

NEWSC Filtration Systems Workshop

Biofilter Case Studies City of Appleton

December 06, 2018

Case Study #1

Valley Transit Biofilter

Parking Lot Reconstruction in 2006

- 1,500 S.F. Biofilter
- Clay soils
- 40% TSS Removal



After Initial Construction 2006

Case Study #1

Valley Transit Biofilter



During Construction 2006

Case Study #1

Valley Transit Biofilter



During Construction 2006

Case Study #1

Valley Transit Biofilter



During Construction 2006

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During Construction 2006

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During Construction 2006

Case Study #1

Valley Transit Biofilter



After Initial Construction 2006

Case Study #1

Valley Transit Biofilter



Coconut Mat Placed in 2011

Case Study #1

Valley Transit Biofilter



Weeds taking over by 2015

Case Study #1

Valley Transit Biofilter



Weeds taking over by 2015

Case Study #1

Valley Transit Biofilter



2018 (Supplemental plantings in 2016)

Case Study #1

Valley Transit Biofilter



2018 (Supplemental plantings in 2016)

Case Study #1

Valley Transit Biofilter



2018 (Supplemental plantings in 2016)

Case Study #1

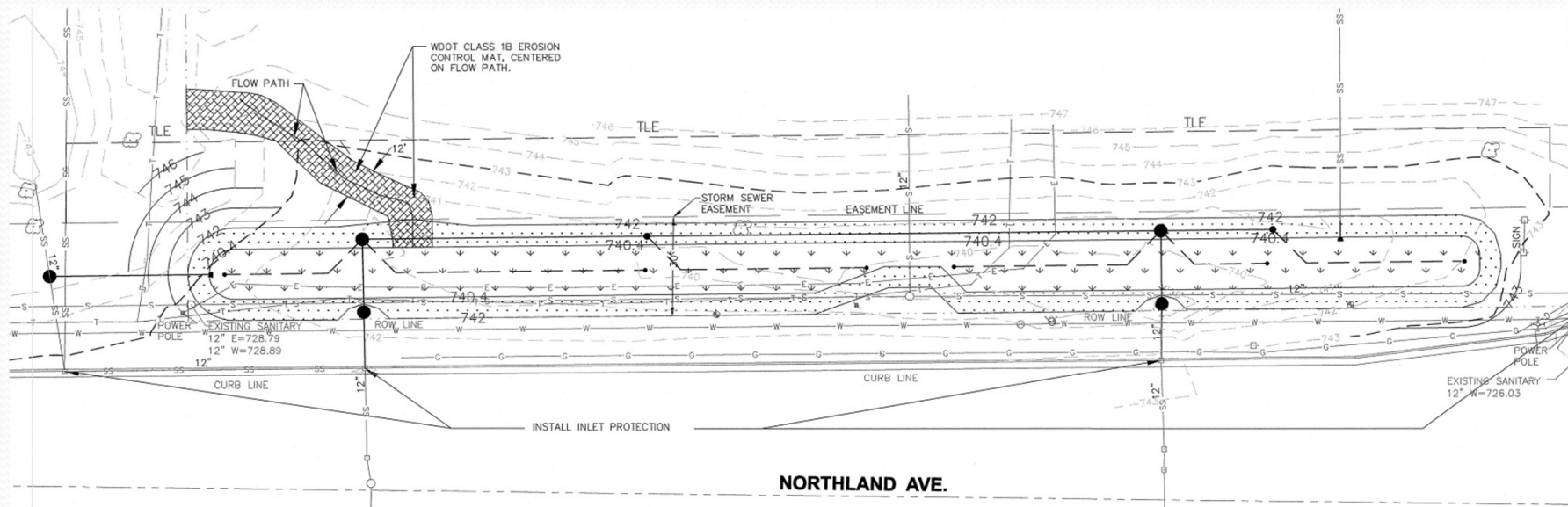
Valley Transit Biofilter



2018 (Supplemental plantings in 2016)

Case Study #2

Northland Ave Biofilter



Retrofit into developed business park

- 5,000 S.F. Biofilter
- Clay soils
- 83.7% TSS Removal for 7.22 acres

Case Study #2

Northland Ave Biofilter



2014 Photo. Initial Planting 2009

Case Study #2

Northland Ave Biofilter



2018 Photo with sediment discharge

Case Study #2

Northland Ave Biofilter



2018 Photo with sediment discharge

Case Study #2

Northland Ave Biofilter



2018 Photo with sediment discharge

Case Study #2

Northland Ave Biofilter



2018 Photo

Case Study #2

Northland Ave Biofilter



2018 Photo

Case Study #2

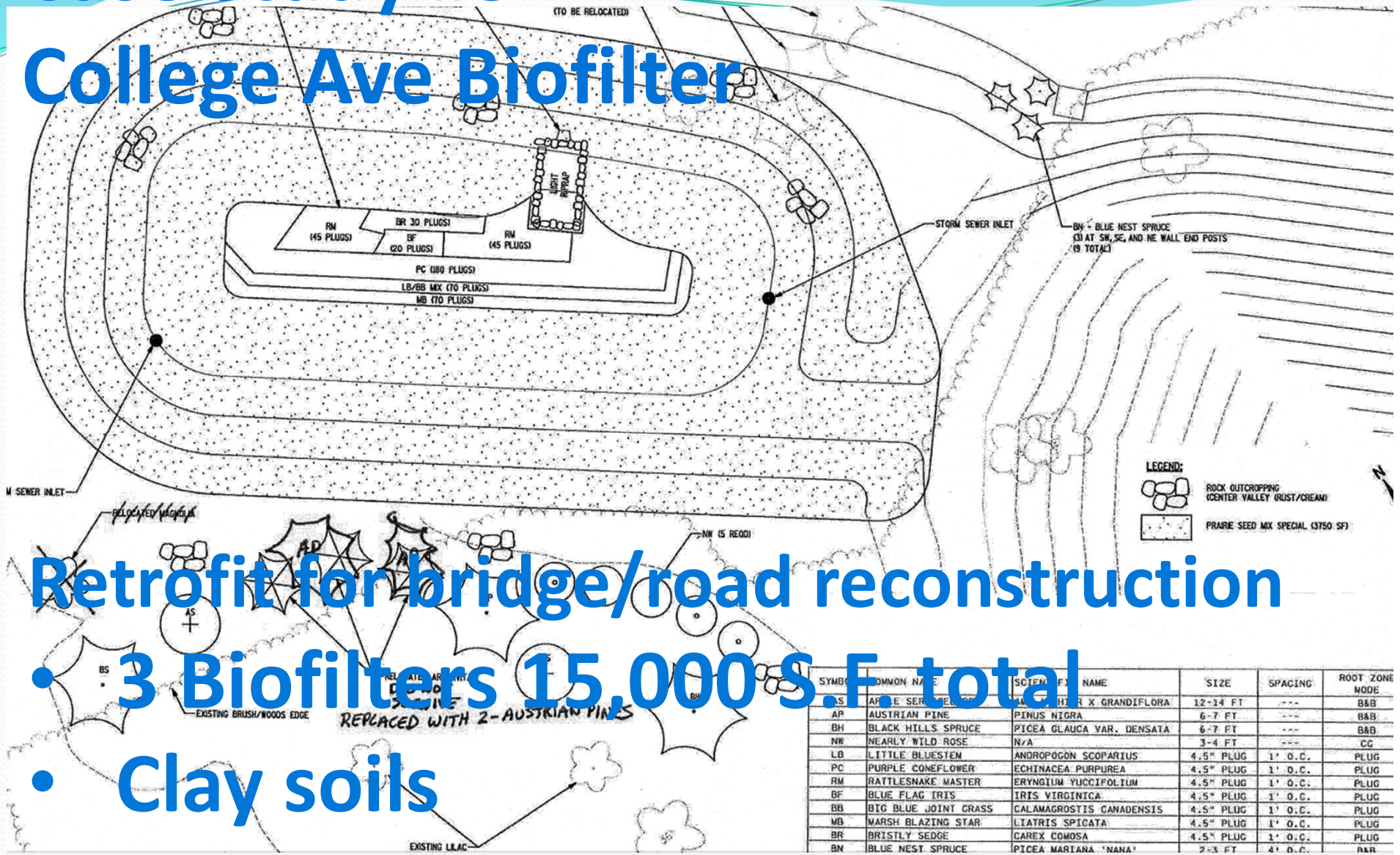
Northland Ave Biofilter



2018 Photo

Case Study #3

College Ave Biofilter



Retrofit for bridge/road reconstruction

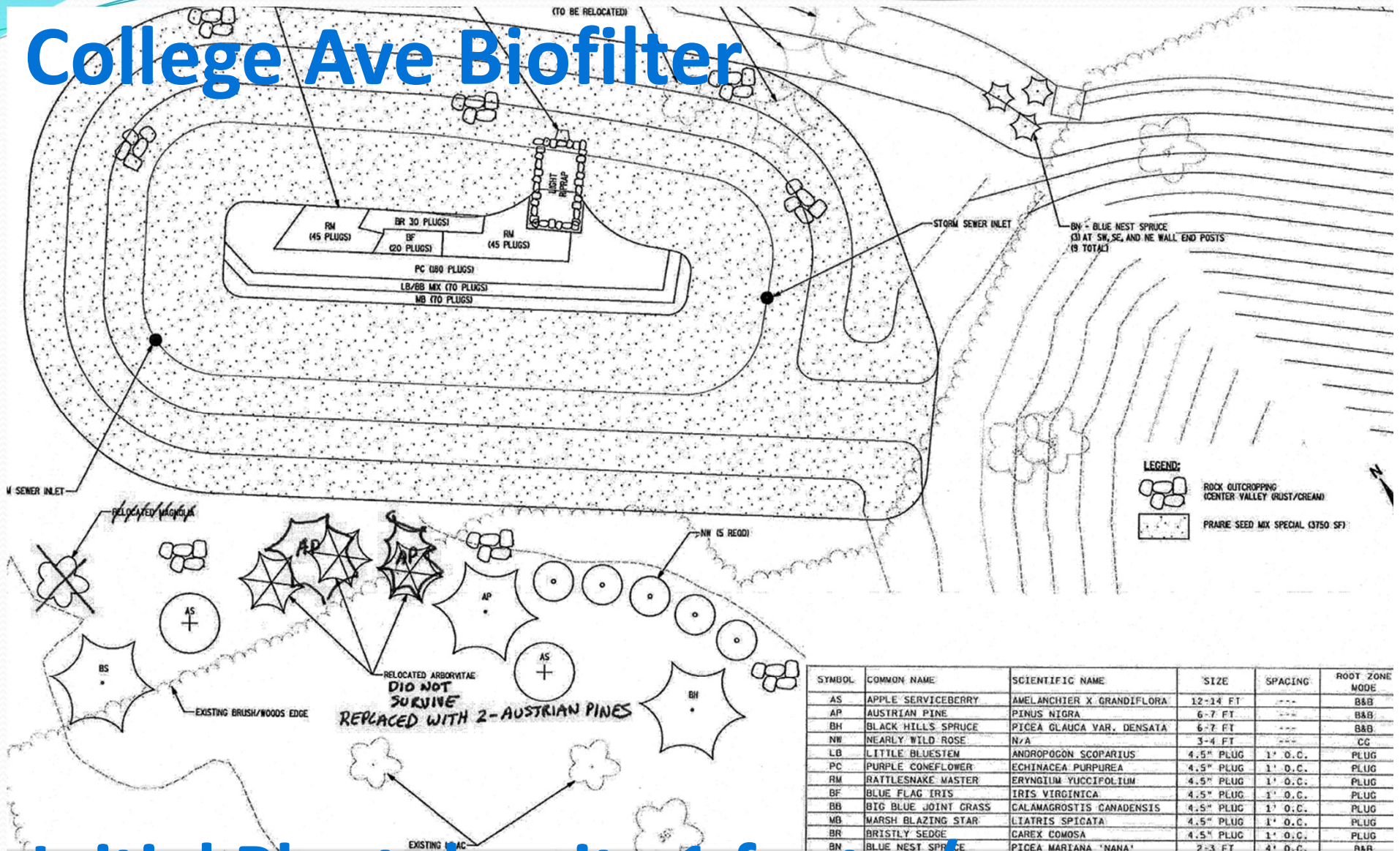
• 3 Biofilters 15,000 S.F. total

• Clay soils

• 40% TSS Removal for project

Case Study #3

College Ave Biofilter



Initial Plant density 1 foot o/c

Case Study #3

College Ave Biofilters



2014 October

Case Study #3

College Ave Biofilters



2014 October

Case Study #3

College Ave Biofilters



2014 October

Case Study #3

College Ave Biofilters

2018 August



Case Study #3

College Ave Biofilters

2018 August



Case Study #3

College Ave Biofilters



2018 August

Case Study #3

College Ave Biofilters



2018 August

Case Study #4

Appleton Police Dept NE Biofilter

APD Redevelopment Site

- 2 Biofilters 1,500 S.F. total
- Clay soils
- 40% TSS Removal for project

2012



Case Study #4

Appleton Police Dept NE Biofilter



2012

Case Study #4

Appleton Police Dept NE Biofilter



2012

Case Study #4

Appleton Police Dept NE Biofilter



2015

Case Study #4

Appleton Police Dept NE Biofilter



2018

Case Study #4

Appleton Police Dept NE Biofilter



2018

Case Study #4

Appleton Police Dept NE Biofilter



2018

Case Study #5

Telulah Park Biofilter

Park Redevelopment Site

- 3,000 S.F. total
- Clay soils
- 40% TSS Removal for project

2015



Case Study #5

Telulah Park Biofilter



2018

Case Study #5

Telulah Park Biofilter



2018

Case Study #5

Telulah Park Biofilter



2018