

TO: Council members

FROM: Joe Rudberg

Meeting of July 1, 2013

Road Improvement Standards

At the Road Improvement Workshops the council reviewed a couple of proposed revisions to the road standard policy. Mike Rude was instrumental in assembling this document which really is a combination of past city policies for road construction taking the best from each and also relying on standards of MnDOT and MnPCA. Permits for many projects would also be required of Thirty Lakes Water Shed District or the DNR so those standards would also be required to be adhered to. The existing policy is somewhat similar to this. The change here is more of an update to that policy.

The issue of conflicting standards is dealt with by a statement that says the more stringent requirement would apply unless agreed to by the city in writing. This allows us to consider all standards but also lean on the most restrictive one under the policy if that is our desire.

Any road improvement project accomplished by the city will require city council approval of plans and specifications. This provides a further check on what is to be accomplished when an improvement is being considered.

Consideration of the policy for adoption would be appreciated.

CITY OF BREEZY POINT

ROAD IMPROVEMENT STANDARDS

Updated June 4, 2013

Introduction

The intent of this policy is to establish certain minimum requirements for newly-constructed roads and existing roads which undergo significant restoration 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 provide minimum construction standards with latitude and flexibility that allow for a balance of safety, health, and financial considerations with natural resource preservation.

Road classifications referenced in these standards (Local, Collector, etc.) are defined in the City of Breezy Point’s “Road Improvement and Assessment Policy”.

Where conflicting requirements exist between other applicable Federal, State, or Local standards and this set of standards, the more stringent requirements shall apply unless agreed to in advance and in writing by the City.

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 its best interest.

Road Construction Standards

1.) Clearing & Grubbing

Clearing and grubbing shall be limited to that which is necessary for roadway and utility construction.

All removed 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 and imported topsoil meeting MnDOT Spec. No. 2105 shall be reapplied to the disturbed slopes and ditch surfaces.

These areas shall be seeded per MnDOT specification number 2575 and in accordance with materials and application rates as specified in the latest edition of MnDOT's "District 3 Turf Establishment Recommendations" memo as published on MnDOT's website.

3.) Subgrade

The top three feet of the subgrade shall be granular material compacted by suitable equipment to meet MnDOT specification 2105 utilizing the Quality Compaction method.

Materials in this region shall meet the requirements for granular backfill as specified by MnDOT specification 3149. Subgrade materials not meeting this standard shall be removed (subcut) and replaced with granular borrow materials meeting the specification. Where this removal is in close proximity to ground water, geotextile fabric shall be placed under the granular borrow.

4.) Aggregate Base

Aggregate base materials shall meet the requirements for Class 5 Aggregate from MnDOT specification 3138. Construction shall be in accordance with MnDOT specification 2211 with compaction by the Quality Compaction method.

5.) Bituminous Pavement

Bituminous pavement shall be plant mixed asphalt meeting the requirements of MnDOT specification 2360, latest edition for the current construction season. Mix designation shall be SPWEB240B.

6.) Shouldering

Where used, aggregate shouldering shall meet the requirements of MnDOT specification 2221 with materials meeting the Class 5 requirements of specification 3138.

7.) Cul-de-sacs

When utilized in roadway design, cul-de-sacs will be required to provide for appropriate turning radii while keeping the impact to the natural vegetation to a minimum. The use of cul-de-sacs in a roadway design will be reviewed by the City on a case-by-case basis and should be avoided by the use of through streets when practical.

8.) Centerline Grade

Centerline grades shall be constructed to a minimum of 0.5% but not greater than:

- 10% on local roads
- 8% on collector roads

When warranted due to environmental impact or other considerations, the City at its sole discretion may approve the use of steeper centerline grades.

9.) Steep Slopes

Along steep slopes, where erosion of ditches or aggregate shoulders may be of concern, the roadway design shall utilize some combination of concrete curb and gutter, storm sewer, retaining walls, ditch checks, or other acceptable measures as approved by the City.

10.) Drainage

Roadway design and construction shall comply with all applicable federal, state, and local regulations for stormwater runoff treatment and control, including but not limited to:

- Minnesota Pollution Control Agency (MPCA) National Pollution Discharge Elimination System (NPDES)
- Thirty Lakes Watershed District permit requirements for roadway, bridge, culvert, and excavation projects
- City of Breezy Point subdivision ordinance

Where conflicting requirements existing in these regulations, the more stringent shall apply.

11.) Erosion and Sediment Control

All construction activities shall meet the requirements of Minnesota Pollution Control Agency's NPDES Construction Storm Water permitting program.

12.) Typical Roadway Sections

Typical roadway sections to be utilized shall conform to the following:

	Collector Road	Local Road
Lane Width	12'	11'
Aggregate Shoulder Width	3'	3'
Fill Slope (maximum)	4:1	3:1
Back Slope (maximum)	3:1	2:1
Ditch Bottom (minimum)	4'	3'
Ditch Depth (minimum)	2'	2'
Aggregate Base	5"	4"
Bituminous Pavement	3 1/2"	2"

When warranted due to existing terrain, environmental impact, or other considerations, the City at its sole discretion may approve the use of alternate roadway sections. Appendix A provides a graphical representation of the above road sections.

13.) Inspection & Testing of Developer Road Projects

The City reserves the right to inspect all work performed on Developer road projects to confirm its conformance to approved plans and specifications. Correction of non-conformances shall be performed in a timely manner and at the sole expense of the Developer.

Depending on the scope of the proposed work, and its sole discretion, the City may also require third party testing services and in some cases construction observation services on the project. Costs for these services shall be paid by the Developer.

14.) MnDOT Specifications

All work shall be completed consistent with the latest edition of MnDOT's "Standard Specifications for Construction".