Town of Plymouth
Fire Department
114 Sandwich Street
Plymouth, Massachusetts 02360
508-830-4213

To: Kere Gillette, Budget Analyst
Advisory and Finance Committee

From: Chief Bradley

CC: Town Manager Melissa Arrighi
Finance Director Lynne Barrett

Date: September 4, 2015

RE: Article 4C
Fall Annual Town Meeting Request, Corrosion Repairs to Fire Apparatus

---

Three of the Town's pumping engines are showing advanced stages of exterior corrosion. These apparatus have aluminum bodies which have held up satisfactorily over the years, much better than the steel bodies used years ago and equally satisfactorily as the stainless steel bodies, which add significant weight and cost to the purchase of the vehicle.

The apparatus, Engine 2 and Engine 5, which went in service in October 2008, and Engine 1, which went in service November 2011, are in need of corrosion repairs and repainting.

Last year we began to notice exterior corrosion on both apparatus especially around door handles and window openings, the 2013 winter had been busy and weather was extreme during and after the blizzard that year.

This past winter we experienced extended extreme weather conditions and the accompanying workload demand. The department's apparatus spent long periods of time responding during the extreme weather on roadways that were at times not plowed or treated. The weather required DPW crews to treat the roadways daily with chemicals that contribute to the body corrosion issues.

This spring the exterior corrosion has accelerated dramatically and needs to be repaired to ensure that we obtain the maximum life from these apparatus.

E-One (the apparatus' manufacturer), has included a Ten Year Paint and Corrosion Warranty as part of their overall warranty coverage. This is a pro-rated warranty that offers 100% coverage up to 36 months, 50% coverage from 37 months to 84 months at which time the warranty coverage is reduced to 25%. The 25% coverage continues up to the 120 month mark.

We are within the 84 months if we act by November and will get 50% cost coverage for the repairs and repainting for Engine 2 and Engine 5, if we wait any longer the repairs will be more substantial and the warranty coverage will be reduced to 25%. We also qualify for 50% reimbursement o Engine 1 repairs.

At this time the estimated cost to make the corrosion repairs and repaint these apparatus is $30,532.00 (our cost, after warranty reimbursement)

The total for all three (full price before warranty work) $50,935.00 including replacement of two intake valves and pump pressure controller (not part of the apparatus and not covered by warranty) and $1,000.00 damage to Engine 5 not covered by warranty.

Plymouth Engine 2, Station 2 West Plymouth Village

2008 E-One Typhoon Rescue Pumper

VIN# 4ENRAAA8281003907

53,504 road miles - 5,138 engine hours (215,796 equivalents)

Plymouth Engine 5, Station 5 Manomet

2008 E-One Typhoon Rescue Pumper

VIN # 4ENRAAA8481003908

44,263 road miles – 4,043 hours (169,806 equivalents)

Plymouth Engine 1, Headquarters Station

2011 E - One Cyclone II Rescue Pumper

35,958 road miles – 3,898 engine hours (163,716 equivalents)

VIN #4EN3AAA85B1006829