A group of people is seen from behind, walking through a dense forest. The trees are tall and thin, with a thick canopy of green leaves. Sunlight filters through the trees, creating a dappled light effect on the forest floor. The people are wearing casual outdoor clothing, including hats and jackets. The overall scene is peaceful and natural.

Middlesex Greenway Extension

Borough of Metuchen, Middlesex County, New Jersey
September 2010

PARTICIPANTS



Metuchen Environmental Commission

Mark Herzberg, Chairperson
Kathy Busch
Patricia Donahue
Thomas Rudel
Ann Sardone
Stephen Toth
Mike Vissichelli
Brian Weeks
Arline Zatz



Association of New Jersey Environmental Commissions



Middlesex Greenway Coalition



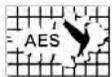
Edison Wetlands Association

A special thanks to the many citizens of Metuchen who participated in the site walks, public workshops, and the Greenway survey.

Prepared by:



Looney Ricks Kiss Architects, Inc.
Princeton, NJ



Applied Ecological Services
Philadelphia, PA



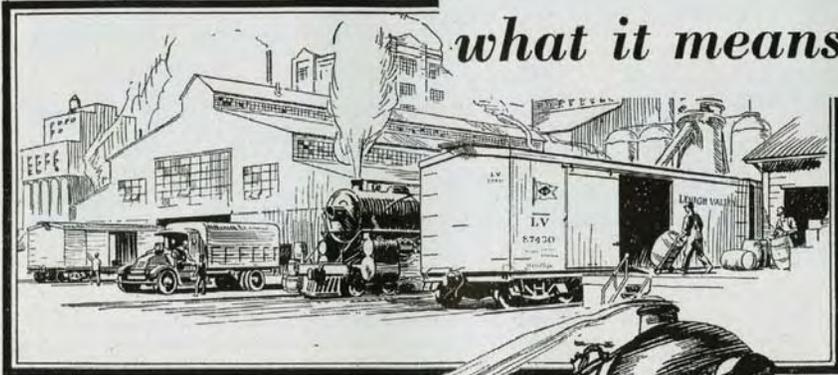


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LEHIGH SERVICE..

what it means



To insure satisfied customers transportation which may be counted on under all circumstances is necessary.

Lehigh service aims to relieve worries regarding prompt deliveries of export or domestic freight. Lehigh Valley representatives are equipped to furnish accurate information regarding progress of your shipments east or westbound.

Try Lehigh service and be convinced.

Lehigh Valley Railroad

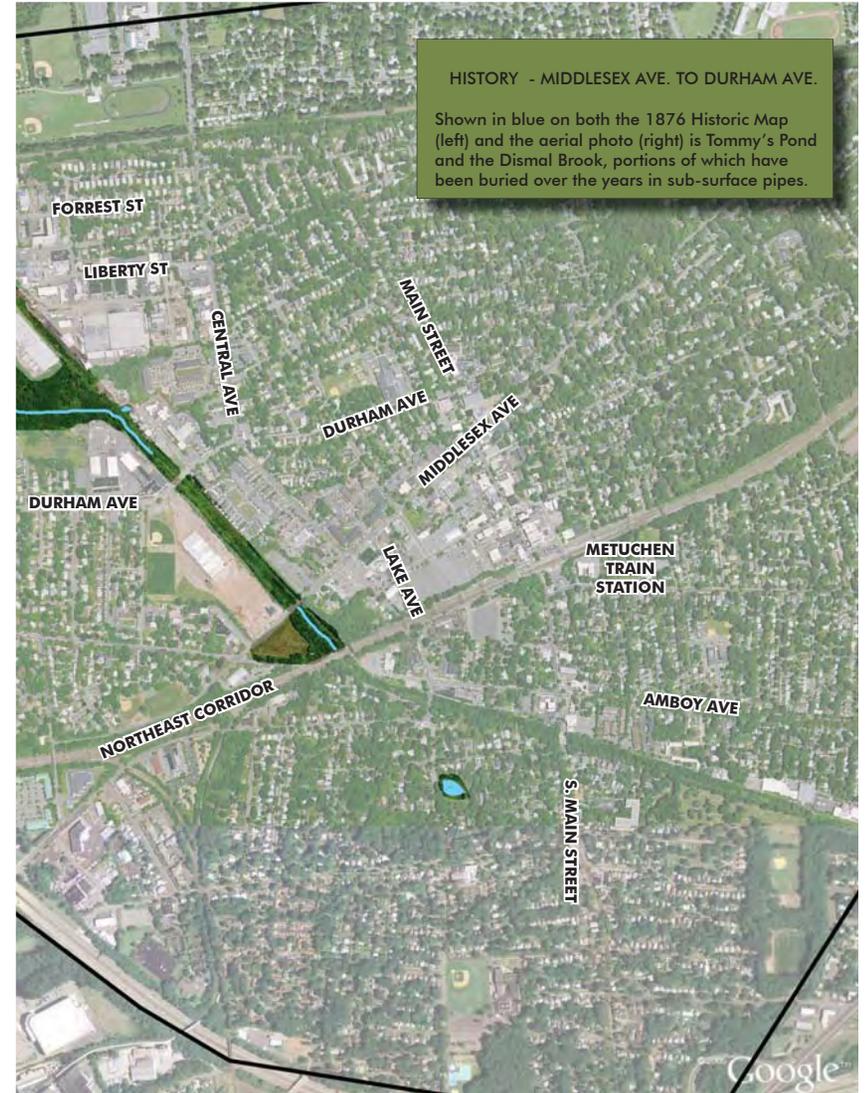
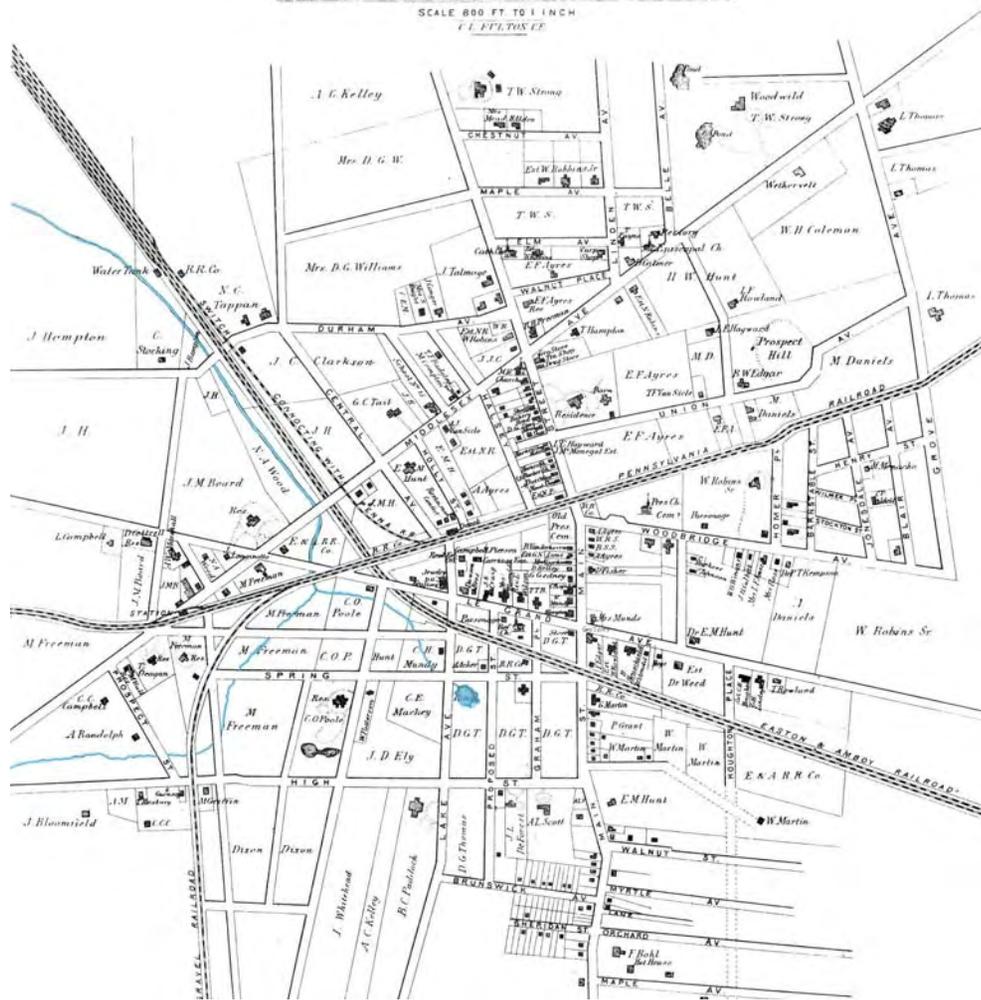
The Route of The Black Diamond



● HISTORY & CONTEXT

PLAN OF METUCHEN

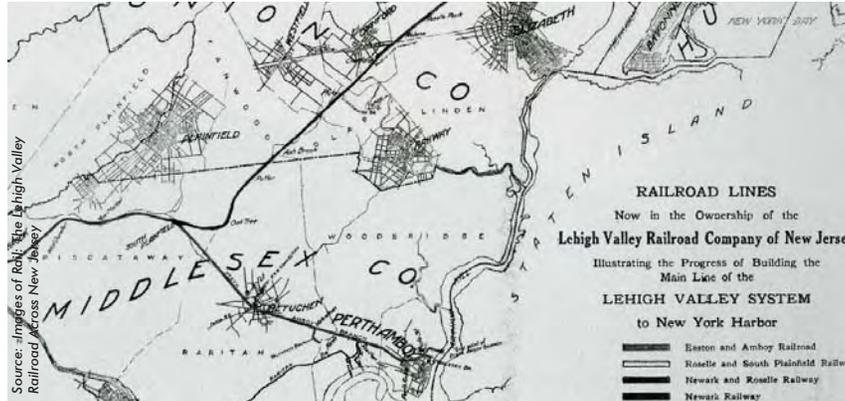
SCALE 800 FT TO 1 INCH
1:12,500



HISTORY - MIDDLESEX AVE. TO DURHAM AVE.
Shown in blue on both the 1876 Historic Map (left) and the aerial photo (right) is Tommy's Pond and the Dismal Brook, portions of which have been buried over the years in sub-surface pipes.

Perth Amboy Branch						
Distance from New York	No. 3 STATIONS and Distances Between Stations	EASTWARD — FIRST CLASS				
		424	426	428	430	432
		Daily A. M.	Daily Except Sunday A. M.	Sunday Only A. M.	Daily Except Sunday P. M.	Sunday Only P. M.
36.1	STATE STREET 0.8	\$ 8.48	\$10.13	\$10.47	\$ 1.13	\$ 5.23
35.3	PERTH AMBOY 1.5	\$ 8.45	\$10.10	\$10.44	\$ 1.10	\$ 5.20
33.8	RARITAN JCT. 0.8	f 8.42	f10.07	f10.41	f 1.07	f 5.17
33.0	FORDS 0.7	f 8.39	f10.04	f10.38	f 1.04	f 5.14
32.3	VALENTINES 0.7	f 8.36	f10.01	f10.35	f 1.01	f 5.11
31.6	PHOENIX 1.3	f 8.33	f 9.58	f10.32	f12.58	f 5.08
30.4	METUCHEN, AMBOY AV. 0.6	\$ 8.30	\$ 9.55	\$10.29	\$12.55	\$ 5.05
29.9	METUCHEN 2.4	\$ 8.27	\$ 9.52	\$10.26	\$12.52	\$ 5.02
27.5	STORAGE GROUNDS 1.0	f 8.23	f 9.48	f10.22	f12.48	f 4.58
26.5	SO. PLAINFIELD (Jct.) 1.0	\$ 8.20	\$ 9.45	\$10.19	\$12.45	\$ 4.55
		A. M.	A. M.	A. M.	P. M.	P. M.

Passenger Schedule Circa 1928



The Perth Amboy Branch of the Lehigh Valley Railroad ran through Metuchen

HISTORY OF THE LEHIGH VALLEY RAILROAD IN METUCHEN

The Lehigh Valley Railroad was one of a number of railroads built in the Northeast to primarily to haul coal from coal mining and hauling operations in Pennsylvania to consumer markets in New York City. It was official incorporated April 21, 1846 and adopted the name Lehigh Valley Railroad in 1853.

Easton and Amboy Railroad was a railroad built across central New Jersey by the Lehigh Valley Railroad in the 1870s. Construction was completed in 1875 extending a branch through Plainfield and Metuchen to Perth Amboy, where a large coal dock was constructed to allow the coal to transport into New York City. The majority of the rail traffic carried coal and other freight. Metuchen had passenger stations along the Perth Amboy Branch line located at Amboy Avenue and at Durham Avenue.

In 1976, major portions of the assets of the bankrupt Lehigh Valley Railroad were acquired by Conrail.



The Former Amboy Avenue Station in Metuchen



The majority of the rail traffic along the Perth Amboy Branch was for the transportation of coal and other freight.

**LOOKING EAST TOWARD MIDDLESEX AVE
AND NORTHEAST CORRIDOR**

WINTER 1940

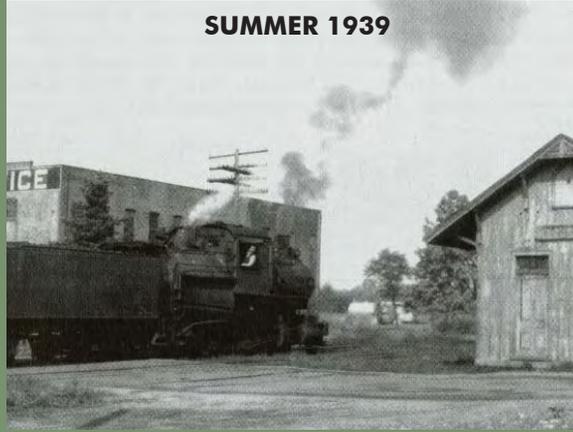


FALL 2009



**DURHAM AVENUE CROSSING
AND FORMER DURHAM STATION**

SUMMER 1939



FALL 2009



**CAMP KILMER SPUR JUNCTION
WITH LEHIGH RAILROAD**

SUMMER 1939

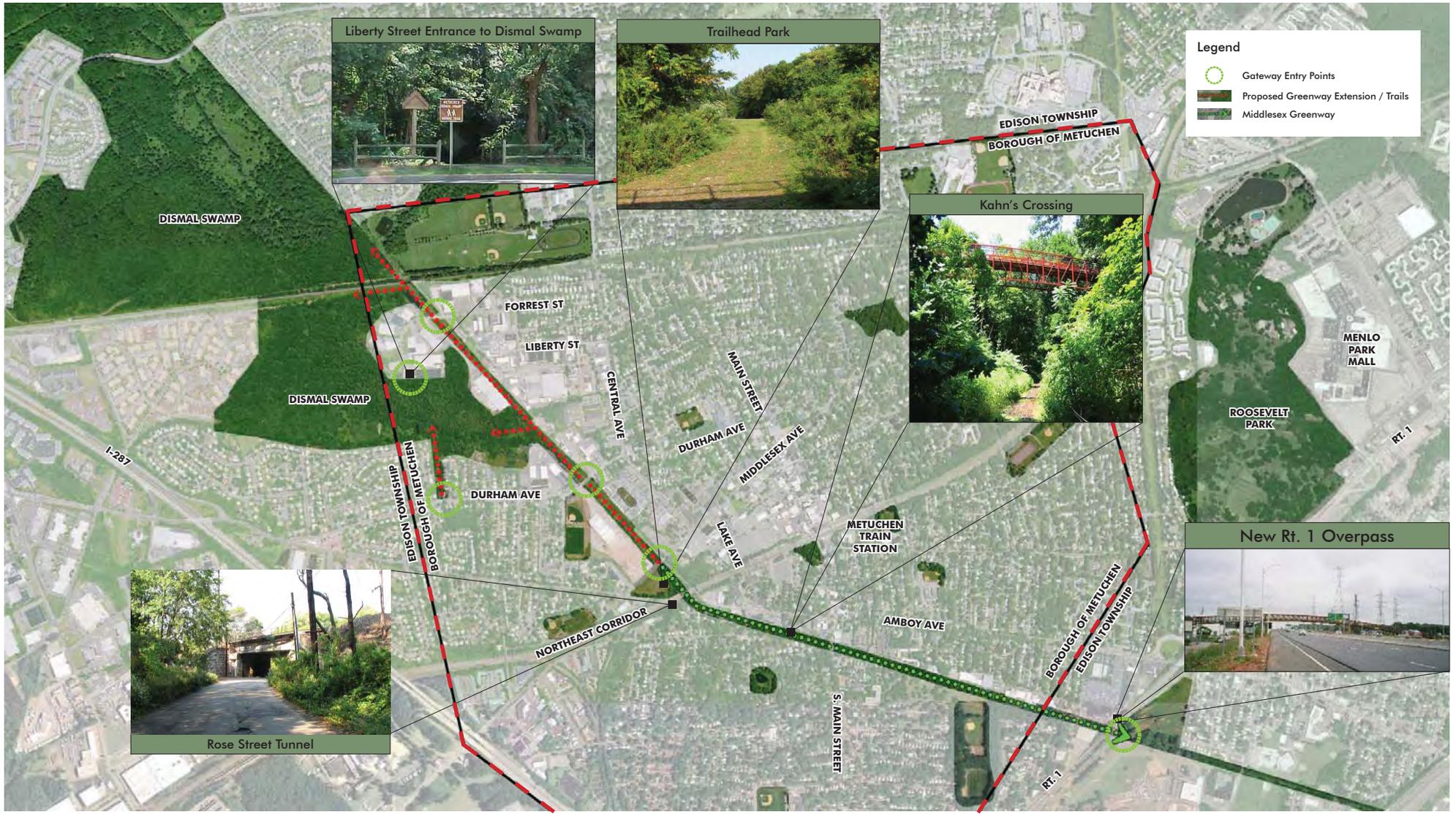


FALL 2009





The Extension of the Middlesex Greenway will create opportunities to retain and reinterpret the railroad and the industrial heritage that transformed this area almost a century ago.

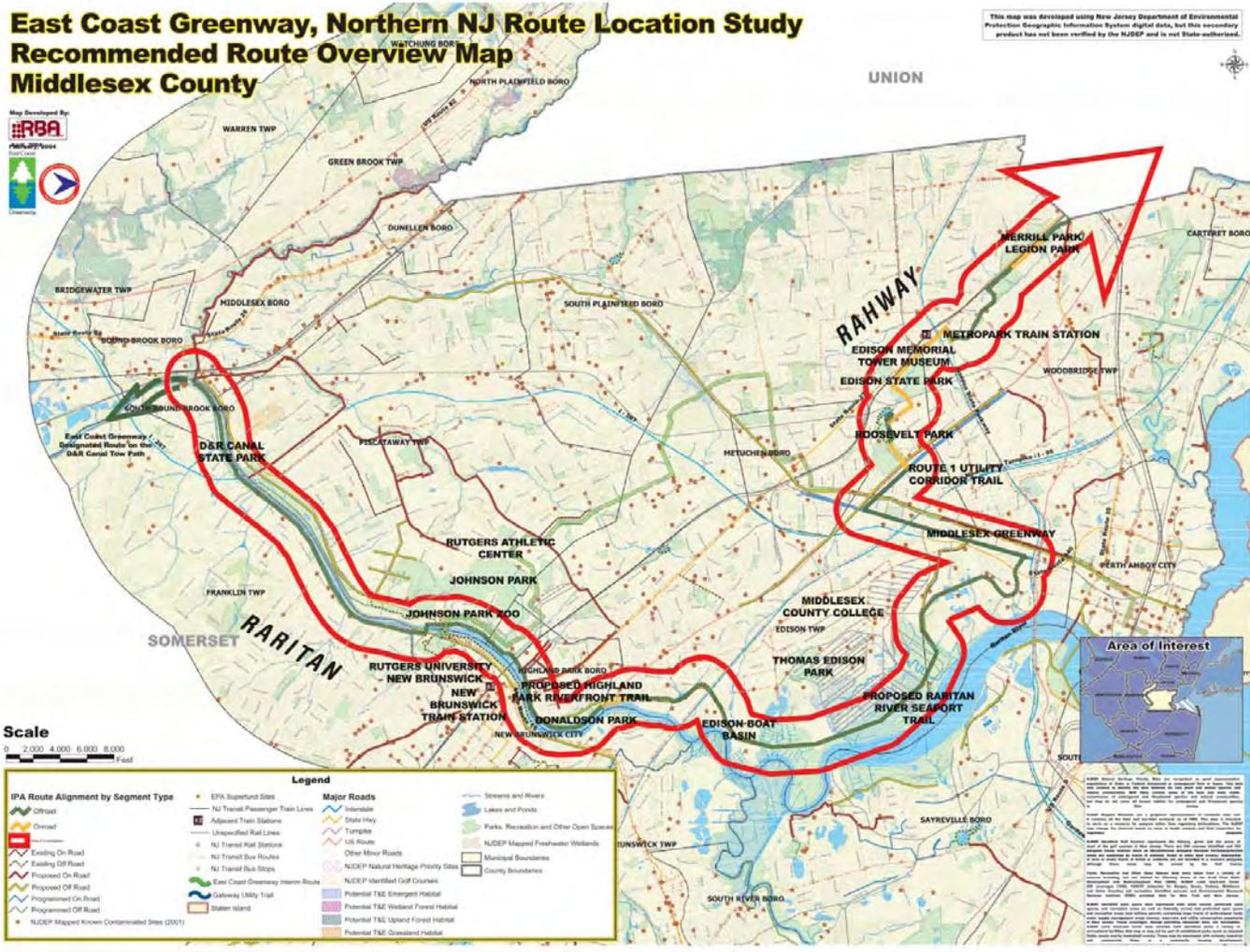


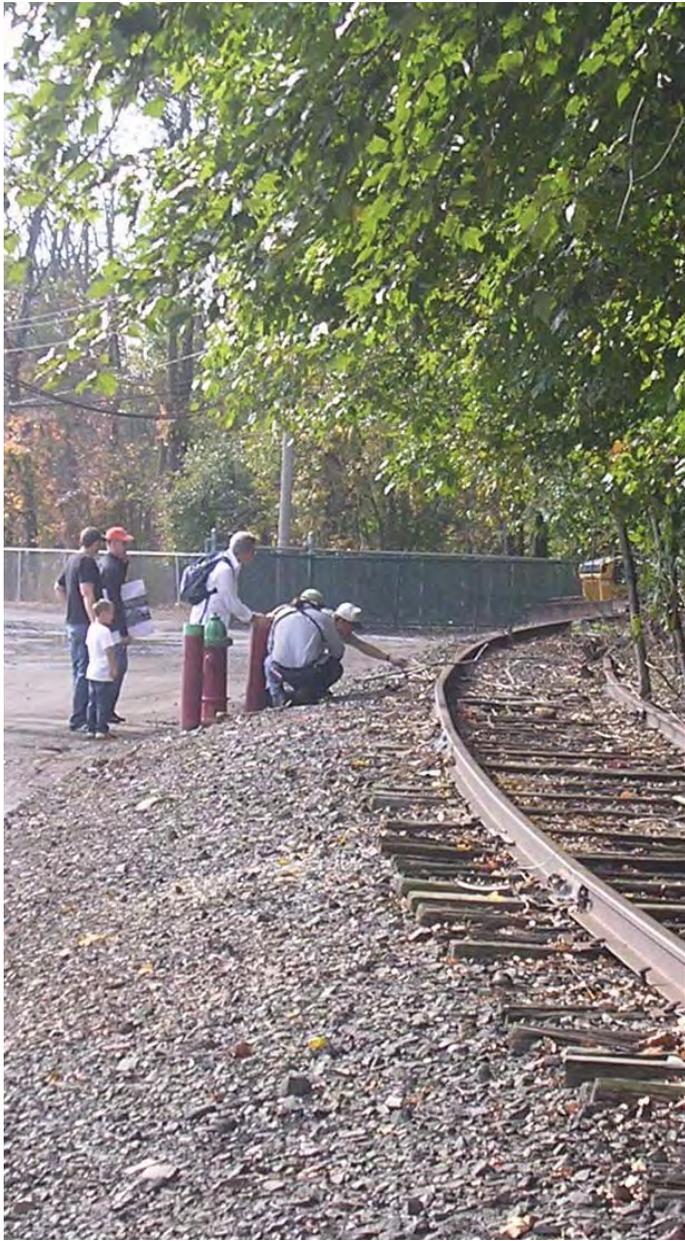
EXTENDING THE EAST COAST GREENWAY

The East Coast Greenway is a developing trail system, spanning nearly 3,000 miles as it winds its way between Canada and Key West, linking all the major cities of the eastern seaboard. Nearly 25 percent of the route is already on safe, traffic-free paths.

The New Jersey portion of the Greenway covers 94 miles between Pennsylvania and New York. It passes through bustling urban areas as well as quiet suburban settings and more rural landscapes than one might expect. The route is currently 48% on traffic-free paths and has the second highest percent of completed trail in any Greenway state.

The Middlesex Greenway provides additional linkages to the system. The County anticipates publishing notice of the construction RFP in the Summer of 2010. For more information on the Greenway please see www.edisongreenways.org/greenway.html.





B *PROCESS*



COMMUNITY PLANNING: MIDDLESEX GREENWAY EXTENSION



While Metuchen has several projects completed, approved and in the advanced planning stages in its Town Center, the Borough is also targeting the clean-up and mixed-use redevelopment of several brownfields sites including a portion of the Lehigh Valley Railroad right-of-way. These sites total approximately 50.69 acres of land that extends from the edge of Metuchen's Town Center to the edge of the Dismal Swamp, the largest natural open space in northern Middlesex County. The Dismal Swamp covers nearly 1,240 acres with a 12-acre portion of its wetland and upland area located in Metuchen.

What started as a "rails-to-trails" vision more than two decades ago is coming to fruition today. The Middlesex Greenway overpass at Route One is installed and Middlesex County is moving forward with implementing trail improvements. The Greenway is a regional open space running through Metuchen, Edison, South Plainfield, Woodbridge and Perth Amboy to access trails and natural open space in the Dismal Swamp. Presently, public access to the uplands of the Dismal Swamp in Metuchen is extremely difficult and limited, thus making the most significant natural open space in the region extremely inaccessible.



Spanning across Metuchen, Edison and South Plainfield, the Dismal Swamp is the most significant natural open space in the region. Recently the Dismal Swamp Planning Commission was created to help protect this natural resource area. Presently, there are a number of interrelated efforts for enhancing the regional recreational value of the Dismal Swamp, including plans for additional trails, a connection to the Environmental Center at the Triple C Ranch in Edison, equestrian trails, etc. The State Wetlands Mitigation Funds may be available to restore freshwater wetlands in the Dismal Swamp.

Selected Comments from the Survey

Central Avenue would be a great bicycle route to Liberty St. especially on weekends - You can see parents pushing carriages and running from Main to Central to Plainfield Ave. We have a truck problem!

Trash needs to be cleaned and trail put in. Otherwise leave pure.

More pedestrian-friendly access to green spaces/parks please!

Better signs and info

Pedestrian and bike access is the next big thing. Middlesex County would be well-off to accommodate

We would love an extension/bike path, being a former NYC bike rider

Separated grade crossing at Middlesex Avenue would be great!

I love the Greenway as it is now - perfect place to walk my dog. Only improvement would be to reduce mud/standing water on the trail as it goes under Main St. and Rt. 27.

Have a sign at the "start" of the trail to bring more awareness to this great place

Link up with Memorial Park in Metuchen

If new railroad parking deck is built, trade-off & eliminate parking on Memorial Way next to Memorial Park & "regreen" that lot as part of the Greenway

I ride my mountain bike from Trailhead Park to Belmont Ave. in South Plainfield. It would be a great loss of the trail if this were (sic) entirely "tamed". There is very little off-road cycling in this area and this is a treasure. Any plans should consider the pre-existing uses of the trail such as mountain biking

Identify the history of the trail - LVRR train stations, etc.

More access points

I think it would be a wonderful idea. Everything is becoming so "city life". It would be great to take kids or your pets. Wonderful idea to get people out and exercise

Please use material which allows for proper drainage. The rails-to-trails walkway behind the TD Bank is too wet by the Kahn's Bridge area.

Please keep reminding us how important this is!

Someplace for teens to "hang out" instead of parking lots

Skateboard Park

Dog park



Citizens, businesses and other interested parties are invited to participate in a public workshop on November 18, 2009 to help create a Concept Plan for the Middlesex Greenway Extension in Metuchen.

Schedule for Public Events November 18, 2009	Did You Know?
<p>OPEN HOUSE Wednesday, November 18, 2009 7:00pm - 9:00pm</p> <p>Metuchen Senior Citizen's Center 15 Center Street • Metuchen</p> <p>Discuss improvements and design possibilities for the proposed Greenway extension with the Environmental Commission, planners and ecologists.</p> <p>Brainstorm ideas on:</p> <ul style="list-style-type: none"> • Pedestrian and Bike Connections • Open Space Design • Sustainable Stormwater Management • Community Gardens • Sustainable Agriculture 	<p>That there used to be numerous working farms in Metuchen and on the lands surrounding the Dismal Swamp. The last working farm disappeared from Metuchen about 50 years ago.</p> <p>The East Coast Greenway, when complete, will extend for approximately 3000 miles from Calais, Maine to Key West, Florida.</p> <p>New Jersey currently has 47 "Rails-to-Trails" totaling 208 miles. Another 14 trails with an additional 103 miles in the advanced planning/construction stage.</p> <p>The American Community Gardening Association estimates there are more than 18,000 community gardens in the United States and Canada.</p> <p>Bioretention is a natural water quality and quantity control practice that uses the chemical, biological and physical properties of plants, microbes and soils for removal of pollutants from storm water runoff.</p>



Have you heard about...

	Number of Responses	
Rails to Trails Greenway?	21	57%
The East Coast Greenway?	13	35%
The Middlesex Greenway?	19	51%
The Dismal Swamp?	30	81%
The Middlesex Greenway Extension?	23	62%
Trailhead Park?	16	43%

Which ideas do you like most for incorporating into the extension of the Middlesex Greenway?

	Number of Responses	
Trails		
Hard Paved Paths	13	35%
Soft Paved Paths	21	57%
Interpretative Nature Trail	18	49%
Other - Mountain Bike Trails	2	5%
Park Space		
Passive Trails & Greenery	22	59%
Restored Wetlands & Native Species Habitat	22	59%
Water's edge along exposed portions of Dismal Brook	15	41%
Formal Park & Garden Space	9	24%
Active Recreation Fields	6	16%
Sports Court	1	3%
Amphitheater	4	11%
Bicycle Park	1	3%

Gardens

Community (small plots available to residents)	19	51%
Wildflower	25	68%
Butterfly	16	43%
Water, wetlands, & wet-tolerant vegetation	22	59%
Touch & scent	9	24%
Formal	2	5%
Sculpture	9	24%
Sustainable Agriculture	13	35%
Other - Vegetable Garden for kids & seniors	1	3%



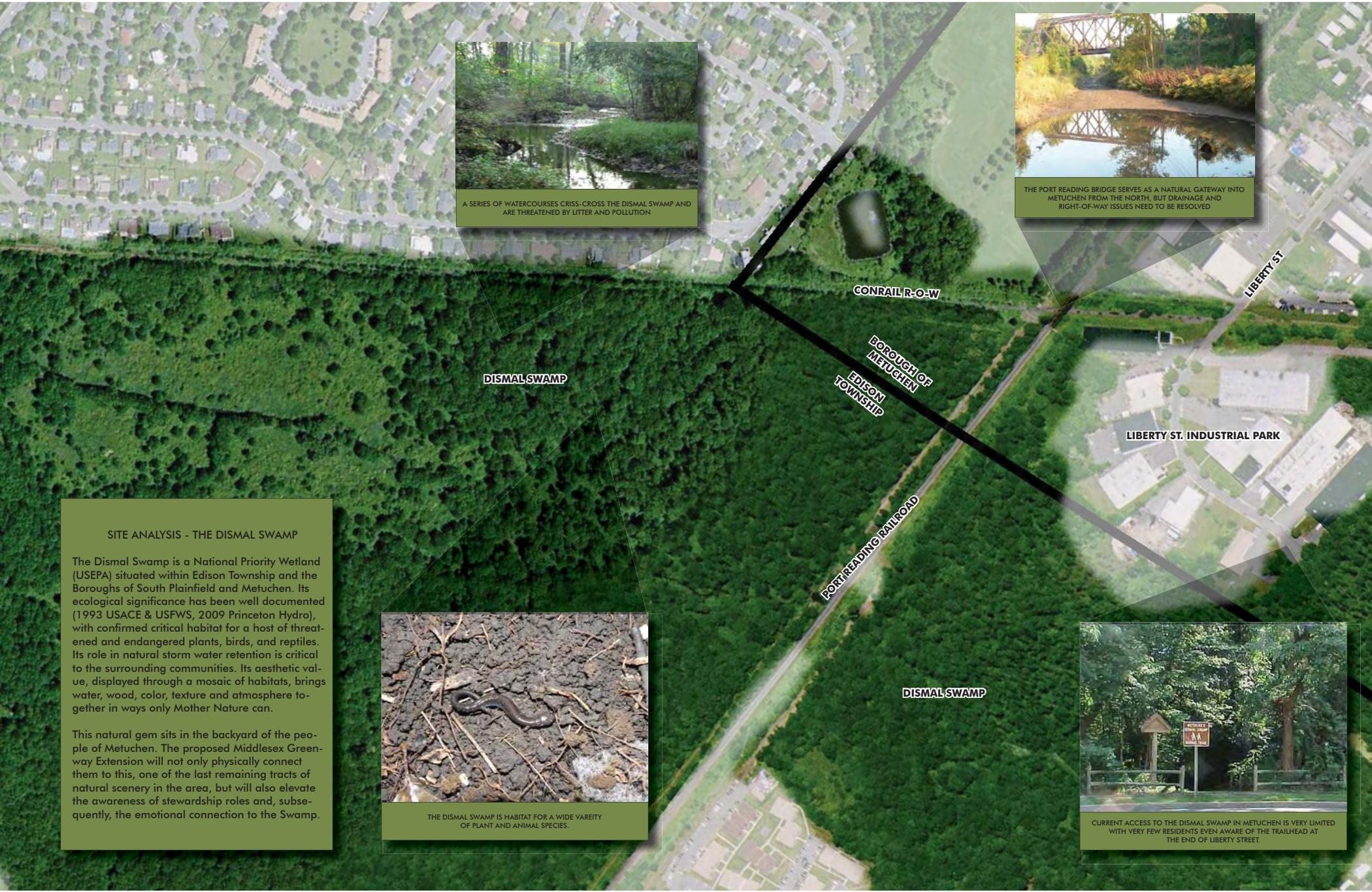
COMMUNITY INVOLVEMENT: WALKING TOURS, WORKSHOPS, AND GREENWAY SURVEY

The Middlesex Greenway Extension Plan was developed using a public participatory process involving site walking tours, community workshops and a survey. Residents and stakeholders offered their perceptions of existing conditions and the possibilities for the Greenway. They identified opportunities and challenges and the potential improvements that would enhance the sustainability and livability of the Borough.

Two walking tours were embarked upon to identify elements of Study Area that the planning team needed to understand through the eyes and experience of the “local experts” who live in the Metuchen. These “walk and talk” tours were conducted in July with the Environmental Commission and in October with citizens attending the Public Workshop.

Two public workshops were held to provide an opportunity to involve the “local experts” in the formulation of the plan. Metuchen citizens also acted as a sounding board for feedback on some key issues, ranging from bicycle and pedestrian safety and access, environment concerns, open space needs, and circulation issues. The format of the workshops allowed the team to listen to the issues and concerns of the community, including both areas of consensus and conflict, to more clearly understand the community’s vision for its future.

The survey was developed to gauge the awareness for the Greenway and Dismal Swamp in the community. It also included questions to gather input for types of open space amenities (trails, park features, gardens, etc.); questions to explore favorite parks as precedents; and a section for comments and direct feedback. The results reinforced the need for increased awareness and publicity for the Greenway. There was general consensus for introducing a variety of trails, “green-themed” public spaces, and community garden elements.



A SERIES OF WATERCOURSES CRISS-CROSS THE DISMAL SWAMP AND ARE THREATENED BY LITTER AND POLLUTION



THE PORT READING BRIDGE SERVES AS A NATURAL GATEWAY INTO METUCHEN FROM THE NORTH, BUT DRAINAGE AND RIGHT-OF-WAY ISSUES NEED TO BE RESOLVED

DISMAL SWAMP

CONRAIL R-O-W

BOROUGH OF METUCHEN
EDISON TOWNSHIP

LIBERTY ST

LIBERTY ST. INDUSTRIAL PARK

PORT READING RAILROAD

DISMAL SWAMP

SITE ANALYSIS - THE DISMAL SWAMP

The Dismal Swamp is a National Priority Wetland (USEPA) situated within Edison Township and the Boroughs of South Plainfield and Metuchen. Its ecological significance has been well documented (1993 USACE & USFWS, 2009 Princeton Hydro), with confirmed critical habitat for a host of threatened and endangered plants, birds, and reptiles. Its role in natural storm water retention is critical to the surrounding communities. Its aesthetic value, displayed through a mosaic of habitats, brings water, wood, color, texture and atmosphere together in ways only Mother Nature can.

This natural gem sits in the backyard of the people of Metuchen. The proposed Middlesex Greenway Extension will not only physically connect them to this, one of the last remaining tracts of natural scenery in the area, but will also elevate the awareness of stewardship roles and, subsequently, the emotional connection to the Swamp.



THE DISMAL SWAMP IS HABITAT FOR A WIDE VARIETY OF PLANT AND ANIMAL SPECIES.



CURRENT ACCESS TO THE DISMAL SWAMP IN METUCHEN IS VERY LIMITED WITH VERY FEW RESIDENTS EVEN AWARE OF THE TRAILHEAD AT THE END OF LIBERTY STREET.



THE BOROUGH'S MASTER PLAN INCLUDES A FUTURE ACCESS ROAD PARALLEL TO CENTRAL AVE. TO RELIEVE SOME OF THE TRUCK TRAFFIC IN THE AREA. THIS WILL HAVE TO BE SENSITIVELY-DESIGNED TO WORK WITH THE PLANS FOR THE GREENWAY EXTENSION.

SITE ANALYSIS- MIDDLESEX AVE. TO DURHAM AVE.

This stretch of the proposed greenway is approximately 200 feet wide. There is little opportunity to provide shade trees along the east side of this section due to active R.O.W. vegetation regulations. This area could invite and use the open sun to its benefit. There is an establishment of beneficial herbaceous plants native to the area already growing here (along with non-natives).

From Durham Avenue to Middlesex Avenue should be a mosaic of open space features including wildflower gardens and prairie grass-type field patches. Interspersed sections of community garden plots can be 'tucked' away into these open space features to minimize the negative impact on aesthetics.



ANY TRAIL CROSSING AT MIDDLESEX AVENUE WILL NEED TO BE CAREFULLY CONSIDERED GIVEN THE HIGH VOLUME OF TRAFFIC, VISIBILITY CONSTRAINTS FROM THE OLD EMBANKMENT, AND LACK OF SAFE PEDESTRIAN/BICYCLE CONNECTIONS



TRAILHEAD PARK. THE TEMPORARY TERMINUS OF THE MIDDLESEX GREENWAY, IS WAITING CURRENTLY FOR A PLAN FROM THE BOROUGH TO BE CREATED. ONCE THE EXTENSION IS COMPLETED IT HAS THE OPPORTUNITY TO BE A KEY COMMUNITY SPACE.

CONRAIL R-O-W

DURHAM AVE

CENTRAL AVE

DURHAM AVE

CONRAIL R-O-W

FUTURE
SPORTSPLEX SITE

MIDDLESEX AVE

TRAILHEAD
PARK

PLANNED
MIDDLESEX
GREENWAY

NORTHEAST CORRIDOR

DISMAL SWAMP



THE RAISED RAILROAD BED ON THE KILMER SIDING IS BOROUGH-OWNED AND OFFERS A GREAT TRAIL OPPORTUNITY TO VIEW OVER THE MARSH LANDS ON EITHER SIDE



THE DISMAL BROOK IS PIPED THROUGH A LONG STRETCH OF THE PROPOSED GREENWAY EXTENSION WITH A LARGE OUTFALL BEHIND THE GULTON TRACT AT THE EDGE OF THE DISMAL SWAMP



THE GRADE DIFFERENCE IN THIS PORTION OF THE LVRR R-O-W OFFERS AN OPPORTUNITY FOR SPLITTING THE TRAIL AND CREATE A LOCATION FOR A BRIDGE ELEMENT.



CURRENTLY THE MIDDLESEX GREENWAY IS PLANNED TO UTILIZE THE OLD LVRR UNDERPASS TO CONTINUE TO THE PLANNED TERMINUS AT MIDDLESEX AVE. LONGER TERM PLANS WILL HAVE TO EXPLORE THE OPTIONS FOR THIS UNDERPASS AND THE ROSE ST. TUNNEL TO DETERMINE THE ULTIMATE PATH OF THE GREENWAY AND NEW ROAD CONNECTIONS.

0 100 200 400 ft

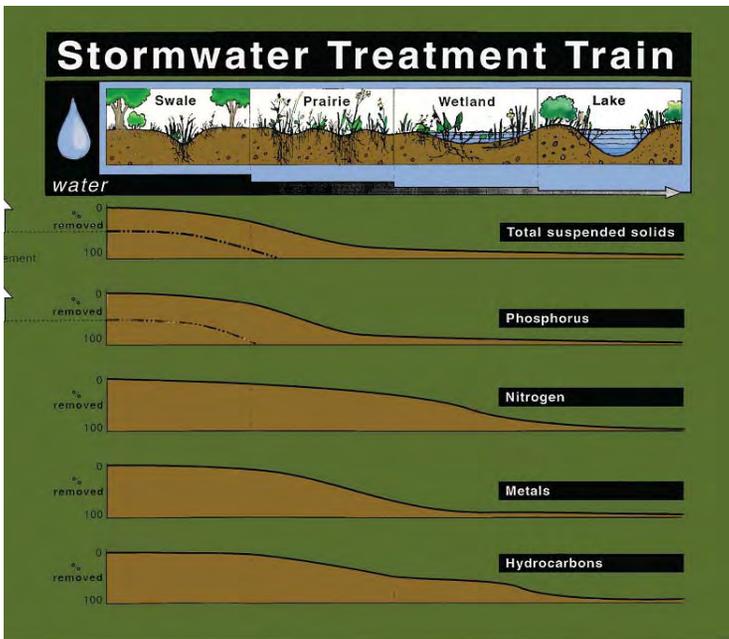




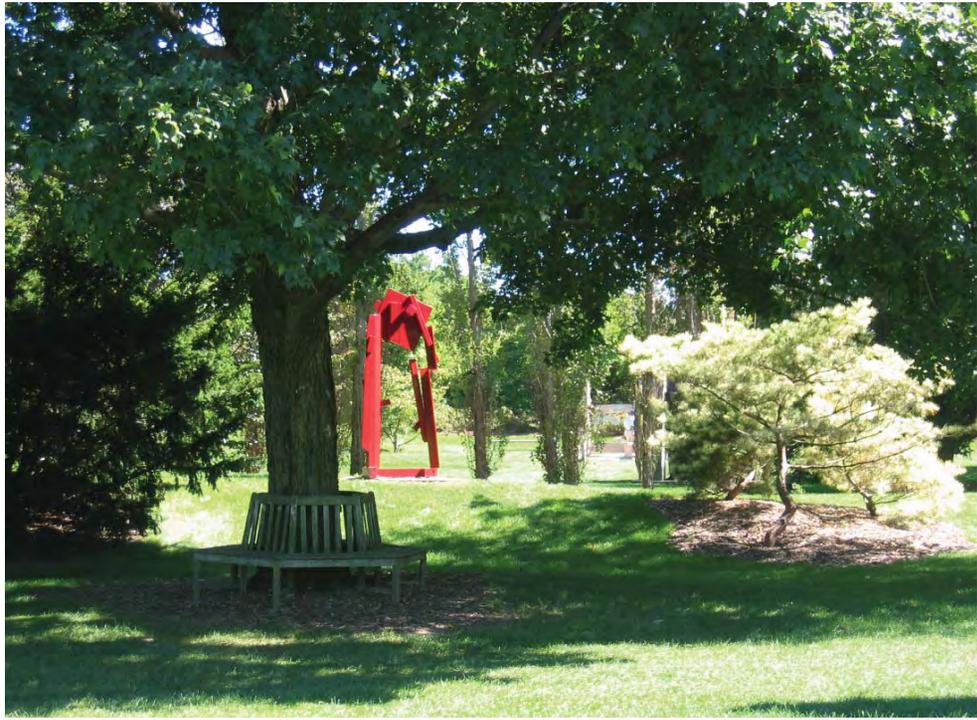
© VISION & BIG IDEAS



BIG IDEAS - GARDENS: WILDFLOWER AND BUTTERFLY GARDENS; COMMUNITY-SUPPORTED AGRICULTURE; RAISED BED COMMUNITY GARDENS



BIG IDEAS - SUSTAINABLE DESIGN: WETLANDS RESTORATION, STORMWATER TREATMENT TRAINS, RAIN GARDENS, STREAM "DAYLIGHTING"



BIG IDEAS - PARK SPACES: QUIET SITTING AREAS, FLOWER GARDENS AND ARBORETUMS, SCULPTURE GARDENS, EMBANKMENT PLANTING AND RESTORATION



BIG IDEAS - TRAILS: PAVED MULTI-USE PATHS, SOFT-PAVED TRAILS, WOODED MOUNTAIN BIKE TRAILS, BRIDGE ELEMENTS



D CONCEPT PLAN
& IMPLEMENTATION



THE OLD HUNTER'S TRAIL WILL GIVE VISITORS FURTHER ACCESS TO THE DISMAL SWAMP AND A PLACE TO VIEW THE WATER COURSES AND THE SWAMP'S WILDLIFE.

STORMWATER MANAGEMENT PRACTICES WILL UTILIZE SUSTAINABLE MEASURES SUCH AS BIO-SWALES AND RAIN GARDENS TO NATURALLY COLLECT AND CLEAN STORMWATER RUN-OFF

THE ACCESS ROAD WILL HAVE LIMITED HOURS DURING WEEKDAYS WITH GATES AT LIBERTY STREET AND DURHAM AVE. ALL OTHER TIMES THE STRETCH OF THE ROADWAY WILL BE AVAILABLE TO GREENWAY USERS.

THE RAISED BED OF THE CAMP KILMER RAIL SIDING WILL BE INCORPORATED AS PART OF THE TRAIL SYSTEM AND WILL PROVIDE ADDITIONAL ACCESS TO THE DISMAL SWAMP

SECTIONS OF THE TRAIL SYSTEM WILL BE LOCATED ON BOARDWALKS TO PROVIDE ACCESSIBILITY, PROTECT THE SWAMP AND OFFER A VANTAGE POINT FOR VIEWING FLORA AND FAUNA.

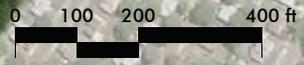
FORREST ST

LIBERTY ST

LIBERTY ST

PORT READING RAILROAD

LIBERTY ST. INDUSTRIAL PARK





THE MAIN TRAIL WILL FOLLOW THE DISMAL BROOK INTO THE SWAMP. THIS WILL HELP TO GIVE GREATER ACCESS TO THE DISMAL SWAMP. A LEG OF THE TRAIL WILL CONTINUE WITH A BUFFER FROM THE ACCESS ROAD TO LIBERTY STREET.

DAYLIGHTING A PORTION OF THE DISMAL BROOK WILL CREATE A WATER FEATURE AND A VISIBLE ADDRESS FOR THE GREENWAY EXTENSION ON DURHAM AVE.

COMMUNITY GARDEN PLOTS WILL BE CREATED IN RAISED BED PLANTERS ALLOWING FOR ACCESSIBLE GARDENING FOR METUCHEN RESIDENTS

TO ASSIST IN SAFELY CROSSING MIDDLESEX AVENUE, THE EXISTING RAILROAD EMBANKMENT CAN BE UTILIZED TO CREATE A GREENWAY BRIDGE. THE BRIDGE CAN UTILIZE A DESIGN THAT WILL BRING VISIBILITY TO THE GREENWAY AND PROPOSED LINEAR PARK SYSTEM.

THE EXISTING RAIL TUNNEL AND THE ROSE STREET TUNNEL OFFER TWO UNDERPASSES AT THE NORTHEAST CORRIDOR. INITIALLY THE GREENWAY WILL CONTINUE THROUGH THE RAIL TUNNEL. AS METUCHEN DEVELOPS ITS CONNECTOR ROAD PLANS THE GREENWAY ACCESS MAY SHIFT TO THE ROSE STREET TUNNEL.

TRAILHEAD PARK WILL BECOME A MID-POINT ALONG A LARGER TRAIL SYSTEM AND IS AN IDEAL LOCATION FOR A SERIES OF COMMUNITY GATHERING AMENITIES RELATED TO THE GREENWAY THEME. SPACE WILL INCLUDE AN INDOOR GATHERING "BARN", AN OPEN LAWN AREA, A COMMUNITY INTERPRETIVE GARDEN, AND GREEN ENERGY ELEMENTS SUCH AS A WINDMILL OR SOLAR PANELS.

GREENWAY EXTENSION - DURHAM AVENUE

The Central portion of the Middlesex Greenway Extension crosses Durham Avenue and will be another main access point for the trail system. This portion extends from the new cross-connector street across Durham Avenue to the lower edge of the Dismal Swamp.

Extending south toward Trailhead Park the Greenway will include butterfly gardens, community floral gardens and sitting areas. The main trail will follow along the western edge and will have access to the proposed sports complex and off-shoot paths to Vidas Fields. An "upper" trail will follow along the eastern side and will be left more rough and rugged to allow for an alternate path for mountain biking. Native grasses and landscape will be restored along this "upper" trail.

Extending to the north from Durham will be a gateway water feature. The Dismal Brook will be "daylighted", which means removing piped sections and restoring the water course to the open. A pair of one-way roads will ring the new water feature with a boardwalk section located on one side as an overlook. This was the location of the Durham Train Station on the LVRR and a small community kiosk may be located on the former site as a tribute to the Greenway's railroad past.

GREENWAY EXTENSION - MIDDLESEX AVENUE

The current Middlesex Greenway ends at Metuchen's Trailhead Park. With the extension of the greenway system, this will no longer function as a trailhead, but more a midpoint. The vision for this space includes creating community space for trail users and Metuchen residents. The concept plan includes a barn structure that would have multiple functions as an information kiosk and a programmable community space for events such as concerts, dances, receptions and art shows. A lawn area and patio space in front of the Barn will also accommodate community events. A sustainable garden and windmill will act as a landmark as you come into town on Middlesex Ave.

The former rail embankment will be used to create a pedestrian and bicycle bridge over Middlesex Avenue. Once across the trail will have a high and low section with the lower trail being the standard Middlesex Greenway paved path and the higher one a more natural trail. Along the trail an area for raised bed community gardens will be provided. The raised beds allow the garden plots to be easier for older users and persons with disabilities. A new connector road will cross over the Greenway with a small park-like tunnel created for the path to continue under.

BLACK WILLOW MEADOW WILL BECOME A KEY "OUTDOOR ROOM" GIVING ACCESS TO THE DISMAL BROOK. PROVIDE A QUIET SEATING AREA AND COULD BE A PRIME LOCATION FOR A SCULPTURE GARDEN

ADDITIONAL SIGNAGE AND TRAIL IMPROVEMENTS WILL HELP TO INCREASE THE VISIBILITY OF THE CURRENT DISMAL SWAMP ACCESS ON DURHAM AVENUE.





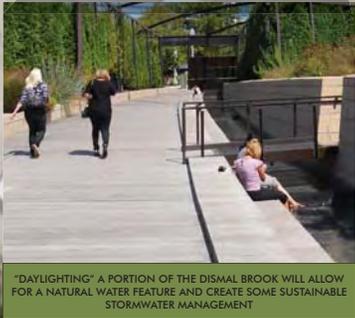
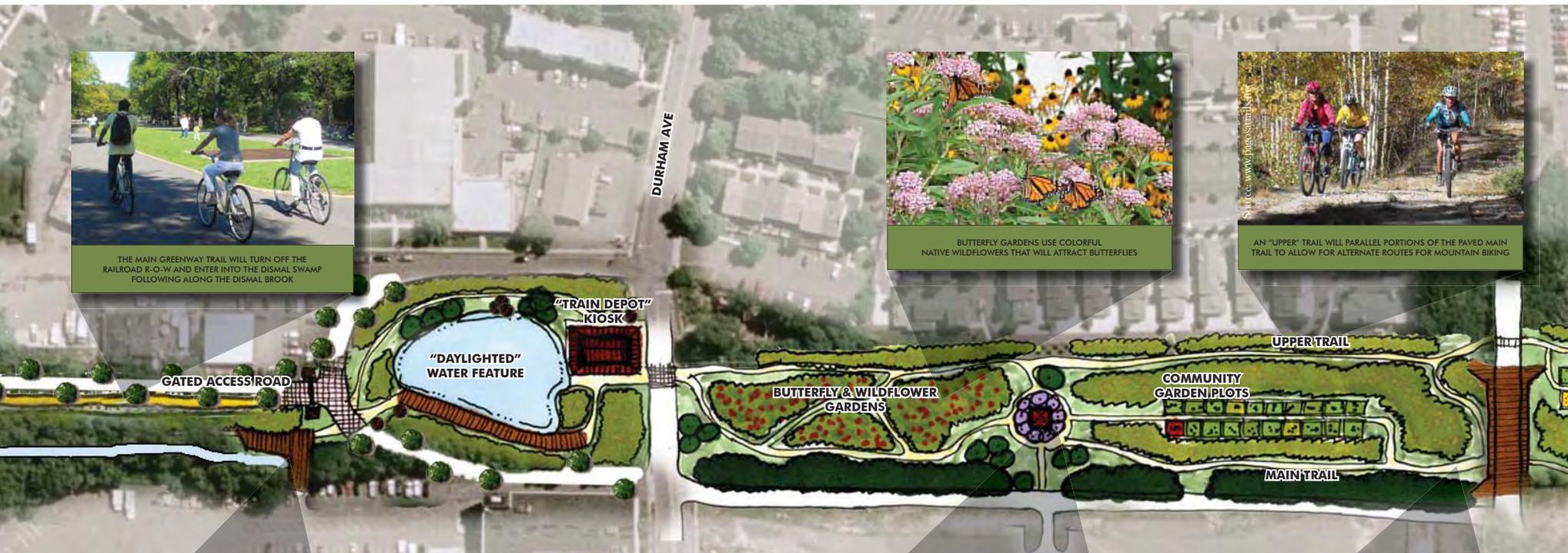
THE MAIN GREENWAY TRAIL WILL TURN OFF THE RAILROAD R.O.W AND ENTER INTO THE DISMAL SWAMP FOLLOWING ALONG THE DISMAL BROOK



BUTTERFLY GARDENS USE COLORFUL NATIVE WILDFLOWERS THAT WILL ATTRACT BUTTERFLIES



AN "UPPER" TRAIL WILL PARALLEL PORTIONS OF THE PAVED MAIN TRAIL TO ALLOW FOR ALTERNATE ROUTES FOR MOUNTAIN BIKING



"DAYLIGHTING" A PORTION OF THE DISMAL BROOK WILL ALLOW FOR A NATURAL WATER FEATURE AND CREATE SOME SUSTAINABLE STORMWATER MANAGEMENT

- IMPLEMENTATION ITEMS - DURHAM AVENUE**
- Activities to activate Durham Avenue as a portion of the Greenway include:
 - Resolve property ownership issues (Owned by Gulton)
 - Habitat restoration
 - Invasive species removal & native plant reintroduction
 - Hydrology assessment
 - Trail markings (colored stakes/ wooden posts)
 - Educational signage (restorative efforts, habitat, ecology (birds/insects/trees))
 - Trail connection to inner Dismal Swamp along Dismal Brook (goes through culvert under major railroad embankment)



SECTIONS OF THE GREENWAY MAY INCLUDE A COMMUNITY GARDEN WITH PATHS, BENCHES, AND SMALL GARDEN STRUCTURES



LOCATING COMMUNITY GARDENS ALONG THE GREENWAY EXTENSION WILL ALLOW FOR GREATER ACCESS AND PROMOTE THE BOROUGH'S SUSTAINABLE INITIATIVES



RAISED BED PLANTERS ARE GREAT COMMUNITY PROJECTS AND CAN BE CONSTRUCTED COST-EFFECTIVELY AS AN EARLY IMPLEMENTATION ITEM



Source: Criteria Hill Village HOA - <http://mychv.com>

AN OPEN LAWN AREA WOULD BE AN IDEAL LOCATION FOR OUTDOOR CONCERTS, OUTDOOR MOVIES, CULTURAL EVENTS AND A FARMER'S MARKET

NORTHEAST CORRIDOR



Source: <http://www.hirthing.ca>

AN "ART BARN" ALLOWS A SMALL SCALE GATHERING SPACES FOR COMMUNITY MEETINGS, CONCERTS, RECITALS, RECEPTIONS, AND OTHER CULTURAL EVENTS

IMPLEMENTATION ITEMS - MIDDLESEX AVENUE

- Interspersed sections of community garden plots can be 'tucked' away into this section of the Greenway. This mosaic will attract pollinating insect species which are key to productive community gardens. Activities to improve this area include:
- Trail design with select tree planting to add some shade along the path (look into ROW regs)
- Vegetative species composition and design of native areas based upon existing establishment
- Native warm season grass (eg. switchgrass, Indian grass, little bluestem, and broomsedge) visual barrier for townhouses
- Bluebird boxes and birdfeeders
- Volunteer trash clean-up
- Raised bed community garden plan
- Educational and instructional signage for gardens (wildflower and community)
- Rain barrels
- Explore solar-lit path lighting with small battery storage



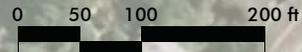
Source: <http://www.nepad.org/>

RAISED BED PLANTERS ARE IDEALLY SUITED FOR ACCESS FOR PERSONS WITH DISABILITIES TO COMMUNITY GARDENS



Source: www.concertsinthecountry.org

THE "ART BARN" COULD FEATURE REVOLVING ART DISPLAYS AND CULTURAL EVENTS





FURTHER LYRR R-O-W ABANDONMENT WILL EXTEND THE TRAIL SYSTEM IN THE REGION TOWARD THE TRIPLE C RANCH IN EDISON AND INTO PORTIONS OF SOUTH PLAINFIELD

MAIN TRAIL TO SOUTH PLAINFIELD AND TRIPLE C RANCH



OLD HUNTER'S TRAIL WILL EXTEND INTO THE EDISON PORTION OF THE DISMAL SWAMP FOLLOWING SOME OF THE EXISTING WATERCOURSES

MAIN TRAIL

OLD HUNTER'S TRAIL

PORT READING RAILROAD

IMPLEMENTATION ITEMS - DISMAL SWAMP/OLD HUNTER'S TRAIL

The Dismal Swamp and Old Hunter's Trail area could benefit from the following activities or improvements.

- Trash clean-up (volunteer effort would suffice)
- Trail markers (colored stakes or wooden posts)
- Educational signage at assembly area/old bait clearing highlighting habitat/species/cultural history with photos and descriptions
- Brief historical analysis of land use
- Low cost natural resource inventory to establish the plant community types, faunal presence, and any highlighted features
- Further exploration of a trail connection to interior Dismal Swamp or loop trail



PATHS IN THE SWAMPS CAN BECOME INTERPRETATIVE TRAILS AND AN EXTENSION OF THE WETLAND EDUCATION EFFORTS OF THE TRIPLE C RANCH



Source: <http://www.alltrails.org>

SOME TRAILS WILL BE LEFT MORE NATURAL AND RESERVED FOR MOUNTAIN BIKING

POSSIBLE TRAIL CONNECTION TO DEGENAL & JOHNSON PARK



THE PORT READING RAILROAD BRIDGE WILL SERVE AS A GATEWAY INTO METUCHEN FROM THE NORTH



SOME BOARDWALK SECTIONS MAY BE INCLUDED AS PART OF THE TRAIL TO CREATE AN ACCESSIBLE PATH AND LIMIT THE DISTURBANCE TO THE SWAMP



A GATED TRUCK ROUTE OF MINIMAL WIDTH WOULD BE CLOSED IN THE EVENINGS AND ON WEEKENDS TO ALLOW FOR EXPANDED USE OF THE GREENWAY



BLACK WILLOW MEADOW WILL SERVE AS A QUIET OUTDOOR ROOM FOR WILDLIFE VIEWING AND ACCESS TO DISMAL BROOK

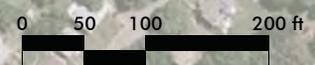


THE EXISTING RAILROAD BED CREATES A PERFECT RAISED TRAIL CONNECTION THROUGH A PORTION OF THE DISMAL SWAMP

IMPLEMENTATION ITEMS - WINCUP/CAMP KILMER SPUR

This 'spur' can be connected to other paths constructed in the swamp, connecting the Liberty Street entrance to the spur, and also perhaps the Durham Avenue R.O.W. entrance and the Gulton Tract (see drawing). Activities to activate this railroad embankment as a portion of the Greenway include:

- Scrap salvaging/historical preservation of railroad
- Soft path substrate
- Leave RR ties as trail support/reptile, amphibian, and small mammal habitat
- Explore reuse of rails
- Historical land use study
- Natural resource inventory/ further exploration of area for trail pathway and educational purposes
- Boardwalk path construction over wetland area to connect to Liberty Street
- Cost estimates for boardwalk materials/implementation
- Explore easement through WinCup parking lot to access spur.

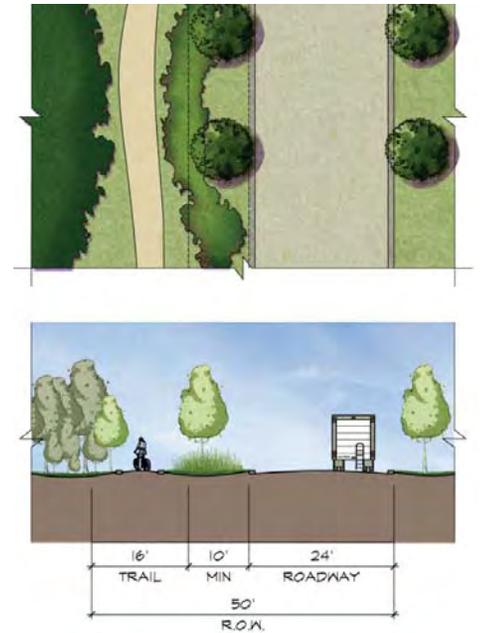


SHARING SPACE: ACCESS ROAD AND MULTI-USE TRAIL

The Durham Avenue to Middlesex Avenue Connector is envisioned in the Metuchen Master Plan Circulation Element to be extended northward to the Liberty Street industrial area. This industrial area is a major source of the truck traffic on Central Avenue, which significantly degrades the service level of the problematic Middlesex/Central/Lake Avenues intersection. The abandoned Lehigh Valley rail right-of-way offers the possibility for this connection. A sensitively located narrow road would connect via Jersey Avenue at Durham Avenue and switch to the northeastern side of the LVRR right-of-way. An additional north-south route such as this would take vehicles off of Central Avenue.

Any road connection would have to be designed in a context-sensitive manner to ensure the safety and usability of the Greenway. The Greenway Extension Plan envisions bringing the main trail into the Dismal Swamp just north of the outfall of the Dismal Brook with a secondary trail following the right-of-way. A narrow access road would extend to Liberty Street and would be gate-controlled. During weekday business hours, the road would be available as an alternate truck route to the industrial area. The Greenway path area will be separated from the access road by a buffer of tall native grasses and plantings, keeping with the sustainable theme and providing separation from the cartway.

Utilizing a flexible “shared space” concept, on evenings and weekends the paved cartway would be closed to motor vehicles and be available exclusively to Greenway users. This section of the Greenway will offer a variety of other possibilities for the trail which could include opportunities for learning to ride a bicycle, roller blading, street art and other activities that would not be possible on a narrower main Greenway path.



Middlesex Greenway				
Activity	Local Effort & Process Steps	Target Date	Possible Funding Sources	Stakeholders & State/County Assistance
Greenway Extension Master Plan	1. Create Project Narrative and Submit Funding	Submitted April '09	ANJEC Smart Growth Planning Grant	Environmental Commission
	2. Community Design Workshop and Site Tour	Fall 2009		Middlesex Greenway
	3. Prepare & Adopt Master Plan	Summer 2010		ANJEC
Ecological Restoration	1. Survey Conditions & Design/Engineering	Winter 2011	Wetlands Mitigation Bank	Environmental Commission
	2. Acquire Properties, Rights-of Way, Easements	Fall 2011		Middlesex Greenway
	3. Construct Improvements	Spring 2012		ANJEC
Improve Trails	1. Survey Conditions & Design/Engineering	Fall 2010		Environmental Commission
	2. Acquire Properties, Rights-of Way, Easements	Winter 2011		Middlesex Greenway
	3. Construct Trail Improvements	Spring 2011		ANJEC
Construct Trailhead Park	1. Rename & Program Park Space	Winter 2010		Environmental Commission
	2. Survey Conditions & Design/Engineering	Spring 2010		Middlesex Greenway
	3. Construct Improvements	Fall 2011		Middlesex County Recreation Department
Pedestrian Bridge over Middlesex Avenue	1. Survey Conditions & Design/Engineering	Winter 2012		Environmental Commission
	2. Acquire Properties, Rights-of Way, Easements	Spring 2012		Middlesex Greenway
	3. Construct Improvements	Fall 2013		Middlesex County DOT Metuchen Police
Community Gardens	1. Survey Conditions & Design/Engineering	Winter 2010		Environmental Commission
	2. Establish a Community Gardens Group	Spring 2010		
	3. Sponsor volunteer work weekend to build raised bed planters	Fall 2011		

