

4/20/11

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NPDES PII Small MS4 General Permit

Annual Report

Municipality/Organization: Town of Fairhaven

EPA NPDES Permit Number: MAR041112

MaDEP Transmittal Number: W-035717

Annual Report Number: 8

& Reporting Period: May 1, 2011

Part I. General Information

Contact Person: John M. Charbonneau

Title: Highway Superintendent

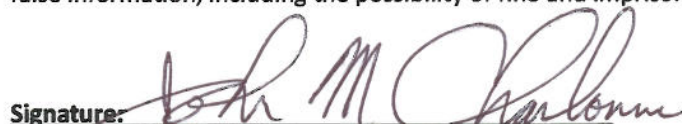
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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:



Printed Name: John M. Charbonneau

Title: Highway Superintendent

Date: May 1, 2011

The following BMP's were instituted in order to comply with the NPDES Phase II

BMP 1-1/1-2: Measurable Goal – Develop article or Brochure and make available at Town Public Buildings with assistance from Buzzards Bay Project.

Brochure's outlining the importance of Stormwater Management is available at the Board of Public Works, Town Hall, Library, and Post Office. (Ongoing)

BMP 1-3: Measurable Goal – Display Stormwater message on the local cable television station.

A Stormwater and water saving tip of the week is being displayed on the local cable television station. (Ongoing)

BMP 1-4: Measurable Goal – Discuss stormwater issues at Board of Public Works meetings.

Stormwater issues are regular topics at Board of Public Works meetings and will be ongoing.

BMP 1-5: Measurable Goal – Educate dog owners about picking up dog waste by developing and distributing a fact sheet.

A pet waste fact sheet was developed and is distributed to pet owners when dog licenses are issued. There are seven mutt mitt dispensers located at parks and along the bike path for pick up of pet waste. These locations are listed on the pet waste fact sheet.

BMP 1-6: Measurable Goal – Contact the School Department to schedule a presentation regarding the importance of Stormwater.

A video entitled “After the Storm” which was co-produced by the EPA and the weather channel, was shown to the Science Class in the Hastings Middle School in May 2010.

BMP 1-7: Sign postings in public water supply areas. Measurable Goal – number of signs installed and inspected.

All sign installations have been completed and are inspected annually.

BMP 1-8: Measurable Goal – Household hazardous waste day held.

Household Hazardous Waste day was held on August 11, 2010.

BMP 1-9: Household paint drop off facility. Measurable Goal – Notify residents of days of operation and advertise on local cable television.

Town Meeting did not support the running of the Paint Shed program this fiscal year. If Town Meeting supports Hazardous Waste day for 2011-2012 then, residents will be notified and the paint can be collected at that time. Paint was accepted at the last Hazardous Waste Day held on August 11, 2010.

BMP 1-10: Develop Ad Hoc Committee, Measurable Goal – number of meetings. (Ongoing)

BMP 2-1: Comply with state public notification guidelines at MGL Chapter 39 Section 23b. Measurable Goal – Notices as currently announced.

Meeting of every Town Board/Commission regarding Stormwater and other issues are advertised in the local paper and on local cable television.

BMP 2-2: Stencil Storm Drains. Measurable Goal – Number of basins stenciled.

All basins were stenciled in the summer of 2010 using summer help (college student).

BMP 2-3: Annual Beach Cleanup Day. Measurable Goal – Beach cleanup day held.

Several cleanup days were held throughout 2010 and the Spring 2011 with the Trial Court Community Service Program. There were several shoreline cleanups by Nye’s Oil Company employees at their Howland Road complex. In all cleanups, the Highway Department supplied and picked up dumpsters, and provided manpower for trash bag pickup.

BMP 3-1: Develop illicit discharge ordinance. Measurable Goal – Develop ordinance and seek Town Meeting approval. (Ongoing)

BMP 3-2: Conduct dry weather outfall screening. Measurable Goal – Continue sampling outfalls.

Dry weather outfall screening could not be conducted in the summer of 2010 due to the extremely wet summer season. Four stream locations were sampled in wet weather conditions. These areas discharge into the Little

Bay/Nasketucket Bay area in east Fairhaven and have contributed to shellfish bed closures. The purpose of the testing was to attempt to isolate the source of pollutants (fecal coliform and nitrogen). Further testing is being proposed for this purpose.

Stormwater Management Plan

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BMP 3-3: Map the stormwater collection system. Measurable Goal – Complete map of all outfalls and catch basins.

The mapping of the Stormwater collection system is now completed. All catch basins and outfalls have been mapped and drainage pipes (sizes and types), have been mapped. We completed a GIS based mapping of the town drainage system which is approximately 99% complete along with photographs of all known drainage outfalls.

BMP 3-4: Develop and implement plan to identify non stormwater discharges to the MS4. Measurable Goal – Number of illicit connections found and removed.

Through our catch basin cleaning program we have not identified any additional illicit connections in 2010.

BMP 4-1: Amend existing Town Subdivision/Zoning regulations to require an erosion and sediment control plan for all construction sites greater than 1 acre. Measurable Goal – Amendment developed.

The Town has adopted the amended Subdivision/Zoning regulations.

BMP 4-3: Consideration of public input. Measurable Goal – Per Massachusetts General Law notification requirements, hold public hearings with opportunity for the general public as well as abutters to review and comment. (Ongoing)

BMP 5-1: Determine necessity of Stormwater BMP reference manual. Measurable Goal – Complete review of existing Stormwater regulations and determine necessity of Stormwater reference manual; select BMP reference manual.

The Town is using the Massachusetts Stormwater Handbook as a reference guide.

BMP 5-2: Ensure long term maintenance of town playing fields and structural BMP's. Measurable Goal – Continue maintenance of town playing fields and structural BMP's.

The maintenance of Town playing fields is an ongoing practice. Developers are required to submit for review a description of all new BMP's along with a 20 year maintenance fee of the proposed project.

BMP 5-3: Evaluate existing structural BMP's for efficiency. Measurable Goal – Create BMP inventory.

An inventory of Structural BMP's complete. A maintenance plan is ongoing as catch basins are repaired as needed, and drainage swales/ditches are cleaned annually. Forty two catch basins were rebuilt, twelve catch basins were repaired and approximately two miles of drainage piping were jet rodded. The Bristol County Mosquito Control performed drainage ditch maintenance at the following locations:

Cleaned with excavator: Shipyard Farms – 990 lf, Sciticut Neck Road @ Pole # 261/A40 – 150 lf, Reservation Road – 165 lf, North end of Silver Shell Beach – 70 lf, Sciticut Neck Road @ house # 770 – 200 lf, Smugglers Cove – 390 lf. Total cleaned = 1965 lf.

The Town installed three tree box filtration units on Elm Avenue as part of a 319 Grant. The 319 Grant will also include the construction of two rain gardens, two storm water treatment units, and numerous additional tree box filtration units. Continued installations of the BMP's will resume in the Spring of 2011.

BMP 5-4: Review site plans for stormwater impacts. Measurable Goal – number of site plans reviewed. (Ongoing)

BMP 6-1: Identify sensitive receptors within the Town. Measurable Goal – List of Sensitive receptors developed, staff notified.

A list of seven sensitive receptors has been identified and employees have been notified to report any unusual circumstances or obvious signs of pollution.

1. Town Beach
2. Nasketucket Bay
3. Nasketucket River Basin
4. Acushnet River
5. Buzzards Bay
6. Winsegansett Salt Marsh
7. Tidal Pond off Potter Street

BMP 6-2: Street Sweeping. Measurable Goal – Percent of streets swept annually, volume of residuals collected.

The Town roads are swept in the spring and fall, (more often if necessary). Records are kept of streets swept and volume of residuals collected. Total amount collected for the year 2010 was 934 cubic yards.

BMP 6-3: Roadway De-icing. Measurable Goal – Alternative deicers evaluated; sand/deicer compound mixture modified if necessary; calibration records maintained; record amount of deicers used.

The deicers and compound mixtures the Town currently uses are proving to be beneficial. The town uses magnesium chloride for on board pre-wetting of sand salt mixture on the four sanders. Magnesium chloride is an environmentally friendly de-icing agent. Calibration of spreaders is done each time the sanding crew gets called out. Calibration records and amounts of deicers are recorded each year.

BMP 6-4: Snow Disposal. Measurable Goal – List of snow disposal sites selected.

Four disposal locations have been designated (if necessary), for snow:

The Standard-Times field off Bridge Street, the Landfill off Bridge Street, the Town Recycle area at the end of Arsene Street and at the Long Road facility.

BMP 6-5: Minimize impacts from hazardous materials associated with vehicle maintenance. Measurable Goal – Volume of material removed from the catch basin located within the containment area.

The containment area catch basin was cleaned once this year, and the residuals were delivered to the Crapo Hill Landfill in New Bedford.

BMP 6-6: Minimize impacts from hazardous materials associated with vehicle maintenance. Measurable Goal – Amount of hazardous materials used; amount of waste materials hauled from our garage by licensed hazardous waste hauler.

STREET SWEEPING

DATE	#OF LOADS		3 CY / LOAD	RUNNING TOTAL CY
Carried Over				6954.9
3/19/2009	7	SAND	21	6975.9
3/20/2009	7	SAND	21	6996.9
3/23/2009	5.5	SAND	16.5	7013.4
3/24/2009	6	SAND	18	7031.4
3/25/2009	5.5	SAND	16.5	7047.9
3/26/2009	1	SAND	3	7050.9
3/27/2009	2	SAND	6	7056.9
3/30/2009	0.5	SAND	1.5	7068.4
3/31/2009	4.5	SAND	13.5	7081.9
4/1/2009	4.5	SAND	13.5	7095.4
4/2/2009	2	SAND	6	7101.4
4/6/2009	2.5	SAND	7.5	7108.9
4/7/2009	4.5	SAND	13.5	7122.4
4/8/2009	6	SAND	18	7140.4
4/9/2009	4	SAND	12	7152.4
4/13/2009	4.5	SAND	13.5	7165.9
4/14/2009	5	SAND	15	7180.9
4/15/2009	2	SAND	6	7186.9
4/16/2009	1	SAND	3	7189.9
4/23/2009	1	SAND	3	7192.9
4/29/2009	1	SAND	3	7195.9
4/30/2009	3	SAND	9	7204.9
5/1/2009	2	SAND	6	7210.9
5/28/2009	2	SAND	6	7216.9
5/29/2009	3	SAND	9	7225.9
6/1/2009	3	SAND	9	7234.9
6/4/2009	3	SAND	9	7243.9
6/8/2009	4	SAND	12	7255.9
6/9/2009	2.5	SAND	7.5	7263.4
6/10/2009	2.5	SAND	7.5	7270.9
6/11/2009	1	SAND	3	7273.9
6/16/2009	4	SAND	12	7285.9
6/17/2009	2	SAND	6	7291.9
6/19/2009	2	SAND	6	7297.9
6/23/2009	0	SAND	0	7297.9
6/24/2009	1	SAND	3	7300.9
6/30/2009	3.5	SAND	10.5	7311.4
7/1/2009	1	SAND	3	7314.4
7/17/2009	2.5	SAND	7.5	7321.9
7/20/2009	2	SAND	6	7327.9
7/24/2009	1	SAND	3	7330.9
7/30/2009	1	SAND	3	7333.9
7/31/2009	1	SAND	3	7336.9
8/3/2009	2	SAND	6	7342.9
8/5/2009	1	SAND	3	7345.9
8/6/2009	2	SAND	6	7351.9
8/7/2009	1.5	SAND	4.5	7356.4
8/10/2009	2	SAND	6	7362.4
8/12/2009	1.5	SAND	4.5	7366.9
8/13/2009	2	SAND	6	7372.9
8/14/2009	2	SAND	6	7378.9

STREET SWEEPING

DATE	#OF LOADS		3 CY / LOAD	RUNNING TOTAL CY
8/20/2009	2	SAND	6	7384.9
8/21/2009	2.5	SAND	7.5	7392.4
8/24/2009	3	SAND	9	7401.4
9/2/2009	1	SAND	3	7404.4
9/3/2009	0.5	SAND	1.5	7405.9
9/4/2009	2	SAND	6	7411.9
9/25/2009	2.5	SAND	7.5	7419.4
9/28/2009	0.5	SAND	1.5	7420.9
10/5/2009	2	LEAVES	6	7426.9
10/7/2009	3	LEAVES	9	7435.9
10/13/2009	4	LEAVES	12	7447.9
10/14/2009	5	LEAVES	15	7462.9
10/15/2009	5	LEAVES	15	7477.9
10/19/2009	5	LEAVES	15	7492.9
10/20/2009	4	LEAVES	12	7504.9
10/21/2009	6	LEAVES	18	7522.9
10/30/2009	7.5	LEAVES	22.5	7545.4
11/2/2009	21	LEAVES	63	7608.4
11/3/2009	13	LEAVES	39	7647.4
11/5/2009	5	LEAVES	15	7662.4
11/6/2009	29	LEAVES	87	7749.4
11/9/2009	29	LEAVES	87	7836.4
11/10/2009	33	LEAVES	99	7935.4
11/12/2009	29	LEAVES	87	8022.4
11/13/2009	3	LEAVES	9	8031.4
11/16/2009	25	LEAVES	75	8106.4
11/17/2009	24	LEAVES	72	8178.4
11/18/2009	21	LEAVES	63	8241.4
11/19/2009	21	LEAVES	63	8304.4
11/20/2009	19	LEAVES	57	8361.4
11/23/2009	6	LEAVES	18	8379.4
12/1/2009	7	LEAVES	21	8400.4
12/2/2009	5	LEAVES	15	8415.4
12/3/2009	6.5	LEAVES	19.5	8434.9
12/8/2009	3	LEAVES	9	8443.9
12/10/2009	1	LEAVES	3	8446.9
3/17/2010	6.5	SAND	19.5	8466.4
3/18/2010	3.5	SAND	10.5	8476.9
3/19/2010	4.5	SAND	13.5	8490.4
3/22/2010	3	SAND	9	8499.4
3/24/2010	2	SAND	6	8505.4
3/25/2010	2	SAND	6	8511.4
3/31/2010	1.5	SAND	4.5	8515.9
4/1/2010	3	SAND	9	8524.9
4/2/2010	1	SAND	3	8527.9
4/9/2010	1	SAND	3	8530.9
4/12/2010	4	SAND	12	8542.9
4/13/2010	4	SAND	12	8554.9
4/14/2010	3	SAND	9	8563.9
4/15/2010	3	SAND	9	8572.9
4/16/2010	2.5	SAND	7.5	8580.4
4/20/2010	2	SAND	6	8586.4

CATCH BASIN CLEANING

DATE	#OF LOADS	TOTAL RUNNING	#CLEANED	
			TOTAL	TOTAL TO DATE
5-1-02	2 @5.2 CY	10.4 CY	50	50
5-2-02	2 @5.2 CY	20.8 CY	38	88
5-13-02	1 @5.2 CY	26.0 CY	17	105
5-14-02	1 @5.2 CY	31.2 CY	53	158
5-29-02	1 @5.2 CY	36.4 CY	52	210
6-6-02	2 @5.2 CY	46.8 CY	34	244
6-7-02	2 @5.2 CY	57.2 CY	50	294
6-14-02	2 @5.2 CY	67.6 CY	49	343
8-12-02	2 @5.2 CY	78.0 CY	48	391
8-19-02	1 @5.2 CY	83.2 CY	39	430
8-20-02	½ @5.2 CY	85.8 CY	25	455
9-16-02	2 @5.2 CY	96.2 CY	50	505
9-17-02	2 @5.2 CY	106.6 CY	41	546
9-23-02	2 @5.2 CY	10.4 CY	44	590
9-27-02	½ @5.2 CY	20.8 CY	16	606
10-7-02	2 @5.2 CY	31.0 CY	37	643
10-16-02	1 @5.2 CY	36.2 CY	13	656
10-17-02	2 @5.2 CY	46.6 CY	40	696
10-28-02	2 @5.2 CY	57.0 CY	40	736
11-4-02	2 @5.2 CY	67.4 CY	44	780
11-14-02	2 @5.2 CY	77.8 CY	48	828
11-22-02	2 @5.2 CY	88.2 CY	38	866
11-25-02	2 @5.2 CY	98.6 CY	49	915
12-04-02	2 @5.2 CY	109.0 CY	4	919
12-16-02	1 @5.2 CY	119.4 CY	9	928
12-17-02	1 @5.2 CY	129.8 CY	32	960
12-30-02	2 @5.2 CY	140.2 CY	30	990

start route

1-9-03	3 @5.2 CY	15.6 CY	36	36
1-10-03	2 @5.2 CY	26.0 CY	37	73
1-15-03	2.5 @5.2CY	39 CY	25	98
1-16-03	2 @5.2 CY	49.4 CY	33	131
1-29-03	1 @5.2 CY	54.6 CY	27	158
1-31-03	1 @5.2 CY	59.8 CY	32	190
2-3-03	½@ 5.2 CY	62.4 CY	27	217
2-4-03	½@ 5.2 CY	65.0 CY	30	247
2-5-03	1@ 5.2 CY	70.2 CY	49	296
2-6-03	2@ 5.2 CY	80.6 CY	31	327
3-5-03	2@ 5.2 CY	91.0 CY	28	355

3-12-03	1@ 5.2 CY	96.2 CY	21	376
3/13/03	2@ 5.2 CY	106.6 CY	38	414
3/17/03	2@ 5.2 CY	117.0 CY	35	449
3/21/03	2@ 5.2 CY	127.4 CY	38	487
3/24/03	2@ 5.2 CY	137.8 CY	37	524
3/25/03	2@ 5.2 CY	148.2 CY	47	571
3/26/03	2@ 5.2 CY	158.6 CY	47	618
3/31/03	2@ 5.2 CY	169.0 CY	53	671
4/1/03	2@ 5.2 CY	179.4 CY	20	691
4/2/03	2@ 5.2 CY	189.8 CY	50	741
4/7/03	1@ 5.2 CY	195.0 CY	14	755
4/14/03	2@ 5.2 CY	205.4 CY	46	801
5/9/03	2@ 5.2 CY	215.8 CY	32	833
8/1/03	.25@ 5.2 CY	217.1 CY	02	835
8/5/03	1 @ 5.2 CY	222.3 CY	17	852
9/16/03	2 @ 5.2 CY	232.7 CY	53	905
10/22/03	2.5@ 5.2CY	245.7 CY	52	957
11/20/03	2 @ 5.2 CY	256.1 CY	19	976
12/15/03	2@ 5.2 CY	266.5 CY	33	1009
12/16/03	2 @ 5.2 CY	276.9 CY	35	1044
12/18/03	1 @ 5.2 CY	282.1 CY	10	1054
12/29/03	2 @ 5.2 CY	292.5 CY	32	1086
12/30/03	3 @ 5.2 CY	308.1 CY	37	1123
1/5/04	1 @ 5.2 CY	313.3 CY	21	1144
1/6/04	3 @ 5.2 CY	328.9 CY	24	1168
1/8/04	2 @ 5.2 CY	339.3 CY	48	1216
2/10/04	2 @ 5.2 CY	349.7 CY	47	1263
2/11/04	1 @ 5.2 CY	354.9 CY	20	1283
2/12/04	2 @ 5.2 CY	365.3 CY	44	1327
2/13/04	2 @ 5.2 CY	375.7 CY	15	1342
2/17/04	1 @ 5.2 CY	380.9 CY	29	1371
2/23/04	3.5@ 5.2 CY	399.1 CY	35	1406
2/24/04	3 @ 5.2 CY	414.7 CY	36	1442
2/25/04	4 @ 5.2 CY	435.5 CY	36	1478
2/27/04	1.5 @ 5.2 CY	443.3 CY	21	1499
3/1/04	3 @ 5.2 CY	458.9 CY	47	1546
3/4/04	3 @ 5.2 CY	474.5 CY	20	1566
3/5/04	2 @ 5.2 CY	484.9 CY	20	1586
3/8/04	3 @ 5.2 CY	500.5 CY	43	1629
3/9/04	1.5 @ 5.2 CY	508.3 CY	39	1668
3/10/04	2 @ 5.2 CY	518.7 CY	27	1695
3/11/04	4 @ 5.2 CY	539.5 CY	36	1731
3/12/04	4 @ 5.2 CY	560.3 CY	40	1771 DONE
<u>start route</u>				
3/15/04	3 @ 5.2 CY	15.6 CY	44	44
3/16/04	3 @ 5.2 CY	31.2 CY	36	80

3/22/04	2 @ 5.2 CY	41.6 CY	24	104
3/23/04	2 @ 5.2 CY	52.0 CY	42	146
3/25/04	2.5 @ 5.2 CY	65.0 CY	45	191
3/26/04	1.5 @ 5.2 CY	72.8 CY	26	217
3/29/04	2.5 @ 5.2 CY	83.2 CY	46	263
3/30/04	3 @ 5.2 CY	98.8 CY	44	307
3/31/04	3 @ 5.2 CY	114.4 CY	46	355
4/2/04	2 @ 5.2 CY	124.8 CY	46	401
4/5/04	3 @ 5.2 CY	140.4 CY	50	451
4/15/04	2 @ 5.2 CY	150.8 CY	20	471
4/27/04	3 @ 5.2 CY	166.4 CY	40	511
5/3/04	2 @ 5.2 CY	176.8 CY	15	526
5/12/04	3 @ 5.2 CY	192.4 CY	32	558
5/13/04	2.5 @ 5.2 CY	205.4 CY	56	614
5/18/04	1 @ 5.2 CY	210.6 CY	8	622
5/19/04	2 @ 5.2 CY	221.0 CY	36	658
6/7/04	4 @ 5.2 CY	241.8 CY	25	683
6/23/04	3 @ 5.2 CY	257.4 CY	28	711

RESTART ROUTE

9/14/04	3 @ 5.2 CY	15.6 CY	20	20
9/15/04	4 @ 5.2 CY	20.8 CY	29	49
9/28/04	2 @ 5.2 CY	31.2 CY	25	74
11/24/04	3 @ 5.2 CY	46.8 CY	32	106
12/7/04	2 @ 5.2 CY	57.2 CY	18	124
12/8/04	4 @ 5.2 CY	78.0 CY	44	168
12/9/04	2 @ 5.2 CY	88.4 CY	40	208
12/10/04	1 @ 5.2 CY	93.6 CY	13	221
12/13/04	4 @ 5.2 CY	114.4 CY	42	263
12/14/04	4 @ 5.2 CY	135.2 CY	42	305
12/15/04	6 @ 5.2 CY	166.4 CY	42	347
12/16/04	5 @ 5.2 CY	192.4 CY	50	397
12/17/04	3 @ 5.2 CY	208.0 CY	37	434
12/20/04	2 @ 5.2 CY	218.4 CY	16	450
12/22/04	4 @ 5.2 CY	239.2 CY	45	495
1/3/05	3 @ 5.2 CY	254.8 CY	51	546
1/14/05	2 @ 5.2 CY	265.2 CY	24	570
2/9/05	3 @ 5.2 CY	280.8 CY	31	601
2/11/05	2 @ 5.2 CY	291.2 CY	11	612
2/14/05	4 @ 5.2 CY	312.0 CY	29	641
2/15/05	4 @ 5.2 CY	332.8 CY	36	677
2/16/05	2 @ 5.2 CY	343.2 CY	34	711
2/17/05	2 @ 5.2 CY	368.6 CY	36	747
2/18/05	1 @ 5.2 CY	373.8 CY	20	767
2/22/05	3 @ 5.2 CY	389.4 CY	31	798
2/23/05	3 @ 5.2 CY	405.0 CY	35	833
3/11/05	2 @ 5.2 CY	415.4 CY	43	876
3/14/05	3 @ 5.2 CY	431.0 CY	22	898

3/15/05	4 @ 5.2 CY	451.8 CY	29	927
3/16/05	3 @ 5.2 CY	467.4 CY	30	957
3/18/05	3 @ 5.2 CY	483.0 CY	21	978
3/21/05	3 @ 5.2 CY	498.6 CY	40	1018
3/22/05	2 @ 5.2 CY	509.0 CY	25	1043
3/23/05	1 @ 5.2 CY	514.2 CY	12	1055
3/24/05	2 @ 5.2 CY	524.6 CY	20	1075
3/29/05	1.5 @ 5.2 CY	532.4 CY	18	1093
3/30/05	2 @ 5.2 CY	542.8 CY	26	1119
3/31/05	3 @ 5.2 CY	558.4 CY	26	1145
4/1/05	3 @ 5.2 CY	574.0 CY	33	1178
4/4/05	2 @ 5.2 CY	584.4 CY	33	1211
4/5/05	2 @ 5.2 CY	594.8 CY	30	1241
4/6/05	2 @ 5.2 CY	605.2 CY	28	1269
4/7/05	2 @ 5.2 CY	615.6 CY	8	1277
4/8/05	3 @ 5.2 CY	631.2 CY	19	1296
4/11/05	2 @ 5.2 CY	641.6 CY	17	1313
4/12/05	4 @ 5.2 CY	662.4 CY	19	1332
4/13/05	4 @ 5.2 CY	683.2 CY	18	1350
4/14/05	2 @ 5.2 CY	693.6 CY	47	1397
4/19/05	2 @ 5.2 CY	704.0 CY	41	1438
4/20/05	3 @ 5.2 CY	719.6 CY	37	1475
4/21/05	3 @ 5.2 CY	735.2 CY	38	1513
4/22/05	2 @ 5.2 CY	745.6 CY	41	1554
4/25/05	2 @ 5.2 CY	756.0 CY	16	1570
4/27/05	1 @ 5.2 CY	761.2 CY	12	1582
4/28/05	2 @ 5.2 CY	771.6 CY	31	1613
4/29/05	2 @ 5.2 CY	782.0 CY	19	1632
5/2/05	1 @ 5.2 CY	787.2 CY	9	1641
5/3/05	3 @ 5.2 CY	802.8 CY	39	1680
5/6/05	2 @ 5.2 CY	813.2 CY	36	1716 DONE

START ROUTE

10/13/05	1 @ 5.2 CY	5.2 CY	4	4
10/14/05	2.5 @ 5.2 CY	18.2 CY	12	16
10/24/05	1 @ 5.2 CY	23.4 CY	12	28
10/25/05	1 @ 5.2 CY	28.6 CY	4	32
10/26/05	1 @ 5.2 CY	33.8 CY	9	41
10/27/05	1 @ 5.2 CY	39.0 CY	5	46
11/17/05	3 @ 5.2 CY	54.6 CY	29	75
11/18/05	1 @ 5.2 CY	59.8 CY	13	88
12/1/05	3 @ 5.2 CY	75.4 CY	24	112
12/2/05	3 @ 5.2 CY	91.0 CY	25	137
12/7/05	2 @ 5.2 CY	101.4 CY	23	160
12/8/05	2 @ 5.2 CY	111.8 CY	37	197
12/12/05	4 @ 5.2 CY	132.6 CY	20	217
12/13/05	2 @ 5.2 CY	143.0 CY	44	261

12/22/05	2.5 @ 5.2 CY	156.0 CY	29	290
12/27/05	3 @ 5.2 CY	171.6 CY	39	329
12/28/05	3 @ 5.2 CY	187.2 CY	29	358
12/29/05	4.5 @ 5.2 CY	210.6 CY	35	393
12/30/05	2 @ 5.2 CY	221.0 CY	10	403
1/4/06	2 @ 5.2 CY	231.4 CY	23	426
1/5/06	3 @ 5.2 CY	247.0 CY	30	456
1/6/06	2 @ 5.2 CY	257.4 CY	36	492
1/9/06	3 @ 5.2 CY	273.0 CY	26	518
1/10/06	3 @ 5.2 CY	283.4 CY	29	547
1/11/06	2 @ 5.2 CY	293.8 CY	14	561
1/12/06	3 @ 5.2 CY	309.4 CY	25	586
1/13/06	2 @ 5.2 CY	319.8 CY	33	619
1/17/06	2 @ 5.2 CY	330.2 CY	27	646
1/18/06	3 @ 5.2 CY	345.8 CY	24	670
1/19/06	2 @ 5.2 CY	356.2 CY	37	707
1/20/06	2 @ 5.2 CY	366.6 CY	31	738
1/23/06	1 @ 5.2 CY	371.8 CY	8	746
1/24/06	2 @ 5.2 CY	382.2 CY	32	778
1/25/06	3 @ 5.2 CY	397.8 CY	29	807
1/27/06	4 @ 5.2 CY	418.6 CY	23	830
1/30/06	2 @ 5.2 CY	429.0 CY	30	860
1/31/06	1 @ 5.2 CY	434.2 CY	12	872
2/1/06	2 @ 5.2 CY	444.6 CY	31	903
2/2/06	2 @ 5.2 CY	455.0 CY	22	925
2/6/06	2 @ 5.2 CY	465.4 CY	33	958
2/7/06	2 @ 5.2 CY	475.6 CY	31	989
2/8/06	3 @ 5.2 CY	491.2 CY	20	1009
2/9/06	2.5 @ 5.2 CY	504.2 CY	18	1027
2/15/06	1 @ 5.2 CY	509.4 CY	12	1039
2/16/06	2 @ 5.2 CY	519.4 CY	25	1064
2/17/06	2 @ 5.2 CY	529.8 CY	10	1074
2/21/06	4 @ 5.2 CY	550.6 CY	20	1094
2/22/06	3 @ 5.2 CY	566.2 CY	21	1115
2/24/06	1 @ 5.2 CY	571.4 CY	8	1123
2/28/06	4 @ 5.2 CY	592.2 CY	20	1143
3/1/06	4 @ 5.2 CY	613.0 CY	22	1165
3/2/06	1 @ 5.2 CY	618.2 CY	16	1181
3/3/06 thru 3/24/06	14 @ 5.2 CY	691.0 CY	17	1198
3/30/06	2 @ 5.2 CY	701.4 CY	22	1220
3/31/06	3 @ 5.2 CY	747.0 CY	27	1247
4/4/06	2 @ 5.2 CY	757.4 CY	27	1274
4/5/06	2 @ 5.2 CY	767.8 CY	32	1306
4/10/06	2 @ 5.2 CY	778.2 CY	45	1351
4/11/06	2 @ 5.2 CY	788.6 CY	38	1389
4/14/06	1 @ 5.2 CY	793.8 CY	8	1397
4/18/06	2 @ 5.2 CY	804.2 CY	36	1433
4/19/06	3 @ 5.2 CY	819.8 CY	18	1451

4/20/06	2 @ 5.2 CY	830.2 CY	18	1469
4/21/06	1 @ 5.2 CY	835.4 CY	15	1484
4/24/06	2.5 @ 5.2 CY	848.4 CY	48	1532
4/25/06	2 @ 5.2 CY	858.8 CY	35	1567
4/26/06	3 @ 5.2 CY	874.4 CY	21	1588
4/27/06	2 @ 5.2 CY	884.8 CY	29	1617
5/1/06	3 @ 5.2 CY	900.4 CY	17	1634
5/2/06	3 @ 5.2 CY	916.0 CY	21	1655
5/8/06	1.5 @ 5.2 CY	923.8 CY	8	1663

DONE 5/8/06

RESTART ROUTE

6/29/06	2 @ 5.2 CY	10.4 CY	26	26
10/23/06	3 @ 5.2 CY	26.0 CY	24	50
10/24/06	1 @ 5.2 CY	31.2 CY	30	80
10/25/06	2 @ 5.2 CY	41.6 CY	33	113
10/26/06	2 @ 5.2 CY	52.0 CY	39	152
10/27/06	2 @ 5.2 CY	62.4 CY	40	192
10/31/06	3 @ 5.2 CY	78.0 CY	57	249
11/1/06	2 @ 5.2 CY	88.4 CY	53	302
11/2/06	1 @ 5.2 CY	93.6 CY	15	317
11/3/06	3 @ 5.2 CY	109.2 CY	54	371
11/15/06	2.5 @ 5.2 CY	134.2 CY	30	401
11/16/06	2 @ 5.2 CY	144.6 CY	18	419
11/29/06	2 @ 5.2 CY	155.0 CY	28	447
12/4/06	2 @ 5.2 CY	165.4 CY	29	476
12/8/06	2 @ 5.2 CY	175.4 CY	19	495
12/13/06	2.5 @ 5.2 CY	182.9 CY	34	529
12/27/06	2 @ 5.2 CY	193.3 CY	49	578
12/28/06	1 @ 5.2 CY	198.5 CY	19	597
1/16/07	2 @ 5.2 CY	208.9 CY	33	630
1/17/07	2 @ 5.2 CY	219.3 CY	21	651
1/18/07	2 @ 5.2 CY	229.7 CY	33	684
1/19/07	2 @ 5.2 CY	240.1 CY	35	719
1/22/07	3 @ 5.2 CY	255.7 CY	30	749
1/23/07	3 @ 5.2 CY	271.3 CY	32	781
1/24/07	2 @ 5.2 CY	281.7 CY	40	821
1/29/07	2 @ 5.2 CY	292.1 CY	30	851
1/30/07	2 @ 5.2 CY	302.5 CY	26	877
1/31/07	2.5 @ 5.2 CY	315.5 CY	32	909
2/1/07	2 @ 5.2 CY	325.9 CY	30	939
2/6/07	2 @ 5.2 CY	336.3 CY	32	971
2/7/07	2 @ 5.2 CY	346.7 CY	41	1012
2/8/07	2 @ 5.2 CY	257.1 CY	34	1046
2/9/07	2 @ 5.2 CY	267.5 CY	30	1076

2/12/07	3 @ 5.2 CY	283.1 CY	29	1105
2/13/07	1 @ 5.2 CY	288.3 CY	10	1115
2/23/07	3 @ 5.2 CY	303.9 CY	32	1147
2/28/07	3 @ 5.2 CY	319.5 CY	31	1178
3/1/07	3 @ 5.2 CY	335.1 CY	33	1211
3/2/07	2 @ 5.2 CY	345.5 CY	25	1236
3/5/07	2.5 @ 5.2 CY	358.5 CY	23	1259
3/6/07	3 @ 5.2 CY	374.1 CY	24	1283
3/7/07	2 @ 5.2 CY	384.5 CY	25	1308
3/8/07	3 @ 5.2 CY	394.9 CY	34	1342
3/9/07	2 @ 5.2 CY	405.3 CY	27	1369
3/12/07	3 @ 5.2 CY	420.9 CY	32	1401
3/13/07	3 @ 5.2 CY	436.5 CY	33	1434
3/15/07	2 @ 5.2 CY	446.9 CY	34	1468
3/16/07	2 @ 5.2 CY	457.3 CY	28	1496
3/19/07	3 @ 5.2 CY	472.9 CY	35	1531
3/20/07	3 @ 5.2 CY	488.5 CY	43	1574
3/21/07	3 @ 5.2 CY	504.1 CY	43	1617
3/28/07	2 @ 5.2 CY	514.5 CY	40	1657
3/29/07	2 @ 5.2 CY	524.9 CY	36	1693
4/2/07	1 @ 5.2 CY	530.1 CY	27	1720

RTE COMPLETED – 4/2/07

START ROUTE

7/11/07	1 @ 5.2 CY	5.2 CY	11	11
11/13/07	3 @ 5.2 CY	20.8 CY	33	44
11/14/07	3 @ 5.2 CY	36.4 CY	25	69
11/15/07	2 @ 5.2 CY	46.8 CY	18	87
12/3/07	2 @ 5.2 CY	57.2 CY	30	117
12/4/07	2 @ 5.2 CY	67.6 CY	40	157
12/5/07	3.5 @ 5.2 CY	85.8 CY	36	193
12/11/07	2 @ 5.2 CY	96.2 CY	28	221
12/27/07	2 @ 5.2 CY	106.6 CY	25	246
1/15/08	3 @ 5.2 CY	122.2 CY	43	289
1/16/08	3 @ 5.2 CY	137.8 CY	43	332
1/17/08	3 @ 5.2 CY	153.4 CY	31	363
1/18/08	3 @ 5.2 CY	169.0 CY	28	391
1/22/08	2 @ 5.2 CY	179.4 CY	25	416
1/23/08	1 @ 5.2 CY	184.6 CY	9	425
3/3/08	3 @ 5.2 CY	200.2 CY	25	450
3/4/08	2 @ 5.2 CY	210.6 CY	33	483