

To: Tony Bunkleman – Village of Caledonia

From: Andy Shoaf

Date: February 09, 2026

Subject: Caledonia Business Park Sewer Memorandum

The following is a short summary detailing the proposed onsite storm sewer for the Caledonia Business Park Project storm sewer design.

Storm Sewer Design Summary

The Caledonia Business Park Project site is located within the Caledonia Business Park and is 11.76 acres with a proposed warehouse building 251,417 square feet. Also including truck docks, trailer parking, passenger vehicle parking, access roads, and landscaped green spaces.

The site is located within the approved stormwater management plan for the park. The site is located within two of the proposed drainage basins. The Eastern half of the site is located within the NW Basin and Western half within the Center Basin as shown on the Proposed Hydrology Exhibit in the report. The eastern half of the site will drain into the NW Basin while the west half will drain into the Center basin.

The proposed storm sewer system for the Caledonia Business Park Project follows the drainage patterns per the approved stormwater report. Stormwater in the Western half of the site will be collected by storm sewers and will discharge into a proposed swale and ultimately into the Center basin. The storm sewer in the eastern half of the site will be collected by storm sewers and connect to the public storm sewer system within Baxter Ct. and ultimately discharged to NW Basin. The storm sewers have been analyzed to show they comply with DSPS requirements.

Shown below are tables indicating the development of the area primarily focusing on the NW basin and Center Basin. Attached to this memo is a drainage basin exhibit and storm sewer calculations.

Proposed Areas and Curve Number Comparison Table For NW Basin

	Approved SWMP	Proposed Development	Meets Approved SWMP
NW Basin	12.10 ac	12.10 ac	Yes
Area of Impervious	8.62 ac	8.54 ac	Yes
Curve Number	95	95	Yes

Proposed Areas and Curve Number Comparison Table For Center Basin

	Approved SWMP	Proposed Development	Meets Approved SWMP
Center Basin	47.44 ac	47.44 ac	Yes
Area of Impervious	35.6 ac	30.29 ac	Yes
Curve Number	95	95	Yes

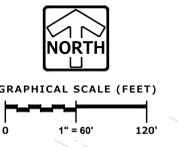
Attachments

- Drainage Basin Exhibit
- Storm Sewer Sizing Calculations
- Revised Proposed Hydrology Exhibit

STRUCTURE DATA			DRAINAGE AREA AND FLOW DATA						PIPE DATA				PIPE CAPACITY INFORMATION					ELEVATIONS		
NOTES	UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	FLOW IS DETERMINED BY SPS 382.36						LENGTH (FT) 32	DIAMETER (IN) 33	SLOPE (%) 34	MANNING COEFFICIENT 35	PIPE CAPACITY IS DETERMINED BY MANNING'S EQUATION $Q = 1.486/N AR^{2/3} S^{1/2}$					RIM/TOC UP 41	INVERT UP 42	INVERT DOWN 43
			GRASS AREA (SF) 11	PVMT AREA (SF) 12	ROOF AREA (SF) 13	INDIVIDUAL FLOW Q (CFS) 14	CUMULATIVE FLOW (CFS) 23	CUMULATIVE FLOW (CFS) 24					REQUIRED DROP (FT) 36	ACTUAL DROP (FT) 37	PERCENT FULL (%) 38	ACTUAL VELOCITY (FPS) 39	MAX. CAPACITY (CFS) 40			
	INL 14.0	MH 13.0	2,035	8,969	0	1	1	296	49.9	12	0.20	0.012	0.04	0.10	41%	2.05	1.86			
	BC 13.1	MH 13.0	0	0	11,016	0.94	0.94	425	42.8	8	1.04	0.012	0.37	0.45	65%	4.15	1.44			
	MH 13.0	INL 12.0	0	0	0		1.60	721	90.1	15	0.23	0.012	0.09	0.21	48%	2.70	3.61			
	BC 12.3	INL 12.0	0	0	11,042	0.95	0.95	426	46.1	8	1.04	0.012	0.40	0.48	65%	4.15	1.44			
	INL 12.0	INL 11.0	2,008	8,957	0	0.66	3.21	1,443	97.5	18	0.20	0.012	0.15	0.20	60%	3.04	5.47			
	INL 11.0	ES 10.0	1,919	2,161	0	0.19	6.08	2,735	52.7	18	0.55	0.012	0.30	0.29	66%	5.20	9.08			
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	INL 34.0	MH 32.0	2,641	5,110	0	0.41	0.41	183	60.7	8	0.30	0.012	0.14	0.18	55%	2.12	0.77			
	BC 32.1	MH 32.0	0	0	21,462	1.84	1.84	828	40.0	10	1.04	0.012	0.40	0.42	69%	4.88	2.60			
	INL 33.0	MH 32.0	7,534	0	0	0.16	0.16	73	19.3	8	0.20	0.012	0.01	0.04	32%	1.43	0.63			
	MH 32.0	MH 31.0	0	0	0		2.41	1,083	45.0	15	0.35	0.012	0.09	0.16	56%	3.50	4.45			
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	INL 30.0	MH 29.0	2,790	6,190	0	0.48	0.48	218	23.9	8	0.20	0.012	0.08	0.05	74%	1.87	0.63			
	BC 29.1	MH 29.0	0	0	24,804	2.13	2.13	957	40.0	10	1.04	0.012	0.53	0.42	78%	5.01	2.60			
	MH 29.0	INL 28.0	0	0	0		2.61	1,174	71.1	15	0.25	0.012	0.18	0.18	68%	3.13	3.76			
	INL 28.0	MH 27.0	3,069	5,920	0	0.47	3.08	1,387	44.8	15	0.35	0.012	0.16	0.16	68%	3.70	4.45			
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	INL 26.0	MH 25.0	2,985	6,444	0	0.51	0.51	228	45.7	8	0.25	0.012	0.21	0.11	70%	2.07	0.70			
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	BC 24.3	INL 24.0	0	0	33,076	2.83	2.83	1,276	69.8	12	1.04	0.012	0.62	0.73	66%	5.45	4.23			
	INL 24.0	INL 23.0	2,682	6,073	0	0.47	3.31	1,489	88.7	15	0.30	0.012	0.34	0.27	77%	3.51	4.12			
	INL 23.0	MH 22.0	1,787	5,433	0	0.41	3.72	1,674	51.1	15	0.35	0.012	0.25	0.18	79%	3.82	4.45			
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	BC 21.2	INL 21.0	0	0	22,072	1.89	1.89	851	47.1	10	1.04	0.012	0.49	0.49	71%	4.91	2.60			
	INL 21.0	INL 20.0	1,833	4,710	0	0.36	2.25	1,014	88.0	12	0.45	0.012	0.55	0.40	77%	3.71	2.79			
	INL 20.0	INL 11.0	1,786	5,685	0	0.43	2.68	1,207	90.8	15	0.20	0.012	0.26	0.18	76%	2.87	3.37			
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	BC 57.1	INL 57.0	0	0	23,256	1.99	1.99	897	125.0	10	1.04	0.012	1.45	1.30	74%	4.96	2.60			
	INL 57.0	ES 56.0	0	22,206	0	1.52	3.52	1,582	20.5	12	1.04	0.012	0.34	0.21	79%	5.67	4.23			
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	BC 55.1	INL 55.0	0	0	26,244	2.25	2.25	1,012	125.0	12	1.04	0.012	0.70	1.30	55%	5.18	4.23			
	INL 55.0	ES 54.0	0	23,278	0	1.60	3.84	1,730	21.0	15	1.04	0.012	0.16	0.22	53%	5.92	7.68			
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	BC 53.1	INL 53.0	0	0	34,992	3.00	3.00	1,349	125.0	12	1.04	0.012	1.24	1.30	69%	5.52	4.23			
	INL 53.0	ES 52.0	0	30,564	0	2.10	5.09	2,292	25.6	15	1.04	0.012	0.21	0.27	66%	6.32	7.68			
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													-	-						
	BC 51.1	INL 51.0	0	0	23,980	2.06	2.06	925	119.6	10	1.04	0.012	1.47	1.24	76%	4.98	2.60			
	INL 51.0	MH 51.2	0	27,073	0	1.86	3.91	1,760	10.9	12	1.04	0.012	0.23	0.11	87%	5.71	4.23			

STRUCTURE DATA			DRAINAGE AREA AND FLOW DATA						PIPE DATA				PIPE CAPACITY INFORMATION					ELEVATIONS		
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	BC 67.4	MH 67.0	0	0	9,817	0.84	0.84	379	107.0	10	1.04	0.012	0.22	1.11	38%	4.04	2.60			
	BC 67.1	MH 67.0	0	0	9,792	0.84	0.84	378	16.0	10	1.04	0.012	0.03	0.17	38%	4.04	2.60			
	MH 67.0	MH 66.0	0	0	0		1.68	756	230.9	18	1.04	0.012	0.08	2.40	20%	4.68	12.48			
	MH 66.0	FES 65.0	0	0	0		1.68	756	67.5	18	1.04	0.012	0.02	0.70	20%	4.68	12.48			

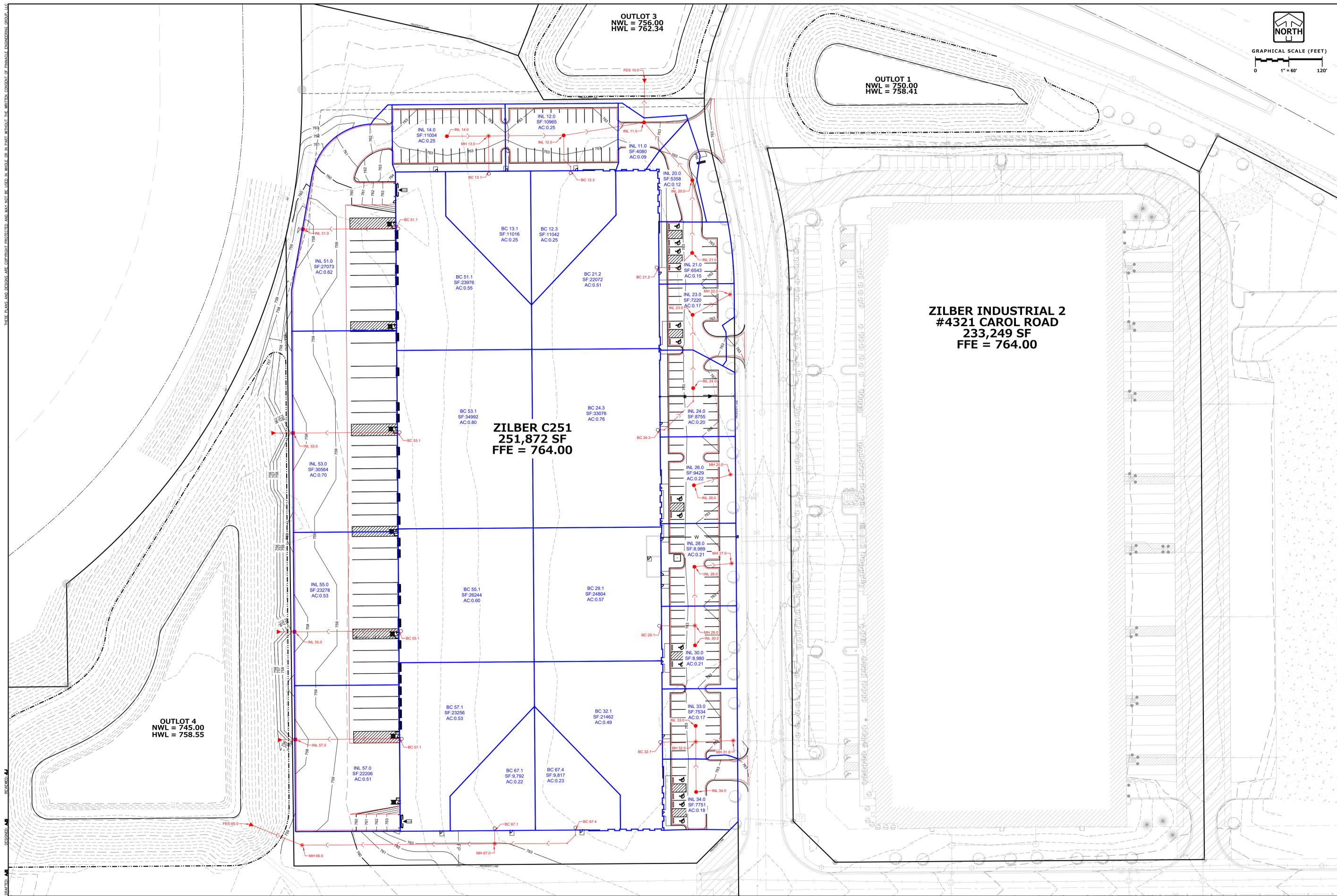
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OUTLOT 3
NWL = 756.00
HWL = 762.34

OUTLOT 1
NWL = 759.00
HWL = 758.41

OUTLOT 4
NWL = 745.00
HWL = 758.55



ZILBER C251
CALEDONIA, WI

STORM DRAINAGE EXHIBIT

REVISIONS

NO.	DESCRIPTION	DATE
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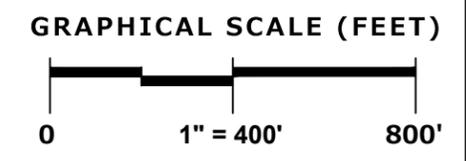
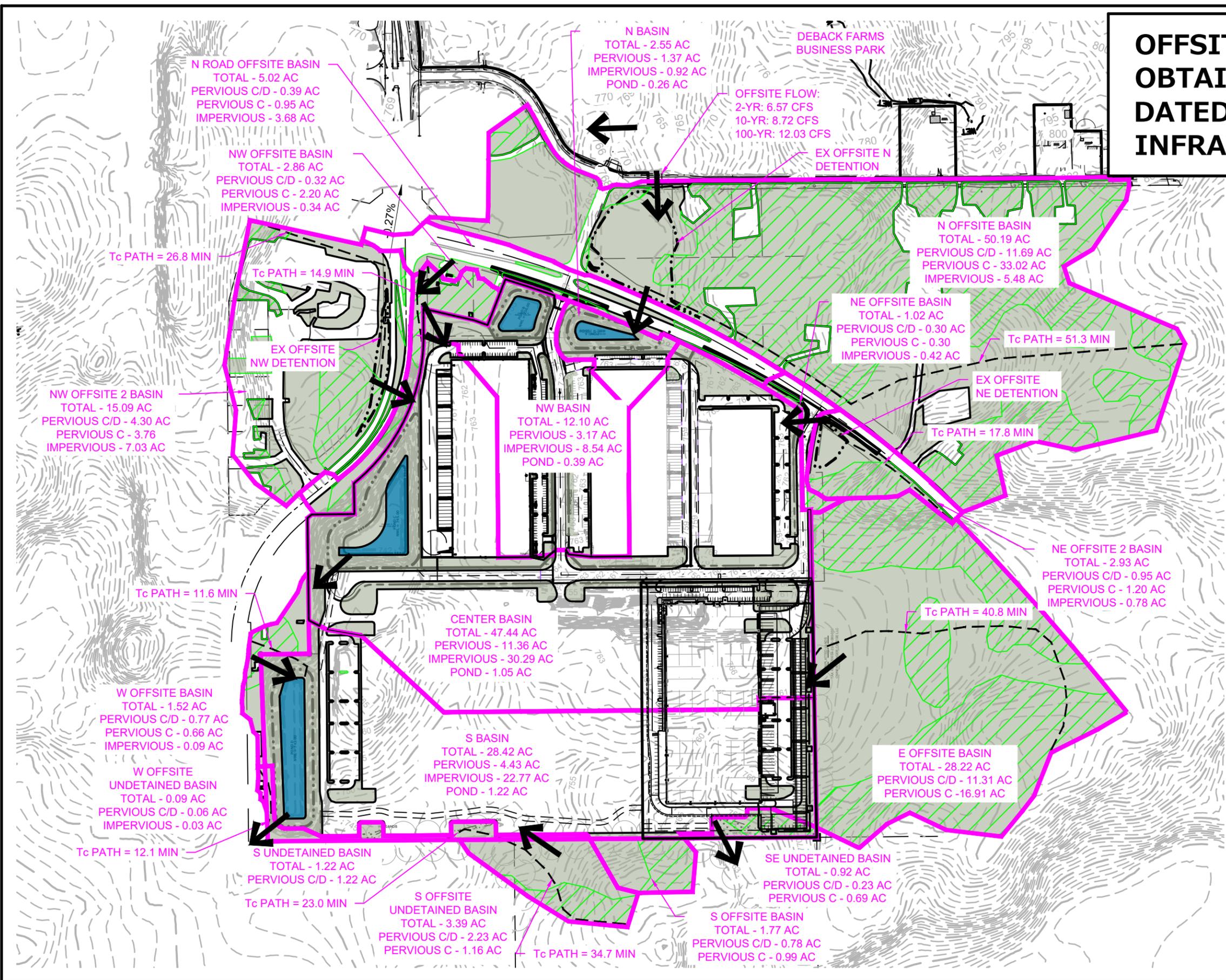
SHEET
EX-1

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STORM DRAINAGE EXHIBIT

OFFSITE CONTOURS OBTAINED FROM SURVEY DATED 03/11/16 & INFRAWORKS 2020

LEGEND	
	PERVIOUS - HSG C
	PERVIOUS - HSG C/D



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