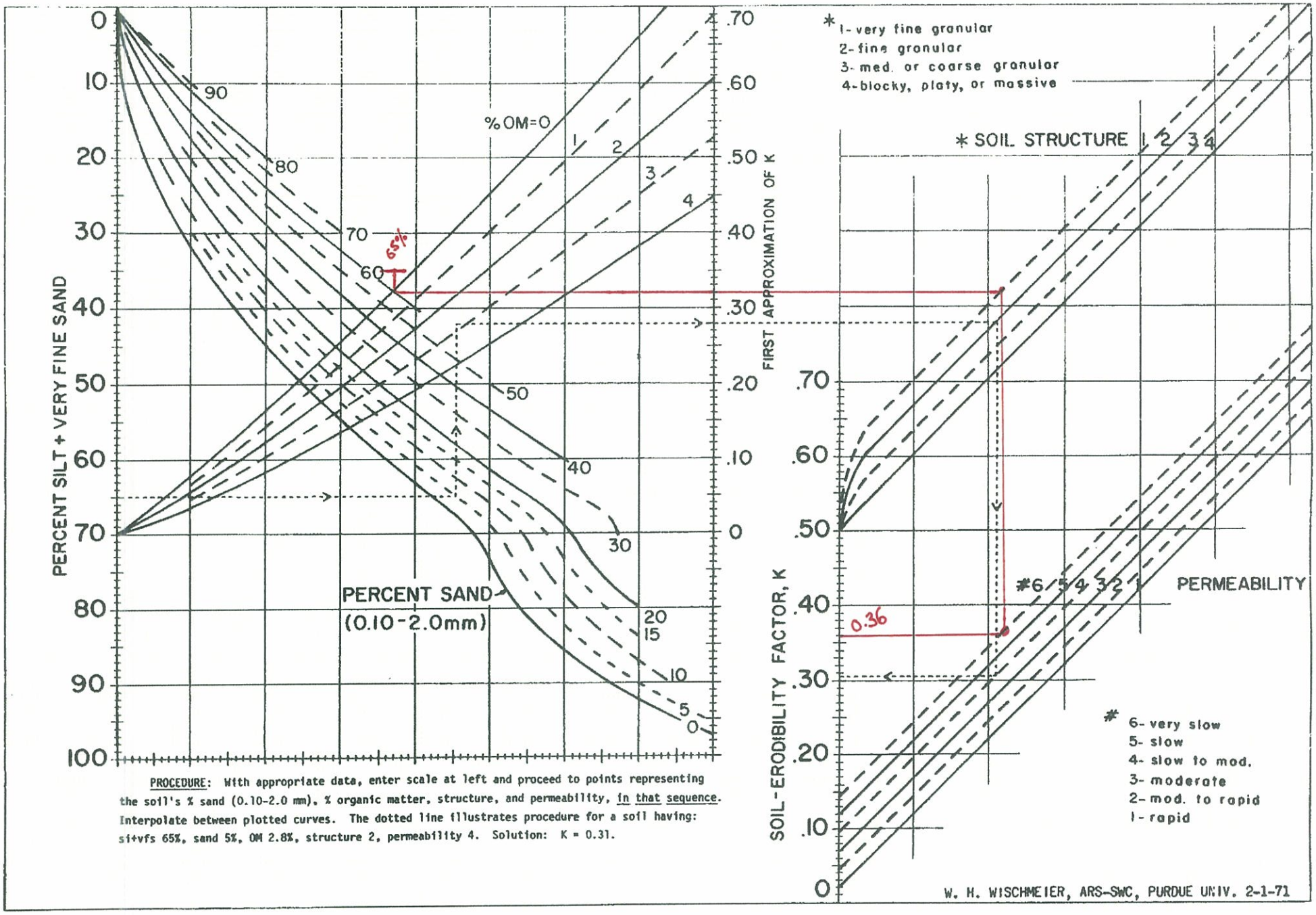

PROCEDURE: With appropriate data, enter scale at left and proceed to points representing the soil's % sand (0.10-2.0 mm), % organic matter, structure, and permeability, in that sequence. Interpolate between plotted curves. The dotted line illustrates procedure for a soil having: si+vfs 65%, sand 5%, OM 2.8%, structure 2, permeability 4. Solution: K = 0.31.

RAINFALL FACTOR (R)
FROM USDA DATA BASE

10 year EI, US
210
10-yr 24-hr rainfall, in.
11
100-yr 24-hr rainfall, in.
0
Annual precip, in.
83
Avg. temp., deg C
17 17 17 17 18 19 20 20 19 19 18 17
EI dist. for Req conditions
req
Eros. density, US eros. / in. ppt
6.4 4.6 6.5 8.2 9.5 7.9 6.9 8.9 9.0 8.8 6.9 4.6
How determine runoff?
based on 10-yr 24-hr ppt
How get erosivity distribution?
From monthly eros. density & precip.
In Req area?
No
Month precip., mm
60 70 110 160 220 140 180 260 310 320 200 78
R Equiv, US
660
R Factor, US
660
R values, US
15 13 27 50 84 45 49 92 110 110 56 14
Standard EI distribution
default
Use frozen/thawing soil routines?
No
What Req area?
Normal Req (Pullman)

MODIFIED UNIVERSAL SOIL LOSS EQUATION

SEDIMENT YIELD CALCULATION

CONDITION: EXISTING

RAINFALL EVENT: 2-YR

$A = R^* K^* L\ S^* C\ ^*P$

$R = 95 * (V\ ^*Qp)^{0.56} / At$

EROSION (TON/ACRE)	A	EROSION CONTROL PRACTICE FACTOR	P
RAINFALL FACTOR	R	VOLUME OF RUNOFF (ACRE-FT)	V
ERODIBILITY FACTOR	K	PEAK FLOW (CUBIC FEET PER SECOND)	Qp
TOPOGRAPHIC FACTOR	LS	TOTAL AREA ACRES	At
COVER AND MANAGEMENT FACTOR	C		

AREA	SOIL NAME	COVER	V	Qp	R	K	LS	C	P	A (ton/acre)	AREA (acre)	TOTAL SEDIMENT (ton)
BASN	CuF	Grass	12.9	224.1	181	0.24	14.04	0.004	1	2.44	21.49	52.51
	CuF	Landfill	12.9	224.1	181	0.36	3.1	1	1	202.32	9.29	1,879.52
	EpF	Grass	12.9	224.1	181	0.24	4.38	0.004	1	0.76	2.34	1.78
	GyC	Grass	12.9	224.1	181	0.1	2.2	0.004	1	0.16	3.14	0.50
	LfC	Landfill	12.9	224.1	181	0.36	0.74	1	1	48.29	2.07	99.97
	MnC	Grass	12.9	224.1	181	0.24	1.66	0.004	1	0.29	0.12	0.03
	PsF	Grass	12.9	224.1	181	0.24	4.16	0.004	1	0.72	7.00	5.07
LN	CuF	Grass	4.7	87.6	208	0.24	7.93	0.004	1	1.59	0.51	0.81
	CuF	Landfill	4.7	87.6	208	0.36	1.53	1	1	114.82	0.57	65.45
	LfC	Landfill	4.7	87.6	208	0.36	3.72	1	1	279.17	12.19	3,403.13
	PsF	Grass	4.7	87.6	208	0.24	9.62	0.004	1	1.93	1.51	2.91
BASW	LfC	Landfill	9.9	179.7	170	0.36	1.88	1	1	115.18	0.51	58.74
	PsF	Grass	9.9	179.7	170	0.24	8.1	0.004	1	1.32	36.38	48.14
LW	PsF	Landfill	0.6	11.6	147	0.36	7.64	1	1	403.35	1.92	774.43
BASE	LfC	Landfill	19	317.9	175	0.36	4.34	1	1	274.05	0.29	79.47
	PsF	Grass	19	317.9	175	0.24	2.93	0.004	1	0.49	65.99	32.56
	PsF	Landfill	19	317.9	175	0.24	7.77	1	1	327.09	4.69	1,534.05
LE	LfC	Grass	2.3	43.4	167	0.36	3.28	0.004	1	0.79	0.86	0.68
	LfC	Landfill	2.3	43.4	167	0.36	6.19	1	1	371.72	5.27	1,958.97
	PsF	Grass	2.3	43.4	167	0.24	4.63	1	1	185.36	1.10	203.90
	PsF	Landfill	2.3	43.4	167	0.24	5.95	1	1	238.21	0.27	64.32
BASSW	LfC	Landfill	3	57.2	156	0.36	5.06	1	1	284.50	1.43	406.83
	PsF	Grass	3	57.2	156	0.24	9.99	0.004	1	1.50	9.42	14.11
BASSE	LfC	Landfill	0.4	8.2	118	0.36	4.65	1	1	197.00	0.05	9.85
	PsF	Grass	0.4	8.2	118	0.24	3.66	0.004	1	0.41	1.52	0.63
LS	LfC	Landfill	2.3	41.8	177	0.36	5.5	1	1	351.02	6.71	2,355.37
	PsF	Landfill	2.3	41.8	177	0.24	4.95	1	1	210.61	0.20	42.12
BASS	PsF	Grass	2	38.9	143	0.24	5.5	0.004	1	0.75	7.61	5.75
										TOTAL	204.45	13,101.60

SEDIMENT YIELD CALCULATION

CONDITION: PROPOSED

RAINFALL EVENT: 10-YR

$A = R^* K^* L S^* C^* P$

$R = 95 * (V^* Qp)^{0.56} / At$

EROSION (TON/ACRE)	A	EROSION CONTROL PRACTICE FACTOR	P
RAINFALL FACTOR	R	VOLUME OF RUNOFF (ACRE-FT)	V
ERODIBILITY FACTOR	K	PEAK FLOW (CUBIC FEET PER SECOND)	Qp
TOPOGRAPHIC FACTOR	LS	TOTAL AREA ACRES	At
COVER AND MANAGEMENT FACTOR	C		

AREA	SOIL NAME	COVER	V	Qp	R	K	LS	C	P	A (ton/acre)	AREA (acre)	TOTAL SEDIMENT (ton)
BASN	CuF	Grass	11.8	206.3	171	0.24	14.04	0.004	1	2.30	21.07	48.48
	CuF	Landfill	11.8	206.3	171	0.36	3.1	1	1	190.50	9.29	1,769.73
	EpF	Grass	11.8	206.3	171	0.24	4.38	0.004	1	0.72	2.34	1.68
	GyC	Grass	11.8	206.3	171	0.1	2.2	0.004	1	0.15	3.14	0.47
	LfC	Landfill	11.8	206.3	171	0.36	0.74	1	1	45.47	2.07	94.13
	MnC	Grass	11.8	206.3	171	0.24	1.66	0.004	1	0.27	0.12	0.03
	PsF	Grass	11.8	206.3	171	0.24	4.16	0.004	1	0.68	5.81	3.96
LN	LfC	Landfill	4	74	108	0.36	5.36	1	1	209.21	21.21	4,437.25
BASW	LfC	Landfill	9.9	179.7	170	0.36	1.88	1	1	115.18	0.51	58.74
	PsF	Grass	9.9	179.7	170	0.24	8.1	0.004	1	1.32	36.38	48.14
LW	PsF	Landfill	0.7	13.6	175	0.36	7.64	1	1	480.68	1.92	922.90
BASE	PsF	Grass	19	304	209	0.24	2.93	0.004	1	0.59	54.92	32.33
	PsF	Landfill	19	304	209	0.24	1.00	1	1	50.23	3.09	155.20
LE	LfC	Landfill	3.1	57.7	111	0.36	7.37	1	1	294.22	15.64	4,601.66
BASSW	LfC	Landfill	2.9	55.6	151	0.36	5.06	1	1	274.75	1.43	392.89
	PsF	Grass	2.9	55.6	151	0.24	9.99	0.004	1	1.45	9.42	13.63
BASSE	LfC	Landfill	0.4	8.2	118	0.36	4.65	1	1	197.00	0.05	9.85
	PsF	Grass	0.4	8.2	118	0.24	3.66	0.004	1	0.41	1.52	0.63
LS	LfC	Landfill	2.3	43	180	0.36	5.5	1	1	356.63	6.71	2,393.00
	PsF	Landfill	2.3	43	180	0.24	4.95	1	1	213.98	0.20	42.80
BASS	PsF	Grass	2	38.9	143	0.24	5.5	0.004	1	0.75	7.61	5.75

TOTAL	204.45	15,033.25

SEDIMENT YIELD CALCULATION

CONDITION: EXISTING

RAINFALL EVENT: 10-YR

$A = R^* K^* L S^* C^* P$

$R = 95 * (V^* Qp)^{0.56} / At$

EROSION (TON/ACRE)	A	EROSION CONTROL PRACTICE FACTOR	P
RAINFALL FACTOR	R	VOLUME OF RUNOFF (ACRE-FT)	V
ERODIBILITY FACTOR	K	PEAK FLOW (CUBIC FEET PER SECOND)	Qp
TOPOGRAPHIC FACTOR	LS	TOTAL AREA ACRES	At
COVER AND MANAGEMENT FACTOR	C		

AREA	SOIL NAME	COVER	V	Qp	R	K	LS	C	P	A (ton/acre)	AREA (acre)	TOTAL SEDIMENT (ton)
BASN	CuF	Grass	27.9	327	345	0.24	14.04	0.004	1	4.65	21.49	99.94
	CuF	Landfill	27.9	327	345	0.36	3.1	1	1	385.07	9.29	3,577.29
	EpF	Grass	27.9	327	345	0.24	4.38	0.004	1	1.45	2.34	3.39
	GyC	Grass	27.9	327	345	0.1	2.2	0.004	1	0.30	3.14	0.95
	LfC	Landfill	27.9	327	345	0.36	0.74	1	1	91.92	2.07	190.27
	MnC	Grass	27.9	327	345	0.24	1.66	0.004	1	0.55	0.12	0.07
	PsF	Grass	27.9	327	345	0.24	4.16	0.004	1	1.38	7.00	9.65
LN	CuF	Grass	9.7	121.1	375	0.24	7.93	0.004	1	2.85	0.51	1.46
	CuF	Landfill	9.7	121.1	375	0.36	1.53	1	1	206.54	0.57	117.73
	LfC	Landfill	9.7	121.1	375	0.36	3.72	1	1	502.17	12.19	6,121.46
	PsF	Grass	9.7	121.1	375	0.24	9.62	0.004	1	3.46	1.51	5.23
BASW	LfC	Landfill	21.9	268.5	332	0.36	1.88	1	1	224.97	0.51	114.74
	PsF	Grass	21.9	268.5	332	0.24	8.1	0.004	1	2.58	36.38	94.04
LW	PsF	Landfill	1.3	15.9	270	0.36	7.64	1	1	742.01	1.92	1,424.66
BASE	LfC	Landfill	42.1	476.1	343	0.36	4.34	1	1	536.48	0.29	155.58
	PsF	Grass	42.1	476.1	343	0.24	2.93	0.004	1	0.97	65.99	63.73
	PsF	Landfill	42.1	476.1	343	0.24	7.77	1	1	640.31	4.69	3,003.05
LE	LfC	Grass	4.8	60.8	304	0.36	3.28	0.004	1	1.44	0.86	1.24
	LfC	Landfill	4.8	60.8	304	0.36	6.19	1	1	677.85	5.27	3,572.29
	PsF	Grass	4.8	60.8	304	0.24	4.63	1	1	338.01	1.10	371.82
	PsF	Landfill	4.8	60.8	304	0.24	5.95	1	1	434.38	0.27	117.28
BASSW	LfC	Landfill	6.6	84.4	302	0.36	5.06	1	1	550.10	1.43	786.65
	PsF	Grass	6.6	84.4	302	0.24	9.99	0.004	1	2.90	9.42	27.28
BASSE	LfC	Landfill	0.9	12.3	233	0.36	4.65	1	1	389.32	0.05	19.47
	PsF	Grass	0.9	12.3	233	0.24	3.66	0.004	1	0.82	1.52	1.24
LS	LfC	Landfill	4.6	57.1	311	0.36	5.5	1	1	616.27	6.71	4,135.17
	PsF	Landfill	4.6	57.1	311	0.24	4.95	1	1	369.76	0.20	73.95
BASS	PsF	Grass	4.5	58.4	283	0.24	5.5	0.004	1	1.49	7.61	11.36
										TOTAL	204.45	24,100.98

SEDIMENT YIELD CALCULATION

CONDITION: PROPOSED

RAINFALL EVENT: 10-YR

$A = R^* K^* L S^* C^* P$

$R = 95 * (V^* Qp)^{0.56} / At$

EROSION (TON/ACRE)	A	EROSION CONTROL PRACTICE FACTOR	P
RAINFALL FACTOR	R	VOLUME OF RUNOFF (ACRE-FT)	V
ERODIBILITY FACTOR	K	PEAK FLOW (CUBIC FEET PER SECOND)	Qp
TOPOGRAPHIC FACTOR	LS	TOTAL AREA ACRES	At
COVER AND MANAGEMENT FACTOR	C		

AREA	SOIL NAME	COVER	V	Qp	R	K	LS	C	P	A (ton/acre)	AREA (acre)	TOTAL SEDIMENT (ton)
BASN	CuF	Grass	26.5	314.6	340	0.24	14.04	0.004	1	4.58	21.07	96.59
	CuF	Landfill	26.5	314.6	340	0.36	3.1	1	1	379.56	9.29	3,526.11
	EpF	Grass	26.5	314.6	340	0.24	4.38	0.004	1	1.43	2.34	3.35
	GyC	Grass	26.5	314.6	340	0.1	2.2	0.004	1	0.30	3.14	0.94
	LfC	Landfill	26.5	314.6	340	0.36	0.74	1	1	90.60	2.07	187.55
	MnC	Grass	26.5	314.6	340	0.24	1.66	0.004	1	0.54	0.12	0.07
	PsF	Grass	26.5	314.6	340	0.24	4.16	0.004	1	1.36	5.81	7.89
LN	LfC	Landfill	8.1	101	192	0.36	5.36	1	1	369.68	21.21	7,840.84
BASW	LfC	Landfill	21.9	268.5	332	0.36	1.88	1	1	224.97	0.51	114.74
	PsF	Grass	21.9	268.5	332	0.24	8.1	0.004	1	2.58	36.38	94.04
LW	PsF	Landfill	1.5	18.5	318	0.36	7.64	1	1	875.08	1.92	1,680.14
BASE	PsF	Grass	42.1	457.6	411	0.24	2.93	0.004	1	1.16	54.92	63.47
	PsF	Landfill	42.1	457.6	411	0.24	1.00	1	1	98.61	3.09	304.69
LE	LfC	Landfill	6.3	78.8	196	0.36	7.37	1	1	521.13	15.64	8,150.40
BASSW	LfC	Landfill	6.5	83.4	297	0.36	5.06	1	1	541.79	1.43	774.76
	PsF	Grass	6.5	83.4	297	0.24	9.99	0.004	1	2.85	9.42	26.87
BASSE	LfC	Landfill	0.9	12.3	233	0.36	4.65	1	1	389.32	0.05	19.47
	PsF	Grass	0.9	12.3	233	0.24	3.66	0.004	1	0.82	1.52	1.24
LS	LfC	Landfill	4.7	58.7	320	0.36	5.5	1	1	633.47	6.71	4,250.55
	PsF	Landfill	4.7	58.7	320	0.24	4.95	1	1	380.08	0.20	76.02
BASS	PsF	Grass	4.5	58.4	283	0.24	5.5	0.004	1	1.49	7.61	11.36
										TOTAL	204.45	27,231.07

SEDIMENT YIELD CALCULATION

CONDITION: EXISTING RAINFALL EVENT: 100-YR

$A = R^* K^* L S^* C^* P$

$R = 95 * (V^* Qp)^{0.56} / At$

EROSION (TON/ACRE)	A	EROSION CONTROL PRACTICE FACTOR	P
RAINFALL FACTOR	R	VOLUME OF RUNOFF (ACRE-FT)	V
ERODIBILITY FACTOR	K	PEAK FLOW (CUBIC FEET PER SECOND)	Qp
TOPOGRAPHIC FACTOR	LS	TOTAL AREA ACRES	At
COVER AND MANAGEMENT FACTOR	C		

AREA	SOIL NAME	COVER	V	Qp	R	K	LS	C	P	A (ton/acre)	AREA (acre)	TOTAL SEDIMENT (ton)
BASN	CuF	Grass	58.5	445.6	621	0.24	14.04	0.004	1	8.37	21.49	179.92
	CuF	Landfill	58.5	445.6	621	0.36	3.1	1	1	693.22	9.29	6,440.01
	EpF	Grass	58.5	445.6	621	0.24	4.38	0.004	1	2.61	2.34	6.11
	GyC	Grass	58.5	445.6	621	0.1	2.2	0.004	1	0.55	3.14	1.72
	LfC	Landfill	58.5	445.6	621	0.36	0.74	1	1	165.48	2.07	342.54
	MnC	Grass	58.5	445.6	621	0.24	1.66	0.004	1	0.99	0.12	0.12
	PsF	Grass	58.5	445.6	621	0.24	4.16	0.004	1	2.48	7.00	17.36
LN	CuF	Grass	19.7	160.4	653	0.24	7.93	0.004	1	4.97	0.51	2.53
	CuF	Landfill	19.7	160.4	653	0.36	1.53	1	1	359.47	0.57	204.90
	LfC	Landfill	19.7	160.4	653	0.36	3.72	1	1	874.00	12.19	10,654.11
	PsF	Grass	19.7	160.4	653	0.24	9.62	0.004	1	6.03	1.51	9.10
BASW	LfC	Landfill	46.6	370.6	608	0.36	1.88	1	1	411.30	0.51	209.76
	PsF	Grass	46.6	370.6	608	0.24	8.1	0.004	1	4.73	36.38	171.92
LW	PsF	Landfill	2.6	20.9	464	0.36	7.64	1	1	1,274.93	1.92	2,447.86
BASE	LfC	Landfill	89.7	659	629	0.36	4.34	1	1	983.06	0.29	285.09
	PsF	Grass	89.7	659	629	0.24	2.93	0.004	1	1.77	65.99	116.79
	PsF	Landfill	87.7	659	621	0.24	7.77	1	1	1,158.61	4.69	5,433.87
LE	LfC	Grass	9.9	80.9	535	0.36	3.28	0.004	1	2.53	0.86	2.17
	LfC	Landfill	9.9	80.9	535	0.36	6.19	1	1	1,193.06	5.27	6,287.43
	PsF	Grass	9.9	90.9	571	0.24	4.63	1	1	635.05	1.10	698.55
	PsF	Landfill	9.9	80.9	535	0.24	5.95	1	1	764.54	0.27	206.42
BASSW	LfC	Landfill	13.9	115.7	547	0.36	5.06	1	1	996.10	1.43	1,424.42
	PsF	Grass	13.9	115.7	547	0.24	9.99	0.004	1	5.24	9.42	49.40
BASSE	LfC	Landfill	2	16.9	435	0.36	4.65	1	1	727.40	0.05	36.37
	PsF	Grass	2	16.9	435	0.24	3.66	0.004	1	1.53	1.52	2.32
LS	LfC	Landfill	9.3	75.2	539	0.36	5.5	1	1	1,066.46	6.71	7,155.92
	PsF	Landfill	9.3	75.2	539	0.24	4.95	1	1	639.87	0.20	127.97
BASS	PsF	Grass	9.6	80.6	518	0.24	5.5	0.004	1	2.73	7.61	20.80
										TOTAL	204.45	42,535.50

SEDIMENT YIELD CALCULATION

CONDITION: PROPOSED RAINFALL EVENT: 100-YR

$A = R^* K^* L\ S^* C\ ^*P$

$R = 95 * (V\ ^*Qp)^{0.56} / At$

EROSION (TON/ACRE)	A	EROSION CONTROL PRACTICE FACTOR	P
RAINFALL FACTOR	R	VOLUME OF RUNOFF (ACRE-FT)	V
ERODIBILITY FACTOR	K	PEAK FLOW (CUBIC FEET PER SECOND)	Qp
TOPOGRAPHIC FACTOR	LS	TOTAL AREA ACRES	At
COVER AND MANAGEMENT FACTOR	C		

AREA	SOIL NAME	COVER	V	Qp	R	K	LS	C	P	A (ton/acre)	AREA (acre)	TOTAL SEDIMENT (ton)
BASN	CuF	Grass	56.9	439	629	0.24	14.04	0.004	1	8.47	21.07	178.57
	CuF	Landfill	56.9	439	629	0.36	3.1	1	1	701.71	9.29	6,518.92
	EpF	Grass	56.9	439	629	0.24	4.38	0.004	1	2.64	2.34	6.19
	GyC	Grass	56.9	439	629	0.1	2.2	0.004	1	0.55	3.14	1.74
	LfC	Landfill	56.9	439	629	0.36	0.74	1	1	167.51	2.07	346.74
	MnC	Grass	56.9	439	629	0.24	1.66	0.004	1	1.00	0.12	0.12
	PsF	Grass	56.9	439	629	0.24	4.16	0.004	1	2.51	5.81	14.59
LN	LfC	Landfill	16.5	133	333	0.36	5.36	1	1	642.39	21.21	13,625.07
BASW	LfC	Landfill	46.6	370.6	608	0.36	1.88	1	1	411.30	0.51	209.76
	PsF	Grass	46.6	370.6	608	0.24	8.1	0.004	1	4.73	36.38	171.92
LW	PsF	Landfill	3	24.4	548	0.36	7.64	1	1	1,506.41	1.92	2,892.32
BASE	PsF	Grass	89.7	634.9	754	0.24	2.93	0.004	1	2.12	54.92	116.46
	PsF	Landfill	89.7	634.9	754	0.24	1.00	1	1	180.93	3.09	559.07
LE	LfC	Landfill	12.8	103.8	341	0.36	7.37	1	1	904.41	15.64	14,144.96
BASSW	LfC	Landfill	13.8	115.1	543	0.36	5.06	1	1	989.19	1.43	1,414.55
	PsF	Grass	13.8	115.1	543	0.24	9.99	0.004	1	5.21	9.42	49.06
BASSE	LfC	Landfill	2	16.9	435	0.36	4.65	1	1	727.40	0.05	36.37
	PsF	Grass	2	16.9	435	0.24	3.66	0.004	1	1.53	1.52	2.32
LS	LfC	Landfill	9.6	77.3	557	0.36	5.5	1	1	1,102.46	6.71	7,397.51
	PsF	Landfill	9.6	77.3	557	0.24	4.95	1	1	661.48	0.20	132.30
BASS	PsF	Grass	9.6	80.6	518	0.24	5.5	0.004	1	2.73	7.61	20.80
										TOTAL	204.45	47,839.32

APPENDIX G

POND SEDIMENTATION ANALYSIS

EXISTING CONDITION

POND ANALYSIS

POND NAME: ***NORTH*** ***CONDITION: EXISTING***

POND DIMENSIONS

POND DIMENSIONS	
Top Area (m^2)	2,079
Average Width (m)	36.50
Average Depth (m)	2.00
Path Length (m)	36.01

PARTICLE CHARACTERISTICS	
Flow (m^3/s)	11.35
Settling Velocity (m/s)	0.03475

MINIMUN REQUIERED DIMENSIONS	
Minimun Surface Area (m^2)	327
Minimun Surface Area (Acre)	0.08

PARTICLE CAPTURE CAPACITY

	Average Diameter (mm)	Settling Velocity (m/s)	Average Velocity (m/s)	Retention Capacity
Fine Sand	0.2	0.03475	0.0055	Particle Retention
Very Fine Sands	0.09	0.00704	0.0055	Particle Retention
Coarse Silt	0.047	0.00217	0.0055	FALSE
Very Fine Silt	0.006	0.00009	0.0055	FALSE

POND ANALYSIS

POND NAME: ***WEST*** ***CONDITION: EXISTING***

POND DIMENSIONS

POND DIMENSIONS	
Top Area (m^2)	2,505
Average Width (m)	20.71
Average Depth (m)	3.00
Path Length (m)	23.00

PARTICLE CHARACTERISTICS	
Flow (m^3/s)	6.17
Settling Velocity (m/s)	0.03475

MINIMUN REQUIERED DIMENSIONS	
Minimun Surface Area (m^2)	178
Minimun Surface Area (Acre)	0.04

PARTICLE CAPTURE CAPACITY

	Average Diameter (mm)	Settling Velocity (m/s)	Average Velocity (m/s)	Retention Capacity
Fine Sand	0.2	0.03475	0.0025	Particle Retention
Very Fine Sands	0.09	0.00704	0.0025	Particle Retention
Coarse Silt	0.047	0.00217	0.0025	FALSE
Very Fine Silt	0.006	0.00009	0.0025	FALSE

POND ANALYSIS

POND NAME: ***EAST*** ***CONDITION: EXISTING***

POND DIMENSIONS

POND DIMENSIONS	
Top Area (m^2)	2,561
Average Width (m)	46.25
Average Depth (m)	1.00
Path Length (m)	55.37

PARTICLE CHARACTERISTICS	
Flow (m^3/s)	0.91
Settling Velocity (m/s)	0.03475

MINIMUN REQUIERED DIMENSIONS	
Minimun Surface Area (m^2)	26
Minimun Surface Area (Acre)	0.01

PARTICLE CAPTURE CAPACITY

	Average Diameter (mm)	Settling Velocity (m/s)	Average Velocity (m/s)	Retention Capacity
Fine Sand	0.2	0.03475	0.0004	Particle Retention
Very Fine Sands	0.09	0.00704	0.0004	Particle Retention
Coarse Silt	0.047	0.00217	0.0004	Particle Retention
Very Fine Silt	0.006	0.00009	0.0004	FALSE