DESIGN INTENT

Peter Schaudt, Hoerr Schaudt Landscape Architects
Landscape Master Plan
Selected Concept
Project Elements

- Tree Enclosure
- Outer Lawn and Promenade
- Bog Filters
- Fountain
- Central Lawn
- Grading
Stormwater Storage Cistern:

Former creek traversed the site
Stormwater Storage Cistern:

Former creek traversed the site

Converted to large diameter storm sewer as town developed

Repurposed as an underground stormwater cistern with development of new infrastructure
Detail Plan

- Bog Threshold Bridge
- Fountain Threshold Bridge
- Filtration Bog
- Reinforced Sloped Lawn
- Fountain Water Flow (Counterclockwise) Turbulence Pool (All Water Terminates Here)
- Precast Concrete Scupper Wall
- Bog to Fountain Runnel
- Bog Cascade Pool
- Permeable Pavers
- Filtration Bog Water Flow (Counter Clockwise)
- Precast Concrete Bench
- Source Pool Weir
- Supply Line for Filtration Bog
- Supply Line for Fountain
- Bollards
- Main Entry Plaza
Detail Plan
Anatomy of the Circle: Filtration Bog
Anatomy of the Circle: Water Feature
Anatomy of the Circle: Flow Patterns

Legend:
- Filtration Bog Flow
- Water Feature Flow
- Water Source Point
- Water Intake Point
Anatomy of the Circle: Flow Patterns
Anatomy of the Circle: Flow Patterns
Anatomy of the Circle: Flow Patterns
Anatomy of the Circle: Flow Patterns
Anatomy of the Circle: Flow Patterns

Legend:
- Filtration Bog Flow
- Water Channel Flow
- Water Source Point
- Water Intake Point
Filtration Bog Threshold
Water Channel Detail
CONSTRUCTION & ENGINEERING
Wayne Aldrich, Town of Normal
2007 Construction (Big Dig)

- Install Underground Infrastructure to support the Water Feature
- New 60-inch Storm Sewer
- Abandon Old 60-inch Storm and use as Cistern
- Install Storm Sewer Filter
- Install Cistern Vault and Equipment Vault
2008 Uptown Street Contract

- June 16, 2008 Council Conditionally Awards Project with Water Feature in the Amount of $9,710,832
- July 21, 2008 Council Received Recommended VE and Authorized Budget Adjustment
- Total Contract $8,947,883 with Water Feature
Contractors

- Stark Excavating, Inc.
- Anderson Electric
- Laesch Electric
- Prochnow Landscaping (LPS Paving)
- Commercial Irrigation
- F&W Lawncare & Landscaping
Non-Point Source Pollution in Stormwater Runoff:

- Sediment
- Hydrocarbons
- Nutrients
- Heavy Metals
- Thermal Pollution
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Illustrative Water Infrastructure Schematic
How does the Filtration Bog work?

Non-Point Source Pollution
Removal Pathways

Sedimentation
Filtration
Adsorption
Microbial action
Volatization
Aeration
Direct plant uptake *

*typically minimal and/or of secondary importance
Non-Point Source Pollution Volume vs. Runoff Volume

Small storms

Medium storms

Large storms
Non-Point Source Pollution – Total Annual Load

Small storms + Medium storms + Large storms = Total Annual Pollutant Load
Anatomy and Operation of the Bog Filter

“Dirty” stormwater pumped from cistern

“Cleaned” stormwater flows into next cell
Filtration Bog (prior to planting)
Filtration Bog