

# Village of Mettawa

open lands management recommendations

2015







Prepared for:

**The Village of Mettawa**  
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# acknowledgements

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# introduction: open lands management recommendations

*A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.*

— Aldo Leopold

The words articulated above by Aldo Leopold, almost a century ago, hold just as true today as they did when he spoke them. The statement supports a land ethic that embodies more than land, it encompasses a community of items such as soil, water, plants, and animals, or collectively: the land. As Mettawa moves forward with the Open Lands Management Recommendations, they are embracing and supporting this land ethic by strengthening an ecological bond between village residents, abiotic and biotic systems, and the land they live upon.

The open lands opportunities identified in this report are meant to enrich village properties, but they also represent more than just an alternative to leaving these properties alone. Native landscapes are an important component of an environmentally sustainable, economically sensible approach to land planning for current village-owned properties. They can also be role models or prototypes of land management for future land development that may come to Mettawa.

From a functional standpoint, native landscapes offer a variety of environmental and cost savings benefits. Environmental benefits include the reduction of surface water runoff, reduced soil erosion and the re-development of organic topsoil, increased local groundwater recharge,

enhanced regional air and water quality, restored wildlife habitat, and increased biological diversity of both plants and animals. Long-term maintenance cost savings can also be significant. Once established, a process that generally takes 5-10 years, native landscapes do not require mowing or the use of fertilizers, pesticides, herbicides, or supplemental watering. Not only aesthetically pleasing, native landscape systems support Monarch Butterfly and Pollinator initiatives started by others in the area and throughout the Midwest.

There are also social benefits to be gained from embracing sustainable design strategies for village open lands. Social benefits include increased public environmental education and awareness, open lands connectivity to regional trail systems, and the promotion of an environmentally stable land

development ethic that can be enacted on private property as well, leaving a legacy for future generations.



*Midwestern tall grass prairie*

# Mettawa: a brief history

The Village of Mettawa is a unique rural community best described as an island of wooded and open land surrounded by commercial, office, and higher density residential uses. Covering 5-1/2 square miles of area in Lake County, Illinois, the landscape is a rich tapestry of woodlands, wetlands, and open space. Characterized by its large properties and undeveloped rural areas, the community evokes a strong sense of identity highlighted by abundant natural resources. The particularly sensitive relationship between the residents of the Village and their natural surroundings is very evident the moment you enter the Village limits.

There are numerous forest preserves and natural resource areas within and surrounding the Village. Based on data obtained from the Lake County Forest Preserve District, there

are in excess of 1,135 acres of Forest Preserve property located within the corporate limits of Mettawa. These Forest Preserves are indicative of the priority that Lake County residents have given to the preservation of the magnificent natural resources located in Mettawa.

In addition to the large public holdings of the Lake County Forest Preserve District, the Village contains the 10-acre Carpenter's Woods natural area at the west end of Old School Road near the Des Plaines River; the Deerpath Farm 90 acre open space conservation easement; the Hamilton Estates open space conservation easement (between Riverwoods Boulevard and Bradley Road); and, many other acres of wetlands, floodplain, and natural habitats for wildlife, located on private property. The vast majority of property within the





Adlai Stevenson with his farm manager, Frank Holland, on "the farm," 1948.  
(Photo courtesy of Jim Holland)

Village is developed at a very low density and contributes to the "open land" character of the community. However, to preserve the character of the Village, and to permit Village residents to benefit from the open land, an overall Master Plan is needed to help guide future planning and stewardship of the Village owned properties, bike trail system, and Rights-of-Ways.

# methodology

## **Stakeholder Interviews**

To better understand the needs and desires of the Village, WRD conducted a number of listening sessions with Trustees, Staff, Ad Hoc Committee members, MOLA (Mettawa Open Lands Association), the Parks and Recreation Board, and select concerned citizens. The listening sessions were held either in person or over the telephone.

Based on the listening sessions, WRD synthesized the comments and concerns into the following:

- Preservation of open land is very important, how can it be preserved in perpetuity? Is the new Open Lands Policy enough by itself?
- How does Mettawa ensure residents that development will not negatively affect open space (public or private)?
- What level of development is enough for residents to enjoy without becoming a maintenance burden for the Village?
- How will the Village ensure that open land is kept “natural”? What does this mean to individuals in the Village? What type of cost will be associated with on-going maintenance of the natural areas?
- Should parking be provided at key locations for residents to access Village owned open land?

## **Analysis**

To better understand the existing conditions of each site, WRD collected GIS data on the following attributes:

- Topography/drainage patterns
- Wetlands/open water
- Floodplains
- Threatened and Endangered Species
- Vegetation cover
- Steep slopes
- Easements
- Edge of pavements
- Parcel boundaries

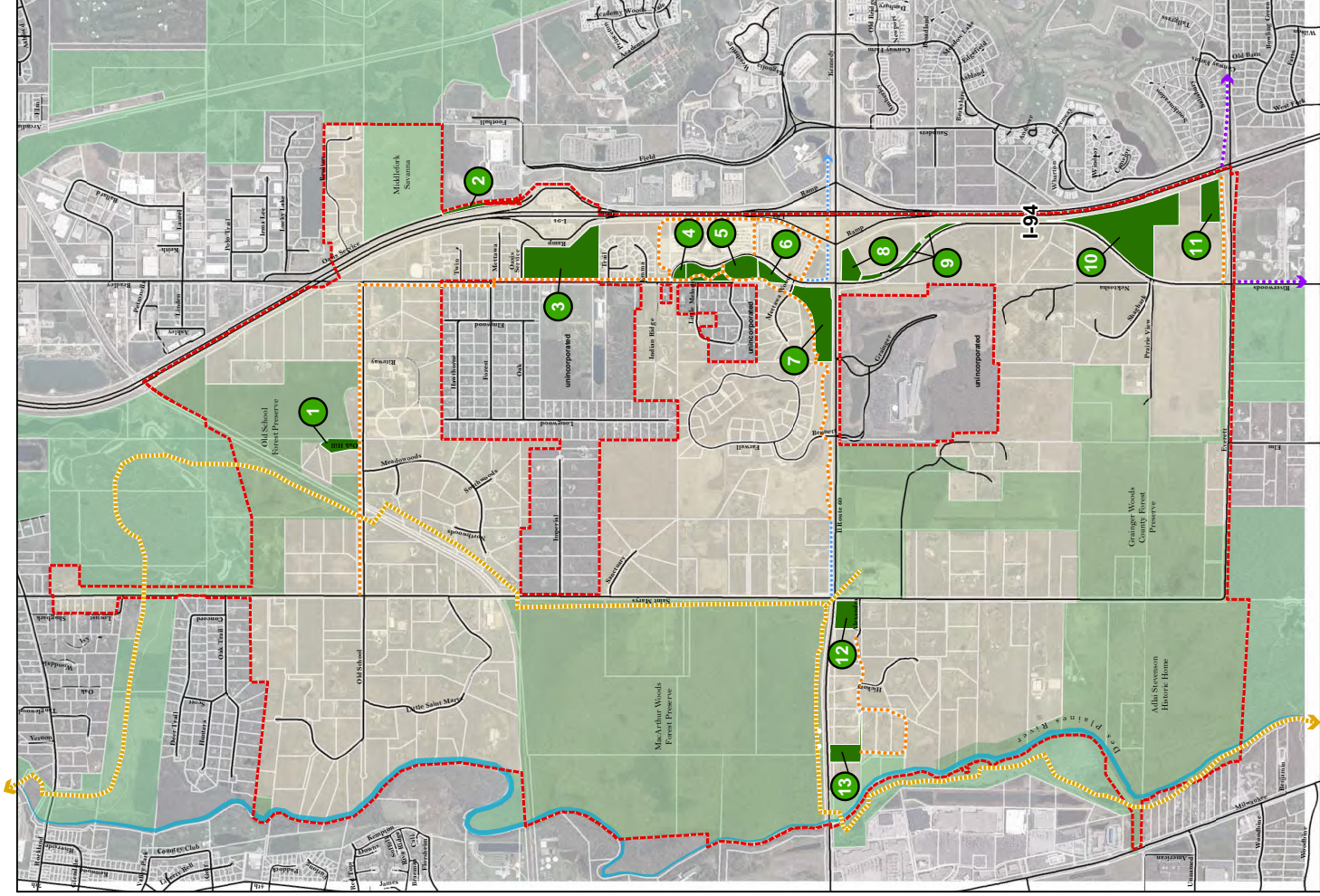
This data was mapped and used in the field to record specific existing conditions that are pertinent to the planning process. After visiting each site as well as the trails and Village-owned R.O.W's, WRD created site analysis maps with Observations and Recommendations. The first set of maps were presented in their entirety to the Mettawa AdHoc Committee, who felt the information represented concerns and thoughts of the residents. This information was then synthesized down to key information items that were presented to the Board and again at a Village of the Whole meeting. Based on feedback from these two meetings, the Observations and Recommendations were modified to meet all of the concerns heard during this process.

# open land parcels

There are numerous forest preserves and natural resource areas within and surrounding the Village. Based on data from the Village's 2025 Comprehensive Plan, there are in excess of 1,135 acres of Lake County Forest Preserve properties located within the corporate limits of Mettawa. These Forest Preserves are indicative of the priority that Lake County residents have given to the preservation of the magnificent natural resources located in Mettawa.

The current land holdings of the Village add to the sizeable existing open land acreage of the forest preserve, and range from open land parcels, to trails, to Rights of Ways along Bradley Road and Old School Road. The majority of the open land parcels are on the eastern edge of Mettawa along Riverwoods Boulevard, with one site on the east side of the

interstate. Parcel sizes range from just below one acre to just over 24 acres. There are also large private land holders such as Grainger that add to the natural feeling and character of Mettawa. With over 1,200 acres of open land, Mettawa has an exceptionally high amount of open land per capita. An accepted standard for adequate access to open land is a ratio of 10 acres per 1,000 residents. The Village has almost 40 times the amount suggested by that standard.



**Village Owned Properties:**

No.	Park Name	Acre	Ownership	Type
1	27570 Oak Hill	2.91	Village	Residential Lot
2	East Side Oasis Service Strip	1.23	Village	Right-Of-Way
3	Oasis Park	20.89	Village	Park/Open Space
4	Riverwoods Blvd.	0.92	Village	Park/Open Space
5	Riverwoods Blvd.	9.04	HOA/Village	Park/Open Space/ Consevation Easement
6	26230 Riverwoods Blvd.	2.41	Village	Commercial
7	Whippoorwill Preserve/Farm	11.18	Village	Park/Open Space
8	SE Corner of Rt. 60 & Riverwoods Rd.	2.80	Village	Open Space
9	Riverwoods Road Berm	2.19	Village	Right-Of-Way
10	701 Riverwoods/Everett Pond North	24.01	Village	Park/Open Space
11	Everett Pond South	5.23	Village	Park/Open Space
12	25960 St. Marys Road	3.95	Village	Residential Lot
13	16 Alexandria Drive	3.91	Village	Residential Lot

**Legend:**

- Village Properties
- Existing Open Space
- Mettawa Village Boundary
- Trails**
- Existing Mettawa Trail
- Proposed Mettawa Trail
- Existing Other Municipal Trails
- Existing Des Plaines River Trail

**Parks, Trails & Open Space**  
Village of Mettawa, Illinois



# open land parcels

## Parcel 1: 27570 Oak Hill — Observations

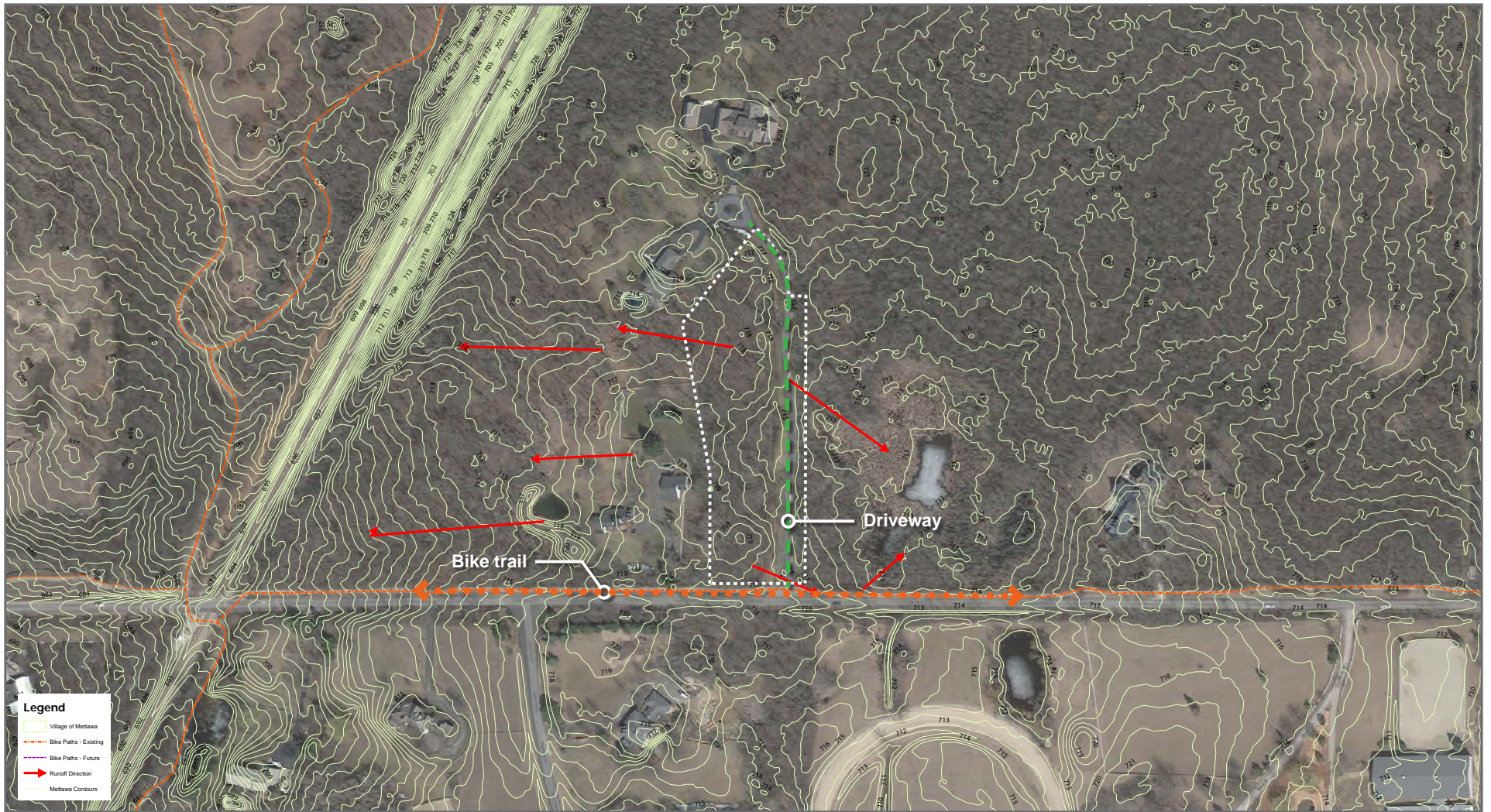
This Parcel abuts Old School Road to the south, private home-owners to the north and west, and Old School Forest Preserve to the east. It is also fronted by a bike path to the south. The Parcel is 2.91 acres in size and considered a Residential Lot.

Key observations for the property include:

- nice oaks in/on property
- heavy infestation of buckthorn
- bike trail runs along south edge of site
- driveway through site makes it feel “private” vrs. “public”

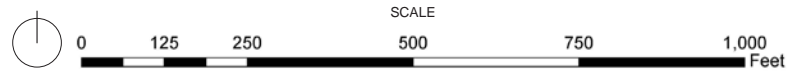


*Image from Google Street View, 2012*



### Parcel 1: 27570 Oak Hill

### Village of Mettawa: Open Lands Management Recommendations



# open land parcels

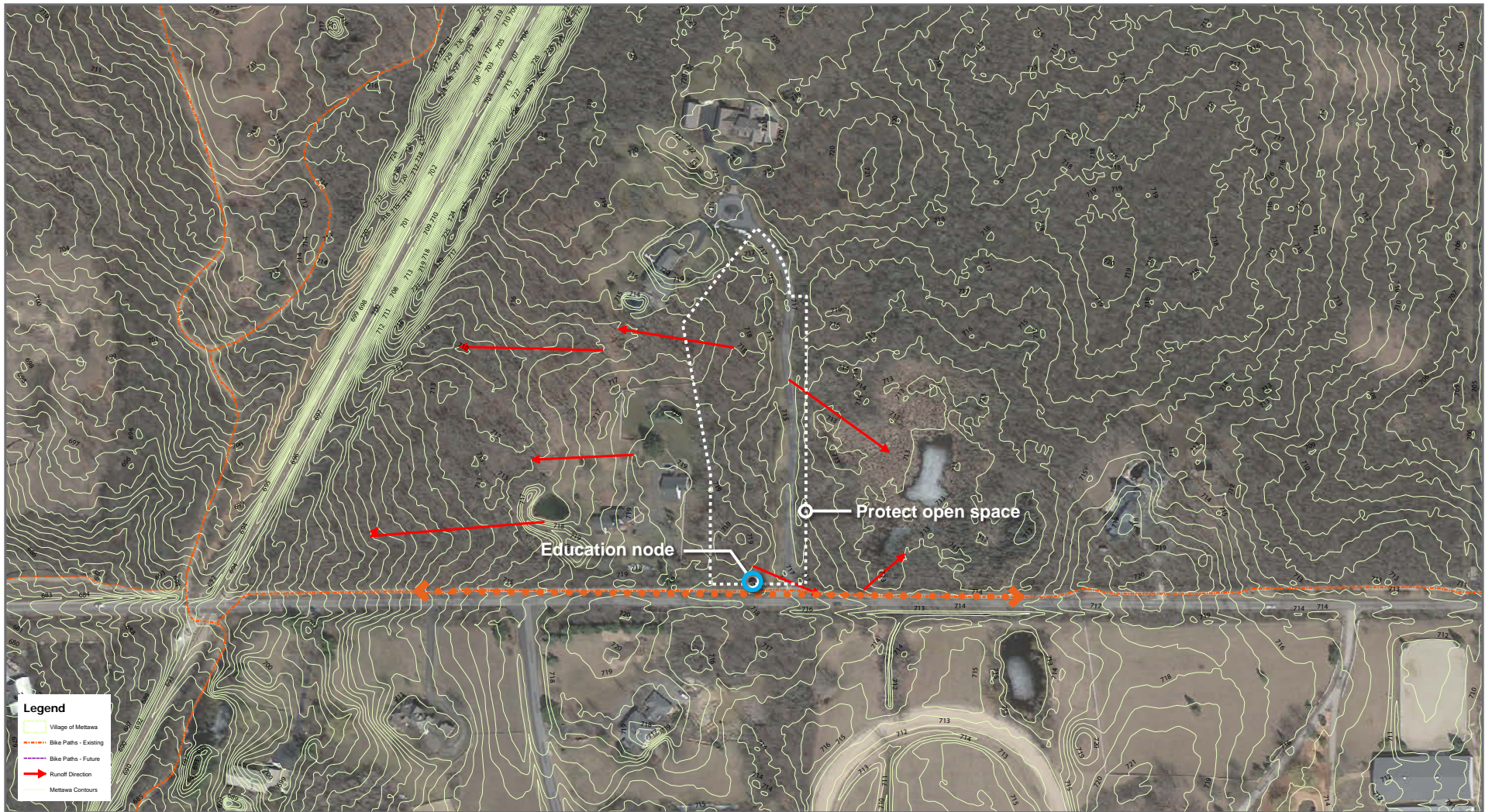
## Parcel 1: 27570 Oak Hill — Recommendations

This property is a great candidate for village residents to adopt and begin the restoration process. Because of its size, this site could be cleared over one winter season. The large oak trees are indicative of a savanna landscape once prevalent across Lake County.

Other recommendations for the site include:

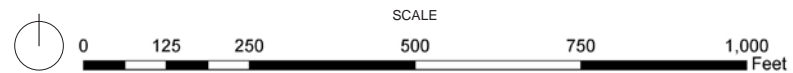
- begin education / hands on working sessions
- remove buckthorn
- seed with savanna species
- monitor for success of native plants
- take advantage of bike trail with an education node





### Parcel 1: 27570 Oak Hill

### Village of Mettawa: Open Lands Management Recommendations



# open land parcels

## Parcel 2: East Side Oasis Service Strip — Observations

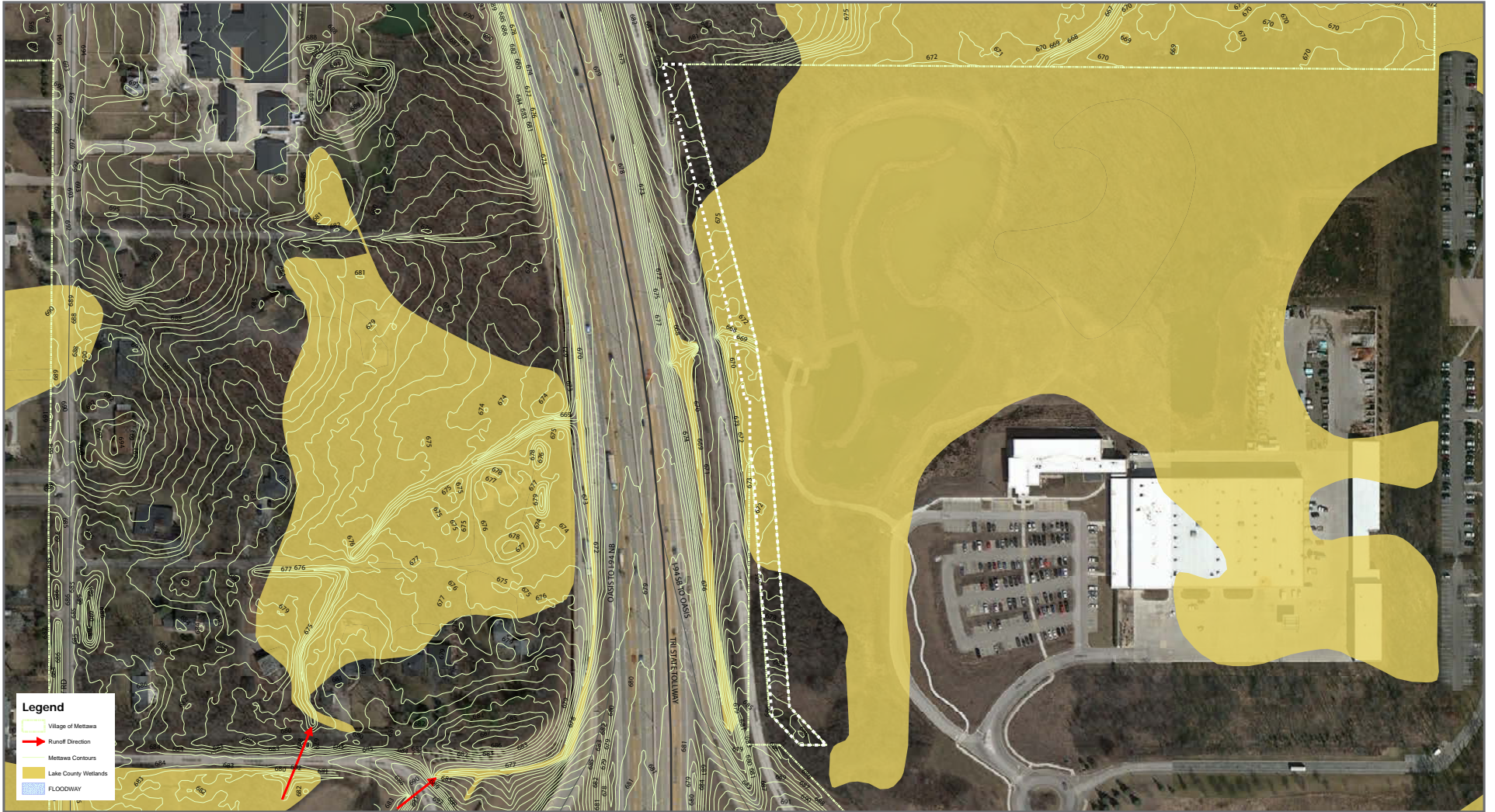
This Parcel runs parallel and east of the Oasis Service Road with Middle Fork Savanna to the north and an industrial property to the east. Approximately half of the property abuts open space while the southern half is adjacent to lawn maintained by the industrial tenant. The parcel is 1.23 acres in size and considered a Village Right of Way.

Key observations for the property include:

- parcel is a right-of-way infested with buckthorn
- right-of-way serves as a significant overland route and drainage way for water
- abuts Forest Preserve property, feels like a part of this property

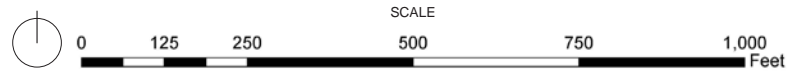


*Image from Google Street View, 2012*



### Parcel 2: East Side Oasis Service Strip

Village of Mettawa: Open Lands Management Recommendations



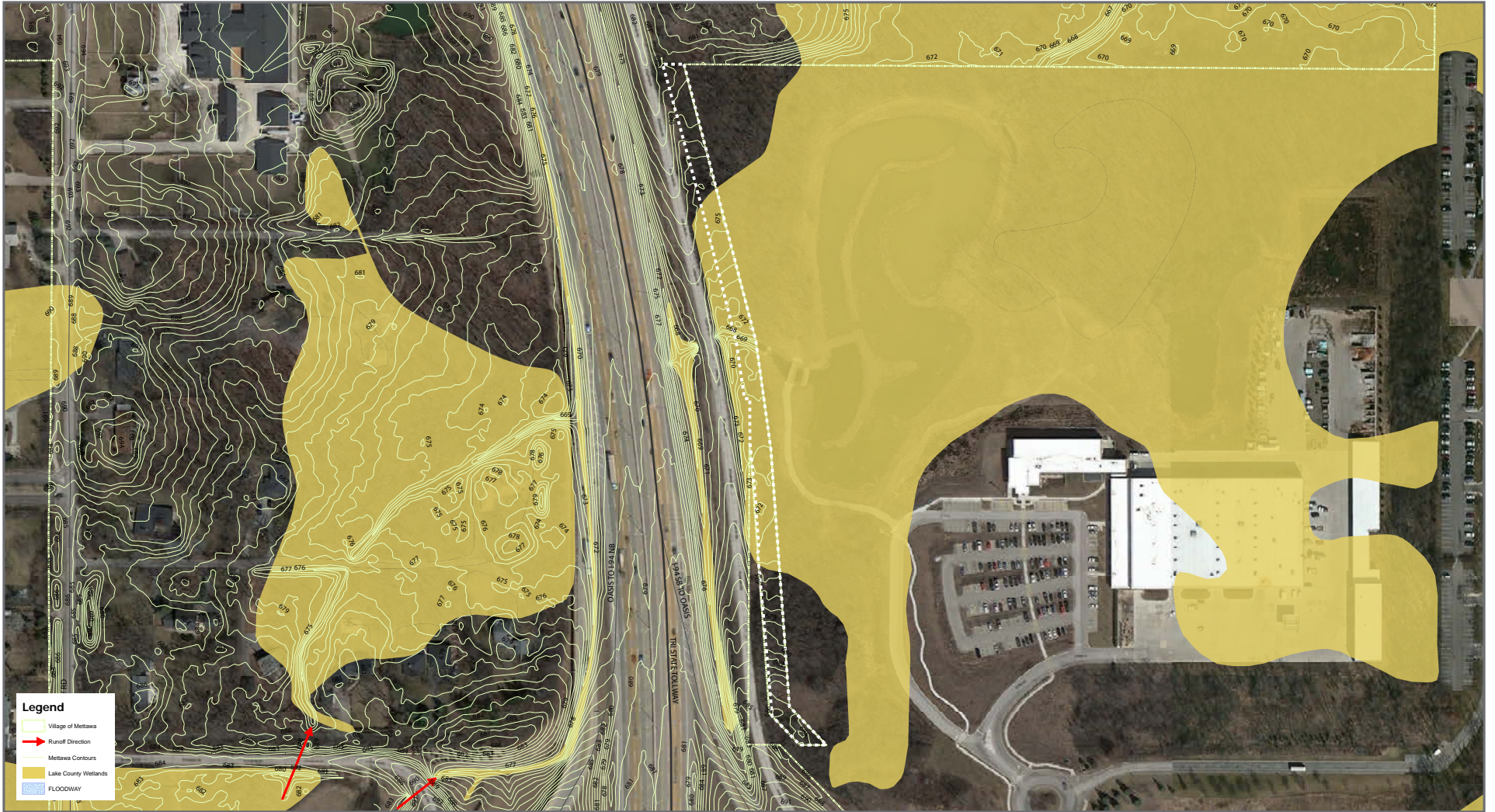
# open land parcels

## Parcel 2: East Side Oasis Service Strip — Recommendations

The primary recommendation for this property is to keep any debris and/or material from blocking culverts directing water into it from upstream properties. This swale serves a fairly significant area for overland stormwater that passes through to the adjacent open space property.

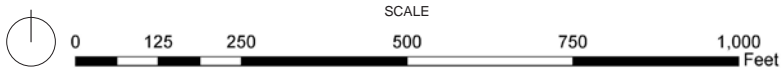
Other recommendations for the site include:

- remove buckthorn
- visit parcel monthly to ensure that overland flow routes are adequately maintained throughout the year



### Parcel 2: East Side Oasis Service Strip

Village of Mettawa: Open Lands Management Recommendations



# open land parcels

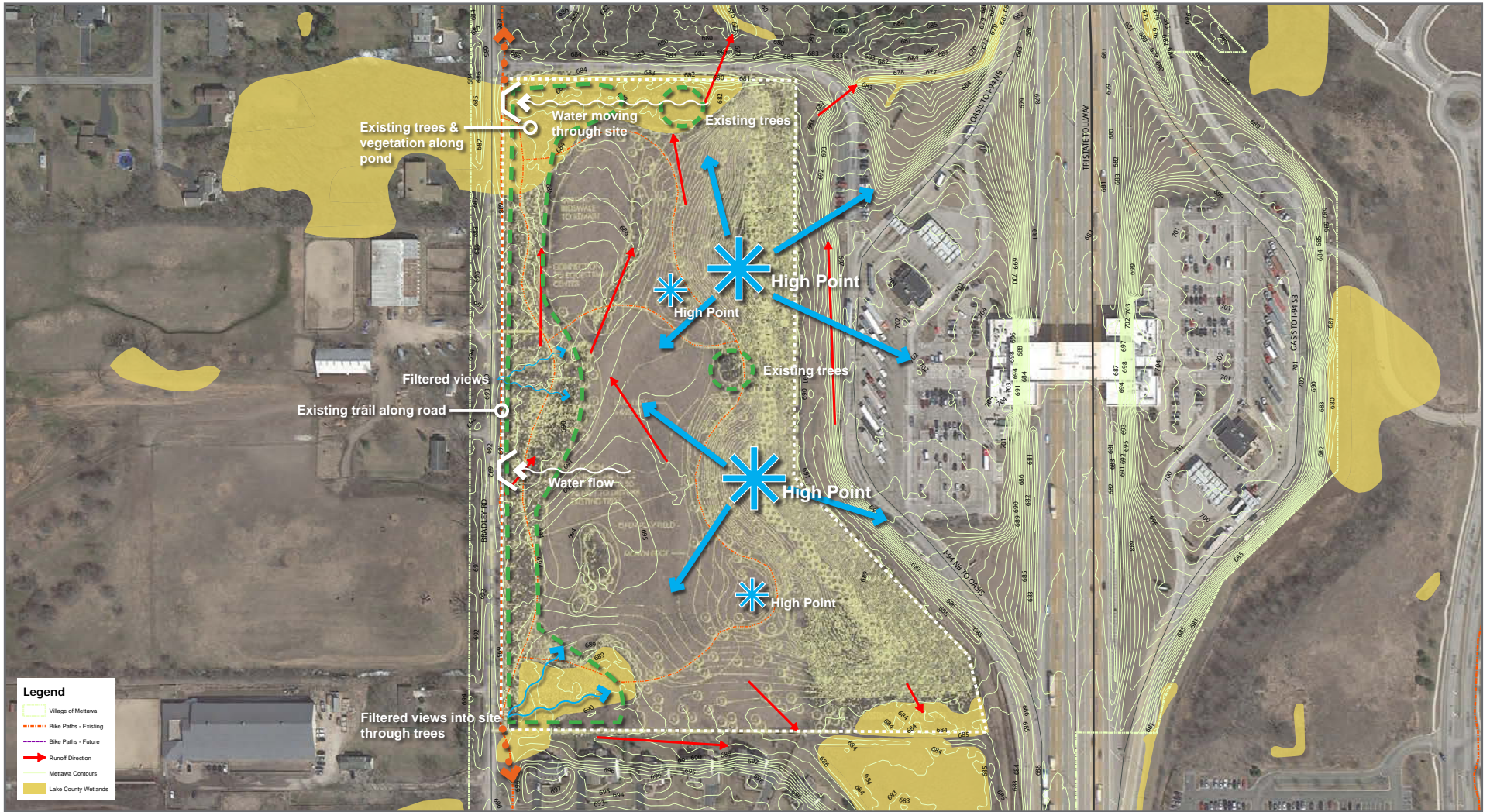
## Parcel 3: Oasis Park — Observations

This Parcel is bounded by Bradley Road on the east, Oasis Service Road on the north, residential properties to the south, and the Interstate to the east. The Parcel is 20.89 acres in size and considered Village Park/Open Space.

Key observations for the property include:

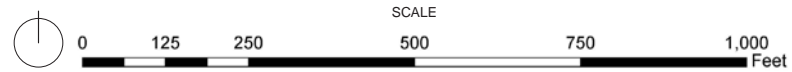
- site “feels” very large and expansive
- trees along road create a nice separation to the site
- berm creates incredible views to landscape beyond
- water moving through site is beginning to erode edges of channels





### Parcel 3: Oasis Park

Village of Mettawa: Open Lands Management Recommendations



# open land parcels

## Parcel 3: Oasis Park — Recommendations

The primary recommendation for this property is to plant the berm with a permanent seed matrix so that erosion of the slopes does not occur. Once this is accomplished, the property can be highlighted with trails running up the berm to overlooks for incredible views of Mettawa.

The existing trees along Bradley Road are a nice amenity that offer filtered views into the site and will offer sanctuary for small oak trees that can be planted in and among the existing for future generations to enjoy.

Other recommendations for the site include:

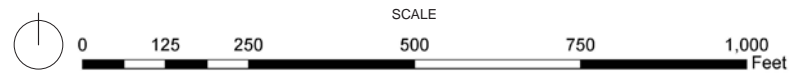
- plant majority of site with native plants, create a large piece of shortgrass prairie
- strategically locate trees on berm to screen Lake Forest Oasis building and lights
- take advantage of high points with observation areas
- start an oak grove along the road
- implement long-term stewardship plan





### Parcel 3: Oasis Park

#### Village of Mettawa: Open Lands Management Recommendations



# open land parcels

## Parcel 4: Riverwoods Blvd. — Observations

This Parcel is bounded by Parcel 5 to the south, Bradley Road on the west, and Riverwoods Boulevard on the north and east. The parcel is 0.92 acres in size and considered Village Park/Open Space. Since this Parcel is contiguous to Parcel 5, it feels much larger than it actually is.

Key observations for the property include:

- creates a nice entry into residential area
- beautiful white oaks on the site
- start of a restoration effort on site
- needs additional savanna species incorporated into restoration
- is a nice continuation of parcel 5 to the south



*Image from Google Street View, 2012*



### Parcel 4: Riverwoods Blvd.

### Village of Mettawa: Open Lands Management Recommendations

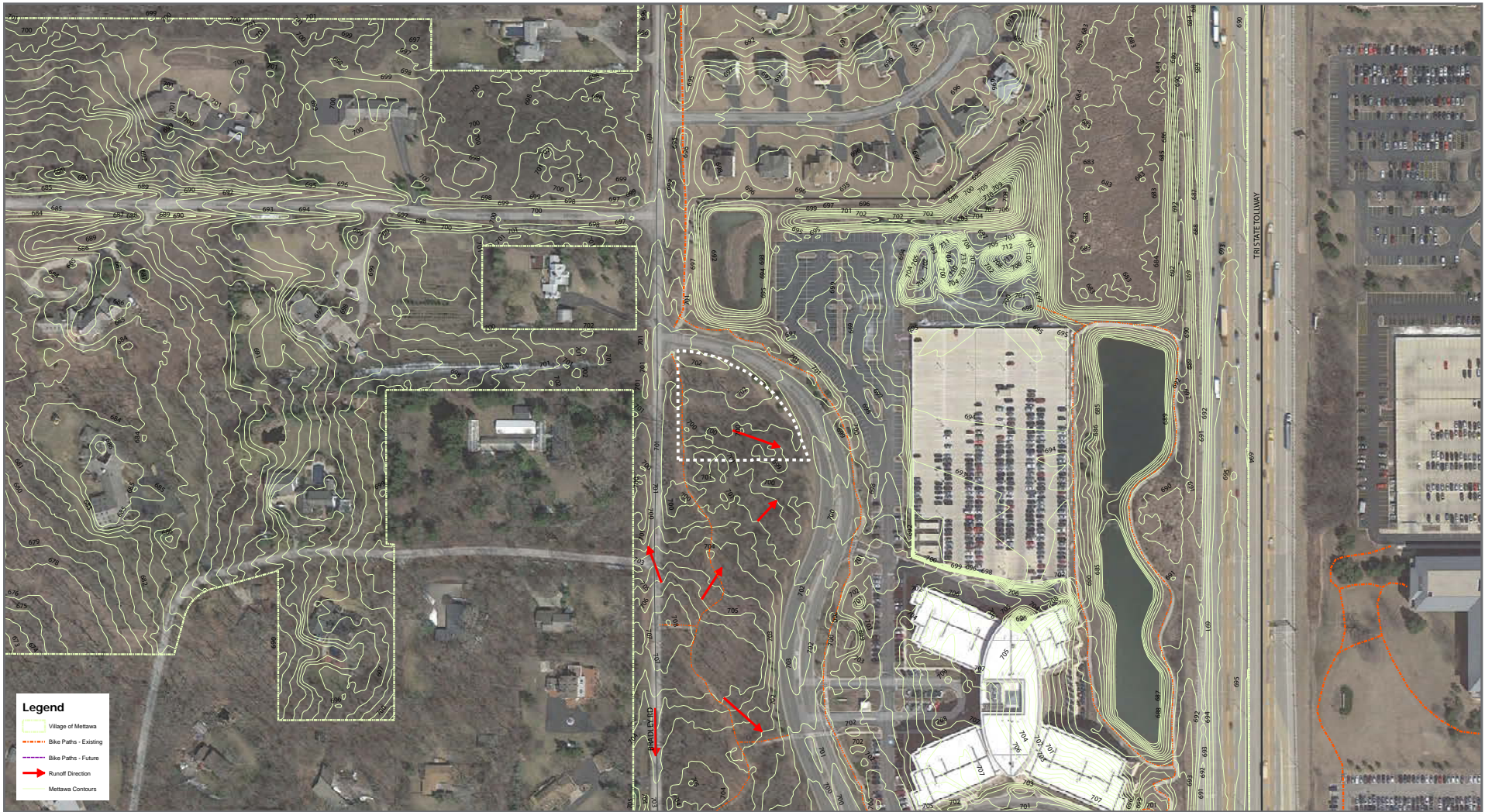
# open land parcels

## Parcel 4: Riverwoods Blvd. — Recommendations

This property is a great candidate for village residents to adopt and begin the restoration process. Because of its size and previous work completed by Tall Grass Restoration, this site could be cleared over one winter season.

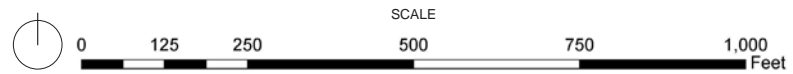
Other recommendations for the site include:

- continue stewardship work
- increase biodiversity - incorporate more savanna species into site
- implement long-term stewardship plan



### Parcel 4: Riverwoods Blvd.

Village of Mettawa: Open Lands Management Recommendations



# open land parcels

## Parcel 5: Riverwoods Blvd. — Observations

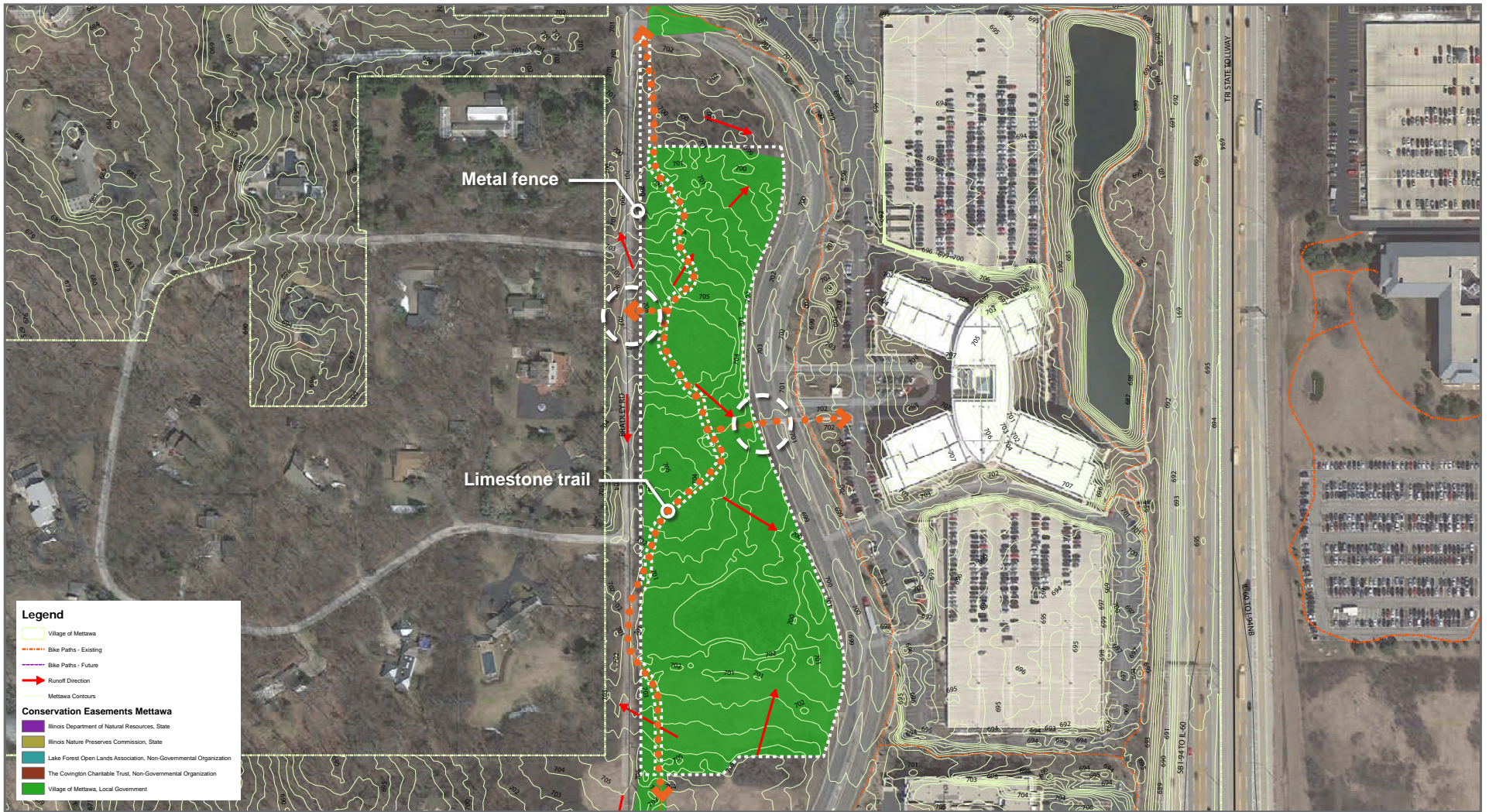
This Parcel is bounded by Parcel 4 to the north, Bradley Road on the west, Riverwoods Boulevard on the east, and Parcel 6 on the south. The parcel is 9.04 acres in size and considered Village Park/Open Space. This Parcel is contiguous to Parcel 4 and 6, making it feel much larger than it actually is. This parcel currently has a Conservation Easement, held through Hamilton Estates Homeowner's Association.

Key observations for the property include:

- incredible oaks on site
- heavy infestation of buckthorn
- existing trail winds nicely through site
- nice connection to business across street
- property provides nice separation to homes to the west
- existing fence on west creates “barrier”



*Image from Google Street View, 2012*



# open land parcels

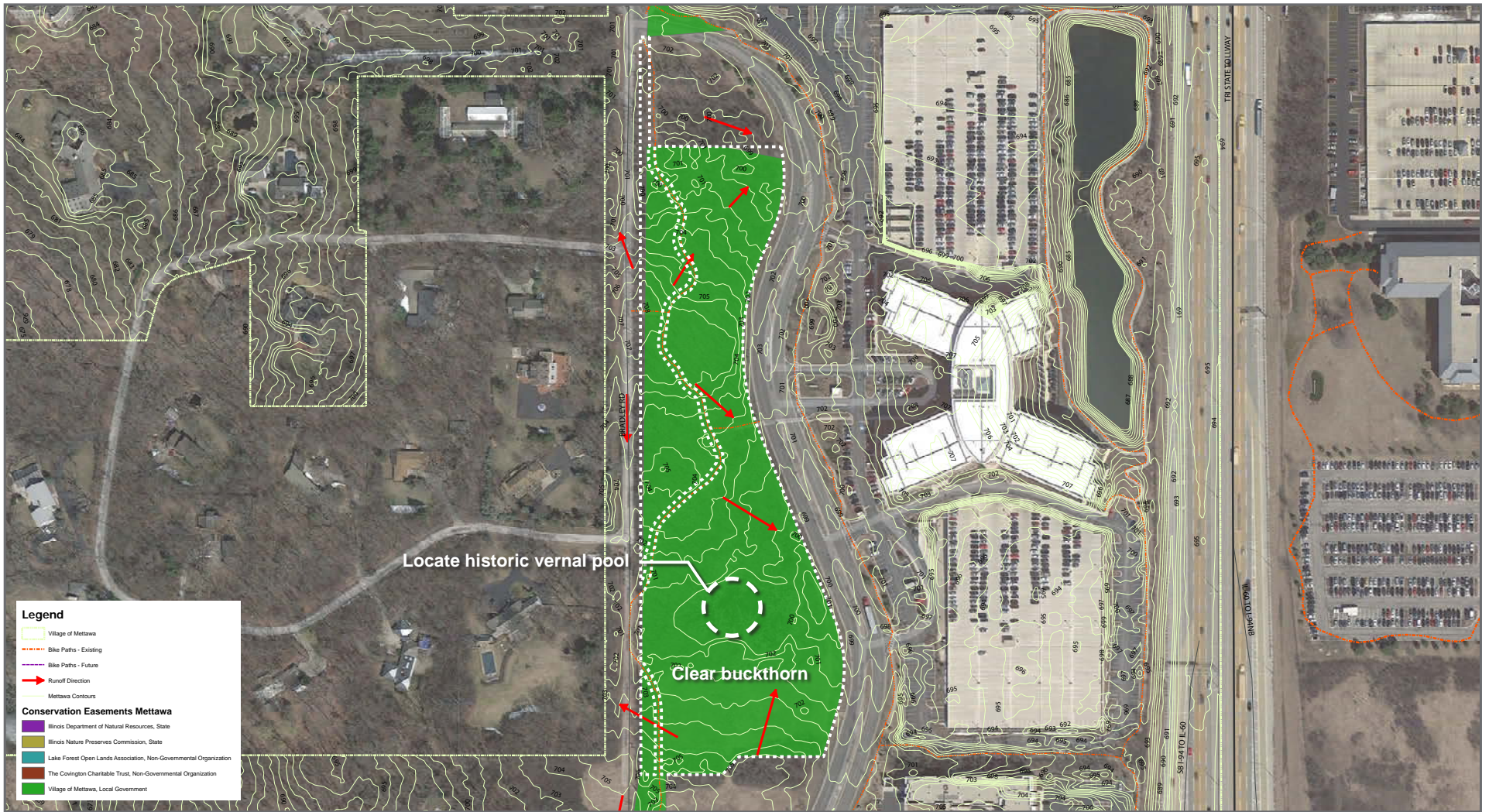
## Parcel 5: Riverwoods Blvd. — Recommendations

This property is a great candidate for village residents to adopt and begin the restoration process. This site contains a vernal pool that was identified by Rick and Linda Phillips during an interview session and represents a unique landscape feature. With proper restoration, this feature could be a significant educational item for the Village.

Other recommendations for the site include:

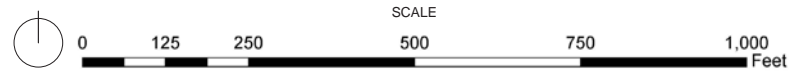
- clear all buckthorn from site
- overseed area with savanna species
- remove existing metal fence on west edge of property
- research Hamilton Estates Homeowner's Association's Conservation Easement, review to ensure holder meets appropriate requirements
- implement long-term stewardship plan
- could be a good place for interpretive signage





### Parcel 5: Riverwoods Blvd.

### Village of Mettawa: Open Lands Management Recommendations



# open land parcels

## Parcel 6: 26230 Riverwoods Blvd. — Observations

This Parcel is bounded by Parcel 5 to the north, a bike trail and private property on the west, Riverwoods Boulevard on the east, and a Mettawa Woods Road on the south. The parcel is 2.41 acres in size and considered Village Commercial property. This Parcel is open and has been cleared of teasel by the Village. It does not have an ecological landscape, which makes it a great candidate for development. This parcel currently has a Conservation Easement on the trail crossing only, held through Hamilton Estates Homeowner's Association.

Key observations for the property include:

- very open site, no landscape to “save”
- no large trees to preserve
- very different “feeling” than sites 4 and 5
- site lends itself to development vrs. restoration
- no ecological story to tell

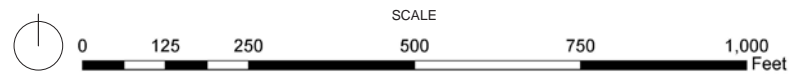


*Image from Google Street View, 2012*



Parcel 6: 26230 Riverwoods Blvd.

Village of Mettawa: Open Lands Management Recommendations



# open land parcels

## Parcel 6: 26230 Riverwoods Blvd. — Recommendations

The primary recommendation for this property is to leave it open for future development. Another important recommendation is to protect the trail that crosses the northwest corner of the property.

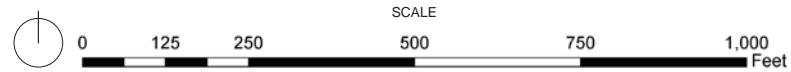
Other recommendations for the site include:

- research Hamilton Estates Homeowner's Association's Conservation Easement on the trail, review to ensure holder meets appropriate requirements



### Parcel 6: 26230 Riverwoods Blvd.

### Village of Mettawa: Open Lands Management Recommendations



# open land parcels

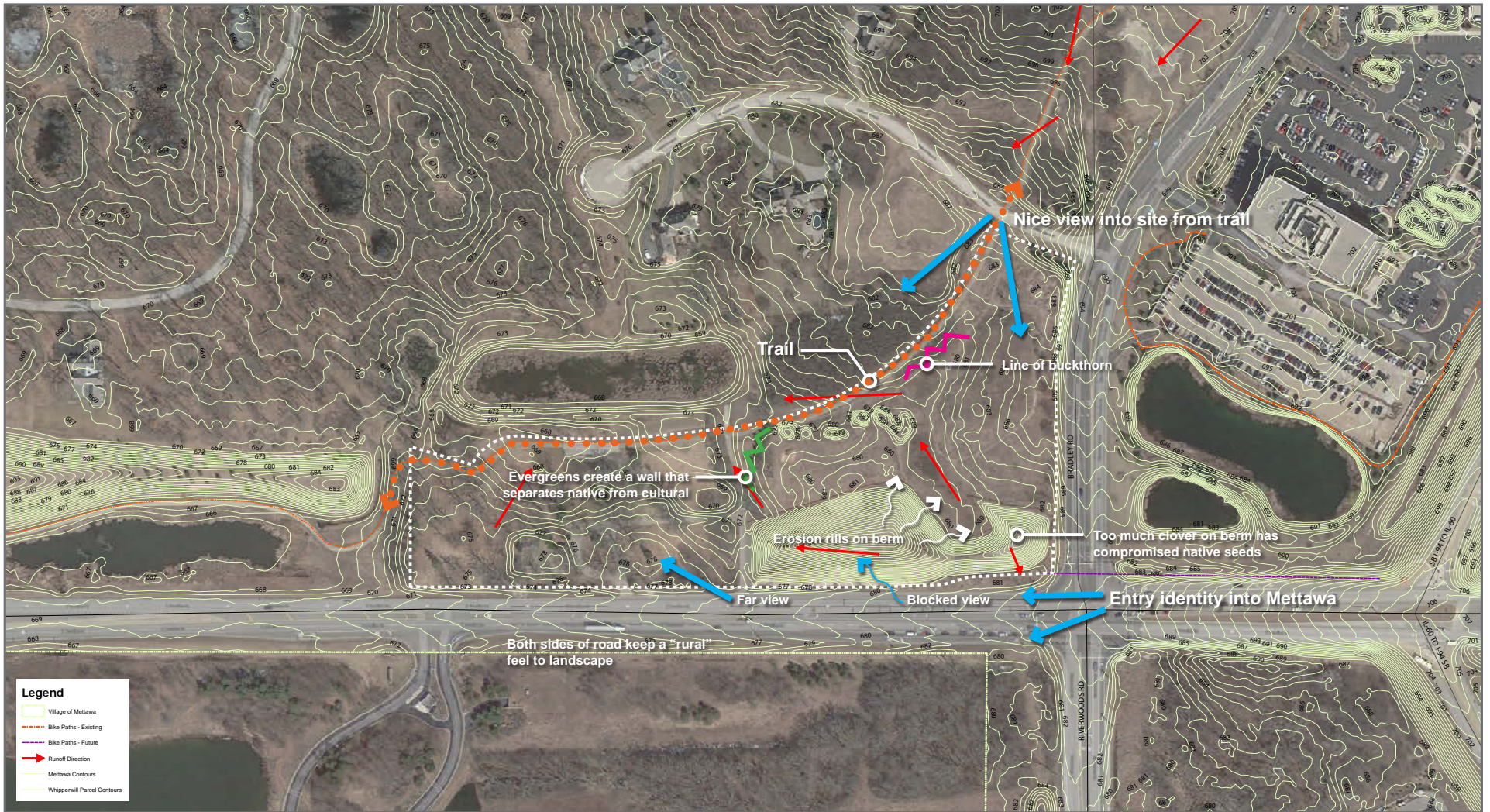
## Parcel 7: Whippoorwill Preserve/Farm — Observations

This Parcel is bounded by Mettawa Woods Road and a pedestrian trail to the north and west, Riverwoods Boulevard on the east, and IL Route 60 (Buckley Road) on the south. The parcel is 11.18 acres in size and considered Village Park/Open Space. This Parcel is at a major intersection leading into Mettawa and includes a large berm that screens the prairie restoration taking place on the property. Currently, the Whippoorwill site is within a Conservation Easement.

Key observations for the property include:

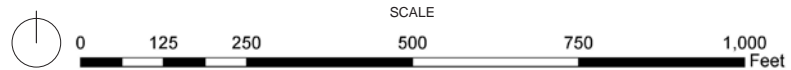
- from western intersection, sets a tone for “rural” feeling in Mettawa
- a few groups of buckthorn need to be removed
- heavy infestation of clover on berm
- nice scattering of large trees on Korhumel property
- low biodiversity





## Parcel 7: Whipoorwill Preserve/Farm

Village of Mettawa: Open Lands Management Recommendations



# open land parcels

## Parcel 7: Whippoorwill Preserve/Farm — Recommendations

The Korhumel property may begin to be cleared of items such as utility poles, non-natives, and items associated with the demolished home. The Whippoorwill site contains an established prairie restoration that can be continually enhanced with stewardship and additional plants. With proper restoration, the berm will add biodiversity to the site as well.

Other recommendations for the site include:

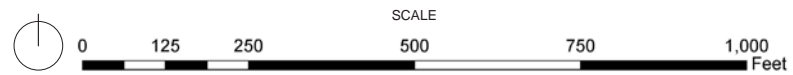
- remove invasives and home landscape from properties
- remove asphalt driveway
- herbicide berm and reseed - include plugs for instant plant show
- remove evergreens, create cohesive feel to both sites
- clean up landscape around house footprint - reset stones and define footprints to tell story of Korhumel
- slowly incorporate native landscape below oaks on Korhumel property
- keep trail on parcel 7 as is, no new trail into site
- incorporate plugs into parcel 7 to increase biodiversity
- implement long-term stewardship plan
- could incorporate interpretive signage into Korhumel property





## Parcel 7: Whippoorwill Preserve/Farm

Village of Mettawa: Open Lands Management Recommendations



# open land parcels

## Parcel 8: SE Corner of Rt. 60 & Riverwoods Road — Observations

This Parcel is bounded by IL Route 60 (Buckley Road) to the north, Riverwoods Boulevard to the west, the Interstate ramp to the east and Costco to the south. The parcel is 2.80 acres in size and considered Village Open Space. This Parcel is at a major intersection leading into Mettawa but is sunk down well below the ramp and road to the north, making it feel detached from the road to the north. From the south, it feels like it is part of Costco due to the location of their security fence.

Key observations for the property include:

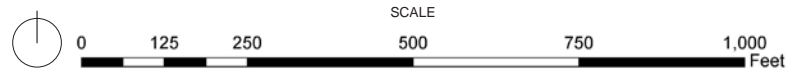
- large stand of big oaks
- helps create a natural entry into Mettawa
- grade change from road creates significant separation to the site
- abrupt separation of nature and man-made - especially with fence at Costco
- cattails are symptom of poor water quality



*Image from Google Street View, 2012*



Parcel 8: SE Corner of Rt. 60 & Riverwoods Road  
 Village of Mettawa: Open Lands Management Recommendations



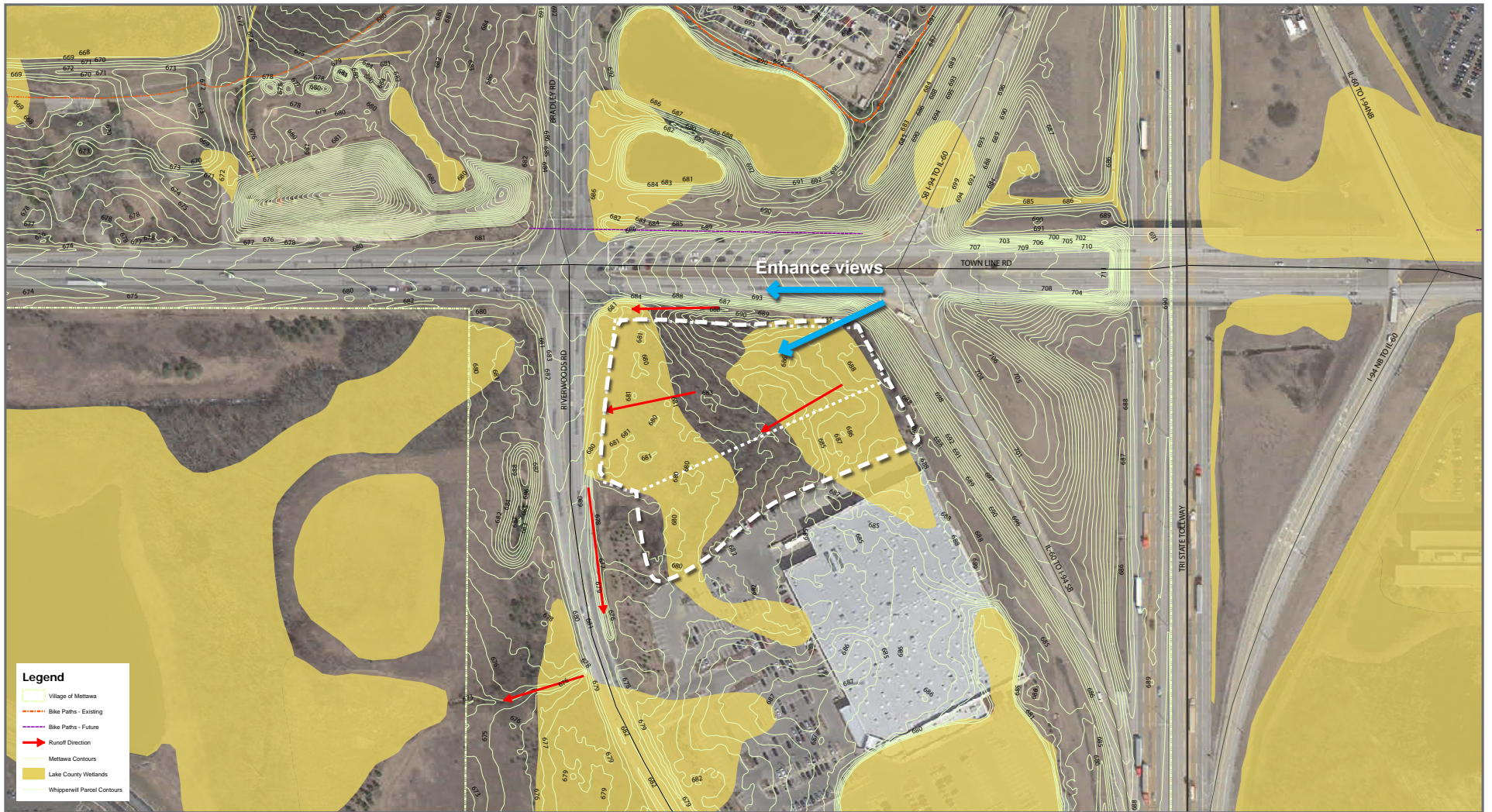
# open land parcels

## Parcel 8: SE Corner of Rt. 60 & Riverwoods Road — Recommendations

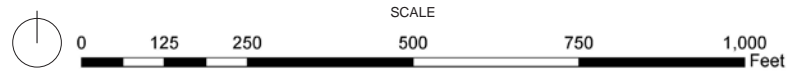
The primary recommendation for this property is to explore the possibility of incorporating the adjacent Costco property with this parcel, creating a larger piece of open space.

Other recommendations for the site include:

- treat property as one unit
- clean out buckthorn
- reduce cattails, work on improving water quality
- work with Costco to protect their open space property



Parcel 8: SE Corner of Rt. 60 & Riverwoods Road  
 Village of Mettawa: Open Lands Management Recommendations



# open land parcels

## Parcel 9: Riverwoods Road Berm — Observations & Recommendations

There are three separate Parcels here that run adjacent to the western edge of the Costco property on the east side of Riverwoods Boulevard. They are maintained by Costco and should be left as is.

### **Key observations:**

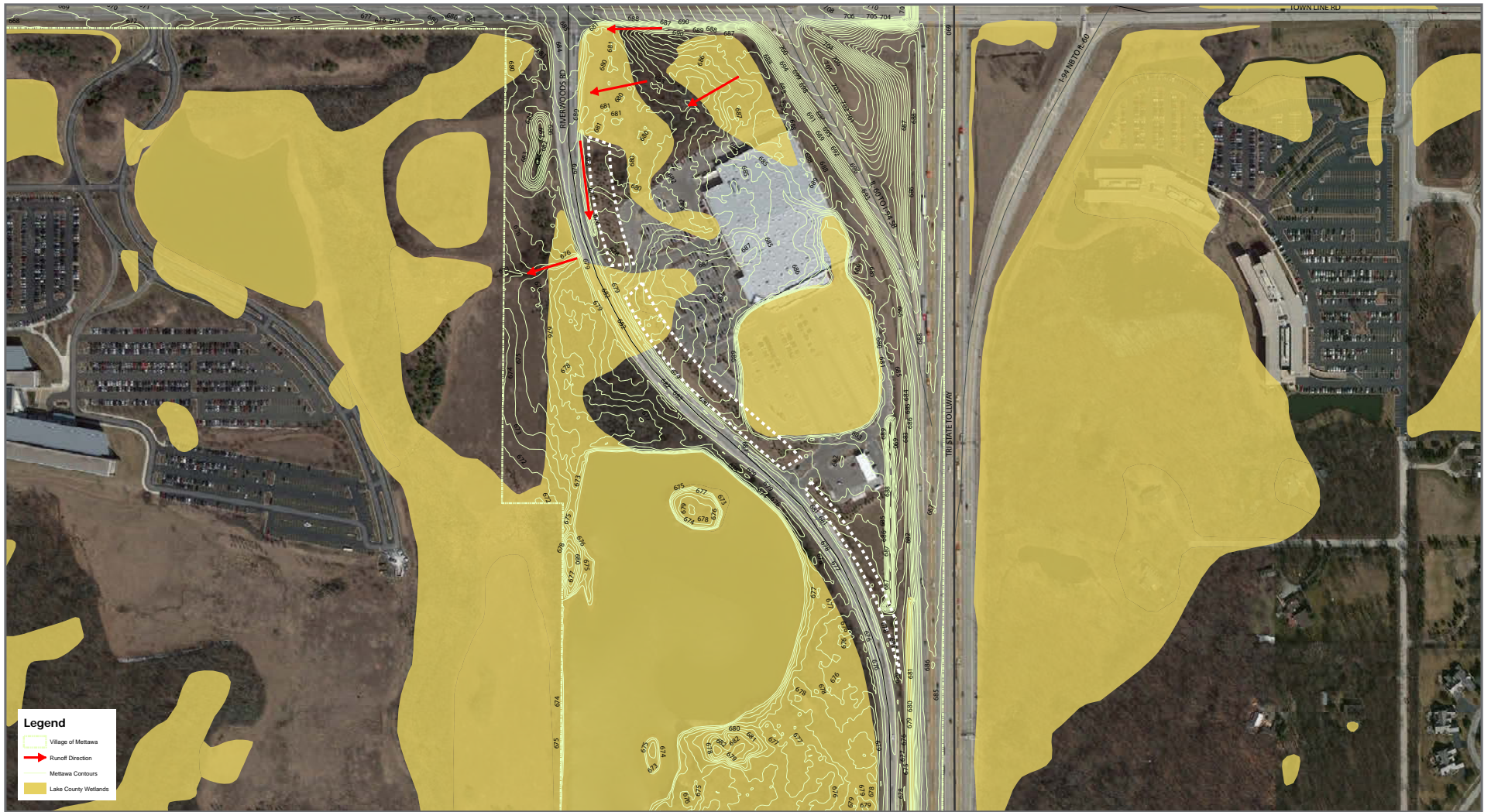
- parcel is a right-of-way with turf grass and ornamental plantings

### **Recommendations:**

- parcel is being maintained by owner of adjacent property: continue this arrangement

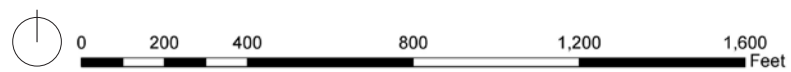


*Image from Google Street View, 2012*



### Parcel 9: Riverwoods Road Berm

Village of Mettawa: Open Lands Management Recommendations



# open land parcels

## Parcel 10: 701 Riverwoods/Everett Pond North — Observations

This Parcel is bounded by Riverwoods Boulevard to the west, the Interstate to the east and Grainger property to the south. The parcel is 24.01 acres in size and considered Village Park/Open Space. This Parcel is at the southern limit of Mettawa and is large open space that helps support an equestrian vernacular for the village.

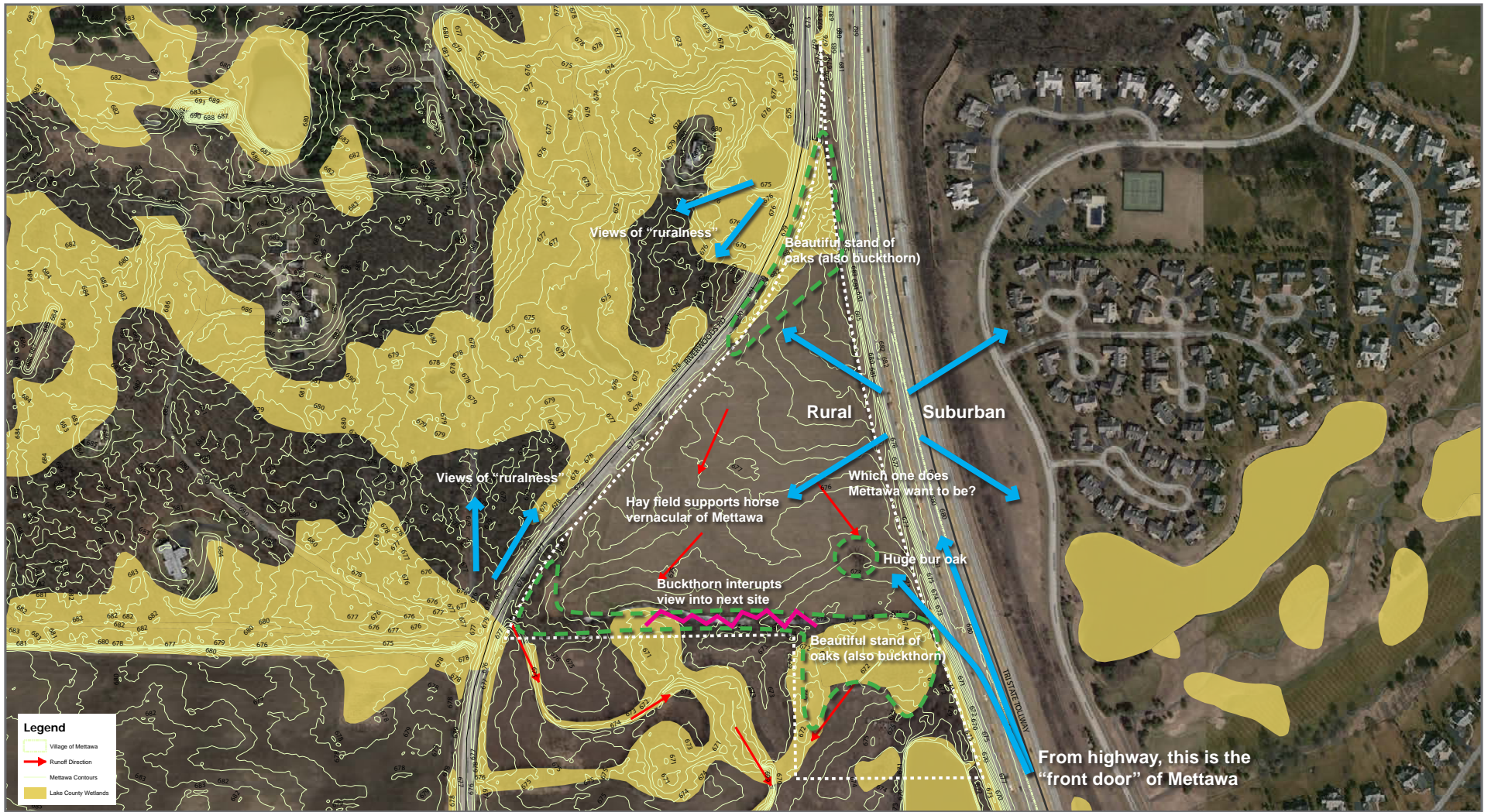
Key observations for the property include:

- site is the “front door” to Mettawa, and sets the tone for who you are as a community
- huge oaks on the edges are being compromised by buckthorn
- hay field is a great icon for the horse vernacular
- the adjacent property should feel like a continuation of this site

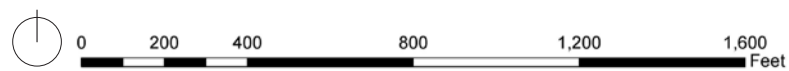


*Image from Google Street View, 2012*





Parcel 10: 701 Riverwoods/Everett Pond North  
 Village of Mettawa: Open Lands Management Recommendations



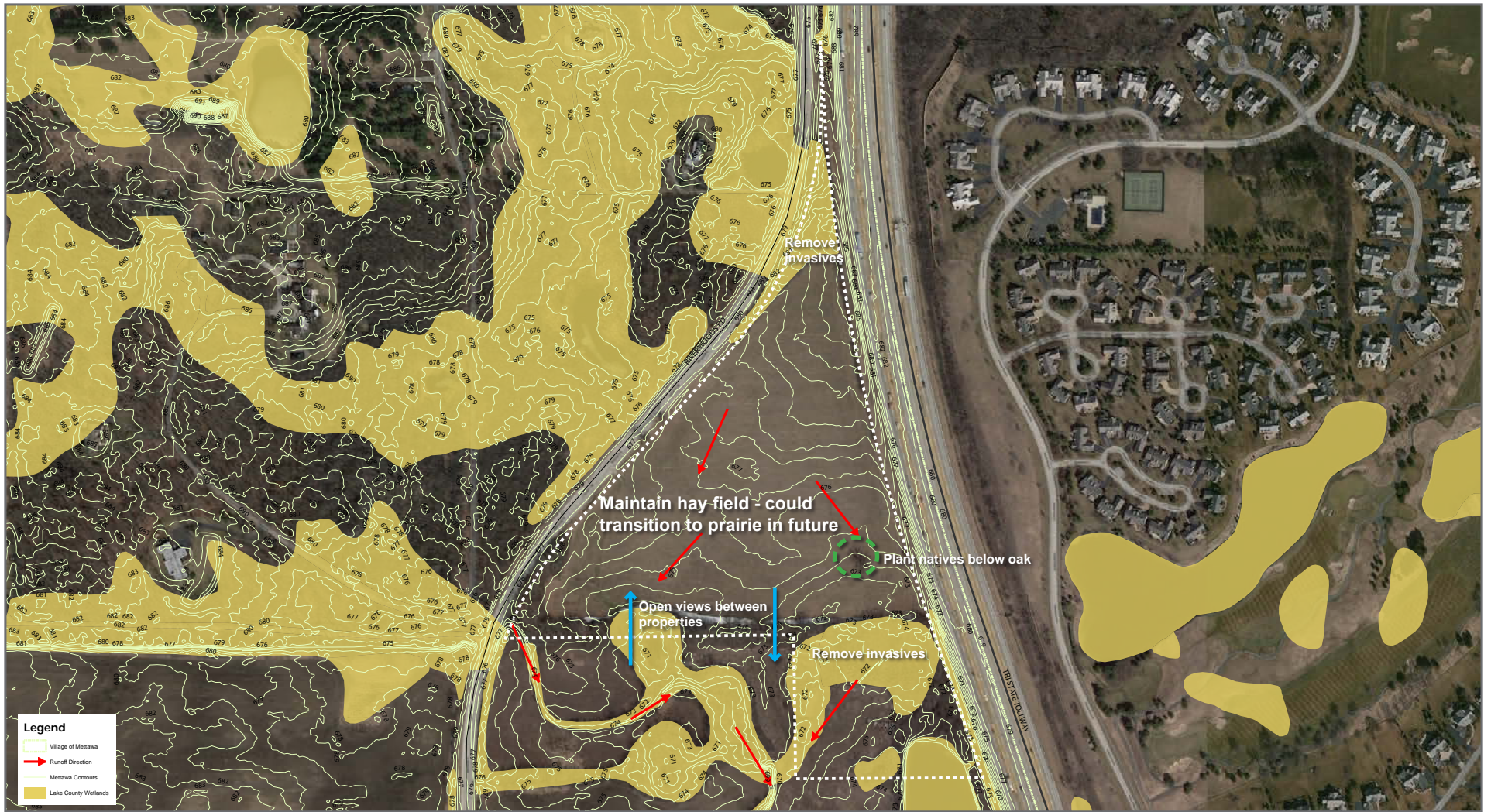
# open land parcels

## Parcel 10: 701 Riverwoods/Everett Pond North — Recommendations

There are restoration opportunities along the south edge of this property, which abuts Grainger property, making it feel like a larger piece of open space.

Other recommendations for the site include:

- remove invasives on site
- plant native savanna plugs below oak trees
- keep hay field active to support “rural” feeling of Mettawa
- establish a long-term stewardship plan



Parcel 10: 701 Riverwoods/Everett Pond North  
 Village of Mettawa: Open Lands Management Recommendations

# open land parcels

## Parcel 11: Everett Pond South — Observations

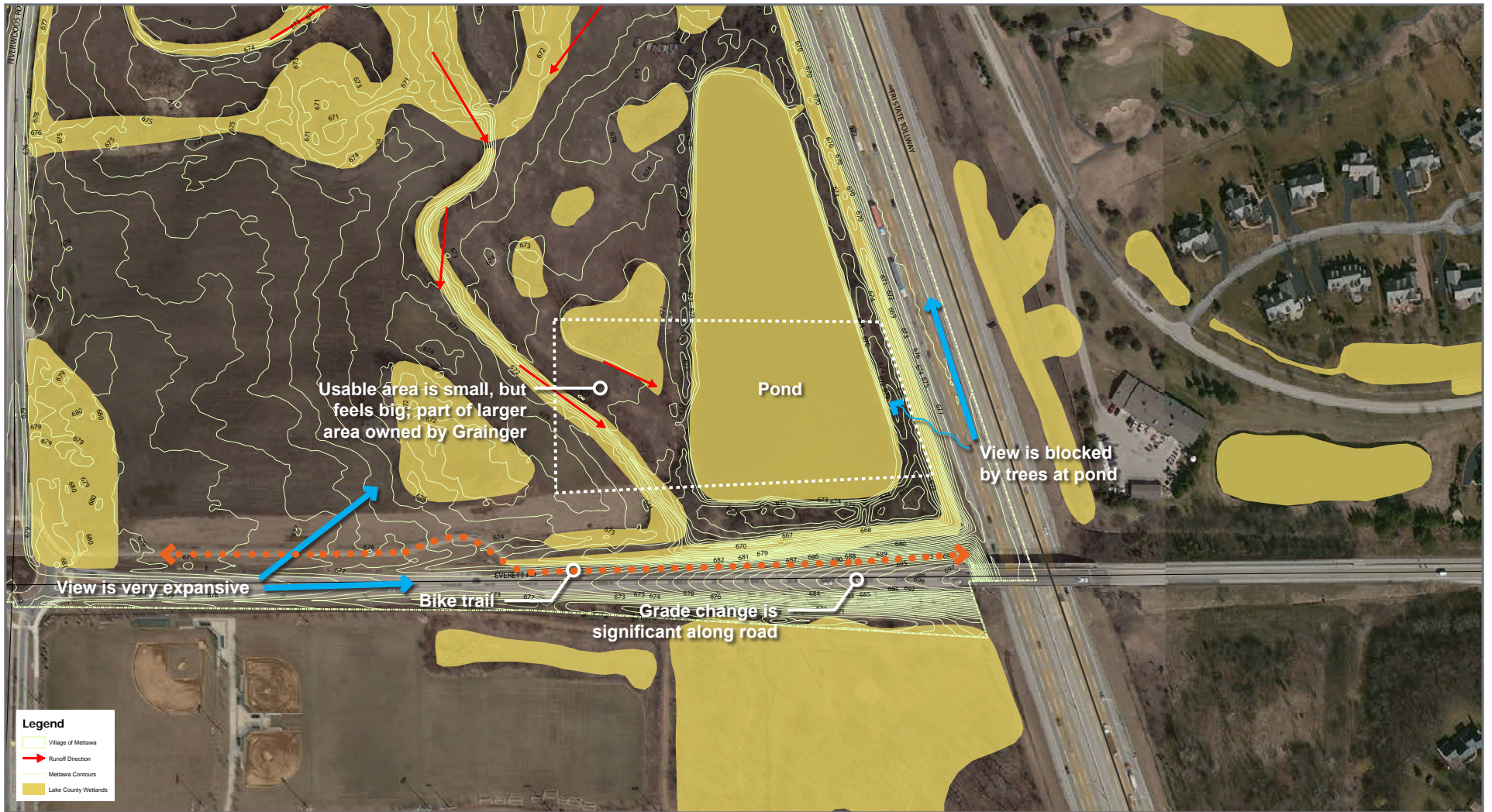
This Parcel is bounded by the Interstate to the east, Grainger property to the north and west, and Everett Road to the south. The parcel is 5.23 acres in size and considered Village Park/Open Space. This Parcel is at the southern limit of Mettawa and is comprised mostly of water in a pond that is likely a borrow pit for the bridge over the Interstate.

Key observations for the property include:

- can not tell where site 11 ends and Grainger begins
- pond is inaccessible
- poplar trees scattered throughout - may be indicative of moisture in soil

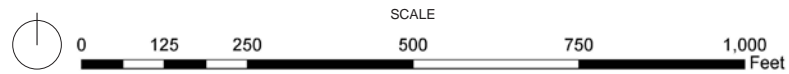


*Image from Google Street View, 2012*



### Parcel 11: Everett Pond South

Village of Mettawa: Open Lands Management Recommendations



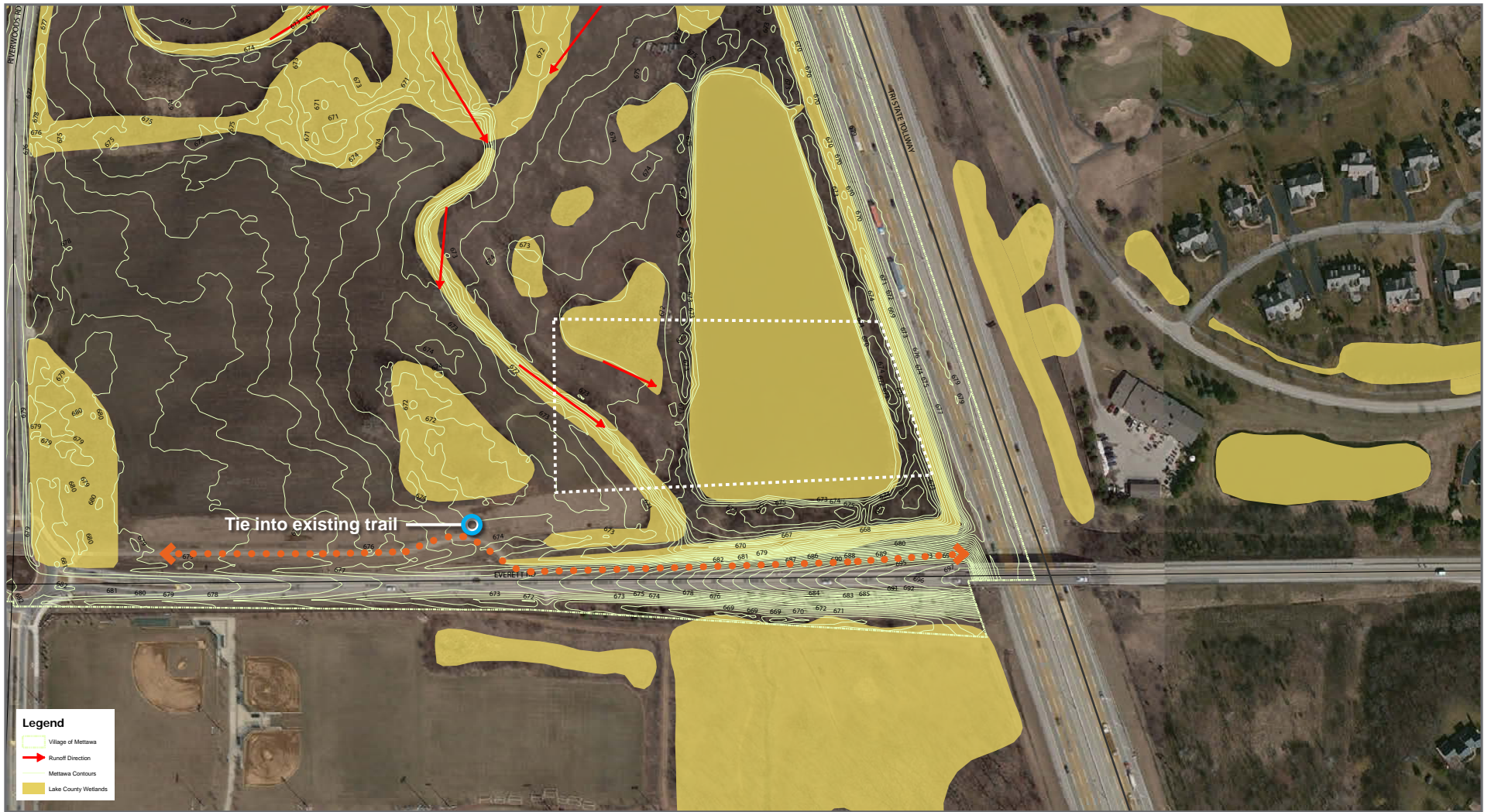
# open land parcels

## Parcel 11: Everett Pond South — Recommendations

There are restoration opportunities on this property, which abuts Grainger property, making it feel like a larger piece of open space.

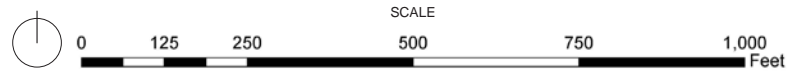
Other recommendations for the site include:

- work with Grainger to “unite” properties, and protect their open land east of Riverwoods Blvd.
- could incorporate walking trails throughout area
- capitalize on low areas and water to create biologically diverse habitats
- establish long-term stewardship plan



### Parcel 11: Everett Pond South

Village of Mettawa: Open Lands Management Recommendations



# open land parcels

## Parcel 12: 25960 St. Mary's Road — Observations

This Parcel is bounded by IL Route 60 (Buckley Road) to the north, St. Mary's Road to the east, and residential properties to the west and south. The parcel is 3.95 acres in size and considered Village Residential Lot. This Parcel once had a single-family residence on it and is being considered for a new Village Hall.

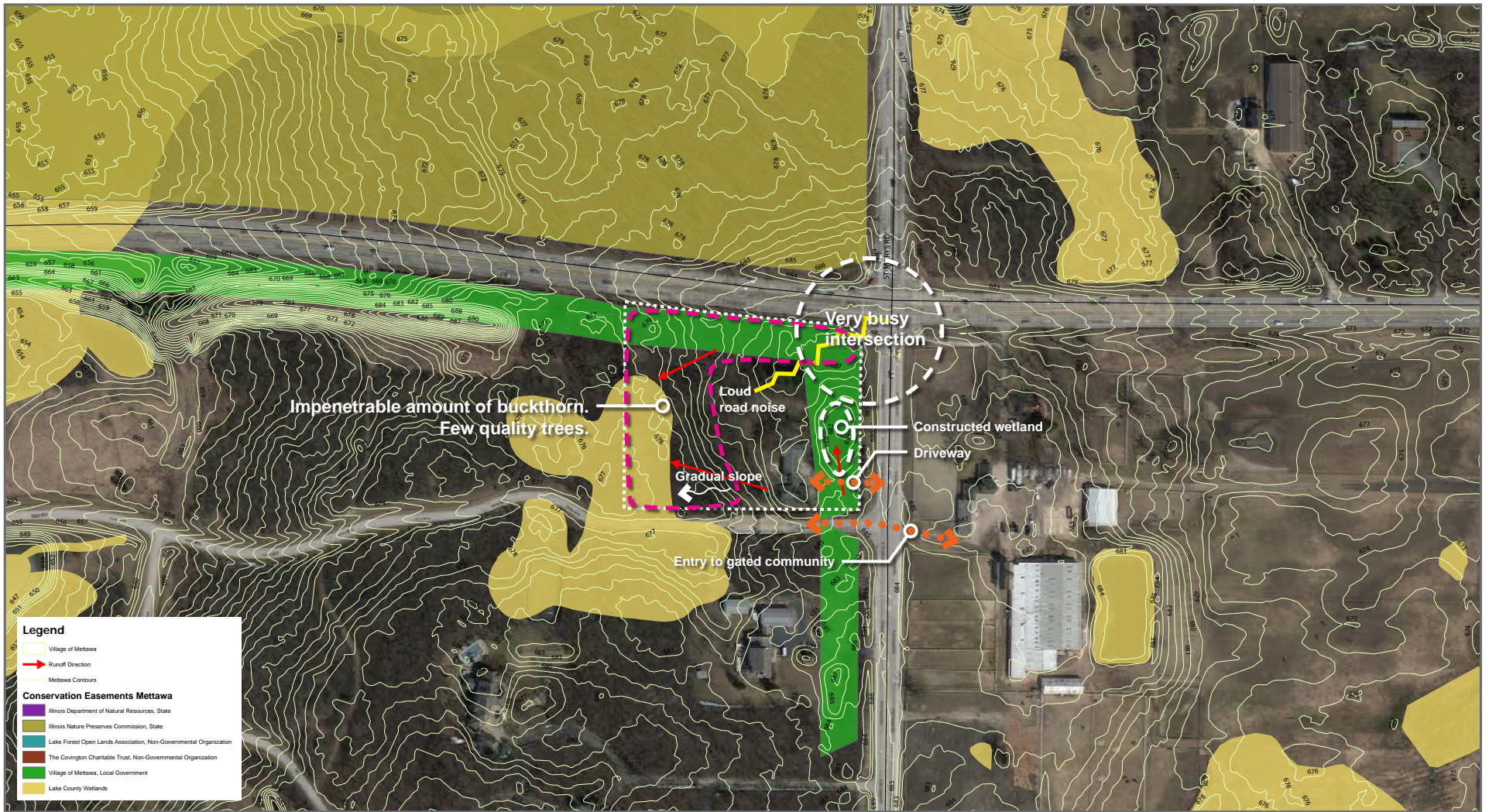
Key observations for the property include:

- a lot of road noise on site
- constructed wetland across east edge of site
- an overwhelming amount of buckthorn - may be indicative of past disturbance
- west edge of site feels "damp", leads toward river and floodplain?



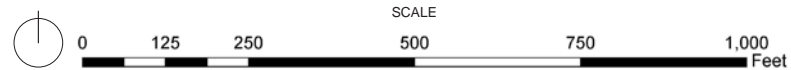
*Image from Google Street View, 2012*





## Parcel 12: 25960 St. Mary's Road

Village of Mettawa: Open Lands Management Recommendations



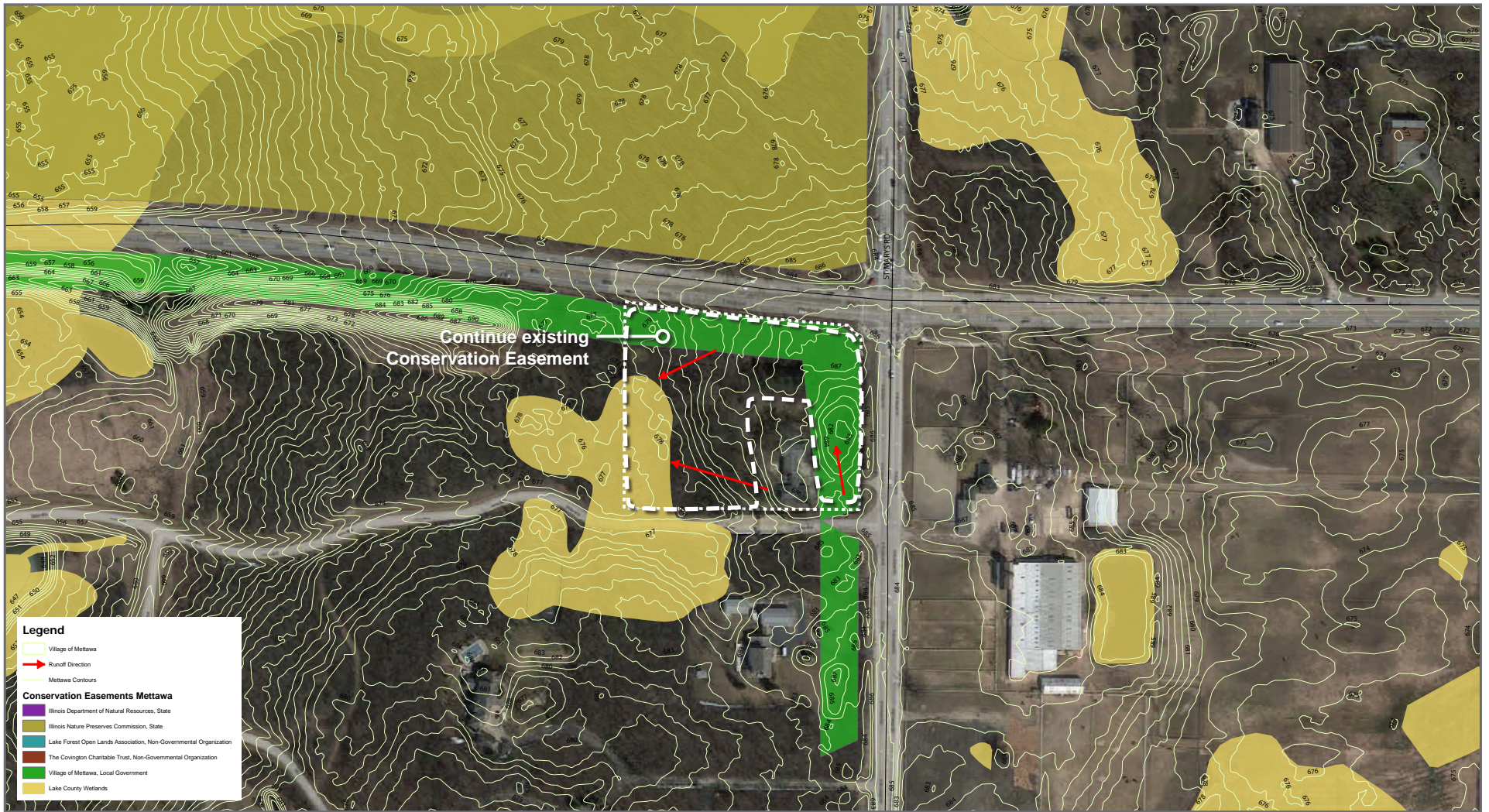
# open land parcels

## Parcel 12: 25960 St. Mary's Road — Recommendations

This property is under consideration for a Mettawa Village Hall building. We recommend that no action is taken until a decision is made regarding the Village Hall location. Once plans are in place for a Village Hall, there are restoration opportunities on the north and west side of the property.

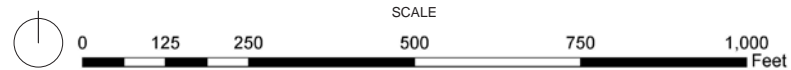
Other recommendations for the site include:

- remove buckthorn
- plant and stabilize western/northern half of property
- protect / enhance existing wetland
- establish long-term stewardship plan



## Parcel 12: 25960 St. Mary's Road

Village of Mettawa: Open Lands Management Recommendations



# open land parcels

## Parcel 13: 16 Alexandra Drive — Observations

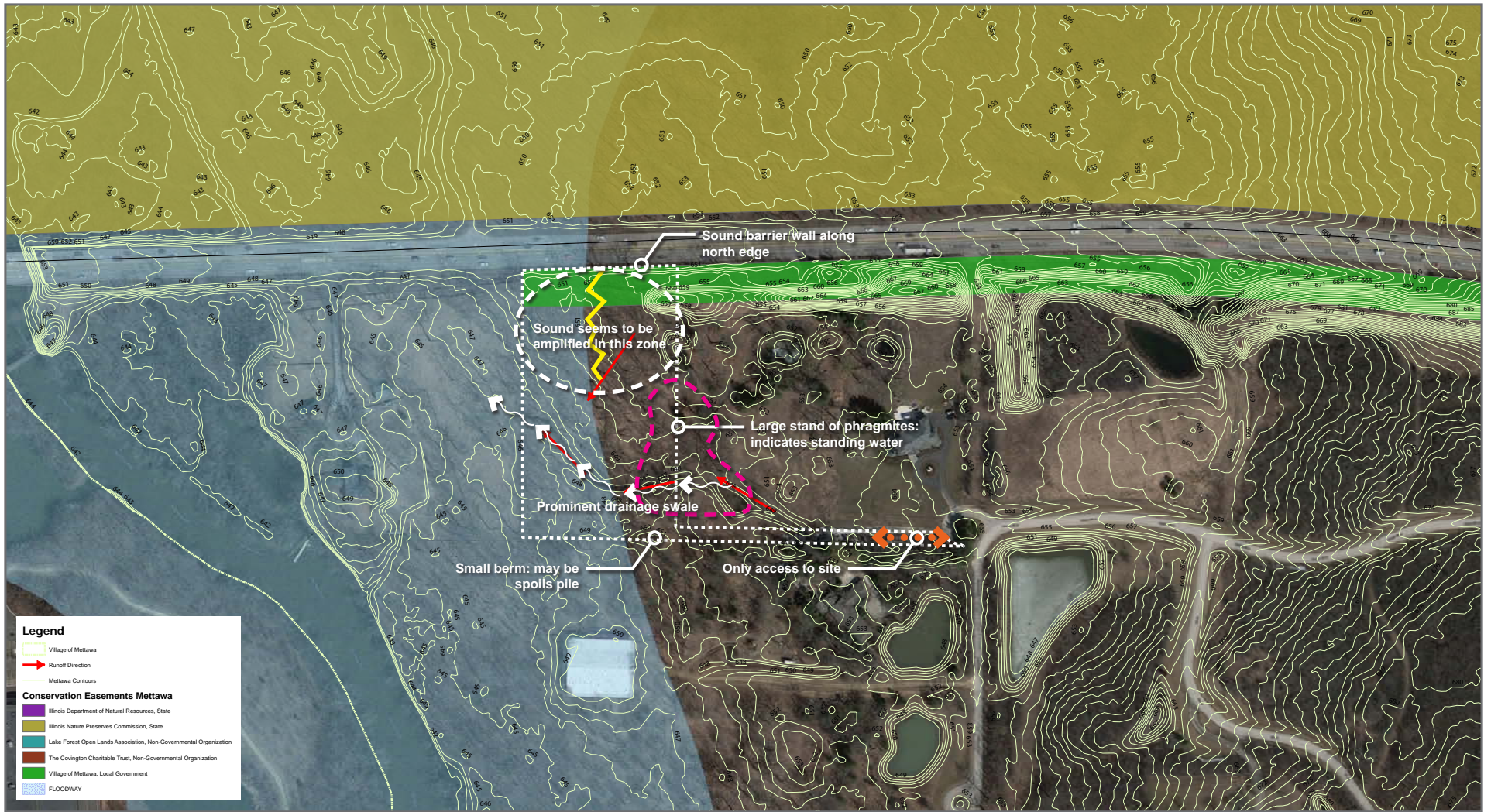
This Parcel is bounded by IL Route 60 (Buckley Road) to the north, and residential properties to the east, west, and south. The parcel is 3.91 acres in size and considered Village Residential Lot. This Parcel once had a single-family residence on it and is mostly in the floodplain of the Des Plaines River. Currently, access to the site is via a narrow R.O.W. from the cul de sac.

Key observations for the property include:

- site is very isolated: access is poor, at best
- sound barrier wall seems to amplify sound around it into site
- few large quality trees, indicative of past disturbance
- significant drainage swale bisects property
- existing well head visible in site

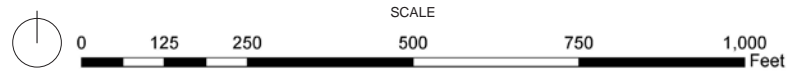


*Image from Google Street View, 2012*



### Parcel 13: 16 Alexandra Drive

#### Village of Mettawa: Open Lands Management Recommendations



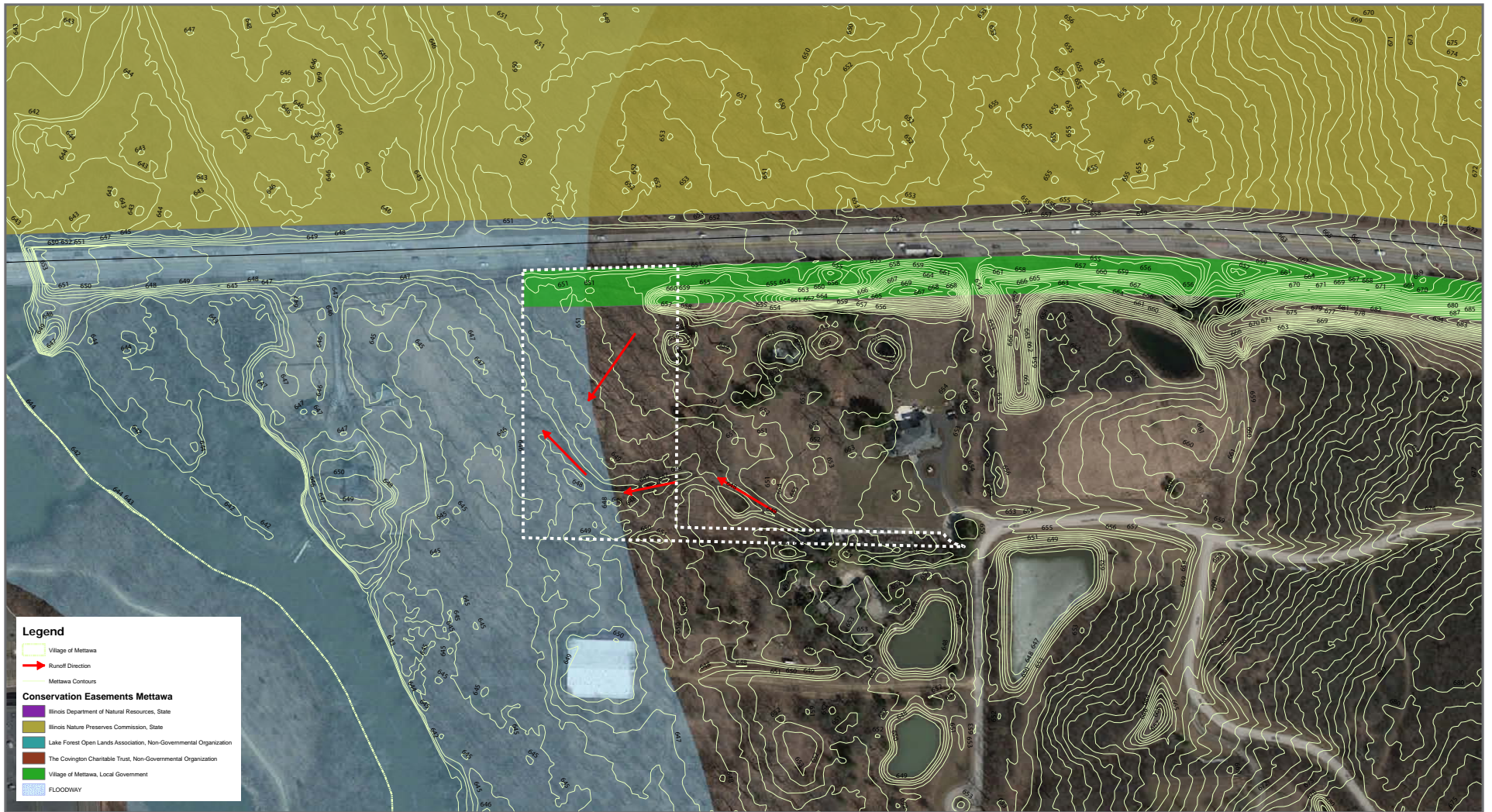
# open land parcels

## Parcel 13: 16 Alexandra Drive — Recommendations

The primary recommendation for this property is to stabilize the soil and be sure that further impacts from flooding are not compromising the site.

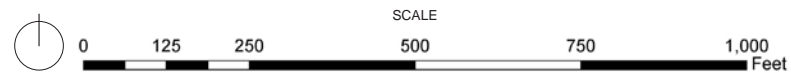
Other recommendations for the site include:

- remove invasive species
- control erosion along overflow swale



### Parcel 13: 16 Alexandra Drive

Village of Mettawa: Open Lands Management Recommendations



# open land parcels

## Right-of-Way — Observations & Recommendations

### **Observations:**

The Village-owned Rights-of-Ways fall along Bradley Road and Old School Road, encompassing both sides of the road. At this time, it is unknown to many what the limits are, making encroachment an unavoidable mistake. Key observations for the property include:

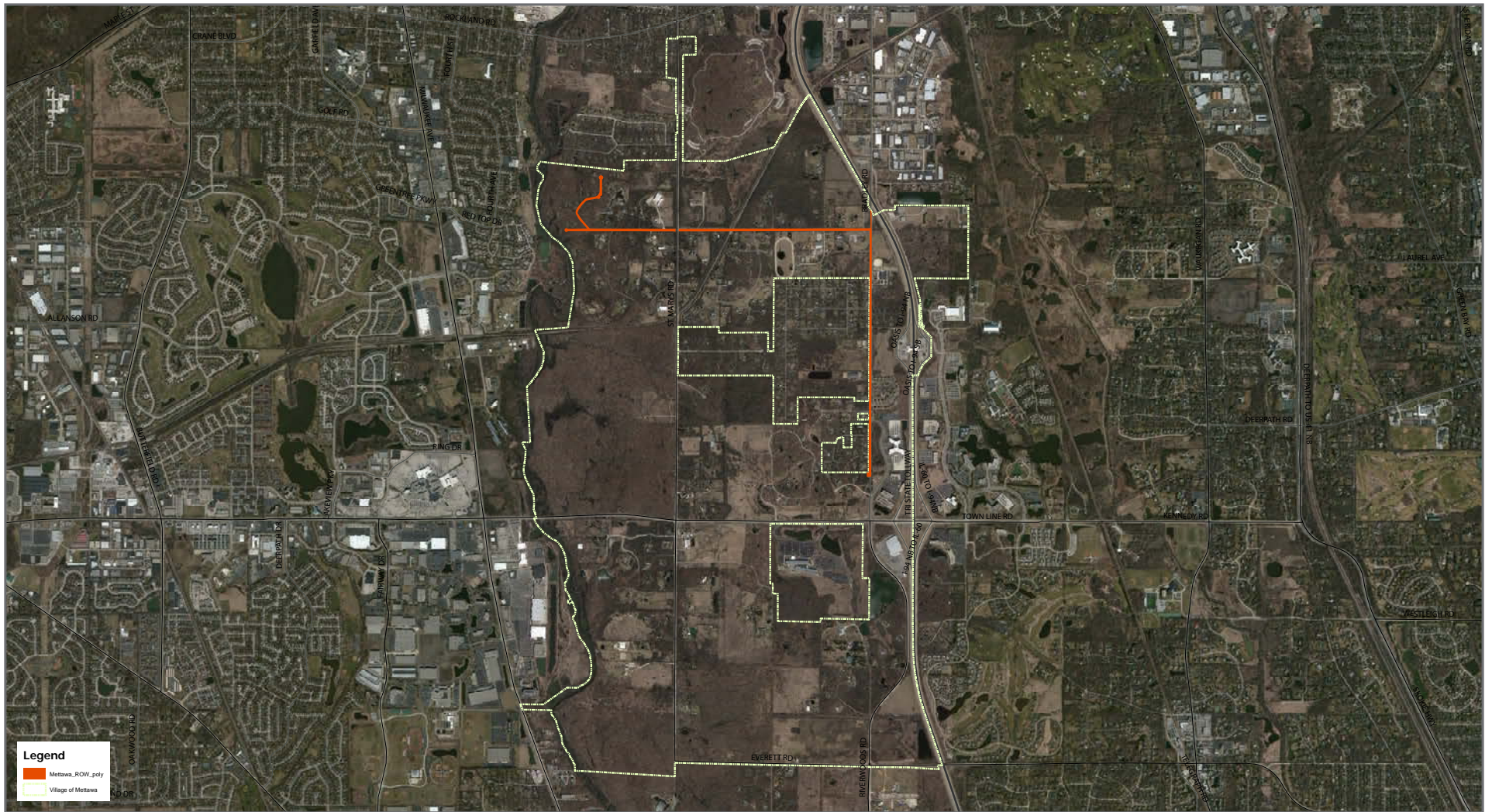
- there is no sense of where right-of-way occurs - what is the width?
- there seem to be intrusions from private property into the right-of-way, including fences and landscape
- there is an abundance of dead green ash and buckthorn trees in right-of-ways
- there are a few locations where the bike trail intersects / runs in the right-of-way
- there are erosion issues in some drainage ditches

### **Recommendations:**

The primary recommendation for the Rights-of-Ways is to establish their boundaries so that confusion regarding maintenance does not occur, especially when it comes to tree trimming. Other recommendations for the site include:

- clearly define right-of-way width along roads
- discuss right-of-way with adjacent land owners, identify intrusions
- systematically remove hazardous trees and invasives
- educate land owners about native plants that can provide desired screen for privacy
- establish long-term tree pruning protocols
- identify sources of water and cause of erosion: stabilize erosion issues





## Right-of-Way

Village of Mettawa: Open Lands Management Recommendations



# open land parcels

## Recreation Trails — Observations & Recommendations

### **Observations:**

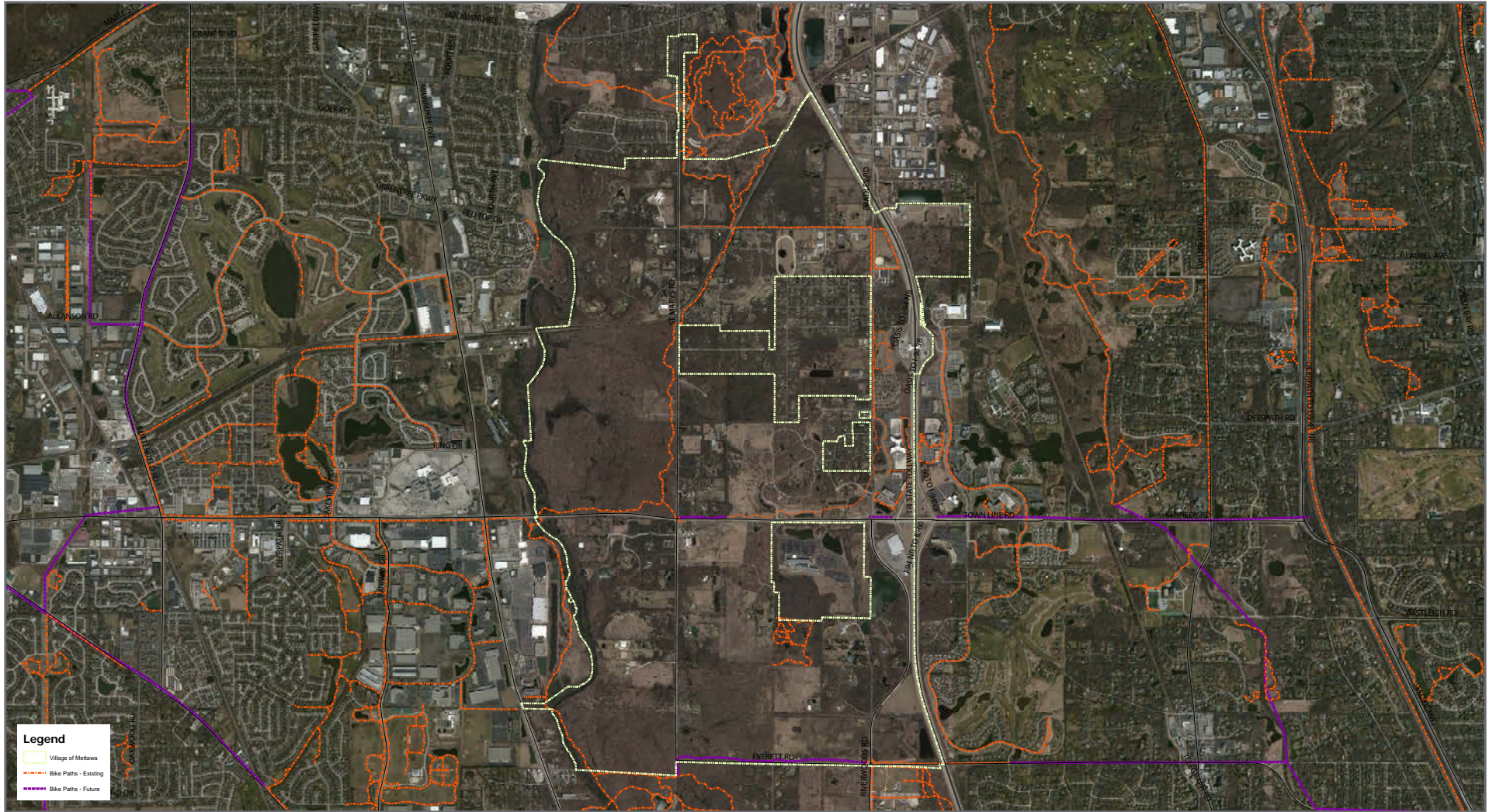
The Village-owned recreation trails create a nice network through and within Mettawa, allowing residents to connect with Lake County open space and the Des Plaines River Trail. Key observations for the property include:

- the existing trails create a nice, usable trail system that connects open space in Mettawa
- most of the bike trails are separated from the roads, making them safe for users
- many of the trails are limestone
- a large portion of the trails are north of Route 60

### **Recommendations:**

The primary recommendation for the recreation trails is to finish a few key links, which have already been identified by the Village. Other recommendations for the site include:

- complete connections between existing trails
- create a maintenance program to visit all trails twice a year and review hazardous / encroaching vegetation, erosion issues, unsafe surface conditions



## Recreation Trails

Village of Mettawa: Open Lands Management Recommendations



# protecting village open lands

It is important to protect Village open space properties. This can be accomplished through a variety of options, including, but not limited to, Open Space Zoning, Illinois Nature Preserve dedication, Conservation Easements and Third Party Conservation Easements with the intent to prohibit development.

## **Open Space Zoning**

Open Space Zoning is an alternative to conventional zoning that is used to both preserve open space, and allow for development. The key characteristic of open space zoning is that it requires new construction to be located on only a portion—typically half—of the land parcel. The remaining open space is then protected by a Conservation Easement co-signed by a local conservation commission or land trust,

and recorded in the registry of deeds. Open Space Zoning is also known as “cluster development.”

## **Illinois Nature Preserves**

The Illinois Nature Preserves Commission (INPC) assists private and public land owners in protecting high quality natural areas and habitats of endangered and threatened species in perpetuity, through voluntary dedication or registration of such lands into the Illinois Nature Preserves System. The Commission promotes the preservation of these significant lands and provides leadership in their stewardship, management and protection.

Private land owners who have a rare, natural area can decide to voluntarily dedicate their property as a nature preserve.

The land owner retains the land title, and benefits from the dedication in many ways, including:

- property tax reduction
- stewardship assistance for the site
- preservation of the land for future generations

Public lands designated as a Nature Preserves offer unique opportunities for recreation, research, and education for members of the community.

Preserves that are open to the public can be used for hiking and observing nature: many preserves are home to rare birds, flowers, trees, and animals.

Researchers also benefit from access to preserves: each year, the INPC issues research permits for biologists, scientists, and students to study and monitor rare species of plants and animals.

Nature preserves can also function as living classrooms, and give students access to the last remnants of our state's natural heritage.

### **Conservation Easements**

A Conservation Easement (also known as a conservation restriction) is a voluntary, legally binding agreement that limits certain types of uses or prevents development from taking place on a piece of property now and in the future, while protecting the property's ecological or open-space

values. The legal agreement is between a landowner and a third party land trust or government agency. Once in place, it still allows landowners to use their land. They can also sell it or pass it on to heirs.

When you donate a Conservation Easement to a land trust, you give up some of the rights associated with the land. For example, you might give up the right to build additional structures, while retaining the right to grow crops. Future owners will also be bound by the easement's terms. The land trust that holds the easement is responsible for making sure the easement's terms are followed. This is managed through "stewardship" by the land trust.

Conservation Easements offer great flexibility. An easement

on property containing rare wildlife habitat might prohibit any development, while an easement on a farm might allow continued farming and the addition of agricultural structures. An easement may apply to all or a portion of the property, and need not require public access.

Currently, a number of parcels have Conservation Easements which are held by the Village of Mettawa: these will need to be researched and transferred to a third party. For those parcels receiving new Conservation Easements, working with an organization which has extensive experience with Conservation Easements would be recommended.

The following stated priorities suggest a timeline for next steps, but not necessarily in a prescribed order:

# next steps

## Priority One

As a top priority, WRD Environmental, Inc. recommends protecting the entirety of parcels 1, 3, 4, 8, 10, and 11 via permanent Conservation Easement, or another method that prohibits development. Permanent Conservation Easements are recommended for specific parts of the following parcels:

- parcel 5—validate existing Conservation Easement
- parcel 6—validate existing Conservation Easement for trail only
- parcel 7—place Korhumel site into Whippoorwil Preserve Conservation Easement
- parcel 12—leave existing easements in place

Permanent Conservation Easements are not recommended for the following parcels:

- parcel 2—a right-of-way
- parcel 9—a right-of-way being maintained by Costco
- parcel 12—a residential lot slated for new Village Hall
- parcel 13—a residential lot

## Priority Two

A final landscape plan should be developed for the Oasis Property. After a plan is approved, the project should be put out to bid, and then installed during the spring or fall, when new plantings are most likely to succeed.

## Priority Three

Establish long-term stewardship plans for parcels 3, 4, 5, 7, 10, and 11. These stewardship plans could include:

- removal of invasive plant species
- mowing native plant areas
- controlled burns

## Priority Four

Start a dialogue with Grainger regarding parcels 10 and 11, with a goal of placing one permanent Conservation Easement on all property east of Riverwoods Blvd.

# native plant community expectations

## Prairie

While traditional landscape plantings generally provide some degree of visual impact immediately upon installation, native landscapes can and will take a few years to establish themselves, especially when planted by seed. The early stages of native plant growth focus' most of the energy on root production in order to survive. As a result, most native prairie wildflower and grass species, when planted by seed, often take 2-3 growing seasons before they begin to substantially appear and flower above ground. In an effort to provide weed control and erosion control cover during the first 1-3 years of establishment, a temporary mix of annual and short-term grasses can be included. In time, these species give way to permanent perennial plants.

The following provides a brief written summary of what should

be expected during the early phases of native landscape development. Understand that with proper management and stewardship, the native landscape will become more colorful and contain an increased diversity of plant species with each new season.

### **Season One**

If you are converting turf to prairie, the first step is to eliminate, 100%, the growing turf. This can be most effectively accomplished by spraying the turf areas with an herbicide. It is critical that 100% of the existing turf is eradicated so that early stewardship is not spent controlling turf regrowth. It is also important to note that this technique does not till or disturb the soil, it is important to not expose soil to new weed seeds. If the restoration is on newly placed soil, it is critical



## Prairie

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to know where the soil came from so that weed seeds are not transported and placed across area to be seeded with native prairie.

The prairie seed mix, which is composed of both native prairie grasses and forbs (flowers), is then installed with a no-till drill that has been calibrated for multiple sizes and planting depths of native seeds. As described above, these species often take several years to become fully established. Early color can be provided by the temporary cover grasses that were planted for erosion and weed control including Annual Oats in combination with a small suite of quick establishing non-native wildflowers like Brown-eyed Susans. Under normal weather conditions, the temporary grasses will begin to appear within two weeks of planting.

Some weedy growth is anticipated during the first growing season. The visual effect of weeds, however, can be controlled by periodic mowing or by selective hand weeding. The intent is to control the negative visual effect of weeds, as well as to encourage sunlight penetration to the ground, which in turn will promote the germination and development of the native species. Depending on the time of planting, the quick establishing flowers such as Brown-eyed Susan's will begin to emerge throughout the summer and fall of the first growing season.

### **Season Two**

During the second growing season, the native grasses will continue to develop extensive root systems and begin to emerge during mid to late summer. The dominant visual



# native plant community expectations

display during the second season should begin in earnest during the month of June, and extend into the fall. The most significant blooming should occur from mid-June through August. The Brown-eyed Susans will likely create the showiest display, although fast-growing native wildflowers like Purple Coneflower, Wild Bergamot, Partridge Pea, Purple Prairie Clover, and Yellow Coneflower will begin to appear during the second growing season. The fall will be punctuated with the rich autumn hues of the native grasses, including Big and Little Blue Stem, Indian Grass, and Switch Grass.

Weed growth in the second season will be handled by a combination of mowing early in the growing season, and selective weed cutting and/or herbicide application after the many wildflowers begin to bloom. It is important to not pull

weeds as it will dislodge natives and open the soil to weed invasions. The initial controlled burn can be implemented in the fall of the second growing season, or in late winter to early spring before the third growing season, depending on the amount of biomass accumulated.

## **Season Three**

During the third growing season, the temporary cover grasses will begin to give way to the native prairie. Some native flowers that often appear during the third growing season include Yellow Coneflower, Purple Coneflower, Purple Prairie Clover, Rattlesnake Master, Wild Bergamot, White Wild Indigo, and goldenrods. The native grasses should also become more established in mid to late summer. Additional prairie wildflowers will continue to appear throughout the growing



season. Weed growth should be reduced, and handled primarily by weed cutting or select herbicide treatment.

### Seasons Four and Five

During the 4th and 5th growing seasons, more native wildflowers will become visible. Controlled burn management will be conducted annually. The establishment of the native landscapes will be evaluated on an ongoing basis and may be amended as necessary.

As the native landscape systems become more fully established with each growing season, the prairie grasses and wildflowers will provide year-round color. Wildflowers will bloom from April through October. Grasses will provide pleasing colors and textures throughout the seasons, and

are particularly notable for their form and color in the winter landscape.

Long term maintenance will consist primarily of annual controlled burn management. Once these native plant communities are established, minimal spot weed control may be required, but little supplemental maintenance is anticipated.



*Prairie flowers (Photo courtesy Conserve Lake County)*

# native plant community expectations

## Savanna / Woodland

A savanna is a grassland ecosystem characterized by the trees being sufficiently widely spaced so that the canopy does not close. The open canopy allows sufficient light to reach the ground to support an unbroken herbaceous layer consisting primarily of grasses. Typical canopy trees in a savanna include white oak, bur oak, and shagbark hickory. A savanna is often a transitional landscape between prairie and woodland. A woodland is often characterized by more trees and lower levels of light reaching the ground floor. Higher densities of trees, with a largely closed canopy, provide extensive and nearly continuous shade.

This ecotype may fall more on north-facing slopes or where water is more prevalent, and includes maples, ash, lindens, and elms.

The first step toward a savanna or woodland restoration is recognizing which trees are worth saving and which ones are not. Too many of our savannas are overrun with trees and shrubs, keeping sunlight from reaching the ground floor and thus reducing or even eliminating germination of native species altogether. In many cases, most of the trees in a savanna are invasive species such as buckthorn and honeysuckle, or natives that are too plentiful such as boxelder, mulberry, and green ash. The native trees worth saving will likely be White Oak, Bur oak, or Sugar Maple.

Historically, our savannas had—on average—four trees per acre. Today, we are seeing upwards of 100 trees per acre, most of which are non-native species such as buckthorn. We are also seeing even-aged trees in woodlands; there



Savanna

are no young, immature trees at the ground level to replace maturing trees.

To accomplish a successful savanna restoration, it starts by removing unwanted non-native species. The best time to do this is during the winter season when leaves are off the trees, making them easier to take down and move. Depending on the number of trees to be removed, it is most effective to burn them on site versus chipping and spreading on the forest floor, which can defeat the purpose by covering up desirable native ground flora.

Once the trees have been cut at the ground, an application of herbicide will kill most of the resprouts. This should be completed within an hour or two of cutting the tree. Additional

applications may be made to resprouts during the growing season.

The savanna seed mix, which is composed of native grasses, sedges, and forbs (flowers), is then installed by broadcast seeding the area. As described above, these species often take several years to become fully established. Early cover can be provided with temporary cover grasses that prevent soil erosion and weed control. Under normal weather conditions, the temporary grasses will begin to appear within two weeks of planting.

Some weedy growth is anticipated during the first growing season. The visual effect of weeds, however, can be controlled by selectively applying herbicide. The intent is

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## Woodland

# native plant community expectations

to control the negative visual effect of weeds, as well as to encourage sunlight penetration to the ground, which in turn will promote the germination and development of the native species.

If the areas to be restored are small and close to buildings, it may be worth investing in trays or flats of native plugs to jump start the process. A flat consists of 32 or 38 plants grown in 2 ½ inch diameter by 4 ½ - 5 ½ inch deep containers. They represent 2-3 year-old plants that will generally develop into full size, blooming flowers and grasses within one growing season. These plants can also be arranged to create large flowing zones of color and texture that bloom throughout the season. These zones also form effective transitions between manicured turf fringes along roads and walkways and the native prairie and savanna areas.

Subsequent seasons for maintenance will closely follow that outlined above for the Prairie Landscape. Fire is a key element to this ecosystem and should be used as a long-term stewardship tool.



*Healthy savanna (Photo courtesy Conserve Lake County)*

## Woodland

# native plant palettes

## Prairie

- *Andropogon gerardii* – Big Bluestem
- *Andropogon scoparius* – Little Bluestem
- *Aster laevis* – Smooth Blue Aster
- *Aster novae-angliae* – New England Aster
- *Astragalus canadensis* – Canada Milk Vetch
- *Bouteloua curtipendula* – Side-oats Grama
- *Desmodium canadense* – Showy Tick Trefoil
- *Echinacea pallida* – Pale Purple Coneflower
- *Elymus canadensis* – Canada Wild Rye
- *Helianthus mollis* – Downy Sunflower
- *Heliopsis helianthoides* – False Sunflower
- *Lespedeza capitata* – Round-headed Bush Clover
- *Monarda fistulosa* – Wild Bergamot
- *Panicum virgatum* – Switch grass
- *Petalostemum purpureum* – Purple prairie clover
- *Ratibida pinnata* – Gray-headed Coneflower
- *Rudbeckia hirta* – Black-eyed Susan
- *Rudbeckia triloba* – Brown-eyed Susan
- *Solidago nemoralis* – Goldenrod
- *Sorghastrum nutans* – Indian Grass
- *Zizia aurea* – Golden Alexanders

## Savanna

- *Anemone virginiana* – Tall Anemone
- *Aquilegia canadensis* – Wild Columbine
- *Avena sativa* – Seed Oats
- *Campanula americanum* – Tall Bellflower
- *Carex muhlenbergii* – Sand Bracted Sedge

- *Carex rosea* – Curly-styled Wood Sedge
- *Elymus virginicus* – Virginia Wild Rye
- *Eupatorium purpureum* – Purple Joe Pye Weed
- *Helianthus strumosus* – Pale-leaved Sunflower
- *Lupinus perennis occidentalis* – Wild Lupine
- *Penstemon digitalis* – Foxglove Beard Tongue
- *Smilacina racemosa* – Feathery False Solomon's Seal

## Woodland

- *Actea rubra* – Red Baneberry
- *Adiantum pedatum* – Northern Maidenhair Fern
- *Ageratina altissima* – White Snakeroot
- *Arisaema triphyllum* – Jack-in-the-pulpit
- *Asarum canadense* – Wild Ginger
- *Bromus pubescens* – Woodland Brome
- *Carex davisii* – Awned Graceful Sedge
- *Carex jamesii* – Grass Sedge
- *Carex pensylvanica* – Common Oak Sedge
- *Dryopteris marginalis* – Leather Wood Fern
- *Eurybia macrophylla* – Big-leafed Aster
- *Geranium maculatum* – Wild Geranium
- *Hysterix patula* – Bottlebrush Grass
- *Phlox divaricata* – Woodland Phlox
- *Polemonium reptans* – Jacob's Ladder
- *Polygonatum biflorum* – Smooth Solomon's Seal
- *Solidago flexicaulis* – Broad-leafed Goldenrod
- *Thalictrum dioicum* – Early Meadow Rue
- *Trillium grandiflorum* – Large-flowered Trillium

# stewardship principles

## Controlled Burning

Controlled or prescribed burning is a technique used in savanna management and prairie restoration. Fire is a natural part of both savanna and grassland ecology and controlled fire can be a tool for stewardship groups to reduce biomass, control unwanted species, rejuvenate new growth, and put carbon back into the natural ecological cycle. Burning is conducted when the vegetation is dormant and generally within the time frame of late October through early April, and only under safe weather conditions.

In most cases, controlled burning is overseen by fire control authorities or firms that have experience with this type of land management. They will also have experience in local regulations for obtaining a burn permit. To conduct a burn, the party responsible will review site conditions, delineate the area, record weather conditions such as wind speed and direction, relative humidity, air temperature, and time of burn

to be conducted. Obtaining a permit is often in association with local authorities and the ILEPA.

It is important to emphasize the necessity of good planning. Prescribed burning is an accepted and highly practical method of establishing, restoring and maintaining native landscapes, but its use must be carefully planned. The exclusion of persons with known health problems may eliminate a medical emergency during a part of the burn when all individuals are needed to help contain the fire.



*Controlled Burn (Photo courtesy of Greencorps Chicago)*



## Native Area Maintenance

Native wildflowers and grasses grow slowly when compared to non-desirable species, which grow much faster in the first two years. Maintenance during the first few years is critical. Keeping weeds cut back in the first year also prevents production of more weed seeds that could cause problems in following years.

Mowing is the best short-term control to ensure successful plant establishment. As a general rule do not pull weeds during the first year of native area growth, as native plants will be disturbed and uprooted with the weed removal. The long-term goal for the native areas is to maintain a majority of native grasses intermixed with native flowers.

The following species need to be controlled, and will require either herbicide spot applications or digging up the entire plant, including the root system:

1. Perennials: Ragweed, Canada Thistle, Horsenettle, Spotted Knapweed, Crown Vetch, Curly Dock, Sweet Clover

2. Trees: Elm species, Cottonwoods, Tree of Heaven

### First Year

To control invasive plant species use a flail-type mower or string trimmer during the first year. Mowing on a regular basis in the first year of establishment is critical to the success of the prairie planting.

- Mow 3-6 times during the first year (frequency will be dependent on plant growth).
- Maintain plant heights between 6-12 inches above the ground.
- Remove clippings to prevent smothering of young prairie seedlings as they grow.
- The last mow should be in early September. The remaining growth will serve as winter protection for seedlings.

# stewardship principles

## **Second Year**

For prairie success to continue, mow at a height of 1 inch in late spring and remove vegetation to prevent smothering. Mowing frequency (2-4 times) will be dependent on invasive plant species activity and available moisture.

- Mow in early summer at a height of 10-12 inches to remove flower heads from invasive plant material that may be growing.
- Do not mow below 10 inches ever in the second year. Do not mow after early September.

## **Third Year and Long-Term Care**

For effective control of invasive plant species in native areas, a controlled burn should ideally be completed in mid-

spring every other year: the successfully established native grasses serve as fuel for the burn.

- The contractor for the prescribed burn shall have experienced, trained and certified professionals including certified burn boss and associated certifications.
- All state and local permits shall be applied for in October of the year prior to burning. In addition to permit, notification to municipal fire and safety departments and adjacent property owners should be performed.
- All submittals required for safety and permit award shall be prepared and provided by the hired professional as required by state and local authorities.

- The contractor should prepare fire breaks and have all necessary equipment for work and safety.

If the site is unable to be burned, a more labor intensive alternative is to mow the area in the spring.

- Mow vegetation to the soil surface and rake off the cut material and compost accordingly.
- Mowing may be needed but will be dependent on invasive plant species activity and available moisture.

Burning or mowing native areas will help ensure continued success. Burning removes plant litter from the previous year, and exposes the soil surface to the sun.

**A note for all years:** In addition to mowing, a spot herbicide application control of invasive plant species may be required; see list on previous page for some problematic plants. *(Observe MSDS labels for appropriate application rates and proximity to water sources; Client acceptance and notification process will supersede use).*



*(Photo courtesy Village of Mettawa website)*

## Additional Resources

**The Mettawa Open Lands Association (MOLA)** is a volunteer group that promotes quality open space in the Mettawa area to maintain its rural use, and encourages protection of public and private open lands. As a contributor to and reviewer of this document, MOLA supports the Open Lands Management Recommendations. MOLA is dedicated to helping the Village and its residents realize a vision of sustainable, native landscapes in Mettawa through active stewardship, education and outreach, and land management centered on invasive species removal. As a group, they look forward to working with the Parks and Recreation Committee to contribute to the restoration of not only the parcels identified in this document, but also additional land with importance to the Village of Mettawa.

**MOLA (Mettawa Open Lands Association)**  
13948 W. Trail Drive, Mettawa, IL 60045  
<http://mettawapenlands.org/>  
[info@mettawapenlands.org](mailto:info@mettawapenlands.org)

**Conserve Lake County** helps people preserve Lake County's precious landscapes, and is committed to making it possible for as many people as possible to be engaged in land conservation. The organization is active in land preservation and stewardship, outreach and education, local food systems, and planning and advocacy. One of Conserve Lake County's main programs, Conservation@Home, was launched in 2011 and helps residents take care of nature in private lawns and gardens by applying ecologically sound landscaping practices. Visit the Conserve Lake County website for more information on this important residential effort.

**Conserve Lake County**  
32492 N. Almond Rd., Grayslake, IL 60030  
847.548.5989  
<http://conserve.lakecounty.org/>

**Village of Mettawa**

<http://www.mettawa.org/>

**Village of Mettawa Parks & Recreation Committee**

Tim Towne, Chair | [tjttgd@aol.com](mailto:tjttgd@aol.com) | 847.573.1460

Bill Armstrong | [barmstrong@mettawa.org](mailto:barmstrong@mettawa.org) | 847.573.1460

Pam Sheldon | [psheldon@mettawa.org](mailto:psheldon@mettawa.org) | 847.573.1460

**Audubon Chicago Region**

17 N State St Suite 1650, Chicago, IL 60602

312.453.0230

<http://chicagoregion.audubon.org/>

**Chicago Botanic Garden**

1000 Lake Cook Road, Glencoe, IL 60022

847.835.5440

<http://www.chicagobotanic.org/>

**Chicago Wilderness**

8 South Michigan Avenue, Suite 900, Chicago, IL 60603

<http://www.chicagowilderness.org/>

**Illinois DNR**

<http://www.dnr.illinois.gov/>

**Illinois Nature Preserves Commission**

One Natural Resources Way, Springfield, IL 62702

217.785.8686

<http://dnr.state.il.us/inpc/>

**Lake County Audubon Society**

P.O. Box 332, Libertyville, IL 60048

847.362.5134

<http://www.lakecountyaudubon.org/>

[audbirds@aol.com](mailto:audbirds@aol.com)

**Lake County Forest Preserve District**

1899 West Winchester Road, Libertyville IL 60002

847.367.6640

<http://www.lcfpd.org/>

**Lake Forest Open Lands Association**

350 N. Waukegan Road, Lake Forest, IL 60045

847.234.3880

<http://www.lfola.org/>

[info@lfola.org](mailto:info@lfola.org)

**Midwest Invasive Plant Network**

Purdue University: c/o The Nature Conservancy of Indiana

620 East Ohio Street, Indianapolis, IN 46202

<http://www.mipn.org/>

[mipninfo@gmail.com](mailto:mipninfo@gmail.com)

**Morton Arboretum**

4100 Illinois Route 53, Lisle, IL 60532

630.968.0074

<http://www.mortonarb.org/>

[trees@mortonarb.org](mailto:trees@mortonarb.org)

**Openlands**

25 East Washington Street, Suite 1650, Chicago, IL 60602

312.863.6250

<http://www.openlands.org/>



# appendix

## Parcel Cost Estimates

The following cost estimates are based on the recommendations for each parcel, and are strictly a starting point for understanding the costs associated with maintenance. \*The stated cost ranges are based on professional labor rates. If completed by volunteers, the costs will be significantly lower.

### Parcel 1: 27570 Oak Hill \*

Item/Service	Cost Range
Clear invasive species: 2.91 acres	\$7,500 - \$12,000
Overseed with savanna mix: 2.91 acres	\$1,500 - \$3,000
Yearly stewardship	\$3,000 - \$5,000
Education node w/ signage	\$1,000 - \$3,000
Permanent Conservation Easement	
- easement establishment	\$5,000 - \$10,000
- legal documentation	\$2,000 - \$3,000
- Alta survey	\$1,200 - \$1,500
- title report	\$500 - \$1,000

### Parcel 2: East Side Oasis Service Strip \*

Item/Service	Cost Range
Clear invasive species: 1.23 acres	\$3,000 - \$5,000
Overseed with savanna mix: 1.23 acres	\$600 - \$12,000
Yearly stewardship	\$1,000 - \$2,000

### Parcel 3: Oasis Park \*

Item/Service	Cost Range
Overseed with prairie mix: +/- 15-18 acres	\$8,000 - \$12,000
New oaks: 50 total	\$7,000 - \$12,000
Boardwalk: 2,000 L.F.	\$180,000 - \$250,000
Walking trail: 5,000 L.F.	\$40,000 - \$60,000
Stone overlooks	\$5,000 - \$8,000
Yearly stewardship	\$12,000 - \$18,000
Permanent Conservation Easement	
- easement establishment	\$30,000 - \$50,000
- legal documentation	\$3,000 - \$5,000
- Alta survey	\$3,000 - 5,000
- title report	\$500 - \$1,000

**Parcel 4: Riverwoods Blvd. \***

Item/Service	Cost Range
Clear invasive species: +/- 0.5 acres	\$1,000 - \$1,500
Overseed with savanna mix: +/- 0.5 acres	\$500 - \$750
Yearly stewardship	\$500 - \$1,000
Permanent Conservation Easement	
- easement establishment	\$5,000 - \$10,000
- legal documentation	\$2,000 - \$3,000
- Alta survey	\$1,200 - \$1,500
- title report	\$500 - \$1,000

**Parcel 5: Riverwoods Blvd. \***

Item/Service	Cost Range
Clear invasive species: 9.04 acres	\$15,000 - \$20,000
Overseed with savanna mix: 9.04 acres	\$4,000 - \$7,500
Remove fence	\$2,500 - \$4,000
Interpretive signage, 3 signs	\$2,000 - \$3,000
Yearly stewardship	\$7,500 - \$10,000
Research Existing Conservation Easement	TBD

**Parcel 6: 26230 Riverwoods Blvd. \***

Item/Service	Cost Range
Yearly stewardship	\$1,200 - \$3,000
Partial Permanent Conservation Easement	
- easement establishment	
- legal documentation	
- Alta survey	
- title report	

**Parcel 7: Whippoorwill Preserve/Farm \***

Item/Service	Cost Range
Clear invasive species: +/- 4 acres	\$5,000 - \$8,000
Remove asphalt surfaces	\$2,500 - \$3,500
Overseed with prairie mix: +/- 3 acres	\$1,500 - \$2,500
Overseed with savanna mix: +/- 2 acres	\$2,000 - \$3,000
Enhancement: prairie plugs	\$2,000 - \$3,000
Remove/salvage cultural artifacts	\$5,000 - \$8,000
Interpretive signage, 3 signs	\$2,000 - \$3,000
Yearly stewardship	\$7,500 - \$10,000
Permanent Conservation Easement	
- easement establishment	\$10,000 - \$20,000
- legal documentation	\$2,000 - \$3,000
- Alta survey	\$2,000 - \$3,000
- title report	\$500 - \$1,000

# appendix

## Parcel Cost Estimates

### Parcel 8: SE Corner of Rt. 60 & Riverwoods Rd. \*

Item/Service	Cost Range
Clear invasive species: +/- 1.75 acres	\$7,500 - \$10,000
Overseed with savanna mix: +/- 1.75 acres	\$1,500 - \$3,000
Yearly stewardship	\$3,000 - \$5,000
Permanent Conservation Easement	
- easement establishment	\$10,000 - \$20,000
- legal documentation	\$2,000 - \$3,000
- Alta survey	\$2,000 - \$3,000
- title report	\$500 - \$1,000

### Parcel 11: Everett Pond South \*

Item/Service	Cost Range
Clear invasive species: +/- 2 acres	\$2,500 - \$3,500
Overseed with savanna mix: +/- 2 acres	\$1,000 - \$1,500
Yearly stewardship	\$2,000 - \$3,000
Permanent Conservation Easement	
- easement establishment	\$10,000 - \$20,000
- legal documentation	\$2,000 - \$3,000
- Alta survey	\$1,200 - \$1,500
- title report	\$500 - \$1,000

### Parcel 10: 701 Riverwoods/Everett Pond North \*

Item/Service	Cost Range
Clear invasive species: +/- 8 acres	\$4,000 - \$6,000
Overseed with savanna mix: +/- 8 acres	\$1,500 - \$3,000
Yearly stewardship	\$3,000 - \$5,000
Permanent Conservation Easement	
- easement establishment	\$20,000 - \$30,000
- legal documentation	\$2,000 - \$3,000
- Alta survey	\$2,000 - \$3,000
- title report	\$500 - \$1,000



**Parcel 12: 25960 St. Mary's Road. \***

<b>Item/Service</b>	<b>Cost Range</b>
Clear invasive species: +/- 2.5 acres	\$5,000 - \$8,000
Overseed with savanna mix: +/- 2.5 acres	\$1,500 - \$3,000
Yearly stewardship	\$3,000 - \$5,000

**Parcel 13: 16 Alexandra Drive \***

<b>Item/Service</b>	<b>Cost Range</b>
Clear invasive species: +/- 2.0 acres	\$6,000 - \$8,000
Overseed with savanna mix: +/- 2.0 acres	\$2,000 - \$3,000
Dismantle existing wellhead	\$1,000 - \$1,200
Protect drainage swale from erosion	\$1,000 - \$1,500
Yearly stewardship	\$3,000 - \$5,000

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