

Water System Demands

Table 1: Summary of Water Demands for Each Scenario

Planning Scenario	Water System				
	Maximum Day Demand (MDD) (gpd)	Difference		Required WTP Capacity	
		(gpd)	(gpm)	(gpd)	(MGD)
Scenario 1: Comprehensive Plan - 2040	1,166,784	NA	NA	19,090,000	19.1
Scenario 2: Without Data Center	1,207,471	40,687	28.3	19,130,687	19.1
Scenario 3: With Data Center	1,426,927	260,144	180.7	19,350,144	19.4
Scenario 4: Data Center + Data Center east of JCRR	1,604,047	437,263	303.7	19,527,263	19.5
Scenario 5: MBC replaced with Medium Density Residential	1,531,960	365,177	253.6	19,455,177	19.5
Scenario 6: MBC replaced with Low Density Residential	923,543	-243,241	-168.9	18,846,759	18.8
Scenario 7: With Phase 1 of the Data Center	1,068,998	-97,786	-67.9	18,992,214	19.0

Scenario 1: Comprehensive Plan -2040

Table 2: Scenario 1 Demands

Scenario 1: Comprehensive Plan - 2040						
LAND USE	Area (ac)	Average Day Demand (gpd/ac)	Usage per Unit (gpcd)	Average Day Demand (ADD) (gpd)	Peaking Factor (ADD to MDD)	Maximum Day Demand (MDD) (gpd)
DATA CENTER - Cooling Water			N/A	-	1.50	-
DATA CENTER - Domestic			N/A	-	1.50	-
DATA CENTER - Cooling Water - East of JCRR			N/A	-	1.50	-
DATA CENTER - Domestic - East of JCRR			N/A	-	1.50	-
MIXED-BUSINESS USE	164.5	1,725	N/A	283,822	2.50	709,555
COMMERCIAL	40.7	2,300	N/A	93,661	2.50	234,153
INDUSTRIAL - LIGHT		2,300	N/A	-	2.50	-
OFFICE		2,300	N/A	-	2.50	-
INSTITUTIONAL		2,300	N/A	-	2.50	-
HOTEL		2,300	N/A	-	2.50	-
OFFICE, INDUSTRIAL, MEDICAL (OIM)			N/A	-	2.50	-
OFFICE, RETAIL, HOTEL, MEDICAL (ORHM)			N/A	-	2.50	-
OFFICE, RETAIL, MEDICAL (ORM)			N/A	-	2.50	-
OFFICE, RETAIL, MEDICAL, IND, CORPORATE (ORMIC)			N/A	-	2.50	-
LOW DENSITY RESIDENTIAL	33.8	725	N/A	24,515	2.50	61,288
MEDIUM DENSITY RESIDENTIAL			N/A	-	2.50	-
HIGH DENSITY RESIDENTIAL	20.9	3,100	N/A	64,715	2.50	161,788
OPEN SPACE	30.4		N/A	N/A	N/A	N/A
OPEN WATER	35.6		N/A	N/A	N/A	N/A
RIGHT-OF-WAY (COLLECTORS AND ARTERIALS)			N/A	N/A	N/A	N/A
PARCEL ID #2 - Defined Development			N/A	N/A	N/A	N/A
PARCEL ID #4 - Defined Development			N/A	N/A	N/A	N/A
PARCEL ID #6 - Defined Development			N/A	N/A	N/A	N/A
PARCEL ID #9 - Defined Development			N/A	N/A	N/A	N/A
PARCEL ID #10 - Defined Development			N/A	N/A	N/A	N/A
TOTAL	326.0			466,713		1,166,784

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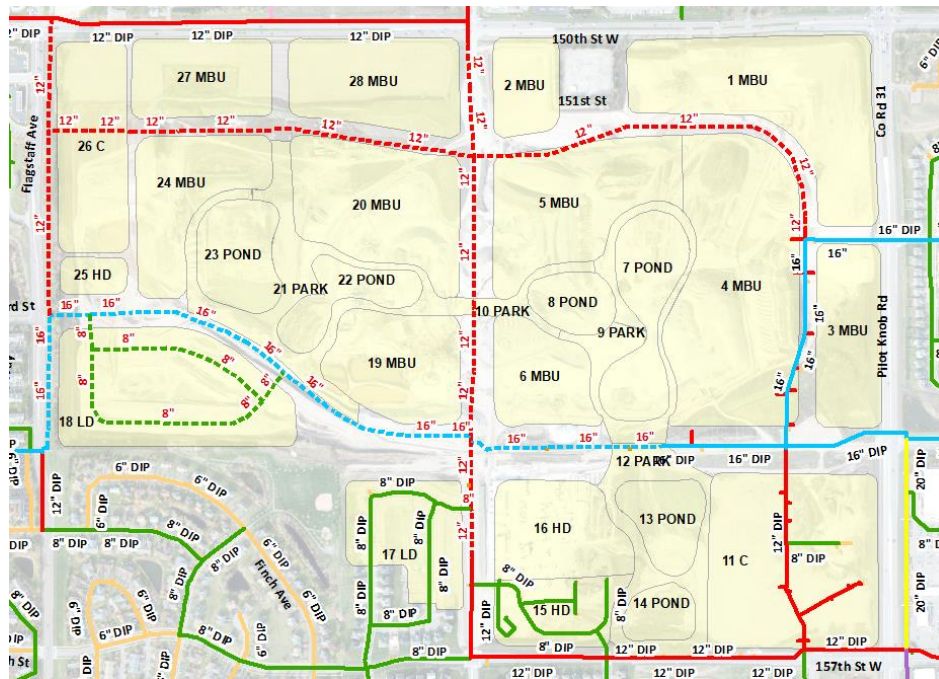


Figure 2: Layout of Scenario 1 – Comprehensive Plan - 2040

Scenario 2: Updated Planning without Data Center

Table 3: Scenario 2 Demands

Scenario 2: Future Planning - Without Data Center						
LAND USE	Area (ac)	Average Day Demand (gpd/ac)	Usage per Unit (gpcd)	Average Day Demand (ADD) (gpd)	Peaking Factor (ADD to MDD)	Maximum Day Demand (MDD) (gpd)
DATA CENTER - Cooling Water			N/A	-	1.50	-
DATA CENTER - Domestic			N/A	-	1.50	-
DATA CENTER - Cooling Water - East of JCRR			N/A	-	1.50	-
DATA CENTER - Domestic - East of JCRR			N/A	-	1.50	-
MIXED-BUSINESS USE	162.2	1,500	N/A	243,367	2.50	608,417
COMMERCIAL	13.7	500	N/A	6,864	2.50	17,160
INDUSTRIAL - LIGHT		1,500	N/A	-	2.50	-
OFFICE		1,100	N/A	-	2.50	-
INSTITUTIONAL		90	N/A	-	2.50	-
HOTEL		2,300	N/A	-	2.50	-
OFFICE, INDUSTRIAL, MEDICAL (OIM)		1,500	N/A	-	2.50	-
OFFICE, RETAIL, HOTEL, MEDICAL (ORHM)		1,500	N/A	-	2.50	-
OFFICE, RETAIL, MEDICAL (ORM)		1,500	N/A	-	2.50	-
OFFICE, RETAIL, MEDICAL, IND, CORPORATE (ORMIC)		1,500	N/A	-	2.50	-
LOW DENSITY RESIDENTIAL	24.9	800	N/A	19,896	2.50	49,739
MEDIUM DENSITY RESIDENTIAL	28.1	2,300	N/A	64,740	2.50	161,851
HIGH DENSITY RESIDENTIAL	3.8	3,200	N/A	12,012	2.50	30,031
OPEN SPACE	62.0		N/A	N/A	N/A	N/A
OPEN WATER			N/A	N/A	N/A	N/A
RIGHT-OF-WAY (COLLECTORS AND ARTERIALS)			N/A	N/A	N/A	N/A
PARCEL ID #2 - Defined Development	5.1		N/A	6,100	2.50	15,250
PARCEL ID #4 - Defined Development	12.1		N/A	19,871	2.50	49,677
PARCEL ID #6 - Defined Development	33.8		N/A	96,913	2.50	242,283
PARCEL ID #9 - Defined Development	7.3		N/A	8,625	2.50	21,563
PARCEL ID #10 - Defined Development	3.8		N/A	4,600	2.50	11,500
TOTAL	356.9			482,988		1,207,471

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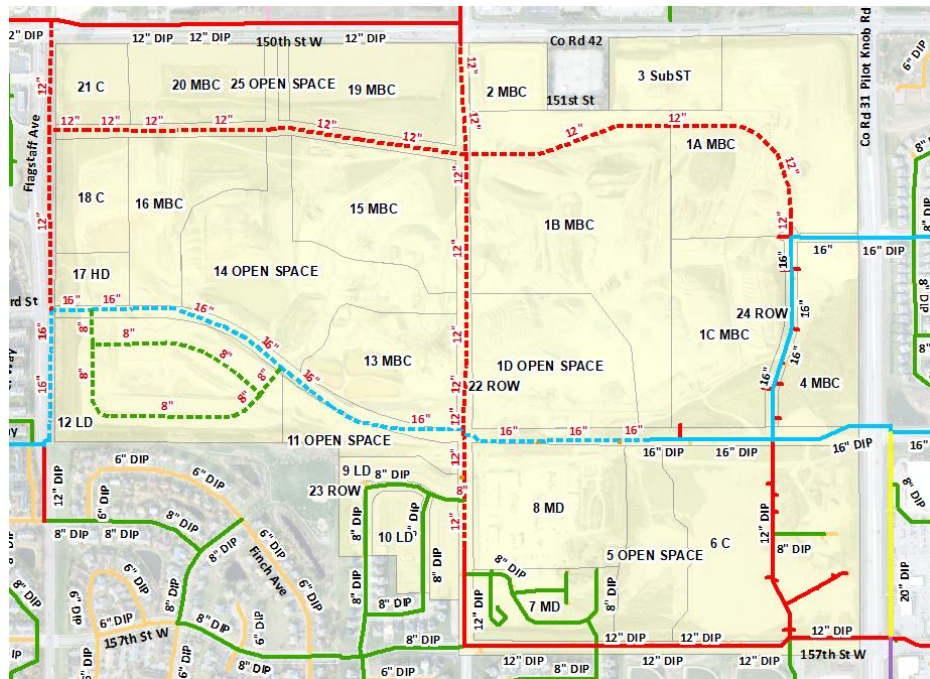


Figure 3: Layout of Scenario 2 – Updated Planning without Data Center

Scenario 3: Updated Planning with Data Center

Table 4: Scenario 3 Demands

LAND USE	Area (ac)	Scenario 3: Future Planning - With Data Center				
		Average Day Demand (gpd/ac)	Usage per Unit (gpcd)	Average Day Demand (ADD) (gpd)	Peaking Factor (ADD to MDD)	Maximum Day Demand (MDD) (gpd)
DATA CENTER - Cooling Water			N/A	550,000	1.00	550,000
DATA CENTER - Domestic			N/A	6,750	2.50	16,875
DATA CENTER - Cooling Water - East of JCRR	73.5		N/A	-	1.00	-
DATA CENTER - Domestic - East of JCRR			N/A	-	2.50	-
MIXED-BUSINESS USE	69.6	1,500	N/A	104,400	2.50	260,999
COMMERCIAL	13.7	500	N/A	6,864	2.50	17,160
INDUSTRIAL - LIGHT		1,500	N/A	-	2.50	-
OFFICE		1,100	N/A	-	2.50	-
INSTITUTIONAL		90	N/A	-	2.50	-
HOTEL		2,300	N/A	-	2.50	-
OFFICE, INDUSTRIAL, MEDICAL (OIM)		1,500	N/A	-	2.50	-
OFFICE, RETAIL, HOTEL, MEDICAL (ORHM)		1,500	N/A	-	2.50	-
OFFICE, RETAIL, MEDICAL (ORM)		1,500	N/A	-	2.50	-
OFFICE, RETAIL, MEDICAL, IND, CORPORATE (ORMIC)		1,500	N/A	-	2.50	-
LOW DENSITY RESIDENTIAL	24.9	800	N/A	19,896	2.50	49,739
MEDIUM DENSITY RESIDENTIAL	28.1	2,300	N/A	64,740	2.50	161,851
HIGH DENSITY RESIDENTIAL	3.8	3,200	N/A	12,012	2.50	30,031
OPEN SPACE	81.1		N/A	N/A	N/A	N/A
OPEN WATER			N/A	N/A	N/A	N/A
RIGHT-OF-WAY (COLLECTORS AND ARTERIALS)			N/A	N/A	N/A	N/A
PARCEL ID #2 - Defined Development	5.1		N/A	6,100	2.50	15,250
PARCEL ID #4 - Defined Development	12.1		N/A	19,871	2.50	49,677
PARCEL ID #6 - Defined Development	33.8		N/A	96,913	2.50	242,283
PARCEL ID #9 - Defined Development	7.3		N/A	8,625	2.50	21,563
PARCEL ID #10 - Defined Development	3.8		N/A	4,600	2.50	11,500
TOTAL	356.9			900,771		1,426,927

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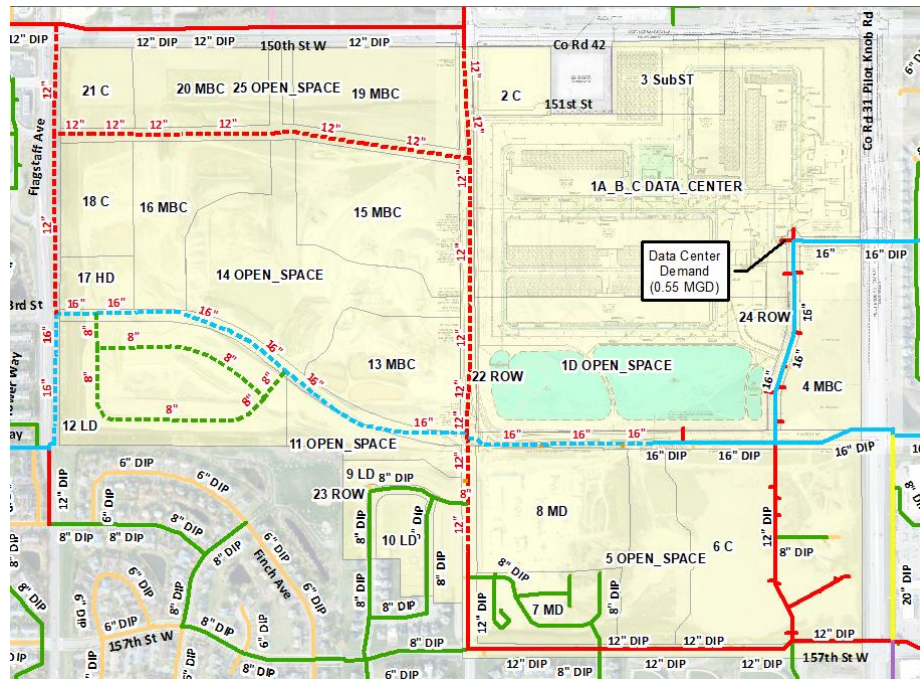


Figure 4: Layout of Scenario 3 – Updated Planning with Data Center

Scenario 4: Data Center and Data Center east of JCRR

Table 5: Scenario 4 Demands

Scenario 4: Future Planning - Two Data Centers						
LAND USE	Area (ac)	Average Day Demand (gpd/ac)	Usage per Unit (gpcd)	Average Day Demand (ADD) (gpd)	Peaking Factor (ADD to MDD)	Maximum Day Demand (MDD) (gpd)
DATA CENTER - Cooling Water			N/A	550,000	1.00	550,000
DATA CENTER - Domestic			N/A	6,750	2.50	16,875
DATA CENTER - Cooling Water - East of JCRR	73.5		N/A	335,500	1.00	335,500
DATA CENTER - Domestic - East of JCRR	45.0		N/A	4,200	2.50	10,500
MIXED-BUSINESS USE	24.6	1,500	N/A	36,847	2.50	92,118
COMMERCIAL	13.7	500	N/A	6,864	2.50	17,160
INDUSTRIAL - LIGHT		1,500	N/A	-	2.50	-
OFFICE		1,100	N/A	-	2.50	-
INSTITUTIONAL		90	N/A	-	2.50	-
HOTEL		2,300	N/A	-	2.50	-
OFFICE, INDUSTRIAL, MEDICAL (OIM)		1,500	N/A	-	2.50	-
OFFICE, RETAIL, HOTEL, MEDICAL (ORHM)		1,500	N/A	-	2.50	-
OFFICE, RETAIL, MEDICAL (ORM)		1,500	N/A	-	2.50	-
OFFICE, RETAIL, MEDICAL, IND, CORPORATE (ORMIC)		1,500	N/A	-	2.50	-
LOW DENSITY RESIDENTIAL	24.9	800	N/A	19,896	2.50	49,739
MEDIUM DENSITY RESIDENTIAL	28.1	2,300	N/A	64,740	2.50	161,851
HIGH DENSITY RESIDENTIAL	3.8	3,200	N/A	12,012	2.50	30,031
OPEN SPACE	81.1		N/A	N/A	N/A	N/A
OPEN WATER			N/A	N/A	N/A	N/A
RIGHT-OF-WAY (COLLECTORS AND ARTERIALS)			N/A	N/A	N/A	N/A
PARCEL ID #2 - Defined Development	5.1		N/A	6,100	2.50	15,250
PARCEL ID #4 - Defined Development	12.1		N/A	19,871	2.50	49,677
PARCEL ID #6 - Defined Development	33.8		N/A	96,913	2.50	242,283
PARCEL ID #9 - Defined Development	7.3		N/A	8,625	2.50	21,563
PARCEL ID #10 - Defined Development	3.8		N/A	4,600	2.50	11,500
TOTAL	356.9			1,172,919		1,604,047

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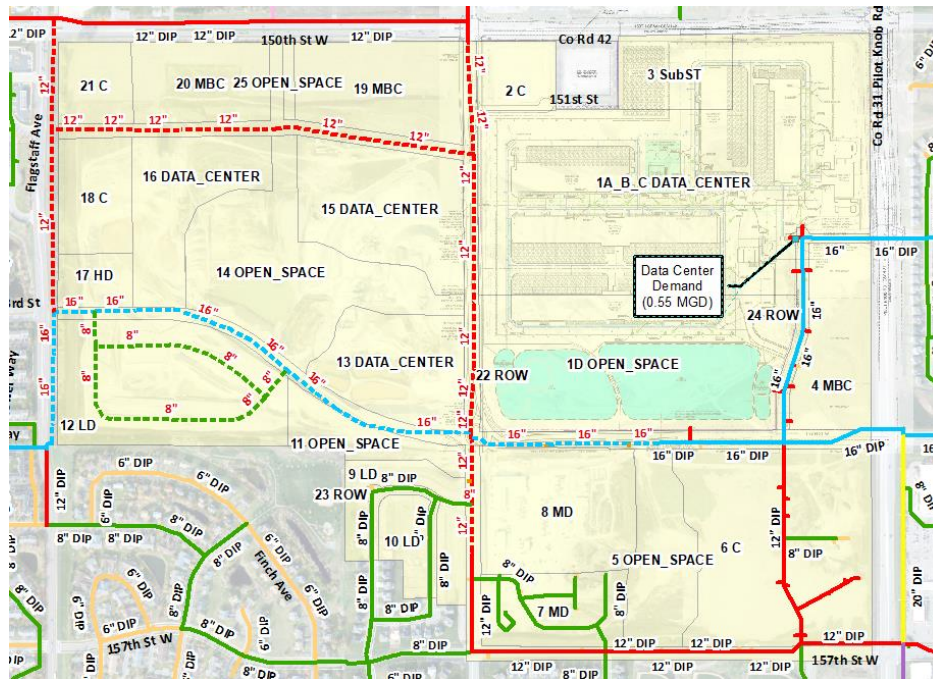


Figure 5: Layout of Scenario 4 – Data Center and Data Center east of JCRR

Scenario 5: MBC replaced with Medium Density Residential

Table 6: Scenario 5 Demands

Scenario 5: Future Planning - MBC replaced with MD Residential						
LAND USE	Area (ac)	Average Day Demand (gpd/ac)	Usage per Unit (gpcd)	Average Day Demand (ADD) (gpd)	Peaking Factor (ADD to MDD)	Maximum Day Demand (MDD) (gpd)
DATA CENTER - Cooling Water			N/A	-	1.50	-
DATA CENTER - Domestic			N/A	-	1.50	-
DATA CENTER - Cooling Water - East of JCRR			N/A	-	1.50	-
DATA CENTER - Domestic - East of JCRR			N/A	-	1.50	-
MIXED-BUSINESS USE	0.0	1,500	N/A	-	2.50	-
COMMERCIAL	13.7	500	N/A	6,864	2.50	17,160
INDUSTRIAL - LIGHT		1,500	N/A	-	2.50	-
OFFICE		1,100	N/A	-	2.50	-
INSTITUTIONAL		90	N/A	-	2.50	-
HOTEL		2,300	N/A	-	2.50	-
OFFICE, INDUSTRIAL, MEDICAL (OIM)		1,500	N/A	-	2.50	-
OFFICE, RETAIL, HOTEL, MEDICAL (ORHM)		1,500	N/A	-	2.50	-
OFFICE, RETAIL, MEDICAL (ORM)		1,500	N/A	-	2.50	-
OFFICE, RETAIL, MEDICAL, IND, CORPORATE (ORMIC)		1,500	N/A	-	2.50	-
LOW DENSITY RESIDENTIAL	24.9	800	N/A	19,896	2.50	49,739
MEDIUM DENSITY RESIDENTIAL	190.4	2,300	N/A	437,903	2.50	1,094,758
HIGH DENSITY RESIDENTIAL	3.8	3,200	N/A	12,012	2.50	30,031
OPEN SPACE	62.0		N/A	N/A	N/A	N/A
OPEN WATER			N/A	N/A	N/A	N/A
RIGHT-OF-WAY (COLLECTORS AND ARTERIALS)			N/A	N/A	N/A	N/A
PARCEL ID #2 - Defined Development	5.1		N/A	6,100	2.50	15,250
PARCEL ID #4 - Defined Development	12.1		N/A	19,871	2.50	49,677
PARCEL ID #6 - Defined Development	33.8		N/A	96,913	2.50	242,283
PARCEL ID #9 - Defined Development	7.3		N/A	8,625	2.50	21,563
PARCEL ID #10 - Defined Development	3.8		N/A	4,600	2.50	11,500
TOTAL	356.9			612,784		1,531,960

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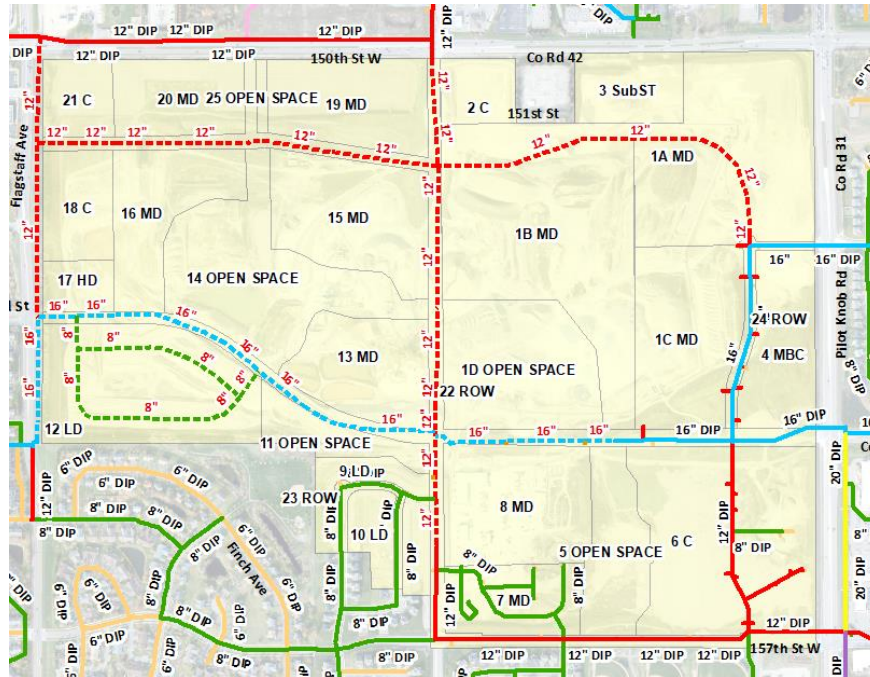


Figure 6: Layout of Scenario 5 – MBC replaced with Medium Density Residential

Scenario 6: MBC replaced with Low Density Residential

Table 7: Scenario 6 Demands

Scenario 6: Future Planning - MBC replaced with LD Residential						
LAND USE	Area (ac)	Average Day Demand (gpd/ac)	Usage per Unit (gpcd)	Average Day Demand (ADD) (gpd)	Peaking Factor (ADD to MDD)	Maximum Day Demand (MDD) (gpd)
DATA CENTER - Cooling Water			N/A	-	1.50	-
DATA CENTER - Domestic			N/A	-	1.50	-
DATA CENTER - Cooling Water - East of JCRR			N/A	-	1.50	-
DATA CENTER - Domestic - East of JCRR			N/A	-	1.50	-
MIXED-BUSINESS USE	0.0	1,500	N/A	-	2.50	-
COMMERCIAL	13.7	500	N/A	6,864	2.50	17,160
INDUSTRIAL - LIGHT		1,500	N/A	-	2.50	-
OFFICE		1,100	N/A	-	2.50	-
INSTITUTIONAL		90	N/A	-	2.50	-
HOTEL		2,300	N/A	-	2.50	-
OFFICE, INDUSTRIAL, MEDICAL (OIM)		1,500	N/A	-	2.50	-
OFFICE, RETAIL, HOTEL, MEDICAL (ORHM)		1,500	N/A	-	2.50	-
OFFICE, RETAIL, MEDICAL (ORM)		1,500	N/A	-	2.50	-
OFFICE, RETAIL, MEDICAL, IND, CORPORATE (ORMIC)		1,500	N/A	-	2.50	-
LOW DENSITY RESIDENTIAL	187.1	800	N/A	149,691	2.50	374,229
MEDIUM DENSITY RESIDENTIAL	28.1	2,300	N/A	64,740	2.50	161,851
HIGH DENSITY RESIDENTIAL	3.8	3,200	N/A	12,012	2.50	30,031
OPEN SPACE	62.0		N/A	N/A	N/A	N/A
OPEN WATER			N/A	N/A	N/A	N/A
RIGHT-OF-WAY (COLLECTORS AND ARTERIALS)			N/A	N/A	N/A	N/A
PARCEL ID #2 - Defined Development	5.1		N/A	6,100	2.50	15,250
PARCEL ID #4 - Defined Development	12.1		N/A	19,871	2.50	49,677
PARCEL ID #6 - Defined Development	33.8		N/A	96,913	2.50	242,283
PARCEL ID #9 - Defined Development	7.3		N/A	8,625	2.50	21,563
PARCEL ID #10 - Defined Development	3.8		N/A	4,600	2.50	11,500
TOTAL	356.9			369,417		923,543

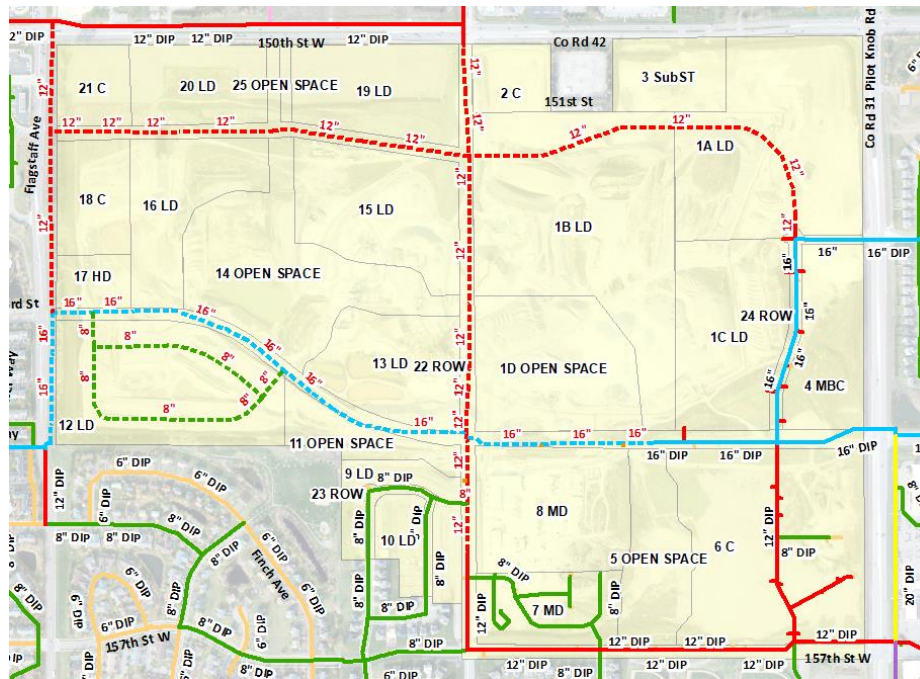


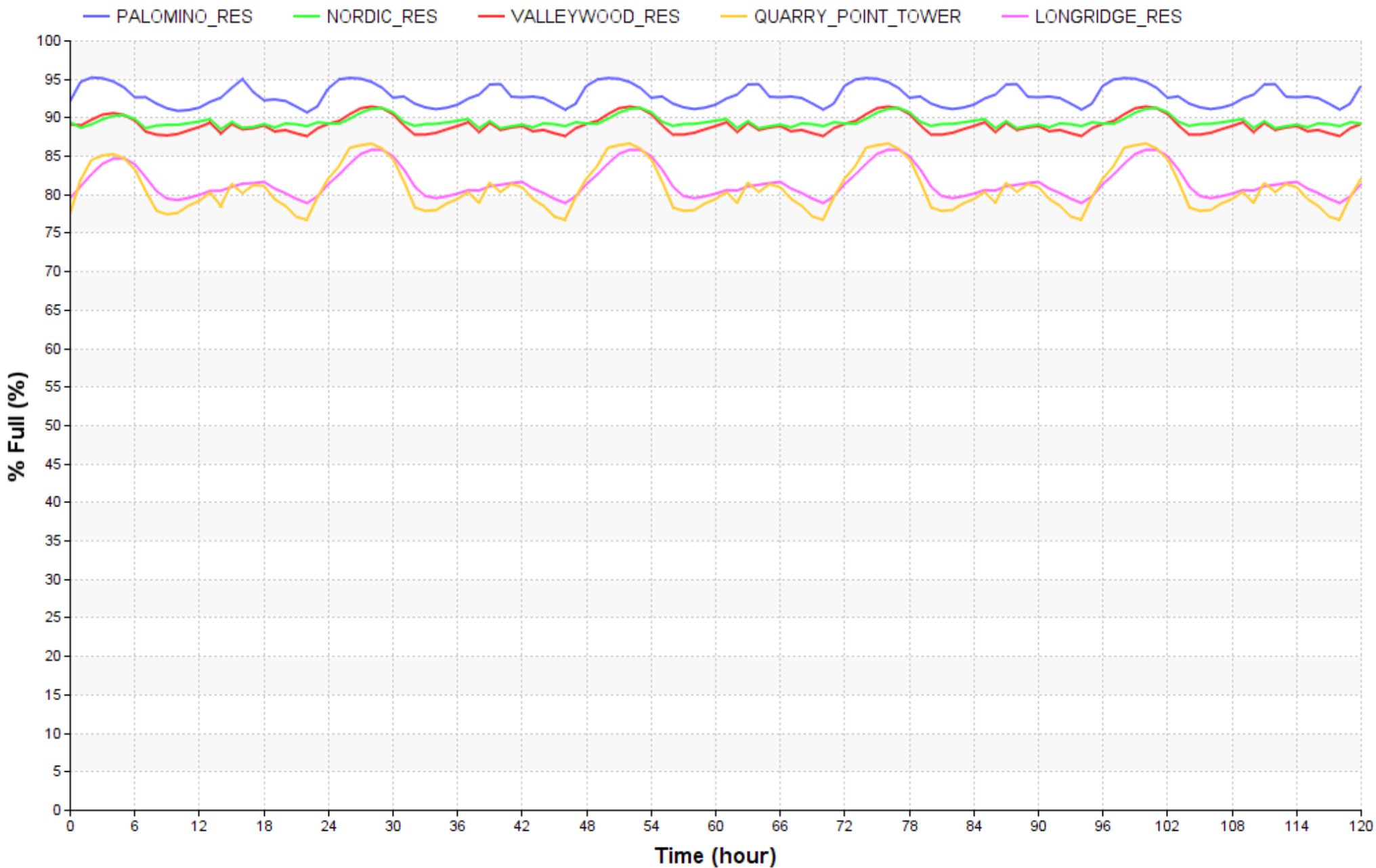
Figure 7: Layout of Scenario 6 – MBC replaced with Low Density Residential

System Analysis

Analysis was completed for the following scenarios and provide information on average pressure, available fire flow and water storage. Exhibits and figures are attached that show the results of the analysis.

- Scenario 1: Comprehensive Plan 2040
- Scenario 2: Without Data Center – current landuse and layout areas
- Scenario 3: With Data Center
- Scenario 4: With Two Data Centers
- Scenario 5: MBC replaced with Medium Density Residential
- Scenario 6: MBC replaced with Low Density Residential

Storage Analysis



Scenario 1 – Comprehensive Plan 2040
System Buildout of Future Water Main
Demand – MDD = 19.1 MGD

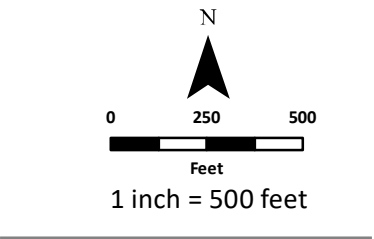
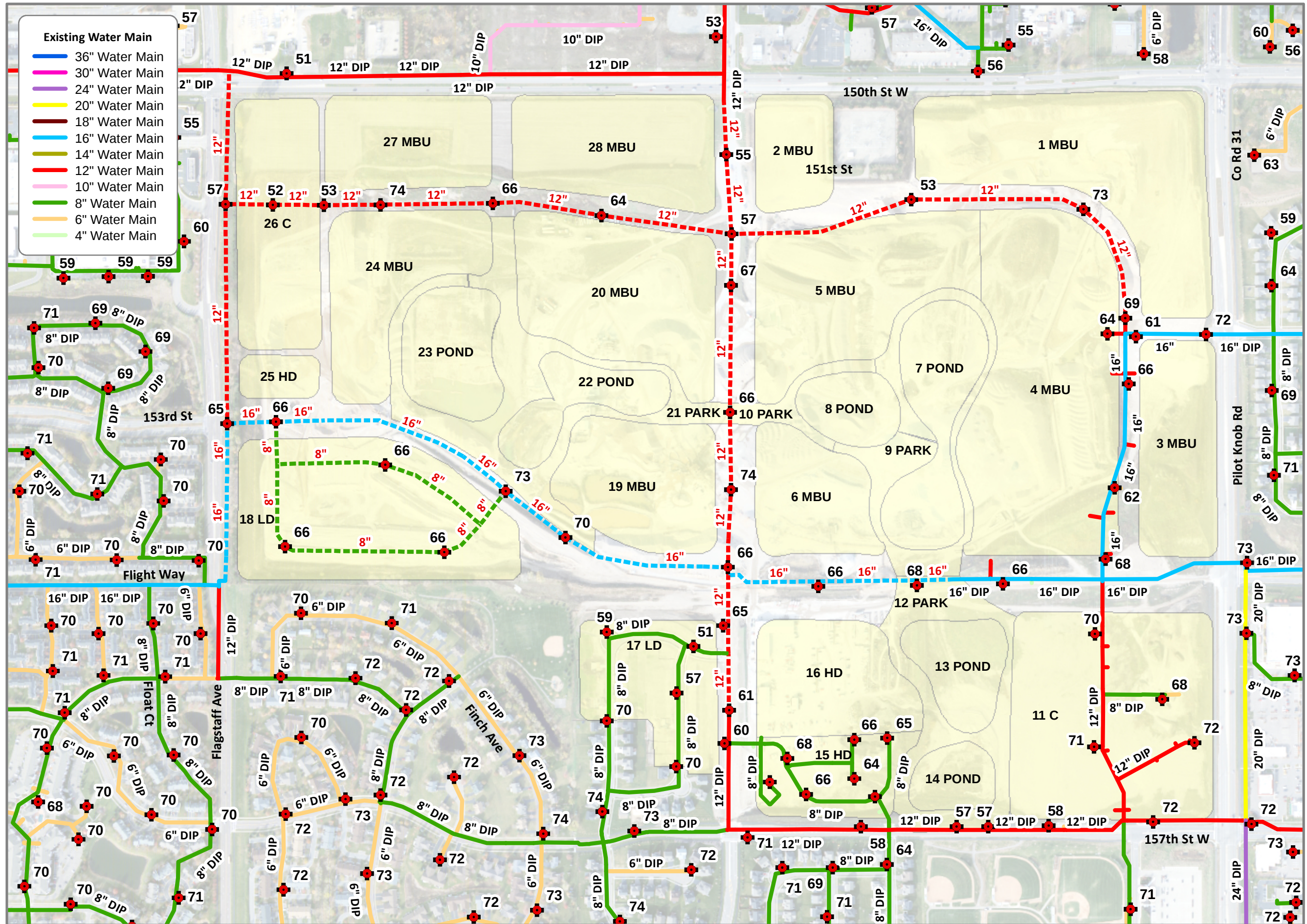


Exhibit 1A

**AVERAGE
PRESSURE
(PSI)**

SCENARIO 1

**BASED ON
COMPREHENSIVE
PLAN 2040**

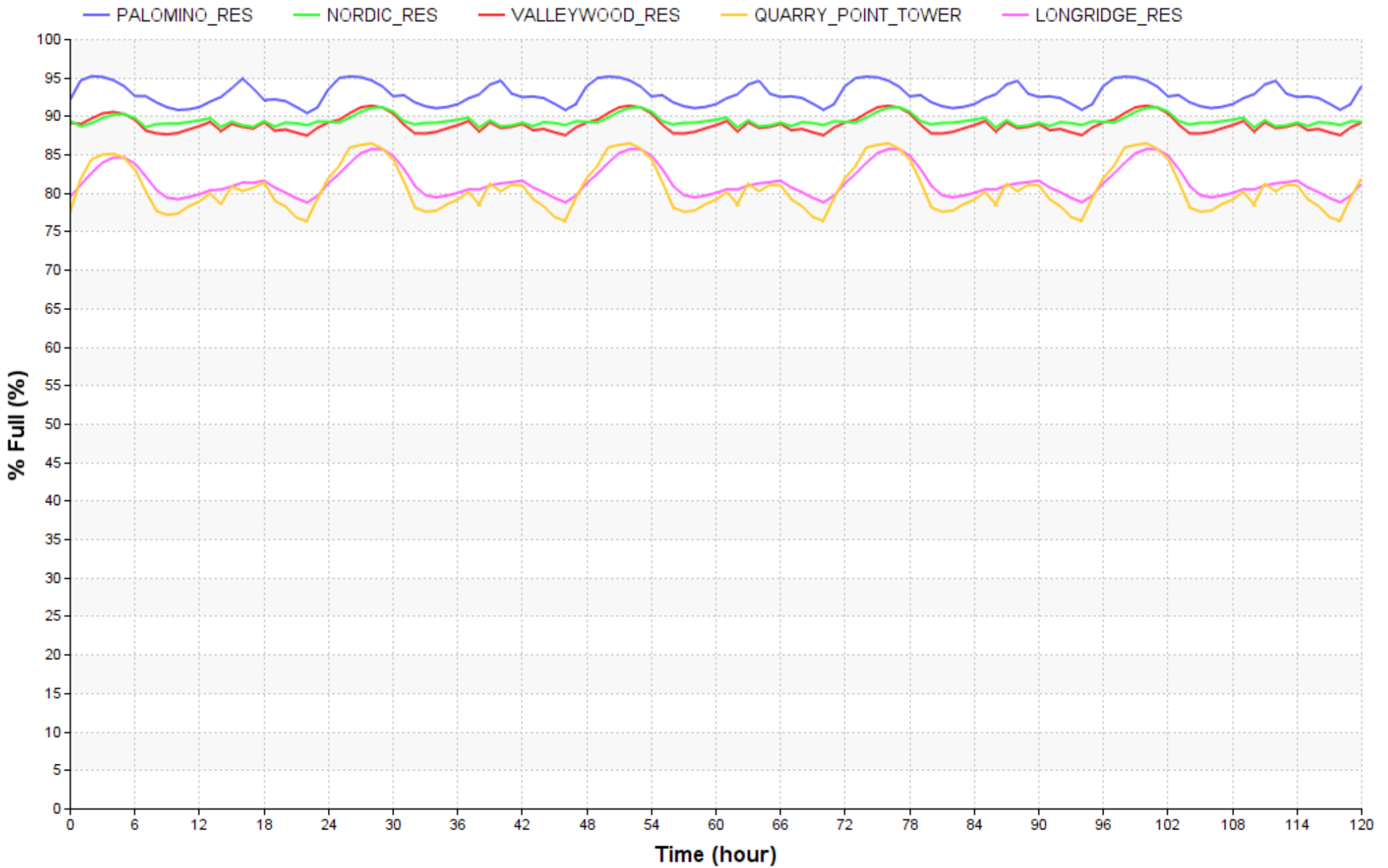
**MAXIMUM DAY
DEMAND**

Date: 3/25/2025

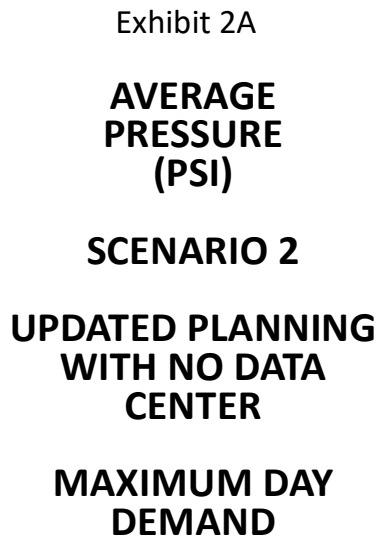




Storage Analysis



Scenario 2: Updated Planning with No Data Center
System Buildout of Future Water Main
Demand – MDD = 19.1 MGD



Date: 3/25/2025



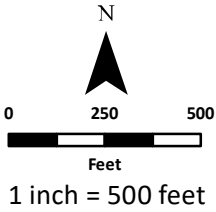
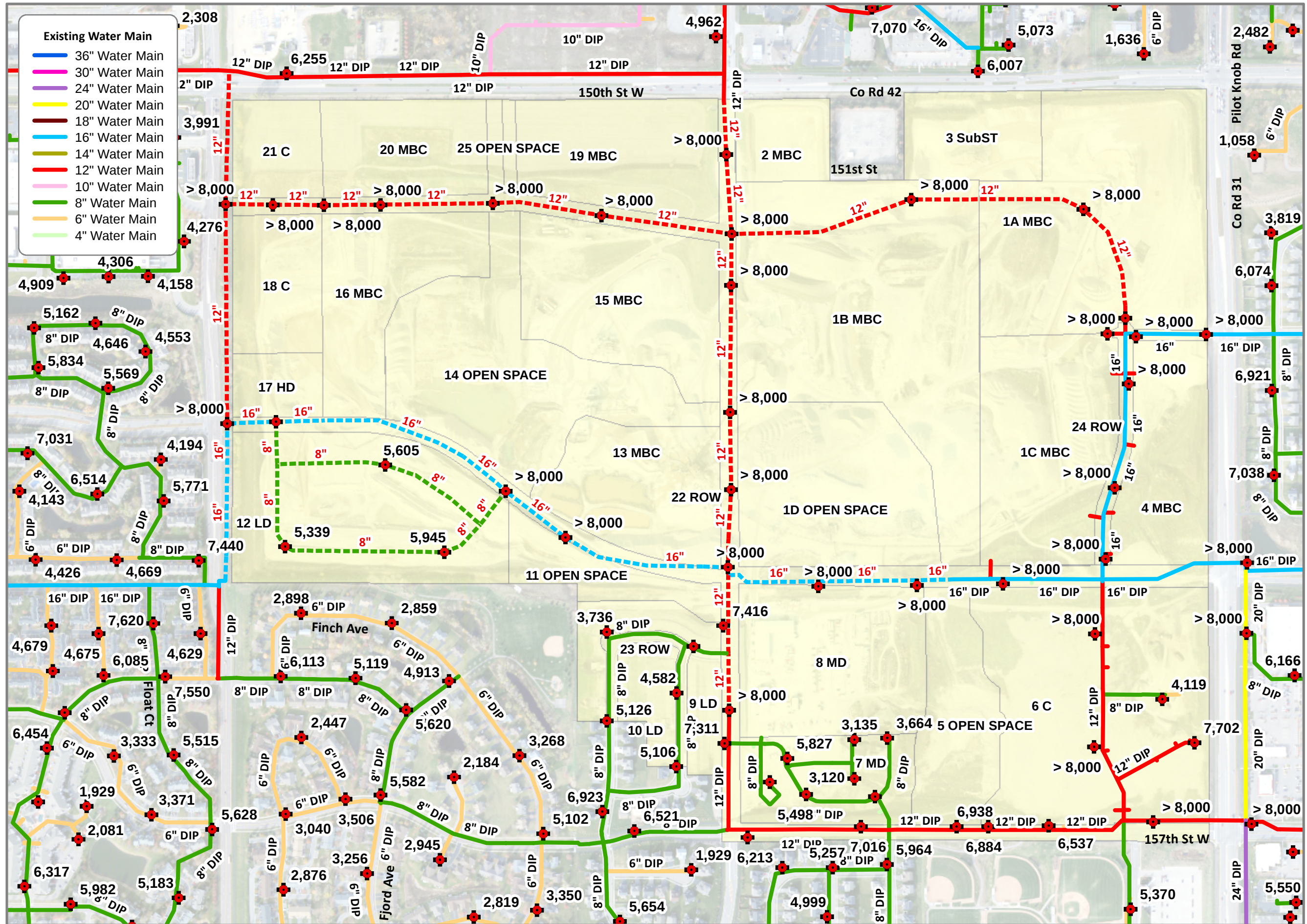


Exhibit 2B

**AVAILABLE FIRE
FLOW (GPM) AT
RESIDUAL PRESSURE
OF 20 PSI**

SCENARIO 2

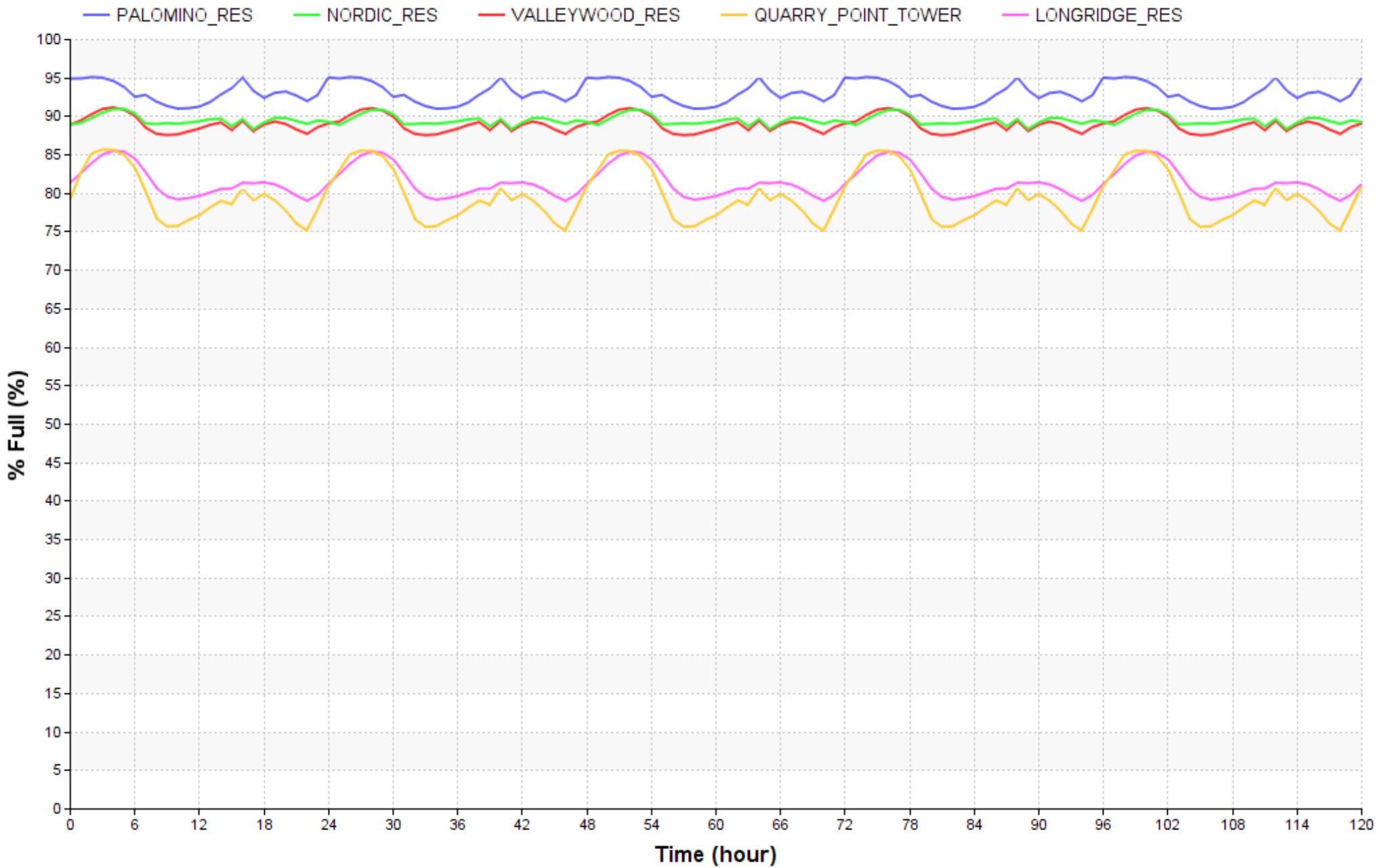
**UPDATED PLANNING
WITH NO DATA
CENTER**

**MAXIMUM DAY
DEMAND**

Date: 3/25/2025



Storage Analysis



Scenario 3 – Updated Planning with Data Center
System Buildout of Future Water Main
Demand – MDD = 19.4 MGD

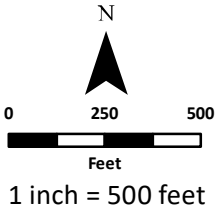
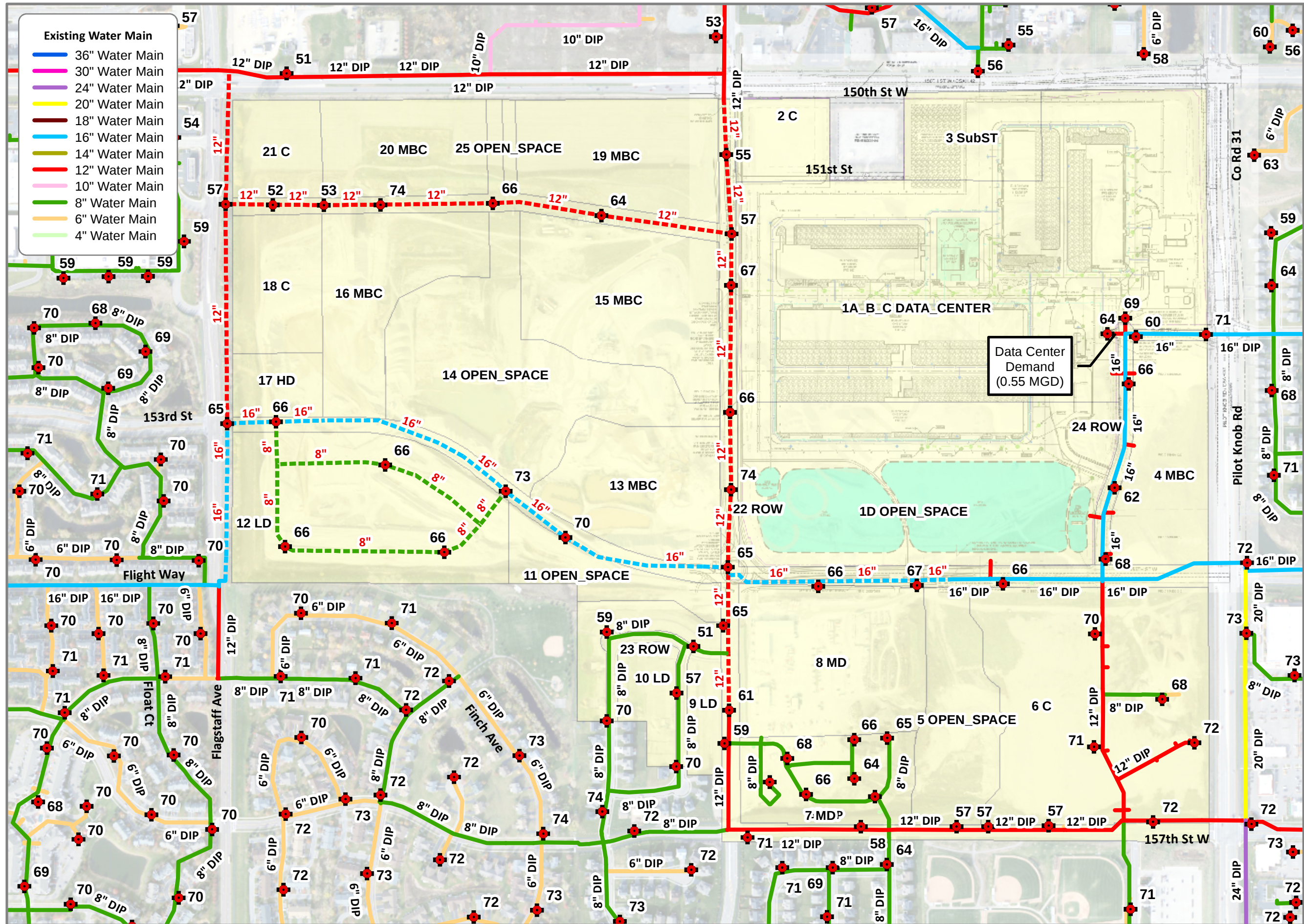


Exhibit 3A

**AVERAGE
PRESSURE
(PSI)**

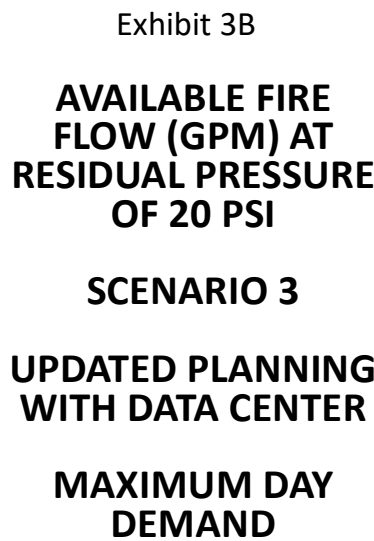
SCENARIO 3

**UPDATED PLANNING
WITH DATA CENTER**

**MAXIMUM DAY
DEMAND**

Date: 3/26/2025

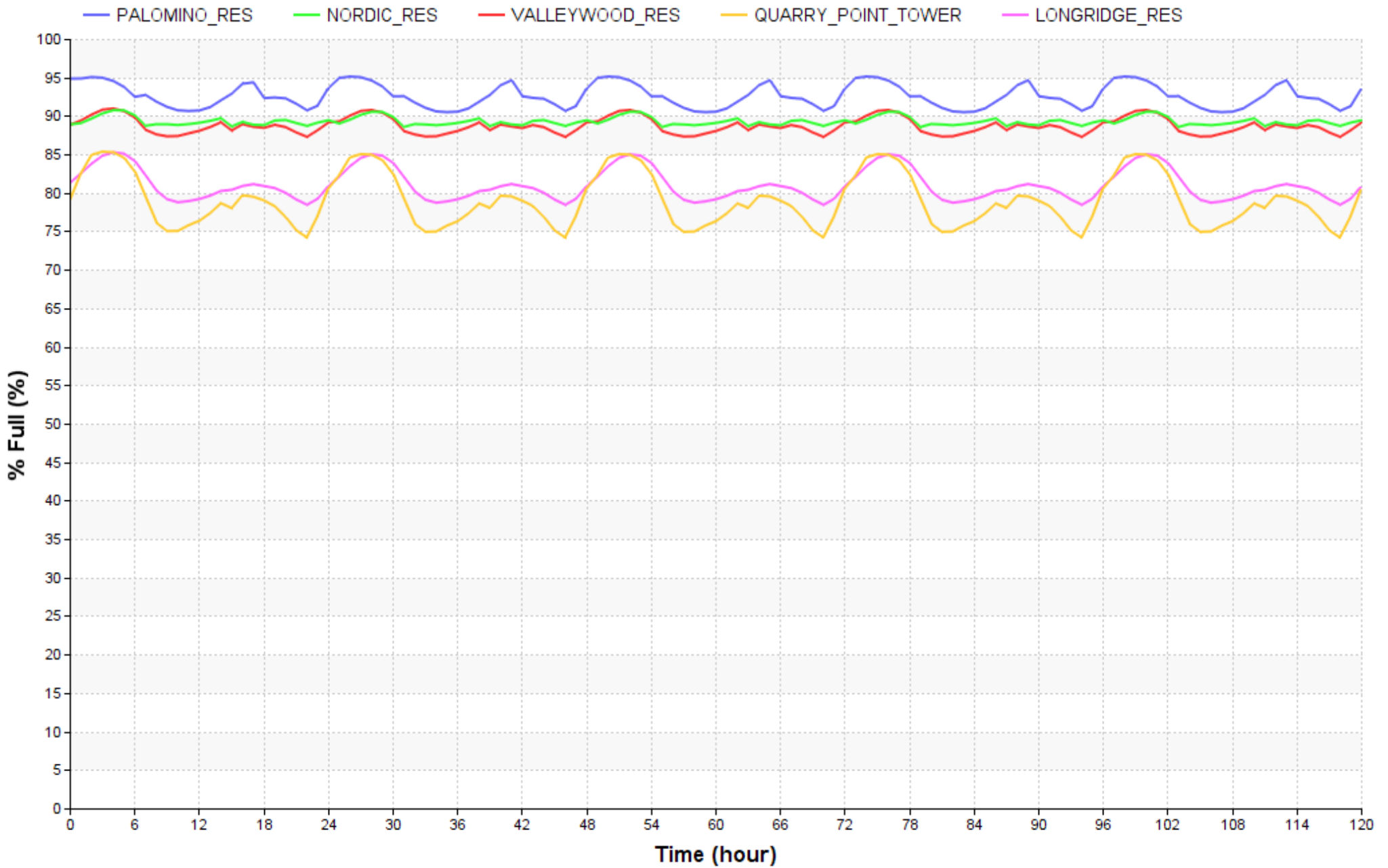




Date: 3/26/2025



Storage Analysis



Scenario 4 – Updated Planning with Data Center + Data Center east of JCRR
System Buildout of Future Water Main
Demand – MDD = 19.5 MGD

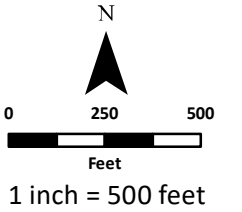
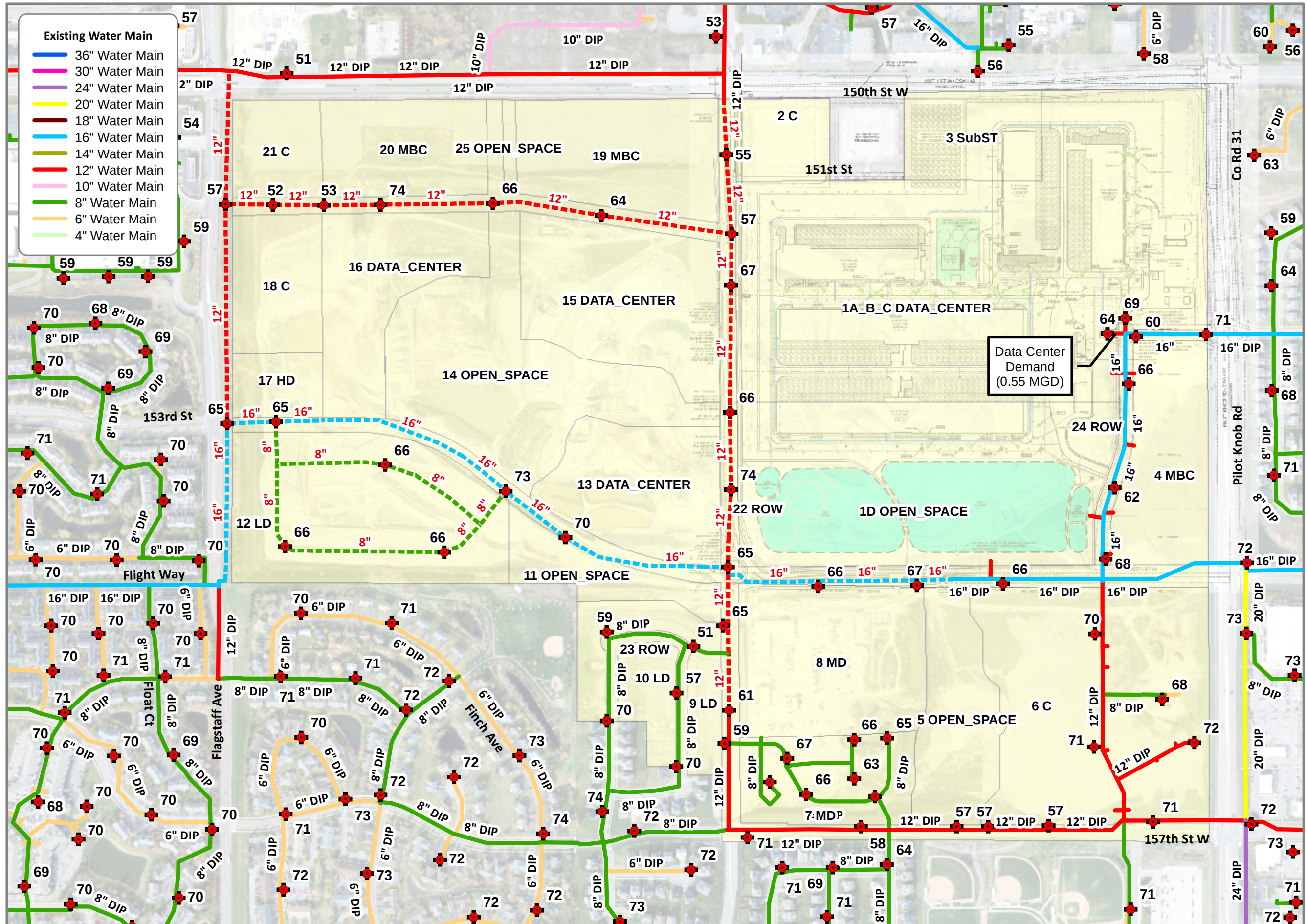


Exhibit 4A

**AVERAGE
PRESSURE
(PSI)**

SCENARIO 4

**DATA CENTER &
DATA CENTER EAST
OF JCRR**

**MAXIMUM DAY
DEMAND**

Date: 3/26/2025



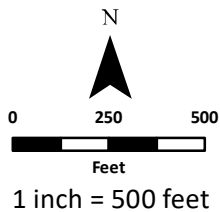


Exhibit 4B

**AVAILABLE FIRE
FLOW (GPM) AT
RESIDUAL PRESSURE
OF 20 PSI**

SCENARIO 4

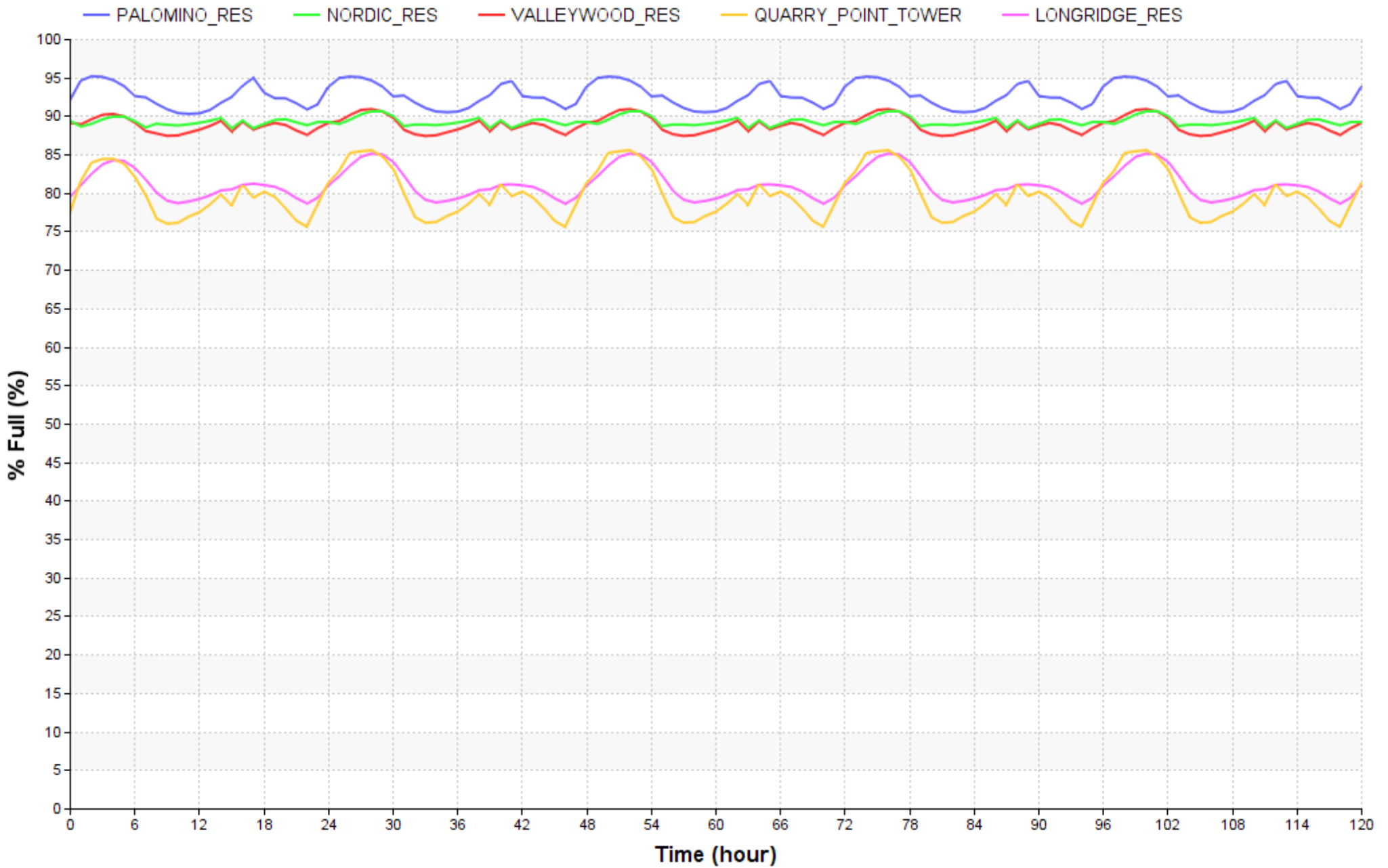
**DATA CENTER &
DATA CENTER EAST
OF JCRR**

**MAXIMUM DAY
DEMAND**

Date: 3/26/2025



Storage Analysis



Scenario 5 – MBC replaced with Medium Density Residential
System Buildout of Future Water Main
Demand – MDD = 19.5 MGD

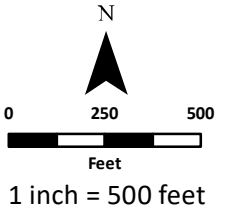
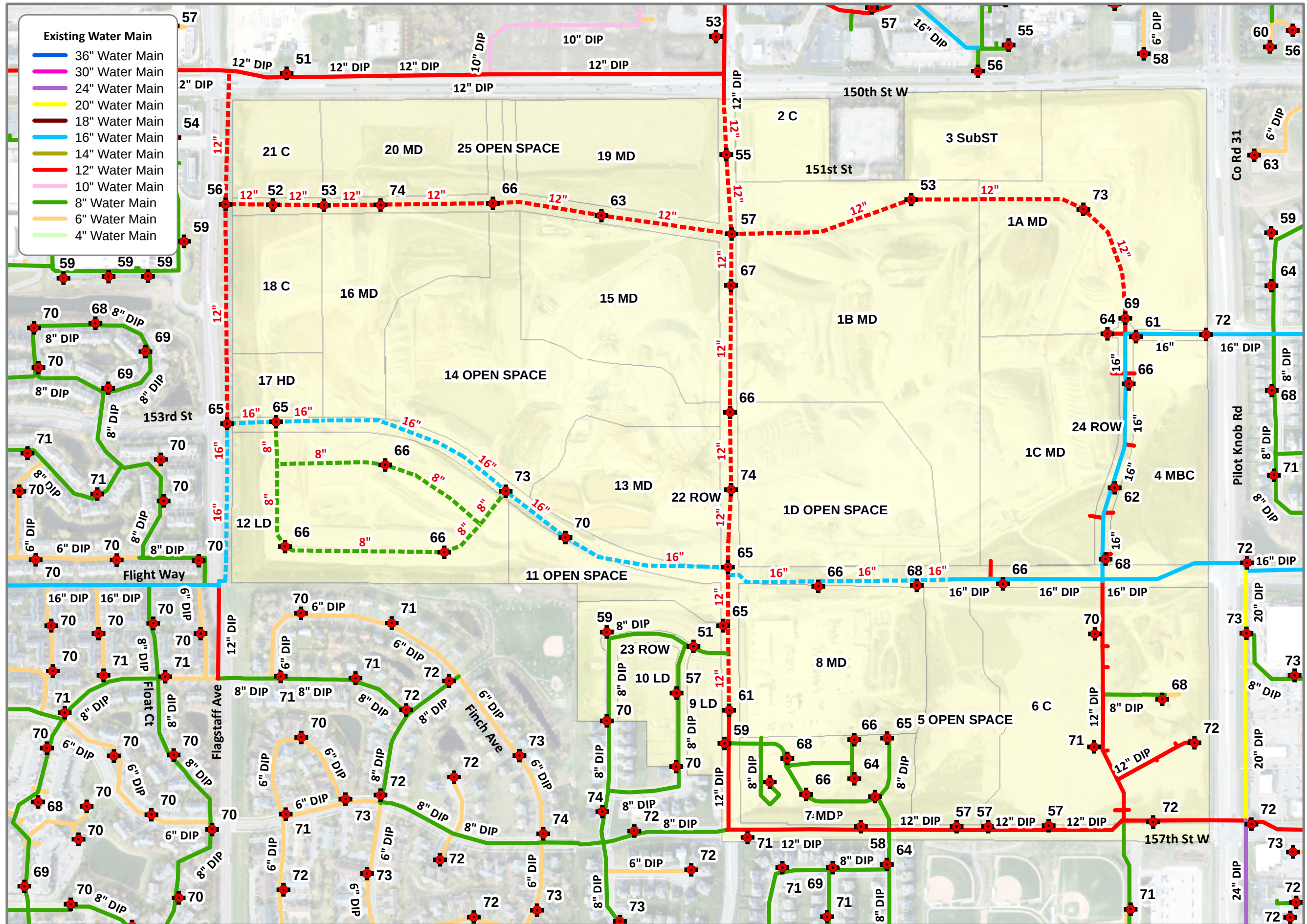


Exhibit 5A

**AVERAGE
PRESSURE
(PSI)**

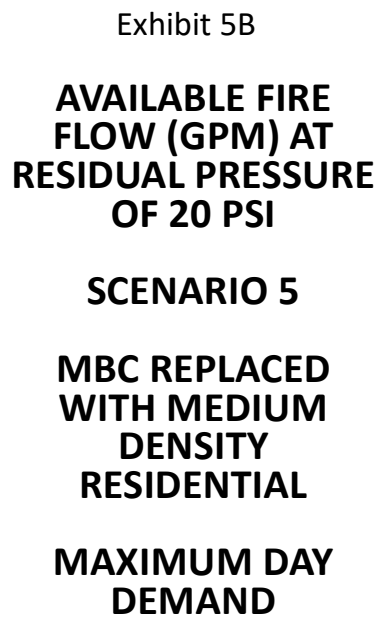
SCENARIO 5

**MBC REPLACED
WITH MEDIUM
DENSITY
RESIDENTIAL**

**MAXIMUM DAY
DEMAND**

Date: 3/25/2025

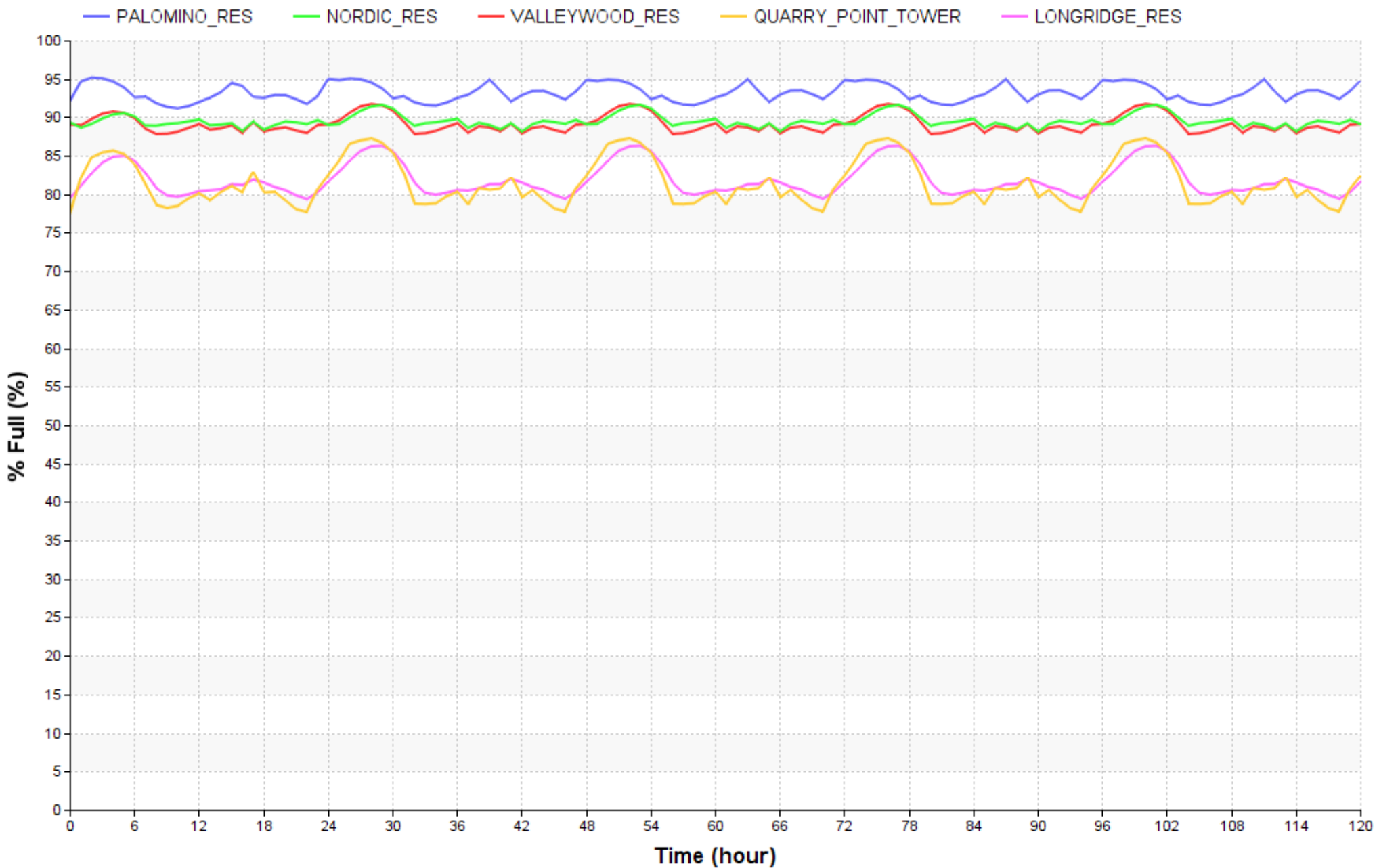




Date: 3/25/2025



Storage Analysis



Scenario 6 – MBC replaced with Low Density Residential
System Buildout of Future Water Main
Demand – MDD = 18.9 MGD

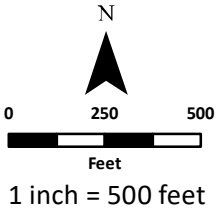
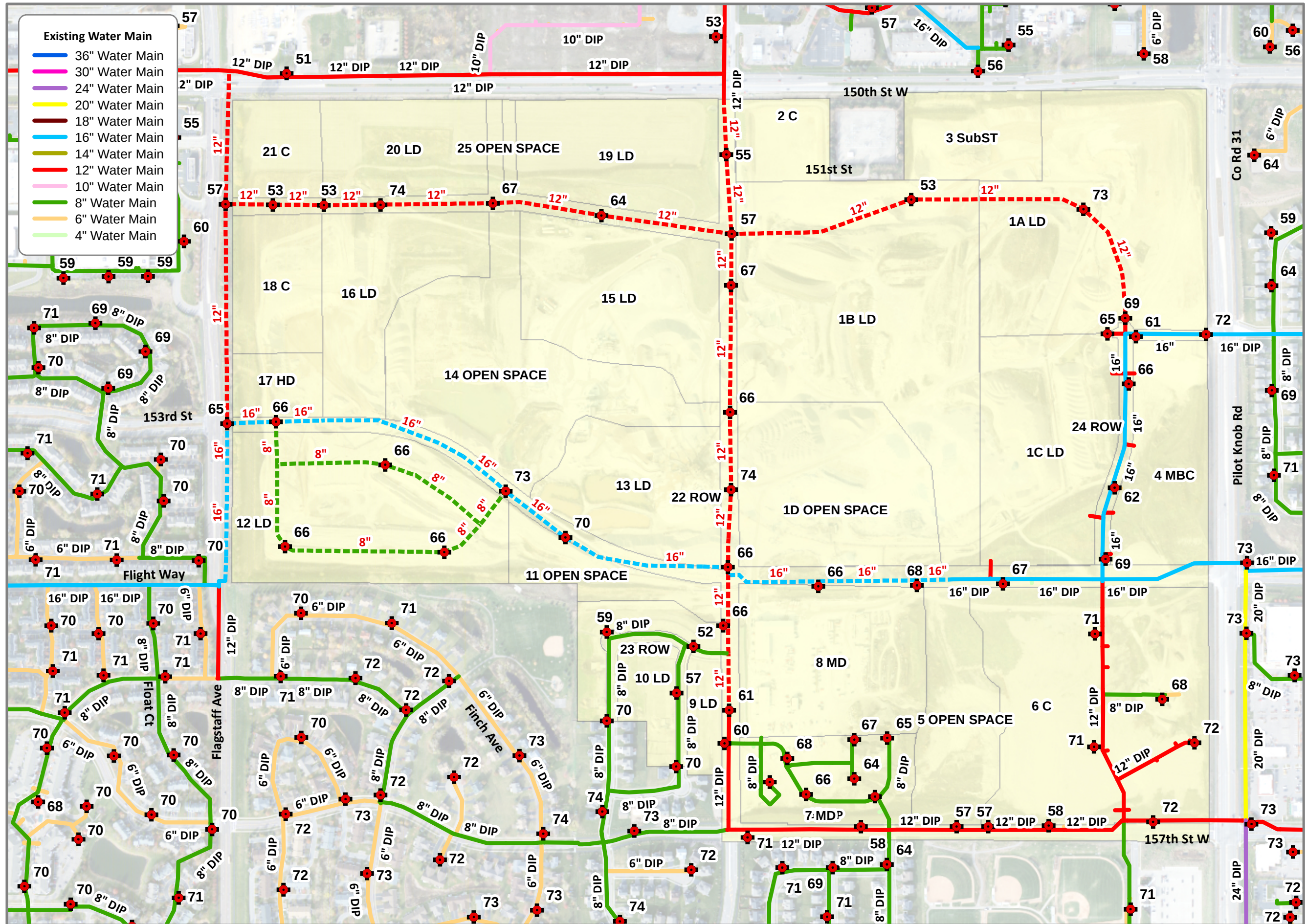


Exhibit 6A

**AVERAGE
PRESSURE
(PSI)**

SCENARIO 6

**MBC REPLACED
WITH LOW DENSITY
RESIDENTIAL**

**MAXIMUM DAY
DEMAND**

Date: 3/25/2025



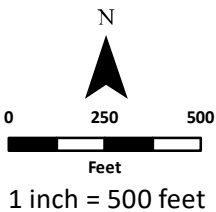


Exhibit 6B

**AVAILABLE FIRE
FLOW (GPM) AT
RESIDUAL PRESSURE
OF 20 PSI**

SCENARIO 6

**MBC REPLACED
WITH LOW DENSITY
RESIDENTIAL**

**MAXIMUM DAY
DEMAND**

Date: 3/25/2025

