

Fenimore Woods Park

Radnor Township

Shade Tree Commission

July 15, 2020



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES





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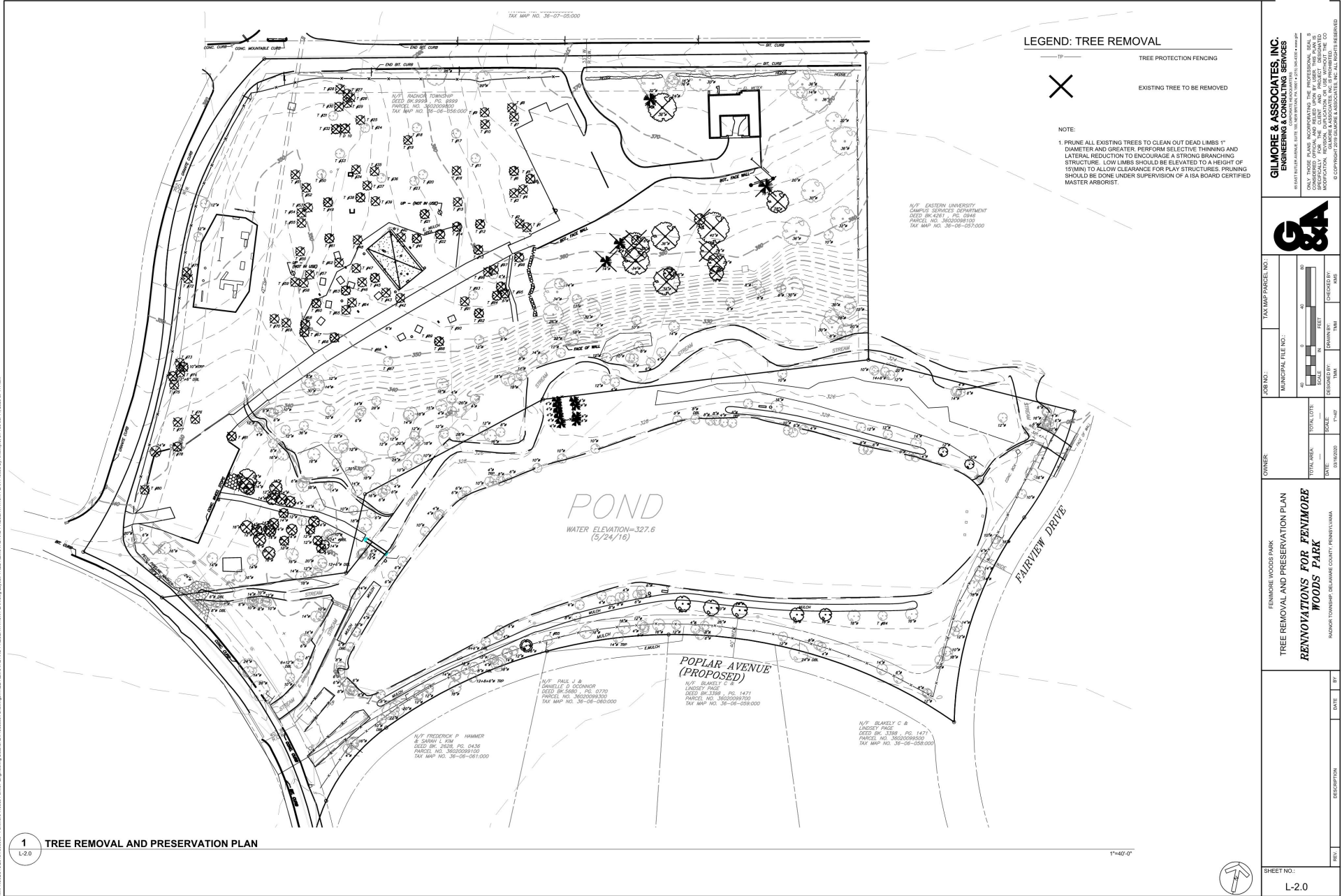
- TJ McIntyre – Registered Landscape Architect





Site Context Map

Tree Removal Plan



#PROJECT202411180001 - FERRIS WOODS PARK/ST. ENGINEERING DESIGN/ARCHITECTURE/DESIGN/STREET REMOVAL AND PRESERVATION PLAN/REVISED BY: JACOBSON ON JUL 14, 2024 AT 7:40AM

GILMORE & ASSOCIATES, INC.
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G&A

TREE REMOVAL AND PRESERVATION PLAN
RENOVATIONS FOR FERRIS WOODS PARK

FERRIS WOODS PARK
HOCKESSY TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA

JOB NO.: 24-00000
MUNICIPAL FILE NO.: 41
TAX MAP PARCEL NO.: 100

OWNER: FERRIS WOODS PARK
DATE: 07/18/2024
SCALE: 1"=40'-0"

TOTAL SHEETS: 1
TOTAL LOTS: 1
DATE: 07/18/2024
SCALE: 1"=40'-0"

DESIGNED BY: JACOBSON
CHECKED BY: JACOBSON
DATE: 07/18/2024
SCALE: 1"=40'-0"

DESCRIPTION: TREE REMOVAL AND PRESERVATION PLAN
REV.: 1
DATE: 07/18/2024
BY: JACOBSON

SHEET NO.: L-2.0

NOT APPROVED FOR BID OR CONSTRUCTION

Tree Removal Calculations

| Proposed Tree Removal - Sizes | Quantity to be Removed | Compensatory Trees Required |
|---|---|-----------------------------|
| 6-18" DBH (1 Compensatory Tree Required) | 91 (17 Trees in Decline/Risk/Defect) | 74 |
| 19-29" DBH (3 Compensatory Trees Required) | 47 (9 Trees in Decline/Risk/Defect) | 114 |
| 30"+ DBH (6 Compensatory Trees Required) | 5 | 30 |
| Total Compensatory Trees Required = 218 (2-2.5" Caliper) | | |

Planting Schedule

PLANTING SCHEDULE - FENIMORE WOODS PARK

| Canopy trees | | | | | | | |
|--------------------|-------------|-------------------------------------|---------------------------------|---------------|-------|----------|----------------|
| Key | Qty. | Botanical name | Common name | Size | Root | Spacing | Notes/Comments |
| Ar | 5 | Acer rubrum 'October Glory' | October Glory' Red Maple | 2.5" Cal. Min | B&B | See Plan | |
| As | 9 | Acer saccharum 'Fall Fiesta' | Fall Fiesta' Sugar Maple | 2.5" Cal. Min | B&B | See Plan | |
| Ck | 9 | Cladrastis kentukea 'Perkins Pink' | Perkins Pink' Yellowwood | 2.5" Cal. Min | B&B | See Plan | |
| Gd | 7 | Gymnocladus dioicus | Kentucky Coffee Tree | 2.5" Cal. Min | B&B | See Plan | |
| Gt | 9 | Gleditsia triacanthos inermis | Honeylocust (Thornless) | 2.5" Cal. Min | B&B | See Plan | |
| Lt | 4 | Liriodendron tulipifera | Tulip Poplar | 2.5" Cal. Min | B&B | See Plan | |
| Ns | 7 | Nyssa sylvatica | Blackgum | 2.5" Cal. Min | B&B | See Plan | |
| Pa | 6 | Platanus acerfolia | London Planetree | 2.5" Cal. Min | B&B | See Plan | |
| Oa | 8 | Quercus acutissima | Sawtooth Oak | 2.5" Cal. Min | B&B | See Plan | |
| Ob | 3 | Quercus bicolor | Swamp White Oak | 2.5" Cal. Min | B&B | See Plan | |
| Tc | 4 | Tilia cordatta | Little Leaf Linden | 2.5" Cal. Min | B&B | See Plan | |
| Ua | 9 | Ulmus americana 'Princeton' | Princeton' Elm | 2.5" Cal. Min | B&B | See Plan | |
| Total | 80 | | | | | | |
| Understory trees | | | | | | | |
| Key | Qty. | Botanical name | Common name | Size | Root | Spacing | Notes/Comments |
| Ac | 7 | Amalanchier canadensis | Common Serviceberry | 8-10' Ht. | B&B | See Plan | Multistem |
| Bn | 13 | Betula nigra 'Duraheat' | Duraheat' River Birch | 8-10' Ht. | B&B | See Plan | Single Stem |
| Cc | 7 | Cercis canadensis | Eastern Redbud | 8-10' Ht. | B&B | See Plan | Single Stem |
| Cf | 8 | Cornus florida | Flowering Dogwood | 8-10' Ht. | B&B | See Plan | Single Stem |
| Hc | 3 | Halesia carolina | Carolina Silverbell | 8-10' Ht. | B&B | See Plan | Single Stem |
| Mv | 6 | Magnolia virginiana | Sweetbay Magnolia | 8-10' Ht. | B&B | See Plan | Multistem |
| Total | 44 | | | | | | |
| Shrubs | | | | | | | |
| Key | Qty. | Botanical name | Common Name | Size | Root | Spacing | Notes/Comments |
| Ca | 34 | Clethra alnifolia | Ruby Spice' Summersweet | 3Gal. | Cont. | 30" | |
| Fg | 35 | Fothergilla gardenii 'Suzanne' | Suzanne Fothergilla | 3Gal. | Cont. | 36" | |
| Ha | 22 | Hydrangea arborescens 'Ryan Gainey' | Ryan Gainey' Smooth Hydrangea | 5Gal. | Cont. | 36" | |
| Hq | 5 | Hydrangea quercifolia 'Pee Wee' | Pee Wee Oakleaf Hydrangea | 5Gal. | Cont. | 48" | |
| Hs | 5 | Hydrangea serrata 'Blue Bird' | Sawtooth Hydrangrea 'Blue Bird' | 5Gal. | Cont. | 48" | |
| Kl | 9 | Kalmia latifolia 'Elf' | Elf' Mountain Laurel | 3Gal. | Cont. | 36" | |
| Lb | 23 | Lindera benzoin | Spicebush | 5Gal. | Cont. | 48" | |
| Va | 3 | Viburnum acerfolium | Maple Leaf Viburnum | 5Gal. | Cont. | 60" | |
| Wf | 14 | Weigela florida 'Fine Wine' | Fine Wine Weigela | 3Gal. | Cont. | 24" | |
| Total | 150 | | | | | | |
| Perennials/Grasses | | | | | | | |
| Key | Qty. | Botanical name | Common name | Size | Root | Spacing | Notes/Comments |
| Ad | 47 | Aster divaricatus 'Eastern Star' | Eastern Star' Woodland Aster | 1Gal. | Cont. | 18" | |
| Ep | 76 | Echinacea purpea 'Purple Emperor' | Purple Emperor' Coneflower | 2Gal. | Cont. | 18" | |
| Hf | 234 | Heuchera x 'Stainless Steel' | Stainless Steel' Coral Bells | 2Gal. | Cont. | 18" | |
| Hv | 249 | Heuchera villosa x 'Caramel' | Caramel Alum Root | 2Gal. | Cont. | 24" | |
| Md | 192 | Monarda didyma | Bee Balm | 2Gal. | Cont. | 18" | |
| Pm | 109 | Pycnanthemum muticum | Mountain Mint | 2Gal. | Cont. | 24" | |
| Ps | 56 | Phlox sublata 'Snowflake' | Snowflake' Creeping Phlox | 1Gal. | Cont. | 18" | |
| Rf | 88 | Rudbeckia fulgida | Black Eyed Susan | 2Gal. | Cont. | 24" | |
| Tc | 177 | Tiarella cordifolia 'Candy Striper' | Candy Striper Foamflower | 1Gal. | Cont. | 18" | |
| Total | 1228 | | | | | | |
| TOTAL | 1502 | | | | | | |

Canopy Trees



October Glory' Red Maple
Acer rubrum 'October Glory'

Key: Ar

Height x Spread: 50' x 40'

Color: Red fall color

Exposure: Full sun

Comment: Showy red fall color



Kentucky Coffee Tree
Gymnocladus dioica

Key: Gd

Height x Spread: 80' x 55'

Color: Yellow fall color

Exposure: Full sun

Comment: Unique, scaly bark



Fall Fiesta' Sugar Maple
Acer saccharum 'Fall Fiesta'

Key: As

Height x Spread: 75' x 45'

Color: Orange, red color

Exposure: Full sun to part shade

Comment: Showy red fall color, rapid growth rate



Honeylocust
Gleditsia triacanthos

Key: Gt

Height x Spread: 80' x 80'

Color: Yellow fall color

Exposure: Full sun

Comment: Tolerant of air pollution, drought, deer



Perkins Pink' Yellowwood
Cladrastis kentukea 'Perkins Pink'

Key: Ck

Height x Spread: 50' x 55'

Color: White

Exposure: Full sun

Comment: Showy, fragrant



Tulip Poplar
Liriodendron tulipifera

Key: Lt

Height x Spread: 90' x 50'

Color: Yellow fall color

Exposure: Full sun

Comment: Pyramidal to broad conical shape

Canopy Trees



Blackgum
Nyssa sylvatica

Key: Ns

Height x Spread: 50' x 30'

Color: Orange, red color

Exposure: Full sun to part shade

Comment: Slow growing, fruits attract birds and wildlife



Swamp White Oak
Quercus bicolor

Key: Qb

Height x Spread: 60' x 60'

Color: Orange fall color

Exposure: Full sun

Comment: Attracts wildlife, glossy dark green leaves



London Planetree
Platanus acerfolia

Key: Pa

Height x Spread: 100' x 75'

Color: Orange fall color

Exposure: Full sun

Comment: Unique, scaly bark



Little Leaf Linden
Tilia cordata

Key: Tc

Height x Spread: 70' x 50'

Color: Yellow fall color

Exposure: Full sun to part shade

Comment: Tolerant of urban conditions, attracts butterflies



Sawtooth Oak
Quercus acutissima

Key: Qa

Height x Spread: 60' x 60'

Color: Orange, yellow fall color

Exposure: Full sun

Comment: Attracts wildlife



Princeton' Elm
Ulmus americana 'Princeton'

Key: Ua

Height x Spread: 70' x 50'

Color: Orange, yellow

Exposure: Full sun

Comment: Tolerant of light shade, drought, air pollution

Understory Trees



Common Serviceberry
Amelanchier canadensis

Key: Ac

Height x Spread: 30' x 20'

Color: White

Exposure: Full sun to part shade

Comment: Showy flowering from April to May



Flowering Dogwood
Cornus florida

Key: Cf

Height x Spread: 30' x 30'

Color: White

Exposure: Full sun to part shade

Comment: Attracts birds and butterflies, showy flowers



Duraheat' River Birch
Betula nigra 'Duraheat'

Key: Bn

Height x Spread: 40' x 35'

Color: Orange fall color

Exposure: Full sun to part shade

Comment: Unique, scaly bark



Carolina Silverbell
Halesia carolina

Key: Hc

Height x Spread: 40' x 35'

Color: White

Exposure: Full sun to **part shade**

Comment: Showy flowers



Eastern Redbud
Cercis canadensis

Key: Cc

Height x Spread: 30' x 35'

Color: Pink

Exposure: Full sun to part shade

Comment: Attracts butterflies, showy flowers



Sweetbay Magnolia
Magnolia virginiana

Key: Mv

Height x Spread: 35' x 35'

Color: White

Exposure: Full sun to **part shade**

Comment: Showy, fragrant

Shrubs



Ruby Spice' Summersweet
Ruby Clethra alnifolia

Key: Ca

Height x Spread: 8' x 6'

Color: White

Exposure: Full sun to part shade

Comment: Showy, fragrant flowers



Pee Wee Oakleaf Hydrangea
Hydrangea quercifolia 'Pee Wee'

Key: Hq

Height x Spread: 4' x 3'

Color: White fading to pink

Exposure: Full sun to part shade

Comment: Showy flowers



Suzanne Fothergilla
Fothergilla gardenii 'Suzanne'

Key: Fg

Height x Spread: 2.5' x 3'

Color: White

Exposure: Full sun to part shade

Comment: Showy, fragrant flowers



Sawtooth Hydrangea 'Blue Bird'
Hydrangea serrata 'Blue Bird'

Key: Hs

Height x Spread: 4' x 4'

Color: Blue

Exposure: Part shade

Comment: Showy flowers



Ryan Gainey' Smooth Hydrangea
Hydrangea arborescens 'Ryan Gainey'

Key: Ha

Height x Spread: 4' x 4'

Color: White

Exposure: Part shade

Comment: Showy flowers



Elf' Mountain Laurel
Kalmia latifolia 'Elf'

Key: Kl

Height x Spread: 3' x 4'

Color: White and pink

Exposure: Part shade

Comment: Showy flowers

Shrubs



Spicebush
Lindera benzoin

Key: Lb

Height x Spread: 12' x 12'

Color: Yellow **fall color**

Exposure: Full sun to **part shade**

Comment: Attracts birds and butterflies



Maple Leaf Viburnum
Viburnum acerfolium

Key: Va

Height x Spread: 6' x 4'

Color: **White**

Exposure: Full sun to **part shade**

Comment: Attracts birds and butterflies, showy flowers



Fine Wine Weigela
Weigela florida 'Fine Wine'

Key: Wf

Height x Spread: 4' x 4'

Color: Rose pink

Exposure: Full sun

Comment: Attracts hummingbirds

Perennials/Grasses



Eastern Star' Woodland Aster
Aster divaricatus 'Eastern Star'

Key: Ad

Height x Spread: 1.5' x 1.5'

Color: White

Exposure: Part shade to full shade

Comment: Showy flowers, attracts butterflies



Purple Emperor' Coneflower
Echinacea purpurea 'Purple Emperor'

Key: Ep

Height x Spread: 1.5' x 1.5'

Color: Purplish pink

Exposure: Full sun to part shade

Comment: Showy flowers, attracts birds and butterflies



Stainless Steel' Coral Bells
Heuchera x 'Stainless Steel'

Key: Hf

Height x Spread: 1' x 1'

Color: Silver overlay

Exposure: Full sun to part shade

Comment: Heat and humidity tolerant



Caramel Alum Root
Heuchera villosa x 'Caramel'

Key: Hv

Height x Spread: 1.5' x 2'

Color: Golden, yellow

Exposure: Full sun to part shade

Comment: Colorful leaves



Bee Balm
Monarda didyma

Key: Md

Height x Spread: 4' x 3'

Color: Red

Exposure: Full sun to part shade

Comment: Showy flowers, attracts hummingbirds and butterflies



Mountain Mint
*Pycnanthemum muticum**

Key: Pm

Height x Spread: 3' x 3'

Color: Pinkish white

Exposure: Full sun to part shade

Comment: Showy flowers, attracts butterflies

* Also located in Rain Garden Plugs Planting Schedule

Perennials/Grasses



Snowflake' Creeping Phlox
Phlox subulata 'Snowflake'

Key: Ps

Height x Spread: 0.5' x 2'

Color: White or light purple

Exposure: Full sun

Comment: Showy flowers, attracts butterflies



Black Eyed Susan
Rudbeckia fulgida

Key: Rf

Height x Spread: 3' x 2.5'

Color: Purplish pink

Exposure: Orange, yellow

Comment: Showy flowers, attracts butterflies



Candy Striper Foamflower
Tiarella cordifolia 'Candy Striper'

Key: Tc

Height x Spread: 1' x 1'

Color: Whitish pink

Exposure: Part shade to full shade

Comment: Showy flowers

Planting Schedule – Rain Gardens

PLANTING SCHEDULE- RAIN GARDEN PLUGS

| Perennials/Grasses | | | | | | | |
|--------------------|------|--|----------------------------------|------|-------|----------|----------------|
| Key | Qty. | Botanical name | Common name | Size | Root | Spacing | Notes/Comments |
| Aa | 1113 | Acorus americanus | Sweetflag | Plug | Cont. | 18" O.C. | |
| Ac | 1113 | Aquilegia canadensis | Wild Columbine | Plug | Cont. | 18" O.C. | |
| Ai | 630 | Asclepias incarnata | Swamp Milkweed | Plug | Cont. | 18" O.C. | |
| Ca | 250 | Calamagrostis acutiflora 'Karl Foerster' | Karl Foerster Feather Reed Grass | Plug | Cont. | 18" O.C. | |
| Cg | 250 | Chelone glabra | Turtlehead | Plug | Cont. | 18" O.C. | |
| Co | 1113 | Chelone obliqua 'Tiny Tortuga' | Tiny Tortuga' Turtlehead | Plug | Cont. | 18" O.C. | |
| HaM | 1113 | Helenium autumnale Mariachi 'Siesta' | Siesta' Sneezeweed | Plug | Cont. | 18" O.C. | |
| Iv | 630 | Iris versicolor | Blue Flag Iris | Plug | Cont. | 18" O.C. | |
| Lc | 630 | Lobelia cardinalis | Cardinal Flower | Plug | Cont. | 18" O.C. | |
| Pv | 350 | Panicum virgatum 'Northwind' | Northwind' Switchgrass | Plug | Cont. | 18" O.C. | |
| Pm | 630 | Pycnanthemum muticum | Mountain Mint | Plug | Cont. | 18" O.C. | |
| Rs | 350 | Rudbeckia subtomentosa 'Henry Eilers' | Henry Eilers' Sweet Coneflower | Plug | Cont. | 18" O.C. | |
| Vn | 350 | Vernonia noveboracensis | New York Ironweed | Plug | Cont. | 18" O.C. | |
| TOTAL | 8522 | | | | | | |

Perennials/Grasses - Rain Garden Plugs



Sweetflag
Acorus americanus

Key: Aa

Height x Spread: 3' x 3'

Color: Bright green

Exposure: Full sun to part sun

Comment: Excellent erosion control species



Karl Foerster Feather Reed Grass
Calamagrostis acutiflora 'Karl Foerster'

Key: Ca

Height x Spread: 5' x 2.5'

Color: Golden, yellow

Exposure: Full sun

Comment: Lush, attracts birds



Wild Columbine
Aquilegia canadensis

Key: Ac

Height x Spread: 3' x 1.5'

Color: Yellow to blood red

Exposure: Full sun to part shade

Comment: Showy flowers, attracts hummingbirds



Turtlehead
Chelone glabra

Key: Cg

Height x Spread: 3' x 2.5'

Color: White

Exposure: Part shade

Comment: Showy flowers, attracts butterflies



Swamp Milkweed
Asclepias incarnata

Key: Ai

Height x Spread: 5' x 3'

Color: White pink

Exposure: Full sun

Comment: Showy, fragrant flowers, attracts butterflies



Tiny Tortuga' Turtlehead
Chelone obliqua 'Tiny tortuga'

Key: Co

Height x Spread: 1' x 10"

Color: Pinkish purple

Exposure: Full sun to part shade

Comment: Showy flowers, attracts butterflies

Perennials/Grasses - Rain Garden Plugs



Siesta' Sneezeweed
Helenium autumnale Mariachi 'Siesta'

Key: HaM

Height x Spread: 2' x 2'

Color: Blood orange

Exposure: Full sun

Comment: Vibrant, attracts butterflies,



Blue Flag Iris
Iris versicolor

Key: Iv

Height x Spread: 2.5' x 2'

Color: Purple

Exposure: Full sun to part shade

Comment: Showy flowers



Cardinal Flower

Key: Lc

Height x Spread: 4' x 2'

Color: Scarlet red

Exposure: Full sun to part shade

Comment: Showy flowers, attracts hummingbirds and butterflies



Northwind' Switchgrass
Panicum virgatum 'Northwind'

Key: Pv

Height x Spread: 6' x 2.5'

Color: Yellow

Exposure: Full sun to part shade

Comment: Tolerant to drought, erosion, air pollution



Henry Eilers' Sweet Coneflower
Rudbeckia subtomentosa 'Henry Eilers'

Key: Rs

Height x Spread: 5' x 2'

Color: Yellow

Exposure: Full sun

Comment: Showy flowers, attracts butterflies



New York Ironweed
Vernonia noveboracensis

Key: Vn

Height x Spread: 6' x 4'

Color: Purple

Exposure: Full sun

Comment: Showy flowers

Thank you



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