Monroe Avenue GIGP

Brighton, Monroe County, New York

Location Map

January 2014

Legend

1. Allens Creek
2. Buckland Creek
3. Green Strips
4. Brighton Schools
5. Transit Stops
6. Continental Apartments
7. Northumberland Road
8. Neighborhood Gateway Improvements

Green Strip Improvements
East: 2,190 +/- LF
West: 3,375 +/- LF

0’ 100’ 500’

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Existing Conditions

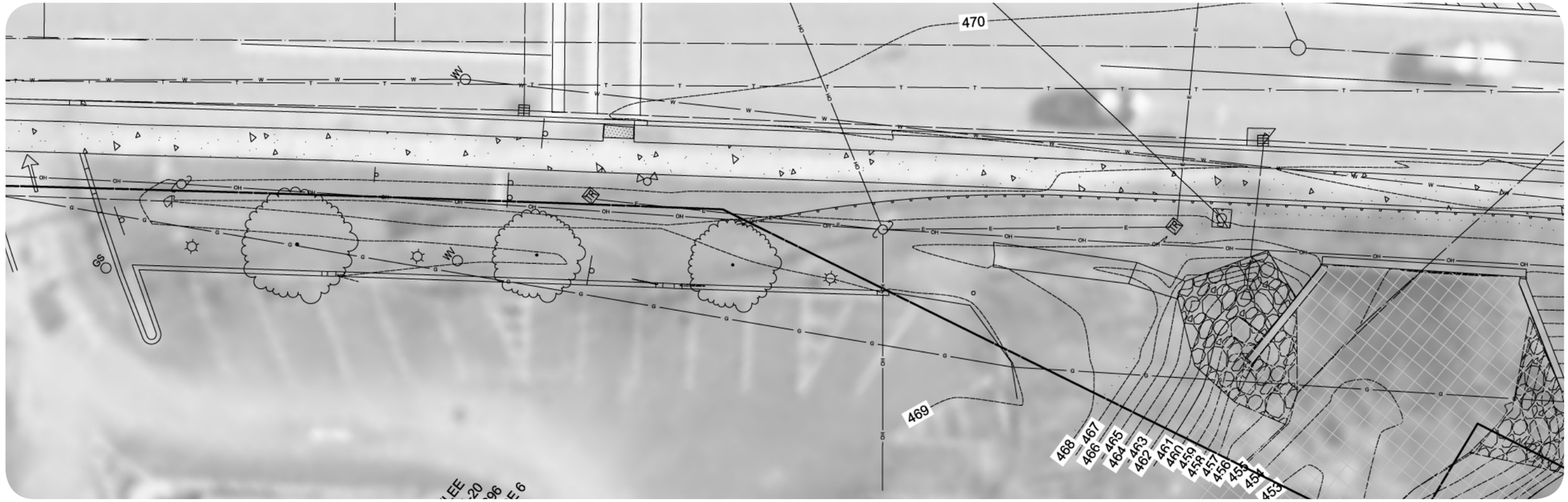
Monroe Avenue Greenway Concept

Concept Rendering

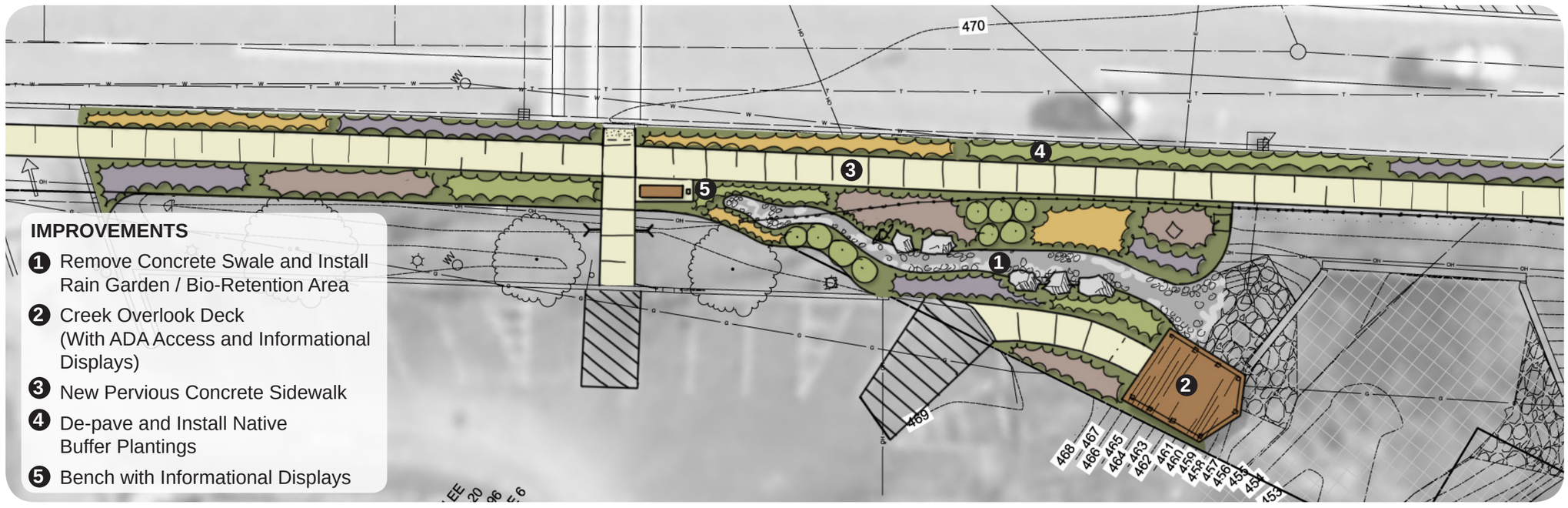
GREEN INFRASTRUCTURE TOOLBOX

- Pervious concrete sidewalks, under-drained as required
- Storm water tree trenches manage run-off and provide water to street trees
- CU Structural Soils to improve infiltration, root growth and street tree survivability
- De-pave and restore green strips between sidewalk and curb
- New street trees improve air quality, intercept rainwater, enhance micro-climate and provide traffic calming
- Rest spots enhance walkability for residents of all mobility levels
- Bio-retention swales cleanse storm water run-off and enhance urban ecology
- Interpretive displays inform and educate
- Improved visual quality increases property values and economic vibrancy

EXISTING CONDITIONS



PROPOSED IMPROVEMENTS



IMPROVEMENTS

1. Remove Concrete Swale and Install Rain Garden / Bio-Retention Area
2. Creek Overlook Deck (With ADA Access and Informational Displays)
3. New Pervious Concrete Sidewalk
4. De-pave and Install Native Buffer Plantings
5. Bench with Informational Displays

Monroe Avenue GIGP
Brighton, Monroe County, New York

Concept Project

Allens Creek Area Improvements SK-2

January 2014

0 10’ 20’

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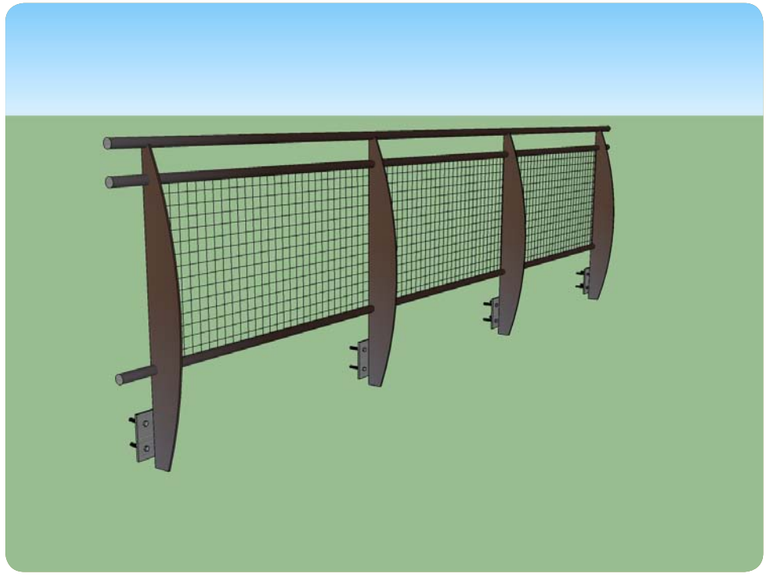
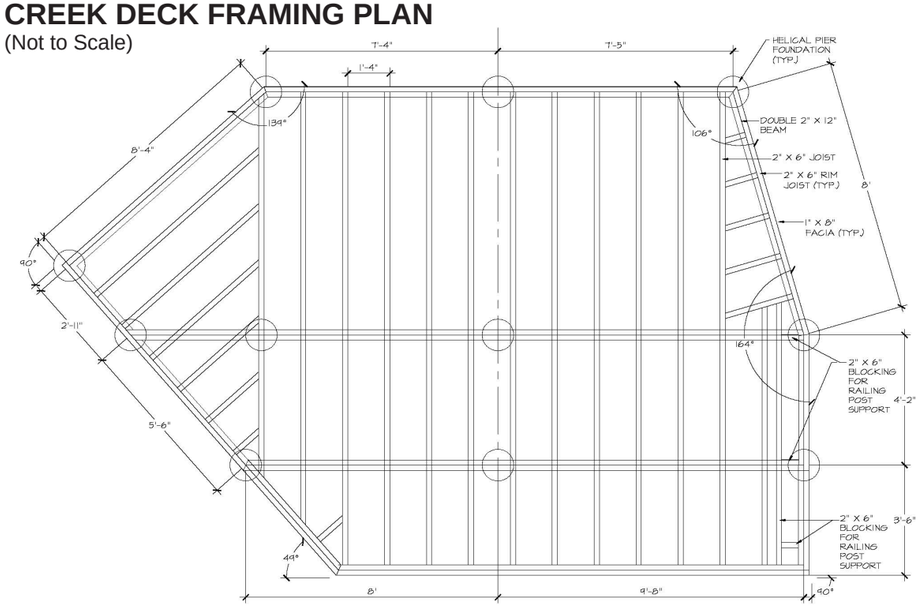
EXISTING ALLENS CREEK CORBETT'S GLEN OVERLOOK

HANDRAIL CONCEPT



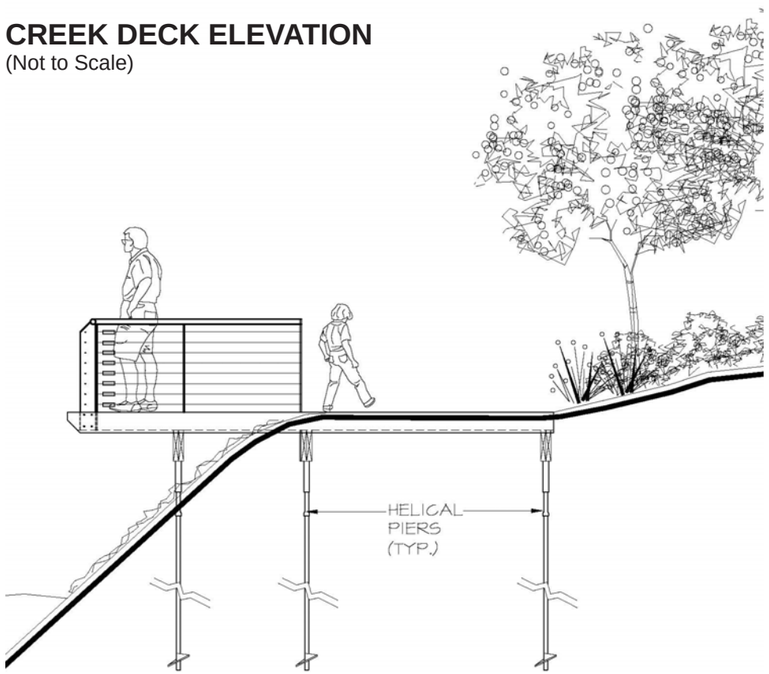
CREEK DECK FRAMING PLAN

(Not to Scale)



CREEK DECK ELEVATION

(Not to Scale)



Monroe Avenue GIGP
Brighton, Monroe County, New York

Concept Project

Allens Creek Overlook

January 2014

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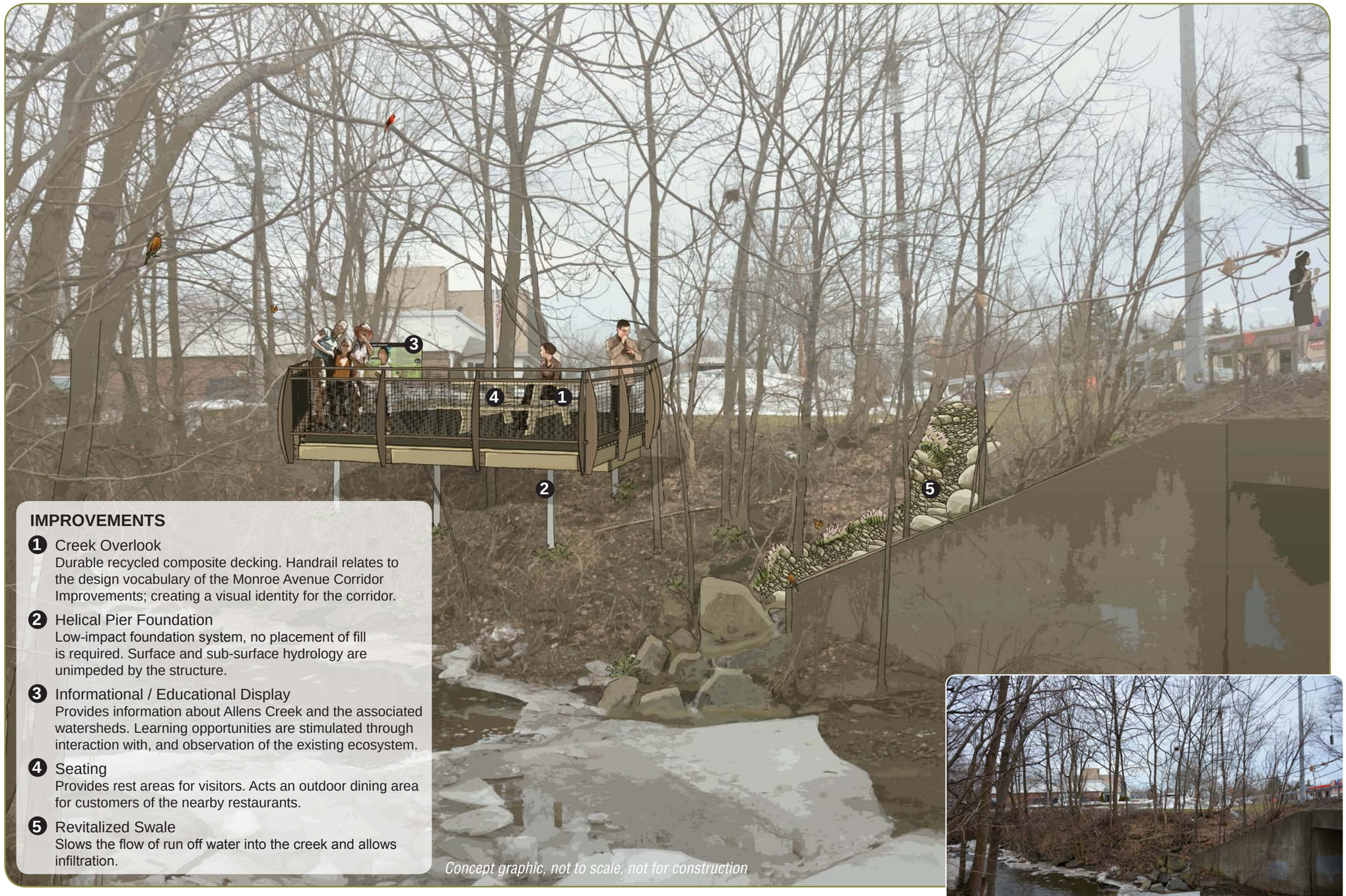
ALLENS CREEK OVERLOOK CONCEPT



IMPROVEMENTS

1. **Creek Overlook**
   Durable recycled composite decking. Handrail relates to the design vocabulary of the Monroe Avenue Corridor Improvements; creating a visual identity for the corridor.
2. **Helical Pier Foundation**
   Low-impact foundation system, no placement of fill is required. Surface and sub-surface hydrology are unimpeded by the structure.
3. **Informational / Educational Display**
   Provides information about Allens Creek and the associated watersheds. Learning opportunities are stimulated through interaction with, and observation of the existing ecosystem.
4. **Seating**
   Provides rest areas for visitors. Acts an outdoor dining area for customers of the nearby restaurants.
5. **Revitalized Swale**
   Slows the flow of run off water into the creek and allows infiltration.

Concept graphic, not to scale, not for construction

EXISTING CONDITIONS

Monroe Avenue GIGP
Brighton, Monroe County, New York

Concept Project

Allens Creek Overlook

January 2014

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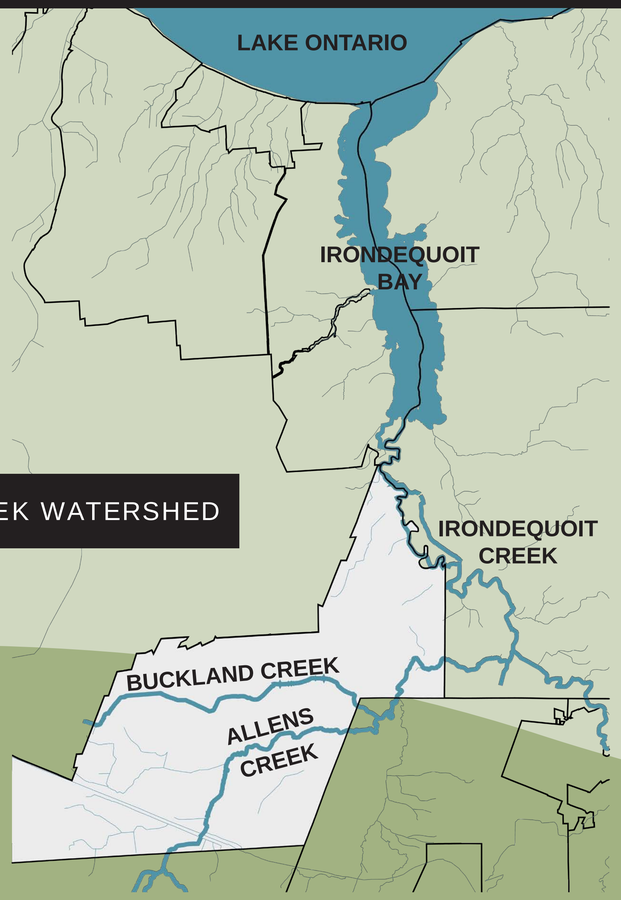
ALLENS CREEK WATERSHED

WELCOME TO THE MONROE AVENUE GREEN CORRIDOR!

The Monroe Avenue Green Corridor spans about one mile from Elmwood Avenue to Westfall Road. The Town of Brighton is purposefully evolving as a sustainable community. Energy conservation, natural resource protection and waste reduction are vitally important to our community. Reintegrating natural systems into the urbanized environment enhances the valuable services that nature provides the human environment, such as filtering stormwater, reducing the heat island effect, creating wildlife habitat, and inviting people to walk, bike, and enjoy their beautiful neighborhoods.



YOU'RE IN THE ALLENS CREEK WATERSHED

WHAT IS STORMWATER? WHY IS IT IMPORTANT?

Stormwater is water from melting snow or rain that does not seep into the ground, but runs off of surfaces such as rooftops, paved streets, highways, and parking lots and is released untreated into our waterways. Stormwater runoff is important for two main reasons. First, stormwater runoff transports an assortment of pollutants that are harmful to water bodies, drinking water, and habitat. Second, during large storms or snow melt, the volume of stormwater is increased and could cause flooding, property damage, or harm the fish and wildlife habitat.

HOW DOES STORMWATER AFFECT WATER QUALITY?

Some of the current stormwater management practices allow for pollution of our water bodies. As it flows, stormwater runoff collects pollutants such as fertilizers, pesticides, automotive fluids, bacteria, sediments, litter, and pet waste and transports these contaminants from parking lots, roads, and driveways to the nearest waterway. Pollution carried by stormwater degrades the quality of drinking water, and damages the habitat of plants and animals that depend on clean water for survival. In addition, large impervious surfaces in urban areas increase the quantity of peak flows of runoff, which end up causing impacts such as eroded stream banks, alteration of natural systems and wetlands, increased sedimentation, and loss of habitat.

DID YOU KNOW?

Based on an average annual local rainfall of 30 inches, 1 acre of impervious surface can produce 600,000 gallons of runoff per year
That's enough runoff to nearly fill an olympic-sized swimming pool!

LETS DO THE MATH

The Monroe Avenue Green Corridor encompasses approximately 17.81 acres 12.96 acres are impervious surfaces (nearly 73% of the total area!)
The corridor could produce approximately 7.8 million gallons of runoff per year
That's enough runoff to nearly fill 12 **Olympic sized swimming pools!**

WHAT IS A WATERSHED?

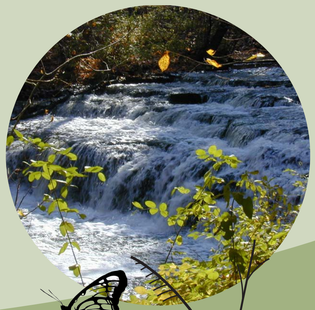
A watershed is an area of land that drains all the streams and rainfall to a common outlet such as the mouth of a bay or lake, the outflow of a reservoir, or any point along a stream or channel. The watershed consists of surface water – lakes, streams, reservoirs, and wetlands – and all the underlying ground water. Watersheds are important because the and the water quality of all bodies of water are affected by things, human-induce or not, happening to all the land area throughout the watershed.

ALLENS CREEK WATERSHED

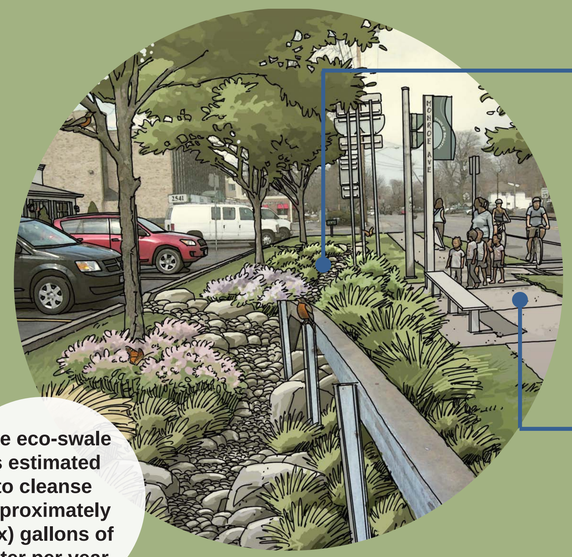
The Monroe Avenue Green Corridor lies within two watershed areas; the Buckland Creek watershed to the North and the Allens Creek Watershed to the South. The watershed divide between the two creeks falls at the approximate mid-point of the Green Corridor. Allens Creek is a tributary of Irondequoit Creek, which flows to Irondequoit Bay and Lake Ontario. Any stormwater runoff within this watershed seeps into the ground or drains downslope through a network of channels and streams reaching Allens Creek, and ultimately reaching Irondequoit Creek, Irondequoit Bay and Lake Ontario. The Great Lakes contain more than 20% of Earth's surface freshwater. The NYSDEC lists Allens Creek on its Priority Waterbodies List with a state classification of B(t). The best usages of Class B waters are primary and secondary contact recreation and fishing. Allens Creek is designated (t), indicating the support of trout.

ALLENS CREEK & CORBETT'S GLEN

Allens Creek flows through the historic Corbett's Glen. Carved by glaciers, portions of this valley have been safeguarded from development due to steep slopes that surround and protect it. The secluded valley in Brighton offers an oasis of sight, sound, and remarkable natural features in an otherwise densely developed suburban area. The Glen has walking trails and educational resources to allow for use and enjoyment. The overall intent of Corbett's Glen is to strike a balance between development for passive recreational use and preservation of scenic, natural, and cultural resources.



IMPROVEMENTS



The eco-swale is estimated to cleanse approximately (x.x) gallons of water per year.

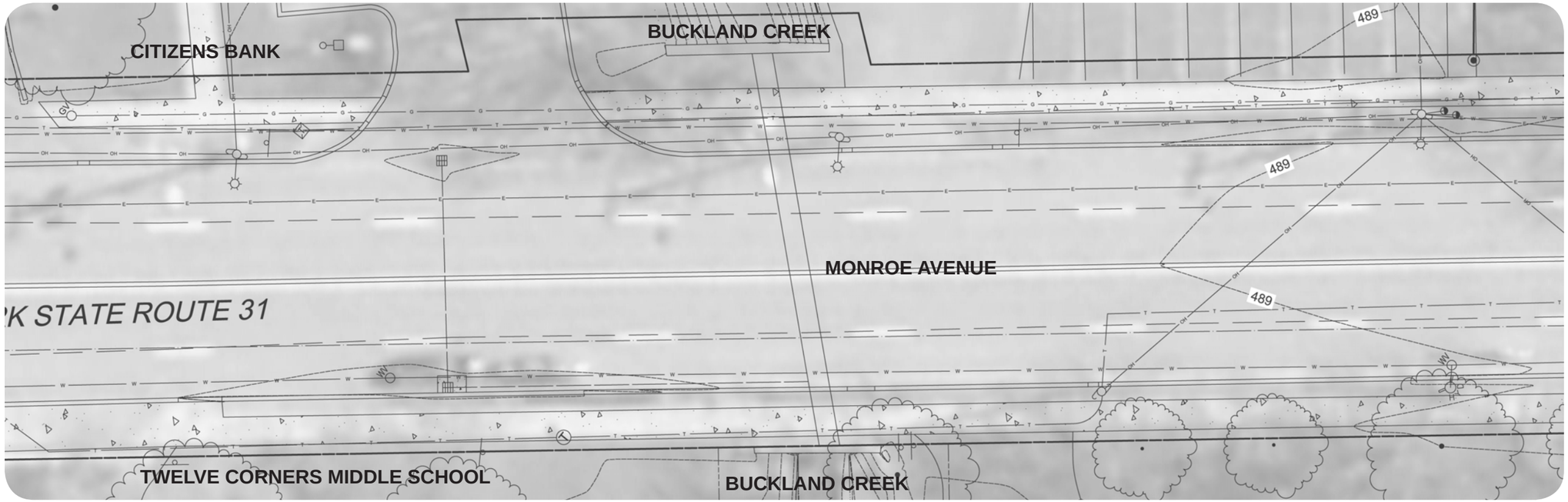
ECO-SWALE

Designed to filter and manage runoff while mimicking natural systems through native plantings. The eco-swale is a multi-functional green space that provides benefits including effective breakdown and removal/immobilization of pollutants found in urban runoff, increased stormwater infiltration time, increased wildlife habitat and biodiversity, and decreased reliance on existing stormwater infrastructure and treatment facilities.

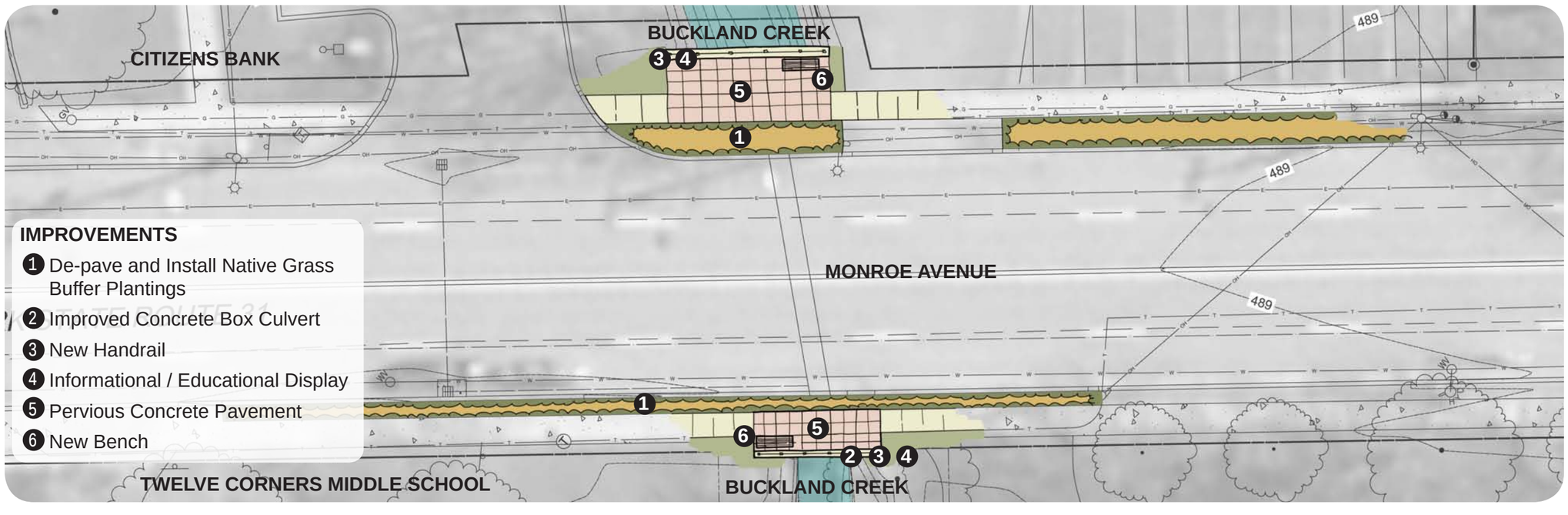
PERVIOUS CONCRETE

Designed to infiltrate rainfall through the pavement surface, thereby reducing stormwater runoff quantities.

EXISTING CONDITIONS



PROPOSED IMPROVEMENTS



Monroe Avenue GIGP
Brighton, Monroe County, New York

Concept Project

Buckland Creek Area Improvements

January 2014

0 10’ 20’

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PROPOSED IMPROVEMENTS


EXISTING BOX CULVERT CONDITIONS


EXISTING CONDITIONS

IMPROVEMENTS

1. De-pave and Install Native Grass Buffer Plantings
2. Improved Concrete Box Culvert
3. New Handrail
4. Informational / Educational Display
5. Pervious Concrete Pavement
6. New Bench
7. Buckland Creek Restoration Project

Concept graphic, not to scale, not for construction

Monroe Avenue GIGP
Brighton, Monroe County, New York

Concept Project

Buckland Creek Area Improvements

January 2014

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PROPOSED IMPROVEMENTS

IMPROVEMENTS

1. De-pave and Install Native Grass Buffer Plantings
2. New Handrail
3. Informational / Educational Display
4. Pervious Concrete Pavement
5. New Bench

Concept graphic, not to scale; not for construction.

EXISTING CONDITIONS

Monroe Avenue GIGP
Brighton, Monroe County, New York

Concept Project

Buckland Creek Area Improvements

January 2014

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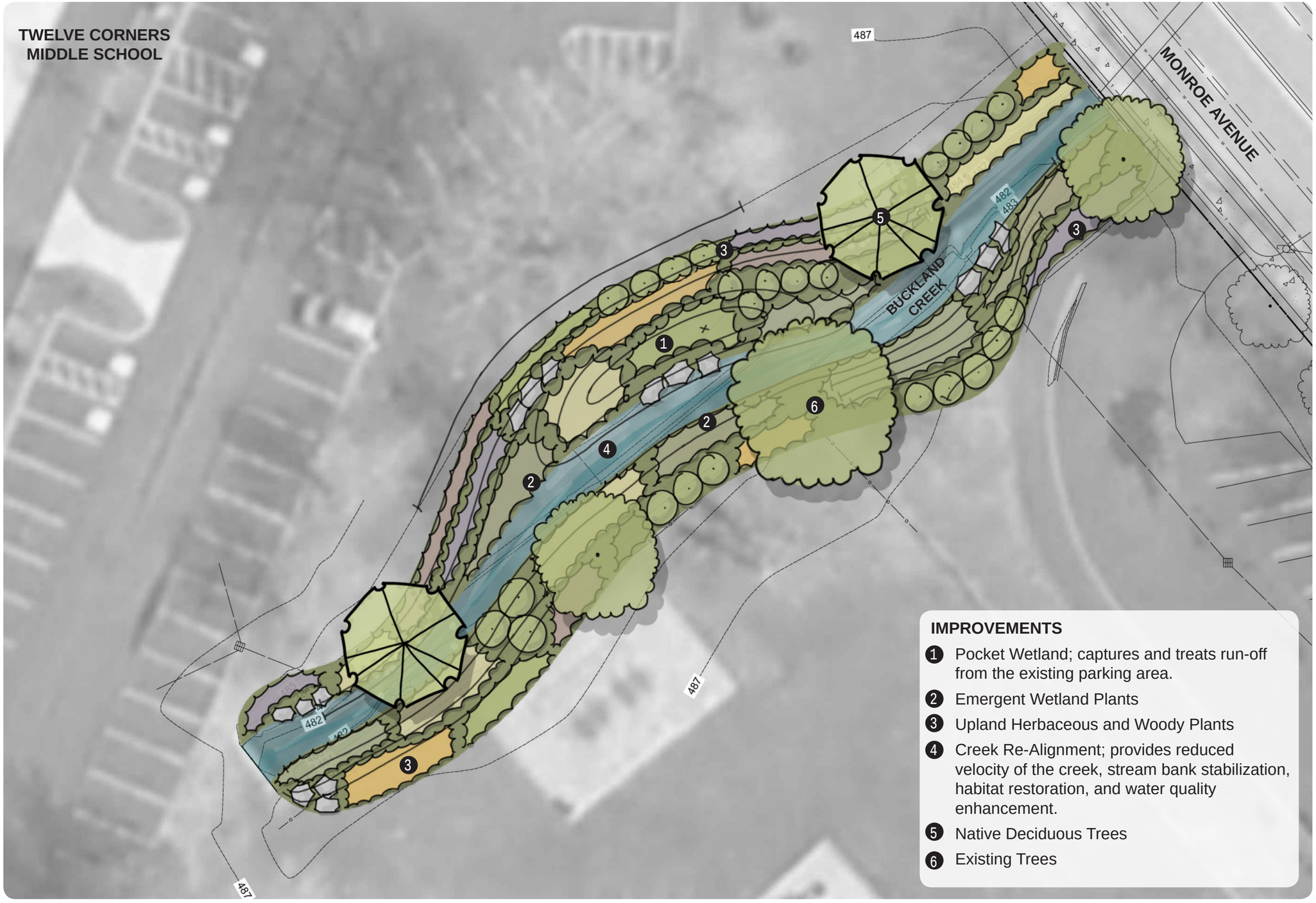
PROPOSED IMPROVEMENTS



IMPROVEMENTS

1. Pocket Wetland; captures and treats run-off from the existing parking area.
2. Emergent Wetland Plants
3. Upland Herbaceous and Woody Plants
4. Creek Re-Alignment; provides reduced velocity of the creek, stream bank stabilization, habitat restoration, and water quality enhancement.
5. Native Deciduous Trees
6. Existing Trees

Monroe Avenue GIGP
Brighton, Monroe County, New York

Concept Project

Buckland Creek Area Restoration: SK 2

February 2014

0 10’ 20’

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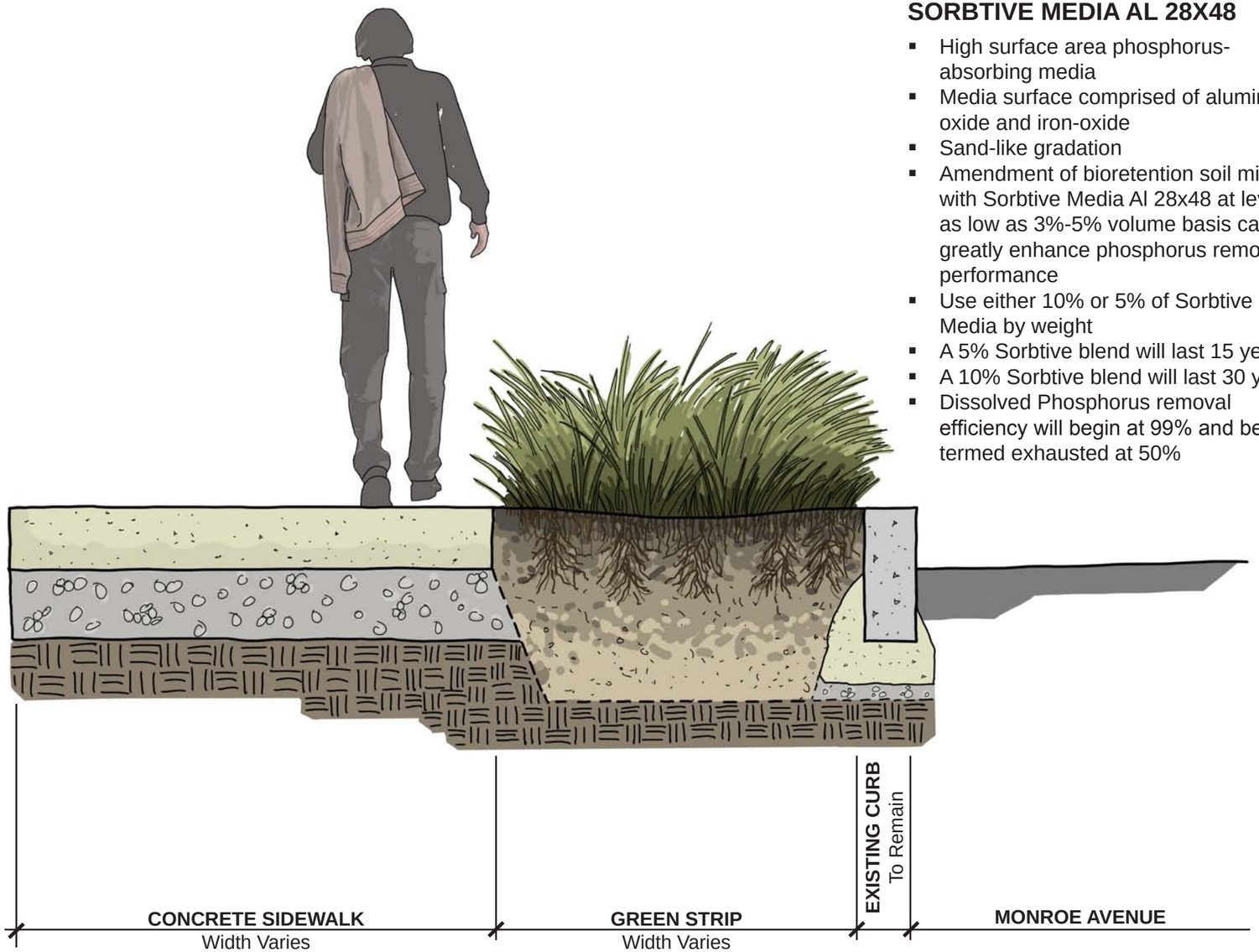
TYPICAL GREEN STRIP ENHANCEMENT



- Existing,
- Replaced, or
- New Pervious Concrete

- Remove existing asphalt
- Remove 2’ depth of existing soil
- Replace with new Planting Media: 5% Sorbtive Media, 15% Peat Moss, 80% Sand
- Native, salt tolerant, hardy grasses. Maximum height of 3’.
- Green Strip may receive underdrain in select locations

0 1’ 2’

Scale: 3/4” = 1’-0”

IMBRIUM SYSTEMS SORBTIVE MEDIA AL 28X48

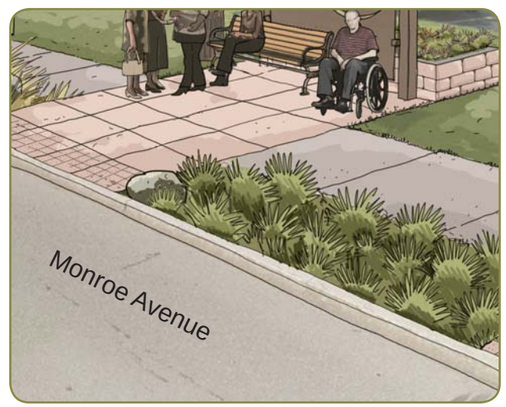
- High surface area phosphorus-absorbing media
- Media surface comprised of aluminum oxide and iron-oxide
- Sand-like gradation
- Amendment of bioretention soil mix with Sorbtive Media Al 28x48 at levels as low as 3%-5% volume basis can greatly enhance phosphorus removal performance
- Use either 10% or 5% of Sorbtive Media by weight
- A 5% Sorbtive blend will last 15 years
- A 10% Sorbtive blend will last 30 years
- Dissolved Phosphorus removal efficiency will begin at 99% and be termed exhausted at 50%

PLANT LIST RECOMMENDATIONS

- Carex aurea - Golden Sedge
- Carex lurida - Lurid Sedge
- Deschampsia cespitosa - Tufted Hair Grass
- Juncus effusus - Soft Rush
- Panicum virgatum - Switch Grass

EXISTING CONDITIONS

LOCATION EXAMPLE



Monroe Avenue GIGP
Brighton, Monroe County, New York

Concept Project

Typical Green Strip Enhancement

January 2014

PROPOSED IMPROVEMENTS

IMPROVEMENTS

1. De-pave and Install Native Grass Buffer Plantings
2. New Guiderail: Relates to Proposed Monroe Avenue Design Vocabulary
3. New Pervious Concrete Sidewalk

   Note: Refer to Green Strip Detail Sheet for More Information

Concept graphic, not to scale, not for construction

Monroe Avenue GIGP
Brighton, Monroe County, New York

Concept Project

Typical Green Strip Enhancement

January 2014

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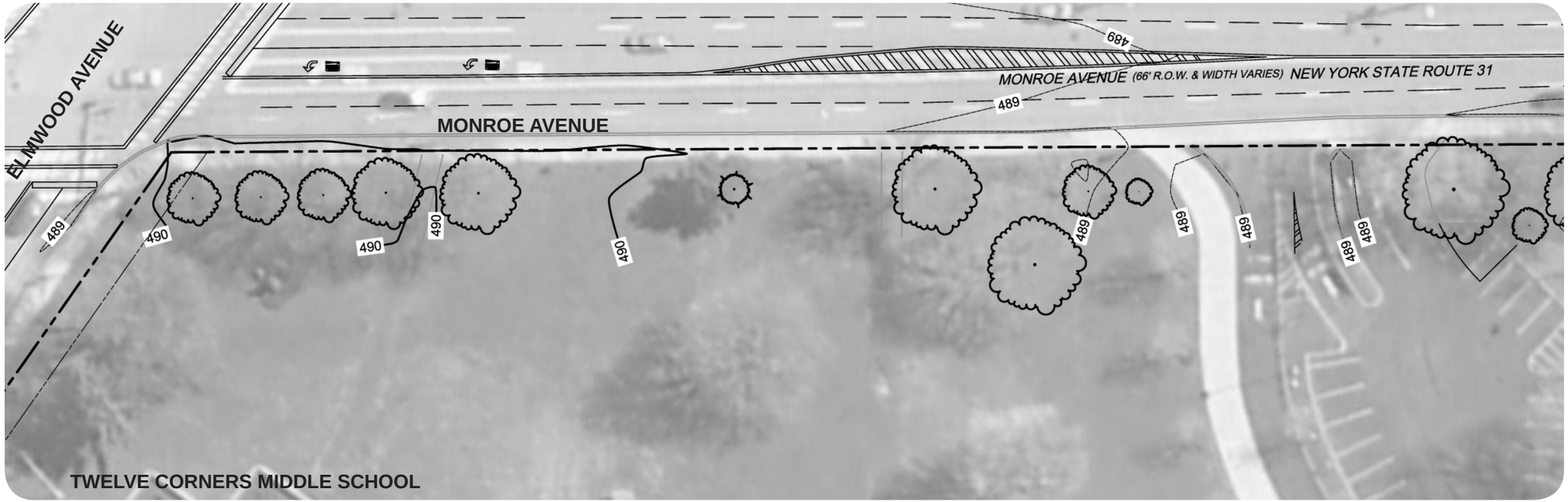
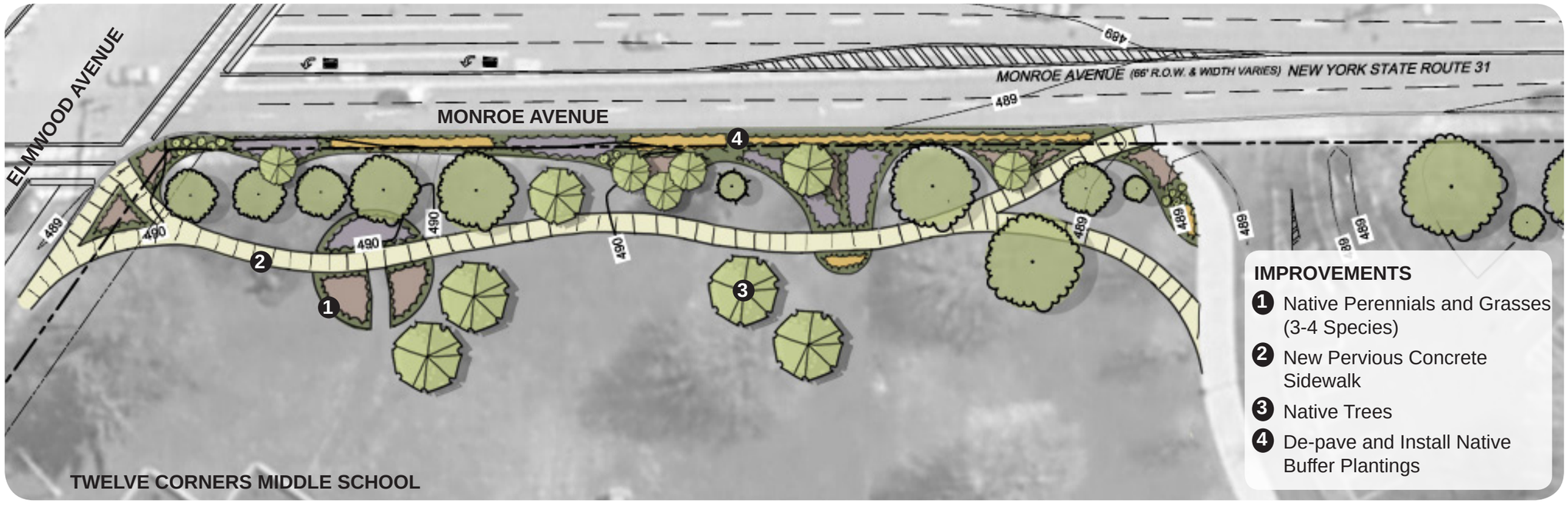
EXISTING CONDITIONS



PROPOSED IMPROVEMENTS



0 20’ 40’

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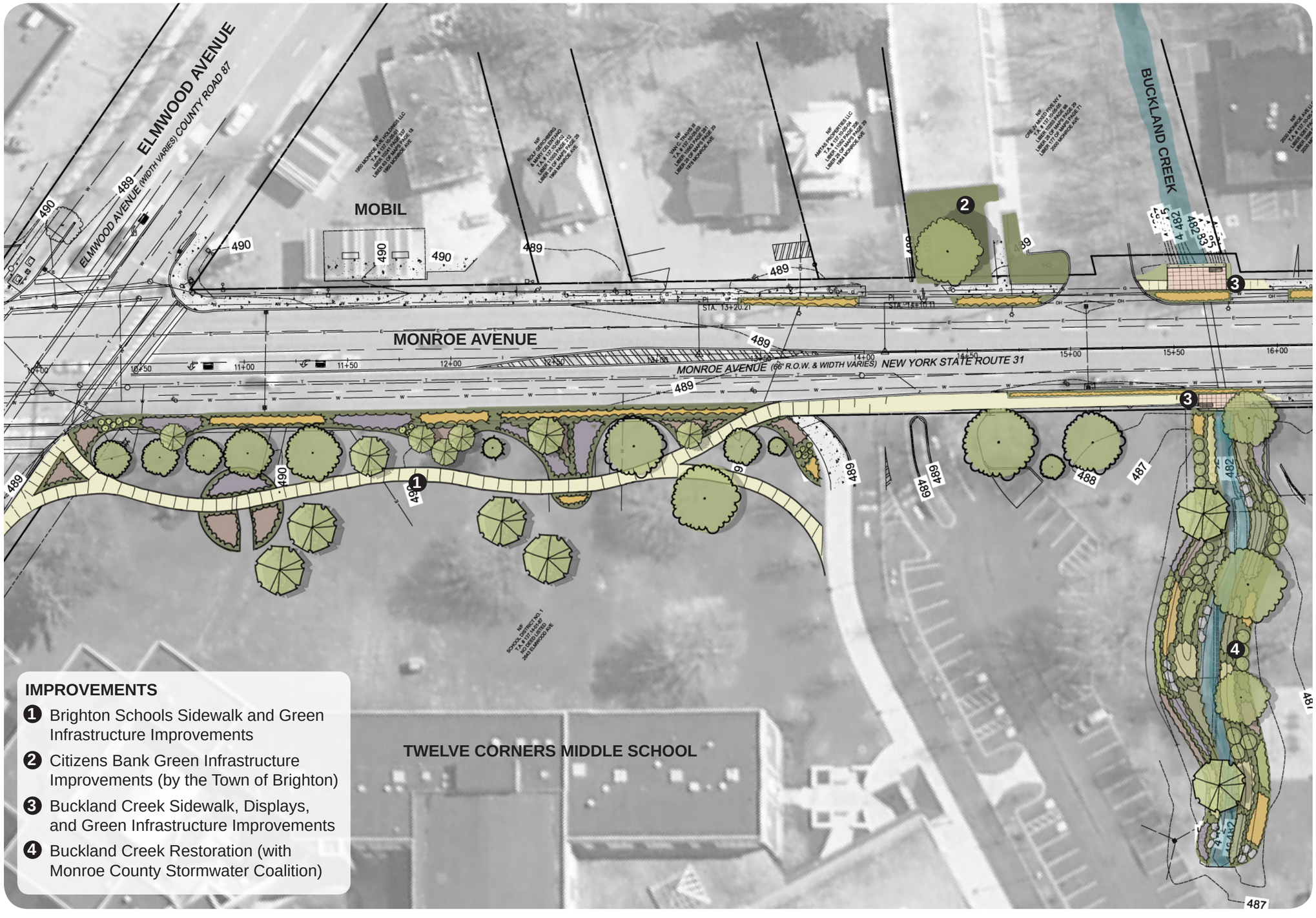
Monroe Avenue GIGP
Brighton, Monroe County, New York

Concept Project
Brighton Schools Improvements

January 2014

PROPOSED IMPROVEMENTS



IMPROVEMENTS

1. Brighton Schools Sidewalk and Green Infrastructure Improvements
2. Citizens Bank Green Infrastructure Improvements (by the Town of Brighton)
3. Buckland Creek Sidewalk, Displays, and Green Infrastructure Improvements
4. Buckland Creek Restoration (with Monroe County Stormwater Coalition)

0 25’ 50’

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Monroe Avenue GIGP
Brighton, Monroe County, New York

Concept Project
Buckland Creek Area Plan

February 2014

Concept Project

Monroe Avenue Corridor Green Bus Stop Improvements

February 2014

Concept graphic, not to scale, not for construction

SCAN to find out more about the project or visit www.brightonGIGP.org

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Concept Project

Monroe Avenue Corridor Green Bus Stop Improvements

February 2014

Concept graphic, not to scale, not for construction

MONROE AVENUE CORRIDOR GREEN BUS STOP IMPROVEMENTS

- Upgrade 5-7 existing bus stops at key corridor locations.
- Utilize sustainable design and construction strategies.
- Improve storm water quality with green infrastructure
- Support and encourage transit use and pedestrian flow.
- Improve streetscape aesthetics and help establish a visual identity for Monroe Avenue.

1. Remove existing asphalt pavement. Replace existing soils. Install buffer plantings of salt-tolerant native species
2. Boulder accents
3. Pervious concrete accent paving
4. New 5’ wide pervious concrete sidewalks
5. Restore and reuse existing bench
6. Stormwater planter: Capture run-off from shelter roof. Bio-filtration provided by plant materials and special soil matrix.
7. Bus stop shelter: Simple, economical design. Durable material, easy maintenance. Signature streetscape architecture for the Monroe Ave. Corridor.
8. Informational / Educational Display

SCAN to find out more about the project or visit www.brightonGIGP.org

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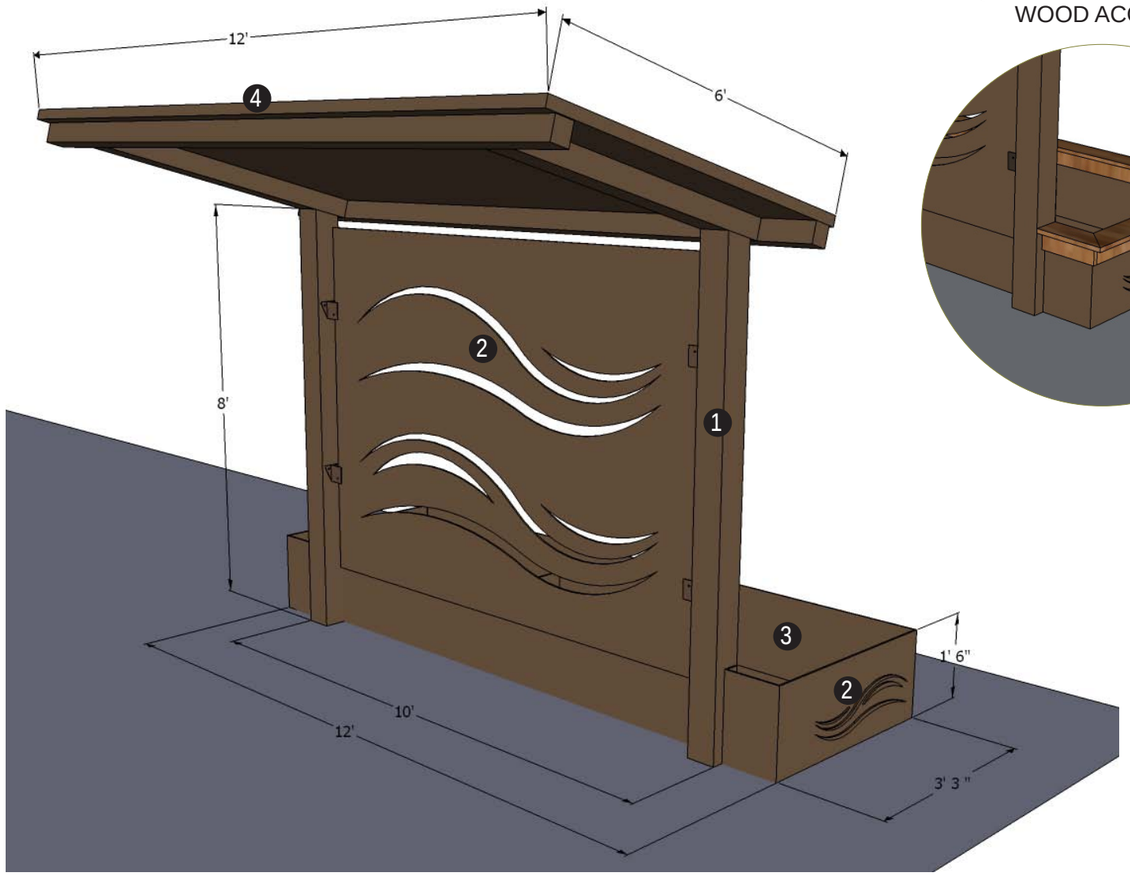
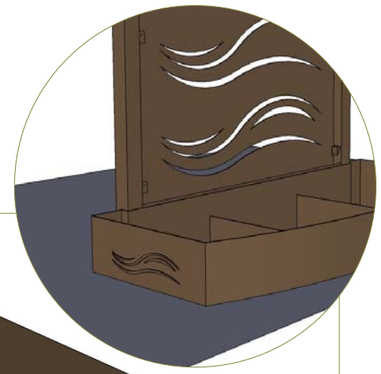
PROPOSED BUS STOP SHELTER

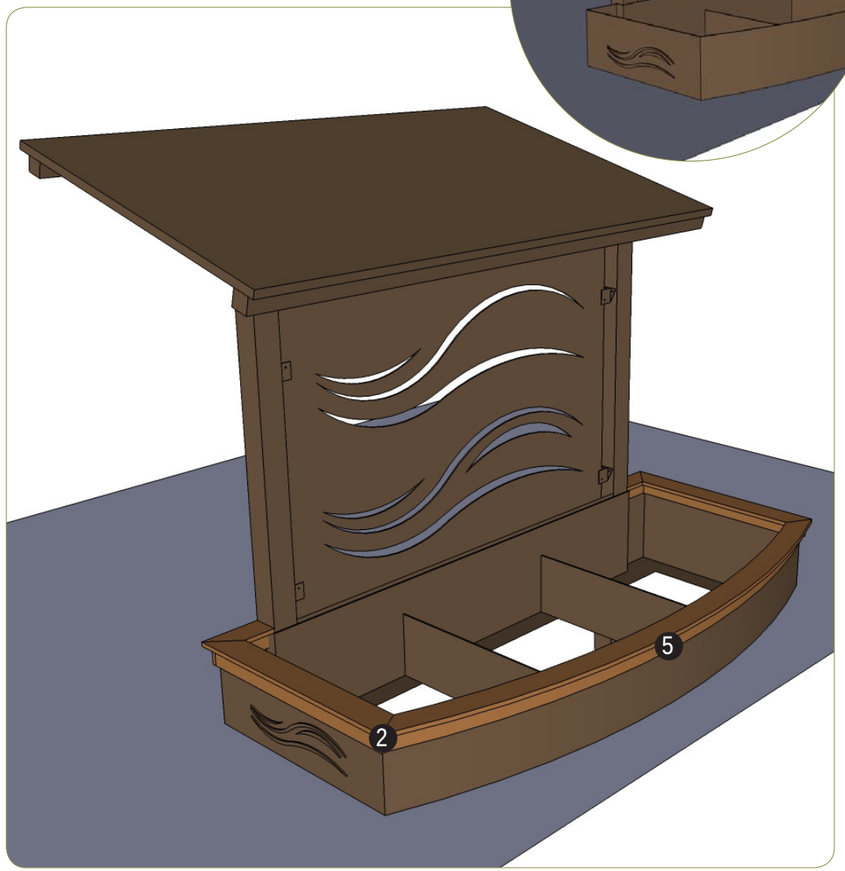


ALTERNATE OPTION #1:
SQUARED PLANTER WITH WOOD ACCENT

ALTERNATE OPTION #2:
ROUNDED PLANTER



ALTERNATE OPTION #3:
ROUNDED PLANTER WITH WOOD ACCENT



LEGEND

1. **Corten Steel Posts**
   Posts set in concrete footing, below local frost depth.
2. **Corten Monroe Avenue Corridor Accent / Design**
   Helps establish a visual identity for Monroe Avenue, signature streetscape architecture. Potential for local artist involvement.
3. **Corten Stormwater Planter**
   Capture run-off from shelter roof. Bio-filtration provided by plant materials and special soil matrix.
4. **Sheet Metal Roof**
5. **Wood Accent**
   Ipe or equal material.

Concept graphics. Shop drawings and structural engineer's approval required prior to construction.

Concept Project

Monroe Avenue Corridor Green Bus Stop Improvements

February 2014

SCAN to find out more about the project or visit www.brightonGIGP.org

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GREEN TRANSIT IMPROVEMENTS

BUS SHELTER ENHANCEMENTS

The green transit improvements incorporate environmental, aesthetic, and transportation benefits. The improvements meet the goals of the Monroe Avenue GIGP Project as well as the Monroe Avenue Corridor Community Vision Plan. The enhancements improve stormwater quality through green infrastructure, support and encourage transit use and pedestrian flow, improve streetscape aesthetics, and establish a visual identity for Monroe Avenue.

Every trip on public transportation begins and ends with a walk or bicycle ride. The transit stop improvements along the Corridor encourage the use of public transportation and act as a key element in making Monroe Avenue a “complete street.” Complete streets enable safe access for people who are walking, bicycling, driving, or riding public transportation.

DID YOU KNOW?

- RGRTA oversees public transportation in Monroe, Genesee, Livingston, Orleans, Wayne, Wyoming and Seneca counties.
- Every RTS bus is equipped with a bike rack on the front, encouraging commuters and recreational cyclists.
- Annual Ridership = 18,175,000
- Number of Buses = 405
- Service Area Population = 1,083,877

Note: Numbers were gathered in February 2014.

BUS SHELTER

Simple, economical design. Durable material, easy maintenance. Roof top is angled to allow stormwater to runoff into a stormwater planter. Shelter design represents the two streams within the corridor. Provides a signature streetscape architecture for the Monroe Avenue Green Corridor.

VEGETATED BUFFER STRIP

Increases pervious area to capture and filter stormwater runoff. Plants manage and treat small volumes of runoff.

PERVIOUS CONCRETE

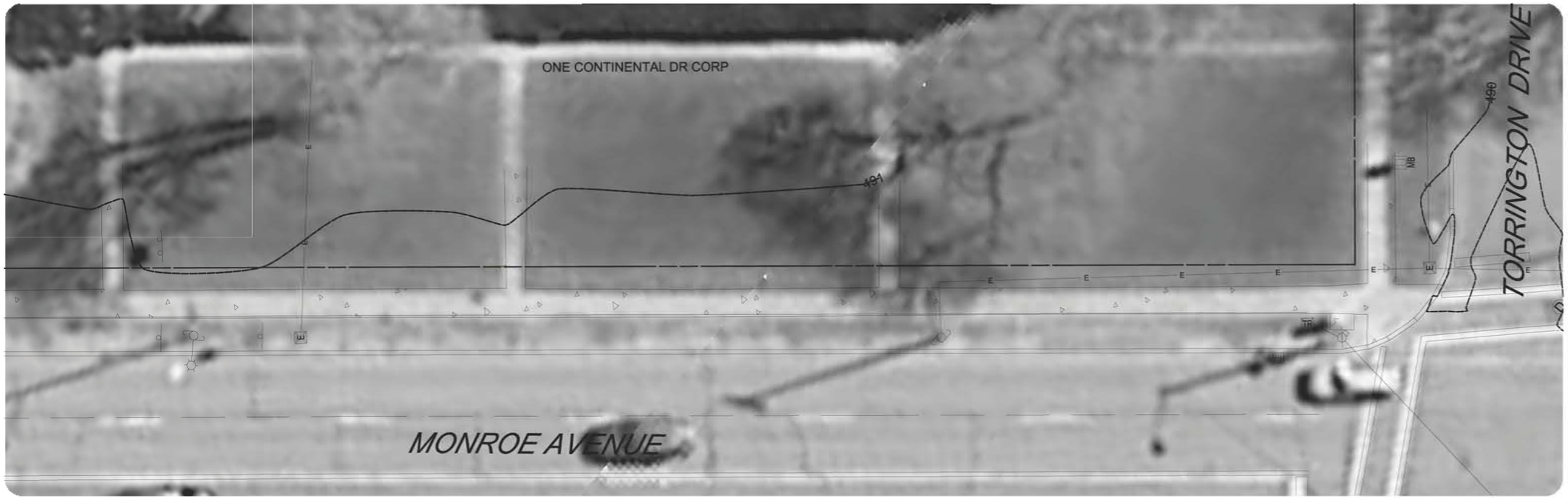
Designed to infiltrate rainfall through the pavement surface, thereby reducing stormwater runoff from the site and providing some pollutant uptake in the underlying soils.

STORMWATER PLANTER

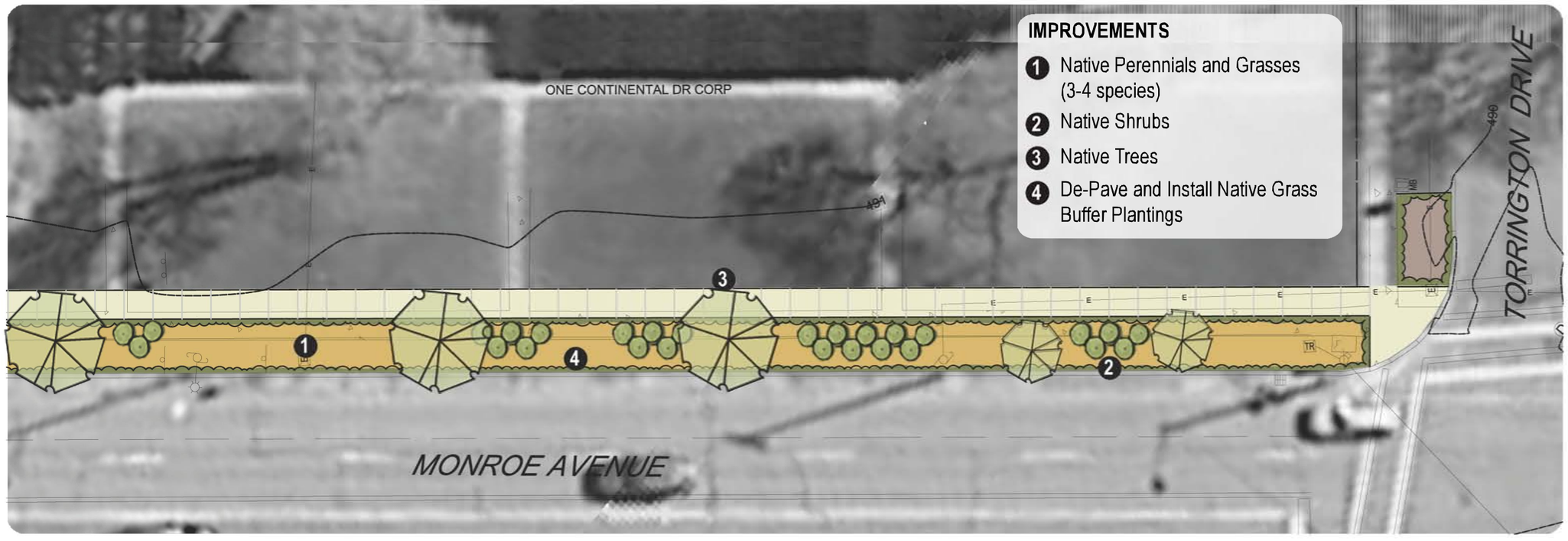
Small landscape stormwater treatment devices that use soil infiltration and biogeochemical processes to decrease stormwater quantity and improve water quality. The roof runoff is captured and filtered through plant material and a special soil matrix.

Monroe Avenue Green Corridor

EXISTING CONDITIONS



PROPOSED IMPROVEMENTS



Monroe Avenue GIGP
Brighton, Monroe County, New York

Concept Project

Continental Apartments Improvements

January 2014

Decreased Impervious

2240 +/- SF

0 10 20

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PROPOSED IMPROVEMENTS

EXISTING CONDITIONS

IMPROVEMENTS

1. Small Native Trees
2. De-pave and Install Native Grass Buffer Plantings
3. Existing Lawn
4. New Pervious Concrete Sidewalk on CU Structural Soil

Concept graphic, not to scale, not for construction

Monroe Avenue GIGP
Brighton, Monroe County, New York

Concept Project

Continental Apartments Improvements

January 2014

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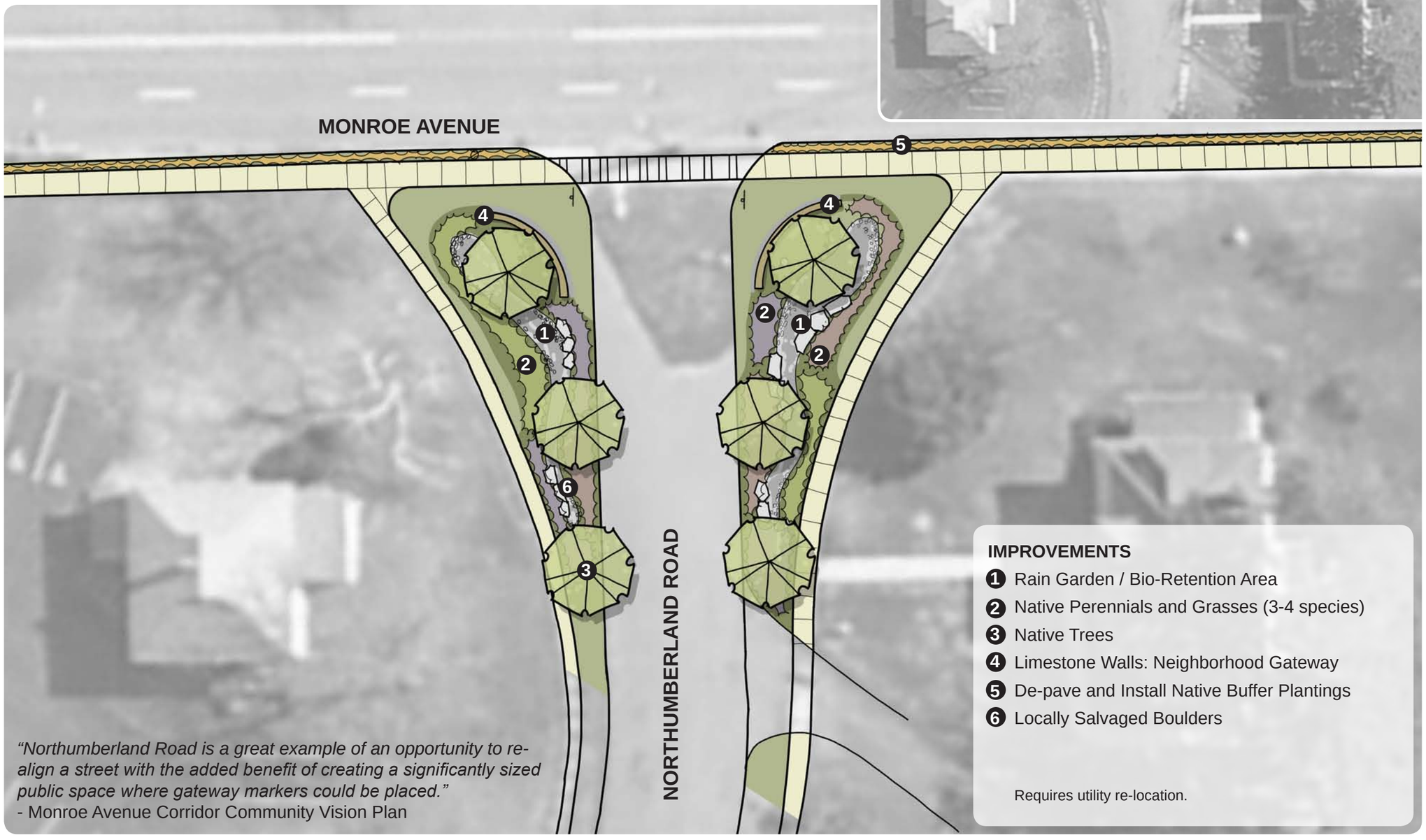
Monroe Avenue GIGP
Brighton, Monroe County, New York

EXISTING CONDITIONS

PROPOSED IMPROVEMENTS



"Northumberland Road is a great example of an opportunity to re-align a street with the added benefit of creating a significantly sized public space where gateway markers could be placed."
- Monroe Avenue Corridor Community Vision Plan

IMPROVEMENTS

1. Rain Garden / Bio-Retention Area
2. Native Perennials and Grasses (3-4 species)
3. Native Trees
4. Limestone Walls: Neighborhood Gateway
5. De-pave and Install Native Buffer Plantings
6. Locally Salvaged Boulders

Requires utility re-location.

Concept Project

Northumberland Road Improvements: SK 2

February 2014

Existing Impervious
4,920 +/- SF
Proposed Impervious
3,115 +/- SF
Decreased Impervious
-1,890 +/- SF

Existing Pervious
1,560 +/- SF
Proposed Pervious
3,450 +/- SF
Increased Pervious
+1,805 +/- SF

0 10’ 20’

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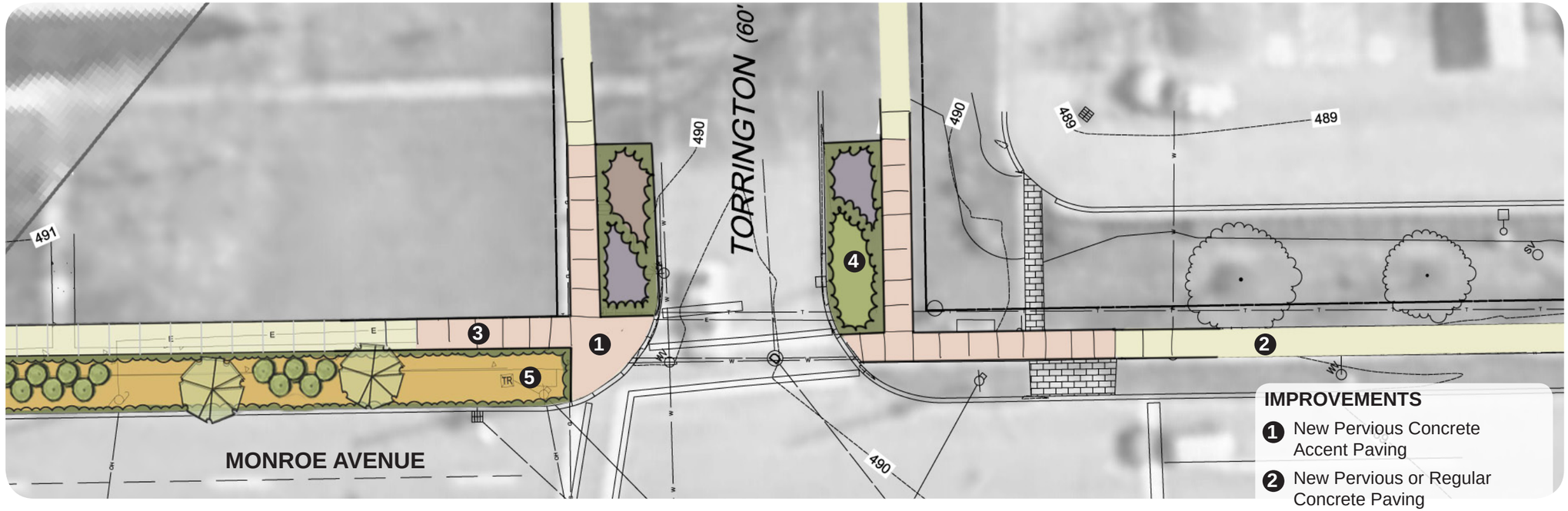
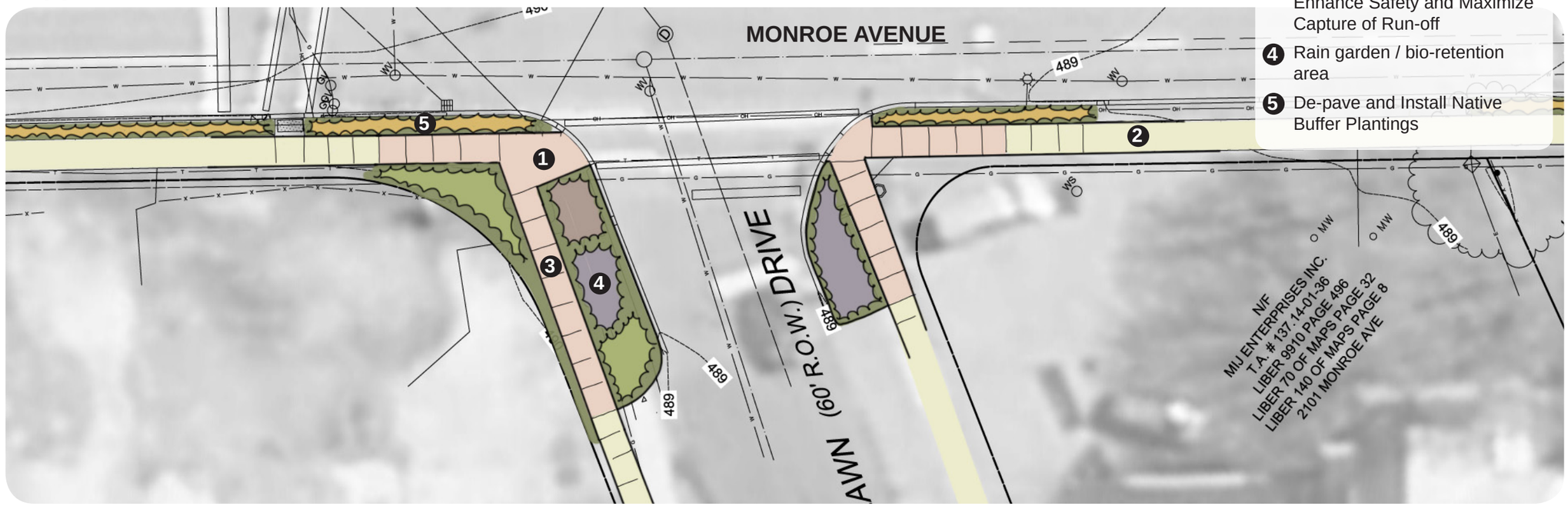
TORRINGTON DRIVE



BROOKLAWN DRIVE



IMPROVEMENTS

1. New Pervious Concrete Accent Paving
2. New Pervious or Regular Concrete Paving
3. Relocated Sidewalk to Enhance Safety and Maximize Capture of Run-off
4. Rain garden / bio-retention area
5. De-pave and Install Native Buffer Plantings

Monroe Avenue GIGP
Brighton, Monroe County, New York

Concept Project

Neighborhood Gateway Improvements
January 2014

0 10’ 20’

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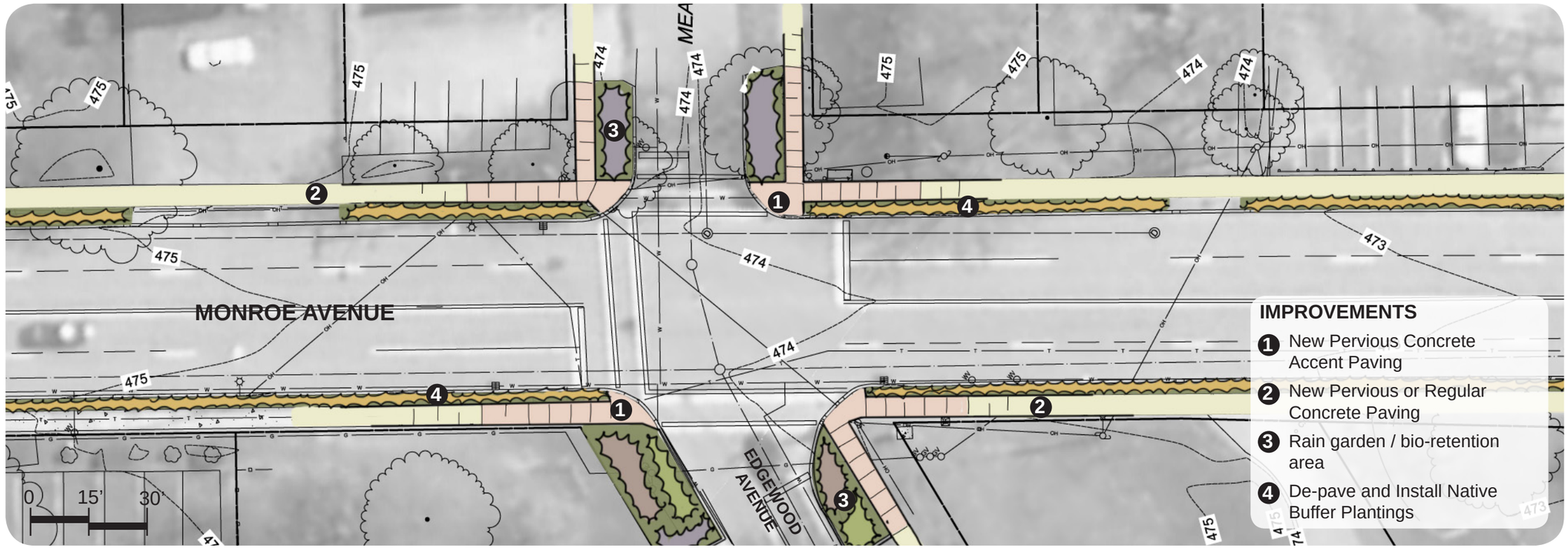
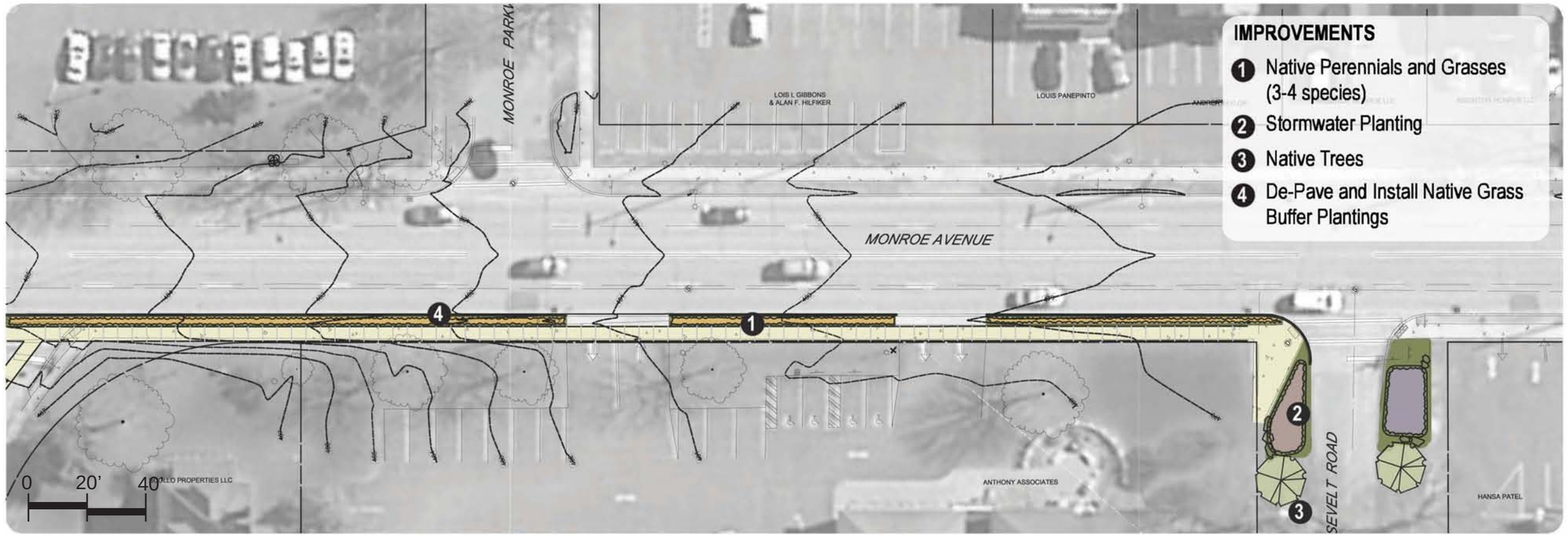
MEADOW DRIVE / EDGEWOOD AVENUE



ROOSEVELT ROAD



Monroe Avenue GIGP
Brighton, Monroe County, New York

Concept Project

Neighborhood Gateway Improvements
January 2014

0 20' 40'

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