

ARTESIAN WATER MARYLAND, INC.

CECIL COUNTY
MASTER WATER & SEWER PLAN
May 22, 2023
DRAFT ADDENDUM

Submitted: May 22, 2023

The Master Water and Sewer Plan includes “Table 6 – Inventory of Existing Water Treatment Facilities” and “Table 16 – Artesian Water Maryland – Projected Water Supply Demands and Planned Capacity” which are both being updated in this addendum to revise the water demand for the Port Deposit system.

Artesian is requesting the following updates to the Cecil County Master Water and Sewer Plan to update information previously incorporated therein.

Appendix B

Update Table 6, “Inventory of Existing Water Treatment Facilities” as marked in Attachment 1.

Replace Table 16, “Artesian Water Maryland – Projected Water Supply Demands and Planned Capacity” with Attachment 2. Table 16 was updated as part of the Addendum submitted on March 15, 2022. This “revised” table has been further modified to include demand projections for the Port Deposit system.

Table 6 - Inventory of Existing Water Treatment Facilities (Port Deposit Notes have been updated)

ARTESIAN WATER MARYLAND - COMMUNITY WATER SYSTEMS - EXISTING TREATMENT FACILITIES											
System	Owner	Water Source	Type Treatment	Plant Location	Rated Plant Capacity (MGD)	Average Plant Capacity (MGD)	Max Peak Flow (MGD)	Storage Capacity	Planned Expansion (MGD) Dates	Method of Sludge Disposal	Operating Agency
Pine Hills	Artesian Water Maryland	Three Wells	Disinfection, pH adjustment, and corrosion inhibitor	94 Arbutus St, Elkton, MD	0.191	0.110	0.191	200,000 gallon standpipe	n/a	n/a	Artesian Water Maryland
Harbor View	Artesian Water Maryland	Three Wells	Disinfection, pH adjustment, and corrosion inhibitor	84 Basin Rd, Chesapeake Gly, Md	0.07	0.05	0.07	2-5,000 gallon hydropneumatic tanks	n/a	n/a	Artesian Water Maryland
Meadowview	Artesian Water Maryland	Two Wells with AWC (3.0 MGD) and United (back-up) Interconnections	Disinfection, pH adjustment, and corrosion inhibitor	235 Fletchwood Rd, Elkton, MD	0.185	0.185	0.275	800,000 gallon tank	2019	n/a	Artesian Water Maryland
Mountain Hill	Artesian Water Maryland	Three Wells	Disinfection, pH adjustment, and corrosion inhibitor	1875 W Old Philadelphia Rd, North East, MD	0.4	0.4	0.4	500,000 gallon elevated tank	1.0 (2019)	n/a	Artesian Water Maryland
Carpenters Point	Artesian Water Maryland	Three Wells	Disinfection, pH adjustment, and corrosion inhibitor	1595 Carpenters Point Rd, Perryville, MD	0.25	0.25	0.25	75,000 gallon elevated tank	1.0 (2019)	n/a	Artesian Water Maryland
Port Deposit	Artesian Water Maryland	Susquehanna River	Disinfection, pH adjustment, and corrosion inhibitor	401 N Main St, Port Deposit, MD	0.86	0.1	0.86	500,000 gallon elevated tank	See Note #1	n/a	Artesian Water Maryland
Chestnut Point Estates	Artesian Water Maryland	One well	Disinfection, pH adjustment, and corrosion inhibitor	35 White Oak Dr, Perryville, MD	0.012	TBD	0.018	18,000 gallon elevated tank	n/a	n/a	Artesian Water Maryland

Note #1 1.1 MGD Treatment = 2018-2020
 10 MG Storage = 2018-2020
 1.0 + MGD Treatment = 2018-2020

Note #1
 2023 - 2024 Design and Construct 1.0 MG Elevated Storage tank
 2023 - 2025 Design and Construct Phase 1 of new WTP
 2026 - 2050 Construct additional treatment trains for WTP as required to meet demand

Table 16
Artesian Water Maryland - Projected Water Supply Demands and Planned Capacity

Service Area	2020 ACTUAL									
	Population			Demand				Planned Capacity (AVG GPD)		
	Total	Served	Unserved	Residential Average (GPD)	Industrial/ Commercial Average (GPD)	Total Average (GPD)	Peak (GPD)	MD Sources	Out-of-State Sources	Total
Meadowview / Elkton West		3,566		798,976			1,198,464	300,000	3,966,575	4,266,575
Pine Hills		913		52,236			78,354	110,000		110,000
Harbor View		326		16,888			25,332	50,000		50,000
Mt. Hill / Carpenters Pt.		2,297		78,084	61,992	140,075	210,113	345,000		345,000
Port Deposit		660		58,779			88,169	1,100,000		1,100,000

Service Area	2025									
	Population			Demand				Planned Capacity (AVG GPD)		
	Total	Served	Unserved	Residential Average (GPD)	Industrial/ Commercial Average (GPD)	Total Average (GPD)	Peak (GPD)	MD Sources	Out-of-State Sources	Total
Meadowview / Elkton West		3,587		803,681			1,205,522	300,000	3,966,575	4,266,575
Pine Hills		918		52,522			78,783	110,000		110,000
Harbor View		328		16,992			25,487	50,000		50,000
Mt. Hill / Carpenters Pt. (1)		2,145		106,054	129,690	235,744	353,616	498,000		498,000
Port Deposit (2)		4,000		377,953	3,000,000	3,377,953	4,391,339	5,000,000		5,000,000

(1) Charlestown Crossing will be built out by 2033.

(2) Port Deposit - first phase of Industrial Customer Requirements

Table 16
Artesian Water Maryland - Projected Water Supply Demands and Planned Capacity

Service Area	2030									
	Population			Demand				Planned Capacity (AVG GPD)		
	Total	Served	Unserved	Residential Average (GPD)	Industrial/ Commercial Average (GPD)	Total Average (GPD)	Peak (GPD)	MD Sources	Out-of-State Sources	Total
Meadowview / Elkton West		3,626		1,020,883			1,531,324	300,000	3,966,575	4,266,575
Pine Hills		928		109,628			164,442	365,000		365,000
Harbor View		332		26,000			39,000	50,000		50,000
Mt. Hill / Carpenters Pt.*		2,168		134,054	197,389	331,443	497,165	1,000,000		1,000,000
Port Deposit		5,000		472,441	3,250,000	3,722,441	4,839,173	5,000,000		5,000,000

* When the well capacity is not sufficient, a pipeline will be constructed from Port Deposit to the Mt Hill area for additional supply.

Service Area	2035									
	Population			Demand				Planned Capacity (AVG GPD)		
	Total	Served	Unserved	Residential Average (GPD)	Industrial/ Commercial Average (GPD)	Total Average (GPD)	Peak (GPD)	MD Sources	Out-of-State Sources	Total
Meadowview / Elkton West		3,671		1,126,034			1,689,051	300,000	3,966,575	4,266,575
Pine Hills		940		130,000			195,000	365,000		365,000
Harbor View		336		26,000			39,000	50,000		50,000
Mt. Hill / Carpenters Pt.		2,195		162,054	265,088	427,142	640,713	1,000,000		1,000,000
Port Deposit		5,500		519,685	3,500,000	4,019,685	5,225,591	5,000,000		5,000,000

Table 16
Artesian Water Maryland - Projected Water Supply Demands and Planned Capacity

Service Area	2040									
	Population			Demand				Planned Capacity (AVG GPD)		
	Total	Served	Unserved	Residential Average (GPD)	Industrial/ Commercial Average (GPD)	Total Average (GPD)	Peak (GPD)	MD Sources	Out-of-State Sources	Total
Meadowview / Elkton West		3,709		1,242,015			1,863,023	300,000	3,966,575	4,266,575
Pine Hills		949		143,000			214,500	365,000		365,000
Harbor View		339		27,000			40,500	50,000		50,000
Mt. Hill / Carpenters Pt.		2,218		190,054	332,787	522,841	784,262	1,000,000		1,000,000
Port Deposit		6,000		566,929	5,000,000	5,566,929	7,237,008	7,500,000		7,500,000

Service Area	2045									
	Population			Demand				Planned Capacity (AVG GPD)		
	Total	Served	Unserved	Residential Average (GPD)	Industrial/ Commercial Average (GPD)	Total Average (GPD)	Peak (GPD)	MD Sources	Out-of-State Sources	Total
Meadowview / Elkton West		3,744		1,242,015			1,863,023	300,000	3,966,575	4,266,575
Pine Hills		958		143,000			214,500	365,000		365,000
Harbor View		342		27,000			40,500	50,000		50,000
Mt. Hill / Carpenters Pt.		2,239		190,054	332,787	522,841	784,262	1,000,000		1,000,000
Port Deposit		6,500		614,173	6,500,000	7,114,173	9,248,425	10,000,000		10,000,000

Table 16
Artesian Water Maryland - Projected Water Supply Demands and Planned Capacity

Service Area	2050									
	Population			Demand				Planned Capacity (AVG GPD)		
	Total	Served	Unserved	Residential Average (GPD)	Industrial/ Commercial Average (GPD)	Total Average (GPD)	Peak (GPD)	MD Sources	Out-of-State Sources	Total
Meadowview / Elkton West		3,780		1,242,015			1,863,023	300,000	3,966,575	4,266,575
Pine Hills		967		143,000			214,500	365,000		365,000
Harbor View		346		27,000			40,500	50,000		50,000
Mt. Hill / Carpenters Pt.		2,261		190,054	332,787	522,841	784,262	1,000,000		1,000,000
Port Deposit		7,000		661,417	7,000,000	7,661,417	9,959,842	10,000,000		10,000,000