

OFFICE OF RESOURCE CONSERVATION
State of Illinois
Grant

PROJECT NUMBER:

PROJECT TITLE: Large Scale Restoration along the Pecatonica River in Northern Illinois

PURPOSE: This is a restoration of **194** acres in the 100 year floodplain of the Pecatonica River consisting of riparian forest, savanna, and prairie. It is Phase 2 & 3 of a 10-phase 600-acre restoration. The project partners are the USFWS, ILDNR, Winnebago County Chapter of Pheasants Forever, and Rockford Blacktop Construction Company (RBT). The project will assist in implementing the Illinois Comprehensive Wildlife Conservation Plan (Illinois Wildlife Action Plan, IV.I, pp. 190-191) and provide habitat for species listed in the plan.

NEED: This project allows for the restoration and enhancement of near stream habitat, 1 mile of frontage along the Pecatonica River and entirely within its 100 year floodplain, as well as habitat for species listed in the Illinois Comprehensive Wildlife Conservation Plan such as Bald Eagles, which have nested and fledged young on this site for the past 5 years. The site has been identified for priority acquisition within the Boone and Winnebago Counties Regional Greenways Plan (Boone and Winnebago Counties Regional Greenways Plan Map, p.1), identified as “significant wildlife habitat” and “natural area” in the 2030 Land Resource Management Plan for Winnebago County, Illinois (2030 Land Resource Management Plan for Winnebago County, Figure 3c, p.22) and is located within the ILDNRs Sugar-Pecatonica River Conservation Opportunity Area (Illinois Wildlife Action Plan, IV.I, pp. 192-193 and VIII. Tables. Table 8, p. 271). In Phases 2 & 3 the tree plantings, 43 acres, provide the ability to fill in a significant gap in the Pecatonica River corridor. Riparian forests are already located on adjoining properties directly to the east, 195 acres, and to the south, 42 acres existing and 45 acres currently being reforested in an ILDNR Project. The replanted forest will be will be important as a resting and feeding area for neo-tropical migrants during the spring and fall. This project is not eligible for USDAs CRP or WRP program. Areas adjacent to the grant area have already been enrolled in the USFWSs Partners for Wildlife Program 15 year contracts. Although an excellent program, funding for the Partners Program is capped each year per property owner and greatly slows down the rate at which the property can be fully restored. The USFWS assisted in restoring 40 acres of mesic prairie and 20 acres of riparian forest in 2008 on this property.

OBJECTIVES: The objectives of the restoration are the same as the Illinois Comprehensive Wildlife Conservation Plan goals for the Rock River Hill Country Natural Division (Illinois Wildlife Action Plan, IV.I, pp. 190-191):

(1) Increase forested acres, in particular protect, restore, and connect riparian forests along the Pecatonica River; **55** acres to be planted to bottomland hardwoods by the end of 2012.

(2) Increase savanna and open woodland acres, through the restoration of degraded areas by restoring natural processes such as fire, removal of invasive species, and planting of native plant communities and **51** additional savanna acres prepped for spring 2013 planting. The large

overstory oaks already exist through most of this area, so restoration would focus on invasive species removal, native species establishment, and fire implementation.

(3) Increased shrubland acres by planting 4 wildlife shrubland copses, totaling **29** acres, between the savanna and prairie planting areas.

(4) Increased native grassland acres through conversion of agricultural land, row crops and pasture to native, large prairie restorations managed with fire and soil disturbance; **59** acres of mesic prairie with smaller areas of dry and wet prairie embedded with the mesic areas site preparation for spring 2013 planting. Native species planted are based on soil types and moisture regimes that are present.

(5) Improve water quality through the restoration of near stream habitat along the Pecatonica River. The entire restoration area lies within the 100 year floodplain on the Pecatonica River, and is connected to the river system through a number of large wetlands-oxbows already on the property. The majority of the site is currently row-crops and pasture.

(6) Provide restored, enhanced, and properly managed habitat for species listed in the Illinois Comprehensive Wildlife Conservation Plan (Illinois Wildlife Action Plan, X. Appendices – Appendix 1, p. 307-308) such as: bald eagle, red shouldered hawk, cerulean warbler, hooded merganser, blue spotted salamander, river otter, Indiana bat, American badger, sandhill crane, brown creeper, rusty blackbird, great blue heron (rookery directly to the southwest across the river), red-headed woodpecker, northern flicker, yellow-billed cuckoo, Henslow's sparrow, bobolink, northern harrier, upland sandpiper, short-eared owl, logger-head shrike, bobwhite quail, and neo-tropical migrants during spring and fall migration.

EXPECTED RESULTS OR BENEFITS: By completing Phase 2 & 3 of this project we will have restored near steam habitat in the land and water transition area within the 100 year flood plain of the Pecatonica River and adjacent agricultural areas, improving water quality and critical wildlife habitat. The restoration will fill in a significant gap in the wildlife corridor along the Pecatonica River which will provide ecological connectivity between forests, savanna and prairie habitats. Completion of this project will allow for the creation of large treeless grasslands transitioning into savanna, and then into riparian forest. Native grassland/savanna plant communities will be managed using prescribed fire, selective mowing, and light discing to control invasive species and provide a diversity of high quality habitat types for species in greatest need of conservation. It will provide a model of large scale habitat restoration and voluntary stewardship on private land and provide improved breeding and migratory habitat for numerous wildlife species. Finally, this project helps achieve the goals of the Illinois Comprehensive Wildlife Conservation Plan set forth in the Rock River Hill Country Natural Division section of the Plan.

APPROACH: This is a restoration of **194** acres in the 100 year flood plain of the Pecatonica River consisting of riparian forest, savanna, and prairie. All site work shall be completed by RBT's affiliate, William Charles Construction, and/or volunteers. This plan was developed by Brian Russart, Natural Areas Coordinator at University of Wisconsin Cooperative Extension, and has been reviewed and approved by both Doug Dufford, ILDNR District Wildlife Biologist and Kraig McPeck, USFWS Private Lands Biologist for NW Illinois. The project will be overseen and completion certified by Doug Dufford, ILDNR District Wildlife Biologist.

Please see the Site Plan described on **Exhibit A**, attached hereto and incorporated by reference, for the description of work to commence in 2010 and which shall be completed by December 31, 2011, subject to flooding and weather conditions affecting the site.

Legend Key

Units designated with a "T" are riparian planting and management areas

Units designated with a "P" are grassland/prairie planting and management areas

Units designated with an "SV" are savanna planting and management units

Units designated with an "S" are shrubland planting and management units

Implementation of the overall site restoration plan began in 2008 and continued through 2009 with the site preparation and planting of units 2P, 2T & 3T (Phase #1). This grant would cover the site preparation and planting of Phase # 2 & # 3, which consists of units 1T, 1S, 2S, 3S, 4S, 6T, 1SV and 3P.

PROJECT SCHEDULE:

2010-Units 1T (Cropland), 6T (Cropland) 1S, 2S, 3S & 4S

1. Unit **1T** will be mowed short (3") after August 1, 2010 and then Planted to RPM trees in October with mats installed in the spring of 2011.
2. The cropland portion of **6T** should have the residue removed if necessary. No burning or herbicides will be required.
3. Unit **6T** (Cropland) should be seeded to redtop and oats.
4. All three units will need at least two mowings the establishment year.
5. Units **1S, 2S, 3S, & 4S** in preparation for planting on 2011, should be mowed (6") after August 1, 2010 and sprayed with Round-up or Rodeo in September 2010. Units **1S, 3S, and 4S** should be burned in later October or early November, which will encourage the soils to warm-up and dry out earlier in the spring. Unit **2S** has existing scattered trees. Burning would likely be very detrimental to these trees so it should not be used tool during installation.

2011-Units 1S, 2S, 3S, 4S, and 6T

1. Units **1S, 2S, 3S, and 4S** should be treated the same: disc, spray, and plant to redtop with the oats cover crop. Shrubs should be planted in the fall of 2011. Tree mats should be installed the following spring and no tree protectors required.
2. Unit **6T** (Pasture) in preparation for planting in 2012 should be mowed (6") after August 1, 2011 and sprayed with Round-up or Rodeo in September 2011. The Unit should then be burned in late October or early November, which will encourage the soils to warm-up and dry out earlier in the spring.

2012 Unit 1SV, 3P, 1T, & 6T

6T (Cropland) should have an existing sod of redtop. The redtop should be mowed short (3") after August 1, 2012 in preparation for the fall RPM tree planting.

6T (Pasture) minus the wetlands, will need to be disced/plowed, sprayed, seeded to redtop and oats, and mowed twice during the establishment year. RPM trees should be planted in October with mats installed in the spring of 2013.

Unit **1T** (forest openings) in preparation for planting in 2013 should be sprayed with Round-up or Rodeo in September of 2012. If possible it should be mowed in August, but given the existing tree cover this may be too difficult.

Units **1SV** and **3P** should be mowed (6") after August 1, 2012 and sprayed with Round-up or Rodeo in September 2012. The Unit should then be burned in late October or early November, which will remove vegetative material and encourage the soils to dry out prior to spring planting (2013). Unit **3P** contains several low swales with remnant wet prairie plant communities. These areas should be preserved as part of the larger unit (i.e. delineated out and not sprayed).

LOCATION: Winnebago County, T27N R10E Sec.1, 4th Meridian.

CONTACT INFORMATION:

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ESTIMATED COSTS:

BY OBJECT CATEGORIES	FED GRANT	RBT MATCH	TOTALS
SALARIES, WAGES, & FRINGE BENEFITS			
TRAVEL			
EQUIPMENT (\$5,000+)		\$4,162	\$4,162
SUPPLIES/COMMODITIES	\$75,907	\$66,916	\$142,823
CONTRACTUAL	\$9,893	\$14,722	\$24,615
TOTAL DIRECT CHARGES: INDIRECT COSTS			
TOTALS	\$85,800	\$85,800	\$171,600
	@ 50%	@ 50%	100%

RELATED GRANTS: None

BUDGET JUSTIFICATION:

Exhibit A: Seed costs were based on the attached seed mix and quoted from Agrecol based in Madison, Wisconsin. Shrub and tree material costs were based on the attached species list and quoted from Forest Keeling Nursery in Elsberry, Missouri.

Exhibit B: Installation and site preparation rates (labor rates) were based on Winnebago County USDA (FSA/NRCS) cost-share rates.

COMPLIANCE:

LITERATURE CITED:

Illinois Department of Natural Resources. 2005. Illinois Comprehensive Wildlife Conservation Plan-Strategy (Illinois Wildlife Action Plan). Illinois Department of Natural Resources. 353p.

Winnebago County Board. 2009. 2030 Land Resource Management Plan for Winnebago County, Illinois. County Board of the County of Winnebago, Illinois. 133p.

Winnebago County Forest Preserve District. 2004. Boone and Winnebago Counties Regional Greenways Plan Map. Winnebago County Forest Preserve District. 1p.

Additional materials used to develop this plan included but were not limited to:

- Historical land surveyor notes
- Existing USDA soil types on the property
- Existing natural vegetation patterns along the Pecatonica river in Winnebago County, IL
- Habitat requirements for species listed in the Illinois Comprehensive Wildlife Conservation Plan
- Current and historical aerial photos
- FIMA flood maps
- National Wetland Inventory/USFWS wetland maps

SITE MAPS: ATTACHED

FEDERAL GRANT SHARE REQUEST**Riparian (Hardwood) Tree Plantings**

Installation Costs - 2010	1T (cropland) & 1T Woodland	23 Acres	Cost	Date
RPM Trees + mats + protectors	\$ 40,877.00	100 trees/acre		2010
Labor (planting)	\$ 3,890.00		\$125/acre	2010
Total	\$ 44,767.00			

Wildlife Shrub Plantings

Installation Costs - 2011	1S (pasture)	3 Acres	Cost	Date
Herbicide (chemical + labor)	\$ 240.00	2 Sprayings	\$40/acre	2011
RPM Shrubs + mats	\$ 4,500.00	100 shrubs/acre		2011
Grass Seed + Cover Crop	\$ 90.00		\$30/acre	2011
Discing	\$ 36.00		\$12/acre	2011
Burning	\$ 90.00		\$30/acre	2011
Labor (planting)	\$ 375.00		\$125/acre	2011
Total	\$ 5,331.00			

Installation Costs - 2011	2S (pasture)	8 Acres	Cost	Date
Herbicide (chemical + labor)	\$ 640.00	2 Sprayings	\$40/acre	2011
RPM Shrubs + mats	\$ 12,000.00	100 shrubs/acre		2011
Grass Seed + Cover Crop	\$ 240.00		\$30/acre	2011
Discing	\$ 96.00		\$12/acre	2011
Burning	\$ 240.00		\$30/acre	2011
Labor (planting)	\$ 1,000.00		\$125/acre	2011
Total	\$ 14,216.00			

Installation Costs - 2011	3S (pasture)	7 Acres	Cost	Date
Herbicide (chemical + labor)	\$ 560.00	2 Sprayings	\$40/acre	2011
Grass Seed + Cover Crop	\$ 210.00		\$30/acre	2011
Discing	\$ 84.00		\$12/acre	2011
Burning	\$ 210.00		\$30/acre	2011
Labor (planting)	\$ 875.00		\$125/acre	2011
Total	\$ 1,939.00			

Installation Costs - 2011	4S (pasture)	11 Acres	Cost	Date
Herbicide (chemical + labor)	\$ 880.00	2 Sprayings	\$40/acre	2011
RPM Shrubs + mats	\$ 16,500.00	100 shrubs/acre		2011
Grass Seed + Cover Crop	\$ 330.00		\$30/acre	2011
Discing	\$ 132.00		\$12/acre	2011
Burning	\$ 330.00		\$30/acre	2011
Labor (planting)	\$ 1,375.00		\$125/acre	2011
Total	\$ 19,547.00			

FEDERAL GRANT SHARE TOTAL	\$ 85,800.00			
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ROCKFORD BLACKTOP CONSTRUCTION CO. MATCH SHARE

Installation Costs - 2011		3S (pasture)	7 Acres	
RPM Shrubs + mats	\$	10,236.00	100 shrubs/acre	2011
Total	\$	10,236.00		

Riparian (Hardwood) Tree Plantings

Installation Costs - 2012		6T (cropland)	32 Acres	
RPM Trees + mats + protectors	\$	49,280.00	100 trees/acre	2012
Grass Seed + Cover Crop	\$	960.00	\$30/acre	2012
Labor (planting)	\$	7,742.00	\$125/acre	2012
Equipment	\$	4,162.00		
Total	\$	62,144.00		

Savanna Plantings & Site Prep

Installation Costs - 2012		1SV (pasture)	51 Acres	Cost	Date
Herbicide (chemical + labor)	\$	4,080.00	2 Sprayings	\$40/acre	2012
Discing	\$	612.00		\$12/acre	2012
Burning	\$	1,530.00		\$30/acre	2012
Total	\$	6,222.00			

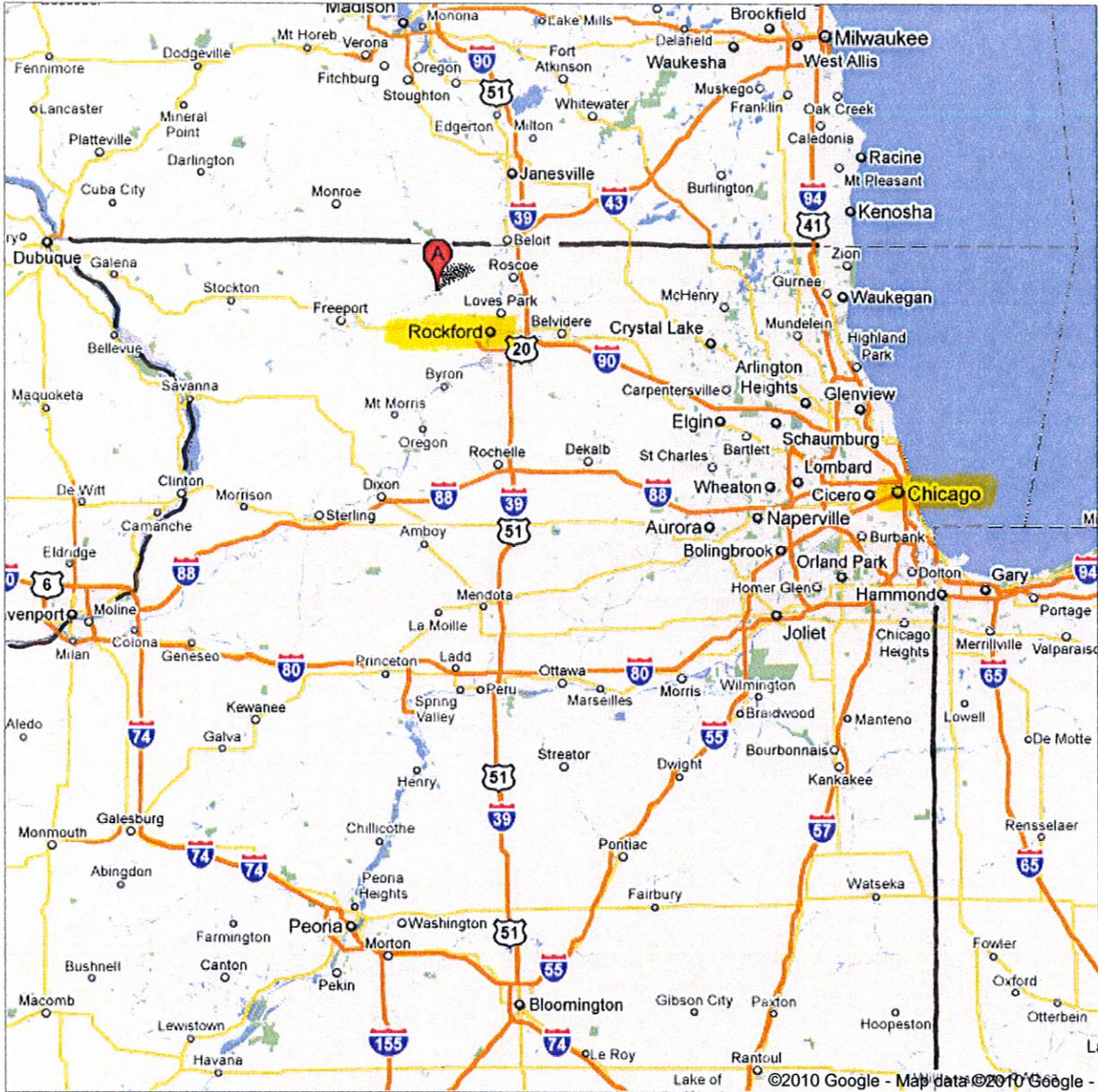
Prairie Planting Site Prep

Installation Costs - 2012		3P (pasture)	59 Acres	Cost	Date
Herbicide (chemical + labor)	\$	4,720.00	2 Sprayings	\$40/acre	2012
Discing	\$	708.00		\$12/acre	2012
Burning	\$	1,770.00		\$30/acre	2012
Total	\$	7,198.00			

MATCH SHARE TOTAL	\$85,800.00
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FEDERAL GRANT SHARE REQUEST	\$	85,800.00
ROCKFORD BLACKTOP CONSTRUCTION CO MATCH SHARE	\$	85,800.00

TOTAL	\$	171,600.00
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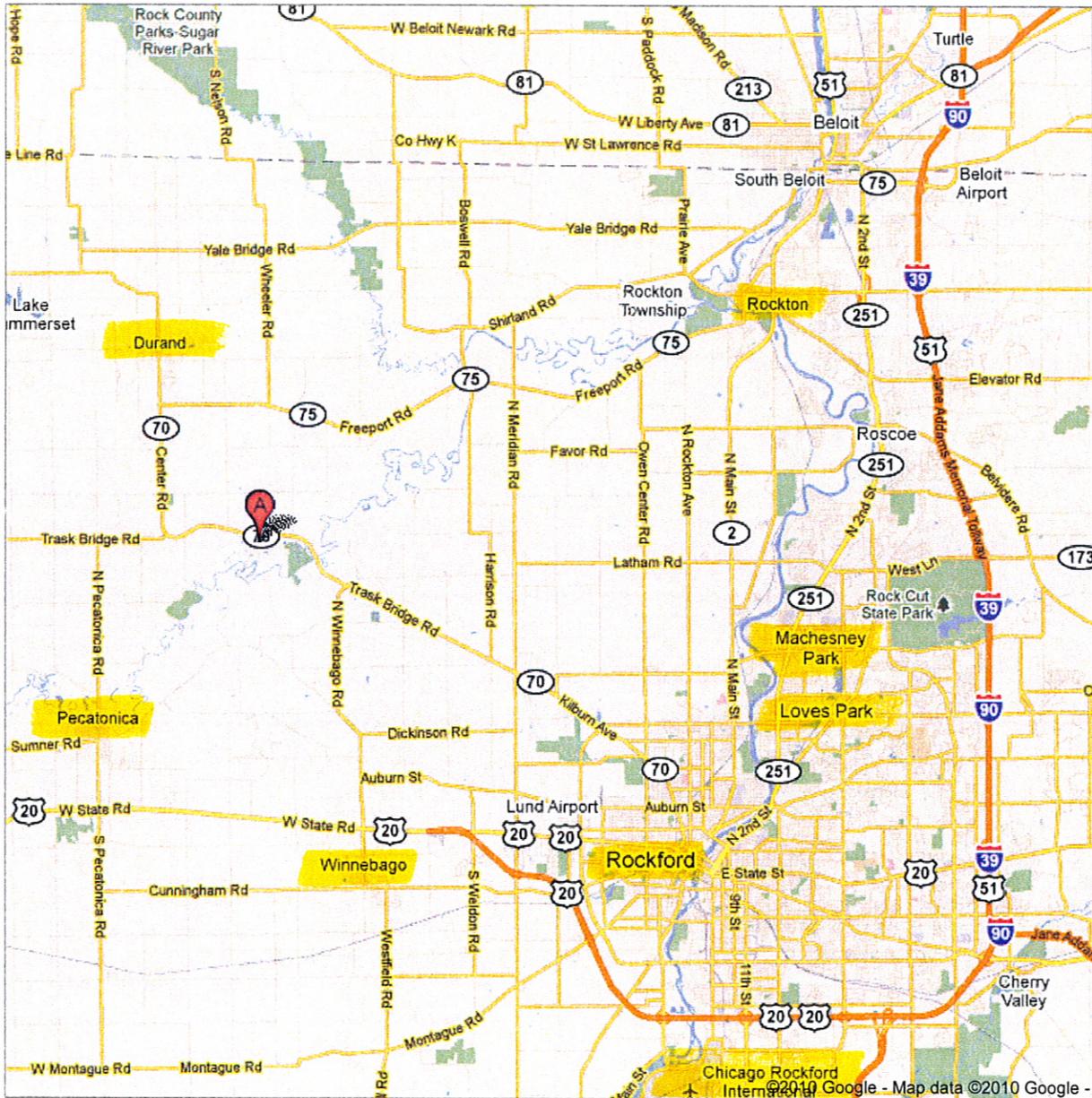


Address 12890 Trask Bridge Rd
Durand, IL 61024

Get Google Maps on your phone

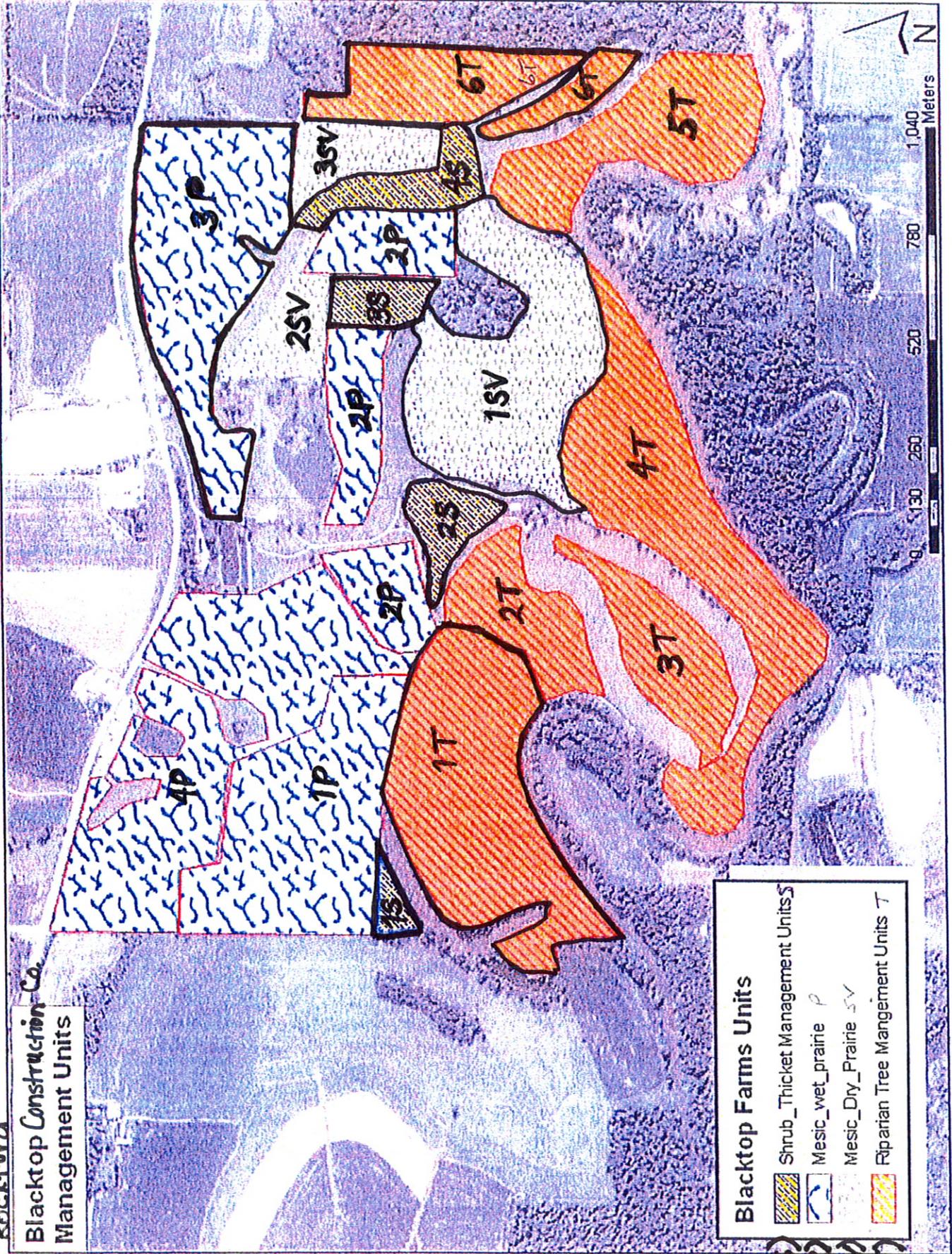


Text the word "GMAPS" to 466453



Rockford

Blacktop Construction Co.
Management Units



- Blacktop Farms Units**
- Shrub_Thicket Management Units S
 - Mesic_wet_prairie P
 - Mesic_Dry_Prairie SV
 - Riparian Tree Management Units T

(S)
(P)
(SV)
(T)