

Task Force RSA-21
Committee - Borough Substandard Road Process
Date: 30 July 2022
Committee Members (Darren Zimmer)

Note — This is an uncoordinated draft committee report published to foster coordination and discussions on the 'process' and recommendations. Readers should not construe any recommendations in this draft report as the Task Force's collective opinion, nor should one draw any inferences from this document to the Task Force's final report to the Assembly.

Part I

Committee Finding and Recommendations

Finding Narrative: Committee #3 of the Mayor's RSA Task Force considered and examined the MSB's processes to address substandard roads Borough-wide. The examination employed six criteria to evaluate the MSB's process: Simple, Robust, Documented, Controlled, Communicated, and Self-correcting. The committee's overall assessment is that the MSB's process to address substandard roads complies with all of these criteria; however, it is evident that there are gaps between the desired the process and the desired outcome based on apparent deficiencies within the process. While this report does not describe the MSB's process for addressing substandard roads, the following is a series of recommendations resulting from this examination for consideration by the MSB Assembly.

Recommendation 1

Issue: Lack of a commonly understood, established standard for road maintenance.

Discussion: Based on several interviews and road inspections, it appears evident that there is a lack of a shared, or common, understanding of what merits a substandard maintained road. Subsequently, the maintenance effort to sustain the existing road conditions (and perhaps improve them) is negatively affected. Those tasked with assessing MSB roads and the efforts to maintain those roads presented discrepant assessments of problem areas along the roads. Without a shared understanding of what 'Right' looks like, it is unlikely that the MSB can apply common standards to the Road Service Areas.

Recommendation: Establish an MSB training course to institutionalize Road Service Area standards for road maintenance. Require attendance by new maintenance contractors,

noncompliant contractors, RSA Road Superintendents, and RSA Board Members and open it to others who assess our roads (MSB Assembly Members et al.).

Recommendation 2

Issue: Conflicting MSB road service area standards leads to ambiguity in understanding the applicable maintenance standards.

Discussion: During interviews, when asked to point to the authoritative source identifying the standard governing the maintenance of the MSB Roads, most identified the MSB Subdivision Construction Manual (SCM). The SCM is the MSB's definitive, authoritative document identifying the standard for designing and constructing all subdivision improvements within the MSB.

The SCM serves the MSB well as the standard for new roads introduced within the MSB inventory of acceptable roads. It does not, however, serve as a standardization document for the maintenance of roads that never have and currently do not meet the SCM standards. The maintenance contractor cannot transform a substandard road (one that does not comply with SCM) into a standardized road through maintenance efforts alone. And therefore, the SCM does not serve as a good source for setting the standard for maintaining sub-standard roads.

Section I of the RSA Maintenance Contract serves as the de facto standard for maintaining the MSBs RSA roads. Section I qualifies two types of roads, Primary and Secondary. These roads are further differentiated between gravel and paved roads. The contract thoroughly articulates minimum maintenance standards for each road by winter and summer season. Paragraph 7 is quite descriptive and informative. While the contract does not innumerate which RSA roads are Primary and which are secondary, nor does it direct the contractor to the authoritative source of this distinction, the contractor was unavailable to ask where/how they found the MSB's list.

There are several ambiguities within the contract, such as: "workmanship will meet the highest standards of the trade" (Section 8, Warranty), without providing a reference document to that authoritative standard; "to provide safe, courteous, competent, year round road maintenance" (Intent) and leaving it to the reader to infer that safe is a road surface 'that a properly equipped and maintained vehicle can drive at the posted speed limit, or 25 MPH if not posted without sustaining damage to the vehicle or be in jeopardy of losing control.' (Para 7 Minimum Road Maintenance Standards).

The SCM, recognized as the MSB Standards for streets, classifies roads as Residential, Residential Subcollector, Residential Collector, Mountain Access Pioneer Road, Alleys, and others. Each of these classifications of roads is further defined with detailed access and design criteria with required (optimum) dimensional data. The SCM further establishes standards for drainage.

The discrepant standards can be explained as one is for designing new roads and the other for maintaining existing roads. However, that argument leads to ambiguity in the proper road standard in the MSB. Once a road is accepted into the MSB inventory, it no longer needs to be

maintained to the standard established in the SCM, as the maintenance contract seems to require a lesser standard. Furthermore, roads introduced into the MSB inventory below the SCM standard serve as an unending source of problems for the contractor as the ambiguity permits a variety of perceptive views on what is right and what is wrong. This leads to a perception management issue where residents or other stakeholders perceive the road is not maintained to standard, whereas the contractor believes it is.

Recommendation. MSB develop a comprehensive set of standards for the wide variety of conditions of roads within the MSB inventory (SCM). Reflect those standards in the MSB Road Service Maintenance Contract.

Recommendation 3

Issue: The MSB fails to hold the road maintenance contractors compliant with and accountable to the standards established in their contracts.

Discussion: Any casual drive through the MSB's roads yields numerous examples of poorly maintained roads not in compliance with the contractual requirements (i.e., potholes, washboarding, lack of grading, vegetation, and poor drainage control). The taxpayers are not getting the complete service for which they are paying. The MSB has incorporated several mechanisms to capture noncompliance to include, but not limited to: contractor self-management, Road Superintendent supervision, RSA Board Members assessments, resident complaints, Assembly members' observations, and many more. Yet, with all these sources to identify noncompliance, MSB roads are often maintained below standards. Correction of deficiencies seems to rest heavy on contractor self regulation, RSA Board member recommendations and Road Superintendent oversight. The mechanisms for compliance are present, yet poorly executed.

Recommendation: MSB Staff enforces existing control measures to ensure its staff and RSA Board members are adequately trained and supervised and responsibly and competently execute their oversight responsibilities.

Recommendation 4

Issue: Insufficient funding to improve the current inventory of substandard roads at an acceptable pace.

Discussion: Many roads within the MSB's inventory were either accepted into the inventory in a substandard condition or have degraded over time and do not meet the acceptable level of access. Road maintenance contracts maintain roads in the present condition and can only marginally improve those roads through proper maintenance techniques. However, to improve the MSB inventory of substandard roads, capital improvement investment is required to fund those efforts.

The MSB relies mainly on RSA appropriated levies to fund those investments. Other sources infrequently contribute to the effort, such as individuals or groups (LID Program, RSA Loan) of residents banding together to improve their roads, contractors requiring improved access to their

worksites, and occasional state and federal funding of specific projects. The fiscal year 2022 budget identifies approximately \$683,000 for the Road Improvement investment for RSA 21.

According to an RSA 21 board member, approximately 80% of the 100 miles of road in the RSA are substandard. Of that 80%, 20% are often safely impassible during certain times of the year. Only 20 miles are paved. At the cost of \$X (edit note - need to confirm the correct numbers) per mile to improve these roads, it will take X years to provide the residents of RSA21 with safe, paved roads at current funding levels.

To execute the MSB government's powers/responsibilities of providing transportation systems, the MSB should seek additional funding sources to supplement the appropriations process.

Recommendation: Hire, on a commission basis, a grant researcher and writer. Conduct other investigations into supplemental funding sources to invest in the MSBs roads (Matching funds programs for businesses,)

Recommendation 5

Issue: Contractor Start-Up Inventory does not appear to be collected or employed to any discernible aim.

Discussion: Paragraph 3.12 of the Special Provisions Section of the MSB Maintenance Contract directs contractors to conduct a detailed and comprehensive inventory and assess the characteristics of the roads they are to maintain. They have 30 days to identify the roads' features and details they cannot maintain in full compliance with the contract. Through discussions with the MSB staff, this measure does not appear to be enforced; only two of the RSA maintenance contractors have inventories on file. There are three issues with this.

1. The lack of a coordinated 'baseline' on the conditions of the roads that the contractor must maintain leads to the acceptance of poorly maintained roads. Without an agreed-upon, lower standard for preserving the condition of pre-contract, substandard roads, the default standard must be those identified within the contract or the SCM. However, as many substandard roads cannot physically be maintained at that higher condition, a lesser standard is de facto accepted. Because a 'baseline' is unavailable, the MSB accepts substandard performance of roads that the contractor deems impossible to maintain to the Contract or SCM standard. That substandard performance can become the new standard for all roads, including those that can be maintained to contractual (or SCM) standards. By not having this baseline, the MSB is not providing its staff the information tools needed to discriminate between genuine sup-par performance (on standard roads) and where that lower level of performance is acceptable.
2. The comprehensive inventory assessment is an invaluable tool to help populate an MSB database depicting the conditions of MSB roads. This information exists only in a dispersed state amongst the various RSA maintenance contractors, the RSA Boards, and Superintendents. Consequently, it is not readily accessible for analysis and planning by the MSB to better maintain road situational awareness for action and planning purposes.

3. The MSB's failure to enforce a key contractual requirement 30 days into a new contract sets the performance standards suggesting that noncompliance with the contract is acceptable.

Recommendation: MSB Staff enforce the maintenance contract and requires each contractor to conduct the inventory. Furthermore, use the collective inventories to develop a comprehensive situational awareness of the condition of the MSB's roads for action and planning purposes. The MSB staff is well underway with developing this tool (edit note - name of tool demonstrated at the 19 July TF RSA meeting) and could use these inventories as its baseline.

Committee Observations and areas for consideration (not formal recommendation)

Observation: The budgetary process for road improvement is reactionary, or passive. Appropriations pay the bills, then whatever is leftover is applied against the Road Improvement Program requirements. Consider using the budget process as a tool to drive road improvement priorities, rather than using it as a reactive process to pay bills, then use the leftover monies to fund the Road Improvement Program.

Observation: The MSB budget cycle from July to June (?) does not align well with the construction season. When dollars become available for commitment/obligation to the Public Works Directorate, the construction season is well underway. This leads to a complicated series of agreements or delayed projects. Consider aligning the MSB fiscal year with the physical year.

Observation. RSA Boards are underpowered. Although RSA boards are 'advisory' in nature, they are underutilized in their capacity to support road service needs. Consider leveraging their experience, man-power, and intellectual capacity by relying more heavily on them for:

- The RSA budgetary process (Maint Contract, Other Maint projects, CIP,)
- Place them into an 'approval' or at least 'concurrence' required status for the development and prioritization of other maintenance projects (\$250K per RSA, \$25K per project)
- Require RSA boards to brief the Assembly on their recommendations for RIP and their priorities for safety, accessibility, and improvement that they employed.
- Direct a 'Matrixed' approach for the RSA Boards to use when forming their recommendations based on MSB priorities for safety and accessibility.

Part II

Committee Background: Attentive to resident concerns about the substandard quality of some of Big Lake's roads, the MSB Assembly established a Task Force to examine several aspects of the Road Service Maintenance program to improve processes. The Task Force, by approved motion, established several committees to address each of the MSB-directed tasks. Ordinance series no 22-020 specifically tasks the Task Force to consider several issues. This committee is concerned with the directive to consider processes to address substandard roads Borough-wide.

Committee Task: Consider processes to address substandard roads Borough-wide.

Task Amplification: Review the formal and informal Borough process to identify RSA roads that fail to meet the Borough published standards. Further, identify Borough processes (means and ways) to improve substandard roads. Attempt to identify shortcomings with adherence to, or within, the process itself. Develop and make recommendations for better compliance or improvements to the process.

Methodology:

- Subject matter expert interviews
- Review Borough documentation
- Establish Borough, de facto, 'substandard roads' process
- Identify the intended outcome of these processes
- Evaluate if the intended result is accomplished
- If not, establish why not. What is not working as intended
- Develop remedial actions to bring adherence back into alignment or improve the process

Interviews

- RSA 21 Board member Mr. Bill Haller
- RSA 21 former Board member, Mr. Greg Quinton
- RSA 21 Road Superintendent, Mr Tyler Blazejewski
- District 5 Assemblyman, Mr. Moke Tew
- MSB Public Works Department Director, Mr. Terry Dolan (outgoing)
- MSB Public Works Department Director, Mr. Tom Adams
- MSB Public Works Department, Operations Jennifer Ballinger, Acting O&M Div. Manager
- Brad Sworts, Pre-Design & Engineering Division Manager
- Alex Senta, Project Management Division Manager
- RSA-21 Maintenance Contractor was unavailable for discussions.

This concludes the Committee Report initial draft submission to the RSA TF.

Report: Road Service Area Task Force. Ordinance 22-020 -

Committee 4, Member Report: Issue A) Alternate Specifications and the issue of Impassible roads and roads with major deficiencies

This portion of my committee report is based primarily on the June 21, 2002 task force meeting. I was absent at that meeting and felt it helpful to give a brief understanding of the action take, particularly as it applies to my assignment.

Committee 4, took on the issues of *(A) Alternate Specifications* and the issue of *Impassible roads and roads with major deficiencies preventing safe public access*

Dealing with the four (4) issues of Ordinance 22-020:

Ord. 22-0920 section 3) provides that the task force is to address four (4) issues. Issue D, Processes to address Substandard Roads¹ was assigned to Committee 4 which eventually was assigned to me.

In accord with the Ordinance the Task Force has been assigned to address four (4) issues:

- *ISSUE 3A), Adoption and implementation of an alternate contract structure; and...*
(ISSUE 3B), scalability; Both assigned to Committee 1.
Subcommittee chair is Jashua Leatham.
- *ISSUE 3C, Brush cutting.*
Assigned to Committee 2
Subcommittee chair is Steve Edwards
- *ISSUE 3D), Processes to address substandard roads Boroughwide is*
assigned to Committee 3
Subcommittee chair is Darren Zimmer

¹ MSB Ordinance Serial No. 22-020

- *ISSUE (4A), Addresses the “optional” issue on dealing with “currently maintained roads which become impassible or have major deficiencies”.*
Subcommittee chair is Ken Walch

“ISSUE” refers back to the work requirement found back in MSB Ordinance 22-045.

The minutes of the task force meeting make several changes (clarifications) to the work descriptions. My understanding of our work as currently laid out is as follows:

The four (4) issues were divided up in the following committee structure:

Committee 1: Assigned issues *A, Alternate Contract and Scalability*, and Issue , *B, Scalability*,

Committee 2: Assigned issue *C, brush cutting* listed above.

Committee 3: Assigned issue *D, substandard roads* listed above.

Committee 4: Assigned issue *A, Alternate Specifications* and the issue of *Impassible roads and roads with major deficiencies preventing safe public access*. (“Alternate Specifications” and “Alternate Contract Structure” are very similar and need some better definition.

The public road process is complex. It involves among other issues, long and short-term planning, soils and site investigations, easements and planning for numerous utilities, planning for **DRAINAGE, DRAINAGE, DRAINAGE**, design & construction issues, post-construction maintenance, road safety issues, and on and on.

How can we improve the process? See next page.

Suggestions for finding our problems & improving the process:

The process of road planning, management, construction, maintenance, etc., etc. is challenging to say the least. We have some excellent tools to work with but the process we have to make those tools work is badly broken.

I also have concerns about our four-committee structure populated with one individual per each committee (along with our Task Force chairman who sits on all four of the committees). It's not very realistic to expect the one individual on this one-man committee to have the broad scope of expertise and background needed to address all the issues we're dealing with.

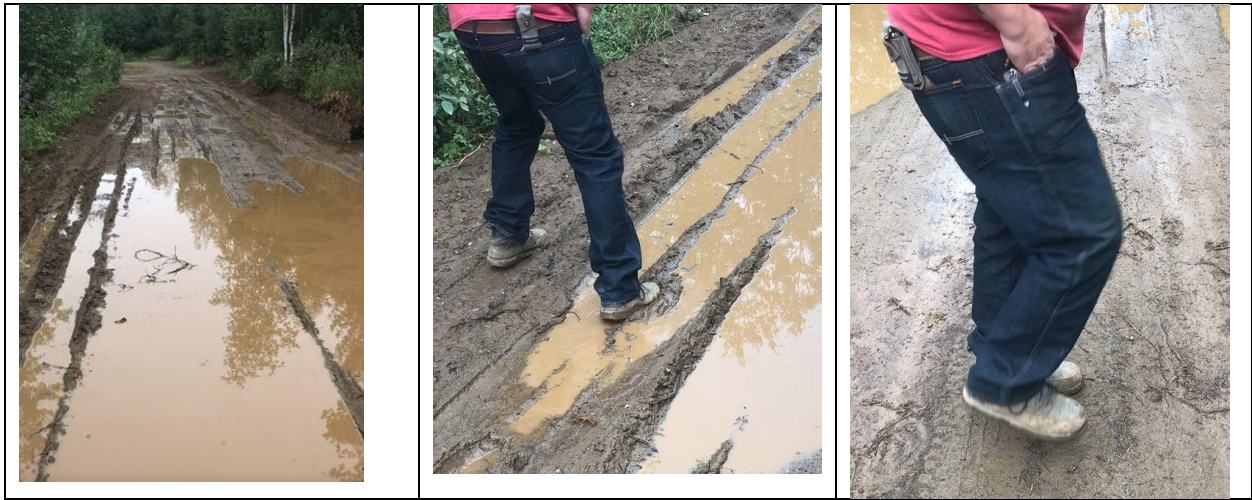
A brief summary of a few of the issues that need review:

Is the committee process we show for finding ways to solve our road management problems adequate?

Is the scope of work stated for the task force adequate to solve the problems?
Here are some of the major problems we're dealing with:

- **PROJECT OVERVIEW:** We are dealing with approximately 106 miles of MSB roads. With the exception of those roads built under a Subdivision Agreement I would estimate that the vast majority have serious deficiencies and failures for meeting design and safety criteria.
- **CONTRACT DOCUMENTS:** The bulk of the documents are pretty well written. The areas most in need of improvement are:
 - The price agreement and method of payment
 - The Bid Form
 - Issues dealing with the start-up inventory
 - Issues with "private" culverts serving private properties
- **START-UP INVENTORY:** (beginning of the spring season). A very necessary document but with a huge work effort to produce and have effective
- **FAILURE TO CAREFULLY EVALUATE THE WORK FOR PAYMENT:**

Photos of Concord Rd taken on 7/20/2022



The photos taken of Concord Rd. illustrate what is all too common. Proper drainage is our most common and serious problem. (This road is not included on the list of Borough maintained roads.)

It's estimated that somewhere in the neighborhood of 85% of our public roads are gravel (often dirt). Think of the **road inventory** write-up for this road if we were to request other items critical to the use of this effort:

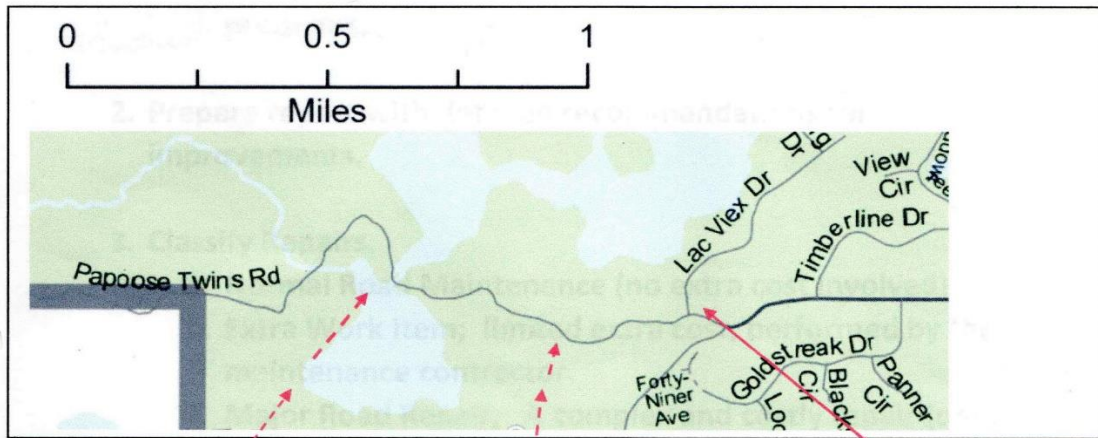
Issues critical to the road inventory. The road is or needs to show::

- Too narrow
- No crown
- No drainage or channeling water off the road surface and away from the roadbed.

Other features that should be shown on the road inventory:

- Utility locates that will show if there are utility conflicts
- ROW encroachments
- Probably road base material that does not meet spec.

The following pages show a few photos of some of the complexity of the road inventory and maintenance program.



Mile x.x. This shows a very serious deficiency requiring a redesign of this section of the road. This may be a serious enough construction defect that constructing the upgrade should be put out to bid as a major repair.



Mile Post y.y. A serious but very common drainage problem that is VERY common on our roads. This can probably be accomplished under an "extra work" item under the Maint. Contract. This may or may not require a CMP. Typically, a maintenance contractor doing this type of maintenance work will have the equipment and experience to make this type of repair. This road has been accepted for maintenance and I would think there is an obligation on the boro's part to provide an acceptable level of maintenance for safer and reasonable travel.



Mile Post 0.0, Papoose Twins looking west. A location map and photos are extremely important to the process of determining where and what upgrades are needed. The road inventory, This can be an extremely useful tool evaluating and prioritizing improvements that are needed.

Tying the location of the photos to the road mileage (using the RSA road map) provides an easy-to-follow reference to where the photo was taken.

A Detailed Road Inventory is Critical to Maintaining a Safe and Functional Road System



Papoose Twins Rd. – This is on the list for road maintenance.



Aerial photo of typical subdivision layout

For us to develop a useful road inventory tool that has some value is a project all by itself. It is not something you produce by putting a line or two of description in the contract documents and expect to get a useful product from the effort. We have a lot of good tools to work with. The task is how to make them work effectively.