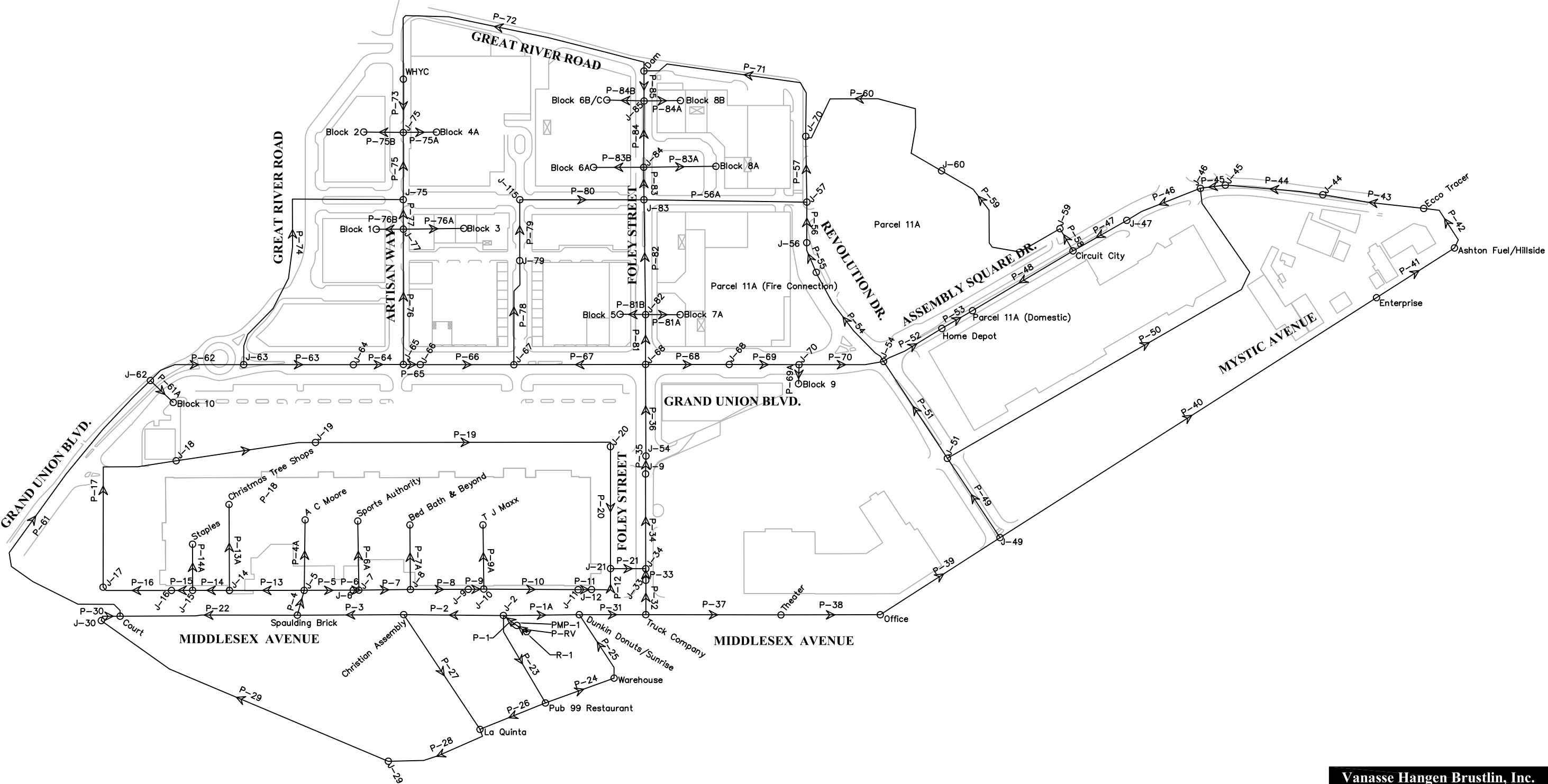


Appendix A

Water System Analysis



Vanasse Hangen Brustlin, Inc.

Water Model May 2, 2014

Water Plan Full Build Out
Assembly Square PUD
Assembly Square Drive
Somerville, Massachusetts





Flow Test Information Sheet

VHB project number: 11496.00
VHB project name: BLOCK 1 & BLOCK 4

Location of test: ASSEMBLY SQUARE DRIVE (NEW SECTION)
(Fire hydrant number if any)

Date & time of test: Date: 8/18/2011 Time: 9:00 (am)(pm)

Temperature: 80 (F)

Test conducted by: RICHARD P. MATTHEWS JR. PE - VHB

Test witnessed by: TIMOTHY HAYES - VHB SOMERVILLE WATER DEPT

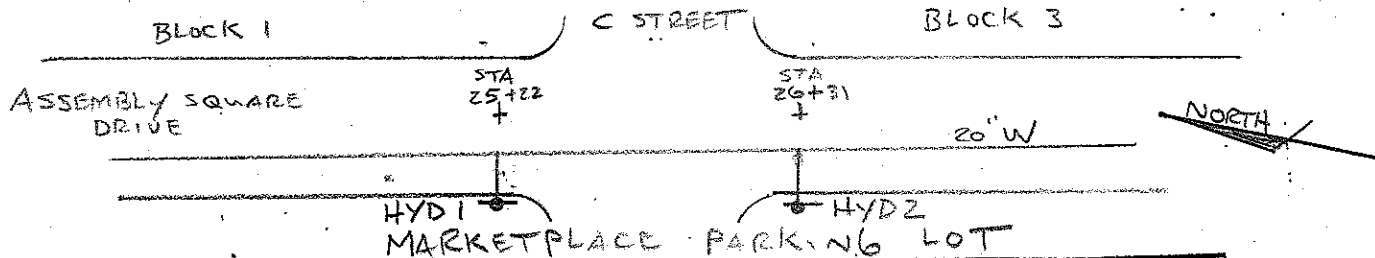
Name of Water District: CITY OF SOMERVILLE

Name of Fire District: " " "

Source of Water Supply: Gravity ☐ Pump ☐ Other MWRA

Is water supply provided by: PRV STA's ☐ YES ☐ NO ☐

Area Map: (Draw Sketch showing property location; bounding streets and names, north arrow, hydrant location and identification numbers, distances from hydrants to property, elevations of hydrants and building floors & grade, all water mains and sizes interconnection valves, etc.)



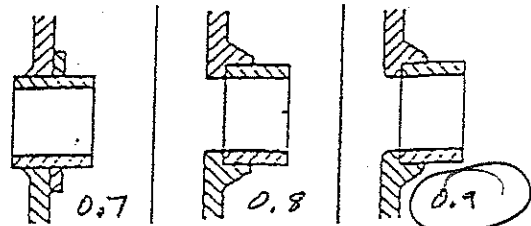
Flow Test Data:

Flow at Hydr. No.	Elevation at Hydr	Static at Hydr. No.	Static PSIG	Residual PSIG	Flow PSIG	Outlet size and coefficient	GPM
2	13.13	1	77	69	57	2.5" 0.9	1265

Miscellaneous comments: HYDRANTS ARE MSH MODEL 929 5 1/4" W/ 2 1/2" HOSE CONNECTIONS

Signed: [Signature]

Witness: [Signature]



Flow Test Information Sheet

VHB project number: 08518.03

VHB project name: Assembly Square PUD

Location of test: Middlesex Ave @ Memory Ln / McGrath Highway / Kensington
(Fire hydrant number if any)

Date & time of test: Date: 9/13/06 Time: 10:20 (am) (pm)

Temperature: _____ (F)

Test conducted by: Lenny Dodge & Dennis Grieco

Test witnessed by: _____

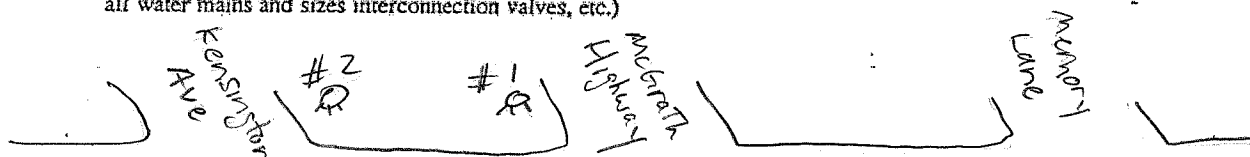
Name of Water District: Somerville, MA

Name of Fire District: Somerville, MA

Source of Water Supply: Gravity ☐ Pump ☒ Other _____

Is water supply provided by: PRV STA's ☐ YES ☐ NO ☐

Area Map: (Draw Sketch showing property location; bounding streets and names, north arrow, hydrant location and identification numbers, distances from hydrants to property, elevations of hydrants and building floors & grade, all water mains and sizes interconnection valves, etc.)



ASSEMBLY SQUARE MALL

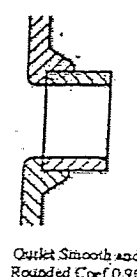
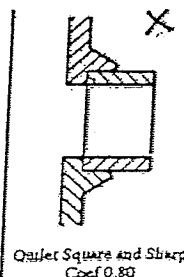
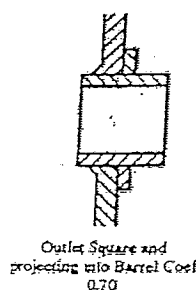
Flow Test Data:

Flow at Hydr. No.	Elevation at Hydr.	Static at Hydr. No.	Static PSIG	Residual PSIG	Flow PSIG	Outlet size and coefficient		GPM Co. (@ 20')
1		2	72	69	52	2 1/2	0.9	5645

Miscellaneous comments: _____

Signed: _____

Witness: _____





Computations

Project: ASSEMBLY SQUARE Project # 08518-03

Location: SOMERVILLE, MA Sheet 1 of 1

Calculated by: DAG Date: 9/13/06

Checked by: MVH Date: 9/13/06

Title

HYDRANT FLOW TEST

RESIDUAL HYDRANT - #2

FLOWED HYDRANT - #1

2 1/2" ORIFICE

OUTLET SMOOTH AND ROUNDED - C = 0.9

STATIC PRESSURE #2 = 72 PSI

RESIDUAL PRESSURE #2 = 69 PSI

FLOWING PITOT PRESSURE #1 = 52 PSI
(VELOCITY HEAD)

THEORETICAL FLOW = 1344 GPM

ACTUAL FLOW = $0.9(1344)$
= 1210 GPM

⇒ CONVERSION TO BASE OF 20 PSI

$$Q_R = Q_F \times \frac{h_r^{.54}}{h_f^{.54}}$$

$$Q_R = 1210 \times \frac{(72-20)^{.54}}{(72-59)^{.54}} \quad \begin{matrix} (8.46) \\ (1.81) \end{matrix}$$

$Q_R = 5645 \text{ GPM @ 20 PSI}$



Flow Test Information Sheet

VHB project number: 08518.03

VHB project name: ASSEMBLY SQUARE - IKEA

Location of test: SOMERVILLE, MA @ ASSEMBLY SQUARE DRIVE.
(Fire hydrant number if any)

Date & time of test: Date: 3/14/07 Time: 1:45 (am) (pm)

Temperature: 71° (F)

Test conducted by: DENNIS GRIECCI & MICHAEL GOODMAN

Test witnessed by: _____

Name of Water District: _____

Name of Fire District: _____

Source of Water Supply: Gravity ☐

Pump ☐

Other _____

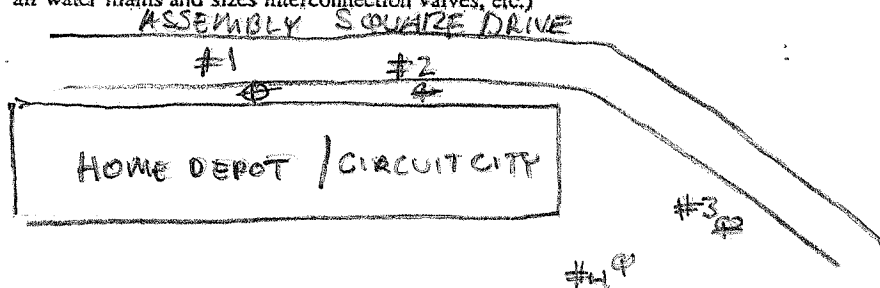
Is water supply provided by: PRV STA's ☐

YES ☐

NO ☐

Area Map:

(Draw Sketch showing property location; bounding streets and names, north arrow, hydrant location and identification numbers, distances from hydrants to property, elevations of hydrants and building floors & grade, all water mains and sizes interconnection valves, etc.)



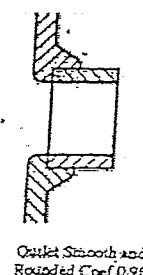
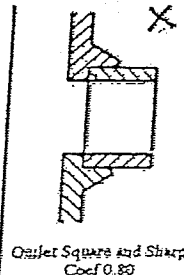
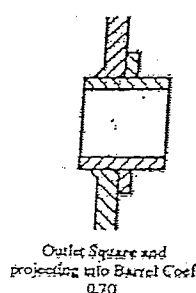
Flow Test Data:

Flow at Hydr. No.	Elevation at Hydr.	Static at Hydr. No.	Static PSIG	Residual PSIG	Flow PSIG	Outlet size and coefficient	GPM @ (20')
1		2	73	68	58	2 1/2" 0.9	4573
3		4	66	61	48	2 1/2" 0.9	3855

Miscellaneous comments: _____

Signed: Mark De

Witness: Ken





Computations

Project: ASSEMBLY SQ / IKEA

Project # 0851802

Location: LOWELL, MA

Sheet 1 of

Calculated by: DAG

Date: 3/16/02

Checked by: MUG

Date: 3/16/07

Title

HYDRANT FLOW TEST #1

RESIDUAL HYDRANT - # 2

FLOWED HYDRANT - # 1

2 1/2" ORIFICE

OUTLET SMOOTH & ROUNDED C = 0.90

STATIC PRESSURE @ #2 = 73 PSI

RESIDUAL PRESSURE @ #2 = 68 PSI

FLOWING PITOT PRESSURE @ #1 = 58

THEORETICAL FLOW : $Q = 29.83 C d^2 \sqrt{P}$

$$Q = 29.83 (.9) (2.5^2) (\sqrt{58}) = 1277.9 \text{ GPM}$$

⇒ CONVERSION TO BASE OF 20 PSI

$$Q_R = Q_F \times \frac{H_R^{.54}}{H_F^{.54}}$$

$$Q_R = 1278 \times \frac{(73 - 20)^{.54}}{(73 - 68)^{.54}} = \underline{\underline{4573 \text{ GPM @ 20 PSI}}}$$



Computations

Project:

Location:

Calculated by: DAG

Checked by:

Title

Project # 08518.03

Sheet 2 of 2

Date: 3/14/07

Date:

HYDRANT FLOW TEST #2

RESIDUAL HYDRANT - #3

FLOWED HYDRANT - #4

2 1/2" ORIFICE

OUTLET SMOOTH & ROUNDED $C = 0.90$

STATIC PRESSURE @ #3 = 66 PSI

RESIDUAL PRESSURE @ #3 = 61 PSI

FLOWING PRESSURE @ #4 = 48 PSI

THEORETICAL FLOW: $Q = 29.83 C d^2 \sqrt{P}$

$$Q = 29.83 (.9) (2.5^2) \sqrt{48} = 1162.5 \text{ GPM}$$

⇒ CONVERSION TO BASE OF 20 PSI

$$Q_R = Q_F \times \frac{H_R^{.54}}{H_F^{.54}}$$

$$Q_R = 1163 \times \frac{(66-20)^{.54}}{(66-61)^{.54}} = \underline{3855 \text{ GPM @ 20 PSI}}$$

Scenario: 3,500 ISO
Current Time Step: 0.000 Hr
Fire Flow Node FlexTable: Fire Flow Report

Label	Zone	Fire Flow Iterations	Satisfies Fire Flow Constraints?	Fire Flow (Needed) (gpm)	Fire Flow (Available) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)
A C Moore	Zone	11	False	3,500.00	2,247.37	3,503.00	2,250.37	20.0
Ashton Fuel/Hillside	Zone	4	False	3,500.00	3,190.13	3,502.00	3,192.13	20.0
Bed Bath & Beyond	Zone	9	False	3,500.00	2,923.59	3,503.00	2,926.59	20.0
Block 1	Zone	4	True	3,500.00	4,166.05	3,583.00	4,249.05	20.0
Block 2	Zone	4	True	3,500.00	4,119.76	3,540.00	4,159.76	20.0
Block 3	Zone	4	True	3,500.00	4,054.81	3,660.00	4,214.81	20.0
Block 4A	Zone	4	True	3,500.00	4,136.68	3,570.00	4,206.68	20.0
Block 5	Zone	4	True	3,500.00	4,157.55	3,604.00	4,261.55	20.0
Block 6A	Zone	4	True	3,500.00	4,082.57	3,524.00	4,106.57	20.0
Block 6B/C	Zone	4	True	3,500.00	4,116.45	3,601.00	4,217.45	20.0
Block 7A	Zone	4	True	3,500.00	4,111.53	3,636.00	4,247.53	20.0
Block 8A	Zone	4	True	3,500.00	4,017.12	3,543.00	4,060.12	20.0
Block 8B	Zone	4	True	3,500.00	4,121.07	3,581.00	4,202.07	20.0
Block 9	Zone	4	True	3,500.00	4,131.42	3,545.00	4,176.42	20.0
Block 10	Zone	3	True	3,500.00	3,608.71	3,511.00	3,619.71	20.0
Christian Assembly	Zone	4	True	3,500.00	4,337.15	3,501.00	4,338.15	20.0
Christmas Tree Shops	Zone	10	False	3,500.00	2,387.65	3,504.00	2,391.65	20.0
Circuit City	Zone	4	True	3,500.00	4,224.06	3,502.00	4,226.06	20.0
Court	Zone	4	True	3,500.00	4,250.56	3,503.00	4,253.56	20.0
Dam	Zone	4	True	3,500.00	4,288.47	3,501.00	4,289.47	20.0
Dunkin Donuts/Sunrise	Zone	4	True	3,500.00	4,359.93	3,503.00	4,362.93	20.0
Ecco Tracer	Zone	3	False	3,500.00	3,370.73	3,503.00	3,373.73	20.0
Enterprise	Zone	4	False	3,500.00	3,153.23	3,501.00	3,154.23	20.0
H-2	<None>	4	True	3,500.00	3,698.38	3,500.00	3,698.38	20.0
H-3	<None>	4	True	3,500.00	4,148.00	3,500.00	4,148.00	20.0
Home Depot	Zone	4	True	3,500.00	4,201.57	3,509.00	4,210.57	20.0
J-2	Zone	5	True	3,500.00	4,397.65	3,500.00	4,397.65	20.0
J-5	Zone	4	True	3,500.00	4,183.30	3,500.00	4,183.30	20.0
J-6	Zone	3	False	3,500.00	3,480.22	3,500.00	3,480.22	20.0
J-7	Zone	3	False	3,500.00	3,415.77	3,500.00	3,415.77	20.0
J-8	Zone	4	False	3,500.00	3,253.81	3,500.00	3,253.81	20.0
J-9	Zone	4	False	3,500.00	3,161.09	3,500.00	3,161.09	20.0
J-9	Zone	5	True	3,500.00	4,363.44	3,500.00	4,363.44	20.0
J-10	Zone	4	False	3,500.00	3,160.21	3,500.00	3,160.21	20.0
J-11	Zone	3	False	3,500.00	3,323.55	3,500.00	3,323.55	20.0
J-12	Zone	3	False	3,500.00	3,417.63	3,500.00	3,417.63	20.0
J-14	Zone	4	False	3,500.00	3,179.46	3,500.00	3,179.46	20.0
J-15	Zone	9	False	3,500.00	2,932.48	3,500.00	2,932.48	20.0
J-16	Zone	10	False	3,500.00	2,829.30	3,500.00	2,829.30	20.0
J-17	Zone	10	False	3,500.00	2,620.32	3,500.00	2,620.32	20.0
J-18	Zone	11	False	3,500.00	2,459.28	3,500.00	2,459.28	20.0
J-19	Zone	10	False	3,500.00	2,471.68	3,500.00	2,471.68	20.0
J-20	Zone	9	False	3,500.00	2,938.55	3,500.00	2,938.55	20.0
J-21	Zone	4	True	3,500.00	3,828.23	3,500.00	3,828.23	20.0
J-29	Zone	4	False	3,500.00	2,986.81	3,500.00	2,986.81	20.0
J-30	Zone	4	True	3,500.00	4,239.23	3,500.00	4,239.23	20.0
J-33	Zone	5	True	3,500.00	4,411.58	3,500.00	4,411.58	20.0
J-34	Zone	5	True	3,500.00	4,403.80	3,500.00	4,403.80	20.0
J-44	Zone	4	True	3,500.00	3,739.90	3,500.00	3,739.90	20.0
J-45	Zone	4	True	3,500.00	3,992.06	3,500.00	3,992.06	20.0
J-46	Zone	4	True	3,500.00	4,044.44	3,500.00	4,044.44	20.0
J-47	Zone	4	True	3,500.00	4,109.79	3,500.00	4,109.79	20.0
J-49	Zone	4	True	3,500.00	4,088.97	3,500.00	4,088.97	20.0
J-51	Zone	4	True	3,500.00	4,175.76	3,500.00	4,175.76	20.0
J-54	Zone	5	True	3,500.00	4,366.35	3,500.00	4,366.35	20.0
J-54	Zone	4	True	3,500.00	4,291.90	3,500.00	4,291.90	20.0
J-56	Zone	4	True	3,500.00	4,242.00	3,500.00	4,242.00	20.0
J-57	Zone	4	True	3,500.00	4,260.68	3,500.00	4,260.68	20.0
J-59	Zone	4	True	3,500.00	4,155.64	3,500.00	4,155.64	20.0
J-60	Zone	4	True	3,500.00	4,096.89	3,500.00	4,096.89	20.0
J-62	Zone	4	True	3,500.00	4,282.19	3,500.00	4,282.19	20.0
J-63	Zone	4	True	3,500.00	4,268.72	3,500.00	4,268.72	20.0

J-64	Zone	4	True	3,500.00	4,332.45	3,500.00	4,332.45	20.0
J-65	Zone	4	True	3,500.00	4,313.64	3,500.00	4,313.64	20.0
J-66	Zone	4	True	3,500.00	4,299.40	3,500.00	4,299.40	20.0
J-67	Zone	4	True	3,500.00	4,290.76	3,500.00	4,290.76	20.0
J-68	Zone	4	True	3,500.00	4,297.96	3,500.00	4,297.96	20.0
J-68	Zone	4	True	3,500.00	4,233.26	3,500.00	4,233.26	20.0
J-70	Zone	4	True	3,500.00	4,293.58	3,500.00	4,293.58	20.0
J-70	Zone	4	True	3,500.00	4,260.99	3,500.00	4,260.99	20.0
J-75	Zone	4	True	3,500.00	4,292.65	3,500.00	4,292.65	20.0
J-75	Zone	4	True	3,500.00	4,319.20	3,500.00	4,319.20	20.0
J-77	Zone	4	True	3,500.00	4,319.67	3,500.00	4,319.67	20.0
J-79	Zone	3	True	3,500.00	3,588.90	3,500.00	3,588.90	20.0
J-82	Zone	4	True	3,500.00	4,290.11	3,500.00	4,290.11	20.0
J-83	Zone	4	True	3,500.00	4,287.28	3,500.00	4,287.28	20.0
J-84	Zone	4	True	3,500.00	4,285.59	3,500.00	4,285.59	20.0
J-85	Zone	4	True	3,500.00	4,285.99	3,500.00	4,285.99	20.0
J-115	Zone	3	True	3,500.00	3,561.61	3,500.00	3,561.61	20.0
J-159	<None>	5	True	3,500.00	4,687.00	3,500.00	4,687.00	20.0
J-160	<None>	5	True	3,500.00	4,489.73	3,500.00	4,489.73	20.0
J-161	<None>	4	True	3,500.00	4,185.66	3,500.00	4,185.66	20.0
J-162	<None>	4	True	3,500.00	3,970.62	3,500.00	3,970.62	20.0
La Quinta	Zone	3	True	3,500.00	3,647.98	3,523.00	3,670.98	20.0
Office	Zone	4	True	3,500.00	4,128.02	3,510.00	4,138.02	20.0
Parcel 11A (Domestic)	Zone	4	True	3,500.00	4,168.72	3,620.00	4,288.72	20.0
Parcel 11A (Fire Connection)	Zone	4	True	3,500.00	4,257.46	3,500.00	4,257.46	20.0
Pub 99 Restaurant	Zone	4	True	3,500.00	4,281.75	3,517.00	4,298.75	20.0
Spaulding Brick	Zone	4	True	3,500.00	4,300.10	3,501.00	4,301.10	20.0
Sports Authority	Zone	4	False	3,500.00	3,043.81	3,503.00	3,046.80	20.0
Staples	Zone	10	False	3,500.00	2,575.26	3,503.00	2,578.26	20.0
T J Maxx	Zone	4	False	3,500.00	2,984.14	3,504.00	2,988.14	20.0
Theater	Zone	4	True	3,500.00	4,308.47	3,515.00	4,323.48	20.0
Truck Company	Zone	5	True	3,500.00	4,378.08	3,502.00	4,380.08	20.0
Warehouse	Zone	4	True	3,500.00	4,281.17	3,501.00	4,282.17	20.0
WHYC	Zone	4	True	3,500.00	4,285.77	3,501.00	4,286.77	20.0

\\Vhb\proj\Wat-LD\08518.05\tech\WaterCad\0851805 Water AmPUD MAY-2014.wtg

Scenario: 3,500 ISO
Current Time Step: 0.000 Hr
Pipe FlexTable:

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen- Williams C	Minor Loss Coefficient (Local)
P-63	308.53	J-63	J-64	20.0	Ductile Iron	130.0	0.390
P-66	263.28	J-66	J-67	20.0	Ductile Iron	130.0	0.390
P-32	96.71	J-33	Truck Company	20.0	Ductile Iron	130.0	1.280
P-22	498.70	Spaulding Brick	Court	20.0	Ductile Iron	80.0	0.390
P-64	140.75	J-64	J-65	20.0	Ductile Iron	130.0	0.390
P-65	47.49	J-65	J-66	20.0	Ductile Iron	130.0	0.390
P-36	257.64	J-68	J-54	20.0	Ductile Iron	130.0	0.390
P-35	50.22	J-54	J-9	20.0	Ductile Iron	130.0	0.390
P-49	267.82	J-49	J-51	12.0	Ductile Iron	110.0	1.280
P-31	187.12	Truck Company	Dunkin Donuts/Sunrise	20.0	Ductile Iron	80.0	0.390
P-3	299.22	Christian Assembly	Spaulding Brick	20.0	Ductile Iron	80.0	0.390
P-24	205.30	Pub 99 Restaurant	Warehouse	16.0	Ductile Iron	100.0	0.390
P-25	207.72	Warehouse	Dunkin Donuts/Sunrise	12.0	Ductile Iron	80.0	0.390
P-23	278.25	J-2	Pub 99 Restaurant	16.0	Ductile Iron	80.0	0.390
P-68	235.11	J-68	J-68	20.0	Ductile Iron	130.0	1.280
P-69	196.43	J-68	J-70	20.0	Ductile Iron	130.0	0.390
P-70	238.60	J-70	J-54	20.0	Ductile Iron	130.0	1.280
P-46	226.19	J-47	J-46	12.0	Ductile Iron	130.0	0.390
P-45	70.90	J-46	J-45	12.0	Ductile Iron	130.0	0.390
P-44	275.57	J-45	J-44	12.0	Ductile Iron	110.0	0.390
P-43	286.46	J-44	Ecco Tracer	12.0	Ductile Iron	110.0	0.390
P-42	167.96	Ecco Tracer	Ashton Fuel/Hillside	12.0	Ductile Iron	110.0	0.390
P-12	113.26	J-12	J-21	8.0	Ductile Iron	100.0	0.800
P-20	343.17	J-21	J-20	8.0	Ductile Iron	110.0	0.390
P-19	842.47	J-20	J-19	8.0	Ductile Iron	110.0	0.390
P-18	395.68	J-19	J-18	8.0	Ductile Iron	110.0	0.390
P-17	544.73	J-18	J-17	8.0	Ductile Iron	110.0	0.390
P-16	196.86	J-17	J-16	8.0	Ductile Iron	100.0	0.390
P-5	138.06	J-5	J-6	8.0	Ductile Iron	100.0	0.390
P-30	62.05	Court	J-30	20.0	Ductile Iron	80.0	1.280
P-27	387.48	Christian Assembly	La Quinta	8.0	Ductile Iron	80.0	0.390
P-26	198.54	La Quinta	Pub 99 Restaurant	8.0	Ductile Iron	100.0	0.390
P-29	903.03	J-30	J-29	8.0	Ductile Iron	90.0	1.280
P-28	299.41	J-29	La Quinta	8.0	Ductile Iron	100.0	0.390
P-34	266.62	J-9	J-34	20.0	Ductile Iron	130.0	0.390
P-33	32.58	J-34	J-33	20.0	Ductile Iron	130.0	0.390
P-21	99.15	J-21	J-34	8.0	Ductile Iron	110.0	0.390
P-39	400.51	Office	J-49	12.0	Ductile Iron	100.0	0.800
P-41	259.85	Ashton Fuel/Hillside	Enterprise	12.0	Ductile Iron	90.0	0.800
P-40	1,255.92	Enterprise	J-49	12.0	Ductile Iron	90.0	0.800
P-15	59.46	J-16	J-15	8.0	Ductile Iron	100.0	0.390
P-14A	129.72	J-15	Staples	6.0	Ductile Iron	120.0	0.390
P-14	103.47	J-15	J-14	8.0	Ductile Iron	100.0	0.390
P-13A	241.80	J-14	Christmas Tree Shops	6.0	Ductile Iron	120.0	1.280
P-6	15.75	J-6	J-7	8.0	Ductile Iron	100.0	0.390
P-6A	194.43	J-7	Sports Authority	8.0	Ductile Iron	120.0	0.390
P-13	210.30	J-14	J-5	8.0	Ductile Iron	100.0	0.390
P-4A	198.17	J-5	A C Moore	6.0	Ductile Iron	120.0	0.390
P-7	144.89	J-7	J-8	8.0	Ductile Iron	100.0	0.390
P-8	162.77	J-8	J-9	8.0	Ductile Iron	100.0	0.390
P-9	43.65	J-9	J-10	8.0	Ductile Iron	100.0	0.390
P-10	265.23	J-10	J-11	8.0	Ductile Iron	100.0	0.390
P-11	37.85	J-11	J-12	8.0	Ductile Iron	100.0	0.390
P-9A	180.47	J-10	T J Maxx	8.0	Ductile Iron	120.0	0.390
P-7A	181.77	J-8	Bed Bath & Beyond	8.0	Ductile Iron	120.0	0.390
P-4	72.49	J-5	Spaulding Brick	12.0	Ductile Iron	100.0	0.390
P-RV	26.87	R-1	PMP-1	30.0	Ductile Iron	130.0	0.000
P-1	49.52	PMP-1	J-65	30.0	Ductile Iron	130.0	0.000
P-57	179.00	J-70	J-57	20.0	Ductile Iron	130.0	0.390
P-56	114.20	J-57	J-56	20.0	Ductile Iron	130.0	0.390
P-47	172.73	Circuit City	J-47	12.0	Ductile Iron	130.0	0.390
P-51	326.19	J-51	J-54	12.0	Ductile Iron	110.0	0.390
P-52	188.85	J-54	Home Depot	12.0	Ductile Iron	130.0	0.390
P-50	1,286.01	J-46	J-51	10.0	Ductile Iron	110.0	0.390

P-67	370.36	J-67	J-68	20.0	Ductile Iron	130.0	0.390
P-77	83.16	J-75	J-77	20.0	Ductile Iron	130.0	0.390
P-76	380.49	J-77	J-65	20.0	Ductile Iron	130.0	0.390
P-75	188.99	J-75	J-75	20.0	Ductile Iron	130.0	0.390
P-73	149.94	J-75	WHYC	20.0	Ductile Iron	130.0	0.390
P-81	140.24	J-68	J-82	20.0	Ductile Iron	130.0	0.390
P-78	299.65	J-67	J-79	8.0	Ductile Iron	130.0	0.390
P-79	171.30	J-79	J-115	8.0	Ductile Iron	130.0	0.390
P-85	84.37	Dam	J-85	20.0	Ductile Iron	130.0	0.390
P-84	186.51	J-85	J-84	20.0	Ductile Iron	130.0	0.390
P-76B	76.22	Block 1	J-77	12.0	Ductile Iron	130.0	0.390
P-75B	111.32	Block 2	J-75	12.0	Ductile Iron	130.0	0.390
P-81B	72.10	J-82	Block 5	12.0	Ductile Iron	130.0	0.390
P-84B	104.77	Block 6B/C	J-85	12.0	Ductile Iron	130.0	0.390
P-83A	203.07	Block 8A	J-84	12.0	Ductile Iron	130.0	0.390
P-84A	102.44	Block 8B	J-85	12.0	Ductile Iron	130.0	0.390
P-69A	53.57	Block 9	J-70	12.0	Ductile Iron	130.0	0.390
P-55	241.85	J-56	Parcel 11A (Fire Connection)	20.0	Ductile Iron	130.0	0.390
P-54	162.57	Parcel 11A (Fire Connection)	J-54	20.0	Ductile Iron	130.0	0.390
P-37	380.14	Truck Company	Theater	20.0	Ductile Iron	80.0	0.800
P-38	279.28	Theater	Office	12.0	Ductile Iron	100.0	0.800
P-60	675.92	J-60	J-70	12.0	Ductile Iron	130.0	0.390
P-58	83.19	Circuit City	J-59	12.0	Ductile Iron	130.0	0.390
P-59	398.81	J-59	J-60	12.0	Ductile Iron	130.0	0.390
P-53	99.53	Home Depot	Parcel 11A (Domestic)	12.0	Ductile Iron	130.0	0.390
P-48	330.28	Parcel 11A (Domestic)	Circuit City	12.0	Ductile Iron	130.0	0.390
P-76A	169.97	J-77	Block 3	12.0	Ductile Iron	130.0	0.390
P-75A	93.56	J-75	Block 4A	12.0	Ductile Iron	130.0	0.390
P-83B	141.24	Block 6A	J-84	12.0	Ductile Iron	130.0	0.390
P-61	1,024.72	Court	J-62	20.0	Ductile Iron	130.0	0.800
P-62	277.24	J-62	J-63	20.0	Ductile Iron	130.0	0.800
P-61A	89.16	J-62	Block 10	8.0	Ductile Iron	130.0	0.390
P-71	612.22	Dam	J-70	20.0	Ductile Iron	130.0	0.390
P-82	323.16	J-83	J-82	20.0	Ductile Iron	130.0	0.390
P-83	91.32	J-84	J-83	20.0	Ductile Iron	130.0	0.390
P-2	280.48	Christian Assembly	J-2	20.0	Ductile Iron	80.0	0.390
P-1A	213.28	J-2	Dunkin Donuts/Sunrise	20.0	Ductile Iron	80.0	0.390
P-74	819.64	J-63	J-75	8.0	Ductile Iron	130.0	0.390
P-81A	97.06	Block 7A	J-82	12.0	Ductile Iron	130.0	0.390
P-80	349.19	J-115	J-83	8.0	Ductile Iron	130.0	0.390
P-56A	458.24	J-57	J-83	12.0	Ductile Iron	130.0	0.390
P-242	517.45	WHYC	J-159	20.0	Ductile Iron	130.0	0.390
P-243	374.38	J-159	Dam	20.0	Ductile Iron	130.0	0.390
P-244	151.05	J-159	J-160	12.0	Ductile Iron	130.0	0.000
P-245	281.80	J-160	J-161	12.0	Ductile Iron	130.0	0.000
P-247	11.17	J-160	H-3	6.0	Ductile Iron	130.0	0.000
P-248	34.32	J-161	J-162	8.0	Ductile Iron	130.0	0.000
P-249	12.61	J-162	H-2	6.0	Ductile Iron	130.0	0.000

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Scenario: 3,500 ISO
Current Time Step: 0.000 Hr
Junction FlexTable:

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
Court	12.60	3.00	168.88	67.6
J-63	13.40	0.00	168.89	67.3
J-64	12.00	0.00	168.90	67.9
J-66	13.20	0.00	168.90	67.4
J-67	13.00	0.00	168.88	67.4
J-68	12.50	0.00	168.87	67.7
J-9	10.00	0.00	168.87	68.7
J-33	8.20	0.00	168.87	69.5
Truck Company	9.10	2.00	168.87	69.1
Spaulding Brick	10.70	1.00	168.87	68.4
J-65	13.00	0.00	168.90	67.5
J-70	12.00	0.00	168.86	67.9
J-56	13.50	0.00	168.86	67.2
J-54	10.00	0.00	168.87	68.7
J-49	12.00	0.00	168.86	67.9
J-51	10.70	0.00	168.86	68.4
Dunkin Donuts/Sunrise	9.20	3.00	168.87	69.1
Christian Assembly	9.50	1.00	168.87	69.0
Pub 99 Restaurant	9.20	17.00	168.87	69.1
Warehouse	8.40	1.00	168.87	69.4
J-2	7.80	0.00	168.87	69.7
J-68	14.00	0.00	168.86	67.0
J-70	13.00	0.00	168.86	67.4
J-54	12.00	0.00	168.86	67.9
Home Depot	11.00	9.00	168.86	68.3
J-47	10.50	0.00	168.86	68.5
J-46	11.00	0.00	168.86	68.3
J-45	11.30	0.00	168.86	68.2
J-44	15.50	0.00	168.86	66.4
Ecco Tracer	26.00	3.00	168.86	61.8
Ashton Fuel/Hillside	31.50	2.00	168.86	59.4
J-12	9.00	0.00	168.87	69.2
J-21	9.50	0.00	168.87	69.0
J-20	9.10	0.00	168.87	69.1
J-19	10.80	0.00	168.87	68.4
J-18	11.50	0.00	168.87	68.1
J-17	12.00	0.00	168.87	67.9
J-16	10.70	0.00	168.87	68.4
J-5	10.70	0.00	168.87	68.4
J-6	10.10	0.00	168.87	68.7
J-10	8.00	0.00	168.87	69.6
J-30	12.20	0.00	168.88	67.8
La Quinta	10.50	23.00	168.87	68.5
J-29	11.50	0.00	168.87	68.1
J-34	8.50	0.00	168.87	69.4
Office	9.80	10.00	168.86	68.8
Enterprise	31.50	1.00	168.86	59.4
J-15	10.10	0.00	168.87	68.7
Staples	11.40	3.00	168.87	68.1
J-14	8.40	0.00	168.87	69.4
Christmas Tree Shops	11.40	4.00	168.87	68.1
J-7	10.30	0.00	168.87	68.6
Sports Authority	10.80	3.00	168.87	68.4
A C Moore	11.40	3.00	168.87	68.1
J-8	7.50	0.00	168.87	69.8

J-9	8.00	0.00	168.87	69.6
J-11	9.50	0.00	168.87	69.0
T J Maxx	10.60	4.00	168.87	68.5
Bed Bath & Beyond	11.10	3.00	168.87	68.3
J-57	13.00	0.00	168.86	67.4
Circuit City	9.00	2.00	168.86	69.2
J-83	12.50	0.00	168.86	67.7
J-115	12.20	0.00	168.87	67.8
J-75	11.90	0.00	168.87	67.9
WHYC	12.60	1.00	168.87	67.6
Dam	12.50	1.00	168.86	67.7
J-77	12.00	0.00	168.88	67.9
J-75	12.50	0.00	168.87	67.7
J-82	12.50	0.00	168.86	67.7
J-79	12.00	0.00	168.88	67.9
J-84	12.50	0.00	168.86	67.7
J-85	12.50	0.00	168.86	67.7
Block 1	13.00	83.00	168.87	67.4
Block 2	13.00	40.00	168.87	67.4
Block 3	13.00	160.00	168.86	67.4
Block 4A	13.00	70.00	168.87	67.4
Block 5	13.00	104.00	168.86	67.4
Block 6A	13.00	24.00	168.86	67.4
Block 6B/C	13.00	101.00	168.86	67.4
Block 7A	13.50	136.00	168.86	67.2
Block 8A	13.00	43.00	168.86	67.4
Block 8B	13.00	81.00	168.86	67.4
Block 9	14.20	45.00	168.86	66.9
Parcel 11A (Fire Connection)	13.00	0.00	168.86	67.4
Theater	9.31	15.00	168.87	69.0
J-60	11.00	0.00	168.86	68.3
J-59	10.30	0.00	168.86	68.6
Parcel 11A (Domestic)	11.00	120.00	168.86	68.3
J-62	12.50	0.00	168.89	67.7
Block 10	12.00	11.00	168.89	67.9
J-159	0.00	0.00	168.87	73.1
J-160	0.00	0.00	168.87	73.1
J-161	0.00	0.00	168.87	73.1
J-162	0.00	0.00	168.87	73.1

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Appendix B

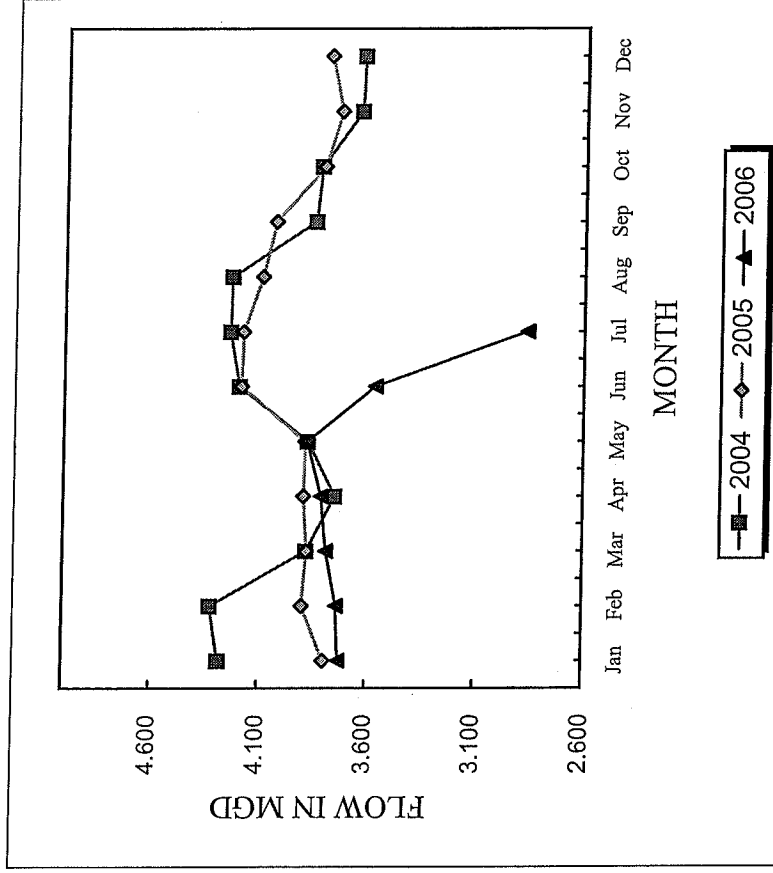
MWRA Meter 91 Readings

Somerville - Total Daily Flow

8/8/2006

Low Service

Month	2004 Flow (MGD)	2005 Flow (MGD)	2006 Flow (MGD)
Jan	4.280	3.796	3.727
Feb	4.321	3.897	3.739
Mar	3.879	3.878	3.789
Apr	3.750	3.895	3.814
May	3.877	3.889	3.880
Jun	4.196	4.187	3.564
Jul	4.240	4.181	2.864
Aug	4.234	4.093	
Sep	3.852	4.034	
Oct	3.826	3.813	
Nov	3.642	3.736	
Dec	3.632	3.787	
Average	3.978	3.929	



Meter 91 Flows:

MWRA Meter 91 daily Flows

Time	CH 1 High Flow	CH 2 Pressure (HGL)
12/9/2003 0:00	1.053	
12/10/2003 0:00	1.042	
12/11/2003 0:00	1.081	
12/12/2003 0:00	1.079	
12/13/2003 0:00	1.103	
12/14/2003 0:00	1.121	
12/15/2003 0:00	1.212	
12/16/2003 0:00	1.046	
12/17/2003 0:00	1.019	
12/18/2003 0:00	1.026	
12/19/2003 0:00	0.998	
12/20/2003 0:00	0.96	
12/21/2003 0:00	0.95	
12/22/2003 0:00	1.021	
12/23/2003 0:00	0.912	
12/24/2003 0:00	0.874	
12/25/2003 0:00	0.822	
12/26/2003 0:00	0.953	
12/27/2003 0:00	0.976	
12/28/2003 0:00	0.976	
12/29/2003 0:00	1.046	
12/30/2003 0:00	1.077	
12/31/2003 0:00	1.071	
1/1/2004 0:00	0.959	
1/2/2004 0:00	0.943	
1/3/2004 0:00	0.928	
1/4/2004 0:00	0.949	
1/5/2004 0:00	0.941	
1/6/2004 0:00	1.027	
1/7/2004 0:00	1.094	186.27
1/8/2004 0:00	1.132	186.61
1/9/2004 0:00	1.127	187.009
1/10/2004 0:00	1.159	186.525
1/11/2004 0:00	1.199	187.002
1/12/2004 0:00	1.238	187.934
1/13/2004 0:00	1.103	184.955
1/14/2004 0:00	1.079	183.661
1/15/2004 0:00	1.093	184.041
1/16/2004 0:00	1.128	183.913
1/17/2004 0:00	1.163	183.674
1/18/2004 0:00	1.083	183.203
1/19/2004 0:00	1.131	183.886
1/20/2004 0:00	1.11	184.27
1/21/2004 0:00	1.094	184.339
1/22/2004 0:00	1.08	183.91
1/23/2004 0:00	1.096	184.261
1/24/2004 0:00	1.134	183.889
1/25/2004 0:00	1.127	183.916
1/26/2004 0:00	1.162	184.783

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
1/27/2004 0:00	1.188	184.651
1/28/2004 0:00	1.176	184.672
1/29/2004 0:00	1.29	184.858
1/30/2004 0:00	1.147	184.736
1/31/2004 0:00	1.169	184.103
2/1/2004 0:00	1.172	184.044
2/2/2004 0:00	1.156	184.602
2/3/2004 0:00	1.15	184.545
2/4/2004 0:00	1.188	184.682
2/5/2004 0:00	1.168	184.376
2/6/2004 0:00	1.105	184.078
2/7/2004 0:00	1.127	183.566
2/8/2004 0:00	1.119	183.341
2/9/2004 0:00	1.111	183.88
2/10/2004 0:00	1.12	183.813
2/11/2004 0:00	1.096	183.707
2/12/2004 0:00	1.147	184.23
2/13/2004 0:00	1.151	184.278
2/14/2004 0:00	1.179	183.346
2/15/2004 0:00	1.152	183.133
2/16/2004 0:00	1.179	183.671
2/17/2004 0:00	1.224	184.984
2/18/2004 0:00	1.293	185.555
2/19/2004 0:00	1.26	184.254
2/20/2004 0:00	1.135	183.789
2/21/2004 0:00	1.104	182.821
2/22/2004 0:00	1.126	182.732
2/23/2004 0:00	1.107	183.268
2/24/2004 0:00	1.085	182.854
2/25/2004 0:00	1.079	183.323
2/26/2004 0:00	1.052	182.972
2/27/2004 0:00	1.051	183.495
2/28/2004 0:00	1.087	183.115
2/29/2004 0:00	1.057	183.172
3/1/2004 0:00	1.05	183.546
3/2/2004 0:00	1.024	183.23
3/3/2004 0:00	0.998	183.318
3/4/2004 0:00	0.913	183.468
3/5/2004 0:00	0.896	183.562
3/6/2004 0:00	0.928	183.358
3/7/2004 0:00	0.937	183.492
3/8/2004 0:00	0.898	183.907
3/9/2004 0:00	0.894	183.808
3/10/2004 0:00	0.917	184.006
3/11/2004 0:00	0.911	178.064
3/12/2004 0:00	0.887	184.164
3/13/2004 0:00	1.14	183.785
3/14/2004 0:00	0.949	183.044
3/15/2004 0:00	0.92	183.777
3/16/2004 0:00	0.883	184.157
3/17/2004 0:00	0.901	184.455

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
3/18/2004 0:00	0.896	184.393
3/19/2004 0:00	0.907	184.771
3/20/2004 0:00	0.952	184.715
3/21/2004 0:00	0.941	184.932
3/22/2004 0:00	0.898	185.155
3/23/2004 0:00	0.904	185.471
3/24/2004 0:00	0.911	185.2
3/25/2004 0:00	0.904	185.309
3/26/2004 0:00	0.908	185.167
3/27/2004 0:00	0.945	185.037
3/28/2004 0:00	0.947	184.92
3/29/2004 0:00	0.919	185.067
3/30/2004 0:00	0.901	185.161
3/31/2004 0:00	0.896	184.609
4/1/2004 0:00	1.07	184.851
4/2/2004 0:00	1.098	184.303
4/3/2004 0:00	1.034	184.423
4/4/2004 0:00	0.986	183.897
4/5/2004 0:00	0.908	183.592
4/6/2004 0:00	0.919	184.742
4/7/2004 0:00	0.914	184.556
4/8/2004 0:00	0.901	184.444
4/9/2004 0:00	0.924	184.554
4/10/2004 0:00	0.953	184.119
4/11/2004 0:00	0.905	183.978
4/12/2004 0:00	0.905	183.985
4/13/2004 0:00	0.95	184.309
4/14/2004 0:00	0.914	183.866
4/15/2004 0:00	0.896	183.84
4/16/2004 0:00	0.9	183.918
4/17/2004 0:00	0.944	183.671
4/18/2004 0:00	0.922	183.498
4/19/2004 0:00	0.945	183.555
4/20/2004 0:00	0.942	183.431
4/21/2004 0:00	0.917	183.004
4/22/2004 0:00	0.944	182.497
4/23/2004 0:00	0.878	182.829
4/24/2004 0:00	0.931	182.881
4/25/2004 0:00	0.928	183.059
4/26/2004 0:00	0.888	182.84
4/27/2004 0:00	0.903	182.996
4/28/2004 0:00	0.911	182.905
4/29/2004 0:00	0.931	182.59
4/30/2004 0:00	0.959	182.481
5/1/2004 0:00	0.969	181.757
5/2/2004 0:00	0.958	181.638
5/3/2004 0:00	0.925	181.967
5/4/2004 0:00	0.916	181.415
5/5/2004 0:00	0.931	181.994
5/6/2004 0:00	0.913	182.41
5/7/2004 0:00	0.936	181.368

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
5/8/2004 0:00	0.931	182.06
5/9/2004 0:00	0.905	182.338
5/10/2004 0:00	0.919	182.568
5/11/2004 0:00	0.982	181.67
5/12/2004 0:00	0.971	181.285
5/13/2004 0:00	0.964	180.856
5/14/2004 0:00	0.954	181.781
5/15/2004 0:00	1.384	181.6
5/16/2004 0:00	0.994	180.943
5/17/2004 0:00	0.994	181.465
5/18/2004 0:00	1.006	181.987
5/19/2004 0:00	0.992	181.153
5/20/2004 0:00	1.016	181.083
5/21/2004 0:00	1.025	181.117
5/22/2004 0:00	1.016	180.858
5/23/2004 0:00	1.029	181.418
5/24/2004 0:00	0.97	181.776
5/25/2004 0:00	0.966	182.062
5/26/2004 0:00	0.968	182.125
5/27/2004 0:00	0.983	182.003
5/28/2004 0:00	0.962	182.169
5/29/2004 0:00	0.982	182.22
5/30/2004 0:00	0.953	182.047
5/31/2004 0:00	1.05	181.508
6/1/2004 0:00	0.976	181.894
6/2/2004 0:00	1.046	180.872
6/3/2004 0:00	1.037	180.715
6/4/2004 0:00	1.025	180.56
6/5/2004 0:00	0.988	180.576
6/6/2004 0:00	0.972	180.926
6/7/2004 0:00	0.989	180.982
6/8/2004 0:00	1.125	180.521
6/9/2004 0:00	1.148	180.085
6/10/2004 0:00	1.025	180.566
6/11/2004 0:00	1.073	180.752
6/12/2004 0:00	1.095	180.918
6/13/2004 0:00	1.106	180.879
6/14/2004 0:00	1.116	180.995
6/15/2004 0:00	1.202	180.671
6/16/2004 0:00	1.185	180.985
6/17/2004 0:00	1.151	181.841
6/18/2004 0:00	1.077	180.721
6/19/2004 0:00	1.083	181.318
6/20/2004 0:00	1.037	181.308
6/21/2004 0:00	1.09	181.206
6/22/2004 0:00	1.131	183.46
6/23/2004 0:00	1.147	182.82
6/24/2004 0:00	1.168	183.442
6/25/2004 0:00	1.127	182.216
6/26/2004 0:00	1.025	181.045
6/27/2004 0:00	1.027	180.998

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
6/28/2004 0:00	1.18	181.958
6/29/2004 0:00	1.202	182.761
6/30/2004 0:00	1.269	183.446
7/1/2004 0:00	1.257	183.088
7/2/2004 0:00	1.162	179.79
7/3/2004 0:00	1.085	178.764
7/4/2004 0:00	1.047	179.172
7/5/2004 0:00	1.068	179.666
7/6/2004 0:00	1.176	181.74
7/7/2004 0:00	1.222	180.83
7/8/2004 0:00	1.221	182.651
7/9/2004 0:00	1.236	183.054
7/10/2004 0:00	1.181	181.521
7/11/2004 0:00	1.157	182.012
7/12/2004 0:00	1.269	183.443
7/13/2004 0:00	1.179	182.362
7/14/2004 0:00	1.171	183.765
7/15/2004 0:00	1.218	184.137
7/16/2004 0:00	1.257	183.798
7/17/2004 0:00	1.244	184.4
7/18/2004 0:00	1.201	183.184
7/19/2004 0:00	1.2	183.704
7/20/2004 0:00	1.281	184.344
7/21/2004 0:00	1.316	184.086
7/22/2004 0:00	1.352	184.327
7/23/2004 0:00	1.328	184.797
7/24/2004 0:00	1.17	182.528
7/25/2004 0:00	1.151	181.981
7/26/2004 0:00	1.212	182.973
7/27/2004 0:00	1.149	182.429
7/28/2004 0:00	1.112	182.124
7/29/2004 0:00	1.191	183.06
7/30/2004 0:00	1.242	183.112
7/31/2004 0:00	1.195	182.185
8/1/2004 0:00	1.146	181.463
8/2/2004 0:00	1.266	182.715
8/3/2004 0:00	1.298	183.515
8/4/2004 0:00	1.26	182.979
8/5/2004 0:00	1.193	183.007
8/6/2004 0:00	1.17	182.869
8/7/2004 0:00	1.211	182.123
8/8/2004 0:00	1.117	181.966
8/9/2004 0:00	1.237	183.096
8/10/2004 0:00	1.261	185.377
8/11/2004 0:00	1.249	185.825
8/12/2004 0:00	1.264	185.782
8/13/2004 0:00	1.074	178.869
8/14/2004 0:00	0.992	175.663
8/15/2004 0:00	0.969	176.109
8/16/2004 0:00	0.983	174.155
8/17/2004 0:00	0.984	176.065

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
8/18/2004 0:00	1.005	176.332
8/19/2004 0:00	1.06	176.159
8/20/2004 0:00	1.059	176.332
8/21/2004 0:00	0.99	176.454
8/22/2004 0:00	0.972	176.978
8/23/2004 0:00	0.992	176.799
8/24/2004 0:00	0.99	177.245
8/25/2004 0:00	0.992	177.728
8/26/2004 0:00	1.024	177.547
8/27/2004 0:00	1.029	177.271
8/28/2004 0:00	1.03	176.625
8/29/2004 0:00	1.036	176.519
8/30/2004 0:00	1.081	177.385
8/31/2004 0:00	1.017	177.284
9/1/2004 0:00	1.283	177.398
9/2/2004 0:00	1.089	177.502
9/3/2004 0:00	1.056	177.377
9/4/2004 0:00	1.033	177.49
9/5/2004 0:00	0.978	177.856
9/6/2004 0:00	1.041	177.858
9/7/2004 0:00	0.991	178.084
9/8/2004 0:00	0.991	177.752
9/9/2004 0:00	0.991	178.02
9/10/2004 0:00	0.991	178.09
9/11/2004 0:00	0.991	178.283
9/12/2004 0:00	0.991	178.35
9/13/2004 0:00	0.991	178.677
9/14/2004 0:00	0.991	178.976
9/15/2004 0:00	0.991	178.792
9/16/2004 0:00	0.991	166.019
9/17/2004 0:00	1.18	179.504
9/18/2004 0:00	1.148	178.918
9/19/2004 0:00	1.107	178.561
9/20/2004 0:00	1.087	179.848
9/21/2004 0:00	1.065	179.491
9/22/2004 0:00	1.111	179.482
9/23/2004 0:00	1.09	178.981
9/24/2004 0:00	1.076	179.343
9/25/2004 0:00	1.062	178.417
9/26/2004 0:00	1.044	177.903
9/27/2004 0:00	1.071	178.944
9/28/2004 0:00	1.073	179.298
9/29/2004 0:00	1.006	178.267
9/30/2004 0:00	1	179.083
10/1/2004 0:00	1.042	179.808
10/2/2004 0:00	1.004	178.111
10/3/2004 0:00	1.014	178.165
10/4/2004 0:00	1.04	179.028
10/5/2004 0:00	1.079	179.589
10/6/2004 0:00	1.058	179.419
10/7/2004 0:00	1.128	180.397

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
10/8/2004 0:00	1.077	179.566
10/9/2004 0:00	1.067	179.171
10/10/2004 0:00	1.017	178.905
10/11/2004 0:00	1.08	178.803
10/12/2004 0:00	0.584	180.482
10/13/2004 0:00	0	
10/14/2004 0:00	0	179.427
10/15/2004 0:00	0	180.108
10/16/2004 0:00	0	179.818
10/17/2004 0:00	0	180.116
10/18/2004 0:00	0	180.443
10/19/2004 0:00	0	180.634
10/20/2004 0:00	0	180.856
10/21/2004 0:00	0	180.836
10/22/2004 0:00	0	181.1
10/23/2004 0:00	0	180.885
10/24/2004 0:00	0	180.967
10/25/2004 0:00	0	180.918
10/26/2004 0:00	0	181.25
10/27/2004 0:00	0	181.761
10/28/2004 0:00	0	181.049
10/29/2004 0:00	0	181.437
10/30/2004 0:00	0	180.827
10/31/2004 0:00	0	181.313
11/1/2004 0:00	0	181.22
11/2/2004 0:00	0	181.52
11/3/2004 0:00	0	181.647
11/4/2004 0:00	0	181.696
11/5/2004 0:00	0	182.076
11/6/2004 0:00	0	181.405
11/7/2004 0:00	0	181.162
11/8/2004 0:00	0	182.304
11/9/2004 0:00	0	182.229
11/10/2004 0:00	0	182.317
11/11/2004 0:00	0	182.328
11/12/2004 0:00	0	182.349
11/13/2004 0:00	0	181.755
11/14/2004 0:00	0	181.686
11/15/2004 0:00	0	182.213
11/16/2004 0:00	0	181.919
11/17/2004 0:00	0	182.318
11/18/2004 0:00	0	182.77
11/19/2004 0:00	0	182.737
11/20/2004 0:00	0	182.039
11/21/2004 0:00	0	182.158
11/22/2004 0:00	0	182.998
11/23/2004 0:00	0	182.492
11/24/2004 0:00	0	182.355
11/25/2004 0:00	0	181.467
11/26/2004 0:00	0	181.736
11/27/2004 0:00	0	181.499

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
11/28/2004 0:00	0	181.882
11/29/2004 0:00	0	166.426
11/30/2004 0:00	0	
12/1/2004 0:00	0	
12/2/2004 0:00	0	
12/3/2004 0:00	0	
12/4/2004 0:00	0	
12/5/2004 0:00	0	
12/6/2004 0:00	0	
12/7/2004 0:00	0	
12/8/2004 0:00	0	
12/9/2004 0:00	0	
12/10/2004 0:00	0	
12/11/2004 0:00	0	
12/12/2004 0:00	0	
12/13/2004 0:00	0	
12/14/2004 0:00	0	
12/15/2004 0:00	0	
12/16/2004 0:00	0	
12/17/2004 0:00	0	
12/18/2004 0:00	0	
12/19/2004 0:00	0	
12/20/2004 0:00	0	
12/21/2004 0:00	0	
12/22/2004 0:00	0	
12/23/2004 0:00	0	
12/24/2004 0:00	0	
12/25/2004 0:00	0	
12/26/2004 0:00	0	
12/27/2004 0:00	0	
12/28/2004 0:00	0	
12/29/2004 0:00	0	
12/30/2004 0:00	0	
12/31/2004 0:00	0	
1/1/2005 0:00	0	
1/2/2005 0:00	0	
1/3/2005 0:00	0	
1/4/2005 0:00	0	
1/5/2005 0:00	0	
1/6/2005 0:00	0	
1/7/2005 0:00	0	
1/8/2005 0:00	0	
1/9/2005 0:00	0	
1/10/2005 0:00	0	
1/11/2005 0:00	0	
1/12/2005 0:00	0	
1/13/2005 0:00	0	
1/14/2005 0:00	0	
1/15/2005 0:00	0	
1/16/2005 0:00	0	
1/17/2005 0:00	0	

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
1/18/2005 0:00	0	
1/19/2005 0:00	0	
1/20/2005 0:00	0	
1/21/2005 0:00	0	
1/22/2005 0:00	0	
1/23/2005 0:00	0	
1/24/2005 0:00	0	
1/25/2005 0:00	0	
1/26/2005 0:00	0	
1/27/2005 0:00	0	
1/28/2005 0:00	0	
1/29/2005 0:00	0	
1/30/2005 0:00	0	
1/31/2005 0:00	0	
2/1/2005 0:00	0	
2/2/2005 0:00	0	
2/3/2005 0:00	0	
2/4/2005 0:00	0	
2/5/2005 0:00	0	
2/6/2005 0:00	0	
2/7/2005 0:00	0	
2/8/2005 0:00	0	
2/9/2005 0:00	0	
2/10/2005 0:00	0	
2/11/2005 0:00	0	
2/12/2005 0:00	0	
2/13/2005 0:00	0	
2/14/2005 0:00	0	
2/15/2005 0:00	0	
2/16/2005 0:00	0	
2/17/2005 0:00	0	
2/18/2005 0:00	0	
2/19/2005 0:00	0	
2/20/2005 0:00	0	
2/21/2005 0:00	0	
2/22/2005 0:00	0	
2/23/2005 0:00	0	
2/24/2005 0:00	0	
2/25/2005 0:00	0	
2/26/2005 0:00	0	
2/27/2005 0:00	0	
2/28/2005 0:00	0	
3/1/2005 0:00	0	
3/2/2005 0:00	0	
3/3/2005 0:00	0	
3/4/2005 0:00	0	
3/5/2005 0:00	0	
3/6/2005 0:00	0	
3/7/2005 0:00	0	
3/8/2005 0:00	0	
3/9/2005 0:00	0	

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
3/10/2005 0:00	0	
3/11/2005 0:00	0	
3/12/2005 0:00	0	
3/13/2005 0:00	0	
3/14/2005 0:00	0	
3/15/2005 0:00	0	
3/16/2005 0:00	0	
3/17/2005 0:00	0	
3/18/2005 0:00	0	
3/19/2005 0:00	0	
3/20/2005 0:00	0	
3/21/2005 0:00	0	
3/22/2005 0:00	0	
3/23/2005 0:00	0	
3/24/2005 0:00	0	
3/25/2005 0:00	0	
3/26/2005 0:00	0	
3/27/2005 0:00	0	
3/28/2005 0:00	0	
3/29/2005 0:00	0	
3/30/2005 0:00	0	
3/31/2005 0:00	0	
4/1/2005 0:00	0	
4/2/2005 0:00	0	
4/3/2005 0:00	0	
4/4/2005 0:00	0	
4/5/2005 0:00	0	
4/6/2005 0:00	0	
4/7/2005 0:00	0	
4/8/2005 0:00	0	
4/9/2005 0:00	0	
4/10/2005 0:00	0	
4/11/2005 0:00	0	
4/12/2005 0:00	0	
4/13/2005 0:00	0	
4/14/2005 0:00	0	
4/15/2005 0:00	0	
4/16/2005 0:00	0	
4/17/2005 0:00	0	
4/18/2005 0:00	0	
4/19/2005 0:00	0	
4/20/2005 0:00	0	
4/21/2005 0:00	0	
4/22/2005 0:00	0	
4/23/2005 0:00	0	
4/24/2005 0:00	0	
4/25/2005 0:00	0	
4/26/2005 0:00	0	
4/27/2005 0:00	0	
4/28/2005 0:00	0	
4/29/2005 0:00	0	

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
4/30/2005 0:00	0	
5/1/2005 0:00	0	
5/2/2005 0:00	0	
5/3/2005 0:00	0	
5/4/2005 0:00	0	
5/5/2005 0:00	0	
5/6/2005 0:00	0	
5/7/2005 0:00	0	
5/8/2005 0:00	0	
5/9/2005 0:00	0	
5/10/2005 0:00	0	
5/11/2005 0:00	0	
5/12/2005 0:00	0	
5/13/2005 0:00	0	
5/14/2005 0:00	0	
5/15/2005 0:00	0	
5/16/2005 0:00	0	
5/17/2005 0:00	0	
5/18/2005 0:00	0	
5/19/2005 0:00	0	
5/20/2005 0:00	0	
5/21/2005 0:00	0	
5/22/2005 0:00	0	
5/23/2005 0:00	0	
5/24/2005 0:00	0	
5/25/2005 0:00	0	
5/26/2005 0:00	0	
5/27/2005 0:00	0	
5/28/2005 0:00	0	
5/29/2005 0:00	0	
5/30/2005 0:00	0	
5/31/2005 0:00	0	
6/1/2005 0:00	0	
6/2/2005 0:00	0	
6/3/2005 0:00	0	
6/4/2005 0:00	0	
6/5/2005 0:00	0	
6/6/2005 0:00	0	
6/7/2005 0:00	0	
6/8/2005 0:00	0	178.778
6/9/2005 0:00	0	179.743
6/10/2005 0:00	0	179.731
6/11/2005 0:00	0	179.585
6/12/2005 0:00	0	179.552
6/13/2005 0:00	0	179.738
6/14/2005 0:00	0	179.71
6/15/2005 0:00	0	180.619
6/16/2005 0:00	0	180.673
6/17/2005 0:00	0	180.159
6/18/2005 0:00	0	180.443
6/19/2005 0:00	0	180.54

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
6/20/2005 0:00	0	184.007
6/21/2005 0:00	0	183.715
6/22/2005 0:00	0	183.694
6/23/2005 0:00	0	182.204
6/24/2005 0:00	0	179.489
6/25/2005 0:00	0	179.167
6/26/2005 0:00	0	179.359
6/27/2005 0:00	0	179.436
6/28/2005 0:00	0	179.393
6/29/2005 0:00	0	180.196
6/30/2005 0:00	0	179.392
7/1/2005 0:00	0	179.025
7/2/2005 0:00	0	178.21
7/3/2005 0:00	0	176.216
7/4/2005 0:00	0	176.991
7/5/2005 0:00	0	179.828
7/6/2005 0:00	0	178.701
7/7/2005 0:00	0	177.141
7/8/2005 0:00	0	176.871
7/9/2005 0:00	0	177.005
7/10/2005 0:00	0	177.516
7/11/2005 0:00	0	179.832
7/12/2005 0:00	0.437	179.18
7/13/2005 0:00	0.951	179.172
7/14/2005 0:00	0.95	179.186
7/15/2005 0:00	0.964	178.716
7/16/2005 0:00	0.959	178.191
7/17/2005 0:00	0.919	177.526
7/18/2005 0:00	0.906	179.276
7/19/2005 0:00	0.934	179.747
7/20/2005 0:00	0.903	171.863
7/21/2005 0:00	0.952	178.842
7/22/2005 0:00	0.967	178.547
7/23/2005 0:00	0.927	175.731
7/24/2005 0:00	0.912	175.446
7/25/2005 0:00	0.928	178.679
7/26/2005 0:00	0.947	178.626
7/27/2005 0:00	0.94	177.945
7/28/2005 0:00	0.928	176.61
7/29/2005 0:00	0.934	176.213
7/30/2005 0:00	0.947	174.174
7/31/2005 0:00	0.903	173.532
8/1/2005 0:00	0.91	176.486
8/2/2005 0:00	0.889	177.711
8/3/2005 0:00	0.905	176.298
8/4/2005 0:00	0.908	176.413
8/5/2005 0:00	0.923	176.74
8/6/2005 0:00	0.921	174.201
8/7/2005 0:00	0.919	174.525
8/8/2005 0:00	0.952	177.352
8/9/2005 0:00	0.922	177.524

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
8/10/2005 0:00	0.939	178.47
8/11/2005 0:00	0.947	178.147
8/12/2005 0:00	0.907	176.591
8/13/2005 0:00	0.937	175.812
8/14/2005 0:00	0.916	173.769
8/15/2005 0:00	0.875	174.934
8/16/2005 0:00	0.884	175.127
8/17/2005 0:00	0.908	176.467
8/18/2005 0:00	0.904	175.172
8/19/2005 0:00	0.911	175.499
8/20/2005 0:00	0.926	174.413
8/21/2005 0:00	0.924	174.483
8/22/2005 0:00	0.917	176.677
8/23/2005 0:00	0.908	176.175
8/24/2005 0:00	0.884	174.914
8/25/2005 0:00	0.885	175.422
8/26/2005 0:00	0.902	176.273
8/27/2005 0:00	0.925	174.463
8/28/2005 0:00	0.917	174.145
8/29/2005 0:00	0.958	175.93
8/30/2005 0:00	0.86	174.187
8/31/2005 0:00	0.884	175.645
9/1/2005 0:00	0.884	175.717
9/2/2005 0:00	0.904	175.61
9/3/2005 0:00	0.899	174.95
9/4/2005 0:00	0.861	174.534
9/5/2005 0:00	0.9	175.304
9/6/2005 0:00	0.903	175.901
9/7/2005 0:00	0.911	176.147
9/8/2005 0:00	0.905	176.166
9/9/2005 0:00	0.891	175.862
9/10/2005 0:00	0.948	175.743
9/11/2005 0:00	0.944	175.997
9/12/2005 0:00	0.921	176.633
9/13/2005 0:00	0.909	176.256
9/14/2005 0:00	0.918	176.407
9/15/2005 0:00	0.892	176.021
9/16/2005 0:00	0.88	175.432
9/17/2005 0:00	0.913	175.499
9/18/2005 0:00	0.927	175.991
9/19/2005 0:00	0.895	176.551
9/20/2005 0:00	0.867	175.64
9/21/2005 0:00	0.878	175.193
9/22/2005 0:00	0.868	175.261
9/23/2005 0:00	0.856	175.246
9/24/2005 0:00	0.893	175.013
9/25/2005 0:00	0.887	175.148
9/26/2005 0:00	0.859	175.513
9/27/2005 0:00	0.869	175.072
9/28/2005 0:00	0.864	174.8
9/29/2005 0:00	1.106	174.576

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
9/30/2005 0:00	1.234	174.197
10/1/2005 0:00	1.273	174.007
10/2/2005 0:00	1.271	174.215
10/3/2005 0:00	1.27	174.357
10/4/2005 0:00	1.251	174.326
10/5/2005 0:00	1.269	174.419
10/6/2005 0:00	1.257	174.325
10/7/2005 0:00	1.234	174.242
10/8/2005 0:00	1.247	174.04
10/9/2005 0:00	1.254	173.99
10/10/2005 0:00	1.24	174.245
10/11/2005 0:00	1.22	174.483
10/12/2005 0:00	1.213	174.484
10/13/2005 0:00	1.215	174.386
10/14/2005 0:00	1.21	174.811
10/15/2005 0:00	1.35	174.804
10/16/2005 0:00	1.29	174.718
10/17/2005 0:00	1.222	175.237
10/18/2005 0:00	1.201	175.432
10/19/2005 0:00	1.22	176.173
10/20/2005 0:00	1.21	176.242
10/21/2005 0:00	1.207	176.491
10/22/2005 0:00	1.238	176.751
10/23/2005 0:00	1.251	176.914
10/24/2005 0:00	1.212	176.839
10/25/2005 0:00	1.252	176.918
10/26/2005 0:00	1.267	175.423
10/27/2005 0:00	0.709	174.367
10/28/2005 0:00	0.32	174.691
10/29/2005 0:00	0.458	174.674
10/30/2005 0:00	0.464	174.638
10/31/2005 0:00	0.345	174.866
11/1/2005 0:00	0.398	174.855
11/2/2005 0:00	0.435	174.934
11/3/2005 0:00	1.437	174.207
11/4/2005 0:00	1.124	174.356
11/5/2005 0:00	0.652	174.466
11/6/2005 0:00	0.872	174.743
11/7/2005 0:00	0.752	174.937
11/8/2005 0:00	0.348	175.146
11/9/2005 0:00	0.339	175.233
11/10/2005 0:00	0.228	175.208
11/11/2005 0:00	0.322	175.33
11/12/2005 0:00	0.297	175.343
11/13/2005 0:00	0.422	175.144
11/14/2005 0:00	0.548	175.552
11/15/2005 0:00	0.576	166.964
11/16/2005 0:00	0.647	165.286
11/17/2005 0:00	0.568	152.151
11/18/2005 0:00	0.54	143.553
11/19/2005 0:00	0.603	143.463

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
11/20/2005 0:00	0.61	143.485
11/21/2005 0:00	0.533	145.071
11/22/2005 0:00	0.453	161.341
11/23/2005 0:00	0.224	173.361
11/24/2005 0:00	0.29	174.633
11/25/2005 0:00	0.224	174.952
11/26/2005 0:00	0.271	174.979
11/27/2005 0:00	0.292	175.034
11/28/2005 0:00	0.274	175.206
11/29/2005 0:00	0.287	175.02
11/30/2005 0:00	0.224	175.199
12/1/2005 0:00	0.211	175.305
12/2/2005 0:00	0.168	175.32
12/3/2005 0:00	0.268	175.377
12/4/2005 0:00	0.218	175.507
12/5/2005 0:00	0.151	175.514
12/6/2005 0:00	0.137	175.426
12/7/2005 0:00	0.14	175.637
12/8/2005 0:00	0.113	175.68
12/9/2005 0:00	0.062	175.691
12/10/2005 0:00	0.209	175.806
12/11/2005 0:00	0.275	175.661
12/12/2005 0:00	0.166	175.979
12/13/2005 0:00	0.169	175.318
12/14/2005 0:00	0.15	176.032
12/15/2005 0:00	0.098	176.009
12/16/2005 0:00	0.081	176.034
12/17/2005 0:00	0.223	176.036
12/18/2005 0:00	0.249	176.151
12/19/2005 0:00	0.16	176.236
12/20/2005 0:00	0.101	176.084
12/21/2005 0:00	0.082	177.485
12/22/2005 0:00	0.056	177.875
12/23/2005 0:00	0.076	178.366
12/24/2005 0:00	0.174	179.076
12/25/2005 0:00	0.063	180.414
12/26/2005 0:00	0.104	179.782
12/27/2005 0:00	0.056	178.803
12/28/2005 0:00	0.265	178.355
12/29/2005 0:00	0.393	177.788
12/30/2005 0:00	0.347	177.929
12/31/2005 0:00	0.432	178.072
1/1/2006 0:00	0.274	178.522
1/2/2006 0:00	0.475	178.845
1/3/2006 0:00	0.233	177.998
1/4/2006 0:00	0.239	178.147
1/5/2006 0:00	0.215	176.263
1/6/2006 0:00	0.207	176.093
1/7/2006 0:00	0.331	176.173
1/8/2006 0:00	0.345	176.251
1/9/2006 0:00	0.214	176.289

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
1/10/2006 0:00	0.241	176.242
1/11/2006 0:00	0.349	176.283
1/12/2006 0:00	0.255	176.245
1/13/2006 0:00	0.213	176.352
1/14/2006 0:00	0.376	176.299
1/15/2006 0:00	0.389	176.565
1/16/2006 0:00	0.466	176.546
1/17/2006 0:00	0.269	176.379
1/18/2006 0:00	0.246	176.315
1/19/2006 0:00	0.283	176.197
1/20/2006 0:00	0.215	176.202
1/21/2006 0:00	0.26	178.156
1/22/2006 0:00	0.288	178.68
1/23/2006 0:00	0.115	178.294
1/24/2006 0:00	0.202	176.093
1/25/2006 0:00	0.209	176.199
1/26/2006 0:00	0.206	176.128
1/27/2006 0:00	0.177	176.198
1/28/2006 0:00	0.297	176.14
1/29/2006 0:00	0.383	176.226
1/30/2006 0:00	0.247	176.36
1/31/2006 0:00	0.184	176.375
2/1/2006 0:00	0.202	176.144
2/2/2006 0:00	0.197	176.084
2/3/2006 0:00	0.149	176.154
2/4/2006 0:00	0.334	176.193
2/5/2006 0:00	0.358	176.156
2/6/2006 0:00	0.236	176.332
2/7/2006 0:00	0.215	176.122
2/8/2006 0:00	0.285	176.189
2/9/2006 0:00	0.257	176.182
2/10/2006 0:00	0.169	176.285
2/11/2006 0:00	0.303	176.21
2/12/2006 0:00	0.278	176.509
2/13/2006 0:00	0.309	176.668
2/14/2006 0:00	0.225	176.422
2/15/2006 0:00	0.267	176.428
2/16/2006 0:00	0.261	176.429
2/17/2006 0:00	0.245	176.58
2/18/2006 0:00	0.366	176.706
2/19/2006 0:00	0.348	176.766
2/20/2006 0:00	0.416	176.745
2/21/2006 0:00	0.285	176.767
2/22/2006 0:00	0.32	176.872
2/23/2006 0:00	0.261	176.638
2/24/2006 0:00	0.303	176.735
2/25/2006 0:00	0.334	176.749
2/26/2006 0:00	0.468	176.856
2/27/2006 0:00	0.301	176.801
2/28/2006 0:00	0.317	176.686
3/1/2006 0:00	0.357	176.801

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
3/2/2006 0:00	0.322	176.773
3/3/2006 0:00	0.338	176.865
3/4/2006 0:00	0.502	176.821
3/5/2006 0:00	0.502	176.649
3/6/2006 0:00	0.4	172.988
3/7/2006 0:00	0.44	176.71
3/8/2006 0:00	0.361	176.524
3/9/2006 0:00	0.391	176.46
3/10/2006 0:00	0.364	176.189
3/11/2006 0:00	0.499	176.233
3/12/2006 0:00	0.491	176.367
3/13/2006 0:00	0.446	176.323
3/14/2006 0:00	0.373	176.208
3/15/2006 0:00	0.381	176.365
3/16/2006 0:00	0.396	176.351
3/17/2006 0:00	0.347	176.203
3/18/2006 0:00	0.441	176.241
3/19/2006 0:00	0.609	176.313
3/20/2006 0:00	0.356	176.357
3/21/2006 0:00	0.325	176.18
3/22/2006 0:00	0.348	176.396
3/23/2006 0:00	0.371	176.341
3/24/2006 0:00	0.335	176.304
3/25/2006 0:00	0.489	176.441
3/26/2006 0:00	0.496	176.541
3/27/2006 0:00	0.438	176.401
3/28/2006 0:00	0.451	176.262
3/29/2006 0:00	0.386	176.098
3/30/2006 0:00	0.404	172.936
3/31/2006 0:00	0.527	176.511
4/1/2006 0:00	0.51	176.321
4/2/2006 0:00	0.595	176.199
4/3/2006 0:00	0.432	176.219
4/4/2006 0:00	0.41	176.159
4/5/2006 0:00	0.387	176.138
4/6/2006 0:00	0.504	176.178
4/7/2006 0:00	0.441	176.176
4/8/2006 0:00	0.65	176.207
4/9/2006 0:00	0.66	176.194
4/10/2006 0:00	0.408	176.202
4/11/2006 0:00	0.186	178.228
4/12/2006 0:00	0.02	182.513
4/13/2006 0:00	0	
4/14/2006 0:00	0	
4/15/2006 0:00	0	
4/16/2006 0:00	0	
4/17/2006 0:00	0	
4/18/2006 0:00	0	
4/19/2006 0:00	0	
4/20/2006 0:00	0	
4/21/2006 0:00	0	

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
4/22/2006 0:00	0	
4/23/2006 0:00	0	
4/24/2006 0:00	0	
4/25/2006 0:00	0	
4/26/2006 0:00	0	
4/27/2006 0:00	0	
4/28/2006 0:00	0	
4/29/2006 0:00	0	
4/30/2006 0:00	0	
5/1/2006 0:00	0	
5/2/2006 0:00	0	
5/3/2006 0:00	0	
5/4/2006 0:00	0	
5/5/2006 0:00	0	
5/6/2006 0:00	0	
5/7/2006 0:00	0	
5/8/2006 0:00	0	
5/9/2006 0:00	0	
5/10/2006 0:00	0	
5/11/2006 0:00	0	
5/12/2006 0:00	0	
5/13/2006 0:00	0	
5/14/2006 0:00	0	
5/15/2006 0:00	0	
5/16/2006 0:00	0	
5/17/2006 0:00	0	
5/18/2006 0:00	0	
5/19/2006 0:00	0	
5/20/2006 0:00	0	
5/21/2006 0:00	0	
5/22/2006 0:00	0	
5/23/2006 0:00	0	
5/24/2006 0:00	0	
5/25/2006 0:00	0	
5/26/2006 0:00	0	
5/27/2006 0:00	0	
5/28/2006 0:00	0	
5/29/2006 0:00	0	
5/30/2006 0:00	0	
5/31/2006 0:00	0	
6/1/2006 0:00	0	
6/2/2006 0:00	0	
6/3/2006 0:00	0	
6/4/2006 0:00	0	
6/5/2006 0:00	0	
6/6/2006 0:00	0	
6/7/2006 0:00	0	
6/8/2006 0:00	0	
6/9/2006 0:00	0	
6/10/2006 0:00	0	179.307
6/11/2006 0:00	0	180.548

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
6/12/2006 0:00	0	180.373
6/13/2006 0:00	0	161.397
6/14/2006 0:00	0	181.393
6/15/2006 0:00	0	183.282
6/16/2006 0:00	0	182.698
6/17/2006 0:00	0	182.917
6/18/2006 0:00	0	182.987
6/19/2006 0:00	0	180.912
6/20/2006 0:00	0	181.422
6/21/2006 0:00	0	181.867
6/22/2006 0:00	0	182.414
6/23/2006 0:00	0	182.402
6/24/2006 0:00	0	183.475
6/25/2006 0:00	0	184.122
6/26/2006 0:00	0	180.388
6/27/2006 0:00	0	174.285
6/28/2006 0:00	0	197.152
6/29/2006 0:00	0	184.344
6/30/2006 0:00	0	177.105
7/1/2006 0:00	0	177.646
7/2/2006 0:00	0	177.383
7/3/2006 0:00	0	177.983
7/4/2006 0:00	0	177.526
7/5/2006 0:00	0	180.511
7/6/2006 0:00	0	179.699
7/7/2006 0:00	0	182.681
7/8/2006 0:00	0	182.513
7/9/2006 0:00	0	182.065
7/10/2006 0:00	0	182.907
7/11/2006 0:00	0	183.027
7/12/2006 0:00	0	156.681
7/13/2006 0:00	0	123.896
7/14/2006 0:00	0	181.623
7/15/2006 0:00	0	182.634
7/16/2006 0:00	0	182.863
7/17/2006 0:00	0	176.754
7/18/2006 0:00	0	184.419
7/19/2006 0:00	0	183.642
7/20/2006 0:00	0	183.437
7/21/2006 0:00	0	183.693
7/22/2006 0:00	0	181.864
7/23/2006 0:00	0	182.056
7/24/2006 0:00	0.321	181.855
7/25/2006 0:00	0.591	182.123
7/26/2006 0:00	0.605	182.035
7/27/2006 0:00	0.603	181.673
7/28/2006 0:00	0.587	181.791
7/29/2006 0:00	0.607	182.919
7/30/2006 0:00	0.608	182.999
7/31/2006 0:00	0.626	182.508
8/1/2006 0:00	0.625	182.061

Meter 91 Flows:

Time	CH 1 High Flow	CH 2 Pressure (HGL)
8/2/2006 0:00	0.614	180.981

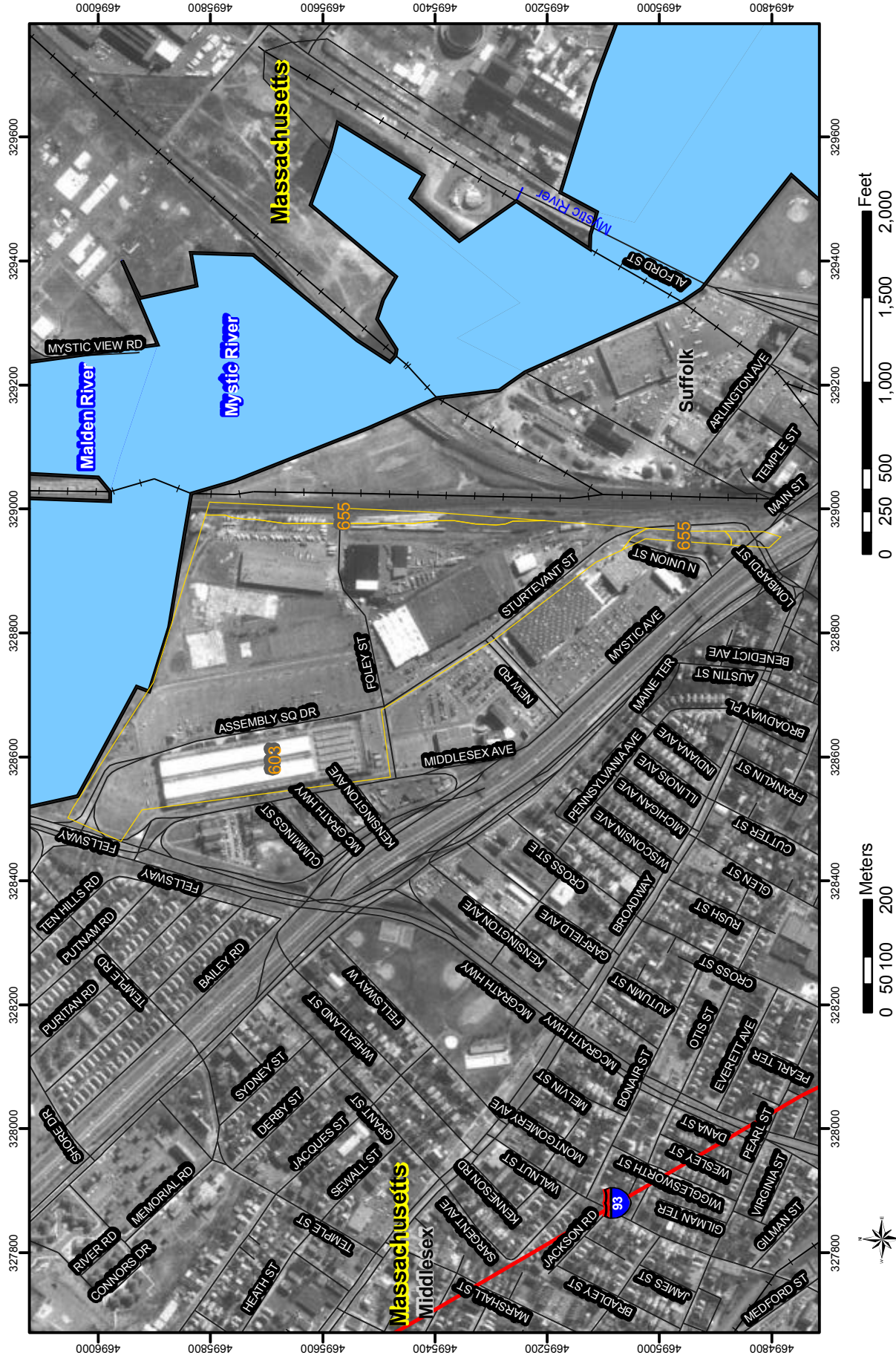
Appendix C

Stormwater Drainage System Analysis

NRCS Soil Survey Information

SOIL SURVEY OF MIDDLESEX COUNTY, MASSACHUSETTS

Assembly Square Full Build



SOIL SURVEY OF MIDDLESEX COUNTY, MASSACHUSETTS

Assembly Square Full Build

MAP LEGEND

- Soil Map Units
- Cities
- Detailed Counties
- Detailed States
- Interstate Highways
- Roads
- Rails
- Water
- Hydrography
- Oceans
- Escarpment, bedrock
- Escarpment, non-bedrock
- Gully
- Levee
- Slope

- Blowout
- Borrow Pit
- Clay Spot
- Depression, closed
- Eroded Spot
- Gravel Pit
- Gravelly Spot
- Gulley
- Lava Flow
- Landfill
- Marsh or Swamp
- Miscellaneous Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Slide or Slip
- Sinkhole
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Perennial Water
- Wet Spot

MAP INFORMATION

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>

Coordinate System: UTM Zone 19

Soil Survey Area: Middlesex County, Massachusetts
Spatial Version of Data: 3
Soil Map Compilation Scale: 1:25000

Map comprised of aerial images photographed on these dates:
4/3/1995

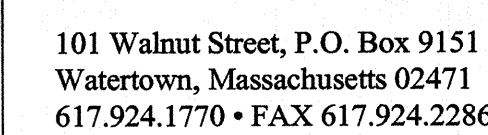
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend Summary

Middlesex County, Massachusetts

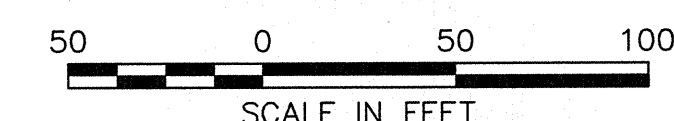
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
603	Urban land, wet substratum	72.0	94.8
655	Udorthents, wet substratum	3.9	5.2

72" Outfall As-Built Plan and Profile



1. UPLAND WORK ZONES, TEMPORARY STAGING AND STOCKPILE PLACES AREAS AND ACCESS ROUTES TO DCR DRIVE AND PARK ARE TO BE PROVIDED TO DCR REVIEW AND APPROVAL, AND MAY BE SUBJECT TO CHANGES BASED ON ACTUAL SITE AND CONSTRUCTION CONDITIONS.
2. SUBJECT TO DCR REVIEW AND APPROVAL, THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF THE STAGING AND STOCKPILE AREAS TO PROVIDE SECURE AND SAFE PUBLIC ACCESS TO THE EAST PART OF GRANT PARK THROUGHOUT CONSTRUCTION.
3. FINAL DESIGN OF THE FISHING PLATFORM IS SUBJECT TO DCR REVIEW AND APPROVAL.
4. CONSTRUCTION Dewatering SHALL BE CONSIDERED TO BE REMOVAL OF THE BAG OF A Dewatering HAYSCALE BASIN PRIOR TO THE CONSTRUCTION OF THE STAGING AREAS. THESE Dewatering BMS SHALL BE LOCATED OUTSIDE THE TEMPORARY STAGING AND STOCKPILE AREA SEDIMENTATION AND EROSION CONTROLS.
5. AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR IS TO REMOVE THE AFTERFLOOD SHEETING THAT IS PERPENDICULAR TO THE SHORELINE, THE EROSION CONTROL SHEETING THAT IS PARALLEL TO THE SHORE LINE IS TO BE COMPLETED TO THE EROSION CONTROL BELOW OCEAN FLOOR AND LEFT IN PLACE IN THE GROUND.
6. CONTRACTOR SHOULD NOTE THAT META EQUULES THAT CROSS THE RAILROAD RIGHT OF WAY TRANSVERSELY HAVE 4' CLEARANCE. HOWEVER, THE CONTRACTOR IS ANTICIPATED DIRECTLY AT THE STORM DRAIN CROSSING LOCATION, BUT IS NOTED IN CASE OF CONSTRUCTION CONDITIONS.

1. ALL EXCAVATED SOILS FROM THE COFFERMANN AREA SHALL BE EXAMINED BY THE ENVIRONMENTAL MONITOR/ENGINEER FOR LEACHING CRITERIA. IF SUITABLE SOILS WILL BE SANDS AND COARSE SANDS (GRUIN) TO EXIST, THEN THE SUITABLE UNSUITABLE SOILS WILL BE SILTS, GLAYS, ROCK AND OTHER DEBRIS.
2. BOTH SUITABLE AND UNSUITABLE SOILS WILL BE HANDLED SEPARATELY WITH CLOSURE CONTROLS AND BE ALLOWED TO DEWATER.
3. UNSUITABLE SOILS WILL BE REMOVED FROM THE SITE ONCE ADEQUATELY DEWATERED.
4. SUITABLE SOILS WILL BE USED IN THE BEACH NURTURE. THE DEBRIS AND UNSUITABLE SOIL WILL BE PLACED AT THE OUTFALL HEADWALL AND WORK AWAY IN BOTH DIRECTIONS. THE DEBRIS AND UNSUITABLE SOILS WILL BE SPREAD UNLIT. THERE IS NO MORE TO BE SPREAD. NO FURTHER SOILS WILL BE REQUIRED. THE LIMITS ON THE PLAN SHOW THE MAXIMUM AREA OF BEACH NURTURE.



EXISTING TIDE AND SLUICE GATE STRUCTURE

SIGN (TYP.) (SEE DETAIL SHEET C-5)

BEACH PLUM BORDER

AS-BUILT

LAND SUBJECT TO COASTAL STORM FLOWAGE (LSCSF) ELEV = 10.4

21' RIVERFRONT AREA

COASTAL BANK ELEV = 9.0

BEACH PLUM BORDER

TEMPORARY ORANGE CONSTRUCTION FENCING TO PROTECT THE PLANTING AREA AND MAINTAIN FOR TWO YEARS

MWRA WET WEATHER CSO (WWR205)

PLANTING NOTES:

Beach Plum (*Rhus typhina*)
Staggered double row, five feet on center.

American beach grass (*Ammophila breviflorata*) planted two plugs per square foot.

SEE DETAIL, SHEET C-5, FOR INSTALLATION INSTRUCTIONS

MAXIMUM AREA OF BEACH NOURISHMENT (12,100 SF)

STABILIZED PLANTING AREA (5,000 SF)

AS-BUILT

LOWEST PREDICTED WATER ELEV = 6.50
MEAN LOW WATER (MLW) ELEV = 6.35
MEAN SEA LEVEL (MSL) ELEV = 0.56
MEAN HIGH WATER (MHW) ELEV = 5.20
ANNUAL HIGH TIDE ELEV = 7.50

SCALE IN FEET

50 0 50 100

LEGEND:

- PLANTING AREA BORDER SHRUB (BEACH PLUM)
- PLANTING AREA (BEACH GRASS)
- BEACH NOURISHMENT AREA

[illegible]

4	AS-BUILT INFORMATION		3-09-12	R
3	JACKING REVISIONS (CONFLICTS)		10-28-11	R
2	JACKING ALIGNMENT REVISIONS		10-20-11	R
1	MBTA COMMENTS		6-22-11	R
No.	Revision		Date	Key
Designed by		Drawn by		Checked by
CAD checked by		Approved by		
Scale	As Noted	Date	May 13, 2011	

COMMONWEALTH OF MASSACHUSETTS
RICHARD P. MATTHEWS JR.
CIVIL
NOV 14 2014
REGISTERED MAIL
PROFESSIONAL MAIL

C-2

Sheet 2 of 5

Project Number
08518.05

Scenario: 10 Year with Tailwater
Current Time Step: 0.000Hr
Conduit FlexTable: Combined Pipe/Node Report

Start Node	Stop Node	Length (Unified) (ft)	System CA (acres)	System Intensity (in/h)	System Rational Flow (ft ³ /s)	Capacity (Full Flow) (ft ³ /s)	Velocity (Average) (ft/s)	Invert (Upstream) (ft)	Invert (Downstream) (ft)	Slope (ft/ft)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)
CB-G6N	DMH-G6	14.0	0.118	5.300	0.63	5.04	4.37	7.50	7.22	0.020	7.83	7.46
CB-G4E	DMH-G4	9.0	0.273	5.300	1.46	5.04	5.55	7.00	6.82	0.020	7.65	7.68
DCB-G2E	DMH-G2	12.0	0.232	5.300	1.24	5.14	1.58	5.00	4.75	0.021	7.72	7.70
CB-G1E	DMH-G1	43.0	0.179	5.300	0.96	3.56	1.22	4.00	3.57	0.010	7.74	7.71
CB-G1NE	DMH-G1	56.0	0.098	5.300	0.52	3.56	0.67	4.00	3.44	0.010	7.73	7.71
DMH-G1	DMH-G2	45.0	0.277	5.062	1.41	77.20	0.11	2.90	2.77	0.003	7.70	7.70
DMH-G2	DMH-G3	42.0	0.509	3.929	2.02	79.91	0.16	2.77	2.64	0.003	7.68	7.68
DMH-G3	DMH-G4	155.0	0.509	3.438	1.76	79.09	0.14	2.64	2.17	0.003	7.68	7.68
DMH-G4	DMH-G5	203.0	0.782	2.435	1.92	62.14	0.15	2.17	1.79	0.002	7.65	7.65
RG-G1	DMH-G5	65.0	0.046	5.300	0.24	8.13	6.74	5.32	4.29	0.016	8.72	7.65
DMH-G5	DMH-G6	118.0	0.827	1.807	1.51	137.41	0.76	1.79	0.71	0.009	7.36	7.35
DMH-G6	DMH-G7	38.0	1.060	1.733	1.85	80.72	0.79	-0.73	-0.85	0.003	6.70	6.69
DMH-G7	DMH-G8	11.0	1.060	1.710	1.83	212.16	0.78	-0.85	-1.09	0.022	6.69	6.69
DMH-G8	DMH-G9	70.0	1.060	1.704	1.82	78.67	0.78	-1.09	-1.30	0.003	6.68	6.68
CB-F7NE	DMH-F7	12.0	0.219	5.300	1.17	5.24	5.37	9.00	8.74	0.022	9.46	9.08
CB-F7NW	DMH-F7	13.0	0.000	5.300	0.00	5.04	0.00	9.00	8.74	0.020	9.00	8.92
CB-F6NE	DMH-F6	12.0	0.195	5.300	1.04	5.24	5.20	9.00	8.74	0.022	9.43	9.49
CB-F6NW	DMH-F6	13.0	0.000	5.300	0.00	5.04	0.00	9.00	8.74	0.020	9.49	9.49
CB-F6NW	DMH-F5	13.0	0.000	5.300	0.00	5.04	0.00	9.00	8.74	0.020	10.32	10.32
CB-F5NE	DMH-F5	13.0	0.212	5.300	1.13	5.04	1.44	9.00	8.74	0.020	10.33	10.32
CB-F4NW	DMH-F4	13.0	0.121	5.300	0.65	3.56	0.83	9.00	8.87	0.010	10.56	10.56
CB-F4NE	DMH-F4	12.0	0.123	5.300	0.66	3.71	0.83	9.00	8.87	0.011	10.56	10.56
CB-F3NE	DMH-F3	10.0	0.240	5.300	1.28	5.04	1.63	8.50	8.30	0.020	11.26	11.25
CB-F1NE	DMH-F1	9.0	0.083	5.300	0.44	3.76	0.56	9.90	9.80	0.011	11.35	11.34
DMH-F1	DMH-F2	78.0	0.514	5.255	2.72	6.83	1.54	8.30	7.97	0.004	11.34	11.29
DCB-F2E	DMH-F2	77.0	0.404	5.300	2.16	5.10	1.76	8.70	8.22	0.006	11.38	11.29
DMH-F2	DMH-F3	36.0	0.917	5.111	4.73	12.50	1.50	7.47	7.36	0.003	11.26	11.25
DMH-F3	DMH-C5	129.0	1.157	5.043	5.88	12.44	1.87	7.36	6.97	0.003	11.22	11.13
CB-C4SW	DMH-C4	12.0	0.075	5.300	0.40	5.04	0.51	9.10	8.86	0.020	11.22	11.22
CB-C4NW	DMH-C4	12.0	0.050	5.300	0.27	5.04	0.34	9.10	8.86	0.020	11.22	11.22
CB-C3SW	DMH-C3	12.0	0.028	5.300	0.15	11.12	0.19	9.60	8.43	0.098	11.22	11.22
CB-C3NW	DMH-C3	12.0	0.025	5.300	0.13	11.12	0.17	9.60	8.43	0.098	11.22	11.22
DMH-C3	DMH-C4	40.0	0.141	5.099	0.73	10.37	0.41	8.43	8.04	0.010	11.22	11.22
DMH-C4	DMH-C5	57.0	0.733	4.824	3.58	10.50	2.02	8.04	7.47	0.010	11.21	11.13
DMH-C5	DMH-C6	33.0	1.890	4.744	9.04	12.45	2.88	6.97	6.87	0.003	11.08	11.02
CB-C7SE	DMH-C7	14.0	0.106	5.300	0.57	5.04	0.72	9.20	8.92	0.020	11.37	11.37
CB-C7NE	DMH-C7	14.0	0.117	5.300	0.63	5.13	0.80	9.20	8.91	0.021	11.37	11.37
CB-C8SE	DMH-C8	14.0	0.146	5.300	0.78	5.04	0.99	10.70	10.42	0.020	12.55	12.54
CB-C8NE	DMH-C8	14.0	0.082	5.300	0.44	5.04	0.56	10.70	10.42	0.020	12.54	12.54
DMH-C8	DMH-C7	178.0	1.598	5.229	8.42	6.82	4.77	8.51	7.76	0.004	12.54	11.37
DMH-C7	DMH-C6	92.0	2.175	5.123	11.23	14.73	3.58	7.26	6.87	0.004	11.25	11.02
DMH-C6	DMH-F4	116.0	4.183	4.711	19.86	22.85	4.05	6.37	6.01	0.003	10.87	10.56
DMH-F4	DMH-F5	122.0	4.789	4.630	22.35	34.16	3.16	5.51	5.19	0.003	10.48	10.32
DMH-F5	DMH-D5	108.0	5.332	4.521	24.29	38.51	3.44	5.19	4.83	0.003	10.25	10.08
CB-D4NW	DMH-D4	12.0	0.112	5.300	0.60	3.56	3.36	10.30	10.18	0.010	10.62	10.46
CB-D4SW	DMH-D4	13.0	0.117	5.300	0.62	3.42	3.31	10.30	10.18	0.009	10.63	10.47
DMH-D4	DMH-D5	90.0	0.452	5.289	2.41	10.50	1.36	8.34	7.44	0.010	10.12	10.08
DCB-D6S	DMH-D6	12.0	0.434	5.300	2.32	5.04	4.11	8.80	8.56	0.020	11.51	11.41
CB-D7E	DMH-D7	54.0	0.133	5.300	0.71	5.18	0.91	8.83	7.69	0.021	11.59	11.57
DMH-D7	DMH-D6	53.0	0.995	5.131	5.15	7.90	2.91	7.69	7.39	0.006	11.54	11.41
DMH-D6	DMH-D5	179.0	1.428	5.080	7.31	8.08	4.65	7.39	6.33	0.006	11.23	10.08
DMH-D5	DMH-F6	123.0	7.212	4.432	32.22	36.58	4.69	4.83	4.46	0.003	9.86	9.49
DMH-F6	DMH-F7	122.0	7.870	4.357	34.57	36.73	5.02	4.46	4.09	0.003	9.35	8.92
DMH-F7	DMH-F8	23.0	8.089	4.288	34.97	43.98	5.08	4.09	3.99	0.004	8.15	8.07
DMH-F8	DMH-F9	10.0	8.089	4.275	34.86	94.32	5.06	3.99	3.79	0.020	7.92	7.89
DMH-F9	DMH-F10	79.0	8.089	4.270	34.82	36.76	5.05	3.79	3.55	0.003	7.74	7.45
CB-E2SE	DMH-E2	8.0	0.195	5.300	1.04	5.19	5.16	7.80	7.63	0.021	8.23	8.14
CB-E2NE	DMH-E2	49.0	0.154	5.300	0.82	3.56	3.69	7.80	7.31	0.010	8.18	8.14
DMH-E2	DMH-E1	33.0	0.348	5.262	1.85	3.56	4.58	7.31	6.98	0.010	8.08	8.03
DMH-E1	DMH-68	9.0	0.348	5.242	1.84	3.36	2.34	5.56	5.48	0.009	8.03	8.01
CB-21	DMH-22	5.0	0.496	5.300	2.65	4.51	3.37	6.82	6.74	0.016	8.52	8.49
CB-20	DMH-22	49.0	0.428	5.300	2.29	3.53	2.91	6.82	6.34	0.010	8.70	8.49
CB-18	DMH-19	6.0	0.140	5.300	0.75	5.44	4.86	8.74	8.60	0.023	9.24	9.26
CB-17	DMH-19	49.0	0.141	5.300	0.75	3.60	3.62	8.74	8.24	0.010	9.26	9.26
CB-11	DMH-12	5.0	0.530	5.300	2.83	3.90	3.60	6.66	6.60	0.012	10.64	10.61
CB-10	DMH-12	49.0	0.419	5.300	2.24	3.56	2.85	6.66	6.17	0.010	10.80	10.61
CB-A6SE	DMH-A6	14.0	0.367	5.300	1.96	3.56	2.49	8.08	7.94	0.010	11.44	11.40
CB-A6N	DMH-A6	15.0	0.169	5.300	0.90	3.56	1.15	8.09	7.94	0.010	11.41	11.40
DMH-A6	DMH-A5	93.0	0.777	5.263	4.12	5.76	2.33	7.94	7.66	0.003	11.72	11.58
DMH-A5	DMH-A4	126.0	0.777	5.150	4.03	5.77	2.28	7.66	7.28	0.003	11.55	11.36
CB-A4S	DMH-A4	14.0	0.041	5.300	0.22	5.04	0.28	10.00	9.72	0.020	11.36	11.36
CB-A4N	DMH-A4	14.0	0.053	5.300	0.28	5.13	0.36	10.00	9.71	0.021	11.36	11.36
DMH-A4	DMH-A3	178.0	0.871	4.994	4.39	12.34	1.40	7.28	6.75	0.003	11.34	11.27
DMH-A3	DMH-A2	42.0	1.360	4.632	6.35	12.59	2.02	6.75	6.62	0.003	11.25	11.21
CB-A1S	DMH-A2	15.0	0.159	5.300	0.85	4.69	1.08	7.50	7.24	0.017	11.22	11.21
CB-A1N	DMH-A2	13.0	0.089	5.300	0.48	5.93	0.61	7.60	7.24	0.028	11.22	11.21
DMH-A2	DMH-A1	23.0	1.642	4.574	7.57	14.92	2.41	6.62	6.52	0.004	11.19	11.16
DMH-A1	DMH-8	93.0	1.642	4.546	7.53	12.19	2.40	6.49	6.22	0.003	11.12	11.01
CB-8B	DMH-8	22.0	0.058	5.300	0.31	3.13	0.39	8.45	8.28	0.008	11.02	11.01
CB-8C	DMH-8	61.0	0.151	5.300	0.80	3.41	1.02	8.20	7.64	0.009	11.05	11.01
CB-8A	DMH-8	65.0	0.229	5.300	1.22	2.42	1.56	8.29	7.99	0.005	11.09	11.01
DMH-8	DMH-9	83.0	2.079	4.436	9.30	11.10	2.96	6.22	6.02	0.002	10.95	10.81
DMH-9	DMH-12	97.0	2.079	4.357	9.13	11.25	2.91	6.00	5.76	0.002	10.76	10.61
DMH-12	DMH-13	242.0	3.028	4.262	13.01	20.93	2.65	5.26	4.63	0.003	10.52	10.27
CB-C1N	DMH-C1	24.0	0.064	5.300	0.34	5.04	0.44	10.00	9.52	0.020	11.30	11.30
CB-C1SE	DMH-C1	17.0	0.056	5.300	0.30	4.96	0.38	10.00	9.67	0.019	11.30	11.30
CB-C2NE	DMH-C2	23.0	0.071	5.300	0.38	5.04	0.48	8.80	8.34	0.020	11.86	11.86
CB-C2SE	DMH-C2	13.0	0.073	5.300	0.39	5.04	0.50	8.90	8.64	0.020	11.86	11.86
DMH-C2	DMH-C1	77.0	1.629	5.165	8.48	10.50	4.80	7.63	6.86	0.010	11.80	11.30
DMH-C1	DMH-13	123.0	1.749	5.120	9.03	10.50	5.11	6.86	5.63	0.010	11.18	10.27
DMH-13	DMH-16	64.0	4.777	4.004	19.28	21.14	3.93	4.63	4.46	0.003	10.03	9.89
CB-14	DMH-16	49.0	0.081	5.300	0.43	3.60	3.09	9.21	8.71	0.010	9.89	9.89

CB-15	DMH-16	12.0	0.078	5.300	0.42	2.30	2.22	9.19	9.14	0.004	9.89	9.89
DMH-16	DMH-19	240.0	4.936	3.958	19.69	20.85	4.01	4.46	3.84	0.003	9.82	9.26
DMH-19	DMH-D1	42.0	5.217	3.788	19.92	33.91	2.82	3.34	3.23	0.003	9.20	9.16
DMH-D3	DMH-D2	46.0	1.280	5.300	6.84	7.74	3.87	6.52	6.27	0.005	10.64	10.44
CB-D2S	DMH-D2	29.0	0.214	5.300	1.14	3.17	2.95	7.00	6.77	0.008	10.56	10.44
DMH-D2	DMH-D1	104.0	1.808	5.266	9.60	11.52	6.09	5.77	4.52	0.012	10.25	9.16
DMH-D1	DMH-22	194.0	7.024	3.746	26.52	33.91	3.92	3.23	2.73	0.003	8.83	8.49
DMH-22	DMH-23	122.0	7.948	3.606	28.89	51.52	3.12	2.23	1.91	0.003	8.39	8.28
DMH-23	DMH-24	11.0	7.948	3.559	28.51	95.92	3.09	1.86	1.76	0.009	8.24	8.23
DMH-24	DMH-105	30.0	7.948	3.555	28.48	91.84	3.08	1.71	1.46	0.008	8.18	8.16
CB-30	DMH-31	47.0	0.320	5.300	1.71	3.52	2.18	7.41	6.95	0.010	9.11	9.00
CB-32O	DMH-32M	54.0	0.000	5.300	0.00	3.43	0.00	4.00	3.50	0.009	9.70	9.70
CB-32R	DMH-32P	37.0	0.386	5.300	2.06	3.31	2.63	7.64	7.32	0.009	10.04	9.92
CB-32Q	DMH-32P	22.0	0.288	5.300	1.54	2.94	1.96	7.48	7.33	0.007	9.96	9.92
DMH-32P	DMH-32M	53.0	1.266	5.260	6.71	10.99	3.80	3.02	2.44	0.011	9.92	9.70
CB-32N	DMH-32M	12.0	0.313	5.300	1.67	2.91	2.13	6.88	6.80	0.007	9.73	9.70
CB-F15	DMH-F13	17.0	0.146	5.300	0.78	5.04	0.99	7.10	6.76	0.020	11.06	11.05
CB-F14	DMH-F13	16.0	0.208	5.300	1.10	5.19	1.40	7.10	6.76	0.021	11.06	11.05
CB-F13	DMH-F12	10.0	0.151	5.300	0.81	5.04	1.03	9.30	9.10	0.020	11.45	11.44
CB-F12	DMH-F11	12.0	0.145	5.300	0.77	5.04	0.99	9.30	9.06	0.020	11.50	11.49
DMH-F11	DMH-F12	128.0	0.388	5.265	5.06	10.50	1.17	7.19	5.91	0.010	11.49	11.44
DMH-F12	DMH-F13	140.0	1.066	4.954	2.32	10.50	3.01	5.91	4.51	0.010	11.41	11.05
DMH-F13	DMH-32T	76.0	1.418	4.823	6.89	10.29	3.90	4.51	3.78	0.010	10.99	10.66
CB-32Z	DMH-32Y	31.0	0.000	5.300	0.00	2.56	5.37	3.86	3.70	0.005	11.40	10.96
DMH-32Y	DMH-32U	47.0	0.000	5.284	0.00	6.85	2.39	3.69	3.49	0.004	10.75	10.67
CB-32V	DMH-32U	27.0	0.255	5.300	1.36	3.22	1.74	6.59	6.37	0.008	10.71	10.67
CB-32W	DMH-32U	18.0	0.212	5.300	1.13	3.03	1.45	6.39	6.26	0.007	10.69	10.67
CB-32X	DMH-32U	38.0	0.217	5.300	1.16	3.32	1.47	6.29	5.96	0.009	10.71	10.67
DMH-32U	DMH-32T	119.0	1.083	5.227	5.71	6.88	5.62	3.39	2.88	0.004	11.72	10.66
DMH-32T	DMH-32S	171.0	2.501	4.767	12.02	21.96	3.31	2.78	2.29	0.003	10.47	10.20
DMH-32S	DMH-32M	277.0	2.501	4.621	11.65	22.45	3.23	2.27	1.44	0.003	10.12	9.70
DMH-32M	DMH-32L	24.0	4.081	4.378	18.01	22.15	4.53	1.42	1.35	0.003	9.57	9.50
DMH-32L	DMH-32K	9.0	4.081	4.363	17.95	43.23	4.52	1.30	1.20	0.011	9.40	9.37
DMH-32K	DMH-32	17.0	4.081	4.358	17.92	24.37	4.51	1.15	1.09	0.004	9.28	9.23
CB-34N	CB-34M	32.0	0.206	5.300	1.10	10.24	0.62	6.81	6.63	0.006	10.60	10.60
CB-34M	CB-34L	40.0	0.415	5.155	2.16	10.35	1.22	6.63	6.40	0.006	10.60	10.59
CB-34L	CB-34K	93.0	0.633	5.062	3.23	10.41	1.83	6.40	5.86	0.006	10.59	10.54
CB-34K	CB-34J	25.0	0.880	4.917	4.36	10.22	2.47	5.86	5.72	0.006	10.54	10.51
CB-34J	CB-34I	51.0	1.114	4.889	5.49	10.12	3.11	5.72	5.44	0.005	10.51	10.43
CB-34I	CB-34H	48.0	1.330	4.842	6.49	22.46	2.07	5.44	5.16	0.006	10.43	10.40
CB-34H	CB-34G	41.0	1.560	4.776	7.51	22.03	2.39	5.16	4.93	0.006	10.40	10.38
CB-34G	CB-34F	41.0	1.776	4.728	8.46	22.50	2.69	4.93	4.69	0.006	10.38	10.34
CB-34F	CB-34E	42.0	1.983	4.685	9.36	22.23	2.98	4.69	4.45	0.006	10.34	10.30
CB-34E	CB-34D	41.0	2.190	4.645	10.26	22.03	3.26	4.45	4.22	0.006	10.30	10.25
CB-34D	CB-34C	41.0	2.418	4.609	11.24	22.50	3.58	4.22	3.98	0.006	10.25	10.19
CB-34C	DMH-34A	18.0	2.641	4.577	12.18	19.61	3.88	3.98	3.90	0.004	10.19	10.16
CB-34B	DMH-34A	32.0	0.043	5.300	0.23	3.73	0.29	4.90	4.55	0.011	10.16	10.16
DMH-34A	DMH-34	67.0	2.683	4.564	12.34	23.12	3.93	3.90	3.20	0.010	10.01	9.81
CB-39D	CB-39C	70.0	0.152	5.300	0.81	3.56	1.03	6.00	5.30	0.010	9.55	9.51
CB-39C	DMH-39A	23.0	0.152	5.108	0.78	5.75	0.99	5.30	4.70	0.026	9.51	9.50
CB-39B	DMH-39A	16.0	0.258	5.300	1.38	3.56	1.75	5.11	4.95	0.010	9.52	9.50
DMH-39A	DMH-38	50.0	0.409	5.042	2.08	6.13	1.70	4.70	4.25	0.009	9.76	9.71
CB-38A	DMH-38	35.0	0.000	5.300	0.00	7.94	2.33	3.40	3.20	0.006	9.76	9.71
CB-40A	DMH-41	12.0	0.214	5.300	1.14	2.72	1.46	5.57	5.50	0.006	9.50	9.49
CB-43	DMH-44	26.0	0.161	5.300	0.86	1.56	1.09	6.16	6.11	0.002	9.66	9.65
CB-42	DMH-44	19.0	0.220	5.300	1.17	4.90	1.49	6.15	5.79	0.019	9.67	9.65
CB-45A	DMH-45	35.0	0.164	5.300	0.88	3.56	1.12	7.12	6.77	0.010	10.32	10.29
CB-46B	DMH-46A	45.0	0.146	5.300	0.78	2.19	1.43	7.75	7.30	0.010	11.12	11.06
CB-46E	DMH-46C	7.0	0.439	5.300	2.34	-2.50	6.72	10.60	10.90	-0.043	12.78	12.52
CB-46D	DMH-46C	40.0	0.195	5.300	1.04	-1.05	2.99	10.60	10.90	-0.008	12.81	12.52
CB-46H	DMH-46F	8.0	0.481	5.300	2.57	1.35	7.37	14.30	14.20	0.013	15.22	14.85
CB-46G	DMH-46F	39.0	0.138	5.300	0.74	-1.37	2.11	13.70	14.20	-0.013	14.94	14.78
CB-46M	CB-46L	58.0	0.111	5.300	0.59	1.23	3.49	16.60	16.00	0.010	16.96	16.51
CB-46L	DMH-46K	46.0	0.216	5.253	1.15	1.26	4.09	16.00	15.50	0.011	16.51	16.00
CB-46Q	DMH-46N	7.0	0.086	5.300	0.46	4.86	3.89	17.20	17.07	0.019	17.53	17.56
CB-46O	DMH-46N	23.0	0.099	5.300	0.53	1.38	3.69	17.37	17.07	0.013	17.71	17.56
DMH-46P	DMH-46N	22.0	0.073	5.300	0.39	1.24	3.14	17.30	17.07	0.010	17.59	17.56
DMH-46N	DMH-46K	137.0	0.258	5.280	1.37	13.52	4.91	17.07	14.80	0.017	17.51	15.82
DMH-46K	DMH-46J	37.0	0.474	5.201	2.49	13.38	5.79	14.80	14.20	0.016	15.40	14.89
DMH-46J	DMH-46I	12.0	0.474	5.183	2.48	13.56	5.84	14.20	14.00	0.017	14.80	14.80
DMH-46I	DMH-46F	52.0	0.474	5.177	2.47	11.28	5.12	14.00	13.40	0.012	14.74	14.78
DMH-46F	DMH-46C	150.0	1.094	5.148	5.68	15.34	8.03	13.40	10.20	0.021	14.32	12.52
DMH-46C	DMH-46A	149.0	1.728	5.096	8.88	14.40	5.02	10.10	7.30	0.019	12.13	11.06
DMH-46A	DMH-45	78.0	1.874	5.011	9.47	12.47	5.36	7.30	6.20	0.014	10.93	10.29
CB-45B	DMH-45	8.0	0.169	5.300	0.90	3.31	2.59	6.80	6.20	0.075	10.34	10.29
CB-45C	DMH-45	33.0	0.188	5.300	1.01	-2.63	1.28	6.85	7.03	-0.005	10.32	10.29
DMH-45	DMH-44	182.0	2.396	4.970	12.00	23.36	3.82	6.20	4.26	0.011	10.16	9.65
DMH-44	DMH-41	186.0	2.776	4.835	13.53	46.13	1.91	4.16	3.27	0.005	9.57	9.49
CB-40	DMH-41	3.0	0.120	5.300	0.64	5.44	0.81	5.48	5.41	0.023	9.49	9.49
CB-39	DMH-41	38.0	0.264	5.300	1.41	3.37	1.80	5.23	4.89	0.009	9.55	9.49
DMH-41	DMH-38	60.0	3.374	4.560	15.51	58.08	1.61	3.22	3.02	0.003	9.72	9.71
DMH-38A(Partners)	DMH-38	123.0	6.562	5.300	35.06	55.92	3.64	3.40	3.02	0.003	9.86	9.71
DMH-38	DMH-37	431.0	10.345	4.454	46.45	74.52	4.02	3.02	1.86	0.003	10.53	10.00
CB-36	DMH-37	3.0	0.510	5.300	2.73	6.50	3.47	5.72	5.62	0.033	10.02	10.00
CB-35	DMH-37	36.0	0.438	5.300	2.34	3.51	2.98	5.80	5.45	0.010	10.16	10.00
DMH-37	DMH-34	101.0	11.294	4.151	47.25	74.26	4.09	1.84	1.57	0.003	9.94	9.81
DMH-34	DMH-33B	71.0	13.977	4.081	57.50	78.12	4.90	1.56	1.35	0.003	9.64	9.51
DMH-33B	DMH-33A	12.0	13.977	4.040	56.92	131.12	4.86	1.30	1.20	0.008	9.40	9.38
DMH-33A	DMH-32	24.0	13.977	4.033	56.82	77.57	4.85	1.15	1.08	0.003	9.27	9.23
CB-32D	DMH-32B	39.0	0.140	5.300	0.75	3.33	0.95	6.62	6.28	0.009	9.28	9.26
CB-32C	DMH-32B	21.0	0.134	5.300	0.72	3.21	0.91	6.90	6.73	0.008	9.27	9.26
CB-32I	DMH-32H	17.0	0.183	5.300	0.98	1.31	2.80	6.70	6.50	0.012	9.48	9.37
CB-32J	DMH-32H	48.0	0.171	5.300	0.91	1.23	2.61	6.40	5.90	0.010	9.65	9.37
DMH-32H	DMH-32E	119.0	0.353	5.248	1.87	22.14	0.60	5.90	4.76	0.010	9.31	9.30
CB-32G	DMH-32E	44.0	0.088	5.300	0.47	1.21	1.34	5.71	5.27	0.010		

DMH-28	DMH-28	165.0	20.097	3.578	72.48	180.57	2.86	0.65	0.35	0.002	8.80	8.74
CB-27	DMH-25	158.0	20.587	3.514	72.92	178.27	2.87	0.35	0.07	0.002	8.70	8.64
CB-26	DMH-25	5.0	0.262	5.300	1.40	2.76	3.53	8.42	8.39	0.006	8.92	8.89
DMH-25	DMH-25	48.0	0.205	5.300	1.09	3.53	3.96	8.41	7.94	0.010	8.85	8.64
CB-24C	DMH-105	61.0	21.054	3.453	73.28	179.83	2.89	0.07	-0.04	0.002	8.18	8.16
CB-24G	DMH-24B	34.0	0.050	5.300	0.27	3.56	0.34	5.23	4.89	0.010	8.33	8.33
CB-24J	DMH-24E	41.0	0.072	5.300	0.38	4.98	0.49	5.90	5.10	0.020	8.45	8.44
CB-24K	DMH-24I	9.0	0.156	5.300	0.83	1.45	2.39	5.80	5.67	0.014	9.01	8.97
DMH-24I	DMH-24I	54.0	0.183	5.300	0.98	1.87	2.80	6.70	5.41	0.024	9.32	8.97
DMH-24H	DMH-24H	173.0	0.339	5.245	1.79	3.61	2.28	5.41	3.63	0.010	8.96	8.52
DMH-24H	DMH-24E	23.0	0.339	5.030	1.72	5.04	2.19	3.53	3.07	0.020	8.50	8.44
CB-24M	DMH-24L	18.0	0.456	5.300	2.44	6.50	3.10	3.10	2.50	0.033	8.88	8.79
CB-24P	DMH-24N	23.0	0.675	5.300	3.61	5.25	4.59	4.60	4.10	0.022	8.86	8.62
CB-24Q	DMH-24N	21.0	0.548	5.300	2.93	7.38	3.73	5.00	4.10	0.043	8.76	8.62
CB-24Q	DMH-24N	154.0	0.071	5.300	0.38	3.63	0.48	5.60	4.00	0.010	8.64	8.62
CB-24S	DMH-24R	26.0	0.171	5.300	0.91	4.42	1.16	6.60	6.20	0.015	9.39	9.37
CB-24T	DMH-24R	11.0	0.775	5.300	4.14	-11.77	5.27	5.40	6.60	-0.109	9.52	9.37
CB-24U	DMH-24R	116.0	0.161	5.300	0.86	2.96	1.09	7.10	6.30	0.007	9.44	9.37
DMH-24R	DMH-24N	300.0	1.106	4.999	5.57	8.58	3.15	6.10	4.10	0.007	9.47	8.62
DMH-24N	DMH-24L	294.0	2.400	4.394	10.63	16.16	3.38	4.00	2.50	0.005	9.44	8.79
DMH-24L	DMH-24E	80.0	2.856	4.148	11.94	14.96	3.80	2.50	2.15	0.004	8.67	8.44
CB-24F	DMH-24E	15.0	0.136	5.300	0.73	3.05	0.93	5.73	5.62	0.007	8.45	8.44
DMH-24E	DMH-24B	37.0	3.403	4.089	14.02	75.96	1.98	1.35	0.87	0.013	8.34	8.33
CB-24D	DMH-24B	35.0	0.121	5.300	0.65	1.51	1.85	6.65	6.10	0.016	8.43	8.33
DMH-24B	DMH-24A	47.0	3.574	4.036	14.54	63.05	2.06	0.87	0.45	0.009	8.29	8.27
DMH-24A	DMH-105	199.0	3.574	3.971	14.31	25.90	2.02	0.30	0.00	0.002	8.25	8.16
DMH-105	MH-68	43.0	32.577	3.429	112.61	266.27	4.32	-0.04	-0.21	0.004	8.05	8.01
MH-68	DMH-107	222.0	32.925	3.418	113.45	258.94	4.35	-0.21	-1.04	0.004	7.89	7.70
DMH-107	DMH-F10	172.0	34.723	3.362	117.66	256.30	4.50	-1.04	-1.67	0.004	7.61	7.45
DMH-F10	DMH-G9	374.0	42.812	3.319	143.24	267.30	5.43	-1.67	-3.16	0.004	7.17	6.68
CB-G12SE	DMH-G12	13.0	0.075	5.300	0.40	5.13	5.90	8.00	7.73	0.021	8.26	7.92
CB-G13SE	DMH-G13	13.0	0.107	5.300	0.57	5.04	4.25	7.50	7.24	0.020	8.08	8.09
DMH-63B	DMH-G14	23.0	1.193	3.600	4.33	2.97	7.94	4.75	4.50	0.011	9.87	9.34
CB-G15SE	DMH-G15	13.0	0.082	5.300	0.44	5.04	0.56	7.70	7.44	0.020	9.35	9.35
MH-74	DMH-G15	10.0	0.037	5.300	0.20	4.63	0.25	4.90	4.80	0.010	9.35	9.35
DMH-G15	DMH-G14	24.0	0.122	5.188	0.64	9.83	0.36	4.71	4.50	0.009	9.34	9.34
CB-G14SW	DMH-G14	17.0	0.062	5.300	0.33	5.11	0.42	7.80	7.45	0.021	9.34	9.34
DMH-G14	DMH-G13	167.0	1.714	3.597	6.21	9.34	3.52	4.50	3.18	0.008	8.67	8.09
CB-G13SW	DMH-G13	13.0	0.103	5.300	0.55	4.84	4.09	7.50	7.26	0.018	8.08	8.09
DMH-G13	DMH-G12	149.0	2.364	3.544	8.44	20.13	2.69	2.68	1.50	0.008	8.02	7.82
CB-G12SW	DMH-G12	13.0	0.045	5.300	0.24	5.13	3.35	8.00	7.73	0.021	8.20	7.88
DMH-G12	DMH-G11	47.0	2.590	3.482	9.09	20.34	2.89	1.50	1.12	0.008	7.21	7.14
CB-E6SW	DMH-E6	9.0	0.247	5.300	1.32	3.56	4.20	8.61	8.52	0.010	9.10	8.95
CB-E6NW	DMH-E6	26.0	0.247	5.300	1.32	3.56	4.20	8.78	8.52	0.010	9.27	8.94
CB-E3SW	DMH-E3	12.0	0.156	5.300	0.83	3.56	1.06	9.10	8.98	0.010	10.12	10.11
CB-E3NW	DMH-E3	26.0	0.151	5.300	0.81	3.63	3.72	10.19	9.92	0.010	10.57	10.24
DMH-E3	DMH-E4	140.0	0.307	5.268	1.63	10.50	0.92	8.09	6.69	0.010	9.66	9.63
CB-E4NW	DMH-E4	26.0	0.134	5.300	0.71	4.99	4.51	9.50	8.99	0.020	9.85	9.63
CB-E4SW	DMH-E4	9.0	0.176	5.300	0.94	5.18	5.01	9.50	9.31	0.021	9.91	9.62
DMH-E4	DMH-E5	122.0	0.617	4.838	3.01	10.50	1.70	6.69	5.47	0.010	9.50	9.39
DMH-E10	DMH-E5	36.0	0.490	5.300	2.62	22.62	0.83	5.33	4.97	0.010	9.39	9.39
CB-E8NE	DMH-E8	10.0	0.075	5.300	0.40	5.04	0.51	8.90	8.70	0.020	10.44	10.44
DMH-E8	DMH-E9	114.0	0.695	5.244	3.67	6.46	2.99	8.45	7.31	0.010	10.41	10.04
CB-E9NE	DMH-E9	10.0	0.097	5.300	0.52	5.04	0.66	8.90	8.70	0.020	10.04	10.04
DMH-E9	DMH-E5	118.0	1.390	5.136	7.20	10.50	4.07	7.06	5.88	0.010	9.96	9.39
DMH-E5	DMH-E6	104.0	2.819	4.635	13.17	22.62	4.19	4.97	3.93	0.010	9.15	8.72
DMH-E6	DMH-E7	56.0	3.313	4.565	15.25	22.62	4.85	3.93	3.37	0.010	7.89	7.58
DMH-E7	DMH-G11	41.0	3.313	4.532	15.14	31.99	4.82	2.28	1.46	0.020	7.36	7.14
DMH-G11	DMH-G10	10.0	5.921	3.464	20.68	66.13	4.21	0.62	0.36	0.026	6.85	6.82
DMH-G10	DMH-G9	18.0	5.921	3.462	20.66	41.01	4.21	0.36	0.18	0.010	6.72	6.68
DMH-G9	MH-75	128.0	49.794	1.662	83.40	0.00	3.60	-12.15	-12.15	0.000	6.68	6.44
MH-75	DMH-110	82.0	49.794	1.645	82.56	405.01	3.57	-3.16	-3.91	0.009	6.25	6.10
DMH-110	DMH-111	211.0	49.794	1.634	82.02	260.76	3.55	-3.91	-4.71	0.004	5.88	5.50
DMH-111	O-1	67.0	49.794	1.606	80.61	258.68	3.50	-4.71	-4.96	0.004	5.32	5.20
CB-2	DMH-3	20.0	0.223	5.300	1.19	3.90	4.36	7.72	7.48	0.012	8.18	7.86
CB-1	DMH-3	72.0	0.203	5.300	1.09	3.09	3.58	7.55	7.01	0.008	7.99	7.79
DMH-3	DMH-4	57.0	0.426	5.243	2.25	10.13	4.61	6.91	6.38	0.009	7.48	7.05
DMH-4	O-2	218.0	0.426	5.208	2.24	10.98	4.88	6.38	4.00	0.011	6.94	4.85

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Scenario: 25-year with tailwater
Current Time Step: 0.000Hr
Conduit FlexTable: Combined Pipe/Node Report

Start Node	Stop Node	Length (Unified) (ft)	System CA (acres)	System Intensity (in/h)	System Rational Flow (ft ³ /s)	Capacity (Full Flow) (ft ³ /s)	Velocity (Average) (ft/s)	Invert (Upstream) (ft)	Invert (Downstream) (ft)	Slope (ft/ft)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)
CB-G6N	DMH-G6	14.0	0.118	6.000	0.71	5.04	0.91	7.50	7.22	0.020	10.16	10.15
CB-G4E	DMH-G4	9.0	0.273	6.000	1.65	5.04	2.10	7.00	6.82	0.020	10.17	10.15
DCB-G2E	DMH-G2	12.0	0.232	6.000	1.40	5.14	1.78	5.00	4.75	0.021	9.52	9.50
CB-G1E	DMH-G1	43.0	0.179	6.000	1.08	3.56	1.38	4.00	3.57	0.010	9.44	9.40
CB-G1NE	DMH-G1	56.0	0.098	6.000	0.59	3.56	0.76	4.00	3.44	0.010	9.42	9.40
DMH-G1	DMH-G2	45.0	0.277	5.778	1.61	77.20	0.13	2.90	2.77	0.003	9.50	9.50
DMH-G2	DMH-G3	42.0	0.509	4.726	2.42	79.91	0.19	2.77	2.64	0.003	10.15	10.15
DMH-G3	DMH-G4	155.0	0.509	4.144	2.13	79.09	0.17	2.64	2.17	0.003	10.15	10.15
DMH-G4	DMH-G5	203.0	0.782	2.971	2.34	62.14	0.19	2.17	1.79	0.002	10.15	10.15
RG-G1	DMH-G5	65.0	0.000	6.000	0.00	8.13	7.08	5.32	4.29	0.016	11.34	10.16
DMH-G5	DMH-G6	118.0	0.782	2.426	1.91	137.41	0.84	1.79	0.71	0.009	10.15	10.14
DMH-G6	DMH-G7	38.0	1.015	2.356	2.41	80.72	0.88	-0.73	-0.85	0.003	10.14	10.14
DMH-G7	DMH-G8	11.0	1.015	2.334	2.39	212.16	0.88	-0.85	-1.09	0.022	9.53	9.53
DMH-G8	DMH-G9	70.0	1.015	2.328	2.38	78.67	0.88	-1.09	-1.30	0.003	9.53	9.52
CB-F7NE	DMH-F7	12.0	0.219	6.000	1.32	5.24	1.69	9.00	8.74	0.022	10.65	10.63
CB-F7NW	DMH-F7	13.0	0.000	6.000	0.00	5.04	0.00	9.00	8.74	0.020	10.64	10.64
CB-F6NE	DMH-F6	12.0	0.195	6.000	1.18	5.24	1.50	9.00	8.74	0.022	11.17	11.16
CB-F6NW	DMH-F6	13.0	0.000	6.000	0.00	5.04	0.00	9.00	8.74	0.020	11.17	11.17
CB-F5NW	DMH-F5	13.0	0.000	6.000	0.00	5.04	0.00	9.00	8.74	0.020	11.59	11.59
CB-F5NE	DMH-F5	13.0	0.212	6.000	1.28	5.04	1.63	9.00	8.74	0.020	11.60	11.58
CB-F4NW	DMH-F4	13.0	0.121	6.000	0.73	3.56	0.93	9.00	8.87	0.010	11.76	11.75
CB-F4NE	DMH-F4	12.0	0.123	6.000	0.74	3.71	0.94	9.00	8.87	0.011	11.76	11.75
CB-F3NE	DMH-F3	10.0	0.240	6.000	1.45	5.04	1.85	8.50	8.30	0.020	12.48	12.46
CB-F1NE	DMH-F1	9.0	0.083	6.000	0.50	3.76	0.64	9.90	9.80	0.011	12.56	12.56
DMH-F1	DMH-F2	78.0	0.514	5.958	3.08	6.83	1.75	8.30	7.97	0.004	12.51	12.44
DCB-F2E	DMH-F2	77.0	0.404	6.000	2.44	5.10	1.99	8.70	8.22	0.006	12.60	12.49
DMH-F2	DMH-F3	36.0	0.917	5.824	5.38	12.50	1.71	7.47	7.36	0.003	12.42	12.40
DMH-F3	DMH-C5	129.0	1.157	5.761	6.72	12.44	2.14	7.36	6.97	0.003	12.39	12.28
CB-C4SW	DMH-C4	12.0	0.075	6.000	0.46	5.04	0.58	9.10	8.86	0.020	12.41	12.40
CB-C4NW	DMH-C4	12.0	0.050	6.000	0.30	5.04	0.39	9.10	8.86	0.020	12.41	12.41
CB-C3SW	DMH-C3	12.0	0.028	6.000	0.17	11.12	0.22	9.60	8.43	0.098	12.32	12.32
CB-C3NW	DMH-C3	12.0	0.025	6.000	0.15	11.12	0.19	9.60	8.43	0.098	12.32	12.32
DMH-C3	DMH-C4	40.0	0.141	5.812	0.83	10.37	0.47	8.43	8.04	0.010	12.32	12.32
DMH-C4	DMH-C5	57.0	0.733	5.566	4.10	10.50	2.32	8.04	7.47	0.010	12.30	12.21
DMH-C5	DMH-C6	33.0	1.890	5.483	10.45	12.45	3.33	6.97	6.87	0.003	12.15	12.08
CB-C7SE	DMH-C7	14.0	0.106	6.000	0.64	5.04	0.81	9.20	8.92	0.020	12.68	12.67
CB-C7NE	DMH-C7	14.0	0.117	6.000	0.71	5.13	0.90	9.20	8.91	0.021	12.68	12.68
CB-C8SE	DMH-C8	14.0	0.146	6.000	0.88	5.04	1.12	10.70	10.42	0.020	13.61	13.60
CB-C8NE	DMH-C8	14.0	0.082	6.000	0.50	5.04	0.63	10.70	10.42	0.020	13.60	13.60
DMH-C8	DMH-C7	178.0	1.598	5.934	9.56	6.82	5.41	8.51	7.76	0.004	13.93	12.46
DMH-C7	DMH-C6	92.0	2.175	5.835	12.79	14.73	4.07	7.26	6.87	0.004	12.41	12.12
DMH-C6	DMH-F4	116.0	4.183	5.453	22.99	22.85	4.68	6.37	6.01	0.003	11.93	11.57
DMH-F4	DMH-F5	122.0	4.789	5.379	25.97	34.16	3.67	5.51	5.19	0.003	11.55	11.36
DMH-F5	DMH-D5	108.0	5.332	5.279	28.37	38.51	4.01	5.19	4.83	0.003	11.34	11.14
CB-D4NW	DMH-D4	12.0	0.112	6.000	0.68	3.56	0.86	10.30	10.18	0.010	11.73	11.73
CB-D4SW	DMH-D4	13.0	0.117	6.000	0.71	3.42	0.90	10.30	10.18	0.009	11.73	11.73
DMH-D4	DMH-D5	90.0	0.452	5.957	2.71	10.50	1.54	8.34	7.44	0.010	11.69	11.63
DCB-D6S	DMH-D6	12.0	0.434	6.000	2.62	5.04	4.73	8.80	8.56	0.020	13.23	13.10
CB-D7E	DMH-D7	54.0	0.133	6.000	0.81	5.18	1.03	8.83	7.69	0.021	13.43	13.40
DMH-D7	DMH-D6	53.0	0.995	5.842	5.86	7.90	3.31	7.69	7.39	0.006	13.26	13.10
DMH-D6	DMH-D5	179.0	1.428	5.794	8.34	8.08	5.34	7.39	6.33	0.006	13.07	11.63
DMH-D5	DMH-F6	123.0	7.212	5.198	37.79	36.58	5.50	4.83	4.46	0.003	11.09	10.67
DMH-F6	DMH-F7	122.0	7.870	5.131	40.71	36.73	5.91	4.46	4.09	0.003	10.62	10.14
DMH-F7	DMH-F8	23.0	8.089	5.089	41.33	43.98	6.00	4.09	3.99	0.004	10.08	9.99
DMH-F8	DMH-F9	10.0	8.089	5.058	41.24	94.32	5.99	3.99	3.79	0.020	9.17	9.13
DMH-F9	DMH-F10	79.0	8.089	5.053	41.20	36.76	5.98	3.79	3.55	0.003	9.07	8.75
CB-E2SE	DMH-E2	8.0	0.195	6.000	1.18	5.19	1.50	7.80	7.63	0.021	9.43	9.42
CB-E2NE	DMH-E2	49.0	0.154	6.000	0.93	3.56	1.18	7.80	7.31	0.010	9.44	9.41
DMH-E2	DMH-E1	33.0	0.348	5.876	2.06	3.56	2.63	7.31	6.98	0.010	9.33	9.22
DMH-E1	MH-68	9.0	0.348	5.838	2.05	3.36	2.61	5.56	5.48	0.009	9.07	9.04
CB-21	DMH-22	5.0	0.496	6.000	3.00	4.51	3.82	6.82	6.74	0.016	10.17	10.14
CB-20	DMH-22	49.0	0.428	6.000	2.59	3.53	3.30	6.82	6.34	0.010	10.47	10.21
CB-18	DMH-19	6.0	0.140	6.000	0.85	5.44	1.08	8.74	8.60	0.023	10.70	10.69
CB-17	DMH-19	49.0	0.141	6.000	0.85	3.60	1.08	8.74	8.24	0.010	10.82	10.79
CB-11	DMH-12	5.0	0.530	6.000	3.20	3.90	4.08	6.66	6.60	0.012	10.96	10.92
CB-10	DMH-12	49.0	0.419	6.000	2.53	3.56	3.23	6.66	6.17	0.010	11.17	10.92
CB-A6SE	DMH-A6	14.0	0.367	6.000	2.22	3.56	2.82	8.08	7.94	0.010	11.45	11.40
CB-A6N	DMH-A6	15.0	0.169	6.000	1.02	3.56	1.30	8.09	7.94	0.010	11.41	11.40
DMH-A6	DMH-A5	93.0	0.777	5.965	4.67	5.76	2.64	7.94	7.66	0.003	12.40	12.22
DMH-A5	DMH-A4	126.0	0.777	5.860	4.59	5.77	2.60	7.66	7.28	0.003	12.16	11.92
CB-A4S	DMH-A4	14.0	0.041	6.000	0.25	5.04	0.32	10.00	9.72	0.020	11.94	11.94
CB-A4N	DMH-A4	14.0	0.053	6.000	0.32	5.13	0.41	10.00	9.71	0.021	11.95	11.95
DMH-A4	DMH-A3	178.0	0.871	5.714	5.02	12.34	1.60	7.28	6.75	0.003	11.91	11.82
DMH-A3	DMH-A2	42.0	1.360	5.380	7.38	12.59	2.35	6.75	6.62	0.003	11.74	11.70
CB-A1S	DMH-A2	15.0	0.159	6.000	0.96	4.69	1.22	7.50	7.24	0.017	11.71	11.70
CB-A1N	DMH-A2	13.0	0.089	6.000	0.54	5.93	0.69	7.60	7.24	0.028	11.70	11.70
DMH-A2	DMH-A1	23.0	1.642	5.326	8.82	14.92	2.81	6.62	6.52	0.004	11.83	11.80
DMH-A1	DMH-8	93.0	1.642	5.302	8.78	12.19	2.79	6.49	6.22	0.003	11.78	11.64
CB-8B	DMH-8	22.0	0.058	6.000	0.35	3.13	0.44	8.45	8.28	0.008	11.59	11.58
CB-8C	DMH-8	61.0	0.151	6.000	0.91	3.41	1.16	8.20	7.64	0.009	11.68	11.64
CB-8A	DMH-8	65.0	0.229	6.000	1.38	2.42	1.76	8.29	7.99	0.005	11.68	11.58
DMH-8	DMH-9	83.0	2.079	5.202	10.90	11.10	3.47	6.22	6.02	0.002	11.39	11.19
DMH-9	DMH-12	97.0	2.079	5.130	10.75	11.25	3.42	6.00	5.76	0.002	11.14	10.92
DMH-12	DMH-13	242.0	3.028	5.045	15.40	20.93	3.14	5.26	4.63	0.003	12.08	11.74
CB-C1N	DMH-C1	24.0	0.064	6.000	0.39	5.04	0.49	10.00	9.52	0.020	13.30	13.30
CB-C1SE	DMH-C1	17.0	0.056	6.000	0.34	4.96	0.43	10.00	9.67	0.019	13.30	13.30
CB-C2NE	DMH-C2	23.0	0.071	6.000	0.43	5.04	0.55	8.80	8.34	0.020	13.20	13.20
CB-C2SE	DMH-C2	13.0	0.073	6.000	0.44	5.04	0.57	8.90	8.64	0.020	13.20	13.20
DMH-C2	DMH-C1	77.0	1.629	5.874	9.65	10.50	5.46	7.63	6.86	0.010	13.95	13.30
DMH-C1	DMH-13	123.0	1.749	5.832	10.28	10.50	5.82	6.86	5.63	0.010	13.35	12.17
DMH-13	DMH-16	64.0	4.777	4.814	23.18	21.14	4.72	4.63	4.46	0.003	11.67	11.47
CB-14	DMH-16	49.0	0.081	6.000	0.49	3.60	0.62	9.21	8.71	0.010	11.92	11.92

CB-15	DMH-16	12.0	0.078	6.000	0.47	2.30	0.60	9.19	9.14	0.004	11.80	11.80
DMH-16	DMH-19	240.0	4.936	4.773	23.75	20.85	4.84	4.46	3.84	0.003	11.40	10.59
DMH-19	DMH-D1	42.0	5.217	4.624	24.32	33.91	3.44	3.34	3.23	0.003	10.57	10.51
DMH-D3	DMH-D2	46.0	1.280	6.000	7.74	7.74	4.38	6.52	6.27	0.005	12.05	11.80
CB-D2S	DMH-D2	29.0	0.214	6.000	1.30	3.17	3.46	7.00	6.77	0.008	11.97	11.80
DMH-D2	DMH-D1	104.0	1.808	5.968	10.88	11.52	6.96	5.77	4.52	0.012	12.33	10.91
DMH-D1	DMH-22	194.0	7.024	4.588	32.48	33.91	4.80	3.23	2.73	0.003	10.47	9.96
DMH-22	DMH-23	122.0	7.948	4.466	35.78	51.52	3.87	2.23	1.91	0.003	9.94	9.77
DMH-23	DMH-24	11.0	7.948	4.372	35.02	95.92	3.79	1.86	1.76	0.009	9.26	9.25
DMH-24	DMH-105	30.0	7.948	4.363	34.96	91.84	3.78	1.71	1.46	0.008	9.22	9.18
CB-30	DMH-31	47.0	0.320	6.000	1.94	3.52	2.47	7.41	6.95	0.010	9.59	9.45
CB-32O	DMH-32M	54.0	0.000	6.000	0.00	3.43	0.00	4.00	3.50	0.009	11.09	11.09
CB-32R	DMH-32P	37.0	0.386	6.000	2.34	3.31	2.97	7.64	7.32	0.009	11.85	11.69
CB-32Q	DMH-32P	22.0	0.288	6.000	1.74	2.94	2.22	7.48	7.33	0.007	11.71	11.66
DMH-32P	DMH-32M	53.0	1.266	5.963	7.61	10.99	4.31	3.02	2.44	0.011	11.37	11.09
CB-32N	DMH-32M	12.0	0.313	6.000	1.89	2.91	2.41	6.88	6.80	0.007	11.12	11.09
CB-F15	DMH-F13	17.0	0.146	6.000	0.88	5.04	1.12	7.10	6.76	0.020	11.31	11.30
CB-F14	DMH-F13	16.0	0.206	6.000	1.25	5.19	1.59	7.10	6.76	0.021	11.32	11.30
CB-F13	DMH-F12	10.0	0.000	6.000	0.00	5.04	0.00	9.30	9.10	0.020	12.12	12.12
CB-F12	DMH-F11	12.0	0.145	6.000	0.88	5.04	1.12	9.30	9.06	0.020	11.64	11.63
DMH-F11	DMH-F12	128.0	0.145	5.968	0.87	10.50	0.49	7.19	5.91	0.010	11.63	11.62
DMH-F12	DMH-F13	140.0	0.915	5.189	4.79	10.50	2.71	5.91	4.51	0.010	11.59	11.30
DMH-F13	DMH-32T	76.0	1.267	5.034	6.43	10.29	3.64	4.51	3.78	0.010	11.67	11.39
CB-32Z	DMH-32Y	31.0	0.000	6.000	0.00	2.56	5.87	3.86	3.70	0.005	11.62	11.10
DMH-32Y	DMH-32U	47.0	0.000	5.984	0.00	6.85	2.61	3.69	3.49	0.004	10.76	10.67
CB-32V	DMH-32U	27.0	0.255	6.000	1.54	3.22	1.97	6.59	6.37	0.008	10.72	10.67
CB-32W	DMH-32U	18.0	0.212	6.000	1.28	3.03	1.64	6.39	6.26	0.007	10.69	10.67
CB-32X	DMH-32U	38.0	0.217	6.000	1.31	3.32	1.67	6.29	5.96	0.009	10.72	10.67
DMH-32U	DMH-32T	119.0	1.083	5.930	6.47	6.88	6.27	3.39	2.88	0.004	12.62	11.29
DMH-32T	DMH-32S	171.0	2.350	4.971	11.78	21.96	3.34	2.78	2.29	0.003	11.11	10.84
DMH-32S	DMH-32M	277.0	2.350	4.818	11.41	22.45	3.26	2.27	1.44	0.003	10.66	10.24
DMH-32M	DMH-32L	24.0	3.930	4.563	18.07	22.15	4.62	1.42	1.35	0.003	10.04	9.97
DMH-32L	DMH-32K	9.0	3.930	4.547	18.01	43.23	4.61	1.30	1.20	0.011	9.55	9.52
DMH-32K	DMH-32	17.0	3.930	4.542	17.99	24.37	4.60	1.15	1.09	0.004	9.46	9.40
CB-34N	CB-34M	32.0	0.206	6.000	1.25	10.24	0.71	6.81	6.63	0.006	10.76	10.75
CB-34M	CB-34L	40.0	0.415	5.864	2.45	10.35	1.39	6.63	6.40	0.006	10.75	10.74
CB-34L	CB-34K	93.0	0.633	5.777	3.69	10.41	2.09	6.40	5.86	0.006	10.74	10.67
CB-34K	CB-34J	25.0	0.880	5.644	5.01	10.22	2.83	5.86	5.72	0.006	10.67	10.64
CB-34J	CB-34I	51.0	1.114	5.617	6.31	10.12	3.57	5.72	5.44	0.005	10.64	10.53
CB-34I	CB-34H	48.0	1.330	5.574	7.47	22.46	2.38	5.44	5.16	0.006	10.53	10.50
CB-34H	CB-34G	41.0	1.560	5.514	8.67	22.03	2.76	5.16	4.93	0.006	10.54	10.50
CB-34G	CB-34F	41.0	1.776	5.489	9.79	22.50	3.12	4.93	4.69	0.006	10.95	10.91
CB-34F	CB-34E	42.0	1.983	5.430	10.85	22.23	3.45	4.69	4.45	0.006	10.91	10.85
CB-34E	CB-34D	41.0	2.190	5.393	11.91	22.03	3.79	4.45	4.22	0.006	10.85	10.78
CB-34D	CB-34C	41.0	2.418	5.361	13.07	22.50	4.16	4.22	3.98	0.006	10.78	10.70
CB-34C	DMH-34A	18.0	2.641	5.331	14.19	19.61	4.52	3.98	3.90	0.004	10.71	10.67
CB-34B	DMH-34A	32.0	0.043	6.000	0.26	3.73	0.33	4.90	4.55	0.011	10.67	10.67
DMH-34A	DMH-34	67.0	2.683	5.319	14.39	23.12	4.58	3.90	3.20	0.010	10.83	10.56
CB-39D	CB-39C	70.0	0.152	6.000	0.92	3.56	1.17	6.00	5.30	0.010	9.56	9.51
CB-39C	DMH-39A	23.0	0.152	5.820	0.89	5.75	1.13	5.30	4.70	0.026	9.51	9.50
CB-39B	DMH-39A	16.0	0.258	6.000	1.56	3.56	1.98	5.11	4.95	0.010	9.53	9.50
DMH-39A	DMH-38	50.0	0.409	5.759	2.38	6.13	1.94	4.70	4.25	0.009	9.78	9.71
CB-38A	DMH-38	35.0	0.000	4.030	0.00	7.94	8.65	3.40	3.20	0.006	10.45	9.71
CB-40A	DMH-41	12.0	0.214	6.000	1.30	2.72	1.65	5.57	5.50	0.006	9.51	9.49
CB-43	DMH-44	26.0	0.124	6.000	0.75	1.56	0.95	6.16	6.11	0.002	9.65	9.64
CB-42	DMH-44	19.0	0.220	6.000	1.33	4.90	1.69	6.15	5.79	0.019	9.69	9.67
CB-45A	DMH-45	35.0	0.185	6.000	1.12	3.56	1.43	7.12	6.77	0.010	10.67	10.64
CB-46B	DMH-46A	45.0	0.146	6.000	0.88	2.19	1.62	7.75	7.30	0.010	11.38	11.31
CB-46E	DMH-46C	7.0	0.439	6.000	2.65	-2.50	7.60	10.60	10.90	-0.043	13.52	13.19
CB-46D	DMH-46C	40.0	0.168	6.000	1.01	-1.05	2.90	10.60	10.90	-0.008	13.46	13.18
CB-46H	DMH-46F	8.0	0.481	6.000	2.91	1.35	8.34	14.30	14.20	0.013	15.33	14.86
CB-46G	DMH-46F	39.0	0.138	6.000	0.84	-1.37	2.39	13.70	14.20	-0.013	14.92	14.65
CB-46M	CB-46L	58.0	0.111	6.000	0.67	1.23	3.60	16.60	16.00	0.010	16.99	16.57
CB-46L	DMH-46K	46.0	0.216	5.952	1.30	1.26	4.10	16.00	15.50	0.011	16.57	16.04
CB-46Q	DMH-46N	7.0	0.086	6.000	0.52	4.86	4.03	17.20	17.07	0.019	17.53	17.57
CB-46O	DMH-46N	23.0	0.099	6.000	0.80	1.38	3.82	17.37	17.07	0.013	17.73	17.56
CB-46P	DMH-46N	22.0	0.073	6.000	0.44	1.24	3.24	17.30	17.07	0.010	17.61	17.56
DMH-46N	DMH-46K	137.0	0.258	5.980	1.55	13.52	5.09	17.07	14.80	0.017	17.54	15.47
DMH-46K	DMH-46J	37.0	0.474	5.899	2.82	13.38	6.00	14.80	14.20	0.016	15.44	14.94
DMH-46J	DMH-46I	12.0	0.474	5.880	2.81	13.56	6.05	14.20	14.00	0.017	14.84	14.73
DMH-46I	DMH-46F	52.0	0.474	5.875	2.81	11.28	5.30	14.00	13.40	0.012	14.64	14.43
DMH-46F	DMH-46C	150.0	1.094	5.845	6.44	15.34	8.30	13.40	10.20	0.021	14.38	12.77
DMH-46C	DMH-46A	149.0	1.700	5.791	9.92	14.40	5.62	10.10	7.30	0.019	12.66	11.33
DMH-46A	DMH-45	78.0	1.846	5.711	10.63	12.47	6.01	7.30	6.20	0.014	11.16	10.37
CB-45B	DMH-45	8.0	0.169	6.000	1.02	3.31	2.93	6.80	6.20	0.075	10.44	10.38
CB-45C	DMH-45	33.0	0.188	6.000	1.14	-2.63	1.45	6.85	7.03	-0.005	10.67	10.64
DMH-45	DMH-44	182.0	2.389	5.672	13.66	23.36	4.35	6.20	4.26	0.011	10.29	9.63
DMH-44	DMH-41	186.0	2.732	5.547	15.28	46.13	2.16	4.16	3.27	0.005	9.59	9.49
CB-40	DMH-41	3.0	0.120	6.000	0.72	5.44	0.92	5.48	5.41	0.023	9.49	9.49
CB-39	DMH-41	38.0	0.264	6.000	1.60	3.37	2.04	5.23	4.89	0.009	9.57	9.49
DMH-41	DMH-38	60.0	3.330	5.289	17.75	58.08	1.85	3.22	3.02	0.003	9.73	9.71
DMH-38A(Partners)	DMH-38	123.0	6.562	6.000	39.69	55.92	4.12	3.40	3.02	0.003	9.90	9.71
DMH-38	DMH-37	431.0	10.302	4.024	41.79	74.52	4.54	3.02	1.86	0.003	10.68	10.00
CB-36	DMH-37	3.0	0.510	6.000	3.09	6.50	3.93	5.72	5.62	0.033	10.02	10.00
CB-35	DMH-37	36.0	0.438	6.000	2.65	3.51	3.38	5.80	5.45	0.010	10.20	10.00
DMH-37	DMH-34	101.0	11.250	3.898	44.20	74.26	4.73	1.84	1.57	0.003	10.48	10.30
DMH-34	DMH-33B	71.0	13.934	3.869	54.35	78.12	5.54	1.56	1.35	0.003	10.23	10.07
DMH-33B	DMH-33A	12.0	13.934	3.852	54.11	131.12	5.52	1.30	1.20	0.008	9.56	9.53
DMH-33A	DMH-32	24.0	13.934	3.850	54.07	77.57	5.52	1.15	1.08	0.003	9.49	9.43
CB-32D	DMH-32B	39.0	0.140	6.000	0.85	3.33	1.08	6.62	6.28	0.009	9.79	9.77
CB-32C	DMH-32B	21.0	0.134	6.000	0.81	3.21	1.03	6.90	6.73	0.008	9.74	9.73
CB-32I	DMH-32H	17.0	0.183	6.000	1.11	1.31	3.17	6.70	6.50	0.012	9.67	9.53
CB-32J	DMH-32H	48.0	0.171	6.000	1.03	1.23	2.96	6.40	5.90	0.010	9.88	9.53
DMH-32H	DMH-32E	119.0	0.353	5.951	2.12	22.14	0.67	5.90	4.76	0.010	9.52	9.51
CB-32G	DMH-32E	44.0	0.088	6.000	0.53	1.21	1.52	5				

DMH-28	DMH-28	165.0	19.902	3.745	75.13	180.57	3.36	0.65	0.35	0.002	9.21	9.12
CB-27	DMH-25	158.0	20.393	3.680	75.64	178.27	3.38	0.35	0.07	0.002	9.11	9.03
CB-26	DMH-25	5.0	0.262	6.000	1.59	2.76	3.64	8.42	8.39	0.006	9.19	9.18
DMH-25	DMH-25	48.0	0.205	6.000	1.24	3.53	4.09	8.41	7.94	0.010	9.22	9.18
CB-24C	DMH-105	61.0	20.860	3.617	76.06	179.83	3.39	0.07	-0.04	0.002	9.02	8.99
CB-24G	DMH-24B	34.0	0.050	6.000	0.30	3.56	0.39	5.23	4.89	0.010	9.22	9.22
CB-24J	DMH-24E	41.0	0.072	6.000	0.43	4.98	0.55	5.90	5.10	0.020	9.26	9.25
CB-24K	DMH-24I	9.0	0.156	6.000	0.94	1.45	2.70	5.80	5.67	0.014	9.02	8.97
DMH-24I	DMH-24I	54.0	0.183	6.000	1.10	1.87	3.16	6.70	5.41	0.024	9.42	8.97
DMH-24H	DMH-24H	173.0	0.339	5.949	2.03	3.61	2.58	5.41	3.63	0.010	9.83	9.26
DMH-24H	DMH-24E	23.0	0.339	5.748	1.96	5.04	2.50	3.53	3.07	0.020	9.22	9.15
CB-24M	DMH-24L	18.0	0.456	6.000	2.76	6.50	3.51	3.10	2.50	0.033	9.16	9.05
CB-24P	DMH-24N	23.0	0.675	6.000	4.08	5.25	5.20	4.60	4.10	0.022	8.92	8.62
CB-24O	DMH-24N	21.0	0.548	6.000	3.31	7.38	4.22	5.00	4.10	0.043	8.80	8.62
CB-24Q	DMH-24N	154.0	0.071	6.000	0.43	3.63	0.55	5.60	4.00	0.010	8.64	8.62
CB-24S	DMH-24R	26.0	0.171	6.000	1.03	4.42	1.31	6.60	6.20	0.015	9.39	9.37
CB-24T	DMH-24R	11.0	0.775	6.000	4.69	-11.77	5.97	5.40	6.60	-0.109	9.56	9.37
CB-24U	DMH-24R	116.0	0.161	6.000	0.97	2.96	1.24	7.10	6.30	0.007	9.46	9.37
DMH-24R	DMH-24N	300.0	1.106	5.719	6.38	8.58	3.61	6.10	4.10	0.007	9.73	8.62
DMH-24N	DMH-24L	294.0	2.400	5.153	12.47	16.16	3.97	4.00	2.50	0.005	9.94	9.05
DMH-24L	DMH-24E	80.0	2.856	4.931	14.20	14.96	4.52	2.50	2.15	0.004	9.54	9.23
CB-24F	DMH-24E	15.0	0.136	6.000	0.82	3.05	1.05	5.73	5.62	0.007	9.26	9.25
DMH-24E	DMH-24B	37.0	3.403	4.878	16.73	75.96	2.37	1.35	0.87	0.013	9.14	9.12
CB-24D	DMH-24B	35.0	0.121	6.000	0.73	1.51	2.09	6.65	6.10	0.016	9.36	9.23
DMH-24B	DMH-24A	47.0	3.574	4.831	17.40	63.05	2.46	0.87	0.45	0.009	9.10	9.07
DMH-24A	DMH-105	199.0	3.574	4.773	17.20	25.90	2.43	0.30	0.00	0.002	9.05	8.92
DMH-105	MH-68	43.0	32.382	3.593	117.29	266.27	4.90	-0.04	-0.21	0.004	8.82	8.77
MH-68	DMH-107	222.0	32.731	3.581	118.16	258.94	4.93	-0.21	-1.04	0.004	8.72	8.48
DMH-107	DMH-F10	172.0	34.528	3.521	122.56	256.30	5.09	-1.04	-1.67	0.004	8.43	8.23
DMH-F10	DMH-G9	374.0	42.617	3.476	149.34	267.30	6.07	-1.67	-3.16	0.004	8.16	7.54
CB-G12SE	DMH-G12	13.0	0.075	6.000	0.46	5.13	0.58	8.00	7.73	0.021	12.20	12.20
CB-G13SE	DMH-G13	13.0	0.107	6.000	0.65	5.04	0.82	7.50	7.24	0.020	11.80	11.80
DMH-63B	DMH-G14	23.0	0.241	6.000	1.46	2.97	2.68	4.75	4.50	0.011	12.16	12.10
CB-G15SE	DMH-G15	13.0	0.082	6.000	0.49	5.04	0.63	7.70	7.44	0.020	11.80	11.80
MH-74	DMH-G15	10.0	1.029	4.200	4.36	4.63	0.55	4.90	4.80	0.010	11.89	11.80
DMH-G15	DMH-G14	24.0	1.113	4.198	4.71	9.83	2.67	4.71	4.50	0.009	12.15	12.10
CB-G14SW	DMH-G14	17.0	0.062	6.000	0.38	5.11	0.48	7.80	7.45	0.021	12.10	12.10
DMH-G14	DMH-G13	167.0	1.754	4.186	7.40	9.34	4.19	4.50	3.18	0.008	12.63	11.80
CB-G13SW	DMH-G13	13.0	0.103	6.000	0.62	4.84	0.79	7.50	7.26	0.018	11.80	11.80
DMH-G13	DMH-G12	149.0	2.399	4.132	9.99	20.13	3.18	2.68	1.50	0.008	12.49	12.20
CB-G12SW	DMH-G12	13.0	0.045	6.000	0.27	5.13	0.35	8.00	7.73	0.021	12.20	12.20
DMH-G12	DMH-G11	47.0	2.639	4.070	10.83	20.34	3.45	1.50	1.12	0.008	13.01	12.90
CB-E6SW	DMH-E6	9.0	0.247	6.000	1.49	3.56	1.90	8.61	8.52	0.010	12.12	12.10
CB-E6NW	DMH-E6	26.0	0.247	6.000	1.49	3.56	1.90	8.78	8.52	0.010	12.15	12.10
CB-E3SW	DMH-E3	12.0	0.156	6.000	0.94	3.56	1.20	9.10	8.98	0.010	13.21	13.20
CB-E3NW	DMH-E3	26.0	0.151	6.000	0.91	3.63	1.16	10.19	9.92	0.010	13.22	13.20
DMH-E3	DMH-E4	140.0	0.307	5.933	1.84	10.50	1.04	8.09	6.69	0.010	13.25	13.21
CB-E4NW	DMH-E4	26.0	0.134	6.000	0.81	4.99	1.03	9.50	8.99	0.020	13.52	13.51
CB-E4SW	DMH-E4	9.0	0.176	6.000	1.07	5.18	1.36	9.50	9.31	0.021	13.45	13.44
DMH-E4	DMH-E5	122.0	0.617	5.529	3.44	10.50	1.95	6.69	5.47	0.010	13.19	13.06
DMH-E10	DMH-E5	36.0	0.963	6.000	5.83	22.62	1.85	5.33	4.97	0.010	12.83	12.80
CB-E8NE	DMH-E8	10.0	0.075	6.000	0.45	5.04	0.58	8.90	8.70	0.020	13.00	13.00
DMH-E8	DMH-E9	114.0	0.695	5.948	4.17	6.46	3.39	8.45	7.31	0.010	13.57	13.10
CB-E9NE	DMH-E9	10.0	0.097	6.000	0.59	5.04	0.75	8.90	8.70	0.020	13.10	13.10
DMH-E9	DMH-E5	118.0	1.390	5.847	8.19	10.50	4.64	7.06	5.88	0.010	14.12	13.40
DMH-E5	DMH-E6	104.0	2.971	5.341	15.99	22.62	5.09	4.97	3.93	0.010	12.62	12.10
DMH-E6	DMH-E7	56.0	3.464	5.279	18.44	22.62	5.87	3.93	3.37	0.010	13.07	12.70
DMH-E7	DMH-G11	41.0	3.464	5.251	18.34	31.99	5.84	2.28	1.46	0.020	13.17	12.90
DMH-G11	DMH-G10	10.0	6.122	4.052	25.00	66.13	5.09	0.62	0.36	0.026	12.84	12.80
DMH-G10	DMH-G9	18.0	6.122	4.049	24.99	41.01	5.09	0.36	0.18	0.010	12.87	12.80
DMH-G9	MH-75	128.0	49.754	2.288	114.77	0.00	5.16	-12.15	-12.15	0.000	7.38	7.23
MH-75	DMH-110	82.0	49.754	2.276	114.15	405.01	5.14	-3.16	-3.91	0.009	7.23	7.13
DMH-110	DMH-111	211.0	49.754	2.268	113.75	260.76	5.12	-3.91	-4.71	0.004	7.02	6.78
DMH-111	O-1	67.0	49.754	2.247	112.71	258.68	5.09	-4.71	-4.96	0.004	5.28	5.20
CB-2	DMH-3	20.0	0.223	6.000	1.35	3.90	4.51	7.72	7.48	0.012	8.21	7.89
CB-1	DMH-3	72.0	0.203	6.000	1.23	3.09	3.70	7.55	7.01	0.008	8.02	7.58
DMH-3	DMH-4	57.0	0.426	5.942	2.55	10.13	4.77	6.91	6.38	0.009	7.52	7.09
DMH-4	O-2	218.0	0.426	5.906	2.54	10.98	5.05	6.38	4.00	0.011	6.98	4.85

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Scenario: 100 Year with tailwater
Current Time Step: 0.000Hr
Conduit FlexTable: Combined Pipe/Node Report

Start Node	Stop Node	Length (Unified) (ft)	System CA (acres)	System Intensity (in/h)	System Rational Flow (ft ³ /s)	Capacity (Full Flow) (ft ³ /s)	Velocity (Average) (ft/s)	Invert (Upstream) (ft)	Invert (Downstream) (ft)	Slope (ft/ft)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)
CB-G6N	DMH-G6	14.0	0.118	7.400	0.88	5.04	1.12	7.50	7.22	0.020	12.01	12.00
CB-G4E	DMH-G4	9.0	0.273	7.400	2.03	5.04	2.59	7.00	6.82	0.020	11.63	11.60
DCB-G2E	DMH-G2	12.0	0.232	7.400	1.73	5.14	2.20	5.00	4.75	0.021	9.53	9.50
CB-G1E	DMH-G1	43.0	0.179	7.400	1.34	3.56	1.70	4.00	3.57	0.010	9.46	9.40
CB-G1NE	DMH-G1	56.0	0.098	7.400	0.73	3.56	0.93	4.00	3.44	0.010	9.42	9.40
DMH-G1	DMH-G2	45.0	0.277	7.190	2.01	77.20	0.16	2.90	2.77	0.003	9.50	9.50
DMH-G2	DMH-G3	42.0	0.509	6.204	3.18	79.91	0.25	2.77	2.64	0.003	10.30	10.30
DMH-G3	DMH-G4	155.0	0.509	5.624	2.88	79.09	0.23	2.64	2.17	0.003	11.60	11.60
DMH-G4	DMH-G5	203.0	0.782	4.394	3.46	62.14	0.28	2.17	1.79	0.002	12.01	12.01
RG-G1	DMH-G5	65.0	0.000	7.400	0.00	8.13	7.72	5.32	4.29	0.016	13.42	12.02
DMH-G5	DMH-G6	118.0	0.782	3.620	2.85	137.41	0.98	1.79	0.71	0.009	12.01	12.00
DMH-G6	DMH-G7	38.0	1.015	3.540	3.62	80.72	1.04	-0.73	-0.85	0.003	12.30	12.30
DMH-G7	DMH-G8	11.0	1.015	3.516	3.60	212.16	1.04	-0.85	-1.09	0.022	12.40	12.40
DMH-G8	DMH-G9	70.0	1.015	3.509	3.59	78.67	1.04	-1.09	-1.30	0.003	12.81	12.80
CB-F7NE	DMH-F7	12.0	0.219	7.400	1.63	5.24	2.08	9.00	8.74	0.022	13.23	13.20
CB-F7NW	DMH-F7	13.0	0.000	7.400	0.00	5.04	0.00	9.00	8.74	0.020	13.20	13.20
CB-F6NE	DMH-F6	12.0	0.195	7.400	1.46	5.24	1.85	9.00	8.74	0.022	13.22	13.20
CB-F6NW	DMH-F6	13.0	0.000	7.400	0.00	5.04	0.00	9.00	8.74	0.020	13.20	13.20
CB-F5NW	DMH-F5	13.0	0.000	7.400	0.00	5.04	0.00	9.00	8.74	0.020	13.10	13.10
CB-F5NE	DMH-F5	13.0	0.212	7.400	1.58	5.04	2.01	9.00	8.74	0.020	13.13	13.10
CB-F4NW	DMH-F4	13.0	0.121	7.400	0.91	3.56	1.15	9.00	8.87	0.010	13.21	13.20
CB-F4NE	DMH-F4	12.0	0.123	7.400	0.92	3.71	1.17	9.00	8.87	0.011	13.21	13.20
CB-F3NE	DMH-F3	10.0	0.240	7.400	1.79	5.04	2.28	8.50	8.30	0.020	12.93	12.90
CB-F1NE	DMH-F1	9.0	0.083	7.400	0.62	3.76	0.79	9.90	9.80	0.011	12.90	12.90
DMH-F1	DMH-F2	78.0	0.514	7.380	3.81	6.83	2.16	8.30	7.97	0.004	13.06	12.95
DCB-F2E	DMH-F2	77.0	0.404	7.400	3.01	5.10	2.45	8.70	8.22	0.006	13.17	13.00
DMH-F2	DMH-F3	36.0	0.917	7.233	6.69	12.50	2.13	7.47	7.36	0.003	12.93	12.90
DMH-F3	DMH-C5	129.0	1.157	7.174	8.37	12.44	2.66	7.36	6.97	0.003	13.98	13.80
CB-C4SW	DMH-C4	12.0	0.075	7.400	0.56	5.04	0.72	9.10	8.86	0.020	13.40	13.40
CB-C4NW	DMH-C4	12.0	0.050	7.400	0.37	5.04	0.48	9.10	8.86	0.020	13.40	13.40
CB-C3SW	DMH-C3	12.0	0.028	7.400	0.21	11.12	0.27	9.60	8.43	0.098	13.40	13.40
CB-C3NW	DMH-C3	12.0	0.025	7.400	0.19	11.12	0.24	9.60	8.43	0.098	13.40	13.40
DMH-C3	DMH-C4	40.0	0.141	7.222	1.03	10.37	0.58	8.43	8.04	0.010	13.40	13.40
DMH-C4	DMH-C5	57.0	0.733	6.982	5.16	10.50	2.92	8.04	7.47	0.010	13.94	13.80
DMH-C5	DMH-C6	33.0	1.890	6.914	13.17	12.45	4.19	6.97	6.87	0.003	14.18	14.07
CB-C7SE	DMH-C7	14.0	0.106	7.400	0.79	5.04	1.00	9.20	8.92	0.020	13.41	13.40
CB-C7NE	DMH-C7	14.0	0.117	7.400	0.87	5.13	1.11	9.20	8.91	0.021	13.41	13.40
CB-C8SE	DMH-C8	14.0	0.146	7.400	1.09	5.04	1.38	10.70	10.42	0.020	13.61	13.60
CB-C8NE	DMH-C8	14.0	0.082	7.400	0.61	5.04	0.78	10.70	10.42	0.020	13.60	13.60
DMH-C8	DMH-C7	178.0	1.598	7.337	11.82	6.82	6.69	8.51	7.76	0.004	15.65	13.40
DMH-C7	DMH-C6	92.0	2.175	7.244	15.88	14.73	5.06	7.26	6.87	0.004	14.58	14.13
DMH-C6	DMH-F4	116.0	4.183	6.886	29.03	22.85	5.91	6.37	6.01	0.003	13.78	13.20
DMH-F4	DMH-F5	122.0	4.789	6.817	32.91	34.16	4.66	5.51	5.19	0.003	13.40	13.10
DMH-F5	DMH-D5	108.0	5.332	6.726	36.15	38.51	5.11	5.19	4.83	0.003	14.22	13.90
CB-D4NW	DMH-D4	12.0	0.112	7.400	0.83	3.56	1.06	10.30	10.18	0.010	13.41	13.40
CB-D4SW	DMH-D4	13.0	0.117	7.400	0.87	3.42	1.11	10.30	10.18	0.009	13.41	13.40
DMH-D4	DMH-D5	90.0	0.452	7.359	3.35	10.50	1.90	8.34	7.44	0.010	13.99	13.90
DCB-D6S	DMH-D6	12.0	0.434	7.400	3.24	5.04	5.80	8.80	8.56	0.020	13.30	13.10
CB-D7E	DMH-D7	54.0	0.133	7.400	0.99	5.18	1.27	8.83	7.69	0.021	13.44	13.40
DMH-D7	DMH-D6	53.0	0.995	7.251	7.27	7.90	4.11	7.69	7.39	0.006	13.35	13.10
DMH-D6	DMH-D5	179.0	1.428	7.206	10.38	8.08	6.62	7.39	6.33	0.006	16.12	13.90
DMH-D5	DMH-F6	123.0	7.212	6.652	48.36	36.58	7.03	4.83	4.46	0.003	13.88	13.20
DMH-F6	DMH-F7	122.0	7.870	6.591	52.28	36.73	7.58	4.46	4.09	0.003	13.99	13.20
DMH-F7	DMH-F8	23.0	8.089	6.534	53.28	43.98	7.72	4.09	3.99	0.004	13.39	13.24
DMH-F8	DMH-F9	10.0	8.089	6.524	53.20	94.32	7.71	3.99	3.79	0.020	12.42	12.35
DMH-F9	DMH-F10	79.0	8.089	6.519	53.16	36.76	7.71	3.79	3.55	0.003	12.22	11.69
CB-E2SE	DMH-E2	8.0	0.195	7.400	1.45	5.19	1.85	7.80	7.63	0.021	12.01	12.00
CB-E2NE	DMH-E2	49.0	0.154	7.400	1.15	3.56	1.46	7.80	7.31	0.010	12.05	12.00
DMH-E2	DMH-E1	33.0	0.348	7.283	2.56	3.56	3.26	7.31	6.98	0.010	12.67	12.50
DMH-E1	MH-68	9.0	0.348	7.247	2.54	3.36	3.24	5.56	5.48	0.009	12.25	12.21
CB-21	DMH-22	5.0	0.496	7.400	3.70	4.51	4.71	6.82	6.74	0.016	11.13	11.08
CB-20	DMH-22	49.0	0.428	7.400	3.20	3.53	4.07	6.82	6.34	0.010	11.47	11.08
CB-18	DMH-19	6.0	0.140	7.400	1.04	5.44	1.33	8.74	8.60	0.023	12.40	12.40
CB-17	DMH-19	49.0	0.141	7.400	1.05	3.60	1.34	8.74	8.24	0.010	12.64	12.60
CB-11	DMH-12	5.0	0.530	7.400	3.95	3.90	5.03	6.66	6.60	0.012	10.98	10.92
CB-10	DMH-12	49.0	0.419	7.400	3.13	3.56	3.98	6.66	6.17	0.010	11.30	10.92
CB-A6SE	DMH-A6	14.0	0.367	7.400	2.73	3.56	3.48	8.08	7.94	0.010	11.48	11.40
CB-A6N	DMH-A6	15.0	0.169	7.400	1.26	3.56	1.60	8.09	7.94	0.010	11.42	11.40
DMH-A6	DMH-A5	93.0	0.777	7.367	5.77	5.76	3.27	7.94	7.66	0.003	12.78	12.50
DMH-A5	DMH-A4	126.0	0.777	7.268	5.69	5.77	3.22	7.66	7.28	0.003	12.42	12.05
CB-A4S	DMH-A4	14.0	0.041	7.400	0.31	5.04	0.39	10.00	9.72	0.020	12.08	12.08
CB-A4N	DMH-A4	14.0	0.053	7.400	0.39	5.13	0.50	10.00	9.71	0.021	12.10	12.10
DMH-A4	DMH-A3	178.0	0.871	7.131	6.26	12.34	1.99	7.28	6.75	0.003	12.03	11.89
DMH-A3	DMH-A2	42.0	1.360	6.818	9.35	12.59	2.98	6.75	6.62	0.003	11.77	11.70
CB-A1S	DMH-A2	15.0	0.159	7.400	1.18	4.69	1.51	7.50	7.24	0.017	11.72	11.70
CB-A1N	DMH-A2	13.0	0.089	7.400	0.67	5.93	0.85	7.60	7.24	0.028	11.70	11.70
DMH-A2	DMH-A1	23.0	1.642	6.769	11.20	14.92	3.57	6.62	6.52	0.004	11.86	11.80
DMH-A1	DMH-8	93.0	1.642	6.746	11.17	12.19	3.55	6.49	6.22	0.003	12.34	12.11
CB-8B	DMH-8	22.0	0.058	7.400	0.43	3.13	0.55	8.45	8.28	0.008	12.03	12.02
CB-8C	DMH-8	61.0	0.151	7.400	1.12	3.41	1.43	8.20	7.64	0.009	12.17	12.11
CB-8A	DMH-8	65.0	0.229	7.400	1.71	2.42	2.17	8.29	7.99	0.005	12.17	12.02
DMH-8	DMH-9	83.0	2.079	6.655	13.95	11.10	4.44	6.22	6.02	0.002	11.69	11.37
DMH-9	DMH-12	97.0	2.079	6.589	13.81	11.25	4.40	6.00	5.76	0.002	11.28	10.92
DMH-12	DMH-13	242.0	3.028	6.512	19.88	20.93	4.05	5.26	4.63	0.003	13.47	12.90
CB-C1N	DMH-C1	24.0	0.064	7.400	0.48	5.04	0.61	10.00	9.52	0.020	13.30	13.30
CB-C1SE	DMH-C1	17.0	0.056	7.400	0.42	4.96	0.53	10.00	9.67	0.019	13.30	13.30
CB-C2NE	DMH-C2	23.0	0.071	7.400	0.53	5.04	0.68	8.80	8.34	0.020	13.21	13.20
CB-C2SE	DMH-C2	13.0	0.073	7.400	0.55	5.04	0.70	8.90	8.64	0.020	13.20	13.20
DMH-C2	DMH-C1	77.0	1.629	7.281	11.96	10.50	6.77	7.63	6.86	0.010	14.30	13.30
DMH-C1	DMH-13	123.0	1.749	7.241	12.77	10.50	7.23	6.86	5.63	0.010	14.72	12.90
DMH-13	DMH-16	64.0	4.777	6.303	30.35	21.14	6.18	4.63	4.46	0.003	13.79	13.44
CB-14	DMH-16	49.0	0.081	7.400	0.61	3.60	0.77	9.21	8.71	0.010	13.45	13.44

CB-15	DMH-16	12.0	0.078	7.400	0.58	2.30	0.74	9.19	9.14	0.004	13.44	13.44
DMH-16	DMH-19	240.0	4.936	6.267	31.18	20.85	6.35	4.46	3.84	0.003	13.59	12.20
DMH-19	DMH-D1	42.0	5.217	6.134	32.26	33.91	4.56	3.34	3.23	0.003	12.15	12.05
DMH-D3	DMH-D2	46.0	1.280	7.400	9.55	7.74	5.40	6.52	6.27	0.005	12.18	11.80
CB-D2S	DMH-D2	29.0	0.214	7.400	1.60	3.17	4.22	7.00	6.77	0.008	12.05	11.80
DMH-D2	DMH-D1	104.0	1.808	7.370	13.43	11.52	8.57	5.77	4.52	0.012	14.85	12.69
DMH-D1	DMH-22	194.0	7.024	6.102	43.21	33.91	6.36	3.23	2.73	0.003	11.96	11.08
DMH-22	DMH-23	122.0	7.948	5.995	48.03	51.52	5.17	2.23	1.91	0.003	12.25	11.95
DMH-23	DMH-24	11.0	7.948	5.913	47.37	95.92	5.10	1.86	1.76	0.009	12.08	12.05
DMH-24	DMH-105	30.0	7.948	5.905	47.31	91.84	5.10	1.71	1.46	0.008	12.39	12.32
CB-30	DMH-31	47.0	0.320	7.400	2.39	3.52	3.04	7.41	6.95	0.010	12.19	11.98
CB-32O	DMH-32M	54.0	0.000	7.400	0.00	3.43	0.00	4.00	3.50	0.009	11.09	11.09
CB-32R	DMH-32P	37.0	0.386	7.400	2.88	3.31	3.67	7.64	7.32	0.009	11.93	11.69
CB-32Q	DMH-32P	22.0	0.288	7.400	2.15	2.94	2.73	7.48	7.33	0.007	11.77	11.69
DMH-32P	DMH-32M	53.0	1.266	7.385	9.40	10.99	5.32	3.02	2.44	0.011	11.51	11.09
CB-32N	DMH-32M	12.0	0.313	7.400	2.33	2.91	2.97	6.88	6.80	0.007	11.14	11.09
CB-F15	DMH-F13	17.0	0.146	7.400	1.09	5.04	1.38	7.10	6.76	0.020	11.32	11.30
CB-F14	DMH-F13	16.0	0.206	7.400	1.54	5.19	1.96	7.10	6.76	0.021	11.33	11.30
CB-F13	DMH-F12	10.0	0.000	7.400	0.00	5.04	0.00	9.30	9.10	0.020	12.65	12.65
CB-F12	DMH-F11	12.0	0.145	7.400	1.08	5.04	1.38	9.30	9.06	0.020	11.86	11.85
DMH-F11	DMH-F12	128.0	0.145	7.369	1.08	10.50	0.61	7.19	5.91	0.010	11.84	11.83
DMH-F12	DMH-F13	140.0	0.915	6.634	6.12	10.50	3.46	5.91	4.51	0.010	11.78	11.30
DMH-F13	DMH-32T	76.0	1.267	6.492	8.29	10.29	4.69	4.51	3.78	0.010	11.86	11.39
CB-32Z	DMH-32Y	31.0	0.000	7.400	0.00	2.56	7.92	3.86	3.70	0.005	12.04	11.10
DMH-32Y	DMH-32U	47.0	0.000	7.386	0.00	6.85	3.52	3.69	3.49	0.004	10.83	10.67
CB-32V	DMH-32U	27.0	0.255	7.400	1.90	3.22	2.42	6.59	6.37	0.008	10.75	10.67
CB-32W	DMH-32U	18.0	0.212	7.400	1.58	3.03	2.02	6.39	6.26	0.007	10.71	10.67
CB-32X	DMH-32U	38.0	0.217	7.400	1.62	3.32	2.06	6.29	5.96	0.009	10.75	10.67
DMH-32U	DMH-32T	119.0	1.083	7.335	8.01	6.88	8.05	3.39	2.88	0.004	13.57	11.39
DMH-32T	DMH-32S	171.0	2.350	6.436	15.25	21.96	4.37	2.78	2.29	0.003	12.41	11.94
DMH-32S	DMH-32M	277.0	2.350	6.299	14.92	22.45	4.31	2.27	1.44	0.003	11.83	11.09
DMH-32M	DMH-32L	24.0	3.930	6.074	24.06	22.15	6.17	1.42	1.35	0.003	11.50	11.37
DMH-32L	DMH-32K	9.0	3.930	6.060	24.00	43.23	6.16	1.30	1.20	0.011	11.54	11.49
DMH-32K	DMH-32	17.0	3.930	6.055	23.98	24.37	6.15	1.15	1.09	0.004	11.71	11.62
CB-34N	CB-34M	32.0	0.206	7.400	1.54	10.24	0.87	6.81	6.63	0.006	10.90	10.90
CB-34M	CB-34L	40.0	0.415	7.271	3.04	10.35	1.72	6.63	6.40	0.006	10.90	10.88
CB-34L	CB-34K	93.0	0.633	7.190	4.59	10.41	2.60	6.40	5.88	0.006	10.88	10.77
CB-34K	CB-34J	25.0	0.880	7.065	6.27	10.22	3.55	5.86	5.72	0.006	10.77	10.72
CB-34J	CB-34I	51.0	1.114	7.040	7.90	10.12	4.47	5.72	5.44	0.005	10.72	10.55
CB-34I	CB-34H	48.0	1.330	7.000	9.38	22.46	2.99	5.44	5.16	0.006	10.55	10.50
CB-34H	CB-34G	41.0	1.560	6.944	10.92	22.03	3.48	5.16	4.93	0.006	10.56	10.50
CB-34G	CB-34F	41.0	1.776	6.902	12.35	22.50	3.93	4.93	4.69	0.006	11.10	11.03
CB-34F	CB-34E	42.0	1.983	6.866	13.72	22.23	4.37	4.69	4.45	0.006	11.03	10.94
CB-34E	CB-34D	41.0	2.190	6.832	15.09	22.03	4.80	4.45	4.22	0.006	10.94	10.83
CB-34D	CB-34C	41.0	2.418	6.802	16.58	22.50	5.28	4.22	3.98	0.006	10.83	10.70
CB-34C	DMH-34A	18.0	2.641	6.775	18.03	19.61	5.74	3.98	3.90	0.004	10.74	10.67
CB-34B	DMH-34A	32.0	0.043	7.400	0.32	3.73	0.41	4.90	4.55	0.011	10.67	10.67
DMH-34A	DMH-34	67.0	2.683	6.764	18.30	23.12	5.82	3.90	3.20	0.010	11.00	10.56
CB-39D	CB-39C	70.0	0.152	7.400	1.13	3.56	1.44	6.00	5.30	0.010	9.59	9.52
CB-39C	DMH-39A	23.0	0.152	7.230	1.10	5.75	1.41	5.30	4.70	0.026	9.52	9.50
CB-39B	DMH-39A	16.0	0.258	7.400	1.92	3.56	2.45	5.11	4.95	0.010	9.55	9.50
DMH-39A	DMH-38	50.0	0.409	7.173	2.96	6.13	2.41	4.70	4.25	0.009	9.81	9.71
CB-38A	DMH-38	35.0	0.000	5.387	0.00	7.94	11.58	3.40	3.20	0.006	11.04	9.71
CB-40A	DMH-41	12.0	0.214	7.400	1.60	2.72	2.03	5.57	5.50	0.006	9.51	9.49
CB-43	DMH-44	26.0	0.124	7.400	0.92	1.56	1.18	6.16	6.11	0.002	9.75	9.73
CB-42	DMH-44	19.0	0.220	7.400	1.64	4.90	2.09	6.15	5.79	0.019	9.81	9.77
CB-45A	DMH-45	35.0	0.185	7.400	1.38	3.56	1.76	7.12	6.77	0.010	11.35	11.30
CB-46B	DMH-46A	45.0	0.146	7.400	1.09	2.19	1.99	7.75	7.30	0.010	12.01	11.90
CB-46E	DMH-46C	7.0	0.439	7.400	3.27	-2.50	9.38	10.60	10.90	-0.043	14.53	14.02
CB-46D	DMH-46C	40.0	0.168	7.400	1.25	-1.05	3.58	10.60	10.90	-0.008	14.45	14.02
CB-46H	DMH-46F	8.0	0.481	7.400	3.59	1.35	10.29	14.30	14.20	0.013	15.80	15.09
CB-46G	DMH-46F	39.0	0.138	7.400	1.03	-1.37	2.95	13.70	14.20	-0.013	15.42	15.14
CB-46M	CB-46L	58.0	0.111	7.400	0.83	1.23	3.78	16.60	16.00	0.010	17.19	16.93
CB-46L	DMH-46K	46.0	0.216	7.346	1.60	1.26	4.59	16.00	15.50	0.011	16.93	16.09
CB-46Q	DMH-46N	7.0	0.086	7.400	0.64	4.86	4.28	17.20	17.07	0.019	17.60	17.63
CB-46O	DMH-46N	23.0	0.099	7.400	0.74	1.38	4.02	17.37	17.07	0.013	17.78	17.62
CB-46P	DMH-46N	22.0	0.073	7.400	0.54	1.24	3.43	17.30	17.07	0.010	17.65	17.61
DMH-46N	DMH-46K	137.0	0.258	7.378	1.92	13.52	5.41	17.07	14.80	0.017	17.59	15.55
DMH-46K	DMH-46J	37.0	0.474	7.289	3.48	13.38	6.36	14.80	14.20	0.016	15.51	15.03
DMH-46J	DMH-46I	12.0	0.474	7.289	3.47	13.56	6.42	14.20	14.00	0.017	14.91	14.98
DMH-46I	DMH-46F	52.0	0.474	7.262	3.47	11.28	5.62	14.00	13.40	0.012	14.90	14.93
DMH-46F	DMH-46C	150.0	1.094	7.230	7.97	15.34	8.77	13.40	10.20	0.021	14.88	14.02
DMH-46C	DMH-46A	149.0	1.700	7.170	12.29	14.40	6.95	10.10	7.30	0.019	13.94	11.90
DMH-46A	DMH-45	78.0	1.846	7.095	13.20	12.47	7.47	7.30	6.20	0.014	12.09	10.86
CB-45B	DMH-45	8.0	0.169	7.400	1.26	3.31	3.61	6.80	6.20	0.075	10.97	10.88
CB-45C	DMH-45	33.0	0.188	7.400	1.41	-2.63	1.79	6.85	7.03	-0.005	11.36	11.31
DMH-45	DMH-44	182.0	2.389	7.058	17.00	23.36	5.41	6.20	4.26	0.011	10.73	9.70
DMH-44	DMH-41	186.0	2.732	6.940	19.12	46.13	2.70	4.16	3.27	0.005	9.64	9.49
CB-40	DMH-41	3.0	0.120	7.400	0.89	5.44	1.14	5.48	5.41	0.023	9.49	9.49
CB-39	DMH-41	38.0	0.264	7.400	1.97	3.37	2.51	5.23	4.89	0.009	9.61	9.49
DMH-41	DMH-38	60.0	3.330	6.700	22.49	58.08	2.34	3.22	3.02	0.003	9.74	9.71
DMH-38A(Partners)	DMH-38	123.0	6.562	7.400	48.95	55.92	5.09	3.40	3.02	0.003	10.00	9.71
DMH-38	DMH-37	431.0	10.302	5.376	55.82	74.52	6.07	3.02	1.86	0.003	11.22	10.00
CB-36	DMH-37	3.0	0.510	7.400	3.81	6.50	4.85	5.72	5.62	0.033	10.03	10.00
CB-35	DMH-37	36.0	0.438	7.400	3.27	3.51	4.16	5.80	5.45	0.010	10.30	10.00
DMH-37	DMH-34	101.0	11.250	5.223	59.24	74.26	6.34	1.84	1.57	0.003	10.87	10.56
DMH-34	DMH-33B	71.0	13.934	5.199	73.02	78.12	7.44	1.56	1.35	0.003	11.56	11.26
DMH-33B	DMH-33A	12.0	13.934	5.184	72.81	131.12	7.42	1.30	1.20	0.008	11.43	11.38
DMH-33A	DMH-32	24.0	13.934	5.181	72.77	77.57	7.42	1.15	1.08	0.003	11.72	11.62
CB-32D	DMH-32B	39.0	0.140	7.400	1.04	3.33	1.33	6.62	6.28	0.009	10.47	10.44
CB-32C	DMH-32B	21.0	0.134	7.400	1.00	3.21	1.28	6.90	6.73	0.008	10.41	10.39
CB-32I	DMH-32H	17.0	0.183	7.400	1.36	1.31	3.91	6.70	6.50	0.012	10.04	9.83
CB-32J	DMH-32H	48.0	0.171	7.400	1.27	1.23	3.65	6.40	5.90	0.010	10.36	9.83
DMH-32H	DMH-32E	119.0	0.353	7.354	2.62	22.14	0.83	5.90	4.76	0.010	9.82	9.80
CB-32G	DMH-32E	44.0	0.088	7.400								

DMH-28	DMH-28	165.0	19.902	5.091	102.12	180.57	4.56	0.65	0.35	0.002	12.50	12.35
DMH-28	DMH-25	158.0	20.393	5.034	103.49	178.27	4.60	0.35	0.07	0.002	12.32	12.17
CB-27	DMH-25	5.0	0.262	7.400	1.96	2.76	2.49	8.42	8.39	0.006	12.52	12.51
CB-26	DMH-25	48.0	0.205	7.400	1.53	3.53	1.95	8.41	7.94	0.010	12.59	12.51
DMH-25	DMH-105	61.0	20.860	4.981	104.73	179.83	4.65	0.07	-0.04	0.002	12.14	12.08
CB-24C	DMH-24B	34.0	0.050	7.400	0.37	3.56	0.48	5.23	4.89	0.010	10.42	10.42
CB-24G	DMH-24E	41.0	0.072	7.400	0.54	4.98	0.68	5.90	5.10	0.020	10.09	10.08
CB-24J	DMH-24I	9.0	0.156	7.400	1.16	1.45	3.33	5.80	5.67	0.014	9.05	8.97
CB-24K	DMH-24I	54.0	0.183	7.400	1.36	1.87	3.90	6.70	5.41	0.024	9.66	8.97
DMH-24I	DMH-24H	173.0	0.339	7.352	2.51	3.61	3.19	5.41	3.63	0.010	10.76	9.90
DMH-24H	DMH-24E	23.0	0.339	7.162	2.44	5.04	3.11	3.53	3.07	0.020	10.19	10.08
CB-24M	DMH-24L	18.0	0.456	7.400	3.40	6.50	4.33	3.10	2.50	0.033	9.21	9.05
CB-24P	DMH-24N	23.0	0.675	7.400	5.04	5.25	6.41	4.60	4.10	0.022	9.08	8.62
CB-24O	DMH-24N	21.0	0.548	7.400	4.09	7.38	5.20	5.00	4.10	0.043	8.90	8.62
CB-24Q	DMH-24N	154.0	0.071	7.400	0.53	3.63	0.67	5.60	4.00	0.010	8.65	8.62
CB-24S	DMH-24R	26.0	0.171	7.400	1.27	4.42	1.62	6.60	6.20	0.015	9.40	9.37
CB-24T	DMH-24R	11.0	0.775	7.400	5.78	-11.77	7.36	5.40	6.60	-0.109	9.66	9.37
CB-24U	DMH-24R	116.0	0.161	7.400	1.20	2.96	1.53	7.10	6.30	0.007	9.50	9.37
DMH-24R	DMH-24N	300.0	1.106	7.134	7.96	8.58	4.50	6.10	4.10	0.007	10.34	8.62
DMH-24N	DMH-24L	294.0	2.400	6.599	15.97	16.16	5.08	4.00	2.50	0.005	10.51	9.05
DMH-24L	DMH-24E	80.0	2.856	6.396	18.42	14.96	5.86	2.50	2.15	0.004	10.61	10.08
CB-24F	DMH-24E	15.0	0.136	7.400	1.02	3.05	1.29	5.73	5.62	0.007	10.09	10.08
DMH-24E	DMH-24B	37.0	3.403	6.348	21.78	75.96	3.08	1.35	0.87	0.013	10.46	10.42
CB-24D	DMH-24B	35.0	0.121	7.400	0.90	1.51	2.58	6.65	6.10	0.016	10.61	10.42
DMH-24B	DMH-24A	47.0	3.574	6.306	22.72	63.05	3.21	0.87	0.45	0.009	10.89	10.84
DMH-24A	DMH-105	199.0	3.574	6.255	22.54	25.90	3.19	0.30	0.00	0.002	12.17	11.94
DMH-105	MH-68	43.0	32.382	4.961	161.92	266.27	6.73	-0.04	-0.21	0.004	11.71	11.62
MH-68	DMH-107	222.0	32.731	4.951	163.33	258.94	6.78	-0.21	-1.04	0.004	11.51	11.05
DMH-107	DMH-F10	172.0	34.528	4.900	170.53	256.30	7.04	-1.04	-1.67	0.004	10.94	10.56
DMH-F10	DMH-G9	374.0	42.617	4.862	208.85	267.30	8.44	-1.67	-3.16	0.004	10.40	9.21
CB-G12SE	DMH-G12	13.0	0.075	7.400	0.56	5.13	0.72	8.00	7.73	0.021	12.20	12.20
CB-G13SE	DMH-G13	13.0	0.107	7.400	0.80	5.04	1.01	7.50	7.24	0.020	11.81	11.80
DMH-63B	DMH-G14	23.0	0.241	7.400	1.80	2.97	3.30	4.75	4.50	0.011	12.19	12.10
CB-G15SE	DMH-G15	13.0	0.082	7.400	0.61	5.04	0.78	7.70	7.44	0.020	11.80	11.80
MH-74	DMH-G15	10.0	1.029	5.300	5.50	4.63	7.00	4.90	4.80	0.010	11.94	11.80
DMH-G15	DMH-G14	24.0	1.113	5.298	5.95	9.83	3.36	4.71	4.50	0.009	12.18	12.10
CB-G14SW	DMH-G14	17.0	0.062	7.400	0.46	5.11	0.59	7.80	7.45	0.021	12.10	12.10
DMH-G14	DMH-G13	167.0	1.754	5.287	9.35	9.34	5.29	4.50	3.18	0.008	13.12	11.80
CB-G13SW	DMH-G13	13.0	0.103	7.400	0.77	4.84	0.98	7.50	7.26	0.018	11.81	11.80
DMH-G13	DMH-G12	149.0	2.399	5.238	12.67	20.13	4.03	2.68	1.50	0.008	12.67	12.20
CB-G12SW	DMH-G12	13.0	0.045	7.400	0.34	5.13	0.43	8.00	7.73	0.021	12.20	12.20
DMH-G12	DMH-G11	47.0	2.639	5.180	13.78	20.34	4.39	1.50	1.12	0.008	13.07	12.90
CB-E6SW	DMH-E6	9.0	0.247	7.400	1.84	3.56	2.34	8.61	8.52	0.010	12.12	12.10
CB-E6NW	DMH-E6	26.0	0.247	7.400	1.84	3.56	2.35	8.78	8.52	0.010	12.17	12.10
CB-E3SW	DMH-E3	12.0	0.156	7.400	1.16	3.56	1.48	9.10	8.98	0.010	13.21	13.20
CB-E3NW	DMH-E3	26.0	0.151	7.400	1.13	3.63	1.43	10.19	9.92	0.010	13.23	13.20
DMH-E3	DMH-E4	140.0	0.307	7.337	2.27	10.50	1.28	8.09	6.69	0.010	13.70	13.63
CB-E4NW	DMH-E4	26.0	0.134	7.400	1.00	4.99	1.27	9.50	8.99	0.020	13.72	13.70
CB-E4SW	DMH-E4	9.0	0.176	7.400	1.32	5.18	1.68	9.50	9.31	0.021	13.71	13.70
DMH-E4	DMH-E5	122.0	0.617	6.955	4.33	10.50	2.45	6.69	5.47	0.010	13.61	13.40
DMH-E10	DMH-E5	36.0	0.963	7.400	7.19	22.62	2.29	5.33	4.97	0.010	13.26	13.23
CB-E8NE	DMH-E8	10.0	0.075	7.400	0.56	5.04	0.71	8.90	8.70	0.020	13.00	13.00
DMH-E8	DMH-E9	114.0	0.695	7.351	5.15	6.46	4.19	8.45	7.31	0.010	13.82	13.10
CB-E9NE	DMH-E9	10.0	0.097	7.400	0.73	5.04	0.93	8.90	8.70	0.020	13.10	13.10
DMH-E9	DMH-E5	118.0	1.390	7.256	10.17	10.50	5.75	7.06	5.88	0.010	14.51	13.40
DMH-E5	DMH-E6	104.0	2.971	6.781	20.30	22.62	6.46	4.97	3.93	0.010	12.94	12.10
DMH-E6	DMH-E7	56.0	3.464	6.724	23.48	22.62	7.47	3.93	3.37	0.010	13.30	12.70
DMH-E7	DMH-G11	41.0	3.464	6.698	23.39	31.99	7.45	2.28	1.46	0.020	13.34	12.90
DMH-G11	DMH-G10	10.0	6.122	5.163	31.87	66.13	6.49	0.62	0.36	0.026	12.86	12.80
DMH-G10	DMH-G9	18.0	6.122	5.161	31.85	41.01	6.49	0.36	0.18	0.010	12.91	12.80
DMH-G9	MH-75	128.0	49.754	3.464	173.72	0.00	7.53	-12.15	-12.15	0.000	8.86	8.54
MH-75	DMH-110	82.0	49.754	3.453	173.15	405.01	7.51	-3.16	-3.91	0.009	8.54	8.33
DMH-110	DMH-111	211.0	49.754	3.445	172.79	260.76	7.50	-3.91	-4.71	0.004	8.10	7.57
DMH-111	O-1	67.0	49.754	3.427	171.85	258.68	7.46	-4.71	-4.96	0.004	5.37	5.20
CB-2	DMH-3	20.0	0.223	7.400	1.66	3.90	4.77	7.72	7.48	0.012	8.27	7.94
CB-1	DMH-3	72.0	0.203	7.400	1.52	3.09	3.91	7.55	7.01	0.008	8.07	7.67
DMH-3	DMH-4	57.0	0.426	7.336	3.15	10.13	5.06	6.91	6.38	0.009	7.59	7.18
DMH-4	O-2	218.0	0.426	7.296	3.13	10.98	5.36	6.38	4.00	0.011	7.05	4.85

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Long Term Best Management Practices Checklist

Assembly Square PUD, Somerville, MA

Long Term Best Management Practices – Maintenance/ Evaluation Checklist

Best Management Practice	Inspection Frequency	Date Inspected	Inspector	Minimum Maintenance and Key Items to Check	Cleaning/Repair Needed ☐ yes ☐ no (List Items)	Date of Cleaning/Repair	Performed by
Pavement Sweeping	Minimum four times per year				☐ yes ☐ no		
Catch Basins with Deep Sumps & Oil/Debris Traps	Minimum four times per year			Sediment (if more than six inches deep) and/or floatable pollutants shall be pumped from the basin and disposed of at an approved offsite facility in accordance with all applicable regulations. Any structural damage or other indication of malfunction will be reported to the site manager and repaired as necessary. During colder periods, the catch basin grates must be kept free of snow and ice. During warmer periods, the catch basin grates must be kept free of leaves, litter, sand, and debris.	☐ yes ☐ no		
Subsurface Detention System	Monthly for first 3 months then annually			All subsurface detention systems shall be inspected at least once each year. If sediment is more than six inches deep, it must be suspended via flushing with clean water and removed using a vactor truck. System will be observed after rainfalls to see if it is properly draining.	☐ yes ☐ no		
Structural Water Quality Devices	Monthly for first 3 months then a minimum four times per year			Cleaned a minimum of at least once per year or when sediment depth reaches within six inches of the dry weather water surface elevation. Follow manufacturer instructions for inspection and cleaning and contact manufacturer if system is malfunctioning.	☐ yes ☐ no		
Bioretention Area and Sediment Forebay	2 times in the first year then annually			Invasive plants, weeds, erosion, litter, mulch depth and condition. Weeds and invasive plant species shall be removed by hand. Leaf litter and other detritus shall be removed twice per year. If needed to maintain aesthetic appearance, perennial plantings may be trimmed at the end of the growing season.	☐ yes ☐ no		
Green Roofs	Annually			Plant health, replace as necessary. Drains should be examined annually to ensure that they have not become clogged with sediment or organic debris.	☐ yes ☐ no		
Roof Drain Leaders	Quarterly			Keep roofs clean and free of debris. Keep roof drainage systems clear. Keep roof access limited to authorized personnel. Clean inlets draining to the subsurface bed twice per year as necessary.	☐ yes ☐ no		
Vegetated Areas	Bi-annually			Inspect planted areas on a semi-annual basis and remove any litter. Maintain planted areas adjacent to pavement to prevent soil washout. Immediately clean any soil deposited on pavement. Re-seed bare areas; install appropriate erosion control measures when native soil is exposed or erosion channels are forming. Plant alternative mixture of grass species in the event of unsuccessful establishment. The grass vegetation should not be cut to a height less than four inches. No pesticides are to be used unless a single spot treatment is required for a specific control application. Fertilizer usage should be avoided. If deemed necessary, slow release fertilizer should be used. Fertilizer may be used to begin the establishment of vegetation in bare or damaged areas, but should not be applied on a regular basis unless necessary.	☐ yes ☐ no		
Permeable Pavers	Monthly for first 3 months then annually			Vacuum sweeping or pressure wash. Inspect once per year and clean as necessary. Shovel snow off permeable pavers as necessary. Do not apply abrasives such as sand or grit on or adjacent to permeable pavers. Avoid plowing of areas with permeable pavers.	☐ yes ☐ no		
Tide Gate/Stormwater Outfall	Monthly for first 3 months then annually			Follow manufacturer instructions for inspection and cleaning and contact manufacturer if system is malfunctioning. Ensure proper functioning and correct any areas that have settled or experienced washouts.	☐ yes ☐ no		

Stormwater Control Manager _____