INTERIM REPORT

GREENLAND PAVEMENT CONDITION ASSESSMENT

TOWN OF GREENLAND
GREENLAND, NEW HAMPSHIRE

December 2016

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Portsmouth, New Hampshire
UEI PROJECT 2079

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1.0 Introduction

1.1 Report Summary

There are approximately 30 miles of paved Town-maintained, Class-V roads in Greenland. With development of new sub-divisions and addition of new roads, the Town's maintenance effort and budget needs will continue to grow. The Class-V roads existing in Town (as of November 2016) are delineated in Figure 1-1 and 1-2.

This summary report represents an engineered approach to a 10-year Roadway Capital Improvement Plan (CIP) for the Town of Greenland. It is organized as follows:

A. The existing capital expenditures for Town-maintained roads is provided in Section 2.
B. Methodology and Field Investigations for road assessments are included in Section 3 and Section 4, respectively.
C. A summary of roadway repairs and maintenance (10-year work plan) are provided in Section 6.
D. Recommendations and suggested budgets to repair and maintain the Town's road network is provided in Section 6.

1.2 Report Objective

This report provides the Town of Greenland with a 10-year CIP and an assessment of roadway conditions within the Town's jurisdiction. The objectives of this project are to:

- Inventory and assess the Town's roadways.
- Develop a weighted rating system to help establish a hierarchy for maintenance and repairs.
- Develop a priority list for road repairs and maintenance.
- Determine appropriate repair strategies for different road conditions.
- Develop a 10-year CIP for roadway repairs and maintenance.
- Develop a recommended yearly budget for road repairs and maintenance.

See Appendix A for the complete UEI Scope of Work.

The reader should note that this report is based on a visual assessment of the roads and there is limited data relative to underlying soils, drainage, and construction. Prior to implementing capital projects, road repair strategies should be reviewed and confirmed.

2.0 Current Maintenance Strategies and Recent Road Improvements

2.1 Recent Maintenance and Repair Projects

The Town regularly completes maintenance, asphalt overlays, and CIP projects on its road network. Historical information provided by the Town regarding recent road maintenance and construction work is included in Appendix B.

2.2 Existing Road Repair and Maintenance Budget

Expenditures for road maintenance and capital projects are summarized in Table 2-1.

Category	*2012*	*2013*	*2014*	*2015*	*2016*	*5-yr AVERAGE*
Routine Maintenance	$ 153,000	$ 148,144	$ 157,500	$ 157,500	$ 210,725	$ 165,374
CIP - Roadway	$ 478,000	$ 125,000	$1,102,148	$ 0	$ 0	$ 341,030
CIP - Drainage	$ 0	$ 0	$ 0	$ 75,000	$ 25,000	$ 20,000
TOTAL	**$ 631,000**	**$ 273,144**	**$1,259,648**	**$ 232,500**	**$ 235,725**	**$ 526,404**

Table 2-1: Previous Highway Department budgets for the Town of Greenland (Appendix B)

3.0 Road Surface Assessment

3.1 Methodology

Road surface assessments are performed to assess the overall condition of the road network. Information from the evaluation is then compiled to develop a prioritized schedule for capital improvement projects and routine roadway. Repair methods will vary depending on the severity of the road's condition. Repair alternatives and anticipated service life of said alternatives is provided in Section 3.3.

Surface assessments are generally completed by windshield inspection while driving each road at slow speeds (10 mph or less). Inspections consist of looking at the existing road surface and evaluating its condition based on a given criteria.

Roads may be divided into sections, which are determined by changes in physical characteristics. Some of these changes can include but are not limited to: change in pavement width, abrupt change in pavement conditions, intersections, and excessive length. Photos showing typical roadway section conditions are also taken at this time for additional documentation and reference.

Once inspections are complete, condition data is normalized to determine the Pavement Condition Indicator (PCI), or grade, for each road section (see Section 3.2). The PCI is then combined with other factors to determine a weighted rating for each road. Once the prioritized list is determined using the weighted ratings, a repair alternative and corresponding budget for each individual road section is determined. A recommended Town CIP is then developed to complete these improvements for roads in need of repair.

3.2 Surface Distresses

There are several types of surface distresses that are rated when assessing roadways. Each distress is logged on a field form (see Appendix D) in accordance with observed severity and extent. The rating of each distress has a corresponding numerical value that is then tallied with the ratings of other distresses for the given road section. These ratings are used to calculate PCI and determine the pavement surface condition. This system is based

on a 1-100 scale with 100 being the best condition possible (see Appendix F for a sample calculation). The following are common distresses for paved surfaces assessed during the evaluation.

- Longitudinal / Transverse Cracking
- Alligator Cracking
- Edge Cracking
- Patching / Potholes
- Drainage
- Roughness
- Rutting

3.3 Weighted Rating and Prioritization

For Greenland, a weighted rating system is used to help prioritize roads in the network. In order of importance, the rating factors for this evaluation include: PCI, traffic volume, and drainage. Appendix G provides the weighted ratings for all roads in the network. For example, a road with a better PCI value, but high traffic volumes may be prioritized higher than a road with a lower PCI value and low traffic volumes.

These weighted ratings are then used to prioritize the roads within strategy groups (preventative maintenance and reconstruction).

3.4 Repair Alternatives

There are several repair strategies for roadway maintenance and reconstruction. UE selected typical repair strategies and assigned a typical service life (see Table 3-1). The following table identifies the strategies applied in Greenland as well as the estimated service life extension for the road surface.

Repair Alternatives	Service Life in Years
Routine Maintenance	
Crack Sealing	*1 to 3*
Shimming/Patching	*1 to 3*
Preventative Maintenance	
HMA Overlay – 1.5 inches	*6 to 8**
Reconstruction	*15 to 20**

*Assumes regular completion of routine maintenance.

Table 3-1: Estimated added pavement life for a given repair alternative

Repair alternatives are assigned a typical repair unit cost (i.e. $ per linear foot of roadway). The reader should note that these repair costs are provided in 2016 dollars, therefore they will increase periodically. These unit costs are used in developing the budget presented in Section 6.5 of this report. Table 3-2 provides the typical unit item repair costs used for various repair strategies and alternatives selected.

Repair Item Unit Costs (2016 $)

Item	Unit	Unit Cost
Routine Maintenance		
Crack Sealing	LF	$2.00
Ditching (both sides)	LF	$6.60
Gravel backing (both sides)	LF	$0.88
Shimming/Patching	LF	$5.00
Preventative Overlays		
1" Overlay	SF	$0.53
1.5" Overlay	SF	$0.80
Reconstruction		
Reclaim	SF	$0.14
Reclaim with 3" Pavement	SF	$1.99
Reclaim with 4" Pavement	SF	$2.60
Reconstruction (3" Pavement)	SF	$4.21
Reconstruction (4" Pavement)	SF	$4.82
Construct Enclosed Drainage	LF	$100.00

*Above costs based on an asphalt price of $80.00 per ton

Table 3-2: Unit costs for repair strategies

*See Appendix C for details regarding repair alternatives

4.0 Field Investigations – Greenland, New Hampshire

Field investigations were conducted as follows:

1) The pavement surface was assessed based on the RSMS system previously developed by UNH.
2) Repair and maintenance strategies were developed based on pavement assessment and drainage.
3) Budgets are provided to address road reconstruction and road maintenance efforts based on evaluations completed at the time of repair.

Field investigations were completed during summer and fall of 2016 as follows:

4.1 Sectioning

Roads were sectioned as shown in Figures 2-1 and 2-2.

4.2 Assessments

Observed surface conditions are noted in the Field Workbook (Appendix D). For a tabulated summary of the findings, see Appendix E. Appendix I also provides brief, one page, condition summaries with photos as a quick reference.

4.3 Data Analysis

Upon completion of the field work, the roadway condition (level of distress) data was used to calculate the PCIs for each road section (see Appendix F). As previously discussed, roadway conditions are assigned numerical values to calculate PCI values for each road section. This is similar to the method used by RSMS software (see sample calculation in Appendix F). Using engineering judgment, we determined that roads with PCIs between 0 and 60 should be reconstructed as part of the proposed 10-year CIP and that roads between 60 and 100 should receive preventative maintenance (i.e. overlays). This accounts for each road in town receiving at least preventative maintenance within this 10-year period. The following table shows the maintenance distribution:

PCI	Strategy	%
0-100	Routine Maintenance	100
60-100	Preventative Maintenance	75
0-60	Reconstruction	25

UE then developed a weighted priority list based on PCI values and ratings for other factors including traffic volume and drainage requirements. Roads were then categorized according to the type of repairs needed (routine, preventative, or reconstruction). This allowed the road sections in the different maintenance strategy groups to be prioritized so the Town can follow a strategic order when budgeting for roadway construction work.

Based on weighted ratings, the following roads are identified as the top 5 priorities in each maintenance category:

Routine Maintenance	Preventative Overlay	Reconstruction
1) Fairview Terrace	1) Portsmouth Avenue -2	1) Willowbrook Avenue
2) Tide Mill Road	2) Alden Avenue	2) Great Bay Drive West
3) Coastal Way	3) Cortland Drive	3) Bayside Road
4) Rolston Avenue	4) Sunset Drive	4) Weeks Avenue
5) Brown Avenue	5) Liam's Court	5) Great Bay Drive

4.4 Photos

Photos showing typical section conditions and specific deficiencies are provided digitally for all roads and in Appendix I as documentation of the current road conditions

4.5 Infrastructure Inventory

An inventory of additional road-related infrastructure is included with this report. This inventory includes locations of guardrails, culverts, catch basins, sidewalk, and curbing. Locations were recorded using a hand-held GPS unit (see Figures 3-1 and 3-2). This inventory was completed by visual inspection and is intended to provide a general overview of Town infrastructure. It may not encompass all assets as some culverts or catch basins may have been hidden by leaves and or other vegetation, and therefore not visually detectable.

The following inventory items were found:

Item	Quantity (Approximate)
Culverts Found	121
Guard Rails	1,595 LF in 11 locations
Curbing	18,600 LF in 7 locations
Sidewalk	9,400 LF in 6 locations
Catch Basins	173

4.6 Soil Investigation

Soil borings are proposed to further define subsurface conditions within priority roadways. Work for this task has not yet been completed. Borings are recommended on the following high priority roads:

- Willow Brook Avenue
- Great Bay Drive West
- Bayside Road
- Weeks Avenue
- Bayshore Drive

4.7 Drainage

During the course of the work, general observations were made regarding the existing drainage conditions. Some roads have satisfactory drainage, while others have poor drainage. Poor surface drainage (puddling of stormwater on road surfaces) and subsurface groundwater (high groundwater beneath pavement) contribute to premature deterioration of the pavement surface. See Section 6.2 for an expanded discussion regarding recommended drainage improvements.

4.8 Trees

The character of some of Greenland's rural roads is created by the close proximity of trees to the roadside. Although trees are aesthetically pleasing, they often increase maintenance requirements. Trees do not allow proper ditching, contribute to debris and sedimentation of ditches and prohibit snow removal. Tree removal and limbing maintenance should be included with preventative road maintenance work.

Certain compromises can be made to maintain that balance; therefore, consideration should be given to the following:

- Selectively remove trees to provide proper roadside drainage controls and ditching.
- Prune or limb trees to remove dead branches where maintenance of trees is desirable.

4.9 Roadway Repair Action Plan

Appendix H presents the Prioritized Roadway Repair Action Plan. The basis of the plan is summarized as follows:

The reader should note that the repair action plan has bold, dashed break lines in the Preventative Maintenance (i.e. overlays) and Reconstruction sections. This line breaks the categories up into two groups of approximately equal total costs, representing an approximate 5-year mark for the CIP. The roads prioritized below the break lines are those found in the routine maintenance (i.e. crack sealing) section. These roads are lower priority and will *not* receive significant work (overlay or reconstruction) within the first 5 years of the 10-year CIP. Therefore, we suggest that routine maintenance be completed within the first 5 years on these road sections to extend the service life until overlays or reconstruction work is completed.

5.0 Additional Considerations

5.1 Load Limits

Truck traffic will increase the level of impact and may lead to premature pavement degradation. The use of load limit postings should be considered on certain roadways (especially during the spring) where alternate truck routes exist. During the spring thaw, water accumulates as ice melts and gets trapped between the frozen soils and asphalt layers, sometimes refreezing and expanding. This trapped water allows pavement courses to become saturated, loosing much of its strength. This loss of strength in combination with a decrease in base material's strength will cause a drastic depression or movement of the road surface when heavy loads are applied.

6.0 Conclusions and Recommendations

6.1 Capital Improvements Project Planning (10-year Plan)

Underwood Engineers, Inc. recommends that the improvements identified in Appendix I be completed over the next 10-years. In order to complete the work identified, the following annual budget is recommended:

Suggested Annual Budgets	
ROUTINE MAINTENANCE =	**$ 238,000**
i. Overlays =	$ 196,000
ii. Gravel Backing =	$ 9,000
iii. Crack Sealing =	$ 24,000
iv. Shimming/Patching =	$ 9,000
DRAIN CIP =	**$ 56,000**
ROAD CIP =	**$ 212,000**
TOTAL =	***$ 506,000***

6.2 General Road Repair Approach

All road reconstruction projects are site specific and require additional evaluation (design phase engineering) prior to implementing including the following:

- Soils investigations
- Topographic Survey
- Drainage evaluation
- Design plans

Though they are not specifically identified, spot repairs can be completed in localized areas where significant cracking, rutting or any other disfiguration is visible or where the pavement is soft using the guidelines outlined in the following sections.

6.3 Drainage

Since drainage plays a significant part in the life of the road, it is recommended that all repairs, especially capital improvements, include shoulder and drainage improvements. This effort will lead to a longer life span for the road.

Drainage is a large factor for many of the roads being in poor condition. It is recommended that the town continues efforts as much as possible to maintain drainage swales and structures so that they perform properly, and take initiative in maintaining gravel shoulders. Keeping up with these maintenance activities will help old roads gain extended service life. The following ditching and shoulder maintenance should be considered:

- Maintain and clean vegetation in existing ditches to improve drainage capabilities. Ditches should be constructed at locations that have water running on top of or adjacent to the edge of the pavement to a minimum depth of 18". Existing ditches exhibiting erosion or new ditches with slopes greater than 5% should be treated with rip-rap or geotextile stabilization matting to minimize erosion.

- Install gravel backing on the edge of all pavements. This allows the water to flow away from the road once it leaves the paved surface. Stormwater will travel over the backing and into the ditch as opposed to simply running off the edge and getting underneath the asphalt surface. Backing also creates a more stable shoulder that will have fewer tendencies to wash out in heavy rains or induce edge cracking.
- Construct closed drainage in areas where the grade of the land does not allow for flow in roadside ditches. When stormwater cannot move away from a road, the base materials can be susceptible to damage from high saturation levels.

Underdrains can also be added along the edge of the roadway, beneath ditches where the water table is known to be high and areas with large cut sections. Underdrains can be added any time during a ditching improvement project or a reconstruction project.

Locating culverts during the evaluation was often difficult due to shoulder over growth or complete burial. It is also recommended that the Town confirm the locations shown in Figures 3-1 and 3-2 and physically mark all culvert locations on the road surface. This could be done by installing timber posts or painting a small arrow on the side of the road where a culvert is located.

6.4 Base Materials

In addition to drainage control issues, a poor gravel sub-base leads to failure of roads. It is recommended that subsurface investigations be performed to verify underlying soil conditions on all reconstruction projects. This may include completion of borings or excavation of test pits in the roadway to a depth of approximately 5'.

This report considers two options for road base materials. The first option is full box out reconstruction and the second is roadway reclamation. We note the following regarding these two options:

- Road Reclamation provides a base of ground pavement and existing base materials that is blended directly from the top layers (typically 8 to 12 inches) of the existing roadway. The materials are used as the new road base layer, typically 8 to 10-inch depth.
- Full Depth Road Reconstruction provides for the excavation of the road box and installation of new gravel and crushed gravel layers (typically combining to be about 20 inches).
- Full depth road reconstruction can be modified to include both reclaim asphalt product with some additional excavation and new gravels beneath. This approach is typically used on rural roadways similar to those found in Greenland.

In terms of the structural strength, a 10-inch thickness of reclaim material can provide the equivalent strength of a gravel/crushed gravel base approximately 20 inches in depth. Therefore, roadway reclamation can be a cost-effective solution when compared to use of imported gravel materials. For both options, construction fabrics can be used to further stabilize the road in areas where sub-soils are known to be unsuitable, such as swamp or marsh areas.

6.5 Pavement

It is recommended that all reconstruction work provide a minimum of three (3) inches of pavement thickness on minor and dead-end roads with less than ten units. Four (4) inches of pavement is recommended on secondary and collector roads with higher traffic volumes. (see Figures 5-1 and 5-2).

6.6 On Going Maintenance

It is recommended that routine inspection and maintenance is performed every year on all roads to help prolong the life and integrity. Failure in performing routine maintenance will result in larger repair costs in the future.

The following maintenance regime is recommended:

- Ongoing gravel backing
- Ongoing ditch maintenance
- Crack sealing and patching every 2 years
- Overlays every 5-10 years

6.7 Quality Assurance and Quality Control (QA/QC)

QA/QC programs are implemented to ensure that construction work is being completed in accordance to project specifications and help ensure a satisfactory product. We have reviewed the Town's current Road Design and Construction Specifications (Appendix J) and understand that QA/QC requirements are already in place. We offer the following additional QA/QC practices for the Town's consideration:

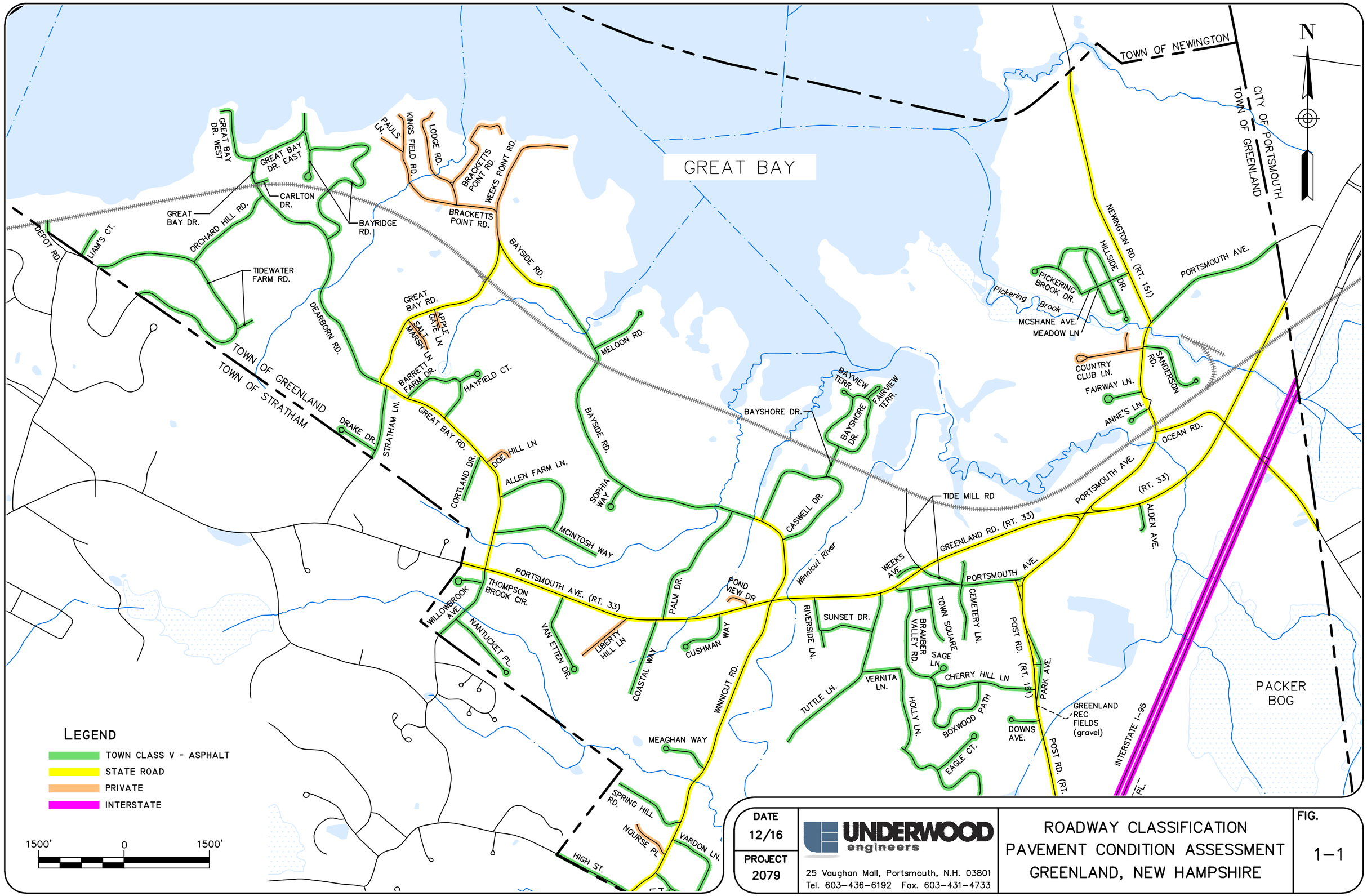
- Gradations and asphalt extraction tests for reclaim asphalt product on all road reclamation projects.
- Review and approval of the asphalt mix design prior to paving.
- Complete asphalt plant inspections with asphalt extractions and gradations to verify that the pavement provided is in accordance with the specifications and the approved mix design.

6.8 CIP Updates

The CIP should be updated and monitored internally on a yearly basis to track progress. On the fourth year, it is recommended that another evaluation be complete. This allows for the reassessment and updating of the priority list. Doing this may help the Town to stay ahead of its repair schedule. Updating the evaluation on the fourth year also allows work to continue through that year and not have repairs on hold, increasing the ability to stay on course. The reader should note that the spreadsheets used as part of this assessment have been included digitally (Appendix K) for the Town's use in updating information.

FIGURES

- **1-1 and 1-2: Town Roads**
- **2-1 and 2-2: Road Sections**
- **3-1 and 3-2: Inventory**
- **4-1 and 4-2: Reconstruction and Overlays**
- **5-1 and 5-2: 3" vs. 4" Asphalt**



DATE 12/16	UNDERWOOD engineers	ROADWAY CLASSIFICATION PAVEMENT CONDITION ASSESSMENT GREENLAND, NEW HAMPSHIRE	FIG. 1–1
PROJECT 2079	25 Vaughan Mall, Portsmouth, N.H. 03801 Tel. 603–436–6192 Fax. 603–431–4733		

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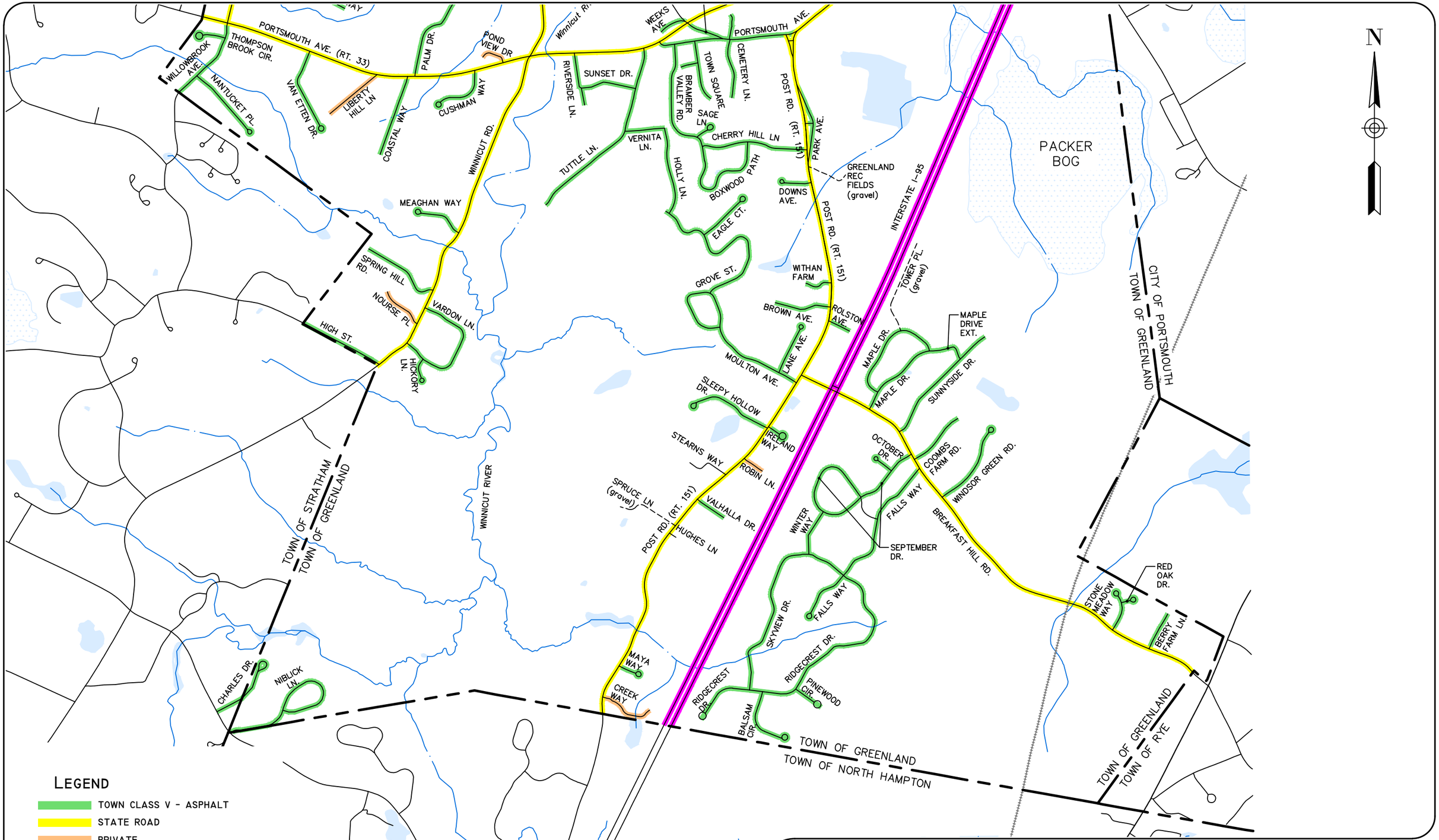

DATE 12/16	UNDERWOOD engineers	ROADWAY CLASSIFICATION	FIG.
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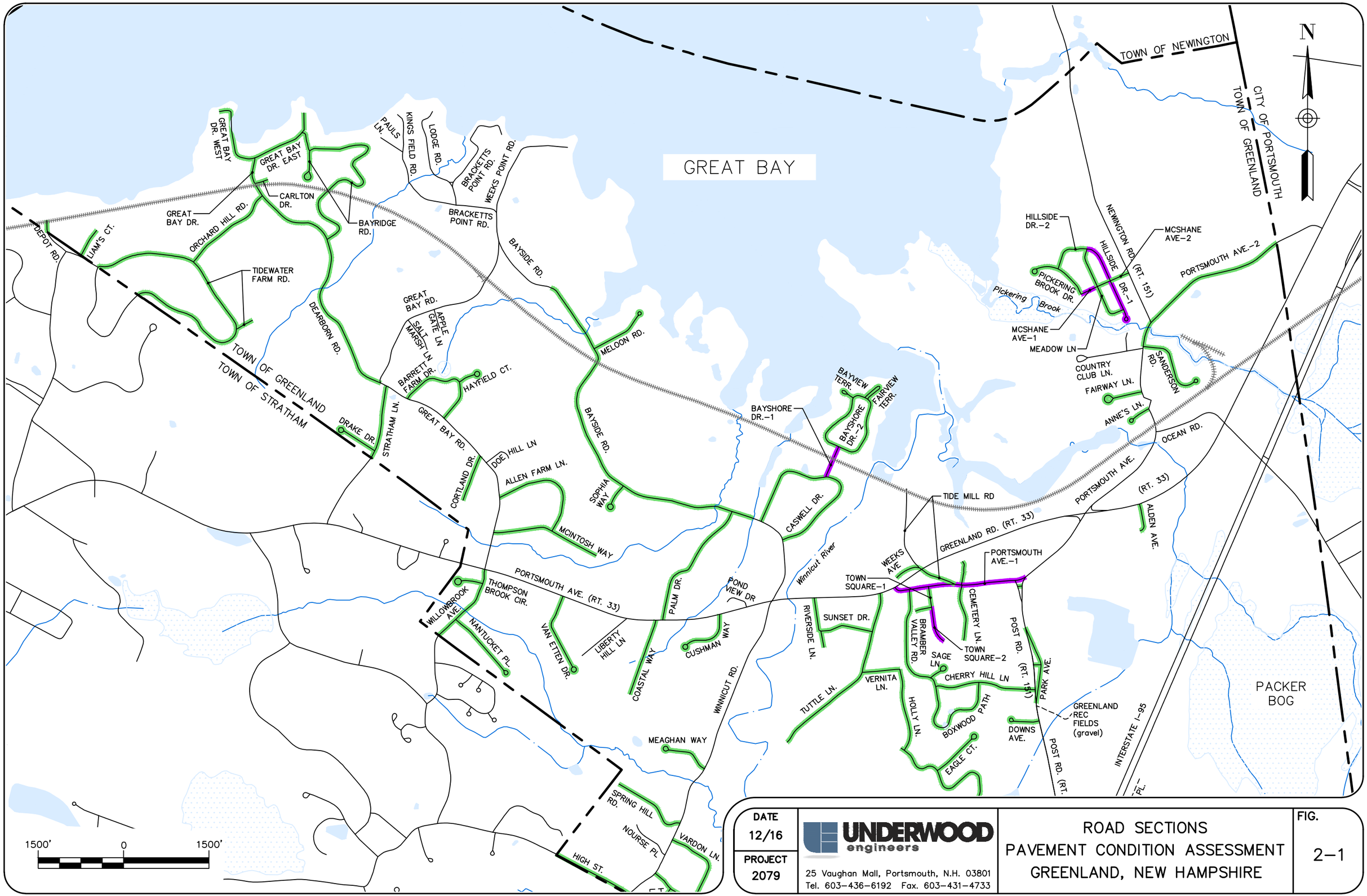

DATE 12/16	UNDERWOOD engineers	ROAD SECTIONS PAVEMENT CONDITION ASSESSMENT GREENLAND, NEW HAMPSHIRE	FIG.
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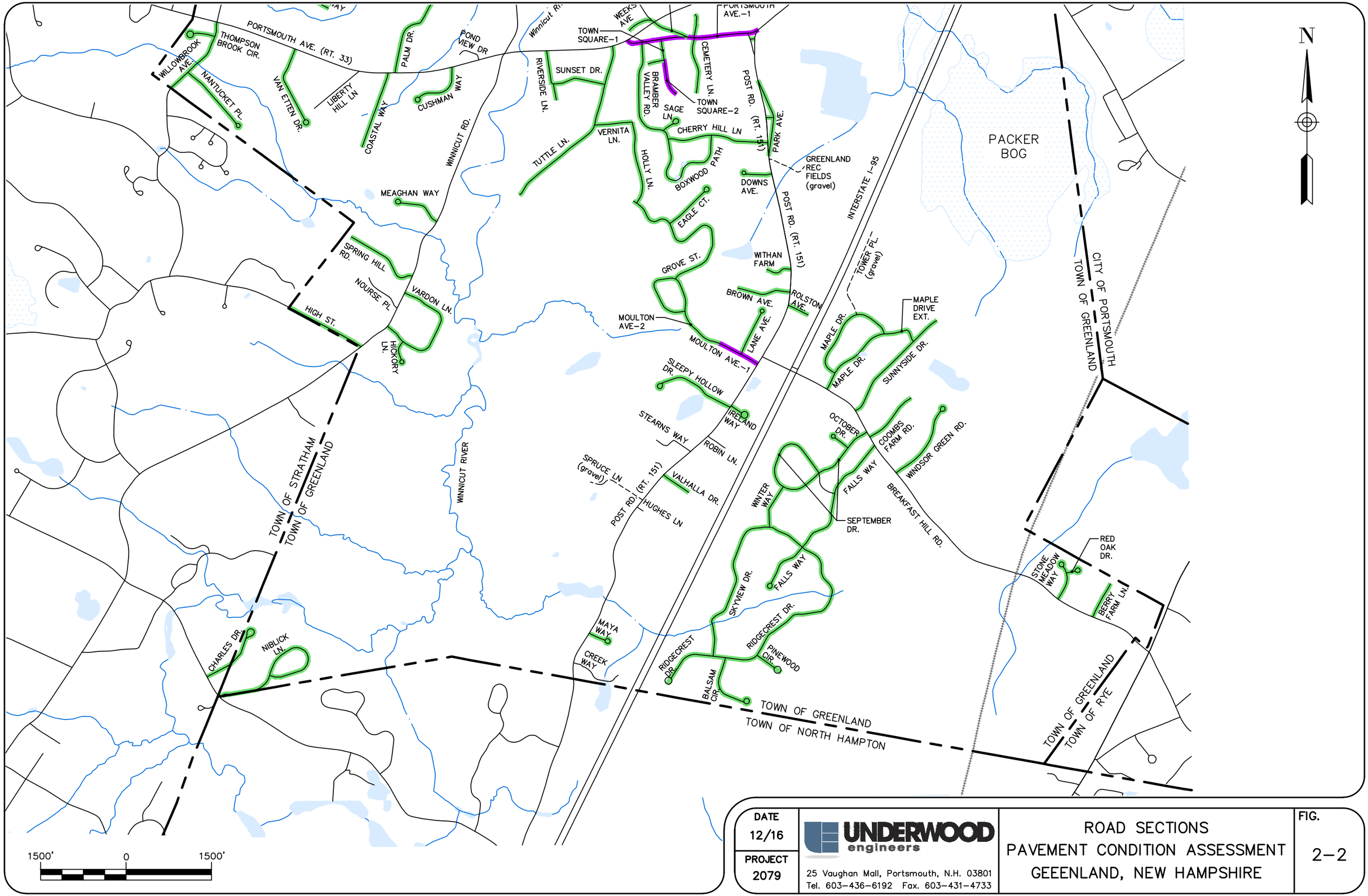

DATE 12/16	UNDERWOOD engineers	ROAD SECTIONS	FIG.
PROJECT 2079	25 Vaughan Mall, Portsmouth, N.H. 03801 Tel. 603–436–6192 Fax. 603–431–4733	PAVEMENT CONDITION ASSESSMENT GEEENLAND, NEW HAMPSHIRE	2–2

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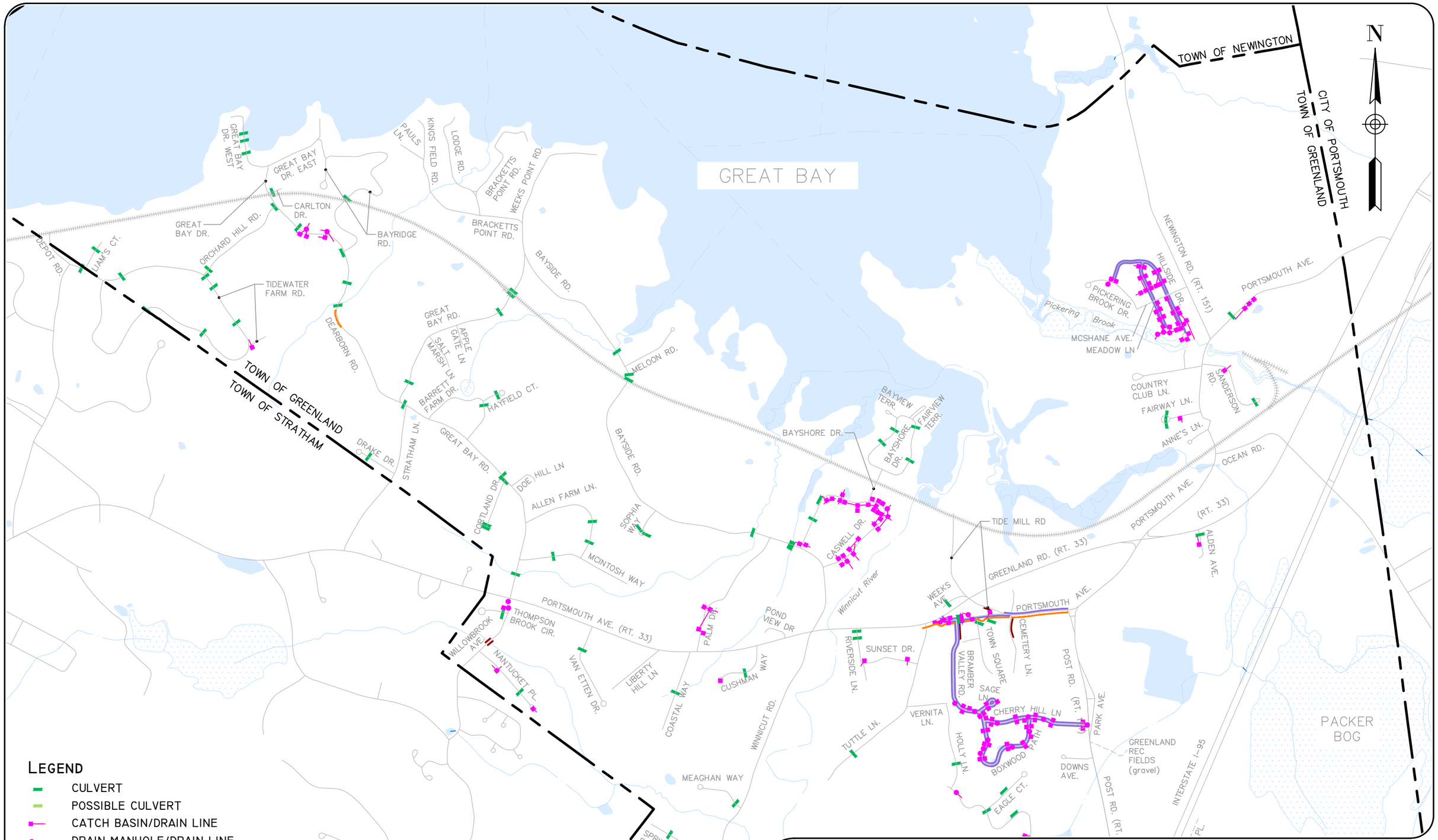

DATE 12/16	UNDERWOOD engineers	INVENTORY PAVEMENT CONDITION ASSESSMENT GREENLAND, NH	FIG. 3–1
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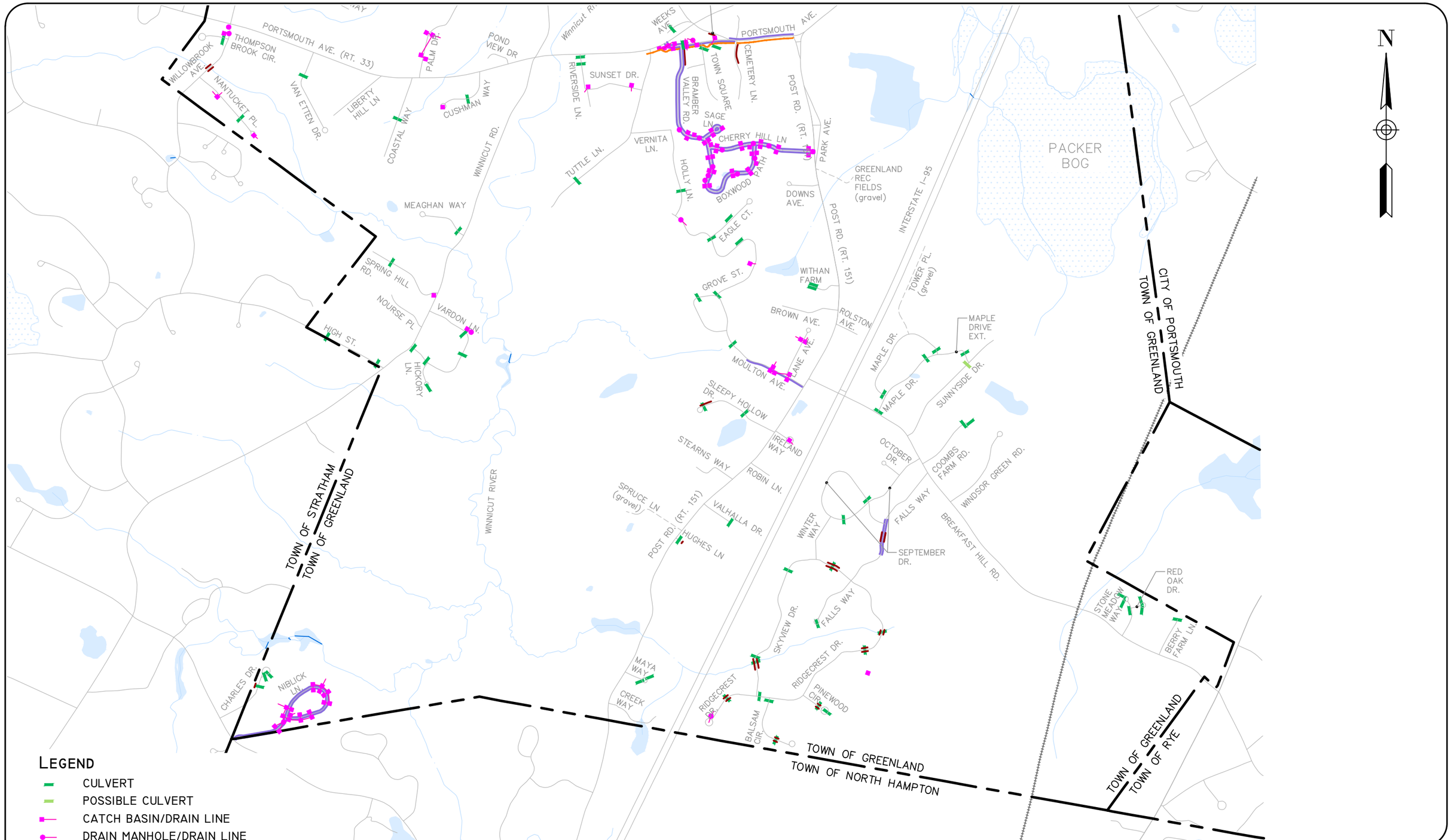

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12/16	UNDERWOOD engineers	INVENTORY PAVEMENT CONDITION ASSESSMENT GREENLAND, NEW HAMSPHIRE	3-2
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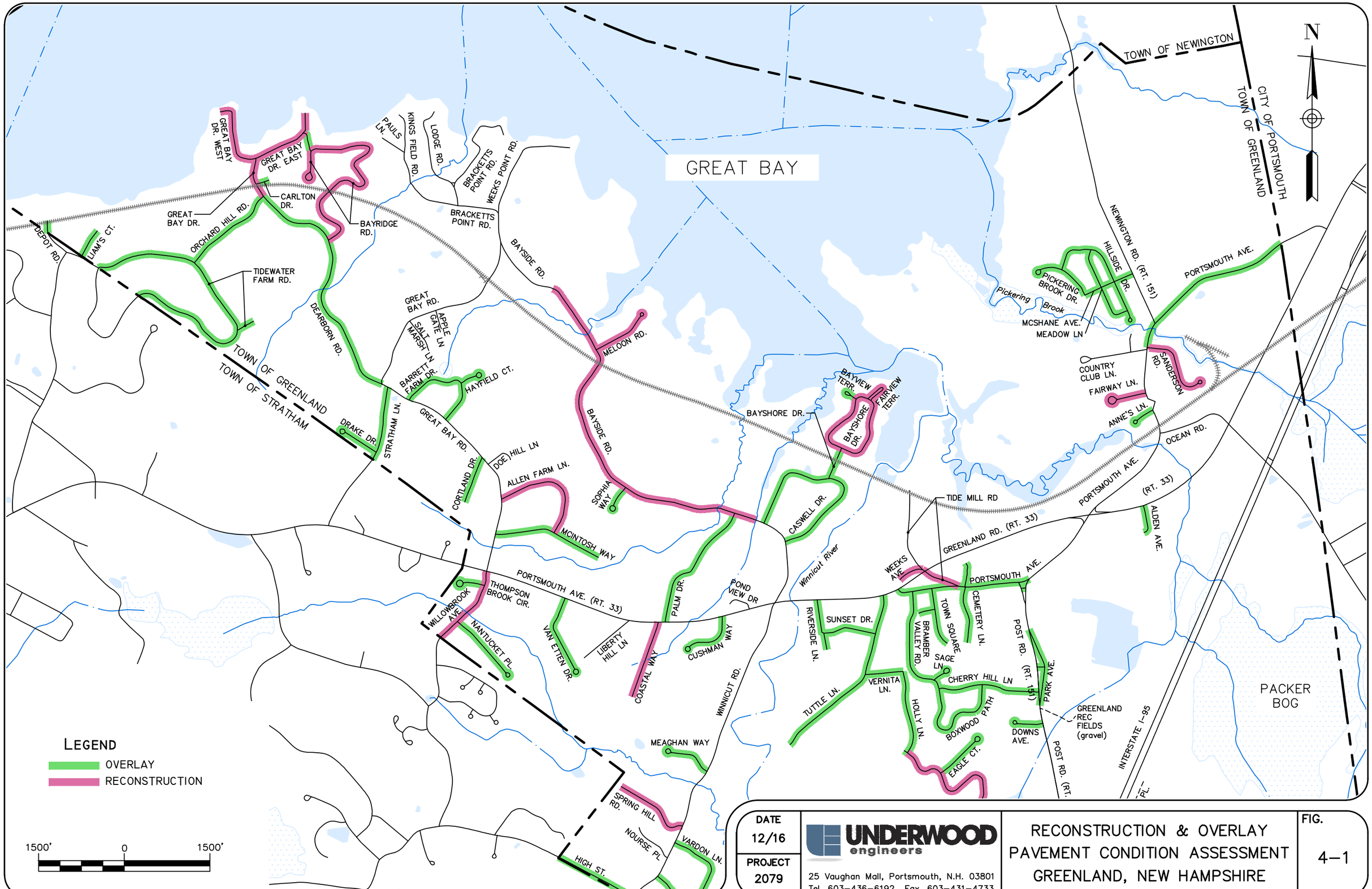

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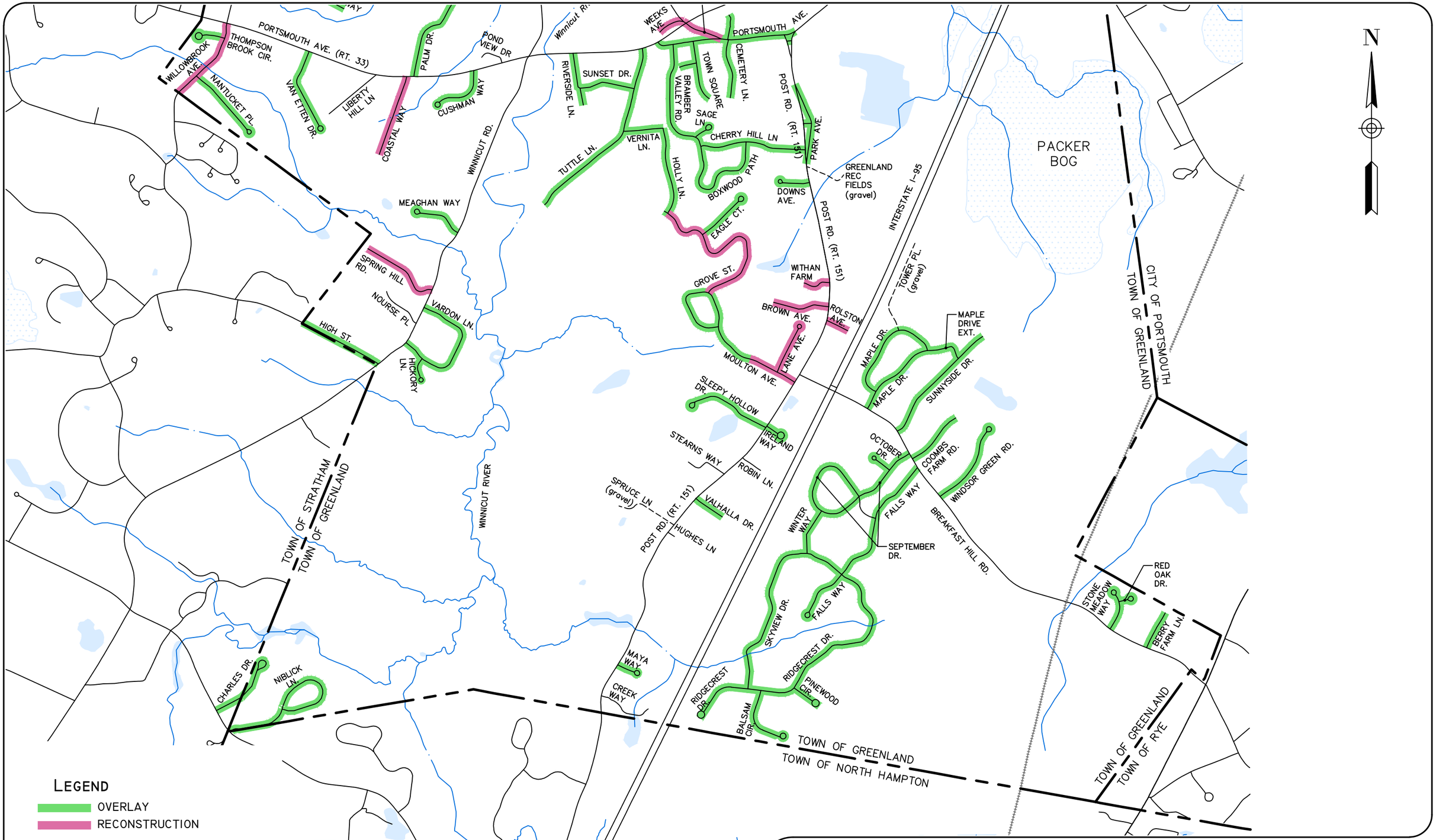

DATE 12/16	UNDERWOOD engineers	RECONSTRUCTION & OVERLAY PAVEMENT CONDITION ASSESSMENT GREENLAND, NEW HAMSPHIRE	FIG. 4–2
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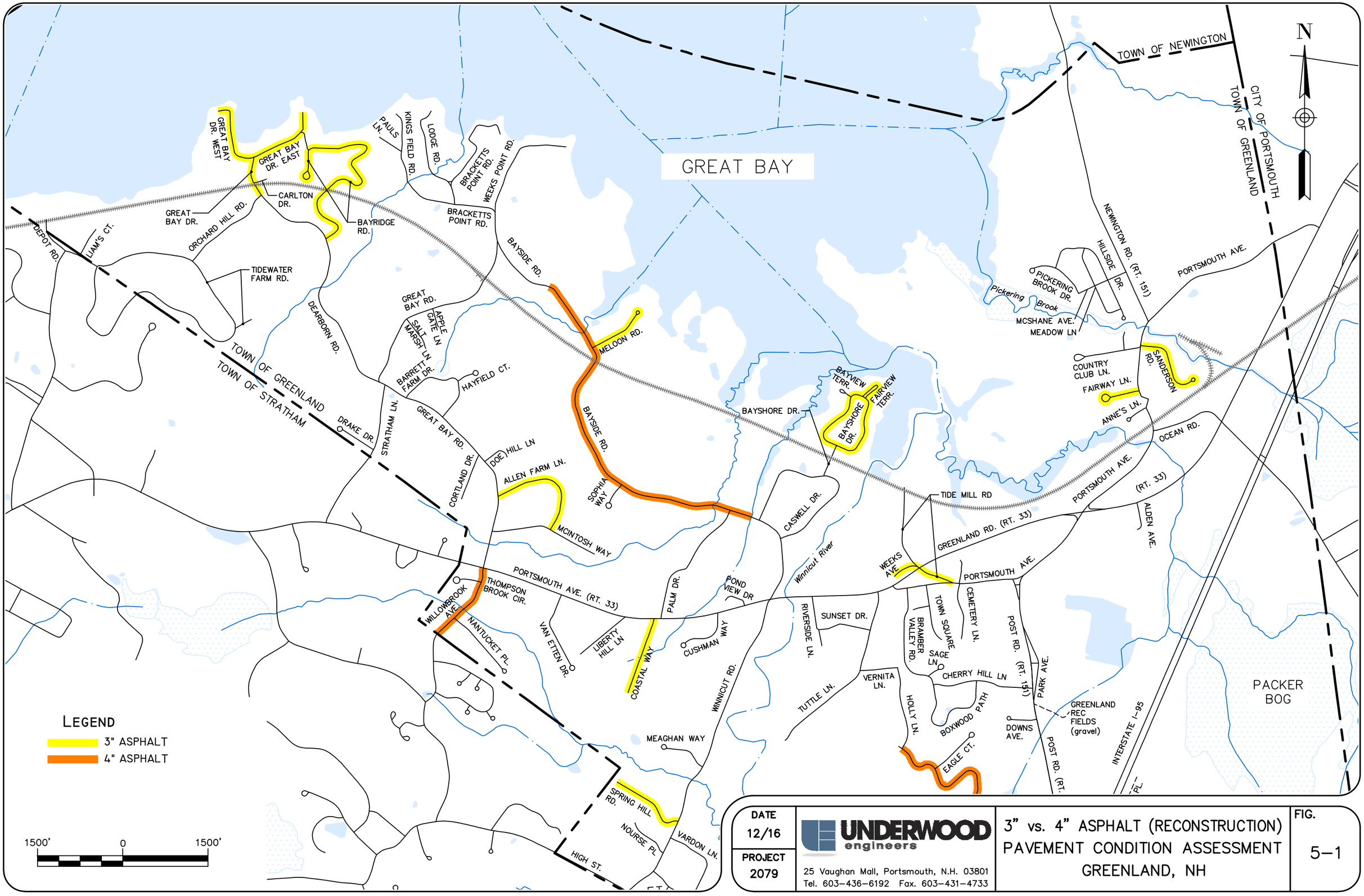

DATE 12/16	UNDERWOOD engineers	3" vs. 4" ASPHALT (RECONSTRUCTION) PAVEMENT CONDITION ASSESSMENT GREENLAND, NH	FIG. 5–1
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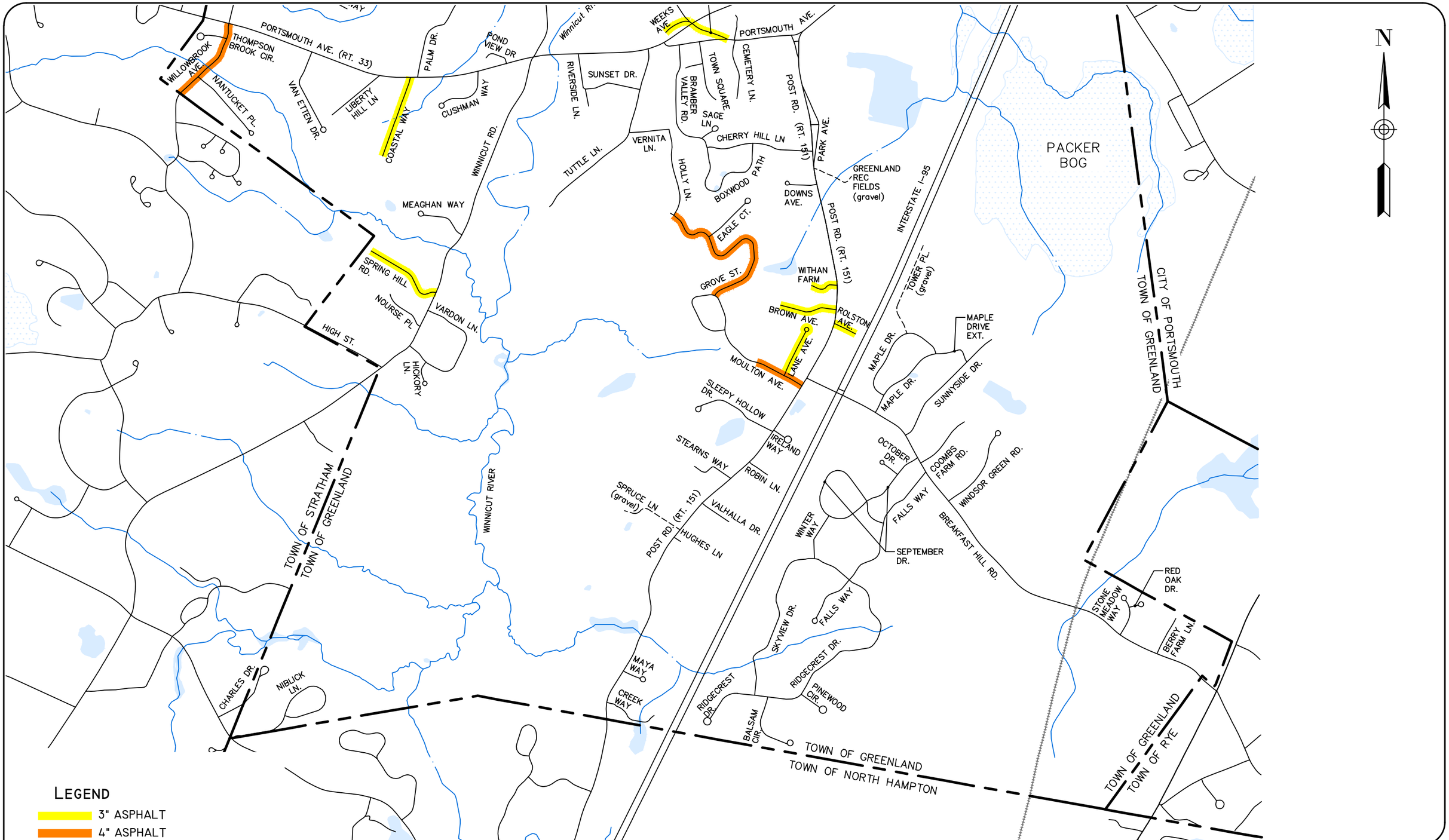

DATE 12/16	UNDERWOOD engineers	3" vs. 4" ASPHALT (RECONSTRUCTION)	FIG.
PROJECT 2079	25 Vaughan Mall, Portsmouth, N.H. 03801 Tel. 603-436-6192 Fax. 603-431-4733	PAVEMENT CONDITION ASSESSMENT GREENLAND, NEW HAMSPHIRE	5-2

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APPENDIX A

UNDERWOOD ENGINEERS INC. SCOPE OF WORK

- Scope of Work

2,79

ENGINEERING SERVICES REQUEST
AUTHORIZATION TO PROCEED

RECEIVED
JUL 18 2016
UNDERWOOD ENGINEERS
PORTSMOUTH, NH

To: Underwood Engineers, Inc. (**Engineer**)
25 Vaughan Mall
Portsmouth, New Hampshire 03801

ESR No.: #12
File No.:
Date: July 14, 2016
Description: **Pavement Condition Assessment**

From: Town of Greenland (**Owner**)
575 Portsmouth Avenue, PO Box 100
Greenland, NH 03840-0100

Owner's Contact(s) (this project): Karen Anderson, Town Administrator
Engineer's Contact(s) (this project): Philip D. MacDonald, Project Manager

Under agreement for Professional Services as Consulting Engineer for the Town of Greenland, dated **May 5, 2010** (UE File #1623) you are authorized to proceed with the following work:

Description:
Underwood Engineers (UE) will provide professional engineering services for the evaluation of the Town's Class V roads to develop a ten (10) year roadway management action plan. The following services are proposed:

Scope of Work:
Engineer will provide the following engineering services:

Task 1 – Data Review, Collection, and Inspection
Underwood Engineers understands the Town currently uses RSMS to prioritize and track roadway maintenance and reconstruction. Work will update the Town's existing RSMS database including the following:

- Work with the Town to gain an understanding of goals and priorities. This will include a kickoff meeting to determine project goals
- Review and discuss existing data available with the Town.
  - Current RSMS Database
  - Historical CIP budgets
  - Previous CIP work complete
- Review the most current RSMS roadway evaluation data and evaluate progress
- Review available traffic data to determine the traffic impacts to various roads.
- Breakdown each road into smaller segments as appropriate and compile work history for each segment
- Complete a visual inspection of each Class V Road within the Town:
  - We will perform a visual survey to identify conditions and update information (paved and gravel) including the following:
    a. Delineate soil types for each roadway based on NCRS soil surveys on file

b. Travel surface condition – Record and measure severity of any pavement distresses (low, medium, or high percent of defect extent)
c. Road shoulder condition
d. Type and character of drainage system (closed or surface) and locations of observed outfalls Drainage inventory will include location, material, size and condition of culverts and structures
e. Note traffic observed (light, medium, high, and estimated volume of truck traffic).
f. Roadway assets will be inventoried including guard rail, sidewalk, and curbing inventory will be provided.

- Summarize the severity of distress for each road (or segment) and calculate a Pavement Condition Index or PCI value (1 = poor condition, 100 = new construction) value for consideration in the development of the prioritized 10 year action plan.

Task 2 – Evaluation and Assessment

Based on the data collection phase, Underwood Engineers will complete an assessment of the Town's roads. Work will include:

- Develop a weighted rating system to help establish a hierarchy for determining maintenance selection. Rating system will incorporate categories and methods identified by the Town (i.e. traffic and emergency response needs).
- All roads will be classified into the following categories (suggested funding sources shown):
  - Deferred Maintenance (no work needed)
  - Routine Maintenance (budget item)
  - Preventative Maintenance/overlays (budget item)
  - Reconstruction (capital project – warrant article)
- Develop opinions of unit costs for:
  - Annual operation and maintenance.
  - Capital projects.
- Provide assistance in reviewing load limits, where appropriate.
- Evaluate the Town's current maintenance budget as it relates to the recommended costs above.
- Develop a capital improvements plan (10-Year Action Plan) with rankings for Road Re-construction and Preventative Maintenance (overlays).
- Provide a brief (clear and concise) report with recommendations. It is anticipated that the report will include the following:
  - Executive summary
  - Summary narrative for each high priority road and/or road segment (1 page summary with typical picture).
  - Overall map of the Town's road system using GIS mapping (or composite tax maps) as the base map. Road repair strategies shall be presented on the maps for public display.
  - Recommended road repair sequence (10-Year Action Plan for Re-construction and Overlays).

  - Summary of opinion of costs (O&M and capital)
- Underwood will provide a draft of the above report and will attend one (1) meeting with the Town to review draft report, focusing on budget and maintenance strategies prior to finalizing report.

Task 3 - Road Maintenance Computerized System

- Provide the Town with a user friendly computerized system (i.e. spreadsheet) that can be updated as work is completed or conditions change. The system will be configured to reflect road rehabilitation repair strategies that optimize maintenance cost, based on PCI thresholds, traffic loading, recommended budgets and localized conditions.
- Provide training to Town Staff concerning data input and system updates.
- Load current roadway conditions information into the program.
- Update unit prices (2020 dollars) to increase usability as a budgeting tool.
- Deliver electronic files to the Town.

Add Alternate A – Subsurface Investigations

Underwood Engineers will complete subsurface investigations on selected road segments to gain a better understanding of subsurface conditions.

- Coordinate and observe one (1) day of subsurface investigations on high priority roads
  - Depth of exploration will generally be 6'
  - Procure spoon samples (3 per boring) for evaluation.
  - Complete up to 10 gradations from samples
- Summarize findings in final report

Summary of Deliverables

- Pavement Conditions Summary Report
- 10-year Action Plan

Additional Services upon Request:

- Topographic or boundary survey services
- Design Engineering Services
- Design Review Services
- Geotechnical or subsurface services (except as noted above)
- Construction Engineering Services
- Traffic Control to be provided by Town if required
- Structural evaluation of bridges or culverts.
- CCTV of existing drainage and culverts.

Engineering Fees:

Task 1 – Data Review, Collection, and Inspection	$ 14,000.00
Task 2 – Evaluation and Assessment	$ 15,000.00
Task 3 – Road Maintenance Computerized System	$ 3,000.00
SUBTOTAL	**$ 32,000.000**
Add Alternate A - Subsurface Conditions – TASK 4	$ 6,300.00
TOTAL – (Tasks 1, 2, 3 & Add Alternate A)	**$ 38,300.00**

Fees for engineering services will be on an hourly basis for the personnel involved. Such hourly fees will be based on the Engineer's technical payroll plus an allowance to cover overhead and profit. Fees also include reimbursement for transportation expenses (per mile), out-of-pocket travel expenses (tolls), prints, telephone calls and miscellaneous materials that may be required to complete the work.

Engineering fees and budgets, as used herein, are best estimates by Underwood Engineers. The budgets are based on available information and prior to a detailed research on the Project. Budgets are not intended to be fixed prices but are reasonable estimates of average costs to complete projects of similar size. Engineering fees will not be exceeded without written authorization.

Schedule:
Underwood Engineers, Inc. will begin work following authorization to proceed. The following schedule is provided for key project milestones:

Authorization to Proceed	July 20, 2016
Kick-off meeting	July 27, 2016
Field Evaluations & Assessment	August/September 2016
Draft Report & CIP to Town	October 14, 2016
Final Report & CIP to Town	November 18, 2016

Approval & Authorization to Proceed:
Approval and authorization to proceed with the scope of work described above for the amount of $38,300 (not to exceed):

Karen Anderson 7/14/16
Karen Anderson Date
Town Administrator, Town of Greenland

7-25-16
Keith Pratt, P.E. Date
President, Underwood Engineers, Inc.

APPENDIX B

HISTORICAL ROADWORK AND ACCOUNTING SUMMARY

- Road Listing
- Historical Expenditures

ROAD LISTING w/ notes re: PREVIOUS WORK

Street Name	Length	TONS	Paved	Notes	Category
Anne's Lane	0.04	75			2
Pickering Brook	0.06				2
Red Oak Drive	0.07		2008	new	2
Rolston Avenue	0.07		2006	75 tons	1
Maple Drive Ext	0.08		2004		2
High Street	0.09		2011		1
Alden Ave	0.1		2006	Paved town portion (530') – end not accepted	2
Liam's Court	0.1				2
Sunset Drive	0.1		2008	250 tons 1/1/2"	2
Great Bay Road	0.11				
Berry Farm Lane	0.13		2004	Top Coat 240 tons	2
Carlton Drive	0.13	240		cracksealed 2009	1
Valhalla Drive	0.13			cracksealed 2007	2
McShane Avenue	0.14		2007, 2014	400 tons newest section	1
Vernita Drive	0.14		2008; 2010	200 tons 1 ½"	1
Drake Drive	0.16		2010	275 tons 1 ½"	1
Great Bay Drive	0.17	140			
Holly Lane	0.17	500 2"	2006		1
Lane Avenue	0.17		2006	407	2
McIntosh Way	0.17	593	2006		2
Brackett Lane	0.18	140	2009		1
Brown Avenue	0.19	342		swale paved 2006	2
Palm Drive	0.19		2007	660 tons	1
Fairway Drive	0.23	414			2
Spring Hill Road	0.25				1
Bayridge Road	0.26			cracksealed 2007;1080 tons 1 ½" overlay	2
Cemetery Lane	0.26	486	2008		3
Fairview Terrace	0.26	726		cracksealed 2009	2
Park Avenue	0.26		2003; 2013	275 TON	1
Stratham Lane	0.26		2010	76 tons 1 ½"	1
Depot Road	0.268	486	2014		1
Downs Ave	0.29	522			1
Nantucket Place	0.291	370	2008	370 tons	1
Bayshore Drive	0.325	740		crack sealed 2007	1
Orchard Hill Road	0.325			400 tons 1.5	2
Sleepy Hollow Drive	0.369		2004	extension 140 tons	1
Stone Meadow Way	0.374		2008	new	2
Riverside Lane	0.413		2010	118 tons 1.5"	1
Sunnyside Drive	0.45		2008	510 tons	2
Charles Drive	0.5	New	2004		2
Coombs Farm Road	0.53	670		cracksealed 2007	3
Niblick Lane	0.53	670	2004	1 ½" topcoat 670 tons	2
Tuttle Lane	0.572		2010	730 tons 1 ½"	2
Grove Street	0.584		2006		1
Hillside Drive	0.594		2014		1
Cortland Drive	0.62	700			2
Coastal Way	0.646	685		cracksealed 2009	3
Moulton Avenue	0.686		2006		3
October Drive	0.686	130	2009		1
September Drive	0.69	845	2009	shim drainage 2004; cracksealed 2006;	2
Sanderson Road	0.74		2005	2009 cracksealed; 2012 drainage	2

ROAD LISTING w/ notes re: PREVIOUS WORK

Eagle Court	0.75		1350 TN	cracksealed 2007 $826	2
Bayview Terrace	0.903	500			2
Meloon Road	0.92	240	2006	cracksealed 2007; 240 tons	2
Caswell Drive	1.03			791 tons 1.5" -2015	1
Maple Drive	1.15		2004	11230 tons fror both	2
Allen Farm Road	1.236	600	2006	600 tons $35,448	2
Bayside Road	1.3		2006	rr tracks to state maint. Line 275 tons; crack sealed 2007 $3,779	1
Tidewater Farm Road	1.4			cracksealed 2007	2
Meagan Way	1.49	300	2002	1 ½" top coat 300 tons	2
Dearborn Road	6.29			crack sealed 2007; reconstructed 2015	1
Cushman Way	0.2		2014	New	1
Hughes Lane			2013	New	1
Ireland Way	0.1		2012	New	1
Maya Way	0.1		2014	New	1
Meadow Lane	0.3		2014		1
Portsmouth Avenue			2004;2013	church to PO	1
Balsam Circle			2013	New	1
Falls Way			2012	New	1
Pinewood Circle	2.75		2013	New	1
Ridgecrest Drive			2012	New	1
Skyview Drive			2012	New	1
Seavey Lane			2015	New	1
Sofia Way			2015	New	1
Tide Mill Road	0.1				2
Van Etten Way			2014	New	1
Varden			2001;2006	new 525 tons	2
Willow Brook Avenue			2004	485 tons	2
Windsor Green Road			2004	500 tons	1
Witham Farm Road				cracksealed 2006	2
Sub Total:	**35.172**				
Brackett Point Road				Private	
Bramber Valley Drive	0.86			Private	
Country Club Lane	0.13			Private	
Great Bay Drive East	0.54		Private	Brackett's	
Great Bay Drive West	0.18		Private	Brackett's	
Kings Field Rd (pvt)			Private	Brackett's	
Lodge Road (pvt)				Brackett's	
Nourse Place (pvt)			Private		
Paul's Lane (pvt)			Private	Brackett's	
Weeks Point Road (pvt)			Private	Week's	
Weeks Road			Private		
Breakfast Hill Road	2.91			State	
Greenland Road	0.03		State		
Newington Road	0.2		State		
Ocean Road	0.193		State		3
Post Road	2.4		State		
Winnicut Road			State		

Historical Accounting Summary

Town of Greenland

Nov-16

TABLE 1

Year	BUDGET CATEGORY							
	Routine Maintenance		Snow Removal		CIP - Roadway		CIP - Drainage	
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual
2012	153,000	109,689	314,000	197,237	478,000	402,836		
2013	148,144	144,889	314,000	368,000	125,000	90,281		
2014	157,500	155,892	339,000	387,325	1,102,148	157,314		
2015	157,500	188,746	430,000	486,545	–	849,877	75,000	65,084
2016	210,725		420,000		–		25,000	
2017								
2018								
2019								
2020								
2021								
2022								
2023								
2024								
2025								
2026								
2027								
	$0	$0	$0	$0	$0	$0	$0	$0

APPENDIX C

REPAIR ALTERNATIVES

Repair Summary of Work

The following repair alternatives were chosen by Underwood Engineers that best fit the repair needs of the town.

Note:

1) Costs shown represent 2016 dollars
2) Units represent entire road surface. For example, to estimate for crack sealing:
   Road Section Length = 1,000 LF
   Crack Sealing Unit Price = $2.00/LF.
   Total cost for crack sealing = $2,000

ASPHALT

BOX-OUT ROAD RECONSTRUCTION

- Reclaim existing roadway, supplement with aggregate as required
- Remove reclaim and perform additional excavation to add gravels as required to achieve 12" depth of select materials
- Furnish and install under drains where needed
- Grade and compact
- Repave with 3 or 4 inches of pavement either 2-inch base or 1 inch wearing or 2.5 inch base with 1.5 inch wearing. Thickness should depend on volume and type of traffic on the road (see recommended repair strategies – Appendix G).
- Cost includes a 15% contingency for engineering services.
- Cost with 3" overlay = $4.21/SF
- Cost with 4" overlay = $4.82/SF

CLOSED DRAIN SYSTEM

- Complete all earthwork necessary for installation
- Furnish and install CPE drainpipe. Cost estimate based on 15" pipe and assumes 70% of total pipe installed to be plastic.
- Furnish and install RCP drainpipe. Cost estimates based on 15" pipe and assumes 30% of total pipe installed to be reinforced concrete.
- Furnish and install catch basins, grates, and frames.
- Furnish and install drain manholes, covers, and frames.
- Furnish and install 6" reveal curbing as needed
- Cost includes a 15% contingency for engineering services.
- Cost = $100/LF of pipe installed

CRACK SEAL

- Fill in surface cracks with sealing material
- Cost = $2.00/LF of road

DITCHING

- Clean ditches along edge of roadway by removing and debris, soil deposits, or shrubbery
- Recommended depth for ditches is 24"
- Allow room for gravel backing on shoulder
- Cost = $6.60/LF of road (work completed on both sides)

GRAVEL BACKING

- Furnish and install gravels along edge of road to protect pavement edge
- Gravels extend approx. 12" from edge of pavement into the shoulder
- Top grade of gravel matches existing surface grade of asphalt
- Cost = $0.88/LF

OVERLAY (1")

- Apply a 1" thick layer of asphalt to the existing surface without the need to work the existing surface.
- Cost = $0.53/SF

OVERLAY (1 ½")

- Apply a 1 ½" think layer of asphalt to the existing surface without the need to work the existing surface.
- Cost = $0.80/SF

PATCHING

- Furnish and install asphalt to fill in potholes in road surface

RECLAIM (8" DEPTH)

- Grind and recycle the existing road surface and base materials to a depth of 8"
- Can be reused as base material as an alternative for road reconstruction or to convert a paved road to a gravel road
- Grade and compact new material

APPENDIX D

FIELD BOOK

- Field Work Book – Greenland Pavement Condition Assessment, 2016

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 10/4/16
Road Name: Alden Avenue
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24 **ft**
Shoulder Width: 2-4 **ft**
Shoulder: Natural Gravel
Gravel Backing: Yes No
Shoulder Description: east side grown in, west still gravel for most part
Mile Post: _____ **End Post:** _____
Length: 0.09 mi.

RIN: Alden
Road Section: Alden-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: 1 2 3 4 5
Population Density: 1 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: serves Fairpoint and other industrial buildings. – Truck traffic. Few patches have been completed. Cracking is of Thin nature, but present throughout. Drainage just fair, water may not get off edge in some areas. Some rutting near southern end → Trucks

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	[illegible]	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	[illegible]	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	[illegible]	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	[illegible]	3
				Good	Fair	Poor
Roughness				[illegible]	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	[illegible]	3
				Good	Fair	Poor
Drainage				1	[illegible]	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/16/16
Road Name: Allen Farm Drive
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24 **ft**
Shoulder Width: 2-4 **ft**
Shoulder: (Natural) Gravel
Gravel Backing: Yes (No)
Shoulder Description: crab grass right up to roadway in most areas
Mile Post: _____ **End Post:** _____
Length: 0.35mi.

RIN: Allen
Road Section: Allen -1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Trans. cracking prevalent full length. All gators seem like result of trans. Average edge cracking. Areas of corrugation/bumps w/out cracks. Shape is mostly in tact except where trans/alligator cracks are bad.

Condition

			None	Low	Medium	High
			←	Extent	→	
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects			
Patch/Pothole			0		2	3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/30/16
Road Name: Anne's Lane
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24 **ft**
Shoulder Width: 0-1 **ft**
Shoulder: (Natural) Gravel
Gravel Backing: Yes (No)
Shoulder Description: grass

RIN: Anne's
Road Section: Anne's-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____
Length: 0.07mi.

Comments: Long/Trans cracking - largest problem throughout. Decent condition. couple of trench/box patches.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0		2	3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/8/16
Road Name: Balsam Circle
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24.5 **ft**
Shoulder Width: 0-3 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: good, some grass into lawn

Mile Post: _____ **End Post:** _____
Length: 0.25 mi.

RIN: Balsam
Road Section: Balsam 1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Recently constructed

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			✓	1	2	3
				Good	Fair	Poor
Roughness				✓	2	3
				Good	Fair	Poor
Rutting (Wheel)				✓	2	3
				Good	Fair	Poor
Drainage				✓	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/16/16

Road Name: Barrett Farm Road

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 24 ft

Shoulder Width: 4 ft

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: good condition

RIN: Barrett

Road Section: Barrett-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____

Length: 0.35mi.

Comments: Very few long/trans. cracks – thin. Shape in tact. Good drainage – swales are in good shape. Some edge cracking for spots.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low		1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/11/16

Road Name: Bayridge Road

Seq. No.: 1

From Dearborn **To** end of cul-de-sac

No. Lanes 2 **Width:** 24' ft

Shoulder Width: 0-2 ft (22' @ cul-de-sac)

Shoulder: (Natural) Gravel

Gravel Backing: (Yes) No

Shoulder Description: Grass, almost non-existant

RIN: Bayridge

Road Section: Bayridge - 1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____

Length: 0.9 miles

Comments: Ride is not the worst, but can definitely feel deficiencies. Not many areas w/out cracking/rutting/uneven surface. Rutting concentrated in specific areas. All types of cracking prevalent throughout. ~50% of cracking has been sealed. Some edge spot defects have been patched

Condition Trans. Rutting more of a problem than long. rutting. Grass observed growing through edge cracks.

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	(8)	
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7		9
			No Defects			
Patch/Pothole			0		2	3
				Good	Fair	Poor
Roughness				1		3
				None	0-1 inch	>1 inch
Rutting (wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

good/fair/poor

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/17/16

Road Name: Bayshore Drive

Seq. No.: 1

From Caswell Drive **To** Loop Section

No. Lanes 2 **Width:** 24 **ft**

Shoulder Width: 2 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: good condition

Mile Post: _____ **End Post:** _____

Length: 0.1mi

RIN: Bayshore

Road Section: Bayshore-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Recently paved. Good condition.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low		1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low		1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low		1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/17/16

Road Name: Bayshore Drive

Seq. No.: 2

Loop Section

No. Lanes 2 **Width:** 24 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: (Natural) Gravel

Gravel Backing: Yes (No)

Shoulder Description: grass or eroded, not many good areas.

Mile Post: _____ **End Post:** _____

Length: 0.55 mi

RIN: Bayshore

Road Section: Bayshore - 2

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Very poor section. Roughly 1/2 of areas of defects to smooth pavement. Cracking has compromised shape in bad areas.

Condition

			None	Low	Medium	High
				←	Extent	→
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects			
Patch/Pothole			0	1		3
				Good	Fair	Poor
Roughness				1	2	
				Good	Fair	Poor
Rutting (Wheel)				1		3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 10/12/16

Road Name: Bayside Road

Seq. No.: _____

From GPS pt. 874 **To** Rte. 33

No. Lanes 2 **Width:** 22.5 **ft**

Shoulder Width: N/A **ft**

Shoulder: Natural Gravel

Gravel Backing: Yes (No)

Shoulder Description: mostly non-existant

RIN: Bayside

Road Section: Bayside-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: 1 2 (3) 4 5

Population Density: 1 (2) 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____

Length: 1.5 mi.

Comments: Overall poor condition. Areas of severe alligator, rutting, uneven lanes. Some bad potholes present. Edge cracking present in a few areas. Full reconstruction needed w/ establishment of drainage.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	~~8~~	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	~~5~~	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	~~8~~	9
			No Defects			
Patch/Pothole			0	1	~~2~~	3
				Good	Fair	Poor
Roughness				1	~~2~~	3
				Good	Fair	Poor
Rutting (Wheel)				1	~~2~~	3
				Good	Fair	Poor
Drainage				1	~~2~~	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/17/16
Road Name: Bayview Terrace
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 18 **ft**
Shoulder Width: 0 **ft**
Shoulder: Natural Gravel
Gravel Backing: Yes (No)
Shoulder Description: no shoulder.

Mile Post: _____ **End Post:** _____
Length: 350 LF

RIN: Bayview
Road Section: Bayview-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Decent condition. Few areas w/ cracking.

Condition

one one at start of roadway

			None	Low	Medium	High
			← Extent →			
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/8/16
Road Name: Berry Farm Lane
Seq. No.: ____
From ____ **To** ____
No. Lanes 2 **Width:** 23 **ft**
Shoulder Width: 0-2 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: Yes (No)
Shoulder Description: mostly grass into lawns

Mile Post: ____ **End Post:** ____
Length: 0.12 mi.

RIN: Berry
Road Section: Berry-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Lots of cracking throughout. Bumpy ride going over alligator and trans. patches. Good site slopes on roadway edges. Reclaim?

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	[illegible]	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	[illegible]	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	[illegible]
		High		7	8	9
			No Defects			
Patch/Pothole			[illegible]	1	2	3
				Good	Fair	Poor
Roughness				1	[illegible]	3
				Good	Fair	Poor
Rutting (Wheel)				[illegible]	2	3
				Good	Fair	Poor
Drainage				[illegible]	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 10/12/16

Road Name: Boxwood Path

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 22 ft

Shoulder Width: N/A ft

Shoulder: Natural Gravel

Gravel Backing: Yes No

Shoulder Description: curb.

Mile Post: _____ **End Post:** _____

Length: 0.35mi.

RIN: Boxwood

Road Section: Boxwood-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Under construction. Binder course installed. Angled curb both sides full length. Appears there will be paved sidewalk on one side, full length. Closed drain.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	✓ 0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	✓ 0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	✓ 0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			✓ 0	1	2	3
				Good	Fair	Poor
Roughness				✓ 1	2	3
				Good	Fair	Poor
Rutting (Wheel)				✓ 1	2	3
				Good	Fair	Poor
Drainage				✓ 1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 10/12/16

Road Name: Bramber Valley Road

Seq. No.: _____

From Portsmouth Ave **To** Cherry Hill Drive

No. Lanes 2 **Width:** 22 **ft**

Shoulder Width: N/A **ft**

Shoulder: Natural Gravel

Gravel Backing: Yes No

Shoulder Description: angled curb

Mile Post: _____ **End Post:** _____

Length: 0.4mi.

RIN: Bramber

Road Section: Bramber -1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Newly constructed. Curb full length both sides. Appears there will be paved sidewalk on one side full length.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16

Road Name: Brown Avenue

Seq. No.: _____

From _____ **To** _____

? Paved Gutter / **No. Lanes** 2 **Width:** 25.5 ft

Shoulder Width: 1-2 ft

Shoulder: Natural Gravel

Gravel Backing: Yes No

Shoulder Description: paved gutter

Gr drainage

Mile Post: _____ **End Post:** _____

Length: 0.17mi.

RIN: Brown

Road Section: Brown-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Gutter line (intentional or unintentional?) for drainage. Several cracks of all types. Good sections are smooth. Shape seems fine.

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	[illegible]	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	[illegible]	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	[illegible]	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	[illegible]	2	3
				Good	Fair	Poor
Roughness				1	[illegible]	3
				Good	Fair	Poor
Rutting (Wheel)				[illegible]	2	3
				Good	Fair	Poor
Drainage				1	2	[illegible]

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/15/16
Road Name: Carlton Drive
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24 **ft**
Shoulder Width: 0-2 **ft**
Shoulder: (Natural) Gravel
Gravel Backing: Yes (No)
Shoulder Description: grassy

Mile Post: _____ **End Post:** _____
Length: 0.04 mi. (220 LF)

RIN: Carlton
Road Section: Carlton - 1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Few specific areas w/ defects. — All types of cracking present. One edge (N) w/ edge cracking prevalent. Culvert under one area of long/trans. cracking and settling.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/17/16

Road Name: Caswell Drive

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 24 **ft**

Shoulder Width: 2 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: gravel, good condition.

Mile Post: _____ **End Post:** _____

Length: 0.65mi.

RIN: Caswell

Road Section: Caswell - 1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Recently reconstructed. No defects.

Condition

			None	Low	Medium	High
				←	Extent	→
Alligator Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low		1	2	3
		Medium		4	5	6
		High		7	8	9
Long/Trans Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low		1	2	3
		Medium		4	5	6
		High		7	8	9
Edge Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low		1	2	3
		Medium		4	5	6
		High		7	8	9
Patch/Pothole			No Defects	1	2	3
Roughness				Good	Fair	Poor
					2	3
Rutting (Wheel)				Good	Fair	Poor
					2	3
Drainage				Good	Fair	Poor
					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/20/16
Road Name: Cemetery Lane
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 20-21 **ft**
Shoulder Width: _____ **ft**
Shoulder: Natural Gravel
Gravel Backing: Yes No
Shoulder Description: _____

Mile Post: _____ **End Post:** _____
Length: 0.18mi.

RIN: Cemetery
Road Section: Cemetery-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Extensive alligator along ℄; some of which has been patched. Super-elevated so that it drains east. Transv/long and edge cracking present as well, but not as much of an issue as alligator

Condition

			None	Low	Medium	High
				← Extent →		
Alligator Cracking			No Defects	<10%	10-30%	>30%
	Severity	Low	0	1	2	3
		Medium		4	5	~~~
		High		7	8	9 / 1
Long/Trans Cracking			No Defects	<10%	10-30%	>30%
	Severity	Low	0	1	2	3
		Medium		~~~	5	6
		High		7	8	9
Edge Cracking			No Defects	<10%	10-30%	>30%
	Severity	Low	0	1	2	3
		Medium		~~~	5	6
		High		7	8	9
Patch/Pothole			No Defects			
			0	1	~~~	3
Roughness				Good	Fair	Poor
				~~	2	3
Rutting (Wheel)				Good	Fair	Poor
				~~	2	3
Drainage				Good	Fair	Poor
				~~	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 11/11/16

Road Name: Charles Drive

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 24.5 **ft**

Shoulder Width: 2-4 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: good

Mile Post: _____ **End Post:** _____

Length: 0.25mi.

RIN: Charles

Road Section: Charles-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Good condition open drain cul-de-sac

Condition

			None	← Extent → Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 10/12/16
Road Name: Cherry Hill Drive
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 22 **ft**
Shoulder Width: N/A **ft**
Shoulder: Natural Gravel
Gravel Backing: Yes No
Shoulder Description: curb.

Mile Post: _____ **End Post:** _____
Length: 0.5mi.

RIN: Cherry Hill
Road Section: Cherry Hill-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Under construction. Binder course installed. Appears there will be need sidewalk full length on 1 side. Angle curb full length both sides.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			✓	1	2	3
				Good	Fair	Poor
Roughness				✓	2	3
				Good	Fair	Poor
Rutting (Wheel)				✓	2	3
				Good	Fair	Poor
Drainage				✓	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16

Road Name: Coastal Way

Seq. No.: ____

From ____ **To** ____

No. Lanes 2 **Width:** 24 **ft**

Shoulder Width: 0-4 **ft**

Shoulder: (Natural) (Gravel)

Gravel Backing: Yes (No)

Shoulder Description: low gravel, many places grassed/weeds over

Mile Post: ____ **End Post:** ____

Length: 0.25mi

RIN: Coastal

Road Section: Coastal - 1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Poor condition. Many alligators. Lots of sealant has been applied. off road drainage swales present, but road depressed, rutting, slope lost → many areas water cannot get off road.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	[illegible]
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	[illegible]	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	[illegible]
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	[illegible]	3
				Good	Fair	Poor
Roughness				1	[illegible]	3
				Good	Fair	Poor
Rutting (Wheel)				1	[illegible]	3
				Good	Fair	Poor
Drainage				1	[illegible]	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/8/16
Road Name: Coombs Farm Road
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24 **ft**
Shoulder Width: 0-4 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: Yes (No)
Shoulder Description: _____

RIN: Coombs
Road Section: Coombs -1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____
Length: 0.19mi

Comments: Decent condition. Trans. cracks are biggest problem. - noticeable new doing over
Drain is good - swales.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7		9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/16/16

Road Name: Cortland Drive

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 24 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: (Natural) (Gravel)

Gravel Backing: Yes (No)

Shoulder Description: grass over gravel LOW in some areas

Mile Post: _____ **End Post:** _____

Length: 0.15 mi.

RIN: Cortland

Road Section: Cortland-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Alligator / Long. cracking concentrated along ℄. Edge cracking not a major of a problem. Crown has been lost in some areas — poor drainage where this has occurred. Rides OK considering defects

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	~~6~~
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	~~6~~
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	~~5~~	6
		High		7	8	9
			No Defects			
Patch/Pothole			~~0~~	1	2	3
				Good	Fair	Poor
Roughness				~~1~~	2	3
				Good	Fair	Poor
Rutting (Wheel)				~~1~~	2	3
				Good	Fair	Poor
Drainage				~~1~~	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16

Road Name: Cushman Way

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 23 **ft**

Shoulder Width: 2-3 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: good

Mile Post: _____ **End Post:** _____

Length: 0.18 mi

RIN: Cushman

Road Section: Cushman-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Recently paved. Good condition. Drainage needs

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			✓	1	2	3
				Good	Fair	Poor
Roughness				✓	2	3
				Good	Fair	Poor
Rutting (Wheel)				✓	2	3
				Good	Fair	Poor
Drainage				✓	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/16/16
Road Name: Dearborn Road
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 22 **ft**
Shoulder Width: 1-3 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: good condition

RIN: Dearborn
Road Section: Dearborn -1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: 1 2 (3) 4 5
Population Density: 1 (2) 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____
Length: 0.85 mi.

Comments: Recently reconstructed. Good condition

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low		1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low		1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low		1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 10/12/16

Road Name: Depot Road

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 18 **ft**

Shoulder Width: 2-4 **ft**

Shoulder: (Natural) (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: mostly gravel

Mile Post: _____ **End Post:** _____

Length: 0.27 mi.

RIN: Depot

Road Section: Depot-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Good condition. Recently re-paved.

Condition

			None	Low	Medium	High
				← Extent →		
Alligator Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
Long/Trans Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
Edge Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
Patch/Pothole			No Defects	1	2	3
Roughness				Good	Fair	Poor
					2	3
Rutting (Wheel)				Good	Fair	Poor
					2	3
Drainage				Good	Fair	Poor
					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/8/16

Road Name: Downs Avenue

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 21 **ft**

Shoulder Width: 0 **ft**

Shoulder: (Natural) Gravel

Gravel Backing: Yes (No)

Shoulder Description: grass in (lawn)

RIN: Downs

Road Section: Downs-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____

Length: 0.1 mi.

Comments: Some cracking of all types. Smooth except when going over trans. cracks (exs. in photos). No swales, ~~[illegible]~~ ~~[illegible]~~, edges are in good condition despite. Recent Shape

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/15/16

Road Name: Drake Drive

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 24.5 **ft**

Shoulder Width: 1-3 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: majority of length has good backing

Mile Post: _____ **End Post:** _____

Length: 0.15 mi

RIN: Drake

Road Section: Drake - 1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: long. cracking mainly along ℄. Cracks straight through cul-de-sac — likely @ paving joints. Appears runoff gets away from roadway sufficiently.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16
Road Name: Eagle Court
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24 **ft**
Shoulder Width: 2-3 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: decent condition - backing
Mile Post: _____ **End Post:** _____
Length: 0.2mi

RIN: Eagle
Road Section: Eagle-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Cracking along ℄. Trans cracks and edge cracking not as prominent. Definitely not requiring immediate attention.

Condition

			None	Low	Medium	High
			←	Extent	→	
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	[illegible]	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	[illegible]	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	[illegible]	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			[illegible]	1	2	3
				Good	Fair	Poor
Roughness				1	[illegible]	3
				Good	Fair	Poor
Rutting (Wheel)				[illegible]	2	3
				Good	Fair	Poor
Drainage				[illegible]	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/17/16

Road Name: Fairview Terrace

Seq. No.: _____

From _____ **To** _____

No. Lanes 1 **Width:** 12 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: (Natural) (Gravel)

Gravel Backing: Yes (No)

Shoulder Description: low, almost non-existent.

Mile Post: _____ **End Post:** _____

Length: 0.12 mi.

RIN: Fairview

Road Section: Fairview -1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic:	1	2	3	4	5
Population Density:	1	2	3	4	5

Inventory Year: 2016 **Current Year:** 2016

Comments: Lots of edge cracking — some sealed. Area on east side has been patched/overlayed but has developed defects similar to rest of roadway. Rutting due to edge cracks. 3 houses worth of traffic. Drainage compromised by cracking.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1		3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	
			No Defects			
Patch/Pothole			0	1		3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)				1		3
				Good	Fair	Poor
Drainage				1	2	

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/30/16

Road Name: Fairway Drive

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 26 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: (Natural) Gravel

Gravel Backing: Yes (No)

Shoulder Description: grass

RIN: Fairway

Road Section: Fairway-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____

Length: 0.15 mi.

Comments: Consistent cracking - all types. Area of depression where alligator is bad — no drain. No swales, some water may stay on EOP. Reclaim.

Condition

			None	Low	Medium	High
				←	Extent	→
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/8/16
Road Name: Falls Way
Seq. No.: ____
From ____ **To** ____
No. Lanes 2 **Width:** 25/30 **ft**
Shoulder Width: 0-3 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: good. curb

Mile Post: ____ **End Post:** ____
Length: 0.65 mi.

RIN: Falls
Road Section: Falls-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Recently constructed. good condition. Drain swales/ closed drainage in one section.

Condition

			None	Extent ← Low	Medium	High →
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/20/16
Road Name: Great Bay Drive East
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 15 **ft**
Shoulder Width: 2 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: established w/ gravel
Mile Post: _____ **End Post:** _____
Length: 0.19mi

RIN: G.B. East
Road Section: GB East-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Recently paved over. Decent condition. Area @ eastern end in poorest state. (GPS Photo pt. 651) — sediment deposit alludes to poor drainage; other areas appear unable to get water off Rd. Next repair should likely be more than just overlay.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/20/16

Road Name: Great Bay Drive West

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 14-15 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: (Natural) Gravel

Gravel Backing: Yes (No)

Shoulder Description: not established

Mile Post: _____ **End Post:** _____

Length: _____

RIN: GB West

Road Section: GB West-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Falling apart. Needs full reconstruction.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7		9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	
			No Defects			
Patch/Pothole			0	1	2	
				Good	Fair	Poor
Roughness				1	2	
				Good	Fair	Poor
Rutting (Wheel)				1	2	
				Good	Fair	Poor
Drainage				1	2	

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/16/16

Road Name: Great Bay Drive

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 17-20 **ft**

Shoulder Width: 0-3 **ft**

Shoulder: (Natural) (Gravel)

Gravel Backing: Yes (No)

Shoulder Description: areas of natural growing grass & areas of gravel

Mile Post: _____ **End Post:** _____

Length: 0.13 mi.

RIN: GB Drive

Road Section: GB Drive -1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Road is falling apart. All defects present. Shape is fair, water can get off the road in most areas. Reconstruction needed.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	
			No Defects			
Patch/Pothole			0	1	2	
				Good	Fair	Poor
Roughness				1	2	
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/16/16

Road Name: Great Bay Road

Seq. No.: 1

From Dearborn Rd **To** Bayside Rd.

No. Lanes 2 **Width:** 221 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: (Natural) Gravel

Gravel Backing: Yes (No)

Shoulder Description: shoulder has overgrown in most areas

Mile Post: _____ **End Post:** _____

Length: 0.6 mi.

RIN: GB Road

Road Section: GB Road - 1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: 1 2 (3) 4 5

Population Density: 1 (2) 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: med/Thick long/trans. cracks throughout. Very poor edge. Few sections w/ wheel rutting present. Alligator present, but not as severe as other cracking. Ride is not smooth, but not terrible. Subsurface damage/materials likely to blame

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	
			No Defects			
Patch/Pothole			0	1		3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)				1		3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/30/16
Road Name: Great Bay Road
Seq. No.: _____
From Portsmouth Ave **To** Newton Road
No. Lanes 2 **Width:** 24 **ft**
Shoulder Width: 0-4 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: Yes No
Shoulder Description: Gravel; grass in along most of roadway
Mile Post: _____ **End Post:** _____
Length: 0.8

RIN: GB Road
Road Section: GB Road - 2
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: 1 2 (3) 4 5
Population Density: 1 2 3 (4) 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Alligator present in center of lanes and/or ℄ of roadway. Edges being lost in some areas due to cracking. Rutting observed in some areas - not too severe. Decent shape except where rutting present, - water can get off road. Area @ intersection of Rt 33 has been overlaid → still **Condition** has deteriorated w/ cracking. Several areas patched and some potholes open

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects			
Patch/Pothole			0	1		3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)				1		3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16

Road Name: Grove Street

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 24 **ft**

Shoulder Width: 24 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: graveled, typ. backing edge/ grass m.

Mile Post: _____ **End Post:** _____

Length: 0.51 mi

RIN: Grove

Road Section: Grove-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Edges are terrible – some areas have lost top coat. Avg. long/trans and alligators throughout. Fairly smooth considering. Shoulder and side slopes are decent.

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	~~~
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	~~~	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	~~~
			No Defects			
Patch/Pothole			0	1	~~~	3
				Good	Fair	Poor
Roughness				1	~~~	3
				Good	Fair	Poor
Rutting (Wheel)				~~~	2	3
				Good	Fair	Poor
Drainage				~~~	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/16/16
Road Name: Hayfield Court
Seq. No.: _____
From _____ **To** _____
No. Lanes _____ **Width:** _____ **ft**
Shoulder Width: 2-4 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: established and mostly sustained
Mile Post: _____ **End Post:** _____
Length: 0.1 mi.

RIN: Hayfield
Road Section: Hayfield 1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: 1 2 3 4 5
Population Density: 1 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Good condition despite some edge cracking and minor long/trans. cracking.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low		1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 10/12/16
Road Name: Hickory Lane
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 22 **ft**
Shoulder Width: 2-4 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: good

RIN: Hickory
Road Section: Hickory-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____
Length: 0.15 mi.

Comments: Recently constructed. Good drain.

Condition

			None	Low	Medium	High
				← Extent →		
Alligator Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
Long/Trans Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
Edge Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
Patch/Pothole			No Defects			
			0	1	2	3
Roughness				Good	Fair	Poor
				1	2	3
Rutting (Wheel)				Good	Fair	Poor
				1	2	3
Drainage				Good	Fair	Poor
				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16
Road Name: High Street
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 21 **ft**
Shoulder Width: 2 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: good

Mile Post: _____ **End Post:** _____
Length: 0.25 mi

RIN: High
Road Section: High-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: 1 (2) 3 4 5
Population Density: 1 (2) 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Good condition/shape

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	[illegible]	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	[illegible]	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	[illegible]	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			[illegible]	1	2	3
				Good	Fair	Poor
Roughness				[illegible]	2	3
				Good	Fair	Poor
Rutting (Wheel)				[illegible]	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/30/16

Road Name: Hillside Drive

Seq. No.: _____

From cul de sac **To** Northern intersection w/ Meadow (GPS 571)

No. Lanes 2 **Width:** 26 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: (Natural) Gravel

Gravel Backing: Yes (No)

Shoulder Description: curb from cul-de-sac to Meshane; then natural/grass mainly

Mile Post: _____ **End Post:** _____

Length: 0.28 mi.

RIN: Hillside

Road Section: Hillside - 1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Recently re-paved. Minor cracks here and there. Smooth ride, closed drainage

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/30/16

Road Name: Hillside Drive

Seq. No.:

From Northern intersection w/ Meadow (GPS 571) **To** Pickering Brook Rd.

No. Lanes 2 **Width:** 26 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: fairly good condition, grass in along some lawns

Mile Post: _____ **End Post:** _____

Length: 0.14 mi

RIN: Hillside

Road Section: Hillside - 2

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: OK section. Recently smooth ride. Edge/Alligator precedent well established swales.

Condition

			None	Low	Medium	High
			←	Extent	→	
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16
Road Name: Holly Lane
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24 **ft**
Shoulder Width: 2-3 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: good.

RIN: Holly
Road Section: Holly -1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____
Length: 0.2 mi.

Comments: Recently paved. Like-new condition

Condition

			None	Low	Medium	High
				←	Extent	→
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 10/19/16
Road Name: Hughes Lane
Seq. No.: 1
From _____ **To** _____
No. Lanes 2 **Width:** 22 **ft**
Shoulder Width: 2-4 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: good

RIN: Hughes
Road Section: Hughes-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____
Length: 115 LF

Comments: Recently new. Very short road serving 2 duplexes. Community parking area: 20'x50' on north side

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16
Road Name: Ireland Way
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24.5 ft
Shoulder Width: 2-4 ft
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: good

Mile Post: _____ **End Post:** _____
Length: 0.08mi

RIN: Ireland
Road Section: Ireland-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Fairly new road. Few small point defects – 1 long crack at cul-de-sac joint., couple edge cracks (small). Good drain sealing.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16

Road Name: Lane Avenue

Seq. No.: ____

From ____ **To** ____

No. Lanes 2 **Width:** 24 **ft**

Shoulder Width: – **ft**

Shoulder: (Natural) Gravel

Gravel Backing: Yes (No)

Shoulder Description: grass in/lawn

RIN: Lane

Road Section: Lane-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: 1 (2) 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: ____ **End Post:** ____

Length: 0.14 mi

Comments: Poor condition – not crumbling but numerous cracks of all types. No swales, depressions, some rutting → poor drain, water stays on pavement in some areas. Reclaim/Reconstruct and upgrade drainage.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1		3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)				1		3
				Good	Fair	Poor
Drainage				1	2	

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/15/16

Road Name: Liam's Court

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 24 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: Yes (No)

Shoulder Description: grass w/ grass growing, below pavement level

Mile Post: _____ **End Post:** _____

Length: 0.1 mi

RIN: Liams

Road Section: Liams - 1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Edge cracking nearly full length. Some areas where runoff cannot get off edge of road. Constant amount of long/trans. cracking throughout. Areas of ⊄ cracking.

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/20/16

RIN: Maple

Road Name: Maple Drive + Maple Drive Extension

Road Section: Maple -1

Seq. No.: _____

Maintenance Div.: Greenland Highway Dept.

From _____ **To** _____

Jurisdiction: Greenland, New Hampshire

No. Lanes 2 **Width:** 23-24 **ft**

Shoulder Width: 0-4 **ft**

Class: V

Shoulder: Natural (Gravel)

Traffic: (1) 2 3 4 5

Gravel Backing: Yes (No)

Population Density: 1 (2) 3 4 5

Shoulder Description: mostly gravel, some areas grass in — lower than pavement surface.

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____

Length: 0.7mi

Comments: Fair condition. Trans. cracks consistent throughout — creates slightly bumpy ride. Drainage swales present - good. Edge cracking pretty much on at least one side of road for full length.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16

Road Name: Maya Way

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 22.5 **ft**

Shoulder Width: 4 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: good

RIN: Maya

Road Section: Maya - 1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____

Length: 0.09mi

Comments: Recently constructed. Like-new

Condition

			None	Low	Medium	High
				←	Extent	→
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	N/A	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	N/A	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	N/A	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			N/A	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/16/16

Road Name: McIntosh Way

Seq. No.: _____

From _____ **To** _____

No. Lanes _____ **Width:** 24 **ft**

Shoulder Width: 2-4 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: Yes No

Shoulder Description: crab grass growing through gravel, up to roadway

Mile Post: _____ **End Post:** _____

Length: 0.3mi

RIN: McIntosh

Road Section: McIntosh-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Similar to Allen Farm. Trans. cracks more severe (thick), not as bad of alligators or edge cracking, but they are still present. Seems like trans. cracks are almost evenly spaced. Shape still in tact, except where ℄ cracks are present. Edges decent.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7		9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/30/16
Road Name: McShane
Seq. No.: _____
From Pickering Brook **To** Meadow Ln
No. Lanes 2 **Width:** 24 **ft**
Shoulder Width: 0-2 **ft**
Shoulder: (Natural) (Gravel)
Gravel Backing: Yes (No)
Shoulder Description: grown in majority

RIN: McShane
Road Section: McShane-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____
Length: 0.05 mi

Comments: Few defects – all types of cracking. Water can't get off EOP some places

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/30/16
Road Name: McShane Avenue
Seq. No.: _____
From Newington Rd. **To** Meadow Ln.
No. Lanes 2 **Width:** 26 **ft**
Shoulder Width: 0-2 **ft**
Shoulder: (Natural) Gravel
Gravel Backing: Yes (No)
Shoulder Description: grass

Mile Post: _____ **End Post:** _____
Length: 0.11 mi

RIN: McShane
Road Section: McShane - 2
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Recently paved. No swales. Some areas may be difficult to get water off. @ cracking (Minor) & edge (Minor)

Condition

			None	Low	Medium	High
				← Extent →		
Alligator Cracking			No Defects	<10%	10-30%	>30%
	Severity	Low		1	2	3
		Medium		4	5	6
		High		7	8	9
Long/Trans Cracking			No Defects	<10%	10-30%	>30%
	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
Edge Cracking			No Defects	<10%	10-30%	>30%
	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
Patch/Pothole			No Defects	1	2	3
Roughness				Good	Fair	Poor
					2	3
Rutting (Wheel)				Good	Fair	Poor
					2	3
Drainage				Good	Fair	Poor
					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/30/16

Road Name: Meadow Lane

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 26 **ft**

Shoulder Width: N/A **ft**

Shoulder: Natural Gravel

Gravel Backing: Yes No

Shoulder Description: Curb (angled)

RIN: Meadow

Road Section: Meadow-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____

Length: 0.27mi

Comments: Recently paved. Great condition. closed drain.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			✓	1	2	3
				Good	Fair	Poor
Roughness				✓	2	3
				Good	Fair	Poor
Rutting (Wheel)				✓	2	3
				Good	Fair	Poor
Drainage				✓	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 7/2/16

Road Name: Meaghan Way

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 24 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: Natural Gravel

Gravel Backing: Yes No

Shoulder Description: some areas gravel, some grass

Mile Post: _____ **End Post:** _____

Length: _____

RIN: Meag

Road Section: Meag-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: 1 2 3 4 5

Population Density: 1 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Average - Good condition, smooth. No exceptional cracking, but present in some areas.

Condition

			None	Low	Medium	High
				← Extent →		
Alligator Cracking			No Defects	<10%	10-30%	>30%
	Severity	Low	0	1	2	3
		Medium		4	[illegible]	6
		High		7	8	9
Long/Trans Cracking			No Defects	<10%	10-30%	>30%
	Severity	Low	0	1	2	3
		Medium		4	[illegible]	6
		High		7	8	9
Edge Cracking			No Defects	<10%	10-30%	>30%
	Severity	Low	0	1	[illegible]	3
		Medium		4	5	6
		High		7	8	9
Patch/Pothole			No Defects			
			[illegible]	1	2	3
Roughness				Good	Fair	Poor
				1	[illegible]	3
Rutting (Wheel)				Good	Fair	Poor
				[illegible]	2	3
Drainage				Good	Fair	Poor
				[illegible]	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/17/16

Road Name: Melvin Road

Seq. No.: ____

From ____ **To** ____

No. Lanes 2 **Width:** 24.5 **ft**

Shoulder Width: 0-1 **ft**

Shoulder: (Natural) Gravel

Gravel Backing: Yes (No)

Shoulder Description: virtually non-existent

Mile Post: ____ **End Post:** ____

Length: 0.2mi

RIN: Melvin

Road Section: Melvin -1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Much of ℄ is failing due to alligators. Most long/trans. cracking has grown into alligator. Several areas of cracking across roadway create bumpy drive. Edge cracking bad in some areas. ~25% cracking has been sealed.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7		9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 7/2/16

Road Name: Moulton Avenue

Seq. No.:

From Post Road **To** GPS pt. 620

No. Lanes 2 **Width:** 26 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: Natural Gravel

Gravel Backing: Yes (No)

Shoulder Description: South side has some angled curb, North is natural or paved

Mile Post: _____ **End Post:** _____

Length: 0.11 mi.

RIN: Moulton

Road Section: Moulton - 1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: 1 (2) 3 4 5

Population Density: 1 (2) 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: All crack types throughout. Not falling apart, but several defects observed. Ride isn't too rough, drainage is closed and open, should be assessed further — no swales, only ICB observed

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0		2	3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16
Road Name: Maulton Avenue
Seq. No.: _____
From GPS pt. 620 **To** around circle
No. Lanes 2 **Width:** 25 **ft**
Shoulder Width: 2-4 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: good for most part, some grass in areas
Mile Post: _____ **End Post:** _____
Length: 0.5mi

RIN: Maulton
Road Section: Maulton-2
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: 1 (2) 3 4 5
Population Density: 1 (2) 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Recently redone like-new condition

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			✓	1	2	3
				Good	Fair	Poor
Roughness				✓	2	3
				Good	Fair	Poor
Rutting (Wheel)				✓	2	3
				Good	Fair	Poor
Drainage				✓	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16

Road Name: Nantucket Place

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 24 **ft**

Shoulder Width: 2-3 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: mostly grass in, but gravel present under weed/grass

Mile Post: _____ **End Post:** _____

Length: 0.25mi

RIN: Nantucket

Road Section: Nantucket-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Even distribution of all types of cracking. Smooth ride except for when driving over crack areas. Some depressions in areas of alligator cracking. Good shape, water gets off road.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1		3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1		3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1		3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16
Road Name: Niblick Lane
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24 **ft**
Shoulder Width: N/A **ft**
Shoulder: Natural Gravel
Gravel Backing: Yes No
Shoulder Description: angled curbing

Mile Post: _____ **End Post:** _____
Length: 0.5mi

RIN: Niblick
Road Section: Niblick-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (0) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Fairly good condition. Few areas of extensive alligatoring — caused depression in ℄. Edge cracking due to curb settling prominent throughout. Smooth ride considering. Closed drainage (hence curb).

Condition

			None	Low	Medium	High
				← Extent →		
Alligator Cracking			No Defects	<10%	10-30%	>30%
	Severity	Low	0	1	2	3
		Medium		4	[illegible]	6
		High		7	8	9
Long/Trans Cracking			No Defects	<10%	10-30%	>30%
	Severity	Low	0	1	[illegible]	3
		Medium		4	5	6
		High		7	8	9
Edge Cracking			No Defects	<10%	10-30%	>30%
	Severity	Low	0	1	2	[illegible]
		Medium		4	5	6
		High		7	8	9
Patch/Pothole			No Defects			
			0	1	2	3
Roughness				Good	Fair	Poor
				[illegible]	2	3
Rutting (Wheel)				Good	Fair	Poor
				[illegible]	2	3
Drainage				Good	Fair	Poor
				[illegible]	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/8/16
Road Name: October Drive
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24.5 **ft**
Shoulder Width: N/A **ft**
Shoulder: (Natural) Gravel
Gravel Backing: Yes (No)
Shoulder Description: grass into lawns

Mile Post: _____ **End Post:** _____
Length: 0.065 mi.

RIN: October
Road Section: October-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Decent condition. Minor cracking of all types spread throughout. No swales, drainage may not get water off roadway enough.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	~~1~~	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		~~4~~	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	~~1~~	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			~~0~~	1	2	3
				Good	Fair	Poor
Roughness				~~1~~	2	3
				Good	Fair	Poor
Rutting (Wheel)				~~1~~	2	3
				Good	Fair	Poor
Drainage				1	~~2~~	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/15/16
Road Name: Orchard Hill Road
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 25 **ft**
Shoulder Width: 2 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: gravel - fairly new

RIN: Orchard
Road Section: Orchard - 1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____
Length: 0.3 mi.

Comments: Fairly new pavement / shoulder, good swales on both sides of roadway

Condition

			None	Low	Medium	High
				← Extent →		
Alligator Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
Long/Trans Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
Edge Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
Patch/Pothole			No Defects	1	2	3
Roughness				Good	Fair	Poor
				0	2	3
Rutting (Wheel)				Good	Fair	Poor
				0	2	3
Drainage				Good	Fair	Poor
				0	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/30/16
Road Name: Palm Drive
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 23.5-24.5 ft
Shoulder Width: 0-3 ft
Shoulder: Natural (Gravel)
Gravel Backing: Yes (No)
Shoulder Description: grass in most areas, no backing
Mile Post: _____ **End Post:** _____
Length: 0.5

RIN: Palm
Road Section: Palm-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: 1 (2) 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Smooth ride. Most defect is trans. cracks consistent throughout (not too many, though). Slight alligator where some trans. cracks are. Minor edge cracking. Drainage swales well established – water gets off road

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/8/16

Road Name: Park Avenue

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 19.5 **ft**

Shoulder Width: 0-3 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: western side established, right grown in

Mile Post: _____ **End Post:** _____

Length: 0.2mi

RIN: Park

Road Section: Park-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Decent condition. Smooth ride. Biggest issue is western edge cracks. consistently present full length. Likely due to poor drainage on that side of roadway.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/30/16
Road Name: Pickering Brook Drive
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24 **ft**
Shoulder Width: 0-2 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: Yes (No)
Shoulder Description: mostly grass in of grass up to EOP
Mile Post: _____ **End Post:** _____
Length: 0.18mi

RIN: P. Brook
Road Section: P. Brook-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: decently smooth ride. Alligator and Edge prevalent. Good swales.

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7		9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/8/16
Road Name: Pinewood Circle
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24.5 **ft**
Shoulder Width: 0-3 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: good, some grass into lawn

Mile Post: _____ **End Post:** _____
Length: 0.11 mi

RIN: Pinewood
Road Section: Pinewood-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Recently constructed

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 10/4/16
Road Name: Portsmouth Avenue
Seq. No.: 1
From Rte.33 **To** Post Rd (Rte 151)
No. Lanes 2 **Width:** _____ ft
Shoulder Width: N/A ft
Shoulder: Natural Gravel
Gravel Backing: Yes No
Shoulder Description: curb.

Mile Post: _____ **End Post:** _____
Length: 0.14mi

RIN: Portsmouth
Road Section: Portsmouth-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: 1 2 (3) 4 5
Population Density: 1 (2) 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: seemingly recent rehab. closed drainage. straight curb full length on southern side w/ sidewalk. ~80% northern side curb. Minor cracking throughout

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	[illegible]	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		[illegible]	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	[illegible]	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	[illegible]	2	3
				Good	Fair	Poor
Roughness				[illegible]	2	3
				Good	Fair	Poor
Rutting (Wheel)				[illegible]	2	3
				Good	Fair	Poor
Drainage				[illegible]	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 10/12/16

Road Name: Portsmouth Avenue

Seq. No.: _____

From Ports. Town Line **To** Newington Rd.

No. Lanes 2 **Width:** 25 **ft**

Shoulder Width: 0-4 **ft**

Shoulder: Natural Gravel

Gravel Backing: Yes No

Shoulder Description: varies. mostly gravel, but lower than pavement elevation.

Mile Post: _____ **End Post:** _____

Length: 0.45mi.

RIN: Portsmouth

Road Section: Portsmouth - 2

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: 1 2 3 4 5

Population Density: 1 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Fair condition. Most prevalent defect is edge cracking. Other cracks present throughout. Drainage swales could be established.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7		9
			No Defects			
Patch/Pothole			0		2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/8/16
Road Name: Red Oak Drive
Seq. No.:
From _____ **To** _____
No. Lanes 2 **Width:** 24.5 **ft**
Shoulder Width: 2.3 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: good

RIN: Red Oak
Road Section: Red Oak-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____
Length: 305 LF

Comments: Recently re-paved. good condition

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	na	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	na	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	na	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			na	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/8/16

Road Name: Ridgecrest Drive

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 24.5 **ft**

Shoulder Width: 0-3 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: Some grass in, but good condition

Mile Post: _____ **End Post:** _____

Length: 0.9 mi.

RIN: Ridgecrest

Road Section: Ridgecrest-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Recently constructed

Condition

			None	Low	Medium	High
				← Extent →		
Alligator Cracking			No Defects	<10%	10-30%	>30%
	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
Long/Trans Cracking			No Defects	<10%	10-30%	>30%
	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
Edge Cracking			No Defects	<10%	10-30%	>30%
	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			✓	1	2	3
				Good	Fair	Poor
Roughness				✓ 1	2	3
				Good	Fair	Poor
Rutting (Wheel)				✓ 1	2	3
				Good	Fair	Poor
Drainage				✓ 1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16

Road Name: Riverside Lane

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 22 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: decent condition, established

Mile Post: _____ **End Post:** _____

Length: 0.11mi.

RIN: Riverside

Road Section: Riverside-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Good condition. rule on one side (east).

Condition

			None	Low	Medium	High
				← Extent →		
Alligator Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
Long/Trans Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
Edge Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
Patch/Pothole			No Defects			
			0	1	2	3
Roughness				Good	Fair	Poor
				1	2	3
Rutting (Wheel)				Good	Fair	Poor
				1	2	3
Drainage				Good	Fair	Poor
				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16

Road Name: Ralston Ave ne

Seq. No.: ____

From _____ **To** _____

No. Lanes 2 **Width:** 17.5 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: (Natural) (Gravel)

Gravel Backing: Yes (No)

Shoulder Description: _____

RIN: Ralston

Road Section: Ralston-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____

Length: 0.07 mi.

Comments: North edge crumbling away in almost full length of roadway. Average. Long/trans. and alligator cracks — not terrible but present. Edge troubles likely due to poor drainage — water can't get off EOP.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 10/12/16
Road Name: Sage Lane
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 22 **ft**
Shoulder Width: N/A **ft**
Shoulder: Natural Gravel
Gravel Backing: Yes No
Shoulder Description: curb.

Mile Post: _____ **End Post:** _____
Length: 0.09mi

RIN: Sage
Road Section: Sage-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: 0 2 3 4 5
Population Density: 1 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Under construction. Binder course installed. Angled curb. both sides full length. Appears there will be paved sidewalk on one side, full length.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low		1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low		1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low		1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/30/16
Road Name: Sanderson Road
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24 ft
Shoulder Width: 0-2 ft
Shoulder: Natural Gravel
Gravel Backing: Yes (No)
Shoulder Description: grass in w/ grass up to EOP
Mile Post: _____ **End Post:** _____
Length: 0.25mi.

RIN: Sanderson
Road Section: Sanderson-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: several trans cracks → alligator occuring off those. Edge cracks fairly consistent throughout. No swales, but crown is OK. Reclaim may be best option.

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/8/16
Road Name: September Drive
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24.5 **ft**
Shoulder Width: 0-3 **ft**
Shoulder: (Natural) Gravel
Gravel Backing: Yes (No)
Shoulder Description: mostly grown into lawns

Mile Post: _____ **End Post:** _____
Length: 0.61 mi

RIN: September
Road Section: September 1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Decent condition. Main issue is long/trans cracks - some area of ⊄ cracking. Drain good - swales.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	✓	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	✓	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		✓	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			✓	1	2	3
				Good	Fair	Poor
Roughness				✓	2	3
				Good	Fair	Poor
Rutting (Wheel)				✓	2	3
				Good	Fair	Poor
Drainage				✓	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/8/16

Road Name: Skyview Drive

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 24.5 **ft**

Shoulder Width: 0-3 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: good, some areas grass into lawn

Mile Post: _____ **End Post:** _____

Length: 0.6 mi.

RIN: Skyview

Road Section: Skyview-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Recently constructed

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			✓	1	2	3
				Good	Fair	Poor
Roughness				✓	2	3
				Good	Fair	Poor
Rutting (Wheel)				✓	2	3
				Good	Fair	Poor
Drainage				✓	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16
Road Name: Sleepy Hollow Drive
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24.5 **ft**
Shoulder Width: 0-4 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: Yes (No)
Shoulder Description: _____

Mile Post: _____ **End Post:** _____
Length: 0.3 mi.

RIN: S. Hollow
Road Section: S. Hollow 1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Overall good condition. ℄ undulating in a few stretches. Few point areas of alligators and/or Long./trans. Drainage decent - some areas where water may not get off Rd easily.

Condition

			None	Low	Medium	High
			←	Extent	→	
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1		3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/20/16
Road Name: Sophia Way
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 22.5 ft
Shoulder Width: 2.5 ft
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: good.

Mile Post: _____ **End Post:** _____
Length: 0.17mi.

RIN: Sophia
Road Section: Sophia-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Recently constructed. Good condition — Good drain.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			✓	1	2	3
				Good	Fair	Poor
Roughness				✓ 1	2	3
				Good	Fair	Poor
Rutting (Wheel)				✓ 1	2	3
				Good	Fair	Poor
Drainage				✓ 1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16
Road Name: Spring Hill Road
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24-25 ft
Shoulder Width: 0-2 ft
Shoulder: (Natural) (Gravel)
Gravel Backing: Yes (No)
Shoulder Description: mostly part of lawn now. - gravel center
Mile Post: _____ **End Post:** _____
Length: 0.2mi

RIN: Spring
Road Section: Spring-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Several of all types of cracks - just not very thick. swales/ lawn slopes away from roadway, but some areas may not get water off EOP. Rides OK for amount of cracking. Reclam/ swale work/ fabric?

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	~~9~~
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	~~3~~
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	~~6~~
		High		7	8	9
			No Defects			
Patch/Pothole			~~0~~	1	2	3
				Good	Fair	Poor
Roughness				1	~~2~~	3
				Good	Fair	Poor
Rutting (Wheel)				~~1~~	2	3
				Good	Fair	Poor
Drainage				1	~~2~~	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/8/16
Road Name: Stone Meadow Way
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24 **ft**
Shoulder Width: 2-3 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: good

Mile Post: _____ **End Post:** _____
Length: 0.11mi

RIN: Stone Meadow
Road Section: Stone Meadow-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Seemingly Recently constructed. good condition

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	✓	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	✓	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			✓ 0	1	2	3
				Good	Fair	Poor
Roughness				✓ 1	2	3
				Good	Fair	Poor
Rutting (Wheel)				✓ 1	2	3
				Good	Fair	Poor
Drainage				✓ 1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/16/16

Road Name: Stratham Lane

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 21 **ft**

Shoulder Width: _____ **ft**

Shoulder: (Natural) Gravel

Gravel Backing: Yes (No)

Shoulder Description: lacks backing, grown w/ grass & weeds

Mile Post: _____ **End Post:** _____

Length: 0.25 mi.

RIN: Stratham

Road Section: Stratham -1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: 1 (2) 3 4 5

Population Density: 1 (2) 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: cut-thru to Stratham from Dearborn Rd. Light long./trans. cracking. Long. cracking mainly on ℄. Edge cracking common on both sides. Some areas where drainage does not get off EOP.

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low		1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/20/16
Road Name: Sunnyside Drive
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 25 **ft**
Shoulder Width: 0-4 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: Some areas w/ well established gravel, others not.
Mile Post: _____ **End Post:** _____
Length: 0.35 mi.

RIN: Sunnyside
Road Section: Sunnyside-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: 1 (2) 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Fair condition, trans. throughout. Drainage is good - swales. Edge is crumbling in a few areas.

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 7/2/16
Road Name: Sunset Drive
Seq. No.: ____
From ____ **To** ____
No. Lanes 2 **Width:** 23 **ft**
Shoulder Width: 0-2 **ft**
Shoulder: (Natural) Gravel
Gravel Backing: Yes (No)
Shoulder Description: almost non-existent

Mile Post: ____ **End Post:** ____
Length: 0.13mi

RIN: Sunset
Road Section: Sunset-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Fairly decent road. Consistent amount of cracks throughout. Trans/Alligators mainly. Water can't get off road in some areas.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	[illegible]	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	[illegible]	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	[illegible]	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	[illegible]	2	3
				Good	Fair	Poor
Roughness				[illegible]	[illegible]	3
				Good	Fair	Poor
Rutting (Wheel)				[illegible]	2	3
				Good	Fair	Poor
Drainage				1	[illegible]	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16

Road Name: Thompson Brook Circle

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 24 **ft**

Shoulder Width: 3-4 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: good

Mile Post: _____ **End Post:** _____

Length: 0.12mi

RIN: T. Brook

Road Section: T. Brook -1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: recently finished road. slight edge cracking in a few areas. Swales established

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	~~0~~	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	~~0~~	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	~~1~~	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			~~0~~	1	2	3
				Good	Fair	Poor
Roughness				~~1~~	2	3
				Good	Fair	Poor
Rutting (Wheel)				~~1~~	2	3
				Good	Fair	Poor
Drainage				~~1~~	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/30/16

Road Name: Tide Mill Road

Seq. No.:

Southern Section

No. Lanes 2 **Width:** 14-16 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: Yes No

Shoulder Description: non-existent to low gravel presence; some grass in

Mile Post: _____ **End Post:** _____

Length: 0.1mi.

RIN: Tide Mill

Road Section: Tide Mill-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Short segment. Several defects for such small section. Edge humble, w/ long/trans. fairly frequent as well. Edge and Alligator conjoining. Water cannot get off road in some sections.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7		9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	
			No Defects			
Patch/Pothole			0	1		3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1	2	

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 8/15/16

Road Name: Tidewater Farm Road

Seq. No.: ____

From ____ **To** ____

No. Lanes ____ **Width:** 24 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: Yes (No)

Shoulder Description: gravel w/ grass growing through, lower than road surface.

Mile Post: ____ **End Post:** ____

Length: 1.1 mi.

RIN: Tidewater

Road Section: Tidewater -1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Consistent medium-grade cracking of all types. Ride is fairly smooth except for when going over trans. cracks. Wheel rutting present in some areas — areas of poor drainage potentially keeping runoff on road or on edge of road.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects			
Patch/Pothole			0		2	3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)				1		3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 11/18/16

Road Name: Town Square

Seq. No.: _____

From Portsmouth Ave **To** Police Driveway

No. Lanes 2 **Width:** 24-26 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: (Natural) Gravel

Gravel Backing: Yes No

Shoulder Description: only on west side – mainly natural

Mile Post: _____ **End Post:** _____

Length: 0.08 mi.

RIN: Town

Road Section: Town-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Initial driveway (entrance) recently done – Good. Rest of section condition graded below. Open drain to swale on west – lip causing low flow to not get off edge.

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 11/11/16

Road Name: Town Square

Seq. No.: _____

From Police Driveway **To** Ball Field

No. Lanes 2 **Width:** 19-20 **ft**

Shoulder Width: 0-3 **ft**

Shoulder: (Natural) (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: mix of gravel backed and natural

Mile Post: _____ **End Post:** _____

Length: 0.12 mi

RIN: Town

Road Section: Town 2

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Decent condition. Open drain - fair. Near - full length long. crack @ joint of widened area.
→ some sediment on roadway, is water not escaping?

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16
Road Name: Tuttle Lane
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 22-23 **ft**
Shoulder Width: 2-3 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: mostly good gravel backing
Mile Post: _____ **End Post:** _____
Length: 0.6mi

RIN: Tuttle
Road Section: Tuttle-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: 1 (2) 3 4 5
Population Density: 1 2 (3) 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: ℄ cracking is biggest deficiency. Few areas of alligator. Drain inlets - good in some areas, others are poor. Smooth ride.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium			5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1		3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness					2	3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage				1		3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16

Road Name: Valhalla Drive

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 25 **ft**

Shoulder Width: 0-4 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: Yes (No)

Shoulder Description: gravel under weeds/grass in most areas. low

Mile Post: _____ **End Post:** _____

Length: 0.09 mi

RIN: Valhalla

Road Section: Valhalla-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: OK condition. Cracks consistent throughout. Good amount of cracks sealed — thru. good side slopes — water can get off.

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4		6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1		3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole				1	2	3
				Good	Fair	Poor
Roughness				1		3
				Good	Fair	Poor
Rutting (Wheel)					2	3
				Good	Fair	Poor
Drainage					2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 10/12/16

Road Name: Van Etten Drive

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 23 **ft**

Shoulder Width: 2-4 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: good

RIN: Van Etten

Road Section: Van Etten-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Mile Post: _____ **End Post:** _____

Length: 0.3mi.

Comments: Recently constructed/ houses still being built. - could still be binder course.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16

Road Name: Vardon Lane

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 24 **ft**

Shoulder Width: 24 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: low in some spots, but otherwise good condition

Mile Post: _____ **End Post:** _____

Length: 0.4mi

RIN: Vardon

Road Section: Vardon-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: smooth ride, fairly new. Few spot long/trans and edge cracks → grass/weeds through edge cracks

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	✓	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	✓	6
		High		7	8	9
			No Defects			
Patch/Pothole			✓	1	2	3
				Good	Fair	Poor
Roughness				✓	2	3
				Good	Fair	Poor
Rutting (Wheel)				✓	2	3
				Good	Fair	Poor
Drainage				✓	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16
Road Name: Vernita Lane
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24 **ft**
Shoulder Width: 2-3 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: good condition, section of paved (low)
Mile Post: _____ **End Post:** _____
Length: 0.12 mi

RIN: Vernita
Road Section: Vernita-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Good condition. Water gets off due to good slope and shoulders.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low		1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0		2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/20/16
Road Name: Weeks Avenue
Seq. No.: _____
From _____ **To** _____
No. Lanes 1? **Width:** ~13 **ft**
Shoulder Width: N/A **ft**
Shoulder: (Natural) Gravel
Gravel Backing: Yes (No)
Shoulder Description: no shoulder

Mile Post: _____ **End Post:** _____
Length: 0.07mi

RIN: Weeks
Road Section: Weeks-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: more of a driveway to one lot than a road. Poor condition – nothing is major problem. likely causing road to be poorly drained – sediment deposits on roadway. Grass growing through cracks.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/2/16

Road Name: Willowbrook Avenue

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 16.5-20 **ft**

Shoulder Width: 0-2 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: Yes (No)

Shoulder Description: needs reestablishment

Mile Post: _____ **End Post:** _____

Length: 0.27 mi

RIN: Willowbrook

Road Section: Willowbrook-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: 1 2 (3) 4 5

Population Density: 1 2 (3) 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: V. Poor condition. Edge is crumbling away in many areas. Long/Trans + Alligator throughout as well. V. Poor. drainage likely major cause. Full Reconstruction needed.

Condition

			None	Low	Medium	High
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	
			No Defects			
Patch/Pothole			0	1	2	
				Good	Fair	Poor
Roughness				1	2	
				Good	Fair	Poor
Rutting (Wheel)				1	2	
				Good	Fair	Poor
Drainage				1	2	

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/8/16
Road Name: Windsor Green Road
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24.5 **ft**
Shoulder Width: 0-3 **ft**
Shoulder: Natural (Gravel)
Gravel Backing: (Yes) No
Shoulder Description: grown in (lawn) mostly, but gravel under.
Mile Post: _____ **End Post:** _____
Length: 0.3 mi.

RIN: Windsor
Road Section: Windsor -1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: (1) 2 3 4 5
Population Density: (2) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: good condition. some drain swales in some areas, other areas drainage adequate as natural swales

Condition

			None	Low	Medium	High
				← Extent →		
Alligator Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low	✓	1	2	3
		Medium		4	5	6
		High		7	8	9
Long/Trans Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low	0	✓	2	3
		Medium		4	5	6
		High		7	8	9
Edge Cracking	Severity		No Defects	<10%	10-30%	>30%
		Low	0	✓	2	3
		Medium		4	5	6
		High		7	8	9
Patch/Pothole			No Defects			
			✓	1	2	3
Roughness				Good	Fair	Poor
				✓	2	3
Rutting (Wheel)				Good	Fair	Poor
				✓	2	3
Drainage				Good	Fair	Poor
				✓	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 11/11/16

Road Name: Winter Way

Seq. No.: _____

From _____ **To** _____

No. Lanes 1 **Width:** 12.5 **ft**

Shoulder Width: 2 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: (Yes) No

Shoulder Description: good

Mile Post: _____ **End Post:** _____

Length: 0.14mi.

RIN: Winter

Road Section: Winter-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Cut-through between neighborhoods. Not open @ all times. Good condition. Open drain.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	9
			No Defects			
Patch/Pothole			0	1	2	3
				Good	Fair	Poor
Roughness				1	2	3
				Good	Fair	Poor
Rutting (Wheel)				1	2	3
				Good	Fair	Poor
Drainage				1	2	3

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 9/8/16

Road Name: Witham Farm Road

Seq. No.: _____

From _____ **To** _____

No. Lanes 2 **Width:** 24-25 **ft**

Shoulder Width: 0-4 **ft**

Shoulder: Natural (Gravel)

Gravel Backing: Yes (No)

Shoulder Description: established in some areas (curves), grass in (lawn) in others

Mile Post: _____ **End Post:** _____

Length: 0.09mi.

RIN: Witham

Road Section: Witham-1

Maintenance Div.: Greenland Highway Dept.

Jurisdiction: Greenland, New Hampshire

Class: V

Traffic: (1) 2 3 4 5

Population Density: (1) 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Alligator along ℄ almost full-length. Trans/long present throughout as well, along w/ edge; but not as severe. Drainage swales present, likely a sub-base/compaction issue.

Condition

			None	Low	Medium	High
				← Extent →		
			No Defects	<10%	10-30%	>30%
Alligator Cracking	Severity	Low	0	1	2	3
		Medium		4	5	6
		High		7	8	slow
			No Defects	<10%	10-30%	>30%
Long/Trans Cracking	Severity	Low	0	1	2	3
		Medium		4	max	6
		High		7	8	9
			No Defects	<10%	10-30%	>30%
Edge Cracking	Severity	Low	0	1	2	3
		Medium		4	5	max
		High		7	8	9
			No Defects			
Patch/Pothole			max	1	2	3
				Good	Fair	Poor
Roughness				1	max	3
				Good	Fair	Poor
Rutting (Wheel)				max	2	3
				Good	Fair	Poor
Drainage				max	2	3

APPENDIX E

2016 MASTER CONDITIONS SUMMARY

Master Conditions Summary

Town of Greenland

Dec-16

Road Name	Section ID	Section Beginning	Section End	Section Length (mi)	Traffic Volume	Paved Width (LF)	Shoulder Width (LF)	Shoulder Description	Drainage Inventory: Drainage Condition	Drainage Ditches Y	Drainage Ditches N	Drainage Ditches %	Catch Basins (#)	Culverts (#)	Closed Drainage Y	Closed Drainage N	Closed Drainage %	Curbing (LF)	Guardrail (LF)	Guardrail Condition	Underground Utilities E/T/C	Underground Utilities Water	Tree Work Required Removal	Tree Work Required Limbing	PCI Rating	Priority Rating
Alden Ave	Alden-1			0.09	2	24	2-4	50/50 natural/gravel	closed drain on west side, east side poor		x		1	1	x		40					x			61	
Allen Farm Road	Allen-1			0.35	1	24	2-4	natural	swales present, but shallow	x		80		2		x					x				58	
Anne's Lane	Anne's-1			0.07	1	24	0-1	natural-grass	poor		x					x						x			67	
Balsam Circle	Balsam-1			0.25	1	24.5	0-3	gravel	good	x		100		2		x			100	recently new	x				100	
Barrett Farm Road	Barrett-1			0.35	1	24	4	gravel-good	good, swales in good shape	x		100		1		x					x				93	
Bayridge Road	Bayridge-1	Dearborn Rd	Culdesac end	0.9	1	24	0-2	natural, almost non-exist	fair condition, areas w/out swales	x		70		1		x					x (50%)				49	
Bayshore Drive	Bayshore-1	Caswell Dr	Loop Section	0.1	1	24	2	gravel-good	satisfactory, decent side slopes get water off road		x					x					x			x	100	
Bayshore Drive	Bayshore-2	Loop	Section	0.55	1	24	0-2	natural, grown in or eroded	fair condition, areas w/out swales	x		40		4		x								x	29	
Bayside Road	Bayside-1	Rte. 33	GPS Pt. 874	1.5	3	22.5	0-2	poor - low, overgrown, etc.	poor - lack of swales, areas with no side slopes	x		10		4		x							x	x	41	
Bayview Terrace	Bayview-1			0.07	1	18	0	no shoulder	poor		x					x									80	
Berry Farm Lane	Berry-1			0.12	1	25	0-2	gravel	decent, side slopes get water off road	x	50			1		x								x	62	
Boxwood Path	Boxwood-1			0.35	1	22	0	angled curb	good, closed		x		13, 5 DMHs		x		100	3200			x	x			100	
Bramber Valley Road	Bramber-1	Portsmouth Ave	Cherry Hill Drive	0.4	1	22	0	angled curb	good, closed		x		6, 2 DMHs		x		100	4100	250	recently new	x	x			100	
Brown Avenue	Brown-1			0.17	1	25.5	1-2	paved gutter	paved gutter down edge of pavement	x		30				x						x			52	
Carlton Drive	Carlton-1			0.04	1	24	0-2	natural-grassy	decent, side slopes get water off road		x			1		x								x	79	
Caswell Drive	Caswell-1			0.65	1	24	2	gravel-good	good	x		20	28, 1 DMH	2	x		80				x				100	
Cemetery Lane	Cemetery-1	Portsmouth Ave	fork in the road	0.18	1	20-21	0	none	flows to Portsmouth Ave. or off to east		x					x			300			x			71	
Cherry Hill Drive	Cherry Hill-1			0.5	1	22	0	angled curb	closed drain		x		11, 4 DMHs		x		100	3000			x	x			100	
Charles Drive	Charles-1			0.25	1	24.5	2-4	gravel	good	x		100		3		x			70	good	x				95	
Coastal Way	Coastal-1			0.25	1	24	0-4	gravel/natural	off-road swales present, water can't escape					1		x									35	
Coombs Farm Road	Coombs-1			0.2	1	24	0-4	gravel , decent	good - swales	x		100		2		x									74	
Cortland Drive	Cortland-1			0.15	1	24	0-2	gravel/natural	decent, swales most of road length	x		85		3		x									62	
Cushman Way	Cushman-1			0.18	1	23	2-3	gravel-good	swales present	x		100	1	1	x		5								100	
Dearborn Road	Dearborn-1			0.85	3	22	1-3	gravel-good	good	x		30		3	x		10								100	
Depot Road	Depot-1			0.27	1	18	2-4	gravel; good	fair							x									100	
Downs Ave	Downs-1			0.1	1	21	0	natural	poor		x					x						x			80	
Drake Drive	Drake-1			0.15	1	24.5	1-3	gravel	appears sufficient - side slopes away from road		x			1		x									88	
Eagle Court	Eagle-1			0.2	1	24	2-3	gravel-decent	good	x		100		1		x					x				74	
Fairview Terrace	Fairview-1			0.12	1	12	0-2	almost non-existent	drainage compromised		x					x									38	
Fairway Drive	Fairway-1			0.15	1	26	0-2	natural-grass	no drainage, no swales		x		1	3	x		5					x			59	
Falls Way	Falls-1			0.65	1	25-30	0-3	gravel	good - mix of closed and open	x		80		2	x		5	1200	250	recently new	x				96	
Great Bay Drive East	GB East-1			0.19	1	15	2	gravel, established	sediment deposit, poor drainage, water can't		x					x								x	86	
Great Bay Drive West	GB West-1			0.25	1	14-15	0-2	natural, not established	poor, culverts eroding		x			3		x							x	x	7	
Great Bay Drive	Great-1			0.13	1	17-20	0-3	gravel/natural	water can escape in most areas		x					x								x	22	
Grove Street	Grove-1			0.51	1	24	2-4	gravel	swales, side slopes decent	x		80	1, 1 DMH	7	x		10				x				54	
Hayfield Court	Hayfield-1			0.1	1	25	2-4	gravel, established	good	x		90		1		x					x				93	
Hickory Lane	Hickory-1			0.15	1	22	2-4	gravel - good	good - swales and cul de sac	x		100		1		x					x				100	
High Street	High-1			0.25	2	21	2	gravel-good	good - side slopes get water off road	x		75		2		x									96	
Hillside Drive	Hillside-1			0.28	1	26	0-2	natural, some curb	closed drainage		x		10		x		100					x			96	
Hillside Drive	Hillside-2			0.14	1	26	0-2	gravel-fairly good	established swales	x		100	5		x		100					x			65	
Holly Lane	Holly-1			0.2	1	24	2-3	gravel-good	swale underdrains southern end of roadway	x		30		1		x						x			100	
Hughes Lane	Hughes-1			0.022	1	22	2-4	gravel-good	good	x		100		1		x			25	recently new	x				100	
Ireland Way	Ireland-1			0.08	1	24.5	2-4	gravel-good	good drain swales	x		100	1		x		10				x				96	
Lane Avenue	Lane-1			0.14	1	24	0	natural	no swales-poor		x		2		x		20				x	x			38	
Liam's Court	Liam's-1			0.1	1	24	0-2	gravel	water can't escape some areas	x		90		1		x					x				65	
Maple Drive/Maple Drive Ext.	Maple-1			0.7	1	23-24	0-4	mostly gravel	swales present-good	x		100		5		x									71	
Maya Way	Maya-1			0.09	1	22.5	4	gravel-good	open drainage swales - good	x		100		2		x					x				100	
McIntosh Way	McIntosh-1			0.3	1	24	2-4	gravel	swales present - seem shallow	x		70		1		x					x				82	
McShane Avenue	McShane-1	Pickering Brk	Meadow Ln	0.05	1	24	0-2	gravel/natural	water can't escape some areas		x					x						x			77	
McShane Avenue	McShane-2	Newington Rd	Meadow Ln	0.11	1	26	0-2	natural, grass	no swales, water can't escape some areas		x					x						x			88	
Meadow Lane	Meadow-1			0.27	1	26	0	angled curb	closed drainage		x		15, 2 DMH		x		100					x			100	
Meaghan Way	Meagan-1			0.2	1	24	0-2	gravel/natural	swales present-good	x		100		1		x									71	
Meloon Road	Meloon-1			0.2	1	24.5	0-1	natural, virtually non-exist	swales present - seem shallow	x		90				x					x				51	
Moulton Avenue	Moulton-1	Post Road	GPS Pt 620	0.11	2	26	0-2	natural	closed		x		6		x		90				x	x			58	
Moulton Avenue	Moulton-2	GPS Pt 620	Around loop	0.5	2	25	2-4	gravel	good	x		80		2		x					x	x			100	
Nantucket Place	Nantucket-1			0.25	1	24	2-3	gravel	water gets off road	x		90	2	1	x		25				x				77	
Niblick Lane	Niblick-1			0.5	1	24	0	angled curbing	closed drainage		x		6, 1 DMH		x		100	4800			x				79	
October Drive	October-1			0.065	1	24.5	0	natural	no swales, not good		x					x									83	
Orchard Hill Road	Orchard-1			0.3	1	25	2	gravel-fairly new	good swales both sides	x		100		2		x					x				98	
Palm Drive	Palm-1			0.5	2	23.5-24.5	0-3	gravel	swales well established	x		70	4	1	x		50				x (50%)				85	
Park Avenue	Park-1			0.2	1	19.5	0-3	gravel	poor - western side		x					x						x			77	
Pickering Brook Drive	Pickering-1			0.18	1	24	0-2	gravel	good swales	x		100	2, 1 DMH		x		20					x			68	
Pinewood Circle	Pinewood-1			0.11	1	24.5	0-3	gravel	good	x		100		2		x			50	recently new	x				100	
Portsmouth Avenue	Portsmouth-1	Rte. 33	Post Rd. (151)	0.4	3	24	0	straight vertical curb	closed drainage		x		21, 2 DMH		x		100	1400				x			89	
Portsmouth Avenue	Portsmouth-2	Newington Rd	Portsmouth TL	0.45	3	25	0-4	mostly gravel, but low	mix of open and closed, fair condition	x		80	3		x		25					x			61	
Red Oak Drive	Red-1			0.073	1	24.5	2-3	gravel-good	good	x		100		2		x					x				100	
Ridgecrest Drive	Ridgecrest-1			0.9	1	24.5	0-3	gravel	good	x		100		7		x			150	recently new	x				100	
Riverside Lane	Riverside-1			0.11	1	22	0-2	gravel	swale on east side	x		50		2		x						x			88	
Rolston Avenue	Rolston-1			0.07	1	17.5	0-2	gravel/natural	poor-water can't escape edge		x					x						x			51	
Sanderson Road	Sanderson-1			0.25	1	24	0-2	non-existent (lawns)	no swales, crown ok		x		1	1	x		10					x			51	
Sage Lane	Sage-1			0.09	1	22	0	angled curb	closed drainage		x		3		x		100	900			x	x			100	
September Drive	September-1			0.61	1	24.5	0-3	natural	good-swales	x		100	2	2	x		?								100	
Skyview Drive	Skyview-1			0.61	1	24.5	0-3	gravel	good-swales	x		100		4		x			200	recently new	x				100	

Road Name	Section ID	Section		Section Length (mi)	Traffic Volume	Paved Width (LF)	Shoulder Width (LF)	Shoulder Description	Drainage Inventory									Curbing (LF)	Guardrail		Underground Utilities		Tree Work Required		PCI Rating	Priority Rating
		Beginning	End						Drainage Condition	Drainage Ditches			Catch Basins (#)	Culverts (#)	Closed Drainage				(LF)	Condition	E/T/C	Water	Removal	Limbing		
										Y	N	%			Y	N	%									
Sleepy Hollow Drive	Sleepy-1			0.3	1	24.5	0-4	gravel	decent - some area issues	x		90		2		x					x			x	83	
Sophia Way	Sophia-1			0.12	1	22.5	2-5	gravel-good	good drainage	x		100		3		x					x				100	
Spring Hill Road	Spring-1			0.2	1	24-25	0-2	gravel/natural	swales or lawn sloping away from road	x		40	1	1	x		5								51	
Stone Meadow Way	Stone-1			0.11	1	24	2-3	gravel-good	good	x		100		3		x					x				96	
Stratham Lane	Stratham-1			0.25	2	21	0-4	natural	some areas drainage issues	x		70				x							x	x	73	
Sunnyside Drive	Sunnyside-1			0.35	1	25	0-4	gravel	good-swales or lawns sloping away from rd	x		50		1		x					x				82	
Sunset Drive	Sunset-1			0.13	1	23	0-2	natural	some areas water can't escape	x		20	2									x			64	
Thompson Brook Circle	T. Brook-1			0.12	1	24	3-4	gravel-good	swales established	x		100		1		x					x				98	
Tide Mill Road	Tide Mill-1	southern	section	0.1	1	14-16	0-2	gravel	poor		x					x			100	wooden		x			40	
Tidewater Farm Road	Tidewater-1			1.1	1	24	0-2	gravel/natural	areas of poor drainage	x		60	1	7							x				41	
Town Square	Town-1	Portsmouth Ave	Police driveway	0.08	1	26	0-2	natural	lacking gravel backing, water can stay on EOP	x		50		1		x						x			68	
Town Square	Town-2	Police driveway	Ball field	0.12	1	20	0-3	gravel/natural	fair	x		100				x									85	
Tuttle Lane	Tuttle-1			0.6	2	22-23	2-3	gravel-mostly good	swales - some good, some poor	x		60		1		x						x	x	x	80	
Valhalla Drive	Valhalla-1			0.09	1	25	0-4	gravel	good side slopes		x			2		x								x	77	
Van Etten Way	Van-1			0.3	1	23	2-4	gravel - good	good - swales to detention pond	x		100		1		x					x				100	
Vardon Lane	Vardon-1			0.4	1	24	2-4	gravel	good	x		100	1, 1 DMH	4							x				90	
Vernita Drive	Vernita-1			0.12	1	24	2-3	gravel-good	good slope and paved shoulders for drain		x					x						x			96	
Weeks Avenue	Weeks-1			0.07	1	13	0	no shoulder	poor		x			1		x						x	x	x	25	
Willow Brook Avenue	Willow-1			0.27	3	16.5-20	0-2	gravel, needs re-establish	very poor		x		1, 2 DMH						100	fair condition			x	x	4	
Windsor Green Road	Windsor-1			0.3	1	24.5	0-3	gravel	stone & natural swales-adequate	x		100				x					x				96	
Winter Way	Winter-1			0.14	1	12.5	2-3	gravel	good	x		100				x									100	
Witham Farm Road	Witham-1			0.09	1	24-25	0-4	gravel	swales present	x		60		2		x						x			59	

APPENDIX F

PAVEMENT CONDITION INDICATOR (PCI) VALUES

Pavement Condition Indicators (Alphabetical)

Town of Greenland

Dec-16

Road Name	Section ID	Alligator Cracking	Long/Trans Cracking	Edge Cracking	Patching/Pot Holes	Roughness	Rutting	Drainage	PCI
Alden Ave	**Alden-1**	5	8	5	5	0	8	8	***61***
Allen Farm Road	**Allen-1**	5	11	8	2	8	0	8	***58***
Anne's Lane	**Anne's-1**	5	8	2	2	8	0	8	***67***
Balsam Circle	**Balsam-1**	0	0	0	0	0	0	0	***100***
Barrett Farm Road	**Barrett-1**	0	2	5	0	0	0	0	***93***
Bayridge Road	**Bayridge-1**	14	8	11	2	8	0	8	***49***
Bayshore Drive	**Bayshore-1**	0	0	0	0	0	0	0	***100***
Bayshore Drive	**Bayshore-2**	14	8	11	5	14	8	8	***32***
Bayside Road	**Bayside-1**	11	8	11	5	8	8	8	***41***
Bayview Terrace	**Bayview-1**	2	5	5	0	0	0	8	***80***
Berry Farm Lane	**Berry-1**	11	8	11	0	8	0	0	***62***
Boxwood Path	**Boxwood-1**	0	0	0	0	0	0	0	***100***
Bramber Valley Road	**Bramber-1**	0	0	0	0	0	0	0	***100***
Brown Avenue	**Brown-1**	8	11	5	2	8	0	14	***52***
Carlton Drive	**Carlton-1**	5	8	8	0	0	0	0	***79***
Caswell Drive	**Caswell-1**	0	0	0	0	0	0	0	***100***
Cemetery Lane	**Cemetery -1**	11	5	5	8	0	0	0	***71***
Charles Drive	**Charles-1**	0	0	5	0	0	0	0	***95***
Cherry Hill Drive	**Cherry Hill-1**	0	0	0	0	0	0	0	***100***
Coastal Way	**Coastal-1**	14	11	11	5	8	8	8	***35***
Coombs Farm Road	**Coombs-1**	5	11	2	0	8	0	0	***74***
Cortland Drive	**Cortland-1**	11	11	8	0	0	0	8	***62***
Cushman Way	**Cushman-1**	0	0	0	0	0	0	0	***100***
Dearborn Road	**Dearborn-1**	0	0	0	0	0	0	0	***100***
Depot Road	**Depot-1**	0	0	0	0	0	0	0	***100***
Downs Ave	**Downs-1**	5	5	2	0	0	0	8	***80***
Drake Drive	**Drake-1**	2	8	2	0	0	0	0	***88***
Eagle Court	**Eagle-1**	8	5	5	0	8	0	0	***74***
Fairview Terrace	**Fairview-1**	5	8	14	5	8	8	14	***38***
Fairway Drive	**Fairway-1**	11	11	11	0		0	8	***59***
Falls Way	**Falls-1**	0	2	2	0	0	0	0	***96***
Great Bay Drive	**GB Drive-1**	14	14	14	14	14	0	8	***22***
Great Bay Drive East	**GB East-1**	2	2	2	0	0	0	8	***86***
Great Bay Drive West	**GB West-1**	14	11	14	14	15	15	14	***3***
Grove Street	**Grove-1**	11	8	14	5	8	0	0	***54***
Hayfield Court	**Hayfield-1**	0	2	5	0	0	0	0	***93***
Hickory Lane	**Hickory-1**	0	0	0	0	0	0	0	***100***
High Street	**High-1**	0	2	2	0	0	0	0	***96***
Hillside Drive	**Hillside-1**	0	2	2	0	0	0	0	***96***
Hillside Drive	**Hillside-2**	11	5	11	0	8	0	0	***65***
Holly Lane	**Holly-1**	0	0	0	0	0	0	0	***100***
Hughes Lane	**Hughes-1**	0	0	0	0	0	0	0	***100***
Ireland Way	**Ireland-1**	0	2	2	0	0	0	0	***96***
Lane Avenue	**Lane-1**	14	8	8	5	8	8	14	***35***
Liam's Court	**Liam's-1**	5	8	14	0	0	0	8	***65***
Maple Drive/Ext.	**Maple -1**	5	8	8	0	8	0	0	***71***
Maya Way	**Maya-1**	0	0	0	0	0	0	0	***100***
McIntosh Way	**Mcintosh-1**	2	11	5	0	0	0	0	***82***
McShane Avenue	**McShane-1**	5	5	5	0	0	0	8	***77***
McShane Avenue	**McShane-2**	0	2	2	0	0	0	0	***96***
Meadow Lane	**Meadow-1**	0	0	0	0	0	0	0	***100***
Meaghan Way	**Meag-1**	8	8	5	0	8	0	0	***71***
Meloon Road	**Meloon-1**	14	8	11	0	8	0	8	***51***
Moulton Avenue	**Moulton-1**	11	8	5	2	8	0	8	***58***
Moulton Avenue	**Moulton-2**	0	0	0	0	0	0	0	***100***

Road Name	Section ID	Alligator Cracking	Long/Trans Cracking	Edge Cracking	Patching/Pot Holes	Roughness	Rutting	Drainage	*PCI*
Nantucket Place	**Nantucket-1**	5	5	5	0	8	0	0	***77***
Niblick Lane	**Niblick-1**	8	5	8	0	0	0	0	***79***
October Drive	**October-1**	2	5	2	0	0	0	8	***83***
Orchard Hill Road	**Orchard-1**	0	0	2	0	0	0	0	***98***
Palm Drive	**Palm-1**	2	8	5	0	0	0	0	***85***
Park Avenue	**Park-1**	2	2	11	0	0	0	8	***77***
Pickering Brook Drive	**P Brook-1**	11	5	8	0	8	0	0	***68***
Pinewood Circle	**Pinewood-1**	0	0	0	0	0	0	0	***100***
Portsmouth Avenue	**Portsmouth-1**	2	5	2	2	0	0	0	***89***
Portsmouth Avenue	**Portsmouth-2**	2	5	11	2	0	0	8	***72***
Red Oak Drive	**Red Oak-1**	0	0	0	0	0	0	0	***100***
Ridgecrest Drive	**Ridgecrest-1**	0	0	0	0	0	0	0	***100***
Riverside Lane	**Riverside-1**	0	2	2	0	0	0	8	***88***
Rolston Avenue	**Rolston-1**	5	8	14	0	8	0	14	***51***
Sage Lane	**Sage-1**	0	0	0	0	0	0	0	***100***
Sanderson Road	**Sanderson-1**	11	11	11	0	8	0	8	***51***
September Drive	**September-1**	2	8	5	0	0	0	0	***85***
Skyview Drive	**Skyview-1**	0	0	0	0	0	0	0	***100***
Sleepy Hollow Drive	**S Hollow-1**	2	5	2	0	0	0	8	***83***
Sophia Way	**Sofia-1**	0	0	0	0	0	0	0	***100***
Spring Hill Road	**Spring-1**	14	8	11	0	8	0	8	***51***
Stone Meadow Way	**Stone-1**	0	2	2	0	0	0	0	***96***
Stratham Lane	**Stratham-1**	0	8	11	0	0	0	8	***73***
Sunnyside Drive	**Sunnyside -1**	2	8	8	0	0	0	0	***82***
Sunset Drive	**Sunset-1**	8	5	5	2	8	0	8	***64***
Thompson Brook Cirlce	**T Brook-1**	0	0	2	0	0	0	0	***98***
Tide Mill Road	**Tide Mill-1**	11	8	14	5	8	0	14	***40***
Tidewater Farm Road	**Tidewater-1**	0	0	0	0	0	0	0	***100***
Town Square	**Town-1**	11	2	11	0	0	0	8	***68***
Town Square	**Town-2**	0	5	2	0	0	0	8	***85***
Tuttle Lane	**Tuttle-1**	5	5	2		0	0	8	***80***
Valhalla Drive	**Valhala-1**	8	5	2	0	8	0	0	***77***
Van Etten Way	**Van Etten-1**	0	0	0	0	0	0	0	***100***
Vardon Lane	**Vardon-1**	0	2	8	0	0	0	0	***90***
Vernita Drive	**Vernita - 1**	0	2	2	0	0	0	0	***96***
Weeks Avenue	**Weeks-1**	11	14	11	2	8	15	14	***25***
Willow Brook Avenue	**Willowbrook-1**	11	11	14	14	14	15	14	***7***
Windsor Green Road	**Windsor-1**	0	5	5	0	0	0	0	***90***
Winter Way	**Winter-1**	0	0	0	0	0	0	0	***100***
Witham Farm Road	**Witham-1**	14	8	11	0	8	0	0	***59***

Pavement Condition Indicators (Ordered by PCI)

Town of Greenland

Dec-16

Road Name	Section ID	Alligator Cracking	Long/Trans Cracking	Edge Cracking	Patching/Pot Holes	Roughness	Rutting	Drainage	PCI
Great Bay Drive West	GB West-1	14	11	14	14	15	15	14	3
Willow Brook Avenue	Willowbrook-1	11	11	14	14	14	15	14	7
Great Bay Drive	GB Drive-1	14	14	14	14	14	0	8	22
Weeks Avenue	Weeks-1	11	14	11	2	8	15	14	25
Bayshore Drive	Bayshore-2	14	8	11	5	14	8	8	32
Coastal Way	Coastal-1	14	11	11	5	8	8	8	35
Lane Avenue	Lane-1	14	8	8	5	8	8	14	35
Fairview Terrace	Fairview-1	5	8	14	5	8	8	14	38
Tide Mill Road	Tide Mill-1	11	8	14	5	8	0	14	40
Bayside Road	Bayside-1	11	8	11	5	8	8	8	41
Bayridge Road	Bayridge-1	14	8	11	2	8	0	8	49
Meloon Road	Meloon-1	14	8	11	0	8	0	8	51
Rolston Avenue	Rolston-1	5	8	14	0	8	0	14	51
Sanderson Road	Sanderson-1	11	11	11	0	8	0	8	51
Spring Hill Road	Spring-1	14	8	11	0	8	0	8	51
Brown Avenue	Brown-1	8	11	5	2	8	0	14	52
Grove Street	Grove-1	11	8	14	5	8	0	0	54
Allen Farm Road	Allen-1	5	11	8	2	8	0	8	58
Moulton Avenue	Moulton-1	11	8	5	2	8	0	8	58
Fairway Drive	Fairway-1	11	11	11	0		0	8	59
Witham Farm Road	Witham-1	14	8	11	0	8	0	0	59
Alden Ave	Alden-1	5	8	5	5	0	8	8	61
Berry Farm Lane	Berry-1	11	8	11	0	8	0	0	62
Cortland Drive	Cortland-1	11	11	8	0	0	0	8	62
Sunset Drive	Sunset-1	8	5	5	2	8	0	8	64
Hillside Drive	Hillside-2	11	5	11	0	8	0	0	65
Liam's Court	Liam's-1	5	8	14	0	0	0	8	65
Anne's Lane	Anne's-1	5	8	2	2	8	0	8	67
Pickering Brook Drive	P Brook-1	11	5	8	0	8	0	0	68
Town Square	Town-1	11	2	11	0	0	0	8	68
Cemetery Lane	Cemetery -1	11	5	5	8	0	0	0	71
Maple Drive/Ext.	Maple -1	5	8	8	0	8	0	0	71
Meaghan Way	Meag-1	8	8	5	0	8	0	0	71
Portsmouth Avenue	Portsmouth-2	2	5	11	2	0	0	8	72
Stratham Lane	Stratham-1	0	8	11	0	0	0	8	73
Coombs Farm Road	Coombs-1	5	11	2	0	8	0	0	74
Eagle Court	Eagle-1	8	5	5	0	8	0	0	74
McShane Avenue	McShane-1	5	5	5	0	0	0	8	77
Nantucket Place	Nantucket-1	5	5	5	0	8	0	0	77
Park Avenue	Park-1	2	2	11	0	0	0	8	77
Valhalla Drive	Valhala-1	8	5	2	0	8	0	0	77
Carlton Drive	Carlton-1	5	8	8	0	0	0	0	79
Niblick Lane	Niblick-1	8	5	8	0	0	0	0	79
Bayview Terrace	Bayview-1	2	5	5	0	0	0	8	80
Downs Ave	Downs-1	5	5	2	0	0	0	8	80
Tuttle Lane	Tuttle-1	5	5	2		0	0	8	80
McIntosh Way	Mcintosh-1	2	11	5	0	0	0	0	82
Sunnyside Drive	Sunnyside -1	2	8	8	0	0	0	0	82
October Drive	October-1	2	5	2	0	0	0	8	83
Sleepy Hollow Drive	S Hollow-1	2	5	2	0	0	0	8	83
Town Square	Town-2	0	5	2	0	0	0	8	85
Palm Drive	Palm-1	2	8	5	0	0	0	0	85
September Drive	September-1	2	8	5	0	0	0	0	85
Great Bay Drive East	GB East-1	2	2	2	0	0	0	8	86
Drake Drive	Drake-1	2	8	2	0	0	0	0	88

Road Name	Section ID	Alligator Cracking	Long/Trans Cracking	Edge Cracking	Patching/Pot Holes	Roughness	Rutting	Drainage	PCI
Riverside Lane	**Riverside-1**	0	2	2	0	0	0	8	88
Portsmouth Avenue	**Portsmouth-1**	2	5	2	2	0	0	0	89
Vardon Lane	**Vardon-1**	0	2	8	0	0	0	0	90
Barrett Farm Road	**Barrett-1**	0	2	5	0	0	0	0	93
Hayfield Court	**Hayfield-1**	0	2	5	0	0	0	0	93
Charles Drive	**Charles-1**	0	0	5	0	0	0	0	95
Falls Way	**Falls-1**	0	2	2	0	0	0	0	96
High Street	**High-1**	0	2	2	0	0	0	0	96
Hillside Drive	**Hillside-1**	0	2	2	0	0	0	0	96
Ireland Way	**Ireland-1**	0	2	2	0	0	0	0	96
McShane Avenue	**McShane-2**	0	2	2	0	0	0	0	96
Stone Meadow Way	**Stone-1**	0	2	2	0	0	0	0	96
Vernita Drive	**Vernita - 1**	0	2	2	0	0	0	0	96
Windsor Green Road	**Windsor-1**	0	2	2	0	0	0	0	96
Orchard Hill Road	**Orchard-1**	0	0	2	0	0	0	0	98
Thompson Brook Cirlce	**T Brook-1**	0	0	2	0	0	0	0	98
Balsam Circle	**Balsam-1**	0	0	0	0	0	0	0	100
Bayshore Drive	**Bayshore-1**	0	0	0	0	0	0	0	100
Boxwood Path	**Boxwood-1**	0	0	0	0	0	0	0	100
Bramber Valley Road	**Bramber-1**	0	0	0	0	0	0	0	100
Caswell Drive	**Caswell-1**	0	0	0	0	0	0	0	100
Cherry Hill Drive	**Cherry Hill-1**	0	0	0	0	0	0	0	100
Cushman Way	**Cushman-1**	0	0	0	0	0	0	0	100
Dearborn Road	**Dearborn-1**	0	0	0	0	0	0	0	100
Depot Road	**Depot-1**	0	0	0	0	0	0	0	100
Hickory Lane	**Hickory-1**	0	0	0	0	0	0	0	100
Holly Lane	**Holly-1**	0	0	0	0	0	0	0	100
Hughes Lane	**Hughes-1**	0	0	0	0	0	0	0	100
Maya Way	**Maya-1**	0	0	0	0	0	0	0	100
Meadow Lane	**Meadow-1**	0	0	0	0	0	0	0	100
Moulton Avenue	**Moulton-2**	0	0	0	0	0	0	0	100
Pinewood Circle	**Pinewood-1**	0	0	0	0	0	0	0	100
Red Oak Drive	**Red Oak-1**	0	0	0	0	0	0	0	100
Ridgecrest Drive	**Ridgecrest-1**	0	0	0	0	0	0	0	100
Sage Lane	**Sage-1**	0	0	0	0	0	0	0	100
Skyview Drive	**Skyview-1**	0	0	0	0	0	0	0	100
Sophia Way	**Sofia-1**	0	0	0	0	0	0	0	100
Tidewater Farm Road	**Tidewater-1**	0	0	0	0	0	0	0	100
Winter Way	**Winter-1**	0	0	0	0	0	0	0	100
Van Etten Way	**Van Etten-1**	0	0	0	0	0	0	0	100

RSMS Inventory and Condition Identification
Asphalt Surface Road Sections

Inspected by: RPH

Date: 10/4/16
Road Name: Alden Avenue
Seq. No.: _____
From _____ **To** _____
No. Lanes 2 **Width:** 24 **ft**
Shoulder Width: 2-4 **ft**
Shoulder: Natural Gravel
Gravel Backing: Yes No
Shoulder Description: east side grass in, west still gravel for most part

Mile Post: _____ **End Post:** _____
Length: 0.09mi.

RIN: Alden
Road Section: Alden-1
Maintenance Div.: Greenland Highway Dept.
Jurisdiction: Greenland, New Hampshire

Class: V
Traffic: 1 2 3 4 5
Population Density: 1 2 3 4 5

Inventory Year: 2016 **Current Year:** 2016

Comments: Serves fairgrounds and other industrial buildings. — Truck traffic. Few patches have been completed. Cracking is of them nature, but present throughout. Drainage just fair, water may not get off edge in some areas. Some rutting near sweetgum end → Trucks

Condition

			None	← Low	Extent Medium	→ High	Numerical Value*
			No Defects	<10%	10-30%	>30%	
Alligator Cracking	Severity	Low	0	1	[illegible]	3	5
		Medium		4	5	6	
		High		7	8	9	
			No Defects	<10%	10-30%	>30%	
Long/Trans Cracking	Severity	Low	0	1	2	3	8
		Medium		4	[illegible]	6	
		High		7	8	9	
			No Defects	<10%	10-30%	>30%	
Edge Cracking	Severity	Low	0	1	[illegible]	3	5
		Medium		4	5	6	
		High		7	8	9	
			No Defects				
Patch/Pothole			0	1	[illegible]	3	5
				Good	Fair	Poor	
Roughness				[illegible]	2	3	0
				Good	Fair	Poor	
Rutting (Wheel)				1	[illegible]	3	8
				Good	Fair	Poor	
Drainage				1	[illegible]	3	8

 see next page

Sample PCI: Pavement Condition Indicator calculation. (Alden Ave.)

RSMS01 includes the capability to calculate a Pavement Condition Indicator (PCI) for the road network. Road managers can then compare the state of their network over time; that is, from one survey to the last.

The network PCI is the sum of an indicator value for each road section based on deduct values for each severity/extent combination for each distress. The Pavement Condition Indicator values for each road section, as well as for the network, SHOULD NOT BE CONFUSED WITH PAVEMENT CONDITION INDEX. The following values are the default deducts in the distributed version of RSMS01.

Unpaved

Distress	Severity/Extent		
Rutting (Matrix 0-9)	2	5	8
	5	8	11
	8	11	14
Loose Aggregate (Matrix 0-9)	2	5	8
	5	8	11
	8	11	14
Corrugations (Matrix 0-9)	2	5	8
	5	8	11
	8	11	15
Potholes (Matrix 0-9)	2	5	8
	5	8	11
	8	11	15
Cross Section (Matrix 1-3)	0	8	14
	0	0	0
	0	0	0
Drainage (Matrix 1-3)	0	8	14
	0	0	0
	0	0	0
Dust Control (Matrix 1-3)	0	8	14
	0	0	0
	0	0	0

Surface Treated and Flexible Pavement

Distress	Severity/Extent			
Alligator Cracking (Matrix 0-9)	2	5	8	5
	5	8	11	
	8	11	14	
Long/Trans Cracking (Matrix 0-9)	2	5	8	8
	5	8	11	
	8	11	14	
Edge Cracking (Matrix 0-9)	2	5	8	5
	5	8	11	
	8	11	14	
Patching/Potholes (Matrix 0-3)	2	5	14	5
	0	0	0	
	0	0	0	
Roughness (Matrix 1-3)	0	8	14	0
	0	0	0	
	0	0	0	
Rutting (Matrix 0-3)	0	8	15	8
	0	0	0	
	0	0	0	
Drainage (Matrix 1-3)	0	8	14	8
	0	0	0	
	0	0	0	

PCI = 100 - 39

= 61

APPENDIX G

WEIGHTED ROAD RATINGS

Road Ratings (Alphabetical)

Town of Greenland

Dec-16

2016 Ranking: 5 = Lowest Priority
41 = Highest Priority

Scale

Traffic Volume	1 = Minimal	5 = High Volume
Road Condition	0 = Good (PCI 100)	5 = Poor (PCI 0)
Drainage	1 = Good	3 = Poor

Road Name	Section ID	Length (mi.)	Traffic Volume	Road Condition	Drainage	Rating as of Nov. 2016
			Weighting Factor			
			3	4	2	
Alden Ave	**Alden-1**	0.09	2	1.95	2	17.8
Allen Farm Road	**Allen-1**	0.35	1	2.1	2	15.4
Anne's Lane	**Anne's-1**	0.07	1	1.65	2	13.6
Balsam Circle	**Balsam-1**	0.25	1	0	1	5
Barrett Farm Road	**Barrett-1**	0.35	1	0.35	1	6.4
Bayridge Road	**Bayridge-1**	0.9	1	2.55	2	17.2
Bayshore Drive	**Bayshore-2**	0.55	1	3.4	3	22.6
Bayshore Drive	**Bayshore-1**	0.1	1	0	1	5
Bayside Road	**Bayside-1**	1.5	3	2.95	2	24.8
Bayview Terrace	**Bayview-1**	0.07	1	1	2	11
Berry Farm Lane	**Berry-1**	0.12	1	1.9	1	12.6
Boxwood Path	**Boxwood-1**	0.35	1	0	1	5
Bramber Valley Road	**Bramber-1**	0.4	1	0	1	5
Brown Avenue	**Brown-1**	0.17	1	2.4	3	18.6
Carlton Drive	**Carlton-1**	0.04	1	1.05	1	9.2
Caswell Drive	**Caswell-1**	0.65	1	0	1	5
Cemetery Lane	**Cemetery -1**	0.18	1	1.45	1	10.8
Charles Drive	**Charles-1**	0.25	1	0.25	1	6
Cherry Hill Drive	**Cherry Hill-1**	0.5	1	0	1	5
Coastal Way	**Coastal-1**	0.25	1	3.25	2	20
Coombs Farm Road	**Coombs-1**	0.2	1	1.3	1	10.2
Cortland Drive	**Cortland-1**	0.15	1	1.9	2	14.6
Cushman Way	**Cushman-1**	0.18	1	0	1	5
Dearborn Road	**Dearborn-1**	0.85	2	0	1	8
Depot Road	**Depot-1**		1	0	1	5
Downs Ave	**Downs-1**	0.1	1	1	2	11
Drake Drive	**Drake-1**	0.15	1	0.6	1	7.4
Eagle Court	**Eagle-1**	0.2	1	1.3	1	10.2
Fairview Terrace	**Fairview-1**	0.12	1	3.1	3	21.4
Fairway Drive	**Fairway-1**	0.15	1	2.05	2	15.2
Falls Way	**Falls-1**	0.65	2	0.2	1	8.8
Great Bay Drive	**GB Drive-1**	0.13	1	3.9	2	22.6

Road Name	Section ID	Length (mi.)	Traffic Volume	Road Condition	Drainage	Rating as of Nov. 2016
			Weighting Factor			
			3	4	2	
Great Bay Drive East	**GB East-1**	0.19	1	0.7	2	9.8
Great Bay Drive West	**GB West-1**	0.25	1	4.85	2	26.4
Grove Street	**Grove-1**	0.51	1	2.3	1	14.2
Hayfield Court	**Hayfield-1**	0.1	1	0.35	1	6.4
Hickory Lane	**Hickory-1**	0.15	1	0	1	5
High Street	**High-1**	0.25	1	0.2	1	5.8
Hillside Drive	**Hillside-2**	0.14	1	1.75	1	12
Hillside Drive	**Hillside-1**	0.28	1	0.2	1	5.8
Holly Lane	**Holly-1**	0.2	1	0	1	5
Hughes Lane	**Hughes-1**	0.022	1	0	1	5
Ireland Way	**Ireland-1**	0.08	1	0.2	1	5.8
Lane Avenue	**Lane-1**	0.14	1	3.25	3	22
Liam's Court	**Liam's-1**	0.1	1	1.75	2	14
Maple Drive/Ext.	**Maple -1**	0.7	1	1.45	1	10.8
Maya Way	**Maya-1**	0.09	1	0	1	5
McIntosh Way	**Mcintosh-1**	0.3	1	0.9	1	8.6
McShane Avenue	**McShane-1**	0.05	1	1.15	2	11.6
McShane Avenue	**McShane-2**	0.11	1	0.2	1	5.8
Meadow Lane	**Meadow-1**	0.27	1	0	1	5
Meaghan Way	**Meag-1**	0.2	1	1.45	1	10.8
Meloon Road	**Meloon-1**	0.2	1	2.45	2	16.8
Moulton Avenue	**Moulton-1**	0.11	2	2.1	2	18.4
Moulton Avenue	**Moulton-2**	0.5	2	0	1	8
Nantucket Place	**Nantucket-1**	0.25	1	1.15	1	9.6
Niblick Lane	**Niblick-1**	0.5	1	1.05	1	9.2
October Drive	**October-1**	0.065	1	0.85	2	10.4
Orchard Hill Road	**Orchard-1**	0.3	2	0.1	1	8.4
Palm Drive	**Palm-1**	0.5	2	0.75	1	11
Park Avenue	**Park-1**	0.2	1	1.15	2	11.6
Pickering Brook Drive	**P Brook-1**	0.18	1	1.6	1	11.4
Pinewood Circle	**Pinewood-1**	0.11	1	0	1	5
Portsmouth Avenue	**Portsmouth-2**	0.45	3	1.4	2	18.6
Portsmouth Avenue	**Portsmouth-1**	0.4	3	0.55	1	13.2
Red Oak Drive	**Red Oak-1**	0.073	1	0	1	5
Ridgecrest Drive	**Ridgecrest-1**	0.9	1	0	1	5
Riverside Lane	**Riverside-1**	0.11	1	0.6	2	9.4
Rolston Avenue	**Rolston-1**	0.07	1	2.45	3	18.8
Sage Lane	**Sage-1**	0.09	1	0	1	5
Sanderson Road	**Sanderson-1**	0.25	1	2.45	2	16.8
September Drive	**September-1**	0.61	1	0.75	1	8
Skyview Drive	**Skyview-1**	0.61	1	0	1	5
Sleepy Hollow Drive	**S Hollow-1**	0.3	1	0.85	2	10.4
Sophia Way	**Sofia-1**	0.12	1	0	1	5
Spring Hill Road	**Spring-1**	0.2	1	2.45	2	16.8

Road Name	Section ID	Length (mi.)	Traffic Volume	Road Condition	Drainage	Rating as of Nov. 2016
			Weighting Factor			
			3	4	2	
Stone Meadow Way	**Stone-1**	0.11	1	0.2	1	5.8
Stratham Lane	**Stratham-1**	0.25	1	1.35	2	12.4
Sunnyside Drive	**Sunnyside -1**	0.35	1	0.9	1	8.6
Sunset Drive	**Sunset-1**	0.13	1	1.8	2	14.2
Thompson Brook Cirlce	**T Brook-1**	0.12	1	0.1	1	5.4
Tide Mill Road	**Tide Mill-1**	0.1	1	3	3	21
Tidewater Farm Road	**Tidewater-1**	1.1	1	0	1	5
Town Square	**Town-1**	0.08	1	1.6	2	13.4
Town Square	**Town-2**	0.12	1	0.75	2	10
Tuttle Lane	**Tuttle-1**	0.6	2	1	2	14
Valhalla Drive	**Valhala-1**	0.09	1	1.15	1	9.6
Van Etten Way	**Van Etten-1**	0.3	1	0	1	5
Vardon Lane	**Varden-1**	0.4	1	0.5	1	7
Vernita Drive	**Vernita - 1**	0.12	2	0.2	1	8.8
Weeks Avenue	**Weeks-1**	0.07	1	3.75	3	24
Willow Brook Avenue	**Willowbrook-1**	0.27	2	4.65	3	30.6
Windsor Green Road	**Windsor-1**	0.3	1	0.5	1	7
Winter Way	**Winter-1**	0.14	1	0	1	5
Witham Farm Road	**Witham-1**	0.09	1	2.05	1	13.2

Road Ratings (Ordered by Rating)

Town of Greenland

Dec-16

2016 Ranking: 5 = Lowest Priority
41 = Highest Priority

Scale

Traffic Volume	1 = Minimal	5 = High Volume
Road Condition	0 = Good (PCI 100)	5 = Poor (PCI 0)
Drainage	1 = Good	3 = Poor

Road Name	Section ID	Length (mi.)	Traffic Volume	Road Condition	Drainage	Rating as of Nov. 2016
			Weighting Factor			
			3	4	2	
Willow Brook Avenue	**Willowbrook-1**	0.27	2	4.65	3	30.6
Great Bay Drive West	**GB West-1**	0.25	1	4.85	2	26.4
Bayside Road	**Bayside-1**	1.5	3	2.95	2	24.8
Weeks Avenue	**Weeks-1**	0.07	1	3.75	3	24
Great Bay Drive	**GB Drive-1**	0.13	1	3.9	2	22.6
Bayshore Drive	**Bayshore-2**	0.55	1	3.4	3	22.6
Lane Avenue	**Lane-1**	0.14	1	3.25	3	22
Fairview Terrace	**Fairview-1**	0.12	1	3.1	3	21.4
Tide Mill Road	**Tide Mill-1**	0.1	1	3	3	21
Coastal Way	**Coastal-1**	0.25	1	3.25	2	20
Rolston Avenue	**Rolston-1**	0.07	1	2.45	3	18.8
Brown Avenue	**Brown-1**	0.17	1	2.4	3	18.6
Portsmouth Avenue	**Portsmouth-2**	0.45	3	1.4	2	18.6
Moulton Avenue	**Moulton-1**	0.11	2	2.1	2	18.4
Alden Ave	**Alden-1**	0.09	2	1.95	2	17.8
Bayridge Road	**Bayridge-1**	0.9	1	2.55	2	17.2
Meloon Road	**Meloon-1**	0.2	1	2.45	2	16.8
Sanderson Road	**Sanderson-1**	0.25	1	2.45	2	16.8
Spring Hill Road	**Spring-1**	0.2	1	2.45	2	16.8
Allen Farm Road	**Allen-1**	0.35	1	2.1	2	15.4
Fairway Drive	**Fairway-1**	0.15	1	2.05	2	15.2
Cortland Drive	**Cortland-1**	0.15	1	1.9	2	14.6
Grove Street	**Grove-1**	0.51	1	2.3	1	14.2
Sunset Drive	**Sunset-1**	0.13	1	1.8	2	14.2
Liam's Court	**Liam's-1**	0.1	1	1.75	2	14
Tuttle Lane	**Tuttle-1**	0.6	2	1	2	14
Anne's Lane	**Anne's-1**	0.07	1	1.65	2	13.6
Town Square	**Town-1**	0.08	1	1.6	2	13.4
Witham Farm Road	**Witham-1**	0.09	1	2.05	1	13.2
Portsmouth Avenue	**Portsmouth-1**	0.4	3	0.55	1	13.2
Berry Farm Lane	**Berry-1**	0.12	1	1.9	1	12.6
Stratham Lane	**Stratham-1**	0.25	1	1.35	2	12.4
Hillside Drive	**Hillside-2**	0.14	1	1.75	1	12

Road Name	Section ID	Length (mi.)	Traffic Volume	Road Condition	Drainage	Rating as of Nov. 2016
			Weighting Factor			
			3	4	2	
McShane Avenue	**McShane-1**	0.05	1	1.15	2	11.6
Park Avenue	**Park-1**	0.2	1	1.15	2	11.6
Pickering Brook Drive	**P Brook-1**	0.18	1	1.6	1	11.4
Bayview Terrace	**Bayview-1**	0.07	1	1	2	11
Palm Drive	**Palm-1**	0.5	2	0.75	1	11
Downs Ave	**Downs-1**	0.1	1	1	2	11
Cemetery Lane	**Cemetery -1**	0.18	1	1.45	1	10.8
Maple Drive/Ext.	**Maple -1**	0.7	1	1.45	1	10.8
Meaghan Way	**Meag-1**	0.2	1	1.45	1	10.8
October Drive	**October-1**	0.065	1	0.85	2	10.4
Sleepy Hollow Drive	**S Hollow-1**	0.3	1	0.85	2	10.4
Coombs Farm Road	**Coombs-1**	0.2	1	1.3	1	10.2
Eagle Court	**Eagle-1**	0.2	1	1.3	1	10.2
Town Square	**Town-2**	0.12	1	0.75	2	10
Great Bay Drive East	**GB East-1**	0.19	1	0.7	2	9.8
Nantucket Place	**Nantucket-1**	0.25	1	1.15	1	9.6
Valhalla Drive	**Valhala-1**	0.09	1	1.15	1	9.6
Riverside Lane	**Riverside-1**	0.11	1	0.6	2	9.4
Carlton Drive	**Carlton-1**	0.04	1	1.05	1	9.2
Niblick Lane	**Niblick-1**	0.5	1	1.05	1	9.2
Falls Way	**Falls-1**	0.65	2	0.2	1	8.8
Vernita Drive	**Vernita - 1**	0.12	2	0.2	1	8.8
McIntosh Way	**Mcintosh-1**	0.3	1	0.9	1	8.6
Sunnyside Drive	**Sunnyside -1**	0.35	1	0.9	1	8.6
Orchard Hill Road	**Orchard-1**	0.3	2	0.1	1	8.4
September Drive	**September-1**	0.61	1	0.75	1	8
Dearborn Road	**Dearborn-1**	0.85	2	0	1	8
Moulton Avenue	**Moulton-2**	0.5	2	0	1	8
Drake Drive	**Drake-1**	0.15	1	0.6	1	7.4
Vardon Lane	**Varden-1**	0.4	1	0.5	1	7
Windsor Green Road	**Windsor-1**	0.3	1	0.5	1	7
Barrett Farm Road	**Barrett-1**	0.35	1	0.35	1	6.4
Hayfield Court	**Hayfield-1**	0.1	1	0.35	1	6.4
Charles Drive	**Charles-1**	0.25	1	0.25	1	6
McShane Avenue	**McShane-2**	0.11	1	0.2	1	5.8
High Street	**High-1**	0.25	1	0.2	1	5.8
Hillside Drive	**Hillside-1**	0.28	1	0.2	1	5.8
Ireland Way	**Ireland-1**	0.08	1	0.2	1	5.8
Stone Meadow Way	**Stone-1**	0.11	1	0.2	1	5.8
Thompson Brook Cirlce	**T Brook-1**	0.12	1	0.1	1	5.4
Balsam Circle	**Balsam-1**	0.25	1	0	1	5
Bayshore Drive	**Bayshore-1**	0.1	1	0	1	5
Boxwood Path	**Boxwood-1**	0.35	1	0	1	5
Bramber Valley Road	**Bramber-1**	0.4	1	0	1	5

Road Name	Section ID	Length (mi.)	Traffic Volume	Road Condition	Drainage	Rating as of Nov. 2016
			Weighting Factor			
			3	4	2	
Caswell Drive	**Caswell-1**	0.65	1	0	1	5
Cherry Hill Drive	**Cherry Hill-1**	0.5	1	0	1	5
Cushman Way	**Cushman-1**	0.18	1	0	1	5
Depot Road	**Depot-1**		1	0	1	5
Hickory Lane	**Hickory-1**	0.15	1	0	1	5
Holly Lane	**Holly-1**	0.2	1	0	1	5
Hughes Lane	**Hughes-1**	0.022	1	0	1	5
Maya Way	**Maya-1**	0.09	1	0	1	5
Meadow Lane	**Meadow-1**	0.27	1	0	1	5
Pinewood Circle	**Pinewood-1**	0.11	1	0	1	5
Red Oak Drive	**Red Oak-1**	0.073	1	0	1	5
Ridgecrest Drive	**Ridgecrest-1**	0.9	1	0	1	5
Sage Lane	**Sage-1**	0.09	1	0	1	5
Skyview Drive	**Skyview-1**	0.61	1	0	1	5
Sophia Way	**Sofia-1**	0.12	1	0	1	5
Tidewater Farm Road	**Tidewater-1**	1.1	1	0	1	5
Van Etten Way	**Van Etten-1**	0.3	1	0	1	5
Winter Way	**Winter-1**	0.14	1	0	1	5

APPENDIX H

PRIORITIZED ROADWAY REPAIR ACTION PLAN

Prioritized Roadway Repair Action Plan

Town of Greenland

Dec-16

Implementation Program	Road Name	Section ID	Est. Length (LF)	Paved Width (LF)	Area (SF)	PCI Rating	Priority Rating	Drainage Condition	Planned Repair Strategy: Crack Sealing Unit Cost (per LF)	Crack Sealing Est. Cost	Shimming/Patching Unit Cost (per LF)	Shimming/Patching Est. Cost	Overlay Unit Cost (per SF)	Overlay Est. Cost	Gravel Backing Unit Cost (per LF)	Gravel Backing Est. Cost	Drainage Ditching Unit Cost (per LF)	Drainage Ditching Est. Cost	Closed Drainage Unit Cost (per LF)	Closed Drainage Est. Cost	Reclamation & Re-Pave Unit Cost (per SF)	Reclamation & Re-Pave Est. Cost	Reconstruction Unit Cost (per SF)	Reconstruction Est. Cost	Total Est. Routine Maint. Cost	Total Est. Road CIP Cost	Total Est. Drain CIP Cost	Total Est. Cost	Implemented: Actual Cost	Implemented: Year Completed
1. Routine Maintenance (*1st 5 Years*)																														
	Fairview Terrace	Fairview-1	634	12	7603	38	21.4	poor	$2.00	$1,267.20	$5.00	$3,168													$4,435	$0	$0	$4,435		
	Tide Mill Road	Tide Mill-1	528	16	8448	40	21	poor	$2.00	$1,056.00	$5.00	$2,640													$3,696	$0	$0	$3,696		
	Coastal Way	Coastal-1	1320	24	31680	35	20	fair	$2.00	$2,640.00	$5.00	$6,600													$9,240	$0	$0	$9,240		
	Rolston Avenue	Rolston-1	370	18	6653	51	18.8	poor	$2.00	$739.20	$5.00	$1,848													$2,587	$0	$0	$2,587		
	Brown Avenue	Brown-1	898	24	21542	52	18.6	poor	$2.00	$1,795.20	$5.00	$4,488													$6,283	$0	$0	$6,283		
	Moulton Avenue	Moulton-1	581	26	15101	58	18.4	fair	$2.00	$1,161.60	$5.00	$2,904													$4,066	$0	$0	$4,066		
	Bayridge Road	Bayridge-1	4752	24	114048	49	17.2	fair	$2.00	$9,504.00	$5.00	$23,760													$33,264	$0	$0	$33,264		
	Meloon Road	Meloon-1	1056	24.5	25872	51	16.8	fair	$2.00	$2,112.00	$5.00	$5,280													$7,392	$0	$0	$7,392		
	Sanderson Road	Sanderson-1	1320	24	31680	51	16.8	fair	$2.00	$2,640.00	$5.00	$6,600													$9,240	$0	$0	$9,240		
	Spring Hill Road	Spring-1	1056	24	25344	51	16.8	fair	$2.00	$2,112.00	$5.00	$5,280													$7,392	$0	$0	$7,392		
	Allen Farm Road	Allen-1	1848	24	44352	54	15.4	good	$2.00	$3,696.00	$5.00	$9,240													$12,936	$0	$0	$12,936		
	Fairway Drive	Fairway-1	792	26	20592	59	15.2	poor	$2.00	$1,584.00	$5.00	$3,960													$5,544	$0	$0	$5,544		
	Grove Street	Grove-1	2693	24	64627	54	14.2	fair	$2.00	$5,385.60	$5.00	$13,464													$18,850	$0	$0	$18,850		
	Witham Farm Road	Witham-1	475	24	11405	59	13.2	good	$2.00	$950.40	$5.00	$2,376													$3,326	$0	$0	$3,326		
	Great Bay Drive East	GB East-1	1003	15	15048	86	9.8	fair	$2.00	$2,006.40															$2,006	$0	$0	$2,006		
	September Drive	September-1	3221	24.5	78910	85	8	good	$2.00	$6,441.60															$6,442	$0	$0	$6,442		
	Dearborn Road	Dearborn-1	4488	22	98736	100	8	good	$2.00	$8,976.00															$8,976	$0	$0	$8,976		
	Bayshore Drive	Bayshore-1	528	24	12672	100	8	good	$2.00	$1,056.00															$1,056	$0	$0	$1,056		
	Moulton Avenue	Moulton-2	2640	25	66000	100	8	good	$2.00	$5,280.00															$5,280	$0	$0	$5,280		
	Drake Drive	Drake-1	792	24.5	19404	88	7.4	good	$2.00	$1,584.00															$1,584	$0	$0	$1,584		
	Vardon Lane	Vardon-1	2112	24	50688	90	7	good	$2.00	$4,224.00															$4,224	$0	$0	$4,224		
	Windsor Green Road	Windsor-1	1584	24.5	38808	96	7	good	$2.00	$3,168.00															$3,168	$0	$0	$3,168		
	Barrett Farm Road	Barrett-1	1848	24	44352	93	6.4	good	$2.00	$3,696.00															$3,696	$0	$0	$3,696		
	Hayfield Court	Hayfield-1	528	25	13200	93	6.4	good	$2.00	$1,056.00															$1,056	$0	$0	$1,056		
	Charles Drive	Charles-1	1320	24.5	32340	95	6	good	$2.00	$2,640.00															$2,640	$0	$0	$2,640		
	Ireland Way	Ireland-1	422	24.5	10349	96	5.8	good	$2.00	$844.80															$845	$0	$0	$845		
	McShane Avenue	McShane-2	581	26	15101	96	5.8	good	$2.00	$1,161.60															$1,162	$0	$0	$1,162		
	Stone Meadow Way	Stone-1	581	24	13939	96	5.8	good	$2.00	$1,161.60															$1,162	$0	$0	$1,162		
	High Street	High-1	1320	22	29040	96	5.8	good	$2.00	$2,640.00															$2,640	$0	$0	$2,640		
	Hillside Drive	Hillside-1	1478	26	38438	96	5.8	good	$2.00	$2,956.80															$2,957	$0	$0	$2,957		
	Thompson Brook Cirlce	T Brook-1	634	24	15206	98	5.4	good	$2.00	$1,267.20															$1,267	$0	$0	$1,267		
	Balsam Circle	Balsam-1	1320	24.5	32340	100	5	good	$2.00	$2,640.00															$2,640	$0	$0	$2,640		
	Boxwood Path	Boxwood-1	1848	22	40656	100	5	good	$2.00	$3,696.00															$3,696	$0	$0	$3,696		
	Bramber Valley Road	Bramber-1	2112	22	46464	100	5	good	$2.00	$4,224.00															$4,224	$0	$0	$4,224		
	Caswell Drive	Caswell-1	3432	24	82368	100	5	good	$2.00	$6,864.00															$6,864	$0	$0	$6,864		
	Cherry Hill Drive	Cherry Hill-1	2640	22	58080	100	5	good	$2.00	$5,280.00															$5,280	$0	$0	$5,280		
	Cushman Way	Cushman-1	950	22	20909	100	5	good	$2.00	$1,900.80															$1,901	$0	$0	$1,901		
	Depot Road	Depot-1	1415	18	25471	100	5	good	$2.00	$2,830.08															$2,830	$0	$0	$2,830		
	Hickory Lane	Hickory-1	792	22	17424	100	5	good	$2.00	$1,584.00															$1,584	$0	$0	$1,584		
	Holly Lane	Holly-1	1056	24	25344	100	5	good	$2.00	$2,112.00															$2,112	$0	$0	$2,112		
	Hughes Lane	Hughes-1	116	22	2556	100	5	good	$2.00	$232.32															$232	$0	$0	$232		
	Maya Way	Maya-1	475	22.5	10692	100	5	good	$2.00	$950.40															$950	$0	$0	$950		
	Meadow Lane	Meadow-1	1426	26	37066	100	5	good	$2.00	$2,851.20															$2,851	$0	$0	$2,851		
	Pinewood Circle	Pinewood-1	581	24	13939	100	5	good	$2.00	$1,161.60															$1,162	$0	$0	$1,162		
	Red Oak Drive	Red Oak-1	385	24.5	9443	100	5	good	$2.00	$770.88															$771	$0	$0	$771		
	Ridgecrest Drive	Ridgecrest-1	4752	24.5	116424	100	5	good	$2.00	$9,504.00															$9,504	$0	$0	$9,504		
	Sage Lane	Sage-1	475	22	10454	100	5	good	$2.00	$950.40															$950	$0	$0	$950		
	Skyview Drive	Skyview-1	3221	24.5	78910	100	5	good	$2.00	$6,441.60															$6,442	$0	$0	$6,442		
	Sophia Way	Sofia-1	634	22.5	14256	100	5	good	$2.00	$1,267.20															$1,267	$0	$0	$1,267		
	Van Etten Way	Van Etten-1	1584	24	38016	100	5	good	$2.00	$3,168.00															$3,168	$0	$0	$3,168		
	Tidewater Farm Road	Tidewater-1	5808	24	139392	100	5	fair	$2.00	$11,616.00															$11,616	$0	$0	$11,616		
	Winter Way	Winter-1	740	12.5	9250	100	5	good	$2.00	$1,480.00															$1,480	$0	$0	$1,480		
										$158,328		$91,608		$0		$0		$0		$0		$0		$0	$249,936	$0	$0	$249,936		

Implementation Program	Road Name	Section ID	Est. Length (LF)	Paved Width (LF)	Area (SF)	PCI Rating	Priority Rating	Drainage Condition	Planned Repair Strategy: Crack Sealing Unit Cost (per LF)	Crack Sealing Est. Cost	Shimming/Patching Unit Cost (per LF)	Shimming/Patching Est. Cost	Overlay Unit Cost (per SF)	Overlay Est. Cost	Gravel Backing Unit Cost (per LF)	Gravel Backing Est. Cost	Drainage Ditching Unit Cost (per LF)	Drainage Ditching Est. Cost	Closed Drainage Unit Cost (per LF)	Closed Drainage Est. Cost	Reclamation & Re-Pave Unit Cost (per SF)	Reclamation & Re-Pave Est. Cost	Reconstruction Unit Cost (per SF)	Reconstruction Est. Cost	Total Est. Routine Maint. Cost	Total Est. Road CIP Cost	Total Est. Drain CIP Cost	Total Est. Cost	Implemented: Actual Cost	Implemented: Year Completed
2. Preventative Maintenance (i.e. overlays) (PCI 60 to 100)																														
	Portsmouth Avenue	Portsmouth-2	2376	26	61776	72	18.6	fair	$2.00	$ 4,752			$0.80	$49,112	$0.88	$2,091	$6.60	$7,840.80	$100.00	$78,408					$55,955	$0	$86,249	$142,204		
	Alden Ave	Alden-1	475	24	11405	61	17.8	fair	$2.00	$ 950			$0.80	$9,067	$0.88	$418	$6.60	$1,568.16	$100.00	$15,682					$10,435	$0	$17,250	$27,685		
	Cortland Drive	Cortland-1	792	24	19008	62	14.6	fair	$2.00	$ 1,584			$0.80	$15,111	$0.88	$697									$17,392	$0	$0	$17,392		
	Sunset Drive	Sunset-1	686	24	16474	64	14.2	fair	$2.00	$ 1,373			$0.80	$13,097	$0.88	$604	$6.60	$2,265.12	$100.00	$17,160					$15,073	$0	$19,425	$34,498		
	Liam's Court	Liam's-1	528	24	12672	65	14	fair	$2.00	$ 1,056			$0.80	$10,074	$0.88	$465									$11,595	$0	$0	$11,595		
	Tuttle Lane	Tuttle-1	3168	22	69696	80	14	fair	$2.00	$ 6,336			$0.80	$55,408	$0.88	$2,788	$6.60	$10,454.40							$64,532	$0	$10,454	$74,987		
	Anne's Lane	Anne's-1	370	24	8870	67	13.6	fair	$2.00	$ 739			$0.80	$7,052	$0.88	$325	$6.60	$1,219.68							$8,116	$0	$1,220	$9,336		
	Town Square	Town-1	425	26	11050	68	13.4	fair	$2.00	$ 850			$0.80	$8,785	$0.88	$374									$10,009	$0	$0	$10,009		
	Portsmouth Avenue	Portsmouth-1	2112	24	50688	89	13.2	good	$2.00	$ 4,224			$0.80	$40,297	$0.88	$1,859									$46,380	$0	$0	$46,380		
	Berry Farm Lane	Berry-1	634	25	15840	62	12.6	good	$2.00	$ 1,267			$0.80	$12,593	$0.88	$558									$14,418	$0	$0	$14,418		
	Stratham Lane	Stratham-1	1320	22	29040	73	12.4	fair	$2.00	$ 2,640			$0.80	$23,087	$0.88	$1,162	$6.60	$4,356.00							$26,888	$0	$4,356	$31,244		
	Hillside Drive	Hillside-2	739	26	19219	65	12	good	$2.00	$ 1,478			$0.80	$15,279	$0.88	$650									$17,408	$0	$0	$17,408		
	McShane Avenue	McShane-1	264	24	6336	77	11.6	fair	$2.00	$ 528			$0.80	$5,037	$0.88	$232	$6.60	$871.20	$100.00	$2,640					$5,797	$0	$3,511	$9,309		
	Park Avenue	Park-1	1056	22	23232	77	11.6	fair	$2.00	$ 2,112			$0.80	$18,469	$0.88	$929	$6.60	$3,484.80							$21,511	$0	$3,485	$24,996		
	Pickering Brook Drive	P Brook-1	950	24	22810	68	11.4	good	$2.00	$ 1,901			$0.80	$18,134	$0.88	$836									$20,871	$0	$0	$20,871		
	Bayview Terrace	Bayview-1	370	18	6653	80	11	fair	$2.00	$ 739			$0.80	$5,289	$0.88	$325			$100.00	$7,392					$6,353	$0	$7,392	$13,745		
	Palm Drive	Palm-1	2640	24.5	64680	85	11	good	$2.00	$ 5,280			$0.80	$51,421	$0.88	$2,323	$6.60	$8,712.00	$100.00	$52,800					$59,024	$0	$61,512	$120,536		
	Maple Drive/Ext.	Maple -1	3696	24	88704	71	10.8	good	$2.00	$ 7,392			$0.80	$70,520	$0.88	$3,252									$81,164	$0	$0	$81,164		
	Cemetery Lane	Cemetery -1	950	22	20909	71	10.8	good	$2.00	$ 1,901			$0.80	$16,622	$0.88	$836									$19,360	$0	$0	$19,360		
	Meaghan Way	Meag-1	1056	24	25344	71	10.8	good	$2.00	$ 2,112			$0.80	$20,148	$0.88	$929									$23,190	$0	$0	$23,190		
	October Drive	October-1	343	24.5	8408	83	10.4	fair	$2.00	$ 686			$0.80	$6,685	$0.88	$302	$6.60	$1,132.56							$7,673	$0	$1,133	$8,806		
	Sleepy Hollow Drive	S Hollow-1	1584	24.5	38808	83	10.4	fair	$2.00	$ 3,168			$0.80	$30,852	$0.88	$1,394									$35,414	$0	$0	$35,414		
	Downs Ave	Downs-1	528	22	11616	80	10.4	fair	$2.00	$ 1,056			$0.80	$9,235	$0.88	$465	$6.60	$1,742.40							$10,755	$0	$1,742	$12,498		
	Eagle Court	Eagle-1	1056	24	25344	74	10.2	good	$2.00	$ 2,112			$0.80	$20,148	$0.88	$929									$23,190	$0	$0	$23,190		
	Coombs Farm Road	Coombs-1	1056	24	25344	74	10.2	good	$2.00	$ 2,112			$0.80	$20,148	$0.88	$929									$23,190	$0	$0	$23,190		
	Town Square	Town-2	635	20	12700	85	10	fair	$2.00	$ 1,270			$0.80	$10,097	$0.88	$559									$11,925	$0	$0	$11,925		
	Valhalla Drive	Valhala-1	475	24	11405	77	9.6	good	$2.00	$ 950			$0.80	$9,067	$0.88	$418									$10,435	$0	$0	$10,435		
	Nantucket Place	Nantucket-1	1320	24	31680	77	9.6	good	$2.00	$ 2,640			$0.80	$25,186	$0.88	$1,162									$28,987	$0	$0	$28,987		
	Riverside Lane	Riverside-1	581	22	12778	88	9.4	fair	$2.00	$ 1,162			$0.80	$10,158	$0.88	$511	$6.60	$1,916.64							$11,831	$0	$1,917	$13,748		
	Carlton Drive	Carlton-1	211	24	5069	79	9.2	good	$2.00	$ 422			$0.80	$4,030	$0.88	$186									$4,638	$0	$0	$4,638		
	Niblick Lane	Niblick-1	2640	24	63360	79	9.2	good	$2.00	$ 5,280			$0.80	$50,371											$55,651	$0	$0	$55,651		
	Falls Way	Falls-1	3432	26	89232	96	8.8	good	$2.00	$ 6,864			$0.80	$70,939	$0.88	$3,020									$80,824	$0	$0	$80,824		
	Vernita Drive	Vernita - 1	634	24	15206	96	8.8	good	$2.00	$ 1,267			$0.80	$12,089	$0.88	$558	$6.60	$4,181.76							$13,914	$0	$4,182	$18,096		
	Sunnyside Drive	Sunnyside -1	1848	25	46200	82	8.6	good	$2.00	$ 3,696			$0.80	$36,729	$0.88	$1,626									$42,051	$0	$0	$42,051		
	McIntosh Way	McIntosh-1	1584	24	38016	82	8.6	good					$0.80	$30,223	$0.88	$1,394									$31,617	$0	$0	$31,617		
	Orchard Hill Road	Orchard-1	1584	25	39600	98	8.4	good					$0.80	$31,482	$0.88	$1,394									$32,876	$0	$0	$32,876		
	Dearborn Road	Dearborn-1	4488	22	98736	100	8	good					$0.80	$78,495	$0.88	$3,949									$82,445	$0	$0	$82,445		
	September Drive	September-1	3221	24.5	78910	85	8	good					$0.80	$62,733	$0.88	$2,834	$6.60	$10,628.64							$65,567	$0	$10,629	$76,196		
	Bayshore Drive	Bayshore-1	528	24	12672	100	8	good					$0.80	$10,074	$0.88	$465									$10,539	$0	$0	$10,539		
	Moulton Avenue	Moulton-2	2640	25	66000	100	8	good					$0.80	$52,470	$0.88	$2,323									$54,793	$0	$0	$54,793		
	Drake Drive	Drake-1	792	24.5	19404	88	7.4	good					$0.80	$15,426	$0.88	$697									$16,123	$0	$0	$16,123		
	Vardon Lane	Vardon-1	2112	24	50688	90	7	good					$0.80	$40,297	$0.88	$1,859									$42,156	$0	$0	$42,156		
	Windsor Green Road	Windsor-1	1584	24.5	38808	96	7	good					$0.80	$30,852	$0.88	$1,394									$32,246	$0	$0	$32,246		
	Barrett Farm Road	Barrett-1	1848	24	44352	93	6.4	good					$0.80	$35,260	$0.88	$1,626									$36,886	$0	$0	$36,886		
	Hayfield Court	Hayfield-1	528	25	13200	93	6.4	good					$0.80	$10,494	$0.88	$465									$10,959	$0	$0	$10,959		
	Charles Drive	Charles-1	1320	24.5	32340	95	6	good					$0.80	$25,710	$0.88	$1,162									$26,872	$0	$0	$26,872		
	Ireland Way	Ireland-1	422	24.5	10349	96	5.8	good					$0.80	$8,227	$0.88	$372									$8,599	$0	$0	$8,599		
	McShane Avenue	McShane-2	581	26	15101	96	5.8	good					$0.80	$12,005	$0.88	$511									$12,516	$0	$0	$12,516		
	Stone Meadow Way	Stone-1	581	24	13939	96	5.8	good					$0.80	$11,082	$0.88	$511									$11,593	$0	$0	$11,593		
	High Street	High-1	1320	22	29040	96	5.8	good					$0.80	$23,087	$0.88	$1,162									$24,248	$0	$0	$24,248		
	Hillside Drive	Hillside-1	1478	26	38438	96	5.8	good					$0.80	$30,559	$0.88	$1,301									$31,860	$0	$0	$31,860		
	Thompson Brook Cirlce	T Brook-1	634	24	15206	98	5.4	good					$0.80	$12,089	$0.88	$558									$12,647	$0	$0	$12,647		
	Balsam Circle	Balsam-1	1320	24.5	32340	100	5	good					$0.80	$25,710	$0.88	$1,162									$26,872	$0	$0	$26,872		
	Boxwood Path	Boxwood-1	1848	22	40656	100	5	good					$0.80	$32,322	$0.88	$1,626									$33,948	$0	$0	$33,948		
	Bramber Valley Road	Bramber-1	2112	22	46464	100	5	good					$0.80	$36,939	$0.88	$1,859									$38,797	$0	$0	$38,797		
	Caswell Drive	Caswell-1	3432	24	82368	100	5	good					$0.80	$65,483	$0.88	$3,020									$68,503	$0	$0	$68,503		
	Cherry Hill Drive	Cherry Hill-1	2640	22	58080	100	5	good					$0.80	$46,174	$0.88	$2,323									$48,497	$0	$0	$48,497		
	Cushman Way	Cushman-1	950	22	20909	100	5	good					$0.80	$16,622	$0.88	$836									$17,459	$0	$0	$17,459		
	Depot Road	Depot-1	1415	18	25471	100	5	good					$0.80	$20,249	$0.88	$1,245									$21,494	$0	$0	$21,494		
	Hickory Lane	Hickory-1	792	22	17424	100	5	good					$0.80	$13,852	$0.88	$697									$14,549	$0	$0	$14,549		
	Holly Lane	Holly-1	1056	24	25344	100	5	good					$0.80	$20,148	$0.88	$929									$21,078	$0	$0	$21,078		
	Hughes Lane	Hughes-1	116	22	2556	100	5	good					$0.80	$2,032	$0.88	$102									$2,134	$0	$0	$2,134		
	Maya Way	Maya-1	475	22.5	10692	100	5	good					$0.80	$8,500	$0.88	$418									$8,918	$0	$0	$8,918		
	Meadow Lane	Meadow-1	1426	26	37066	100	5	good					$0.80	$29,467	$0.88	$1,255									$30,722	$0	$0	$30,722		
	Pinewood Circle	Pinewood-1	581	24	13939	100	5	good					$0.80	$11,082	$0.88	$511									$11,593	$0	$0	$11,593		
	Red Oak Drive	Red Oak-1	385	24.5	9443	100	5	good					$0.80	$7,507	$0.88	$339									$7,847	$0	$0	$7,847		
	Ridgecrest Drive	Ridgecrest-1	4752	24.5	116424	100	5	good					$0.80	$92,557	$0.88	$4,182									$96,739	$0	$0	$96,739		
	Sage Lane	Sage-1	475	22	10454	100	5	good					$0.80	$8,311	$0.88	$418									$8,729	$0	$0	$8,729		
	Skyview Drive	Skyview-1	3221	24.5	78910	100	5	good					$0.80	$62,733	$0.88	$2,834									$65,567	$0	$0	$65,567		
	Sophia Way	Sofia-1	634	22.5	14256	100	5	good					$0.80	$11,334	$0.88	$558									$11,891	$0	$0	$11,891		
	Van Etten Way	Van Etten-1	1584	24	38016	100	5	good					$0.80	$30,223	$0.88	$1,394									$31,617	$0	$0	$31,617		
	Tidewater Farm Road	Tidewater-1	5808	24	139392	100	5	fair					$0.80	$110,817	$0.88	$5,111									$115,928	$0	$0	$115,928		
	Winter Way	Winter-1	740	12.5	9250	100	5	good					$0.80	$7,354	$0.88	$651									$8,005	$0	$0	$8,005		
										$81,901		$0		$1,960,317		$89,159		$60,374		$174,082		$0		$0	$2,131,377	$0	$234,456	$2,365,833		

Implementation Program	Road Name	Section ID	Est. Length (LF)	Paved Width (LF)	Area (SF)	PCI Rating	Priority Rating	Drainage Condition	Planned Repair Strategy: Crack Sealing Unit Cost (per LF)	Crack Sealing Est. Cost	Shimming/Patching Unit Cost (per LF)	Shimming/Patching Est. Cost	Overlay Unit Cost (per SF)	Overlay Est. Cost	Gravel Backing Unit Cost (per LF)	Gravel Backing Est. Cost	Drainage Ditching Unit Cost (per LF)	Drainage Ditching Est. Cost	Closed Drainage Unit Cost (per LF)	Closed Drainage Est. Cost	Reclamation & Re-Pave Unit Cost (per SF)	Reclamation & Re-Pave Est. Cost	Reconstruction Unit Cost (per SF)	Reconstruction Est. Cost	Total Est. Routine Maint. Cost	Total Est. Road CIP Cost	Total Est. Drain CIP Cost	Total Est. Cost	Implemented: Actual Cost	Year Completed
3. Roadway Re-Construction (PCI 0 to 60)																														
	Willow Brook Avenue	Willowbrook-1	1426	24	34214	7	30.6	poor							$0.88	$1,255	$6.60	$7,527.17	$100.00	$28,512			$4.82	$164,862	$0	$166,117	$36,039	$202,156		
	Great Bay Drive West	GB West-1	1320	22	29040	3	26.4	fair							$0.88	$1,162	$6.60	$6,969.60					$4.21	$122,229	$0	$123,391	$6,970	$130,361		
	Bayside Road	Bayside-1	7920	24	190080	41	24.8	fair							$0.88	$6,970	$6.60	$41,817.60			$2.60	$494,018			$0	$500,988	$41,818	$542,805		
	Weeks Avenue	Weeks-1	370	16	5914	25	24	poor							$0.88	$325	$6.60	$1,951.49					$4.21	$24,890	$0	$25,216	$1,951	$27,167		
	Great Bay Drive	GB Drive-1	686	22	15101	22	22.6	fair							$0.88	$604	$6.60	$3,624.19					$4.21	$63,559	$0	$64,163	$3,624	$67,787		
	Bayshore Drive	Bayshore-2	2904	24	69696	32	22.6	poor							$0.88	$2,556	$6.60	$15,333.12			$1.99	$138,660			$0	$141,216	$15,333	$156,549		
	Lane Avenue	Lane-1	739	24	17741	35	22	poor							$0.88	$650			$100.00	$73,920			$4.21	$74,671	$0	$75,322	$73,920	$149,242		
	Fairview Terrace	Fairview-1	634	12	7603	38	21.4	poor							$0.88	$558			$100.00	$63,360	$1.99	$15,127			$0	$15,684	$63,360	$79,044		
	Tide Mill Road	Tide Mill-1	528	16	8448	40	21	poor							$0.88	$465	$6.60	$2,787.84			$1.99	$16,807			$0	$17,272	$2,788	$20,060		
	Coastal Way	Coastal-1	1320	24	31680	35	20	fair							$0.88	$1,162							$4.21	$133,341	$0	$134,503	$0	$134,503		
	Rolston Avenue	Rolston-1	370	18	6653	51	18.8	poor							$0.88	$325	$6.60	$1,951.49			$1.99	$13,236			$0	$13,561	$1,951	$15,512		
	Brown Avenue	Brown-1	898	24	21542	52	18.6	poor							$0.88	$790	$6.60	$4,739.33			$1.99	$42,859			$0	$43,648	$4,739	$48,388		
	Moulton Avenue	Moulton-1	581	26	15101	58	18.4	fair							$0.88	$511					$2.60	$39,247			$0	$39,758	$0	$39,758		
	Bayridge Road	Bayridge-1	4752	24	114048	49	17.2	fair							$0.88	$4,182	$6.60	$25,090.56			$1.99	$226,898			$0	$231,080	$25,091	$256,171		
	Meloon Road	Meloon-1	1056	24.5	25872	51	16.8	fair							$0.88	$929	$6.60	$5,575.68			$1.99	$51,472			$0	$52,402	$5,576	$57,977		
	Sanderson Road	Sanderson-1	1320	24	31680	51	16.8	fair							$0.88	$1,162	$6.60	$6,969.60			$1.99	$63,027			$0	$64,189	$6,970	$71,159		
	Spring Hill Road	Spring-1	1056	24	25344	51	16.8	fair							$0.88	$929	$6.60	$5,575.68			$1.99	$50,422			$0	$51,351	$5,576	$56,927		
	Allen Farm Road	Allen-1	1848	24	44352	54	15.4	good							$0.88	$1,626	$6.60	$9,757.44			$1.99	$88,238			$0	$89,865	$9,757	$99,622		
	Fairway Drive	Fairway-1	792	26	20592	59	15.2	poor							$0.88	$697					$1.99	$40,968			$0	$41,665	$0	$41,665		
	Grove Street	Grove-1	2693	24	64627	54	14.2	fair							$0.88	$2,370	$6.60	$14,217.98			$2.60	$167,966			$0	$170,336	$14,218	$184,554		
	Witham Farm Road	Witham-1	475	24	11405	59	13.2	good							$0.88	$418					$1.99	$22,690			$0	$23,108	$0	$23,108		
	Great Bay Drive East	GB East-1	1003	15	15048	86	9.8	fair							$0.88	$883	$6.60	$3,310.56			$1.99	$29,938			$0	$30,821	$3,311	$34,131		
										$0		$0		$0		$30,527		$157,199		$165,792		$1,501,573		$583,553	$0	$2,115,653	$322,991	$2,438,645		
								10-year Opinion of Cost:		*$240,228*		*$91,608*		*$1,960,317*		*$119,686*		*$217,573*		*$339,874*		*$1,501,573*		*$583,553*	*$2,381,313*	*$2,115,653*	*$557,447*	*$5,054,413*		

Notes: 1. All costs are in 2016 dollars.

Suggested Annual Budgets

ROUTINE MAINTENANCE =	**$**	**238,000**
i. Overlays =	$	196,000
ii. Gravel Backing =	$	9,000
iii. Crack Sealing =	$	24,000
iv. Shimming/Patching =	$	9,000
DRAIN CIP =	**$**	**56,000**
ROAD CIP =	**$**	**212,000**
TOTAL =	**$**	**506,000**

APPENDIX I

HIGH PRIORITY ROAD PHOTO DOUMENTATION

Pavement Condition Assessment
Greenland, New Hampshire
Alden Avenue

GENERAL ASSESSMENT

- Serves FairPoint Communications, Inc. and other industrial buildings and is exposed to a greater volume of truck traffic
- Longitudinal cracking is the most common deficiency
- Some rutting present

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing
- Ditch improvements
- Evaluate closed drainage, repair/replace as needed

Pavement Assessment
Greenland, New Hampshire
Anne's Lane

GENERAL ASSESSMENT

- Fair condition – long/trans cracks are main deficiency
- No gravel shoulder – lawns have grown in to edge of roadway
- Lacking ditches

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5" Overlay
- Gravel backing
- Ditch improvements

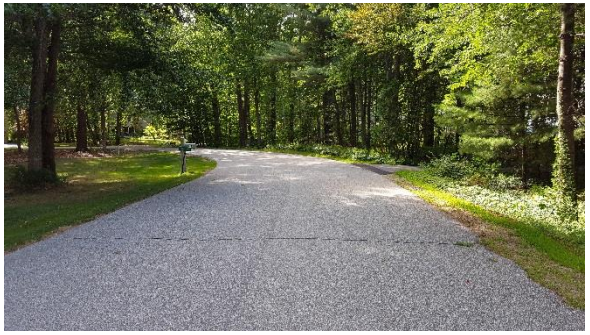
Pavement Assessment
Greenland, New Hampshire
Bayshore Drive - 2

GENERAL ASSESSMENT

- Poor section of Bayshore Dr.
- Various types of cracking throughout
- Rutting present
- Lacking ditches

RECOMMENED IMPROVEMENTS

- Road reclamation with 3" new pavement
- Gravel backing
- Ditch improvements



Pavement Assessment
Greenland, New Hampshire
Bayside Road

GENERAL ASSESSMENT

- Higher traffic volume, collector route from Route 33
- Overall poor condition – severe alligator cracking, rutting, uneven areas – needs reshaping
- Trees could pose issues during work activities

RECOMMENDED IMPROVEMENTS

- Road reclamation with 4” new pavement
- Gravel backing
- Ditch improvements
- Tree removal anticipated to complete roadwork

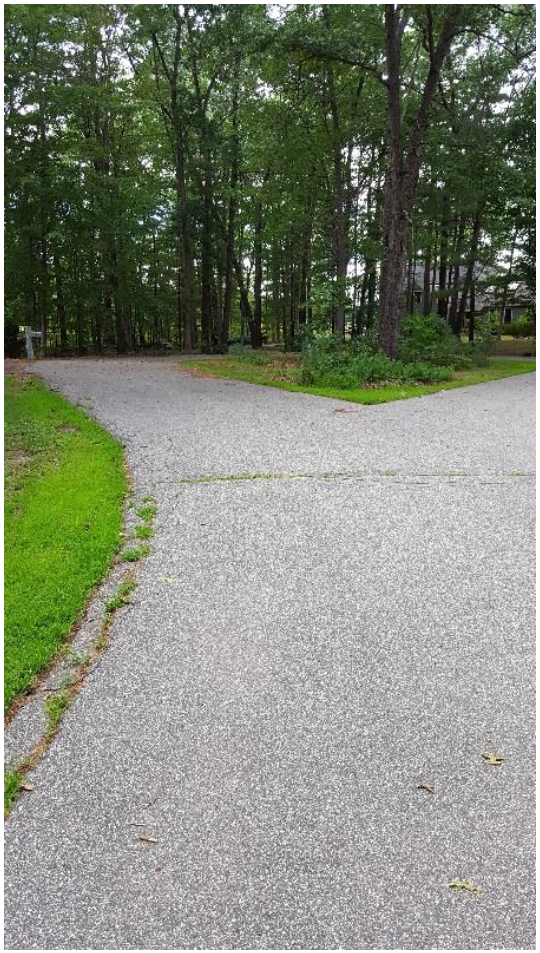
Pavement Assessment
Greenland, New Hampshire
Bayview Terrace

GENERAL ASSESSMENT

- Some areas with all classes of cracking
- Cracks accommodate weed growth
- Lacking ditches in some areas

RECOMMENDED IMPROVEMENTS

- Crack cleaning/sealing
- 1.5” Overlay
- Gravel backing
- Install closed drainage



Pavement Assessment
Greenland, New Hampshire
Carlton Drive

GENERAL ASSESSMENT

- Various types of cracking present throughout
- Edge cracking prevalent on northern side
- No gravel shoulder
- Side slopes satisfactory

RECOMMENED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing

Pavement Assessment
Greenland, New Hampshire
Cemetery Lane

GENERAL ASSESSMENT

- Alligator cracking is main deficiency – heavy in some areas along centerline
- Some patching has been completed
- Road has good grade – drainage not an issue
- Guardrail present on east side

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing

Pavement Assessment
Greenland, New Hampshire
Coombs Farm Drive

GENERAL ASSESSMENT

- Satisfactory condition
- Transverse cracks noticeable when driving
- Drainage swales in good condition
- No gravel shoulders
- Good cross-sectional shape

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing

Pavement Assessment
Greenland, New Hampshire
Cortland Drive

GENERAL ASSESSMENT

- Alligator and longitudinal cracking along centerline is main deficiency
- Edges in fair condition
- Drainage ditching is in good condition
- No gravel shoulders

RECOMMENED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing

Pavement Assessment
Greenland, New Hampshire
Downs Avenue

GENERAL ASSESSMENT

- Cracks consistent throughout
- No swales or ditching present

RECOMMENED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing
- Ditch improvements

Pavement Assessment
Greenland, New Hampshire
Eagle Court

GENERAL ASSESSMENT

- Satisfactory condition
- Cracking along centerline is main deficiency
- Drainage swales in good condition

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing

Pavement Assessment
Greenland, New Hampshire
Fairview Terrace

GENERAL ASSESSMENT

- Very low volume traffic - serves three (3) houses
- Road has been crack sealed and shimmed/patched, but new cracks have formed
- No drainage observed

RECOMMENED IMPROVEMENTS

- Road reclamation with 3” new pavement
- Gravel backing
- Construct closed drainage

Pavement Assessment
Greenland, New Hampshire
Falls Way

GENERAL ASSESSMENT

- Access road for several homes off of Breakfast Hill Road
- Recently constructed – good condition
- Gravel shoulders beginning to grow in with vegetation

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing

Pavement Assessment
Greenland, New Hampshire
Great Bay Drive

GENERAL ASSESSMENT

- Large areas of extensive cracking
- Previous pothole patching
- Drainage ditches lacking in many areas
- No gravel shoulders

RECOMMENDED IMPROVEMENTS

- Road reconstruction with 3" new pavement
- Gravel backing
- Ditch improvements

Pavement Assessment
Greenland, New Hampshire
Great Bay Drive West

GENERAL ASSESSMENT

- Roadway surface has failed
- Lowest PCI in road network

RECOMMENDED IMPROVEMENTS

- Road reconstruction with 3” new pavement
- Gravel backing
- Ditch improvements

Pavement Assessment
Greenland, New Hampshire
Hillside Drive – 2

GENERAL ASSESSMENT

- Fair condition
- Alligator and edge cracking are main deficiencies
- Drainage swales are well-established

RECOMMENED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing

Pavement Assessment
Greenland, New Hampshire
Lane Avenue

GENERAL ASSESSMENT

- Various types of cracking throughout
- Road has some uneven areas and rutting present
- Crack sealing treatment previously completed, but new cracks have formed
- Lacking drainage
- No gravel shoulder

RECOMMENDED IMPROVEMENTS

- Road reconstruction with 3” new pavement
- Gravel backing
- Construct closed drainage

Pavement Assessment
Greenland, New Hampshire
Liam's Court

GENERAL ASSESSMENT

- Various types of cracking throughout
- Edge cracking nearly full length
- Gravel shoulder in poor condition
- Drainage ditches are in good condition

RECOMMENED IMPROVEMENTS

- Crack sealing
- 1.5" Overlay
- Gravel backing

Pavement Assessment
Greenland, New Hampshire
Maple Drive & Maple Drive Ext.

GENERAL ASSESSMENT

- Fair condition
- Transverse cracks throughout
- Edge cracking throughout
- Drainage ditches are in good condition

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5" Overlay
- Gravel backing

Pavement Assessment
Greenland, New Hampshire
McShane Avenue – 1

GENERAL ASSESSMENT

- Various types of cracking throughout
- Poor drainage
- No gravel shoulders

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing
- Ditch improvements
- Install closed drainage

Pavement Assessment
Greenland, New Hampshire
Meaghan Way

GENERAL ASSESSMENT

- Fair condition – cracking present
- Drainage in good condition
- Mix of natural and gravel shoulders

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing

Pavement Assessment
Greenland, New Hampshire
Nantucket Place

GENERAL ASSESSMENT

- Satisfactory condition
- Various types of low severity cracks throughout
- Some rutting where alligator cracking is present
- Road has good cross-sectional shape
- Drainage satisfactory
- No gravel shoulders

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing

Pavement Assessment
Greenland, New Hampshire
Niblick Lane

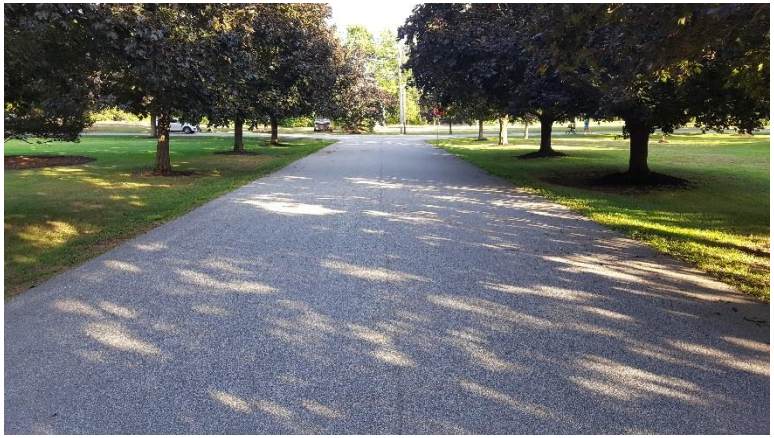
GENERAL ASSESSMENT

- Edge cracking along curbline
- Alligator cracking and rutting along centerline
- Curb and closed drain system noted – good condition

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay

Pavement Assessment
Greenland, New Hampshire
October Drive



GENERAL ASSESSMENT

- Low severity cracking of all types throughout
- Road has good cross-sectional shape
- No drainage ditches observed

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing
- Ditch improvements

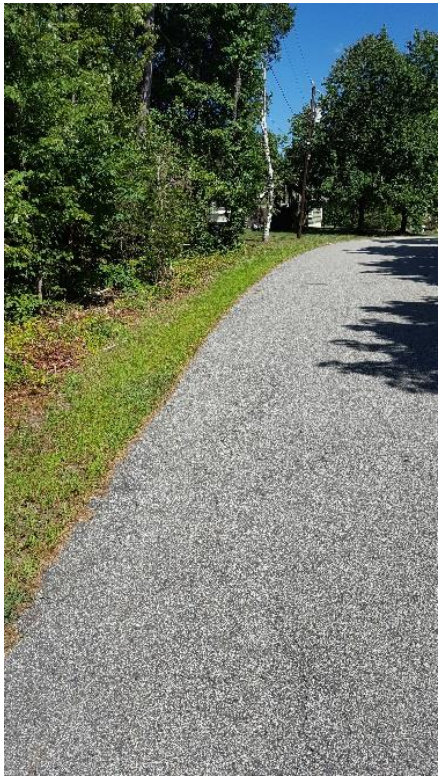
Pavement Assessment
Greenland, New Hampshire
Palm Drive

GENERAL ASSESSMENT

- Road is in satisfactory condition
- Main defect is transverse cracking
- Ditching present with some in poor condition
- Aging closed drainage system is operational

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing
- Ditch improvements
- Evaluate closed drainage, repair/replace as needed



Pavement Assessment
Greenland, New Hampshire
Park Avenue

GENERAL ASSESSMENT

- Road rides smooth and is in good condition
- Main deficiency is edge cracking on western side likely due to water being unable to escape edge
    - Lacking ditches
- Gravel backing being overcome by vegetation

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing
- Ditch improvements

Pavement Assessment
Greenland, New Hampshire
Pickering Brook Drive

GENERAL ASSESSMENT

- Various types of cracking present throughout
- Alligator and edge are most prevalent
- Side slopes and/or ditching are present and in good condition
- No gravel shoulder

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing

Pavement Assessment
Greenland, New Hampshire
Portsmouth Avenue – 1

GENERAL ASSESSMENT

- This section has had recent projects complete reconstruction efforts in 20__ and 20__
- Low severity cracking throughout
- Curb and sidewalk on southern side (full length); curb on northern side (~80%)
- Closed drainage

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing where curb is not present

Pavement Assessment
Greenland, New Hampshire
Portsmouth Avenue – 2

GENERAL ASSESSMENT

- Fair condition – edge cracking is most prevalent
- Drainage ditches (where present) are in poor condition
- Closed drainage appears to be aged

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Install gravel backing along road edge
- Ditch improvements
- Evaluate closed drainage, repair/replace as needed

Pavement Assessment
Greenland, New Hampshire
Riverside Lane

GENERAL ASSESSMENT

- Satisfactory condition
- Various types of cracking throughout: low severity
- East side has drainage swale
- Culvert in need of repair close to intersection with Route 33
- Gravel shoulders (where present) in poor condition

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing
- Ditch improvements
- Culvert replacement

Pavement Assessment
Greenland, New Hampshire
Sleepy Hollow Drive

GENERAL ASSESSMENT

- Centerline cracking
- Some areas with alligator and/or long/trans cracks
- Ditching in good condition

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing

Pavement Assessment
Greenland, New Hampshire
Stratham Lane

GENERAL ASSESSMENT

- Cut-thru to Stratham, NH from Dearborn Road results in higher traffic volumes
- Edge cracking is common on both sides
- Trees and limbs close to edge of pavement in some areas
- Lacking drainage ditches

RECOMMENED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing
- Ditch improvements
- Tree removal

Pavement Assessment
Greenland, New Hampshire
Sunnyside Drive

GENERAL ASSESSMENT

- Good cross-sectional shape
- Good drainage
- Transverse cracking is main defect
- Severe edge cracking in some areas
- No gravel shoulders

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing

Pavement Assessment
Greenland, New Hampshire
Sunset Drive

GENERAL ASSESSMENT

- Fair condition
- Various types of cracking throughout
- Alligator and transverse cracking are most common
- Lacking drainage ditches
- Closed drainage system in select area near Tuttle Lane

RECOMMENED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing
- Ditch improvements
- Evaluate closed drainage, repair/replace as needed

Pavement Assessment
Greenland, New Hampshire
Town Square - 1

GENERAL ASSESSMENT

- Driveway from Portsmouth Ave to the Police Station entrance
- Alligator and edge cracking are most prominent
- Drains to the west into ditch, however, ditches may need improvement

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing
- Ditching improvements

Pavement Assessment
Greenland, New Hampshire
Town Square - 2

GENERAL ASSESSMENT

- Section from Police entrance to the ball field parking area
- Full length crack or separating seam from widening
- Shoulders and drainage generally in good condition
    - Isolated area of sediment deposit on roadway

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing
- Ditching improvements

Pavement Assessment
Greenland, New Hampshire
Tuttle Lane

GENERAL ASSESSMENT

- Road has good cross-sectional shape
- Centerline cracking is most common defect
- Trees within right-of-way
- Lacking ditches
- No gravel shoulders

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing
- Ditch improvements

Pavement Assessment
Greenland, New Hampshire
Valhalla Drive

GENERAL ASSESSMENT

- Road has extensive cracking of various types
- Some cracks have previously been sealed
- Side slopes are in good condition
- No gravel backing

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing

Pavement Assessment
Greenland, New Hampshire
Vernita Lane

GENERAL ASSESSMENT

- Satisfactory condition
- Edge cracking most common defect; low extent
- No drainage ditches present

RECOMMENDED IMPROVEMENTS

- Crack sealing
- 1.5” Overlay
- Gravel backing
- Ditch improvements

Pavement Assessment
Greenland, New Hampshire
Weeks Avenue

GENERAL ASSESSMENT

- Short road to historic Weeks House
- Poor cross-sectional shape
- Poor drainage
- Severe rutting
- Cracks accommodate vegetation growth
- Surface has failed and road in poor condition

RECOMMENDED IMPROVEMENTS

- Road reconstruction with 3” new pavement
- Gravel backing
- Ditch improvements

Pavement Assessment
Greenland, New Hampshire
Willowbrook Avenue

GENERAL ASSESSMENT

- Second lowest PCI in town
- Edge is crumbling in some areas
- Alligator cracking present nearly the full extent of the road
- Poor cross-sectional shape
- Poor drainage
- Higher traffic volume

RECOMMENED IMPROVEMENTS

- Road reconstruction with 4” new pavement
- Gravel backing
- Ditch improvements and closed drainage repair/replacement needed

APPENDIX J

TOWN ROAD DESIGN AND CONSTRUCTION SPECIFICATIONS

ADDENDUM A TO SUBDIVISION REGULATIONS

ROAD DESIGN AND CONSTRUCTION SPECIFICATIONS

CHECKLIST FOR PRELIMINARY HEARING

I. Design Criteria Necessary

A. Preliminary design of subdivision
B. Plot plan, scale, and designer
C. Contour Sheet (2' intervals) (Amended 2014)
D. Soils data, name of soil scientist, test pits location and acres (square feet)
E. Preliminary road location and grades
F. Preliminary drainage
G. Bench mark, T.P.'s, elevation, and descriptions (NGVD-Datum)
H. 50' Front Setback

II. First Public Hearing: (Design checked by the designated Town agent before hearing) Final Design of Project/Subdivision (Amended 2014)

A. Final design of roadway, "profile" (Scale: 1" = 4' vertical; 1" = 40' horizontal.)
B. Contour sheet (2' intervals)
C. Cross sections of road at 50' intervals and at all drainage structures, intersections, and dead-end turnarounds
D. Final centerline staked on the ground, with finish grades shown on the grade stakes
E. Profile of road drainage ditches left and right plotted separately on profile paper (Scale: 1" = 4' vertical, 1" = 40' horizontal.)
F. Complete runoff calculations using the SCS TR 55 method or equivalent (See Section 4.5.2 for storm frequencies)
G. Finish grades of road profile
H. Easements plotted on plan "25" foot width
I. Typical section of roadway shown on plan, including utilities, sewer and water
J. Sight distance at intersection along road (See Table #1)
K. Maximum back slopes 3:1 cuts, 4:1 fills, 5:1 cul-de-sac turn-around fills
L. Benchmark and T.P.'s (shown on plan described with elevation)
M. All pipe structures under roadway will be R.C.P. class III with mortar joints or rubber ring gaskets or smooth wall HDPE pipe, frame and grate catch base covers. (Amended 2014)
N. Sewer pipe (S.D.R.) 35 P.V.C. laid in a stone envelope 6" all around pipe. Pipe locations shown on design with elevations (see typical section with utilities).
O. Road surface to be asphalt 2.5" rolled of base binder, 1.5" rolled of finish coat. (Amended 2006)
P. Hand auger soil borings along centerline (100' stations) of roadway to denote depth to solid ground. This aids in setting finish grade of road also rough estimate of gravel necessary.
Q. Under drains may be required by a designated Town agent. The use of fabric may be necessary; also more gravel may be necessary through wet areas. With ledge or any other field problems, the designated Town agent may require field design changes. (Amended 2014)

R. All utilities shown on design. See typical section for water and sewer utilities.

III. Private Road

A. Use same design and specifications as for Town Roads (see typical section).
B. Construction inspection to be done by a designated Town agent same as for Town Roads. See Section 6.1 of Site Plan Review Regulations. (Amended 2014)
C. Must be bonded.

The Town has adopted New Hampshire State Highway and Bridges specifications. For any specifications not covered in these regulations, refer to New Hampshire specifications of roads.

IV. Construction Specifications

A. Subgrade

1. Subgrade shaped and compacted full width, ditch cut and shaped.
2. Grade stakes in place every 50'.
3. Subgrade and finish grade centerline elevations should be marked in the field for review and approval by the construction inspector. (Amended 1999)
4. Subgrade properly graded and crowned with grader.
5. The Developers Geotechnical testing company shall provide to the designated Town agent a written certification that all organic material has been removed from the roadway. This shall be completed by inspection of the subgrade prior to placement of any fill, by proof rolling with a minimum of a ten ton vibratory roller making five passes over the subgrade. Any areas, which demonstrate weaving, shall be considered unsuitable. (Amended 1999, 2002, 2014)
6. No gravel (until subgrade inspected and approved).
7. Use of construction fabric may be required at unstable/wet locations. This determination shall be made by the designated Town agent. (Amended 2014)

B. Gravel to be approved by the designated Town agent (Amended 2014)

1. Bank run gravel put in eight-inch (8") lifts. (Amended 1999)
2. Grade stakes in place every 50'.
3. Compaction test, sieve analysis, and as built cross sections for each lift.
4. No processed gravel until bank run inspected and approved.
5. Processed gravel same procedure as bank run gravel.
6. Compactor on project for sub-grade bank run and finished processed gravel.
7. R.C.P. pipe: All bells to be laid up stream. (Amended 2014)
8. Driveway culverts will be (A.C.C.M.P. or R.C.P.) 18" RCP diameter min., length 30'; permits must be acquired from the Building Inspector. (Amended 2014)
9. Erosion control measures during construction.
10. Loam and seeding: 4" of loam conservation mix for slopes is the recommended seeding.

V. Paving Asphalt Finish

A. Before any paving of roadway a letter of approval by the designated Town agent stating that the sub surface is ready and weather is acceptable. This letter will be given to the prime contractor and also to the subdivider of the project. (Amended 2014)
B. 2.5" of binder (rolled). (Amended 1999, 2005)
C. 1.5" finish coat (rolled). (Amended 2005)
D. Paving: As built, cross sections on binder and also on final coat surface.
E. Maintenance bond will be held for one year after completion and Town acceptance.

VI. As-Built Construction Plans

A. Must be delivered to Town before bonds are released.
B. Must show all drainage structures (stations), inverts and outlet elevations, utility lines and structures.
C. Must show road ditches profile.
D. Must show drainage easements.
E. Must show any changes from original design.
F. Must show lot line corner monuments installed: 4" x 5" x 36" stone or concrete
G. Must indicate Sign Installation

1. Stop signs
2. Road "name" signs
3. Power and telephone
4. Road delineators

H. Bond Release

1. By Board of Selectmen (Amended 2014)
2. Deed road right-of-way to Town, including all 50' laterals and paper streets for future utilization.

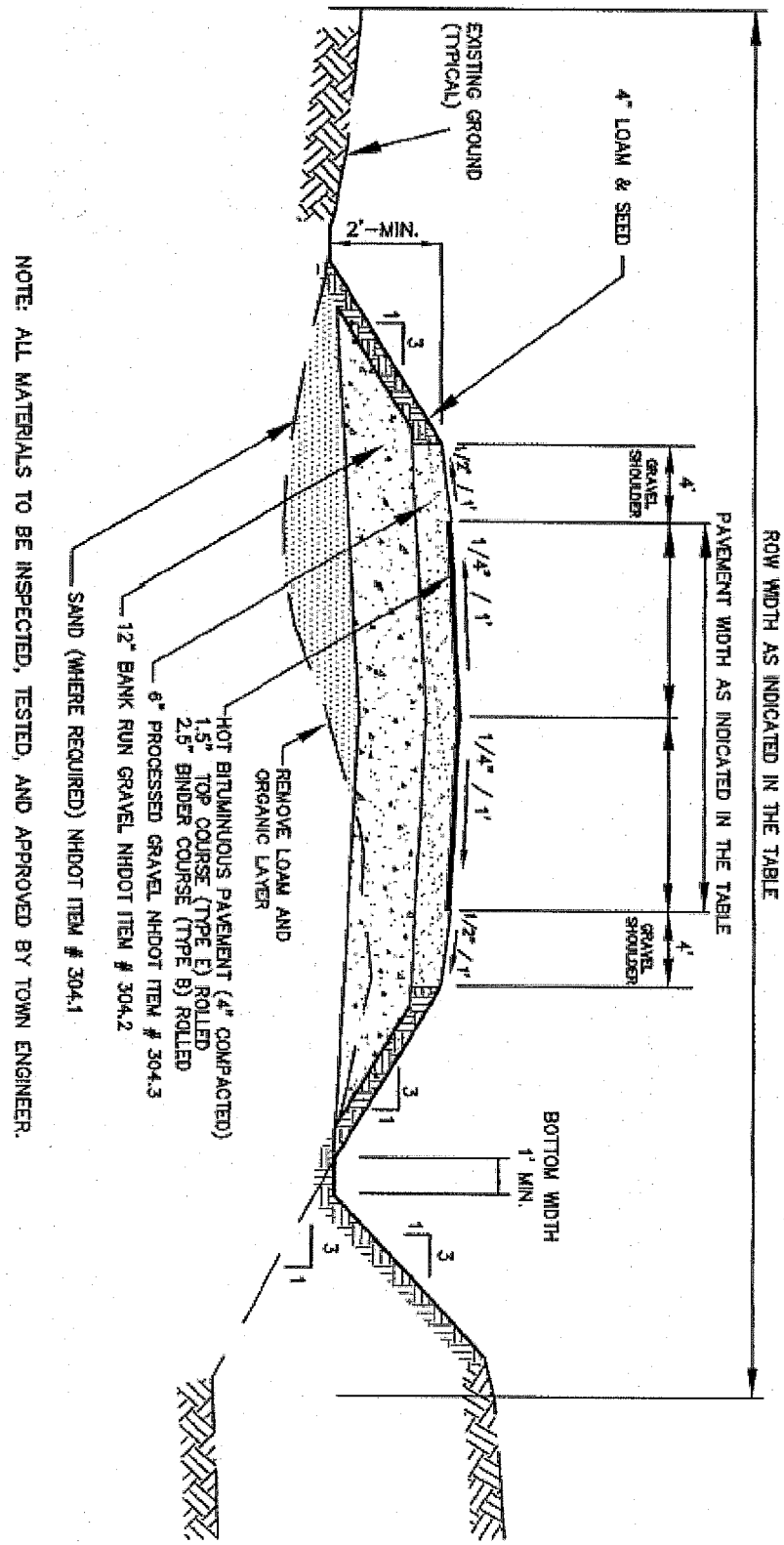
TABLE I - ROADWAY DESIGN CRITERIA

(Amended 2005, 2006, 2014)

Description	Local Res.	Res. Feeder	Indust. Primary	Indust. Secondary
Right-of-Way Width	50'	60'	75'	60'
Wooded Clear	Up to 50'	Up to 60'	80'	80'
Pavement Width	22'	24'	28'	28'
Sidewalk Width	5'	5'	5' *	5" *
Minimum Centerline Radius	150'	150'	300'	300'
Minimum Curb Radius (Intersections)	30'	40'	50'	50'
Minimum Profile Grade (Elsewhere)	2%	2%	2%	2%
Maximum Grade within 75' of Intersection	3%	3%	3%	3%
Minimum Grade (Intersections)	2%	2%	2%	2%
Maximum Profile Grade	8%	6%	5%	8%
Maximum Profile Grade (Cul-de-Sac Turn-Around)	3%	2%	2%	2%
Minimum Stopping Sight Distance	Refer to Section 4.4.2(p) - Chart			
Distance Between Intersections	Refer to Section 4.4.2(e)			
Base Run Gravel Depth	12"	12"	16"	16"
Crushed Gravel Depth	6"	6"	6"	6"
Base Course Depth	2.5"	2.5"	3.5"	3.5"
Wearing Course Depth	1.5"	1.5"	1.5"	1.5"

*One Side Only

Figure A - TYPICAL ROAD SECTION



NOTE: ALL MATERIALS TO BE INSPECTED, TESTED, AND APPROVED BY TOWN ENGINEER.

TYPICAL ROADWAY CROSS SECTION

NOT TO SCALE

Figure B - TYPICAL DETAIL PAVED "BUBBLE" TURN AROUND

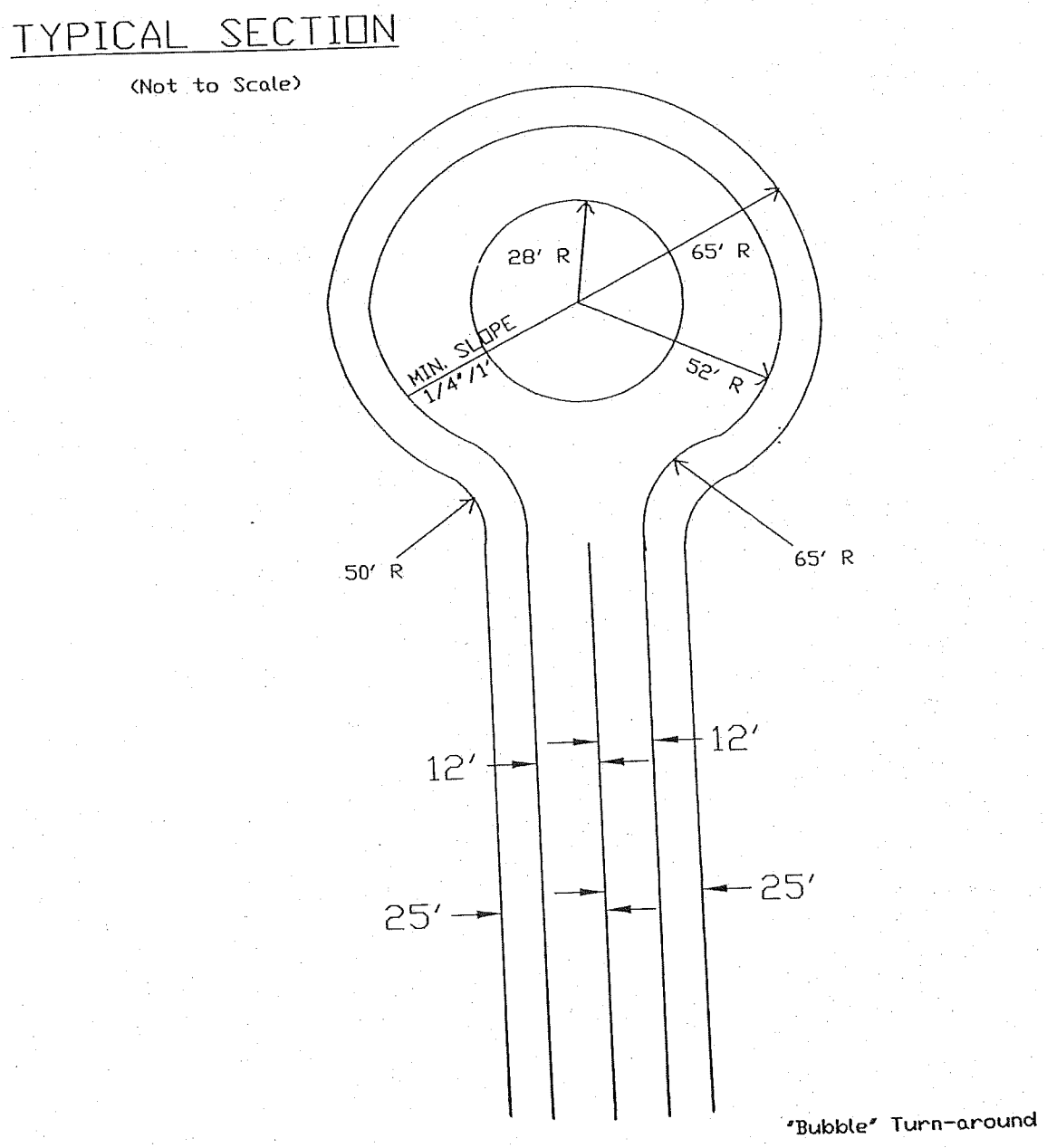
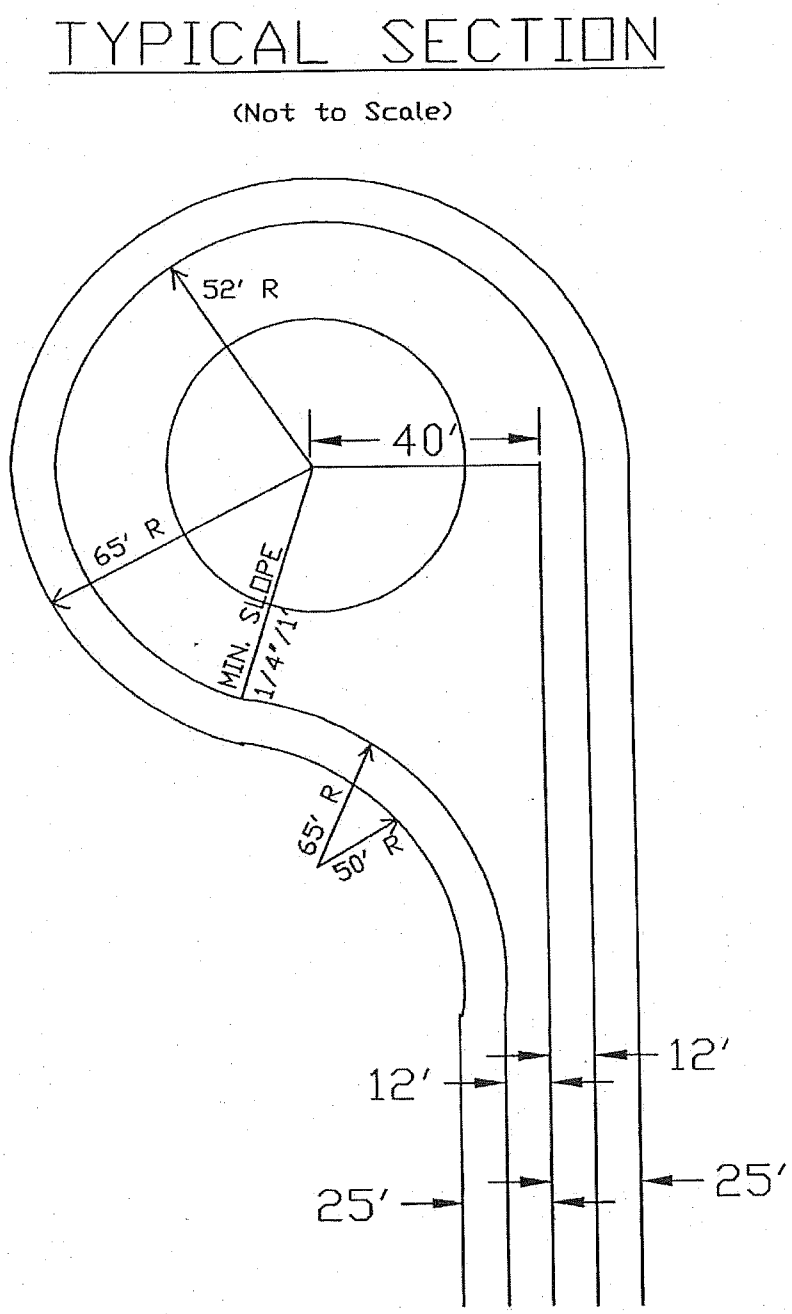


Figure C - TYPICAL DETAIL REVERSE "P" TURN AROUND



APPENDIX K

DIGITAL RECORDS

APPENDIX L

DEFINITION OF TERMS

DEFINITION OF TERMS

Box out Reconstruction: The process of excavating the asphalt surface and gravel road base (approximately a total depth of 22"), and replacing the materials with new, imported gravel and crushed gravel. The road is then compacted and shaped as a new road base. Asphalt is then paved over the new base to a total thickness of 3 or 4".

Class-V Road: A road, asphalt or gravel, owned and maintained by the Town.

Class-VI Road: A road owned but no longer maintained by the Town.

Crack Sealing: The application of a rubberized asphalt material into cracks in the paved surface. This helps prevent water from seeping below the surface.

Deferred Maintenance: When a road does not need any immediate maintenance because it is a new road, in very good condition or an older road in poor condition and is a low priority.

Ditching: Ditches give water running on the surface of the road a place to go where it cannot get below the surface. Ditches also encourage the drainage of water out of the gravels.

Enclosed Drain: Enclosed drainage can be installed to re-route the surface water into sub-surface piping through the use of catch basins and discharging the runoff downstream. Often needed where ditches cannot be installed or maintained.

Gravel Backing: Gravel installed up against the edge of the pavement and extends 1-2' into the shoulder. Carries water from the road surface into the ditch and reduces edge cracking.

Private Road: A road owned and maintained by a private individual or association.

Preventative Maintenance: When a road is beginning to show signs of stress. Usually consisting of overlays, it extends the life of the road further. For the Town of Belmont, overlays were considered for roads where future rehabilitation was proposed, but avoided where reconstruction was proposed.

Preventative Overlay: Overlays extend the service life of the pavement a few more years but are <u>not</u> a permanent fix. This is also done where future rehabilitation will be completed including reclamation.

The additional thickness of asphalt will give a better Reclaim Asphalt Product (R.A.P.) when the road is ground.

Reclamation: The process of grinding and mixing (like tilling a garden) the asphalt surface and the soils beneath to create one product, Reclaim Asphalt Product (R.A.P.). The R.A.P. is then compacted and shaped as the new road base. Asphalt is then paved over the new base to a total thickness of 3 or 4".

Reconstruction: Roads in this category have been noted to have poor structural integrity of the surface and sub base has diminished creating ruts, potholes, and extensive cracking. Poor subsurface drainage has been identified. Work includes improving road base conditions by either box-out reconstruction or roadway reclamation. Road is then paved following gravel placement. This can also include extensive drainage work.

Reinforcing Fabric: Usually applied in low, swampy areas, or where soils are fine or silty. This acts as a barrier keeping the fine soils from migrating up into the base as water percolates in and out of the base soils. Silts and fines have the ability to retain water causing frost heaves and other surface problems.

Routine Maintenance: When a road is only in need of minor maintenance such as crack sealing, ditching, and gravel backing. This can also be a newer road in good condition or a road in poor condition awaiting reconstruction.

Shimming: Shimming can be a stand-alone fix but more commonly is used in conjunction with an overlay to help improve the road surface. Shimming involves applying thin layers of asphalts in rutted areas or very rough spots to aid in correcting the cross-section before paving.

Spot Repair: Some roads are in good shape overall but have a few areas that are in poor condition. Instead of reconstructing the entire length of the road, a spot repair rebuilds only the short section of road in need. The remainder of the road may be left alone, overlaid, or rehabilitated.

State Road: A road owned and maintained by the State Department of Transportation.

Underdrain: Usually installed in areas where a road has been cut into the side of or through a hill and/or where the water tables is expected to be high. It helps keep the sub-base dry in wet conditions. Perforated pipe is installed just below the gravels

and ground water will drain into these pipes and flow to a pre-determined discharge point.