

04/21/2002
065854 AP

Figure 2D-2 Drainage Description Sheet
Printed By: ches21/afk

DESIGNED BY: JAA
CHECKED BY: JMB

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC WILL BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

| NO. | DATE | REVISION | BY | DESCRIPTION |
|-----|------|----------|----|---------------------------------|
| | VA | | | |
| | | 143 | | DMJ-BP-FOS, RW-204/RW-202 C-501 |

DRAINAGE DESCRIPTION

SHEET 3

- 3-1 1- Sfd, Di-3A Req'd. (precast)
H=4.22m Inv.10.50
- 3-1 4-10 5.3m - 0.375m Conc. Pipe Req'd. (0.8m cover)
Inv./In: 10.50 Inv./Out: 10.15

SHEET 4

- 4-1 1- Sfd, Di-3B Req'd. L=1.8m (precast)
H=4.20 Inv.9.40
- 4-1a 2.89m - Sfd, MH-1 or MH-2 Req'd.
Inv. 7.52 Sfd, 15-1 Req'd.
1- Sfd, MH-1 Frame & Cover Req'd.
- 4-1 4-1a 1m - 0.375m Conc. Pipe Req'd. (0.8m cover)
Inv./In: 9.40 Inv./Out: 9.39
- 4-1a 5-8a 49m - 0.60m Conc. Pipe Req'd. (2.7m cover)
Inv./In: 9.32 Inv./Out: 7.77
- 4-2 1- Sfd, Di-3A Req'd. (precast)
H=4.20 Inv.9.95
- 4-2 4-13 1m - 0.375m Conc. Pipe Req'd. (0.8m cover)
Inv./In: 9.85 Inv./Out: 9.24
- 4-13 4-1a 7.3m - 0.60m Conc. Pipe Req'd. (2.5m cover)
Inv./In: 8.05 Inv./Out: 7.55
- 4-3 1- Sfd, Di-3A Req'd. (precast)
H=4.20 Inv.10.00
- 4-3 4-12 1m - 0.375m Conc. Pipe Req'd. (0.8m cover)
Inv./In: 10.00 Inv./Out: 9.99
- 4-12 4-13 16m - 0.60m Conc. Pipe Req'd. (2.5m cover)
Inv./In: 8.15 Inv./Out: 8.08
- 4-4 1- Sfd, Di-3A Req'd. (precast)
H=4.20 Inv.10.25
- 4-4 4-4a 1m - 0.375m Conc. Pipe Req'd. (0.8m cover)
Inv./In: 10.25 Inv./Out: 10.24
- 4-4a 2.98m - Sfd, MH-1 or MH-2 Req'd.
Inv. 8.27 Sfd, 15-1 Req'd.
1- Sfd, MH-1 Frame & Cover Req'd.

- 4-4a 4-12 2.3m - 0.60m Conc. Pipe Req'd. (2.3m cover)
Inv./In: 8.27 Inv./Out: 8.15
- 4-5 1- Sfd, Di-3B Req'd. L=1.2m (precast)
H=4.20 Inv.10.30
- 4-5 4-11 1m - 0.375m Conc. Pipe Req'd. (0.8m cover)
Inv./In: 10.30 Inv./Out: 10.29
- 4-11 4-4a 19m - 0.60m Conc. Pipe Req'd. (2.3m cover)
Inv./In: 8.37 Inv./Out: 8.30
- 4-6 1- Sfd, Di-3B Req'd. L=1.8m (precast)
H=4.43m Inv.9.05 Sfd, 15-1 Req'd.
- 4-6 5-1a 42.5m - 0.60m Conc. Pipe Req'd. (0.9m cover)
Inv./In: 9.05 Inv./Out: 8.84
- 4-7 1- Sfd, Di-3B Req'd. L=1.2m (precast)
H=4.33m Inv.9.29 Sfd, 15-1 Req'd.
- 4-7 4-6 2.3m - 0.450m Conc. Pipe Req'd. (0.9m cover)
Inv./In: 9.29 Inv./Out: 9.17
- 4-8 1- Sfd, Di-3B Req'd. L=1.8m (precast)
H=4.30m Inv.9.55 Sfd, 15-1 Req'd.

- 4-8 4-7 42m - 0.450m Conc. Pipe Req'd. (0.8m cover)
Inv./In: 9.55 Inv./Out: 9.32
- 4-9 1- Sfd, Di-3B Req'd. L=1.2m (precast)
H=4.20m Inv.9.80 Sfd, 15-1 Req'd.

SHEET 4 (CONTINUED)

- 4-9 4-8 2.3m - 0.375m Conc. Pipe Req'd. (0.9m cover)
Inv./In: 9.80 Inv./Out: 9.65
- 4-10 1- Sfd, Di-3B Req'd. L=1.2m (precast)
H=4.22m Inv.10.13 Sfd, 15-1 Req'd.
- 4-10 4-9 51m - 0.375m Conc. Pipe Req'd. (0.8m cover)
Inv./In: 10.13 Inv./Out: 9.80
- 4-11 3m - Sfd, MH-1 or MH-2 Req'd.
Inv. 8.37 (connect to exist. pipes)
1- Sfd, MH-1 Frame & Cover Req'd. Sfd, 15-1 Req'd.
- 4-12 2.87m - Sfd, MH-1 or MH-2 Req'd.
Inv. 8.15 (connect to exist. 0.30m pipe)
1- Sfd, MH-1 Frame & Cover Req'd. Sfd, 15-1 Req'd.
- 4-13 2.89m - Sfd, MH-1 or MH-2 Req'd.
Inv. 8.05 (connect to exist. 0.30m pipe)
1- Sfd, MH-1 Frame & Cover Req'd. Sfd, 15-1 Req'd.

SHEET 4C

- 4C-2 4C-1 12m - DBL 120m Conc. Pipe Req'd. (0.8m cover)
Inv./In: 7.40 Inv./Out: 7.30 2- Sfd, EW-7S Req'd.
35 m.Tons Erosion Control Stone Class 1, Sfd, EC-1 Placement
Excavate 0.75m and Backfill with
72 M. Tons (0.6 m depth) No. 3 Stone
Cap with 18 M. Tons (0.15 m depth) Bedding Matl. Aggr. No. 25 or 26
Extend Bedding Matl. Aggr. No. 25 or 26 as Class 1 Backfill per 2001
PB-1 Standards, 80 M.Tons Req'd
24 Square Meters Geotextile (Embankment Stabilization) Fabric Req'd.
61 Cubic Meters Minor Structure Excavation
1-Dewatering Basin Req'd.

SHEET 5

- 5-2 5B-1 8.3m - Sfd, 21.3m x 182m BDU1.5 Req'd.
Inv./In: 6.52 Inv./Out: 6.30
4 - Sfd, BW-21 Req'd.
10 deg. Inlet & 5 deg. outlet skew, Debris Rock Req'd at inlet end.
Excavate 1.0 m and Backfill with
1205 M.Tons Bedding Matl. Aggr. No. 25 or 26
3482 Cubic Meters Minor Structure Excavation
127 Metric Tons Erosion Control Stone Class 1 Req'd.
Sfd, EC-1 Placement 1-Dewatering Basin Req'd.
Sleeve exist. san. sewer thru box, see sheet 6B1
Sfd, MH-1 on Wingwalls & Headwalls Req'd.
(connect to exist. 375mm pipe.)
See Sheet 6B2/5 for Waterline Crossing Details
- 5-3 1- Sfd, Di-3AA Req'd.
H= 3.01m Inv. 6.99 Sfd, 15-1 Req'd.
- 5-3 Box 28.5m - 0.60m Conc. Pipe Req'd. (2.4m cover)
Inv./In: 6.99 Inv./Out: 6.81 (1/6 into proposed box culvert)
- 5-4 1- Sfd, Di-3AA Req'd. (precast)
H= 2.69m Inv. 7.20 Sfd, 15-1 Req'd.
- 5-4 5-3 36m - 0.60m Conc. Pipe Req'd. (2.4m cover)
Inv./In: 7.20 Inv./Out: 7.02

- 5-5 1- Sfd, Di-3AA Req'd. (precast)
H= 2.44m Inv. 7.40 Sfd, 15-1 Req'd.
- 5-5 5-4 35m - 0.60m Conc. Pipe Req'd. (2.0m cover)
Inv./In: 7.40 Inv./Out: 7.23
- 5-6 5-5 16m - 0.60m Conc. Pipe Req'd. (1.8m cover)
Inv./In: 7.50 Inv./Out: 7.40
- 5-6 1- Sfd, Di-3C Req'd. L=1.8m (precast)
H= 2.34m Inv. 7.50 Sfd, 15-1 Req'd.
- 5-7 1- Sfd, Di-3AA Req'd. (precast)
H= 3.34m Inv. 6.50
1- Sfd, SL-1 Req'd. Sfd, 15-1 Req'd.
- 5-7 Box 15m - 0.60m Conc. Pipe Req'd. (2.7m cover)
Inv./In: 6.50 Inv./Out: 6.81 (1/6 into proposed box culvert)
- 5-8 1- Sfd, Di-3BB Req'd. L=1.2m (precast)
H= 3.59m Inv. 7.14
1- Sfd, SL-1 Req'd. Sfd, 15-1 Req'd.
- 5-8 5-7 15m - 0.60m Conc. Pipe Req'd. (2.7m cover)
Inv./In: 7.04 Inv./Out: 6.94

SHEET 5 (CONTINUED)

- 5-8a 3.06m - Sfd, MH-1 or MH-2 Req'd.
Inv. 7.14
1- Sfd, MH-1 Frame & Cover Req'd. Sfd, 15-1 Req'd.
- 5-8a 5-8 12.5m - 0.60m Conc. Pipe Req'd. (2.4m cover)
Inv./In: 7.14 Inv./Out: 7.07
- 5-9 1- Sfd, Di-4B Req'd. L=1.8m (precast)
H= 2.40m Inv. 7.65 Sfd, 15-1 Req'd.
- 5-9 Box 27m - 0.90m Conc. Pipe Req'd. (2.2m cover)
Inv./In: 7.65 Inv./Out: 6.98
Excavate 0.6m and Backfill with
83 M.Tons Bedding Matl. Aggr. No. 25 or 26
(1/6 into proposed box culvert)
54 Square Meters Geotextile (Embankment Stabilization) Fabric Req'd.
- 5-10 1- Sfd, Di-4B Req'd. L=1.8m (precast)
H= 2.20m Inv. 7.73 Sfd, 15-1 Req'd.
- 5-10 5-9 32m - 0.90m Conc. Pipe Req'd. (1.5m cover)
Inv./In: 7.73 Inv./Out: 7.68
Excavate 0.6m and Backfill with
98 M.Tons Bedding Matl. Aggr. No. 25 or 26
64 Square Meters Geotextile (Embankment Stabilization) Fabric Req'd.
- 5-11 1- Sfd, Di-4A Req'd. (precast)
H= 2.10m Inv. 7.76 Sfd, 15-1 Req'd.
- 5-11 5-10 22.5m - 0.90m Conc. Pipe Req'd. (1.3m cover)
Inv./In: 7.76 Inv./Out: 7.73
Excavate 0.6m and Backfill with
69 M.Tons Bedding Matl. Aggr. No. 25 or 26
45 Square Meters Geotextile (Embankment Stabilization) Fabric Req'd.
- 5-12 1- Sfd, Di-4C Req'd. L=2.4m (precast)
H= 1.94m Inv. 7.83 Sfd, 15-1 Req'd.
- 5-12 5-11 27.5m - 0.90m Conc. Pipe Req'd. (1m cover)
Inv./In: 7.83 Inv./Out: 7.79
Excavate 0.6m and Backfill with
85 M.Tons Bedding Matl. Aggr. No. 25 or 26
55 Square Meters Geotextile (Embankment Stabilization) Fabric Req'd.

| PLANNED | PROJECT | FILE NO. | SHEET NO. |
|---------|------------|----------|-----------|
| | DMJ-BP-FOS | | 48 |

FIGURE 2D - 2 SAMPLE DRAINAGE DESCRIPTION SHEET*

* Rev. 1/07