



TOWN OF MERRIMACK INTER-DEPARTMENT COMMUNICATION

DATE: May 4, 2023

AT (OFFICE): Department of Public Works

TO: Paul Micali, Town Manager

FROM: Dawn B. Tuomala, PE, LLS, CWS
DPW Director

RE: Daniel Webster Highway Pavement Improvements

Mr. Micali,

The section of (US Route 3) Daniel Webster Highway that is considered within the Urban Compact area is our largest Arterial Highway in Town. In order to be able to sustain the road and keep up with maintenance we are asking to withdraw the \$375,000 from the Capital Reserve Account.

The funding will be used to overlay a 7,100 foot section of Daniel Webster Highway between Greeley Street to the lights at Rite-Aid. To minimize the impact to the roadway the proposal is to do a "Pavement Preservation" project utilizing a Bonded Wearing Course.

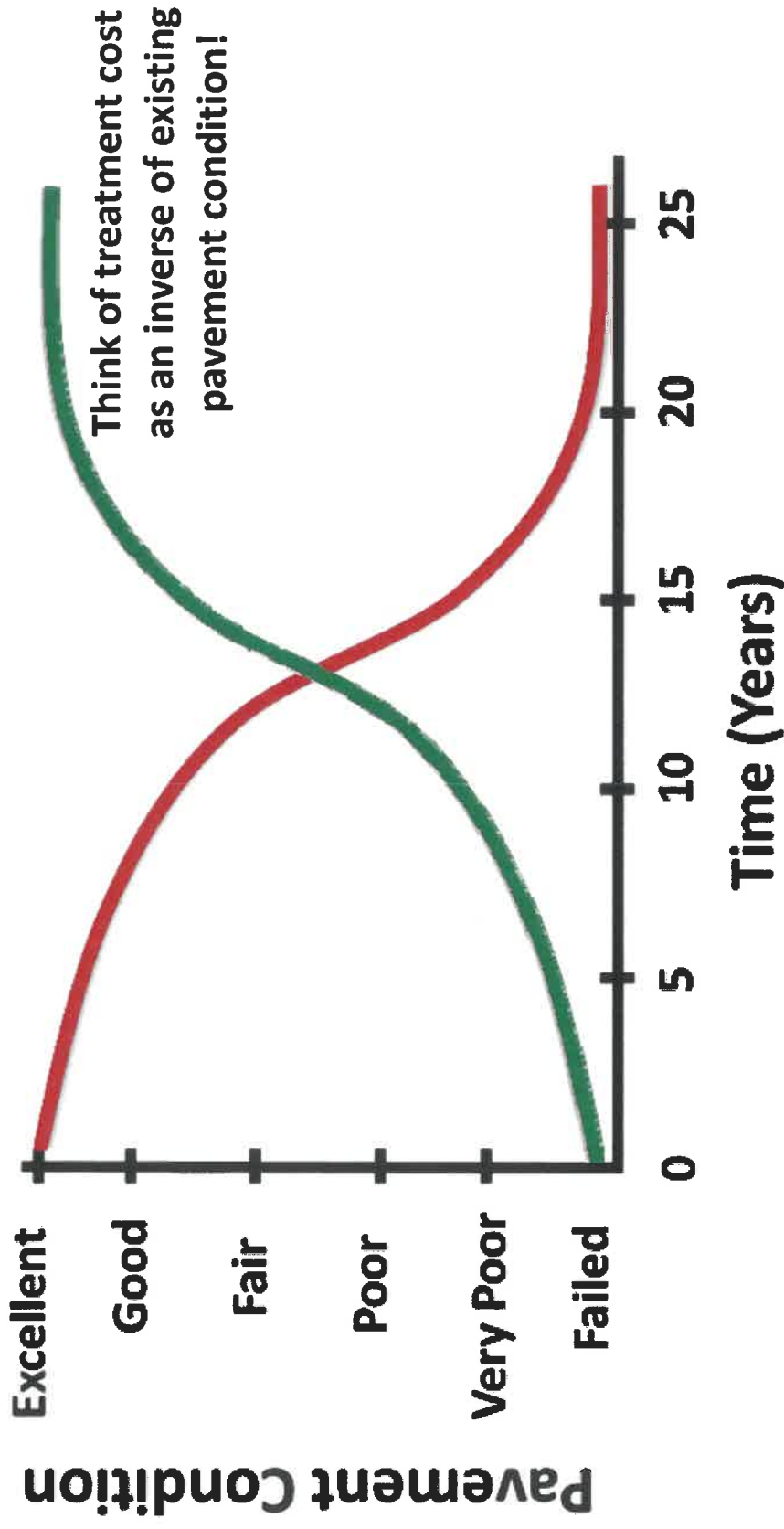
The Bonded Wearing Course will waterproof and seal the existing pavement. The thin application will allow for the curbing reveal along the highway to be preserved. This process will be performed at night, it allows for a quick turnaround time with a minimal curing process, this will all lead to minimal traffic impact. This treatment had an 8 to 14 year life extension.

Should you have any questions please let me know,

Dawn

CC: File

Treatment Timing vs. Cost



“Pavement Preservation”

Pavement preservation is a program employing a network level, long-term strategy that enhances pavement performance by using an integrated, cost-effective set of practices that extend pavement life, improve safety and meet motorist expectations.

Source: FHWA-2005



All States
Materials Group

WWW.ASMG.COM

Bonded Wearing Course

Existing Road Condition

- Low to high volume roads
- Sound structural pavement with a good profile
- Minor to moderate surface distress (cracking, raveling, oxidation, and minor rutting)

Process

- Leveling course and crack sealing/filling (as needed)
- Spray paver application of polymer modified emulsion and ultrathin (5/8" - 3/4") gap graded HMA overlay
- Immediate rolling and return to traffic

Benefits

- Waterproofs and seals pavement, including small cracks, minor rutting, and surface imperfections
- Superior bonding allows for thin application that preserves curb reveals
- High skid resistant wearing surface that will not de-laminate
- Quick construction and curing process allows for minimal traffic impact
- 8-14 year life extension on good candidates

