



HIGHFILL

DRAFT ADDENDUM NO. 1

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Date: December 28, 2022
November 8, 2023 – Addendum No. 1

Proj. No.: CSE2201

From: Brian Oschwald, PE

Subject: Wallbrook Development
Gravity Sewer Capacity Evaluation

Section 1 - Background

Representatives from Raleigh Water (Janeen Goodwin, Jonathan Ham, and Tim Beasley) and HIGHFILL (Brian Oschwald and Jeremy Allen) met on August 17, 2023 to discuss the Wallbrook Development's Offsite Sewer Improvements Project. The reimbursement request was greater than \$300,000, therefore Raleigh Water required the project to be publicly bid, which was the initial topic of conversation.

During the conversation, Raleigh Water asked the reason for the improvements and the details behind those reasons. The reason was to increase capacity in the gravity sewer downstream of the Wallbrook Development, specifically along Virginia Water Drive and south of Trillick Court. At the intersection of Virginia Water Drive and Trillick Court, a 12-inch gravity sewer intercepts the sewer from the Wallbrook Development. That 12-inch gravity sewer conveys wastewater flow from the Willow Crest Pump Station. Raleigh Water informed everyone of an upcoming Capital Improvement Project to extend the Sanford Creek Sewer Outfall to the Willow Creek Pump Station and abandon the station. By doing this, the City will free up capacity in the gravity sewer south of Trillick Court.

Therefore, Raleigh Water directed HIGHFILL and the Wallbrook Development team to remove the sewer upsize south of Trillick Court from the Offsite Sewer Improvements. Raleigh Water asked for a capacity evaluation based on the timeline of wastewater flow generation from the Wallbrook Development and the Willow Creek PS wastewater flow being redirected to the Sanford Creek Sewer Outfall.

Section 2 - Sewer Capacity Evaluation

The sewer capacity evaluation was updated to reflect a timeline of wastewater flow coming on and off-line. The following capacity evaluations were performed:

- 1) Existing Flow through Existing Pipes
- 2) Existing + Proposed Flows through Existing and Upsized Pipes from Q1-2025 through Q2-2026, when the Willow Crest PS is planned to be taken offline and all Wallbrook flow will be online.

The detailed sewer capacity evaluations are located in Appendix C.

Downstream of Trillick Court, there are four (4) sewer segments over 100% capacity at the end of Q2-2026. Table 2.1 illustrates the capacities of these segment throughout the evaluation period. Figure 4 shows the capacities in the pipes at the end of the evaluation period.

Table 2.1 – Summary of Sewer Capacity Tabulation (> 100%)

Pipe Slope (%)	Ex. Flow thru Ex. Pipe (% capacity)	Q1- 2025	Q2- 2025	Q3- 2025	Q1- 2026	Q2- 2026 ¹
		Ex. + Prop. Flows thru Ex. Pipe (% capacity)				
0.21	119	127	131	141	145	128
0.28	107	114	117	126	129	115
0.35	97	102	106	113	116	103
0.29	106	112	116	124	128	113

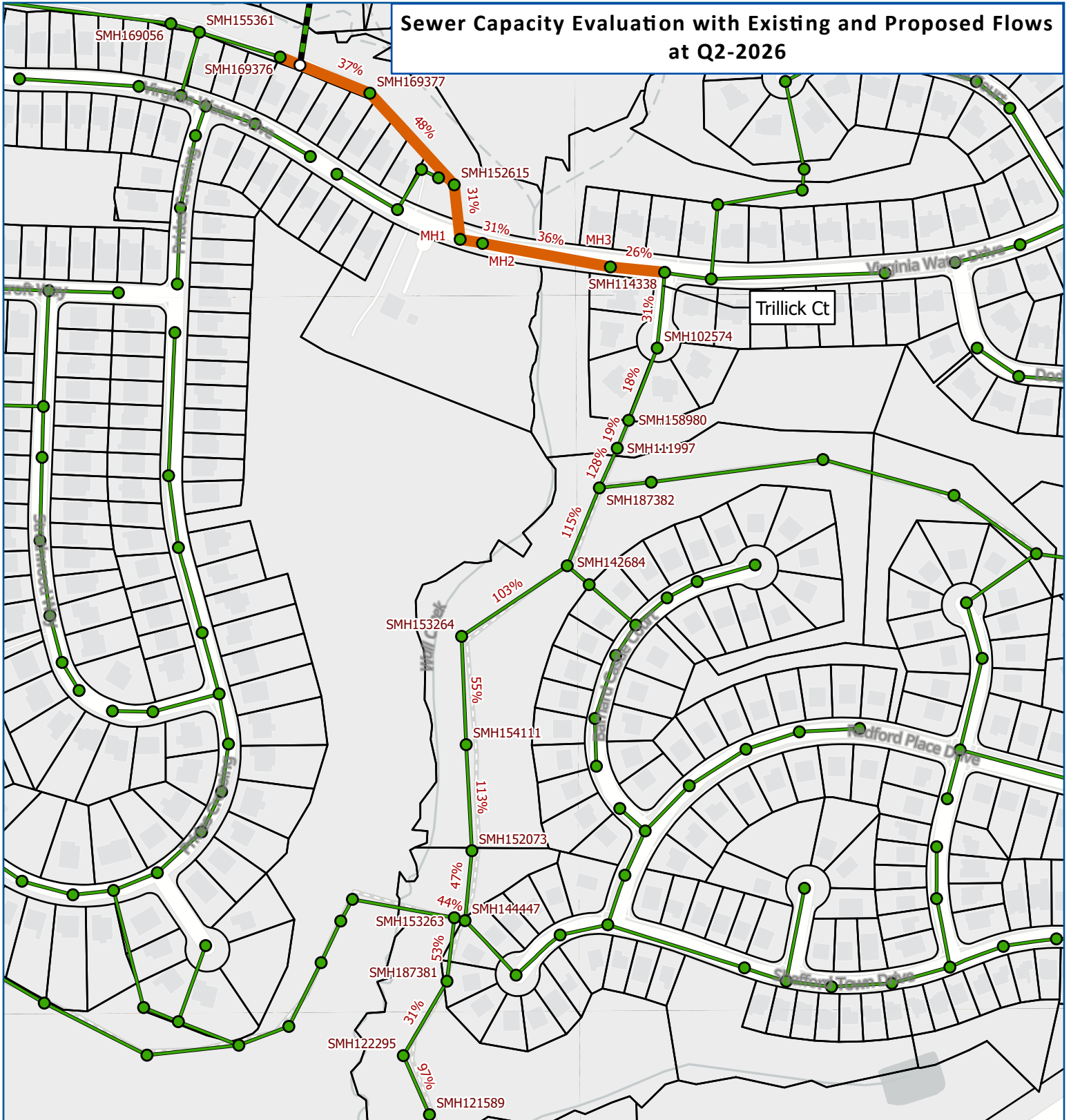
1-All wastewater flows from Wallbrook are included and the Willow Crest PS wastewater flows are removed.

Attachments:

- Figure 4 – Capacity of Existing and Upsized Downstream Sewer

Appendix C – Wastewater Flowrate Tabulation and Capacity Evaluation

Sewer Capacity Evaluation with Existing and Proposed Flows at Q2-2026



Wallbrook Offsite
Utility Improvements

Crosland Southeast
Project No. CSE2201

Figure 4
Capacity of Existing and Upsized
Downstream Gravity Sewer
at Q2-2026

Legend

- Proposed Manholes Raleigh GIS Manhole ID
- Ex. Sewer Manhole SMH123456
- Ex. Gravity Sewer
- Proposed Gravity Sewer
- ▭ Parcels
- Upsized Sewer
- 8 to 12-inch



N



0 150 300
Feet

Appendix C
Wastewater Flowrate Tabulation and Capacity Evaluation

Appendix C-1
 Wallbrook Downstream Gravity Sewer Evaluation
 Existing Flow thru Existing Pipes
 Snapshot of Existing Capacity

Sub-Basin ID	Metered Flow	Peaked Flow	Sub-Basin Peak Flow (GPD)	Cumulative Peak Flow (GPD)	Line Size (inches)	Manning's "n" value	Length (ft.)	Upstream SSMH	Downstream SSMH	Pipe Slope from Survey	100% Capacity (GPD)	Percentage of Pipe Capacity
Tributary	X		456,480									
Area 1	X		21,024									
Node A				477,504	8	0.013	219	169376	169377	0.73	667,302	72%
Node B				477,504	8	0.013	282	169377	152615	0.43	512,147	93%
				477,504	8	0.013	124	152615	169410	0.65	629,677	76%
				477,504	8	0.013	61	169410	165692	2.10	1,131,802	42%
				477,504	8	0.013	279	165692	165691	0.43	512,147	93%
				477,504	8	0.013	21	165691	160905	8.01	2,210,432	22%
				477,504	8	0.013	123	160905	114338	1.53	966,065	49%
Tributary to Area 2	X		679,680									
Area 2	X		100,656									
Node C				1,257,840	12	0.013	172	160905	102574	3.46	4,283,271	29%
				1,257,840	12	0.013	176	102574	158980	10.11	7,321,720	17%
				1,257,840	12	0.013	68	158980	111997	9.43	7,071,204	18%
				1,257,840	12	0.013	98	111997	187382	0.21	1,055,230	119%
Area 3	X		49,104									
Node D				1,306,944	12	0.013	191	187382	142684	0.28	1,218,475	107%
Area 4	X		8,928									
Node E				1,315,872	12	0.013	287	142684	153264	0.35	1,362,296	97%
				1,315,872	12	0.013	245	153264	154111	1.25	2,574,498	51%
				1,315,872	12	0.013	240	154111	152073	0.29	1,240,042	106%
				1,315,872	12	0.013	158	152073	144447	1.71	3,011,172	44%
Area 5	X		23,904									
Node F				1,339,776	12	0.013	26	144447	153263	1.96	3,223,781	42%
Area 6		X	109,375									
Area 7		X	25,000									
Node G				1,474,151	12	0.013	144	153263	187381	1.70	3,002,355	49%
				1,474,151	12	0.013	195	187381	122295	5.07	5,184,913	28%
				1,474,151	12	0.013	146	122295	121589	0.51	1,644,457	90%

Between 50% and 65% Capacity
 Over 65% Capacity

Appendix C-2
 Wallbrook Downstream Gravity Sewer Evaluation
 Existing + Proposed Flow thru Existing and Upsized Pipes
 Snapshot of Capacity: Q1-2025

Sub-Basin ID	Month-Year the Flow is Online	Metered Flow	Peaked Flow	Sub-Basin Flow (GPM)	Cumulative Flow (GPD)	Line Size (inches)	Length (ft)	Upstream SSMH	Downstream SSMH	Pipe Slope from Design Drawings/Survey	100% Capacity (GPM)	Percentage of Pipe Capacity
Tributary to Wallbrook		X		456,480								
Lot 9												
Lot 10												
Lot 11												
					456,480	12	--	MH07	MH06	2.00	3,256,511	14%
					456,480	12	--	MH06	MH05	1.90	3,174,054	14%
					456,480	12	--	MH05	MH04	2.40	3,567,329	13%
Lot 1	Feb-25		X	49,050								
					505,530	12	--	MH04	MH16	0.60	1,783,664	28%
					505,530	12	--	MH16	MH14	0.60	1,783,664	28%
					505,530	12	--	MH14	MH113	0.60	1,783,664	28%
Lot 5												
					505,530	12	--	MH113	MH112	0.57	1,738,501	29%
					505,530	12	--	MH112	MH111	0.67	1,884,842	27%
					505,530	12	--	MH111	MH110	2.90	3,921,358	13%
					505,530	12	--	MH110	MH109	1.90	3,174,054	16%
					505,530	12	--	MH109	MH107	0.68	1,898,856	27%
Lot 12												
Lot 13												
Lot 6												
Lot 7												
Lot 8												
					505,530	12	--	MH107	MH106	0.60	1,783,664	28%
					505,530	12	--	MH106	MH105	0.66	1,870,723	27%
					505,530	12	--	MH105	MH104	0.91	2,196,637	23%
					505,530	12	--	MH104	MH103	1.16	2,480,085	20%
					505,530	12	--	MH103	MH102	1.04	2,348,303	22%
					505,530	12	--	MH102	MH101	0.60	1,783,664	28%
					505,530	12	--	MH101	MH100	0.53	1,676,391	30%
Area 1		X		21,024								
Node A					526,554	12	219	169376	169377	0.73	1,967,428	27%
Node B					526,554	12	282	169377	152615	0.43	1,509,982	35%
					526,554	12	124	152615	169410/MH1	1.05	2,359,566	22%
					526,554	12	89	169410/MH1	MH2	1.05	2,359,566	22%
					526,554	12	258	MH2	160905/MH3	0.78	2,033,690	26%
					526,554	12	124	160905/MH3	114338	1.53	2,848,284	18%
Tributary to Area 2		X		679,680								
Disclude Willow Crest PS Flow												
Obligated to Area 2				28,224								
Area 2		X		100,656								
Node C					1,335,114	12	172	114338	102574	3.46	4,283,271	31%
					1,335,114	12	176	102574	158980	10.11	7,321,720	18%
					1,335,114	12	71	158980	111997	9.43	7,071,204	19%
					1,335,114	12	98	111997	187382	0.21	1,055,230	127%
Area 3		X		49,104								
Node D					1,384,218	12	191	187382	142684	0.28	1,218,475	114%
Area 4		X		8,928								
Node E					1,393,146	12	287	142684	153264	0.35	1,362,296	102%
					1,393,146	12	245	153264	154111	1.25	2,574,498	54%
					1,393,146	12	240	154111	152073	0.29	1,240,042	112%
					1,393,146	12	159	152073	144447	1.71	3,011,172	46%
Area 5		X		23,904								
Node F					1,417,050	12	25	144447	153263	1.96	3,223,781	44%
Obligated to Area 6&7			X	31,824								
Area 6			X	109,375								
Area 7			X	25,000								
Node G					1,583,249	12	145	153263	187381	1.70	3,002,355	53%
					1,583,249	12	195	187381	122295	5.07	5,184,913	31%
					1,583,249	12	146	122295	121589	0.51	1,644,457	96%

Wallbrook Wastewater Flow Added
 New Sewer Line thru Wallbrook Development
 Pipes requiring upsize
 Between 50% and 65% Capacity
 Over 65% Capacity

Appendix C-3
 Wallbrook Downstream Gravity Sewer Evaluation
 Existing + Proposed Flow thru Existing and Upsized Pipes
 Snapshot of Capacity: Q2-2025

Sub-Basin ID	Month-Year the Flow is Online	Metered Flow	Peaked Flow	Sub-Basin Flow (GPM)	Cumulative Flow (GPD)	Line Size (inches)	Length (ft)	Upstream SSMH	Downstream SSMH	Pipe Slope from Design Drawings/Survey	100% Capacity (GPM)	Percentage of Pipe Capacity
Tributary to Wallbrook		X		456,480								
Lot 9												
Lot 10	May-25		X	15,750								
Lot 11	Apr-25		X	7,200								
					479,430	12	--	MH07	MH06	2.00	3,256,511	15%
					479,430	12	--	MH06	MH05	1.90	3,174,054	15%
					479,430	12	--	MH05	MH04	2.40	3,567,329	13%
Lot 1	Feb-25		X	49,050								
					528,480	12	--	MH04	MH16	0.60	1,783,664	30%
					528,480	12	--	MH16	MH14	0.60	1,783,664	30%
					528,480	12	--	MH14	MH113	0.60	1,783,664	30%
Lot 5	May-25		X	22,950								
					551,430	12	--	MH113	MH112	0.57	1,738,501	32%
					551,430	12	--	MH112	MH111	0.67	1,884,842	29%
					551,430	12	--	MH111	MH110	2.90	3,921,358	14%
					551,430	12	--	MH110	MH109	1.90	3,174,054	17%
					551,430	12	--	MH109	MH107	0.68	1,898,856	29%
Lot 12												
Lot 13												
Lot 6												
Lot 7												
Lot 8												
					551,430	12	--	MH107	MH106	0.60	1,783,664	31%
					551,430	12	--	MH106	MH105	0.66	1,870,723	29%
					551,430	12	--	MH105	MH104	0.91	2,196,637	25%
					551,430	12	--	MH104	MH103	1.16	2,480,085	22%
					551,430	12	--	MH103	MH102	1.04	2,348,303	23%
					551,430	12	--	MH102	MH101	0.60	1,783,664	31%
					551,430	12	--	MH101	MH100	0.53	1,676,391	33%
Area 1		X		21,024								
Node A					572,454	12	219	169376	169377	0.73	1,967,428	29%
Node B					572,454	12	282	169377	152615	0.43	1,509,982	38%
					572,454	12	124	152615	169410/MH1	1.05	2,359,566	24%
					572,454	12	89	169410/MH1	MH2	1.05	2,359,566	24%
					572,454	12	258	MH2	160905/MH3	0.78	2,033,690	28%
					572,454	12	124	160905/MH3	114338	1.53	2,848,284	20%
Tributary to Area 2		X		679,680								
Disclude Willow Crest PS Flow												
Obligated to Area 2				28,224								
Area 2		X		100,656								
Node C					1,381,014	12	172	114338	102574	3.46	4,283,271	32%
					1,381,014	12	176	102574	158980	10.11	7,321,720	19%
					1,381,014	12	71	158980	111997	9.43	7,071,204	20%
					1,381,014	12	98	111997	187382	0.21	1,055,230	131%
Area 3		X		49,104								
Node D					1,430,118	12	191	187382	142684	0.28	1,218,475	117%
Area 4		X		8,928								
Node E					1,439,046	12	287	142684	153264	0.35	1,362,296	106%
					1,439,046	12	245	153264	154111	1.25	2,574,498	56%
					1,439,046	12	240	154111	152073	0.29	1,240,042	116%
					1,439,046	12	159	152073	144447	1.71	3,011,172	48%
Area 5		X		23,904								
Node F					1,462,950	12	25	144447	153263	1.96	3,223,781	45%
Obligated to Area 6&7			X	31,824								
Area 6			X	109,375								
Area 7			X	25,000								
Node G					1,629,149	12	145	153263	187381	1.70	3,002,355	54%
					1,629,149	12	195	187381	122295	5.07	5,184,913	31%
					1,629,149	12	146	122295	121589	0.51	1,644,457	99%

Wallbrook Wastewater Flow Added
 New Sewer Line thru Wallbrook Development
 Pipes requiring upsize
 Between 50% and 65% Capacity
 Over 65% Capacity

Appendix C-4
 Wallbrook Downstream Gravity Sewer Evaluation
 Existing + Proposed Flow thru Existing and Upsized Pipes
 Snapshot of Capacity: Q3-2025

Sub-Basin ID	Month-Year the Flow is Online	Metered Flow	Peaked Flow	Sub-Basin Flow (GPM)	Cumulative Flow (GPD)	Line Size (inches)	Length (ft)	Upstream SSMH	Downstream SSMH	Pipe Slope from Design Drawings/Survey	100% Capacity (GPM)	Percentage of Pipe Capacity
Tributary to Wallbrook		X		456,480								
Lot 9												
Lot 10	May-25		X	15,750								
Lot 11	Apr-25		X	7,200								
					479,430	12	--	MH07	MH06	2.00	3,256,511	15%
					479,430	12	--	MH06	MH05	1.90	3,174,054	15%
					479,430	12	--	MH05	MH04	2.40	3,567,329	13%
Lot 1	Feb-25		X	49,050								
					528,480	12	--	MH04	MH16	0.60	1,783,664	30%
					528,480	12	--	MH16	MH14	0.60	1,783,664	30%
					528,480	12	--	MH14	MH113	0.60	1,783,664	30%
Lot 5	May-25		X	22,950								
					551,430	12	--	MH113	MH112	0.57	1,738,501	32%
					551,430	12	--	MH112	MH111	0.67	1,884,842	29%
					551,430	12	--	MH111	MH110	2.90	3,921,358	14%
					551,430	12	--	MH110	MH109	1.90	3,174,054	17%
					551,430	12	--	MH109	MH107	0.68	1,898,856	29%
Lot 12												
Lot 13												
Lot 6	Jul-25		X	78,750								
Lot 7												
Lot 8	Aug-25		X	24,300								
					654,480	12	--	MH107	MH106	0.60	1,783,664	37%
					654,480	12	--	MH106	MH105	0.66	1,870,723	35%
					654,480	12	--	MH105	MH104	0.91	2,196,637	30%
					654,480	12	--	MH104	MH103	1.16	2,480,085	26%
					654,480	12	--	MH103	MH102	1.04	2,348,303	28%
					654,480	12	--	MH102	MH101	0.60	1,783,664	37%
					654,480	12	--	MH101	MH100	0.53	1,676,391	39%
Area 1		X		21,024								
Node A					675,504	12	219	169376	169377	0.73	1,967,428	34%
Node B					675,504	12	282	169377	152615	0.43	1,509,982	45%
					675,504	12	124	152615	169410/MH1	1.05	2,359,566	29%
					675,504	12	89	169410/MH1	MH2	1.05	2,359,566	29%
					675,504	12	258	MH2	160905/MH3	0.78	2,033,690	33%
					675,504	12	124	160905/MH3	114338	1.53	2,848,284	24%
Tributary to Area 2		X		679,680								
Disclude Willow Crest PS Flow												
Obligated to Area 2				28,224								
Area 2		X		100,656								
Node C					1,484,064	12	172	114338	102574	3.46	4,283,271	35%
					1,484,064	12	176	102574	158980	10.11	7,321,720	20%
					1,484,064	12	71	158980	111997	9.43	7,071,204	21%
					1,484,064	12	98	111997	187382	0.21	1,055,230	141%
Area 3		X		49,104								
Node D					1,533,168	12	191	187382	142684	0.28	1,218,475	126%
Area 4		X		8,928								
Node E					1,542,096	12	287	142684	153264	0.35	1,362,296	113%
					1,542,096	12	245	153264	154111	1.25	2,574,498	60%
					1,542,096	12	240	154111	152073	0.29	1,240,042	124%
					1,542,096	12	159	152073	144447	1.71	3,011,172	51%
Area 5		X		23,904								
Node F					1,566,000	12	25	144447	153263	1.96	3,223,781	49%
Obligated to Area 6&7			X	31,824								
Area 6			X	109,375								
Area 7			X	25,000								
Node G					1,732,199	12	145	153263	187381	1.70	3,002,355	58%
					1,732,199	12	195	187381	122295	5.07	5,184,913	33%
					1,732,199	12	146	122295	121589	0.51	1,644,457	105%

Wallbrook Wastewater Flow Added
 New Sewer Line thru Wallbrook Development
 Pipes requiring upsize
 Between 50% and 65% Capacity
 Over 65% Capacity

Appendix C-5
Wallbrook Downstream Gravity Sewer Evaluation

Existing + Proposed Flow thru Existing and Upsized Pipes
Snapshot of Capacity: Q1-2026

Sub-Basin ID	Month-Year the Flow is Online	Metered Flow	Peaked Flow	Sub-Basin Flow (GPM)	Cumulative Flow (GPD)	Line Size (inches)	Length (ft)	Upstream SSMH	Downstream SSMH	Pipe Slope from Design Drawings/Survey	100% Capacity (GPM)	Percentage of Pipe Capacity
Tributary to Wallbrook		X		456,480								
Lot 9	Jan-26			9,000								
Lot 10	May-25		X	15,750								
Lot 11	Apr-25		X	7,200								
					488,430	12	--	MH07	MH06	2.00	3,256,511	15%
					488,430	12	--	MH06	MH05	1.90	3,174,054	15%
					488,430	12	--	MH05	MH04	2.40	3,567,329	14%
Lot 1	Feb-25		X	49,050								
					537,480	12	--	MH04	MH16	0.60	1,783,664	30%
					537,480	12	--	MH16	MH14	0.60	1,783,664	30%
					537,480	12	--	MH14	MH113	0.60	1,783,664	30%
Lot 5	May-25		X	22,950								
					560,430	12	--	MH113	MH112	0.57	1,738,501	32%
					560,430	12	--	MH112	MH111	0.67	1,884,842	30%
					560,430	12	--	MH111	MH110	2.90	3,921,358	14%
					560,430	12	--	MH110	MH109	1.90	3,174,054	18%
					560,430	12	--	MH109	MH107	0.68	1,898,856	30%
Lot 12	Feb-26		X	23,400								
Lot 13												
Lot 6	Jul-25		X	78,750								
Lot 7	Feb-26			12,150								
Lot 8	Aug-25		X	24,300								
					699,030	12	--	MH107	MH106	0.60	1,783,664	39%
					699,030	12	--	MH106	MH105	0.66	1,870,723	37%
					699,030	12	--	MH105	MH104	0.91	2,196,637	32%
					699,030	12	--	MH104	MH103	1.16	2,480,085	28%
					699,030	12	--	MH103	MH102	1.04	2,348,303	30%
					699,030	12	--	MH102	MH101	0.60	1,783,664	39%
					699,030	12	--	MH101	MH100	0.53	1,676,391	42%
Area 1		X		21,024								
Node A					720,054	12	219	169376	169377	0.73	1,967,428	37%
Node B					720,054	12	282	169377	152615	0.43	1,509,982	48%
					720,054	12	124	152615	169410/MH1	1.05	2,359,566	31%
					720,054	12	89	169410/MH1	MH2	1.05	2,359,566	31%
					720,054	12	258	MH2	160905/MH3	0.78	2,033,690	35%
					720,054	12	124	160905/MH3	114338	1.53	2,848,284	25%
Tributary to Area 2		X		679,680								
Disclude Willow Crest PS Flow												
Obligated to Area 2				28,224								
Area 2		X		100,656								
Node C					1,528,614	12	172	114338	102574	3.46	4,283,271	36%
					1,528,614	12	176	102574	158980	10.11	7,321,720	21%
					1,528,614	12	71	158980	111997	9.43	7,071,204	22%
					1,528,614	12	98	111997	187382	0.21	1,055,230	145%
Area 3		X		49,104								
Node D					1,577,718	12	191	187382	142684	0.28	1,218,475	129%
Area 4		X		8,928								
Node E					1,586,646	12	287	142684	153264	0.35	1,362,296	116%
					1,586,646	12	245	153264	154111	1.25	2,574,498	62%
					1,586,646	12	240	154111	152073	0.29	1,240,042	128%
					1,586,646	12	159	152073	144447	1.71	3,011,172	53%
Area 5		X		23,904								
Node F					1,610,550	12	25	144447	153263	1.96	3,223,781	50%
Obligated to Area 6&7			X	31,824								
Area 6			X	109,375								
Area 7			X	25,000								
Node G					1,776,749	12	145	153263	187381	1.70	3,002,355	59%
					1,776,749	12	195	187381	122295	5.07	5,184,913	34%
					1,776,749	12	146	122295	121589	0.51	1,644,457	108%

- Wallbrook Wastewater Flow Added
- New Sewer Line thru Wallbrook Development
- Pipes requiring upsize
- Between 50% and 65% Capacity
- Over 65% Capacity

Appendix C-6
 Wallbrook Downstream Gravity Sewer Evaluation
 Existing + Proposed Flow thru Existing and Upsized Pipes
 Snapshot of Capacity: Q2-2026

Sub-Basin ID	Month-Year the Flow is Online	Metered Flow	Peaked Flow	Sub-Basin Flow (GPM)	Cumulative Flow (GPD)	Line Size (inches)	Length (ft)	Upstream SSMH	Downstream SSMH	Pipe Slope from Design Drawings/Survey	100% Capacity (GPM)	Percentage of Pipe Capacity
Tributary to Wallbrook		X		456,480								
Lot 9	Jan-26		X	9,000								
Lot 10	May-25		X	15,750								
Lot 11	Apr-25		X	7,200								
					488,430	12	--	MH07	MH06	2.00	3,256,511	15%
					488,430	12	--	MH06	MH05	1.90	3,174,054	15%
					488,430	12	--	MH05	MH04	2.40	3,567,329	14%
Lot 1	Feb-25		X	49,050								
					537,480	12	--	MH04	MH16	0.60	1,783,664	30%
					537,480	12	--	MH16	MH14	0.60	1,783,664	30%
					537,480	12	--	MH14	MH113	0.60	1,783,664	30%
Lot 5	May-25		X	22,950								
					560,430	12	--	MH113	MH112	0.57	1,738,501	32%
					560,430	12	--	MH112	MH111	0.67	1,884,842	30%
					560,430	12	--	MH111	MH110	2.90	3,921,358	14%
					560,430	12	--	MH110	MH109	1.90	3,174,054	18%
					560,430	12	--	MH109	MH107	0.68	1,898,856	30%
Lot 12	Feb-26		X	23,400								
Lot 13	May-26		X	6,750								
Lot 6	Jul-25		X	78,750								
Lot 7	Feb-26		X	12,150								
Lot 8	Aug-25		X	24,300								
					705,780	12	--	MH107	MH106	0.60	1,783,664	40%
					705,780	12	--	MH106	MH105	0.66	1,870,723	38%
					705,780	12	--	MH105	MH104	0.91	2,196,637	32%
					705,780	12	--	MH104	MH103	1.16	2,480,085	28%
					705,780	12	--	MH103	MH102	1.04	2,348,303	30%
					705,780	12	--	MH102	MH101	0.60	1,783,664	40%
					705,780	12	--	MH101	MH100	0.53	1,676,391	42%
Area 1		X		21,024								
Node A					726,804	12	219	169376	169377	0.73	1,967,428	37%
Node B					726,804	12	282	169377	152615	0.43	1,509,982	48%
					726,804	12	124	152615	169410/MH1	1.05	2,359,566	31%
					726,804	12	89	169410/MH1	MH2	1.05	2,359,566	31%
					726,804	12	258	MH2	160905/MH3	0.78	2,033,690	36%
					726,804	12	124	160905/MH3	114338	1.53	2,848,284	26%
Tributary to Area 2		X		679,680								
Disclude Willow Crest PS Flow				-188,000								
Obligated to Area 2				28,224								
Area 2		X		100,656								
Node C					1,347,364	12	172	114338	102574	3.46	4,283,271	31%
					1,347,364	12	176	102574	158980	10.11	7,321,720	18%
					1,347,364	12	71	158980	111997	9.43	7,071,204	19%
					1,347,364	12	98	111997	187382	0.21	1,055,230	128%
Area 3		X		49,104								
Node D					1,396,468	12	191	187382	142684	0.28	1,218,475	115%
Area 4		X		8,928								
Node E					1,405,396	12	287	142684	153264	0.35	1,362,296	103%
					1,405,396	12	245	153264	154111	1.25	2,574,498	55%
					1,405,396	12	240	154111	152073	0.29	1,240,042	113%
					1,405,396	12	159	152073	144447	1.71	3,011,172	47%
Area 5		X		23,904								
Node F					1,429,300	12	25	144447	153263	1.96	3,223,781	44%
Obligated to Area 6&7			X	31,824								
Area 6			X	109,375								
Area 7			X	25,000								
Node G					1,595,499	12	145	153263	187381	1.70	3,002,355	53%
					1,595,499	12	195	187381	122295	5.07	5,184,913	31%
					1,595,499	12	146	122295	121589	0.51	1,644,457	97%

Willowcrest PS Flow
 New Sewer Line thru Wallbrook Development
 Pipes requiring upsize
 Between 50% and 65% Capacity
 Over 65% Capacity