

Metric C3 Cool Season Turfgrass Nutrient Management Plan  
University of Minnesota Member No. Minnesota  
lat,lon = 44.989,-93.252  
GP refers to Growth Potential based upon five-year average temperature  
Rate of fertilizer application is g/m^2

| Month | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   | OCT   | NOV   | DEC   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| GP    | 0.00  | 0.00  | 0.00  | 0.07  | 0.78  | 0.88  | 0.77  | 0.89  | 0.98  | 0.26  | 0.01  | 0.00  |
| N     | 0.0   | 0.0   | 0.0   | 0.2   | 2.7   | 3.1   | 2.7   | 3.1   | 3.4   | 0.9   | 0.0   | 0.0   |
| K     | 0.0   | 0.0   | 0.0   | 0.1   | 1.4   | 1.5   | 1.3   | 1.6   | 1.7   | 0.5   | 0.0   | 0.0   |
| P     | 0.0   | 0.0   | 0.0   | 0.0   | 0.3   | 0.4   | 0.3   | 0.4   | 0.4   | 0.1   | 0.0   | 0.0   |
| Ca    | 0.0   | 0.0   | 0.0   | 0.0   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.1   | 0.0   | 0.0   |
| Mg    | 0.00  | 0.00  | 0.00  | 0.02  | 0.17  | 0.19  | 0.17  | 0.19  | 0.21  | 0.06  | 0.00  | 0.00  |
| S     | 0.00  | 0.00  | 0.00  | 0.02  | 0.20  | 0.23  | 0.20  | 0.23  | 0.26  | 0.07  | 0.00  | 0.00  |
| Fe    | 0.000 | 0.000 | 0.000 | 0.001 | 0.014 | 0.015 | 0.013 | 0.016 | 0.017 | 0.005 | 0.000 | 0.000 |
| Mn    | 0.000 | 0.000 | 0.000 | 0.000 | 0.005 | 0.006 | 0.005 | 0.006 | 0.006 | 0.002 | 0.000 | 0.000 |

|    | Annual g/m^2 | Soil ppm | MLSN ppm |
|----|--------------|----------|----------|
| N  | 16.3         | NA       | NA       |
| K  | 8.1          | 54       | 37       |
| P  | 2            | 14       | 21       |
| Ca | 1.6          | 11       | 331      |
| Mg | 1            | 7        | 47       |
| S  | 1.2          | 8        | 7        |
| Fe | 0.1          | 0.5      | 90       |
| Mn | 0            | 0.2      | 30       |