



**FRANKLIN WETLANDS
STORMWATER TREATMENT PARK**

HYDROLOGICAL

SOCIOLOGICAL

ECOLOGICAL

OBJECTIVES

- flood protection and flow control
- water quality improvement
- landscape and recreational amenity
- provision of wildlife habitat

- Bicycle interconnectivity/accessability for Eugene urban fabric
- Landscape and recreation amenity

- Wildlife and habitat support
- Ecological connections and interactions

GOALS

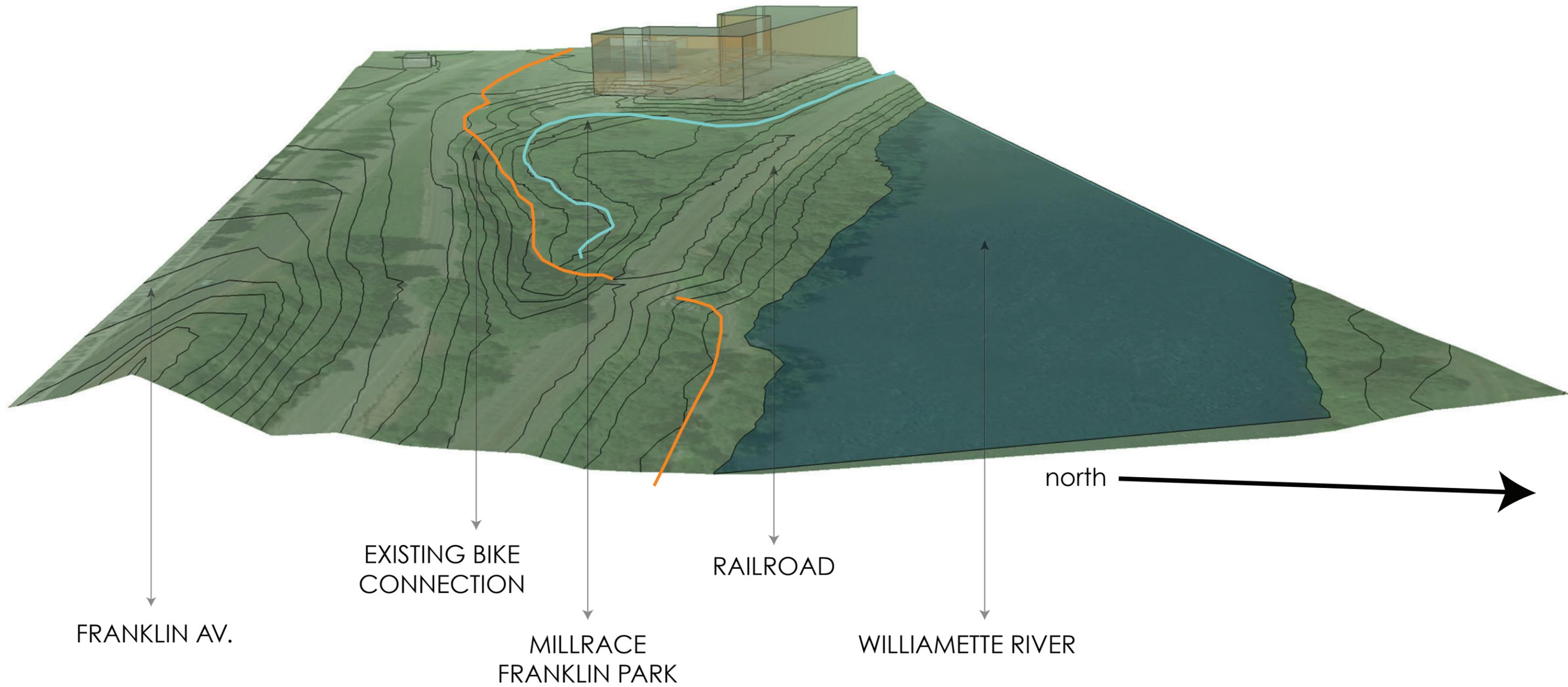
- biological uptake of nutrients and metals by aquatic vegetation
- formation of chemical complexes of nutrients and metals in the sediments
- wetland vegetation to provide surface areas for filtration and surface adhesion of fine particles
- direct sedimentation of larger particles

- Improve human-use within Franklin Park [Ammenities: boardwalk, lookout, paths]
- Provide adequate accessability to park open space
- Create a recognizable threshold to park entrance
- Connect existing bike infrastructure

- Create necessary infrastructure to support stormwater infiltration and sedimentation through constructed wetland ecosystem[s]
- Multi-use of stormwater infrastructure as wildlife habitat [pond]

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STORMWATER TREATMENT PARK



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CURRENT CONDITIONS
 PERSPECTIVE VIEW



NEW APARTMENTS

PROPERTY LINE

EXISTING MILLRACE

RAILROAD



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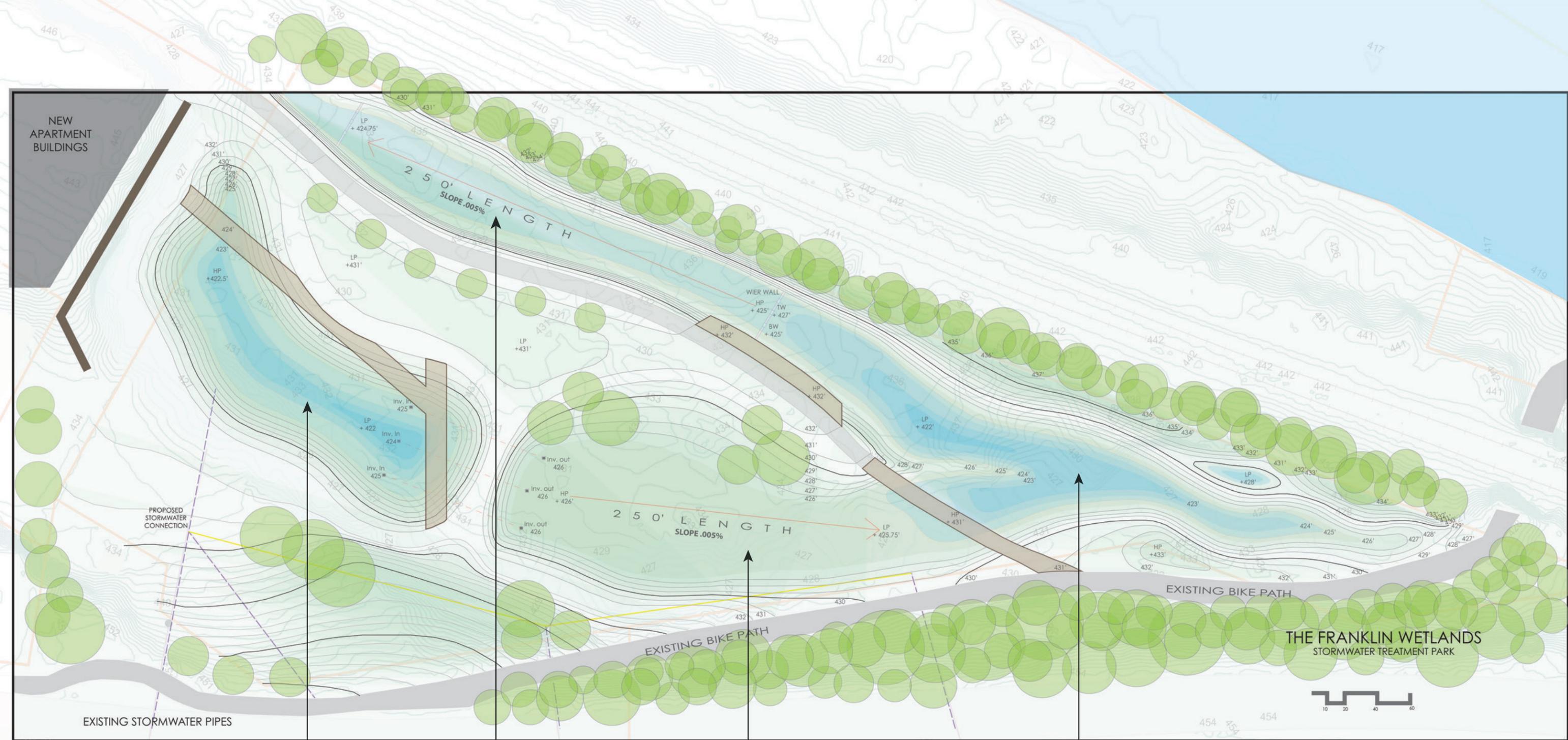
CURRENT CONDITIONS
PLAN VIEW



3x STORMWATER OUTFALLS
INTO MILLRACE [2.8 acre/ft -- 10 year storm]

CURRENT CONDITIONS
PLAN VIEW

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SEDIMENTATION

POLISH MEADOW

EMERGENT MARSH

POND[S]

PLAN VIEW

DESIGNER: KYLE POLLACK

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EMERGENT MARSH AND BICYCLE CONNECTION
PLAN VIEW: CONTEXT/MATERIALS

EXISTING BIKE PATH

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Wetland zone Primary role of plants

Examples of plants:

Inlet

To distribute flows and bind and protect sediments

Schoenoplectus validus
Phragmites australis
Juncus procerus

(River Club-rush)
(Common Reed)
(rush)

Depth: Varies with
volume
Grade: 3:1 side slope

SEDIMENTATION

Shallow marsh:

Shallow inundated area that regularly dries out to provide a substrate for algal epiphytes and biofilms to enhance soluble pollutant uptake

Eleocharis acuta
Baumea acuta
Baumea ribiginosa
Isolepis inundata

(Common Spike rush)
(Pale Twig-rush)
(Soft Twig-rush)
(Swamp Club-rush)

Depth: 6"
Grade: .005% slope

EMERGENT MARSH

Marsh:

Medium-depth inundated area that occasionally dries out to maximize surface area in the flow path for the adhesion of particles

Bolboschoenus medianus
Baumea arthrophylla
Schoenoplectus pungens

(Marsh Club-rush)
(rush)
(rush)

Depth: Max 3.5'
Grade: 3:1 and 5:1
side slopes

PERMANENT POND

Deep marsh:

Permanent inundated area to enhance sedimentation of particles

Schoenoplectus validus
Baumea articulata
Eleocharis sphacelata

(River Club-rush)
(Jointed Twig-rush)
(Tall Spike-rush)

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EXISTING APARTMENTS

SOCIAL SPACE [CIRCULATION]

SEDIMENTATION POND + BOARDWALK

MAIN PARK OPEN SPACE + BICYCLE CONNECTION[S]



SOCIAL SPACE AND SEDIMENTATION



PROPOSED CONDITIONS
SECTION ELEVATION VIEW: [NORTHEAST]

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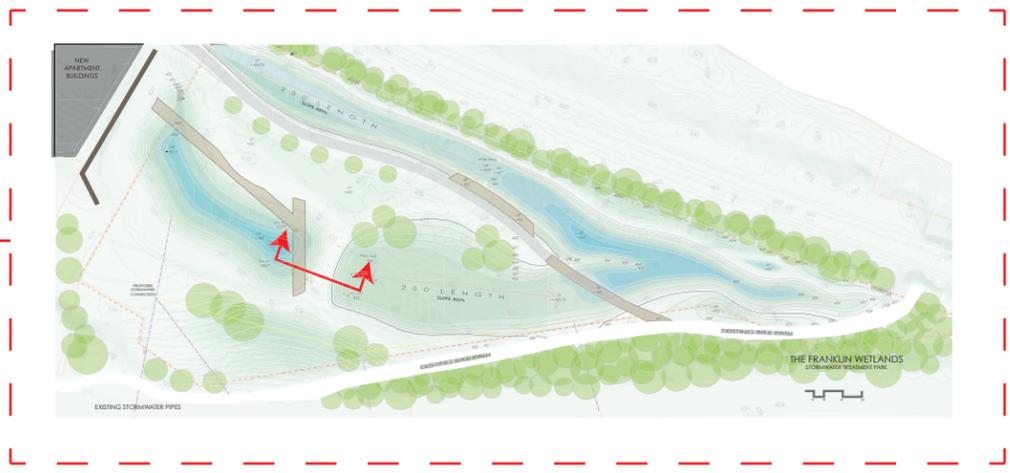


SEDIMENTATION
CATCHMENT [3X]
ELEVATION: 425'

BOARDWALK CROSSING

MAIN PARK ACCESS AND SEPARATION BERM [SEDIMENTATION FROM EMERGENT MARSH]

EMERGENT
MARSH ELEVATION
426'



PROPOSED CONDITIONS
SECTION PERSPECTIVE VIEW [NORTH]

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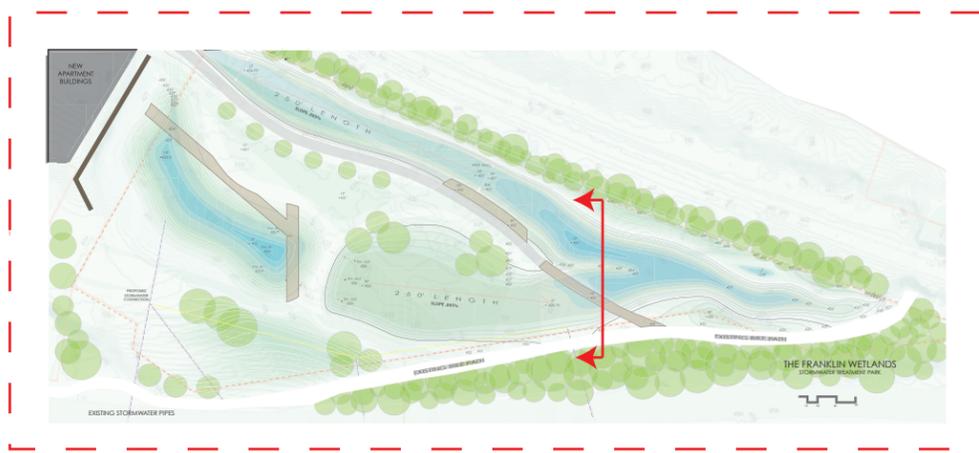
EMERGENT MARSH AND POND



EXISTING SLOPE	BIKE PATH	3:1 SLOPE	PROPOSED EMERGENT MARSH + BICYCLE BOARDWALK	BERM + LOOKOUT	POND	RAILROAD BUFFER
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ELEVATION: 425.75'

ELEVATION: 422'



PROPOSED CONDITIONS
SECTION ELEVATION VIEW [WEST]

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THANK YOU



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KYLE L. POLLACK