

**First-Round Winner**

Innovations Challenge  
<http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm>

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Prepared by Customer Relations  
Missouri Department of Transportation

**Liquid Pelletized Lime**



**Description**

In certain areas of the state, soil chemistry has played a major role in the failure of efforts to establish vegetative growth on construction slopes. In areas where soil acidity is high, neutralization efforts have failed to establish growth prior to the applied seed being carried away due to erosion. This is a two-step process for neutralization using a treatment of liquid lime for initial growth followed by traditional pelletized lime for longer term neutralization.

**Benefit**

This innovation saves money and time by eliminating the need to come back and rework eroded slopes. This innovation improves quality by eliminating unsightly slopes and polluted runoff from right of way due to erosion.

**For More Information:**

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Additional photos can be seen at the Innovations Challenge homepage:  
<http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm>



## FERTILIZING

**1.0 Description.** In accordance with Section 801 of the Standard Specifications, the Contractor shall apply the following to all disturbed areas at the rates specified:

Commercial Fertilizer: In accordance with Section 801.2.3, the following fertilizers shall be applied at the rate specified

### Areas within the first 30 feet (Mow Area)

|                        | <u>RATE</u>   |
|------------------------|---------------|
| Nitrogen (N)           | 40 lbs/acre   |
| Phosphoric Acid (P2O5) | 160 lbs/acre  |
| Potash (K2O)           | 40 lbs/acre   |
| Soil neutralization    | 1400 lbs/acre |

### Areas outside the first 30 feet and 3:1 slope or steeper

|                        | <u>RATE</u>   |
|------------------------|---------------|
| Nitrogen (N)           | 80 lbs/acre   |
| Phosphoric Acid (P2O5) | 320 lbs/acre  |
| Potash (K2O)           | 80 lbs/acre   |
| Soil neutralization    | 2100 lbs/acre |

Additionally, for areas with 3:1 slope or steeper, the contractor shall apply, per manufacturer's specifications, a treatment of liquid lime to achieve a soil pH of 6.5. The current pH of the soil in these areas is estimated to be 5.7. The contractor may be required, at no direct pay, to test certain areas to confirm the pH of the soil as directed to by the engineer.