

# **Skokie River Woods Wetland Restoration**

## **Tony St. Aubin**

- Ecological Consulting
- Native Plant Nursery
- Restoration Services
- Cultural Resource Management







## **Project Background**

- County Stormwater Commission Wetland Violation Fund
- Illinois High-quality aquatic resource (based on FQI)
- Natural communities includes:
  - Shallow emergent marsh
  - Sedge meadow
  - Wet prairie
  - Red oak woodland
  - Swamp White Oak flatwoods
- Forest understory dominated by invasive trees/ shrubs







### **PROJECT LOCATION MAP**

NOT TO SCALE





## **Project Goals**

- Create 1.5 acres of additional wetland
- Enhance15.0 acres of existing wetland
  - Increase native plant coverage
  - Expand habitat (Blue Spotted Salamander)
- Improve 5.0 acres of wetland buffer
  - Decrease invasive plant coverage









## **Project Scope**

- Wetland construction design
- Federal and state permitting
- Surveys include:
  - Topographic
  - Construction layout
  - As-built
- 5,500 cy excavation and disposal
- Soil Amendments
- Installation of water control structure (Agridrain)
- Dam removal

- Sediment and Erosion Control
  - Silt fence
  - PAM
  - straw waddles
- 15.0 acres of woody invasive species removal
- 20.5 acres of herbaceous herbicide control
- 20.5 acres of native seeding/ planting
- 5 years of natural areas maintenance (selective herbicide, mowing)
- 5 years of monitoring (vegetative, hydrological)



## **Design & Permitting**







## **Invasive Species Removal**

#### Rhamnus frangula

- Cut-stump treatment
- Forestry mowing
- Garlon 3a herbicide

#### Typha angustifolia

- Selective herbicide
- Aquaneat







## **Sediment and Erosion Control**

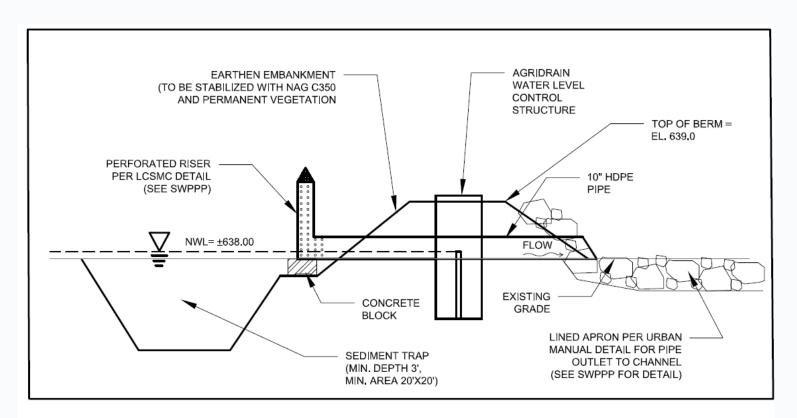
- Silt fence
- PAM
  - Water soluble polymers
  - Bind soil particles to floc logs
  - Due to extended soil exposure
- Straw Saddles/ Check Dams







## Water Control Structure (Agridrain)



WATER LEVEL CONTROL STRUCTURE DETAIL













## **Excavation**















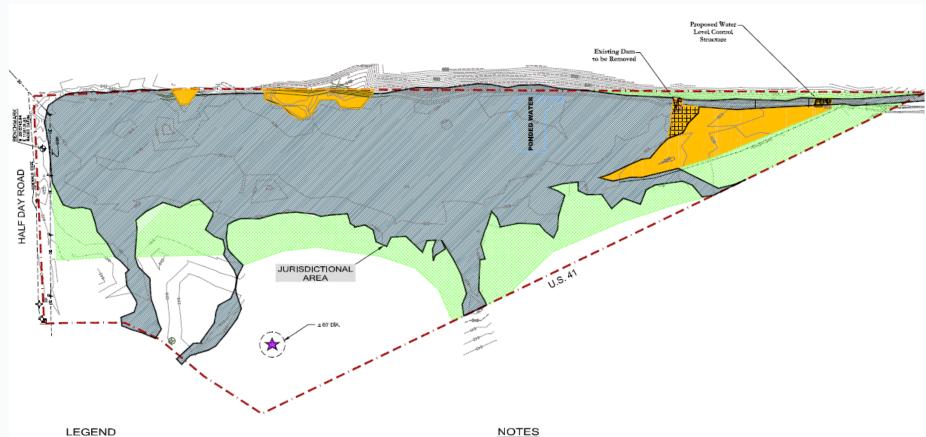














PROJECT BOUNDARY

ON-SITE JURISDICTIONAL AREA (± 13.90-ACRES) TO BE ENHANCED

WETLAND RESTORATION AREAS WHERE GRADING SHALL OCCUR (±1.50-ACRES)

Site 11-L-674 /AREA OF KNOWN CULTURAL ARTIFACTS

WETLAND IMPACT AREAS (±0.13-ACRE)

PROPOSED GRADE

WETLAND BUFFER UPLAND RESTORATION AREA (± 5.0 ACRES)

- 1.) IMPACTS ARE ASSOCIATED WITH MINOR GRADING ASSOCIATED WITH REMOVING EXISTING FILLISPOILS, REMOVAL OF DAM, INSTALLATION OF ADJUSTABLE WATER CONTROL STRUCTURE, AND ADDRESSING EROGION, AND PROMOTING EXPANDED WETLAND HYDROLOGY.
- DRAWINGS ARE BASED ON CONCEPTUAL DRAWINGS PREPARED BY HEY AND ASSOCIATES, INC. MINOR ADJUSTMENTS IN THE FIELD MAY BE NECESSARY DURING IMPLEMENTATION OF THE PROJECT.
- 3.) BASE MAP PROVIDED BY WOOLPERT, INC.

























#### **Direct Additional Questions to:**

Tony St. Aubin

Operations Manager, Northwest Region

tony.staubin@cardno.com

(708) 534-3450

## www.cardnojfnew.com