



# DITCH ANALYSIS

**PID :** 124096      **Date :** 12/18/2025      **Project :** CUY-480-16.56 Slide

**Location :** STA. 897+80 to STA. 902+00

**Description :** Ditch Calculations to Check for Erosion/Capacity Needs

**Designer :** SHT

**Rainfall Area :** A

**Allowable Shears**

	<b>Seed:</b>	0.40	<b>Jute Mat:</b>	0.45	<b>Temporary Mat:</b>	1.00
<b>Permanent Mat</b>	<b>Type 1:</b>	3.00	<b>Type 2:</b>	4.00	<b>Type 3:</b>	5.00
<b>RCP</b>	<b>Type B:</b>	6.00				

(\*) Warning: Grade is steeper than allowable.

If value is parantheses, design parameters have been exceeded. - See user manual.

STATION BEGIN	STATION END	SIDE	LENGTH (ft.)	RADIUS WIDTH (ft.)	IN SLOPE (ft./ft.)	BACK SLOPE (ft./ft.)	GRADE (ft./ft.)	AREA (acres)	AREA SUM (acres)	RUNOFF COEFF.	CA (Sum)	PROTECT TYPE	RAIN INT. (in./hr.)	STORM FREQ. (yrs.)	MANN. COEFF.	TIME FLOW (min.)	VEL. FLOW (fps.)	SHEAR (lbs./ sq.ft.)	DESIGN FLOW (cfs.)	DEPTH FLOW (ft.)	WIDTH FLOW (ft.)
902+00	901+00	L	100.00	2.00	2.00	2.00	0.0679	0.26	0.26	0.80	0.21	Seed	4.31	5	0.030	10.54	3.04	0.55	0.90	0.13	2.52
												Jute Mat	4.29	5	0.040	10.65	2.53	0.65	0.89	0.15	2.61
												Temp. Mat	4.29	5	0.040	10.65	2.53	0.65	0.89	0.15	2.61
												Temp. Mat	4.82	10	0.040	10.63	2.63	0.69	1.00	0.16	2.66
901+00	900+00	L	100.00	2.00	2.00	2.00	0.1205 *	0.25	0.51	0.80	0.41	Seed	4.23	5	0.030	11.02	4.61	1.21	1.72	0.16	2.64
												Jute Mat	4.21	5	0.040	11.09	3.79	1.43	1.72	0.19	2.76
												Temp. Mat	4.21	5	0.040	11.09	3.79	1.43	1.72	0.19	2.76
												Perm, Type 1	4.21	5	0.040	11.09	3.79	1.43	1.72	0.19	2.76
												Perm, Type 1	4.74	10	0.040	11.05	3.94	1.53	1.94	0.20	2.82
900+00	899+00	L	100.00	4.00	2.00	2.00	0.0500	0.29	0.80	0.90	0.67	Seed	4.13	5	0.030	11.58	3.39	0.58	2.76	0.19	4.75
												Jute Mat	4.12	5	0.040	11.68	2.81	0.69	2.75	0.22	4.88
												Temp. Mat	4.12	5	0.040	11.68	2.81	0.69	2.75	0.22	4.88
												Temp. Mat	4.64	10	0.040	11.61	2.93	0.74	3.11	0.24	4.95



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STATION BEGIN	STATION END	SIDE	LENGTH (ft.)	RADIUS WIDTH (ft.)	IN SLOPE (ft./ft.)	BACK SLOPE (ft./ft.)	GRADE (ft./ft.)	AREA (acres)	AREA SUM (acres)	RUNOFF COEFF.	CA (Sum)	PROTECT TYPE	RAIN INT. (in./hr.)	STORM FREQ. (yrs.)	MANN. COEFF.	TIME FLOW (min.)	VEL. FLOW (fps.)	SHEAR (lbs./ sq.ft.)	DESIGN FLOW (cfs.)	DEPTH FLOW (ft.)	WIDTH FLOW (ft.)
899+00	899+00	L	100.00	2.00	1.00	1.00	0.0649	3.65	4.45	0.90	3.95	Seed	4.08	5	0.030	11.89	7.92	3.01	16.14	0.74	3.49
												Jute Mat	4.08	5	0.040	11.94	6.43	3.53	16.12	0.87	3.74
												Temp. Mat	4.08	5	0.040	11.94	6.43	3.53	16.12	0.87	3.74
												Perm, Type 1	4.08	5	0.040	11.94	6.43	3.53	16.12	0.87	3.74
												Perm, Type 2	4.08	5	0.040	11.94	6.43	3.53	16.12	0.87	3.74
												Perm, Type 2	4.60	10	0.040	11.86	6.65	3.78	18.19	0.93	3.87
899+00	898+25	L	75.00	2.00	2.50	2.00	0.0506	0.37	4.82	0.80	4.25	Seed	4.05	5	0.030	12.13	6.70	2.25	17.20	0.71	5.21
												Jute Mat	4.04	5	0.040	12.17	5.43	2.60	17.17	0.82	5.70
												Temp. Mat	4.04	5	0.040	12.17	5.43	2.60	17.17	0.82	5.70
												Perm, Type 1	4.04	5	0.040	12.17	5.43	2.60	17.17	0.82	5.70
												Perm, Type 1	4.56	10	0.040	12.09	5.60	2.76	19.40	0.87	5.93