



Town of Stratham, NH
Highway Department
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Pavement Evaluation Study



**Submitted to:
Town of Stratham Budget Committee**

Presented by:

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Town of Stratham, NH
Final Pavement Evaluation Study

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I. Introduction

The Town of Stratham owns and maintains approximately 45 Miles of paved roads. The Highway Department would like to develop short-term and long-term strategies for maintenance and repair, and for financing of improvements to keep their roadways safe and passable.

The Town of Stratham's Highway Agent, Colin Lavery conducted a roadway condition assessment to inventory and numerically rank the condition of all the town roads, and prepare a capital improvement plan (CIP) so the town can develop a financial plan to maintain the roads. The team conducted a field inventory, reviewed the town's maintenance history, estimated repair and maintenance costs, and developed maintenance strategies. This study summarizes all findings and recommendations.

II. Field Investigations and Pavement Ratings

a. Field Investigations

A two-person engineering team from the Highway Department conducted field inventory of the existing roadways during the weeks of July 8, 2013 and July 15, 2013. The two used a Kubota RTV to slowly drive and measure each roadway in town, assess road conditions, areas of concern, maintenance history, and the town's road maintenance budget.

Mr. Lavery created a field inventory which entailed the road name, road ID, the roads length, width, square feet and total number of miles. Also noted in the inventory was the size of any radius, aprons, cul-de-sac's, and hammerhead. A qualitative analysis was conducted using the methodology contained in the Asphalt Institute's *A Pavement Rating System for Low-Volume Asphalt Roads*. This method quantifies defects such as rutting, cracking, potholes, drainage, etc., and a number (either between 0 and 5, or 0 and 10) is assigned for each defect. The condition rating is computed by subtracting the sum of defects from 100. Roads that score high values are in very good condition, and roads with lower values are in poorer condition.

b. Road Inventory

This document outlines each road within the Town of Stratham. The spreadsheet is organized by the Road ID, which is an ID created by the Highway Department to keep track of snow and paving maintenance routes. Included in this spreadsheet is the roads length, width, square feet, and total length measured in miles. Additionally noted is whether or not the road has a hammerhead or circle.

c. Work History

This document includes all road work within the past twenty years. The spreadsheet outlines the road where work was performed, the date completed, and the type of work performed. Types of work include:

Reclamation

Full depth reclamation involves using a reclaiming machine to grind and mix the existing pavement and base materials together. The materials are compacted, fine graded and compacted again making for a stronger base product.

Binder Course

Bituminous concrete course with the largest aggregate size approximately 3/4 inch in diameter.

Surface Course

Bituminous concrete course with the largest aggregate size approximately 3/8 inch in diameter.

Leveling Course

Where roadway surfaces are distorted and excessive crown may be present, a leveling course of 3/8 inch bituminous concrete is installed to restore a proper cross section. Typically a surface course of bituminous concrete is installed shortly after a leveling course has been installed.

d. Rating Condition Spreadsheet

The results of the field inventory and rating analysis are included in the rating condition spreadsheet in Appendix A. It is an Excel spreadsheet which can be sorted and graphed for the purpose of identifying and prioritizing roadways for repair. It can also be sorted to determine which roads exhibit more or less of a particular defect, i.e. potholes, cracking, deficient drainage systems etc. Below is a list of definitions which will help when reviewing the rating condition spreadsheet.

Road ID

This Column contains a unique identifying number for the roadway segment. These numbers are assigned by the Highway Department specifically for snow maintenance routes.

Street Name

This column contains the name of the street.

Length

This column describes the length of the roadway segment. This information is used to quantitatively prioritize roadway segments.

Width

This is the width of the traveled roadway. Widths may vary along the segment, and the width shown is an average dimension. This information is used along with length to quantitatively prioritize roadway segments.

Transverse Cracks

This column provides an estimate of the amount and severity of transverse cracking within the roadway segment. Transverse cracks run across the roadway and are perpendicular to the centerline. They can be caused by thermal expansion/contraction of the pavement, or by cracks or weaknesses in the road base (such as a culvert without sufficient cover or joints in a lower pavement layer).



Longitudinal Cracks

This column provides an estimate of the amount and severity of longitudinal cracking within the roadway segment. Longitudinal cracks are cracks that run along the roadway parallel to the centerline. They can be caused by improperly constructed joints or by vehicle loading.



Alligator Cracks

This column provides an estimate of the amount and severity of longitudinal cracking within the roadway segment. Alligator cracks resemble the skin of an alligator, are formed by the intersection of transverse and longitudinal

cracks, and are caused by vehicle loading. Alligator cracking is a sign that the road base is not strong enough to support the vehicle traffic, and is often associated with excess water in the base materials.



Shrinkage Cracks

This column provides an estimate of the amount and severity of shrinkage cracks within the roadway segment. Shrinkage cracks are formed when the binder material in bituminous concrete pavement breaks down over time and separates from the adjacent pavement. These cracks are due to forces inside the pavement, not loading, and generally form blocks that are several feet across. Shrinkage cracks are usually associated with older pavement that has weakened due to exposure to the elements.

Rutting

This column provides an estimate of the amount and severity of rutting within the roadway segment. Ruts are deformations in the roadway where the pavement surface is depressed below that of the adjacent pavement. Ruts run parallel to the centerline and are generally caused by compaction of the pavement base materials or by the lateral displacement (shoving) of the base materials.



Corrugations

This column provides an estimate of the amount and severity of corrugations within the roadway segment. Corrugations are a washboard type surface with closely spaced valleys and crests. On a paved road corrugations are caused by a lack of stability in the pavement layers

Raveling

This column provides an estimate of the amount and severity of raveling within the roadway segment. Raveling is the disintegration of pavement due to weathering of the binder material and subsequent release of the aggregate. Moisture on the pavement can lead to increased raveling. Raveling can be localized (such as in a pothole or the edge of the roadway), or it can occur over the entire surface.

Shoving or Pushing

This column provides an estimate of the amount and severity of shoving and/or pushing within the roadway segment. Shoving is the lateral displacement of pavement due to vehicle loading. Pushing is similar but is usually in the longitudinal direction. These defects occur because of weaknesses in the pavement, weaknesses in the joint between pavement layers or weaknesses in the base materials.

Pot Holes

This column provides an estimate of the amount and severity of potholes within the roadway segment. Potholes are holes in the pavement and usually form in areas where other pavement defects have weakened the pavement. They can form in areas where the base material has a defect such as a large stone, or in areas where the pavement contains debris such as a stick.

Excess Asphalt

This column provides an estimate of the amount and severity of excess asphalt within the roadway segment. Excess asphalt, also known as bleeding, is when the asphalt binding material rises to the surface of the pavement. It is indicative of too high an asphalt content in the pavement mixture.

Polished Aggregate

This column provides an estimate of the amount and severity of aggregate polishing. Aggregate polishing is when the aggregate in the surface of the pavement has worn smooth over time. This is usually due to soft aggregate material or the use of aggregate that has smooth surfaces.

Deficient Drainage

This column provides an estimate of the extent and severity of drainage problems within the roadway segment. It includes the ability of water to drain from the road surface as well as the ability of the surrounding area to drain water away from the roadway. Standing water, ditches, erosion, culverts and slopes were all considered as part of this metric. Water is a contributing factor to many of the other pavement defects, and saturated base materials can severely impact a road's ability to carry vehicle loads.

Overall Ride Quality

This column provides an estimate of the ride quality. Ride quality is the "feel" of the road, and is affected by bumps, ruts, potholes and other pavement defects.

Condition Rating

This column is a representation of the pavement condition. It is computed by subtracting the Sum of Defects from 100. Roads that score high values are in very good condition, and roads with lower values are in poorer condition. It is intended to be used as a quantitative measurement of roadway conditions and importance in order to prioritize roadway maintenance or improvements.

e. Planning & Cost Analysis

Using current liquid asphalt pricing, this spreadsheet outlines current overlay pricing for all roads in Stratham. There are a total of fourteen roads that merit reconstruction. This is due to a series of factors which may include deficient drainage, substantial cracking due to a poor road base which leads to extensive frost heaves in the winter. The current cost to reconstruct a road is more than two times the cost to overlay a road. The plan shows to reconstruct the fourteen roads within a ten year time frame. To do so this will cost the town 1.3 million dollars.

The overlay plan provides a three tier schedule which includes a 10, 12.5, or 15 year schedule. The 10 year plan includes roads that are more heavily traveled or are used as connector roads. These include Stratham Heights Road, High Street, Frying Pan Lane, etc. The 12.5 year plan focuses on roads that are moderately traveled such as Barker Road, Academic Way, Gifford Farm Road, etc. The 15 year plan focuses on the secondary roads, primarily subdivisions which include Lamington Hill Road, Coach Road, Chestnut Way, etc. All schedules focus on roads with road rating scores of 70 or below. The repair schedules set priority on roads that can be resurfaced, maintaining the integrity of the road before the road reaches the point of requiring reconstruction. The

reconstruction schedule would accommodate reconstructing one to two roads per year depending on the overall size and cost of the road needed to be reconstructed.

Crack sealing will be used as a maintenance practice for roads developing transverse, alligator, longitudinal, and shrinkage cracks. This will help prevent water from reaching the roads sub base, causing more significant damage such as heaving, pot holes, rutting, and eventually the need for a full reconstruction.

III. Other Considerations

a. Guardrail

The Highway Department inventoried all guardrail throughout the town. All components were taken into consideration including guardrail type, number of posts, end treatments, etc. The condition of the guardrail was scored as well as providing estimated cost of replacement. Areas were noted where guardrail may be required as well as steep grade changes which could affect the guardrail from performing properly.

b. Signs

A comprehensive inventory was taken of all street sites in Stratham. Many of the town's street signs do not meet the current requirements in the 2009 Manual on Uniform Traffic Control Devices (MUTCD). Currently all street signs are type I ATSM grade which has very little if any retro reflectivity. Included in appendix G is spreadsheet that outlines all street signs, their conditions and estimated cost of replacement.

c. Ditching, Culverts, & Drainage

Installing and maintaining surface and subsurface drainage systems is crucial for managing stormwater runoff. Without these systems in place, it can lead to several failures within a roadway. Erosion, cracking, and deterioration of the roads subbase is all due to lack of stormwater management. The Highway Department took a culvert inventory which details all culverts throughout town, their condition, and whether or not there is any deficient drainage that needs to be addressed. Please reference appendix H for details.

IV. Conclusion & Recommendations

Upon thorough review and analysis of all infrastructures within The Town of Stratham, The Highway Department has used the results of this study to provide a financial plan to support roadway maintenance.

The Highway Department requests \$270,000 be allocated for roadway reconstruction and paving (CIP). These funds will be used to reclaim, compact, fine grade, and install 2- ½

inches of bituminous concrete on roadways with a pavement evaluation score of less than 70. This will be evaluated annually. One to two roads will be reconstructed each year depending on the length and cost of the road.

In order to execute the roadway overlay three tier schedule, the Highway Department recommends that \$380,000 be budgeted for road paving within the annual Highway Department operating budget (Budget No. 100-4312-01-325). This money will be used to overlay roads and uphold their integrity to prevent reaching the need for reconstruction. Crack sealing will be included as a preventive maintenance measure. Crack sealing will prevent the spread of shrinkage, alligator, transverse, and longitudinal cracking. This will aid the goal of keeping roadways' subbase water tight, preventing heaving.

Looking at the condition of several Town signs, along with all street signs being out of compliance with the current federal highway regulations, the Highway Department requests \$2,800 for new signs (Budget No. 100-4312-01-318). With this money, the Highway Department will begin to replace street signs and regulatory sign as needed and as indicated by the sign inventory referenced in appendix G.

It is requested that \$1,200 be allocated for cleaning culverts, ditch lines, and installing new cross culverts as needed. The Highway Department will begin addressing guardrail deficiencies throughout 2014. These may include guardrail damage to posts, end terminals, or reflective markers. No additional funds are needed for this purpose.

The funding requested will support the needed infrastructure improvements.

Appendix A
Road Inventory

No.	Road Name	Road ID	Length	Width	SF	Miles	Hammerhead	Circle
54	Trisha Way	1-01	1460	24	35040	0.27652	X	
55	Stephen Drive	1-02	2050	24	49200	0.38826	X	
56	Bittersweet Lane	1-03	2170	22	47740	0.41098		
57	Market Street	1-04	1215	22	26730	0.23011		
58	Brown Ave	1-05	1678	24	40272	0.31780		X
59	Tall Pines Drive	1-06	1853	24	44472	0.35095		
60	Frying Pan Lane	1-07	5419	22	119218	1.02633		
61	Autumn Lane	1-08	1938	24	46512	0.36705	X	
62	River Road	1-09	5584	18	100512	1.05758	X	
63	Boat Club Drive	1-10	1091	24	26184	0.20663	X	
64	Ox Bow Farm	1-11	821	24	19704	0.15549	X	
65	Gretas Way	1-12	1128	24	27072	0.21364	X	
66	Raeder Drive	1-13	3776	24	90624	0.71515		X
67	Doe Run	1-14	3074	24	73776	0.58220		X
68	Meadow View Lane	1-15	455	24	10920	0.08617		
69	Butterfield Lane	1-16	4196	24	100704	0.79470		X
70	Oak Lane	1-17	1020	24	24480	0.19318		X
71	Emery Lane	1-18	1265	22	27830	0.23958		
72	Patriots Way	1-19	2380	22	52360	0.45076	X	
73	Evergreen Way	1-20	1600	24	38400	0.30303		
74	Winding Brook Lane	1-21	2170	24	52080	0.41098		
75	Tansy Lane	2-01	1630	24	39120	0.30871		
76	Chase Lane	2-02	1995	24	47880	0.37784		X
77	Jewett Lane	2-03	730	24	17520	0.13826		X
78	Iris Lane	2-04	605	24	14520	0.11458		X
79	Tansy Avenue	2-05	1810	22	39820	0.34280		X
80	Barron's Way	2-06	610	22	13420	0.11553	X	
81	Crockett's Way	2-07	1100	22	24200	0.20833	X	
82	Chisolm Farm	2-08	2900	24	69600	0.54924		
83	Laurel Lane	2-09	910	24	21840	0.17235	X	
84	Crestview Terrace	2-10	4730	24	113520	0.89583		
85	Mark Ave	2-11	415	24	9960	0.07860		
86	Jason Drive	2-12	2468	24	59232	0.46742		
87	Linda Lane	2-13	485	24	11640	0.09186		
88	Jana Lane	2-14	2340	24	56160	0.44318		
89	Joyce Lane	2-15	460	24	11040	0.08712		
90	Benjamin Drive	2-16	2790	24	66960	0.52841		
91	Jack Rabbit Lane	2-17	1020	24	24480	0.19318		
92	Sandy Point Road	2-18	1600	22	35200	0.30303		
93	Morning Star Drive	2-19	3440	24	82560	0.65152		

Road Inventory
Appendix A

94	Tucker Trail	2-20	1600	22	35200	0.30303		X
95	Dunbarton Oats	2-21	4702	24	112848	0.89053		
96	Depot Road	2-22	4743	24	113832	0.89830		
97	Stratham Lane	2-23	1310	24	31440	0.24811		
98	Linwood Drive	2-24	1055	24	25320	0.19981		X
99	Blue Ridge Circle	2-25	645	24	15480	0.12216		X
100	Lovell Road	2-26	5780	24	138720	1.09470		
101	Lucian Way	2-27	374	24	8976	0.07083	X	
102	Willow Brook	2-28	3560	24	85440	0.67424		
103	Sweetland Place	3-01	895	24	21480	0.16951		X
104	Walters Way	3-02	500	24	12000	0.09470	X	
105	Erik Way	3-03	370	24	8880	0.07008	X	
106	Rollins Farm Road	3-04	2214	24	53136	0.41932	X	
107	Country Farm Road	3-05	4550	24	109200	0.86174		X
108	Guinea Road	3-06	2625	24	63000	0.49716		
109	Apple Way	3-07	1900	24	45600	0.35985	X	
110	Orchard Hill	3-08	700	24	16800	0.13258	X	
111	Williams Circle	3-09	1750	24	42000	0.33144		X
112	Pinewood Drive	3-10	3590	24	86160	0.67992		
113	Squire Way	3-11	710	24	17040	0.13447	X	
114	Elton Ave	3-12	1320	24	31680	0.25000		X
115	Stratham Heights Road Phase 1	3-13	5115	22	112530	0.96875		
116	Stratham Heights Phase 2	3-14	6807	22	149754	1.28920		
117	Marin Way	3-15	2270	24	54480	0.42992		X
118	Academic Way	3-16	450	40	18000	0.08523	X	
119	Drury Plains Road	3-17	570	24	13680	0.10795	X	
30	Merles Lane	4-01	720	24	17280	0.13636		
31	Humes Court	4-02	1735	24	41640	0.32860		X
32	Coach Road	4-03	2990	24	71760	0.56629		
33	Bartlett Road	4-04	850	24	20400	0.16098		X
34	Barker Road	4-05	2582	24	61968	0.48902		
35	Union Road Phase 1	4-06	6470	24	155280	1.22538		
36	Seavy Pasture	4-07	770	24	18480	0.14583	X	
37	High Street	4-08	10370	24	248880	1.96402		
38	Perth Drive	4-09	840	24	20160	0.15909	X	
39	Pond View Drive	4-10	662	24	15888	0.12538		
40	Points of Rock Terrace	4-11	2400	24	57600	0.45455	X	
41	Scamman Road	4-12	2950	24	70800	0.55871		
42	Birnum Woods	4-13	3084	24	74016	0.58409		
43	Beech Court	4-14	900	24	21600	0.17045	X	
44	Whitaker Drive	4-15	825	24	19800	0.15625		X

Appendix A
Road Inventory

45	Hillcrest Drive	4-16	540	24	12960	0.10227		X
46	Alex Way	4-17	340	22	7480	0.06439	X	
47	Barker Lane	4-18	340	15	5100	0.06439		
48	Stonewall Way	4-19	630	22	13860	0.11932		X
49	Charles Drive	4-20	660	24	15840	0.12500		X
50	Long Hill Road	4-21	2050	24	49200	0.38826		X
51	Easton Hill Road	4-22	1270	24	30480	0.24053	X	
52	Gifford Farm Road	4-23	5285	24	126840	1.00095		
53	Berry Hill Road	4-24	760	24	18240	0.14394		
1	Chestnut Way	5-01	1441	24	34584	0.27292		X
2	Lamington Hill	5-02	1058	24	25392	0.20038	X	
3	Lamington Place	5-03	565	24	13560	0.10701		X
4	Murfield Lane	5-04	2008	24	48192	0.38030		
5	Shannon Drive	5-05	531	24	12744	0.10057		X
6	Barnes Drive	5-06	616	24	14784	0.11667		X
7	Murfield Drive	5-07	2442	24	58608	0.46250		
8	Hickory Pond Lane	5-08	2258	24	54192	0.42765	X	
9	Juniper Drive	5-09	1505	24	36120	0.28504		
10	Lilac Way	5-10	760	24	18240	0.14394		
11	Mason Drive	5-11	1285	22	28270	0.24337		X
12	Chelsea Way	5-12	789	22	17358	0.14943		X
13	Russell Drive	5-13	870	24	20880	0.16477		X
14	Spruce Lane	5-14	2316	24	55584	0.43864		
15	Fifield Lane	5-15	800	18	14400	0.15152		
16	Strawberry Lane	5-16	1613	24	38712	0.30549		
17	Wiggin Way	5-17	3350	24	80400	0.63447		
18	Vanessa Drive	5-18	935	24	22440	0.17708	X	
19	Winterberry Lane	5-19	1230	24	29520	0.23295	X	
20	Balsam Way	5-20	772	24	18528	0.14621	X	
21	Christie Lane	5-21	1678	24	40272	0.31780	X	
22	Union Road Phase 2	5-22	5771	22	126962	1.09299		
23	Holmgren Drive	5-23	3577	24	85848	0.67746		
24	Holmgren Court	5-24	455	24	10920	0.08617		X
25	Chapman Road	5-25	560	24	13440	0.10606		X
26	Hersey Lane	5-26	1522	24	36528	0.28826	X	
27	Wedgewood Drive	5-27	785	24	18840	0.14867		X
28	Smith Farm Road	5-28	2595	24	62280	0.49148		X
29	Roby Jewel Lane	5-29	1460	24	35040	0.27652		
Total			234056		5503368	44.32879		
Lane Miles						88.38106		

Road Name	Road ID	Date	Work Performed
Trisha Way	1-01	1999	Surface Course
Stephen Drive	1-02	1999	Surface Course
Bittersweet Lane	1-03	2015*	Surface Course
Market Street	1-04	2015*	Surface Course
Brown Ave	1-05	1999	Surface Course
Tall Pines Drive	1-06	1995	Surface Course
Frying Pan Lane	1-07	2005, 2004, 1994	Surface Course, Leveling Course, Surface Course
Autumn Lane	1-08	2004	Surface Course
River Road	1-09	2006	Surface Course
Boat Club Drive	1-10	2006	Surface Course
Ox Bow Farm	1-11	2008	Surface Course
Gretas Way	1-12	2006	Surface Course
Raeder Drive	1-13	2009, 2005	Surface Course, Reclaim & Binder
Doe Run	1-14	2009, 2005	Surface Course, Reclaim & Binder
Meadow View Lane	1-15	2009, 2005	Surface Course, Reclaim & Binder
Butterfield Lane	1-16	2010, 2006	Surface Course, Reclaim & Binder
Oak Lane	1-17	2001	Surface Course
Emery Lane	1-18	2000	Surface Course
Patriots Way	1-19	2000	Surface Course
Evergreen Way	1-20	2001	Surface Course
Winding Brook Lane	1-21	2001	Surface Course
Tansy Lane	2-01	2005, 2003	Surface Course, Binder
Chase Lane	2-02	2005	Surface Course
Jewett Lane	2-03	2005	Surface Course
Iris Lane	2-04	2005	Surface Course
Tansy Avenue	2-05	2009	Surface Course
Barron's Way	2-06	2009	Surface Course
Laurel Lane	2-09	2013, 2011, 1998	Reclaim & Binder Course, Patch, Surface Course
Crestview Terrace	2-10	1998-1997	Reclaim & Binder Course, Surface Course
Mark Ave	2-11	1998	Reclaim & Binder Course, Surface Course
Jason Drive	2-12	2008	Reclaim & Binder Course
Linda Lane	2-13	2008	Reclaim & Binder Course
Jana Lane	2-14	2008	Reclaim & Binder Course
Joyce Lane	2-15	2008	Reclaim & Binder Course
Benjamin Drive	2-16	2008	Reclaim & Binder Course
Jack Rabbit Lane	2-17	2005	Binder Course
Sandy Point Road	2-18	2005	Surface Course
Morning Star Drive	2-19	2001, 2000	Surface Course, Leveling Course
Tidewater Farms	Feb-29	1999	Surface Course
Tucker Trail	2-20	2001	Surface Course

Appendix B
Work History

Dunbarton Oats	2-21	2011, 2007	Surface Course, Reclaim & Binder
Depot Road	2-22	2005, 1994	Surface Course, Surface Course
Stratham Lane	2-23	2013, 1995	Leveling Course, Surface Course
Linwood	2-24	2009	Surface Course
Blue Ridge Circle	2-25	2004	Leveling Course
Lovell Road	2-26	2006, 2003	Surface Course, Surface Course
Lucian Way	2-27	2009	Surface Course
Willow Brook	2-28	2007	Surface Course
Sweetland Place	3-01	1999	Surface Course
Walters Way	3-02	2006	Surface Course
Erik Way	3-03	2006	Surface Course
Rollins Farm Road	3-04	2013, 1995	Reclaim & Binder Course, Surface Course
Crockett's Way	2-07	2009	Surface Course
Country Farm Road	18-Mar	1996	Surface Course
Chisolm Farm	2-08	2012	Surface Course
Apple Way	3-07	2012, 2000	Surface Course, Surface Course
Orchard Hill	3-08	2012	Surface Course
Williams Circle	3-09	2012, 2004	Surface Course, Surface Course
Pinewood Drive	3-10	2012, 2004	Surface Course, Surface Course
Squire Way	3-11	2004	Surface Course
Elton Ave	3-12	2003, 1996	Surface Course, Surface Course
Stratham Heights Road Phase 1	3-13	2012, 2009, 2002	Reclaim & Binder Course, Leveling Course, Surface Course Reclaim & Binder Course, Surface Course, Leveling Course, Leveling, Surface
Stratham Heights Phase 2	3-14	2013, 2000, 1999, 1997, 1996	Course, Leveling Course
Marin Way	3-15	2009, 2002	Entrance-Binder Course & Surface Course, Surface Course
Academic Way	3-16	2012	Surface Course
Guinea Road		2011, 2000, 1997	Leveling Course & Surface Course, Surface Course, Leveling Course
Drury Plains Road	3-17	2000	Surface Course
Merles Lane	4-01	2003	Surface Course
Humes Court	4-02	2003	Surface Course
Coach Road	4-03	1997	Surface Course
Bartlett Road	4-04	2006	Surface Course
Barker Road	4-05	2007, 2003, 2002	Surface Course, Leveling Course, Leveling Course
Union Road Phase 1	4-06	2011, 2010, 2001, 1994	Surface Course, Reclaim & Binder, Surface Course, Surface Course
Seavy Pasture	4-07	2005	Surface Course
High Street	4-08	2004, 1999	Surface Course, Leveling Course
Perth Drive	4-09	1994	Surface Course
Pond View Drive	4-10	1994	Surface Course
Points of Rock Terrace	4-11	2015*	Surface Course
Scamman Road	4-12	1994	Surface Course
Birnum Woods	4-13	2013, 1999	Reclaim & Binder Course, Surface Course

Appendix B
Work History

Beech Court	4-14	1995	Surface Course
Whitaker Drive	4-15	2006	Surface Course
Hillcrest Drive	4-16	1993	Surface Course
Alex Way	4-17	2013	Surface Course
Barker Lane	4-18	1995	Surface Course
Stonewall Way	4-19	2002	Surface Course
Charles Drive	4-20	2007	Surface Course
Long Hill Road	4-21	2006	Surface Course
Easton Hill Road	4-22	2006	Surface Course
Gifford Farm Road	4-23	2003	Surface Course
Berry Hill Road	4-24	2007	Surface Course
Chestnut Way	5-01	2003	Surface Course
Lamington Hill	5-02	2000	Surface Course
Lamington Place	5-03	2000	Surface Course
Murfield Lane	5-04	2003	Surface Course
Shannon Drive	5-05	2003	Surface Course
Barnes Drive	5-06	2003	Surface Course
Murfield Drive	5-07	2003	(Winnicutt End)-Surface Course
Hickory Pond Lane	5-08	2003	Surface Course
Juniper Drive	5-09	2003	Surface Course
Lilac Way	5-10	2003	Surface Course
Mason Drive	5-11	2004	Surface Course
Chelsea Way	5-12	2004	Surface Course
Russell Drive	5-13	2008	Surface Course
Spruce Lane	5-14	2003	Surface Course
Fifield Lane	5-15	1998	Surface Course
Strawberry Lane	5-16	2002	Surface Course
Wiggin Way	5-17	2002	Surface Course
Vanessa Drive	5-18	2002	Surface Course
Winterberry Lane	5-19	2002	Surface Course
Balsam Way	5-20	2002	Surface Course
Christie Lane	5-21	2002	Surface Course
Union Road Phase 2	5-22	2002	Surface Course
Holmgren Drive	5-23	1999	Surface Course
Holmgren Court	5-24	1999	Surface Course
Chapman Road	5-25	2004	Surface Course
Hersey Lane	5-26	2011, 2007	Surface Course, Reclaim & Binder
Wedgewood Drive	5-27	2007	Surface Course
Smith Farm Road	5-28	2011, 2009, 1998	Surface Course, Reclaim & Binder, Surface Course
Stoneybrook Lane	30-May	2003	Leveling Course
Roby Jewel Lane	5-29	2003	Surface Course

Town Buildings & Parking Lots	Date	Work Performed
Municipal Center	2013	Reclaim & Binder Course
Stratham Hill Park	2013	Reclaim & Binder Course
Transfer Station	2012	Binder & Leveling Course
Municipal Center	2011	Patch Work
Maple Lane Cemetery	2010	Drainage
Fire Department	2007	Binder Course & Surface Course
Highway Department	2007	Surface Course
Police Department	2007	Surface Course
Transfer Station	2007	Binder Course
Police Department	2006	Binder Course
Stevens Field	2006	Binder Course
Municipal Center	2006	Handicap Walkways
Stevens Field	2004	Binder Course
Highway Department	2004	Reclaim & Binder Course
Highway Department	2003	Binder Course
Highway Department	2002	Patch Work- Fuel Pumps
Highway Department	2002	Binder Course & Surface Course- Salt Shed
Highway Department	1998	Surface Course
Stratham Memorial School	1996	Surface Course
Fire Department	1995	Reclaim & Binder Course, Surface Course
Transfer Station	1995	Binder Course
Highway Department	1994	Binder Course

No.	Road Name	Road ID	Length	Width	Rating Based	Transverse	Longitudinal	Alligator	Shrinkage	Shoving or				Pot	Excess	Polished	Deficient	Overall Ride	Condition
					On 100	Cracks	Cracks	Cracks	Cracks	Rutting	Corrugations	Raveling	Pushing	Holes	Asphalt	Aggregate	Drainage	Quality	Rating
1	Trisha Way	1-01	1460	24	70	4	3	4	2	2	1	3	1	0	0	4	0	6	70
2	Stephen Drive	1-02	2050	24	70	4	3	4	2	2	1	3	1	0	0	4	0	6	70
3	Bittersweet Lane	1-03	2170	22	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
4	Market Street	1-04	1215	22	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
5	Brown Ave	1-05	1678	24	40	5	4	9	4	6	3	3	4	6	0	5	2	9	40
6	Tall Pines Drive	1-06	1853	24	75	4	3	6	2	0	0	1	1	0	0	3	0	5	75
7	Frying Pan Lane	1-07	5419	22	75	4	3	6	2	0	0	1	1	0	0	3	0	5	75
8	Autumn Lane	1-08	1938	24	85	2	1	2	2	0	0	0	2	0	0	2	0	4	85
9	River Road	1-09	5584	18	70	4	3	3	4	3	0	2	2	1	0	3	1	4	70
10	Boat Club Drive	1-10	1091	24	70	4	4	4	4	3	0	1	3	0	0	3	1	3	70
11	Ox Bow Farm	1-11	821	24	90	2	1	2	0	0	0	0	0	0	0	3	0	2	90
12	Gretas Way	1-12	1128	24	80	3	4	2	3	0	0	0	0	0	0	3	1	4	80
13	Raeder Drive	1-13	3776	24	95	2	1	0	0	0	0	0	0	0	0	1	0	1	95
14	Doe Run	1-14	3074	24	95	1	0	1	1	0	0	0	0	0	0	0	0	2	95
15	Meadow View Lane	1-15	455	24	95	0	2	1	0	0	0	0	0	0	0	0	0	2	95
16	Butterfield Lane	1-16	4196	24	95	2	0	1	0	0	0	0	0	0	0	0	0	2	95
17	Oak Lane	1-17	1020	24	75	3	4	2	5	0	1	2	0	0	0	3	0	5	75
18	Emery Lane	1-18	1265	22	65	5	4	4	4	3	1	0	1	3	0	4	0	6	65
19	Patriots Way	1-19	2380	22	70	4	3	3	2	2	0	1	2	3	0	3	0	7	70
20	Evergreen Way	1-20	1600	24	75	4	2	3	1	2	1	2	1	1	0	3	0	5	75
21	Winding Brook Drive	1-21	2170	24	55	5	4	5	5	4	2	3	2	2	1	5	0	7	55
22	Tansy Lane	2-01	1630	24	70	4	3	4	4	0	2	2	1	1	0	3	0	6	70
23	Chase Lane	2-02	1995	24	70	5	4	5	4	0	1	1	0	0	0	4	0	6	70
24	Jewett Lane	2-03	730	24	70	4	4	5	4	0	2	0	0	0	1	4	0	6	70
25	Iris Lane	2-04	605	24	75	4	4	5	4	0	2	0	0	0	1	4	0	6	70
26	Tansy Avenue	2-05	1810	22	95	1	0	1	1	0	0	0	0	0	0	2	0	0	95
27	Barron's Way	2-06	610	22	95	1	0	1	1	0	0	0	0	0	0	2	0	0	95
28	Crockett's Way	2-07	1100	22	95	1	0	1	1	0	0	0	0	0	0	2	0	0	95
29	Chisolm Farm	2-08	2900	24	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
30	Laurel Lane	2-09	910	24	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
31	Crestview Terrace	2-10	4730	24	75	3	4	3	2	1	1	1	2	0	0	4	0	4	75
32	Mark Ave	2-11	415	24	80	3	3	3	2	0	1	0	0	0	0	4	0	4	80
33	Jason Drive	2-12	2468	24	95	2	0	1	0	0	0	0	0	0	0	1	0	1	95
34	Linda Lane	2-13	485	24	95	2	0	1	0	0	0	0	0	0	0	1	0	1	95
35	Jana Lane	2-14	2340	24	95	2	0	1	0	0	0	0	0	0	0	1	0	1	95
36	Joyce Lane	2-15	460	24	95	2	0	1	0	0	0	0	0	0	0	1	0	1	95
37	Benjamin Drive	2-16	2790	24	95	1	1	1	0	0	0	0	0	0	0	1	0	1	95
38	Jack Rabbit Lane	2-17	1020	24	75	3	2	5	3	4	1	0	1	0	0	3	0	3	75
39	Sandy Point Road	2-18	1600	22	75	3	4	3	2	2	1	0	1	0	0	3	0	6	75
40	Morning Star Drive	2-19	3440	24	45	5	5	5	5	4	3	3	3	3	3	5	3	8	45
41	Tucker Trail	2-20	1600	22	65	5	3	4	4	2	2	3	2	0	0	3	2	5	65
42	Dunbarton Oats	2-21	4702	24	95	1	0	1	1	0	0	0	0	0	0	1	0	1	95

Appendix C
Rating Condition

43	Depot Road	2-22	4743	24	70	3	2	2	3	3	1	2	1	4	1	3	1	4	70
44	Stratham Lane	2-23	1310	24	65	4	3	4	4	3	1	2	1	4	1	3	0	5	65
45	Linwood Drive	2-24	1055	24	90	1	1	1	2	0	0	0	0	0	0	3	0	2	90
46	Tidewater Farms	2-25	2385	24	70	3	4	4	3	2	2	1	0	0	0	5	0	6	70
47	Blue Ridge Circle	2-26	645	24	70	3	4	4	3	2	2	1	0	0	2	3	0	6	70
48	Lovell Road	2-27	5780	24	75	3	2	2	3	2	1	2	0	3	0	3	0	4	75
49	Lucian Way	2-28	374	24	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
50	Willow Brook	2-29	3560	24	80	3	3	2	3	1	0	0	0	1	0	3	0	4	80
51	Sweetland Place	3-01	895	24	70	4	3	4	4	2	1	1	0	0	0	5	0	6	70
52	Walters Way	3-02	500	24	85	3	2	1	3	0	0	0	0	0	0	3	0	3	85
53	Erik Way	3-03	370	24	70	2	2	4	3	1	2	3	2	1	2	3	0	5	70
54	Rollins Farm Road	3-04	2214	24	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
55	Country Farm Road	3-05	4550	24	30	5	5	5	5	5	5	5	5	5	5	5	5	10	30
56	Guinea Road	3-06	2625	24	95	2	0	0	1	1	0	0	0	0	0	1	0	0	95
57	Apple Way	3-07	1900	24	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
58	Orchard Hill	3-08	700	24	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
59	Williams Circle	3-09	1750	24	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
60	Pinewood Drive	3-10	3590	24	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
61	Squire Way	3-11	710	24	80	2	3	2	3	1	1	0	0	0	0	4	0	4	80
62	Elton Ave	3-12	1320	24	70	3	4	4	4	1	1	1	1	1	2	4	0	4	70
63	Stratham Heights Road Phase 1	3-13	5115	22	90	2	3	1	1	0	0	0	0	0	0	2	0	1	90
64	Stratham Height's Road Phase 2	3-14	6807	22	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
65	Marin Way	3-15	2270	24	75	3	3	2	1	2	1	2	1	3	2	3	0	2	75
66	Academic Way	3-16	450	40	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
67	Drury Plains Road	3-17	570	24	75	2	3	3	2	1	1	2	3	0	2	3	0	3	75
68	Merles Lane	4-01	720	24	65	5	5	4	4	2	2	1	3	0	0	4	0	5	65
69	Humes Court	4-02	1735	24	65	5	5	4	4	2	2	1	3	0	0	4	0	5	65
70	Coach Road	4-03	2990	24	55	5	5	5	5	4	2	3	4	0	0	4	0	8	55
71	Bartlett Road	4-04	850	24	70	2	4	4	3	1	2	3	2	0	0	4	0	5	70
72	Barker Road	4-05	2582	24	80	3	3	3	3	0	0	0	1	0	0	3	0	4	80
73	Union Road Phase 1	4-06	6470	24	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
74	Seavy Pasture	4-07	770	24	75	3	3	2	3	0	1	1	1	0	0	3	0	3	80
75	High Street	4-08	10370	24	70	4	4	3	4	3	2	2	0	1	0	3	0	4	70
76	Perth Drive	4-09	840	24	60	5	5	5	5	3	2	1	2	0	1	4	0	7	60
77	Pond View Drive	4-10	662	24	60	5	5	5	5	3	3	0	2	0	0	5	0	7	60
78	Points of Rock Terrace	4-11	2400	24	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
79	Scamman Road	4-12	2950	24	45	5	5	5	5	5	3	4	4	0	1	5	0	8	50
80	Birnum Woods	4-13	3084	24	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
81	Beech Court	4-14	900	24	75	4	3	3	3	2	2	0	0	0	0	4	0	4	75
82	Whitaker Drive	4-15	825	24	80	3	3	4	3	0	2	0	0	0	0	3	0	2	80
83	Hillcrest Drive	4-16	540	24	65	4	4	5	5	3	1	1	2	0	0	5	0	5	65
84	Alex Way	4-17	340	22	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100
85	Barker Lane	4-18	340	15	85	1	1	1	2	1	1	2	0	0	0	3	0	3	85
86	Stonewall Way	4-19	630	22	95	2	0	1	0	0	0	0	0	0	0	1	0	1	95

Appendix C
Rating Condition

87	Charles Drive	4-20	660	24	95	2	1	0	0	0	0	0	0	0	0	0	1	0	1	95
88	Long Hill Road	4-21	2050	24	75	3	4	3	2	2	2	1	0	0	0	3	1	4	75	
89	Easton Hill Road	4-22	1270	24	80	4	3	1	2	2	1	0	0	0	3	0	4	80		
90	Gifford Farm Road	4-23	5285	24	75	3	2	3	3	1	1	0	2	3	0	3	0	4	75	
91	Berry Hill Road	4-24	760	24	75	3	2	3	3	1	1	0	2	3	0	3	0	4	75	
92	Chestnut Way	5-01	1441	24	95	0	1	1	0	0	0	0	0	0	0	2	0	1	95	
93	Lamington Hill	5-02	1058	24	75	5	3	3	2	3	0	0	0	0	0	3	0	6	75	
94	Lamington Place	5-03	565	24	75	5	3	3	2	3	0	0	0	0	0	3	0	6	75	
95	Murfield Drive Phase 1	5-04	2008	24	65	5	4	3	4	4	2	1	2	0	1	5	0	4	65	
96	Shannon Drive	5-05	531	24	70	5	4	5	4	3	4	2	0	1	0	3	0	4	65	
97	Barnes Drive	5-06	616	24	70	5	5	3	4	3	0	2	0	0	0	4	0	4	70	
98	Murfield Drive Phase 2	5-07	2442	24	95	2	0	0	0	0	0	0	0	1	0	1	0	1	95	
99	Hickory Pond Lane	5-08	2258	24	95	0	2	0	0	0	0	0	0	1	0	1	0	1	95	
100	Juniper Drive	5-09	1505	24	90	0	0	2	3	0	0	0	0	1	0	1	0	3	90	
101	Lilac Way	5-10	760	24	95	2	0	0	0	0	0	0	0	0	0	2	0	1	95	
102	Mason Drive	5-11	1285	22	90	2	2	1	0	0	0	0	0	0	0	3	0	2	90	
103	Chelsea Way	5-12	789	22	90	2	2	1	0	0	0	0	0	0	0	3	0	2	90	
104	Russell Drive	5-13	870	24	85	4	4	2	2	1	1	1	0	0	0	3	0	2	80	
105	Spruce Lane	5-14	2316	24	95	2	0	0	0	0	0	0	0	0	0	2	0	1	95	
106	Fifield Lane	5-15	800	18	70	4	4	4	4	2	1	1	1	0	0	5	0	4	70	
107	Strawberry Lane	5-16	1613	24	70	4	4	4	4	2	1	1	1	0	0	5	0	4	70	
108	Wiggin Way	5-17	3350	24	85	3	1	2	1	1	1	1	0	0	0	3	0	2	85	
109	Vanessa Drive	5-18	935	24	90	2	3	0	0	0	0	0	0	0	0	3	0	2	90	
110	Winterberry Lane	5-19	1230	24	90	2	3	1	0	0	0	0	0	0	0	2	0	2	90	
111	Balsam Way	5-20	772	24	85	3	3	2	2	1	0	0	0	0	0	2	0	2	85	
112	Christie Lane	5-21	1678	24	85	3	3	2	2	1	0	0	0	0	0	2	0	2	85	
113	Union Road Phase 2	5-22	5771	22	55	5	5	4	4	3	3	4	2	3	0	3	2	7	55	
114	Holmgren Drive	5-23	3577	24	70	5	4	5	4	2	1	1	1	0	0	3	0	4	70	
115	Holmgren Court	5-24	455	24	70	5	4	5	4	2	1	1	1	0	0	3	0	4	70	
116	Chapman Road	5-25	560	24	70	4	4	5	5	2	2	1	1	0	0	3	0	3	70	
117	Hersey Lane	5-26	1522	24	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100	
118	Wedgewood Drive	5-27	785	24	85	2	2	3	2	0	0	1	0	0	0	3	0	2	85	
119	Smith Farm Road	5-28	2595	24	100	0	0	0	0	0	0	0	0	0	0	0	0	0	100	
120	Roby Jewel Lane	5-29	1460	24	90	2	3	1	1	0	0	0	0	0	0	2	0	1	90	
121	Stonybrook Drive	5-30	560	24	70	3	2	2	2	2	1	1	1	3	2	3	2	6	70	

Appendix D
 Planning + Cost
 Analysis

No.	Road Name	Road ID	Length	Width	SF	Miles	Road Course		Estimated Cost		Future Overlay Planning		
							Rating	Of Action	Overlay	Reconstruction	10 Yr.	12.5 Yr.	15 Yr.
1	Trisha Way	1-01	1460	24	35040	0.27652	70 Overlay	\$ 30,660.00				\$ 30,660.00	
2	Stephen Drive	1-02	2050	24	49200	0.38826	70 Overlay	\$ 43,050.00				\$ 43,050.00	
3	Bittersweet Lane	1-03	2170	22	47740	0.41098	100 Overlay	\$ 41,664.00				\$ 41,664.00	
4	Market Street	1-04	1215	22	26730	0.23011	100 Overlay	\$ 23,328.00				\$ 23,328.00	
5	Brown Ave	1-05	1678	24	40272	0.31780	40 Reconstruction		\$ 75,510.00			\$	
6	Tall Pines Drive	1-06	1853	24	44472	0.35095	75 Overlay	\$ 38,913.00				\$ 38,913.00	
7	Frying Pan Lane	1-07	5419	22	119218	1.02633	75 Overlay	\$ 104,044.80		\$ 104,044.80			
8	Autumn Lane	1-08	1938	24	46512	0.36705	85 Overlay	\$ 40,698.00				\$ 40,698.00	
9	River Road	1-09	5584	18	100512	1.05758	70 Overlay	\$ 88,227.20				\$ 88,227.20	
10	Boat Club Drive	1-10	1091	24	26184	0.20663	70 Overlay	\$ 22,911.00				\$ 22,911.00	
11	Ox Bow Farm	1-11	821	24	19704	0.15549	90 Overlay	\$ 17,241.00				\$ 17,241.00	
12	Gretas Way	1-12	1128	24	27072	0.21364	80 Overlay	\$ 23,688.00				\$ 23,688.00	
13	Raeder Drive	1-13	3776	24	90624	0.71515	95 Overlay	\$ 79,296.00			\$ 79,296.00		
14	Doe Run	1-14	3074	24	73776	0.58220	95 Overlay	\$ 64,554.00			\$ 64,554.00		
15	Meadow View Lane	1-15	455	24	10920	0.08617	95 Overlay	\$ 9,555.00			\$ 9,555.00		
16	Butterfield Lane	1-16	4196	24	100704	0.79470	95 Overlay	\$ 88,116.00			\$ 88,116.00		
17	Oak Lane	1-17	1020	24	24480	0.19318	75 Overlay	\$ 21,420.00				\$ 21,420.00	
18	Emery Lane	1-18	1265	22	27830	0.23958	65 Overlay	\$ 24,288.00		\$ 24,288.00			
19	Patriots Way	1-19	2380	22	52360	0.45076	70 Overlay	\$ 45,696.00			\$ 45,696.00		
20	Evergreen Way	1-20	1600	24	38400	0.30303	75 Overlay	\$ 33,600.00				\$ 33,600.00	
21	Winding Brook Drive	1-21	2170	24	52080	0.41098	55 Reconstruction		\$ 97,650.00		\$ 45,570.00		
22	Tansy Lane	2-01	1630	24	39120	0.30871	70 Overlay	\$ 34,230.00			\$ 34,230.00		
23	Chase Lane	2-02	1995	24	47880	0.37784	70 Overlay	\$ 41,895.00				\$ 41,895.00	
24	Jewett Lane	2-03	730	24	17520	0.13826	70 Overlay	\$ 15,330.00				\$ 15,330.00	
25	Iris Lane	2-04	605	24	14520	0.11458	75 Overlay	\$ 12,705.00				\$ 12,705.00	
26	Tansy Avenue	2-05	1810	22	39820	0.34280	95 Overlay	\$ 34,752.00				\$ 34,752.00	
27	Barron's Way	2-06	610	22	13420	0.11553	95 Overlay	\$ 11,712.00				\$ 11,712.00	
28	Crockett's Way	2-07	1100	22	24200	0.20833	95 Overlay	\$ 21,120.00				\$ 21,120.00	
29	Chisolm Farm	2-08	2900	24	69600	0.54924	100 Overlay	\$ 60,900.00				\$ 60,900.00	
30	Laurel Lane	2-09	910	24	21840	0.17235	100 Overlay	\$ 19,110.00				\$ 19,110.00	
31	Crestview Terrace	2-10	4730	24	113520	0.89583	75 Overlay	\$ 99,330.00				\$ 99,330.00	
32	Mark Ave	2-11	415	24	9960	0.07860	80 Overlay	\$ 8,715.00				\$ 8,715.00	
33	Jason Drive	2-12	2468	24	59232	0.46742	95 Overlay	\$ 51,828.00				\$ 51,828.00	
34	Linda Lane	2-13	485	24	11640	0.09186	95 Overlay	\$ 10,185.00				\$ 10,185.00	
35	Jana Lane	2-14	2340	24	56160	0.44318	95 Overlay	\$ 49,140.00				\$ 49,140.00	
36	Joyce Lane	2-15	460	24	11040	0.08712	95 Overlay	\$ 9,660.00				\$ 9,660.00	
37	Benjamin Drive	2-16	2790	24	66960	0.52841	95 Overlay	\$ 58,590.00				\$ 58,590.00	
38	Jack Rabbit Lane	2-17	1020	24	24480	0.19318	75 Overlay	\$ 21,420.00			\$ 21,420.00		
39	Sandy Point Road	2-18	1600	22	35200	0.30303	75 Overlay	\$ 30,720.00		\$ 30,720.00			
40	Morning Star Drive	2-19	3440	24	82560	0.65152	45 Reconstruction		\$ 154,800.00		\$ 72,240.00		
41	Tucker Trail	2-20	1600	22	35200	0.30303	65 Overlay	\$ 30,720.00				\$ 30,720.00	
42	Dunbarton Oats	2-21	4702	24	112848	0.89053	95 Overlay	\$ 98,742.00				\$ 98,742.00	
43	Depot Road	2-22	4743	24	113832	0.89830	70 Overlay	\$ 99,603.00		\$ 99,603.00			
44	Stratham Lane	2-23	1310	24	31440	0.24811	65 Overlay	\$ 27,510.00			\$ 27,510.00		
45	Linwood Drive	2-24	1055	24	25320	0.19981	90 Overlay	\$ 22,155.00				\$ 22,155.00	
46	Tidewater Farms	2-25	2385	24	57240	0.45170	70 Overlay	\$ 50,085.00			\$ 50,085.00		
47	Blue Ridge Circle	2-26	645	24	15480	0.12216	70 Overlay	\$ 13,545.00				\$ 13,545.00	
48	Lovell Road	2-27	5780	24	138720	1.09470	75 Overlay	\$ 121,380.00		\$ 121,380.00			
49	Lucian Way	2-28	374	24	8976	0.07083	100 Overlay	\$ 7,854.00				\$ 7,854.00	
50	Willow Brook	2-29	3560	24	85440	0.67424	80 Overlay	\$ 74,760.00		\$ 74,760.00			
51	Sweetland Place	3-01	895	24	21480	0.16951	70 Overlay	\$ 18,795.00				\$ 18,795.00	
52	Walters Way	3-02	500	24	12000	0.09470	85 Overlay	\$ 10,500.00				\$ 10,500.00	
53	Erik Way	3-03	370	24	8880	0.07008	70 Overlay	\$ 7,770.00				\$ 7,770.00	
54	Rollins Farm Road	3-04	2214	24	53136	0.41932	100 Overlay	\$ 46,494.00				\$ 46,494.00	

Appendix D
 Planning + Cost
 Analysis

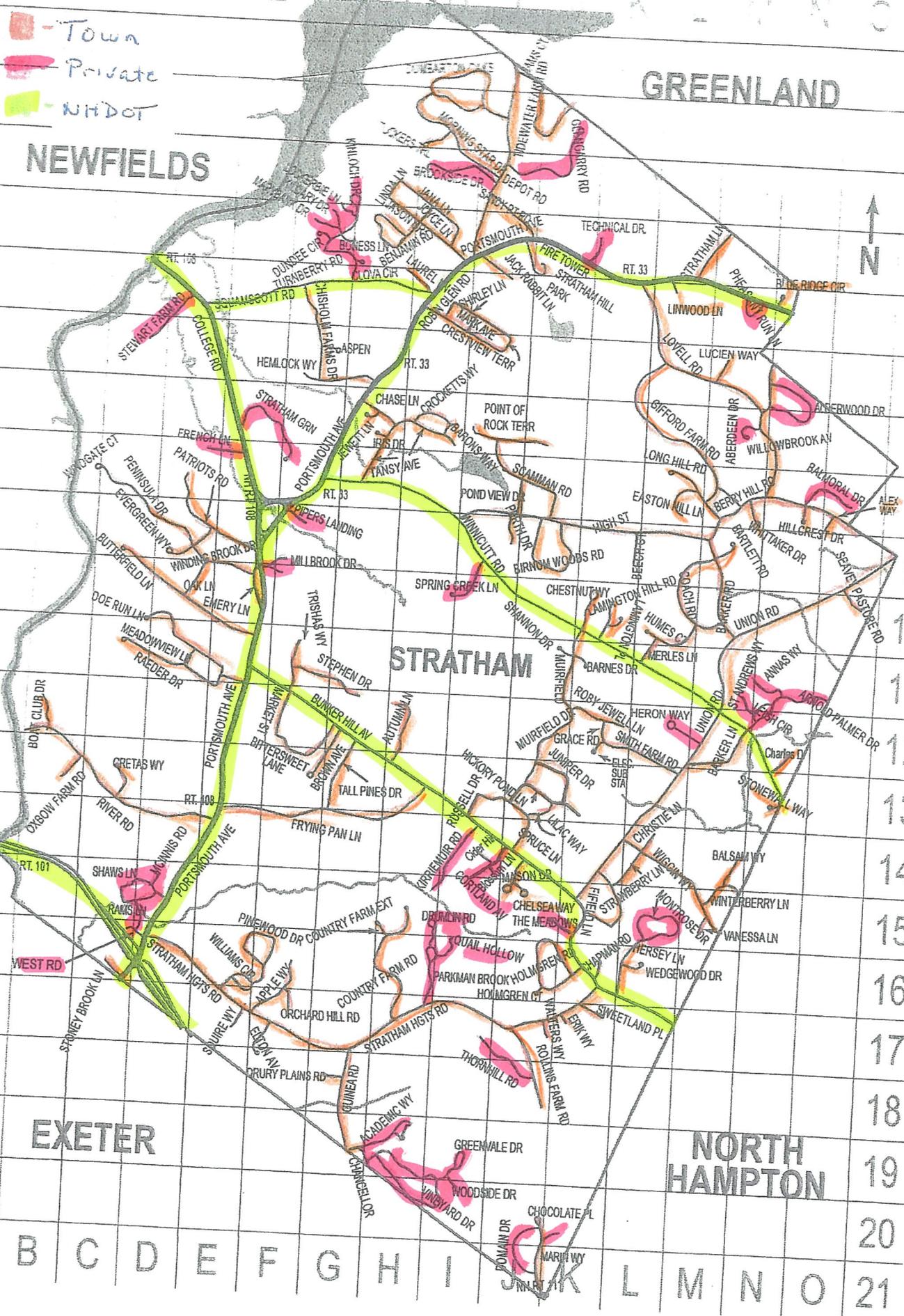
55	Country Farm Road	3-05	4550	24	109200	0.86174	30 Reconstruction		\$ 204,750.00		\$ 95,550.00
56	Guinea Road	3-06	2625	24	63000	0.49716	95 Overlay	\$ 55,125.00		\$ 55,125.00	
57	Apple Way	3-07	1900	24	45600	0.35985	100 Overlay	\$ 39,900.00			\$ 39,900.00
58	Orchard Hill	3-08	700	24	16800	0.13258	100 Overlay	\$ 14,700.00			\$ 14,700.00
59	Williams Circle	3-09	1750	24	42000	0.33144	100 Overlay	\$ 36,750.00			\$ 36,750.00
60	Pinewood Drive	3-10	3590	24	86160	0.67992	100 Overlay	\$ 75,390.00			\$ 75,390.00
61	Squire Way	3-11	710	24	17040	0.13447	80 Overlay	\$ 14,910.00			\$ 14,910.00
62	Elton Ave	3-12	1320	24	31680	0.25000	70 Overlay	\$ 27,720.00			\$ 27,720.00
63	Stratham Heights Road Phase 1	3-13	5115	22	112530	0.96875	90 Overlay	\$ 98,208.00		\$ 98,208.00	
64	Stratham Height's Road Phase 2	3-14	6807	22	149754	1.28920	100 Overlay	\$ 130,694.40		\$ 130,694.40	
65	Marin Way	3-15	2270	24	54480	0.42992	75 Overlay	\$ 47,670.00		\$ 47,670.00	
66	Academic Way	3-16	450	40	18000	0.08523	100 Overlay	\$ 15,750.00		\$ 15,750.00	
67	Drury Plains Road	3-17	570	24	13680	0.10795	75 Overlay	\$ 11,970.00			\$ 11,970.00
68	Merles Lane	4-01	720	24	17280	0.13636	65 Reconstruction		\$ 32,400.00		\$ 15,120.00
69	Humes Court	4-02	1735	24	41640	0.32860	65 Reconstruction		\$ 78,075.00		\$ 36,435.00
70	Coach Road	4-03	2990	24	71760	0.56629	55 Reconstruction		\$ 134,550.00		\$ 62,790.00
71	Bartlett Road	4-04	850	24	20400	0.16098	70 Overlay	\$ 17,850.00			\$ 17,850.00
72	Barker Road	4-05	2582	24	61968	0.48902	80 Overlay	\$ 54,222.00		\$ 54,222.00	
73	Union Road Phase 1	4-06	6470	24	155280	1.22538	100 Overlay	\$ 135,870.00		\$ 135,870.00	
74	Seavy Pasture	4-07	770	24	18480	0.14583	75 Overlay	\$ 16,170.00			\$ 16,170.00
75	High Street	4-08	10370	24	248880	1.96402	70 Overlay	\$ 217,770.00		\$ 217,770.00	
76	Perth Drive	4-09	840	24	20160	0.15909	60 Reconstruction		\$ 37,800.00		\$ 17,640.00
77	Pond View Drive	4-10	662	24	15888	0.12538	60 Reconstruction		\$ 29,790.00		\$ 13,902.00
78	Points of Rock Terrace	4-11	2400	24	57600	0.45455	100 Overlay	\$ 50,400.00			\$ 50,400.00
79	Scamman Road	4-12	2950	24	70800	0.55871	45 Reconstruction		\$ 132,750.00		\$ 61,950.00
80	Birnum Woods	4-13	3084	24	74016	0.58409	100 Overlay	\$ 64,764.00			\$ 64,764.00
81	Beech Court	4-14	900	24	21600	0.17045	75 Overlay	\$ 18,900.00			\$ 18,900.00
82	Whitaker Drive	4-15	825	24	19800	0.15625	80 Overlay	\$ 17,325.00			\$ 17,325.00
83	Hillcrest Drive	4-16	540	24	12960	0.10227	65 Overlay	\$ 11,340.00			\$ 11,340.00
84	Alex Way	4-17	340	22	7480	0.06439	100 Overlay	\$ 6,528.00			\$ 6,528.00
85	Barker Lane	4-18	340	15	5100	0.06439	85 Overlay	\$ 4,794.00			\$ 4,794.00
86	Stonewall Way	4-19	630	22	13860	0.11932	95 Overlay	\$ 12,096.00			\$ 12,096.00
87	Charles Drive	4-20	660	24	15840	0.12500	95 Overlay	\$ 13,860.00			\$ 13,860.00
88	Long Hill Road	4-21	2050	24	49200	0.38826	75 Overlay	\$ 43,050.00		\$ 43,050.00	
89	Easton Hill Road	4-22	1270	24	30480	0.24053	80 Overlay	\$ 26,670.00		\$ 26,670.00	
90	Gifford Farm Road	4-23	5285	24	126840	1.00095	75 Overlay	\$ 110,985.00		\$ 110,985.00	
91	Berry Hill Road	4-24	760	24	18240	0.14394	75 Overlay	\$ 15,960.00		\$ 15,960.00	
92	Chestnut Way	5-01	1441	24	34584	0.27292	95 Overlay	\$ 30,261.00			\$ 30,261.00
93	Lamington Hill	5-02	1058	24	25392	0.20038	75 Overlay	\$ 22,218.00			\$ 22,218.00
94	Lamington Place	5-03	565	24	13560	0.10701	75 Overlay	\$ 11,865.00			\$ 11,865.00
95	Murfield Drive Phase 1	5-04	2008	24	48192	0.38030	65 Reconstruction		\$ 90,360.00	\$ 42,168.00	
96	Shannon Drive	5-05	531	24	12744	0.10057	70 Reconstruction		\$ 23,895.00		\$ 11,151.00
97	Barnes Drive	5-06	616	24	14784	0.11667	70 Reconstruction		\$ 27,720.00		\$ 12,936.00
98	Murfield Drive Phase 2	5-07	2442	24	58608	0.46250	95 Overlay	\$ 51,282.00		\$ 51,282.00	
99	Hickory Pond Lane	5-08	2258	24	54192	0.42765	95 Overlay	\$ 47,418.00			\$ 47,418.00
100	Juniper Drive	5-09	1505	24	36120	0.28504	90 Overlay	\$ 31,605.00			\$ 31,605.00
101	Lilac Way	5-10	760	24	18240	0.14394	95 Overlay	\$ 15,960.00			\$ 15,960.00
102	Mason Drive	5-11	1285	22	28270	0.24337	90 Overlay	\$ 24,672.00			\$ 24,672.00
103	Chelsea Way	5-12	789	22	17358	0.14943	90 Overlay	\$ 15,148.80			\$ 15,148.80
104	Russell Drive	5-13	870	24	20880	0.16477	85 Overlay	\$ 18,270.00			\$ 18,270.00
105	Spruce Lane	5-14	2316	24	55584	0.43864	95 Overlay	\$ 48,636.00			\$ 48,636.00
106	Fifield Lane	5-15	800	18	14400	0.15152	70 Overlay	\$ 12,640.00			\$ 12,640.00
107	Strawberry Lane	5-16	1613	24	38712	0.30549	70 Overlay	\$ 33,873.00			\$ 33,873.00
108	Wiggin Way	5-17	3350	24	80400	0.63447	85 Overlay	\$ 70,350.00			\$ 70,350.00
109	Vanessa Drive	5-18	935	24	22440	0.17708	90 Overlay	\$ 19,635.00			\$ 19,635.00
110	Winterberry Lane	5-19	1230	24	29520	0.23295	90 Overlay	\$ 25,830.00			\$ 25,830.00

Appendix D
Planning + Cost
Analysis

111	Balsam Way	5-20	772	24	18528	0.14621	85 Overlay	\$ 16,212.00			\$ 16,212.00	
112	Christie Lane	5-21	1678	24	40272	0.31780	85 Overlay	\$ 35,238.00			\$ 35,238.00	
113	Union Road Phase 2	5-22	5771	22	126962	1.09299	55 Reconstruction		\$ 259,695.00	\$ 110,803.20		
114	Holmgren Drive	5-23	3577	24	85848	0.67746	70 Overlay	\$ 75,117.00			\$ 75,117.00	
115	Holmgren Court	5-24	455	24	10920	0.08617	70 Overlay	\$ 9,555.00			\$ 9,555.00	
116	Chapman Road	5-25	560	24	13440	0.10606	70 Overlay	\$ 11,760.00			\$ 11,760.00	
117	Hersey Lane	5-26	1522	24	36528	0.28826	100 Overlay	\$ 31,962.00			\$ 31,962.00	
118	Wedgewood Drive	5-27	785	24	18840	0.14867	85 Overlay	\$ 16,485.00			\$ 16,485.00	
119	Smith Farm Road	5-28	2595	24	62280	0.49148	100 Overlay	\$ 54,495.00			\$ 54,495.00	
120	Roby Jewel Lane	5-29	1460	24	35040	0.27652	90 Overlay	\$ 30,660.00			\$ 30,660.00	
121	Stonybrook Drive	5-30	560	24	13440	0.10606	70 Overlay	\$ 11,760.00		\$ 11,760.00		
Total			237,001		5574048	44.88655		\$ 4,242,454.20	\$ 1,379,745.00	\$ 1,250,936.40	\$ 910,119.00	\$ 2,679,654.00
Miles			89.77310606		0.19994146			Overall Total:	\$ 5,622,199.20			
								\$ 270,538.24	\$ 125,093.64	\$ 72,809.52	\$ 178,643.60	

Proposed Annual Paving Maintenance				\$ 376,546.76
Proposed Reconstruction Budget				270,538.24
Total Proposed Paving & Recon Budget				\$ 647,085.00

Summary	
Proposed Annual Paving Maintenance	\$ 376,546.76
Proposed Reconstruction Budget	\$ 270,538.24
Total Proposed Paving & Recon Budget	\$ 647,085.00
Cost to Reconstruct All of Stratham	\$ 10,665,045.00
Cost to Overlay All of Stratham	\$ 4,977,021.00
Cost/Mile to Overlay	\$ 110,880.00
Cost/Mile to Reconstruct	\$ 237,600.00000
Delta	2.142857143



- 1 ■ - Town
- 2 ■ - Private
- 3 ■ - NHDOT



NEWFIELDS

GREENLAND

STRATHAM

EXETER

NORTH HAMPTON

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Town of Stratham Highway Department
Guardrail Inventory

Street Name	Type	Length	# of End Terminals	Condition	Reflectors	Post Type	# of Posts	Estimated Cost to Replace	Comments
Linda Lane	Wooden Post	35'	None	Poor		3 Wood	4	\$ 1,005.55	No guardrail
Morning Star Drive	Galvanized	160'		2 Good	No	Wood	25	\$ 4,716.80	No Plow Markers
Lovell Rd	Galvanized	180'		2 Good	No	Wood	29	\$ 5,291.40	No Plow Markers
Willowbrook Ave	Galvanized	196'		2 Fair to Good	No	Wood	30	\$ 5,751.08	2 Sections bent, 4 has Plow Damage
Willowbrook Ave	Galvanized	240'		1 Good	No	Wood	38	\$ 7,015.20	Connects to Alderwood Dr, No Plow Markers
Alderwood Dr	Galvanized	176'		1 Good	No	Wood	29	\$ 5,116.48	Connects to Willowbrook Ave, No Plow Markers
Market St	Galvanized	140'		2 Excellent	No	Galvanized	23	\$ 4,142.20	No Plow Markers
Point of Rocks Terrace	Corten	92'		2 Excellent	No	Wood	15	\$ 2,763.16	No Plow Markers
Scamman Rd	Corten	265'		2 Excellent	No	Wood	43	\$ 7,733.45	From #27 to Point of Rocks Terr, no plow markers
Scamman rd	Corten	270'		4 Excellent	No	Wood	46	\$ 7,877.10	From end of stone wall to #25, no plow markers, 2 sections 1x 45', 1 x 225'
Seavey Pasture	Galvanized	152'		2 Good	No	Wood	25	\$ 4,486.96	4 sections damaged, 2 posts bent but not broken, 1 end terminal damaged, no plow markers
Charles Dr	Corten	102'		2 Good	No	Wood	17	\$ 3,050.46	No plow markers
Strawberry Ln (Both Sides of Road)	Galvanized	64'		2 Good	No	Galvanized	11	\$ 3,797.44	
Frying Pan Ln	Galvanized	105'		2 Good	No	Wood	16	\$ 3,136.65	2 Sections bent, 1 End terminal bent
River Rd	Galvanized	168'		2 Good	No	Wood	27	\$ 4,946.64	4 Sections bent, 1 Post needs straightening
Squire Way	Galvanized	140'		2 Good	No	Wood	23	\$ 4,142.20	Across end of Way
Guinea Rd	Galvanized	152'		2 Good	No	Wood	27	\$ 4,486.96	
Guinea Rd	Galvanized	64'		2 Good	No	Wood	11	\$ 1,958.72	
Wiggin Way	Galvanized	380'		2 Good	No	Wood	61	\$ 11,037.40	Odd side
Wiggin Way	Galvanized	328'		2 Good	No	Wood	53	\$ 9,543.44	Even side after #10
Wiggin Way	Galvanized	132'		2 Good	No	Wood	22	\$ 3,912.36	Odd side, End Terminal and 2 sections damaged
Wiggin Way	Galvanized	132'		2 Good	No	Wood	22	\$ 3,912.36	Even side
Vanessa Dr	Galvanized	78'		2 Good	No	Wood	13	\$ 2,360.94	Both sides of road
High St	Corten	148'		2 Fair	Yes	Wood	24	\$ 4,372.04	6 Sections damaged w/broken reflectors, ner Barker Rd Intersection
High St	Galvanized	104'		2 Good	No	Wood	17	\$ 3,107.92	Needs Plow Markers, damaged end terminal
Murfield Dr	Corten	88'		2 Good	No	14 wood/3 galvanized		\$ 2,648.24	1 section damaged, needs plow markers, even side
Murfield Dr	Corten	65'		2 Good	No	8 wood/3 galvanized		\$ 9,457.25	1 section is galvanized, odd side
Boat Club Drive	Galvanized	325'		2 Good	Yes	Wood	52	\$ 9,457.25	1 end is dented, has plow markers
Tansy Avenue	Galvanized	44'		2 Good	Yes	Wood	8	\$ 1,384.12	No plow markers
Tansy Avenue	Galvanized	88'		2 Good	Yes	Wood	19	\$ 2,648.24	Located at hammerhead
Chisolm Farm	Galvanized	56'		2 Good	Yes	Wood	9	\$ 1,728.88	Portsmouth Avenue side with 1 traffic attenuater
Chisolm Farm	Corten	57'		2 Good	Yes	Wood	8	\$ 1,757.61	Has 1 plow marker
Juniper Dr	Corten	56' x 2		4 Good	No	6 Wood/3 Galvanized		\$ 3,217.76	
Guardrail Total								\$ 151,964.26	

Town of Stratham Highway Department
Street Sign Inventory

Street Name	Sign Type	# of Signs	Cross Sign	Stop Sign	Quality	Theft/Vandalism	Date	Due for Replacement	Estimated Cost to Replace
Holmgren Road	Street	1	No	Yes	Poor	No	n/a	Yes	\$ 42.00
Holmgren Road	Stop	1	No	Yes	Poor	No	n/a	Yes	\$ 49.80
Stratham Heights Road	Caution Children	1	No	n/a	Poor	No	n/a	Yes	\$ 27.30
Stratham Heights Road	Signal Ahead	1	No	n/a	Poor	No	n/a	Yes	\$ 54.60
Stratham Heights Road	Stop Ahead	2	No	n/a	Poor	No	n/a	Yes	\$ 124.80
Sweetland Place	Stop	1	No	Yes	Poor	No	n/a	Yes	\$ 49.80
Rollins Farm Road	Dead End	1	No	n/a	Poor	No	n/a	No	\$ 27.30
Guinea Road	Stop	1	No	Yes	Poor	Yes	1/7/2014	Yes	\$ 49.80
Drury Plains	Stop	1	No	Yes	Poor	Yes	1/7/2014	Yes	\$ 49.80
Pine Wood Drive	Stop	1	No	Yes	Poor	Yes	1/7/2014	Yes	\$ 49.80
Elton Ave	25 MPH	1	No	n/a	Poor	No	n/a	Yes	\$ 27.30
Wiggin Way	Hammerhead Chevron	1	No	n/a	Poor	No	N/a	Yes	\$ 143.20
Balsam Way	Hammerhead Chevron	1	No	n/a	Poor	No	N/a	Yes	\$ 143.20
Grace Lane	Street	1	No	Yes	Poor	Yes	1/7/2014	Yes	\$ 42.00
Shannon Drive	Street	1	No	Yes	Poor	No	n/a	Yes	\$ 42.00
Shannon Drive	Stop	1	No	Yes	Poor	No	n/a	yes	\$ 49.80
Barnes Drive	Street	1	No	Yes	Poor	No	n/a	Yes	\$ 42.00
Beech Court	Stop	1	No	Yes	Poor	Yes	1/8/2014	Yes	\$ 49.80
High Street	Caution Children	1	No	No	Poor	No	N/a	Yes	\$ 27.30
High Street	Road Right	1	No	No	Poor	No	N/a	Yes	\$ 27.30
Trisha Way	Hammerhead Chevron	1	No	No	Poor	No	N/a	Yes	\$ 143.20
Stephen Drive	Hammerhead Chevron	1	No	No	Poor	No	N/a	Yes	\$ 143.20
Emery Lane	One Way on Sunday	1	No	No	Poor	No	N/a	Yes	\$ 27.30
Patriots Road	Street	1	No	Yes	Poor	No	N/a	Yes	\$ 42.00
Patriots Road	Stop	1	No	Yes	Poor	No	N/a	Yes	\$ 49.80
Butterfield Lane	Dead End	1	No	No	Poor	No	N/a	Yes	\$ 27.30
Raeder Drive	25 MPH	1	No	No	Poor	No	n/a	No	\$ 27.30
Raeder Drive	Caution Children	1	No	No	Poor	No	N/a	Yes	\$ 27.30
Doe Run	Caution Children	1	No	No	Poor	No	N/a	Yes	\$ 27.30
River Road	Dead End	1	No	No	Poor	No	N/a	Yes	\$ 27.30
Tidewater Farm	Stop	1	No	Yes	Poor	No	N/a	Yes	\$ 49.80
Depot Road	Caution Children	1	No	No	Poor	No	N/a	Yes	\$ 27.30
Benjamin Road	Street	1	No	Yes	Poor	No	N/a	Yes	\$ 42.00

Appendix G
Sign Inventory

Benjamin Road	Stop	1 No	Yes	Poor	No	N/a	Yes	\$	49.80
Mason Drive	Street	1 No	Yes	Good	No	n/a	No	\$	42.00
Mason Drive	Stop	1 No	Yes	Good	No	n/a	No	\$	49.80
Mason Drive	Keep Right	1 No	n/a	Good	No	n/a	No	\$	27.30
Chesnut Way	Street	1 Yes (1)	Yes	Good	No	n/a	No	\$	84.00
Chesnut Way	Stop	1 No	Yes	Good	No	n/a	No	\$	49.80
Chesnut Way	Keep Right	1 No	n/a	Good	No	n/a	No	\$	27.30
Holmgren Road	25 MPH	1 No	n/a	Good	No	n/a	No	\$	27.30
Holmgren CT	Street	1 No	n/a	Good	No	n/a	No	\$	42.00
Hersey Lane	Street	1 No	Yes	Good	No	n/a	No	\$	42.00
Wedgewood Drive	Street	1 No	Yes	Good	No	n/a	No	\$	42.00
Wedgewood Drive	Stop	1 No	Yes	Good	No	n/a	No	\$	49.80
Sweetland Place	Street	1 No	Yes	Good	No	n/a	No	\$	42.00
Walters Way	Street	1 No	Yes	Good	No	n/a	No	\$	42.00
Walters Way	Stop	1 No	Yes	Good	No	n/a	No	\$	49.80
Rollins Farm Road	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Rollins Farm Road	25 MPH	1 No	n/a	Good	No	N/a	No	\$	27.30
Guinea Road	School Zone	1 No	n/a	Good	No	n/a	No	\$	27.30
Academic Way	Street	1 No	n/a	Good	No	n/a	No	\$	42.00
Marin Way	Street	1 No	Yes	Good	No	n/a	No	\$	42.00
Marin Way	Stop	1 No	Yes	Good	No	n/a	No	\$	49.80
Marin Way	25 MPH	2 No	n/a	Good	No	n/a	No	\$	27.30
Apple Way	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Apple Way	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Orchard Hill Road	Street	1 No	Yes	Good	No	n/a	No	\$	42.00
Williams Circle	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Williams Circle	Stop	1 No	Yes	Good	No	n/a	No	\$	49.80
Pine Wood Drive	Street	1 No	n/a	Good	No	n/a	No	\$	42.00
Squire Way	Street	1 No	Yes	Good	No	n/a	No	\$	42.00
Squire Way	Stop	1 No	Yes	Good	No	n/a	No	\$	49.80
Elton Ave	Street	1 Yes	Yes	Good	No	n/a	No	\$	42.00
Elton Ave	Stop	1 No	Yes	Good	No	n/a	No	\$	49.80
Chapman Road	Street	2 No	Yes	Good	No	n/a	No	\$	84.00
Chapman Road	Stop	1 No	Yes	Good	No	n/a	No	\$	49.80
Fifield Lane	Street	1 No	n/a	Good	No	n/a	No	\$	42.00
Fifield Lane	Yield	1 No	n/a	Good	No	n/a	No	\$	49.80
Strawberry Lane	Street	2 No	Yes	Good	No	n/a	No	\$	84.00
Strawberry Lane	25 MPH	1 No	Yes	Good	No	n/a	No	\$	27.30
Wiggin Way	Street	2 Yes	Yes	Good	Yes (1)	n/a	Yes (1)	\$	84.00
Wiggin Way	Stop	5 Yes	Yes	Good	No	n/a	No	\$	249.00
Wiggin Way	25 MPH	1 No	n/a	Good	No	n/a	No	\$	27.30

Appendix G
Sign Inventory

Wiggin Way	Dead End	1 No	n/a	Good	No	n/a	No	\$	27.30
Vanessa Lane	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Vanessa Lane	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Winterberry	Street	1 No	Yes	Good	No	n/a	No	\$	42.00
Winterberry	Stop	1 No	Yes	Good	No	n/a	No	\$	49.80
Balsam Way	Street	1 No	Yes	Good	No	n/a	No	\$	42.00
Balsam Way	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Christie Drive	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Smith Farm Road	Street	2 No	Yes	Good	No	N/a	No	\$	84.00
Smith Farm Road	25 MPH	1 No	No	Good	No	n/a	No	\$	27.30
Smith Farm Road	Caution Children	1 No	No	Good	No	N/a	No	\$	27.30
Smith Farm Road	Stop	3 No	Yes	Good	No	n/a	No	\$	149.40
Grace lane	Stop	2 No	Yes (2)	Good	No	n/a	No	\$	99.60
Murfield Drive	Street	4 Yes	Yes	Good	No	n/a	No	\$	168.00
Murfield Drive	Stop	4 No	Yes	Good	No	n/a	No	\$	49.80
Murfield Drive	Caution Children	1 No	No	Good	No	n/a	No	\$	27.30
Barnes Drive	Stop	1 No	Yes	Good	No	n/a	No	\$	49.80
Russell Drive	Street	1 No	Yes	Good	No	n/a	No	\$	42.00
Russell Drive	25 MPH	1 No	No	Good	No	n/a	No	\$	27.30
Russell Drive	Caution Children	1 No	No	Good	No	n/a	No	\$	27.30
Russell Drive	Stop	2 No	Yes	Good	No	n/a	No	\$	99.60
Spruce Lane	Street	4 No	Yes	Good	No	N/a	No	\$	168.00
Spruce Lane	Stop	4 No	Yes	Good	No	N/a	No	\$	199.20
Spruce Lane	Caution Children	1 No	No	Good	No	n/a	No	\$	27.30
Spruce Lane	25 MPH	1 No	No	Good	No	n/a	No	\$	27.30
Lilac Way	Street	2 Yes	Yes	Good	No	n/a	No	\$	84.00
Lilac Way	Stop	2 Yes	Yes	Good	No	n/a	No	\$	99.60
Hickory Pond Lane	Street	4 Yes	Yes	Good	No	N/a	No	\$	168.00
Hickory Pond Lane	Stop	4 Yes	Yes	Good	No	N/a	No	\$	149.40
Chestnut Way	Street	1 Yes	Yes	Good	No	N/a	No	\$	42.00
Lamington Hill Road	25 MPH	1 No	Yes	Good	No	n/a	No	\$	27.30
Lamington Hill Road	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Lamington Place	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Lamington Place	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Union Road	Street	5 No	Yes	Good	No	N/a	No	\$	210.00
Union Road	Stop	5 Yes	Yes	Good	No	N/a	No	\$	249.00
Union Road	35 MPH	4 No	No	Good	No	N/a	No	\$	27.30
Union Road	Caution Children	1 No	No	Good	No	N/a	No	\$	27.30
Union Road	Stop Ahead	2 No	No	Good	No	N/a	No	\$	99.60
Seavey Pasture	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Seavy Pasture	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80

Appendix G
Sign Inventory

Seavy Pasture	Caution Children	1 No	No	Good	No	N/a	No	\$	27.30
Mereles Lane	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Mereles Lane	25 MPH	1 No	No	Good	No	N/a	No	\$	27.30
Mereles Lane	Stop	2 Yes	Yes	Good	No	N/a	No	\$	99.60
Mereles Lane	Caution Children	1 No	No	Good	No	N/a	No	\$	27.30
Humes Court	Street	2 No	Yes	Good	No	N/a	No	\$	84.00
Humes Court	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Humes Court	25 MPH	1 No	No	Good	No	N/a	No	\$	27.30
Humes Court	Caution Children	1 No	No	Good	No	N/a	No	\$	27.30
Barker Road	Street	2 Yes	Yes	Good	No	N/a	No	\$	84.00
Barker Road	Stop	2 Yes	Yes	Good	No	N/a	No	\$	99.60
Barker Road	35 MPH	1 No	No	Good	No	N/a	No	\$	27.30
Bartlett Road	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Bartlett Road	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Bartlett Road	25 MPH	1 No	Yes	Good	No	N/a	No	\$	27.30
Whittaker Drive	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Whittaker Drive	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Hillcrest Road	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Hillcrest Road	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Berry Hill Road	Street	2 No	Yes	Good	No	N/a	No	\$	84.00
Berry Hill Road	Stop	2 No	Yes	Good	No	N/a	No	\$	99.60
Berry Hill Road	25 MPH	1 No	No	Good	No	N/a	No	\$	27.30
Easton Hill	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Scamman Road	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Pond View Drive	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Pond View Drive	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Perth Drive	Street	2 No	Yes	Good	No	N/a	No	\$	84.00
Perth Drive	Stop	2 No	Yes	Good	No	N/a	No	\$	99.60
Birnum Woods	Street	2 No	Yes	Good	No	N/a	No	\$	84.00
Birnum Woods	Stop	2 No	Yes	Good	No	N/a	No	\$	49.80
Birnum Woods	25 MPH	1 No	No	Good	No	N/a	No	\$	27.30
Beech Court	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Beech Court	25 MPH	1 No	No	Good	No	N/a	No	\$	27.30
High Street	Stop	3 Yes	Yes	Good	No	N/a	No	\$	149.40
High Street	35 MPH	3 No	No	Good	No	N/a	No	\$	27.30
High Street	Town line	1 No	No	Good	No	N/a	No	\$	44.80
Frying Pan Lane	Street	2 Yes	Yes	Good	No	N/a	No	\$	84.00
Frying Pan Lane	Stop	2 No	Yes	Good	No	N/a	No	\$	99.60
Frying Pan Lane	Horse Crossing	1 No	No	Good	No	N/a	No	\$	27.30
Gifford Farm Road	Street	2 No	Yes (2)	Good	No	N/A	No	\$	84.00
Gifford Farm Road	Stop	2 No	Yes	Good	No	N/a	No	\$	99.60

Appendix G
Sign Inventory

Lovell Road	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Lovell Road	Stop	2 No	Yes	Good	No	N/a	No	\$	99.60
Sandy Point Road	Street	2 No	Yes	Good	No	N/a	No	\$	84.00
Sandy Point Road	Stop	2 No	Yes	Good	No	N/a	No	\$	99.60
Autumn Lane	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Autumn Lane	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Brown Ave	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Brown Ave	Dead End	1 No	No	Good	No	N/a	No	\$	27.30
Trisha Way	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Trisha Way	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Trisha Way	25 MPH	1 No	No	Good	No	N/a	No	\$	27.30
Trisha Way	No Outlet	1 No	NO	Good	No	N/a	No	\$	27.30
Emery Lane	Street	3 No	Yes	Good	No	N/a	No	\$	126.00
Emery Lane	Stop	3 No	Yes	Good	No	N/a	No	\$	49.80
Emery Lane	25 MPH	2 No	No	Good	No	N/a	No	\$	27.30
Evergreen Way	Street	2 Yes	Yes	Good	No	N/a	No	\$	84.00
Evergreen Way	Stop	2 No	Yes	Good	No	N/a	No	\$	99.60
Windingbrook Drive	Street	2 Yes	Yes	Good	No	n/a	No	\$	84.00
Windingbrook Drive	Stop	2 No	Yes	Good	No	N/a	No	\$	99.60
Oak Lane	Street	2 No	Yes	Good	No	N/a	No	\$	84.00
Oak Lane	Stop	2 No	Yes	Good	No	N/a	No	\$	99.60
Butterfield Lane	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Butterfield Lane	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Meadowview Lane	Street	2 No	Yes	Good	No	N/a	No	\$	84.00
Meadowview Lane	Stop	2 No	Yes	Good	No	N/a	No	\$	99.60
Doe Run	Street	1 No	No	Good	No	N/a	No	\$	42.00
Gretas Way	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Gretas Way	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Boat Club Drive	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Boat Club Drive	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Ox Bow Drive	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
River Road	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Chase Lane	Caution Children	1 No	No	Good	No	N/a	No	\$	27.30
Jewett Lane	Street	1 No	No	Good	No	N/a	No	\$	42.00
Iris Drive	Street	1 No	No	Good	No	N/a	No	\$	42.00
Chisolm Farm Lane	Caution Children	2 No	No	Good	No	N/a	No	\$	27.30
Laurel Lane	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Laurel Lane	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Lucian Way	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Lucian Way	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Linwood Drive	Street	1 No	Yes	Good	No	N/a	No	\$	42.00

Appendix G
Sign Inventory

Linwood Drive	Children at Play	1 No	No	Good	No	N/a	No	\$	27.30
Blue Ridge Circle	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Blue Ridge Circle	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Stratham Lane	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Stratham Lane	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Stratham Lane	25 MPH	1 No	No	Good	No	N/a	No	\$	27.30
Stratham Lane	Caution Children	1 No	No	Good	No	N/a	No	\$	27.30
Stratham Lane	Town Line	1 No	No	Good	No	N/a	No	\$	44.80
Depot Road	25 MPH	2 No	No	Good	No	N/a	No	\$	27.30
Morning Star Drive	Street	2 No	Yes	Good	No	N/a	No	\$	84.00
Morning Star Drive	Stop	2 No	Yes	Good	No	N/a	No	\$	99.60
Tucker Trail	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Tucker Trail	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Dunbarton Oats	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Dunbarton Oats	Street	1 No	Yes	Good	No	N/a	No	\$	27.30
Dunbarton Oats	25 MPH	1 No	No	Good	No	N/a	No	\$	42.00
Jason Drive	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Jason Drive	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Jason Drive	25 MPH	1 No	No	Good	No	N/a	No	\$	27.30
Jana Lane	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Jana Lane	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Linda Lane	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Linda Lane	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Stoneybrook Lane	Stop	1 No	Yes	Good	No	n/a	No	\$	49.80
Stoneybrook Lane	Street	1 No	Yes	Good	No	n/a	No	\$	42.00
Joyce Lane	Street	2 No	Yes	Good	No	N/a	No	\$	84.00
Joyce Lane	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Jackrabbit Lane	Street	1 No	Yes	Good	No	N/a	No	\$	42.00
Jackrabbit Lane	Stop	1 No	Yes	Good	No	N/a	No	\$	49.80
Crestview Terrace	Street	2 No	Yes	Good	No	N/a	No	\$	84.00
Crestview Terrace	Stop	2 No	Yes	Good	No	N/a	No	\$	99.60
Mark Ave	Street	2 No	No	Good	No	N/a	No	\$	84.00
Mark Ave	Stop	2 No	No	Good	No	N/a	No	\$	99.60
Shirley Lane	Street	2 No	No	Good	No	N/a	No	\$	84.00
Robin Glen	Street	2 No	No	Good	No	N/a	No	\$	84.00
Stratham Heights Road	35 MPH	2 No	n/a	Fair	Yes (1)	1/7/2014	Yes	\$	27.30
Stratham Heights Road	Chevron Left	3 No	n/a	Fair	No	n/a	Yes	\$	217.30
Stratham Heights Road	Chevron Right	3 No	n/a	Fair	No	n/a	Yes	\$	217.30
Stratham Heights Road	Stop	2 No	Yes	Fair	No	n/a	Yes	\$	99.60
Hersey Lane	25 MPH	1 No	n/a	Fair	No	n/a	Yes	\$	27.30
Hersey Lane	Caution Children	1 No	n/a	Fair	No	n/a	Yes	\$	27.30

Appendix G
Sign Inventory

Sweetland Place	25 MPH	1 No	n/a	Fair	No	n/a	Yes	\$	27.30
Erik Way	Street	1 No	Yes	Fair	No	n/a	Yes	\$	42.00
Erik Way	Stop	1 No	Yes	Fair	No	n/a	Yes	\$	49.80
Country Farm Road	Street	2 No	Yes	Fair	No	N/a	Yes	\$	84.00
Country Farm Road	Stop	2 No	Yes	Fair	No	N/a	Yes	\$	99.60
Guinea Road	Deaf Child	1 No	n/a	Fair	No	n/a	Yes	\$	27.30
Guinea Road	End School Zone	1 No	n/a	Fair	No	n/a	Yes	\$	27.30
Drury Lane	Street	1 No	Yes	Fair	No	N/a	No	\$	84.00
Williams Circle	25 MPH	1 No	n/a	Fair	No	n/a	Yes	\$	27.30
Squire Way	Hammerhead Chevron	1 No	n/a	Fair	No	N/a	Yes	\$	128.60
Winterberry	25 MPH	1 No	No	Fair	No	n/a	Yes	\$	27.30
Christie Drive	Stop	3 No	Yes	Fair	Yes	1/7/2014	Yes	\$	149.40
Lamington Hill Road	Street	1 No	Yes	Fair	No	N/a	No	\$	42.00
Hillcrest Road	25 MPH	1 No	No	Fair	No	N/a	Yes	\$	27.30
Easton Hill	Stop	1 No	Yes	Fair	No	N/a	Yes	\$	49.80
Scamman Road	Stop	1 No	Yes	Fair	No	N/a	Yes	\$	49.80
Scamman Road	25 MPH	1 No	No	Fair	No	N/a	Yes	\$	27.30
Pond View Drive	25 MPH	1 No	No	Fair	No	N/a	Yes	\$	27.30
Perth Drive	25 MPH	1 No	No	Fair	No	N/a	Yes	\$	27.30
Birnum Woods	Caution Children	1 No	No	Fair	No	N/a	Yes	\$	27.30
High Street	Sharp Curve	1 No	No	Fair	No	N/a	Yes	\$	27.30
Tall Pines Road	No Thru Trucks	2 No	No	Fair	No	N/a	Yes	\$	27.30
Brown Ave	Stop	1 No	Yes	Fair	No	N/a	Yes	\$	49.80
Brown Ave	25 MPH	1 No	No	Fair	No	N/a	Yes	\$	27.30
Emery Lane	Deaf Child	1 No	No	Fair	No	N/a	Yes	\$	27.30
Windingbrook Drive	25 MPH	1 NO	No	Fair	No	N/a	Yes	\$	27.30
Butterfield Lane	25 MPH	1 No	NO	Fair	No	N/a	Yes	\$	27.30
Butterfield Lane	Caution Children	1 No	No	Fair	No	N/a	Yes	\$	27.30
Doe Run	Dead End	1 No	No	Fair	No	N/a	Yes	\$	27.30
Ox Bow Drive	Stop	1 No	Yes	Fair	No	N/a	Yes	\$	49.80
River Road	Stop	1 No	Yes	Fair	No	N/a	Yes	\$	49.80
River Road	Caution Children	5 No	No	Fair	No	N/a	Yes	\$	27.30
River Road	25 MPH	2 No	No	Fair	No	N/a	Yes	\$	27.30
Chase Lane	25 MPH	1 No	No	Fair	No	N/a	Yes	\$	27.30
Tansy Avenue	25 MPH	1 No	No	Fair	No	N/a	Yes	\$	27.30
Linwood Drive	Stop	1 No	Yes	Fair	No	Na	No	\$	49.80
Linwood Drive	25 MPH	1 No	Yes	Fair	No	N/a	Yes	\$	27.30
Morning Star Drive	25 MPH	2 No	NO	Fair	No	N/a	Yes	\$	27.30
Morning Star Drive	Caution Children	1 No	No	Fair	No	N/a	Yes	\$	27.30
Jason Drive	Caution Children	1 No	No	Fair	No	N/a	Yes	\$	27.30
Stratham Heights Road	Street	2 Yes (2)	Yes	Excellent	No	n/a	No	\$	168.00

Appendix G
Sign Inventory

Hersey Lane	Stop	1 No	Yes	Excellent	No	n/a	No	\$	49.80
Rollins Farm Road	Street	1 No	Yes	Excellent	No	n/a	No	\$	42.00
Guinea Road	Street	1 Yes	Yes	Excellent	No	n/a	No	\$	84.00
Academic Way	Stop	1 No	Yes	Excellent	No	N/A	NO	\$	498.00
Roby Jewell	Street	2 Yes	Yes	Excellent	No	N/a	No	\$	84.00
Juniper Drive	Street	2 Yes	Yes	Excellent	No	N/a	No	\$	84.00
Juniper Drive	Stop	2 Yes	Yes	Excellent	No	N/a	No	\$	49.80
Alex Way	Street	1 No	Yes	Excellent	No	N/a	No	\$	42.00
Alex Way	Stop	1 No	Yes	Excellent	No	N/a	No	\$	49.80
Alex Way	Dead End	1 No	No	Excellent	No	N/a	No	\$	27.30
Long Hill Road	Street	1 No	Yes	Excellent	No	N/a	No	\$	49.80
Long Hill Road	3 Way Stop Sign	3 No	Yes	Excellent	No	N/a	No	\$	149.40
Long Hill Road	25 MPH	1 No	No	Excellent	No	N/a	No	\$	27.30
Point of Rock	Street	1 No	Yes	Excellent	No	N/a	No	\$	42.00
Point of Rock	No Parking	1 No	No	Excellent	No	N/a	No	\$	27.30
High Street	Street	2 Yes	Yes	Excellent	No	N/a	No	\$	84.00
Gifford Farm Road	20mph while flashing	2 No	No	Excellent	No	N/A	No	\$	820.00
Gifford Farm Road	Pedestrian Ahead Flashing	2 No	NO	Excellent	No	N/a	NO	\$	820.00
Gifford Farm Road	Pedestrian Crossing Flashing	2 No	No	Excellent	No	N/a	No	\$	820.00
Tall Pines Road	Street	2 No	Yes	Excellent	No	N/a	No	\$	84.00
Tall Pines Road	Stop	2 No	Yes	Excellent	No	N/A	No	\$	99.60
Tall Pines Road	25 MPH	1 No	No	Excellent	No	N/a	No	\$	27.30
Bittersweet Lane	Street	2 Yes	Yes	Excellent	No	N/a	No	\$	126.00
Bittersweet Lane	Stop	2 NO	Yes	Excellent	No	N/a	No	\$	99.60
Bittersweet Lane	Pedestrian Crossing	4 No	No	Excellent	No	N/a	No	\$	27.30
Market Street	Street	2 Yes	Yes	Excellent	No	N/a	NO	\$	84.00
Market Street	Stop	2 No	Yes	Excellent	No	N/a	No	\$	99.60
Market Street	Pedestrian Crossing	2 No	No	Excellent	No	N/a	No	\$	27.30
Stephen Drive	Street	1 No	Yes	Excellent	No	N/a	No	\$	42.00
Stephen Drive	Stop	1 No	Yes	Excellent	No	N/a	No	\$	49.80
Raeder Drive	Street	1 No	Yes	Excellent	No	N/a	No	\$	42.00
Raeder Drive	Stop	1 No	Yes	Excellent	No	N/a	No	\$	49.80
Chase Lane	Street	2 Yes	Yes	Excellent	No	N/a	No	\$	84.00
Chase Lane	Stop	2 No	Yes	Excellent	No	N/a	No	\$	99.60
Tansy Avenue	Street	4 Yes	Yes	Excellent	No	N/a	No	\$	336.00
Tansy Avenue	Stop	4 No	Yes	Excellent	No	N/a	No	\$	199.20
Tansy Avenue	Caution Children	4 No	No	Excellent	No	N/a	No	\$	27.30
Tansy Avenue	Rotary	1 No	No	Excellent	No	N/a	No	\$	62.80
Tansy Avenue	No Parking	1 No	No	Excellent	No	N/a	No	\$	27.30
Barron's Way	Street	2 Yes	No	Excellent	No	N/a	No	\$	84.00
Barron's Way	No Parking	1 No	No	Excellent	No	N/a	No	\$	27.30

Appendix G
Sign Inventory

Crockett's Way	Street	2 Yes	No	Excellent	No	N/a	No	\$	84.00
Chisolm Farm Lane	Street	2 No	Yes	Excellent	No	N/a	No	\$	84.00
Chisolm Farm Lane	Stop	2 No	Yes	Excellent	No	N/a	No	\$	99.60
Chisolm Farm Lane	25 MPH	2 No	NO	Excellent	No	N/a	No	\$	27.30
Lovell Road	School 20 MPH	2 No	No	Excellent	No	N/a	No	\$	27.30
Lovell Road	3 Way Stop Sign	6 No	No	Excellent	No	N/a	No	\$	297.60
Depot Road	Street	2 No	Yes	Excellent	No	N/a	No	\$	84.00
Depot Road	Stop	2 No	Yes	Excellent	No	N/a	No	\$	99.60
Tidewater Farm	Street							\$	42.00
								\$	22,454.30

Street Sign Total \$ 7,476.00

Stop Sign Total \$ 8,432.40

Other Signs \$ 6,545.90

Sign Total \$ 22,454.30

Stratham Hill Park	Stop	1 No	Yes	Excellent	No	N/a	No	\$	49.80
Fire Department	Stop	4 No	Yes	Good	No	N/a	No	\$	199.20
Fire Department	Handicap Parking	5 No	No	Good	No	N/a	No	\$	136.50
Fire Department	Stop Here on Red	4 No	No	Excellent	No	N/a	No	\$	109.20
Police Department	Handicap Parking	2 No	No	Excellent	No	N/a	No	\$	54.60
Municipal Center	No Thru Traffic	1 No	No	Excellent	No	N/a	No	\$	27.30
Municipal Center	Stop	3 No	No	Excellent	No	N/a	No	\$	149.40
Municipal Center	One Way Right Arrow	2 No	No	Excellent	No	N/a	No	\$	54.60
Municipal Center	Wrong Way	2 No	No	Excellent	No	N/a	No	\$	84.60
Municipal Center	One Way Left Arrow	2 No	No	Excellent	No	N/a	No	\$	27.30
Municipal Center	Do Not Enter	5 No	No	Excellent	No	N/a	No	\$	211.50
Municipal Center	Right Turn Only	2 No	No	Excellent	No	N/a	No	\$	54.60
Municipal Center	Reserved Handicap	5 No	No	Excellent	No	N/a	No	\$	136.50
Municipal Center	No Parking Fire Lane	1 No	No	Excellent	No	N/a	No	\$	27.30
Municipal Center	Authorized Vehicles Only	1 No	No	Excellent	No	N/a	No	\$	27.30
Municipal Center	Entrance Only Left Arrow	1 No	No	Excellent	No	N/a	No	\$	27.30
Municipal Center	Entrance Only Right Arrow	1 No	No	Excellent	No	N/a	No	\$	27.30
Municipal Center	Handicap Accessible	3 No	No	Excellent	No	N/a	No	\$	81.90

Total Municipal Property Signs \$ 1,486.20

Appendix H
Culvert Pipe Inventory

Town of Stratham Highway Department
Culvert Pipe Inventory

Street Name	Type	Location	Length	Diameter	# of Flared Ends	Condition	Comments
Jason Drive	Concrete	Int w/Joyce	58'	18"	none	Good	Natural Stone Headwall 1 end
Linda Lane	Concrete	Int w/Jana	48'	18"	none	Fair	
Jana Lane	Aluminum	175' from	40'	24"	none	Excellent	Needs Pavement Markings
Joyce Lane	Aluminum	Int w/Jana Ln	40'	24"	none	Excellent	Natural Stone on downstream end
Benjamin Rd	Concrete	75' from Jason	44'	12"	none	Good	Usually has a ball in it'upstream end
Benjamin Rd	Concrete	at #1	48'	15"	none	Good	
Benjamin Rd	Concrete	Drop inlet	83'	18"	none	Good	Runs diagonally from Drop Inlet on odd # side
Benjamin Rd	Concrete	13-15	65'	18"	none	Good	
Tricia	Concrete	#5	105'	18"		2 Good	Grass dumped at downstream end
Depot Rd	unk	#7-#9	40'	unk	unk	unk	Snowbound
Depot Rd	Concrete	#14	43'	12"	none	Fair	From Catch basin at #14
Tidewater Farm Rd	Concrete	#3 & Liam's Ct	55'	18"		2 Good	Severe Scour on Downstream end
Depot Rd	Galvanized Steel	Int of Dumbarton Oaks	65'	12"	none	Good	Downstream end Snowbound
Dumbarton Oaks	Concrete	Int of Depot	55'	15"	none	Good	
Dumbarton Oaks	Concrete	At Inspection	55'	12"	none	Good	Repair upstream headwall
Dumbarton Oaks	Concrete	#55	100'	12"	none	Good	Granite Block upstream headwall
Dumbarton Oaks	Concrete	#54	85'	24"	none	Good	Natural Stone headwall
Morning Star Drive	Concrete	125' from Private Road Intersection	56'	18"		2 Good	Hump in Road Crossing
Morning Star Drive	Concrete	#10	75'	12"	none	Good	Needs Cleaning at inlet
Tucker's Trail	Concrete	#3	120'	24"		2 Good	
Morning Star Drive	Concrete	#3	55'	18"		2 Good	
Morning Star Drive	Concrete	83' before #1 Property Mkr	60'	18"		1 Good	from Catch basin on even # side, needs street markings
Sandy Point Rd	Concrete	#16	36'	18"	none	Good	Downstream headwall needs repair, upstream snowbound, needs cleaning pipe 1/2 full
Lovell Rd	Concrete	#18	32'	12"	none	Good	Pipe 1/3 full needs cleaning
Lovell Rd	Concrete	#21-23	32'	18"	none	Good	
Lovell Rd	Concrete	at Willowbrook Ave Intersection	40'	2 x 24"	none	Fair	Natural Stone Headwalls, Bell broken on 1 pipe upstream end
Willowbrook Ave	Galvanized	Between Willowbrook & Alderwood	54'	2 x 24"	none	Good	Large Stone Headwalls
Willowbrook Ave	Galvanized	Between # 105 - 107	58'	2 x 18"	none	Good	No Headwalls

Appendix H
Culvert pipe Inventory

Gifford Farm Rd	Concrete	Between #17 - 19	42'	18"	None	Good	Stone Headwall, Downstream end snowbound
Gifford Farm Rd	Concrete	Between # 21 - 23	40'	18"	none	Good	Stone Headwall, Downstream end snowbound
Gifford Farm Rd	Concrete	Between # 25 - 27	42'	18"	none	Good	Stone Headwall, Downstream end needs cleaning of swale
Gifford Farm Rd	Concrete	At SMS	80'	18"		2 Good	1 Flare cracked
Gifford Farm Rd	Concrete	At corner #45	50'	18"		1 Good	
Gifford Farm Rd	Concrete	210' from Lovell Rd	50'	2 x 18"		2 Good	Needs cleaning(Leaves)
High St	Concrete	At Birnum Woods Rd(Low End)	62'	36"	none	Good	Debris on Upstream End
Birnum Woods	Concrete	#11 - 13	64'	42"		2 Fair	Flare Ends are starting to spall and expose reinforcing wire
Birnum Woods	ADS inside Concr	#17 - 19	60'	16"		1 Excellent	Sleeved w/ADS in 2013
Scamman Rd	Concrete	170' from High St	80'	15"	none	Fair to Goo	End of Pipes cracking
Scamman Rd	Concrete	Before #2	80'	2 x 24"	none	Fair to Goo	End of Pipes cracking, needs street markings
Scamman Rd	Concrete	Between #20 - 22	65'	18"	none	Fair to Goo	Natural Stone Headwall upstream end
High St	Galvanized	#11 - 12	60'	12"	none	Good	
Perth Dr	Concrete	#5	96'	12"	none	Fair to Goo	Natural Stone Headwall upstream end, downstream end of pipe deteriorating, no street markings
Perth Dr	Concrete	#3	75'	15"	none	Good	Natural Stone Headwalls, empties into pond
Beech Ct	Concrete	At Hammerhead	60'	15"	none	Good	Natural Stone Headwalls
Bartlett Rd	Concrete	#5 - 7 at circle	88'	18"	none	Good	Natural Stone Headwalls, Downstream end overgrown w/vines
Barker Rd	Galvanized	Between #16 - 24	30'	24"	none	Fair to Poor	Natural Stone Headwalls, Downstream end deteriorating
Barker Rd	Concrete	#29 - 30	40'	12"	none	Good	
Coach Rd	unknown	Lower Entrance	42'	unk	unk		Snowbound both ends
Coach Rd	Concrete	At Intersection of Humes Ct	58'	18"		2 Good	Needs cleaning, pipe 1/2 full
Coach Rd	Concrete	#13 - 15	50'	12"		2 Good	
Coach Rd	Concrete	#23	52'	24"	none	Good	Natural Stone Headwalls, needs street markings
Coach Rd	Concrete	#25	56'	24"	none	Good	
Union Rd	Galvanized	Between #158 -162	50'	48"	none	Good	
Union Rd	Galvanized	Between#138 - 140	40'	12"	none	Good	
Union Rd	Galvanized	Between #126 - 130	42'	36"	none	Fair to Goo	Large Stone Headwalls, Lower 1/3 interior pipe surface has lost Galvanizing

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Union Rd	Galvanized	Between Barker Rd & #108	42'	12"	none	Good	
Union Rd	Concrete	Between #91 - 98	38'	36"	none	Good	Large Stone Headwall, Power for Catholic Protection for Gas Pipeline runs over our pipe
Humes Ct	Concrete	#3 - 5	42'	36"		1 Good	CIP Headwall upstream end
Humes Ct	Concrete	At #3	42'	12"	none	Good	To CB(?) downstream end snowbound, pipe runs parallel to road for 50'
Seavey Pasture	Concrete	45' from Union Rd	60'	2 x 15"	none	Good	Stone Headwalls
Charles Dr	Concrete	At #20 near Transformer	60'	36"		1 Good	Prefab combination retaining/headwall system
Charles Dr	Concrete	At #20	82'	18"		2 Good	From Circle to swale
Charles Dr	Concrete	Between #20 - 22	64'	18"		2 Good	From swale to circle
Barker Ln	Galvanized	20' from Winnicutt Rd	58'	12"	none	Good	Has NHDOT markings 1 end
Union Rd	Concrete	Between #73 & Dry Hydrant	44'	12"	none	Fair to Good	needs cleaning, pipe 1/2 full
Union Rd	Concrete	90' from Heron Way	50'	24"	None	Good	Downstream end overgrown
Union Rd	Concrete	75' from #41 Driveway	50'	36"	none	Good	Beaver Preventer installed upstream
Union Rd	Concrete	Between #17 - 25	40'	18"	none	Good	
Strawberry Ln	Concrete	20' from Union Rd	100'	12"	none	Good	Natural Stone Headwalls
Strawberry Ln	Concrete	#10 - 12	80'	24"	none	Good	Natural Stone Headwalls, overgrown
Chase Ln	Concrete	30' from Portsmouth Ave	48'	15"	none	Good	Natural Stone Headwalls
Pinewood Dr	Aluminum	Between #18 - 22	38'	2 x 24"	none	Good	
Pinewood Dr	Aluminum	#36	48'	12"	none	Good	
Marin Way	Concrete	In Circle near 1 Fine Chocolate Place	48'	12"	none	Fair to Good	Needs Cleaning!! Pipe 2/3 full, downstream discharge delta needs clearing
Marin Way	Concrete	At Intersection of Domain Dr	60'	24"	None	Good	From Pond to MH off Marin Way Extension
Marin Way Extension	Concrete	20' from Marin Way	70'	24"	none	Good	From MH, also 12" concrete pipe ties in from swale
Marin Way	Concrete	#2 & 90' from Domain Dr	68'	24"	none	Good	Ties into CB by Pond, CB needs street marking

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Marin Way	Concrete	30' from NH Route 111	75'	18"	none	Good	Discharge Area needs cleaning, pipe 1/2 full needs cleaning, needs street markings
Stratham Heights Rd	Concrete	#142	38'	24"	none	Good	Could use cleaning, pipe 1/3 full
Stratham Heights Rd	Concrete	#163	45'	12"	none	Good	
Stratham Heights Rd	Concrete	#166	45'	12"	none	Good	Ties into CB even # side
Holmgren Rd	Concrete	#17 - -18	52'	24"	none	Fair	Stone Headwall, upstream end of pipe deteriorating
Stratham Heights Rd	Concrete	225' from Parkman Brook Ln	50'	12"	none	Good	Natural Stone headwall, Discharge area needs cleaning, needs street markings
Country Farm Rd	Concrete	Between #5 - 7	50'	24"	none	Good	Natural Stone Headwalls, needs cleaning, pipe 1/2 full, discharge swale full of Cattails
Country Farm Rd	Concrete	between #18 - 20	45'	12"	none	Good	Downstream Headwall needs to be rebuilt, discharge area needs cleaning
Country Farm Rd	Concrete	#35	48'	18"	none	Good	Natural Stone Headwalls
Country Farm Rd	Concrete	#36	55'	24"	none	Good	Natural Stone Headwalls
Country Farm Rd	Concrete	#40	44'	12"	none	Good	Both Natural Stone Headwalls need to be rebuilt, needs cleaning, pipe 2/3 full
Drury Plains	Concrete	20' from Guinea Rd	78'	18"		1 Good	Drop Inlet on upstream end
Guinea Rd	Concrete	#15 - 17	50'	2 x 36"	none	Good	Large Stone Headwalls
Fifield Ln	Concrete	#8 - 10	38'	18"	none	Good	
Union Rd	Galvanized	Parallel to Road from intersection of Wiggins Way to driveway of #18 Union, 17' off Union Rd	230'	12"	none	Good	
Wiggins Way	ADS	Between #10-12	65'	3 x 36"	none	Excellent	Stone Headwalls w/drains
Wiggins Way	ADS	Between #18 - 20	60'	2 x 36"	none	Excellent	Stone Headwalls
Vanessa Dr	ADS	350' from Wiggins Way	40'	3 x 24"	none	Excellent	Precast section headwalls
Winterberry Ln	ADS	#31	102'	24"		1 Excellent	Downstream has Natural Stone Headwall, needs street markings
Balsam Way	ADS	#3	57'	24"		1 Excellent	Downstream has Natural Stone Headwall
Chesnut Way	Concrete	70' from Winnicutt Rd	48'	15"		2 Good	
Chesnut Way	Concrete	Between #10 - 11	263'	18"		1 Good	CIP Drop Inlet
Muirfield Dr	Concrete	40' from Winnicutt Rd	63'	12"	none	Fair	Delineator marking end of pipe
Shannon Dr	Concrete	13' from Muirfield Dr	48'	12"	none	Fair	discharge needs cleaning

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Barnes Dr	Concrete	Under Cul-de-sac	138'	15"	none	Good	Downstream end snowbound
Muirfield Dr	Concrete	#15	60'	24"	none	Good	
Muirfield Dr	Concrete	#17 - 19	58'	24"	none	Good	
Muirfield Dr	Concrete	Under Hi-voltage Lines	46'	2 x 15"	none	Good	Precast Headwalls
Muirfield Dr	Concrete	Near #35	42'	144 x 36" E		2 Excellent	Precast Flared ends
Roby Jewell Ln	Concrete	At Muirfield Dr	50'	24"		1 Excellent	CIP Headwall
Smith Farm Rd	Concrete	#1 - 3	40'	12"	none	Good	
Smith Farm Rd	Concrete	#10 - 12	40'	18"	none	Good	
Laurel Lane	Concrete	#26	60'	18"	none	Good	
Crestview Terrace	ADS	#32	86'	48"	none	Excellent	
Crestview Terrace	Galvanized	#40	82'	18"	none	Good	
Robin Glen	Galvanized	#4	50'	12"	none	Fair	
Stoneybrook Lane	Galvanized	End of St.	168'	10"	none	Fair	Needs erosion stone
Raeder Drive	Concrete	End of St.	50'	24"	none	Good	
Butterfield Lane	Concrete	Before #2	58'	18"	none	Good	
Butterfield Lane	Concrete	#35	58'	18"		2 Good	
Oak Lane	Concrete	#20	60'	18"	none	Excellent	
Evergreen Way	Concrete	#35	44'	48"		2 Good	
Windingbrook Road	Concrete	#22	58'	18"		1 Good	
Windingbrook Road	Concrete		105'	12"		1 Good	
Patriots Road	Concrete		60'	15"	none	Good	
Tansy Ave	Concrete		44'	48"	none	Good	
Chisolm Farm	Concrete	#24	50'	18"		1 Excellent	
Chisolm Farm	Concrete	#45	66'	18"	none	Excellent	
Chisolm Farm	Concrete	Near Squamscott Rd	50'	18"	none	Excellent	
Autumn Lane	ADS		70'	24"		2 Good	
Boat Club Drive	Concrete		50'	24"	none	Good	
River Road	ADS		40'	24"		1 Good	
Frying Pan Lane	Concrete	#9-11	68'	12"	none	Good	
Frying Pan Lane	Concrete	#11-13	30'	12"	none	Good	
Frying Pan Lane	Concrete	#24	32'	12"	none	Good	
Frying Pan Lane	Concrete	#38	40'	18"	none	Good	
Frying Pan Lane	Concrete	#37-45	38'	12"	none	Good	
Doe Run	Concrete		75'	36"	none	Good	Located at bottom of hill
Spruce Ln	Concrete	Intersection of LilacWay	52'	24"		2 Excellent	
Lilac Way	Concrete	Intersection of Spruce Ln	62'	18"		2 Excellent	
Lilac Way	Concrete	Midway between Spruce & Hickory Pond	75'	18"	none	Excellent	Natural Stone Headwalls, discharge area needs cleaning
Lilac Way	Concrete	At Intersection of Hickory Pond Ln	50'	15"		2 Excellent	
Hickory Pond Ln	Concrete	At Intersection of Lilac Way	50'	15"		1 Excellent	Natural Stone Headwall on downstream end
Hickory Pond Ln	Concrete	At Hammerhead	40'	12"	none	Excellent	CB, Natural Stone Headwall

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Hickory Pond Ln	Concrete	At Intersection of Muirfield Dr	50'	15"	2 Excellent	
Juniper Dr	Concrete	At #6	44'	144" x 24" none	Excellent	Precast box culvert w/o bottom
Mason Dr	Concrete	At Intersection of Chelsea Way	48'	12"	2 Excellent	
Mason Dr	Concrete	#10 to circle	46'	15"	2 Excellent	
Mason Dr	Concrete	Circle to #11	78'	18"	2 Excellent	Discharges behind Transformer
Mason Dr	Concrete	Circle to #6	160'	18"	2 Excellent	From Circle to MH at 85' then continues to Discharge(Elevation Change and Direction at MH