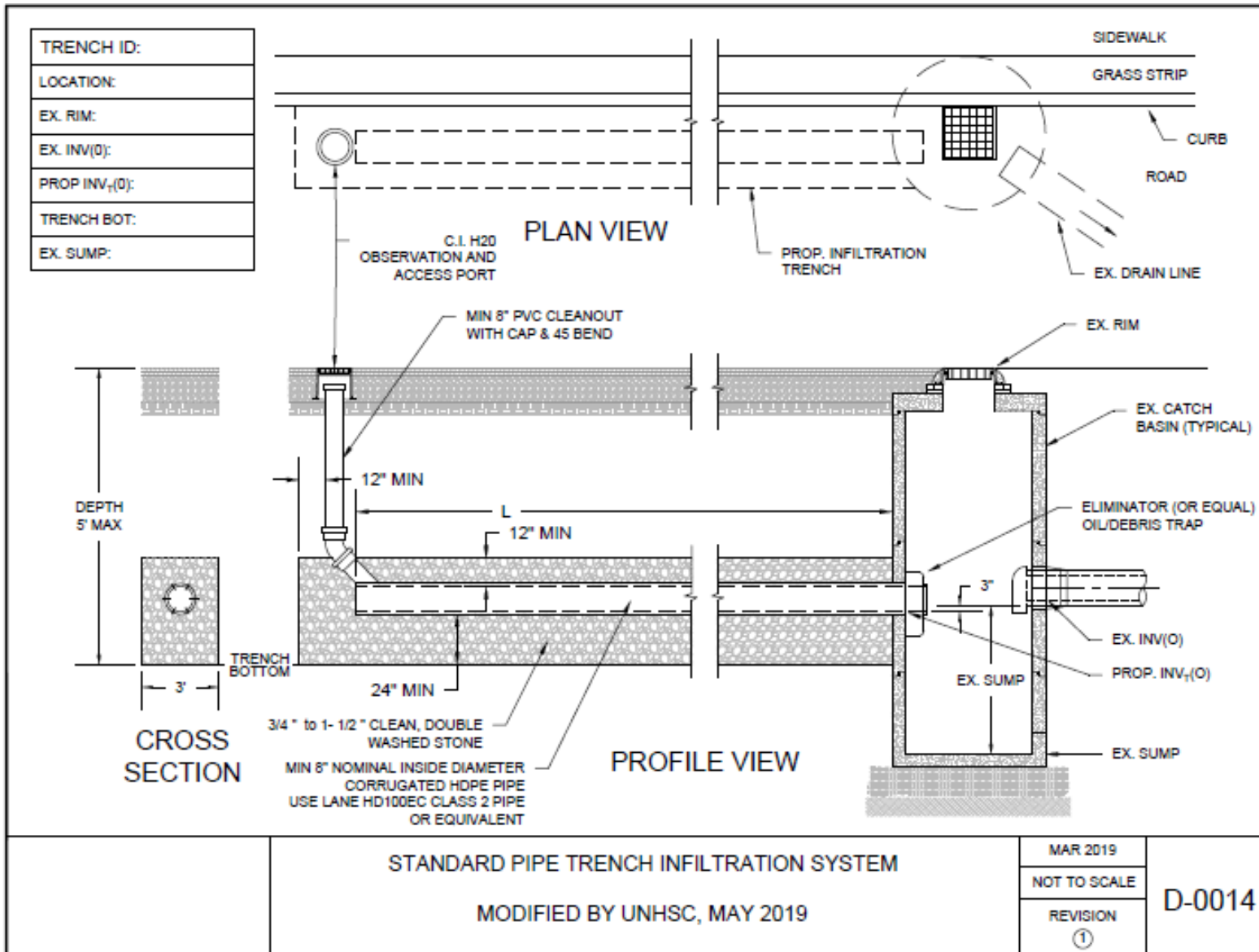


Appendix A: Arlington Infiltration Trench Concept Design



Arlington Results:

Location	ABV	Units	1	2	3	4	5	6	7	8	9	AVE	Total
Drainage Area (estimated)	DCIA	Acres	0.12	0.12	0.12	0.12	0.1	0.11	0.12	0.12	0.12	0.12	1.05
Water Quality Volume (Philly)	WQVP	cf	327	436	436	436	363	399	436	436	436	411	3703
Design Storage Volume	DSV	cf	42	47	45	44	37	41	44	44	44	43	386.0
Infiltration Rate	Inf	in/hr	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	NA
BMP Capacity: Depth of Runoff from Impervious Area	PSC	in	0.13	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	NA
TP Reduction		lb/yr	0.08	0.10	0.09	0.09	0.08	0.09	0.09	0.09	0.09	0.09	0.8
TN Reduction		lb/yr	0.51	0.60	0.59	0.58	0.48	0.53	0.58	0.58	0.58	0.56	5.0
TSS Reduction		lb/yr	23	28	27	26	22	24	26	26	26	26	230
Volume Reduction		cf	132	155	152	149	124	137	149	149	149	144	1296

	Units	US dollars
Cost (estimated)	System	\$ 2,200.00
Cost (estimated)	per acre IC treated	\$18,857.14
Cost (estimated)	per lb of TP	\$24,750.00
Cost (estimated)	per lb of TN	\$ 4,920.48
Cost (estimated)	per lb of TSS	\$ 21.44
Cost (estimated)	per cf of volume eliminated	\$ 0.02