
Final
Environmental Impact Statement
Page Avenue Extension

St. Charles and St. Louis Counties, Missouri

Section 6(f) Evaluation

Prepared for:
The Missouri Highway and Transportation Department

Prepared by:
Booker Associates, Inc.

Volume 4 of 4

November 1992

SECTION 6(f) EVALUATION

Route D, St. Louis - St. Charles Counties, Missouri
(Page Avenue Extension)

Bennington Place Westerly to Route 40
Job Nos. 6-U-D-803B, 6-U-D-803C and 6-U-D-803D

Prepared Pursuant to 42 USC 4332(2)(c) and 16 USC 4607-8

by the U. S. Department of Transportation
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and

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Cooperating Agencies
U. S. Army Corps of Engineers
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National Park Service, U. S. Department of the Interior
U. S. Fish and Wildlife Service, U. S. Department of the Interior

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**LIST OF TECHNICAL REPORTS
(Under Separate Cover)**

Air Quality Technical Report

Biological Survey and Reconnaissance Technical Report

Cultural Resources: An Overview

Energy Technical Report

Noise Technical Report

Plant Community and Wetlands Technical Report

Surface Water Quality Technical Report

Traffic Operations Analysis and Level of Service Evaluation

Wetlands Mitigation Report

Wintering Bald Eagle Study

**SECTION 6(f) EVALUATION
TABLE OF CONTENTS**

	<u>PAGE NO.</u>
EXECUTIVE SUMMARY	ES-1
1.0 INTRODUCTION	1
2.0 PROPOSED ACTION	1
2.1 PURPOSE	1
2.2 ALTERNATES	2
2.3 AFFECTED PROPERTIES - OVERVIEW	3
2.4 SECTION 6(f)/COMPLIANCE WITH SCORP	3
3.0 AFFECTED PROPERTY	4
3.1 CREVE COEUR LAKE MEMORIAL PARK (CCLMP)	4
3.1.1 Size	5
3.1.2 Ownership/Type	5
3.1.3 Available Activities	6
3.1.4 Existing Facilities	6
3.1.5 Use/Access	6
3.1.6 Relationship to Other Recreation Lands	8
3.1.7 Ownership Clauses	9
3.1.8 Unusual Characteristics	9
3.1.9 Impacts to Creve Coeur Lake Memorial Park	12
3.1.10 Combined Impacts from Bennington Place to Common Point	19
3.1.10.1 Red Alignment	19
3.1.10.2 Green-Black/Red Combination	23
3.1.10.3 Yellow-Black/Red Combination	26
3.1.10.4 Blue/Red Combination	29
3.1.11 Summary of Alternate Impacts	32
3.2 ANALYSIS OF ALTERNATIVES	37
3.2.1 Red Alignment	37
3.2.2 Utility Corridor Alternate Impacts of Unreasonable Magnitude	38
3.2.3 Blue Segment Impacts of Unreasonable Magnitude	42
3.2.4 Residential Displacement Comparisons	43

TABLES

2.1-1	MISSOURI RIVER CROSSING TRENDS (VEHICLES PER DAY)	2
2.3-1	RECREATIONAL PROPERTIES AFFECTED BY ALTERNATES	3
3.1-1	SUMMARY OF IMPACTS - RED ALIGNMENT	21
3.1-2	SUMMARY OF IMPACTS - GREEN-BLACK/RED COMBINATION	24
3.1-3	SUMMARY OF IMPACTS - YELLOW-BLACK/RED COMBINATION	27
3.1-4	SUMMARY OF IMPACTS - BLUE/RED COMBINATION	30
3.1-5	IMPACT EVALUATION MATRIX (ALL ROUTES)	33
3.3-1	RED ALIGNMENT/SECTION 601 MITIGATION PLAN IMPACT EVALUATION MATRIX	56

PHOTOGRAPHS

PHOTO 1	RED ALIGNMENT CCLMP BRIDGE (1990)	14
PHOTO 2	CREVE COEUR LAKE AND ENVIRONS (1960)	70
PHOTO 3	CREVE COEUR LAKE AND ENVIRONS (1971)	71
PHOTO 4	CREVE COEUR LAKE AND ENVIRONS (1973)	72
PHOTO 5	CREVE COEUR LAKE AND ENVIRONS (1980)	73
PHOTO 6	CREVE COEUR LAKE AND ENVIRONS (1986)	74
PHOTO 7	POSSIBLE ST. LOUIS COUNTY PAGE AVENUE EXTENSION ALTERNATES (1991)	75
PHOTO 8	PROPOSED CCLMP EXPANSION (1991)	76

REFERENCE MATERIALS

FIGURES

FIGURE 1	PARKS AND RECREATION AREAS
FIGURE 2	ALIGNMENT ALTERNATIVES
FIGURE 3	ADJACENT LAND USE
FIGURE 4	CREVE COEUR LAKE MEMORIAL PARK ACTIVITIES
FIGURE 5	PARKLAND MITIGATION AREAS - MITIGATION PLAN
FIGURE 6	CCLMP PROPOSED EXPANSION WITH MITIGATION PLAN
FIGURE 7	CCLMP NOISE IMPACTS
FIGURE 8	CCLMP VISUAL IMPACTS
FIGURE 9	JURISDICTIONAL WETLANDS - RED ALIGNMENT
FIGURE 10	SECTION 6(f) SUITABLE REPLACEMENT LANDS



EXECUTIVE SUMMARY

This Section 6(f) evaluation addresses potential impacts to recreational resources that would be affected by the Page Avenue Extension's Selected Alternate, the Red Alignment. These impacts are confined to Creve Coeur Lake Memorial Park (CCLMP) in St. Louis County, a park owned and managed by St. Louis County. Land and Water Conservation Fund (LWCF) Act monies have been utilized to assemble and improve CCLMP, therefore making it a property subject to Section 6(f) of the LWCF Act.

Creve Coeur Lake Memorial Park

The Red Alignment of the Page Avenue Extension will traverse CCLMP by means of a bridge structure and embankment at the southern end of the core portion of this facility. About 37 acres of park will be directly affected (25.8 acres under piers or fill and 11.2 acres by aerial easement). Construction impacts and/or operational impacts will be minimized and mitigated but will extend beyond those 37 acres. Without question, utilization of these public lands is the most problematic aspect of the Red Alignment.

The State of Missouri asserts that there is no reasonable alternative to the use of CCLMP for the Page Avenue Extension. Problems and deficiencies associated with alternate routes in general, and the three CCLMP physical-avoidance segments (Green-Black, Yellow-Black and Blue) that could be combined with the Red Alignment in particular, would represent impacts of individual or collective extraordinary magnitude, rendering each unacceptable. Moreover, the State of Missouri believes that the Section 601 Mitigation Plan, in concert with related initiatives, provides more than adequate replacement lands to meet all Section 6(f) requirements. Section 601 of the Pipeline Safety Act of 1992 may afford other opportunities to address impacts to CCLMP as well.

With specific reference to the Green-Black/Red, Yellow-Black/Red and Blue/Red Combinations, relative to the Red Alignment, the following facts support the State of Missouri's assertion that there is no reasonable alternative to the use of CCLMP for the Page Avenue Extension:

- ◆ The Red Alignment complies with more than two decades of local planning. The other routes do not comply with local planning.
- ◆ The Red Alignment agrees with existing local development patterns. The other routes are at severe variance with local development patterns.
- ◆ The Red Alignment utilizes an especially preserved corridor, designated for the Page Avenue Extension twenty years ago. Only one other route, the Blue/Red Combination, would make even modest use of this preserved corridor.
- ◆ Given the above, the Red Alignment will displace only 20 households, including its CCLMP mitigation. In contrast, the Green-Black/Red,

Yellow-Black/Red and Blue/Red Combinations would displace 133, 92 and 75 homes, respectively. Relative to estimated population losses, these routes would displace from 276% to 567% more people than the Red Alignment. All told, only the Red Alignment's residential impacts are in line with recent State of Missouri highway project experience.

- ◆ The Red Alignment will have comparatively few major utility impacts. The Green-Black/Red and Yellow-Black/Red Combinations attempt to reduce residential impacts by using an existing utility corridor, presenting a large array of technical problems. On a cost basis, relative to utilities, these routes would cost 375% and 438% more than the Red Alignment. The Blue/Red Combination would cost 88% more relative to utilities, primarily because of large numbers of residential service disruptions.
- ◆ The Red Alignment's habitat-related impacts to CCLMP will be fully mitigated as part of the Section 601 Mitigation Plan that includes the substantial enlargement of that park for outdoor recreational purposes. Habitat losses associated with the other routes would not be mitigated to the same degree. Relative to the Blue/Red Combination, its habitat losses would be a virtual mirror image of those associated with the Red Alignment without the CCLMP enlargement. The Green-Black/Red and Yellow-Black/Red Combinations would devastate much of the linear ecosystem that currently exists in the utility corridor, again without the expansion benefits to the park.
- ◆ The Red Alignment, including its CCLMP additions under the Section 601 mitigation plan, will cost less than the CCLMP-avoidance routes.

The core of the mitigation effort associated with the Red Alignment will be the Section 601 CCLMP Mitigation Plan, most of which was first negotiated with and endorsed by St. Louis County in 1991. This \$6,000,000 or more effort represents a major commitment to provide more than mere replacement land to CCLMP. It will result in a much larger, enhanced CCLMP that will better serve the recreational needs of local residents and visitors. Moreover, there is no local funding to expand or improve CCLMP foreseeable at this time.

It should be noted that Section 601 of the Pipeline Safety Act of 1992 authorizes the U. S. Secretary of Transportation to waive Section 4(f) evaluation of the Red Alignment's passage through CCLMP. However, it also mandates the major mitigation commitment relative to the Red Alignment's implementation as a prerequisite to the Section 4(f) waiver. Substantive agency and local input will be part of these mitigation efforts.

Pertinent aspects of the Pipeline Safety Act of 1992 are discussed at length in the Prefatory Note to Volume I of this FEIS as well as Section 3.3.1 of this volume.



SECTION 6(f) EVALUATION FOR THE PAGE AVENUE EXTENSION

1.0 INTRODUCTION

The purpose of this Section 6(f) Evaluation is to provide information, analysis and assessment of existing conditions as well as expected impacts and conversion needs, relative to the plans of the Missouri Highway and Transportation Department (MHTD) for the Page Avenue Extension in St. Louis County. Section 6(f) lands are those which were purchased by, or have had improvements made with, federal funds provided by the Land and Water Conservation Fund Act. The single Section 6(f) recreational resource potentially impacted is Creve Coeur Lake Memorial Park (CCLMP). Sections 2.0 and 3.0 discuss the proposed action, subsequent impacts, and conversion needs. Photographs, reference materials, and ten figures, basically maps, conclude this volume.

2.0 PROPOSED ACTION

The Page Avenue Extension Selected Alternate, the Red Alignment, will be a fully limited, access-controlled freeway facility extending Page Avenue from Bennington Place in St. Louis County across the Missouri River into St. Charles County and will terminate at Route 40/61 (future Route I-64). The proposed typical section would be ten-lanes wide with a 26-foot wide median from Bennington Place to Route 94 and along Route 94. For the primary route along Route N to Route 40/61, the typical section will be four lanes with a 70-foot median. Overall, the minimum right-of-way will be 250-feet wide. A detailed discussion of the various build alternates is included in Section 2.0, Alternatives, in the Final Environmental Impact Statement. Summary descriptions are included below.

2.1 PURPOSE

The primary purpose of the Page Avenue Extension is to create an additional Missouri River crossing to serve increased traffic demands between St. Louis and St. Charles Counties. Traffic volume on the Page Avenue Extension's crossing in the Year 2015 is expected to be 73,500 vehicles per day. Table 2.1-1 identifies the historical trends and projected demand for Missouri River crossings with and without the Page Avenue Extension.

TABLE 2.1-1
MISSOURI RIVER CROSSING TRENDS (VEHICLES PER DAY)

Route	1970	1980	1989	Without Page Avenue Ext. 2015	With Page Avenue Ext. 2015
I-70	57,900	75,800	141,970	230,000	188,700
115	15,200	16,900	18,050	93,100	72,400
40/61	8,800	22,600	41,900	80,800	69,700
Page Ext.	-----	-----	-----	-----	73,500
	81,900	115,300	201,920	403,900	404,300

2.2 ALTERNATES

Two basic alternate routes, the preferred Red Alignment and the Green Alignment, were formalized in 1986 for the extension of Page Avenue. The Red and Green Alignments were described in MHTD's 1986 Reconnaissance Report/St. Louis-St. Charles Counties Page Avenue Extension/New Missouri River Crossing. At that time, the Green Alignment was a CCLMP-avoidance route. However, in 1989 the St. Louis County Department of Parks and Recreation leased a 44.3 acre tract in its path primarily for use as a polo facility and a model airplane flying club area. The leased tract is located south of CCLMP.

The Red Alignment proceeds northwesterly from Bennington Place utilizing a corridor preserved by St. Louis County for the Page Avenue Extension since the early 1970s. It then traverses Creve Coeur Lake Memorial Park, crosses the Missouri River as well as the KATY Trail State Park, and shadows Hemsath Road to Route 94. It then assumes the existing right-of-way of Route 94 and heads west-southwest until Route N. It parallels Route N to Route 40/61 before joining Route N at its terminus.

The Green Alignment would proceed southwesterly from Bennington Place and then westerly across the Missouri River as well as the KATY Trail State Park, upstream of the Red Alignment crossing. It would continue to Kisker Road at Route 94 before heading northwest to Mexico Road and on to Route I-70.

On November 2, 1990 the Missouri Highway and Transportation Commission adopted the Red Alignment as the State of Missouri's Selected Alternate for the Page Avenue Extension. This action followed environmental analysis and review culminating in issuance of the Draft Environmental Impact Statement and accompanying Section 4(f) and 6(f) Evaluation in June of 1990, a combined location and design public hearing on June 28, 1990, and an extended period for written comments. Public hearing comments and written comments have supported or opposed the Red Alignment with or without suggested modifications. The U. S. Department of Interior expressed concerns that there might be feasible alternative alignments in St. Louis County that could avoid Creve Coeur Lake Memorial Park.

Subsequently, the Green-Black/Green Combination and later the Green-Black/Red, Yellow-Black/Red and Blue/Red Combinations were conceptualized to avoid CCLMP. The Red Alignment and each of its variants coincide at a common point approximately 3,000 feet west of Creve Coeur Mill Road. From that point onward to the terminus at Route N they are identical as part of the Red Alignment.

The Green-Black/Red and Yellow-Black/Red Combinations each make use of an east-west utility corridor south of CCLMP to pass from the developed uplands to the floodplain below. The Blue/Red Combination makes partial use of the Red Alignment's preserved corridor before crossing a residential area and utilizing the corridor between CCLMP and leased parklands. This facility would not directly require parkland from CCLMP or the leased park area. However, it would produce noise impacts that constitute takings for Section 6(f) purposes.

2.3 AFFECTED PROPERTIES - OVERVIEW

Public and private recreation areas within the project area are illustrated in Figure 1.

Only one Section 6(f) property would be impacted by the Page Avenue Extension. It is Creve Coeur Lake Memorial Park (CCLMP).

Table 2.3-1 identifies which routes would affect CCLMP.

TABLE 2.3-1
RECREATIONAL PROPERTIES AFFECTED BY ALTERNATES

	<u>Creve Coeur Lake Memorial Park (CCLMP)</u>
Red Alignment	X
Green-Black/Red Combination	No Section 6(f) Effect
Yellow-Black/Red Combination	No Section 6(f) Effect
Blue/Red Combination	X

Section 3.0 describes Creve Coeur Lake Memorial Park in St. Louis County and the associated impacts of the Red Alignment or its combinations.

2.4 SECTION 6(f)/COMPLIANCE WITH SCORP

16 USC 460l-8, commonly known as Section 6(f) of the Land and Water Conservation Act, requires that ... "No property acquired or developed with assistance under this section shall, without the approval of the Secretary, be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only if he finds it to be in accord with the then existing comprehensive Statewide outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreation properties of at least equal fair market

value and of reasonably equivalent usefulness and location." ("Secretary" refers to the U. S. Secretary of the Department of the Interior.) The authority to approve Section 6(f) land conversions has been delegated to the Regional Directors of the National Park Service (NPS).

The Missouri Outdoor Recreation Plan (1991), in two volumes, is the State of Missouri's Statewide Comprehensive Outdoor Recreation Plan (SCORP) for the 1991-1996 period. Missouri has regularly prepared such documents pursuant to its participation in programs and grants afforded by the Land and Water Conservation Act. The SCORP's Land and Water Conservation Fund (LWCF) priorities play a critical role in LWCF grant activities across Missouri. The document does not address the traversal of Creve Coeur Lake Memorial Park by the Red Alignment of the Page Avenue Extension. Its scope is much more wide-ranging than specific facilities.

In general terms, however, it does reflect concerns, report needs and embrace policies that suggest that the mitigation, i.e. expansion and improvements, related to CCLMP associated with the Red Alignment's implementation will advance the cause of outdoor recreation in and around St. Louis County. For example, the larger and improved CCLMP will help meet these state and local LWCF priorities described in Volume I: Assessment and Policy Plan of the SCORP:

1. Expand outdoor recreation opportunities for water-based activities. (p. 79)
2. Link existing facilities and expand recreational opportunities by developing new recreational trails, in this instance connecting CCLMP to the KATY Trail State Park. (pp. 81-82, 84)
3. Acquire environmentally sensitive lands for preservation as well as restore, enhance and create wetlands. (p. 82)
4. Preserve open space in an urban area. (p. 83)
5. Acquire buffer zones around an existing recreation area. (p. 84)

Missouri's SCORP strongly supports additional recreational acres and opportunities. The proposed mitigation measures are in keeping with the SCORP. Other Section 6(f) issues are addressed elsewhere in this document.

3.0 AFFECTED PROPERTY

Creve Coeur Lake Memorial Park (CCLMP) is the only potentially affected public recreation property. It is located in St. Louis County, Missouri. As noted previously, CCLMP is a Section 6(f) property.

3.1 CREVE COEUR LAKE MEMORIAL PARK (CCLMP)

CCLMP is the St. Louis County Department of Parks and Recreation's oldest and second largest park. By itself, the core portion of CCLMP represents more than 10.6% of the St. Louis County Government's 10,746 acres of park

lands. It extends approximately 13,800 feet along Creve Coeur Mill Road and 7,200 feet along Marine Avenue. Within CCLMP, Creve Coeur Lake covers about 300 acres. Most of CCLMP is located on the Missouri River's floodplain with adjacent land uses primarily being residential and agricultural (Figure 3).

3.1.1 Size

The core portion of Creve Coeur Lake Memorial Park comprises approximately 1,141 acres of land and water acquired since 1937 through gifts and purchases by St. Louis County. It was assembled as follows:

400.00 Acres	(1937 Acquisition)
+ 29.90 Acres	(1944 Acquisition)
+ <u>710.97 Acres</u>	(1971 Acquisition with LWCF money)
1,140.87 Acres	(Core CCLMP Total)

Red Alignment or Blue/Red Combination CCLMP impacts are subject to Section 6(f) review and evaluation because U. S. Department of the Interior, Bureau of Outdoor Recreation, Land and Water Conservation Fund Act (LWCF) grants were used for acquisition, lake dredging and resident relocation. In 1989, a twenty-five year lease was utilized to retain a non-contiguous tract of land south of CCLMP primarily for use as a polo facility. This tract was not acquired with LWCF money, is not subject to Section 6(f), and would not be directly impacted by the Red Alignment or its variants. However, the Blue/Red Combination could produce indirect impacts within both the core and leased portions of CCLMP, i.e. noise.

3.1.2 Ownership/Type

Creve Coeur Lake Memorial Park provides outdoor recreation activities for the residents of St. Louis County, its environs and visitors to Metropolitan St. Louis. It is one of a network of facilities owned and maintained by the St. Louis County Department of Parks and Recreation.

As previously indicated, CCLMP was assembled, in part, by using a grant from the U. S. Department of the Interior's Land and Water Conservation Fund (LWCF). Later, additional funds from the Department of the Interior and the U. S. Environmental Protection Agency were used for removing sediment from Creve Coeur Lake. LWCF grants were used for land acquisition, dredging and the relocation of former residents. Information made available by Missouri's Department of Natural Resources reports three LWCF grants:

1.	29-00292	(1971-1977)	\$1,824,100.95
2.	29-00478	(1973-1977)	405,000.00
3.	29-01146-B	(1983-1984)	<u>92,050.00</u>
	Total LWCF Funding		\$2,321,150.95

St. Louis County also received an Environmental Protection Agency (EPA) grant of \$683,738.00 in 1980 (EPA Grant CS 805479-01-03) to fund dredging of Creve Coeur Lake. Accordingly, the Federal Government's total reported investment in CCLMP surpasses \$3,000,000.

3.1.3 Available Activities

Creve Coeur Lake Memorial Park provides numerous opportunities for both active and passive recreational pursuits. Most active uses occur in the northern two-thirds of the park (Figure 4). Active pursuits include archery, softball, tennis, sailing, rowing, sail-boarding, ice skating, disc golf and jogging. Passive activities include picnicking, walking, sunbathing, sightseeing, bird watching and fishing. Special events also take place such as power boat racing once a year. Additionally, there is an active rowing club on the northern shore that uses the lake for practice with racing sculls. Swimming is not allowed in the lake due to excessive bacteriological conditions. The State of Missouri's Department of Conservation has determined that Creve Coeur Lake is contaminated with chlordane. Therefore, carp and channel catfish caught there cannot be eaten.

3.1.4 Existing Facilities

Existing facilities in the core portion of Creve Coeur Lake Memorial Park include:

- ◆ Four picnic shelters
- ◆ Four picnic areas with tables
- ◆ Four playgrounds
- ◆ Two boat access areas
- ◆ One archery range
- ◆ One disc golf field
- ◆ Four multi-purpose athletic fields
- ◆ One cross country track course
- ◆ Tennis courts

Additionally, a polo field is located in the leased, non-contiguous area, which is not Section 6(f) property.

3.1.5 Use/Access

The St. Louis County Parks and Recreation Department has maintained detailed records of activity and facility usage during recent years.

For example, the 1988 summary of monthly activity reports for Creve Coeur Lake Memorial Park indicated annual use by 84,083 persons. Picnicking was the most popular park activity with an estimated 51,903 persons participating. Athletic and spectator activities were enjoyed by 32,325 park users during 1988. There is a strong demand for the available facilities. At times, this intensive use presents a problem common to urban parks. CCLMP provides substantial passive recreation opportunities as diverse as people watching, bird watching or sailing. Other people enjoy more active pursuits, often accompanied by loud music. Such

conflicts frequently occur in urban park environments that provide passive resources as well as active use areas.

The lake and wooded area at the southern end of CCLMP are remote from the active use areas. This locale affords secluded areas for passive recreational pursuits. Creve Coeur Lake has a limit on the sizes and types of motors (electric only) used in normal boating activity. This benefits the aquatic environment as well as preserves the serenity of the lake and woodland setting. However, there are times during the day when traffic levels on Marine Avenue are so great that the resultant noise disrupts this otherwise quiet location. Additionally, the lake is occasionally used as a site for hydroplane races which generate noise throughout CCLMP.

Future recreation demand for the area immediately adjacent to Creve Coeur Lake Memorial Park has been identified in the document, Recreation Spaces, Community Places, 1982-2000, prepared by St. Louis County. Various Park Planning Districts were analyzed according to future population projections, recreational standards and existing facilities. The net result was the identification of unmet demand for certain facilities as well as underutilized surplus facilities in some instances.

Creve Coeur Lake Memorial Park is the major park in "Park Planning District 6B," bounded by the old Norfolk and Southern Railroad tracks to the north, the Missouri River to the west, Route I-270 to the east and Olive Street Road (Route 340) to the south. Recreational needs by 2000 that will not be satisfied by existing facilities, as indicated for District 6B, included twenty baseball/softball fields, two football/soccer fields, seven tennis courts, four picnic shelters, eleven miles of bicycle trails, six miles of fitness trails, seven miles of equestrian trails and twenty miles of hiking and nature trails. The lack of funding precluded implementation of most of these recommendations.

In 1991, St. Louis County's Parks and Recreation Department formulated a new conceptual plan for Creve Coeur Lake Memorial Park. This plan assumes the Page Avenue Extension Red Alignment's passage through CCLMP as well as implementation of a 1991 mitigation program that is discussed in Section 3.3.1. St. Louis County's plan, illustrated by Figure 6, would use the Page Avenue Extension as a major feature separating passive and active recreational uses. In general, active uses would be dispersed north of the roadway (the activity area) while passive uses would occur to the south (the nature area). At this time, there is no funding for St. Louis County to expand CCLMP on its own. It should be noted that any future CCLMP development will be subject to Section 6(f) requirements as well as other laws and regulations.

Traffic conditions along Marine Avenue and within the road and parking areas adjacent to the lake are often so crowded that access to the boat ramp area has to be restricted or closed. Under conditions of limited access, only one vehicle is allowed to enter the area for each vehicle that departs.

The existing access routes to Creve Coeur Lake Memorial Park are:

- ◆ The primary entranceway, from Marine Avenue, is from the east, collecting traffic from Dorsett Road; and
- ◆ The secondary entranceway, from the west, is also along Marine Avenue with traffic originating from Creve Coeur Mill Road.

3.1.6 Relationship to Other Recreation Lands

The very size of Creve Coeur Lake Memorial Park demonstrates its importance to recreation and leisure activity in the western portion of St. Louis County. Surrounding land suitable for park and recreation development exists for the expansion of present facilities. The St. Louis County Department of Parks and Recreation has always coveted the area south toward and including the land already leased from the St. Louis Metropolitan Sewer District (MSD) as possible expansion for Creve Coeur Lake Memorial Park.

In August of 1989, St. Louis County and MSD entered into a twenty-five year lease arrangement for 44.32 acres of land subject to yearly review. As part of the lease, St. Louis County has the right to construct improvements incidental to activities including, but not limited to, the following: polo fields, paths, bike trails, softball fields, soccer-football fields, tennis courts, parking lots, shelters, play areas, restrooms or comfort stations, picnic areas, nature areas or preserves. Termination of the lease shall not occur for a period of five years from execution of the lease, August 10, 1989. Following that five-year period, in 1994, either party may terminate the lease by providing written notice a minimum of 120 days in advance.

Other recreation areas and facilities in proximity to Creve Coeur Lake Memorial Park include:

- ◆ Creve Coeur Legion Park providing baseball/softball diamonds southwest of CCLMP (semi-public);
- ◆ Chesterfield Golf Course on River Valley Road, west of CCLMP, providing a nine-hole golf course (privately owned - open to the public);
- ◆ Creve Coeur Recreation Complex on Creve Coeur Mill Road, immediately northwest of CCLMP, - providing a golf practice driving range (privately owned - open to the public);
- ◆ Little Lake Golf Range on Creve Coeur Mill Road comprising 75 acres to the southwest of CCLMP and offering golf lessons, a golf driving range and miniature golf (privately owned - open to the public);
- ◆ Hale Irwin Golf Learning Center (privately-owned - open to the public); and
- ◆ KATY Trail State Park in St. Charles County is approximately two miles distant but there is no access across the Missouri River.

3.1.7 Ownership Clauses

The core portion of CCLMP, approximately 1,141 acres, is owned and maintained solely by the St. Louis County Department of Parks and Recreation. A majority of its property was purchased, in part, using a Land and Water Conservation Fund Act grant provided by the U. S. Department of the Interior. Consequently, the permanent park area is subject to the requirements of the Land and Water Conservation Fund Act, Section 6(f).

3.1.8 Unusual Characteristics

Creve Coeur Lake Memorial Park is an interesting tract of land with various natural features located within its boundaries. These features enhance the value of the park for St. Louis County residents and its other visitors. Several unusual characteristics are subsequently detailed.

Creve Coeur Lake

This oxbow lake, the central feature and namesake of CCLMP, is located in a region known as the Missouri Bottoms in west central St. Louis County. It represents a major recreational and ecological asset for the area inasmuch as it is the only natural lake in St. Louis County of any size, and one of the few in Missouri. Geologic studies indicate that it was formed when an old meander of the Missouri River was halted in its easterly advance by the limestone bluffs. After retreating, it left the oxbow lake. Meander loops and oxbow lakes are not characteristic features of the present-day lower Missouri River. This lake is one of a limited number along the Missouri River as well as the only one near St. Louis west of the Mississippi River. Development of this oxbow lake occurred several thousand years ago during a period of deglaciation. At that time, the river carried a slurry of very fine colloids produced by glacial actions upon igneous and metamorphic rocks of the Canadian Shield.

The recorded history of the lake dates back to the late 1700s, the advent of the earliest white settlements in the area. At that time, and for many years thereafter, there was also a smaller, upper lake, southwest of the present lake. Maps prepared as late as 1920 indicate both lakes. About that time, Creve Coeur Creek was altered by levees and diverted into the surviving lake. "Upper Creve Coeur Lake" no longer exists, but the depression of its outline is still evident on topographic maps. Flooding is a frequent occurrence there.

By the early 1900s, Creve Coeur Lake was a major recreational facility and resort for St. Louis and its suburbs. It was served first by the Missouri Pacific Railroad and later by a street car line which carried passengers from central St. Louis and other points to the lake. Privately-owned cabins were constructed on the north shore of the lake in the vicinity of what is now Marine Avenue.

The area declined during Prohibition (1920-1933) and never fully regained its original popularity, although hydroplane races were frequently held there prior to World War II. Beginning with St. Louis County's purchase

in 1937, and subsequent development as a recreation resource, Creve Coeur Lake has steadily increased in its importance and value to generations of St. Louisians.

During the mid-1970s, Creve Coeur Lake was dredged to an average depth of ten feet with a surface area of approximately 300 acres. It still provides attractive opportunities for sailing and fishing, as well as one of the few lake beaches for sunbathing in Metropolitan St. Louis. However, siltation has been a chronic problem and dredging is needed again. As previously noted, bacteriological and chlordane contamination prevent, respectively, swimming and the human consumption of carp and channel catfish.

Creve Coeur Creek

The drainage area of Creve Coeur Creek extends south and southwest of the lake, covering approximately 27.5 square miles. Primary land uses in the watershed are residential and commercial. Creve Coeur Creek flows into the lake at its southern end. It exits the northern end of the lake on its way to the Missouri River.

Dripping Spring (Waterfall)

Another water feature associated with Creve Coeur Lake is a small spring which emanates from the limestone bluff above its southeastern edge. The spring's flow forms a small waterfall that drains into the lake. This setting has been furnished with benches to create a pensive environment.

Habitat

The heavily wooded southern portion of Creve Coeur Lake Memorial Park, through which Creve Coeur Creek passes, is a mixture of woodlands and wetland habitats. Many different species of birds, small mammals, and reptiles, as well as a variety of wetland flora, inhabit this natural area. All of CCLMP and its environs are also within the Mississippi River Flyway for migratory waterfowl.

The Red Alignment of the Page Avenue Extension, beginning at the western end of Page Avenue, will traverse residential lands from Bennington Place to the upper edge of the Missouri River bluff. Included within this section is a preserved mowed grass right-of-way approximately 250 feet in width sustaining a small area of trees. The Missouri River bluff is a high quality upland woods dominated by oaks (Quercus sp.) and maples (Acer saccharium). It has a well-developed shrub and tree sapling strata and a wide variety of forbs.

At the base of the bluff, extending to Creve Coeur Creek, are a series of small wetland community types. These include a small section of thin canopied wetland woods. Willows (Salix nigra) dominate the thin canopy. Wetland habitats north of the Red Alignment include areas having a well-developed herbaceous layer of sedges (Carex sp.), grasses (Leersia sp.), and cattails (Typha sp.). A second community dominated by a dense stand of cattails (Typha sp.) with a scattering of other herbaceous species

extends to a small embayment of Creve Coeur Lake and continues for a few yards on the western side of the embayment. A dense willow (Salix nigra) dominated tree community extends to Creve Coeur Creek. All plant communities in this section are wetland communities. Moreover, the criteria of hydric soils and hydrology to be classified as wetlands are also satisfied.

Jurisdictional wetlands have been delineated and are shown on Figure 9.

The area from Creve Coeur Creek to Creve Coeur Mill Road is partially wooded. Although the dominant woody species are willows (Salix nigra) and cottonwood (Populus deltoides), species suggesting a wooded wetland, the herbaceous strata are mainly upland old field invaders, goldenrod (Solidago sp.) and dock (Rumex sp.).

Dredged Material Area

Most of the west bank of Creve Coeur Lake is an elevated area comprising over four million cubic yards of dredged material. This manmade feature was created with deposited sediments from past dredging of the lake. This area is closed to the public. In the past, various recreational development plans were proposed for this area but none were implemented. Figure 6 depicts future uses of this area as envisioned by St. Louis County's Department of Parks and Recreation in 1991.

Upper Park - Limestone Bluff

Limestone bluffs of the St. Louis and Ste. Genevieve formations (Mississippian Age) are present along the eastern boundaries of Creve Coeur Lake Memorial Park. They contribute to the beauty of the park and constitute natural landmarks in western St. Louis County. The upper portion of Creve Coeur Lake Memorial Park, along the ridge of the wooded bluff, contains an archery range, two baseball diamonds, a tennis court, and multiple picnicking and playground facilities. The scenic view from the bluff area overlooks the park and floodplain out to the Missouri River.

Natural Landforms and Manmade Features

The existing conditions provide a varied texture of visual qualities associated with CCLMP and adjacent areas. The existing landforms are a mixture of bluffs and floodplain, with Creve Coeur Lake as a focal point of interest and activity. Major landscape features consist of woodlands along the bluff, bottomland woodlands south of the lake and a mixture of fields and sparsely wooded areas over the remainder of the park. The western edge of the park is bounded by a Creve Coeur Mill Road, a railroad track, and high power electric transmission lines and tower structures. A two-lane road runs through the northeastern portion of the park and a parking lot with a boat ramp is provided along the eastern edge.

3.1.9 Impacts to Creve Coeur Lake Memorial Park

Size and Location

The Red Alignment would cross the core portion of Creve Coeur Lake Memorial Park, south of the southern tip of Creve Coeur Lake, for approximately 4,650 feet east to west. The right-of-way through the park, including an aerial easement, would amount to approximately 37 acres. For approximately 2,800 feet, the roadway would be atop a bridge built on piers. The remaining section would be on fill material, 650 to 500 feet wide from north to south for 1,850 feet across the park, which would physically convert parkland to road. The bridge would be elevated 60-120 feet above ground level. It would impact the surface during construction over an area larger than its aerial easement. Once built, any operational impacts, noise and visual excepted, would tend to be concentrated at surface level along its length.

Although the Blue/Red Combination would avoid direct impacts to CCLMP by utilizing the narrow corridor (approximately 875 feet) that separates the park and the leased area to the south, it would produce construction-related and operational proximal impacts. Noise and visual impacts, for example, will be experienced both north and south of this route. Proximal impacts to CCLMP associated with the Green-Black/Red and the Yellow-Black/Red Combinations would be negligible.

Land Required

The Red Alignment's bridge structure and embankment would require the conversion of parkland as well as an aerial easement. The actual physical transformation of parkland to road would amount to approximately 25.8 acres, including the support piers of the bridge structure and the embankment to be constructed on fill material. The aerial easement, which would not prevent the use of the parkland below the bridge, would be about 11.2 acres. Accordingly, the total CCLMP right-of-way and aerial easement would be 37.0 acres. This taking requires replacement per Section 6(f).

Visual Impacts within CCLMP

The Red Alignment will require construction and operation of a concrete pier-supported bridge and highway descending from the bluff to pass over and through bottomland woodland areas and over Creve Coeur Creek. It will then cross a manmade embankment on the western side of the park. The primary extended vista in the park is to the south or southwest from the waterside parking lots and boat ramp on the northern and eastern shores of Creve Coeur Lake, which will be a minimum distance of 2,000 feet from the proposed bridge. The proposed structure, to be placed to the south of the lake, would become a component of this extended vista of open water and distant woods. The visibility/appearance of the bridge will change with the seasons.

Visual impacts of constructing the Red Alignment through CCLMP will affect commuters and users of the park. Commuters and other users of the proposed highway traveling from the east will have a view of the

floodplain from the bluff. Further along the bridge, the proposed 42-inch side barrier will all but eliminate any scenic views of the floodplain below. The side barriers are present to reduce the noise levels from the highway. (This design feature is subject to review by the Design Committee established by Section 601 of the Pipeline Safety Act of 1992 in the context of projected noise levels.)

From the park user's perspective the major direct impact will be for those persons who hike the wooded area in the southern portion of the park and the bridge. The southern area is heavily wooded with maturing canopy and abundant understory during the spring-to-fall seasons and, therefore, at ground level the bridge will not be easily visible. Once the park user is within 40-60 feet of the underside of the bridge, the supporting piers may become evident as well as the cleared area under the bridge. During the winter season, the foliage will be gone and the bridge will become more prominent at close range. However, this is also a time of few park users.

Other users of the park, primarily boaters, fishermen, users of the picnic tables and grills, and users of the athletic fields will be aware of the bridge as a component of a distant view that will be a minimum of 2,000 feet and as much as 5,000+ feet away from the boat ramp and shoreside activities. The users in these boating and shoreside activities are primarily focused on their specific activity and, therefore, the bridge in the distant view will not be a major visual impact.

The 1990 photographic rendering on the following page illustrates how the bridge structure will be integrated as an element of the existing visual setting. The actual design features of the bridge will be developed in conjunction with the Section 601 Design Committee. The view in the photograph was taken from a helicopter at an elevation of 100-150 feet. The bridge will be less noticeable from the ground because more of the bridge would be hidden by tree cover. Also, at ground level the impact of the bridge as an element in the vista will be less than illustrated because of the greater forefront provided by the lake at ground level.

On the western side of the park, the roadway will be located on fill material at an elevation approximately 40 feet above ground. The resulting footprint would require 650 feet, north to south on the eastern edge and taper to 500 feet north to south on the western end of the roadway as it approaches Creve Coeur Mill Road. Side slopes will be a 1-foot vertical for each 4-foot horizontal dimension, thus the view will be one of a gently sloping hill. North of the roadway is the area where the dredged spoil materials were placed during the dredging of Creve Coeur Lake in the late 1970's. There are no park facilities in this portion of the park and road access is limited.

South of the proposed roadway and berm are open athletic fields that are used by various sports groups. Users in this category come to the facility focused for their specific event or activity. The adjacent roadway and berm will have limited visual impacts for these users.



Proposed Bridge over Creve Coeur Memorial Park
St. Louis County

For purposes of this analysis, the visual impact areas are considered to be 100 feet on either side of the right-of-way for the roadway on fill material and at 60 feet on either side of the roadway through the wooded areas. Near the open water area the visual impact would extend out to 1,000 feet north of the roadway. Sailing occurs in the northern and central portion of the lake, more than 2,000 feet away from the proposed bridge.

Figure 8 illustrates the visual impact area in CCLMP for the Red Alignment. It totals 23.1 acres. However, 18.6 acres of the visual impact area are already included within the replacement lands noted for the noise impact replacement lands, discussed subsequently. The remaining 4.5 acres, requiring replacement for visual impacts, are those areas that have existing background noise levels at or exceeding 57 dBA.

The visual impact of the Blue/Red Combination would be for all purposes negligible. The Blue/Red Combination would be outside of the park boundary and hidden by the wooded areas.

Noise Impacts within CCLMP

Both the Red Alignment and Blue/Red Combination, utilizing the Blue Segment, will produce noise impacts within CCLMP at or above a noise level of 57 dBA. Neither the Green-Black/Red Combination nor the Yellow-Black/Red Combination would produce comparable noise impacts anywhere within CCLMP. The figure of 57 dBA as a noise impacts threshold was reached through coordination among MHTD, the Federal Highway Administration (FHWA), Missouri's Department of Natural Resources and St. Louis County's Department of Parks and Recreation in accordance with FHWA criteria for lands where serenity and quiet are extraordinarily significant. Figure 7 depicts the areas within CCLMP that would be subjected to 57 dBA(+) noise levels by the operational Red Alignment or the Blue/Red Combination of the Page Avenue Extension in 2015. The most pervasive ongoing source of noise of Creve Coeur Mill Road.

CCLMP has experienced multiple noise sources since its creation. The most pervasive ongoing source of noise by far, however, is Creve Coeur Mill Road. Large amounts of noise are associated with aircraft using two small nearby airports (Creve Coeur and Arrowhead Airports) as well as Lambert-St. Louis International Airport, about six miles east-northeast. The proximal use of farm machinery generates noise. Hydroplane boat races on Creve Coeur Lake, held periodically, are extremely noisy. Loud car radios, personal stereos, car horns, shouting, etc. contribute sporadic noise throughout the year.

It should be noted that noise attenuation design is a mandated element of the Red Alignment's CCLMP bridge as part of the Section 601 Mitigation Plan.

The Red Alignment's gross CCLMP noise impact area taking would total 225.0 acres, all of them situated in the existing park's core portion. The noise contours would extend out 1,000 to 1,225 feet on either side of the proposed bridge. However, this acreage is substantially modified by

considering the amount of this area that already has a noise level of 57 dBA or more due to Creve Coeur Mill Road traffic as well as the 37 acres (including the aerial easement) that would be converted for roadway construction. With these factors included, the resulting CCLMP noise impacts area for the Red Alignment is 141.9 acres:

225.0 Acres	Predicted 57 dBA(+) Area (including the Right-of-Way and Aerial Easement)
-57.5 Acres	Existing 57 dBA(+) Area
<u>-25.6 Acres</u>	Parkland to be Converted for Right-of-Way and Aerial Easement (less Area within Right-of-Way where Existing Noise Level Exceeds 57 dBA)
141.9 Acres	Net CCLMP Noise Impacts Area Taking

CCLMP core areas having noise impacts are subject to Section 6(f) replacement.

The Blue Segment's gross CCLMP noise impacts area taking would be 84.8 acres, split between the park's core portion and the leased southern land. However, this figure would also be reduced by consideration of the amount of it that is already at or above 57 dBA, again due to Creve Coeur Mill Road's traffic:

84.8 Acres	Predicted 57 dBA(+) Area
<u>-20.8 Acres</u>	Existing 57 dBA(+) Area
64.0 Acres	Net CCLMP Noise Impacts Area Taking

Inasmuch as the Blue/Red Combination does not traverse any portion of the existing core or leased portions of CCLMP, there is no modification for parkland to be directly converted for road right-of-way.

Accessibility

The Red Alignment will have an interchange beyond Creve Coeur Mill Road to the west of Creve Coeur Lake Memorial Park. This interchange, initially at least, would allow access to River Valley Drive and, in turn, Creve Coeur Mill Road. Ultimately, it could be incorporated into the Earth City Expressway Extension, should that roadway be built. In either case, access to and use of CCLMP and its environs will be increased. Each of the Red Alignment's St. Louis County variants would have a comparable facility.

Existing access problems include crowded entranceways, with congestion along Marine Avenue, as well as the lower portion of the park along Creve Coeur Mill Road. By itself, the proposed interchange will not resolve these problems, although it would tend to more evenly distribute arriving and departing traffic. The constricting element of sole reliance upon Marine Avenue through the park to reach most recreational areas will remain.

Segmentation

Discussions between MHTD and the St. Louis County Department of Parks and Recreation have been conducted in order to minimize any adverse impacts associated with the taking of parkland and the physical separation of the northern and southern portions of the park. In order to minimize the amount of CCLMP's land transformed into roadway, the Red Alignment's bridge length was increased from its first concept, approximately 1,650 feet, to 2,800 feet. For engineering purposes, this reduced the actual amount of land directly required. The movements of wildlife and people between the northern and southern portions of CCLMP would be comparable to current circumstances east of Creve Coeur Creek. Beyond the park, the Red Alignment will bridge Creve Coeur Mill Road, and parallel railroad tracks as well, with sufficient horizontal and vertical clearances underneath to provide for two-way traffic flow. As previously noted, it is the intent of St. Louis County's Department of Parks and Recreation to concentrate active recreational uses north and passive recreational uses south of the Page Avenue Extension, respectively.

Creve Coeur Creek Alteration

Creve Coeur Creek flows into the southern end of Creve Coeur Lake. Siltation during construction, or debris scattered during normal roadway operations, may cause temporary adverse impacts to the creek and wetlands area. A minor modification to Creve Coeur Creek is anticipated in order to allow proper functioning of the siltation lake required by Section 601 of the Pipeline Safety Act. This is not anticipated to cause any adverse effect on the outdoor recreational use of CCLMP.

Creve Coeur Lake Siltation

Extensive dredging of all of Creve Coeur Lake took place more than fifteen years ago for recreation and aesthetic purposes. Approximately 4,000,000 cubic yards of sediment were removed and placed in the dredge spoils areas west of the lake. Prior to dredging, siltation from the Creve Coeur Creek watershed had reduced the lake's overall depth to a few feet and limited its usefulness. Siltation is again a problem in the southern end of the lake.

It should be noted that implementation of the Red Alignment Section 601 Mitigation Plan includes provisions for sediment removal from Creve Coeur Lake. As part of the Mitigation Plan, a siltation lake will be created upstream of Creve Coeur Lake in an effort to reduce sediment reaching the lake.

Loss of Mature Woodlands

The construction and location of the Red Alignment through parkland will result in losses in mature woodlands in the bluff area on the eastern edge of the lake as well as underneath the proposed bridge structure.

Wetland Habitat Disruption

The wetlands associated with Creve Coeur Creek and Lake are typical of midwest wetlands and, as such, provide habitat for migratory waterfowl and birds. The placement of any bridge structure in such areas will cause disruption of this habitat, at least during construction of the piers, bridge deck and superstructure. The construction of the Red Alignment will affect 12.49 acres of jurisdictional wetlands within CCLMP.

Roadway Environmental Pollution

The crossing of Creve Coeur Lake Memorial Park by bridge will subject the wetlands and wooded areas below to the effects from runoff of road safety chemicals used during winter months. Other runoff from the highway, including gasoline and oil products being deposited by normal traffic conditions, could contribute to the potential chemical contamination of the area below. Some debris thrown from cars and trucks, such as food wrappers and beverage cans, will fall to the surface.

It should be noted that a special drainage system will be incorporated into the Red Alignment's CCLMP bridge design and construction to prevent surface-level contamination from roadway runoff, as required by the Mitigation Plan.

Air Pollution Within CCLMP

The Air Quality Analysis completed for the Final Environmental Impact Statement for the Page Avenue Extension indicates that, on a regional basis, the air quality will remain within National Air Quality Standards for this parameter. Moreover, it will be in conformance with the Statewide Implementation Plan for air quality.

3.1.10 Combined Impacts from Bennington Place to Common Point

3.1.10.1 Red Alignment

In addition to its impacts associated with CCLMP, the Red Alignment also will create other impacts along its course from Bennington Place to the "common point" 3,000 feet west of Creve Coeur Mill Road. In order to provide an overall comparison of the recommended Red Alignment and its CCLMP physical-avoidance combinations, an intensive analysis of all four routes is provided.

The Page Avenue Extension Red Alignment will begin at the intersection of Page Avenue and Bennington Place in St. Louis County. A grade separation for Bennington Place over the Page Avenue Extension, as well as the western half of a diamond interchange, would be constructed. The new roadway would curve northwesterly within the preserved 250-foot wide (38.5 acres) corridor, and be slightly elevated at about 15 feet above existing terrain for approximately 1,000 feet. The route will be interrupted by some residential development along and near Amiot Drive, that extends to CCLMP. There would be a grade separation for about 4,000 linear feet to the bluff line that would cut 10-80 feet below the existing terrain with

the Page Avenue Extension passing below Amiot Drive and Seven Pines Drive. This alignment of the Page Avenue Extension would continue west across CCLMP and the southern end of Creve Coeur Lake. A bridge of approximately 2,800 feet would span Creve Coeur Creek and its associated wooded bottomland. A large embankment, about 2,000 feet by 500 to 650 feet, would carry the roadway through the western side of CCLMP.

The Red Alignment would continue tangent where it would bridge Creve Coeur Mill Road and the St. Louis Southwestern Railway Company's tracks. It then would curve northwest to the common point and continue onward toward the Missouri River.

This segment represents the most easterly portion of the entire Page Avenue Extension Red Alignment approved by the Missouri Highway and Transportation Commission as the Selected Alternate on November 2, 1990. It would be 2.84 miles long and ten-lanes wide from Bennington Place to the common point at a current estimated cost of \$64,893,000, including an interchange at River Valley Drive. The Mitigation Plan, intended to ameliorate the Red Alignment's passage through CCLMP, would cost an estimated minimum of \$6,009,000, raising the total to \$70,902,000.

Two interrelated features distinguish the Red Alignment from its St. Louis County variants. They are:

1. Full utilization of the preserved corridor that has been intended for the Page Avenue Extension for two decades; and
2. Traversal of CCLMP.

MHTD and local governmental officials recognize that utilization of the preserved corridor would dramatically reduce a broad spectrum of short-term and long-term impacts within the densely developed residential neighborhood that stretches between Bennington Place and CCLMP. As a practical matter, utilization of this corridor, which was designated to minimize impacts of the future freeway before most of the area was developed, necessitates traversing CCLMP.

The Section 601 Mitigation Plan, subsequently described in Section 3.3.1, will minimize and mitigate the inevitable impacts of this crossing through the park. Section 6(f) replacement lands will be designated within the land acquired for the Section 601 Mitigation Plan. Exclusive of the Mitigation Plan, the projected impacts of the Red Alignment may be summarized by the following table from Bennington Place to the common point.

TABLE 3.1-1
SUMMARY OF IMPACTS
RED ALIGNMENT (TO COMMON POINT WITHOUT SECTION 601 MITIGATION PLAN)

Length	2.84 Miles
MHTD's Estimated Right-of-Way/ Land Acquisition Costs	\$ 3,873,000
MHTD's Estimated Construction Costs (Roadway/Bridge/Utilities)	<u>61,020,000</u>
MHTD's Total Estimated Costs	\$64,893,000
Land Use (Acres)	
Residential	48.4
Commercial	0
Recreation	40.6
Industrial	0
Public	0
Transportation	1.0
Other (Agricultural/Non-Urban)	<u>69.7</u>
Total	159.7
Compliance with Pertinent Local Planning	Yes
Agreement with Existing Local Development Patterns	Yes
Neighborhood Segmentation/Disruption	Low
Prime Farmland ¹ (Acres)	80.6
Relocations	
Single-Family Residences	17
Multi-Family Residences	<u>0</u>
Total Residences	17
Estimated Population	47
Businesses	0
Economic	
Induce New Development	Minimal
Constrain Floodplain Development	No
Noise (Residences Impacted at 65 dBA)	0
Noise Taking (CCLMP Acreage Impacted at 57 dBA(+))	141.9 Net / 225.0 Gross
Visual Taking (CCLMP Acreage Impacted)	4.5 Net

Habitat (Acres)	
Cultivated	66.5
Pasture/Hay	12.8
Developed	8.6
Upland Woods	5.7
Grass/Old Field	38.3
Wetlands	<u>27.8²</u>
Total	159.7
Floodplain (Acres)	
Floodplain-Missouri River	86.2
Floodway-Creve Coeur Creek/Creve Coeur Lake	0.3
Floodplain-Unnamed Tributary	0
Floodway-Unnamed Tributary	<u>0</u>
Total	86.5
Wild and Scenic Rivers	None
Water Body Impacts	Stream/Lake
Water Quality Impacts	Construction/ Minimal Long-Term
Endangered Species	
Federal	None
State	None
Public Lands (Acres) Required:	
Actual Taking (plus Aerial Easement)	37.0
Noise	141.9
Visual	4.5
Significant Cultural Resources/ Historic Sites	None
Hazardous Waste Sites	None
Construction Impacts	Major
Major Utility Impacts	7
MHTD's Estimated Utility Costs	\$800,000

¹ The determination of "prime farmland" is based upon the soil-types of both agricultural and other non-urbanized/lightly developed properties. Therefore, it may exceed the acreage in actual agricultural use.

² Only 20.89 acres are "jurisdictional wetlands" to the common point as determined by 1992 field studies. Habitat acreages were derived from 1989 corridor analysis.

3.1.10.2 Green-Black/Red Combination

The Green-Black/Red Combination includes a modified version of the original Green-Black Segment, previously associated with a variant of the Green Alignment. It, too, would seek to utilize an existing east-west utility corridor to transition to the Missouri River's floodplain. This corridor is the location of major water and electrical service lines.

The Green-Black Segment would head west-southwesterly from Bennington Place. A grade separation for Bennington Place over the Page Avenue Extension with the western half of a diamond interchange would be built. On its course to the utility corridor, the Green-Black Segment would cross through a large residential area and be depressed 10-30 feet below ground level. Parkway Estates, Sherwood Manor, Seven Pines and Willowick Estates would be impacted before Seven Pines Drive would pass above the freeway. Greenfield (Polo Run) would also be impacted before the roadway bridged over various utility lines and assumed a more westerly direction along the southern edge of the utility corridor. As it proceeded down the utility corridor, the roadway would be elevated approximately 20-40 feet. This would allow service to the water mains underground and permit creation of a box culvert over the unnamed tributary to Creve Coeur Creek that adjoins the utility corridor.

Several homes in Old Farm Estates, south of the utility corridor, would be impacted before a grade separation allowed the new roadway to pass above Bookbinder Drive. The Old Farm Estates subdivision ballfield and swimming pool would be displaced as the Green-Black Segment headed westward toward its grade separation over Creve Coeur Mill Road. West of Creve Coeur Mill Road, the roadway would bridge Creve Coeur Creek and its floodway. It would then curve north-northwesterly after completing a grade separation taking it above St. Louis County Water Works Road and the St. Louis Southwestern Railway Company tracks. The roadway would impact the privately-owned Little Lake Golf Range and pass through agricultural floodplain areas before joining the Red Alignment at the common point. An interchange at River Valley Drive would be provided.

The Green-Black Segment would be 3.25 miles long and ten-lanes wide and is currently estimated to cost \$83,704,000. Adverse impacts of the Green-Black Segment include the greatest amount of displaced population (367), a high degree of neighborhood segmentation and disruption, and a massive reworking of the utility corridor. Its projected impacts may be summarized as identified in Table 3.1-2.

TABLE 3.1-2
SUMMARY OF IMPACTS
GREEN-BLACK/RED COMBINATION (TO COMMON POINT)

Length	3.25 Miles
MHTD's Estimated Right-of-Way/ Land Acquisition Costs	\$21,201,000
MHTD's Estimated Construction Costs (Roadway/Bridge/Utilities)	<u>\$62,503,000</u>
MHTD's Total Estimated Costs	\$83,704,000
Land Use (Acres)	
Residential	37.5
Commercial	8.3
Recreation	4.5
Industrial	12.4
Public	0
Transportation	.5
Other (Agricultural/Non-Urban)	<u>90.9</u>
Total	154.1
Compliance with Pertinent Local Planning	No
Agreement with Existing Local Development Patterns	No
Neighborhood Segmentation/Disruption	More
Prime Farmland ¹ (Acres)	104.6
Relocations	
Single-Family Residences	52
Multi-Family Residences	<u>81</u>
Total Residences	133
Estimated Population	367
Businesses	2
Economic	
Induce New Development	Minimal
Constrain Floodplain Development	No
Noise (Residences Impacted at 65 dBA)	0
Noise Taking (CCLMP Acreage Impacted at 57 dBA)	0
Visual Taking (CCLMP Acreage Impacted)	0

Habitat (Acres)	
Cultivated	62.9
Pasture/Hay	4.3
Developed	75.4
Upland Woods	0
Grass/Old Field	2.9
Wetlands	<u>8.6²</u>
Total	154.1
Floodplain (Acres)	
Floodplain-Missouri River	93.7
Floodway-Creve Coeur Creek/Creve Coeur Lake	<0.1
Floodplain-Unnamed Tributary	5.0
Floodway-Unnamed Tributary	<u>5.3</u>
Total	104.0
Wild and Scenic Rivers	None
Water Body Impacts	Two Streams
Water Quality Impacts	Construction/More Long-Term
Endangered Species	
Federal	None
State	None
Public Lands (Acres) Required	0
Significant Cultural Resources/ Historic Sites	1 (23SL737)
Hazardous Waste Sites	None
Construction Impacts	Major
Major Utility Impacts	14
MHTD's Estimated Utility Costs	\$3,800,000

¹ The determination of "prime farmland" is based upon the soil-types of both agricultural and other non-urbanized/lightly developed properties. Therefore, it may exceed the acreage in actual agricultural use.

² Not necessarily "jurisdictional wetlands." Jurisdictional wetlands determination was performed only for the Red Alignment.

3.1.10.3 Yellow-Black/Red Combination

The Yellow-Black/Red Combination includes a refinement of the Green-Black Segment designated the Yellow-Black Segment. It is routed closer to Fee Fee Road from Bennington Place to Bookbinder Drive in order to minimize neighborhood disruption. It is identical in all respects to the Green-Black Segment from Bookbinder Drive to the common point. The Yellow-Black Segment differs in its course to the utility corridor. It also makes use of a greater amount of the utility corridor. As such, it represents a tradeoff between decreased social impacts and increased utility corridor impacts.

The Yellow-Black Segment would take a more southwesterly heading from Bennington Place than the Green-Black Segment. It would begin with a grade separation for Bennington Place over the Page Avenue Extension and a new western half of a diamond interchange. The roadway would be depressed 30-40 feet from Bennington to Willowyck.

Portions of the Parkway Estates, Willowyck Estates and Greenfield (Polo Run) residential developments would be traversed along the Yellow-Black Segment's approach to the utility corridor. It would also take St. Louis County's Thornhill Branch Library. There would be grade separations for Willowyck Court and Seven Pines Drive as well as a new access road for portions of Wellman Court and Parkway Estates Drive.

The Yellow-Black Segment would bridge the City of St. Louis Water Division's right-of-way into the utility corridor area about 150 feet west of Fee Fee Road. From that point, it would assume a westerly direction and become elevated 20-40 feet, taking several homes in the Old Farm Estates subdivision. There would be a grade separation above Bookbinder Drive as it followed the remainder of the Green-Black Segment's course to the common point and its link with the Red Alignment.

The Yellow-Black Segment would be 3.34 miles long and ten-lanes wide. It would constitute an improvement over the Green-Black Segment relative to social impacts. Although neighborhood segmentation and disruption would be minimized to the point of being the least of all four routes, the Yellow-Black Segment would be the only route with serious residential noise impacts. A total of 254 people and one public institution would be displaced. Moreover, its utility impacts, to water mains in particular, would be even more massive, and technically problematic, than the Green-Black Segment's by a considerable margin. Its projected impacts may be summarized as identified in Table 3.1-3.

TABLE 3.1-3
SUMMARY OF IMPACTS
YELLOW-BLACK/RED COMBINATION (TO COMMON POINT)

Length	3.34 Miles
MHTD's Estimated Right-of-way/ Land Acquisition Costs	\$19,315,000
MHTD's Estimated Construction Costs (Roadway/Bridge/Utilities)	<u>\$64,940,000</u>
MHTD's Total Estimated Costs	\$84,255,000
Land Use (Acres)	
Residential	29.4
Commercial	8.3
Recreation	4.5
Industrial	16.5
Public	1.7
Transportation	.5
Other (Agricultural/Non-Urban)	<u>96.0</u>
Total	156.9
Compliance with Pertinent Local Planning	No
Agreement with Existing Local Development Patterns	No
Neighborhood Segmentation/Disruption	Least
Prime Farmland ¹ (Acres)	103.6
Relocations	
Single-Family Residences	92
Multi-Family Residences	<u>0</u>
Total Residences	92
Estimated Population	254
Businesses	2
Public Library	1
Economic	
Induce New Development	Minimal
Constrain Floodplain Development	No
Noise (Residences Impacted at 65 dBA)	40
Noise Taking (CCLMP Acreage Impacted at 57 dBA)	0

Visual Taking (CCLMP Acreage Impacted)	0
Habitat (Acres)	
Cultivated	64.8
Pasture/Hay	0
Developed	68.8
Upland Woods	0
Grass/Old Field	6.0
Wetlands	<u>17.3²</u>
Total	156.9
Floodplain (Acres)	
Floodplain-Missouri River	93.7
Floodway-Creve Coeur Creek/Creve Coeur Lake	<0.1
Floodplain-Unnamed Tributary	5.0
Floodway-Unnamed Tributary	<u>5.3</u>
Total	104.0
Wild and Scenic Rivers	None
Water Body Impacts	Two Streams
Water Quality Impacts	Construction/More Long-Term
Endangered Species	
Federal	None
State	None
Public Lands (Acres) Required	0
Significant Cultural Resources/ Historic Sites	1 (23SL737)
Hazardous Waste Sites	None
Construction Impacts	Major
Major Utility Impacts	15
MHTD's Estimated Utility Costs	\$4,300,000

¹ The determination of "prime farmland" is based upon the soil-types of both agricultural and other non-urbanized/lightly developed properties. Therefore, it may exceed the acreage in actual agricultural use.

² Not necessarily "jurisdictional wetlands." Jurisdictional wetlands determination was performed only for the Red Alignment.

3.1.10.4 Blue/Red Combination

The Blue/Red Combination utilizes the Blue Segment. The Blue Segment makes limited use of the Page Avenue Extension's preserved corridor before passing through the densely developed residential area to the west and between CCLMP and leased parkland. It would have no direct impacts in CCLMP. However, proximal impacts to both portions of the park would occur during its construction and operation.

The Blue Segment would begin with a grade separation for Bennington Place over the new roadway and creation of the western half of a diamond interchange. It would curve northwesterly and skirt the Sherwood Manor townhouse development to utilize a short stretch of the Red Alignment's preserved corridor before heading west. The remainder of the alignment would be elevated 10-40 feet or depressed to 30 feet depending on terrain. The worst St. Louis County neighborhood segmentation and disruption impacts of any proposed Page Avenue Extension route would be produced by the Blue Segment as it cut through four subdivisions (The Village of Seven Pines, Seven Pines, Old Farm Estates and "Amiot," a new development of luxury homes west of Amiot Drive). It would bridge Seven Pines Drive and pass under Amiot Drive.

About 875 feet separates CCLMP and the leased parkland. From the bluffs to Creve Coeur Mill Road this private, mostly undeveloped expanse is the continuation of the adjoining parkland in terms of habitat, topography, geology, drainage, etc. It has long been regarded as a logical CCLMP expansion site.

The Blue Segment would traverse this corridor in the same manner as the Red Alignment Segment would cross CCLMP, with construction and operational impacts of similar kinds and magnitudes (e.g., noise and visual quality). Some of these impacts would be noticeable in one or both portions of CCLMP. A bridge, about 2,300-feet long, would extend from the bluffs to a manmade embankment to the west of Creve Coeur Creek. The roadway would continue atop a 650-foot wide embankment, curving northwest to and beyond Creve Coeur Mill Road onto the Missouri River's floodplain. A bridge would interrupt the embankment to allow passage of Creve Coeur Mill Road and the tracks of the St. Louis Southwestern Railway Company. From there to the common point, and its link to the Red Alignment, the Blue Segment would cross agricultural land. An interchange at River Valley Drive would be provided.

The Blue Segment would be the shortest route to the common point at 2.69 miles. It, too, would be ten-lanes wide.

The Blue Segment's severe neighborhood segmentation and disruption impacts have already been noted. It would displace the fewest people, 207, of any alternative St. Louis County route. However, this relative advantage will be reduced as Amiot, the new subdivision of 350,000 homes in its path west of Amiot Drive, is completed. The fact that the Blue Segment's utility impacts are, by far, the least of the CCLMP-avoidance segments is a point in its favor. The Blue Segment's projected impacts are summarized in Table 3.1-4.

TABLE 3.1-4
SUMMARY OF IMPACTS
BLUE/RED COMBINATION (TO COMMON POINT)

Length	2.69 Miles
MHTD's Estimated Right-of-Way/ Land Acquisition Costs	\$15,436,000
MHTD's Estimated Construction Costs (Roadway/Bridge/Utilities)	<u>\$59,853,000</u>
MHTD's Total Estimated Costs	\$75,289,000
Land Use (Acres)	
Residential	37.4
Commercial	0
Recreation	0
Industrial	0
Public	0
Transportation	1.0
Other (Agricultural/Non-Urban)	<u>97.7</u>
Total	136.1
Compliance with Pertinent Local Planning	No
Agreement with Existing Local Development Patterns	No
Neighborhood Segmentation/Disruption	Most
Prime Farmland ¹ (Acres)	90.6
Relocations	
Single-Family Residences	75
Multi-Family Residences	<u>0</u>
Total Residences	75
Estimated Population	207
Businesses	0
Economic	
Induce New Development	Minimal
Constrain Floodplain Development	No
Noise (Residences Impacted at 65 dBA)	0
Noise Taking (CCLMP Acreage Impacted at 57 dBA)	64.0 Net / 84.8 Gross

Visual Taking (CCLMP Acreage Impacted)	0
Habitat (Acres)	
Cultivated	72.7
Pasture/Hay	11.9
Developed	29.8
Upland Woods	3.0
Grass/Old Field	10.9
Wetland Woods	<u>7.8²</u>
Total	136.1
Floodplain (Acres)	
Floodplain-Missouri River	83.2
Floodway-Creve Coeur Creek/Creve Coeur Lake	<0.1
Floodplain-Unnamed Tributary	0
Floodway-Unnamed Tributary	<u>0</u>
Total	83.2
Wild and Scenic Rivers	None
Water Body Impacts	One Stream
Water Quality Impacts	Construction/More Long-Term
Endangered Species	
Federal	None
State	None
Public Lands (Acres) Required:	
Actual Taking plus Aerial Easement	0
Noise	64.0
Visual	0
Cultural Resources/Historic Sites	None
Hazardous Waste Sites	None
Construction Impacts	Major
Major Utility Impacts	7
MHTD's Estimated Utility Costs	\$1,500,000

¹ The determination of "prime farmland" is based upon the soil-types of both agricultural and other non-urbanized/lightly developed properties. Therefore, it may exceed the acreage in actual agricultural use.

² Not necessarily "jurisdictional wetlands." Jurisdictional wetlands determination was performed only for the Red Alignment.

3.1.11 Summary of Impacts of Alternatives

A summary matrix of the impacts associated with the Red Alignment as well as combinations utilizing the Green-Black Segment, the Yellow-Black Segment and the Blue Segment is presented on Table 3.1-5. This matrix compiles information previously presented in a unified format for direct comparisons. All data reflects variable prospective rights-of-way (with aerial easements considered surface impacts) of 250 feet or more from Bennington Place to the common point about 3,000 feet west of Creve Coeur Mill Road. In each instance, there is an interchange with River Valley Drive.

TABLE 3.1-5
 IMPACT EVALUATION MATRIX (ALL ROUTES)
 PAGE AVENUE EXTENSION
 (ST. LOUIS COUNTY: BENNINGTON PLACE TO COMMON POINT)
 RED ALIGNMENT (WITHOUT SECTION 601 MITIGATION PLAN)
 GREEN-BLACK/RED COMBINATION
 YELLOW-BLACK/RED COMBINATION
 BLUE/RED COMBINATION

	<u>Red Alignment</u>	<u>Green-Black/ Red Combination</u>	<u>Yellow-Black/ Red Combination</u>	<u>Blue/Red Combination</u>
Length	2.84 Miles	3.25 Miles	3.34 Miles	2.69 Miles
MHTD's Estimated Right of Way/Land Acquisition Costs	\$ 3,873,000	\$21,201,000	\$19,315,000	\$15,436,000
MHTD's Estimated Construction Costs (Roadway/Bridge/Utilities)	<u>\$61,020,000</u>	<u>\$62,503,000</u>	<u>\$64,940,000</u>	<u>\$59,853,000</u>
MHTD's Estimated Total Costs	\$64,293,000 ¹	\$83,704,000	\$84,255,000	\$75,289,000
Land Use (Acres)				
Residential	48.4	37.5	29.4	37.4
Commercial	0	8.3	8.3	0
Recreation	40.6	4.5	4.5	0
Industrial	0	12.4	16.5	0
Public	0	0	1.7	0
Transportation	1.0	.5	.5	1.0
Other (Agricultural/ Non-Urban)	<u>69.7</u>	<u>90.9</u>	<u>96.0</u>	<u>97.7</u>
Totals	159.7	154.1	156.9	136.1

	<u>Red Alignment</u>	<u>Green-Black/Red Combination</u>	<u>Yellow-Black/Red Combination</u>	<u>Blue/Red Combination</u>
Compliance with Pertinent Local Planning Agreement with Existing Local Development Patterns	Yes	No	No	No
Neighborhood Segmentation/Disruption	Low	More	Least	Most
Prime Farmland ² (Acres)	80.6	104.6	103.6	90.6
Relocations	17	52	92	75
Single-Family Res.	0	81	0	0
Multi-Family Res.	17	133	92	75
Total Residences				
Estimated Population	47	367	254	207
Businesses	0	2	2	0
Public Library	0	0	1	0
Economic	Minimal	Minimal	Minimal	Minimal
Induce New Development	Minimal	Minimal	Minimal	Minimal
Constrain Floodplain Development	No	No	No	No
Noise (Residences Impacted at 65 dBA)	0	0	40	0
Noise Taking (CCLMP Acreage Impacted at 57 dBA)	141.9 Net 225.0 Gross	0	0	64.0 Net 84.8 Gross
Visual Taking (CCLMP Acreage Impacted)	4.5	0	0	0

	<u>Red Alignment</u>	<u>Green-Black/Red Combination</u>	<u>Yellow-Black/Red Combination</u>	<u>Blue/Red Combination</u>
Habitat (Acres)				
Cultivated	66.5	62.9	64.8	72.7
Pasture/Hay	12.8	4.3	0	11.9
Developed	8.6	75.4	68.8	29.8
Upland Woods	5.7	0	0	3.0
Grass/Old Field	38.3	2.9	6.0	10.9
Wetland Woods/Open Water/ Emergent Wetlands	<u>27.8³</u>	<u>8.6³</u>	<u>17.3³</u>	<u>7.8³</u>
Totals	159.7	154.1	156.9	136.1
Floodplain (Acres)				
Floodplain-Missouri River	86.2	93.7	93.7	83.2
Floodway-Creve Coeur Creek/ Creve Coeur Lake	0.3	<0.1	<0.1	<0.1
Floodplain-Unnamed Tributary	0	5.0	5.0	0
Floodway-Unnamed Tributary	<u>0</u>	<u>5.3</u>	<u>5.3</u>	<u>0</u>
Totals	86.5	104.0	104.0	83.2
Wild and Scenic Rivers	None	None	None	None
Water Body Impacts	Stream/Lake	Two Streams	Two Streams	One Stream
Water Quality Impacts	Construction/ Minimal Long-Term	Construction/ More Long-Term	Construction/ More Long-Term	Construction/ More Long-Term
Endangered Species	None	None	None	None
Federal	None	None	None	None
State	None	None	None	None

	<u>Red Alignment</u>	<u>Green-Black/Red Combination</u>	<u>Yellow-Black/Red Combination</u>	<u>Blue/Red Combination</u>
Public Lands (Acres) Required:				
Actual Taking plus Aerial Easement	37.0	0	0	0
Noise	141.9	0	0	64.0
Visual	4.5	0	0	0
Significant Cultural Resources/ Historic Sites	None	One (23SL737)	One (23SL737)	None
Hazardous Waste Sites	None	None	None	None
Construction Impacts	Major	Major	Major	Major
Major Utility Impacts	7	14	15	7
MHTD's Estimated Utility Costs	\$800,000	\$3,800,000	\$4,300,000	\$1,500,000

¹ Mitigation Plan costs are a minimum of \$6,009,000. Total costs are \$70,902,000.

² The determination of "prime farmland" is based upon the soil types of both agricultural and other non-urbanized/lightly developed properties. Therefore, it may exceed the acreage in actual agricultural use.

³ Not necessarily "jurisdictional wetlands." The Red Alignment affects 20.89 acres of jurisdictional wetlands to the common point.

3.2 ANALYSIS OF ALTERNATIVES

3.2.1 Red Alignment

The Red Alignment will directly impact CCLMP in a variety of short-term and long-term ways. Any of the CCLMP physical-avoidance segments would have, at most, varying degrees of proximal impacts upon CCLMP with the Blue Segment's being the greatest.

Outside of CCLMP, however, the Red Alignment would produce the least, or among the least, impacts in most categories of a broad spectrum of concerns. This is principally due to its full utilization of a corridor that has been preserved for it since the early 1970s. Basically, the surrounding residential area was developed around this corridor with the future Page Avenue Extension's implementation assumed to occur within it. Developers, utilities, home buyers, local governments, etc., have acted in accord with this knowledge. Consequently, the prospective overall level of impacts for the Red Alignment, outside of CCLMP, is comparatively low for a freeway's passage through an urbanized area of this scale and density.

The State of Missouri recognizes the serious nature of the impacts that the Red Alignment of the Page Avenue Extension will produce in CCLMP. Accordingly, on May 3, 1991, the Missouri Highway and Transportation Commission adopted an Enhancement Plan, a \$6,009,000 package at minimum, of measures proposed by St. Louis County intended to mitigate those impacts. Its successor, the Section 601 Mitigation Plan, is subsequently detailed in Section 3.3.1.

The State of Missouri advocates the basic Red Alignment Segment, CCLMP impacts notwithstanding, because it believes it represents good public policy as the best, most cost-efficient, and overall least invasive approach to providing the service required to the common point in St. Louis County. Moreover, within the contexts of the overall project and this portion of St. Louis County, the State of Missouri believes that the CCLMP-avoidance segments would each result in a collective set of impacts of unreasonable magnitude that render them individually unacceptable and not reasonable. A review of pertinent facts supports these views:

- ◆ The Red Alignment would cost less money than any of the alternate combinations (\$64,893,000 vs. \$75,289,000 for the Blue/Red Combination). Including the Mitigation Plan (\$6,009,000), the Red Alignment still would cost less (\$70,902,000).
- ◆ The Red Alignment complies with pertinent local planning. The combination routes do not. For more than two decades, the Red Alignment and its antecedents have been cornerstones of local planning and development.
- ◆ Today, the Red Alignment is in agreement with existing local development patterns. The alternate routes would be highly intrusive relative to local development patterns.

- ◆ The Red Alignment would produce the second-least amount of neighborhood segmentation/disruption.
- ◆ The Red Alignment would require less farmland and/or prime farmland than any of the alternate combinations.
- ◆ The Red Alignment would displace the fewest households and smallest population by a ratio of not less than 1:4.4. It would displace no businesses or public institutional structures.
- ◆ None of the possible routes would induce anything other than minimal new development in St. Louis County. However, only the Red Alignment would have the effect of constraining possible floodplain development by the acquisition of 600+ acres of additional parkland.
- ◆ The Red Alignment would have the second-least amount of combined floodplain/floodway impacts.
- ◆ Each of the routes would impact one or more bodies of water during construction, including, in each instance, Creve Coeur Creek.
- ◆ The Red Alignment will require 37.0 acres of public lands as right-of-way, including an aerial easement, in CCLMP. This taking, as well as noise and visual takings, is totally replaced as required by Section 6(f) and in compliance with Section 601.
- ◆ The Red Alignment will have comparatively few major utility impacts. Its residential utility disruptions will be minimal. Consequently, its estimated utility impacts costs are slightly more than half of the Blue/Red Combination's roughly one-fifth of the Green-Black/Red Combination and less than one-fifth of the Yellow-Black/Red Combination's.

There are some areas where the Red Alignment is relatively disadvantageous, including total land required (its CCLMP bridge embankment has a large "footprint") and non-developed area construction impacts.

3.2.2 Utility Corridor Alternate Impacts of Unreasonable Magnitude

Background

The St. Louis County utility corridor stretches from Fee Fee Road to Creve Coeur Mill Road, heading generally east-west with a slight bend in the middle. The City of St. Louis Water Division owns a 100-foot right-of-way but the rest of it is a mixture of easements and common ground. The Green-Black and Yellow-Black Segments would make extensive use of the corridor, approximately 3,800 and 5,480 feet, respectively. Along the length of their passages, the corridor ranges from roughly 500 to 700 feet in width. Figure 2 illustrates the utility corridor.

The corridor is basically an elongated, shallow natural valley that affords the easiest local surface-level transition between the uplands

above and Creve Coeur Lake and the Missouri River floodplain below. A small unnamed tributary to Creve Coeur Creek meanders through most of the corridor. Its channel is about 10 feet deep and 15 to 20 feet wide. Normal water volumes collect in shallow pools of a foot or two but high flows range upward to five feet. Brush/shrub vegetation covers the streambanks.

Although the stream itself is not biologically very productive or diverse, it is the central element of the corridor's role as an ecological "linear zone." There are substantial amounts of low ground cover. Trees line either side of most of the corridor. Birds as well as rabbits, squirrels and other small mammals abound. Deer are sighted occasionally by residents of homes in the vicinity.

Except for the utility installations, which are located below-ground for the most part, there are few man-made intrusions. A streetcar line once carried visitors to Creve Coeur Lake but its tracks were removed decades ago. Today, the most prominent non-utility constructed elements are Bookbinder Drive, the only roadway that crosses the corridor, and the nearby Old Farm Estates subdivision ballfield and swimming pool. Utility crews maintain most of the corridor.

There are two utility corridor alternates for the Page Avenue Extension. The Green-Black Segment was conceptualized to avoid both the core and leased portions of Creve Coeur Lake Memorial Park. The Yellow-Black Segment is a refinement of the Green-Black Segment intended to take maximum advantage of the utility corridor. Either route would produce negligible proximal impacts to CCLMP. In tandem with the balance of the Red Alignment, these alternatives are the Green-Black/Red Combination and the Yellow-Black/Red Combination.

Residential and Population Losses

Using the utility corridor to avoid CCLMP would come at a high price for the surrounding community. Total residential losses for the Page Avenue Extension to the common point would be a minimum of 92 (Yellow-Black) or 133 (Green-Black) units. Twenty residences, by comparison, would be taken for the Red Alignment, including its CCLMP Mitigation Plan. Relative estimated population losses would be 254, 367 and 55, respectively. On a percentage basis, utility corridor route population losses would be 362% to 567% greater than the Red Alignment. These disparities are directly attributable to the utilization, or non-utilization, of the special corridor preserved for the Page Avenue Extension for more than two decades as well as concurrent local planning and development.

The ultimate differences between the Red Alignment and the utility corridor routes could be even larger. Displaced utilities, most notably the relocation of Union Electric's towers and lines, might produce additional residential takings. Even if a particular tower were relocated within the corridor, for example, current or future safety standards could require the removal of one or more residences within a specified distance. At this time, this potential problem can be recognized but not quantified.

Habitat Loss

Other substantive impacts would occur if the utility corridor were required for Page Avenue. Habitat loss is a certainty. A box culvert, a minimum of 3,200 feet long, would be required to enclose the utility corridor's unnamed stream. This would essentially be a long box, open at both ends but closed, except for manholes, at the top. Biological activity within the culvert and downstream to Creve Coeur Creek would be radically altered. Moreover, the roadway itself would occupy a large portion of the corridor. The net effect would be to drastically diminish the utility corridor's functioning as an ecological linear zone.

Major Utility Impacts

The large array of major utilities impacted by placing the Page Avenue Extension in the utility corridor would include the following facilities:

City of St. Louis Water Division

2 60" Water Conduits
1 72" Water Conduit

These conduits range from about 20 to 50 and 60 years old. Each conveys large volumes of potable water to the City of St. Louis reservoirs and distribution system from its Howard Bend treatment facility.

Metropolitan St. Louis Sewer District (MSD)

3 10" to 48" Sanitary Sewer Feeder Lines

These lines converge at MSD's Creve Coeur Pump Station, north of the utility corridor and just east of Creve Coeur Mill Road. From there, a force main leads north to MSD's Missouri River Sewage Treatment Plant.

St. Louis County Water Company

1 36" Water Main
1 6" Water Main

The 36" line is one of several that carries potable water to this private utility's service area from its nearby waterworks. It would be bridged twice by the Green-Black or Yellow-Black Segments. The 6" line runs north-south to the west of Bookbinder Drive.

Union Electric Co. (UE)

2 to 4 Transmission Towers

UE's 345 KV Sioux-Mason above-ground transmission line runs through the utility corridor along a series of twin transmission towers. Relocation of two to four towers would be necessary to accommodate Page Avenue at this time. However, UE also contemplates a future additional 345 KV transmission line in the same corridor.

Unless otherwise noted, the lines described above run roughly east-west through the utility corridor and would be encountered once by the Page Avenue Extension. As previously indicated, electric transmission towers would need to be relocated, within or outside the corridor. Underground water and sewer lines would need to be bridged, encased or relocated, as appropriate, probably within the corridor. Lesser facilities, such as numerous residential lines, would also be impacted.

The affected utilities have repeatedly expressed verbal and/or written doubts regarding the efficacy of disturbing their installations. The City of St. Louis Water Division has been particularly vocal. It would be impossible to build a freeway and maintain the same degree of utility corridor access that present circumstances afford. Moreover, traffic-generated vibrations could weaken fragile joints, for example, along the 50 and 60-year old water conduits. A rupture could jeopardize water supplies as well as undermine the roadway.

All of this is technically problematic and expensive. Overall difficulties would be compounded by the need to reduce or avoid service interruptions. MHTD's estimated relative utility construction costs, probably conservative, reflect the disparity of utility impacts from Bennington Place to the common point.

Utility Costs: Bennington Place to Common Point

\$ 800,000		Red Alignment and Mitigation Plan
\$3,800,000 (+375%)		Green-Black Segment
\$4,300,000 (+438%)		Yellow-Black Segment

The percentages indicate the increased utility costs relative to the Red Alignment.

Total Development Costs

Good public policy requires that new facilities be built that can provide a needed service, within applicable requirements, at the lowest possible cost. The Red Alignment, as well as either of the utility corridor routes, would effectively move large volumes of traffic between Bennington Place and the common point. However, the cost differentials among the routes are such as to raise the public policy issue. The utility corridor routes are more expensive because each requires comparatively massive residential takings as well as expensive utility impacts remediation.

Total Development Costs: Bennington Place to Common Point

\$70,902,000		Red Alignment and Section 601 Mitigation Plan
\$83,704,000 (+18%)		Green-Black Segment
\$84,255,000 (+19%)		Yellow-Black Segment

The percentages indicate the increased overall costs compared to the Red Alignment.

Conclusion

The State of Missouri considers the utility corridor routes for the Page Avenue Extension technically possible but not prudent. Individually, and collectively, dramatically increased residential displacements, devastation of the ecological linear zone within the corridor, markedly greater utility impacts, and substantial project cost increases, constitute adverse impacts of unreasonable magnitude. As such, the utility corridor routes do not represent realistic alternatives to the Red Alignment.

3.2.3 Blue Segment Impacts of Unreasonable Magnitude

Background

The Blue Segment, in combination with the Red Alignment, would form the Blue-Red Combination. This alternate was conceptualized after the problems with the utility corridor CCLMP-avoidance routes became apparent. It avoids Creve Coeur Lake Memorial Park by traversing a space, about 875 feet in width, that separates CCLMP from the leased non-contiguous southern area. CCLMP would have noise impacts from this roadway.

Residential and Population Losses

The Blue-Red Combination would generate major residential and population displacements as compared to the Red Alignment. It would require the taking of an estimated 75 homes and relocation of an estimated 207 residents. Moreover, this number will grow as a new subdivision of \$350,000 homes, "Amiot," is completed west of Amiot Drive. By comparison, the Red Alignment, with its Mitigation Plan, would require only 20 residences and displace only 55 residents. The Blue-Red Combination's population displacement impact, based upon current data, would be 276% greater than the Red Alignment. Again, this is evidence of the value of the prior planning and development controls associated with the Red Alignment and its preserved corridor.

Neighborhood Cohesion

Paradoxically, the Blue-Red Combination would take the fewest residences of any of the CCLMP physical-avoidance routes but produce the highest level of neighborhood cohesion impacts. The utility corridor routes, at least, make use of an established non-residential corridor. The Blue-Red Combination, by way of contrast, makes modest use of the Red Alignment's preserved corridor near Bennington Place before slicing east-west through the heart of the surrounding community. No other Page Avenue Extension alternate would so segment this community without regard to prior planning and development patterns.

Habitat Loss

The Blue-Red Combination's transition from the uplands to the Missouri River floodplain would be comparable to the Red Alignment's passage. A comparable bridge and embankment would be required with similar impacts. The primary habitat that would be impacted is a continuation of the wetland woods associated with Creve Coeur Creek to the north and south. This land, in private hands, has long been regarded by St. Louis County's Department of Parks and Recreation as the logical next acquisition for expanding CCLMP.

Proximal Impacts to CCLMP

Given its location, the Blue-Red Combination would have the greatest potential for proximal impacts to CCLMP of any of the park physical-avoidance routes. Noise impacts from its operation would be noticeable in CCLMP.

Utility Impacts

A point in favor of the Blue-Red Combination is that it would have the same number of major utility impacts as the Red Alignment, only seven. However, it would have many more residential-related utility impacts. Consequently, its estimated utility costs would be about 88% more than those of the Red Alignment: \$1,500,000 vs. \$800,000.

Total Development Costs

Current estimated total development costs from Bennington Place to the common point in St. Louis County for the Page Avenue Extension Red Alignment and its Mitigation Plan as compared to the Blue-Red Combination are \$70,902,000 and \$75,289,000. The difference is \$4,387,000 or more than 6%.

Conclusion

The State of Missouri considers the Blue-Red Combination for the Page Avenue Extension unreasonable due to its excessive residential displacements, severe neighborhood cohesion impacts, and the habitat loss adjoining CCLMP that individually and collectively constitute adverse impacts of unreasonable magnitude. In addition, it would be marginally more expensive to develop. Moreover, there is a fundamental question of whether this alternate could be considered a CCLMP-avoidance route, given its potential for proximal noise impacts. This alignment, unlike the Red Alignment, is not subject to the Section 4(f) waiver under Section 601 of the Pipeline Safety Act of 1992. For all of these reasons, the Blue Segment, as part of the Blue-Red Combination, does not represent a reasonable or acceptable alternative to the Red Alignment.

3.2.4 Residential Displacement Comparisons

The State of Missouri maintains that the residential displacements alone associated with any of the CCLMP physical-avoidance routes represent

impacts of unreasonable magnitude. This belief is supported by comparison with other MHTD projects throughout the state. Within the context of the Page Avenue Extension from Bennington Place to the common point in St. Louis County, the residential displacements are as follows:

Residential Displacements: Bennington Place to Common Point

<u>Route</u>	<u>Residences</u>	<u>% Increase</u>	<u>Miles</u>	<u>Residential Units Units Per Mile</u>	<u>% Increase</u>
Red Alignment and Mitigation Plan	20	---	2.84	7.04	---
Green-Black Segment	133	565%	3.25	40.92	481%
Yellow-Black Segment	92	360%	3.34	27.54	291%
Blue Segment	75	275%	2.69	27.88	296%

A review of all MHTD right-of-way acquisitions during the five-year period from January 1, 1987 through December 31, 1991 indicates that there were 348 projects where right-of-way acquisitions were necessary, and that approximately 4,900 parcels were acquired. Of these 348 projects, 43 had residential displacements. Only 293 residences were displaced for these 43 projects, an average of 6.81 per project. Among all 348 projects, the average was only 0.84 displaced residences per project.

Obviously, the scale, nature and setting of these projects varied markedly. For the record, the greatest number of single-project residential displacements was 53, followed by instances of 32, 24 and 21. All told, these figures suggest that the CCLMP-avoidance routes would generate residential displacements of unreasonable magnitude within the context of recent MHTD experience across the State of Missouri.

Among major roadway projects currently undergoing environmental document preparation in Missouri, similarly low relative residential displacement impacts are anticipated. All figures quoted are for preferred or selected alternates.

- (D) Development of a Wetland Wildlife Area that includes lake areas and marshes, trails, observation points, and other environmentally compatible features in CCLMP or in one of the additions to CCLMP referred to above;
- (E) Dredging of Creve Coeur Lake to help remedy a chronic siltation problem and to promote fish and wildlife populations;
- (F) Construction of a new lake in one of the additions to CCLMP referred to above to help alleviate the recurrence of a chronic siltation problem in a manner that minimizes, to the maximum extent practicable and in accordance with Section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344), the disturbance of any existing wetlands;
- (G) Design and construction of features to minimize the visual and physical impact of the project in the vicinity of CCLMP consistent, to the extent practicable, with recommendations of a design committee appointed by the Governor of Missouri, including:
 - (i) the use of textured concrete, as appropriate;
 - (ii) the minimization of bridge pier sizing in the elevated portion of the project;
 - (iii) the use of a bridge design that is more aesthetically pleasing than standard elevated roadway designs;
 - (iv) construction of bridge siderails with materials that are effective noise attenuators to reduce operational noise levels near the bridge;
 - (v) design and construction of a drainage system to prevent contamination of Creve Coeur Lake and Creve Coeur Creek with pollution from roadway runoff;
 - (vi) landscaping of the area between the elevated roadway and Creve Coeur Mill Road to enhance visual parameters without compromising road user safety; and
 - (vii) the placement of signs to direct road users to appropriate park entrances and facilities;
- (H) Such other mitigation measures as the U. S. Secretary of Transportation may determine are appropriate to ensure that the environmental benefits of the project mitigation plan exceed the environmental damage associated with the project; and
- (I) A monetary contribution by the State of Missouri as may be necessary to implement the entire mitigation plan, in an amount not less than \$6,000,000, including the payment of not less than \$250,000 for facility improvements in CCLMP, with all funds to come from non-federal sources of funding.

In some respects, MHTD expects to exceed the requirements of Section 601. For example, a minimum of 600 acres of land will be acquired by MHTD to expand CCLMP. This tentatively includes 628 acres in Areas A through E, discussed subsequently, as well as 11(+/-) acres in St. Louis County required for the walking/biking link to the KATY Trail State Park in St. Charles County.

Section 601 Land for CCLMP Expansion

The expansion of CCLMP per Section 601 would be accomplished utilizing at least five areas of privately-owned land to be acquired by MHTD and donated to the St. Louis County Department of Parks and Recreation. Figure 5 identifies each area. Their acreages are as follows:

Area A	159 Acres
Area B	178 Acres
Area C	49 Acres
Area D	168 Acres
Area E	<u>74 Acres</u>
Total	628 Acres

An additional 11(+/-) acres of private land would be purchased by MHTD for use in the St. Louis County portion of the walking/biking path connecting CCLMP and the KATY Trail State Park in St. Charles County. In any case, MHTD would acquire at least 600 acres of land for public park purposes required by Section 601. Three businesses and two residences would be displaced and various farming operations impacted.

The land for CCLMP Section 601 expansion falls into two groups. Areas A, B, C, D and E represent adjoining expanses of land of reasonably equivalent usefulness and location. The 11(+/-) acres devoted to the walking/biking path, parallel to but physically separate from the northern right-of-way of the Red Alignment in St. Louis County from CCLMP to the Missouri River, is of reasonably equivalent usefulness. It, too, would be donated to St. Louis County to become part of the park.

None of these 639 acres are in public ownership. A 44.32 acre portion of Area B has been leased by St. Louis County on a year to year basis (after 1994) through 2014 since 1989. It is south of CCLMP and includes a polo field. Area B's acquisition and donation would make this tract, as well as the balance of Area B, a permanent part of CCLMP.

Red Alignment Section 6(f) CCLMP Takings

As previously noted, CCLMP will be impacted in three ways that will constitute Section 6(f) takings attributable to the Red Alignment: required right-of-way, visual impacts and noise impacts. These conversions overlap. For example, the same point can experience both noise and visual impacts. However, these overlaps have been accounted for

The lack of available funding, among other factors, delayed the Page Avenue Extension project for more than a decade, except for a modest westward addition to the roadway between Route I-270 and Bennington Place that was implemented in 1983-1984. All the while, new development began to fill the area around the preserved Page Avenue Extension corridor. New development continues, in fact, in this area to this day.

Almost all of this development has been residential in character. In general, multi-family townhouse, condominium and apartment structures have been built in closest proximity to the preserved corridor (particularly to the north of the corridor) while single-family homes, with some exceptions, have tended to be concentrated to the south. Each of these complexes and subdivisions, numbering about fifteen in the general vicinity, have individual characteristics. However, each was developed with the idea that the Page Avenue Extension, when constructed, would utilize the preserved corridor.

Knowledge of the St. Louis County Page Avenue Extension preserved corridor's existence and purpose has been widespread throughout the St. Louis development and real estate communities, as well as among local area residents, for two decades. Through time, thousands of people have decided to buy, or not to buy, or sell local properties, largely or in part because they thought they knew, with some certainty, where the Page Avenue Extension would be someday. The intense local support for the Red Alignment in St. Louis County today is rooted in this fact. Many local property owners now are appalled that this roadway could be constructed elsewhere, thereby jeopardizing homes and real estate values that they understood were "safe."

A new phase of official activity concerning the Page Avenue Extension began in late 1984. Several St. Charles County communities requested a "reconnaissance report" to designate an updated Page Avenue Extension corridor in light of increasing Missouri River crossing problems. MHTD's Division of Surveys and Plans issued its Reconnaissance Report/St. Louis-St. Charles Counties Page Avenue Extension/New Missouri River Crossing in February of 1986. Until the completion of the May 1990 Draft Environmental Impact Statement and accompanying Section 4(f) and 6(f) Evaluation, it represented the most detailed analysis of location issues relating to construction of the Page Avenue Extension. Two basic possible routes were examined in depth (the Red and Green Alignments) as well as optional variations for segments of both alignments. The final recommendation was the Red-Red Dashed-Red Line Alternate, including a segment that utilized the preserved Page Avenue Extension St. Louis County corridor and traversed Creve Coeur Lake Memorial Park. This alternate has evolved into the present Red Alignment.

It is worth noting that various local planning documents, issued both prior to and after the Reconnaissance Report, by St. Louis County, local municipalities such as Maryland Heights (incorporated in 1985), other governmental entities and the East-West Gateway Coordinating Council (EWGCC) have addressed generally or specifically the need for more Missouri River crossings and/or the Page Avenue Extension. Where a particular route is described or depicted for the Page Avenue Extension

(in varying detail), it is obvious that, in effect, it is the Red Alignment in each such document. Examples include:

St. Charles County, Missouri River-Crossing Report (1978), Missouri River Bridges Committee

Highway System Plan (Various Years), St. Louis County

Long-Range Transportation Plan: Highway Component (1984), EWGCC

General Plan Update (1985), St. Louis County

Comprehensive Plan (1987), City of Maryland Heights

St. Charles County Transportation Study (1987), EWGCC

Year 2000 Master Plan (1990), St. Charles County

Obviously, for many years, there has been a clear consensus among local planners as to where the Page Avenue Extension would go.

For a long time, MHTD's lack of resources curtailed new roadway construction and was the principal obstruction delaying implementation of the Page Avenue Extension and numerous other projects across Missouri. In April of 1987, however, Missouri's voters passed Proposition "A," a 4¢ per gallon gasoline tax increase. As part of the campaign for this measure, MHTD specified projects that would be implemented within fifteen years, provided that the additional gas taxes were approved. The Page Avenue Extension was one of the largest projects so specified.

The advent of Proposition "A" allowed MHTD to initiate the required environmental clearance procedures for the Page Avenue Extension. During 1988, MHTD held a series of three scoping meetings while simultaneously selecting a consultant to prepare the Draft and Final Environmental Impact Statements and related documents. A Project Team headed by Booker Associates, Inc. was selected and issued a notice to proceed in late 1988.

Throughout the period that led to the issuance of the Draft Environmental Impact Statement and Section 4(f) and 6(f) Evaluation (May 1990), and subsequently, coordination between the St. Louis County Government and MHTD regarding CCLMP has been frequent, meaningful and productive. At all times, the officials who have held the elective post of St. Louis County Executive, and who have been appointed Director of St. Louis County's Department of Parks and Recreation, wanted to know, understand, minimize and mitigate the prospective impacts of the Page Avenue Extension upon CCLMP and its surrounding area. Among the issues addressed were:

- ◆ The status of the Page Avenue Extension's preserved corridor;
- ◆ The length, placement and design of the CCLMP bridge; and

- ◆ The location and extent of replacement lands for that portion of CCLMP that would be utilized by the Page Avenue Extension's Red Alignment.

Resolution of these concerns, and others, culminated in the creation of the "Enhancement Plan" in 1991. The Enhancement Plan was supported by the incumbent St. Louis County Executive and has been endorsed by the St. Louis County Council, the jurisdiction's legislative body. It has now been incorporated into the Section 601 Mitigation Plan for the Red Alignment.

Additional coordination has taken place regularly with other governmental entities. For example, MHTD and the Missouri Department of Natural Resources, Division of Parks, Recreation and Historic Preservation, engaged in a July 1989 exchange of correspondence. In August of 1989, a meeting was held at CCLMP that included representatives from the St. Louis County Department of Parks and Recreation, the U.S.D.A. Soil Conservation Service, the U. S. Fish and Wildlife Service, the Missouri Department of Natural Resources, the Missouri Department of Conservation, MHTD and Booker Associates, Inc. to review and discuss the project.

Following publication of the Draft Environmental Impact Statement and Section 4(f) and 6(f) Evaluation in May of 1990, written comments were received from eleven U. S. Government entities, four State of Missouri agencies and numerous local governments and elected officials. On August 28, 1991, a delegation of U. S. Department of the Interior officials from Omaha, Nebraska, as well as Federal Highway Administration personnel from Jefferson City and Kansas City, Missouri, Missouri Department of Natural Resources representatives, and the Acting Director of the St. Louis County Department of Parks and Recreation met with MHTD staff and conducted a joint on-site review of the St. Louis County portion of the project area and the Red Alignment and its variants. All of these contacts, as well as numerous others, partly or largely concerned Creve Coeur Lake Memorial Park.

A four-volume Preliminary Final Environmental Impact Statement for the Page Avenue Extension, including a new and separate Section 4(f) and 6(f) Evaluation, was prepared and distributed to state and federal reviewing agencies in September of 1991. Additional coordination by telephone and letter occurred relative to CCLMP as well as other concerns. Moreover, two meetings were held in late 1991 to help resolve critical issues.

On October 30, 1991, the Federal Highway Administration hosted an interagency meeting in Kansas City, Missouri. MHTD was represented as well as the National Park Service, the U. S. Fish and Wildlife Service, the Environmental Protection Agency, the U. S. Army Corps of Engineers and the U. S. Coast Guard. MHTD's mitigation efforts were noted and a general consensus formed that the Page Avenue Extension is a necessary project. Additional coordination ensued.

A two-day series of meetings was chaired by MHTD in Jefferson City, Missouri on December 10 and 11, 1991. Representatives from the Federal Highway Administration, the U. S. Fish and Wildlife Service, the

Environmental Protection Agency, the Federal Emergency Management Agency, Missouri's Department of Conservation and St. Charles County's Planning Department attended some or all of the sessions. Again, progress was made and additional coordination occurred.

At the same time, the four-volume Preliminary Final Environmental Impact Statement II for the Page Avenue Extension, with additional revisions to its accompanying Section 4(f) and 6(f) Evaluation, was heading toward final form. These documents, completed in February of 1992, reflected the results of the recent meetings as well as ongoing coordination efforts on a broad front. However, these documents were not immediately circulated for general agency review.

During most of 1992, contacts and coordination continued at various levels. For example, cultural resources work, largely unrelated to CCLMP, was headed toward completion. Other aspects of the project were finalized.

On October 26, 1992, a new federal statute was signed into law with important implications for the Page Avenue Extension. Section 601 of the Pipeline Safety Act of 1992 authorizes the U. S. Secretary of Transportation to waive Section 4(f) requirements for the Red Alignment of the Page Avenue Extension. In conjunction with any such waiver, the key features of the old Enhancement Plan must be implemented as part of the "project mitigation plan" specified by this law. Additional CCLMP mitigation measures are specified as well. Requirements of the Section 601 Mitigation Plan are summarized in 3.3.1, Section 601 Mitigation Plan.

Enactment of the Pipeline Safety Act of 1992 provided new impetus for the Page Avenue Extension's environmental documentation efforts. Copies of the four-volume Preliminary Final Environmental Impact Statement II were distributed for agency review within days of the law's passage. As comments arrived from various agencies (Federal Emergency Management Agency, Missouri's Department of Conservation, the National Park Service, Missouri's Department of Natural Resources, etc.), additional contacts were made with these as well as other agencies.

Recognizing the new regulatory context for the Red Alignment of the Page Avenue Extension, a new four-volume Final Environmental Impact Statement was prepared, including a Section 6(f) Evaluation. It should be noted that Volume 3, Comments and Coordination, of the Page Avenue Extension FEIS also reports citizen and agency interest regarding St. Louis County's portion of the Page Avenue Extension in additional detail.

A series of seven aerial photographs, presented subsequently, chart the transformation of the area around Creve Coeur Lake and CCLMP between 1960 and 1991. In 1960, it was a semi-rural area with little evidence of urbanization. By 1971, residential development was well underway with the construction of the Willowwyck Estates (1963), Old Farm Estates (1965) and Seven Pines (1967) subdivisions. The 1971 aerial photograph also depicts the then newly-expanded CCLMP and the current route of the Red Alignment. All subsequent photographs show the Page Avenue Extension Red Alignment.

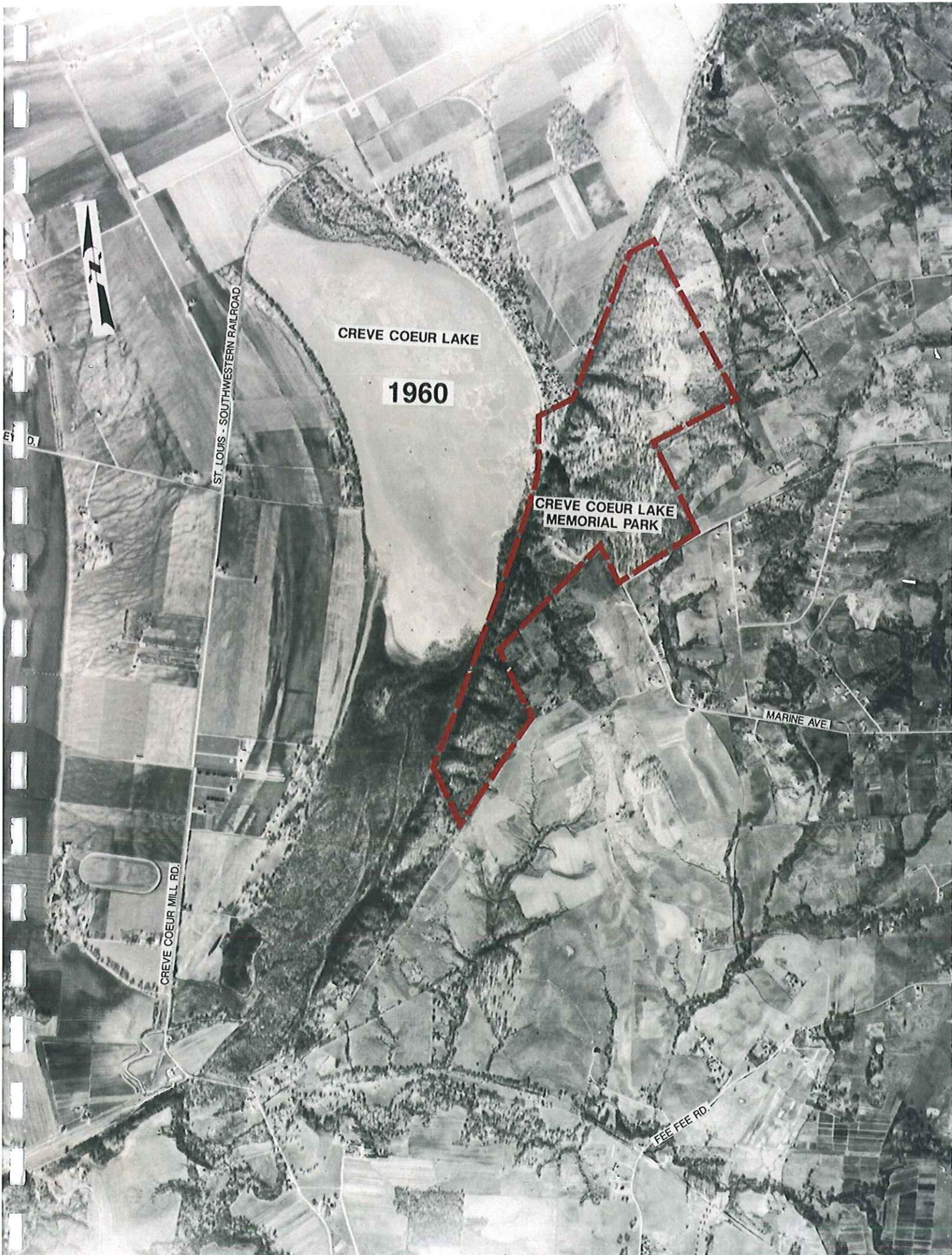
The 1980 and 1986 photographs illustrate the ongoing intensification of local development. New subdivisions included Parkway Estates (1974) and The Village of Seven Pines (1976).

There are two 1991 aerial photographs. New residential development is evident at Polo Run (1986), Sherwood Manor (1987), Greenfield (1987) and Polo Parc (1988) in both of them.

The first 1991 photograph depicts all the St. Louis County build alternates analyzed in this document:

- ◆ The Red Alignment (Selected Alternate)
- ◆ The Green-Black/Red Combination
- ◆ The Yellow-Black/Red Combination
- ◆ The Blue/Red Combination

The last aerial photograph depicts the land proposed to be acquired for CCLMP per the Section 601 Mitigation Plan.



CREVE COEUR LAKE

1960

CREVE COEUR LAKE
MEMORIAL PARK

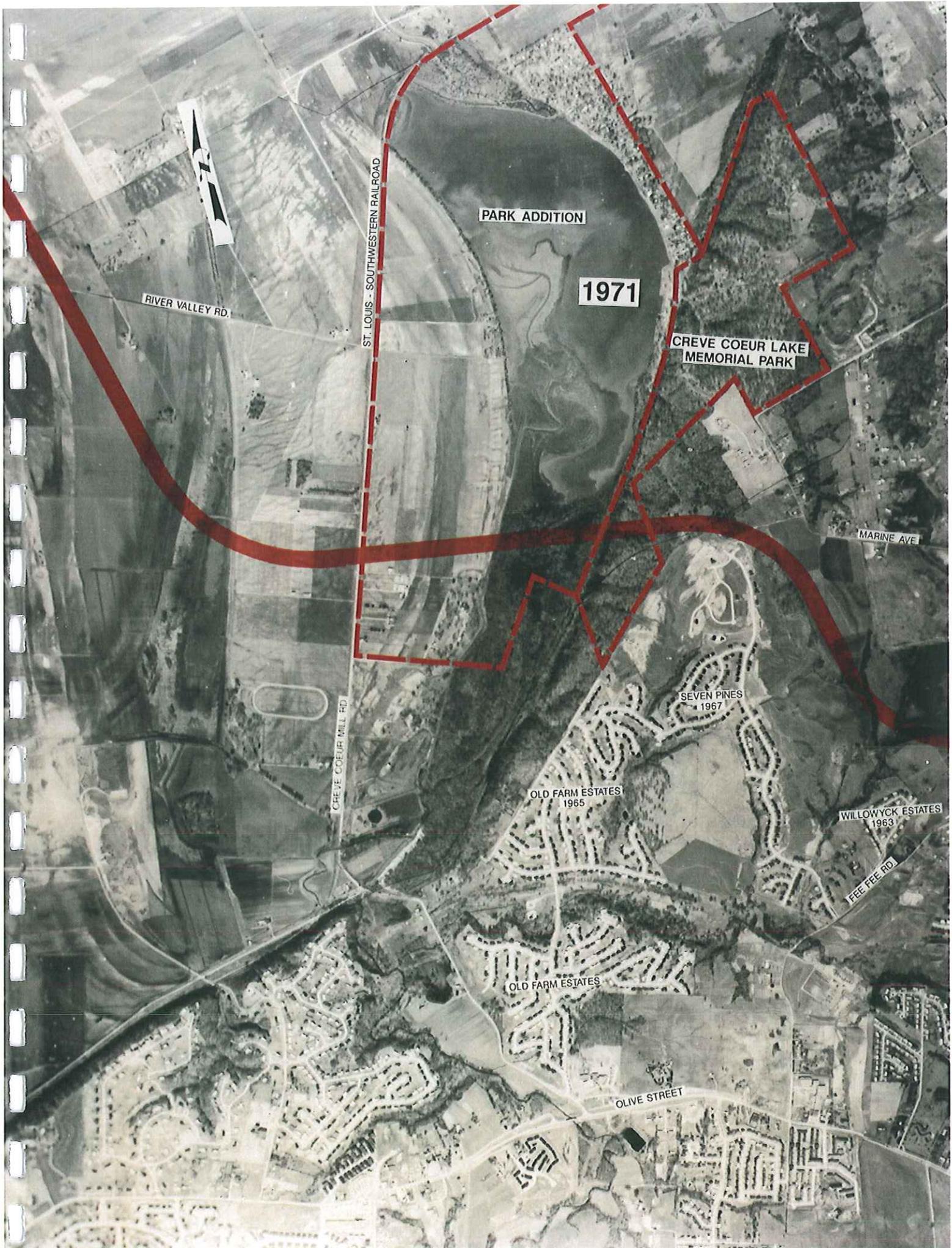
ST. LOUIS - SOUTHWESTERN RAILROAD

CREVE COEUR MILL RD.

MARINE AVE.

FEE FEE RD.





RIVER VALLEY RD.

ST. LOUIS - SOUTHWESTERN RAILROAD

PARK ADDITION

1971

CREVE COEUR LAKE
MEMORIAL PARK

MARINE AVE

CREVE COEUR MILL RD

SEVEN PINES
1967

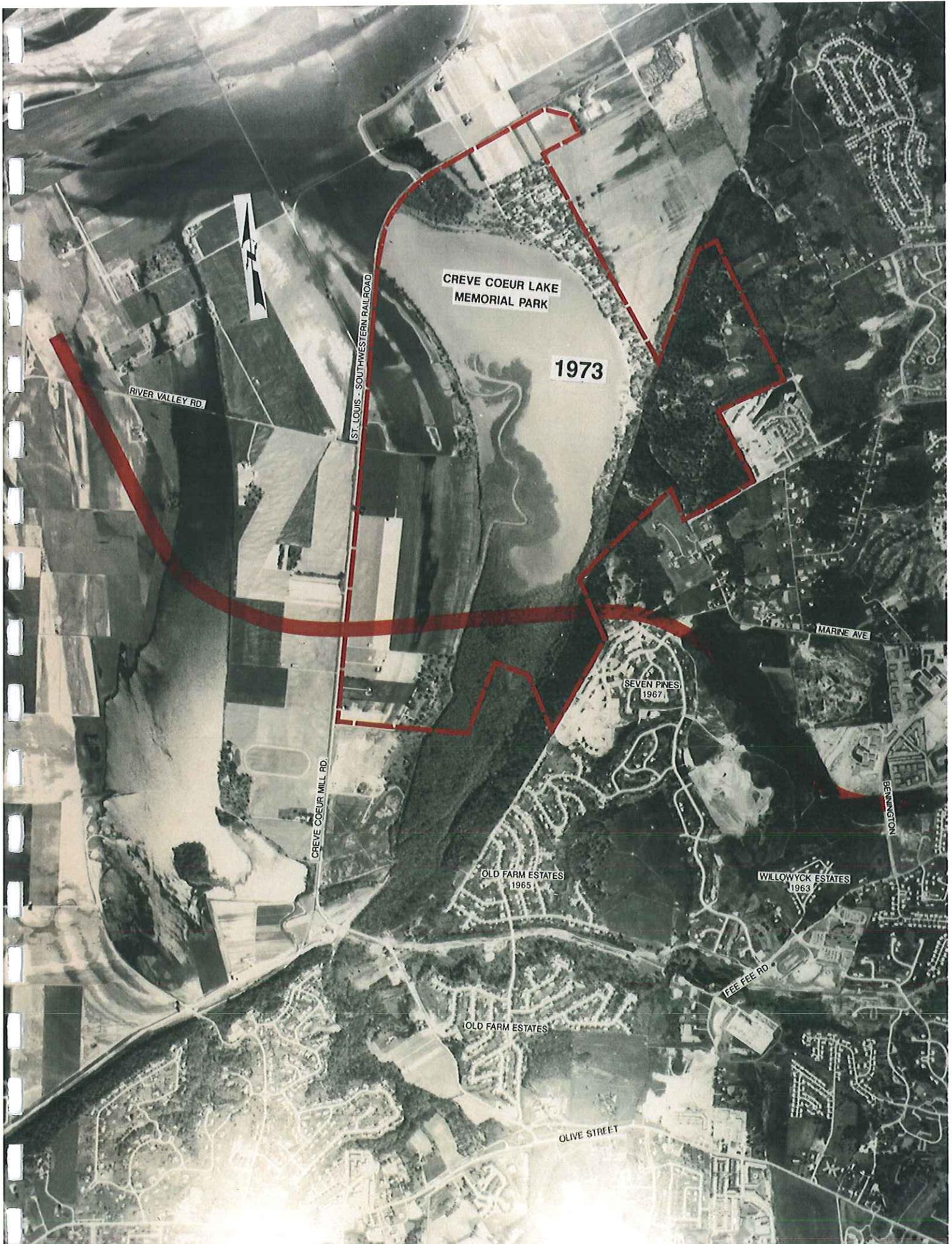
OLD FARM ESTATES
1965

WILLOWYCK ESTATES
1963

FEE FEE RD.

OLD FARM ESTATES

OLIVE STREET



CREVE COEUR LAKE
MEMORIAL PARK

1973

RIVER VALLEY RD.

ST. LOUIS - SOUTHWESTERN RAILROAD

CREVE COEUR MILL RD.

MARINE AVE

SEVEN PINES
1967

BENNINGTON

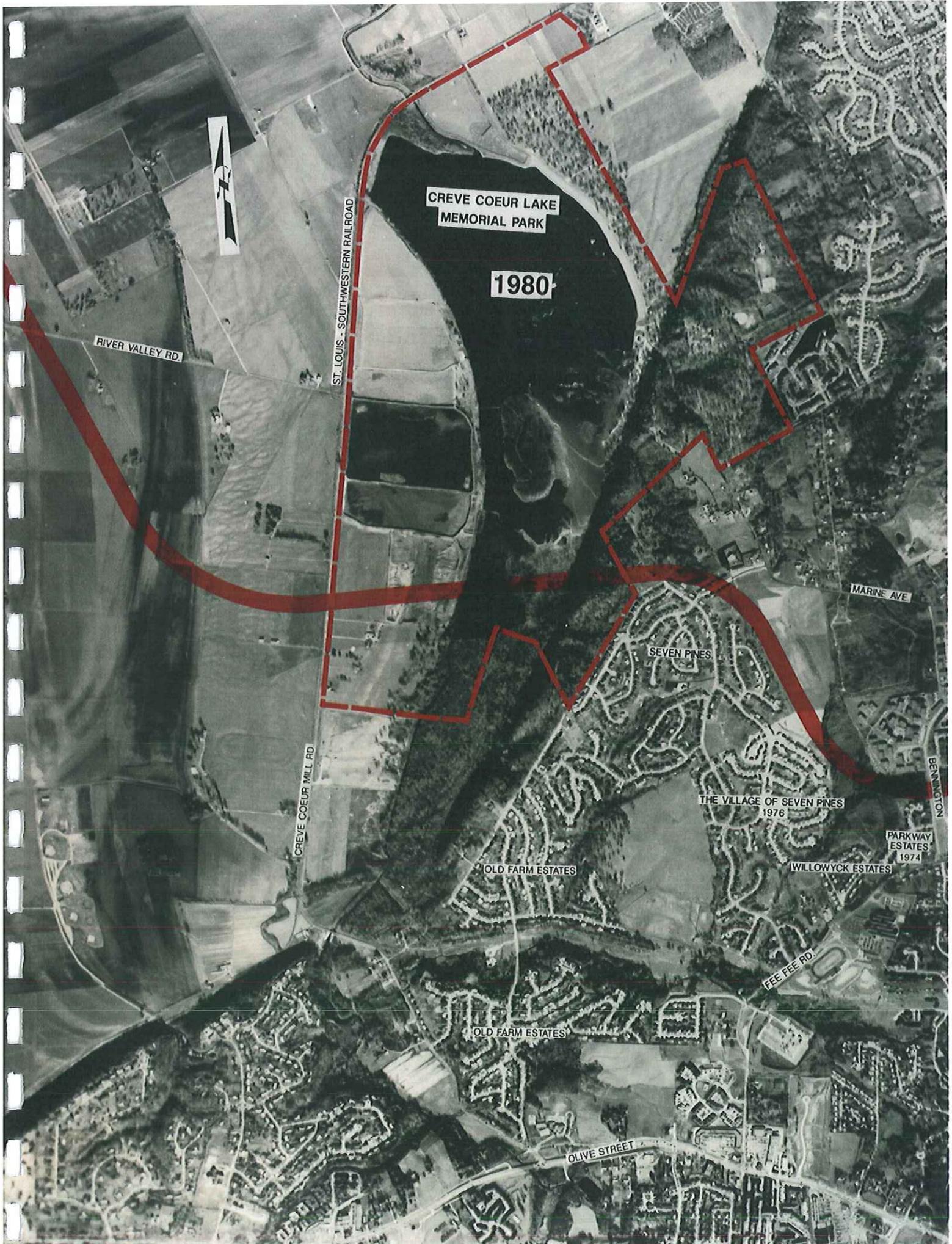
OLD FARM ESTATES
1965

WILLOWYCK ESTATES
1963

OLD FARM ESTATES

WEE FEE RD.

OLIVE STREET



CREVE COEUR LAKE
MEMORIAL PARK

1980

RIVER VALLEY RD.

ST. LOUIS - SOUTHWESTERN RAILROAD

CREVE COEUR MILL RD

SEVEN PINES

THE VILLAGE OF SEVEN PINES
1976

OLD FARM ESTATES

WILLOWYCK ESTATES

PARKWAY
ESTATES
1974

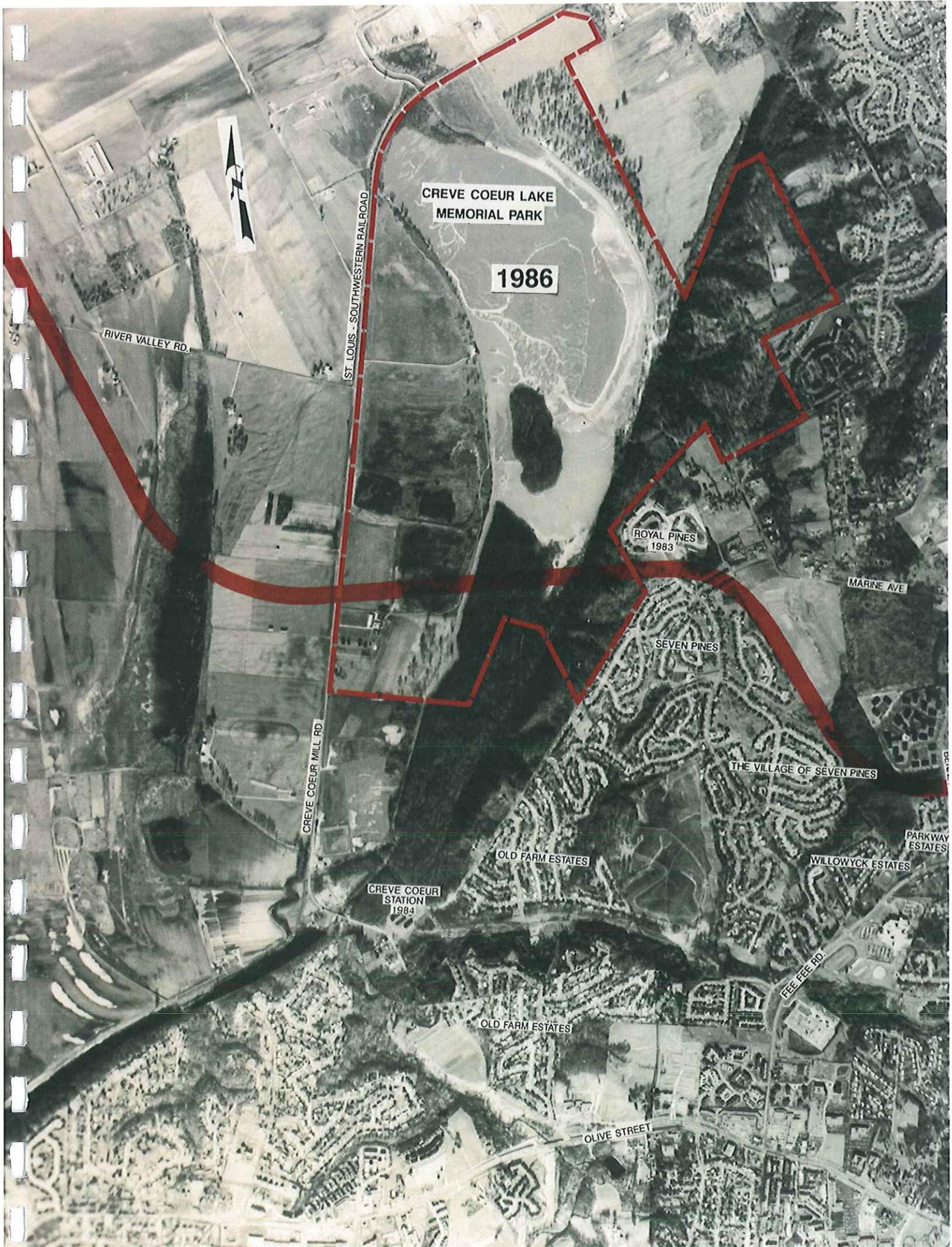
FEE FEE RD.

OLD FARM ESTATES

OLIVE STREET

MARINE AVE

BENNINGTON



CREVE COEUR LAKE
MEMORIAL PARK

1986

RIVER VALLEY RD.

ST. LOUIS - SOUTHWESTERN RAIL ROAD

ROYAL PINES
1983

MARINE AVE

SEVEN PINES

THE VILLAGE OF SEVEN PINES

PARKWAY
ESTATES

OLD FARM ESTATES

WILLOWYCK ESTATES

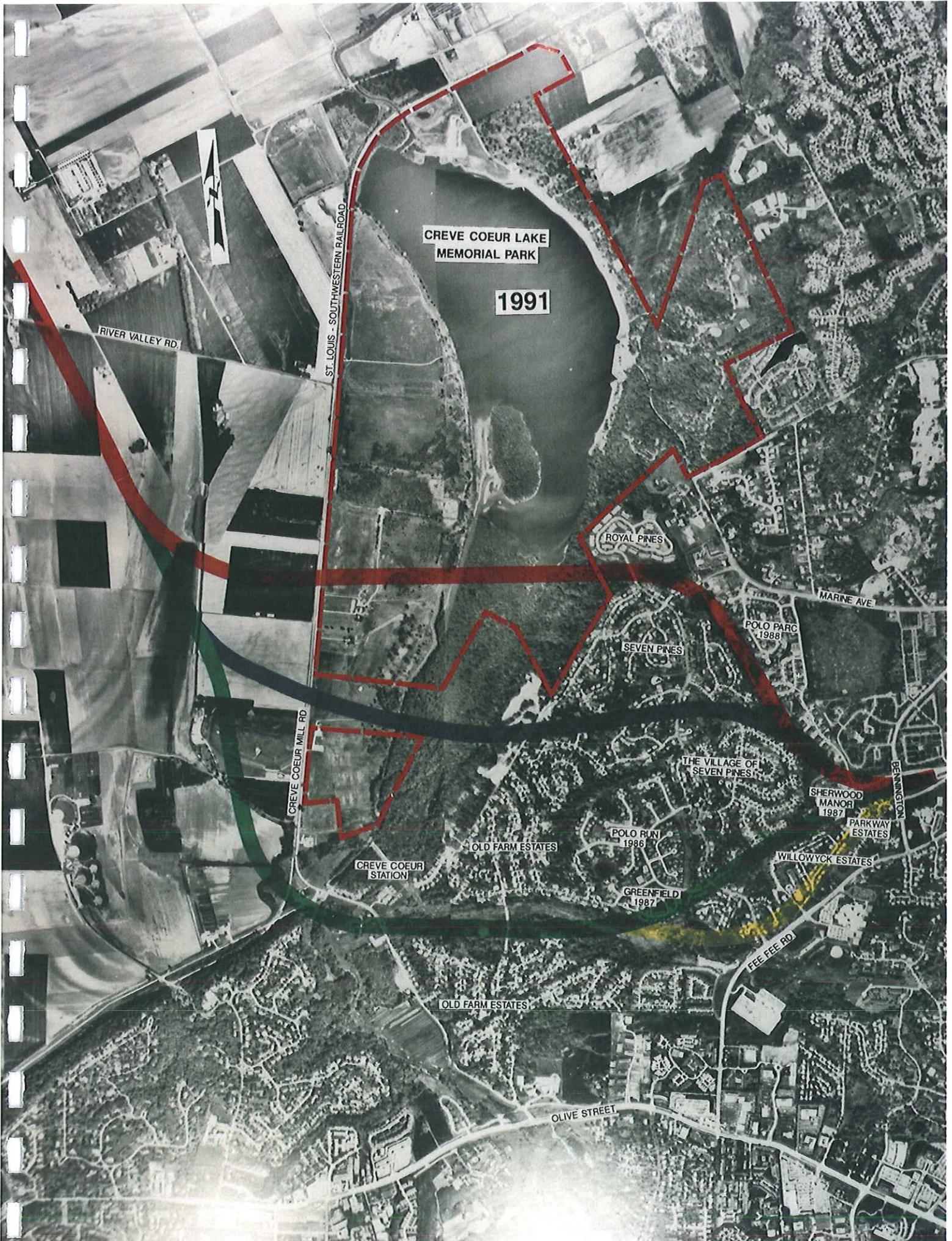
CREVE COEUR
STATION
1984

CREVE COEUR MILL RD.

FEE FEE RD.

OLD FARM ESTATES

OLIVE STREET



CREVE COEUR LAKE
MEMORIAL PARK

1991

RIVER VALLEY RD.

ST. LOUIS - SOUTHWESTERN RAILROAD

CREVE COEUR MILL RD.

ROYAL PINES

MARINE AVE.

POLO PARC
1988

SEVEN PINES

THE VILLAGE OF
SEVEN PINES

SHERWOOD
MANOR
1987

PARKWAY
ESTATES

BENNINGTON

CREVE COEUR
STATION

OLD FARM ESTATES

POLO RUN
1986

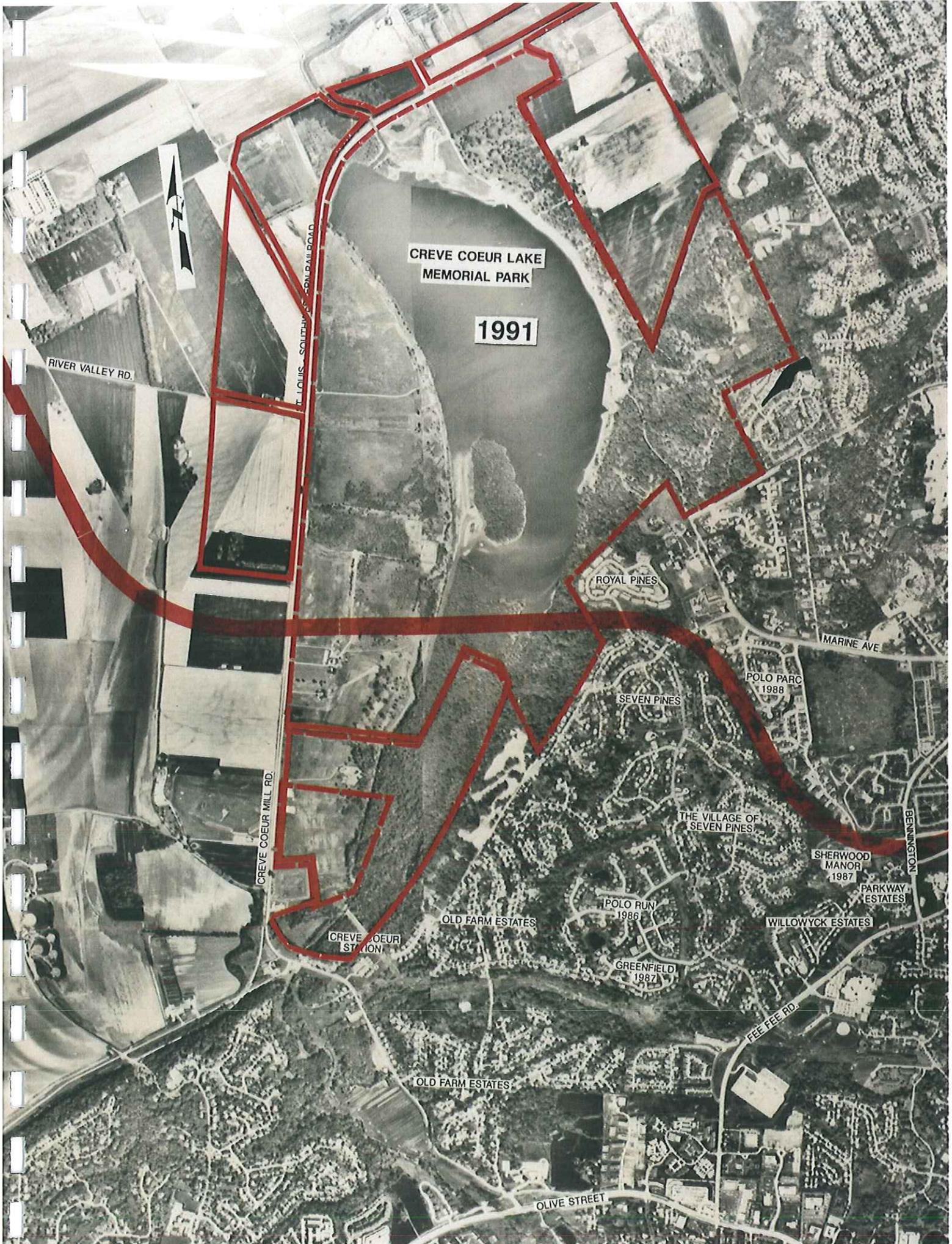
GREENFIELD
1987

WILLOWYCK ESTATES

FEE FEE RD.

OLD FARM ESTATES

OLIVE STREET



CREVE COEUR LAKE
MEMORIAL PARK

1991

RIVER VALLEY RD.

T. LOUIS - SOUTHERN RAILROAD

ROYAL PINES

MARINE AVE

POLO PARC
1988

SEVEN PINES

CREVE COEUR MILL RD.

THE VILLAGE OF
SEVEN PINES

SHERWOOD
MANOR
1987

BENNINGTON

PARKWAY
ESTATES

OLD FARM ESTATES

POLO RUN
1986

WILLOWYCK ESTATES

CREVE COEUR
STATION

GREENFIELD
1987

OLD FARM ESTATES

FEE FEE RD.

OLIVE STREET

Reference Materials



JOHN ASHCROFT

November 6, 1992



RON KUCERA

Acting Director

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF THE DIRECTOR
P. O. Box 176 Jefferson City, MO 65102 314-751-4422

November 6, 1992

Mr. Wayne Muri
Chief Engineer
Missouri Highway and
Transportation Department
P. O. Box 270
Jefferson City, MO 65102

Dear Mr. Muri:

This is in response to an October 16, 1992, letter from Mr. Bob Sfreddo, Division Engineer, Design, which requested this department's comment on the preliminary Final Environmental Impact Statement (FEIS) for the proposed Page Avenue Extension project in St. Louis County and St. Charles County, Missouri.

We would like to offer the following comments on the preliminary FEIS and to identify several issues pertaining to Section 601 of the Pipeline Safety Act of 1992 that address the implementation of a project mitigation plan that we believe need to be clarified in the Final EIS.

GROUNDWATER

We recommend that the potential construction impacts to groundwater and existing water wells be evaluated more fully in the final report. The Department of Natural Resources must also be notified if abandoned water wells are encountered during construction, or if water wells currently in use must be abandoned due to the project. When notified, we can provide plugging specifications to eliminate the chances of groundwater contamination due to improper well abandonment.

WETLANDS

Since remaining wetlands in Missouri constitute only 1.4 percent of our total land mass, remaining wetlands should be enhanced and protected as much as possible. We recommend that total wetland mitigation should be accomplished to at least a 1:1 ratio, as coordinated with the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service and the Missouri Department of Conservation.



Mr. Wayne Muri
November 6, 1992
Page 2

We commend the Department of Highway and Transportation for its incorporation of plans to accomplish dredging in order to improve the existing lake and river habitat. Siltation appears to be a major threat to the wetlands and riverine habitat, and removal of excess sediments and their replacement as highway fill material can greatly enhance the environmental values of the area. We encourage the Missouri Department of Highways and Transportation to incorporate the ideas of the Missouri Department of Conservation in enhancing fisheries and wildlife values through their construction designs.

FLOODPLAINS

The red alignment affects 398 acres of floodplain. We recommend that some sort of mitigation in the form of enhanced flood plain values should be addressed in the Final Environmental Impact Statement. Of special concern is the possibility of induced development in the adjoining floodplain areas. The text states that such induced development will not occur unless 500-year flood protection is provided for the affected areas. We stress that induced development within floodplains is not in the best interest of the public. We recommend that the Final EIS include a statement recommending against any subsequent plans to provide access to the proposed Page Avenue Extension that could induce development in the floodplain.

The planning for a potential increase of water surface profiles appears adequate. However, it is very important that the Final EIS state that design considerations demonstrate no accumulative increase in flood heights or velocities.

ARCHAEOLOGICAL SITE AND HISTORIC ARCHITECTURE

In compliance with Section 106 of the National Historic Preservation Act (16 U.S.C. 470f) and the Advisory of Historic Preservation's regulations Protection of Historic Properties (36 CFR Part 800), the stipulations outlined in the attached Memorandum of Agreement (MOA) shall be implemented. Pursuant to that MOA, a mitigation plan shall be developed that addresses treatment of resources identified as eligible for listing in the National Register of Historic Places.

LAND AND WATER CONSERVATION FUND SECTION 6(f) REQUIREMENTS

It is our understanding that appropriate documentation will be provided as required under LWCF 6(f), including final detailed location maps, appraisals, and additional environmental

Mr. Wayne Muri
November 6, 1992
Page 3

assessment of the converted and replacement lands. As you know, replacement land must be of at least equal fair market value and utility as the converted land and include adequate acreage to replace not only land lost physically, but must also include land adequate to replace visual, noise, and environmental intrusions. Please note that if portions of the proposed replacement land are impacted by visual, noise, or other intrusions, those impacts must also be considered in the environmental assessments and appraisal process.

Environmental evaluation of the converted and replacement parcels must focus on the environmental losses incurred as a result of converting one property and those gained because of acquisition of the replacement parcel.

Proposed LWCF replacement land must also meet the eligibility requirements for LWCF assisted acquisition. Land presently owned by a governmental agency, land being utilized for public recreation, or land intended for purchase with Federal moneys may not be eligible as replacement.

The Department of Natural Resources will need a copy of the state clearinghouse letter indicating this project has been subjected to the Intergovernmental Review System along with comments received during that process. Circulation of the Final EIS to the state clearinghouse process will be sufficient for this purpose.

We will need documentation showing that this conversion and replacement meets the recreation needs identified in the Statewide Comprehensive Outdoor Recreation Plan (SCORP).

PROJECT MITIGATION PLAN

Under the terms of Section 601 of the Pipeline Safety Act of 1992, we recommend that the issues listed below be accomplished in the schematic and construction document phases of the project.

- . In corporation of noise abatement techniques on the bridge and highway corridor so as to maintain necessary limits to any increase in sound levels within the public park lands.
- . Incorporation of all landscaping, vegetative screening, aesthetics, environmental resource mitigation, and trail development within the project budget. These project elements would not be considered "enhancements" for the purpose of meeting statewide obligations under ISTEA.

Mr. Wayne Muri
November 6, 1992
Page 4

- Planning, design and alignment of bridge structures as well as highway corridors to minimize physical disturbance and impacts to wetland areas.
- Vertical alignment of the bridge structures to minimize visual impacts from the park lands.
- Development of a physically separate walk/bike path on the bridge structure that meets or exceeds American Association of State Highway and Transportation Officials (AASHTO) standards as developed in "Guide for Bicycle Routes."
- Development of a trailhead facility at Creve Coeur Lake Park that meets Missouri Department of Natural Resources' standards.
- Acquisition and donation of comparable or like land to mitigate the impact of the proposed project on existing wetlands and Creve Coeur Lake Park.
- A payment of \$250,000.00 for mitigation of outdoor recreational facility improvements at Creve Coeur Lake Park.
- Design of a drainage system that will collect all water run-off and convey it to a detention area outside the natural wetlands and Creve Coeur Park Lake.
- The use of textured concrete and other design elements to reduce the visual impact of the bridge.

We appreciate the opportunity to review a preliminary FEIS for this proposed project, and we look forward to further inter-agency coordination in the future with regard to this project, as well as other transportation projects in the State of Missouri.

Very truly yours,

DEPARTMENT OF NATURAL RESOURCES


Ron Kucera
Acting Director

RK:jm

c: Mr. Gerald Reihsen, Federal Highway Administration

Attachment



United States Department of the Interior



NATIONAL PARK SERVICE

Midwest Region
1709 Jackson Street
Omaha, Nebraska 68102-2571

IN REPLY REFER TO:

29-00292,00478,01146 (MWR-RW)

Mr. Bob Sfreddo
Division Engineer, Design
Missouri Highway and
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Capitol Avenue at Jefferson Street
P.O. Box 270
Jefferson City, Missouri 65102

Asst. Dir. Engr-L&D
 Asst. Dir. Engr-Plan
 Asst. Dir. Engr-Resour.
 Asst. Dir. Engr-Transp.
 Asst. Dir. Engr-Util.
 Asst. Dir. Engr-Admin.
 Asst. Dir. Engr-Reg.
 Asst. Dir. Engr-Info.
 Asst. Dir. Engr-Off. Aff.
 Asst. Dir. Engr-Gen. Inv.
 Asst. Dir. Engr-Other
 Asst. Dir. Engr-Training
 Asst. Dir. Engr-Research
 Asst. Dir. Engr-Development
 Asst. Dir. Engr-Construction
 Asst. Dir. Engr-Operations
 Asst. Dir. Engr-Maintenance
 Asst. Dir. Engr-Administration
 Asst. Dir. Engr-Records Management
 Asst. Dir. Engr-Information Systems
 Asst. Dir. Engr-Office Management
 Asst. Dir. Engr-Other

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 Asst. Dir. Engr-Plan
 Asst. Dir. Engr-Resour.
 Asst. Dir. Engr-Transp.
 Asst. Dir. Engr-Util.
 Asst. Dir. Engr-Admin.
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 Asst. Dir. Engr-Off. Aff.
 Asst. Dir. Engr-Gen. Inv.
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 Asst. Dir. Engr-Operations
 Asst. Dir. Engr-Maintenance
 Asst. Dir. Engr-Administration
 Asst. Dir. Engr-Records Management
 Asst. Dir. Engr-Information Systems
 Asst. Dir. Engr-Office Management
 Asst. Dir. Engr-Other

NOV - 3 1992



Dear Mr. Sfreddo:

This is in response to your recent request for comments on the preliminary final Environmental Impact Statement (FEIS) for the Page Avenue Extension in St. Louis and St. Charles counties, Missouri. As was agreed during the interagency meetings held on August 28 and October 30, 1991, the Midwest Regional Office, National Park Service (NPS), among other agencies, would be provided the opportunity to formally comment on the FEIS prior to its finalization.

Legislation recently enacted by the United States Congress authorized the Secretary of Transportation to waive requirements of Section 4(f) of the Department of Transportation (DOT) Act of 1966 as it relates to the "Red Alternative" route. Therefore, our review of this draft no longer includes an assessment of the various proposed route alternatives, but rather a general assumption that the "Red Alternative" route will be the final selected route.

Section 6(f) Comments:

Pursuant to the Land and Water Conservation Fund (L&WCF) Section 6(f)(3) requirements, the selection of the "Red Alternative" route through Creve Coeur Park will result in an obvious conversion of park land. An assessment of this present draft has been completed with those areas identified for required Section 6(f)(3) conversion documentation. Although certain Land and Water Conservation Fund (L&WCF) actions will be required of the project sponsor and the Missouri Department of Natural Resources, such as the States' formal approval of a final route, we would anticipate most of the environmental and related information necessary for a Section 6(f)(3) evaluation to be included in the FEIS.

The preliminary FEIS continues to identify and suggest that approximately 40 acres is the "taking" in the park. It is our position that this may only represent a small fraction of the acreage actually impacted by the "Red Alternative". As we have

indicated in previous comments, we anticipate that a significant noise impact will occur on the park as a result of this project. In calculating the estimated acres impacted by noise, we would suggest that a highway corridor be identified through the park that encompasses an area of projected noise levels to 57dBA. The preliminary FEIS presently identifies only a corridor to 67dBA, which we believe constitutes a significant adverse noise impact. In similar circumstances, the NPS has suggested that noise levels exceeding a range of 55dBA to 60dBA in park areas and/or an increase of 3dBA above currently measured noise levels may constitute a "taking" for Section 6(f)(3) purposes. An identified area of projected noise levels to 57dBA could be utilized in making a final determination regarding the boundary and size of an anticipated conversion area. We are also presently awaiting the completion of a technical study on noise impact for a more detailed analysis of this issue.

The FEIS presently includes a discussion on the "Enhancement Package" which includes mitigation measures for the anticipated impact on Creve Coeur Park. Compliance with Section 6(f)(3) requirements will necessitate the providing of replacement land that has an equal or higher market value and is of reasonably equivalent usefulness to the land being converted. To make this determination, both converted and proposed replacement land must be appraised and an environmental analysis completed. The present document, although containing an environmental analysis on the existing park land, does not meet the environmental requirements of the L&WCF Act in regard to the proposed replacement lands. We would suggest that further environmental analysis be conducted on these particular lands and the results incorporated in the FEIS.

Areas that may be considered and proposed as replacement land must also meet the eligibility requirements for L&WCF assisted acquisition as outlined in the "L&WCF Grants-in-Aid Manual" and 36 CFR, Part 39. In particular, issues such as land presently owned by a governmental agency, land being utilized for public recreation, or land intended for purchase with Federal moneys may be declared ineligible for Section 6(f)(3) replacement purposes.

In addition to the above information and to make a final determination of this anticipated Section 6(f)(3) conversion, we would further suggest that the following issues also be addressed in the FEIS:

The Intergovernmental Review System (E.O. 12372) review procedures have been adhered to since the proposed conversion and substitution constitutes significant changes to the original Land and Water conservation Fund project.

Although the preliminary FEIS presently discusses the outdoor recreation needs in the immediate area of Creve Coeur Park as

identified in the document Recreation spaces, Community Places, 1982-2000, there is no reference to the Missouri Statewide Comprehensive Outdoor Recreation Plan (SCORP). The proposed conversion and substitution must be shown to be in accord with the SCORP.

General Comments:

Although the earlier Draft Environmental Impact Statement (DEIS) had failed to adequately address cumulative and secondary impacts, the present document appears to have addressed these issues in a more complete and acceptable manner. In section 4.23, the cumulative and secondary impacts are addressed in sufficient detail including such issues as flood protection, the Earth City Expressway Extension, social, economic and environmental impacts, and others.

The cultural resources survey, although limited to localized spot checks of accessible areas or a "windshield" reconnaissance, and literature research, appears to be adequate and acceptable for the FEIS. We note that approximately 10 properties were identified by the Missouri Office of Historic Preservation as being potentially eligible for the National Register of Historic Places. On page 4-122, the Missouri Highway and Transportation Department (MHTD) states that portions of the proposed highway plans are already being redesigned to avoid impact to those historic structures that have been determined eligible or potentially eligible for the National Register of Historic Places. The preliminary FEIS further states "It is expected that no eligible structures will be taken or adversely affected". We remind MHTD that should a no adverse effect or an adverse effect be determined for any of the above properties, or Section 6(f)(3) replacement properties, further coordination with the Advisory Council on Historic Preservation will be required to satisfy the Section 106 review process.

We appreciate the opportunity to review the Page Avenue Extension preliminary FEIS through the intergovernmental exchange, and as a recently designated cooperating agency, look forward to actively participating in the final stages of this FEIS process.

Sincerely,



Don H. Castleberry
Regional Director

cc:
Mr. Gerald Reihsen, Federal Highway Administration, Missouri
Highway and Transportation Department, Capitol Avenue at
Jefferson Street, P.O. Box 270, Jefferson City, Missouri 65102

St Chas/St Louis Rte D 260484

Asst. Dir. Eng-LE
 Asst. Dir. Eng-Oper
 Utilities
 Fed. Aid
 Plan. Eng
 Photo Eng

[Redacted] Gm
 [Redacted] DE
 [Redacted] MK

October 23, 1992

Mr. Don H. Castleberry, Regional Director
United States Department of the Interior
1709 Jackson Street
Omaha, NE 68102-2571

Dear Mr. Castleberry:

Subject: Page Avenue Extension
St. Louis-St. Charles Counties
Project 6-U-803

We have received your October 20, 1992 letter requesting to be a cooperating agency for the final stages of the EIS process. We would be happy to have your agency in that capacity for this project so that Section 6(f)(3) matters can be successfully concluded.

Sincerely yours,

R. G. ANDERSON
Gerald J. Reihsen, P.E.
Division Administrator

cc: MHTD Design

- CHIEF ENGR
- _____
- _____
- _____
- FISCAL
- IRAD
- LEGAL
- M&T
- M&R
- PLANNING
- RW
- TRANSP
- _____



10-21-92 10:53AM FROM SENATOR DANFORTH DL

TO 313145264405

PO02

10/20/92 14:43

202 208 3877

CONSERV & WILDLIFE --- SEN. DANFORTH

002

10/20/92 14:16

202 343 3898

WASO/RGD (784) --- SOL C&W

002/002

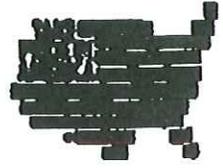
10/20/92 11:07

NATIONAL PARK SERVICE

002



United States Department of the Interior



NATIONAL PARK SERVICE

Midwest Region
1700 Jackson Street
Omaha, Nebraska 68109-2571

NO IMP/REPOL TO

29-00292,00478,01146 (MWR-RW)

OCT 30 1992

Mr. Gerald J. Reihsen
Division Administrator
Federal Highway Administration
P.O. Box 1787
Jefferson City, Missouri 65102

Dear Mr. Reihsen:

The National Park Service (NPS) Midwest Regional Office, as Federal administrator of the Land and Water Conservation Fund (LWCF) program in Missouri, has an inherent interest in the proposed Page Avenue Extension road project in St. Louis, Missouri. As we have indicated in previous comments and correspondence with the taking of land anticipated to occur if the route through Crane Lake Park becomes a reality, Section 4(f)(3) of the LWCF act of 1965 (Act), as amended, must be appropriately addressed. The information required to address Section 4(f)(3) should be incorporated in the final Environmental Impact Statement (EIS) for the above highway project.

With measures recently enacted to legislatively resolve the Section 4(f) issue, this Office is now able to actively and expeditiously review Section 4(f)(3) considerations as required by the Act. We are, therefore, requesting that the NPS Midwest Regional Office be approved for designation as a cooperating agency. As a cooperating agency we would hope to participate in the final stages of the EIS process and to encourage the incorporation of necessary documentation for a successful evaluation of Section 4(f)(3).

We would appreciate your consideration of this request and look forward to a favorable response. If you require additional information, please feel free to contact Clay McDerweilt of my staff at 402-321-3203.

Sincerely,


Don H. Castleberry
Regional Director



JOHN ASHCROFT
Governor

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Bridge
Chapflound
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P.A.
F.H.W.A
Sent 10-26
DM*



*Desis
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*St Chas / St Louis Rte D
JWC 0803*

RON KUCERA
Acting Director

*C
M*

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF PARKS, RECREATION, AND HISTORIC PRESERVATION
P.O. Box 176 Jefferson City, MO 65102 314-751-2479

October 20, 1992

- Asst. Dir. Engr-L&D
- Asst. Dir. Engr-Oper
- Asst. Dir. Engr-Plan
- Asst. Dir. Engr-Rec.
- Asst. Dir. Engr-Transp.
- Asst. Dir. Engr-Value
- Asst. Dir. Engr-Offices
- Asst. Dir. Engr-Files
- Asst. Dir. Engr-Coord.
- Asst. Dir. Engr-Design
- Asst. Dir. Engr-Value
- Asst. Dir. Engr-Office Mgmt.
- Asst. Dir. Engr-Files

21

Mr. Don H. Castleberry
Regional Director
National Park Service
Midwest Region
1709 Jackson Street
Omaha, Nebraska 68102-2571

Re: Request for Conversion
Creve Coeur Park - St. Louis County
LWCF Projects 29-00292, 29-00478, 29-01146

Dear Mr. Castleberry:

Congress recently passed legislation, S.1583 - Pipeline Safety Act, that authorizes the Secretary of Transportation to waive the requirements of section 4(f) of the Department of Transportation Act after certain requirements are met. Since it is anticipated that the President will sign that legislation, we hereby give notice that the state of Missouri is initiating the Land and Water Conservation Fund Act 6(f) conversion process on the above project.

As you know, the Missouri Highway and Transportation Department plans to construct a ten lane bridge across Creve Coeur Park in St. Louis County within the Land and Water Conservation Fund (LWCF) project boundary as a part of the Page Avenue extension project. Actual construction will directly impact approximately forty acres of park land. Other impacts will include visual, noise, and potential environmental intrusions.

A 6(f) boundary map and appraisals for both the converted and the replacement lands will be submitted when completed. In addition, the state will provide adequate replacement lands, appraisals, and 6(f) boundary maps for any park lands which the National Park Service subsequently determines to be converted as a result of construction and operation of the proposed project through the environmental impact process.



Recycled Paper

Mr. Don H. Castleberry
October 20, 1992
Page 2

Please feel free to contact me at the above address if you have questions.

Very truly yours,



William Palmer
Deputy State Liaison Officer and
Director, Division of Parks,
Recreation, and Historic Preservation

Enclosure

WP:sl

cc: ✓ Mr. Wayne Muri, Chief Engineer, Missouri Department of Highway
and Transportation, P.O. Box 270, Jefferson City, MO 65102-0270

Mr. George Westfall, County Executive, St. Louis County,
41 South Central Avenue, Clayton, MO 63105

Mr. Clay McDermeit, Chief, Western Heartlands Division,
Recreation Assistance Programs, National Park Service,
1709 Jackson Street, Omaha, NE 68102-2571

Bill G



MISSOURI HIGHWAY AND TRANSPORTATION DEPARTMENT

Wayne Muri
Chief Engineer

Capitol Ave at Jefferson St. P O Box 270. Jefferson City, MO 65102 (314) 751-2551 Fax (314) 751-6555

October 13, 1992

Mr. Ron Kucera, Acting Director
Missouri Department of Natural Resources
P. O. Box 176
Jefferson City, MO 65102

Dear Mr. Kucera:

Subject: Design, Route D, St. Louis and St. Charles
Counties, Page Avenue Extension, Job No. 6U0803,
Creve Coeur Lake Memorial Park

Attached is a copy of our proposed enhancement plan for Creve Coeur Lake Memorial Park. Also attached is a copy of legislation recently enacted by the U.S. Congress authorizing the Secretary of Transportation to waive requirements of Section 4(f) of the Department of Transportation (DOT) Act of 1966 (Section 138 of Title 23 U.S.C. and Section 303 of Title 49 U.S.C.) as it applies to the proposed extension of Page Avenue in St. Louis and St. Charles Counties. Our park enhancement plan was proposed prior to recent Congressional action on the Page Avenue extension. The provisions of the recent legislation may go beyond the enhancement measures originally conceived in our proposed enhancement plan. However, we intend to fully comply with the mitigation measures set forth in the legislation, if the legislation is signed into law by the President. These documents are being provided for your information.

Sincerely yours,

Bob Sfreddo
Division Engineer, Design

bg/pr

Attachments

Copies: Mr. J. T. Yarnell-6
Mr. Gerald Reihsen-FHWA
Ms. Peggy Porter-pa
Mr. Rich Tiemeyer-cc } w/out Attachments

St Charles - St Louis Cos Rte D
Page Ave Extension J604903

MISSOURI DEPARTMENT OF CONSERVATION



MAILING ADDRESS
P.O. Box 180
Jefferson City, Missouri 65102-0180

STREET LOCATION
2901 West Truman Boulevard
Jefferson City, Missouri

Telephone: 314/751-4115
JERRY J. PRESLEY, Director

February 18, 1992

SW
 Gen. Inv. Engr.
 Asst. Div. Engr.
 Utilities
 Fed. Aid
 Recon. Engr.
 Photo Engr.

 CMA
mark

Mr. Robert Sfreddo
Chief, Planning Division
MO Highway and Transportation Department
P. O. Box 270
Jefferson City, Missouri 65102

*copied Dist 6
2-25-92*

Dear Mr. Sfreddo:

As part of the ongoing coordination process to develop the most sensible, feasible and environmentally least damaging alternative for the proposed extension of Page Avenue, the following suggestion is offered for your consideration.

The Creve Coeur Lake fishery and Department efforts to manage the lake are frustrated by the shallowness of the lake and the chronic sediment input from Creve Coeur Creek. These problems will persist as development continues throughout the watershed. If the Missouri Highway and Transportation Department acquires Tract B as proposed in the area enhancement plan, we hope you would consider construction of a siltation basin on that site through which the creek would flow. The cleared area west of the creek may be suitable for such a basin. The basin would help improve water clarity and extend the benefits of lake dredging. It could also reduce chlordanes levels in the lake and in fish. These benefits would enhance the lake's fisheries and provide more diverse fishery management opportunities.

The large amount of fill generated by construction of the basin could be used for elevating the Page Avenue right-of-way. Our staff is available to further consult on this idea. Please direct future coordination on this matter to Mr. Norman P. Stucky at the above address.

Sincerely,

DAN F. DICKNEITE
PLANNING DIVISION CHIEF



COMMISSION

ANDY DALTON

JAY HENGES

JOHN POWELL
Rolla

United States Senate

WASHINGTON, DC 20510-2802

January 28, 1992

The Honorable Manuel Lujan
Secretary of the Interior
Department of the Interior
1849 C St., N.W.
Washington, D. C. 20240

Dear Secretary Lujan:

We are writing in support of the Missouri Highway and Transportation Department's (MHTD) plan to extend Page Avenue in St. Louis County through a portion of Creve Coeur Park. We feel that the State's plan, known as the Red Alignment, is the only feasible and prudent plan to alleviate the chronic traffic congestion at the Missouri River crossings between St. Louis and St. Charles Counties. We request your support for the Red Alignment.

As you know, because the planned route traverses parkland, the plan must meet the requirement of section 4(f) of the Department of Transportation Act of 1966. The Act states that the Federal Highway Administration will approve such use of parkland only if "there is no feasible and prudent alternative to the use of such land." We believe that there clearly is no feasible and prudent alternative.

Since 1969, a plan similar to the Red Alignment has been part of the St. Louis region's plans to relieve area traffic problems. In 1973, the MHTD approved a study which established a Page Avenue Extension corridor in St. Louis and St. Charles Counties. Since then, St. Louis County has protected the Red Alignment corridor from development. Developers constructed townhouses, condominiums, apartment structures, and single-family homes around the preserved corridor, and individuals made purchases and rentals, with the strong expectation that the route would be developed where the county planned it to be. Thousands of individuals have made decisions about purchasing property with that expectation in mind. To determine now that the highway cannot be built where the State, the county, and homeowners have expected it to be built for the last 23 years would be breaking a compact. To force the State to choose a route which traverses the now-developed neighborhoods would be unacceptable.

United States Senate

WASHINGTON, DC 20510-2802

January 28, 1992

The Honorable James B. Busey
Acting Secretary of Transportation
Department of Transportation
400 Seventh Street, S.W.
Washington, D.C. 20590

Dear Admiral Busey:

We are writing in support of the Missouri Highway and Transportation Department's (MHTD) plan to extend Page Avenue in St. Louis County through a portion of Creve Coeur Park. We feel that the State's plan, known as the Red Alignment, is the only feasible and prudent plan to alleviate the chronic traffic congestion at the Missouri River crossings between St. Louis and St. Charles Counties. We request your approval of the Red Alignment.

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The Honorable James D. Busey
January 28, 1992
Page 2

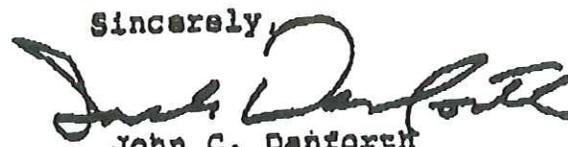
In addition to representing a compact between property owners and the State, the Red Alignment has other advantages. It is the least expensive of the plans that have been considered. Also, the other potential alignments would require the taking of up to an additional 113 residences, and would displace up to an additional 312 persons.

The Department of Transportation Act also requires the project to include "all possible planning to minimize harm to such park . . . resulting from such use" of the parkland. As you assess the State's plan, we strongly urge you to give serious consideration to the excellent enhancement plan for the park developed by St. Louis County and the MHTD. The State would acquire and donate to the county over 600 acres, increasing the size of the park by more than 50 percent. Creve Coeur Park will be a better park after the Red Alignment plan is implemented.

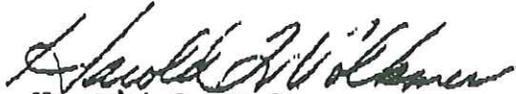
Finally, and very importantly, the Red Alignment is favored by a strong bipartisan coalition of elected officials on the city, county, state, and federal levels. Such support reflects the fact that this route is the one the vast majority of people in the area want. At a public hearing on June 28, 1990, in St. Charles, a record crowd of 1,100 people showed up to express its strong support for expeditious construction of the Red Alignment.

We believe that after all the information is considered, it will be clear that the Red Alignment is the only feasible and prudent option to alleviate the increasingly worsening traffic situation in the area. The MHTD plans to release a new draft of the Final Environmental Impact Statement by February 10, 1992. We request your support of the draft and approval of the final Statement.

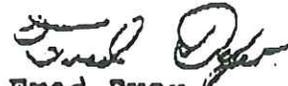

Christopher S. Bond
United States Senator

Sincerely,

John C. Danforth
United States Senator

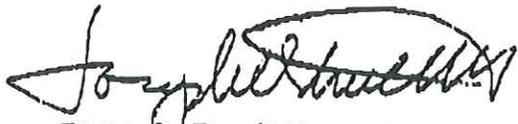
The Honorable James D. Busey
January 28, 1992
Page 3


Harold L. Volkmer
Member of Congress


John Ashcroft
Governor of Missouri


Fred Dyer
Missouri State Senator
St. Charles County

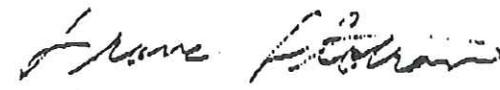

George James
Missouri State Representative
St. Charles County


Joseph R. Ortwerth
Missouri State Representative
St. Charles County


Steven E. Ehlmann
Missouri State Representative
St. Charles County


Ted House
Missouri State Representative
St. Charles County


Craig Kilby
Missouri State Representative
St. Charles County


Francis E. Flotron, Jr.
Missouri State Senator
St. Louis County

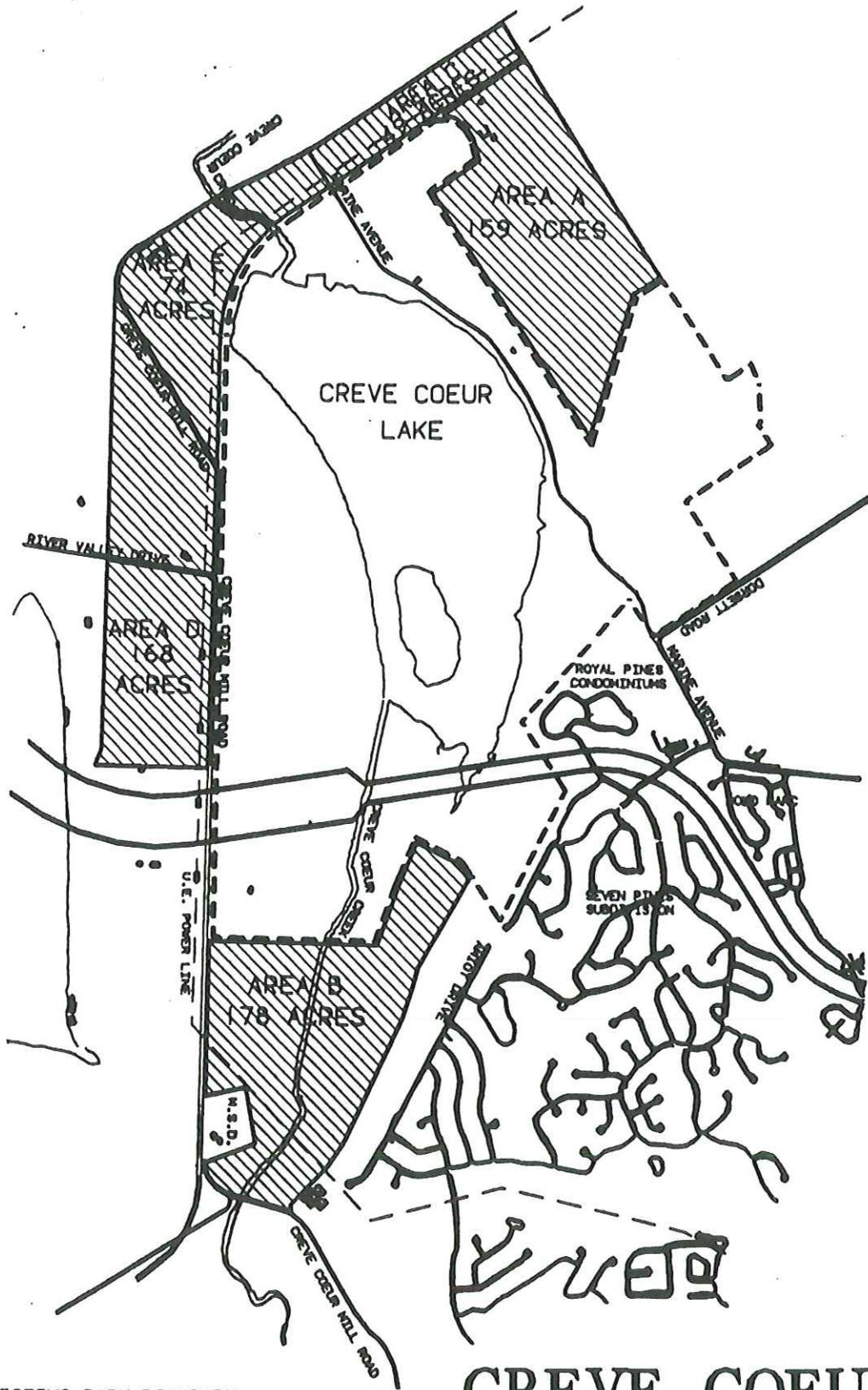

Mark Holloway
Missouri State Representative
St. Louis County


W. Todd Akin
Missouri State Representative
St. Louis County


Edwin L. Dirck
Missouri State Senator
St. Louis County


George R. Westfall
County Executive
St. Louis County


Eugene C. Schwendemann
Presiding Commissioner
St. Charles County



--- EXISTING PARK BOUNDARY

▨ MITIGATION LANDS

0 1/8 1/4 1/2 MILE

CREVE COEUR MEMORIAL PARK ENHANCEMENT PLAN



VINCENT C. SCHOEMEHL, JR.
MAYOR
JAMES M. SHEA
DIRECTOR OF PUBLIC UTILITIES

City of St. Louis
DEPARTMENT OF PUBLIC UTILITIES

—WATER DIVISION—
Design And Construction Section
1640 So. Kingshighway Blvd.
St. Louis, Missouri 63110
(314) ~~771-4880~~ 771-4806



STANLEY T. FLETCHER
DIVISION ENGINEER

March 6, 1991

Mr. J.T. Yarnell, P.E.
District Engineer
Missouri Highway and Transportation Department
329 South Kirkwood Road
Kirkwood, Missouri 63122

Re: Page Avenue Extension
Green Route Alternate Location

Dear Mr. Yarnell:

On December 21, 1990, Mr. Randy Chang of your office met with us to explain the referenced project. Since the Green Route alternate location would cross our conduit right-of-way twice, Mr. Chang asked us to review the project and comment about how it would impact on us. He left plans with us that show the alternate Green Route.

As background, it should be pointed out that we have three water conduits in our right-of-way. Conduit 1 is a 62 inch steel riveted joint main constructed from 1925 to 1929. Conduit 2A is a 60 inch steel dresser coupling joint main constructed from 1936 to 1937. Conduit 3 is a 72 inch welded steel welded joint main constructed from 1971 to 1972.

Your two proposed crossings of our conduit right-of-way would occur at your station 891+00+/-, near Creve Coeur Mill Road; and at your station 940+00+/-, just east of Old Farm Estates subdivision. In addition, there is a slight conflict at your station 909+00+/-100, just west of Old Farm Estates. At that point it appears that your highway right-of-way will encompass portions of all three of our conduits, but they will not be under the pavement itself, merely alongside.

We have reviewed our files and have talked with other utilities, but as yet have no good information on cost of relocation of each conduit. In order to avoid our conduit crossings at Stations 891+00 and 940+00, each conduit would need to be relocated approximately 4,900 feet between Stations 891+00 and 940+00. If bridge crossings are used as noted under Option 2, mentioned later, there will be a conflict at Station 909+00 which will require approximately 500 feet of relocation per conduit. We should have an estimate of these costs in the near future.

Mr. J.T. Yarnell, P.E.
District Engineer
Missouri Highway and Transportation Department

March 6, 1991
Page 2 of 3

In addition to the direct costs involved in relocation, there are other factors to consider. The Highway Department will have to acquire additional right-of-way for our relocated conduits to occupy. During construction, we could only allow for one conduit at a time to be taken out of service for draining, connecting with the new relocated section, disinfecting and putting back into service. We feel that valving and an interconnecting manifold at each end of the relocated conduits would facilitate and minimize disinfection and also expedite reconnection and reduce downtime on the conduits.

These conduits supply approximately one third of the water used by the City of St. Louis. In addition, they supply a major portion of the water used by the cities of St. Charles and St. Peters, and upon completion of connections currently under construction, they will supply a significant portion of the water used by St. Louis County. We need two conduits to be in service at any time so that if a break should occur on one of the mains in use, we still have a transmission conduit in service.

The second option would include the two crossings of the Highway over our Right-of-Way. As we understand your plans, you are proposing bridges over our conduits. This would seem to be a way to avoid doing anything with our conduits. However, we are concerned that vibrations from traffic could transfer to the bridge foundation and in turn cause vibrations in the soils surrounding our conduits. We feel that the two older conduits, 60+ and 50+ years old, could be susceptible to joint weakening and possible failure if subjected to continual vibrations. Due to the volume of water these conduits carry, any failure could cause severe damage to the highway and would need to be protected. The newer conduit, nearly 20 years old, would not be as susceptible to joint problems; however, it has suffered a previous failure along Water Works Road not far from the Creve Coeur Mill Road crossing which should be taken into consideration.

With this second option, we would require that the conduits be reinforced concrete encased directly adjacent to the bridge foundations for a distance to where your soils engineering experts figure that vibrations from the bridge foundations are negligible. This would give better protection to our conduits. Also required under this second option, would be the 500 foot relocation at Station 909+00 mentioned above.

If concrete encasement were to be utilized on this project, it could be done with our conduits in service. Certain precautions would need to be followed during the construction process. Hand digging would be necessary near the pipe surface and below it to avoid damage to the coating and pipe wall. Due to the weight of water in the unsupported pipe, the length of pipe uncovered at any one time would be limited to 25 feet. Also, based upon inspection, if the existing pipes show signs of weakness due to corrosion or other factors, they should be repaired or replaced. Concrete encasement should be performed on the equivalent of new pipe.

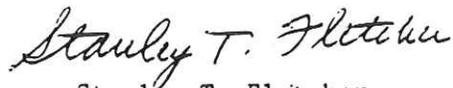
Mr. J.T. Yarnell, P.E.
District Engineer
Missouri Highway and Transportation Department

March 6, 1991
Page 3 of 3

We have one other request concerning your bridge crossings. To allow for the possibility of performing maintenance or repairs on our mains, we need an equipment clearance of 18 feet minimum between ground surface and the lowest point of the bridge deck structure.

I hope that our comments have addressed your needs sufficiently enough for you to proceed on the evaluation of the alternate Green Route. If you have any further questions or need clarification on points already covered, please contact me or Joe Kammerer at 771-4806.

Sincerely,



Stanley T. Fletcher
Division Engineer
Design and Construction Section

STF/JJK/mbe

cc: W.R. Bosse, Water Commissioner
Dave Visintainer, Executive Engineer
G. Frank Herron, Executive Engineer
Ken Fetter, Special Projects Engineer
Joe Kammerer, Assistant Division Engineer, Design & Construction



City of St. Louis
DEPARTMENT OF PUBLIC UTILITIES

—WATER DIVISION—

And Construction Section
 1040 So. Kingshighway Blvd.
 St. Louis, Missouri 63110
 (314) 771-4800 x 771-4806



STANLEY T. FLETCHER
 DIVISION ENGINEER

VINCENT C. SCHOEMER, JR.
 MAYOR
 JAMES M. SHEA
 DIRECTOR OF PUBLIC UTILITIES

RECEIVED
 JUN 3 - 1991
 May 30, 1991
 Missouri Highway Dept.

Bergman

RES
W
A

Mr. J.T. Yarnell, P.E.
 District Engineer
 Missouri Highway and Transportation Department
 329 South Kirkwood Road
 Kirkwood, Missouri 63122

Re: Page Avenue Extension
 Green Route Alternate Location

Dear Mr. Yarnell:

	DIST. ENGR	
	ASST. D.E. - DESIGN	<i>JA</i>
	ASST. D.E. - OPE.	<i>JA</i>
	ASST. ENGR.	
	COMM. RELATIONS	
	CONSTRUCTION	
	DESIGN	<i>RES</i>
	DIST. INVEST.	
	GARAGE	
	LEGAL	
	MAINT. & TR.	
	MAT'L.	
	OFFICE MGR.	
	PERSONNEL	
	R/W	
	C-RE	

This letter is a follow-up to our March 6, 1991 letter in which we stated that we did not then have good information on costs for relocation of our large transmission conduits. We have since made some estimates of relocation costs, which Mr. Randy Chang of your office indicated in a phone conversation yesterday that the Highway Department is still interested in receiving.

We based our estimates on figures obtained from the 1984 version of the Dodge Guide to Public Works and Heavy Construction Costs for steel water pipe in trenches including excavation, backfill, thrusts and welded joints. These costs were then extrapolated from 1984 costs to 1991 costs using the Engineering News Record's Construction Cost Indexes. We arrived at costs per lineal foot of \$410 for the sixty inch diameter conduits and \$550 for the seventy-two inch diameter conduit.

Referring to our previous letter, if you had to relocate our conduits between your Stations 891+00 and 940+00, those 4,900 feet for all three conduits would cost about \$6,713,000.00 total. If you had to relocate our conduits at the other location in question, in the area of your Station 909+00, those 500 feet for all three conduits would cost about \$685,000.00 total. The total combined cost for the required relocations is estimated to be \$7,398,000.00. Please note that these costs reflect direct construction costs only. Associated costs such as engineering costs, administrative costs and inspection costs should be considered also. We will leave those costs to your estimators at this time.

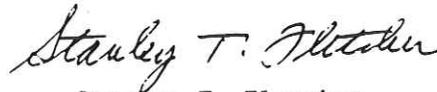
Mr. J.T. Yarnel, P.E.
Missouri Highway & Transportation Dept.

Page 2 of 2
May 30, 1991

As a reminder, if you choose the option to bridge over our conduits instead of relocating them, we are requiring that reinforced concrete encasement be placed around them in the area adjacent to the bridge foundations as detailed in our March 6 letter.

I trust that this information will suffice to finalize your project costs dealing with our facility adjustments. If you need more information or have any questions, please call me or Joe Kammerer at 771-4806.

Sincerely yours,



Stanley T. Fletcher
Division Engineer
Design and Construction Section

STF/JJK/

cc: W.R. Bosse, Water Commissioner
D.A. Visintainer, Engineering Executive
G.F. Herron, Engineering Executive
J.J. Kammerer, Assistant Division Engineer, Design and
Construction
K.L. Fetter, Special Projects Engineer

[corresp/joe_mhtdpaex.s1]

FAX COMMUNICATION FROM UNION ELECTRIC CO.

March 7, 1991

Mr. J. T. Yarnell
Missouri Highway and Transportation
Commission
329 South Kirkwood Road
Kirkwood, MO 63122

Dear Mr. Yarnell:

Sioux-Mason Right-of-Way
Page Avenue Extension

This letter is in response to your request for our review of the plans illustrating an alternate design of the Page Avenue extension which were recently submitted to us by your Mr. Kandy Chang. The alternate route, which is shown south of Creve Coeur Lake, runs parallel to and also crosses our Sioux-Mason right-of-way and would affect both our existing and proposed future facilities. However, if this alternate route could be shifted approximately 100 feet to the south, it would only cross our right-of-way as opposed to using a portion of it. This would reduce relocation difficulties and costs.

Our Sioux-Mason right-of-way is presently used for a double circuit 345 KV transmission line, and we are in the preliminary stages of the design for an additional double circuit 138 KV transmission line which would parallel the existing line. A future double circuit 345 KV transmission line may also be required and could be accommodated along the existing right-of-way.

The following comments regarding the alternate route were provided by our engineers and were made under the assumption that a relocated right-of-way, at least as wide as our existing right-of-way, would be available and would parallel the highway extension.

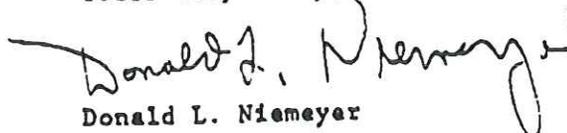
1. Any relocation of the existing and future transmission lines in this area must avoid conflict with the three water mains which run roughly parallel to the existing line. Therefore, a relocated right-of-way will need to be located far enough away from the water mains or be sufficiently wide in order to avoid conflicts with tower foundations.
2. The cost for relocating the existing 345 KV double circuit tower line to accommodate the proposed highway routing would be approximately \$2,100,000. This estimate is based on a preliminary review of possible alternative transmission line routes and on available information for building the existing transmission line updated to current construction

costs. A complete layout and design of one particular line relocation was not performed. Furthermore, the above cost estimate was made assuming that outages to facilitate construction could be obtained when required and the necessary permits could be obtained in a timely fashion.

3. Present plans call for two additional double circuit transmission lines along this right-of-way. The first of these future transmission lines is already under preliminary layout and design. If an alternate route in this area is identified and decided upon within the next 14 months, there would not be a significant increase in the cost of this future line. However, delays in any decision to relocate beyond that time frame would mean additional costs for the future lines as well. A worst case scenario would be if the proposed future line was already constructed through this area along the present right-of-way. The cost to relocate it would be approximately \$1,600,000.00, which is in addition to the \$2,100,000.00 already mentioned.
4. Our District engineers estimate that there would be approximately \$500,000.00 worth of distribution facility relocation work required in the alternate route for the extension of Page Avenue.
5. The above estimates do not include costs for obtaining alternate right-of-way to accommodate the relocations. The Real Estate Department has not performed a recent cost study of land values in the area of the extension and, therefore, is not in a position to provide you with this cost information.

If you have any questions concerning these matters or need additional information, please feel free to contact Mrs. Johanna Yovich of my staff at 554-2128.

Yours very truly,


Donald L. Niemeyer
Real Estate Agent

✓
JIY/cjm

cc: Mr. Randy Chang
Missouri Highway and Transportation Commission

bcc: Messrs. J. G. Bizoff
M. J. Nealon
D. A. Whiteley



- Asst. Dir. Eng. C & B
- Asst. Dir. Eng. - Land
- Utilities
- Pwd. Adm.
- Public Eng.
- Plans Eng.
- Architecture
- C-16
- District Eng.
- Urban Eng.
- Urban Eng.
- Solid Waste Eng.
- Eng. - Highway - Gen.
- CAD Eng.
- Water Eng.
- Urban Mgr.
- PWA

OFFICE OF THE COUNTY EXECUTIVE
 SAINT LOUIS COUNTY
 CLAYTON, MISSOURI 63105

H. C. MILFORD
 COUNTY EXECUTIVE

July 30, 1990

Mr. Wayne Muri, Chief Engineer
 Missouri Highway and Transportation Department
 P. O. Box 270
 Jefferson City, Missouri 65102

Subject: Draft Environmental Impact Statement
 for Page Avenue Extension

Dear Mr. ~~Muri~~: **WAYNE**

Thank you for the opportunity to review the approved Draft Environmental Impact Statement for the proposed Page Avenue Extension through St. Louis County. You requested a review and comment prior to August 1, 1990.

As stated in our previous correspondence, dated June 20, 1990, St. Louis County is supportive of the alignment which utilizes the previously dedicated right-of-way and crosses the southern end of Creve Coeur Park. The Environmental Impact Statement regarding this corridor has been reviewed and concurred in by St. Louis County.

Thank you again for the opportunity to comment on the Draft Environmental Impact Statement for the proposed Page Avenue Extension.



Sincerely,

H
 H. C. Milford
 County Executive

HCM:dj

- cc: Mr. Jan H. Paynton, Director, Department of Highways and Traffic
 Mr. Roger M. Grow, Director, Department of Planning
 Mr. Albert L. Phillips, Acting Director, Department of Parks and Recreation
 Mr. J. T. Yarnell, District Engineer, Missouri Highway and Transportation Department
 Mr. Gregory W. Knauer, Vice President and Manager, Planning Department, Booker Associates, Inc.



OFFICE OF THE COUNTY EXECUTIVE
SAINT LOUIS COUNTY
CLAYTON, MISSOURI 63105

H. C. MILFORD
COUNTY EXECUTIVE

June 26, 1990

Mr. J. T. Yarnell, District Engineer
Missouri Highway and Transportation Department
329 South Kirkwood Road
Kirkwood, Missouri 63122

Dear Mr. Yarnell: *J.T.*

Reference is made to your recent request for comments by St. Louis County on the alignment of the proposed Page Avenue Extension.

Since 1971, the County Departments of Planning and Highways and Traffic have required development to set aside right-of-way for the Page Avenue Extension. We are supportive of the alignment which utilizes this dedicated right-of-way and crosses the southern end of the Creve Coeur Park. The southern alignment depicted on your map would have an unfavorable impact on the subdivisions in the area, by the taking of numerous homes and the bisecting of local neighborhoods.

Thank you for the opportunity to comment on the proposed Page Avenue Extension.

Sincerely

H. C. Milford
County Executive

HCM:ml

cc: Mr. Jan H. Paynton, Director, Department of Highways and Traffic
Mr. Roger M. Grow, Director, Department of Planning
Mr. Albert L. Phillips, Acting Director, Department of Parks and Recreation
Mr. Gregory W. Knauer, Vice-President and Manager, Planning Department, Booker Associates, Inc.



Booker Associates, Inc.
1139 Olive Street
St. Louis, Missouri 63101

(314) 421-1476
Telefax (314) 421-1744

May 16, 1990

Ms. Dee Joyner, Chief of Staff
Office of the County Executive
St. Louis County
41 S. Central
Clayton MO 63105

Re: Coordination for Creve Coeur
Lake Memorial Park
Page Avenue EIS
Booker Project No. E-3231

Dear Ms. Joyner:

Enclosed are copies of previous correspondence to and from Wayne Kennedy in reference to the proposed construction of Page Avenue through Creve Coeur Lake Memorial Park. In addition, I am enclosing a map illustrating the alignment through the park which is the preferred alignment according to the Missouri Highway and Transportation Department, plus two alternate alignments south of the park.

Due to the change of the County Executive since the time of Mr. Kennedy's letters, we wish to confirm that the letters, especially the letter dated November 16, 1987, are still accurate. If the County feels at this time it is able to support the alignment through the park, which minimizes residential disruption, we would ask that you provide such comments to either the Missouri Highway and Transportation Department (MHTD) or to Booker Associates. We will include the response as part of our coordination for both the Environmental Impact Statement and Section 4(f) and 6(f) Report being prepared.

The public meeting for this project is being scheduled for late June, 1990. If you have any questions please contact me at your earliest convenience.

Very truly yours,

BOOKER ASSOCIATES, INC.

A handwritten signature in cursive script that reads "Greg Knauer".

Gregory W. Knauer, AICP
Vice-President and Manager
Planning Department

GWK/dkj

Enclosures:

JOHN ASHCROFT
Governor

G. TRACY MEHAN III
Director



STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF PARKS, RECREATION, AND HISTORIC PRESERVATION

P.O. Box 176
Jefferson City, MO 65102
314-751-2479

Division of Energy
Division of Environmental Quality
Division of Geology and Land Survey
Division of Management Services
Division of Parks, Recreation,
and Historic Preservation

July 12, 1989

Mr. Wayne C. Kennedy, Director
St. Louis County Department
of Parks and Recreation
41 S. Central
Clayton, MO 63105



Déar Mr. Kennedy:

It has come to my attention that there is some question regarding reservation of lands within the boundary of Creve Coeur Lake Memorial Park for the proposed extension of Page Avenue. You will recall that approximately 711 acres of land were purchased with assistance from the federal Land and Water Conservation Fund (LWCF) under project number 29-00292, awarded in 1971. With the acceptance of that award, St. Louis County agreed, by written contract, that the lands purchased with federal assistance would be placed under restriction dictated by the Land and Water Conservation Fund Act.

One such restriction requires that land developed or acquired with LWCF assistance, regardless of the extent of that assistance, be dedicated to outdoor recreation in perpetuity. Such lands may not be converted to other use without prior approval from the Department of the Interior.

In July of 1971, you notified the State Interagency Council for Outdoor Recreation that the Missouri State Highway Department would place the Page Avenue extension through Creve Coeur Park as originally planned. You offered three alternatives, with your preferred alternative being to proceed with the present plan of acquisition with federal matching funds but with adequate correspondence signifying that the parties involved were aware of the proposal to extend Page Avenue thus protecting those governmental agencies concurred with the problem. You indicated that development of the area could be planned to prevent conflicts and still provide much needed facilities. The Department of the Interior concurred with your recommendation and advised you to proceed with the present plan of acquisition.

Mr. Wayne C. Kennedy
July 12, 1989
page 2

Completion of the plan of acquisition is evidenced by the purchase of lands identified on the attached boundary map. All lands within the boundary are covered by restrictions under the LWCF Act agreed to under the terms of project agreement 29-00292 (attached). None of those lands have been reserved for highway purposes.

I have attached a copy of the telegram forwarded to you, from the Department of the Interior's Bureau of Outdoor Recreation, which states the concurrence with your proposed alternative (attached). Note that the Bureau states that correspondence confirming that position on land acquisition and amplifying the Bureau's position on possible highway encroachment would be provided in the regular manner.

In correspondence dated September 10, 1971, please note that the Washington Office of the Bureau clearly indicated that any proposal of a highway traversing the park would need to stand the test of Section 4(f) of the Department of Transportation Act and Section 5(f) of the LWCF Act (now section 6(f) of the act as amended). If any of the lands proposed for use in the Page Avenue extension lie within the boundary indicated on the attached map for LWCF project 29-00292, section 6(f) compliance procedures for conversion must be met under the LWCF Act. If federal highway monies are being used, section 4(f) compliance also must be assured.

I am including the 6(f) compliance procedure for your review and information. If section 4(f) also must be addressed, you should have your contact in the Highway Department to get in touch with me as I coordinate those activities on behalf of Mr. G. Tracy Mehan, the State Liaison Officer.

For your additional use, I have attached boundary maps identifying those lands dedicated to outdoor recreation use under LWCF project numbers 29-00478 and 29-01146. Sections 4(f) of the DOT Act and 6(f) of the LWCF are applicable to these lands also. You also should be aware that in signing amendment number one to project 29-01146 (copy attached), you, in essence, agreed to place all 1,141 acres of Creve Coeur Park under LWCF restrictions. Thus, the lands originally conveyed for Creve Coeur Park, approximately 425 acres are bound by the requirements of section 6(f)(3) of the LWCF Act as amended.

03 minutes 20 seconds West a distance of 297.66 feet; South 68 degrees 23 minutes 20 seconds West a distance of 60.72 feet; South 48 degrees 01 minute West a distance of 381.01 feet to a point on the Southwestern line of said Lot 1; thence North 22 degrees 19 minutes West along the said Southwestern line of said Lot 1 a distance of 520.08 feet to a point; said point being the Northwest corner of said Lot 1 and the Southwest corner of said Lot 7; thence North 22 degrees 28 minutes 30 seconds West along the said Southwestern line of said Lot 7 a distance of 1646.40 feet to the point of beginning and containing 65.9769 acres, more or less.

SECTION 2. The preliminary approval, pursuant to Section 1003.187 SLCRO 1964, as amended, is granted subject to all ordinances, rules and regulations, and to the conditions recommended by the Planning Commission in its report dated November 16, 1971, as follows:

1. Prior to the issuance of any building permit, petitioner shall submit to the Planning Commission a site plan for the property in question, showing the location and size of all existing and proposed structures, existing and proposed grades, location and size of all proposed parking areas, all roadways and driveways on or adjacent to the property in question, all proposed landscaping, and the location and size of all proposed berms, fencing, or other buffer material.
2. Petitioner shall also submit to the Planning Commission written approval from the St. Louis County Department of Highways and Traffic of the location of all proposed roadways and curb cuts.
3. The petitioner shall be required to reserve the northeast portion of the subject tract which has been deemed the possible right-of-way for Page Avenue as indicated on Missouri State Highway plans. A setback from said reserve strip shall also be established.
4. Petitioner shall insure that all proposed recreation facilities are adequate in size to serve the residents of the development. Upon 50% completion of the dwelling units, at least 50% of the recreation facilities shall be installed. Upon 95% completion of dwelling units, 100% of the recreation facilities shall be completed.
5. The proposed recreation building shall be constructed and screened so as to blend with the total development in architectural and aesthetic quality. Said facility shall conform to all St. Louis County Health Department standards and to appropriate performance standards as contained in Section 1003.163 of the Zoning Ordinance.
6. All parking areas shall include marked spaces for vehicles. Each space shall be 10' by 20' in dimension and computed at a ratio of at least 2 spaces per dwelling unit.

7. This Planned Environment Unit permit authorizes a maximum of 272 dwelling units.

8. Within 12 months of the date of approval of the preliminary development plan by the County Council, the final development plan shall be submitted to the Planning Commission for its approval. Within 18 months of the date of approval of the final development plan by the Planning Commission, construction shall commence.

9. Any transfer of ownership or lease of the property shall include in the transfer or lease agreement a provision that the purchaser or lessee agrees to be bound by the conditions herein set forth and the approved development plan for the property.

10. The Zoning Enforcement Officer of St. Louis County, Missouri shall be charged with the duty of enforcing the conditions of this permit.

SECTION 3. The St. Louis County Council, pursuant to the petition of Alport-Hitt, Inc., c/o Albert A. Michenfelder, 130 South Bemiston, Clayton, Missouri 63105, requesting the approval of a Planned Environment Unit Plan for residential development of a tract of land described in Section 1 of this ordinance as an alternative zoning, and pursuant to the recommendation of the St. Louis County Planning Commission that said petition be granted, after public hearing held by the said Commission on October 25, 1971, and a regular meeting held on November 1, 1971, adopts this ordinance pursuant to the St. Louis County Charter authorizing the Council to exercise legislative power pertaining to planning and zoning, and returns the application and plan to the St. Louis County Planning Commission for consideration of a final development plan, pursuant to Section 1003.187 SLCRO 1964, as amended.

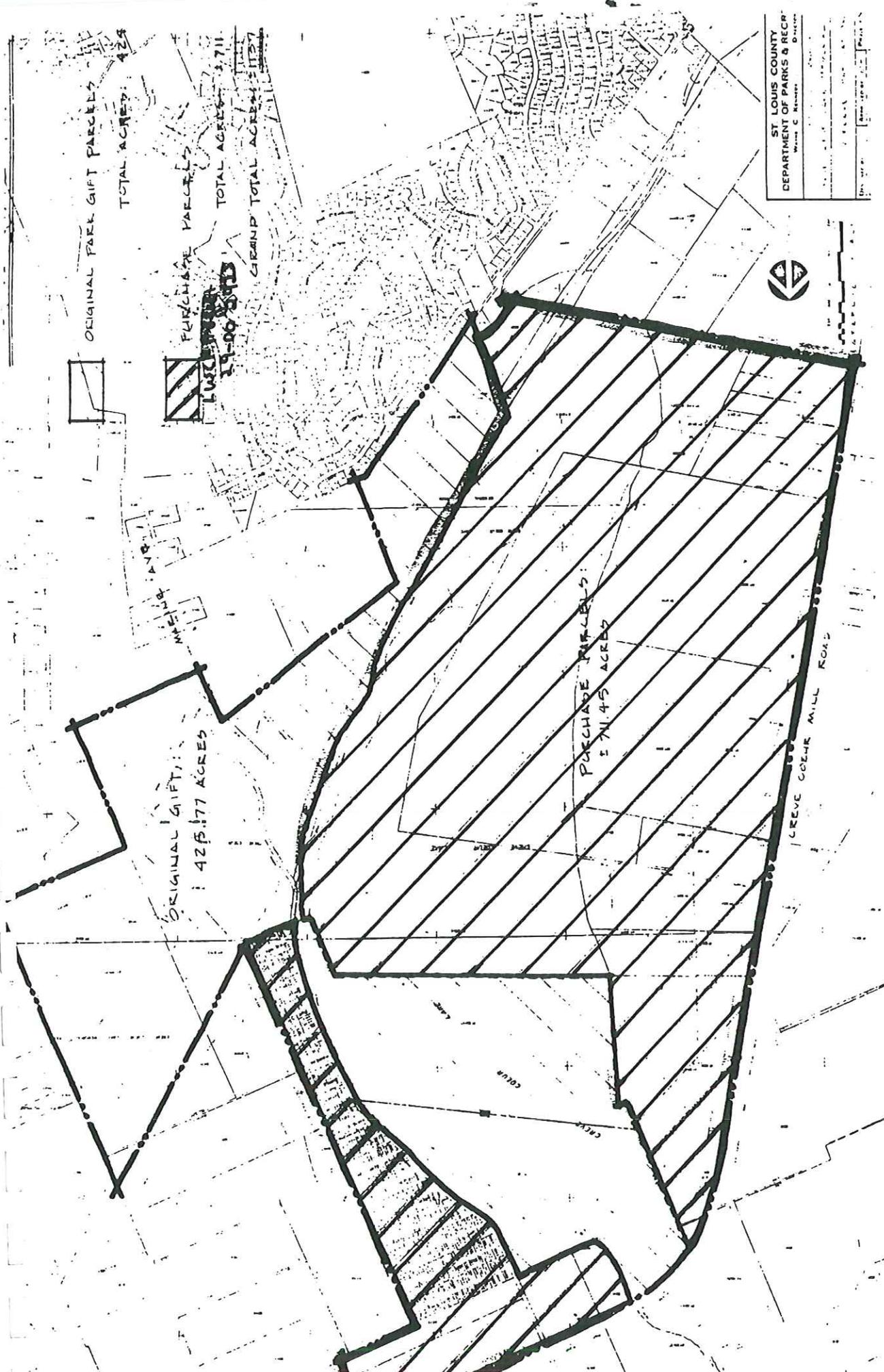
ADOPTED March 16, 1972

Milton J. Bischof, Jr.
CHAIRMAN, COUNTY COUNCIL

APPROVED March 20, 1972

Lawrence K. Roos
COUNTY SUPERVISOR

ATTEST: Lela Anderson
DEPUTY COUNTY CLERK



CREVE COEUR LAKE MEMORIAL PARK EXPANSION
 LMCF Grant 29-00292 (1971-1977)



United States Department of the Interior

BUREAU OF OUTDOOR RECREATION
WASHINGTON, D.C. 20240

IN REPLY REFER TO:
G26
#29-00292

SEP 10 1971

Memorandum

To: Regional Director, Lake Central Regional Office

From: Director, Bureau of Outdoor Recreation

Subject: Possible Highway Conflict, Project #29-00292, Creve Coeur Lake Park

We have reviewed your memorandum of August 10, 1971, and recommendations on the possible highway encroachment in Creve Coeur Lake Park.

We concur that the acquisition of land should proceed as proposed in alternative number one, presented by St. Louis County in their letter of July 20, 1971. In notifying Mr. Dunkeson of our concurrence, you should make it clear that any proposal of a highway traversing the park would need to stand the test of Section 4(f) of the DOT Act. If Fund-assisted land should be lost to the proposed highway, it will be necessary to comply with Section 5(f) of the Land and Water Conservation Fund Act.

Alternatives 2 and 3 both have raised serious questions. As presented, number 2 would appear to be a premature acceptance of the proposed highway routing, and number 3 raises a question of legality, in terms, of the Land and Water Conservation Fund Act.

Although the material submitted was not intended to be used for evaluating possible alternative routes, we should encourage the parks department to seek other routings for the highway to minimize the intrusion on the park. They should be encouraged not to forego the recreational benefits to the public in their proposed development only to accommodate a proposed highway routing. If this is the only prudent highway corridor there may be an opportunity to construct it on piers and retain the use of the lands for outdoor recreation purposes.

G. Douglas Hofe, Jr.
G. Douglas Hofe, Jr.



G26-Mo.
X:2253

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF OUTDOOR RECREATION

LAKE CENTRAL REGION
1203 RESEARCH PARK DRIVE
ANN ARBOR, MICHIGAN 48104

RECEIVED

OCT 11 1971

STATE INTER-AGENCY
COUNCIL FOR
OUTDOOR RECREATION

October 5, 1971

Project 29 - 00292

Mr. Robert L. Dunkeson
Executive Secretary
Inter-Agency Council for Outdoor Recreation
1203 Jefferson Building, Box 564
Jefferson City, Missouri 65101

Dear Mr. Dunkeson:

Enclosed for your information is a copy of a memorandum from our Washington Office in response to Mr. Kennedy's request of July 20, 1971, through your office, for guidance in the acquisition on Project 29 - 00292, Creve Coeur Lake Park, in view of the potential highway conflict.

You will note that the Bureau has suggested that acquisition proceed in accordance with Alternative No. 1 of Mr. Kennedy's letter. You will also note that the Bureau wishes to encourage Mr. Kennedy to make every attempt to save the park land from conversion to highway use and assure the recreational benefits to the public.

In order to expedite the acquisition, the Bureau advised Mr. Kennedy by telegram on September 10, 1971, to proceed in accordance with Alternative No. 1. A copy of the telegram is also enclosed.

Sincerely yours,


Robert H. Myers
Acting Regional Director

2 Enclosures

St. Louis County, Missouri



DEPARTMENT OF PARKS
AND RECREATION

ST. LOUIS COUNTY GOVERNMENT CENTER
7900 FORSYTH BLVD.
CLAYTON, MISSOURI 63105

WAYNE C. KENNEDY
DIRECTOR

July 20th, 1971

RECEIVED

JUL 22 1971

STATE INTER-AGENCY
COUNCIL FOR
OUTDOOR RECREATION

Mr. Robert L. Dunkeson
Executive Secretary
State Inter-Agency Council for Outdoor Recreation
1203 Jefferson Building
P. O. Box 564
Jefferson City, Missouri 65101

RE: ST. LOUIS COUNTY, MISSOURI ACQUISITION OF LAND FOR
CREVE COEUR LAKE PARK SITE - PROJECT 29-00292

Dear Sir:

In our initial application to the Bureau of Outdoor Recreation for matching funds on our Creve Coeur project, our plan showed a proposed highway, Page Avenue, through a portion of the property to be acquired. Our office later received word that the State Highway Department was investigating other routes for this artery and we were advised to remove it from all future plans.

We have now been advised by the Missouri State Highway Department that they have investigated all alternate routes for this proposed road and find that the original plan is the only feasible route. We are, therefore, placed in a very serious dilemma as to how to proceed with our purchase of this area and still protect those people who will be concerned with this road in the future. The proposed highway, at this time, is not funded but is part of the overall 1990 Highway Plan for our Metropolitan area. Members of the Park Department staff, the St. Louis County Highway Department staff, the staff of the County Counselor's office, and the staff of the County Supervisor's office have reviewed this situation and feel that we have one of the following three alternatives in our method of procedure:

- 1) To proceed with the present plan of acquisition with Federal matching funds but with adequate correspondence signifying that we are aware of this proposal thereby protecting those governmental agencies that will be concerned with this problem in the

7 20-71

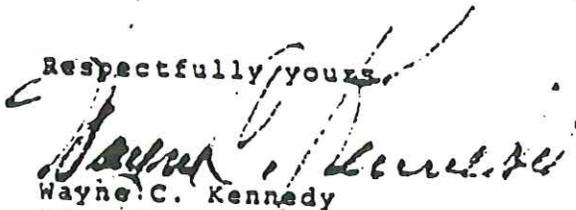
future. I feel that we must face this problem at this time and resolve it to the best of our ability. The eventual development of the area can be planned to prevent any conflicts and still provide much needed facilities.

- 2) That St. Louis County proceed to purchase with matching funds that area up to the northern boundary of the proposed corridor and delete that area including the corridor and all land south of the corridor. This proposal would drastically cut the amount of the area needed for the deposit of material from the dredging operation. It would further delete from the park the much needed athletic fields planned for this area. More than sixty acres is involved in this area.
- 3) That we purchase the entire area with the exception of the corridor with Federal matching funds and then purchase the corridor with County Park funds. This would delete Federal involvement of the actual corridor, placing the entire responsibility of the transfer of the corridor to the local authorities. I think this is a very deceptive type of action to be used only if the concerned authorities do not want to include a decision from the various agencies involved at this time.

Our department has been notified previously that there is a project deadline on the acquisition of the First Phase. As a result of conferences with the various departments of Saint Louis County, I should like to recommend that Alternate One, as outlined in this letter, be approved as our method of procedure.

I have been informed by our negotiators that they are in a position to close on a great deal of the property involved in this decision. May I, therefore, respectfully request your immediate counsel in this matter?

Respectfully yours,


Wayne C. Kennedy
Director

WCK:hs

Mr. Roman H. Koenings
Bureau of Outdoor Recreation
Mr. Robert J. Baer
Mr. Robert Rollins
Office of the County Supervisor
Mr. Morton I. Golder
Office of the County Counselor

St. Louis County, Missouri



DEPARTMENT OF PARKS
AND RECREATION

ST. LOUIS COUNTY GOVERNMENT CENTER
7900 FORSYTH BLVD.
CLAYTON, MISSOURI 63105

WAYNE C. KENNEDY
DIRECTOR

July 26th, 1971

Mr. Robert L. Dunkeson
Executive Secretary
State Inter-Agency Council for Outdoor Recreation
1203 Jefferson Building
Jefferson City, Missouri 65101

RE: CREVE COEUR LAKE PARK SITE - PROJECT

Dear Sir:

Attached hereto please find a copy of the present proposed right-of-way requested by the State Highway Department for the extension of Page Avenue through the Creve Coeur Lake Park area. While this is their present plan, I could not accept it without a good deal of negotiation.

In the first place, the requested right-of-way is much wider than I would be inclined to approve. Secondly, our Highway Department has indicated to me that it would be possible to move the right-of-way to the South about eight hundred feet. This would greatly facilitate the planning of the overall area. Should you have any questions regarding this matter, please advise.

Sincerely,

Wayne C. Kennedy
Director

WCK:hs
Enc.

CC:
Mr. Morton I. Golder
Mr. J. Wilson
Mr. Robert H. Myers

UTILITIES
 FED. AID
 COMPUTER
 PHOTO ENGR.
 PLANS CLERK
 HANDLE
 C-ME

DESIGN ENGR.
 SUPPL. BOARD
 LIAISON ENGR.
 URBAN ENGR.
 SPEC. ASSIGN.
 PAVT. & SOILS
 FILE
 DESTROY

R
 R
 H

329 South Kirkwood Road
 Kirkwood, Missouri 63122
 March 15, 1971

**SURVEYS AND PLANS: Page Avenue Extension
 St. Louis County**

Mr. Wayne C. Kennedy, Director
 Department of Parks & Recreation
 7900 Forsyth Boulevard
 Clayton, Missouri 63105

Dear Mr. Kennedy:

Last year at the urging of the County, the State Highway Commission agreed that the Highway Department would make a detailed corridor location study for the proposed extension of Page Avenue following the general alignment as set out in the East-West Gateway Coordinating Council's Master Plan for the St. Louis area. Since that time the Highway Commission, in cooperation with St. Louis County Officials and other Officials in the State, has proposed a highway plan entitled Inter City - Inter Regional Highway Plan. Included in this proposed plan is the Page Avenue extension and any work on this proposed extension is dependent upon the approval of the Inter City - Inter Regional Plan. We realize that this is an important extension, but funds are not now available to schedule any work along this corridor.

The Department is proceeding with the corridor study, but the final location of this proposed extension would be dependant on public hearings that would have to be held.

We are aware of the problems that arise when highways are proposed through park land and we are also aware of the possibility that a park in this area could literally preclude the chance of building this road if provisions are not made for the highway.

Yours very truly,

R. J. TRIM
 DISTRICT ENGINEER
 MAR 16 1971

c.c. Mr. Roger R. Linsin
 Mr. William Epstein
 Mr. Richard Daykin
 Mr. James F. Roberts

with copy of Mr. Kennedy's letter.

St. Louis County, Missouri

RECEIVED
MAR 11 1971
DISTRICT 6
State Highway Dept.



DEPARTMENT OF PARKS AND RECREATION

ST. LOUIS COUNTY GOVERNMENT CENTER

7900 FORSYTH BLVD.
CLAYTON, MISSOURI 63105

DIST. ENGR.	
DIST. SUPERVISOR	<input checked="" type="checkbox"/>
CONST.	
MAINT. SUP.	WAYNE C. KENNEDY
S. P.	DIRECTOR
URBAN S. P.	
R/W	
LEASE	
MAPS	
OPERATIONS	
CARE	
ALL DEPT.	
C-M	<input checked="" type="checkbox"/>
FILE	

March 9, 1971

Mr. William Trimm, District Engineer
District 6
Missouri State Highway Department
310 South Kirkwood
Kirkwood, Missouri 63122

SUBJECT: Possible extension of Page Avenue, Missouri
Route D, from Interstate 244 across the
Missouri Bottoms into St. Charles County

Dear Mr. Trimm:

The St. Louis County Department of Parks & Recreation has recently been awarded a federal grant by the Bureau of Outdoor Recreation for the purchase of property in the vicinity of Creve Coeur Lake for the development of Creve Coeur Park as specified under the 1969 St. Louis County Park Bond Issue.

Being cognizant of the 9005 East-West Gateway Coordinating Council's approved Transportation Plan through the year 1990 for the St. Louis County area, we note that it includes a proposal to extend Page Avenue (Missouri Highway Department Route D) across the Creve Coeur Lake area and Missouri Bottoms area and the Missouri River into St. Charles County for a tie with Interstate Highway 270.

We have been advised by the Department of Highways & Traffic that they had previously submitted a corridor location to your office for consideration. We have requested the Department of Highways & Traffic to furnish this office with that proposed location so as to evaluate it in light of our proposed preliminary park layout.

Please be advised that we will commence the purchase of the land required for Creve Coeur Park to the north of the corridor location previously suggested to you by the St. Louis County Department of Highways & Traffic. Federal grant funds will be used in the purchase of this land.

Mr. William Trimm, District Engineer
Page Two
March 9, 1971

We are, of course, aware of recent Supreme Court decisions wherein extreme difficulty has been encountered in crossing park land with highways and for highway construction. We are most interested in coordinating our development plans with your proposed extension of Page Avenue, Missouri Route D, in the interest of providing sufficient park and recreational areas for the citizens of our County and in providing an adequate highway network for use by citizens of our County and the State of Missouri.

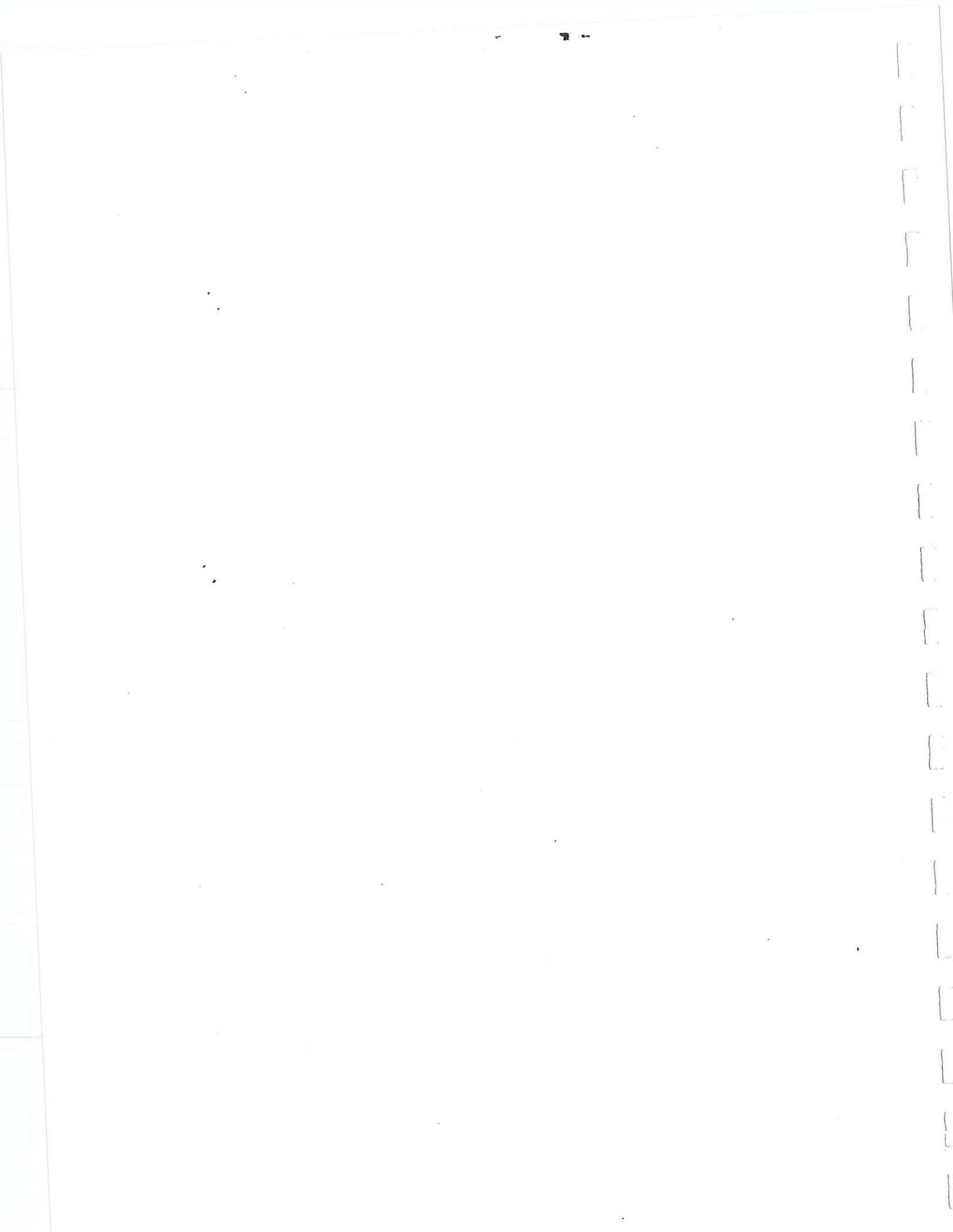
Sincerely,



Wayne C. Kennedy, Director
Department of Parks & Recreation

WCK/kad

cc: Roger L. Linsin, State Highway Commissioner
William Epstein, Chairman, St. Louis County
Parks & Recreation Advisory Board

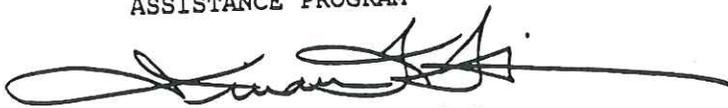


Mr. Wayne C. Kennedy
July 12, 1989
page 3

I hope this will satisfy any questions in regard to the reservation of lands for highway use. If I can be of additional assistance, please contact me.

Very truly yours,

OUTDOOR RECREATION
ASSISTANCE PROGRAM



Deirdre K. Hirner, Ph.D.
Director

DKH:jc

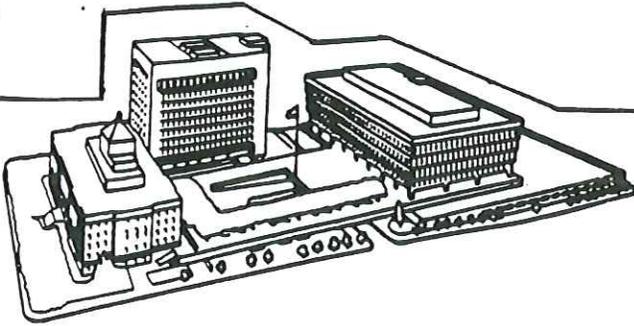
Attach.

P.S. For your information, the following people have contacted my office in this regard and I am providing them with information by copy of this letter: Mr. Davis Biggs, Jr.; Mr. Ralph Tharp, Booker Assoc.; Mr. Roger Pryor.

CONVERSION PROCESS & DOCUMENTATION REQUIREMENTS

Section 6(f)(3) of the Land and Water Conservation Fund Act states that property acquired or developed with fund assistance shall not be converted to other than public outdoor recreation uses without the prior approval of the Secretary of the Interior. To obtain the Secretary's approval, one must request a conversion and justify the need for such action with appropriate documentation. To provide such documentation, you must address each of the following:

1. A statement must be prepared which indicates the reason for converting the land and justifying the need for doing so. It must indicate that all practical alternatives to the conversion were evaluated and rejected on a sound basis;
2. Both parcels of property must be of at least equal fair market value as established by a state approved appraisal. The fair market value of both parcels must be reported as of the date the properties were transferred;
3. The property that has been purchased must be reasonably equivalent to the previously owned property in usefulness and location. It must constitute or be part of a viable recreation area and must be administered by the same political jurisdiction as the converted property;
4. The new property must be appropriate for use as an area dedicated to outdoor recreation;
5. An environmental evaluation must be completed on both the original property and the land that has replaced it. It must focus on the environmental losses incurred as a result of converting one property and those gained because of acquisition of the replacement parcel. A detailed outline of the requirements for preparation of an environmental assessment is provided;
6. A determination must be made as to whether the conversion has affected properties listed in or eligible for listing in the National Register of Historic Places. Such determination must include a cultural resource survey of the replacement property. The survey must be completed by a qualified archeologist;
7. A site map must be provided showing the location of both parcels of property relative to the city;
8. Boundary maps must be drawn for both parcels. The maps must be drawn to scale and be accompanied by the legal description of the properties;
9. A conceptual development map indicating how the replacement property will be developed must be submitted for review.
10. The proposal must undergo the Missouri State and Local Review process.



ST. LOUIS COUNTY, MISSOURI
GENE McNARY, COUNTY EXECUTIVE
DEPARTMENT OF HIGHWAYS AND TRAFFIC
RICHARD F. DAYKIN, DIRECTOR

May 18, 1989



Booker Associates, Inc.
1139 Olive Street
St. Louis, MO 63101

Attention: Mr. Greg Knauer

Subject: Earth City Expressway Extension
St. Louis County Project No. AR-281

Dear Mr. Knauer:

Enclosed please find copies of correspondence from the St. Louis County Department of Parks and Recreation relative to the Page Avenue corridor through Creve Coeur Lake Park. This is the information you requested during our meeting on May 17, 1989.

If we can provide any additional information in this regard, please contact the undersigned at 889-3143.

Very truly yours,

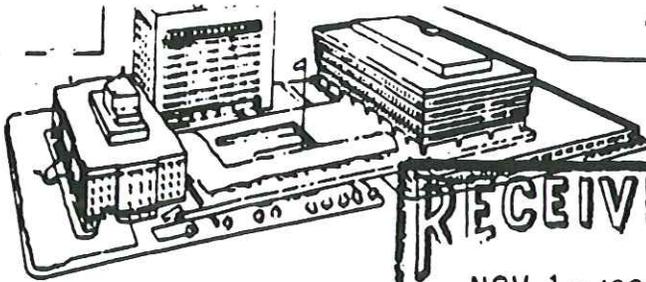
A handwritten signature in cursive script that reads "Thomas E. Barta".

Thomas E. Barta
Assistant Engineer of
Planning and Design

TEB/bl

Enclosure

cc: Mr. Richard F. Daykin, Director



ST. LOUIS COUNTY, MISSOURI
GENE McNARY, COUNTY EXECUTIVE
DEPARTMENT OF PARKS AND RECREATION
WAYNE C. KENNEDY, DIRECTOR

November 16, 1987

Mr. Frank G. Kriz
District Engineer
Missouri Highway & Transportation Commission
329 South Kirkwood Road
Kirkwood, Missouri 63122

Re: Right of Way - Route (Page Avenue Extension)

Dear Mr. Kriz:

St. Louis County Department of Parks & Recreation has reviewed the proposed alignment of Page Avenue Extension through Creve Coeur County Park. We have the following concerns:

1. According to your plans, the 2,000 foot long bridge going west crossing the south end of the lake, stops at the western edge of the wet lands. Solid fill ranging from 35 to 60 feet in height will be carried from the end of the bridge all the way to Creve Coeur Mill Road bridge. This extensive fill will dissect the park into two halves allowing no connection on the dry land.

In order to properly implement the Creve Coeur Park Long Range Plan, the 2,000 foot long bridge needs to be extended to 2,200 feet long to provide approximately 200 feet wide openings along the west bank of the wetlands. A 50 foot wide opening would also need to be furnished along the east side of the railroad and Creve Coeur Mill Road adjacent to the east end of Creve Coeur Mill Bridge.

2. As you see on the aerial photograph, the wetlands lying at the south end of the lake offer rare and unique habits to plants and wildlife. We would like to be advised as to what measures are to be taken to minimize the disturbance during the construction of the major bridge crossing the wetland. We desire to work very closely with you on this matter.
3. After reviewing the Creve Coeur Park Plan and the increasingly popular jogging and cycling activities, we would like to suggest that a bicycle/pedestrian lane be designated and provided on the bridge to allow joggers and cyclists to get to lowland area west of the lake from the bluff lying east of the lake. We would be glad to work out the pedestrian circulation and cycling pattern of the general area with you.

Copy: Bergman

DIST. ENGR.	
DIST. OP. ENGR.	
CONST.	
MAINT. & TR.	
ES. & P.	
R/W	
LEGAL	
MAT'L.	
OFF. MGR.	
PERSONNEL	
GARAGE	
ALL D.P.T.	
C - ME	
FILE	

ALL SEC.	
REF. MGR.	
CH. DESIG.	
TR. NEG.	
INF. APPR.	
POST. SEC.	
CH. EST.	
DESC. SEC.	
SECRETARY	

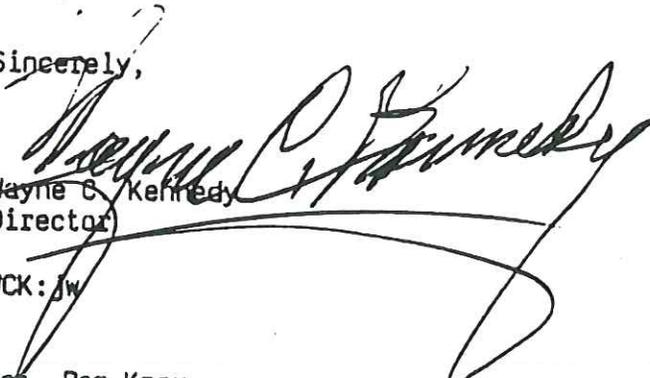
Mr. Frank Kriz
Page Avenue Extension
November 16, 1987
Page Two

4. As to the R.O.W. land replacement required by the Federal Bureau of Outdoor Recreation, we have looked into the land parcels along the east side of Marine Avenue adjacent to the northeast boundary of Creve Coeur Park. The desirable land replacement is shown on the attached aerial photograph. The ownership map also attached indicates the County's priority rating of the land replacement area. As you know, this is still subject to the approval of the National Park Service (previously the Bureau of Outdoor Recreation).

On the aerial photograph from your office, three alternative routes crossing the south end of the lake area are shown. Apparently, the central route has been selected for implementation. We wonder whether there would be any chance to go for the southern route which has always been the way St. Louis County has envisioned? It works out the best according to the County Plan and requires no right of way land replacement.

Thank you for your cooperation on the subject matter.

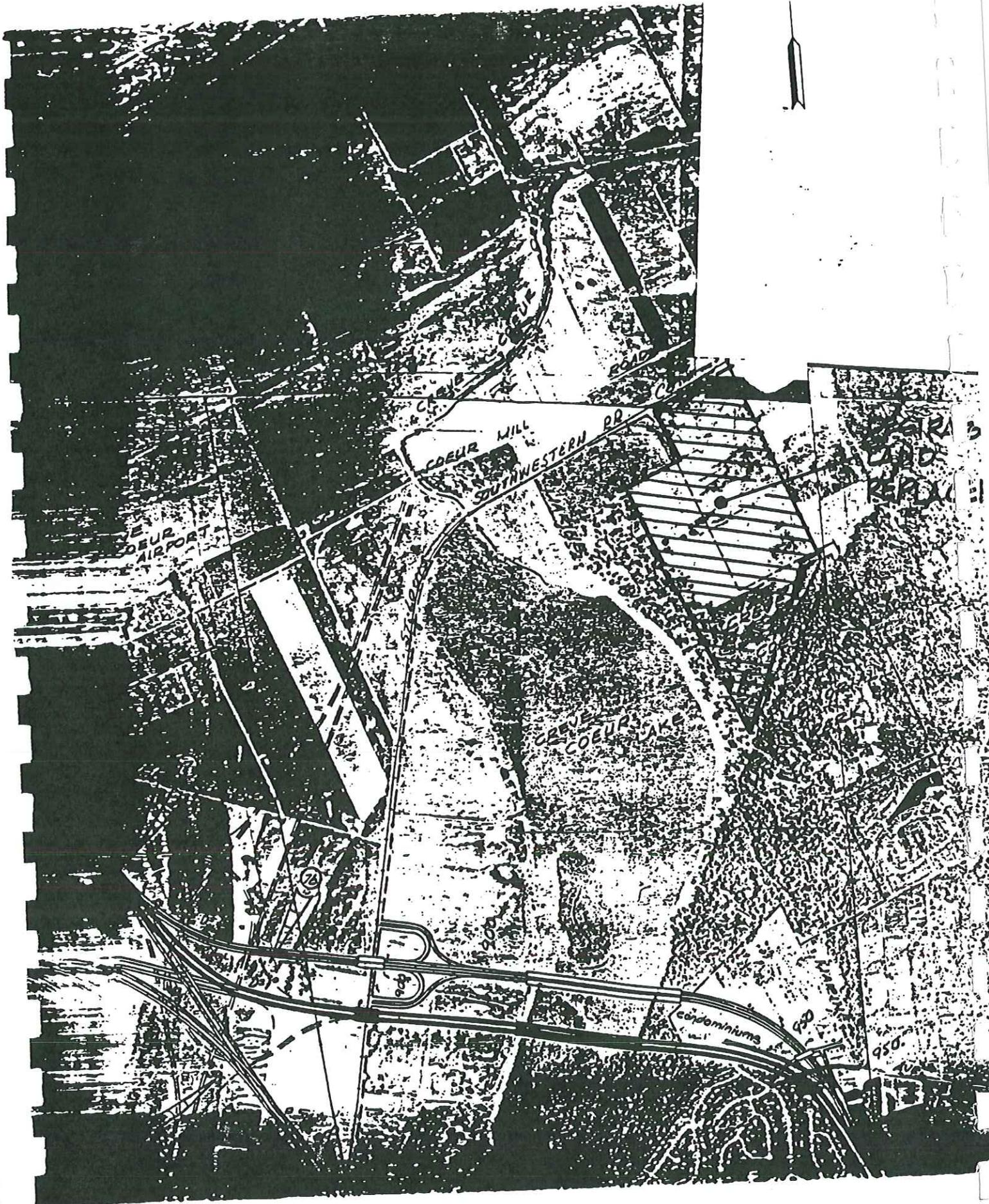
Sincerely,


Wayne C. Kennedy
Director

WCK: JW

cc: Ben Knox
Herbert Liu

0639a





PRIORITY 2
1354003
150 AC
MIONS

1354003
150 AC
MIONS
1354003
150 AC
MIONS

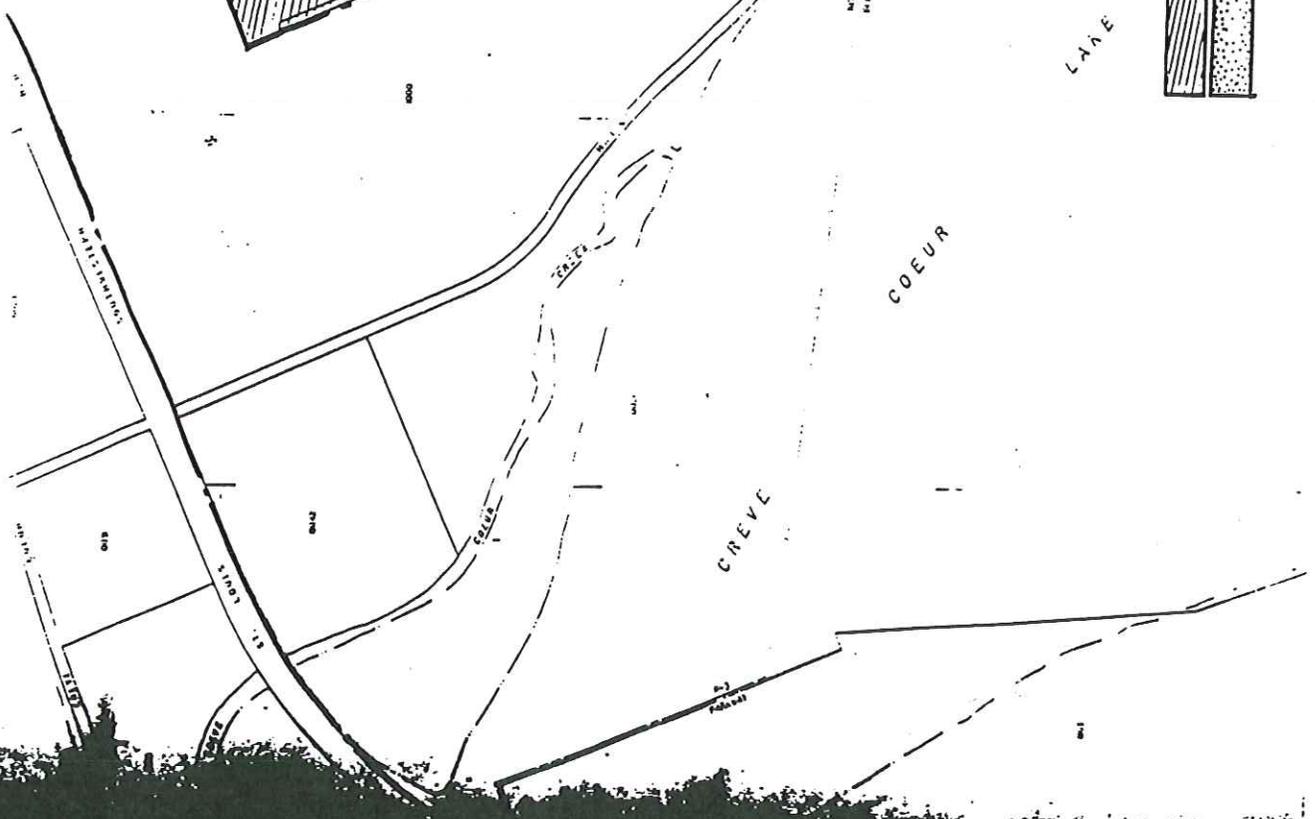
PRIORITY 1
1354003
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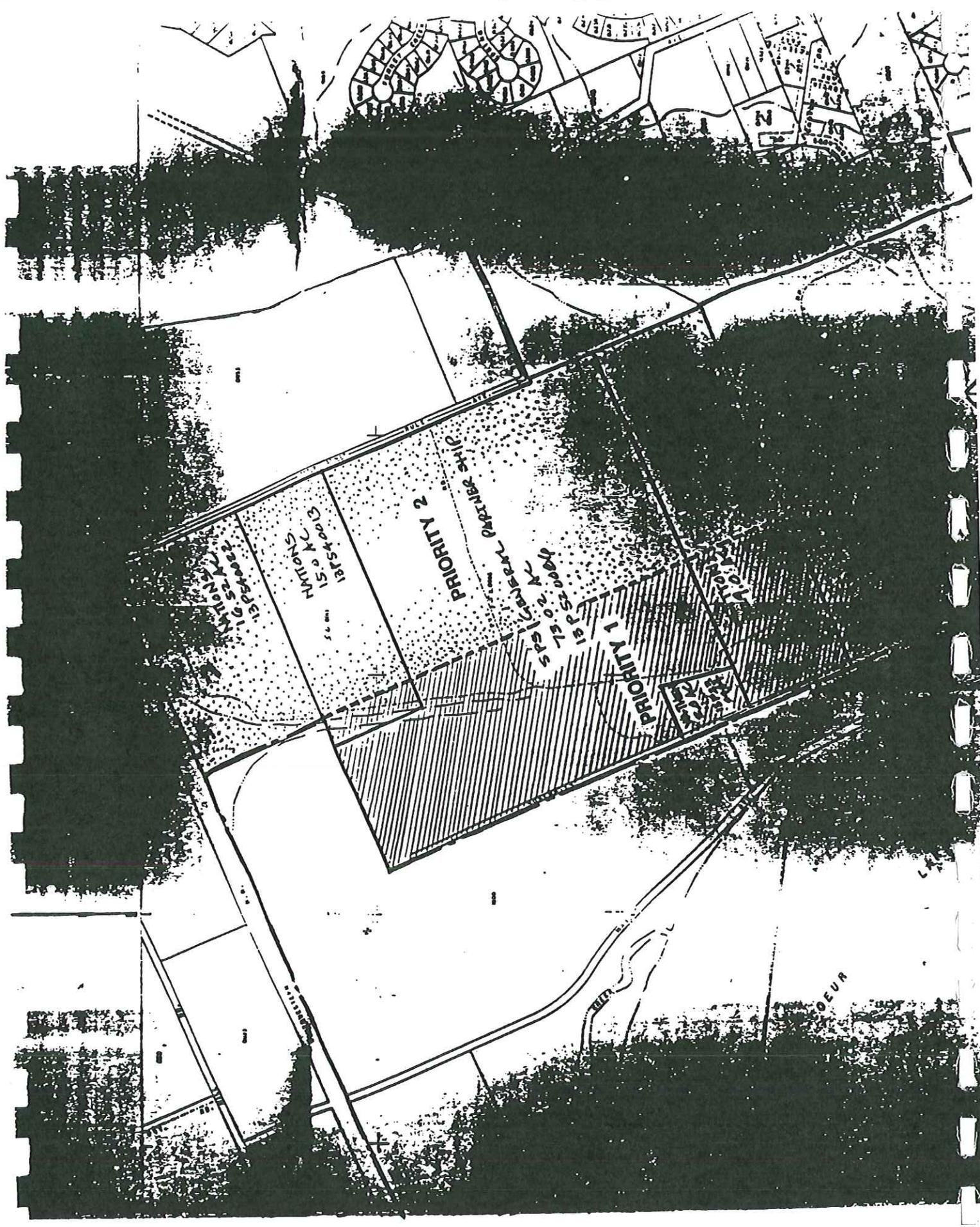
1354003
150 AC
MIONS

PRIORITY 1

PRIORITY 2


OWNERSHIP MAP





PRIORITY 2

PRIORITY 1

13.5 AC
15.0 AC
18.5 AC

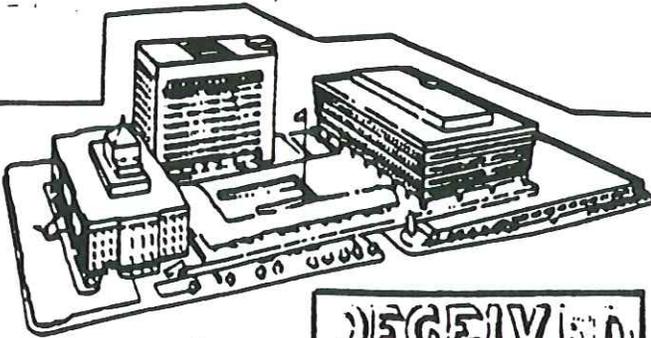
15.0 AC
13.5 AC
18.5 AC

15.0 AC
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DEUR

PC



ST. LOUIS COUNTY, MISSOURI
GENE McNARY, COUNTY EXECUTIVE
DEPARTMENT OF PARKS AND RECREATION
WAYNE C. KENNEDY, DIRECTOR

RECEIVED
MAY 15 1987
DISTRICT 6
Mo. State Highway Dept.

May 13, 1987

DIST. ENGR.	W
DIST. OP/ ENGR.	
CONST.	
MAINT. & TR.	
S. & P.	
R/W	
LEGAL	
MAT'L	
OFF. MGR.	
GARAGE	
ALL DEPT.	
C-ME	
FILE	

Handwritten initials and scribbles next to the routing table.

Mr. Frank G. Kriz
District Engineer
Missouri Highway & Transportation Commission
329 South Kirkwood Road
Kirkwood, Missouri 63122

Dear Mr. Kriz:

Re: Page Avenue Extension, *St. Louis Co.*

As requested by Mr. Barry Bergman of your office enclosed for your information are copies of current aerial photograph showing out-boundaries of Creve Coeur Park, legal descriptions contained in various documents and survey plats.

Bergman has

As Creve Coeur Park was acquired with matching funds from the Bureau of Outdoor Recreation, we are also forwarding to your office copies of correspondence with involved federal agencies concerning the said acquisition.

Please note that in the Department of Interior memo dated September 10, 1971, the reference made to section 5(f) of the Land and Water Conservation Fund Act is now in section 6 (f) (3). This section refers to the conversion requirements as attached.

Please keep us informed of the right-of-way development. We would be glad to work with you to minimize impact on the Park Master Plan.

If we could be of further assistance, please let us know.

Sincerely,

Handwritten signature of Herbert Liu

Herbert Liu
Advance Planner

HL/ps

Enclosures

0639a

Handwritten note: Copy: Bergman

1972 ST. LOUIS COUNTY ORDINANCE
CREATING THE RED ALIGNMENT'S
PRESERVED CORRIDOR.

BILL NO. 412, 1971

ORDINANCE NO. 6249, 1972

Introduced by Councilman Stewart

AN ORDINANCE

AUTHORIZING AND GIVING PRELIMINARY APPROVAL TO A PLANNED ENVIRONMENT UNIT PLAN FOR THE RESIDENTIAL DEVELOPMENT OF A TRACT OF LAND SPECIFICALLY DESCRIBED HEREIN, LOCATED IN THE "R-3" 10,000 SQ. FT. RESIDENCE DISTRICT, SUBJECT TO CONDITIONS RECOMMENDED BY THE PLANNING COMMISSION AND INCORPORATED HEREIN AND PROVIDING FOR THE RETURN TO THE PLANNING COMMISSION FOR CONSIDERATION OF FINAL DEVELOPMENT PLANS. (P.C. 175-71 Alport-Hitt, Inc.)

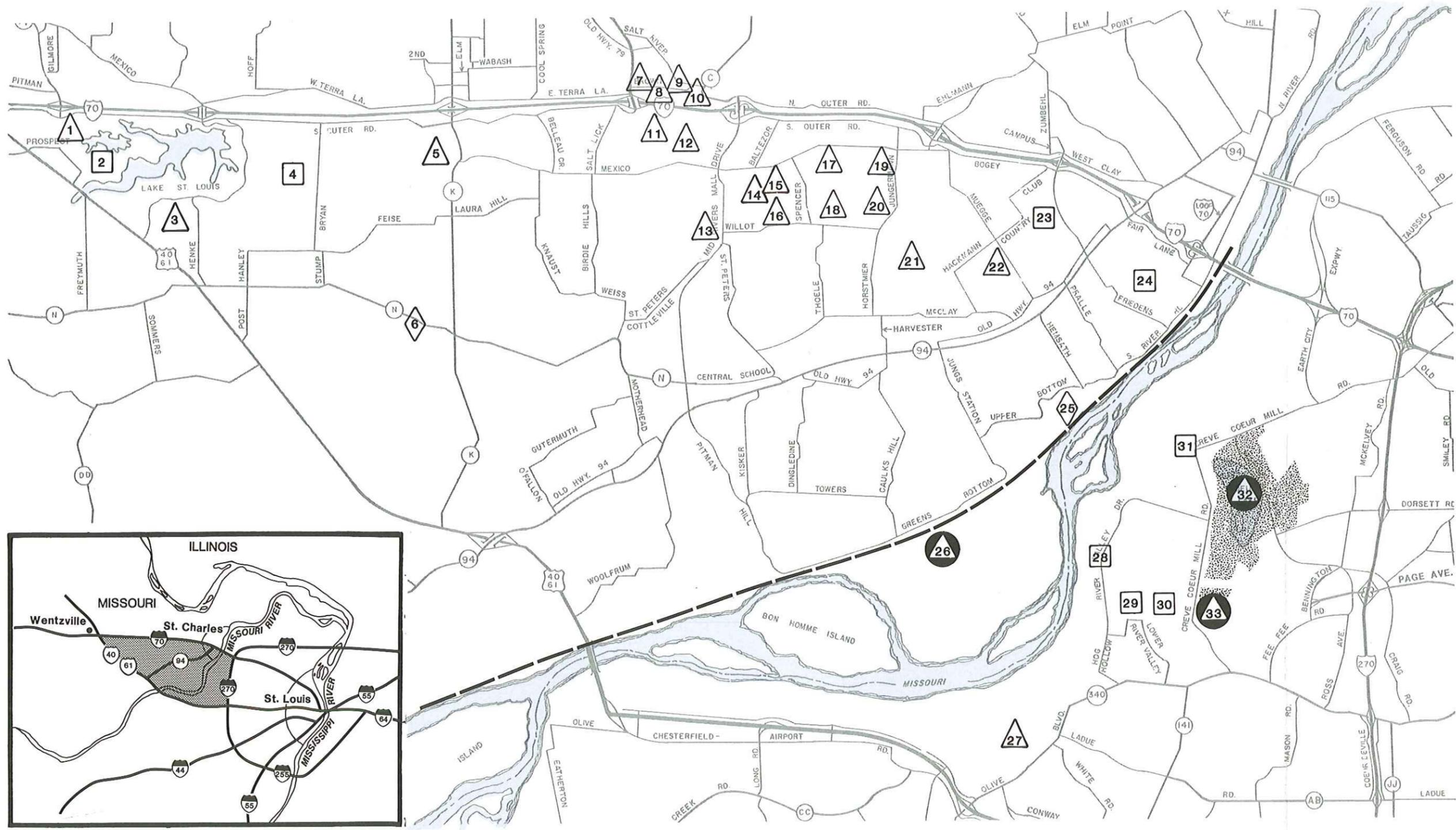
BE IT ORDAINED BY THE COUNTY COUNCIL OF ST. LOUIS COUNTY, MISSOURI, AS FOLLOWS:

SECTION 1. Preliminary approval of a Planned Environment Unit Plan for the residential development of a certain tract of land located in the "R-3" 10,000 Sq. Ft. Residence District in St. Louis County, Missouri, is granted, said tract being described as follows:

A tract of land being Part of Lots 1 and 7 of the HARTLEY SAPPINGTON TRACT in U.S. Survey 1929, Township 46 North, Range 5 East and being more particularly described as follows: Beginning at the Northwest corner of said Lot 7, thence North 67 degrees 08 minutes 20 seconds East along the Northwestern line of said Lot 7 a distance of 288.05 feet to a point; thence South 22 degrees 28 minutes 30 seconds East a distance of 167.35 feet to a point; thence South 62 degrees 09 minutes 10 seconds East a distance of 68.03 feet to a point; thence North 18 degrees 22 minutes 50 seconds East a distance of 204.79 feet to a point; thence North 58 degrees 56 minutes 00 seconds East a distance of 183.48 feet to a point; thence North 28 degrees 16 minutes 56 seconds West a distance of 40.00 feet to a point on the Northwestern line of said Lot 7; thence North 67 degrees 08 minutes 20 seconds East along the Northwestern line of said Lot 7 a distance of 682.33 feet to a point; thence North 88 degrees 41 minutes 40 seconds East a distance of 477.26 feet to a point; thence South 0 degrees 01 minute 40 seconds East a distance of 606.50 feet to a point; thence along the meanders of the creek the following described courses and distances; South 14 degrees 01 minute 40 seconds East a distance of 257.40 feet; South 4 degrees 46 minutes 40 seconds East a distance of 284.46 feet; South 20 degrees 28 minutes 20 seconds West a distance of 89.10 feet; South 02 degrees 43 minutes 20 seconds West a distance of 327.36 feet; South 49 degrees 31 minutes 40 seconds East a distance of 94.38 feet; South 36 degrees 13 minutes 20 seconds West a distance of 382.80 feet; South 29 degrees 13 minutes 20 seconds West a distance of 273.90 feet; South 72 degrees

Figures





LEGEND

- | | | | |
|--|---------------------------------|-------------------------------------|---------------------------------------|
| 1. Freymuth Park | 12. Dardenne Park | 24. St. Charles Golf Course | △ Public Parks and Recreation Areas |
| 2. Community Association Golf Club | 13. Rabbit Run Park | 25. Spring Bend Estate | □ Private Parks and Recreation Areas |
| 3. Lakewood Park | 14.* Brookmount Trail | 26. KATY Trail State Park | ● Parks and Recreation Areas Impacted |
| 4. Lake Forest Golf and Country Club | 15. Brookmount Pool | 27. Faust County Park | ◇ Potential Historic Sites |
| 5. Fort Zumwalt Park | 16. Tot Lot Park | 28. Chesterfield Golf Course | — KATY Trail State Park |
| 6. Captain James Campbell House | 17. St. Peters City Centre/Park | 29. Creve Coeur Legion Park | * Parks with 6(f) Involvement |
| 7.* St. Peters Sports Center Complex | 18. Oak Creek Park | 30. Little Lake Golf | |
| 8. Olde Towne Park | 19. Spencer Creek Park | 31. Creve Coeur Recreation Complex | |
| 9. Brown Road Field | 20. Covenant Park | 32.* Creve Coeur Lake Memorial Park | |
| 10. Lone Wolff Park | 21. Laurel Park | 33. CCLMP Leased Park Land | |
| 11. St. Peters Golf and Recreation Complex | 22.* Wapelhorst Park | | |
| | 23. Bogey Hills Country Club | | |

Section 6(f) Report

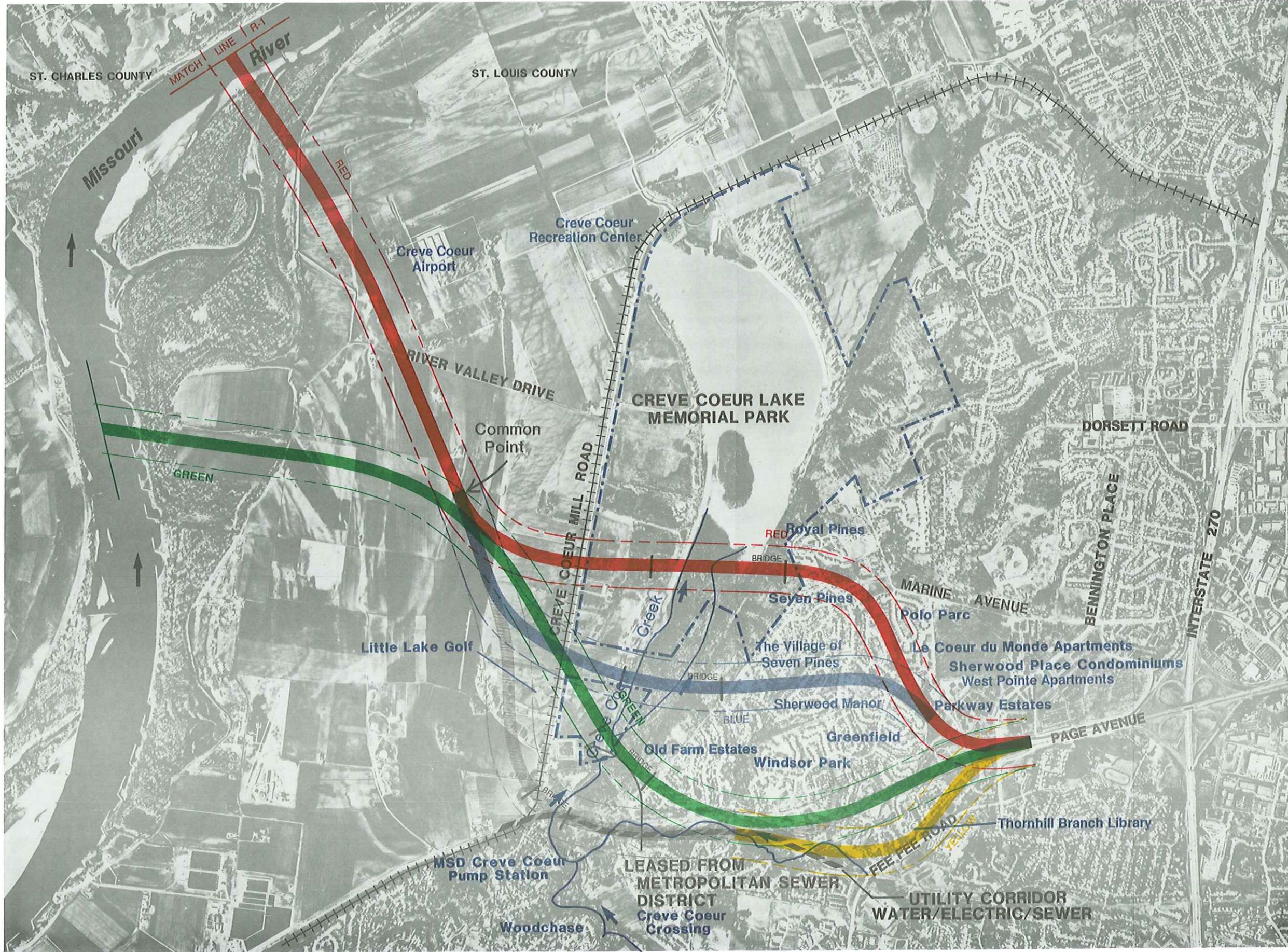


Approximate Scale 1" = 8000'

**Final Environmental Impact Statement
Page Avenue Extension
St. Charles and St. Louis Counties, Missouri**

Parks and Recreation Areas

Figure 1



Section 6(f) Report

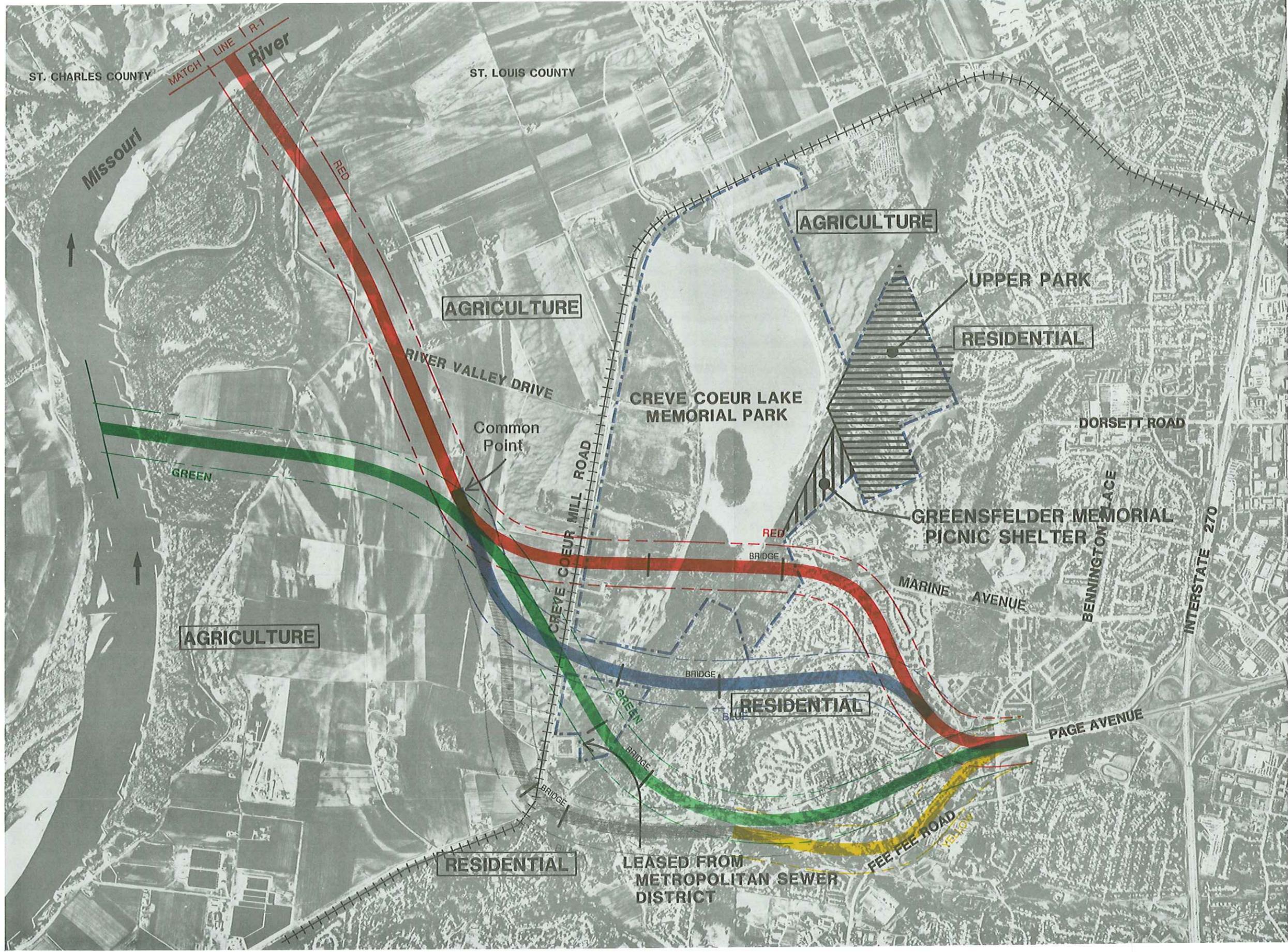
Final Environmental Impact Statement
 Page Avenue Extension
 St. Charles and St. Louis Counties, Missouri



Approximate Scale 1" = 2000'

Alignment Alternatives

Figure 2



Section 6(f) Report

Final Environmental Impact Statement
 Page Avenue Extension
 St. Charles and St. Louis Counties, Missouri

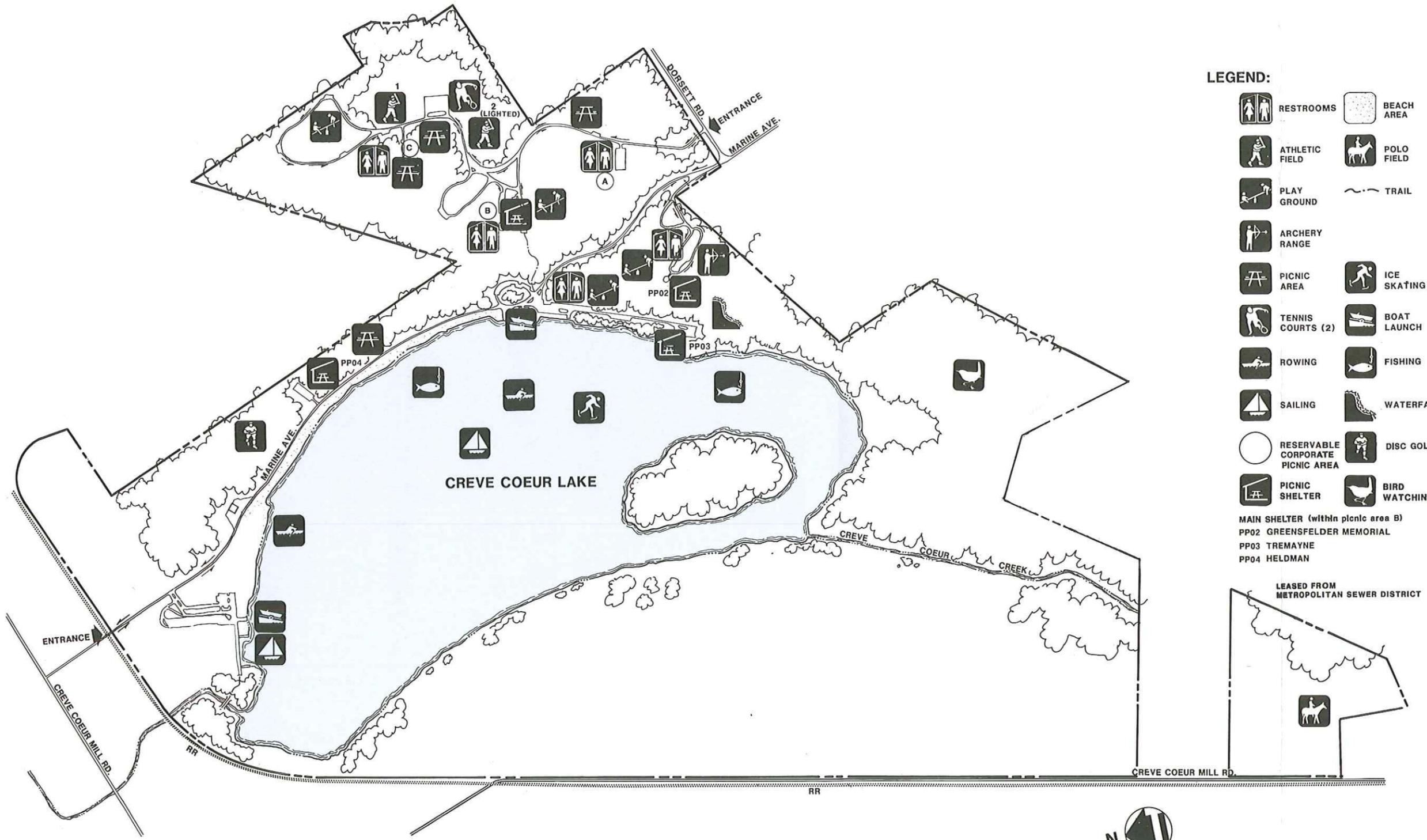
Approximate Scale 1" = 2000'



NORTH

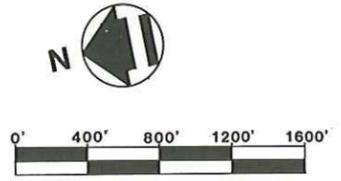
Adjacent Land Use

Figure 3



- LEGEND:**
- RESTROOMS
 - ATHLETIC FIELD
 - PLAY GROUND
 - ARCHERY RANGE
 - PICNIC AREA
 - TENNIS COURTS (2)
 - ROWING
 - SAILING
 - RESERVABLE CORPORATE PICNIC AREA
 - PICNIC SHELTER
 - BEACH AREA
 - POLO FIELD
 - TRAIL
 - ICE SKATING
 - BOAT LAUNCH
 - FISHING
 - WATERFALL
 - DISC GOLF
 - BIRD WATCHING
- MAIN SHELTER (within picnic area B)
 PP02 GREENSFELDER MEMORIAL
 PP03 TREMAYNE
 PP04 HELDMAN

LEASED FROM METROPOLITAN SEWER DISTRICT



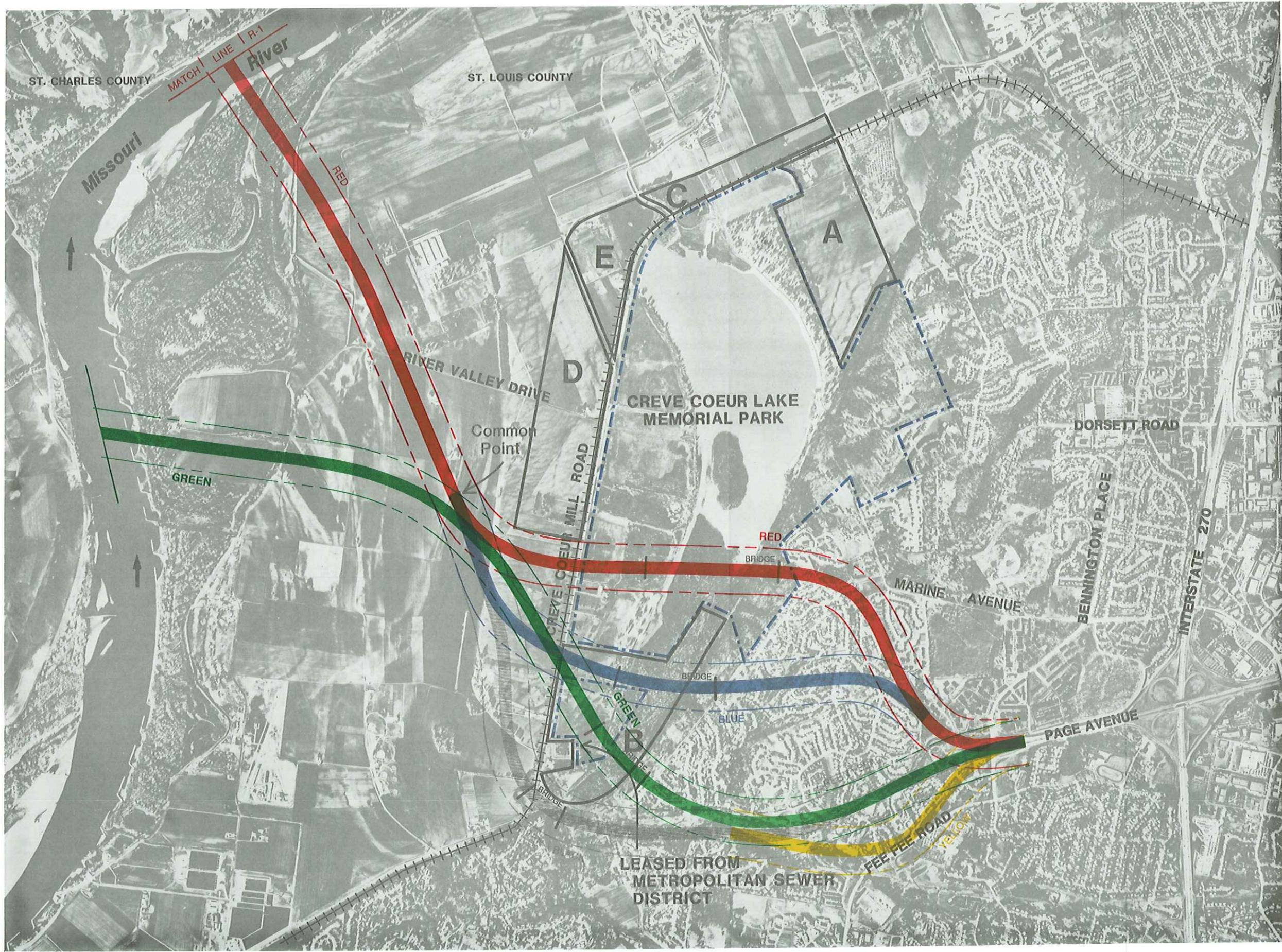
Source: St. Louis County Department of Parks and Recreation

Section 6(f) Report

Final Environmental Impact Statement
 Page Avenue Extension
 St. Charles and St. Louis Counties, Missouri

Creve Coeur Lake Memorial Park Activities

Figure 4



Section 6(f) Report

Final Environmental Impact Statement
 Page Avenue Extension
 St. Charles and St. Louis Counties, Missouri

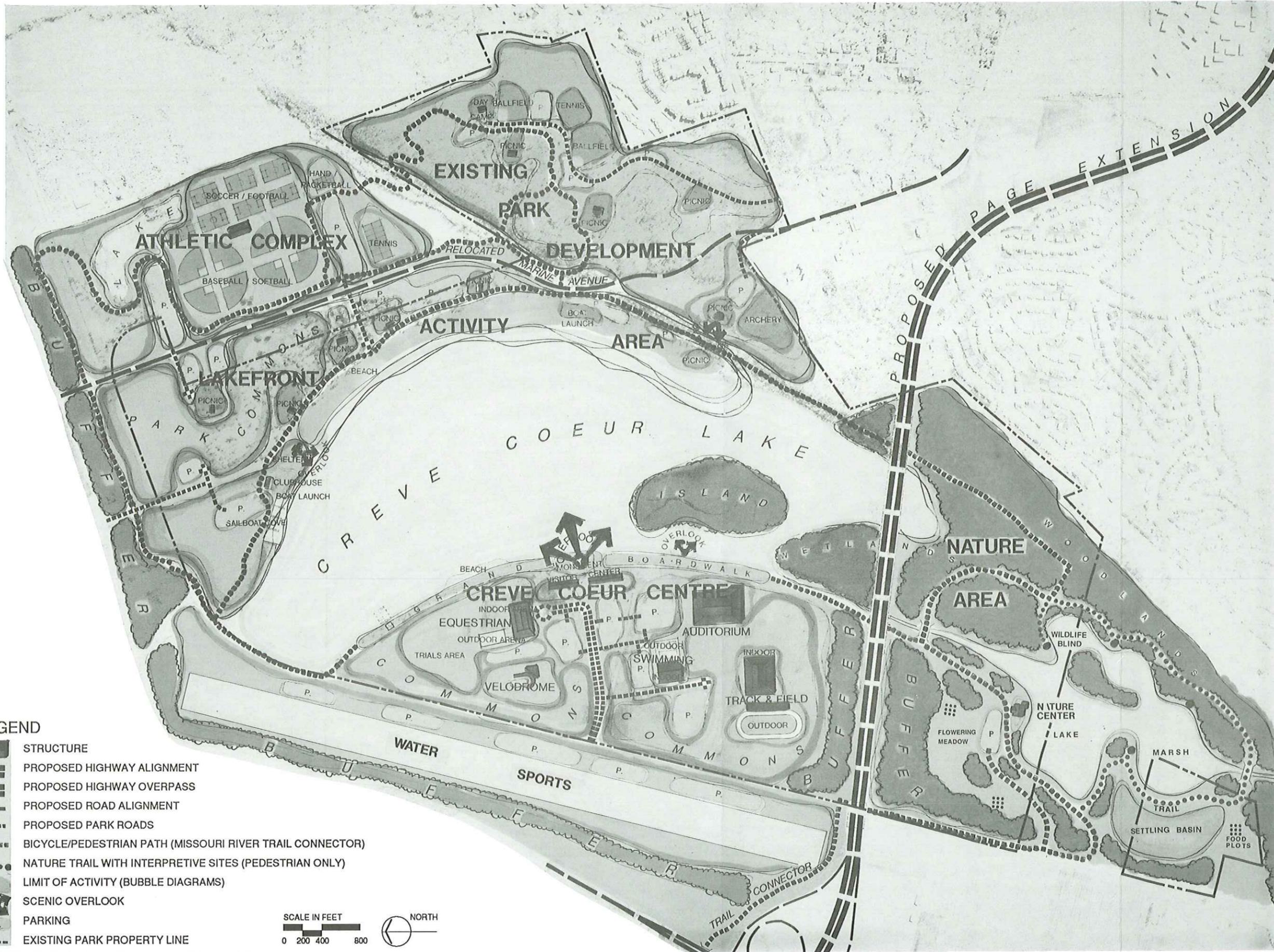
Approximate Scale 1" = 2000'



NORTH

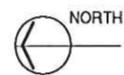
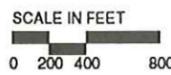
Parkland Mitigation Areas - Enhancement Plan

Figure 5

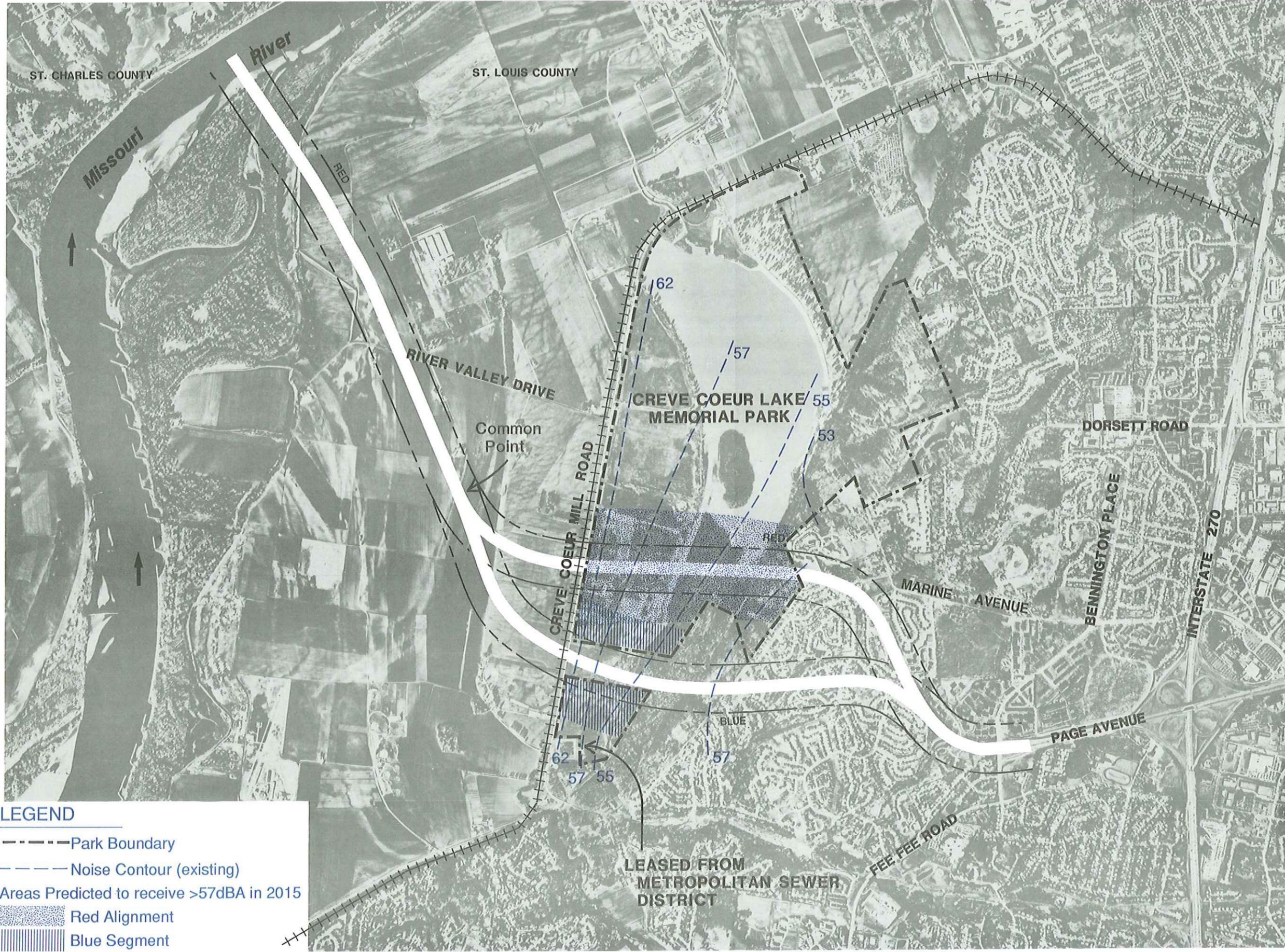


LEGEND

- STRUCTURE
- PROPOSED HIGHWAY ALIGNMENT
- PROPOSED HIGHWAY OVERPASS
- PROPOSED ROAD ALIGNMENT
- PROPOSED PARK ROADS
- BICYCLE/PEDESTRIAN PATH (MISSOURI RIVER TRAIL CONNECTOR)
- NATURE TRAIL WITH INTERPRETIVE SITES (PEDESTRIAN ONLY)
- LIMIT OF ACTIVITY (BUBBLE DIAGRAMS)
- SCENIC OVERLOOK
- PARKING
- EXISTING PARK PROPERTY LINE



SOURCE: St. Louis County Department of Parks and Recreation



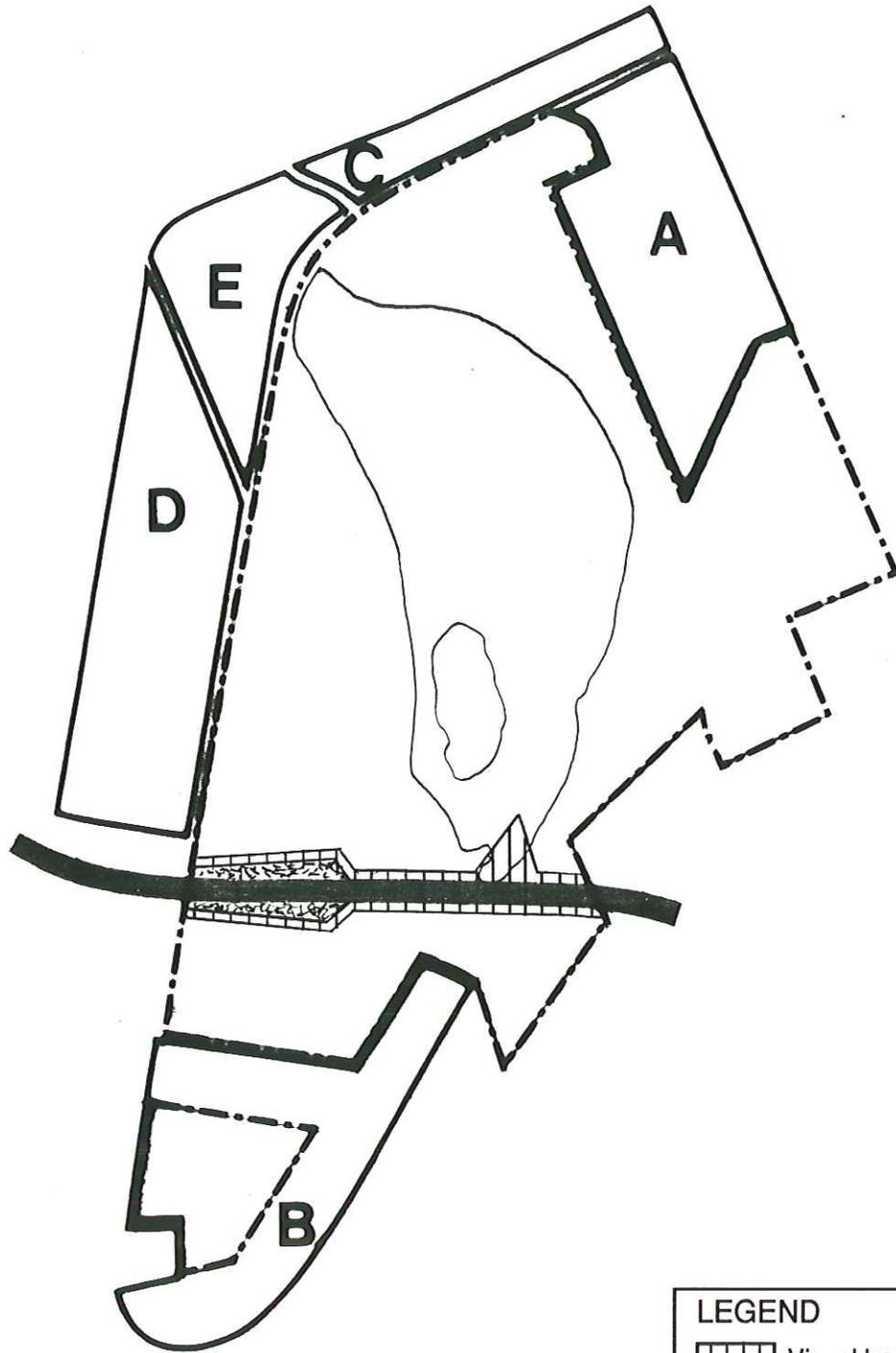
- LEGEND**
- Park Boundary
 - - - Noise Contour (existing)
 - Areas Predicted to receive >57dBA in 2015
 - Red Alignment
 - Blue Segment

Section 6(f) Report

Final Environmental Impact Statement
 Page Avenue Extension
 St. Charles and St. Louis Counties, Missouri

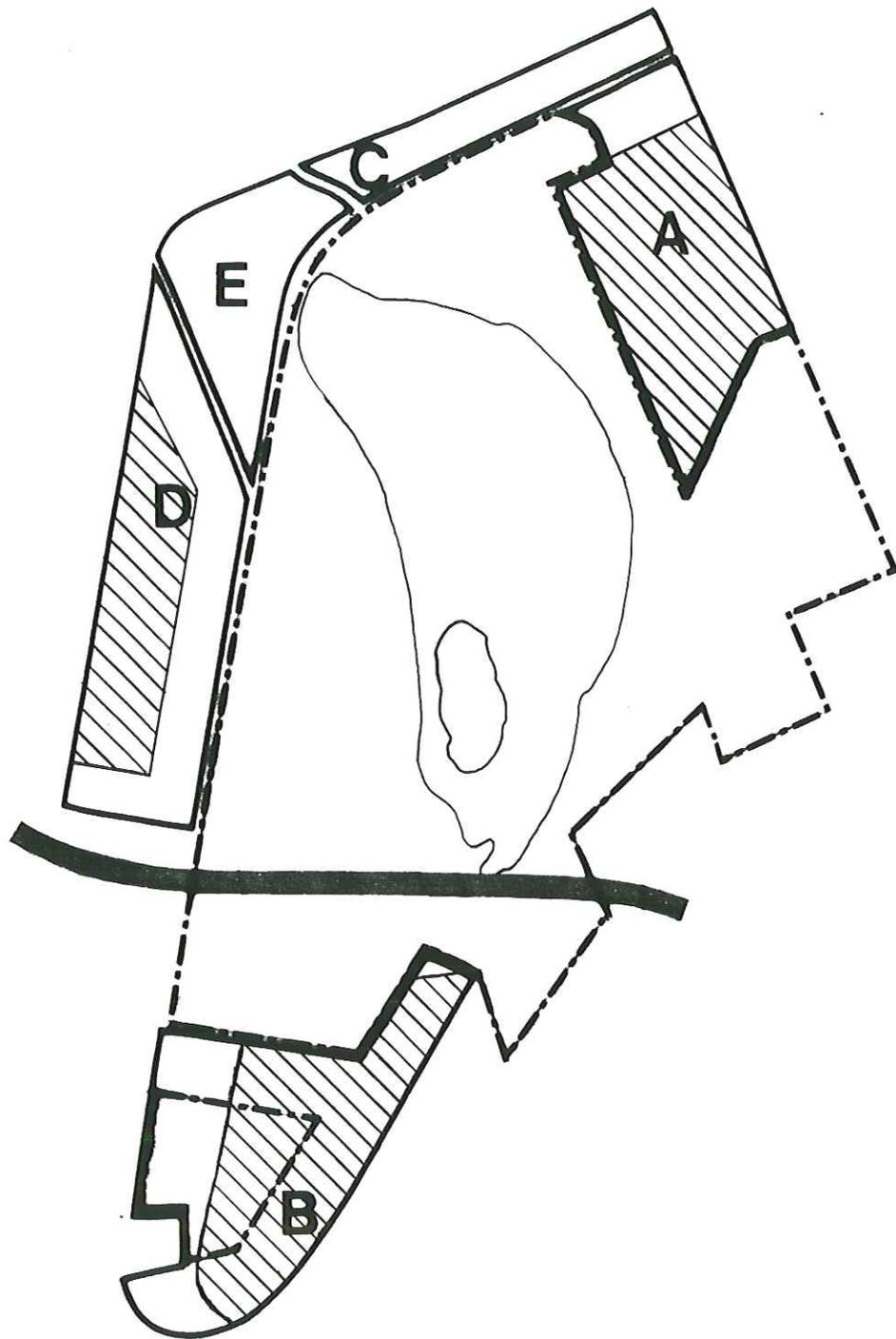
Approximate Scale 1" = 2000'





LEGEND

 Visual Impact Area
 Roadway Berm



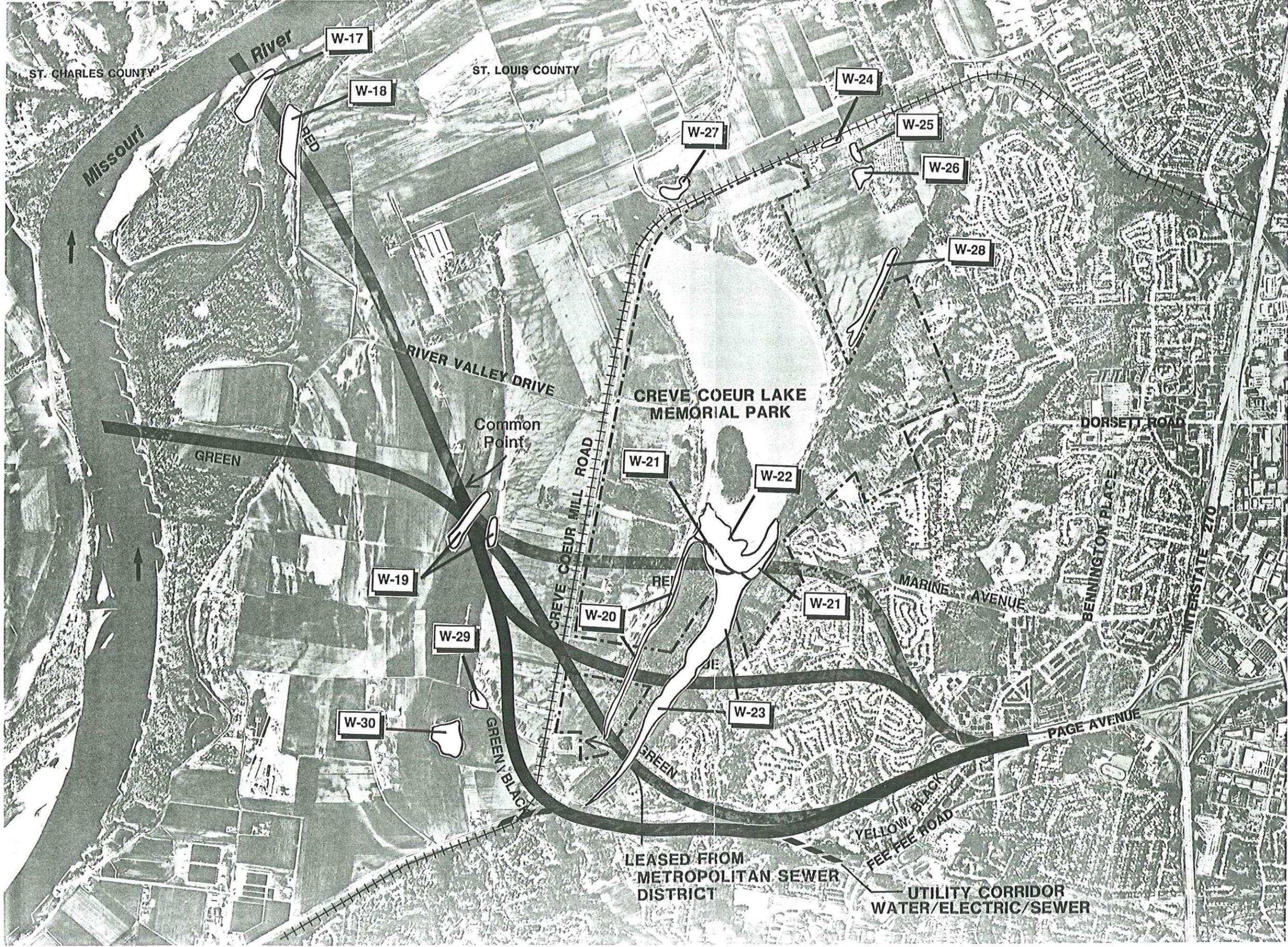
Section 6(f) Report

Final Environmental Impact Statement
Page Avenue Extension

St. Charles and St. Louis Counties, Missouri

Section 6(f) Suitable Replacement Lands

Figure 10



Section 6(f) Report

Final Environmental Impact Statement
Page Avenue Extension

Approximate Scale 1" = 2000'



NORTH

St. Charles and St. Louis Counties, Missouri

Jurisdictional Wetlands, Red Alignment

Figure 9