

**Pavement Management Policy  
for  
The City of Golden Valley  
January 17, 1995**

Amended October 15, 1996  
Amended December 9, 1997  
Amended June 7, 2005  
Amended January 20, 2009  
Amended December 19, 2019

**Purpose**

There are approximately 120 miles of street to be maintained within the City of Golden Valley. Of this total, 23.67 miles are designated as Municipal State Aid (MSA) roadways, and the remaining 96.33 miles are local streets. Keeping the street system in good condition is necessary to provide safe and reasonable transportation to the citizens of the City, to maintain property values and to keep the City an attractive and desirable place to live and do business.

The goal of the Pavement Management Policy is to establish a Pavement Management Program (PMP) that systematically evaluates the street network to maximize the pavement lifespan, at minimum long-term cost, by performing the proper rehabilitation measure at the proper time.

**Background**

A properly constructed street can be expected to have an average effective lifespan of 50 to 60 years if proper maintenance measures (crack sealing, surface treatments, and bituminous overlays) are performed at the proper times. Many of the streets in Golden Valley were constructed more than 30 years ago, and did not receive the subgrade corrections that are consistent with today's standards. Many were constructed without removing unsuitable soils from the street subgrade, which causes the street to crack, distort and break up under normal traffic loading. This breakup of the pavement allows moisture into the subgrade, which further accelerates deterioration.

Many of Golden Valley's streets are newer, having been constructed to City standards within the last 20 years. Although the pavement on these streets also exhibits some distress, the Pavement Management Program will include maintenance and rehabilitation of these streets in order to maximize their functional lifespan.

**The Pavement Management Program (PMP)**

The entire street system under the jurisdiction of the City of Golden Valley has been broken into segments which are evaluated by staff and consultants to determine the type of pavement distresses present. Staff then records the severity and extent of each pavement distress as well as the quality of the ride, traffic volumes and structural capacity on each street segment. Using a pavement management computer program, staff analyzes the recorded information and assigns a *Pavement Quality Index* (PQI) to each street segment. For example, a PQI of 10.0 represents a newly constructed street with

little or no distress evident; and a PQI of 2.0 represents a street pavement that has completely failed. The PQI of each street segment is then inventoried, and streets are selected for rehabilitation strategies based on staff opinion and the analysis of the computer software. The goal of the City is to maintain a street system with an average PQI of 6.0 to 7.0. Residential streets shall be designated for an axle loading of 7 ton.

Because streets decay at different rates depending on subgrade and pavement conditions, staff will periodically evaluate the pavement and assign PQIs. Approximately every fifth year, a consulting engineering firm will conduct a complete inventory and evaluation of the street system. This will ensure that the baseline data being used for decision-making is current and that each street in the system receives appropriate rehabilitation measures when the need for maintenance first arises. Rehabilitation measures will include surface treatments, edge and full-width milling and overlays, varying degrees of in-place reclamation, total street reconstruction and other potential methods that may become available as new technology develops.

### ***Surface Treatments***

Surface Treatments are a preventive maintenance measure used to extend the life of a bituminous pavement. Various asphalt emulsifiers are applied to help seal out moisture, reduce abrasion of the existing surface, increase skid resistance and help prevent older pavements from drying out and prematurely deteriorating. A properly installed surface treatment should last approximately 3 to 5 years.

Surface Treatments will be applied to those streets in the system that have been constructed to City standards and do not exhibit distresses indicative of poor street subgrade.

### ***Bituminous Milling and Overlay***

Bituminous milling and overlay consists of mechanically removing a portion of the existing bituminous pavement surface, and placing new pavement. After placement of a bituminous overlay, a properly timed surface treatment can extend the life of a street for an estimated 20 to 25 years before another overlay is required.

Bituminous overlays will be performed on those streets that have been constructed to City standards and do not have distresses indicative of a poor subgrade. The streets receiving overlays also will be subject to crack sealing, curb repair, and patching before the placement of the overlays.

### ***Reconstruction***

Reconstruction is defined as any major rehabilitation involving the removal or relaying of all surface material for a particular segment of street. Reconstruction will be performed on streets that have deteriorated to the point where reconstruction is the only cost-effective method of rehabilitation. Sanitary sewer, water main, and storm sewer systems on streets subject to reconstruction will also be investigated as part of the PMP. Those utilities that exhibit inadequate capacity, maintenance problems, and do not meet specific state or federal requirements for the utility will be repaired or replaced as part of the street reconstruction project.

### Construction Standards

The City will construct all local streets to a 28-foot wide standard, measured from face of curb to face of curb and maintain parking arrangements. Variation from this standard may be considered by the City Engineer under the following situations:

1. On Municipal State Aid streets where MSA standards apply.
2. On collector and local streets where traffic volumes exceed 500 vehicles per day.
3. Where existing safety, geometric, or topographic conditions necessitate deviation.
4. Where adhering to the standard would cause environmental impacts such as wetland filling and removal of significant trees.

### Drainage Improvements

The City will attempt to improve drainage conditions during reconstruction wherever possible and feasible. Drainage improvements for areas outside of public right-of-way will be implemented where feasible and in accordance with the Special Assessment Policy.

### Landscaping Impacts

The City will endeavor to minimize landscaping disturbances whenever possible, and shall consider reasonable replacements when disturbances are necessary. The Environmental Coordinator shall comment on tree and landscaping impacts due to proposed projects and will include this review in project feasibility reports.

### Concrete Curb and Gutter

Concrete curb and gutter provides structural support for the edge of the paved roadway, aids in snow removal and facilitates drainage of storm water for water quality treatment and minimizing damage to adjacent properties. Therefore, design of streets subject to reconstruction will include concrete curb and gutter. The City's standard for concrete curb and gutter is the Minnesota Department of Transportation's B-618 design constructed according to industry standards.

Concrete curb and gutter designs other than the City's standard, such as D type, may be considered based upon neighborhood input. In order for alternate styles to be installed, 100 percent of the property owners abutting a street must sign a petition prepared by the Public Works Department requesting the alternate curb style. This petition will state that the City will no longer repair damages to turf, landscaping, sprinkler systems, mailboxes or other items placed within the public right-of-way by property owners resulting from the City's snow and ice control measures.

### Property Owner Involvement

During the preliminary design phase of any reconstruction project, the City will hold open houses for affected property owners. Property owners will be consulted and provided the opportunity to have input in the preliminary project design during the open houses. The City will also endeavor to keep *property owners informed during construction through the use of* construction e-newsletters, daily construction notices, targeted correspondence and other means of communication deemed appropriate.

### Driveway Reconstruction

Pavement Management street reconstruction projects will include an opportunity for residents in the project area to reconstruct their driveways as part of the project. If property owners wish to participate in the driveway reconstruction program the City will prepare an estimate for the work, determine eligibility and liability for participation, determine the indirect costs for the work, prepare a contract and manage reconstruction of the driveway. Following reconstruction the property owner may choose to pay for the driveway reconstruction in one of two methods as outlined in the Special Assessment Policy.

The City of Golden Valley will pay for replacement of the portion of each driveway that is removed due to the street reconstruction with the same material that was removed (asphalt or concrete). If property owners wish to have the driveway reconstructed in a material other than what was removed (install concrete when asphalt was removed) they will be responsible for the cost differential between the materials.

The City reserves the right to reject requests for private driveway reconstruction in situations where the reconstruction requires that the City and/or its contractors must assume a higher degree of liability during construction than a normal driveway, or where the ability to achieve the required quality is not possible. Such situations include excessive or minimal slopes, landscaping impacts, structural impacts or similar conditions. The determination of eligibility to participate in the driveway reconstruction program is at the discretion of the Public Works Department.

### Sanitary Sewer Service Repair

Pavement management street reconstruction projects will include an opportunity for property owners affected by the street reconstruction to reconstruct their private sanitary sewer services. This voluntary program will allow property owners to become compliant with Chapter 3 of Golden Valley City Code, and helps the community reduce the inflow and infiltration of clear water into the sanitary sewer system. If a property owner wishes to participate in the sewer service rehabilitation program, the City will prepare estimates for the work, determine eligibility and liability for participation, determine the indirect costs for the work, prepare a contract and manage the rehabilitation work. Following completion of the sewer service rehabilitation the property owner may choose to pay for the work as outlined in the Special Assessment Policy.

### Maintenance

The City will perform major maintenance procedures in a timely and cost-effective manner to maintain condition over the life of the street, including overlays and surface treatments. However, streets that need reconstruction also need maintenance measures beyond what is required for streets built to City standards. These maintenance measures must also be performed more frequently on poor quality streets, resulting in an increasing burden on General Fund street maintenance and the need for more taxes to finance them. Therefore, those streets recommended for reconstruction consistent with the Pavement Management Policy but denied by the City Council because of resident opposition will no longer be subject to maintenance measures beyond those deemed necessary for public safety. Maintenance measures required for public safety will include, but are not limited to, repair of large potholes in the driving lanes and patching of utility openings.

## Sidewalks

The construction of sidewalks will be evaluated for each street in keeping with the goals of the Golden Valley sidewalk and bicycle facilities included in the Comprehensive Transportation Plan. Sidewalk construction will be financed by the City.

## **Financing and Special Assessments**

The City of Golden Valley Pavement Management Program is to be financed through the General Fund and general obligation bonds. The bonds will be repaid through tax levies and special assessments. Surface treatments will be financed completely through the General Fund, with no assessments to adjacent properties. Bituminous overlays may be contracted with the reconstruction portion of the program and will be financed through bonding as funding allows. Special assessments will only be levied against those properties adjacent to streets being reconstructed. The amount of the special assessments will be set in the City's annual fee resolution based on the Special Assessment Policy.

## **Typical Project Schedule and Process**

The following schedule and process is typical for a Pavement Management street reconstruction project.

1. City staff makes recommendations to the City Council regarding proposed reconstruction projects for each year. The City Council reviews the recommendations and orders feasibility reports for projects.
2. Preliminary project data gathering, including surveying, soil borings and review of maintenance records is performed.
3. Preliminary project design and public participation occurs.
4. Project design continues with preparation of the feasibility report, and public hearings for project authorization and special assessments are held.
5. Following project authorization the final plans, specifications and contract documents are prepared, the project is bid and a contract is awarded.
6. Project construction occurs begins in the spring and is completed in the fall.