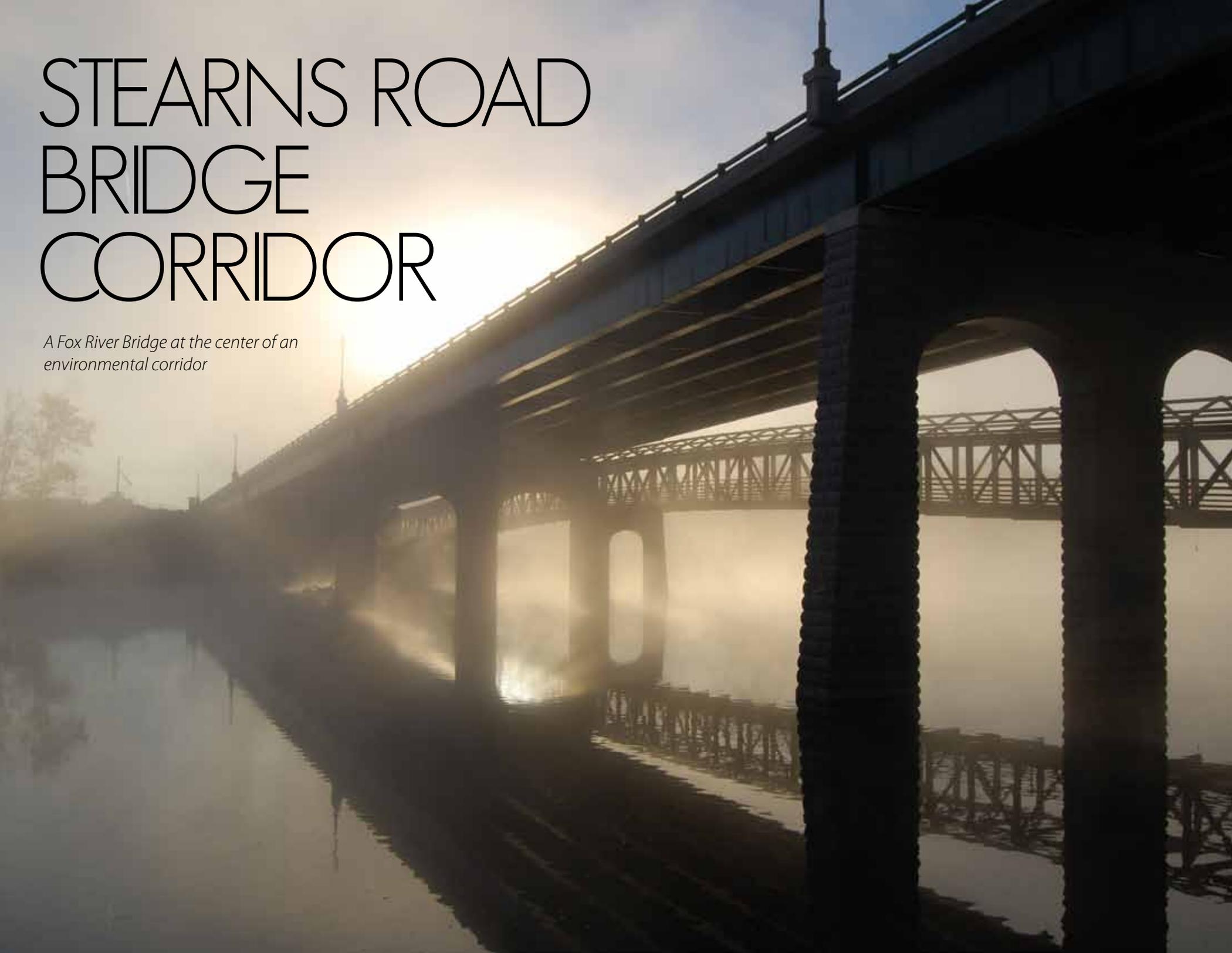


STEARNS ROAD BRIDGE CORRIDOR

*A Fox River Bridge at the center of an
environmental corridor*





Kane County Board

List includes all County Board members since 1993 (date County first appropriated funds to corridor).

Chairman

Karen McConnaughay

President, Forest Preserve Commission

John J. Hoscheit

Deborah Allan	2002 - Present	Karen McConnaughay	1992 - Present
Leon Ardelean	1998 - 2002	Robert McConnaughay	1990 - 2010
Michael Arians	1992 - 1998	Mike McCoy	1992 - 2004
Lee Barrett	1998 - 2006	Alex McTavish	1992 - 1994
Terence Bermes	1988 - 1996	Jeanette Mihalic	2008 - Present
Penny Cameron	1980 - 2004	James Mitchell	1990 - Present
Bonnie Campbell	1992 - 1998	Myrna Molina	2006
Jan Carlson	1994 - 2008	William Morse	1992 - 2002
Cristina Castro	2008 - Present	Rudy Neuberger	1996 - 2008
Donnell Collins	2007 - Present	John Noverini	2002 - 2008
Jack Cook	1990 - 2004	Peter Pund	1992 - 1996
Mark Davoust	2004 - Present	Donald Rage	1994 - 2002
Jesus de la Isla	2006 - 2008	Mary Richards	1980 - 2004
Michael DeStefano	1980 - 1996	Dorothy Sanchez	1996 - 2006
John Fahy	2006 - 2010	Brad Sauer	1990 - 1996
Harold Floyd	2001 - 2002	Margaret Scalfaro	2002 - 2004
Ron Ford	2008 - Present	Carol Schoengart	1980 - 1994
Marlena Fox	2004 - 2006	Arlene Shoemaker	1982 - 1994
Drew Frasz	2008 - Present	Arlene Shoemaker	2006 - 2009
Paul Greviskes	1990 - 2008	Pat Sjurseth	1990 - 1996
Ken Griffin	2002 - 2006	James Spear	1996 - 2000
Tom Hartwell	1996 - 2000	Mary Taylor	1982 - 1996
Linda Holmes	2004 - 2007	Judith Tooley	1980 - 1996
John Hoscheit	1996 - Present	Jackie Tredup	1996 - Present
Catherine Hurlbut	1994 - Present	Walter Treiber	1990 - 1996
Gerald Jones	1992 - 2010	Thomas Van Cleave	2004 - Present
Warren Kammerer	1982 - 1996	Caryl Van Overmeiren	1992 - 2006
Michael Kenyon	2004 - Present	Jesse Vazquez	2008 - Present
Dennis Kosinski	1994 - 2002	Dan Walter	2000 - 2004
Robert Kudlicki	2002 - 2010	Nancy Wauchope	1978 - 1994
Bonnie Lee Kunkel	2004 - Present	Doug Weigand	1992 - 2004
Jennifer Laesch	2009 - 2010	Barbara Wojnicki	1998 - Present
Sylvia Leonberger	2006 - 2010	Don Wolfe	1996 - 2008
Philip Lewis	2006 - Present	John Wood	1994 - 1998
Hollie Lindgren	2004 - Present	William Wyatt	1996 - 2010
John B. Mayer	2009 - 2010		



Letter from the Chairman



December 15, 2010

Kane County is so proud to announce the completion of the long awaited Stearns Road Bridge Corridor. This project represents the culmination of the efforts of so many people, and the end result is a much needed new Fox River Bridge Crossing and roadway corridor that extends from Randall Road to the DuPage County Line.

When the County embarked on a study to identify additional east-west river crossings over 20 years ago, to all outward appearances, the Stearns Road Bridge Corridor did not appear to be the most likely corridor to be selected. The environmental resources and the beautiful natural surroundings made this location a difficult place to site a road.

But thankfully, through the significant efforts of Speaker Dennis Hastert and Kane County's partnership with the Federal Highway Administration, the US Army Corps of Engineers, the Illinois Department of Natural Resources, the Illinois Department of Transportation and many, many others, we were able to develop a new bridge and roadway corridor that not only protects the existing environment along the corridor, but also enhances, restores and protects precious resources.

The result... "A Fox River Bridge at the Center of an Environmental Corridor."

We are so thrilled to have many of the people responsible for making this project a reality participating in the ribbon cutting ceremony today to celebrate the completion of the largest infrastructure project in the history of Kane County. And we were especially pleased to have constructed this project during a time when much needed jobs could be created to help the region endure a very difficult economic time. Further, the region is looking forward to the long term economic development opportunities that will be created by completion of the corridor.

This project will reward the community with enhanced connections for the passage of wildlife and people. It interconnects the major environmental sites within the corridor through newly created public access and linkages to the areas. We hear about sustainability goals evolving today, yet Kane County was years ahead in this effort, and we are so pleased to present the Stearns Road Bridge Corridor to the residents of Kane County. The project is consistent with its context – from the use of form liners replicating locally-quarried limestone to color choices and plantings to ornamentation that truly reflects the corridor and its surroundings. We have completed a much needed new regional transportation corridor, enhanced with 216 acres of new open space and restored native prairie, oak savanna and wetlands for the enjoyment of generations to come.

Sincerely,

Karen McConaughay
County Board Chairman





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ECONOMIC DEVELOPMENT

Putting People Back to Work

A project of the magnitude of Stearns Road wouldn't have been feasible without a united effort. Kane County is grateful for the support and dedication of our valued partners in the labor unions. The Stearns Road Corridor will serve as a testament to the skill, pride and commitment of these men and women for generations to come.

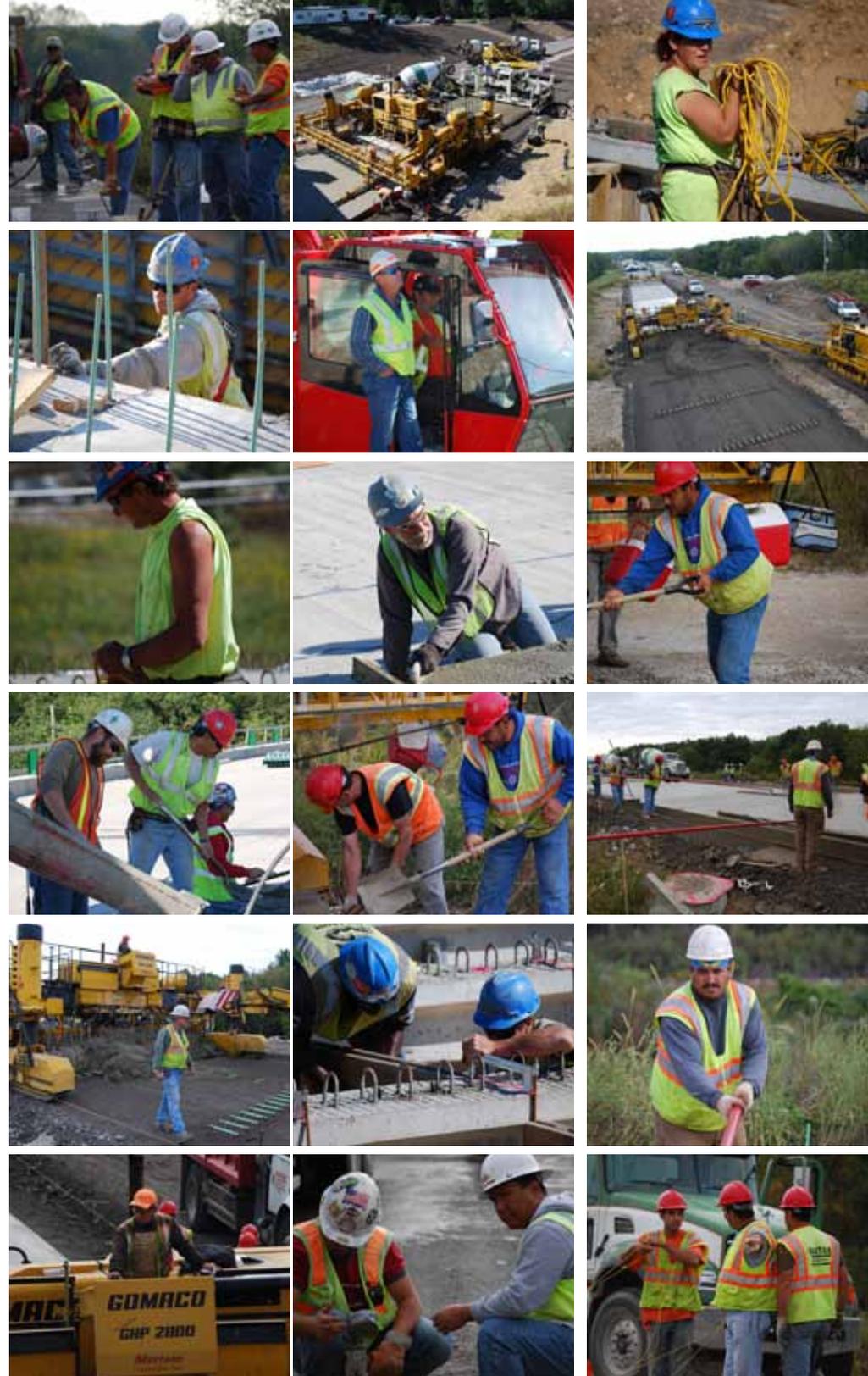
Our labor union partners include:

- ✓ Carpenters Local 363
- ✓ Electricians Local 117
- ✓ Finishers Local 11, Area 638
- ✓ Ironworkers Local 393
- ✓ Laborers Local 76
- ✓ Landscapers
- ✓ Operators Local 76
- ✓ Painters Local 30
- ✓ Teamsters Local 673

The project came along at a time when the region could use it most. Many jobs were created, with employment numbers on-site at 220 workers per day.

Based on estimates from the US Department of Transportation, \$1 million in construction investment results in 35 jobs for workers and local businesses.

That means the Stearns Road project generated 5,138 jobs for the region. This provided a much needed economic boost when Kane County needed it most.



Long Term Economic Growth Impacts

Not only did Stearns Road bring jobs to the region during an economic downturn, this project will have long term and lasting impact on the entire region. The corridor creates a link between the east and west sides of the county, providing opportunities for people on the east side of the river, for instance, to easily visit shopping destinations along Randall Road.



ACHIEVING THE ENVIRONMENTAL VISION

Celebrating and Restoring the History of the Corridor

Green Land Acquisition

The areas highlighted in green represent land acquisition to preserve and restore the environment (216 acres).

McLean Fen – Groundwater Recharge Protection Area

A fen is a type of wetland usually fed by groundwater with higher pH (neutral base to alkaline.) Acquiring the recharge area for the McLean Fen sets it aside for open space, and protects that area from the pressures of suburban development.

Vegetative Swales, Native Plantings

Because of the sensitive natural resources adjacent to Stearns Road, special best management practices were incorporated into the final plans. These include vegetated swales with native plantings for water filtering, clay lined ditches to prevent roadway runoff from entering sensitive groundwater resources and shallow wetland bottom detention basins planted with native vegetation. The native plantings were included in the stormwater features for water quality enhancements, aesthetics, and natural adaptation to area conditions, thereby lowering future maintenance costs.

Jon Duerr Forest Preserve Site

This Kane County Forest Preserve site is located immediately south of Illinois Route 31, east and west of the McLean Boulevard intersection. During construction, Sugar Ridge ditch was relocated and regraded, with detention areas constructed along the stream. To protect water quality flowing into this preserve, which includes a natural 8 foot high waterfall, strict erosion and sediment controls were incorporated into the plans. Inspection and maintenance of these controls were intensive to ensure water quality goals.

River Protection

The Fox River is a valued resource within the Stearns Road corridor. During the environmental surveys that were conducted, numerous state listed threatened or endangered species were observed in the Fox River. These included the River Redhorse fish (*Moxostoma carinatum*), the Greater Redhorse (*M. valenciennesi*), and the slippershell mussel (*Alasmidonta viridis*). To protect the fish species, work was suspended within the Fox River or Brewster Creek during the spawning period for these fishes (February through June).

Mussel surveys conducted in the Fox River prior to construction did not turn up the slippershell mussel, but did encounter another state endangered species, the black sandshell (*Ligumia recta*).



Minimize Light Pollution

Light, obtrusive pollution, or excessive artificial light disturbs the natural night time landscape. Stearns Road features minimal lights to accomplish sufficient levels and highlights the bridge.

Wetland Restoration Site

The project began with the acquisition and creation of a massive stormwater quality wetland restoration site - a 65 acre acquisition. This enabled the main construction contracts to discharge clean stormwater to the Fox River and upstream tributaries. This protected Brewster Creek and the Fox River from potential sediment runoff during construction and beyond.

James "Pate" Philip State Park

Formerly known as Tri-County State Park, this preserve is located immediately north of existing Stearns Road and east of Dunham. Combined with the adjacent Pratts Wayne Woods Forest Preserve, it encompasses over 3,400 acres of remnant and restored native communities. This site harbors restored native wetland and prairie communities, plus a natural, undisturbed meandering section of Brewster Creek. The site provides habitat for numerous species of wildlife including endangered reptiles, birds and a state listed plant species: the dwarf burreed (*Sparganium chlorocarpum*). During construction, the Stearns Road work area was defined with fencing to prevent any accidental intrusions into this natural area.

Recycled Bridge

A former highway bridge was converted to a mixed-use trail to reduce cost and reduce construction waste. An additional bridge was relocated for reuse to other parts of the County.

Pratts Wayne Woods Forest Preserve

This DuPage County Forest Preserve site is located south of Stearns Road and is part of the open space complex that includes James "Pate" Philip State Park. This site includes restored native wetlands and prairie communities and hundreds of acres of habitat for wildlife.

Brewster Creek Fen

The Brewster Creek Fen is located south of the Stearns Road Corridor. This dedicated Illinois Nature Preserve is a fine example of a groundwater fed fen community dominated by herbaceous, non-woody plants. Numerous state listed plant species are known to occur within the Brewster Creek Fen. Being downstream from Stearns Road on the East Branch of Brewster Creek, any discharge of sediment or other pollutants into Brewster Creek from construction could pose harm to the Fen. Therefore, state of the art soil erosion and sediment control measures were designed specifically for Stearns Road. In addition, the County's diligent pursuit of water quality protection assured that all erosion and sediment controls were well maintained. Two bridges were constructed over the East Branch of Brewster Creek utilizing these specific erosion and sediment controls.

Adaptive Management Plan Areas— Restored Native Communities

Known as the South Elgin Sedge Meadow / Sand Hill Annex, these sites total approximately 35 acres. The goal of these facilities is to return these areas to their native vegetation including oak savanna. To accomplish this, the County performed selective clearing through controlled burns, removing scrub trees, fencing, buildings and driveways. Over 150 deciduous trees, 350 shrubs and 200 perennials were planted, in addition to mulching and seeding. The facilities include new pervious concrete drives and parking lots, and permeable trails that allow stormwater to flow through, as well as benches, bike racks, parking lots, and other facilities to make the area accessible to the public. These areas will become part of the Kane County Forest Preserve.



THE 20-YEAR HISTORY OF STEARNS ROAD

Pre - 1990



ENVIRONMENTAL IMPACT STUDY (EIS): WIN-WIN SOLUTION

Five corridors were advanced to an EIS, with three locations identified as preferred: Bolz Road, Stearns Road and Mooseheart/IL 56. The Stearns Road Corridor proves to be a difficult challenge due to the native areas and pristine environmental resources along the corridor. But through proactive community engagement, a compromise is developed in the form of an environmental vision for the corridor, which saves Stearns Road as a preferred corridor.

FOX RIVER BRIDGE CROSSING STUDY (20 CORRIDORS)

1990

Fox River Bridge Advisory Committee is formed. Congressman Dennis Hastert champions a committee of local government representatives. Twenty corridors are identified for study. Nine corridors are considered "potentially suitable."

CORRIDOR ANALYSIS DOCUMENT (9 CORRIDORS)

May 1994

Corridor Analysis Document is published.

EIS INITIATED (5 CORRIDORS)

June 1994

EIS is initiated with five corridors under consideration.

RIGHT OF WAY INITIATED

July 1999

Started acquiring right-of-way

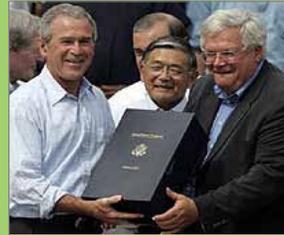
Nabi Fakkroddin, PE, SE
County Engineer

Jeffrey Dailey, PE
County Engineer

1997

FUNDING PURSUITS

Once again, the project struggles to survive: the project carries a big pricetag. In 2005, Congressman Hastert comes through again with SAFETEA-LU funding for a majority of the project. The County prioritizes improvements and a phased construction plan is devised.



ENVIRONMENTAL VISION IS COMPLETED

February 2002

Stearns Road Environmental Vision Document is completed. This document provides a vision for the long-term goals for the mitigation, restoration and management of environmental resources along the corridor.

FEDERAL RECORD OF DECISION (3 CORRIDORS)

May 2002

FHWA issues a Record of Decision approving the EIS and three preferred corridors. Stearns Road is selected as the County's first priority.

GROUND BREAKING CEREMONY

October 2006



STEARNS ADVANCE WORK CONTRACTS

November 2006 to January 2008

Advance work contracts are designed and built:

1. Illinois 31 over New Stearns Road
2. Wetland Restoration Site
3. Dunham/CC&P Grade Separation
4. Stearns Bridge over Brewster Creek

DESIGN MAINLINE CONTRACTS

January 2008

Armed with a phased construction plan to build the ten year plan for the Corridor, the County engages engineering consultants to initiate roadway and bridge design contracts. Phase II Engineering begins. The project is broken up into manageable pieces, prioritizing elements to streamline design and construction.

CONSTRUCTION MAINLINE CONTRACTS

April & June 2009

Four major construction contracts are bid and awarded. Construction begins.

RIBBON CUTTING

December 2010

Ribbon Cutting! Corridor is open to the public.

Carl Schoedel, PE
County Engineer

THE PROJECT STORY

Stearns Road: A Fox River Bridge at the center of an environmental corridor.

That sounds a bit unconventional...and it is.

The Stearns Road corridor has a long and interesting story – over 20 years in fact - which ends with the completion of a much needed new crossing of the Fox River in central Kane County. Want to learn more? Read on...



Early History

In 1990, then Congressman Dennis Hastert championed the formation of the Fox River Bridge Advisory Committee. It consisted primarily of local government representatives, with assistance from the Chicago Area Transportation Study (now known as Chicago Metropolitan Agency for Planning). From this committee, 20 possible corridors ranging from Algonquin in McHenry County to Yorkville in Kendall County were identified for evaluation.

A study was commissioned and completed, and in 1994, the Corridor Analysis Document was published. Of the 20 corridors originally identified, nine were considered potentially suitable. These were identified as:

- ✓ County Line Road
- ✓ Longmeadow Parkway/Bolz Road
- ✓ Miller Road/Lake Marian Road
- ✓ Boncosky Road
- ✓ CC&P RR/Stearns Road
- ✓ Red Gate Road
- ✓ Crane Road/Country Club Road
- ✓ CNWRR/Dean Street
- ✓ Moosehart Road/Illinois 56/Oak Street

Ultimately four corridors were eliminated from consideration by the County for a variety of reasons. Five corridors were selected to be studied by Kane County in a combined Environmental Impact Statement (EIS).

What is an EIS?

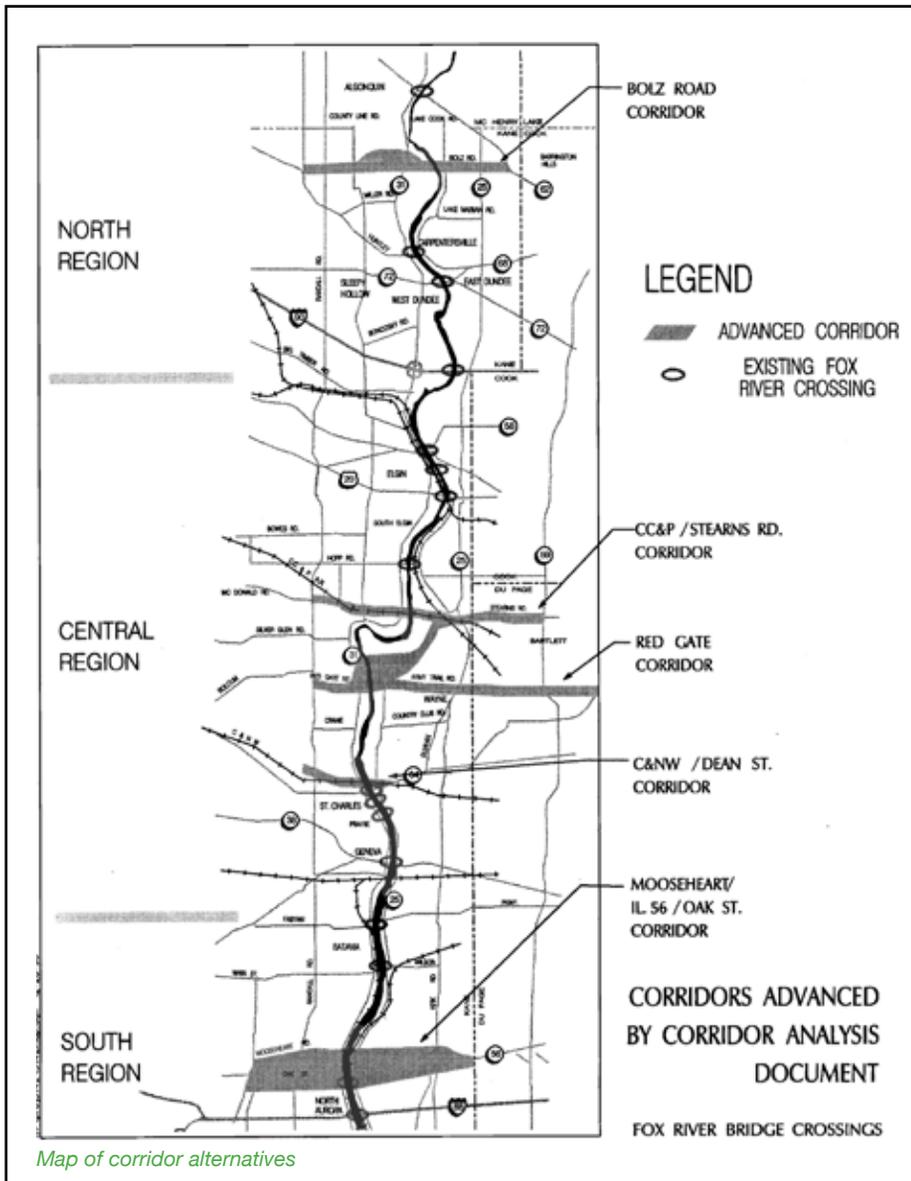
An Environmental Impact Statement (EIS) under United States environmental law is a document required by the National Environmental Policy Act (NEPA) for federal government agency actions that could “significantly affect the quality of the human environment.” A tool for decision making, an EIS describes the positive and negative environmental effects of a proposed agency action - and cites alternative actions.

When a major transportation project is planned and federal funding is anticipated, the agency must comply with NEPA to remain eligible for federal funding. This ensures that the agency considers the impacts to the environment in the alternatives evaluated and chosen.

The Kane County EIS

The EIS undertaken by Kane County included the ambitious evaluation of five corridors in one document. These included:

- ✓ Longmeadow Parkway/Bolz Road
- ✓ CC&P RR/Stearns Road
- ✓ Red Gate Road
- ✓ CNWRR/Dean Street
- ✓ Moosehart Road/Illinois 56/Oak Street



Map of corridor alternatives

Project Purpose & Need

One of the first steps in completing an EIS is to develop an acceptable purpose and need statement for the project. The Federal Highway Administration (FHWA) is responsible for the administration of NEPA policy, and says the following about the purpose and need statement in their September 1990 publication titled “The Importance of Purpose and Need in Environmental Documents”:

“The purpose and need section is in many ways the most important chapter of an environmental impact statement (EIS). It establishes why the agency is proposing to spend large amounts of taxpayers’ money while at the same time causing significant environmental impacts. A clear, well-justified purpose and need section explains to the public and decision makers that the expenditure of funds is necessary and worthwhile and that the priority the project is being given relative to other needed highway projects is warranted. In addition, although significant environmental impacts are expected to be caused by the project, the purpose and need section should justify why impacts are acceptable based on the project’s importance.”

Without a well-defined, well-established and well-justified purpose and need, it will be difficult to determine which alternatives are reasonable, prudent and practicable, and it may be impossible to dismiss the no-build alternative.”

The purpose and need statement is reviewed and “concurrence” is granted by resources agencies, indicating that they agree with the reasons for pursuing the project. In Illinois, these resource agencies include:

- ✓ U.S. Army Corps of Engineers (US ACOE)
- ✓ U.S. Fish and Wildlife (USF&W)
- ✓ U.S. Environmental Protection Agency (USEPA)
- ✓ U.S. Department of Agriculture (USDA)
- ✓ Illinois Department of Natural Resources (IDNR)

Fox River Bridges Purpose and Need

The purpose and need statement for the Fox River Bridges consisted of the following three components:

1. **Enhance Transportation** for the Kane County corridor by reducing congestion and providing alternate and more direct routes.

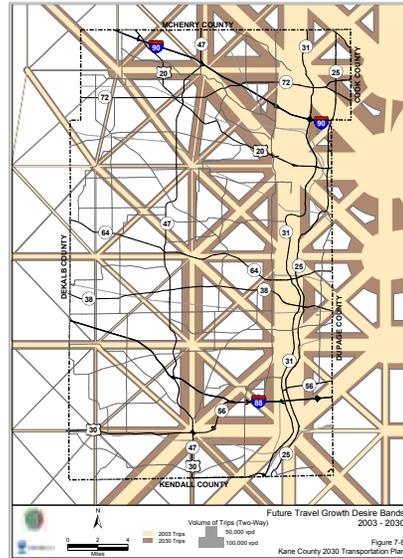
THE PROJECT STORY

As can be seen in this Traffic Growth Desire Bands graphic from the County's long range transportation plan below, traffic has a strong east west and diagonal component. The tan lines illustrate people's desired routes of travel in Kane County - the thicker the line, the heavier the traffic pattern. There is a heavy northwest to southeast movement up near the McHenry/Kane border and a heavy southwest to northeast movement down near the Kendall/Kane border. In general these parallel the I-90 and I-88 corridors, which are the sources of high speed access to employment centers.

2. **Serve Land Use** by providing access to Central Business Districts, public service and commercial centers. The project should support and enhance local and regional land use by creating access to these areas.

3. **Conform with local land use plans.** Kane County has implemented the 50/50/50 Land Resource Management Strategy which means:

- ✓ in order to preserve 50% of the Kane County land area in open space and agriculture
- ✓ the County needs 50% of the growth in the urban corridor (along the Fox River)
- ✓ and 50% of the growth in the "critical growth" area in the central part of Kane County



Traffic Growth Desire Bands

In layman's terms, Kane County is a great place to live, but the employment centers are either along the I-90 corridor from Schaumburg to O'Hare, or along the I-88 high-tech corridor through Naperville...or even other points east like the City of Chicago. Therefore, there is a heavy need for traffic to cross the Fox River. Meanwhile there were very few bridge crossings up and down the valley. Stearns Road addresses this issue effectively by providing an east-west connection to and from DuPage and Cook Counties.

Alternatives Evaluations

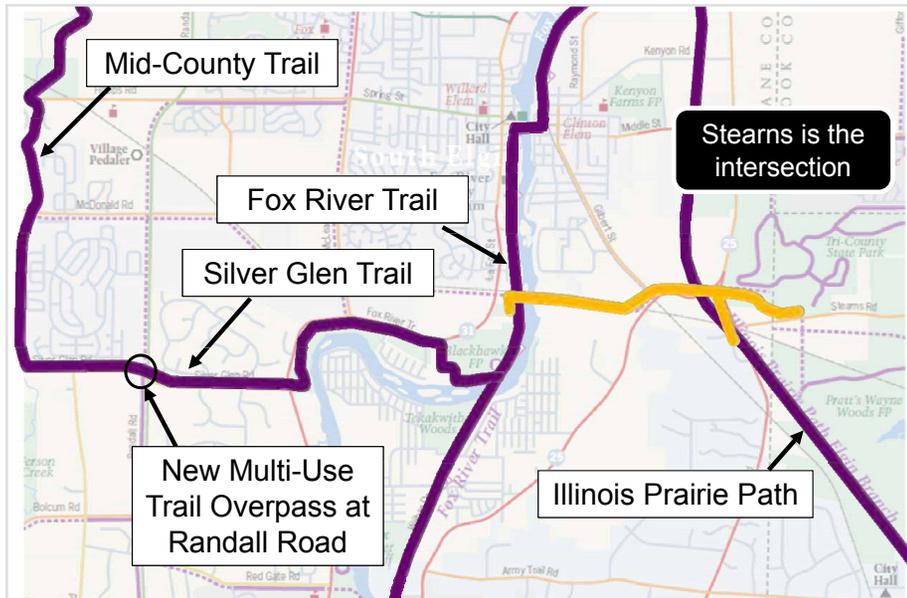
Once the purpose and need was established and approved, a series of alternatives for all five corridors was considered. Three corridors emerged as serving the purpose and need:

- ✓ North – Bolz Road (Longmeadow Pkwy)
- ✓ Central – Stearns Road
- ✓ South - Oak Street/IL Rte 56

The environmental impacts of the three remaining alternatives were then studied and evaluated in further detail.

As the EIS evolved, the Stearns Road corridor was the subject of much discussion regarding the rich environmental resources and in some cases, the degradation of these former treasures in the County along this route. It became a question of serious debate whether or not a road should be sited in this corridor. At some point, it appeared that this corridor would be struck from consideration due to the environmental challenges and the perceived impacts. But the project team persevered, as this was the most central of the three locations and the alignment that best met the purpose and need. As the project developed, all of the resource agencies - US EPA, US ACOE, USF&W, IEPA and IDNR - began to see the value and the wisdom of pursuing the Stearns corridor alignment because it offered a way to not only protect, but enhance the various environmental features. The no-build scenario was seen as resulting in continued degradation of the environment and so the do-nothing approach was LESS sustainable than pursuing the project.

As a result of extensive coordination with the resource agencies, a number of environmental concessions were made to protect, preserve and restore degraded portions of the proposed Stearns Corridor. These included protection of the ground water recharge areas that provide drinking water to the region, restoration of native savanna, establishment of a protected wetland area for the high quality river tributary area and a number of other concepts that were summarized in a report entitled the "Environmental Vision" document. One of the agreements made was to connect the regional trails in the area by providing a mixed-use path along the new corridor. The graphic at the top of the next page depicts this connection.



The completion of the elements in this document secured the Stearns Road Corridor’s future, and thus laid the groundwork for **"a Fox River Bridge at the center of an environmental corridor."**

The Record of Decision - May 2002

The final significant milestone in an EIS is the issuance of a Record of Decision (ROD) for the project. The ROD is signed off by the FHWA. A Record of Decision for a project such as this outlines the many commitments that are agreed to by the agencies involved in the project. These typically represent compromises among the owner and stakeholders to ensure that the alternative selected meets the agreed upon conditions which were discussed and negotiated along the way.

The ROD for the Stearns Road EIS was issued in May 2002 and included the approval of the three corridors – Longmeadow/Bolz, Stearns and Oak Street/IL 56.

8. Conclusion

The FHWA has reached its decision based upon information and analysis contained in the FEIS and outlined in this document. FHWA’s decision concludes that each of the build alternatives for three of the five corridors as described in this document herein: 1) best satisfies Purpose and Need, 2) poses the least impacts to the natural and human environment, 3) has been selected based on processes in compliance with NEPA and other applicable requirements, 4) each remains eligible for Federal Highway funding, and 5) Kane County, as project sponsor, may advance each through the project development process.

Date: 5/13/02

Signed: 
 Norman R. Stoner, P.E.
 Division Administrator
 Federal Highway Administration

Record of Decision Approval

The Next Step - Engineering Design

Due to its location in the central section of the county and the positive impact that the project could have to the region, Stearns Road became the County’s first priority. Engineering is a two step process – preparation of a combined design report (preliminary engineering) that outlines the roadway alignment and geometry and then preparation of final engineering plans for the purpose of obtaining bids and constructing the project. The combined design report was completed and approved – a team effort by the County and the Illinois Department of Transportation – as they each have jurisdiction on various roads on this corridor. The next step, final engineering plans, was stalled due to funding concerns.

Funding Pursuits

What happens next is another point where the fate of Stearns Road was relatively precarious. Some funding had been secured, but it was not near enough to complete the whole project. Congressman Dennis Hastert had assisted in obtaining Federal Funding, and the County had pursued grants and cost sharing wherever available, but the monies were still not enough to complete the entire corridor. The County evaluated several options, and finally arrived at an idea to develop a plan that would include construction of staged improvements for a ten year planning horizon. The County would continue to seek funding sources, and then completion of the remaining work (ultimate buildout) would be initiated as soon as additional monies could be secured. Once again, Stearns Road was back on track, and the County moved forward with the design plans and construction of the project.

THE PROJECT STORY

The Economy Helps Build the Rest

With the corridor 20 years in the making, the project could have been built at many points along the way. However, bidding in 2009 was quite fortuitous for Kane County. With a recession looming and contractors eagerly seeking to secure contracts to keep their workers employed, the bids for the mainline construction contracts came in substantially lower than the original estimates. This resulted in another win-win for the project, with taxpayers benefitting from good bid prices while providing much needed construction jobs in a down economy. The good bid prices freed up additional funds, allowing the ultimate buildout to be initiated several years ahead of the 10 year planning horizon for the final improvements. The final chapter of new Stearns Road will be written with the completion of this work.

Corridor Challenges

In developing the plan for Stearns Road, there were many challenges that required the hard work and cooperation of many partners along the way. These included:

- ✓ **Active rail lines** – The CN (CC&P) rail line runs along the length of the entire corridor, and the UP has several crossings on the corridor. This required construction of grade separation structures at Dunham Road and McLean Boulevard and reconstruction of the at-grade crossing where the CC&P crosses Illinois Route 25.
- ✓ **Trolley Museum** – The historic Fox River Trolley Museum operates along the west bank of the Fox River right through the project, crossing under the proposed river bridge. Coordination with the museum was required to ensure that the new bridge would not impact their facilities, and that their operations could continue



throughout the two year construction period. In a cooperative spirit, the museum board worked with the County and even provided construction tours to local school children.

- ✓ **Major parks/forest preserves** – There are several parks and forest preserves along the corridor. The Kane County Forest Preserve District was a valued partner in developing the plan for Stearns Road. Extensive coordination with the Kane County Forest Preserve District and DuPage County was completed to ensure that the improvements were an enhancement to the area and did not impact or prohibit future plans. In a very cooperative spirit, a multiparty Intergovernmental Agreement was executed by these entities, with the end result being a solution that meets all the needs of these parties, and creates an “intersection” for the regional trails coming together along the corridor.

Project Highlights

Stearns Road is a project of mammoth proportions. To provide a feel for the size and complexity of the project here are some details:

- ✓ Eight highway bridges were built in this first stage including the Fox River Bridge, which is 980 feet long, constructed with 62,000 square feet of concrete (equivalent to 10 regulation sized basketball courts) and 3.9 million pounds of structural and reinforcing steel
- ✓ Six new traffic signals equipped with 25,000 feet of electrical conduit and 83,000 feet of electrical wire
- ✓ Five miles of new roadway, including 148,000 square yards of concrete pavement, 147,000 linear feet of pavement striping, 7,900 feet of guardrail and 72,500 linear feet of curb and gutter

Once completed, the Stearns Road Corridor will have ten detention ponds. The total volume of stormwater that they will hold is about 14 million gallons. That's about the same as 20 Olympic sized pools!

- ✓ Four pedestrian bridges, including a much needed new bike/pedestrian crossing over the Fox River
- ✓ Interconnect to three regional bike trails, creating a true regional network for the area
- ✓ Nearly three miles of new multi-use path
- ✓ 33,000 feet of storm sewer pipe and ten detention ponds with a total stormwater volume of 14 million gallons

Sustainability

Stearns Road was a sustainable project in the works long before the industry began to even recognize the need to consider "green" in their roadway designs. In the past, roadway projects were completed with the goal of "efforts to minimize harm." Stearns Road writes a new chapter in this book. Instead of efforts to minimize harm, Stearns Road is a lesson on undoing harm and leaving the corridor in a BETTER place than it was to start with.

Looking at the footprint of the corridor, nearly ¾ of the land acquisition is set aside for open space for environmental reasons. The highway right-of-way itself is actually a fairly SMALL footprint within the overall green corridor. This is a tribute to the efforts of many partners in understanding that the region's transportation demands could be met without further degrading the local environment.

These ideas were captured in the Environmental Vision document, which exemplifies sustainability at its best. Highlights of these efforts are as follows:

- **Sensitive wetlands** – 65 acres were purchased to create a Wetland Restoration Site. This new environmentally pristine facility was created in advance of the major construction project to minimize impacts to the Fox River and its tributaries. This site also includes stormwater detention to accommodate the runoff both during and after construction.
- **Threatened and Endangered Species** – The River Red Horse and Greater Red Horse, as well as the two mussels, were all found in the project area. Requirements were included during construction to literally shut down operations for a "river quiet period" to allow the red horse to spawn. The mussels were gently relocated to an alternate location to secure their safety.
- **McLean Fen** – A fen is a type of wetland fed by groundwater with higher pH (neutral base to alkaline). Buying the right of way containing the recharge area for the McLean Fen sets it aside for open space and protects that area from the pressures of suburban development.
- **South Elgin Sedge Meadow/Sand Hill Annex Restoration** – This work, known as the Adaptive Management Plan area, included the acquisition of sites that were losing their natural grandeur over time due to development and land use. Together, these sites total approximately 35 acres. The County purchased them to ensure their future as green space. The work to restore these areas included selective clearing through controlled burns, and removal of scrub trees, fencing, buildings and driveways. 150 deciduous trees were planted as well as 350 shrubs, 200 perennials, and traditional mulching and seeding.



Endangered Slipper Shell Mussel

THE PROJECT STORY

- **Environmentally Friendly Pavements** – Along with new pervious concrete drives and parking lots and permeable paths; benches, bike racks and other facilities were installed to make the area accessible to the public and afford them the opportunity to enjoy a part of the history of Kane County. When this work is completed, these areas will be managed by the Kane County Forest Preserve District.
- **Reuse of structures** – Throughout the project the County employed an array of other sustainable techniques. One of these included re-using existing structures (example: the old Dunham Road structure became the new bike path structure over the railroad)
- **Night Sky Pollution** – The project was designed to blend in with the environment, utilizing natural and focused lighting to minimize night sky light pollution.

When completed, over 28 acres of erosion control blanket will have been installed. That's enough to cover an area the size of Millennium Park in downtown Chicago!

Aesthetics

Aesthetics was a major consideration for the project team. Once the parameters of the corridor were set, the team was able to look at options to maximize the already great look and feel of the corridor, preserving the dramatic experience of driving it from end to end.



Renderings like the ones above were used to help visualize ideas and choose patterns, colors and textures. The photo to the right shows the completed treatment on the pedestrian underpass walls that was conceptualized in the renderings.

Elements of the aesthetics draw upon the historical themes from the area. The form liner used on the concrete piers for the new Fox River Bridge, for example, recalls the large blocks of locally-quarried limestone and are also reminiscent of the piers for the parallel railroad structure immediately north of the new Stearns Road Fox River Bridge.

The truss design of the pedestrian bridge mimics the aesthetic of the century-old railroad bridge which crosses over the Fox River immediately north of the new river bridge.

STEARNS ROAD

THE PROJECT STORY

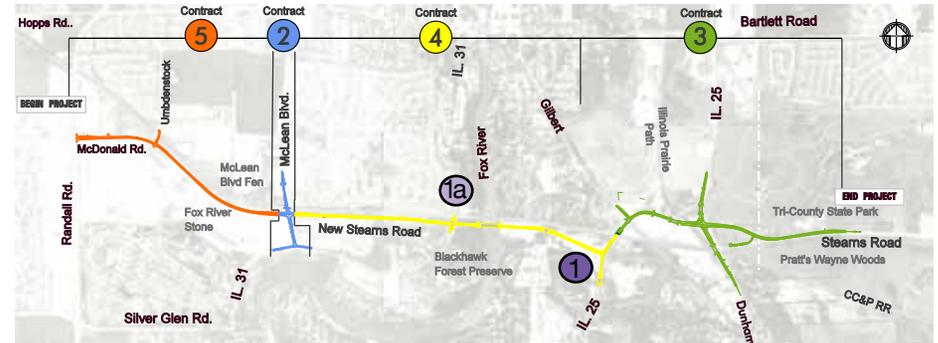
Getting to the Finish Line...The Construction Phase

The mainline roadway pavement and new bridge over the Fox River were constructed during 2009 and 2010. However, several contracts were built in previous years, allowing the work in 2009 and 2010 to proceed without delay.

The County chose to break the project into five contracts to create opportunities of a manageable size. Contract 1 and 1A included the advance work, and contracts 2-5 were completed simultaneously.

While each project required a significant amount of earthwork, they all had unique character and experienced different challenges due to the location and type of construction required. The weather in 2009 and 2010 had extremes in rainfall and cold winter temperatures, creating significant challenges in performing the work.

The contractors for each of the projects were made aware of the specific environmental challenges that were present within their job limits. Each contractor was responsible for strict adherence to national pollution control standards. Weekly erosion and sediment control inspections were performed by the construction managers and deficiencies were quickly corrected.



Map identifying the five project contracts

Descriptions of the Contracts

Contracts 1 and 1A

This work included advance contracts to enable the major construction contracts to be completed. This included:

- ✓ IL 31 bridge over new Stearns Road
- ✓ Stearns Road over north arm of Brewster Creek
- ✓ Dunham Road over CC&P Railroad
- ✓ Wetland restoration site

Contract 2

McLean Boulevard was previously a narrow, two lane roadway with limited vertical clearance under the CN Railroad timber bridge structure. In order to complete the project within the narrow confines, a detour was utilized for the duration of the project, with McLean Boulevard closed.

The design plans called for a significant widening of McLean, necessitating the need to replace the CN bridge. The original plan was to build a rail detour known as a shoo-fly. The contractor for this project devised a value engineering proposal to “roll-in” the new railroad structure instead, with the goal to save time and money. The new steel bridge was built parallel to the existing structure and track. In one day, the contractor demolished the old timber structure, removed the necessary length of track, rolled the new bridge into place and completed the track connections. The CN was back in business by 7:30 that night! The photos on the next page show a sequence of completion for the roll-in.

Construction Roll-in Sequence

10:12am - Structure being readied for move



12:35pm - Structure is rolled into place



5:36pm - Final track connections made



While the work on the railroad bridge was ongoing, the contractor worked on significant drainage improvements closer to Illinois 31. This included construction of a large detention basin and a box culvert under McLean Boulevard. After the roll-in was completed, the contractor excavated for the new roadway and built the large retaining walls on the east and west sides of McLean. These walls were constructed with the same form liner that was used in Contract 4 to maintain consistency throughout the corridor.

Contract 3

This contract is considered to be the most typical of urban-type construction projects. Live traffic was maintained throughout most of the project, with the exception of the relatively brief Dunham Road and Illinois 25 detours.

A key component of this contract was the combination of the Stearns Road/ Dunham Road and Illinois 25/Dunham Road intersections into one, major and much safer intersection. To accomplish this, the contractor needed to move a massive amount of dirt, creating a new intersection almost 15 feet above the previously existing ground level. Most of the mass hauling of excavated material took place in September of 2009, with other final grading operations happening in spring and summer of 2010. All of the embankment material used for the new intersection and new roadway areas of Dunham Road, Stearns Road, and Illinois 25 came from the six on-site detention ponds that were created by this project, reducing dirt hauling across roads throughout the County.

Additionally, two new bridges needed to be built over the environmentally sensitive East Branch of Brewster Creek. These structures utilize very similar types of construction and were specifically designed to eliminate negative impacts to the creek, both during construction and after completion.



When completed, the Stearns Road Corridor contractors' will have moved a combined total of almost 950,000 cubic yards of dirt. That amount would nearly fill the entire volume of the John Hancock Building.

■ THE PROJECT STORY

They feature open bottoms to allow wildlife passage on natural earth. The contractor did an excellent job of adhering to the special provisions, and the final products provide the perfect context for Brewster Creek and its surroundings.

Two of the signature elements of the project are new multi-use path underpass structures. These structures allow trail users safe access under Stearns Road and Illinois 25. The new path replaces a link of the Illinois Prairie Path (Elgin Spur) and creates connections to the Fox River Trail and Pate Philip State Park networks. These structures were created with “form-lined” concrete, designed to portray a natural rock structure. The walls were also stained by hand, creating additional depth and character.

Finally, the finished pavement in this project, both concrete and asphalt, was constructed quickly behind the grading operations. The new Stearns Road alignment and consolidation of two intersections into one creates a much better traffic flow in this area.

Contract 4

This project was the largest of the four. It included the signature Stearns Road Bridge over the Fox River.

The work to the west of the Fox River started with significant tree removal. Mass earth moving and detention basin grading followed quickly behind.

The material excavated from the basins was used to create the new roadway base, allowing Kane County to balance the excavation and embankment within the project limits.

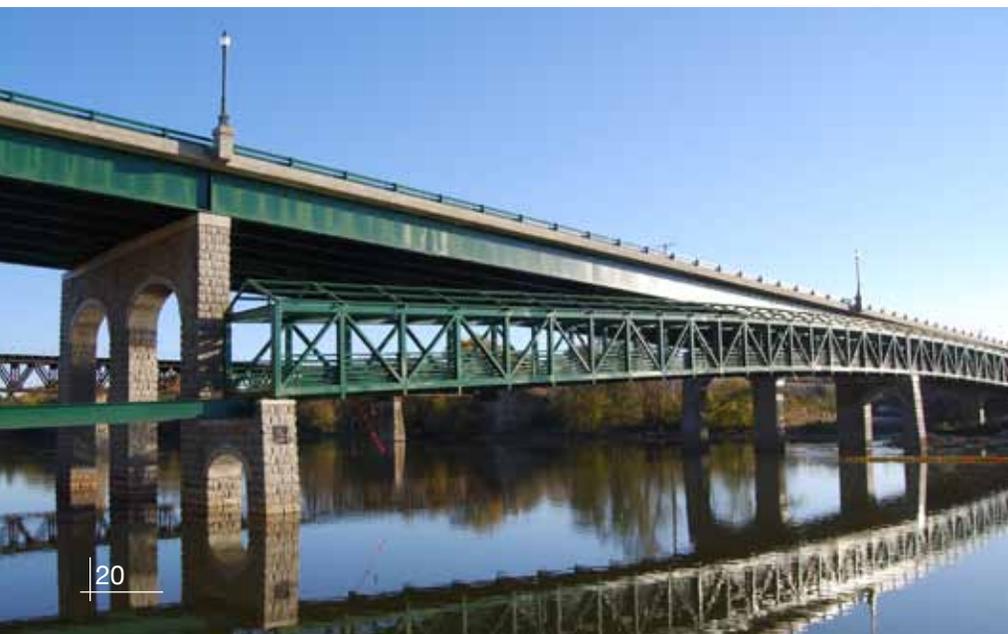
The work to the east of the Fox River also proceeded quickly. Much of the roadway base in this area was graded as part of the advance work projects, allowing the contractor to place the subgrade and finished concrete pavement in the fall of 2009.

The construction of the Fox River bridge started in July of 2009 (ahead of contracts 2, 3 and 5), and proceeded from east to west. Temporary stone causeways (work platforms) were constructed in the river. The pier (main bridge support) on the eastern bank was built first. Next came the piers in the river. The pier foundations (supports below the ground) utilized drilled shafts, a type of large (78”) diameter caisson (cylinder) augured to about 85 feet below water level.

The pier on the west bank of the river was started at about the same time as the western river pier. As the footings (foundations below ground) for the four piers were completed, work immediately commenced on the construction of the pier columns and abutments (the work above ground). These elements were built with a concrete form liner that recreates the historic stone pattern of the Canadian National railroad bridge immediately to the north. The resulting natural look of the piers references the area's industrial heritage, recalling a pattern of locally-quarried Silurian Dolomite (limestone).

In early 2010, the bridge was ready for the steel girders. The decking and reinforcement steel followed quickly behind. The contractor took advantage of some ideal spring weather and the deck pours were completed in June. In the meantime, the contractor continued to work on the multi-use path bridge over the Fox River as well as the new Fox River Trail structure. These new elements created the vital trail link from the west side of the Fox to the east side.

In summer 2010, the contractor completed the subgrade (base) of the roadway on the west side of the river. The westbound concrete pavement construction commenced in September, while the eastbound pavement was completed in October.



Contract 5

The alignment for Contract 5 follows old “McDonald Road” to Umbdenstock. At that point, it gently curves through land previously owned by the LaFarge Quarry and carries down to McLean Boulevard. The curved roadway required a significant earthmoving operation. Almost 50 vertical feet of material needed to be moved up and down the hill to meet the previously existing topography. The contractor for this section worked very long shifts in August and September 2009 to take advantage of ideal weather conditions. This allowed them to construct the finished concrete pavement from Umbdenstock to McLean very early in 2010.

In addition to the massive earthmoving operation, the contractor constructed a long mechanically stabilized earth (MSE) wall along the LaFarge quarry closer to McLean. The visual result of this project is a stunning, sweeping alignment next to a live mining operation.

The Result

Stearns Road is a story of cooperation among public and private partners. It is a story of listening to stakeholders and enhancing a natural corridor. And in the end, a much needed Fox River Crossing was built.

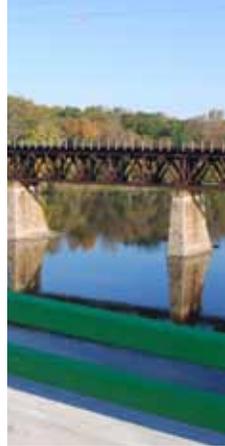
Why is Stearns Road Different?

- ✓ It became a sustainable project long before “I-LAST” and LEED* were on the horizon
- ✓ The County and our many partners found a way to use a transportation project to restore a degrading environment to its pre-development quality
- ✓ It is a win-win solution for the community - from motorists to bicyclists to environmentalists we compromised to develop a project that meets all needs

*ILAST = Illinois - Livable and Sustainable Transportation

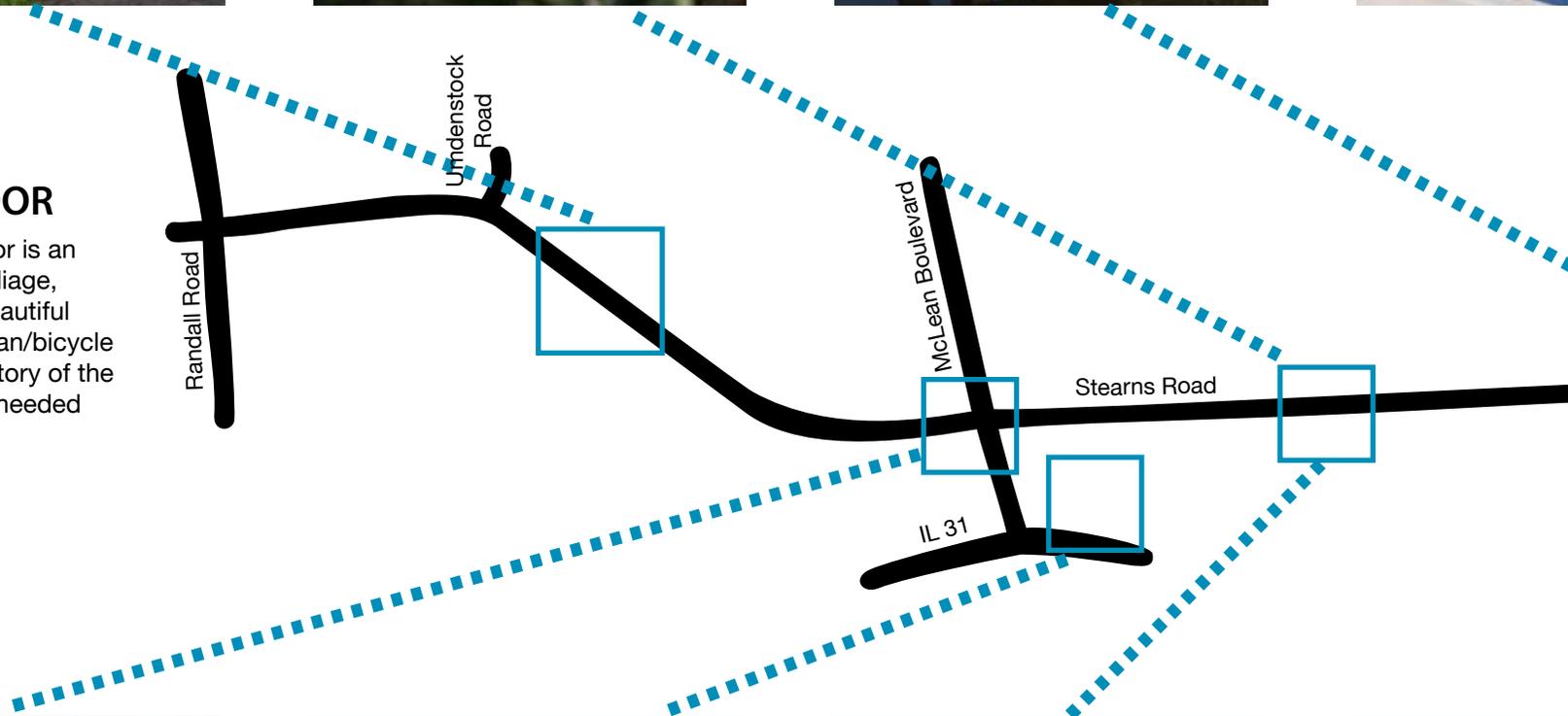
*LEED = Leadership in Energy & Environmental Design

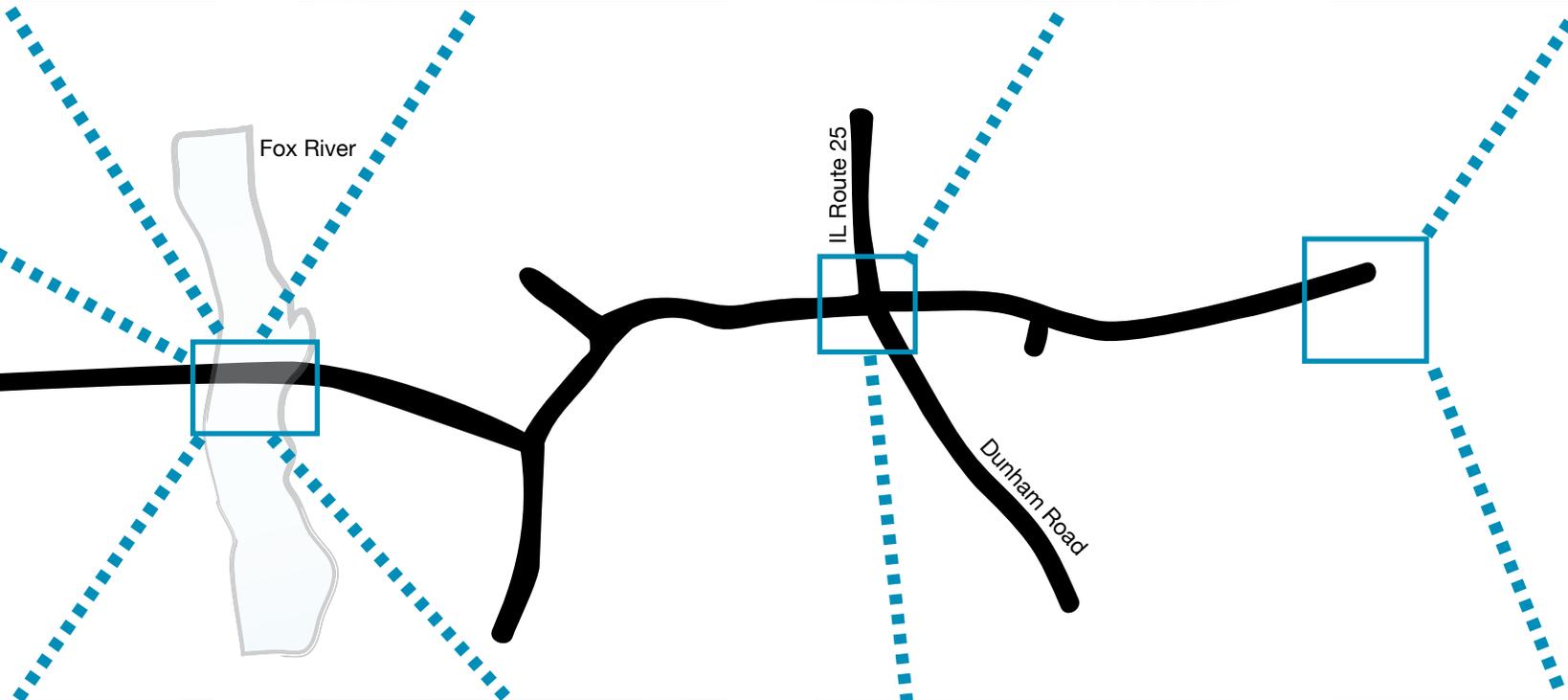




DRIVING THE CORRIDOR

Driving the Stearns Road Corridor is an amazing experience. The lush foliage, natural landscape, simple but beautiful river crossing and open pedestrian/bicycle trial link celebrate the natural history of the corridor while providing a much needed transportation link to the region.





■ A FEW WORDS

Below are a few words from some of our partners who had an impact on the project.

Dennis Hastert
Congressman, 1987-2007

"I've grown old trying to build this bridge. It's been a long, hard trail. There was a big battle ... and a lot of concern by communities on both sides of the river about where it goes and how it should be done and whether it should be done."

Dick Young
Kane County Forest Preserve District, retired
Author, Kane County Wild Plants & Natural Areas

"However, they [natural amenities] need not be diminished as an inevitable consequence of growth for in most cases we could improve and enrich the quality and balanced complexity of our landscape. And, if some habitats simply must be destroyed for a needed change we ought to think about compensatory replacement for plants and wildlife as we do compensatory storage of floodwaters when hard surfacing urban areas."

- Dick Young in Kane County Wild Plants & Natural Resources

Jeff Dailey, PE
County Engineer 1997-2003

"The Stearns Road Bridge Corridor was going nowhere as originally proposed. It wasn't until a meeting with Phil Bus (Kane County Development Department) did the idea of an environmental corridor come about. Teaming with Richard Young (Forest Preserve District of Kane County), we walked the corridor and developed a plan that would enhance environmental and recreation benefits for the County while providing a much needed recreational corridor that will serve the area for years to come. I am proud to have been a part of a team to make this amazing improvement come to be."

Carl Schoedel, PE
County Engineer, 2003 - Present

"This project proves that innovation and incrementalism are not incompatible. Driven by necessity, the County Board has held focus on this project for more than 20 years, taking what at times seemed like an endless series of small victories, while making creative decisions at nearly every turn and in nearly every aspect of the project.

By crafting the overarching environmental vision, employing innovative financing, engaging in unparalleled intergovernmental cooperation, purposefully structuring the engineering contracts, dividing the massive construction into manageable pieces and delivering the project in a strategic order, this long-sought triumph is a monumental achievement that Kane County and the Division of Transportation should be very proud of for years to come."

Manny Gomez, PE
Kane County Design Manager, 2007 - Present

"This is truly a once in a lifetime project experience. I have been in this profession for over 20 years, and prior to Stearns, never designed and built a highway within an environmental corridor."

JD Stokes, PE
FHWA, Chicago Metropolitan Office, 1997-2000

"The Stearns Road Corridor shows two faces, much like Janus, the ancient Roman god of passage and beginnings. One face seeks speed and mobility, the other wants natural beauty, wetland bounty and livable community. The Stearns Corridor Project identified the regional passage problems and achieved Janus poise by figuring out natural transition and balance between countryside and city, between past and future, and between struggle and serene ... when a highway runs through it."

Peter Orum and Irma Orum
Midwest Groundcovers Nursery, 1974 – Present
Midwest Trading Horticultural Supplies, 1981 - Present

"Nobody wants a highway or a bridge in their backyard; neither did Wayne nor we. They won and we lost and got the highway through our nursery. But looking forward, we may also have won. Today we are looking at a beautiful bridge and highway that will bring us miles west of the Fox River in just a few minutes.

To many Kane County staff and elected officials, present and past – Thank you for the professional and civil way in which you dealt with us. Let us today celebrate together."

Pat Kelsey, CPSS/SC
Consultant Team, 1997 - Present

"Stearns Road demonstrates the vision, leadership and will to create a much needed regional transportation corridor that improves the natural environment for all citizens of Kane County. The vision that has been implemented exceeds the expectations of the commitments made by Kane County to the public. The Stearns Road Corridor project weaves a tapestry of human effort interacting with natural processes to improve the nature and environment in which we live, work and play. The project exemplifies implementation of true green infrastructure at many levels for the traveling public, wildlife, recreational users and the environment-at-large."



PROJECT PARTNERS

The Stearns Road Corridor included many partners to make this project a reality

Local Agencies

Kane County
DuPage County
DuPage County Forest Preserve District
Kane County Forest Preserve District
Village of Bartlett
Village of South Elgin

State Partners/Resource Agencies

Chicago Metropolitan Agency for Planning
Federal Highway Administration
Illinois Department of Natural Resources
Illinois Department of Transportation
Illinois Historic Preservation Agency
Illinois Nature Preserve Commission
Illinois State Geological Survey
Kane/DuPage Soil/Water Conservation Service
United States Army Corps of Engineers
United States Environmental Protection Agency
United States Fish and Wildlife Service

Contractors

Alpine Demolition, Inc.
Bell Excavating, Inc.
Earthwerks, Inc.
F.H. Paschen/SN Nielsen
Geneva Construction, Inc.
Herlihy Mid-Continent Company
Home Towne Electric, Inc.
Lake County Grading
Martam Construction, Inc.
Sjostrom & Sons, Inc.
Thorne Electric, Inc.
Tri Tech Electric, Inc.

Consultants

Alfred Benesch & Company
Andrews Engineering, Inc.
Apex Consulting Engineers, LLC
Bollinger, Lach & Associates, Inc.
Bowman, Barrett & Associates, Inc.
Christopher B. Burke Engineering, Ltd.
Civiltech Engineering, Inc.
Civil Engineering Services, Inc.
Hampton Lenzini & Renwick, Inc.
Huff & Huff, Inc.
Mark Engineering
McDonough Associates, Inc.
Michael Baker Jr. Inc.
N. Steffens & Associates, Ltd.
Omega & Associates
Santa Cruz Associates, Ltd.
S.T.A.T.E. Testing, LLC
T. Engineering Service
Testing Service Corporation
TBE Group
TY Lin International Great Lakes, Inc.
URS Corporation
Wills Burke Kelsey Associates, Ltd.

Labor Unions

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Electricians Local 117
Finishers Local 11, Area 638
Ironworkers Local 393
Laborers Local 76
Landscapers
Operators Local 76
Painters Local 30
Teamsters Local 673



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- ✓ Engaging a Community
- ✓ Stimulating the Economy
- ✓ Promoting Recreation



Christopher B. Burke Engineering, Ltd.

is proud to be a part of the Stearns Road Corridor project

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As platinum sponsors of the Stearns Road Grand Opening, Baker congratulates Kane County Division of Transportation on realizing their vision.



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Creating value by delivering innovative and sustainable solutions for infrastructure and the environment.

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Congratulations, Kane County on the Stearns Road Corridor successfully

"mediating the built and natural environments"



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