

BEALL TRACT AT DEAN RANCH

AVERAGE DAILY WATER DEMAND

PARCEL NO.	WATER	
	(GPM)	(MGD)
1	6.0	0.009
2	15.1	0.022
3	1.1	0.002
4	25.1	0.036
5	23.1	0.033
6	5.9	0.009
7	24.7	0.036
8	5.1	0.007
9A	5.3	0.008
9B	341.4	0.492
10	88.0	0.127

TOTAL = 541 GPM 0.78 MGD

Notes:

1. Parcels and corresponding land/building uses are based on a land plan prepared by MESA dated August 30, 2023.
2. Average per day capita usage values are based on City of Fort Worth Water Department Installation Policy and Design Criteria.
3. Values in the summary table above are average daily usage and do not include peaking factors.
4. Fire flow protection will need to be determined when preparing the water study.

Population assumptions:

Non-residential = 1 person per 400 SF of building structure

Single Family Residential = 3.5 persons per lot

Multi-Family Residential = 2.5 persons per unit

Population assumptions are per City of Fort Worth Water Department Installation Policy and Design Criteria.

WATER DEMAND

Parcel No.	Use	Acres	Building Area (SF)	Units/Lots	Population	Average Day per Capita	Avg. Day Flow (gpm)		Max Daily Flow (2.25 Factor)		Max Hour Flow (2.0 Factor)		Max Day + Fire Flow (gpm)
							(MGD)	(gpm)	(MGD)	(gpm)	(MGD)	(gpm)	
1	Commercial	2.9	15,555	N/A	39	50	0.002	1.4	0.004	3.0	0.01	6.1	1503
	Commercial	3.3	23,515	N/A	59	50	0.003	2.0	0.007	4.6	0.01	9.2	1505
	Commercial	3.8	30,235	N/A	76	50	0.004	2.6	0.009	5.9	0.02	11.9	1506
	Total =	10.0	69,305		174			0.009	6.042	0.020	13.6	0.04	27.2
2	Warehouse	4.9	66,350	N/A	166	50	0.008	5.8	0.019	13.0	0.04	25.9	1513
	Warehouse	3.2	55,820	N/A	140	50	0.007	4.9	0.016	10.9	0.03	21.9	1511
	Flex Space	1.9	25,970	N/A	65	50	0.003	2.3	0.007	5.1	0.01	10.2	1505
	Flex Space	2.1	25,970	N/A	65	50	0.003	2.3	0.007	5.1	0.01	10.2	1505
	Total =	12.1	174,110		436			0.022	15.139	0.049	34.1	0.10	68.1
3	Office	2.3	12,375	N/A	31	50	0.002	1.1	0.003	2.4	0.01	4.8	1502
	Total =	2.3	12,375		31			0.002	1.076	0.003	2.4	0.01	4.8
4	Commercial	3.8	17,950	N/A	45	50	0.002	1.6	0.005	3.5	0.01	7.0	1504
	Commercial	0.8	5,250	N/A	13	50	0.001	0.5	0.001	1.0	0.00	2.0	1501
	Commercial	0.8	4,900	N/A	12	50	0.001	0.4	0.001	0.9	0.00	1.9	1501
	Commercial	3.8	20,655	N/A	52	50	0.003	1.8	0.006	4.1	0.01	8.1	1504
	Commercial	2.8	19,675	N/A	49	50	0.002	1.7	0.006	3.8	0.01	7.7	1504
	Hotel	8.8	211,250	N/A	528	50	0.026	18.3	0.059	41.3	0.12	82.5	1541
	Commercial	9.8	9,450	N/A	24	50	0.001	0.8	0.003	1.9	0.01	3.8	1502
Total =	30.6	289,130		723			0.036	25.104	0.081	56.5	0.16	113.0	
5	QSR	1.4	5,300	N/A	13	50	0.001	0.5	0.001	1.0	0.00	2.0	1501
	QSR	0.9	4,000	N/A	10	50	0.001	0.3	0.001	0.8	0.00	1.6	1501
	QSR	1.2	4,000	N/A	10	50	0.001	0.3	0.001	0.8	0.00	1.6	1501
	QSR	0.9	4,000	N/A	10	50	0.001	0.3	0.001	0.8	0.00	1.6	1501
	QSR	0.9	4,000	N/A	10	50	0.001	0.3	0.001	0.8	0.00	1.6	1501
	Grocery	16.0	130,500	N/A	326	50	0.016	11.3	0.037	25.5	0.07	50.9	1525
	Commercial	7.6	64,375	N/A	161	50	0.008	5.6	0.018	12.6	0.04	25.2	1513
	Commercial	3.1	23,210	N/A	58	50	0.003	2.0	0.007	4.5	0.01	9.1	1505
	Commercial	4.1	27,380	N/A	68	50	0.003	2.4	0.008	5.3	0.02	10.6	1505
Total =	36.1	266,765		666			0.033	23.125	0.075	52.0	0.15	104.1	
6	Office	1.2	12,850	N/A	32	50	0.002	1.1	0.004	2.5	0.01	5.0	1503
	Office	1.0	9,450	N/A	24	50	0.001	0.8	0.003	1.9	0.01	3.8	1502
	Office	1.0	11,275	N/A	28	50	0.001	1.0	0.003	2.2	0.01	4.4	1502
	Office	1.5	15,200	N/A	38	50	0.002	1.3	0.004	3.0	0.01	5.9	1503
	Office	2.0	19,570	N/A	49	50	0.002	1.7	0.006	3.8	0.01	7.7	1504
Total =	6.7	68,345		171			0.009	5.938	0.019	13.4	0.04	26.7	
7	Office	9.6	194,040	N/A	485	50	0.024	16.8	0.055	37.9	0.11	75.8	1538
	Commercial	2.1	14,565	N/A	36	50	0.002	1.3	0.004	2.8	0.01	5.6	1503
	Commercial	1.6	14,565	N/A	36	50	0.002	1.3	0.004	2.8	0.01	5.6	1503
	Commercial	3.2	29,540	N/A	74	50	0.004	2.6	0.008	5.8	0.02	11.6	1506
	Commercial	5.6	32,550	N/A	81	50	0.004	2.8	0.009	6.3	0.02	12.7	1506
Total =	22.1	285,260		712			0.036	24.722	0.080	55.6	0.16	111.3	
8	QSR	1.5	5,000	N/A	13	50	0.001	0.5	0.001	1.0	0.00	2.0	1501
	QSR	1.0	4,000	N/A	10	50	0.001	0.3	0.001	0.8	0.00	1.6	1501
	QSR	1.1	4,000	N/A	10	50	0.001	0.3	0.001	0.8	0.00	1.6	1501
	Restaurant	3.2	18,000	N/A	45	50	0.002	1.6	0.005	3.5	0.01	7.0	1504
	Commercial	1.4	12,250	N/A	31	50	0.002	1.1	0.003	2.4	0.01	4.8	1502
	Commercial	2.3	14,690	N/A	37	50	0.002	1.3	0.004	2.9	0.01	5.8	1503
Total =	10.5	57,940		146			0.007	5.069	0.016	11.4	0.03	22.8	
9A	Restaurant	6.5	15,000	N/A	38	50	0.002	1.3	0.004	3.0	0.01	5.9	1503
	Commercial	0.6	5,250	N/A	13	50	0.001	0.5	0.001	1.0	0.00	2.0	1501
	Commercial	0.5	5,600	N/A	14	50	0.001	0.5	0.002	1.1	0.00	2.2	1501
	Commercial	1.8	17,610	N/A	44	50	0.002	1.5	0.005	3.4	0.01	6.9	1503
	Commercial	1.9	18,160	N/A	45	50	0.002	1.6	0.005	3.5	0.01	7.0	1504
Total =	11.3	61,620		154			0.008	5.347	0.017	12.0	0.03	24.1	
9B	Multi-Family	18.6	674,520	542	1355	180	0.244	169.4	0.549	381.1	1.10	762.2	1881
	Multi-Family	8.6	323,660	249	623	180	0.112	77.9	0.252	175.2	0.50	350.4	1675
	Multi-Family	7.0	376,260	301	753	180	0.136	94.1	0.305	211.8	0.61	423.6	1712
Total =	34.2	1,374,440		2731			0.492	341.375	1.106	768.1	2.21	1536.2	
10	Residential	21.2	N/A	201	704	180	0.127	88.0	0.285	198.0	0.57	396.0	1198
	Total =	21.2			704			0.127	88.000	0.285	198.0	0.57	396.0

GRAND TOTAL = 197.1 2,659,290 6,648 0.78 541 1.75 1,217 3.51 2,434