
CITY OF BREEZY POINT

ROAD IMPROVEMENT STANDARDS

Adopted August 7, 2006

Introduction

The intent of this policy is to establish certain minimum requirements for newly constructed roads and existing roads which undergo significant restoration and/or improvement from existing conditions. The City recognizes that not only is a “one size fits all” approach not desirable, but simply will not work given the unique topographic features and natural resources of the area. The goal of this policy is to call out for minimum construction standards, however, to also provide for latitude and flexibility in balancing safety, health and financial considerations of the improvements with an eye toward natural resource preservation. This policy will from time to time reference a road classification report (dated December 6, 2004), which given the classification of roads, ultimate design and construction will be influenced.

The City also recognizes that land use patterns and zoning will have influence on ultimate road improvements regardless of an existing or new road. The City will strive as well to promote road sections that are typical or employ best practices given density and traffic volumes. In higher population (more dense) areas and traffic volumes the City recognizes that a more urban road section is preferable. This approach, mainly utilizing curb and gutter will call for and allow better management of storm water, pedestrian movement and curb appeal of neighborhoods. When undertaking improvements in less dense areas with lower traffic volumes the City will approach road improvements with more of a rural method in utilizing ditches and shoulders. In situations where you have a combination different than identified above (ie. Lower density and higher traffic volumes) the City will encourage an approach that incorporates the best of all methods to provide for an outcome which truly balances any number of considerations. Of course, utilities (water/sewer) will also have an effect on what the City considers to be the best road section to utilize.

This policy is intended to serve as a guide. The City reserves the right to make changes from time to time when deemed to be in the City’s best interest.

Road Construction Standards

1.) Right of way improvements

It is commonly accepted that some degree of tree and vegetation removal will be required in order to adequately construct and improve road ways which includes utilities, turn lanes, drainage and other features while balancing safety considerations. However, the City will implement and look favorably when attempts are made to preserve natural vegetative conditions. The clearing of rights of ways to the entire 66 feet should only be made a priority with roads identified as Collectors. Local Collectors, Local and Limited Access roads will either not have the right of way entirely cleared or will be done so with the goal of maintaining as much natural vegetation. In cases where tree removal is necessary to road construction and improvement a planting plan will be required which replaces trees on a 2:1 ratio. In cases where removal is necessary all vegetation shall be disposed of in accordance with applicable State, Federal and Local requirements and shall not be buried in the road right of way.

2.) Topsoil & Turf Establishment

Topsoil shall be removed from graded areas and stockpiled during road construction. Upon completion of grading, a minimum of three inches (compacted depth) of salvaged native topsoil meeting MnDOT Spec. No. 2105 or equal shall be reapplied to the disturbed slopes and ditch surfaces. The City will require the addition of supplemental topsoil quantities as needed given the scarcity of native topsoil. These areas shall be seeded per MnDOT specification number 2575, applied at a rate of 125 lbs/acre, or as approved by the City.

Commercial Fertilizer, Analysis 23-0-30 200 lbs. Per acre

Mulch Material, Type 1 2 tons per acre

Mulch Material, Type 5 Hydro-mulch 2 tons per acre

Disc Anchoring is required unless Hydro-seeded

3.) Subgrade

The top one-foot of the sub-grade shall be granular material compacted by suitable equipment to meet MnDOT Spec. No. 2105 for ordinary compaction method, and free of rocks greater than 3" in diameter and sticks greater than 1" in diameter and 6" in length.

It shall be required to provide 3rd party density tests, as directed by the City.

4.) Non-granular Material Excavation (muck)

In the event the native material is not of granular material, it shall be required to excavate and replace the material with granular material. If the material is of muck, peat moss, or similar material, the Contractor shall provide soil borings, geo-textile fabric and granular material to obtain the required density and compaction. It is required that the City will

inspect and approve replacement of muck excavation section. Third party density testing maybe required at the discretion of the City.

5.) Gravel Surfacing

The generally accepted standard for gravel surfacing is to use a Class 5 material meeting MnDot Spec. 2211 and typically placed to a compact depth of 4 inches. Based upon City review and classification of roads a different aggregate material and compacted to a depth greater than 4 inches maybe required at the discretion of the City.

6.) Bituminous Surfacing

Bituminous surfacing shall be MnDOT Spec. No. 2350 and shall be 2.5 inches thick after compaction for local roads and 3.5 inches (2 inches base, 1.5 inches of wear course) thick after compaction for collector roads.

7.) Shouldering

Due to severe change in elevation within the City, issues with deterioration of shoulders have been problematic. The City will require additional stabilization of shoulders such as utilizing a bonding agent or similar product. In addition it maybe acceptable to establish the shoulder in a reinforced grass surface. In higher dense areas of the City it maybe necessary to construct surmountable curb and gutter. The minimum standard is a three foot should width whether aggregate or reinforced grass.

8.) Cul-de-sacs

Cul-de-sacs and turn-around area will be determined upon City review given safety and design considerations. When practical cul-de-sacs will be required to provide for ample turn around area while keeping the impact to the natural vegetation to a minimum. In all cases there shall be a 2 foot aggregate shoulder.

9.) Inspection

The City shall inspect the sub-grade prior to graveling and shall inspect the graveling prior to placement of bituminous. Sub-grade inspection shall be conducted by an independent third party to ensure density specifications have been met. The City will also require gradation testing of the aggregate to ensure it meets the required specification and sample testing of the bituminous pavement after it is placed to ensure compliance with the appropriate specification. Final inspection prior to the acceptance will be made after required corrections, bituminous surfacing and seeding are completed.

10.) Centerline Grade

Centerline grade for new road construction shall be a minimum of 0.5% but not greater than 10% on local roads and 8% on collector roads. Centerline grade of existing constructed roadways shall meet the above grade percent requirements whenever improvement costs and associated disturbances deem this approach to be in the best interest of the City. When warranted, the City at its discretion may utilize steeper centerline grade standards.

11.) Steep Slopes

Along steep slopes, the Contractor shall construct bituminous gutter, concrete curb and gutter or employ other acceptable measures such as retaining walls at the direction of the City.

12.) Erosion Control

Where steep slopes are used (steeper than 3:1), erosion control measures such as erosion control blanket, rock rip-rap with geo-textile filter, and alternative seeding methods, such as hydro-seeding, shall be implemented. In addition, all erosion control measures must comply with Minnesota Pollution Control Agencies Storm Water permitting requirements.

13.) MnDot Specifications

All work shall be completed consistent with MnDOT Specifications; Refer to “Standard Specifications for Construction” 2005 Edition, Minnesota Department of Transportation.

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