighborhood and, with more people walking and biking along the street corridor, increase perceived safety.



## DEVELOP INTERNAL CIRCULATION ROUTES TO PROVIDE ACCESS TO LAND USE AREAS

Develop a north-south spine following the existing abandoned road that connects Raytown Road to Ozark Road. An east-west internal circulation road (north of sites 11 and 12) should also be developed connecting Eastern Avenue and Ozark Road. A collector road should loop from the east side of Area 4/5, turning west north of Area 3, and connecting back to Coal Mine Road in the middle of Area 1.





#### RECOMMENDATION 06:

## POSITION MUNICIPAL FARM AS A KEY LINK WITHIN A REGIONAL TRAIL NETWORK

The Country Club Plaza, Truman Sports Complex, Rock Island Corridor, and Swope Park are important regional destinations that could be strengthened through a connected recreation trail (Figure 4-3). The westernmost edge of the Municipal Farm site, which adjoins the confluence of Brush Creek and the Blue River, is ideally situated for trail access. Currently, the Brush Creek trail system terminates approximately 0.5 miles west of the confluence, and the Trails KC plan envisions a trail along the Blue River. The Trails KC Plan also envisions a trail along the former Rock Island rail corridor. This regional trail corridor is intended to eventually connect into Missouri's renowned Katy Trail, completing a continuous connection from Kansas City to St. Louis.

Utilizing Municipal Farm's unique location to connect these trails would create opportunity for a wide exchange of regional users, as well as local users from the Eastwood Hills Neighborhood. Recreational and nature-based land uses would be complemented by the trail system. The conceptual land use plan lays out an extensive trail system that connects regional destinations and ties into the larger, regional trail network.

CREATE NEW EAST-WEST PEDESTRIAN CONNECTIONS BETWEEN THE TWO PORTIONS OF THE SITE A new east-west pedestrian and trail connection (or connections) is necessary to create the regional trail link. A direct connection between the two portions of the site would help penetrate the lengthy pedestrian barrier posed by I-435 and help attract recreation users from the Eastwood Hills neighborhood as well as regional users from adjacent destinations. The most feasible site for this connection is the north end of both sides along Round Grove Creek (this connection would have to go under I-435). Another potential connection with more direct neighborhood access is at the south end of both sides (this connection would have to go over I-435). A sidewalk connection is recommended along Raytown Road from the site entrance to Blue Ridge Cutoff.











#### FIGURE 4-3 | REGIONAL TRAIL CONNECTIONS

Existing Metro Green trails

Phase I Metro Green trails

Phase II Metro Green trails

RECOMMENDATION 07:

## LEVERAGE BROWNFIELDS AS AN OPPORTUNITY TO CATALYZE CLEANUP AND INVESTMENT

Based on the information provided for the Area-Wide Brownfield Plan (AWBP), twenty-six brownfield areas and two non-brownfield areas of concern have been identified for the entire Municipal Farm Site. Recommendations have been made to follow up on identified concerns. The recommendations include Phase I Environmental Site Assessments (ESAs) as a preliminary investigation or starting point. Additional actions will be based on the results of the Phase II ESAs or targeted screening activities and Conceptual Site Models that will be used to determine whether human or ecological receptors are potentially exposed to unacceptable levels of contamination. Based on the available information to the AWBP, it is not known what type, if any, of potential remediation or cleanup activities will be necessary. Based on the known historic and current uses at the time of AWBP, future remediation measures, if necessary, do appear feasible for the majority of the Brownfield Areas and Non-Brownfield Areas of Concern. However, use restrictions are currently in-place for the HEHS, ARMCO fill material placement and Round Grove Creek Landfill.

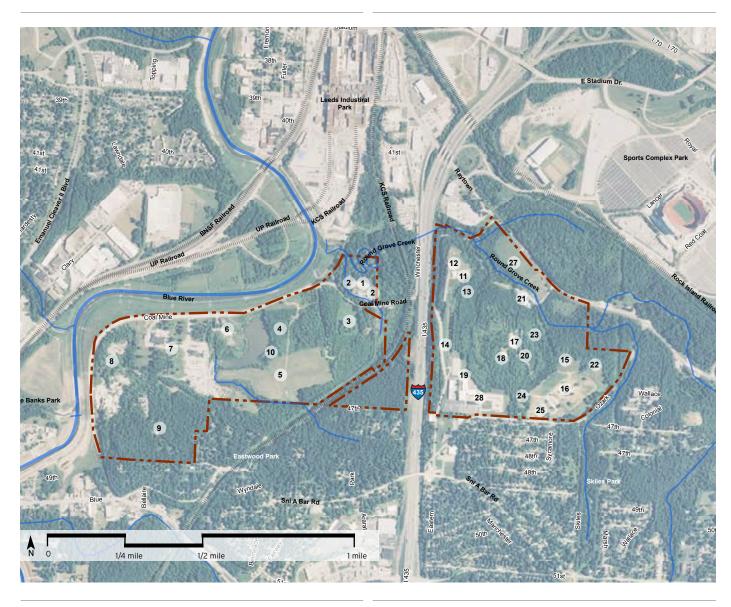
Resources for the assessment of environmental concerns and remediation of environmental impacts identified by those assessment and site characterization activities, will remain a long-term challenge for implementation of the Sustainable Reuse Plan and future site development. Fortunately, there are currently significant potential and secured resources for brownfields redevelopment at the federal, state and local level available for Municipal Farm. The U.S. Environmental Protection Agency (EPA) offers brownfield grants for assessment, cleanup and revolving loan funds for cleanup. The State of Missouri offers tax credits and loans for the remediation of brownfield sites. The City of Kansas City, Missouri currently administers several EPA brownfield grants for assessment and cleanup, community development block grant (CDBG) grant funds from the U.S. Department of Housing and

Economic Development (HUD), and, through its economic development agency, the Economic Development Corporation of Kansas City, Missouri (EDC), it offers conventional tax abatement and incentive programs that can help defray environmental, public infrastructure and other pre-development costs.

Perhaps of equal importance to resources in meeting environmental objectives for future land use will be the control of assessment and remediation costs through the strategic application of the State of Missouri's cleanup rules and guidance, collectively known as Missouri Risk-Based Corrective Action (MRBCA). In addition, enrolling CLUP Areas and sites into the Missouri Brownfields Voluntary Cleanup Program (BVCP) helps create eligibility for state and federal incentives, and upon completion of remediation activities, can lead to State certification that sites are clean and ready for intended uses, and thereby facilitate Sustainable Reuse Plan implementation and development.

The area's classification as a potential brownfield opens the door for brownfield funding to invest in clean up and future redevelopment, if sold to an eligible entity. Interim ownership by a quasi-governmental entity or development authority could lead to both assessment and cleanup funding. Property transfer could be designed as part of new incentive district (TIF, 353, enterprise zone, etc.) to stimulate new private investment and implement SRA for this area. Needed assessment activity for new district to identify impacts of concrete and mine operation could also determine geotechnical profile of site, some indication of geologic stability of undermined areas, and hydrological connections between site and river. Cleanup projects could combine risk management of impacted areas with crushing of concrete, capping of contaminants under new road beds, and new graded areas for sustainable development.





#### FIGURE 4-4 | SITES FOR FURTHER ENVIRONMENTAL INVESTIGATION

- 1. KCPD firing range
- Two potters fields (aka municipal cemetery)
- 3. KCPD bomb detonation area
- 4. ARMCO fill material placement site
- 5. Part of former municipal farm now occupied by the communication towers field
- 6. Part of former municipal farm now occupied by Round Grove Creek Lift Station
- 7. Public Works Facilities
- 8. Former LaFarge Concrete Batch Plant
- 9. Former Botsford Mine
- 10. Former agricultural use areas

- 11. KCPD Patrol Support Unit (Helicopter & K-O Training Facility)
- 12. Former tuberculosis hospital
- 13. Former tuberculosis hospital dump site
- 14. Potters field (aka Municipal Cemetery)
- 15. Former Men's Reformatory
- 16. Former Municipal Corrections Institution (MCI)
- 17. Former Health Emergency HAZMAT Site (HEHS)
- 18. Former agricultural use areas
- 19. Former Women's Reformatory
- 20. Part of former municipal farm once occupied by the police kennel
- 21. Animal Shelter

- 22. Communication tower
- 23. Former quarry (part of municipal farm activities)
- 24. Former canning factory (part of municipal farm activities)
- 25. "City workhouse" and former stable/garage/ vehicle house, storage, machinery storage, and approximate location of feed house
- 26. Former orchard (part of municipal farm activities)
- 27. Round Grove Creek Land Fill
- 28. Missouri National Guard Armory



## CONCEPTUAL LAND USE PLAN OVERVIEW



FIGURE 5-1 | CONCEPTUAL LAND USE PLAN (CLUP)



CLUP delineated areas per physiographic features

potential mixed use nodes per Eastwood Hills Neighborhood Plan





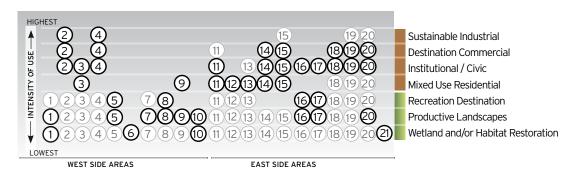


FIGURE 5-2 | SUMMARY LAND USE RECOMMENDATIONS

This table summarizes the land use recommendations per CLUP area found on the subsequent pages. In order to maintain flexibility for the long term yet give as much direction as possible, compatible uses and most compatible uses are represented for each area.

(A) most compatible

(A) compatible

Areas in the Conceptual Land Use Plan (CLUP) are delineated by physiographic features (geographic and physical attributes) and are divided into the major categories of sustainable design and restorative design, as illustrated in Figure 5-1. The Restorative Design Area (both shades of green) includes the most environmentally sensitive features, which play critical roles in the health of ecosystems on and around the site. Land within the Sustainable Design Area (orange) is less vulnerable to ecosystem degradation, and therefore could accommodate permanent structures within the parameters of the site's natural resource limit. Figure 5-2 summarizes the compatible and most compatible land uses for each area. The range of potential uses indicated in the figure maintains flexibility for the long term buildout of the site and provides specificity about what uses are incompatible and what uses are most compatible.

In the following pages, the description for each area provides the rationale for the land use recommendation. The grey sidebar on each page is an overview of the land use recommendation, infrastructure, and brownfield status within each area. The infrastructure graphic summarizes what is known about sewer, water, gas, power, communication, green infrastructure, access, and internal roads within the respective area. For the full report on

infrastructure and transportation, refer to the companion document: Infrastructure, Transportation, Economic Development and Agriculture Analysis. The brownfield graphic and information summarizes the status and recommendations from the Area-Wide Brownfield Plan (AWBP). Each area is given a low, moderate or high data uncertainty level ranking. This ranking is based on the amount of information available and known at the time of the AWBP. For example, a low data uncertainty level ranking indicates that the past and current uses of the subarea are known and documented. A high data uncertainty level ranking indicates that the past uses and/or current conditions are not known or documented. Each area is also given a low, moderate or high relative environmental concern level ranking. This ranking is intended to convey a relative level of environmental concern for a sub-area in relation to the whole Municipal Farm Site and other types of contaminated properties, and was based on available information and professional judgment and experience with similar properties and site histories. For example, a low relative environmental concern level ranking indicates a low potential for unacceptable levels of contamination. A high environmental concern level ranking indicates a high potential for unacceptable levels of contamination. For the full report on brownfields, refer to the companion document: the Area-Wide Brownfield Plan.

## LAND USE DESCRIPTIONS

Land uses in the Conceptual Land Use Plan are defined here. Each land use is intended to function in a system of uses that contribute to economic growth, livability and recreation, environmental resilience, efficiency and resource reuse, and innovation (see diagram below). The area overviews describe in more detail how the designated land uses function for each area of the site.



#### Sustainable Industrial

Industrial areas support the most intensive uses, such as sustainable industrial operations or infrastructure and utility uses. Examples of this could be a recycling center, sustainable manufacturing facility, or a pump station. Industrial areas should not encroach on neighborhood uses or negatively impact the rural character of the area. Sustainable industrial uses should align with the vision and development strategy recommended in this plan.





#### Institutional/Civic

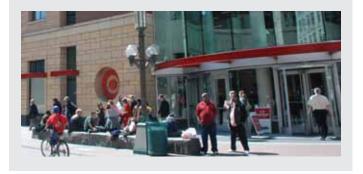
Institutional/Civic areas would support uses such as a research center or government offices. These areas support less intense development than either industrial or destination commercial areas.

#### **Destination Commercial**

Destination Commercial areas are appropriate for large commercial developments such as an office park or an eco-tourism village. These areas should be designed to align with the vision and development strategy recommended in the plan.



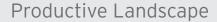






#### Mixed Use Residential

Mixed use residential areas have neighborhood commercial uses and a mix of housing types including detached single family homes, town homes, rowhouses, and multifamily buildings. Commercial uses are smaller than the destination commercial areas and are integrated into the neighborhood.



Productive landscape areas support a variety of uses including agriculture and renewable energy generation. Productive Landscapes can also generate argo-tourism. These areas will be rural in character while still supporting the goals of the efficiency + resource use, economic growth, and research.









#### Recreation Destination

Recreation destination areas support event spaces, parks, or sports fields. The design of these areas will restore the natural environment and its ability to provide valuable natural services, such as storm water management. Along with productive landscape areas, recreation destination areas have the potential to generate enviro-tourism and argo-tourism.

#### Wetland and Habitat Restoration

The wetland and habitat restoration areas encompass critical environmental assets and sensitive areas. Uses can include wetland banking, invasive species removal and native plan restoration, educational interpretation of the natural environment including trails and other recreational uses that do not disturb fragile environmental conditions.





## AREA 1

#### SITE DESCRIPTION

Area 1 has good access to Coal Mine Road, the Blue River, Blue Banks Park, existing trails connecting to Brush Creek and the Plaza, and the potential mixed use area identified in the Eastwood Hills Neighborhood Plan. The Area is also characterized by proneness to flooding (primarily within the 100-year floodplain), soils classified as pits and quarry, and dense tree canopy except where cleared for the former LaFarge Concrete Batch Plant. The slopes in this area are mostly gentle 1% to 3%, with a few steep slopes approaching 30%. The only previous use on this area is the former LaFarge Concrete Batch Plant (Figure 5-3).

#### **BROWNFIELD STATUS**

Area 1 is of low environmental concern, with a moderate level of data uncertainty. Potential environmental concerns include the former concrete batch plant due to its potential for volatiles, semi-volatiles, petroleum related contaminates, and metals. These potential concerns, however, do not preclude the suggested productive landscape or wetland/habitat land use for Area 1. Presently, there is no environmental data to

confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for the former concrete batch plant to identify whether there are significant potential concerns, followed by an initial screening investigation of surface soils and near surface soils in key locations to identify whether contaminates are present and, if so, their type and extent.

#### INFRASTRUCTURE STATUS

Area 1 is largely devoid of internal infrastructure, as shown in Figure 5-4. However, it does have good access to a main sanitary trunk line, a three phase feeder line for power, and communication lines for telephone and internet along Coal Mine Road. Depending on future water demand, it's possible that the six-inch dead-end water line along Coal Mine Road could be reused to serve this area. If Areas 2 and 4 are further developed, it is recommended that an east-west collector road and utilities be constructed through Area 1, intersecting with Coal Mine Road and extending east to provide continuity and efficiency of circulation to Areas 2 and 4.



#### RECOMMENDED USE

Based on its proximity to the Blue River and existing natural conditions, Area 1 is best suited for habitat restoration, productive landscapes, and/or recreation (Figure 5-4). If done well, habitat restoration work could be highly visible and positively impact water quality of runoff entering the Blue River. These natural uses should be thought of as complements to the adjacent development opportunities like the proposed mixed use area at the intersection of Blue Parkway/350 and Hardesty Ave/Coal Mine Road, less than a half mile away (as identified in the Eastwood Hills Neighborhood Plan), and Areas 2 and 4 which are likely to be the areas of most intense development on the West side of the Municipal Farm Site. Area 1 may also remain the entrance to the site of the former LaFarge Concrete Batch Plant. Restoration and recreation activities will need to maintain this important access if and when redevelopment occurs.





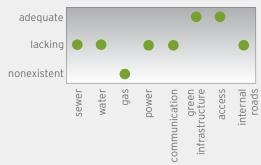


## **12.8** ACRES

#### LAND USE RECOMMENDATION



## EXISTING INFRASTRUCTURE WITHIN AREA 1



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary environmental assessment of the former concrete batch plant
- Remove the drums, containers, and debris while taking note of any visibly stained areas prior to removal of concrete
- Investigate quarry pits and subsurface areas for potential dumping of hazardous wastes
- Evaluate for the presence of sink holes, and the locations for former rock quarries and subsurface mining operations

## AREA 2

#### SITE DESCRIPTION

Area 2 is characterized by moderate topography with some steep slopes, soils classified as pits and quarry, and dense vegetation with clearings from the former LaFarge Concrete Batch Plant. About fifty percent of the total area has slopes ranging from 1% to 8%. There are some steep slopes throughout the area that range from 8% to 30%, which present challenges for development. Smaller building footprints in nodal development patterns will likely be more feasible than large-footprint buildings. The only previous use in this area is the former LaFarge Concrete Batch Plant (Figure 5-5).

#### **BROWNFIELD STATUS**

Area 2 is of low environmental concern with a low level of data uncertainty. Potential environmental concerns include the former concrete batch plant due to its potential for volatiles, semi-volatiles, petroleum related contaminates, and metals. These potential concerns, however, do not preclude the suggested sustainable industrial, commercial, and institutional land use. Presently, there is no environmental data to confirm

the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for the former concrete batch plant to identify whether there are significant potential concerns, followed by an initial screening investigation of surface soils and near surface soils in key locations to identify whether contaminates are present and, if so, their type and extent.

#### INFRASTRUCTURE STATUS

With some access concerns on Winchester Avenue and limited access from I-435/Raytown Road, regional access for Area 2 is practical from the south of the Municipal Farm site at the Eastwood Trafficway/ Route 350 full interchange. Area 2 is largely devoid of internal infrastructure, as shown in Figure 5-6. However, it does have good access to a main sanitary trunk line, a three phase feeder line for power, and communication lines for telephone and internet along Coal Mine Road. Depending on future water demand, it's possible that the six-inch dead-end water line along Coal Mine Road could be reused to serve this area.

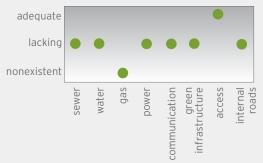


## **12.0** ACRES

#### LAND USE RECOMMENDATION



## EXISTING INFRASTRUCTURE WITHIN AREA 2



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







#### Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary environmental assessment of the former concrete batch plant
- Remove the drums, containers, and debris while taking note of any visibly stained areas prior to removal of concrete
- Investigate quarry pits and subsurface areas for potential dumping of hazardous wastes
- Evaluate for the presence of sink holes, and the locations for former rock quarries and subsurface mining operations

#### RECOMMENDED USE

Being out of the flood prone area combined with good access, remnant concrete structures, adjacent future and existing trails, and proximity to 185 acres of restorative design area on the west portion of this planning area positions this area with a unique opportunity to adaptively reuse the concrete structures and take advantage of habitat restoration and trail connectivity as an opportunity to integrate built systems into a site design that captures the natural beauty. While destination commercial and industrial uses may not be incompatible with this program potential (and with the right program may be ideal), institutional/civic uses would likely maximize the recreation, education, and research benefits. Each recommended land use (Figure 5-6) should incorporate economic growth, livability and recreation, environmental resilience, efficiency and resource reuse, and innovation.



LaFarge Concrete Batch Plant | looking at west side of former building



## AREA 3

#### SITE DESCRIPTION

Area 3 is characterized by moderate topography with north and west facing slopes, some of the highest elevations on the west side of the site, soils classified as Urban Land Harvester complex, Menfro silty clay loam, and Snead-Rock outcrop complex, and dense vegetation covering almost all of the area. This area is surrounded by steep slopes to the north and west which creates a barrier and makes the area seem like its own "room." About fifty percent of Area 3 has slopes ranging from 1% - 8%; the other fifty percent ranges mostly from 8.1% - 15%. There are a few steep slopes greater that 15% throughout the area, but in general the slopes in this area wouldn't inhibit development. Area 3 is heavily undermined and the implications of these mines need to be better understood. The face of the former Botsford Quarry makes up almost the entire area (Figure 5-7). This pillar mine is estimated to have 450 to 500 rooms which accommodated subsurface mining operations. The exact location of mine entries and sinkhole locations should be investigated, as well as the potential inundation with

water from surface and groundwater flow. The Area is also adjacent to residential development to the south and future use needs to respect the neighborhood character of the southern boundary.

#### **BROWNFIELD STATUS**

Area 3 is of moderate environmental concern with a high level of data uncertainty. Potential environmental concerns include the former Botsford Mine due to its potential for volatiles, semi-volatiles, petroleum-related contaminants, and metals. These potential concerns, however, do not preclude the suggested institutional or mixed use residential land use for Area 3. Presently, there is no environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for the former Botsford Mine to identify whether there are significant potential concerns, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present and, if so, their type and extent.



INFRASTRUCTURE STATUS

Regional transportation access is a challenge in Area 3. Access is most feasible from Sni-a-Bar Road because of the steep slopes surrounding Area 3 to the north and west. As shown in Figure 5-8, internal infrastructure is largely non-existent in Area 3, except for the eightinch water line going through the area feeding the Public Works facility. Future development could tie in to the power and communication lines along Coal Mine Road or from the neighborhood. Future sanitary could tie in to Coal Mine Road, but there are no sanitary sewer lines within the neighborhood to the south (the neighborhood is on septic tanks).

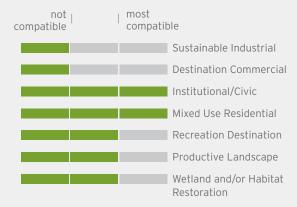
#### RECOMMENDED USE

Removed from the flood-prone area, Area 3 holds some development potential. Mixed use residential appears to best complement the rolling topography, local access, and existing residential (Figure 5-8). However, better understanding the implications of the undermined area will help to determine development feasibility and could even lead to new economic opportunities if a creative use can be identified for the mines (either as usable space or to temper air, etc.).

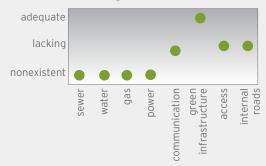


## **27.4** ACRES

#### LAND USE RECOMMENDATION



## EXISTING INFRASTRUCTURE WITHIN AREA 3



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary environmental assessment of the former Botsform Mine
- Evaluate the presence of sink holes, the location of former rock quarries, and subsurface mining operations

## AREA 4

#### SITE DESCRIPTION

Area 4 is characterized by moderate topography, soils classified as Udarents-Urban land complex with some Pits and Quarry, and some dense vegetation to the west and south of the area. The Kansas City, Missouri Public Works Facility and the Streets and Traffic Operations Facility is located within Area 4 (Figure 5-9). About seventy-five percent of the area has gentle slopes, ranging from 1% to 8 %. The remaining twenty-five percent of the site has some steep slopes ranging mostly from 8% to 15%, with very few along the south border greater than 15%.

#### **BROWNFIELD STATUS**

Area 4 is of moderate environmental concern with a moderate level of data uncertainty. Potential environmental concerns include the Public Works and Streets and Traffic Operations Facility (potential for volatiles, semi-volatiles, petroleum-related contamination, and herbicides/pesticides), the concrete batch plant (potential for volatiles, semi-volatiles, petroleum-related contaminants, and metals), and the former agricultural sub-area (potential herbicides and pesticides). These

potential concerns, however, do not preclude the suggested sustainable industrial, commercial, and institutional land uses. Presently, there is no environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for the Public Works and Streets and Traffic Operations Facilities, former agricultural use sub-area, and the concrete batch plant to identify whether there are significant potential concerns, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present and, if so, their type and extent.

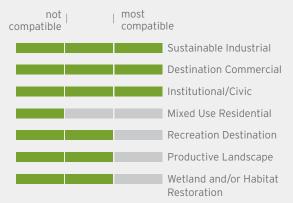
#### INFRASTRUCTURE STATUS

With some access concerns on Winchester Avenue and limited access from I-435/Raytown Road, regional access for Area 4 is practical from the south of the Municipal Farm site at the Eastwood Trafficway/Route 350 full interchange. Because of the existing uses within Area 4, internal infrastructure exists in adequate condition, as shown in Figure 5-10. The only utility without a main line for connection is gas.

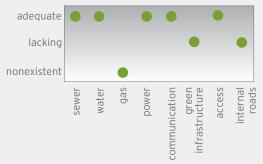


## **24.7** ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 4



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary environmental assessment of the Public Works Facility, Streets and Traffic Operations Facility, former agricultural use subarea, and the concrete batch plant
- Review available documents regarding the operation of the pumping station and potential storage tanks
- Conduct biased sampling of sediment at a prominent downgradient drainage relief point for pesticides and herbicides within the former agricultural sub-area
- Remove drums, containers, and debris while making note of any visibly stained areas within the former concrete bath plant

#### RECOMMENDED USE

One of the biggest challenges for Area 4 is to integrate the existing Public Works and Streets and Traffic Operations Facility into an ambitious vision for long term development. It is likely, at least in the short term, that current uses will not change. However, due to its prominent location on the west side, steps should be taken to establish a plan for how the existing use can be beneficial to the long term development of the Municipal Farm property. The long term development should maximize economic growth, livability and recreation, environmental resilience, efficiency and resource reuse, and innovation for the entire Municipal Farm property. Area 4 has significant potential to integrate habitat restoration in the site design, taking advantage of the natural beauty and helping restore a healthy ecosystem. The wetlands in Area 6 positions Area 4 to do just that, encouraging a robust program of education, research, and recreation. Whether it's sustainable industrial, destination commercial, or institutional/civic land uses, the most compatible future land uses (Figure 5-10) will maximize the potential for nontraditional uses that complement the theme for the whole site, and are in line with trends that point toward a strong need for energy conservation, sustainability, technology, research, and eco-friendly development.



## AREA 5

#### SITE DESCRIPTION

Area 5 has good visibility and access from Coal Mine Road, relatively flat topography, soils classified as Udarents-Urban land complex, some scattered vegetation, proneness to flooding, and the presence of the Round Grove Creek Lift Station. Area 5 also includes the existing access road to the Public Works Facility in Area 4. About ninety percent of the Area 5 ranges from 1%-3% slopes. There are two linear areas with steeper slopes which indicate drainage ways: one is mostly east-west at the northeast side of Area 5, just south of the lift station. The other drainage way starts south of the Municipal Farm property flowing north under the railroad tracks, and then into Area 6. This drainage pattern shows up in Area 5 at its southeast corner. It is likely that Area 5 drains towards the east, which eventually consolidates and flows southeast to the existing body of water.

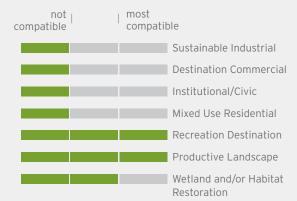
#### **BROWNFIELD STATUS**

Area 5 is of moderate environmental concern with a moderate level of data uncertainty. Potential environmental concerns include the Round Grove Creek Pumping Station (potential for volatiles, semi-volatiles, herbicides/pesticides) and the Public Works and Streets and Traffic Operations Facilities (potential for volatiles, semi-volatiles, petroleumrelated contamination, herbicide/pesticide). These potential concerns, however, do not preclude the suggested recreation and productive landscape land uses in Area 5. Presently, there is no environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for the Public Works Facility, Streets and Traffic Operations Facility, Round Grove Creek Pumping Station, and the former agricultural use sub-area to identify whether there are significant potential concerns, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present and if so, their type and extent.

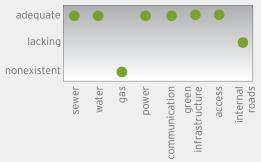


## **19.9** ACRES

#### LAND USE RECOMMENDATION



## EXISTING INFRASTRUCTURE WITHIN AREA 5



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary environmental assessment of the Public Works Facility, Streets and Traffic Operations Facility, Round Grove Creek Pumping Station, and the former agricultural use sub-area
- Evaluate ongoing practices of materials, waste handling, and storage activities at the Public Works facility and Round Grove Creek Pumping Station
- Conduct additional investigations of former agricultural use sub-area, including sampling of sediment at drainage relief point that is downgradient from the majority of the area

#### INFRASTRUCTURE STATUS

With some access concerns on Winchester Avenue and limited access from I-435/Raytown Road, regional access for Area 5 is practical from the south of the Municipal Farm site at the Eastwood Trafficway/Route 350 full interchange. Because of the existing uses within Area 4 and the Round Grove Creek Lift Station in Area 5, internal infrastructure exists largely in adequate condition, as documented in Figure 5-12.

#### RECOMMENDED USE

With the Round Grove Creek Lift Station at the northeast corner of the area, there is a unique opportunity to investigate opportunities for future development synergies that improve sustainable operations of the sanitary sewer system, contribute to the health of the natural ecosystem, improve the aesthetic of the place, and even create a destination for learning and recreation. Area 5 is also the "front lawn" of Area 4. Development within Area 5 could build on uses within Area 4 to create a robust program of research, education, and recreation. Because Area 5 is within the flood-prone area, it is suitable for less intense land uses including recreation, productive landscapes, and wetland/habitat restoration (Figure 5-12).



## Area 6

#### SITE DESCRIPTION

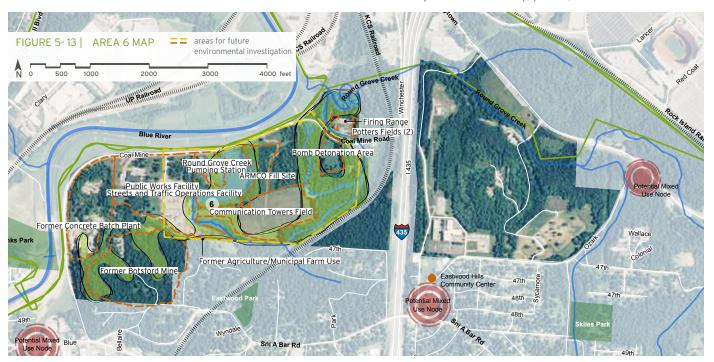
Area 6 is characterized by the existing creeks and water bodies, topography ranging from steep slopes to flat stream beds, vegetation largely of dense tree canopy, proneness to flooding, and a range of soils from rocky to hydric including Snead-Rock outcrop complex, Udarents-Urban land complex, Menfro silty clay loam, Wiota silt loam, Colo Silty clay loam, and Bremer silt loam. Invasive species including Honeysuckle and China Sumac were observed on site, as well as an overgrowth of algae and unpleasant odor from the eastern-most drainage way east of Area 7. The western portion of Area 6 has east, north, and west facing slopes. These steep slopes range mostly from 8% to more than 30% in some places. The remaining portions of Area 6 are primarily existing drainage ways or saturated areas holding water. The drainage ways include some steep slopes on the banks, and the lowest elevations of the West side. Most of the water on the west side of the site drains to Area 6, and is then piped under Coal Mine Road into the Blue River.

#### **BROWNFIELD STATUS**

Area 6 is of moderate environmental concern, with portions ranked low, moderate, and high. The overall environmental data uncertainty is high due to many data gaps and the absence of prior investigations. There are several potential environmental concerns (see Figure 5-13) because Area 6 spans the entire west side of the site. These potential concerns, however, do not preclude the suggested wetland and habitat restoration land use. Presently, there is no environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for each sub-area of potential environmental concern as shown in Figure 5-13 and listed in Figure 5-14, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present and, if so, their type and extent.

#### INFRASTRUCTURE STATUS

Few internal utility lines or roads exist within Area 6 due to its rural character (Figure 5-14). Future development could easily tie in to sanitary, power, and communication



lines along Coal Mine Road. Future water demands should be determined to know if the eight-inch line feeding the Public Works Facility and Pump Station can be extended for future needs within Area 6. Although more can be done to implement green infrastructure solutions to manage stormwater, the extent of pervious surface allowing rainwater to infiltrate and recharge groundwater where it falls positively impacts water quality.

#### RECOMMENDED USE

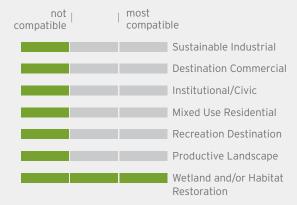
The potential for wetland and habitat restoration within Area 6 is significant (Figure 5-14). As a restored wetland and habitat area, the environmental benefits include restoration of native species and healthy soils, reduced flooding, reduced erosion, water recharge, improved water quality, and wildlife habitat. With such a large amount of land for wetland and habitat restoration in combination with other unique site factors, this area could be what attracts sustainable development to the Municipal Farm property. In addition to being an economic catalyst, this site is ideal for integrating opportunities for people to enjoy, learn, and do research in the natural environment. Site amenities such as trails, water recreation, and outdoor classrooms could be amenities for new development, nearby schools, the neighborhood, and even nearby universities.





### **100.1** ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 6



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary environmental assessment for the firing range, two potter's fields, bomb detonation field, ARMCO fill, communication towers field, Round Grove Creek Pumping Station, Public Works and Streets and Traffic Operations Facility, former concrete batch plant, former Botsford Mine, and the former agricultural use sub-area
- Survey the potters fields to help delineate the boundaries
- Conduct additional investigations of former agricultural use sub-area, including sampling of sediment at drainage relief point that is down-gradient from the majority of the area
- Evaluate ongoing practices at the firing range and bomb detonation field
- Obtain all available records about the former ARMCO fill site
- Evaluate ongoing practices of materials, waste handling, and storage activities at the Public Works facility and Round Grove Creek Pumping Station

## AREA 7

#### SITE DESCRIPTION

Area 7 is characterized by its relatively flat topography, variation in vegetation cover, soils classified as Colo silty clay loam, Bremer silt loam, and Udarents-Urban land complex, and proneness to flooding. About ninety-five percent of the total area has slopes ranging from 1% - 3%, with the remaining area varying in moderate slopes not exceeding 15%. Dense vegetation covers the northern half of the site, but the south side of the site is cleared and covered with short grasses that accommodate the existing Botts Radio communication towers.

#### **BROWNFIELD STATUS**

Area 7 is of moderate environmental concern, with a moderate level of data uncertainty. Potential environmental concerns include the ARMCO fill site (potential for metals, PCBs, petroleum related contaminants), the communication towers field (potential for PCBs, herbicides/pesticides, and petroleum related contaminants), and the former agricultural use sub-area (potential herbicides/pesticides). These potential concerns, however, do not

preclude the suggested productive landscape land use for Area 7. Presently, there is no environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for ARMCO fill sub-area and the former agricultural use area to identify whether there are significant potential concerns, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present and, if so, their type and extent.

#### INFRASTRUCTURE STATUS

Although close to some major utility lines, internal infrastructure is largely nonexistent except for power, as shown in Figure 5-16. The existing power lines within Area 7 are due to the Botts Radio communication towers. Future development could tie in to sanitary, and communication lines along Coal Mine Road. Future water demands should be determined to know if the eight-inch line feeding the Public Works Facility and Lift Station can be extended for future needs within Area 7.



#### RECOMMENDED USE

One of the biggest challenges for Area 7 is to integrate the existing uses into a vision for the future that will be beneficial for both the long-term development of Municipal Farm and the existing users. It is likely that the Botts Communication towers use will remain. However, steps should be taken to establish a plan for how the existing use can be beneficial to the long term development of the Municipal Farm property. This area could support land uses including a recreation destination, productive landscape, or wetland and habitat restoration (Figure 5-16). With the physiography, location, and shear acreage of this area, a productive landscape will likely maximize economic growth, environmental stewardship, and amenities for people that create opportunities to support fitness, education, and research. Management of rainwater through sustainable development decisions should be of particular importance because Area 7 is surrounded by wetlands (Area 6), which could be restored to provide high functioning ecosystem services. Development in Area 7 has direct impact on quality and quantity of rainwater flowing in to the wetlands.





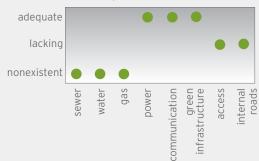


## **30.5** ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 7



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary environmental assessment of the former agricultural use sub-area
- Conduct additional investigations of former agricultural use sub-area, including sampling of sediment at drainage relief point that is downgradient from the majority of the area
- Conduct a Phase I Environmental Assessment (ESA) with a focus on obtaining all available records and interviews regarding the ARMCO Steel Plant fill materials paced in the ARMCO Fill sub-area. Follow-up Phase II screening should be conducted to confirm the results of Blue Valley Industrial Corridor Background Soil Study samples and address any other data gaps identified in the Phase I ESA

## Area 8

#### SITE DESCRIPTION

Some challenges with auto access exist along Winchester Avenue; however Area 8's connectivity to future trails planned by KC Trails and Metro Green have significant potential. This area has two distinct internally focused spaces separated by Coal Mine Road. Although not visible from the surface, Area 8 north of Coal Mine Road includes historic potters fields. Efforts are currently underway to identify the exact boundary of these historic cemeteries (Municipal Farm Cemetery Boundaries Delineation Project). Built partially on top of the potters fields, the Police Firing Range is utilizing the relatively flat topography with dense tree canopy surrounding the cleared area. Soils are predominately of Udarents Urban land complex, showing some proneness to flooding. Almost the entire area includes slopes ranging from 1% -3% with minimal slopes around the perimeter of the site. This area drains to the northwest into Round Grove Creek and a small tributary. Area 8 south of Coal Mine Road is characterized by relatively flat topography, vegetation including a grassy clearing, accommodating the existing use of the Police bomb detonation field with dense tree

canopy surrounding the area, soils predominately of Wiota silt loam, and proneness to flooding. About ninety-five percent of the area has slopes ranging from 1% - 3%. The remaining area has moderate slopes not exceeding 8%.

#### **BROWNFIELD STATUS**

Area 8 is of moderate environmental concern with a high level of data uncertainty. Potential environmental concerns include the firing range (potential for lead and other metals), two potters fields (potential for embalming fluid), the bomb detonation field (potential for unknown contaminants), and the former agricultural use sub-area (potential for herbicides/pesticides and petroleum related contaminants). These potential concerns, however, do not preclude the suggested destination and productive landscape land uses. Presently, there is no environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for the bomb detonation field and the firing range to identify whether there are significant potential concerns, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present.



#### INFRASTRUCTURE STATUS:

Regional transportation access is a challenge for Area 8. The limited access interchange at I-435/ Raytown Road and the choke point on Winchester Avenue hinder regional access from the north. With the exception of power, Area 8 is largely devoid of internal infrastructure, as shown in Figure 5-18. According to KCMO Water Services maps, no water lines serving the firing range are mapped. The closest water line is feeding the Pump Station. Future development could tie in to a main sanitary line just west of the firing range.

#### RECOMMENDED USE

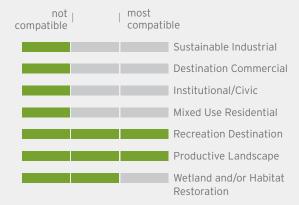
One of the biggest challenges for Area 8 is to integrate the existing and historic uses into a vision for the future that will be beneficial for both the long term development of Municipal Farm and the existing users. Without knowing the needs and long term vision for the firing range and bomb detonation field, it's likely, at least in the short-term, that this use will not change. However, steps should be taken to evaluate alternative locations for this use. The noise from the existing firing range is a non-starter for desirable other development on the west side. The natural setting, location, and potential for improved trail network supports a long-term recommended use maximizing a productive landscape or creating a recreation destination that integrates and complements the surrounding uses (Figure 5-18). The firing range, potters fields, and beauty of the natural environment within this area is an opportunity for creativity in site design and development of future uses.





## 9.6 ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 8



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary environmental assessment of the bomb detonation field and the firing range
- Evaluate ongoing practices at the firing range and bomb detonation field
- Survey the potters fields to help delineate the boundaries and conduct additional historical research and interviews to gather data about grave burial practices
- Conduct additional investigations of former agricultural use sub-area, including sampling of sediment at drainage relief point that is downgradient from the majority of the area

#### SITE DESCRIPTION

Area 9 is remote and geographically challenged with surrounding steep slopes. Area 9 is characterized by the adjacent residential development, views overlooking the west side of the Municipal Farm site, primarily northwest facing slopes, soils mostly of Snead-Rock outcrop complex with some Knox-Urban land complex, and dense vegetation. Areas 9 and 10 feel more connected to the residential development along 47th Street than to the rest of the west side, because the slopes and the railroad tracks that run along the northwest side of Area 10. About fifty percent of Area 9 has slopes ranging from 8% - 15% with the remaining area having slopes from 15.1% to 30%.

#### **BROWNFIELD STATUS**

Area 9 is of low environmental concern with a moderate level of data uncertainty. Although there are no known potential environmental concerns within this area, a preliminary or "due diligence" environmental assessment is recommended for the area to identify potential concerns.

#### INFRASTRUCTURE STATUS

Area 9 is devoid of internal infrastructure, as shown in Figure 5-20. Future development could tie in to the power, water, and communication lines from the neighborhood, but there are no sanitary sewer lines (the neighborhood has a septic system). Access to this area is from the south along 47th Street and Sni-a-Bar Road.

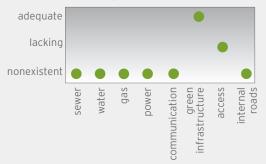


## 4.0 ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 9



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

 Conduct a preliminary environmental assessment of the area, although there are no known environmental concerns within the area



RECOMMENDED USE

East-west trail connections position Area 9 as a very

important link for local and regional connectivity.

Continuing Brush Creek trail to connect to Truman

Sports Complex and the potential commuter rail along

the Rock Island will require a connection within Area 9 or at the north side of the property where Round Grove

Creek passes under I-435. In addition to connectivity,

Area 9 could support a land use that brings daytime

of future trails within the Municipal Farm property. Due

user is the most likely tenant for Area 9. It may make sense for mixed-use residential which could include a small scale institutional or office user (Figure 5-20).

to the physiographic features and location, a specialized

activity, which would improve perceived safety of a future trail ("eyes on the park") and likely benefit usage

#### SITE DESCRIPTION

Area 10 is characterized by the adjacent residential development, views overlooking the west side of the Municipal Farm site, steep topography, primarily northwest facing slopes, soils classified as Snead-Rock outcrop complex with some Knox-Urban land complex, and dense vegetation. Areas 10 and 9 feel more connected to the residential development along 47th Street than to the rest of the west side because the slopes and the railroad tracks that run along the northwest side of Areas 10. About ninety percent of Area 10 has slopes ranging from 15%-30%. Slopes at the northwest side of the area along the railroad tracks are greater than 30%.

#### **BROWNFIELD STATUS**

Area 10 is of low environmental concern, with a moderate level of data uncertainty. Although there are no known potential environmental concerns within this area, a preliminary or "due diligence" environmental assessment is recommended for the area to identify potential concerns.

#### INFRASTRUCTURE STATUS

Area 10 is devoid of internal infrastructure, as shown in Figure 5-22. Future development could tie in to the power, water, and communication lines from the neighborhood, but there are no sanitary sewer lines (the neighborhood has a septic system).

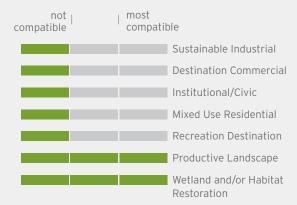
#### RECOMMENDED USE

Considering the access challenges, steep slopes, and isolated nature of Area 10, habitat restoration and productive landscapes are recommended for this area (Figure 5-22). As specific development projects are considered, stewardship of the environment should be a priority. Area 10 is adjacent to and drains into the ecologically valuable portions of Area 6 so that any new development or restoration work needs to be done to enhance ecological value.



## **13.0** ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 10



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

 Conduct a preliminary environmental assessment of the area, although there are no known environmental concerns within the area





#### SITE DESCRIPTION

Area 11 is characterized by its existing use of the National Guard Armory which has a lease until 2034, and the adjacent uses which include residential development and the Eastwood Hills Community Center. This area has moderate slopes, is mostly clear of vegetation within the fenced area of the Armory, soils mostly of Knox Urban land complex with some Snead-Urban land Complex and Knox silty clay loam. Past uses include the former Woman's Reformatory which was located towards the northwest corner of Area 11, and possibly a small portion of the potters field to the very northwest corner of the area.

#### **BROWNFIELD STATUS**

Area 11 is of moderate environmental concern with a moderate level of data uncertainty. Potential environmental concerns include the potters field (potential for embalming fluid), the former agricultural use areas (potential for pesticides and herbicides), the former woman's reformatory (potential for petroleum related contaminants), and the National Guard Armory (potential for petroleum related contaminants, metals, pesticides, herbicides). These potential concerns, however, do not preclude the suggested institutional and residential land uses for Area 11. Presently, there is no environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for the National Guard Armory, former agricultural sub-area, the potters field, and the former women's reformatory to identify whether there are significant potential concerns, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present and, if so, their type and extent.

#### INFRASTRUCTURE STATUS

Due to the existing use in Area 11, internal infrastructure is in adequate condition (Figure 5-24). Sanitary sewer, water, power, and communication lines can be easily accessed and used for future use. The area is currently accessed from Ozark Road and Eastern Avenue, each a two-lane collector road with varying levels of horizontal and vertical curvature.



#### RECOMMENDED USE

One of the biggest challenges for Area 11 is to integrate the existing (National Guard) and historic (potters field) uses into a vision for the future that will be beneficial for both the long term development of Municipal Farm and the existing users. Without knowing the needs and long term development strategy of the National Guard, it's likely that this use will not change. Whether it changes or not, Area 11 should complement the uses on the site as a whole, especially the adjacent uses including the existing residential development, the community garden, the Eastwood Hills Community Center, future development of Area 12, and the potential pedestrian/bicycle bridge over I-435. While lower intensity uses and destination commercial may not be incompatible with the land use potential, mixed use residential or institutional/civic uses would likely maximize benefits (Figure 5-24). Mixed use residential and institutional/civic uses could activate the site and give more reason to invest in integrating recreation and education into the built environment.

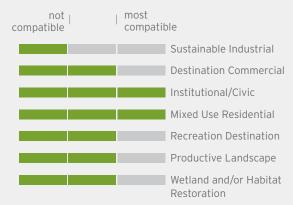




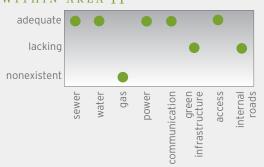


# **18.3** ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 11



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary environmental assessment of the National Guard Armory, former agricultural sub-area, potters field, former women's reformatory
- Evaluate ongoing practices of hazardous waste, storage, and disposal at the National Guard Armory
- Conduct additional investigations of the former agricultural use sub-area, including sampling of sediment at drainage relief point that is downgradient from the majority of the area
- Survey the potters fields to help delineate the boundaries and conduct additional historical research and interviews to gather data about grave burial practices
- Conduct additional investigations regarding the presence of the 30-gallon storage tank at the former women's reformatory

### Area 12

#### AREA 12 SITE DESCRIPTION

Area 12 is characterized by moderate topography with some steep slopes, soils predominately Knox-Urban Land Complex with some Knox silty clay loam, and vegetation including primarily open grassland with some dense tree canopy on the west and southeast portions of the area. About fifty percent of the total area has slopes ranging from 3% - 8%, the remainder of the area has slopes mostly between 8% - 15% with some steeper slopes getting up to 30%. Smaller building footprints in nodal development patterns will likely be more feasible than large-footprint buildings because of the variation in topography and steep slopes.

#### **BROWNFIELD STATUS**

Area 12 is of moderate environmental concern with a moderate level of data uncertainty. Potential environmental concerns include the former Municipal Corrections Institute (potential for petroleum related contaminants, pesticides/herbicides, and related metals), former agricultural use areas (potential herbicide/pesticide), former canning factory (potential for volatiles, petroleum related

contaminants, pesticides/herbicides, related metals), and the former city workhouse (potential for volatiles, petroleum related contaminants, metals, pesticides/herbicides, related metals). These potential concerns, however, do not preclude the suggested residential land use for Area 12. Presently, there is no environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for the former agricultural use sub-area, former canning factory sub-area, former city workhouse sub-area, and former Municipal Corrections Facility to identify whether there are significant potential concerns, followed by an initial screening investigation of soil s in key locations to verify whether contaminants are present and, if so, their type and extent.

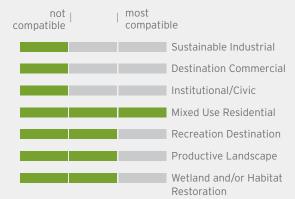
#### INFRASTRUCTURE STATUS

Ozark Road, a residential two-lane collector, provides good access to Area 12. As shown in Figure 5-26, some internal infrastructure within Area 12 exists, but much of it is in questionable condition and should be investigated before reuse. Old water and power lines from the former



### 6.1 ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 12



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary environmental assessment of the former agricultural use sub-areas, former canning factory sub-area, former city workhouse, and former Municipal Corrections Facility
- Conduct additional historical research and interviews with local experts related to the former Municipal Farm activities, specifically regarding the former canning factory sub-area, areas of maintenance and storage locations, and feed house locations
- Conduct additional investigations of the former agricultural use sub-area, including sampling of sediment at drainage relief point that is downgradient from the majority of the area

Municipal Corrections Institution are no longer in use, and have likely been abandoned for forty years. Future development can tie in to main sanitary, water, power, and communication lines along Eastern Avenue and Ozark Road.

#### RECOMMENDED USE

The location, physiography, and relationship to the land uses on the rest of the site make Area 12 prime for mixed use residential (Figure 5-26). Extending residential development into the east side of the Municipal Farm site, especially along the North side of Ozark Road, begins to make the line between Municipal Farm and the neighborhood less of a boundary. Mixed use residential also adds reason to invest in walkability and bikeability improvements along Ozark, but does not change the traffic capacity so much that it would encroach on the existing residents. Future development in Area 12 has significant opportunity to connect to the adjacent neighborhood and provide amenities that serve existing residents as well as attract a new generation of people who are invested in the vision for the Municipal Farm property. Residential density should occur in a pattern that is diverse and interconnected, and should be complemented by green infrastructure in the form of parks, greenways, and tree-lined streets. Although low intensity uses like productive landscapes and a recreation destination aren't necessary incompatible with that program potential, attracting people to live, work, and play within the Municipal Farm Property is imperative to spurring reinvestment and sustainable growth.



#### SITE DESCRIPTION

Area 13 is characterized by great views of Arrowhead stadium, moderate topography, soils predominately of Knox-Urban land complex with some Knox silty clay loam, vegetation including primarily open grassland with some trees throughout and dense tree canopy surrounding the northwest, northeast, and southeast sides of the area, and the existing 1-acre community garden (started in 2011) towards the north side of the area. There is also an existing communication tower at the northeast end of the area. About forty-five percent of Area 13 has slopes ranging from 1%-3% with another forty-five percent ranging from 3% - 8%. The remaining area, approximately ten percent of the area, has steeper slopes mostly between 8 % - 15% with a few slopes reaching 30%.

#### **BROWNFIELD STATUS**

Area 13 is of moderate environmental concern with a moderate level of data uncertainty. Potential concerns include the former men's reformatory (potential for petroleum related contaminants, pesticides/herbicides,

related metals), former Municipal Corrections Institution (potential for petroleum related contaminants, pesticides/ herbicides, related metals), former agricultural use subareas (potential herbicide/pesticide), communication tower (potential herbicide/pesticide), and the former orchard sub-area (potential herbicide/pesticide). These potential concerns, however, do not preclude the suggested residential land use. Sampling has been conducted where the 1.25 acre community garden now exists. That investigation indicated that the soil and underground water had not been contaminated by historical activities within that sub-area. Presently there is no other environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for the former men's reformatory, former Municipal Corrections Institute, former agricultural use sub-area, communication tower, and former orchard to identify whether there are significant potential concerns, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present and, if so their type and extent.



#### INFRASTRUCTURE STATUS

Area 13 is lacking in adequate infrastructure, as shown in Figure 5-28. Old sanitary, water, power, and communication lines from the former Municipal Corrections Institution are no longer in use, and have likely been abandoned for forty years. If a main north-south road is planned for future development, main lines for utilities such as sanitary, water, power, and communication should be developed which would allow for secondary utility lines to feed development throughout the east side.

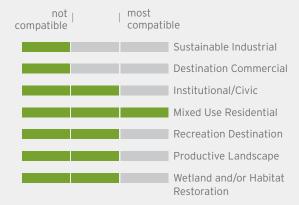
#### RECOMMENDED USE

The location, physiography, and relationship to the land uses on the rest of the site make Area 13 prime for mixed use residential (Figure 5-28). Residential density should occur in a pattern that is diverse and interconnected, and should be complemented by green infrastructure in the form of parks, greenways, and tree-lined streets. This area delineation is separate from Area 12 because Area 13 is generally more flat and the elevation and expansive views make this area feel like it's own "room." Mixed use residential adds reason to invest in walkability and bikeability improvements along Ozark, but does not change the traffic capacity so much that it would impede on the existing residents. This development also adds reason to invest in a north-south spine (largely following the existing abandoned road) connecting Raytown Road to Ozark Road. Future development in Area 13 has significant opportunity to connect to the adjacent neighborhood and provide amenities that serve existing residents as well as attract a new generation of people who are invested in the vision for the Municipal Farm property. Future development for Area 13 should build off the existing assets like the community garden and integrate with the adjacent residential uses. Although institutional/civic and productive landscapes are not necessary incompatible with this program potential, attracting people to live, work, and play within the Municipal Farm Property is imperative to spurring reinvestment and sustainable growth.



### **15.7** ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 13



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Review the 2011 Phase I Environmental Assessment and limited Phase II investigation of the community garden site to inform and conduct a preliminary environmental assessment of the former orchard sub-area, former agricultural use sub-area, former Municipal Corrections Institute, former men's reformatory, and communication tower
- Conduct additional historical research and interviews with local experts related to the former Municipal Farm activities, specifically regarding the former orchard sub-area and the two corrections institutions
- Conduct additional investigations of the former agricultural use sub-area, including sampling of sediment at drainage relief point that is downgradient from the majority of the area

#### SITE DESCRIPTION

Area 14 has a remote feel with varying topography and some steep slopes, soils primarily including Snead-Rock outcrop complex with some Knox-Urban land complex and Knox silty clay loam, and dense tree cover. About fifty percent of the area has slopes ranging from 2% - 8%. Approximately twenty-five percent has slopes ranging from 8% to 30%, with the remaining portion having very steep slopes that could exceed 30%. Smaller building footprints in nodal development patterns will likely be more feasible than large-footprint buildings because of the variation in topography and steep slopes.

#### **BROWNFIELD STATUS**

Area 14 is of moderate environmental concern, with a moderate level of data uncertainty. Potential environmental concerns include the former agricultural use sub-area (potential herbicide/pesticide, sawmill and dairy operations, vehicle/machinery maintenance, storage tanks, quarry operations, HEHS site, storage houses), former police kennel (potential herbicide/pesticide, rodenticides used in dog food storage), and the former

quarry (potential herbicide/pesticide, quarry operations). These potential concerns, however, do not preclude the suggested commercial, institutional, and residential land uses for Area 14. Presently, there is no environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for the former agricultural use sub-area, former rock quarry, and former police kennel to identify whether there are significant potential concerns, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present and, if so, their type and extent.

#### INFRASTRUCTURE STATUS

Similar to Area 13, this area is lacking in adequate infrastructure, as shown in Figure 5-30. Old water, power, and communication lines from the former Orchard area and the Municipal Corrections Institution are no longer in use, and have likely been abandoned for forty years. Access is poor due to the substandard conditions of the abandoned road that connects this site to Ozark Road and Raytown Road. If a main north-south road is planned for future



development, main lines for utilities such as sanitary, water, power, and communication should be upgraded or developed which would allow for secondary utility lines to feed development throughout the east side.

#### RECOMMENDED USE

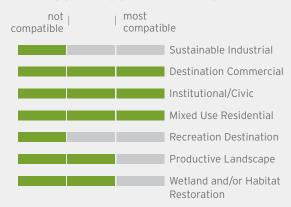
Physiographic features and future access from Raytown and Ozark Road make Area 14 most suitable for mixed use residential, institutional/civic, and/or destination commercial (Figure 5-30). Users like residents, employees, and consumers will help provide an active connection between uses on the east side. Because Area 14 is relatively small, the end use of this area should build off of adjacent development sites. Building off adjacent uses ensures the compatibility and can spark synergies that otherwise might not be realized.



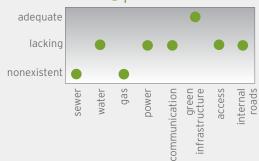


### 3.9 ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 14



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary environmental assessment of the former agricultural use sub-area, former rock quarry, and former police kennel
- Conduct additional investigations of the former agricultural use sub-area, including sampling of sediment at drainage relief point that is downgradient from the majority of the area

#### SITE DESCRIPTION

Area 15 is characterized by some of the highest elevations on the east side of the site with views of Arrowhead Stadium, a rural character, rolling topography with some steep slopes, soils classified as Knox-Urban land complex, Knox silty clay loam, and Snead-Rock outcrop complex, and relatively dense vegetation with some clearings which indicate the past uses of the former Health Emergency Hazmat Site (HEHS), the former police kennel, and agricultural use from the former Municipal Farm. About sixty percent of the area has slopes ranging from 3% - 8%. Approximately thirty percent of the area has slopes ranging from 8% to 15%, with the remaining areas having steeper slopes generally from 15% to 30%.

#### **BROWNFIELD STATUS**

Area 15 is of moderate environmental concern, with a moderate level of data uncertainty. Potential environmental concerns include the former Health Emergency Hazmat Site (HEHS) (potential for rat bait, herbicide/pesticide, stored hazardous waste chemicals, storage houses), former agricultural use areas (potential herbicide/pesticide, sawmill and dairy operations, grain silo and feed house operations, vehicle machinery maintenance, storage tanks, quarry operations, storage houses), and the former police kennel (potential herbicide/pesticide, rodenticides used in dog food storage). Currently some restrictions (deed restriction) on residential uses exist on 1.25 acres of the former HEHS site. Other potential concerns, however, do not preclude the suggested commercial, institutional, and residential land uses for Area 15. With the exception of the HEHS site, there is no other environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for the former agricultural use sub-area and the former police kennel to identify whether there are significant potential concerns, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present and, if so, their type and extent.



#### INFRASTRUCTURE STATUS

Area 15 is largely devoid of infrastructure, as shown in Figure 5-32. An old water line, power, and communication line once served various farming activities within Area 15, but would have to be tested before reuse. Internal roads and access is poor due to the substandard conditions of the abandoned roads. If a main north-south road is planned for future development, main lines for utilities such as sanitary, water, power, and communication should be upgraded or developed which would allow for secondary utility lines to feed development throughout the east side.

#### RECOMMENDED USE

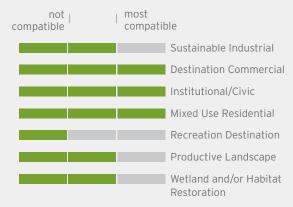
Great views, potential for good access from Raytown Road, and the beauty of the natural environment make this area ideal for a significant development. Mixed use residential, institutional/civic, and destination commercial uses could bring an appreciable amount of people to the site, which would complement the vast amount of open space within the Municipal Farm property (Figure 5-32). Future development should complement the surrounding future uses, build community amenities, and take contribute to the vision of creating a robust program of education, research, and recreation.



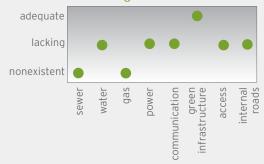


## **24.2** ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 15



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary environmental assessment of the former agricultural use areas and the former police kennel
- Evaluate current status of the HEHS site. Review available documents from the former HEHS environmental assessment and conduct additional sampling if the deed restriction limits the preferred use for the area
- Conduct additional investigations of the former agricultural use sub-area, including sampling of sediment at drainage relief point that is downgradient from the majority of the area

### Area 16

#### SITE DESCRIPTION

Area 16's primary use is currently a parking lot for the adjacent Soap Box Derby. Historically, this area was largely a potters fields. Efforts are currently underway to identify the exact boundary of these historic cemeteries. Area 16 is characterized by moderate topography with some steep slopes, soils ranging from Knox-Urban land complex, Snead-Urban Land complex, Knox silty clay loam, and Snead-Rock Outcrop complex, and vegetation partly cleared for the existing Soap Box Derby track and parking lot with dense tree cover towards the north half of the area. Area 16 has a visual connection with Area 18 because Area 17 sets up a linear view corridor between the two areas. Area 16 is accessible from Eastern, but is considerably higher than the road, therefore the slope on the access road is steep. About fifty percent of the area has slopes ranging from 3% - 8%, with the remaining slopes ranging from 8% -15%.

#### **BROWNFIELD STATUS**

Area 16 is of moderate environmental concern, with a moderate level of data uncertainty. Potential environmental concerns include the potter's field (potential for embalming fluid), former agricultural use sub-area (potential for pesticides/herbicides), and the former woman's reformatory (potential for petroleum-related contaminant). These potential concerns, however, do not preclude the suggested institutional, recreation, and productive landscape land uses for Area 16. Presently, there is no environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for the former agricultural use sub-area, potter's field, and the former women's correctional facility to identify whether there are significant potential concerns, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present and, if so, their type and extent.

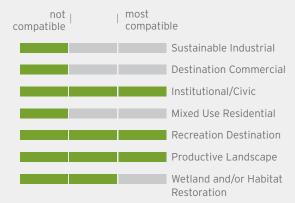
#### INFRASTRUCTURE STATUS

Area 16 is close to main utility lines, but is largely devoid of interior infrastructure, as shown in Figure 5-34. Power and communication lines run along Eastern Avenue, and could easily be assessed for future development. Sanitary lines could also be easily accessed as they run through this site

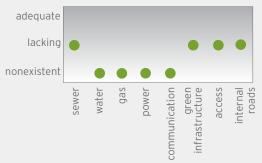


# 6.5 ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 16



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary environmental assessment of the former agricultural use sub-area, potter's field, and former women's correctional facility
- Conduct additional investigations of the former agricultural use sub-area, including sampling of sediment at drainage relief point that is downgradient from the majority of the area
- Survey the potters fields to help delineate the boundaries and conduct additional historical research and interviews to gather data about grave burial practices

to the KCPD Patrol Support Unit, which then head to the main trunk line along Round Grove Creek. There is not a water line along Eastern Avenue, but future development could tap in to the main line along Ozark Road. Eastern Avenue is largely undeveloped and has some tight turns in the road due to the Round Grove Creek crossing. Due to the elevation change from the parking lot in this area to Eastern Avenue, the access point is steep.

#### RECOMMENDED USE

The physiographic features, access, and historical potters field make this area suitable for habitat restoration, productive landscapes, and institutional/civic uses (Figure 5-34). As improvements or specific development projects are considered, respecting the potters field should be a priority.





## Area 17

#### SITE DESCRIPTION

Area 17 includes the existing Soap Box Derby track running north-south, with the lowest part towards the center of the area. Area 17 has a unique relationship between Areas 16 and 18 because of the linear view this area creates. No existing signs of the historical potters field can be seen. Efforts are currently underway to identify the exact boundaries of this historic cemetery in the Municipal Farm Cemetery Boundaries Delineation Project. Area 17 is characterized by rolling topography, soils classified as Knox-Urban land complex, Snead-Urban land complex, and Knox silty clay loam, and vegetation including turf grass and some tree canopy along the perimeter. About fifty percent of the area has slopes ranging from 3% to 8%, while the remaining area has slopes ranging from 8% to 30%.

#### **BROWNFIELD STATUS**

Area 17 is of moderate environmental concern, with a high level of data uncertainty. Potential environmental concerns include the Police Department Patrol Support Unit (potential for unknown contaminants historical and current maintenance and materials storage). former Tuberculosis Hospital and dump site (potential for biological and unknown contaminants), and the potter's field (potential for embalming fluid). These potential concerns, however, do not preclude the suggested institutional, recreation, and productive landscape land uses for Area 17. Presently, there is no environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for the former Tuberculosis Hospital and dump site, Patrol Support Unit, and the potters field to identify whether there are significant potential concerns, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present and, if so, their type and extent.

#### INFRASTRUCTURE STATUS

Similar to Area 16, this area is close to main utility lines, but is largely devoid of interior infrastructure, as



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shown in Figure 5-36. Power and communication lines run along Eastern Avenue, and could easily be assessed for future development. Sanitary lines could also be easily accessed as they run through this site to the KDPD Patrol Support Unit, which then flows to the main trunk line along Round Grove Creek. There is not a water line along Eastern Avenue, but future development could tap in to the line that feeds the KCPD Patrol Support Unit from Raytown Road. The Soap Box Derby Track runs north-south through this area, but is only accessed from the parking lot located in Area 16.

#### RECOMMENDED USE

Although some location constraints on future development exist with the existing soap box derby and the historic potters fields, it's possible that institutional/civic uses could positively activate this side of the Municipal Farm property between Eastern Road and the soap box derby track (Figure 5-36). Low impact uses such as habitat restoration, productive landscapes, and recreation destination are also compatible uses that, through design, could improve the site's connectedness, create many environmental benefits (improved water quality, reduce erosion, provide habitat), and be a way to celebrate the historic potters fields.

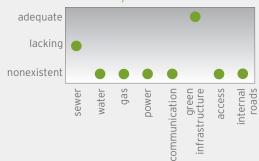


### 5.7 ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 17



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary environmental assessment of the Police Department Patrol Support Unit, former Tuberculosis Hospital and dump site, and the potters field
- Phase I and II Environmental Assessment recommended for both the former tuberculosis hospital and dump site
- Survey the potters fields to help delineate the boundaries and conduct additional historical research and interviews to gather data about grave burial practices

### Area 18

#### SITE DESCRIPTION

Area 18 is characterized by its views of Arrowhead Stadium, relatively flat with some gentle slopes, soils classified as Knox-Urban land complex with some Knox silty clay loam and Snead-Urban Land Complex, turf grass vegetation with dense tree canopy along the perimeter of the area, and the existing Kansas City, Police Department Patrol Support Unit (including a police helicopter pad and K-9 Training Facility). About sixty percent of the area has slopes ranging from 1% to 3%, while the remaining area has slopes ranging from 3% to 8%. Area 18 is one of the highest points of elevation on the east side of the site. Although slopes within the area are moderate, the slopes around Area 18 are generally very steep as they descend into the banks of Round Grove Creek. Area 18 has a visual connection with Area 16 because Area 17 sets up a linear view corridor between the two areas. Indications of some building foundations can be seen in this Area 18 from the former Tuberculosis Hospital which was demolished in 1971.

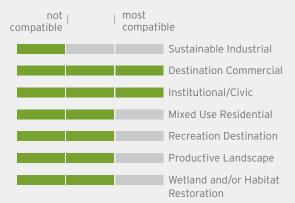
#### **BROWNFIELD STATUS**

Area 18 is of moderate environmental concern. with a moderate level of data uncertainty. Potential environmental concerns include the Police Department Patrol Support Unit (potential for unknown contaminants historical and current maintenance and materials storage) and the former Tuberculosis Hospital and dump site (potential for biological and unknown contaminants). These potential concerns, however, do not preclude the suggested commercial and institutional land uses for Area 18. Presently, there is no environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for the former Tuberculosis Hospital and dump site and the Patrol Support Unit to identify whether there are significant potential concerns, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present and, if so, their type and extent.

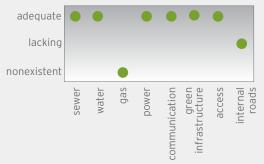


## 4.6 ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 18



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







#### Level of Data Uncertainty







#### Recommendations

- Preliminary Environmental Assessment recommended for the former tuberculosis hospital, former tuberculosis dump site, and the underground storage tank operations in the Kansas City Patrol Support Unit
- Phase I and II Environmental Assessment recommended for both the former tuberculosis hospital and dump site

#### INFRASTRUCTURE STATUS

Due to its existing use, Area 18 has adequate infrastructure, as shown in Figure 5-38. Currently with no natural gas hookups, the KCPD Patrol Support Unit uses propane for heating. If future development or improvements require gas, main lines are located along Raytown Road and Ozark Road. Although access is adequate from Eastern Avenue, there are some tight turns and possible flooding where Eastern crosses Round Grove Creek.

#### RECOMMENDED USE

While re-purposing of the site is not necessarily essential for immediate development, scenarios should be explored that consider what improvements or development would support the economic viability, the people, and environment of the site as a whole. The physiographic features and location make Area 18 suitable for habitat restoration, productive landscapes, institutional/civic, and destination commercial (Figure 5-38).





#### SITE DESCRIPTION

Area 19 is tucked between steep slopes to the southwest and Round Grove Creek to the northeast. It is characterized by great views of Round Grove Creek, moderate topography with some steep slopes, soils primarily of Snead-Rock outcrop complex with some Kennebec silt loam closer to the creek bed, and vegetation consisting mostly of dense tree canopy except where cleared for the existing Kansas City Missouri Animal Shelter. About sixty percent of the area has slopes ranging from 1% to 8 % while the remaining area has steep slopes ranging mostly from 15% to 30%.

#### **BROWNFIELD STATUS**

Area 19 is of low environmental concern, with a low level of data uncertainty. Potential environmental concerns include the animal shelter and its current and past operations (on-site incinerators/animal cremators, rodenticides in animal food storage areas), and the former agricultural use areas (potential herbicides/pesticides). These potential concerns, however, do not

preclude the suggested commercial and institutional land uses for Area 19. Presently, there is no environmental data to confirm the presence of contamination.

A preliminary or "due diligence" environmental assessment is recommended for the animal shelter and former agricultural use areas to identify whether there are significant potential concerns, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present and, if so, their type and extent.

#### INFRASTRUCTURE STATUS

All major infrastructure is in adequate condition feeding the existing use (Figure 5-40). This area is very close to the main sanitary trunk line running along Round Grove Creek, and also a main water line and communication line along Raytown Road. Future development should have no problem tying in to main utility lines. Aside from some steeper roads, this area has good access from Raytown Road.



## 1.9 ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 19



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary Environmental Assessment for former agricultural use areas and the Kansas City Missouri Animal Shelter
- Evaluate ongoing practices for the operation of on-site animal incinerators for compliance with the Air Pollution Operating Permit
- Evaluate procedures for use, storage, and handling of any potentially hazardous materials such as rodenticides for compliance with federal and state regulations
- Conduct additional investigations of former croplands, including sampling of sediment at drainage relief point that is down-gradient from the majority of the area as a biased sampling location

#### RECOMMENDED USE

Although a small area, Area 19 is a beautiful site perched above Round Grove Creek. Located at the entrance to the property, future development in Area 19 could be emblematic of the vision established in the Sustainable Reuse Plan. Institutional/civic and/or destination commercial uses would be well served by Area 19's location off of Raytown road, adjacency to Area 20's Repowering America's Land study, proximity to future trail connections, and adjacency to the potential future commuter rail along the Rock Island rail corridor (Figure 5-40). While lower intensity uses such as habitat restoration, productive landscapes, and a recreation destination are not incompatible with the carrying capacity of the land, uses that bring an appreciable amount of users would help support the rest of the property by creating jobs, attracting people for recreation, and supporting the potential commuter rail. Re-purposing of the existing animal shelter is not necessarily essential for immediate development, but scenarios should be explored that consider what improvements or development would support the economic viability, the people, and environment of the site as a whole.



#### SITE DESCRIPTION

Area 20 is characterized by relatively flat topography generally draining southwest towards Round Grove Creek, grassy vegetation with some scattered trees and dense canopy along the creek corridor, and soils primarily located on Udarents-Urban land complex with some Kennebec silt loam along the creek corridor. Beyond the soils mapped by the NRCS Soil Survey, actual composition is unknown and likely highly variable due to the past use of this area as the Round Grove Creek Landfill which was active from about 1971 to 1972. This area is park property, which, unless altered, has some implications that regulate use. Basically all of Area 20 slopes gradually down to the banks of Round Grove Creek ranging mostly from 1% to 3%, with some steeper slopes around the access road that spurs from Raytown Road. Area 20 has some of the best access and visibility of the whole Municipal Farm site. While the visibility and access lend themselves to development, a better understanding of the landfill is needed before development could take place.

#### **BROWNFIELD STATUS**

Area 20 is of moderate environmental concern, with a high level of data uncertainty. Potential environmental concerns include the former agricultural use sub-area (potential herbicide/pesticide) and the Round Grove Creek Landfill (non-brownfield site), Significant potential concerns associated with the structural stability of the former Round Grove Creek Landfill require further investigation prior to development. Presently, there is no environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for the former landfill and former agricultural use areas to identify whether there are significant potential concerns, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present and, if so, their type and extent.

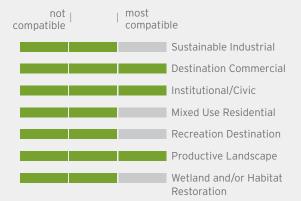
#### INFRASTRUCTURE STATUS

Although close to most major utilities along the perimeter, Area 20 is largely devoid of interior infrastructure, as shown in Figure 5-42. Future development could tap in

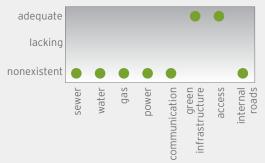


### 8.0 ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 20



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct Phase I and II Environmental Site
   Assessments on the Round Grove Creek Landfill,
   with a focus on obtaining all available records and
   interviewing City contacts with knowledge regarding
   waste materials in the landfill
- Evaluate current status of the landfill including compliance with permit, bank stability, and maintenance deficiencies that might compromise prevention of contaminant migration
- Conduct a preliminary environmental assessment on the former agricultural use areas
- Conduct additional investigations in the area of former agricultural use, including sampling the sediment at a drainage relief point that is down-gradient from the majority of the area

to a main water line, gas line, and communication line along Raytown Road. Sanitary is also close by running along Round Grove Creek. There are no power lines along Raytown Road except to provide power to the street lights. Raytown Road currently carries one travel lane in each direction, and provides good regional access to Area 20.

#### RECOMMENDED USE

Area 20 could generate renewable energy, drive economic development, serve as a neighborhood and regional amenity, and support the potential future commuter rail. The former landfill and park ownership adds layers of complexity to future development, but the opportunity is huge. Located at the entrance to the Municipal Farm property, future development in Area 20 could be emblematic of the vision for sustainable development established in this plan. Destination commercial and/or institutional/civic uses could capture the full potential for more of a regional destination if the site proves feasible after gaining a better understanding of the landfill implications (Figure 5-42). Whether or not challenges from the landfill are too great to overcome for structural building, creating a productive landscape generating solar energy is already gaining traction through the RePowering America's Land study. Uses that offer jobs, attract customers, and take advantage of the opportunity for a robust program of education, research, and recreation will maximize positive impact for the neighborhood and region as a whole.



#### SITE DESCRIPTION

Area 21 is characterized by Round Grove Creek, very steep slopes, mostly dense vegetation with heavy tree canopy, and soils ranging from rocky to saturated including Snead-Rock outcrop complex, Knox Urban land complex, Knox silty clay loam, and Kennebec silt loam. The steepest slopes follow the diagonal of Round Grove Creek, and are generally northeast facing. Theses slopes range from 15% to over 30%. Most of the rainwater from the east side flows into Round Grove Creek, goes under I-435, and then empties into the Blue River just north of the Municipal Farm site. The rainwater that flows into Round Grove Creek also includes a large area northeast of the Municipal Farm site including the Truman Sports Complex.

#### **BROWNFIELD STATUS**

Area 21 is of moderate environmental concern, with portions ranked low, moderate, and high. The overall environmental data uncertainty is high due to many data gaps and the absence of prior investigations.

There are several potential environmental concerns (see Figure 5-43) because Area 21 spans the entire east side of the site. These potential concerns, however, do not preclude the suggested wetland and habitat restoration land use. Sampling has been conducted where the 1.25 acre community garden now exists. That investigation indicated that the soil and underground water had not been contaminated by historical activities within that sub-area. Sampling on a portion of the HEHS site indicated known contamination and resulted in a deed restriction within that sub-area. With the exception of the HEHS site, there is no other environmental data to confirm the presence of contamination. A preliminary or "due diligence" environmental assessment is recommended for each sub-area of potential environmental concern as shown in Figure 5-43 and listed in Figure 5-44, followed by an initial screening investigation of soils in key locations to verify whether contaminants are present and, if so, their type and extent.

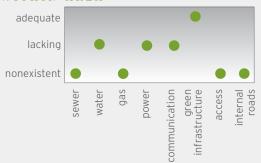


## **92.1** ACRES

#### LAND USE RECOMMENDATION



### EXISTING INFRASTRUCTURE WITHIN AREA 21



#### AREA-WIDE BROWNFIELD SUMMARY

Environmental Concern Level







Level of Data Uncertainty







#### Recommendations

- Conduct a preliminary environmental assessment of the Patrol Support Unit, former Tuberculosis Hospital and dump site, potter's field, former men's reformatory, former Municipal Corrections Institution, former agricultural use sub-area, former women's reformatory, former police kennel, KC MO Animal Shelter, communication tower, former quarry, former canning factory, former city workhouse, former orchard, Round Grove Creek Landfill, and the Missouri National Guard Armory
- Survey the potters fields to help delineate the boundaries and conduct additional historical research and interviews to gather data about grave burial practices
- Evaluate current status of the HEHS site
- Evaluate current status of the landfill
- Evaluate ongoing practices at the Patrol Support Unit, National Guard Armory, and the Animal Shelter

#### INFRASTRUCTURE STATUS

Some internal utility lines run through Area 21, as shown in Figure 5-44. However, due to the aging characteristics, most should be tested before reuse. If a main north-south road is planned for future development on the east side, main lines for utilities such as sanitary, water, power, and communication should be upgraded or developed which would allow for secondary utility lines to feed development within Area 21.

#### RECOMMENDED USE

The most sustainable use for Area 21 is habitat restoration (Figure 5-44). As a restored habitat, the positive environmental impacts are huge. Protecting and restoring the steep slopes and drainage patterns provide a multitude of ecosystem benefits such as the restoration of native species, healthy soils, stable stream banks, water recharge, improved water quality, and diverse flora and fauna. Large swaths of green space also benefit grey infrastructure by reducing the capacity needs to carry rainwater runoff. With a robust trail network, this area could be a regional connection that links pedestrians and bicyclists throughout the eastern half of the site and provides opportunities to connect to the Rock Island Corridor and the Truman Sports Complex.



WHILE THE INTEGRATED DEVELOPMENT STRATEGY AND THE CONCEPTUAL LAND USE PLAN FOCUS ON THE LONG TERM DEVELOPMENT FOR MUNICIPAL FARM, THE PLAN FORWARD PROVIDES STEPS AND RESOURCES TO MOVE THE PLAN INTO IMPLEMENTATION. THIS CHAPTER IDENTIFIES THE MOST CRITICAL NEXT STEP ACTIONS AND CONNECTS THEM TO POTENTIAL PARTNERS AND FUNDING, TARGETS PRIORITY AREAS WHERE ACTIVITY MAY CATALYZE DEVELOPMENT FOR THE SITE AS A WHOLE, IDENTIFIES POTENTIAL PROJECTS THAT ALIGN WITH THE VISION AND GUIDING PRINCIPLES, AND PROVIDES A FRAMEWORK FOR PHASING THAT ILLUSTRATES SEQUENCING RELATIONSHIPS BETWEEN ALL COMPONENTS OF THE PLAN FORWARD (NEXT STEP ACTIONS, PRIORITY AREAS, AND POTENTIAL PROJECTS).

### **NEXT STEP ACTIONS**

NEXT STEP ACTIONS ENABLE STRATEGIC FORWARD MOVEMENT OF THE INTEGRATED DEVELOPMENT STRATEGY (SEE CHAPTER 4 FOR MORE DESCRIPTION OF THE STRATEGY). THE NEXT STEP ACTIONS LISTED BELOW ARE ORGANIZED UNDER EACH RECOMMENDATION FROM THE INTEGRATED DEVELOPMENT STRATEGY. EACH NEXT STEP ACTION IS DESCRIBED IN THE FOLLOWING PAGES.

01

CONCENTRATE MORE INTENSE DEVELOPMENT WITHIN SUSTAINABLE DESIGN AREAS WHILE FOCUSING ON HABITAT RESTORATION WITHIN RESTORATIVE DESIGN AREAS

Habitat restoration feasibility study

02

PROMOTE LAND USES THAT WORK TOGETHER TO CREATE A COMPREHENSIVE SYSTEM

- · Land use decision process
- Potters field archeological studies
- · Potters field design competition
- · Build on community garden efforts

03

CREATE SUSTAINABLE ECONOMIC DEVELOPMENT STRATEGIES THAT REFLECT THE UNIQUE VISION FOR MUNICIPAL FARM

- · Development model
- · Implementation committee
- Find a champion
- · Real estate market studies

04

INVEST IN INNOVATIVE TECHNOLOGIES TO UPGRADE UTILITIES, EMPHASIZING GREEN INFRASTRUCTURE AND RENEWABLE ENERGY

- · Assess existing operations and infrastructure
- Support Repowering America
- District-wide water reuse feasibility study



### 05

### IMPROVE CONNECTEDNESS THROUGH MULTI-MODAL TRANSPORTATION STRATEGIES

- Upgrade perimeter streets
  - · Ozark Road upgrade
  - Sni-A-Bar Road/E 49th Street upgrade (from Skiles Park to Blue Parkway)
  - Coal Mine Road upgrade
  - Raytown Road upgrade (from the site entrance to Blue Ridge Cutoff)
  - Eastern Avenue upgrade
- · Assess Coal Mine Road choke point
- · Upgrade internal circulation roads
- Upgrade highway access
- Feasibility study, multi-modal connection to Sports Complex and Rock Island corridor

### 06

### POSITION MUNICIPAL FARM AS A KEY LINK WITHIN A REGIONAL TRAIL NETWORK

- Bicycle/pedestrian bridge feasibility study
- Perimeter trail schematic design package
- Internal trail network schematic design package
- Trails environmental assessment

### 07

### LEVERAGE BROWNFIELD SITES AS AN OPPORTUNITY TO CATALYZE CLEANUP AND INVESTMENT

- Firing range assessment
- · Lafarge environmental assessment
- · Round Grove Creek landfill geotechnical assessment
- Areas 12 and 13 environmental assessment

#### RECOMMENDATION 01:

CONCENTRATE MORE INTENSE DEVELOPMENT WITHIN SUSTAINABLE DESIGN AREAS WHILE FOCUSING ON HABITAT RESTORATION WITHIN RESTORATIVE DESIGN AREAS

#### NEXT STEP ACTION:

### HABITAT RESTORATION FEASIBILITY STUDY

ESTABLISH A PLAN TO REMOVE INVASIVE SPECIES AND IMPLEMENT HABITAT RESTORATION

The Blue River Greenways Phase II plan identified 47 to 89 acres of potentially feasible habitat restoration opportunities within the Municipal Farm and nearby Blue Banks Park (see appendix for overview). The planning area provides a variety of ecosystem restoration opportunities. While each habitat is valuable in its own right, providing a wide range of natural habitats and vegetation types would increase the diversity of opportunities for different wildlife species or for individual species during the various stages of their lives. The "Restoration, Recreation, and Education Priority Area" (see page 128), which includes the Blue River Greenway planning area, could be a starting point for habitat restoration within the Municipal Farm property.

The next step in the ecosystem restoration planning process is to prepare preliminary designs and conduct a feasibility study to determine the practicality and cost-effectiveness of ecosystem restoration options. Existing conditions will be studied and habitat areas will be delineated to determine what is present on site. Preliminary designs will be prepared to determine the broad outlines and feasibility of habitat restoration areas, identify necessary improvements and constraints, and develop preliminary cost estimates. Various alternatives will be compared to select a preferred option, and matching funds will be requested (up to 75 percent of the total project cost) through the U.S. Army Corps of Engineers Section 1135 Continuing Authorities Program. In the meantime, local sources of funding and technical assistance will be pursued to begin preparing the site for future restoration, including invasive species removal and replacement with desirable species.



Habitat restoration activities should consider existing information on brownfields from the Area-wide Brownfield Plan, and should include environmental assessments and remediation strategies where necessary. Habitat restoration should also be used as a strategy to prevent accelerated deterioration of the potters field cemeteries.

community involvement to build ownership in the site and to provide educational opportunities.

As partnerships are built, identify opportunities for

Habitat restoration activities should also explore the appropriateness of establishing a conservation easement to permanently protect sensitive restoration areas while accommodating development in sustainable design areas.

The City of Kansas City Water Services Department anticipates modification of FEMA floodplain maps in 2017. Potential modifications to the Blue River floodplain should be considered as implementation activities for Municipal Farm progress.



#### POTENTIAL PARTNERS

- Missouri Department of Conservation
- Kansas City WildLands
- Blue River Watershed Association
- Heartland Tree Alliance.
- Grow Native
- Economic Development Commission
- Workforce Investment Board
- Full Employment Council
- Missouri River Relief/Project Blue River Rescue
- Green Works KC
- City of Kansas City: Water Services
   Department, Parks & Recreation Department
- · U.S. Army Corps of Engineers
- School Districts
- · Blue River Watershed Association
- Earth Riders Trail Association
- Eastwood Hills Neighborhood Association
- Bridging The Gap
- Conservation organizations (Ducks Unlimited, Pheasants Forever, Audubon)
- Trust for Public Land

#### FUNDING RESOURCES

- Missouri Department of Conservation (MDC)
- MDC Forest Stewardship Program
- MDC Conservation Reserve Program
- MDC Small Watershed Managwement Program
- MDC State Forest Nursery
- MDC Tree Resource Improvement Maintenance (TRIM) Grant
- MDC Community Stewardship Grant Program
- MDC Community Assistance Program
- Missouri Department of Natural Resources (MDNR)
- MDNR Recreational Trails Program
- MDNR Land and Water Conservation Fund
- MDNR Section 319 Nonpoint Source
   Watershed Plan Implementation subgrants
- MDNR Water Protection Financial Assistance
- MDNR Nonpoint Source Grants
- U.S. Department of Housing and Urban Development (HUD): "Choice Neighborhood Initiative" grants
- EPA: Superfund, Brownfields, Environmental Justice, Water programs, Targeted Watershed Grants, Wetland Protection Grants
- USACE: Section 1135 and 206 Programs
- Mid-America Regional Council (MARC): regulatory assistance, planning, green infrastructure assistance
- National Resource Conservation Service
   Technical Service Provider Assistance
- Federal Highway Administration
   Transportation Enhancement Grant
- National Audubon Society and Toyota Together Green Innovation Grant
- Department of Interior/Fish and Wildlife Conservation
   Technical Assistance and CCPI program

#### RECOMMENDATION 02:

DEVELOP LAND USES THAT WORK TOGETHER TO CREATE A COMPREHENSIVE SYSTEM

#### NEXT STEP ACTION:

### LAND USE DECISION PROCESS

DEFINE A PROCESS FOR LAND USE DECISIONS

Define and implement a process that articulates the criteria by which development proposals can be evaluated will ensure projects that are in line with the vision, guiding principles, and recommendations of the Municipal Farm Sustainable Reuse Plan. This process should involve stakeholders and the implementation committee, and should integrate operations of relevant city departments. Apply this process to development proposals, funding pursuits, tenant lease agreements, operation and maintenance.

The implementation committee should use the land use decision process to ensure each potential development project is assessed within the broader context of the neighborhood and within the Municipal Farm property to maximize the potential for economic development, livability, environmental resilience, efficiency, resource reuse, and innovation.





#### RECOMMENDATION 02:

DEVELOP LAND USES THAT WORK TOGETHER TO CREATE A COMPREHENSIVE SYSTEM

#### NEXT STEP ACTION:

### POTTERS FIELD ARCHEOLOGICAL STUDIES

FINALIZE INVESTIGATIONS TO DELINEATE BOUNDARIES OF POTTERS FIELD CEMETERIES

Continuing efforts to delineate the boundaries of the potters fields is the first step in respecting the historic use and opening the door for a reuse that engages people to celebrate the history. Potters Field Cemeteries Boundary Delineation Project recommends archeological studies of the potters field located under the firing range, as well as the former tuberculosis trash pit. These studies will clearly identify the areas that should be protected from future disturbance, will specifically delineate boundaries for development of future land uses, and will provide valuable historical information regarding Municipal Farm's cultural assets.



\* 0 - \$80K

Archeological studies may be completed by professional archeologists, or by a University research team and students to enhance educational benefits. Final boundaries should be registered with the County Recorder of Deeds.

#### POTENTIAL PARTNERS

- · Association for Gravestone Studies
- · Missouri State Historic Preservation Office
- Midwest Afro-American Genealogical Interest Coalition (MAGIC)
- Gloria Lundy (Leeds Cemetery Families Representative)
- · Eastwood Hills neighborhood
- Historic Kansas City FoundationJackson County Historical Society
- Society for Historical Archaeology
- Missouri Archaeological Society
- Kansas City Archaeological Society
- University of Missouri Anthropology Department
- University of Kansas Anthropology Department

#### FUNDING SOURCES

- Historic Kansas City Foundation
- MDNR
- National Trust for Historic Preservation (technical assistance)
- American Express Partners in Preservation Program
- · Andrew W. Mellon Foundation
- The Kinsman Foundation
- · National Endowment for the Humanities

#### RECOMMENDATION 02:

DEVELOP LAND USES THAT WORK TOGETHER TO CREATE A COMPREHENSIVE SYSTEM

#### NEXT STEP ACTION:

### POTTERS FIELD DESIGN COMPETITION

HOST A DESIGN COMPETITION TO CELEBRATE AND MEMORIALIZE THESE HISTORICAL ASSETS

Host a community-judged design competition for a landmark to memorialize and celebrate the cultural resource and historical asset of the Municipal Farm potters fields. Design concepts should celebrate history while incorporating the other guiding principles and recommendations of the Municipal Farm Sustainable Reuse Plan.

As recommended by the Potters Field Cemetaries Boundary Delineation Project, designs should enhance appearance of the potters fields and enhance pedestrian accessibility. Designs may also incorporate habitat restoration and the internal trails network, as recommended by this plan.



\* 0 - \$80K

#### POTENTIAL PARTNERS

- Kansas City Design Center
- University of Missouri- Kansas City
- · University of Missouri- Columbia
- University of Kansas
- Kansas State University
- Professional Design Firms



DEVELOP LAND USES THAT WORK TOGETHER TO CREATE A COMPREHENSIVE SYSTEM

#### NEXT STEP ACTION:

### **BUILD ON COMMUNITY GARDEN EFFORTS**

ENHANCE THE WORK OF THE EXISTING EASTWOOD HILLS NEIGHBORHOOD COMMUNITY GARDEN

Building support and capacity for the existing community garden is a good first step in making apparent the rich agricultural history of the site.

Building partnerships could also help link resources and potential for projects related to healthy food systems on the Municipal Farm property.



\* 0 - \$80K

#### POTENTIAL PARTNERS

- Kansas City Community Gardens
- Cultivate Kansas City

- USDA
- Missouri Department of Agriculture
- Private funding sources with a focus on community, food and agriculture

CREATE SUSTAINABLE ECONOMIC DEVELOPMENT STRATEGIES THAT REFLECT THE UNIQUE VISION FOR MUNICIPAL FARM

#### NEXT STEP ACTION:

## **DEVELOPMENT MODEL**

ESTABLISH A DEVELOPMENT MODEL TO PROACTIVELY PURSUE PROJECTS

A majority of the Municipal Farm project will likely advance in conjunction with the selection of a development partner and the pursuit of a public/private partnership. The duration of the project timeline and the diverse uses require a carefully thought out partnership model. Upon the completion of the plan:

- Investigate partnership models that honor the plan's intent.
- Write a Request for Proposals to be distributed to development partners.
- Select a development partner and finalize an agreement on the model.
- Commit to an agreement whereby the developer and City agree to cost sharing on required infrastructure and brownfield remediation.

- It may be appropriate to design (but wait to construct) the major infrastructure improvements at this time.
- Work with the development partner to assemble appropriate grant applications, incentive opportunities, and to define which parts of the site should be included in the agreement.



#### NEXT STEP ACTION:

### IMPLEMENTATION COMMITTEE

INITIATE AN IMPLEMENTATION COMMITTEE RESPONSIBLE FOR TAKING ACTION WITH PLAN RECOMMENDATIONS

This group of community members, key stakeholders, City staff and the project champion should lead the implementation of plan recommendations and the initial steps within this Plan Forward. Look to participants of the planning process to identify interested members for the implementation committee.





CREATE SUSTAINABLE ECONOMIC DEVELOPMENT STRATEGIES THAT REFLECT THE UNIQUE VISION FOR MUNICIPAL FARM

#### NEXT STEP ACTION:

### FIND A CHAMPION

IDENTIFY AN INDIVIDUAL OR ORGANIZATION TO CHAMPION THE PROGRESS OF PLAN IMPLEMENTATION

Once a public-private partnership has been established, the City of Kansas City must remain actively involved in the project to market the site's potential and proactively approach partners. Senior public officials must be willing to be actively involved, with one public official acting as a champion to move the effort forward. Assigning a Planning and Development staff member to monitor the performance of the development partnership and evaluate progress will assure success.



#### NEXT STEP ACTION:

### REAL ESTATE MARKET STUDIES

PROACTIVELY SEEK AND ALIGN FUTURE PROJECTS TO MAXIMIZE POTENTIAL OF THE SITE WITHIN ITS CONTEXT AND FOR THE SITE AS A WHOLE

The implementation committee should use the land use decision process to ensure each potential development project is assessed within the broader context of the neighborhood and within the Municipal Farm property to maximize the potential for economic development, livability, environmental resilience, efficiency, resource reuse, and innovation.



INVEST IN INNOVATIVE TECHNOLOGIES TO UPGRADE UTILITIES, EMPHASIZING GREEN INFRASTRUCTURE AND RENEWABLE ENERGY

#### NEXT STEP ACTION:

# ASSESS EXISTING OPERATIONS AND INFRASTRUCTURE

ASSESS EXISTING OPERATIONS AND INFRASTRUCTURE TO TARGET EXISTING USES FOR GREEN INFRASTRUCTURE AND RENEWABLE ENERGY UPGRADES

Targeting existing uses to study the potential for green infrastructure and renewable energy improvements is an opportunity for short-term improvements that lead by example. In addition to potential improvements, efficiency and opportunities for material reuse should be assessed. Examples include integrating stormwater best management practices with the public works facility, and conducting habitat restoration in conjunction with the Corp of Engineers floodplain improvements.



\* \$80K - \$250K

#### POTENTIAL PARTNERS

- Kansas City, MO Parks and Recreation
- Jackson County, MO Parks and Recreation
- Kansas City, MO Water Services Department
- Metropolitan Energy Center (job training)
- Department of Labor supported job training, focusing on solar array training, via state/local WIB's
- EPA Environmental Finance Center (University of North Carolina)
- American Council for an Energy Efficient Environment (ACEEE) (technical assistance)

- Bureau of Reclamation Water Reuse and Reclamation Grants
- EPA National Student design competition for Sustainability
- EPA Non point source management grants
- EPA green infrastructure technical assistance
- Office of Energy Efficiency and Renewable Energy
- National Association of State Energy Officials
- MO Department of Agriculture renewable energy; conversation of resources
- City of Kansas City, MO Parks and Recreation
- Jackson County, MO Parks and Recreation



INVEST IN INNOVATIVE TECHNOLOGIES TO UPGRADE UTILITIES, EMPHASIZING GREEN INFRASTRUCTURE AND RENEWABLE ENERGY

#### NEXT STEP ACTION:

### SUPPORT REPOWERING AMERICA

SUPPORT AND BUILD ON THE REPOWERING AMERICA FEASIBILITY STUDY

The results from the feasibility study should be utilized to catalyze the implementation of renewable energy on the Municipal Farm property. Next steps could include an assessment of energy needs for existing uses and potential development projects and could work in cooperation with the removal of invasive species for biomass. Three projects which have some traction and real potential for implementation are included in the Potential Projects section of the Plan Forward.

PRIORITY

critical supportive

Next steps to move forward with projects include:

- Identify funds and then solicit proposals to design a specific renewable energy development to meet the identified needs.
- Prepare a solicitation seeking proposals from public, private or institutional partners for a renewable energy development consistent with identified needs.
- Negotiate purchase power agreements or similar arrangements between KCP&L, the City and the selected partners.

INVEST IN INNOVATIVE TECHNOLOGIES TO UPGRADE UTILITIES, EMPHASIZING GREEN INFRASTRUCTURE AND RENEWABLE ENERGY

#### NEXT STEP ACTION:

### DISTRICT-WIDE WATER REUSE FEASIBILITY STUDY

CONDUCT A FEASIBILITY STUDY TO INVESTIGATE THE REQUIREMENTS AND COSTS OF DISTRICT-WIDE FRESH WATER AND WASTEWATER INFRASTRUCTURE USING RAINWATER CAPTURE AND NATURAL SYSTEM WASTE FILTRATION

Processes and infrastructure that reuse rainwater and wastewater will benefit the environment and could also be a cost-effective way to supply new development with utilities that use green infrastructure instead of gray infrastructure. A district-wide system could serve development on the Municipal Farm property in addition to the adjacent neighborhood.



\* \$80K - \$250K

#### POTENTIAL PARTNERS

- · City of Kansas City, MO Water Services
- Developers
- · Kansas City Power & Light
- Missouri Gas Energy

- Missouri Department of Natural Resources (MDNR) Water Protection Financial Assistance Center
- MDNR 310 Nonpoint Source Project Grants
- MDNR State Revolving Fund
- EPA Environmental Finance Center (University of North Carolina)
- EPA Green Infrastructure technical assistance grants



IMPROVE CONNECTEDNESS THROUGH MULTI-MODAL TRANSPORTATION STRATEGIES

#### NEXT STEP ACTION:

### **UPGRADE PERIMETER STREETS**

UPGRADE PERIMETER STREETS TO INCLUDE STREETSCAPE AMENITIES AND SAFE PEDESTRIAN AND BICYCLE ACCESS

Road improvements along key routes will enhance multi-modal access to the site. Streetscape improvements will provide for safe and pedestrian and bicycle travel, and will enhance regional and internal trail connectsions as recommended later in this plan. Improvements can also incorporate habitat restoration and other flood mitigation practices. Several specifica upgrades are recommended below.



\* \$1 M - \$5 M planning, design, and construction (per each street upgrade)

#### OZARK ROAD UPGRADE

Improvements on Ozark Road could include repaired sidewalks, bike lanes, and appropriate streetscape amenities such as street lighting. These improvements would help stop illegal dumping and promote biking and walking connections from the neighborhood to the amenities on the Municipal Farm property.

#### COAL MINE ROAD UPGRADE

Improving Coal Mine Road and the adjacent trail into a naturalized complete street would accommodate all modes of transportation and integrate prairie plantings and trees into a seamless and attractive movement corridor for pedestrians, bicyclist, buses, and automobiles.

# SNI-A-BAR ROAD/E 49TH STREET UPGRADE (FROM SKILES PARK TO BLUE PARKWAY)

Improvements on Sni-A-Bar/E 49th Street from Skiles Park to Blue Parkway could include sidewalks, bike lanes, and appropriate streetscape amenities such as street lighting, benches, and trash cans. Creating a continuous loop of good pedestrian and bicycle infrastructure will promote these modes of transportation and improve access from the neighborhood to amenities at the Municipal Farm property.

# RAYTOWN ROAD UPGRADE (FROM THE SITE ENTRANCE TO BLUE RIDGE CUTOFF)

Integrating sidewalks, bike lanes, and appropriate streetscape amenities such as street lighting on Raytown Road from Eastern Avenue to Blue Ridge Cutoff would help create an entry to the Municipal Farm property and would provide necessary infrastructure to promote safe and enjoyable walking and biking from the neighborhood to the Municipal Farm property.



#### IMPROVE CONNECTEDNESS THROUGH MULTI-MODAL TRANSPORTATION STRATEGIES

#### EASTERN AVENUE UPGRADE

Improvements should include an assessment of the flooding issue at the lower portion of Eastern Avenue, an important access issue for existing and future development. . Solutions should both resolve the flooding issue over the road and improve stream bank stability and health. Future development projects on the east side of the site should be designed to integrate green infrastructure solutions in order to minimize negative impacts (including flooding) near stream corridors.

- Private or non-profit funding sources
- Kansas City, MO
  - Public Improvements Advisory Committee - PIAC (summer 2013)
  - Special District or Tax increment financing (including Community Improvement and Neighborhood Improvement Districts)
  - Other Special or Council Funding
- Jackson County (Capital Funding)
- Mid-America Regional Council
  - Creating Sustainable Places Program
  - Transportation Enhancement Program
  - Federal Surface Transportation Program (STP) Funding (Transportation Improvement Program)
- Missouri Department of Transportation
- Missouri Department of Natural Resources
  - Recreational Trails Program

- Land and Water Conservation Fund
- Federal Highway Administration
  - Transportation, Community and System Preservation Program (TCSP) and other specifically focused Federal discretionary programs (expected timeframe winter 2012-2013)
  - Federal line item allocations (earmarks)
  - Future TIGER/ARRA type discretionary grant program funding
- Missouri Economic Development Grants
- Missouri state grants or general fund allocations
- Loan Options
  - Missouri Transportation Finance Corporation
- Programs that may fund transportation in addition to other project elements (such as State and Local Assistance Act funds and HUD Community development Block Grants)

IMPROVE CONNECTEDNESS THROUGH MULTI-MODAL TRANSPORTATION STRATEGIES

#### NEXT STEP ACTION:

## ASSESS COAL MINE ROAD CHOKE POINT

CONDUCT A FEASIBILITY AND REALIGNMENT STUDY FOR COAL MINE ROAD/WINCHESTER ROAD

Addressing the choke point on Coal Mine Road will improve access to the site from the north. Assessment could include feasibility of alternative paths for realignment to help identify solutions. If the road is realigned, this portion of Coal Mine Road could be dedicated solely to pedestrian and bicycle traffic, which could ultimately resolve the automobile choke point. Coal Mine Road bicycle traffic could connect to the east side of the site through a path that travels under I-435. This study should also consider the impacts of flooding in relationship to the design of the road, and the potential for the road to serve as a levee for certifiable flood protection of the site.



\* \$80K - \$250K assessment only

- Private or Non-Profit Funding Sources
- · Kansas City, MO
  - · Department Funding
  - Public Improvements Advisory
     Committee PIAC (summer 2013)
  - Special District or Tax Increment Financing (including Community Improvement and Neighborhood Improvement Districts)
  - Other Special or Council Funding
- Jackson County (Department, Outside Agency, or Special Funding)
- Mid-America Regional Council
  - Transportation and Community
     Development Funding (2013 Budget)

- Federal Surface Transportation Program (STP) Funding (Transportation Improvement Program)
- Federal Congestion Mitigation / Air Quality Program (CMAQ) Funding
- Missouri Department of Transportation
- Federal Highway Administration
  - Transportation, Community and System Preservation Program (TCSP)
  - Federal line item allocations (earmarks)
- Missouri Economic Development Grants
- Missouri state grants or general fund allocations
- Programs that may fund transportation in addition to other project elements (such as State and Local Assistance Act funds and HUD Community development Block Grants)



IMPROVE CONNECTEDNESS THROUGH MULTI-MODAL TRANSPORTATION STRATEGIES

#### NEXT STEP ACTION:

### **UPGRADE INTERNAL CIRCULATION ROADS**

UPGRADE/DEVELOP INTERNAL CIRCULATION ROADS TO CREATE ACCESS FOR KEY DEVELOPMENT SITES

On the East side of the site, develop a north-south spine (largely following the existing abandoned road) connecting Raytown Road to Ozark Road.

On the West side of the site, develop a collector road to provide access to and connect development sites within the area.



\* East Side cost estimate \$1 M - \$5 M planning, design, and construction (assumes approximately one-half mile of new roadway, probably at the upper end of the range, does not include environmental mitigation or remediation)

West Side cost estimate \$5M - 15M planning, design, and construction (assumes approximately one mile of new roadway, probably at the upper end of the range, does not include environmental mitigation or remediation)

- · Private or Non-Profit Funding Sources
- Kansas City, MO
  - Public Improvements Advisory
     Committee PIAC (summer 2013)
  - Special District or Tax Increment Financing (including Community Improvement and Neighborhood Improvement Districts)
  - Other Special or Council Funding
- Jackson County (Capital Funding)
- · Mid-America Regional Council
  - Federal Surface Transportation Program (STP) Funding (Transportation Improvement Program)
- Missouri Department of Transportation

- Federal Highway Administration
  - Federal discretionary programs
  - Federal line item allocations (earmarks)
  - Future TIGER/ARRA type discretionary grant program funding
- Missouri Economic Development Grants
- Missouri state grants or general fund allocations
- Loan Options
  - Missouri Transportation Finance Corporation
- Programs that may fund transportation in addition to other project elements (such as State and Local Assistance Act funds and HUD Community development Block Grants)

IMPROVE CONNECTEDNESS THROUGH MULTI-MODAL TRANSPORTATION STRATEGIES

#### NEXT STEP ACTION:

### **UPGRADE HIGHWAY ACCESS**

CONDUCT A FEASIBILITY STUDY TO UPGRADE THE I-435-/RAYTOWN ROAD INTERCHANGE TO SERVE ALL MOVEMENTS

While the proximity to Stadium Drive and I-70 interchanges would make the creation of a full-access interchange difficult, it is recommended that the possibility of providing better access from the north, through braided ramps, collector-distributor roads, or some other means be explored.

If it is determined unfeasible, the I-70/Raytown Road interchange does provide full access, and could be considered an alternative location for improvements.



\* \$80K - \$250K initial feasibility study only

- Private or Non-Profit Funding Sources
- Kansas City, MO
  - Department Funding
  - Public Improvements Advisory Committee - PIAC
  - Special District or Tax Increment Financing (including Community Improvement and Neighborhood Improvement Districts)
  - · Other Special or Council Funding
- Jackson County
- Mid-America Regional Council (MARC)
  - Transportation and Community
     Development Funding
  - Federal Surface Transportation Program (STP) Funding

- Federal Congestion Mitigation / Air Quality Program (CMAQ) Funding
- Missouri Department of Transportation
- Federal Highway Administration
  - Transportation, Community and System Preservation Program
  - Federal line item allocations (earmarks)
  - Future TIGER/ARRA type discretionary grant program funding
- Missouri Economic Development Grants
- Missouri state grants or general fund allocations
- Programs that may fund transportation in addition to other project elements (such as State and Local Assistance Act funds and HUD Community development Block Grants)



IMPROVE CONNECTEDNESS THROUGH MULTI-MODAL TRANSPORTATION STRATEGIES

#### NEXT STEP ACTION:

# FEASIBILITY STUDY, MULTI-MODAL CONNECTION TO SPORTS COMPLEX AND ROCK ISLAND CORRIDOR

CONDUCT A FEASIBILITY STUDY TO DETERMINE MULTI-MODAL CONNECTIONS BETWEEN THE MUNICIPAL FARM SITE AND FUTURE RAIL STOPS ALONG THE ROCK ISLAND CORRIDOR

Preliminary planning work related to the Jackson County Commuter Corridor Alternatives Analysis identified a potential rail stop near the Truman Sports Complex, within a short distance of the Municipal Farm site. Topography and conservation recommendations from the Stream Asset Inventory make a direct connection challenging, but potential synergies between future development of these two sites warrants a thorough assessment to identify potential multi-modal connections.



\* \$80K - \$250K initial feasibility study only

- Jackson County Sports Authority
- · Private or Non-Profit Funding Sources
- Kansas City Area Transportation Authority (KCATA)
- · Kansas City, MO
  - · Department Funding
  - Public Improvements Advisory Committee - PIAC
  - Special District or Tax Increment Financing
  - · Other Special or Council Funding
- Jackson County (Department, Outside Agency, or Special Funding)
- Mid-America Regional Council (MARC)
  - Transportation and Community Development Funding

- Planning Sustainable Places Program
- Federal Surface Transportation Program
- Federal Congestion Mitigation / Air Quality Program (CMAQ) Funding
- Transit Funding Programs
- Missouri Department of Transportation
- U.S. Department of Transportation (Federal Transit Administration and Federal Highway Administration
  - Transportation, Community and System Preservation Program (TCSP)
  - Federal line item allocations (earmarks)
  - Future discretionary grant program funding such as TIGER/ARRA type funding
- Missouri Economic Development Grants
- Missouri state grants or general fund allocations

POSITION MUNICIPAL FARM AS A KEY LINK WITHIN A REGIONAL TRAIL NETWORK

#### NEXT STEP ACTION:

## BICYCLE/PEDESTRIAN BRIDGE FEASIBILITY STUDY

CONDUCT A FEASIBILITY STUDY FOR A BICYCLE/PEDESTRIAN BRIDGE AND/OR TUNNEL ACROSS I-435 HIGHWAY

A bridge over I-435 at the south end of the property and/ or a tunnel under I-435 at the north end of the property would allow for regional connectivity from the plaza to the Rock Island Corridor as well as local connectivity from the adjacent residential neighborhood to the future amenities on the Municipal Farm property.



\* \$80K - \$250K feasibility study only

#### POTENTIAL PARTNERS

- Missouri Bicycle and Pedestrian Federation
- The Greater Kansas City Bicycle Federation
- · Kansas City Metro Bicycle Club

- Jackson County Sports Authority
- Private or Non-Profit Funding Sources
- Kansas City, MO
  - Department Funding
  - Public Improvements Advisory Committee - PIAC
  - · Special District or Tax Increment Financing
  - · Other Special or Council Funding
- Jackson County
- Mid-America Regional Council (MARC)
  - Transportation and Community Development Funding

- Planning Sustainable Places Program
- Transportation Enhancement Program
- Missouri Department of Transportation
- Missouri Department of Natural Resources
  - Recreational Trails Program
  - · Land and Water Conservation Fund
- Federal Highway Administration
- Transportation, Community and System Preservation Program (TCSP)
- Federal line item allocations (earmarks)
- Future discretionary grant program funding such as TIGER/ARRA type funding
- Missouri Economic Development Grants
- Missouri state grants or general fund allocations
- State and Local Assistance Act funds
- HUD Community development Block Grants



POSITION MUNICIPAL FARM AS A KEY LINK WITHIN A REGIONAL TRAIL NETWORK

#### NEXT STEP ACTION:

### PERIMETER TRAILS SCHEMATIC DESIGN PACKAGE

CREATE A SCHEMATIC DESIGN PACKAGE FOR PERIMETER TRAIL CONNECTIONS FROM BRUSH CREEK TRAIL TO ARROWHEAD STADIUM AND POTENTIAL COMMUTER RAIL SERVICE ALONG ROCK ISLAND CORRIDOR

Perimeter trail connections will position the Municipal Farm property as the regional connection from the Plaza to Rock Island corridor. The schematic design package should address trail design extending Brush Creek Trail through the Municipal Farm site to the Truman Sports Complex and the Rock Island Rail Corridor. The trail design relates to the bicycle/pedestrian bridge and tunnel feasibility study and the multi-modal feasibility study connecting the Municipal Farm site and the future rail corridor.



\* \$250K - \$1M environmental approvals and design package

#### POTENTIAL PARTNERS

- · Missouri Bicycle and Pedestrian Federation
- The Greater Kansas City Bicycle Federation
- Kansas City Metro Bicycle Club
- · Kansas City Disc Golf Club
- Earthriders

- Jackson County Sports Authority
- Private or Non-Profit Funding Sources
- · Kansas City, MO
  - Department Funding
  - Public Improvements Advisory Committee - PIAC (summer 2013)
  - Special District or Tax Increment Financing
  - Other Special or Council Funding

- Jackson County (Department, Outside Agency, or Special Funding)
- Mid-America Regional Council (MARC)
  - Transportation and Community
     Development Funding
  - Planning Sustainable Places Program
  - Transportation Enhancement Program
- Missouri Department of Transportation
  - Missouri Department of Natural Resources
  - Recreational Trails Program Land and Water Conservation Fund
- Federal Highway Administration
- Transportation, Community and System Preservation Program (TCSP)
- Missouri Economic Development Grants
- Missouri state grants or general fund allocations

POSITION MUNICIPAL FARM AS A KEY LINK WITHIN A REGIONAL TRAIL NETWORK

#### NEXT STEP ACTION:

### INTERNAL TRAIL SCHEMATIC DESIGN PACKAGE

DEVELOP A PLAN FOR AN INTERNAL NETWORK OF TRAILS

An internal trail network will serve the Eastwood Hills neighborhood, provide a recreation node along the regional network of trails, be integrated with habitat restoration and historic uses like the potter's field, and connect land uses on the site. Although not a permitted use, areas 9 and 10 are currently used by all-terrain vehicles. The trails in these areas could be converted to single-track trails for mountain biking, which- if properly designed and maintained- would be compatible with upland woodland restoration in these areas. Trail planning should coordinate with environmental assessments to assure compatibility for potential funding.



\* \$80K - \$250K plan development only

#### POTENTIAL PARTNERS

- · Missouri Bicycle and Pedestrian Federation
- The Greater Kansas City Bicycle Federation

- Jackson County Sports Authority
- Private or Non-Profit Funding Sources
- · Kansas City, MO
  - Department Funding
  - Public Improvements Advisory
     Committee PIAC (summer 2013)
  - Special District or Tax Increment Financing
  - Other Special or Council Funding
- Jackson County (Department, Outside Agency, or Special Funding)

- Mid-America Regional Council (MARC)
  - Transportation and Community
     Development Funding
  - Planning Sustainable Places Program
  - Transportation Enhancement Program
- Missouri Department of Transportation
  - Missouri Department of Natural Resources
  - Recreational Trails Program Land and Water Conservation Fund
- · Federal Highway Administration
- Transportation, Community and System Preservation Program (TCSP)
- Missouri Economic Development Grants
- Missouri state grants or general fund allocations



POSITION MUNICIPAL FARM AS A KEY LINK WITHIN A REGIONAL TRAIL NETWORK

#### NEXT STEP ACTION:

### TRAILS ENVIRONMENTAL ASSESSMENT

COORDINATE AN ENVIRONMENTAL ASSESSMENT FOR AN INTERNAL NETWORK OF TRAILS WITH FUNDING OPPORTUNITIES AND TRAIL PLANNING

Conduct an environmental assessment to evaluate the impact of trails and to support trail design that best stewards the natural resources on the Municipal Farm site. In some cases, phase one environmental assessments are prerequisites for funding sources that support trail construction.



\* 0 - \$80K

#### POTENTIAL PARTNERS

• Environmental Advisors and Engineers, Inc.

- Community Block Development Grant Funds
- Department of Interior trails resources
- EPA targeted brownfield assessment

LEVERAGE BROWNFIELD SITES AS AN OPPORTUNITY TO CATALYZE CLEANUP AND INVESTMENT

#### NEXT STEP ACTION:

### FIRING RANGE ASSESSMENT

EXAMINE THE EXISTING AND POTENTIAL FUTURE USE OF THE FIRING RANGE

The active use of the firing range on site precludes almost all development types on the western half of the property. It is the opinion of the study team that for any new development to take place the firing range would have to move or the noise impacts would need to be remediated. The potter's field and brownfield conditions on this site will require a careful assessment of how to redevelop this site while honoring cultural resources and mitigating environmental risks.





LEVERAGE BROWNFIELD SITES AS AN OPPORTUNITY TO CATALYZE CLEANUP AND INVESTMENT

#### NEXT STEP ACTION:

### LAFARGE ENVIRONMENTAL ASSESSMENT

CONDUCT A PHASE I & LIMITED PHASE II ENVIRONMENTAL ASSESSMENT ON THE LAFARGE SITE

The City was recently awarded EPA support to perform a Phase I environmental assessment of the combined areas. Further action should follow from the results identified through the Phase I process. Additional screening could include screening of surface soils in areas of concern. Also, drums, containers, debris and structures be removed from the CLUP area and to make note of any visibly stained areas. Quarry pits and subsurface areas should be investigated for potential dumping of hazardous wastes. Inspect any visibly stained concrete prior to removal and assess impacted soils. Examine areas potentially affected by past equipment and machinery maintenance, truck washing operations, the location of the LUST, UST and AST sites, the potential for presence of stored hazardous materials, and the disposal practices of spent solvents or other hazardous wastes.



\* 0 - \$80K

- EPA Targeted Brownfields Assessment (TBA) Program
- MDNR Targeted Brownfields Assessment (TBA) Program
- EPA Brownfield Assessment Grants
- PIAC
- Missouri Brownfields Redevelopment Program - Remediation Tax Credits

LEVERAGE BROWNFIELD SITES AS AN OPPORTUNITY TO CATALYZE CLEANUP AND INVESTMENT

#### NEXT STEP ACTION:

# ROUND GROVE CREEK LANDFILL GEOTECHNICAL INVESTIGATION

CONDUCT A GEOTECHNICAL ASSESSMENT ON THE ROUND GROVE CREEK LANDFILL SITE TO DELINEATE BOUNDARIES, CONTENT AND STABILITY

The EPA recently awarded the City of Kansas City, Missouri with technical assistance to complete Phase I environmental assessment of the Round Grove Creek Landfill and Animal Shelter areas.

In addition to this assessment, a noninvasive geotechnical investigation could delineate the boundaries of the landfill and determine the areas stable enough to support redevelopment. This invesitgation should work with the City Office of Environmental Quality to obtain previous documentation of landfill contents and to record new information on contents, cap structure, and other pertinent information.



\* 0 - \$80K

#### POTENTIAL PARTNERS

- Environmental Advisors and Engineers, Inc.
- American Council for an Energy Efficient Environment (ACEEE) (information/technical assistance)

- EPA Targeted Brownfields Assessment (TBA) Program
- MDNR Targeted Brownfields Assessment (TBA) Program
- · EPA Brownfield Assessment Grants
- PIAC
- Missouri Brownfields Redevelopment Program - Remediation Tax Credits



LEVERAGE BROWNFIELD SITES AS AN OPPORTUNITY TO CATALYZE CLEANUP AND INVESTMENT

#### NEXT STEP ACTION:

### **AREAS 12 & 13 ENVIRONMENTAL ASSESSMENT**

CONDUCT A PHASE I ENVIRONMENTAL ASSESSMENT FOR CLUP AREAS 12 AND 13

The City was recently awarded EPA support to perform a Phase I environmental assessment of the combined areas. Further action should follow from the results identified through the Phase I process. Additional screening could include investigation of surface and near surface soils in key locations: agricultural use & canning factory areas of maintenance and storage, former UST and LUST areas and maintenance at the former Municipal Correctional Institution (MCI). Sample sediment at a drainage relief points downgradient of suspect areas.



#### **PARTNERSHIPS**

• Environmental Advisors and Engineers, Inc.

NEXT STEP ACTIONS MAY BE TARGETED TOWARD PRIORITY SITES WITHIN MUNICIPAL FARM THAT DEMONSTRATE POTENTIAL TO CATALYZE DEVELOPMENT FOR THE SITE AS A WHOLE.

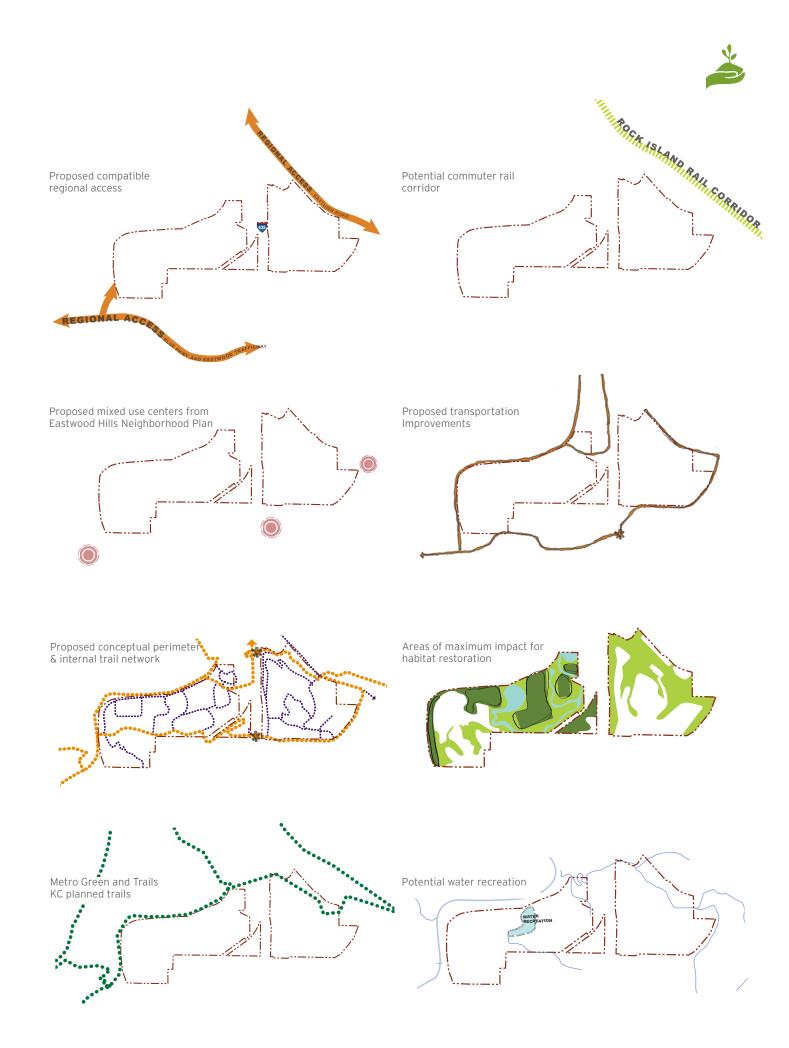
Four priority areas were chosen as targeted sites that hold the greatest potential for initial development activity. A variety of conditions contribute to the potential of these sites as catalysts for development across the Municipal Farm area. All of these sites have important connections to the surrounding context of Municipal Farm. Major access roads and active or planned transportation improvements make them important points of entry. Previous interest in development and existing activity in these areas contribute to a growing momentum. The Conceptual Land Use Plan recommends uses for these areas that hold potential to stimulate additional development activity, and each of these areas has a combination of characteristics that provide opportunity for integration of Sustainable Reuse Plan principles and recommendations.

The four priority areas are delineated by boundaries created in the Conceptual Land Use Plan, which are defined by physical characteristics. Boundaries as mapped by the Conceptual Land Use Plan should not be mistaken for development site boundaries; new development should consider habitat restoration as an integral part of site improvements. Other criteria established through the land use decision process will define the actual boundaries to parcel and develop land. The synergy maps below illustrate the contextual alignments that supported the prioritization of these four areas for development.



Proposed sites for RE-Powering

America's Land solar & biomass



### LAFARGE ADAPTIVE REUSE AREA

THIS POTENTIAL DEVELOPMENT SITE COULD INCLUDE CONCEPTUAL LAND USE PLAN AREAS 1 AND 2, WHICH WERE DELINEATED IN THE CONCEPTUAL LAND USE PLAN BY PHYSIOGRAPHIC FEATURES.

Recent road improvements to the intersection of Blue Parkway and Hardesty enhanced the access to this area as an entry point to the west side Municipal Farm. The combination of uses recommended by the Conceptual Land Use Plan presents an opportunity for vibrant mix of end uses for areas 1 and 2. The recommended emphasis on habitat restoration, productive landscapes and recreation for area 1 could translate to a beautiful riverfront complete street landscape which connects to trails planned for Brush Creek and the Blue River.

The CLUP recommends more intense uses for Area 2, including destination commercial, institutional/civic use, or sustainable industrial use. These uses could bring jobs and economic benefit to Municipal Farm and the surrounding neighborhood. This site could also be complementary to the proposed mixed use

development area at the intersection of Blue Parkway/ Hwy350 and Hardesty Avenue/ Coal mine road, which was recommended by the Eastwood Hills Neighborhood Plan. Plan Forward recommendations for streetscape improvements to Coal Mine Road would provide contextual support development at this site.

Remnants concrete structures and debris from the former LaFarge Concrete Factory could be utilized for near-term future development such as crushed aggregate in green infrastructure site solutions or subgrade future road improvements. Recommendations from the Blue River Greenway plan targets significant improvements involving the U.S. Army Corps of Engineers and the City in or near these areas to meet site and regional flood protection and mitigation objectives.





### RESTORATION, RECREATION, EDUCATION AREA

THIS POTENTIAL DEVELOPMENT SITE COULD INCLUDE CONCEPTUAL LAND USE PLAN AREAS 5, 6, AND 7, WHICH WERE DELINEATED IN THE CONCEPTUAL LAND USE PLAN BY PHYSIOGRAPHIC FEATURES.

This site bears great potential for outdoor recreation and education, development of productive landscapes, and as a nexus point for a regional and internal trails system. Due to its location in the flood plain, the Conceptual Land Use Plan recommends restricted land uses on this site. A combination of wetland and/or habitat restoration, recreational uses, and productive landscapes are suggested.

With over 100 acres, this area bears potential for practices that benefit stream health, water quality, wildlife habitat, and groundwater recharge. Restorative design and compatible end uses could make this site an amenity to complement other mixed uses throughout Municipal Farm; providing a node for respite, recreation, and education. The Blue River Greenway Plan provides specific recommendations for end uses in this area.

Existing tenants in these areas are scheduled to remain on site in the near to mid-term future. Sustainable Reuse Plan recommendations can work synergistically with ongoing uses of current tenants. Tenants include the KCMO Public Works facilities and Round Grove Creek lift station and Botts communication towers may cooperate with habitat restoration or water reclamation efforts, strategical ly pursuing projects that are mutually beneficial for existing tenants and other users from surrounding areas.

The site is also a primary candidate for implementation of the City's NREL RePowering America initiative, which is currently underway. The study will determine the feasibility of solar power and biomass as strategies for renewable energy production. Development of such initiatives at this site could help support the City's goal to reach 10 percent renewable energy production by 2020.



### COMMUNITY REVITALIZATION AREA

THIS POTENTIAL DEVELOPMENT SITE COULD INCLUDE CONCEPTUAL LAND USE PLAN AREAS 12 AND 13. WHICH WERE DELINEATED IN THE CONCEPTUAL LAND USE PLAN BY PHYSIOGRAPHIC FEATURES.

Areas 12 and 13 combined represent a potential development site with the most direct connection to the Eastwood Hills neighborhood. Existing internal roads, some in good condition, provide access to this site from Ozark Road. Existing infrastructure which once served the Municipal Corrections Institution may still have capacity for reuse. The City of Kansas City recently received EPA funding to conduct a Phase 1 environmental celebrating the agricultural history of Municipal Farm. assessment of the site, which will help advance the necessary preconditions for development.

The Conceptual Land Use Plan recommends mixed use residential as the most compatible land use for this site. Future development in Area 12 has significant opportunity to connect to the adjacent neighborhood and provide amenities that serve existing residents as well as attract a new generation of people who are invested in the vision for the Municipal Farm property. The recently installed community garden has brought new energy to these sites, inviting nearby residents to grow their own food while Continued development of this community asset could enhance future compatible interaction between end uses of this site and the existing neighborhood.





### REDEFINING THE LANDFILL AREA

THIS POTENTIAL DEVELOPMENT SITE COULD INCLUDE CONCEPTUAL LAND USE PLAN AREA 20, WHICH WAS DELINEATED IN THE CONCEPTUAL LAND USE PLAN BY PHYSIOGRAPHIC FEATURES.

This site's location on Raytown Road provides a unique regional connection for Municipal Farm. The nearest highway interchange is at Raytown Road and Interstate 70. While it is not a complete interchange, it does provide regional access, and poses Area 20 as an entry point for access to Municipal Farm land uses. The proximity to the Truman Sports Complex and the Rock Island Corridor (currently undergoing planning for future rail and trail use) provide an opportunity to develop creative connections between land uses at area 20 and these regional community assets.

The Conceptual Land Use Plan recommends a range of potential land uses for this site, including destination commercial, institutional/civic, and productive landscape. The City of Kansas City recently received EPA funding to conduct a Phase 1 environmental assessment of the site, which will help advance the necessary preconditions for development. The site is also a primary candidate for implementation of the City's NREL RePowering America initiative, which is currently underway. The study will determine the feasibility for solar power and biomass processing as potential strategies for renewable energy production. Development of such initiatives at this site could help support the City's goal to reach 10 percent renewable energy production by 2020.



PROJECTS THAT GAINED TRACTION THROUGH ANALYSIS, PUBLIC ENGAGEMENT AND THE IMPLEMENTATION WORKSHOP ARE LISTED BELOW. THIS LIST IS FOLLOWED BY INDIVIDUAL PROJECT SHEETS THAT INCLUDE A DESCRIPTION, POTENTIAL PARTNERS, AND FUNDING SOURCES.

INLAND WATER RESEARCH INSTITUTE
SOLAR FARM
DISTRIBUTED SOLAR ENERGY GENERATION
BIOMASS
G R E E N H O U S E
CITY-OWNED GREEN INFRASTRUCTURE MAINTENANCE AND TRAINING FACILITY
GREEN INFRASTRUCTURE BUSINESS INCUBATOR
WATER RECREATION
MODEL COMMUNITY DEVELOPMENT
SUSTAINABLE MANUFACTURING
FOOD HUB
FOOD FOREST
EDUCATIONAL FARMSTEAD
OUTDOOR CLASSROOM



### INLAND WATER RESEARCH INSTITUTE

This site's location on Raytown Road provides a unique regional connection for Municipal Farm. The nearest highway interchange is at Raytown Road and Interstate 70. While it is not a complete interchange, it does provide regional access, and poses Area 20 as an entry point for access to Municipal Farm land uses. The proximity to the Truman Sports Complex and the Rock Island Corridor (currently undergoing planning for future rail and trail use) provide an opportunity to develop creative connections between land uses at area 20 and these regional community assets.

#### POTENTIAL PARTNERS

- Kansas City Parks and Recreation
- Missouri State Parks
- Cultivate Kansas City
- · Missouri Department of Agriculture
- Kansas City Community Gardens
- American Royal
- MRIGlobal

- Missouri State Parks Outdoor Recreation Grants
- US Department of Agriculture

### **SOLAR FARM**

A solar farm is a large land area where multiple ground-mounted or roof-mounted solar tracking panels are installed. Recent efforts to require in-state production of renewables rather than allowing producers to buy out-of-state credits could prove favorable for a solar farm on the Municipal Farm property. A better understanding is needed of the Missouri public benefit requirements for energy production limits. Area 20 should be assessed as a potential solar farm site in coordination with related investments like the land fill remediation strategy and stream bank stabilization.

#### POTENTIAL PARTNERS

- KCPL
- NREL/DOE
- Planned Industrial Expansion Authority
- MDNR
- EDC
- Show-me-energy
- Environmental Improvement Resource Authority (EIERA)
- Metropolitan Energy Center (job training)
- Missouri Energy Initiative
- MRI Global
- DOL-supported job training, focusing on solar array training, via state/local WIBs

- Power Purchase Agreements or similar financing arrangements
- Federal Energy Production Tax Credits
- MARC solid waste district grants
- Brownfield funding(for assessment and cleanup)
- Landfill revolving fund loans
- Missouri Department of Natural Resources Energy Revolving Fund loans
- New Market Tax Credits
- EPA Re-Powering America's Lands program (technical assistance)
- Energy bonds



### DISTRIBUTED SOLAR ENERGY GENERATION

Distributed solar energy generation refers to electricity provided by small, modular generators (typically ranging in capacity from a few kilowatts to 50 megawatts) located at or near customer demand. This type of project has real potential to coordinate with KCMO's current efforts to enter into long-term operating leases with interested parties to install multiple 25kW capacity solar energy generating systems on the rooftops of City buildings. Proposed master leases would be 20 year

agreements that are projected to provide electricity at lower costs than what the City currently pays to purchase electricity used in the buildings where the solar panels would be installed. The City hopes to complete a master lease agreement for up to 40 installations with Brightergy in the near term. Subsequently, the City will be negotiating a master lase agreement for up to 40 additional installations with KCPL, the local electrical utility.

#### POTENTIAL PARTNERS

- KCPL
- Solar Integrators/Installers
- FDC
- Environmental Improvement Resource Authority (EIERA)
- Metropolitan Energy Center
- Brightergy

- Federal Solar Tax Credit (30%) until 2016 with accelerated depreciation
- KCPL two dollars per watt with a maximum of \$25,000
- · Missouri Energy Revolving Fund loan
- New Markets Tax Credits

### **BIOMASS**

Biomass as an energy source can either be used directly, or converted into other energy products such as biofuel. Plant biomass, like forest residues, yard clippings, wood chips, and even municipal solid waste, can be used directly to generate electricity with steam turbines and gasifies or produce heat, usually by direct combustion. Biomass converted into fibers or other industrial chemicals, including biofuels, can be grown from numerous types of plants and a variety of tree species. Biomass should be assessed on the Municipal Farm site in coordination with related investments like the removal of invasive species.

#### POTENTIAL PARTNERS

- KCPL
- FIFRA
- Mid America Regional Council
- 3 Degrees
- Show-Me Energy
- · Metropolitan Energy Center
- DOL-supported job training, focusing on solar array training, via state/local WIBs

- · DOE's loan guarantees and cost sharing
- USDA's Supplemental Environmental Project enforced by the EPA or MDNR compliance funds
- Waste for fertilizer incentives
- New Market Tax Credits
- Energy bonds



### **GREENHOUSE**

A greenhouse would be a metropolitan resource for local food production, enabling farmers to extend the growing season. Cooperative management, maintenance and financing structures could be operated by a collaborative of urban agriculture organizations and local farmers.

#### POTENTIAL PARTNERS

- Private sector horticultural businesses, such as Critsite, Suburban Lawn and Garden, etc.
- Private sector greenhouse operations producing food products
- Cultivate Kansas City
- Kansas City Community Gardens
- Powell Gardens
- University of Missouri Research & Extension
- Lincoln University Research & Extension
- Kansas City Zoo to produce food for Zoo animals.
- Future Farmers of America
- 4H Clubs

- · Missouri Department of Agriculture
- Rural Energy For America Program
- US Department of Agriculture, various options dependent on focus
- Missouri Department of Agriculture Specialty Crop Block Grants
- Private funding sources with a focus on food/ agriculture, public health, entrepreneurship/ employment training, youth training, other
- Farm Service Agency or other farm financing sources for private sector farm businesses
- Public-private partnershipsvarious options available

# CITY-OWNED GREEN INFRASTRUCTURE MAINTENANCE AND TRAINING FACILITY

If it would meet a City need and if desired by the community, the area currently occupied by the Public Works department could be an appropriate location for a water quality BMP maintenance and training facility. A variety of BMPs could be installed as both training aids for native plant installation and maintenance, and as public demonstration projects. Existing lawn areas in wetter or flood prone locations could be converted into native plant nurseries for training and to provide plant stock for BMP maintenance around the city.

Existing or new buildings could provide classroom and administrative space, and equipment storage. The facility could be used to train City staff or support a community "green collar jobs program" or both.

#### POTENTIAL PARTNERS

- Kansas City Zoo grow food for the zoo animals
- Future Farmers of America

- · Community Block Development Grant funds
- General obligation bonds



### GREEN INFRASTRUCTURE BUSINESS INCUBATOR

This incubator may be dedicated solely to private business, or may function as a public-private partnership that benefits both sectors. The incubator would provide an indoor and outdoor production facility for native plants to be used by green infrastructure practices on site and throughout the region. The area currently occupied by the Public Works department could be an appropriate location for this facility. Existing lawn areas in wetter or flood-prone locations could be converted into native plant nurseries for training and to provide

plant stock for BMP maintenance around the city. Existing or new buildings could provide classroom and administrative space, and equipment storage. The incubator could provide training for business development and jobs training.

#### POTENTIAL PARTNERS

- MDNR Water Protection Financial Assistance Center
- · Jackson County, MO Parks Department
- · City of Kansas City, Public Works Department
- · City of Kansas City, Water Services
- Kansas City, MO Parks and Recreation Dept.

- HUD Section 108 Ioan guarantee
- Local development tax incentives/TIF
- SBA loan guarantees or Section 504 development company debentures

## WATER RECREATION

Non-invasive water activities that offer users of the site and residents of the surrounding neighborhood an opportunity for recreation would be an amenity for all. Activities could include fishing and paddle-boating.

#### POTENTIAL PARTNERS

- YMCA
- Bass Pro
- Cabellas
- North Face

#### **FUNDING SOURCES**

• Missouri State Parks Outdoor Recreation Grants



## MODEL COMMUNITY DEVELOPMENT

This mixed use development would model a combination of residential, destination and commercial/industrial uses that work together in a mutually supportive way. It will be a living laboratory for redefining community, creativity, education, security, and urban infrastructure including resource management (energy, water, food, transportation). The design of uses and local partners could transform this place to become one of the most attractive places in the region for living, learning, working, and playing. The beauty and integration of nature and the built environment would be a local and regional model for increased social, economic, and environmental vitality.

#### POTENTIAL PARTNERS

• EPA Building Blocks (technical assistance)

- New Market Tax Credits
- Bonds (Industrial Development or General Obligation bonds, depending on focus)
- Local tax incentives/TIF
- Low Income Housing Tax Credits (for residential portion)
- SBA loan guarantees or Section 504 development company debentures (for commercial/industrial portion)

## SUSTAINABLE MANUFACTURING

A sustainable facility would be constructed and operated using innovative sustainable technologies that reclaim gray water, use power produced on site, and direct byproducts for re-use.

#### POTENTIAL PARTNERS

- US Green Building Council (information/ technical assistance)
- National Association of manufacturers (information/technical assistance)
- Universities/Manufacturing Extension Partnership (MEP) (technical assistance)

- Industrial development bonds (depending on end-use focus)
- New markets Tax Credits
- Economic Development Authority
- Kansas City allocation of HUD CDBG funds



### **FOOD HUB**

A food hub is an aggregation, processing and distribution facility for local producers. Facility operation equips local farmers to create value-added products, and package produce for institutional purchasing and regional distribution.

#### POTENTIAL PARTNERS

- Local food and agriculture organizations and businesses, including Cultivate Kansas City, Greater Kansas City Food Policy, University of Missouri Research and Extension, Lincoln University Research and Extension, Good Natured Family Farms, Fresh Food Express, and others
- Individual companies already engaged in food packaging/ processing and distribution, such as Ball Foods, HyVee, others
- Farmer cooperatives such as Patchwork Family Farms

- US Department of Agriculture, various options dependent on focus
- US Economic Development Administration, various programs
- Missouri Department of Agriculture Specialty Crop Block Grants
- Private funding sources with a focus on food/ agriculture, public health, entrepreneurship/ employment training, youth training, other
- Farm Service Agency or other farm financing sources for private sector farm businesses
- Wallace Center at Winrock International
- Foundations

## **FOOD FOREST**

A food forest would be a production and land management system based on woodland ecosystems, but substituting trees (such as fruit or nut trees), bushes, shrubs, herbs and vegetables which have yields directly useful to humans.

#### POTENTIAL PARTNERS

- Missouri Department of Conservation
  - Forest Crop Land Program
  - Agroforestry in Missouri
- Cultivate Kansas City
- Heartland Tree Alliance
- Kansas City Community Gardens
- Girl Scouts
- Boy Scouts
- · Society of St. Andrew

#### **FUNDING SOURCES**

Private foundations



## **EDUCATIONAL FARMSTEAD**

Activities on site would provide children an opportunity to learn about the sources of their food. Petting zoos, vegetable gardens and flower gardens can be features of this site. This use can be tied into other economic development uses such as the Food Hub.

#### POTENTIAL PARTNERS

- · Kansas City Parks and Recreation
- Kansas City, MO Department of Public Health
- Missouri Department of Natural Resources (Division of State Parks)
- Missouri Department of Agriculture
- University of Missouri Research & Extension
- Lincoln University Research & Extension
- Cultivate Kansas City
- Kansas City Community Gardens
- Powell Gardens
- American Royal
- Private sector agritourism, retail agriculture, or horticultural/ small livestock industry businesses

- Missouri State Parks Outdoor Recreation Grants
- Foundations and private funding sources with a focus on youth education, health, culture ("Friends of the Municipal Farm Homestead")
- Farm Service Agency or other farm financing sources for private sector farm businesses
- Entry fees, site rental fees for events, other earned income

## **OUTDOOR CLASSROOM**

With a site rich in wetland and prairie ecosystems, an outdoor classroom would be an amenity for nearby schools, the neighborhood, and could even be used for monitoring and testing by universities. The outdoor classroom could be designed as a flexible space that integrates into the landscape even in flooding conditions.

#### POTENTIAL PARTNERS

- YMCA
- Nature Explore
- Boy Scouts
- Girl Scouts
- · Children's Mercy Hospital
- Truman Medical Center
- KC Healthy Kids
- · Missouri Department of Health
- Kansas City Community Gardens

- Missouri State Parks Outdoor Recreation Grants
- MDNR Scrap Tire Surface Material Grants
- Kansas City allocation of HUD CDBG funds



### PHASING FRAMEWORK

THE PHASING FRAMEWORK ORGANIZES ALL COMPONENTS OF THE PLAN FORWARD (NEXT STEP ACTIONS, PRIORITY AREAS, AND POTENTIAL PROJECTS) INTO A FLEXIBLE SEQUENCE. AS THE IMPLEMENTATION COMMITTEE WORKS TO PUT THE SUSTAINABLE REUSE PLAN INTO ACTION, SOME NEXT STEPS WILL BE CRITICAL TO MOVE DEVELOPMENT FORWARD, AND OTHERS WILL SUPPORT DEVELOPMENT AS IT OCCURS. THE MOST CRITICAL NEXT STEPS ARE RELATED TO PROCESSES THAT LAY A FOUNDATION FOR SUCCESSFUL DEVELOPMENT. NEXT IN SEQUENCE ARE STEPS THAT HELP PREPARE AND ATTRACT THE RIGHT KIND OF DEVELOPMENT. AFTER DEVELOPMENT PROCESS AND

### Critical Next Steps

#### **DEVELOPMENT PROCESSES**

- Find a champion
- Implementation committee
- Land use decision process
- Development model
- Firing range assessment

#### **DEVELOPMENT PREPARATIONS**

- Support Repowering America
- · Real estate market studies
- Assess existing operations and infrastructure
- Potters field archeological studies
- District-wide water reuse feasibility study
- Habitat restoration feasibility study
- Potter's field design competition
- Perimeter trail schematic design package
- Build on community garden efforts
- Feasibility study for multimodal connection to Truman Sports Complex and Rock Island corridor
- Bicycle/pedestrian bridge feasibility study

#### **DEVELOPMENT TARGETS**

#### **WEST SIDE**

#### **Overall Connections**

- Sni-A-Bar Road/E 49th Street upgrade
- Coal Mine Road upgrade
- Assess Coal Mine Road choke point

#### LaFarge Adaptive Reuse Area

- Lafarge environmental assessment
- Upgrade internal circulation roads

# Restoration, Recreation, & Education Area

· Upgrade internal circulation roads

#### EAST SIDE

#### **Overall Connections**

- Raytown Road upgrade
- Eastern Avenue upgrade
- · Ozark Road upgrade

#### Community Revitalization Area

- Upgrade internal circulation roads
- Areas 12 and 13 environmental assessment

#### Redefining the Landfill Area

- · Upgrade internal circulation roads
- Round Grove Creek landfill geotechnical investigation



PREPARATIONS HAVE STARTED TO BUILD CAPACITY, AREAS OF THE SITE WITH HIGHEST POTENTIAL FOR IMMEDIATE IMPROVEMENTS SHOULD BE TARGETED FOR DEVELOPMENT. PROJECTS WITHIN TARGETED AREAS ARE LISTED UNDER THE APPROPRIATE AREA. NEXT IN SEQUENCE ARE STEPS THAT SUPPORT DEVELOPMENT ON THE SITE, BUT MAY NOT BE CRITICAL TO NEAR-TERM DEVELOPMENT. THE LIST OF POTENTIAL PROJECTS SHOULD BE UTILIZED AS A STARTING POINT FOR PURSUING END USERS ALIGNED WITH THE VISION AND GUIDING PRINCIPLES OF THE SUSTAINABLE REUSE PLAN.

### Supportive Next Steps

### **DEVELOPMENT SUPPORT**

- Upgrade highway access
- Internal trail schematic design package
- · Trails environmental assessment

#### POTENTIAL PROJECTS

- Inland water research institute
- Solar farm
- Distributed solar energy generation
- Biomass
- Greenhouse
- City-owned green infrastructure maintenance and training facility
- Green infrastructure business incubator
- Water recreation
- · Model community development
- Sustainable manufacturing
- Food hub
- Food forest
- · Educational farmstead
- Outdoor classroom



## **EXISTING PLANS SUMMARY**

THE RECOMMENDATIONS OF THE SUSTAINABLE REUSE PLAN ARE GROUNDED IN AN UNDERSTANDING OF PAST ANALYSIS AND PLANNING EFFORTS. THE MUNICIPAL FARM SUSTAINABLE REUSE PLAN WAS ITSELF A RECOMMENDATION OF BOTH THE EASTWOOD HILLS NEIGHBORHOOD PLAN AND EASTGATE LAND USE PLAN.

The following plans were incorporated into the analysis and recommendations for the Municipal Farm site:

- Eastwood Hills Neighborhood Plan (2005)
- Eastgate Land Use and Development Plan (2001)
- AURI Master Plan Framework (2002)
- Blue River Greenway Study (2012)
- Stream Asset Inventory Phase 1 (2003)
- MetroGreen (updated 2002)
- SmartMoves Regional Transit Vision (2008)
- Smart Moves Commuter Corridors Alternatives Analysis (2012)
- KC Trails Plan (2008)
- KC Major Streets Plan (2010)

This appended report provides additional information about three key plans in order to complement the analysis and recommendations provided in the Sustainable Reuse Plan. It is intended to provide a reference for the visions, major issues and recommendations that relate to the Municipal Farm site and its relationship with its surrounding context.

### Links to Existing Plans:

Eastwood Hills Neighborhood Plan:, Eastgate Land Use and Development Plan, Stream Asset Inventory Phase 1

http://www.kcmo. org/KCMO/Depts/ CityPlanningandDevelopment/ AdoptedPlans/OtherPlans/ index.htm

#### MetroGreen Regional Plan:

http://www.marc.org/ metrogreen/

Smart Moves Regional Transit Vision, Smart Moves Commuter Alternatives Analysis:

http://www.kcsmartmoves.org/



#### EASTWOOD HILLS NEIGHBORHOOD PLAN

Adopted November, 2005

#### **Neighborhood Vision**

Eastwood Hills is...

- · A distinctive place where everyone knows your name
- A naturally beautiful place that is safe and litter-free
- A stable place that is noted for its attractive, well-maintained homes and businesses. A thriving place where business, commercial and residential uses coexist in a harmonious environment
- An urban place that respects the natural environment, offers high-quality public services and infrastructure
- A top-ten place in Kansas City to locate a family or business

#### Neighborhood Mission Statement

In Eastwood Hills; business, commercial and residential stakeholders recognize that they are part of this neighborhood.

Each of these components is aware of the Eastwood Hills Neighborhood Plan and understands the impact that its own concern has on the whole community.

All interests willingly participate in neighborhood activities and contribute time and effort toward the present health and the growing vitality of the area.

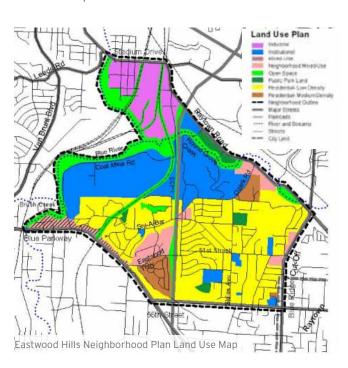
Eastwood Hills works hard to preserve its unique history, its natural respite from urban stricture and its connectivity to the future.

#### Neighborhood Issues that relate to Municipal Farm

- The need to preserve and maintain the wooded and green space
- The need for access to green space and the preservation of natural amenities and features in new development
- The need to improve walkability and pedestrian safety
- · The need to improve infrastructure including

storm/sanitary sewers and waterlines

- The need for drainage improvements to minimize erosion and flooding
- The need to reduce the impact of stadium traffic on the neighborhood
- The need to reduce nuisances, such as excessive noise from Police Department firing range
- The need for increased cooperation with area businesses and institutions
- The need to encourage attractive and neighborhood-friendly commercial uses (e.g., grocery store, dime store, cleaners, barbershops)
- The need to increase community involvement by both residents and businesses with a particular emphasis on involving neighborhood youth.
- The need to work with the neighborhood's major land owners to help realize a common vision for the community
- The need to improve the vitality and appearance of underutilized and vacant commercial and industrial areas
- The need to protect the residential areas of the



neighborhood from incompatible development

 The need to attract and retain neighborhood serving businesses

#### Land Use Recommendations

- Reinforce existing land use patterns; prohibit additional multi-family development in the single-family core of the neighborhood
- Encourage neighborhood-oriented commercial uses in areas designated for mixed use
- Provide new development that is consistent with the massing, density, scale and character of existing development
- The development and use of municipal property within Eastwood Hills should be compatible with and respectful of Potter's Fields and other cultural resources, adjacent environmental resources and existing residential uses
- Enhance the distinctive "country within a city" environment
- · Work to improve neighborhood access to green spaces

#### Infrastructure Recommendations

- Develop Skiles Park
- Invest in basic infrastructure insuring comprehensive sanitary sewer service, sidewalks, and drainage improvements and erosion control measures.
- Upgrade storm water drainage and retention systems to limit future flooding and erosion.
- Target and coordinate improvements to storm water management systems with sanitary
- Sewer or street and sidewalk improvement projects.
- Work with the City and relevant departments to connect all homes within Eastwood Hills to a central sanitary sewer system.
- Pursue infrastructure and development standards that reflect environmentally sensitive and sustainable practices

#### Transportation Recommendations

- Make walkability improvements in the four Priority Areas
- Make multi-modal transportation infrastructure a priority
- Upgrade KCATA transit stops and connect with sidewalks
- Implement traffic calming measures that raise awareness of bicyclists and pedestrians
- Control the impact of traffic from the Truman Sports Complex
- Housing
- Work with neighborhood residents to support the maintenance of sound housing within the neighborhood.
- Actively support home ownership opportunities within the neighborhood.
- Insure that single-family infill development is of high quality and is consistent with the diverse character of the neighborhood.
- Support and promote the marketability of properties in the Eastwood Hills Neighborhood

#### Neighborhood Livability Recommendations

- Pursue long-term, quality business growth in the neighborhood
- Target economic incentives and small business development tools toward areas recommended for mixed use.
- Encourage and support neighborhood property maintenance

#### Safety and Security Recommendations

- Involve residents, public agencies and interested stakeholders in addressing maintenance issues within the neighborhood.
- · Work to address crime and perceptions of crime
- Work with public agencies and interested stakeholders to address neighborhood cleanliness and illegal dumping issues.

#### Mixed Use Development Targets



- · Area 1 Blue Parkway between Sni-A-Bar and 55th Street
- Area 1A Intersection of Hardesty and Blue Parkway
- Area 2 Eastwood Trafficway between Blue Parkway and I-435
- Area 3 The intersection of Eastern Avenue and Sni-A-Bar Road
- · Areas 4 and 5 Raytown Road and Blue Ridge Cutoff

#### **Municipal Farm Recommendations**

- · Development and use of municipal property within Eastwood Hills should be compatible with and respectful of Potter's Fields and other cultural resources, adjacent environmental resources and existing residential uses
- Incorporate the recommendations of this plan in any Master Plan for the municipal property and will actively engage and include neighborhood stakeholders in the creation of the Municipal Farm Master Plan

Land Use Plan



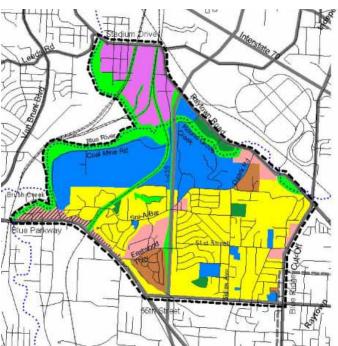
Mixed use area 1



Mixed use area 2









#### EASTGATE LAND USE AND DEVELOPMENT PLAN

Adopted October, 2001

#### Purpose of Plan

To guide future investment by individuals, businesses and public agencies to create a strong, cohesive identity for the district as an east-west corridor and key gateway to Kansas City, Missouri. Eastgate's significance as a gateway is apparent through landmarks and influences as diverse as the Plaza, Swope Park, Kauffman and Arrowhead stadiums, retail development, residential communities, road and rail transportation, an industrial base, and natural features such as Brush Creek and the Blue River.

#### Issues Identified:

#### Flood Control:

- Blue river improvements
- · Hardesty Floodplain
- Blue parkway run-off flooding

#### Transportation and Traffic:

- Hardesty at Blue Parkway intersection improvement
- Sni-A-Bar at Blue Parkway 90 degree intersection
- 55th at Blue Parkway add turn lane
- Coal Mine Road- realigned to connect with Hardesty

#### Infrastructure:

- Blue River bridge lower bridge scheduled for removal, primary bridge improvements
- Bridges over railroad (Sni-A-Bar, 56th Street, 58th Street) scheduled for replacement
- Sewer installed (55th & Bennington, along Hardesty)

#### Development:

- Add businesses to provide basic services to neighborhood residents
- · Develop vacant commercial and industrial properties
- Develop municipal farm property

#### Property Maintenance:

- Blighted commercial and industrial properties
- Noise nuisance- MAST siren tests, police firing range
- Illegal dumping

#### Neighborhoods:

- · Additional market-based housing
- Low housing density
- · Maintain economic and racial diversity

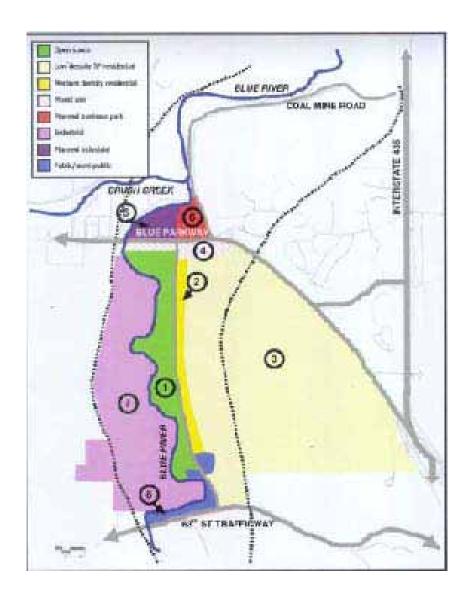
#### Plan Recommendations

The plan recommendations address the role of public policy in guiding development in the Eastgate Corridor. The plan's recommendations include policy recommendations by category, and a redevelopment framework that describes four prototype development projects, to illustrate urban design concepts as an expression of the land use. Key recommendations include:

- Adopt land use changes to make proposed land use consistent with city comprehensive plan, FOCUS Kansas City.
- Establish a preliminary framework for a proposed Blue Parkway Corridor Task Force to address interjurisdictional transportation and development issues among Kansas City, Raytown and Lee Summit.



- Create a master plan for the city owned property commonly known as the .Municipal Farm,. Along Coal Mine Road west of I-435.
- Establish design guidelines to assure compatible development. Specific design recommendations include extension of the boulevard designation along Blue Parkway, preservation of green space and terrain where possible, and gateway enhancements
- Preservation of I-435 scenic view of downtown Kansas City
- The characteristics of mixed-use, nodal development, integration of open space and recreational opportunities, increased multi-modal access, and recognition of the existing neighborhood character, as illustrated in three prototype development projects and one design project.



#### ROUND GROVE CREEK STREAM ASSET INVENTORY

#### Study Context:

The Round Grove Creek stream asset inventory was completed as a part of the larger Line Creek inventory within the Kansas City Stadium/Park East Planning Area. The inventory was a strategy to better understand, protect and incorporate Kansas City's natural resources into development and stormwater management.

Streams within the Line Creek Watershed and Stadium/
Park East Planning Area were the focus of this initial
stream asset inventory. The goals of the study were to
determine water quality and adjacent riparian (stream)
corridor conditions. This inventory will be used to establish
a baseline reference of the streams and their related
natural resources and to provide recommendations
related to the City's goals for improving natural resource
protection and stormwater management.

Round Grove Creek sits within Zone 2 (sub watersheds are not defined in this planning area, zones were divided for the sake of discussing study results) of the Stadium/Park East Planning Area included in the Stream Asset inventory. 8 samples were taken of the creek. It is the only named tributary of the Blue River within the planning area.

Due to the amount of development (i.e., pavement) present, very little water seeps into the ground. Water in this area primarily flows into storm sewers and ditches, which then discharge into Round Grove Creek, the unnamed tributaries, or directly into the Blue River.

#### Study Results

The study analysis shows an absence of highest (Type 1) and lowest (Type 5) quality. In Stadium/Park East high quality and restorable (Type 2-3) stream reaches are generally found in areas with little disturbance/development and with intact vegetated corridors, while Type 4 (highly disturbed) streams are generally located adjacent to major roadways or newly disturbed/developed areas.

Stream segments of Round Grove Creek in Zone 2 (see map page 37) are in moderate to good (Type 3, 2) condition with the exception of the segment south of the Stadium Complex which is in poor condition (Type

4). This segment exhibited severely eroded banks, septic odors and trash, and a stream channel constriction formed by the bridge on Eastern Rd.

#### Type 2 - High Quality

This type of stream may have some down or side-cutting however, bank and bed composition (bedrock) assist in keeping the impact low. Water quality is generally good and the riparian zone is largely intact, although vegetation may be altered from that of a typical native plant association.

#### Type 3 - Restorable

Deterioration of the riparian corridor is more noticeable. While some remnant plant associations may be present, overall vegetative canopy cover is comprised of immature tree species. The potential for restoration exists although erosion and sedimentation can be greater than desirable.

#### Type 4 - Low Quality

Impacts are greater on this stream type with significant indicators of bank erosion and sedimentation present. The adjoining riparian corridor may be intact but vegetation is not representative of a native plant association. Although signs of historic degradation are present, it appears that streams within the Stadium/Park East Planning Area are well into the process of stabilization. The age and nature of development throughout this area has resulted in places where disturbances (construction), a lack of management, and intentional introduction (roadside plantings) of exotic species have negatively altered the function of the landscape and the streams. Although the vegetation present is a mix of native and non-native exotic (crown vetch, amur honevsuckle, and musk thistle) plants, it is helping to stabilize many of the streambanks. Another factor influencing these streams is their downcutting to bedrock which often results in stabilization of the stream's profile.

#### Recommendations

Recommendations for this study area place the greatest emphasis on protecting the buffer areas along Round Grove Creek and reducing the amount of impervious surfaces (roads, parking lots, roof tops) as appropriate during redevelopment. Protection Strategies include:



- Integrating watershed management across department and city boundaries
- Implementing stormwater Best Management Practices (BMPs)
- · Implementing stream buffers and setbacks
- Setting the standard for watershed stewardship through public education and involvement
- Balancing regulations, incentives, and partnerships

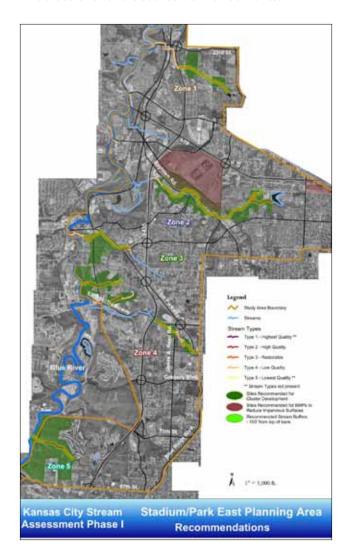
#### Land Use recommendations:

- Make conservation of existing natural areas a high priority. Preserve existing open space:
- 100 acres along the east end of Round Grove Creek. It contains a mix of woodland and grassland that could provide a quality buffer with minimal management efforts.
- Wooded area in Zone 5 adjacent to the west side of Hillcrest Country Club.
- Steep, wooded area in Zone 3 west of I-435.
- · Direct growth to areas that can best accommodate it
- Maintain topographic constraints (steep slopes) when redeveloping parcels.
- Provide incentives to landowners with old, dysfunctional septic systems to repair or replace these systems.
- · Implement Stream Buffers
- Enhance and protect existing riparian buffers, especially along Round Grove Creek.
- Remove nonnative exotic vegetation and establish native trees, shrubs, or grasses.

#### Implement greenway program:

- Convert abandoned rail line on the south side of the Stadiums, that runs parallel to Raytown Road for greenway connection for bicycles and pedestrians (Rails to Trails program).
- Encourage use of vacant lots (commercial and residential) to create connectivity between parks and to create additional open space in the form of neighborhood parks (Brownfields program).

- Establish impervious cover goals for each stream type
- Reduce the amount of pavement within parking lots for the Stadiums and Blue Ridge Mall.
- Encourage cluster development as an alternative to large lot development
- Given the limited availability of sizable tracts of land within the Planning Area, there is minimal opportunity for recommending places to locate cluster development.
- Areas like the Stadiums and Blue Ridge Mall are ideal locations to implement and demonstrate the functionality of stormwater BMPs but, would also provide shade (which helps reduce the heat produced by the pavement) for recreational and aesthetic enhancements.



## BLUE RIVER GREENWAY PHASE II OVERVIEW

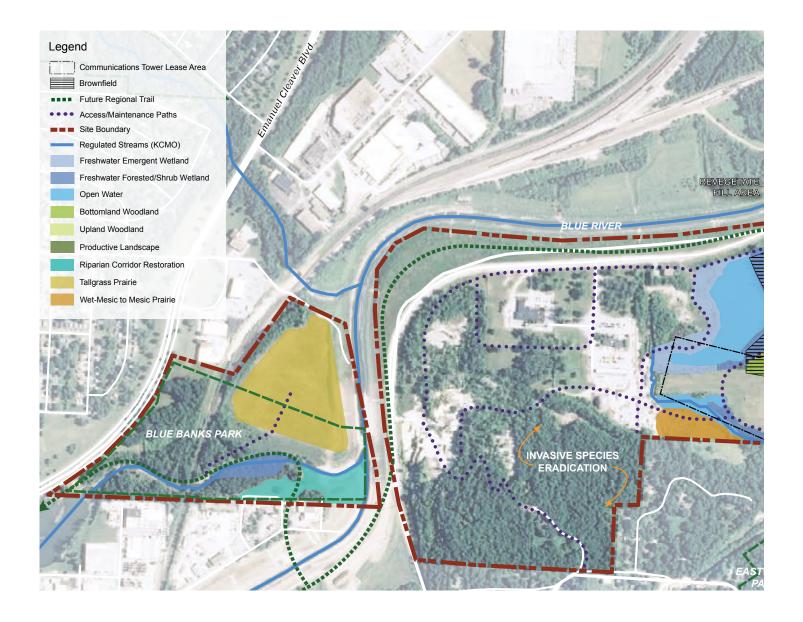
#### PRELIMINARY SHORT-TERM RESTORATION AND ENHANCEMENT OPPORTUNITIES

The Blue River Greenway planning area consists of the west 254 acres (or 57%) of the 441-acre Municipal Farm property; and an additional 62 acres of City-owned land at the Brush Creek/ Blue River confluence. The study area is generally bound by Coal Mine Road/Union Pacific Railroad on the north, 47th Street on the south, Blue Banks Park on the west, and I-435 on the east.

The planning area provides a number of ecosystem restoration opportunities. While each habitat is valuable in its own right, providing a wide range of natural habitats and vegetative options would increase the diversity of opportunities for different wildlife species or for individual species during the various stages of their development. The Preliminary

Short-Term Restoration Opportunities Map (below) illustrates the general type, extent, and locations where the most beneficial and cost-effective ecosystem restoration could be undertaken in the immediate future. These restoration opportunities could be pursued if current site uses remain.

The Productive Landscape areas could potentially be restored or could be converted to other uses in the future; anticipated uses would be compatible with the surrounding ecosystem restoration, and could include things like urban agriculture, biomass production, or passive recreation and education. The contaminated fill area could potentially be revegetated or used as parking for other





purposes, provided that the clay cap is not disturbed in the process. A planned Overflow Control Program facility site at the confluence of Brush Creek and the Blue River could be restored to tallgrass prairie as a holding cover type until the facility is constructed 10 to 20 years in the future. The remaining ecosystem restoration areas would be maintained regardless of future site uses.

Specific opportunities are noted on the figure and are briefly described in the sidebar. The range of potential restoration acreages reflects the possible changes in cover type described previously.



#### **Invasive Species**

Invasive species eradication and maintenance is important for all vegetated site areas, both for habitat establishment and long-term protection. Invasive species removal and selective woodland thinning may improve both the appearance and function of these areas, allowing healthy timber stands to develop.

#### Wetland Fringes (3 Acres)

Enhancement of the wetland fringe around existing water bodies, including expanding the littoral bench and terrestrial fringe, and revegetation with desirable species.

### Freshwater Emergent Wetlands (8 Acres)

Restoring former emergent wetlands by revegetating them with desirable species and by restoring hydrology where necessary.

## Freshwater Forested/Shrub Wetlands (6 to 11 Acres)

Creating or restoring transition zones between existing and restored freshwater emergent wetlands and bottomland hardwood forest areas.

## Bottomland Hardwood Forest (25 to 30 Acres)

Restoration and enhancement of bottomland hardwood species and a healthy, appropriate understory in low-lying woodland areas not otherwise planned for productive landscapes or passive recreation.

**Upland Woodlands** (15 Acres) Restoration and enhancement of upland woodlands in areas not otherwise planned for intensive development.

### Riparian Corridor Restoration (2 to 4 Acres)

Restoration and enhancement of existing riparian corridors adjacent to on-site streams, including the enhancement of existing riparian canopy and understory species.

#### Wet-Mesic to Mesic Prairie (3 Acres)

Establishment of wet-mesic to mesic prairie species in one or two strategic locations where open spaces will be maintained and are desirable for habitat and for recreational or other purposes.

#### Tallgrass Prairie (15 Acres)

Establishment of tallgrass prairie as a holding use in areas proposed for future Overflow Control Program facilities.





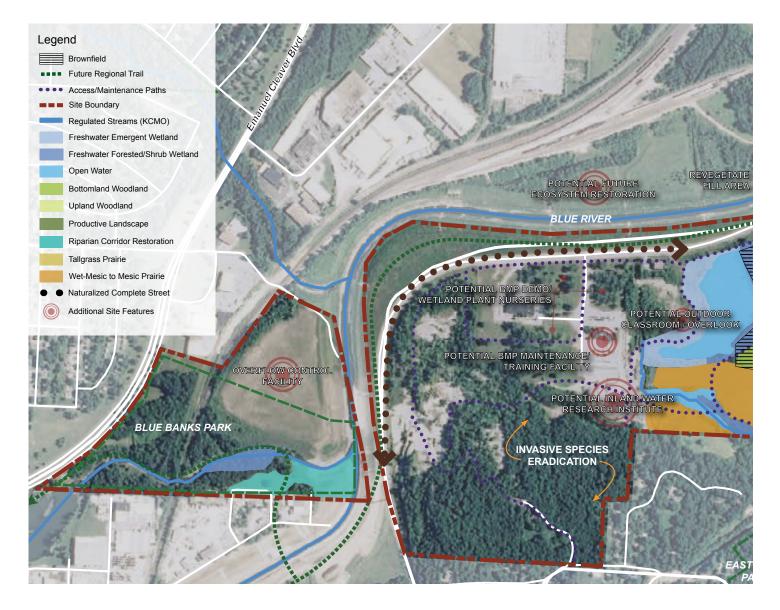


#### PRELIMINARY LONG-TERM RESTORATION AND ENHANCEMENT OPPORTUNITIES

The 316-acre Blue River Greenway Phase II Planning area could support a wide variety of restored habitats in the future, while still allowing for development or productive uses in appropriate locations. The Preliminary Long-Term Restoration Opportunities Map (below) illustrates the general type, extent, and locations of beneficial and cost-effective ecosystem restoration over the long-term. The Productive Landscape areas could potentially be restored or could be converted to other uses that are compatible with ecosystem restoration, such as urban agriculture, biomass production, or passive recreation and education. Tallgrass prairie plantings at the Brush Creek/Blue River confluence may give way to an anticipated Overflow Control Program facility, if selected for that location. The existing communications tower leasehold could be converted to wet meadow or prairie to provide additional habitat variety.

A number of additional site features could potentially enhance the general restoration opportunities. Recreation, community education, and scientific research could be tied directly to ecosystem restoration. Other uses such as water quality demonstrations and native plant nurseries would be appropriate, sustainable companion land uses. These features would provide additional community benefits, increasing the overall value of the planning area to the citizens and City and justifying the ecosystem restoration investment.

The figure below illustrates ecosystem restoration opportunities and related site features. More details on the potential ecosystem restoration areas are provided in the sidebar.







#### **Invasive Species**

Invasive species eradication and maintenance is important for all vegetated site areas, both for habitat establishment and long-term protection. Invasive species removal and selective woodland thinning may improve both the appearance and function of these areas, allowing healthy timber stands to develop.

#### Wetland Fringes (3 Acres)

Enhancement of the wetland fringe around existing water bodies, including expanding the littoral bench and terrestrial fringe, and revegetation with desirable species.

## Freshwater Emergent Wetlands (8 Acres)

Restoring former emergent wetlands by revegetating them with desirable species and by restoring hydrology where necessary.

## Freshwater Forested/Shrub Wetlands (6 to 11 Acres)

Creating or restoring transition zones between existing and restored freshwater emergent wetlands and bottomland hardwood forest areas.

## Bottomland Hardwood Forest (25 to 30 Acres)

Restoration and enhancement of bottomland hardwood species and a healthy, appropriate understory in low-lying woodland areas not otherwise planned for productive landscapes or passive recreation.

**Upland Woodlands** (15 Acres) Restoration and enhancement of upland woodlands in areas not otherwise planned for intensive development.

## Riparian Corridor Restoration (2 to 4 Acres)

Restoration and enhancement of existing riparian corridors adjacent to on-site streams, including the enhancement of existing riparian canopy and understory species.

Wet-Mesic to Mesic Prairie (21 Acres) Establishment of wet-mesic to mesic prairie species in one or two strategic locations where open spaces will be maintained and are desirable for habitat and for recreational or other purposes.







## **COMMUNITY MEETING SUMMARIES**

THE SUSTAINABLE REUSE PLAN INVOLVED A ROBUST COMMUNITY ENGAGEMENT PROCESS, RESULTING IN A VISION AND GUIDING PRINCIPLES FOR FUTURE DEVELOPMENT OF THE MUNICIPAL FARM SITE.

#### 1ST COMMUNITY MEETING, 9.27.2011

#### **Facilitators**

Christopher Kinzel, HDR; Meghan Jansen, Momentum; Elise Hubbard, BNIM; Emily Miller, BNIM

#### Attendees

Neighbors and residents of Eastwood Hills, two interested City employees not from the team (one from Parks), Scott Schulte from Patti Banks Associates (largely to observe; managing confluence study project), two representatives from Bott Communications (leasing land on west side with communications towers in operation), SPICA representative "involved in the decision making process" for a long time; interested KC resident (no previous connection to site)

### Vision

#### Common Vision:

To create mutually beneficial land use relationships between the site and its surroundings with a focus on the natural environment, learning, recreation, and celebration of the site's history.

#### Table Visions:

- Near the stadium: A place that offers (stadium)
  visitors somewhere to go (shopping, etc.) served by
  an urban rail station. Remainder of the site: A happy,
  healthy, safe collection of peaceful coexisting uses
  that benefit the community, use natural resources
  wisely, and protect the existing rural feel.
- Major theme: create neighborhood amenities with a focus on recreation and nature. The development should also encourage and support activities









- for youth and seniors, including opportunities to learn about the natural environment.
- Major theme: The major emphasis was connecting the neighborhood to the municipal farm site, providing more opportunities for recreational interaction between the neighborhood and the natural areas in a way that supports and enhances natural features.
- Major theme: create neighborhood amenities and care for the natural environment, integrating opportunities for learning, and elements of the site history.

#### Mapping Exercise Discussion Highlights:

#### Needs/Issues

- Neighborhoods need more infrastructure: sidewalks, storm sewers, curbs, gutters.
- Improve Manchester/Hardesty connection.
- The racquetball courts at the intersection of Ozark and Raytown is perceived as an unsafe area.
- Everyone agreed that LOTS of dumping goes on along the Ozark on the East side of the site.
   Many of the residents had even caught people in the act, and confronted them. Ultimately, it was agreed on that Ozark feels very dark and unsafe.
- The neighborhood area just south of the East Neighborhood Room was perceived to have a lot of crime.

#### Constraints

- West room limited road access
- Poor infrastructure throughout property
- People knew much more about the West Room than they did about the east half of the site. The east half of the site seemed mysterious and unsafe to most people.
- Key constraints identified in the west room were land instability in the old Lafarge mine area and underground wires in the communication tower area (which could prevent urban agriculture and some recreational uses)

 Economic engines should be compatible with the neighborhood and capacity of infrastructure (transportation). There was some resistance to office and light industrial use

#### Opportunities

- · Natural environment
- Water and wetlands
- · Want to attract younger people.
- Perhaps some future residential.
- Put solar panels in the draw?
- Everyone wanted to celebrate the history of the potters fields
- People liked the radio towers in the West Room because/the hawks use them, and deer run through the mowed field.
- The West side focus was largely on water. People were interested in wetlands banking and light water recreation (fishing and non-motorized boats)
- The East natural area focus was on Round Grove creek. Since it is not part of the combined sewer system water quality can be better preserved. Ideas for this area centered around connecting the neighborhood to the creek and enhancing the health of the creek.
- People were interested in creating a graduated phasing of the neighborhood into the natural areas in a way that increases interaction with the site, both through recreational uses and neighborhood oriented commercial uses "like Brookside"

#### Land Use Ideas

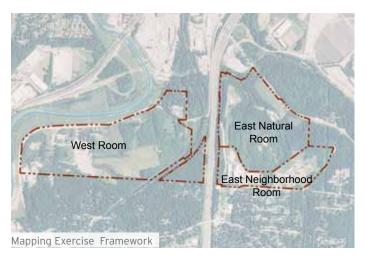
The following ideas were generated through a mapping exercise. Each group of 6-8 participants worked with a baseline inventory map of the site, divided into three separate "rooms". The "rooms" approach enabled participants to brainstorm uses specific to areas of the site with distinct characteristics, opportunities and constraints. After brainstorming ideas, participants completed a dot exercise to prioritize potential uses.

The West Room encompassed the western half of the site. The East Natural Room encompassed the northeastern section of the site, largely wooded and natural in character. The East Neighborhood Room encompassed the southeastern section of the site, closer to the neighborhood and with a concentration and history of built uses.

Ideas for each room are listed below, with the number of dot "votes" each received. Because groups varied slightly in size, the emphasis shown by number of votes also varies slightly.

#### East Natural Room

- 7 votes ball fields
- 7 votes biking trails/multi-use
- 5 votes Horses/equestrian opportunities
- 5 votes Horseback/trails
- 5 votes Walk/Bike/Multi Use Trails
- 5 votes Alternative Energy
- · 4 votes connect to trail outside site
- 3 votes Mixed Use Neighborhood Amenities
- · 3 votes Safety on Racquetball court
- 3 votes Celebrating Historical Elements in some way
- 3 votes Restore native plants/hillsides
- · 2 votes Stadium-serving retail
- 2 votes Neighborhood trails



- 2 votes Keep the Animal Shelter and Upgrade
- 2 votes Housing fades into park land
- 2 votes rock climbing
- 2 votes light industrial
- 1 votes skateboard park
- 1 vote Habitat/ stormwater BMPS
- 1 vote Sports Information or Character Integration
- 1 vote Light rail stop

#### East Neighborhood Room

- 6 votes ball fields/ recreational facilities
- 6 votes neighborhood graduating into natural recreation use
- 6 votes Better Streets and lighting (especially Ozark)
- 6 votes Police Substation
- 5 votes Limited-stay, "primitive" campground
- 4 votes American Royal pasturing/grazing
- 4 votes Expand community garden
- 3 votes Sidewalks
- 3 votes Community Garden
- 3 votes Learning Center
- 2 votes Senior housing
- 2 votes learning center
- 1 votes art galleries
- 2 votes build off existing roads/ infrastructure
- 2 votes "Woodside": Single family, Small commercial, Small business incubator
- 2 votes Partner with/ community organizations to care for and activate the site
- 2 votes Playground
- 1 vote Limit Dumping
- 1 vote Shelter with rain barrels to feed garden
- 1 vote local shopping
- O votes development of neighborhood



#### West Room

- 7 votes trails
- 6 votes recreational water use (fishing, light boats)
- 6 votes trails
- 5 votes wetlands
- 5 votes celebrate potters field
- 5 votes Interpretive center, perhaps a museum that ties into/honors the Potters field
- 5 votes wetland banks
- 4 votes trails/hiking
- 4 votes nature center
- 4 votes soccer fields
- 3 votes keep communication towers
- 3 votes alternative energy
- 3 vote orchard
- 3 votes Blue River boating
- 3 votes Accessible fishing area(s)
- 2 votes Trails
- 2 votes open air laboratory/ research facility
- 2 votes create access to Blue River
- 1 vote playing fields
- 1 vote learning center
- 1 vote light industrial
- 1 vote Educational classroom
- O votes water activities/fishing (retention pond)









#### 2ND COMMUNITY MEETING 10.25.2011

#### Table Facilitators

Meghan Jansen, Momentum: Zach Flanders, BNIM; Elise Hubbard, BNIM

#### **Attendees**

A total of 21 people signed in. Attendees included neighbors and residents of Eastwood Hills, a representative from Jackson County Historical Society, a couple representatives from Eastwood Hills Community Association, a representative from Water Services, a representative from Bott Broadcasting, a representative from City Council, a representative from Patty Banks Association (and the Blue River Greenway Master Plan Study), a representative from the Radio Network (communication towers), a representative from Parks and Recreation, and a couple representatives from K.C. Soap Box Derby.

#### Vision

To create mutually beneficial relationship between this unique site and its surroundings that celebrate the site's history, restore and enhance the natural environment, revitalize the economy, and create opportunities for learning and recreation.

- Everybody seemed to like the vision overall
- One comment was that "sustainability" should be included in the vision text

#### Land Use Systems

One of the tables had a long discussion on the Land Use Systems, while another table didn't have much of a discussion about the systems but went right to the Scenario Map.

- Some people latched on to the idea that each "spoke
  of the wheel" was important in creating sustainable
  development on the Municipal Farm property. For
  example, they recognized that economic growth,
  livability + recreation, environmental resilience,
  efficiency + resource reuse, and research were
  all important components of the development.
- Most of the neighborhood residents understood the concept that the strength of all the systems was that they could be working together to be

self sufficient: for living, working, and playing. People really liked the idea to be living, working, and playing on the Municipal Farm site.

#### Food System

- Many people agreed that the Food System was
  a strong land use system for this site. They liked
  the identity it created, thought it would alleviate
  the food dessert in the area, and recognized
  there might be opportunities for funding through
  the development of a strong food system.
- One of the tables identified the Food System to have strengths including environmental benefits, water reclamation and reuse, and that it could be an opportunity to create jobs.

#### Research System

- There was one comment that "research" in the Land Use System components and "Research" as one of the names for the three example systems was confusing.
- One person was unsure if the Research System really had much potential.
- Overall, not much was said about the Research System

#### Efficiency System

- Many of the residents understood the importance of industrial uses providing jobs for the area. With that, people were much more willing to accept industrial uses if the industrial development followed sustainable guidelines and integrated into the neighborhood and natural environment.
- Another group of people had concerns about uses such as recycling. They had concerns with pollution, lower property values, aesthetics, and the compatibility with neighborhood uses.

#### Scenario Exercise

- Would like a focus on amenities that enhance the neighborhood for the benefit of current residents and that will help in attracting new residents.
- Can the area support more residential? [Facilitator note: Initially the group was strongly against any additional residential because they associated "residential" with more single-family houses, and saw new residential as competition for the existing



neighborhood. After walking through the other types of residential opportunities and how new residential could help support many of the amenities the neighborhood desires, the group was more receptive.]

- Some people were opposed to industrial uses, and some people understood that industrial uses were an important piece of revitalizing the economy.
- Everybody wants to see recreation and environmental preservation be a component of this plan. Particular recreational uses vary based on the preferences of the people

#### **Voting Questions**

Each attendee participated in the voting exercise. Attendees were asked if a specific land use type was acceptable in each of the three "rooms" (the West Room, the East Room Natural, and the East Neighborhood Room). The range of land uses included recreation and restoration, mixed use, residential, institutional and civic, and light industrial.



- 95% accepted recreation & restoration land uses
- 69% accepted mixed use land uses
- 38% accepted residential land uses
- · 88% accepted institution and civic
- 65% accepted light industrial

#### East Natural Room:



- 88% accepted recreation & restoration land uses
- 65% accepted mixed use land uses
- 59% accepted residential land uses
- 86% accepted institution and civic
- 38% accepted light industrial

#### East Neighborhood Room:



- 100% accepted recreation & restoration land uses
- 65% accepted mixed use land uses
- 53% accepted residential land uses
- 71% accepted institution and civic
- 29% accepted light industrial

Overall, the voting exercise revealed the range of opinions. In all the rooms recreation and restoration was widely accepted. Over half of the people thought mixed use land uses were acceptable in all the rooms. There was some variety with residential land uses, however, about half of the people thought residential was acceptable in all the rooms. Institutional and civic land uses were widely accepted in all the rooms. Industrial uses had a range of acceptance: in the West Room industrial was acceptable to more than half of the people. Less than half the people accepted industrial uses in the East Natural Room, and even fewer accepted industrial uses in the East Neighborhood Room.



This map was used to guide community meeting discussion; it was part of the working process and does not represent plan recommendations.

#### OPEN HOUSE 05.07.2012

The Open House was well received by the community and local stakeholders. Councilwoman Cindy Circo welcomed the attendees and voiced her support of the project. Stephen Hardy and Elise Hubbard of BNIM made a short presentation that focused on the vision, guiding principles, integrated development strategy, and conceptual land use plan. Several boards, both of the Sustainable Reuse Plan and of the Blue River Greenway Phase II Plan, were set up that allowed attendees to dig in to the details, ask questions, and leave comments. The comments were used in crafting the final Sustainable Reuse Plan.

#### IMPLEMENTATION WORKSHOP 05.10.2012

In support of Kansas City, Missouri's Brownfield Area-Wide Planning (BFAWP) activity, the Environmental Protection Agency (EPA) provided technical assistance regarding the implementation of Kansas City's vision for the Municipal Farms site. Based on extensive communication between Kansas City, EPA and their technical assistance contractor, SRA International, the assistance included two phases: 1) Review of the draft Brownfield Area-Wide Plan and Draft Sustainable Reuse Plan for their capacity to result in implementation actions; and 2) Help creating content for, organizing, facilitating and summarizing findings of an Implementation Workshop.

The purpose of the workshop was to leverage the collective expertise of key stakeholders with influence, knowledge of resources for, and related expertise in the Municipal Farms site including public agencies, citizens and businesses. To provide context and background information, participants received presentations regarding BFAWP activity, the Municipal Farms history, and a tour of Municipal Farms. For facilitated discussions

the audience was broken out into four tables, each focused on specific areas within Municipal Farms and attendees were assigned to tables according to their areas of expertise and interest. Table discussions focused on four key areas and their potential reuse scenarios defined in the Conceptual Land Use Plan.

- Areas 1 & 2 Possible industrial/commercial development or habitat restoration area
- Areas 12 & 13 -Residential neighborhood and mixed use neighborhood development
- Areas 5 & 7 Habitat restoration focus
- · Area 20 Renewable Energy facility

Table facilitation was intended to collect information organized by the following categories:

- Champion
- Partnership
- Synergy
- Incentives and Funding Opportunities
- Related Planned Investments
- Identify actions for near-, mid- or long term implementation

Information from the table discussions built knowledge and capacity that carried through to the Plan Forward.

#### IMAGE CREDITS

BNIM is grateful for the generosity of project team members and case studies who contributed photography for the development of this plan. Thanks to the creators of the following images:

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Photos are numbered left to right, top to bottom

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- 9. Men Working with Tractor. Courtesy of Missouri Valley Special Collections, Kansas City Public Library.
- 11. Potter's Field. Courtesy of Missouri Valley Special Collections, Kansas City Public Library.
- 16. Former Lafarge Facility. Courtesy of Gerald Williams

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Top: Potter's Field. Courtesy of Missouri Valley Special Collections, Kansas City Public Library.

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Page 6:

Top left: Municipal Farm. Courtesy of Missouri Valley Special Collections, Kansas City Public Library.

Top right: Men Working with Tractor. Courtesy of Missouri Valley Special Collections, Kansas City Public Library.

Bottom: Aerial looking North over Mid-Point of Property. 1966. Courtesy of Missouri Valley Special Collections, Kansas City Public Library.

#### Integrated Development Strategy

Page 34, Figure 1-2:

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#### Conceptual Land Use Plan

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