

DRAINAGE NOTES

- 1 STA 10+055, LT 5.9 m - STA 10+100, LT 4.8 m
150 x 45.9 m UNDERDRAIN
INV. AT STA 10+055 = 77.457
FLUSHING BASIN, +055, LT 5.9 m
- 2 STA 10+055, RT 5.3 m - STA 10+100, RT 4.8 m
150 x 45.3 m UNDERDRAIN
INV. AT STA 10+055 = 77.865
FLUSHING BASIN, +055, RT 5.3 m
- 3 DRIVE CULVERT
STA 10+072, LT 10.8 m - STA 10+087, LT 10.9 m
375 x 15.0 m PCCSP, CAAP, OR CPEP
CSP, CPEP OR CAAP END SECTION AT STA 10+072, LT 10.8 m
INV. AT STA 10+072 = 78.500
CSP, CPEP OR CAAP END SECTION AT STA 10+087, LT 10.9 m
INV. AT STA 10+087 = 78.394
- 4 INLET PIPE
STA 10+100, LT 10.4 m - LT 4.8 m
450 x 5.3 m PCCSP, CAAP, OR CPEP
CSP, CPEP OR CAAP END SECTION AT STA 10+100, LT 10.4 m
INV. AT STA 10+100 = 78.170
- 5 STA 10+100, RT 4.8 m - LT 4.8 m
350 x 575 x 9.0 m RCP (111) ELLIPTICAL PIPE (NO OPTION)
PC - DI WITH GRATE, TYPE E AT STA 10+100, RT 4.8 m
RIM EL. = 79.012
INV. IN (S) = 77.640 (150 UND)
INV. OUT (W) = 77.564
- 6 STA 10+100, LT 4.8 m - STA 10+168, LT 4.8 m
450 x 67.4 m RCP (V), CAAP, PCCSP, OR CPEP (SL)
PC - DI WITH GRATE, TYPE E AT STA 10+100, LT 4.8 m
RIM EL. = 79.012
INV. IN (S) = 77.158 (150 UND)
INV. IN (W) = 77.610
INV. IN (E) = 77.480
INV. OUT (N) = 76.966
- 7 STA 10+102, RT 5.3 m - STA 10+147, RT 8.1 m
150 x 46.3 m UNDERDRAIN
INV. AT STA 10+102 = 76.982
FLUSHING BASIN, +102, RT 5.3 m
- 8 STA 10+102, LT 5.9 m - STA 10+168, LT 4.8 m
150 x 66.9 m UNDERDRAIN
INV. AT STA 10+102 = 77.109
FLUSHING BASIN, +102, LT 5.9 m
- 9 STA 10+168, RT 4.8 m - LT 4.8 m
450 x 9.0 m RCP (V), CAAP, PCCSP, OR CPEP (SL)
PC - DI WITH GRATE, TYPE E AT STA 10+168, RT 4.8 m
RIM EL. = 78.045
INV. IN (S) = 76.552
INV. OUT (W) = 76.521
- 10 STA 10+147, RT 8.1 m - STA 10+168, RT 4.8 m
450 x 20.4 m RCP (V), CAAP, PCCSP, OR CPEP (SL)
PC - DI WITH GRATE, TYPE E AT STA 10+147, RT 8.1 m
RIM EL. = 78.175
INV. IN (S) = 76.876 (150 UND)
INV. OUT (N) = 76.803
- 11 STA 10+178, LT 5.9 m - STA 10+220, LT 4.8 m
150 x 41.3 m UNDERDRAIN
INV. AT STA 10+178 = 76.199
FLUSHING BASIN, +178, LT 5.9 m
- 12 STA 10+170, RT 5.3 m - STA 10+220, RT 4.8 m
150 x 51.1 m UNDERDRAIN
INV. AT STA 10+170 = 76.233
FLUSHING BASIN, +170, RT 5.3 m
- 12A STA 10+145, RT 17.0 m - STA 10+184, RT 11.0 m
ABANDON EXISTING CPEP AND FILL WITH CONCRETE CLASS D (MOD. FLOWABLE FILL)
- 12B STA 10+186, RT 10.5 m - STA 10+233, RT 5.0 m
~~ABANDON EXISTING CPEP AND FILL WITH CONCRETE CLASS D (MOD. FLOWABLE FILL)~~
NEW 300 x 9m CPEP W/ CPEP ELBOW TIE INTO EXISTING SYSTEM

- 13 STA 10+168, LT 4.8 m - STA 10+196, LT 10.1 m
450 x 27.1 m RCP (V), CAAP, PCCSP, OR CPEP (SL)
PC - DI WITH GRATE, TYPE E AT STA 10+168, LT 4.8 m
RIM EL. = 77.992
INV. IN (W) = 76.529 (150 UND.)
INV. IN (S) = 76.364
INV. IN (E) = 76.364
INV. OUT (N) = 76.288
- 14 STA 10+196, LT 10.1 m - STA 10+211, LT 11.2 m
450 x 13.4 m RCP (V), CAAP, PCCSP, OR CPEP (SL)
PC - CB WITH GRATE, TYPE A AT STA 10+196, LT 10.1 m
RIM EL. = 77.333
INV. IN (S) = 75.806
INV. OUT (N) = 75.775
- 15 STA 10+211, LT 11.2 m - STA 10+272, LT 14.3 m
450 x 59.0 m RCP (V), CAAP, PCCSP, OR CPEP (SL)
PC - CB WITH GRATE, TYPE D AT STA 10+211, LT 11.2 m
RIM EL. = 77.159
INV. IN (S) = 75.641
INV. OUT (N) = 75.610
- 15A SEE BELOW
- 16 STA 10+193.4, LT 4.8 m - STA 10+220, LT 4.8 m
450 x 25.7 m RCP (V), CAAP, PCCSP, OR CPEP (SL)
PC - DI WITH GRATE, TYPE E AT STA 10+193.4, LT 4.8 m
RIM EL. = 77.606
INV. OUT (N) = 75.742
- 17 STA 10+270, LT 5.3 m - STA 10+220, LT 4.8 m
150 x 53.6 m UNDERDRAIN
INV. AT STA 10+270 = 76.471
FLUSHING BASIN, +270, LT 5.3 m
- 18 STA 10+220, RT 4.8 m - LT 4.8 m
450 x 9.0 m RCP (V), CAAP, PCCSP, OR CPEP (SL)
PC - DI WITH GRATE, TYPE D AT STA 10+220, RT 4.8 m
RIM EL. = 77.510
INV. IN (N) = 75.966 (150 UND)
INV. IN (S) = 75.966 (150 UND)
INV. OUT (W) = 75.681
- 19 STA 10+270, RT 5.3 m - STA 10+220, RT 4.8 m
150 x 50.2 m UNDERDRAIN
INV. AT STA 10+270 = 76.300
FLUSHING BASIN, +270, RT 5.3 m
- 20 STA 10+220, LT 4.8 m - STA 10+256.2, LT 8.5 m
450 x 35.1 m RCP (V), CAAP, PCCSP, OR CPEP (SL)
PC - DI WITH GRATE, TYPE D AT STA 10+220, LT 4.8 m
RIM EL. = 77.354
INV. IN (S) = 75.498
INV. IN (SW) = 75.776 (150 UND.)
INV. IN (NW) = 75.776 (150 UND.)
INV. IN (E) = 75.597
INV. OUT (N) = 75.467
- 21 STA 10+301, RT 5.9 m - STA 10+272, RT 4.8 m
150 x 29.3 m UNDERDRAIN
INV. AT STA 10+301 = 77.657
FLUSHING BASIN, +301, RT 5.9 m
- 22 STA 10+303, RT 4.8 m - STA 10+272, RT 4.8 m
450 x 30.1 m RCP (V), CAAP, PCCSP, OR CPEP (SL)
PC - DI WITH GRATE, TYPE E AT STA 10+303, RT 4.8 m
RIM EL. = 79.747
INV. IN (W) = 77.750 77.755
INV. OUT (S) = 77.719 77.725
- 23 STA 10+303, LT 4.8 m - RT 4.8 m
450 x 9.0 m RCP (V), CAAP, PCCSP, OR CPEP (SL)
PC - DI WITH GRATE, TYPE E AT STA 10+303, LT 4.8 m
RIM EL. = 79.747
INV. OUT (E) = 77.918
- 15A STA 10+250, LT 17.5 m - STA 10+272, LT 14.3 m
450 x 23m CPEP(SL)
PC - MH W/ COVER @ 10+255, LT 17.5m
RIM EL. = 77.985
INV. IN(S) = 75.180
INV. OUT(N) = 75.180

- 24 STA 10+272, RT 4.8 m - LT 5.0 m
450 x 8.9 m RCP (V), CAAP, PCCSP, OR CPEP (SL)
PC - CB WITH GRATE, TYPE E AT STA 10+272, RT 4.8 m
RIM EL. = 78.376
INV. IN (E) = 76.652 (150 UND.)
INV. IN (N) = 76.527
INV. OUT (W) = 76.310
- 25 STA 10+301, LT 5.3 m - STA 10+272, LT 5.0 m
150 x 29.0 m UNDERDRAIN
INV. AT STA 10+301 = 77.657
FLUSHING BASIN, +301, LT 5.3 m
- 26 STA 10+256.2, LT 8.5 m - STA 10+272, LT 14.3 m
450 x 15.6 m CONCRETE ENCASED RCP (V), OR "HEAVY DUTY" CPEP (SL)
PC - CB WITH GRATE, TYPE D AT STA 10+256.2, LT 8.5 m
RIM EL. = 77.710
INV. IN (S) = 75.119
INV. OUT (N) = 74.357
- 27 STA 10+272, LT 5.0 m - LT 14.3 m
450 x 8.4 m RCP (V), CAAP, PCCSP, OR CPEP (SL)
PC - DI WITH GRATE, TYPE E AT STA 10+272, LT 5.0 m
RIM EL. = 78.368
INV. IN (E) = 76.226
INV. IN (N) = 76.519 (150 UND.)
INV. OUT (W) = 76.195
- 28 STA 10+272, LT 14.3 m - STA 10+276, LT 14.3 m
600 x 2.8 m RCP (V), CAAP, PCCSP, OR CPEP (SL)
PC - MH WITH COVER AT STA 10+272, LT 14.3 m
RIM EL. = 78.190
INV. IN (S) = 75.020
INV. IN (SE) = 74.170
INV. IN (E) = 76.114
INV. OUT (N) = 74.094
- 29 STA 10+276, LT 14.3 m - STA 10+296, LT 16.4 m
600 x 13.3 m RCP (V), CAAP, PCCSP, OR CPEP (SL)
PC - STORMCEPTOR UNIT (STC2400) OR EQUAL AT STA 10+276, LT 14.3 m
RIM EL. = 78.160
INV. IN (S) = 74.038
INV. OUT (N) = 74.007
- 30 STA 10+296, LT 16.4 m - STA 10+322, LT 18.3 m
600 x 25.6 m RCP (V) (NO PIPE OPTION)
PC - DI WITH GRATE, TYPE A AT STA 10+296, LT 16.4 m
RIM EL. = 77.372
INV. IN (S) = 73.851
INV. OUT (N) = 73.820
INV. AT STA 10+322 = 73.515
IF OUTLET IS IN BEDROCK, CONST. 1200 WIDE CHANNEL WITH 4V:1H SIDESLOPES TO POINT WHERE LEDGE DROPS OFF TO RIVER.

IF OUTLET IS ABOVE BEDROCK, CONST. 3600 WIDE X 1200 DEEP STONE FILLED PAD, TYPE II AT OUTLET AND CONST. 1800 WIDE CHANNEL WITH 1:2 SIDESLOPES TO POINT WHERE CHANNEL DROPS OFF TO RIVER.
- 31 STA 10+423, LT 17.0 m - RT 10.0 m
450 x 26.4 m PCCSP, CAAP OR CPEP
PROPOSED PIPE SHALL BE PLACED THROUGH EXISTING BINWALL AT LT 10.1 m. ALL COSTS INCIDENTAL TO PIPE.
THE INSTALLED PIPE SHALL HAVE NO CONTACT WITH THE BIN WALL RC - HEADWALL AT STA 10+423, LT 17.0 m
INV. IN AT STA 10+423, LT = 81.025

- 32 STA 10+540, LT 16.4 m - STA 10+416, LT 16.7 m
1800 WIDE X 300 DEEP STONE FILL DITCH, TYPE I
EL. AT STA 10+416 = 81.265
LOW POINT IN DITCH AT STA 10+423, LT 18.2 m
EL. AT STA 10+423 = 81.133
- 33 STA 10+590, LT 10.1 m - STA 10+540, LT 16.4 m
1200 WIDE x 300 DEEP STONE FILL DITCH, TYPE I
EL. AT STA 10+590 = 95.711
EL. AT STA 10+540 = 90.547
- 34 STA 10+423, RT 10.0 m - STA 10+420, RT 24.2 m
450 x 13.9 m PCCSP, CAAP, OR CPEP
PC - 2.8 m DROP MH WITH COVER AT STA 10+423, RT 10.0 m
RIM EL. = 83.444
INV. IN (W) = 78.643
INV. IN (N) = 81.488
INV. OUT (E) = 78.567
CSP, CPEP OR CAAP END SECTION AT STA 10+420, RT 24.2 m
INV. AT STA 10+420 = 75.793
5000 WIDE x 1200 DEEP STONE FILL PAD, TYPE II AT OUTLET (SEE SWALE DETAIL "B")
- 35 STA 10+425, RT 4.3 m - STA 10+423, RT 10.0 m
450 x 5.2 m PCCSP, CAAP, OR CPEP
PC - STORMCEPTOR UNIT (STC1800) OR EQUAL AT STA 10+425, RT 3.7 m
RIM EL. = 85.273
INV. IN (N) = 81.778 81.749
INV. OUT (E) = 81.748 81.718
- 36 STA 10+428, RT 4.8 m - STA 10+425, RT 4.3 m
450 x 1.7 m PCCSP, CAAP, OR CPEP
PC - CB WITH GRATE, TYPE E AT STA 10+428, RT 4.8 m
RIM EL. = 85.372
INV. IN (W) = 81.939
INV. OUT (S) = 81.863 81.921
- 37 STA 10+428, LT 4.8 m - RT 4.8 m
450 x 8.4 m PCCSP, CAAP, OR CPEP
PC - CB WITH GRATE, TYPE E AT STA 10+428, LT 4.8 m
RIM EL. = 85.372
INV. IN (S) = 82.267
INV. IN (N) = 83.105 82.605
INV. OUT (E) = 82.191 82.20
- 38 STA 10+409, LT 4.8 m - STA 10+428, LT 4.8 m
450 x 18.1 m PCCSP, CAAP, OR CPEP
PC - DI WITH GRATE, TYPE E AT STA 10+409, LT 4.8 m
RIM EL. = 84.517
INV. IN (E) = 82.719
INV. OUT (N) = 82.668
- 39 STA 10+409, RT 4.8 m - LT 4.8 m
450 x 9.0 m PCCSP, CAAP, OR CPEP
PC - DI WITH GRATE, TYPE E AT STA 10+409, RT 4.8 m
RIM EL. = 84.517
INV. OUT (W) = 82.884

GENERAL DRAINAGE NOTES

1. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES PRIOR TO STORM DRAIN CONSTRUCTION. ANY CONFLICTS BETWEEN THE ACTUAL LOCATION AND DESIGN SHALL BE REPORTED TO THE RESIDENT ENGINEER FOR RESOLUTION.
2. EXTRUDED POLYSTYRENE INSULATION BOARD (50 mm MIN.) SHALL BE INSTALLED BETWEEN STORM DRAIN AND WATERLINE IF CLEARANCE IS LESS THAN 450 mm. ALL COSTS SHALL BE PAID AS ITEM 622.10, INSULATION BOARD.

**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

Town Of COLCHESTER-SOUTH BURLINGTON	Bridge No. 6
Highway No. TH 4/3	Log Sta. Surv.Sta.
TH 4/3 OVER WINOOSKI RIVER & N.E.C.R.	
DRAINAGE & SEWER NOTES/DETAILS (1 OF 2)	
Designed By S.W. BEKIER	Drawn By C.S. MERCER
Checked By D.M. PECK	Date 4/05
PROJECT COLCHESTER-SOUTH BURLINGTON	
PROJECT NO. BRM 5600 (6) S C/2	
I.G.C. Info.	
Bridge Sheet No. ZDI39DS1	Sheet 27 of 124

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)