

UPC Wind Sheffield Stormwater Analysis
 Stormwater Treatment Summary
 Prepared by Pioneer Environmental Associates, LLC.
 September 22, 2006

S/N No.	RECEIVING WATER	TREATED IMPERVIOUS AREA (Acres)	TOTAL TREATED SITE AREA (Acres)	CONVEYANCE TREATMENT PROVIDED	RECHARGE PROVIDED	WQV REQUIRED	CPV CONTROL REQUIRED	OVERBANK FLOOD CONTROL REQUIRED	EXTREME FLOOD CONTROL REQUIRED	DESCRIPTION
001, 002	Annis Brook	4.8	40.1	Rock Lined Channel Wet Pond (P-1)	To be determined	Yes	Yes	Yes	No	Runoff from turbines C-01, C-07, C-08, and C-09 and roads collected by rock lined channel and basins B-01, B-02 to Annis Brook
003	Calendar Brook	1.6	12.8	Rock Lined Channel Wet Pond (P-1)	To be determined	Yes	Yes	Yes	Yes	Runoff from turbines C-14 and C-16 and roads collected by rock lined channel and stormwater basin B-03 to Calendar Brook
004	Clark Brook	1.2	17.5	Rock Lined Channel Wet Pond (P-1)	To be determined	Yes	Yes	Yes	Yes	Runoff from turbines C-04, and C-11 and roads collected by rock lined channel and stormwater basin B-04 to Clark Brook
005	Calendar Brook	1.3	24.7	Rock Lined Channel Wet Pond (P-1)	To be determined	Yes	Yes	Yes	Yes	Runoff from turbine C-15 and roads collected by rock lined channel and stormwater basin B-05 to Calendar Brook
006	Calendar Brook	0.9	9.7	Rock Lined Channel Wet Pond (P-1)	To be determined	Yes	No	Yes	Yes	Runoff from turbine C-13 and roads collected by rock lined channel and stormwater basin B-06 to Calendar Brook
007	Calendar Brook	1.1	13.4	Rock Lined Channel Wet Pond (P-1)	To be determined	Yes	Yes	Yes	Yes	Runoff from turbine C-10 and roads collected by rock lined channel and stormwater basin B-07 to Calendar Brook
008	Calendar Brook	1.1	19.9	Rock Lined Channel Wet Pond (P-1)	To be determined	Yes	Yes	Yes	Yes	Runoff from turbine C-02 and roads collected by rock lined channel and stormwater basin B-08 to Calendar Brook
009	Calendar Brook	1.2	10.8	Rock Lined Channel Wet Pond (P-1)	To be determined	Yes	Yes	Yes	Yes	Runoff from turbine C-03 and roads collected by rock lined channel and stormwater basin B-09 to Calendar Brook
010	Calendar Brook	1.7	24.2	Rock Lined Channel Wet Pond (P-1)	To be determined	Yes	Yes	Yes	Yes	Runoff from turbine C-05 and C-12 and roads collected by rock lined channel and stormwater basin B-10 to Calendar Brook
011	Clark Brook	0.5	2.5	Rock Lined Channel Wet Pond (P-1)	To be determined	Yes	No	Yes	Yes	Runoff from roads collected by rock lined channel and stormwater basin B-11 to Clark Brook
012	Clark Brook	0.4	5.4	Rock Lined Channel Wet Pond (P-1)	To be determined	Yes	No	Yes	Yes	Runoff from turbine C-06 and roads collected by rock lined channel and stormwater basin B-12 to Clark Brook

Channel Protection (CPv) shall be waived for:

- A site where the pre-routed post development discharge is less than 2 cfs;
- A site that directly discharges to a waterbody with a drainage area equal to or greater than 10 sq. mi., and that is less than 5% of the watershed area at the site's upstream boundary.

Overbank Flood Protection (Qp10) shall be waived if:

- A site discharges directly to a large reservoir, lake, or stream with a drainage area greater than or equal to 10 sq. mi.;
- The site is smaller than five acres and the channel has adequate capacity to convey the post development 10 yr. discharge;
- Downstream to the point of the so called 10% rule and downstream conveyance systems have adequate capacity to convey the 10 yr storm.

Extreme Flood Protection (Qp100) shall be waived if:

- A site discharges directly to a large reservoir, lake, or stream with a drainage area greater than or equal to 10 sq. mi.;
- The impervious area is less than 10 acres;
- A downstream analysis is conducted that indicated extreme flood control is not necessary for the site.