PRIORITY 1 DESIGNS
NOTES:
1. DENSE, WET AND DRY-TOLERANT VEGETATION.
2. PONDING DEPTH 6" MAX.
3. PONDED WATER MUST DRAIN WITHIN 72 HOURS TO PREVENT MOSQUITO BREEDING.
4. MAXIMUM CONTRIBUTING AREA OF 1 ACRE.
5. BIORETENTION SOIL DEPTH 12" MIN. DEPTH TO BE CALCULATED.

TYPICAL SECTION

PLAN

2' MIN. RAIN GARDEN

LENGTH TO BE CALCULATED

HIGH FLOW BYPASS INLET

NOTES:

1. DENSE, WET AND DRY-TOLERANT VEGETATION.
2. PONDING DEPTH 6" MAX.
3. PONDED WATER MUST DRAIN WITHIN 72 HOURS TO PREVENT MOSQUITO BREEDING.
4. MAXIMUM CONTRIBUTING AREA OF 1 ACRE.
5. BIORETENTION SOIL DEPTH 12" MIN. DEPTH TO BE CALCULATED.

TYPICAL SECTION

PLAN

2' MIN. RAIN GARDEN

LENGTH TO BE CALCULATED

HIGH FLOW BYPASS INLET

NOTES:

1. DENSE, WET AND DRY-TOLERANT VEGETATION.
2. PONDING DEPTH 6" MAX.
3. PONDED WATER MUST DRAIN WITHIN 72 HOURS TO PREVENT MOSQUITO BREEDING.
4. MAXIMUM CONTRIBUTING AREA OF 1 ACRE.
5. BIORETENTION SOIL DEPTH 12" MIN. DEPTH TO BE CALCULATED.
NOTES:
1. IF SWALE PROVIDES TREATMENT, LENGTH SHALL BE DESIGNED TO PROVIDE 12 MINUTES OF CONTACT TIME IF FLOW ENTERS UNIFORMLY ALONG LENGTH. LENGTH SHALL PROVIDE 5 MINUTES OF CONTACT TIME IF 90% OR MORE OF THE FLOW ENTERS AT THE UPSTREAM END.
2. SOIL TO BE SPECIFIED BY DESIGN ENGINEER TO MEET VOLUME CAPTURE AND GOVERNING AGENCY REQUIREMENTS. IF NON-STRUCTURAL SOIL IS SELECTED A CUTOFF WALL IS REQUIRED IN PLACE OF A MOISTURE BARRIER.
3. SWALE MUST CONVEY HIGH FLOWS PER GOVERNING AGENCY DESIGN STANDARDS.
1. STRUCTURAL SOIL UNLESS OTHERWISE APPROVED BY GEOENGINEERING ENGINEER AND ACCEPTED BY GOVERNING AGENCY.
2. SWALE MUST CONVEY FLOOD DESIGN FLOWS PER GOVERNING AGENCY DESIGN STANDARDS.
3. PARKING ISLAND WIDTH PER APPLICABLE GOVERNING AGENCY STANDARDS.
PRIORITY 2 DESIGNS
NOTES:
1. DENSE, WET AND DRY-TOLERANT VEGETATION.
2. PONDING DEPTH 6" MAX.
3. PONDED WATER MUST DRAIN WITHIN 72 HOURS TO PREVENT MOSQUITO BREEDING.
4. MAXIMUM CONTRIBUTING AREA OF 1 ACRE.
5. BIORETENTION SOIL DEPTH 12" MIN. DEPTH TO BE CALCULATED.

TYPICAL SECTION

PLAN

PRIORITY 2
RAIN GARDEN

SCALE: NONE
DATE: 05/10/11
DWN. D/T CHK. HH SHEET 1 of 1 P2-01

Not to Scale
NOTES:
1. SIDEWALK, GUTTER AND PLANter WIDTHS PER APPLICABLE GOVERNING AGENCY STANDARDS (TYP).

REFER TO SHEET 2 FOR SECTION VIEWS
TYPE A - CURB OPENING AT LOW POINT

LENGTH TO BE CALCULATED

THICKENED EDGE (TYP)

1. SIDEWALK, GUTTER AND PLANTER WIDTHS PER APPLICABLE MUNICIPAL STANDARDS (TYP).
2. TOP OF 6" PERFORATED PIPE TO BE SET 6" BELOW ROAD STRUCTURAL SECTION, MIN.
3. TYPE A MINIMUM DIMENSIONS AND GRADES APPLY TO TYPE B.

NOTE:

TYPE B - CURB OPENING ALONG A SLOPE

Not to Scale
SECTION A-A

NOTES:
1. SIDEWALK AND PLANTER WIDTHS PER APPLICABLE GOVERNING AGENCY STANDARDS (TYP).
2. TOP OF 6" PERFORATED PIPE TO BE SET 6" BELOW BOTTOM OF ROAD STRUCTURAL SECTION.

SECTION B-B
NOTES:
1. SOIL TO BE SPECIFIED BY DESIGN ENGINEER TO PROVIDE VOLUME CAPTURE AND MEET GOVERNING AGENCY REQUIREMENTS. IF NON STRUCTURAL SOIL IS SELECTED A CUTOFF WALL IS REQUIRED IN PLACE OF A MOISTURE BARRIER.
2. SWALE MUST CONVEY DESIGN FLOWS PER GOVERNING AGENCY DESIGN STANDARDS.
3. TOP OF 6" PERFORATED PIPE TO BE SET 5" BELOW BOTTOM OF ROAD STRUCTURAL SECTION.

SECTION A-A

TREATMENT AREA

6" PERFORATED PIPE PER NOTE 3

VOLUME CAPTURE PER NOTE 1

UNDISTURBED NATIVE SOIL

10 MIL PLASTIC MOISTURE BARRIER, SEE NOTE 1.

ROAD

EDGE OF PAVEMENT

ROAD

HIGH FLOW BYPASS INLET

WIDTH PER APPLICABLE STANDARDS

HIGH POINT

2:1 MAX

2 MIN

5' (TYP)

2' MIN

6" PERFORATED PIPE (TYP)

SIMILAR TO P1-02 WITH A PERFORATED DRAIN PIPE

PRIORITY 2
ROADSIDE BIORETENTION - NO CURB AND GUTTER

SCALE: NONE DATE: 04/06/17
DWN. D/T CHK. HM P2-05

Not to Scale
1. Permeable pavement or surface per governing agency standards
2. Sand layer (fine sand)
3. Transition layer (coarse sand) as needed for conveyance and treatment
4. Structural soil or drain rock

Undisturbed native soil

Perforated pipe

Treatment

Volume capture
PRIORITY 3 DESIGNS
NOTES:
1. DENSE, WET AND DRY-TOLERANT VEGETATION.
2. PONDING DEPTH 6" - 12"
3. PONDED WATER MUST DRAIN WITHIN 72 HOURS TO PREVENT MOSQUITO BREEDING.
4. MAXIMUM CONTRIBUTING AREA OF 1 ACRE.
5. BIORETENTION SOIL DEPTH 12" MIN. DEPTH TO BE CALCULATED.
Not Permitted

Effective 12/23/2021

Recommend Considering Revising Design to

Build-out Design (see CASQA detail SW-5.1)

dated 8/31/2017

SECTION A-A

TRENCH ZONE

JOINT

TREATMENT AREA

5" PERFORATED PIPE PER NOTE 2

SIXWALK PER NOTE 1

PERVIOUS CONCRETE GUTTER

5" PERFORATED PIPE (TYP)

VOLUME CAPTURE AND TREATMENT AREA

TREATMENT AREA

10 MIL PLASTIC MOISTURE BARRIER

AB2

NATIVE SOIL (TYP)

MOISTURE BARRIER LINER, NO

SIMILAR TO P2-3 WITH

INFLATION

GOVERNING AGENCY STANDARDS

WIDTH PER APPLICABLE

SIDEWALK AND CURB AND GUTTER

6" PERFORATED PIPE TO BE SET IN BOTTOM OF TREATMENT AREA.

NOTE:

SCALE: NONE

DATE: 04/06/17

PRIORITY 3

ROADSIDE BIORETENTION

- CONTINUOUS SIDEWALK

DKI: D11

SHEET 1 of 1

P3-03

Not to Scale
NOTE:
1. SIDEWALK, GUTTER AND PLANTER WIDTHS PER APPLICABLE GOVERNING AGENCY STANDARDS (TYP).
2. 6" PERFORATED PIPE TO BE SET IN BOTTOM OF TREATMENT AREA.
3. TYPE A MINIMUM DIMENSIONS AND GRADES APPLY TO TYPE B.

SIMILAR TO P2-04 WITH A MOISTURE BARRIER LINER, NO INFILTRATION.

PRIORITY 3
ROADSIDE BIORETENTION
- CURB OPENING

SCALE: NONE    DATE: 04/06/17
DWT CHK. HM    SHEET 1 of 2  P3-04
SECTION A-A

- JOINT TRENCH ZONE
- THICKENED EDGE (TYP)
- STRUCTURAL SOIL (TYP)
- 5" PERF PIPE PER NOTE 2
- STORM DRAIN PER PLAN
- DEPRESS FLOWLINE 0.17'
- AC
- AB2
- MOISTURE BARRIER (TYP)
- TRENCH PLUG
- TRENCH BACKFILL
- UNDISTURBED NATIVE SOIL
- 10 MIL MOISTURE BARRIER

NOTES:
1. SIDEWALK, GUTTER AND PLANTER WIDTHS PER APPLICABLE GOVERNING AGENCY STANDARDS (TYP).
2. 6" PERFETED PIPEx TO BE SET IN BOTTOM OF TREATMENT AREA.

SECTION B-B

- HIGH FLOW BYPASS
- STORM DRAIN PER PLAN
- 6" PERFORATED PIPE (TYP)
- UNDISTURBED NATIVE SOIL
- 10 MIL MOISTURE BARRIER

SIMILAR TO P2-04 WITH A MOISTURE BARRIER LINER, NO INFILTRATION.
NOTE:
1. ALL SURFACE WATER MUST DRAIN WITHIN 72 HOURS.
NOTES:
1. DEPTH SHALL NOT EXCEED WIDTH OR LENGTH.
2. TO BE USED AS PART OF A TREATMENT TRAIN.
3. ALL SURFACE WATER MUST DRAIN WITHIN 72 HOURS.
NOTES
1. SWALE LENGTH TO BE DESIGNED TO PROVIDE 12 MINUTES OF CONTACT TIME WHEN FLOW ENTERS UNIFORMLY ALONG LENGTH, OR PROVIDE 5 MINUTES OF CONTACT TIME IF 90% OR MORE OF THE FLOW ENTERS AT THE UPSTREAM END.
2. SWALE MUST CONVEY DESIGN FLOWS PER MUNICIPAL DESIGN STANDARDS.
3. PARKING ISLAND WIDTH PER APPLICABLE MUNICIPAL STANDARDS.

N.T.S.

PRIORITY 3
VEGETATED SWALE

SCALE: NONE  DATE: 05/10/11
DWN. D/T  CHK. HH  SHEET 1 of 1  P3-07

Not to Scale