

**CONCEPTUAL LAND USE PLAN**  
**SUNFLOWER ARMY AMMUNITION PLANT**

**Amendment to**  
*Johnson County Rural Comprehensive Plan*  
**Resolution No. 079-98**  
**July 23, 1998**

**Background**

The United States General Services Administration (GSA), in conjunction with the United States Army, is completing a review process that will eventually lead to the disposal of the Sunflower Army Ammunition Plant property. This process provides the County with both a challenge and an opportunity to exercise some control over the disposal and to establish policies and guidelines for redevelopment of the Sunflower site.

On April 21st, 1998, at the public hearing held by the GSA, Commissioner Johnna Harris-Lingle spoke on behalf of the Johnson County Board of County Commissioners and outlined the primary points of interest for the County, which included:

1. That a comprehensive land use plan should be developed for the whole property and should guide its disposal and ultimate redevelopment;
2. That the property should be divided into a minimum number of parcels for disposal and redeveloped in a compatible manner; and,
3. That environmental remediation and clean-up should be planned and financed for the entire site and not just certain portions of the property.

Those points of interest were repeated throughout the comments of other local officials and area residents.

The future development of the Sunflower site will depend greatly upon how well the County and GSA, together with the State, cooperate to guide the disposal and redevelopment. Two key issues to controlling the future development are (1) what the conceptual, future land-use plan for the property will be; and, (2) what methods are available to the State and to the County to implement and guide redevelopment.

The Sunflower property is now under Federal jurisdiction and is not subject to any State, Johnson County, or other local governmental regulations (building codes, zoning, etc.) or taxation (real estate, personal property, etc.). If the

property, however, is sold, conveyed, or released for uses other than a Federal purpose, the property may become subject to Johnson County regulations. In this event the County will need to have a basis for evaluating development proposals before any building permits will be issued. For this reason staff is recommending that the Board establish a conceptual land use plan for the redevelopment of the plant site. Such a plan, if approved by the Board of County Commissioners and adopted as an amendment to the *Johnson County Rural Comprehensive Plan* would establish a clear vision and policy on how the Sunflower site should be developed as well as establish a firm basis for evaluating any future development proposals for the site.

To assist in that consideration, County staff has completed a preliminary review of the area and has developed the attached "Future Land Uses - Concept Plan" on page 7. This plan would be considered during reviews of zoning and development proposals and during preparation of special studies with respect to the Sunflower site and its environs.

This Future Land Uses - Concept Plan has been prepared by the County with a full understanding that at this time Johnson County has no planning, zoning, or building codes jurisdiction over the Sunflower property. This plan, however, has been prepared with the expectation that the GSA will eventually complete its mission and dispose of the property. Rather than wait until the GSA has completed this property transfer, the County has taken a proactive approach to establish plans and policies for how the site should be developed.

## **Sunflower Army Ammunition Plant**

### *The Site*

The Sunflower Army Ammunition Plant site covers 9,065 acres of land in northwestern Johnson County. The location boundaries of the site are shown on the attached proposed Future Land Uses Plan. The approximately 14-square mile facility is located just south of Kansas Highway 10 (K-10) and the City of DeSoto. The facility was established in 1941 by the U. S. Army and went into production in 1942, employing over 10,000 workers manufacturing explosives. Placed on inactive status in 1946, the facility was reactivated for the Korean and Vietnam conflicts.

Until 1992, the facility's most recent use was for the production of nitroguanidine, an ingredient in large gun propellant. There is now no active production of nitroguanidine on the site which contains over 2,200 buildings in varying conditions. The facility is currently maintained and operated by Alliant Techsystems, under a contract with the U.S. Army until March 2000. Several private companies now have leases to use the site including Koch Industries (sulfuric acid), Southwestern Bell and Sprint (communication tower), Sunflower

Aquaculture, L.L.C. (tilapia fish farm), and Kansas Wastewater, Inc. (commercial wastewater treatment). Kansas State University (KSU) has leased over 300 acres in the southeast corner of the site for an agriculture research facility and other locations on the site have been leased to individuals for private agriculture production.

### ***Major Topography and Streams***

The Sunflower property is divided approximately in half, east/west, by a major north/south ridge line that generally runs through the center of the property. The highest elevation on the site is 980 ft. mean sea level (msl) located at the southeast corner of the site just northwest of 143rd and Dillie Road.

Three creeks pass through the Sunflower property and flow into the Kansas River to the north. All three of the streamways have designated flood plains that presents opportunities for future public open space preservation and recreational use as well as constraints to future development. The two streamways located on the east side of the major ridgeline are Kill Creek and Spoon Creek. Kill Creek, the largest streamway, is located on the far eastern portion of the Sunflower property. The lowest elevations on the property, 780 ft. msl, are found along the banks of Kill Creek on the northeast corner of the property near 95th Street. Spoon Creek is west of Kill Creek and connects with Kill Creek at approximately 111th Street. Captain Creek is located on the far west side of the major ridge line that divides the Sunflower property. Captain Creek flows northwest and into Douglas County where it empties into the Kansas River.

### ***Environmental Concerns***

According to Sunflower officials, 53 sites on the property have been identified as "solid waste management units" (SWMU) having environmental contamination. These contaminants consist of concentrations of nitroglycerin, chromium, and lead from the production of large gun propellants. The largest contaminant on the site, however, is asbestos found in existing structures and wrapped around several miles of pipes used to carry steam throughout the facility. U.S. Army officials have acknowledged responsibility for the site and are currently conducting an "Environmental Baseline Study" to determine the extent of clean-up necessary. A Restoration Advisory Board (RAB), comprised of local residents, has been established by the Army to participate in the oversight of the clean up operation. In addition, the Kansas Department of Health and Environment (KDHE) and the Federal Environmental Protection Agency (EPA) will have responsibility for monitoring clean up efforts.

### ***Existing Surrounding Land Uses***

The land uses surrounding the Sunflower site are varied. Immediately to the north is Clearview City, a private, 230-unit multifamily residential development built to house Sunflower workers during World War II. Clearview City was annexed into DeSoto in the Spring of 1998. Some light manufacturing and warehouse operations are located just west of Clearview City on 103rd Street and north along Sunflower Road. Sunflower Park, an approximately 40-acre passive recreation area (trails and picnicking) is owned by Johnson County and is located adjacent to the north boundary of the Sunflower property, just west of the main entrance to Sunflower on 103rd Street. Lighted baseball diamonds, owned by the City of DeSoto, are located on the north end of the Sunflower property, adjacent to the west side of Sunflower Park. Northeast along Lexington Avenue is a new apartment complex under construction, a tire repair shop, Countryside Elementary School, and a recently completed contractors shop. Several large acreage residences are located between K-10 and 103rd Street.

Hunt Midwest Rock Quarry is located adjacent to the east side of the Sunflower property. A 10-year Conditional Use Permit (LE-CU-867) was issued for the rock quarry on January 24, 1991 and may be reconsidered for an continuation in January 2001. Long term future reclamation plans for the site include conversion to recreational (park and golf course) and residential uses.

The County's new, approximately 850-acre, Kill Creek Park is also adjacent to the Sunflower property, just south of the Hunt Midwest rock quarry. Projected to open in the year 2000, future development for the park includes extensive trails, picnicking, fishing, and limited group and day camping. Other land uses to the east are primarily agricultural and very low density residences. The areas to the south and west of the Sunflower site are predominately agricultural with some scattered, very low density residences. An approximately 50-acre park owned by the City of DeSoto is located adjacent to the south west boundary of the Sunflower Property. An approximately 3-acre Lexington Township Cemetery is located just north of the DeSoto park and adjacent to the Sunflower property.

### ***Transportation***

The only public entrance to the Sunflower property is from the gated entry located on 103rd Street, just south of Clearview City. Recently widened and resurfaced, 103rd Street is a paved, County-maintained roadway. Three interchanges on K-10 Highway provide direct access to the site: Lexington Road, Edgerton Road, and Evening Star Road. All three of these county-maintained roads are paved to 103rd Street. K-10 Highway now carries an average daily traffic (ADT) of over 25,000 vehicles. With the exception of 135th and 143rd Streets, all of the other roads south of K-10 that approach (but do not connect) with the site are gravel-surfaced. There are no public roads that pass through the Sunflower property nor is there any public transit service available to the site or to the DeSoto area.

Rail service is available to the site from a spur owned by the U.S Army. The site itself contains over 20 miles of standard gauge track. The spur connects with the Santa Fe/Burlington Northern tracks located to the north in DeSoto. The Sunflower site itself has an extensive internal road network comprised of over 120 miles of paved and unpaved streets in varying condition.

### ***Utilities***

Originally the Sunflower facility had its own utilities system. Over the past five years, however, the U.S. Army has sold or leased these utilities. In May 1998, the Army leased the sewer and water treatment utilities to the City of DeSoto. The existing sewer system has a 0.25 million gallon per day (MGD) capacity. A separate wastewater treatment facility built by the Army in 1992 for treating nitrogen has been leased to a private company, Kansas Wastewater, Inc., which commercially processes industrial wastewater. The existing water treatment facility has a storage capacity of over 13 million gallons making it capable of serving very large users. Power to the site is now provided by Western Resources (approximately 115,000 Kilovolts) with 40,000 Kilowatts of capacity available. Natural gas is available to the site from Williams Natural Gas Company. Telephone and fiber optic services are now available to the site.

### ***Public Safety***

Rural Fire District No. 3 now provides limited (nights, weekdays, and holidays) fire suppression service to the Sunflower facility on a contract basis. The facility has its own security service and does not rely on the County Sheriffs Office.

### ***Options***

Due to its size and location, the Sunflower facility offers a variety of options for land use planning. Given its current use and condition, the most obvious land use plan would be centered around industrial and manufacturing uses. These obvious industrial and manufacturing uses, however, are not necessarily the most viable and preferred uses. Absorption rates for such uses on over 9,000 acres would indicate that full development could take more than 50 years, and the resulting density of those uses would adversely affect much of the surrounding area.

Significantly, the Sunflower site offers a much more unique opportunity – to plan and create a landmark community in a single, planned development. The proposed plan is, therefore, based upon a “planned community” concept.

### **Planned Community Concept Objectives:**

The planned community concept seeks to achieve the following primary objectives for the property:

1. Minimize the impact of the development on surrounding properties and maintain the overall natural character of the area;
2. Recognize existing infrastructure and topography to best serve the property;
3. Establish land uses that are compatible with existing infrastructure and existing comprehensive plans, including the K-10 Corridor plan, with an emphasis upon high-tech, research industry, and business center uses;
4. Establish diverse, but compatible land uses to fully integrate sections of the property into a comprehensive whole, while ensuring that sufficient properties can be developed in a reasonable time period to make the development viable;
5. Establish a prominent community presence for governmental and public uses at the center of the development; and,
6. Provide for adequate green space and parkland in a community setting to create the park atmosphere and to provide accessible park ground as a buffer zone for surrounding properties.

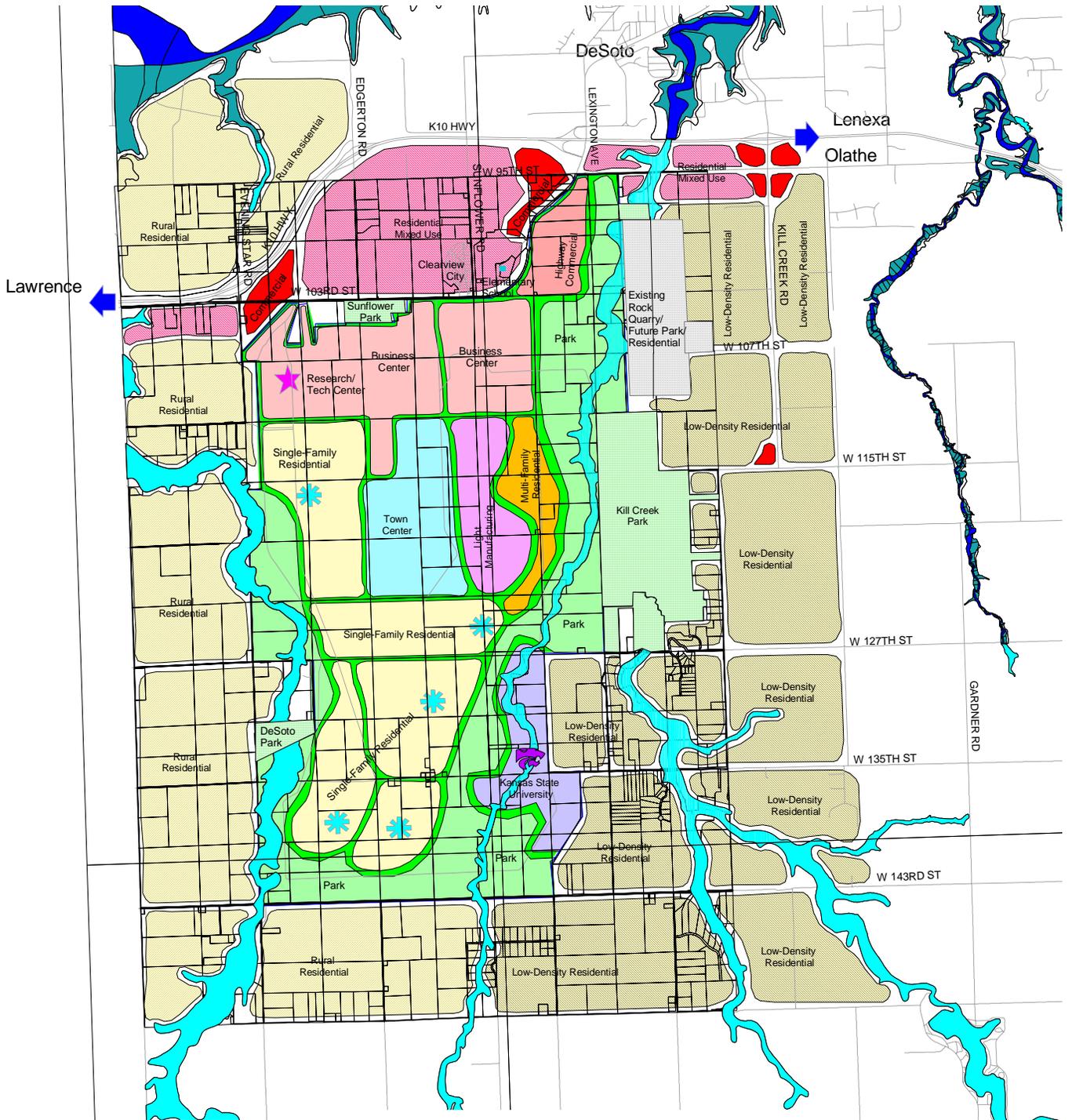
## **Planned Community Description - "Community in a Park"**

### *Within Sunflower Site*

The central theme of the plan is "Community in a Park" – approximately 3,450 acres of green space and defined park land uses woven throughout the property connecting separate land use areas. Park land is designated along the east, south, and west boundaries to take advantage of existing topography, which is partially wooded and partially flood plain. The park land provides a green belt buffer zone to the surrounding properties. The over 400 acres in the southeast corner of the site now leased by KSU as an agriculture research facility would be integrated as part of the community's open space.

The plan incorporates a substantial portion of property designated for residential use, planned at urban area design standards of three to four homes per acre. The residential areas would encompass nearly 3,000 developable acres. Multi-family residential areas would be available in a buffering area.

An area designated for light industrial uses would be available near the center of the development. That area accommodates existing facilities, including the water treatment plant and sewage plant. The area would allow limited light industrial and would seek to obtain industries related to high technology. The area would cover approximately 400 acres, which is considered adequate for projected industry absorption rates in the County.



### Future Land Uses - Concept Plan

- |                          |                         |                       |                           |                                  |
|--------------------------|-------------------------|-----------------------|---------------------------|----------------------------------|
| <b>Surrounding Area*</b> |                         | <b>Sunflower Site</b> |                           | <b>Pedestrian/Bicycle Trails</b> |
|                          | Low-Density Residential |                       | Business Center           |                                  |
|                          | Rural Residential       |                       | Highway Commercial        |                                  |
|                          | Residential Mixed Use   |                       | Town Center               | <b>Flood Plains</b>              |
|                          | Commercial              |                       | Kansas State University   |                                  |
|                          |                         |                       | Light Manufacturing       |                                  |
|                          |                         |                       | Multi-Family Residential  |                                  |
|                          |                         |                       | Park                      | <b>FLOODWAY</b>                  |
|                          |                         |                       | Single-Family Residential |                                  |
|                          |                         |                       | Neighborhood Center       |                                  |

\* Generally consistent with DeSoto and County Comprehensive Plans.

5280 0 5280 Feet

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A town center area of approximately 600 acres would serve as the prominent center piece. That area would serve as the location for schools, churches, government offices, medical facilities, and the typical down-town retail and small office establishments.

The remaining area would be designated for business center, highway commercial, and research and technology center. Those areas would encompass more than 2,000 acres, or roughly eight (8) times the size of the Sprint campus. The business uses would be located at the north boundary, which has the primary road access, but also maintains minimum impact to the surrounding uses. A potential site for a research/technical center, including a possible microchip manufacturer, has been identified for the northwest area of the Sunflower property.

### *Surrounding Sunflower Site*

Proposed land uses surrounding the Sunflower property have been coordinated with the recently adopted City of DeSoto *Comprehensive Plan* (1996) and the Johnson County *Rural Comprehensive Plan* (1991). The proposed uses surrounding the Sunflower property are dependent upon the prior development of the Sunflower site, including the installation of the adequate infrastructure (sewer, water, power, etc.) required to support development within and outside the Sunflower property.

The proposed uses north of 103rd Street consist of residential mixed uses including single and multi-family dwellings with limited retail, office, and light industrial businesses. Commercial uses are proposed for the Evening Star Road, Lexington Road and Kill Creek Road interchanges with K-10 Highway. The proposed land uses south of 95th Street and east of the Sunflower property are for park and low density residences (3 to 4 dwelling units/acre with sewers) uses. If sewers are not available the residential uses in this area should be restricted to a range of: 1 dwelling unit/2 acres to 1 dwelling unit/10 acres, depending upon the availability of adequate infrastructure. A small commercial area at 115th and Kill Creek Road is proposed to serve future park user needs generated by Kill Creek Park.

Proposed land uses for west of the Sunflower property are Rural Residential, ranging between 1 dwelling unit/10 acres to 1 dwelling unit/3 acres, also depending upon the availability of adequate infrastructure. This recommendation is based on the long-range limited availability of infrastructure in this area (primarily sewer and roads) and is consistent with the County *Rural Comprehensive Plan*.

## Proposed Land Uses:

### *Within Sunflower Site:*

BUSINESS CENTER	Mixed office, research and development, technology, <i>etc.</i>
HIGHWAY COMMERCIAL	Automobile-oriented retail, hotels, services, <i>etc.</i>
TOWN CENTER	Mixed use retail, office, public and quasi-public facilities ( <i>e.g.</i> schools, churches, medical facilities), civic, cultural and entertainment, residential
LIGHT MANUFACTURING	Low-intensity industrial
MULTI-FAMILY RESIDENTIAL	Five or more dwelling units per acre
SINGLE-FAMILY RESIDENTIAL	Three to four dwelling units per acre
PARK/OPEN SPACE	Parks, open space, trails network, recreation, <i>etc.</i>
KANSAS STATE UNIVERSITY	Agricultural research

### *Surrounding Sunflower Site:*

RETAIL COMMERCIAL	Retail businesses, including shopping centers and isolated retail establishments
RESIDENTIAL MIXED USE	Single and multi-family with limited retail, office and light industrial, <i>etc.</i>
LOW DENSITY RESIDENTIAL	If public sewers area available, three to four dwelling units per acre. If public sewers are <u>not</u> available, one dwelling unit per two acres to one dwelling unit per ten acres
RURAL RESIDENTIAL	Depending upon the availability of adequate infrastructure, one dwelling unit per 10 acres to one dwelling unit per 3 acres

## Implementation

The planned community concept allows redevelopment of the Sunflower plant site as one comprehensive whole, with the minimum number of segregated parcels. Linkages throughout the development would be enhanced by inter-connecting parks and a network pedestrian/bicycle path systems. It also establishes diversity of land uses that make the comprehensive development

viable, but it includes uses that have a minimum impact on surrounding properties.

Implementation of the plan will depend on the following factors:

1. A full and complete plan for the environmental remediation of the entire property;
2. A means to establish a redevelopment district over the property to provide means to attract development and to develop the park land atmosphere; and,
3. A cooperation agreement with GSA and the State of Kansas to complete the clean-up, to process the disposal of the property, and to attract quality high-tech business ventures.

**Recommendation:**

Planning staff has provided copies of the proposed conceptual land use plan to County staff, utility providers, various individuals, and has made presentation of the plan to:

- K-10 Association Executive Committee
- Johnson County Planning Commission
- Aubry, Lexington, McCamish, Gardner, and Olathe/Monticello/Shawnee Township Zoning boards
- Lawrence/Douglas County Planning Commission
- City of DeSoto
- OZ Entertainment Company
- U.S. General Services Administration (GSA)
- Sunflower Army Ammunition Plant Task Force

Based upon the favorable comments received, staff recommends approval of the attached proposed "Future Land Uses - Concept Plan" for the Sunflower Army Ammunition Plant.