

APPENDIX L

November 30, 1994

To: Interested Citizens and Committees

From: Roads Management Advisory Committee

This document was prepared by the Selectman's Road Management Advisory Committee to address two principal concerns. To provide a process for the Public Works Commission to use in the review of roads projects and as a subcomponent investigate whether the Town of Concord needs a Scenic Roads Bylaw. The Committee researched and reviewed matters of public safety, funding, insurance, liability, scenic and historic roads data, road standards, etc. Based on that research (on file in the Selectman's office) and analysis of the data a Policy and Process was formulated that comprises the current "semi-final" draft.

The Committee does not recommend pursuing a Scenic Roads Bylaw, financial reimbursement is not an issue and upon adoption of the recommended Policy it was agreed that a much broader vision will be gained for the Town of Concord than a Scenic Roads Bylaw could provide.

We anticipate a representative to be available to answer questions at scheduled meetings of Boards and Committees throughout December. If you would prefer to send your comments or suggestions in the written form please direct them c/o Public Works Department 144 Keyes Road, Concord MA. 01742 Attention: Roads Management Advisory Committee, by December 21, 1994. While there will be an opportunity to comment later in the process at the Selectman's meeting, your input is most valuable now.

Thank You for your attention to this matter.

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Roads Management Advisory Committee Report

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Policy Statement

In the reconstruction or construction of roads, the Town of Concord seeks to maintain those aspects of the existing environment which enhance the historic, scenic, and agricultural properties of the roadway, consistent with public safety.

I. General Design Criteria

A. Retain Characteristics Consistent with Policy such as:

1. Scenic Characteristics

- a. Open vistas
- b. Stone walls
- c. Shade trees
- d. Curves and topography consistent with existing landscape
- e. Bridges
- f. Etc.

2. Historic Characteristics

- a. Age, a road layout that has had little or no change since its first known layout
- b. Events
- c. Unique characteristics such as significant residences, unusual structures, or a distinguishing streetscape.
- d. Bordering features, which may include markers, troughs, burial grounds, and natural historical features.
- e. Etc.

B. Avoid Design Characteristics Inconsistent with Policy, except when required for safety, such as:

1. Wider pavement
2. Straightening of roads
3. Removal of trees and walls
4. Signage and pavement markings, avoiding cumulative visual impact

- C. Address Public Safety Considerations, such as:
1. Accessibility for emergency vehicles
 2. Adequate water supply, consider needs to upgrade water service (size of main, hydrants, etc.)
 3. Appropriate response to accident history and other safety issues.
 4. The review of signage needs and other accident avoidance issues.

- II. **Public Works Commission** to develop, implement and periodically update policy, guidelines and procedures.
- A. Areas where more detailed design criteria are required to implement Policy, for example:
1. Improved drainage without major changes to character of road.
 2. Design options for guardrails and retaining walls.
- B. A defined criteria for those reconstruction actions which may be delegated to DPW staff and do not require Commission approval (with no effect on General Design Criteria I above and below a certain cost)
- C. A defined criteria for roads projects requiring PWC approval and those requiring a public review process.
- D. Refinement of Draft procedure for public process developed by Roads Management Advisory Committee (See Process for Project Review and Approval)
- E. Work with Planning Board to develop consistent design for subdivision roads which promote Policy.

- III. **Police Department** to support Policy by:
- A. 1. Review signage and speed limits to discourage traffic from using residential streets.
 2. Reduce speeds in areas where design upgrades might otherwise promote greater speed
- B. Report to Tree Warden dangerously located or damaged trees.
- IV. **Fire Department** to implement Policy by reporting any accessibility issues or problems with the water supply to the Public Works Director and give input to the Public Works Commission at the time the Roads project list is being reviewed.
- V. **Natural Resources Commission** should review its Policies and Procedures with a goal of supporting the general design criteria in I above. Tree Warden should develop policy for systematically reviewing trees for maintenance, removal and replacement along roadways.
- VI. **Planning Board** to implement Policy for the permitting of private development by:
- A. Revise Subdivision Rules and Regulations, for example; make revisions which promotes new road construction compatible with existing roads accessing the subdivision.
 - B. Work with Public Works Commission to develop consistent Road Standards.
 - C. Development of Policy and Guidelines for distribution to developers giving guidance as to features which will cause a proposed subdivision to have greater support.
 - D. Establishment of curbcut and driveway criteria consistent with Policy

Process for Roads Projects Review and Approval

Goal:

- Make the PWC the proactive leader of determining road project priorities and project scope not a reactive administrator.

Assumptions:

- Road classification matrix is in use and that all roads are either classified, or are classified as soon as a project is proposed.
- Road management is conducted in co-ordination with other town agencies, (Light Plant, Selectman, Planning Board, NRC, Historic Commission, etc.) and with an eye to overall town planning policies - i.e. the Long Range Plan, the desire to respect the character of the town etc.

Process

- A planning "cycle" will start with the DPW compiling and reviewing a list of all road project with the Town Manager. The "List" of anticipated projects would normally be compiled at the beginning of each budget cycle, in June, and would be an important starting input for the process of that year.

Other projects could be added to the "List" in the course of the year on an exception basis, such as an emergency repair situation or unanticipated work by another department, etc.

The DPW would be responsible for maintaining a status file of all projects on the "List". The PWC would be responsible for overseeing the projects. At the beginning of each planning cycle the PWC and the Town Manager would also agree on a project size "trigger" in terms of a dollar amount. Any project over that size whether a minor repair or more substantial would receive detailed review by the PWC .

- Each proposed project will have a general written overview prepared which should allow the PWC to classify each of the projects into one of three categories.
 - a. Minor repairs*
 - b. Structural repairs*
 - c. Reclassification of a road's category
(local, collector, arterial, major arterial)
- In each overview the issues which the project seeks to resolve should be listed along with a conceptual proposal for resolution. The issues listed should be supported by "factual" evidence such as road bed condition, safety history, concerns from Police or Fire, etc. At the beginning of each cycle, June, the list of projects requiring overviews will be submitted to the other departments. The other departments will therefore be in a position to do all their overview work at once. All initial overview work would be completed by early September. Overviews for exception basis projects as the need arose.
- The PWC will review the overviews in the September planning cycle and either accept the classification or require more background. The PWC would finalize priorities in this timeframe.
- Once an overview has been accepted, if the determination of the PWC is that "no action" or "minor repair" is required then there will be no further public process.
- For "structural improvement" or "reclassification" projects a public meeting process would then commence. The process will start with an Informational Meeting to discuss the scope of the project and to receive questions and comments from neighbors and others. Site walk(s) would take place prior to this meeting.

* See Overview of Road Repair Types for definitions

The public information process may add new material at this time to the overview of the project. The Town Engineers design concept would also be reviewed.

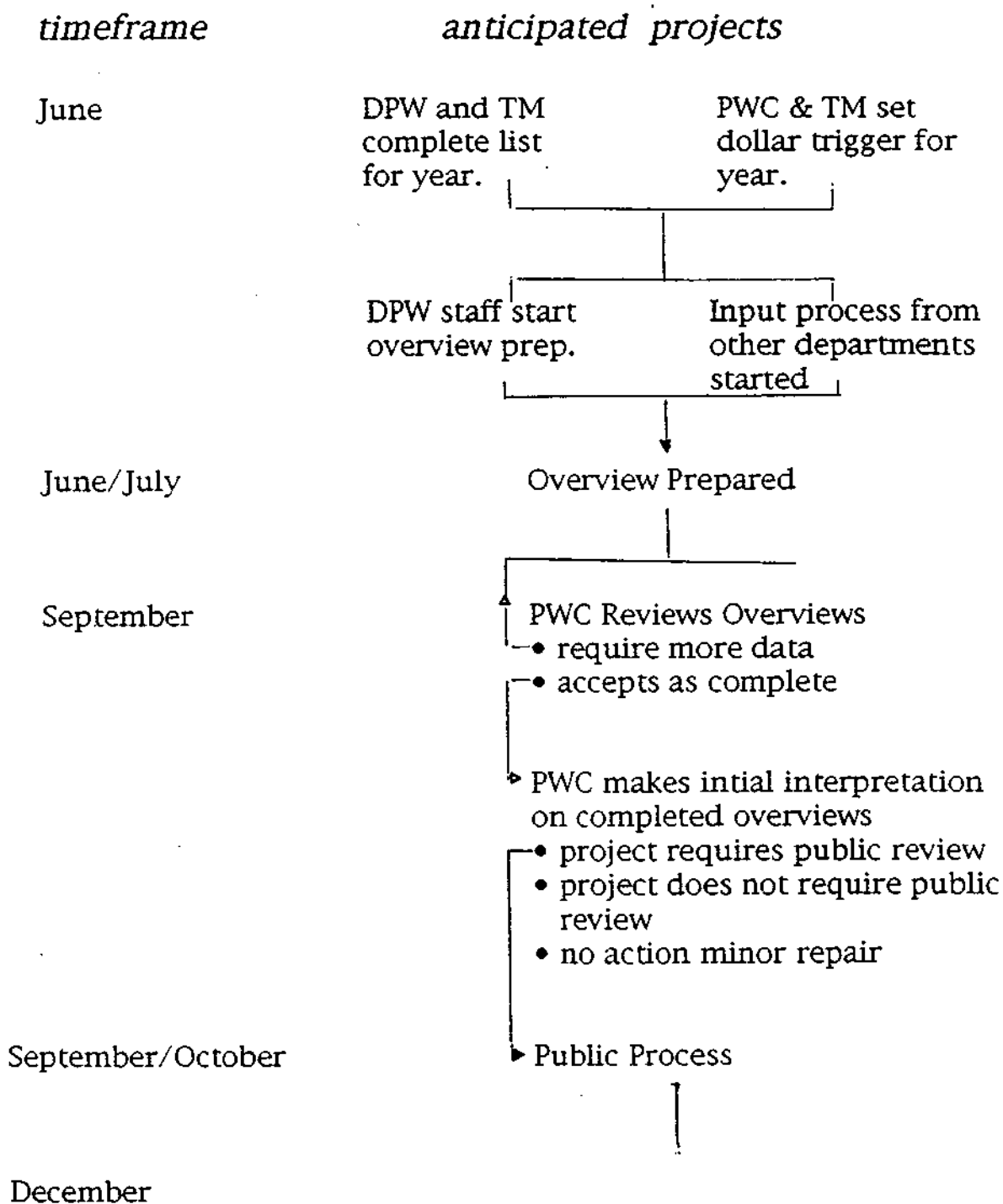
Based on this public meeting the PWC would then give direction on how to proceed with the identified issues and may request a Plan from the Town Engineer. The Plan would be available for public review.

At the second public meeting the Plan would be reviewed and comments taken. The PWC would make its determination of what to do and give direction to the DPW.

Other subsequent meetings may be held as deemed appropriate.

Once the plan is complete, the DPW will keep the PWC informed of the progress. The responsibility of execution is the Departments while the Public Works Commissions will be to monitor the progress.

Process Flow and Time Chart for Roads Projects



Note: PWC monitors work in progress and unanticipated projects as noted in text.

An Overview of Road Repair Types

The Town of Concord Roads Program is part of Public Works Repair Operations which are all under the general oversight of the Town Manager and the Public Works Commission. The following information provides an overview of the types of road repairs included in this program.

The Department of Public Works Highway Division inspects the pavement of Town roads routinely. On the basis of the pavement survey the Department of Public Works makes an initial judgment to: a. take *no action*, b. make *minor repairs*, or c. make *significant repairs*. Recommendations are reviewed by the Town Manager. An overview of what is involved in the three choices is as follows:

- a. A *no action* recommendation may arise for a variety of reasons, which include: lack of funding, project delay due to coordination with other construction projects, pavement not in need of repair at this time, etc..
- b. *Minor repair recommendations* are scheduled and executed through the DPW Highway Division. This type of repair is considered routine maintenance. When a minor repair affects the access to abutting property, residents will be notified of the work and planned date. Minor repair types and definitions may include, but are not limited to the following:
 1. chip sealing- application of road oil and peastone,
 2. crack sealing- cleaning and sealing of random cracks in bituminous concrete pavement,
 3. infrared patching- heating the surface of bituminous concrete with an infared heating device then adding bituminous material which is spread and compacted
 4. full depth patch- localized repair from base up (used where a localized structural failure occurs),

5. repair of pavement surface - an overlay of bituminous this may include a leveling course to remove surface irregularities where they are excessive. Shoulder maintenance may be scheduled in conjunction with an overlay. Some benefits of this type of repair are to seal cracks thereby keeping water out of the roadway base, to provide short term structural improvement and to smooth the surface for improved ridability.

c. *Significant repairs* to the pavement are most often considered structural and may include the following:

1. A thick (2" or greater) overlay of bituminous concrete over the entire width of existing roadway,
2. Planing (or other removal of) the existing pavement of the roadway base and placement of an overlay (1" or greater) on top of the existing roadway base,
3. Recycling or Grinding the existing pavement and compacting it to form a new roadway base then placing an overlay on top of the new base. Some benefits of this type of repair are to correct problems with the top layer of pavement, breakdown of the roadway base, poor drainage, and/or keeping the roadway from completely breaking up. The paved surface may be relocated somewhat within the right of way to correct alignment, and improve sight distances during this process.

Maintenance of overgrowth along the roadsides will be managed on an annual basis by the Town Manager or appointee reviewing the areas in need and the budget with the Public Works Commission.