**Project Title:** Mercury Drive Drain

**Project No.:** 2190523

Client: Ottawa County Water Resources Commissioner

Date: 5/21/2020
Engineer Firm: Prein&Newhof
Engineer: Lucas Timmer, PE

	[مما ممسلا	Weighted RO	Equival	Pro-Rata Share [%]	
	Area [ac]	Coeff*	Area [ac]		
Ottawa County ROW	39.90	0.577	23.04	51.83%	
Ottawa County				25.915%	
Ottawa County Road Comm				25.915%	
City of Grand Haven ROW	0.00	0.47	0.00	0.00%	
All Other Lands	85.65	0.25	21.41	48.17%	
Grand Haven Township	85.65	0.25	21.41	48.17%	

Road Element	RO Coeff
Pavement	0.9
Sidewalk	0.9
Gravel Road	0.5
Gravel - Shoulder	0.5
Pervious Areas	0.15
Remaining DD Area	0.25

<sup>\*</sup>Weighted runoff coefficient is equal to sum of the Equiv Area for the entity divided by the overall area.

Right-of-Way Name	Width [ft]	Paved Rd	Sidewalk	Gravel Road	Gravel Shld	Pervious	Weighted	Area [Ac]	Equiv Area
rught of way runne	vviacii [iej	Width [ft]	Width [ft]	Width [ft]	Width [ft]	Width [ft]	RO Coeff		[Ac]
148th Avenue	66	30	0	0	0	36	0.49	0.38	0.18
152nd Avenue	66	21	0	0	7	38	0.43	0.16	0.07
160th Avenue	66	21	0	0	4	41	0.41	0.60	0.25
160th Avenue	66	21	8	0	4	33	0.50	1.44	0.72
161st Avenue	66	21	0	0	2	43	0.40	0.72	0.29
Ammeraal Avenue	66	21	0	0	3	42	0.40	0.35	0.14
Apple Street	66	21	0	0	7	38	0.43	0.92	0.39
Bignell Drive	66	30	0	0	0	36	0.49	0.55	0.27
Cedar Avenue	66	20	0	0	8	38	0.42	0.70	0.29
Coleman Avenue	66	22	0	0	4	40	0.42	0.10	0.04
Comstock Street	66	30	8	0	4	24	0.60	0.35	0.21
David Street	66	21	0	0	2	43	0.40	0.78	0.31
Groesbeck Street	66	24	8	0	7	27	0.55	1.35	0.74
Lake Avenue	66	21	0	0	4	41	0.41	0.52	0.21

Mercury Drive	66	40	8	0	0	18	0.70	13.34	9.28
Mercury Drive	76	40	8	0	0	28	0.62	0.79	0.49
Mercury Drive	86	40	8	0	0	38	0.57	11.56	6.57
Mercury Drive	91	40	8	0	0	43	0.55	1.62	0.89
Pine Street	66	22	0	0	4	40	0.42	0.73	0.31
Robbins Road	66	30	8	0	5	23	0.61	1.72	1.04
Ronny Road	66	22	0	0	2	42	0.41	0.08	0.03
Sharon Avenue	66	21	0	0	4	41	0.41	0.74	0.30

<sup>\*</sup>All roads are owned by the Ottawa County Road Commission

<sup>\*\*</sup>All road dimensions were measured in the field except Mercury Drive. Mercury Drive dimensions were taken from record drawings that were sent from the Ottawa County Road Commission.