## CITY OF BISMARCK GIS SUBMITTAL REQUIREMENTS

### Introduction

The Bismarck/Burleigh County Community Development Department requires all preliminary plats, final plats, and minor subdivision final plats to be submitted in digital format. The purpose of these specifications is to form a standardized approach to the way a digital drawing submittal is collected, retrieved, stored, and analyzed, allowing the ability to share data among multiple departments and to reduce data redundancy. This will allow the Geographic Information System to be as current as possible, therefore making the information more valuable to all the agencies involved. This requirement is in addition to the existing hardcopy submission requirements. The intent of a digital submittal is to enable the required hardcopy and digital submission to be produced from the same digital data without significant modification. Engineering stamps/certifications are not required on the digital submission. There are some basic structure required, such as layer designation, line type, and use of the same geodetic base. However, there are no database linkage requirements. The digital submittal requirements are subject to change, and the hard copy will continue to be the official document.

### Purpose

The purpose of this document is to describe the minimum content and format of digital files for all subdivision plans and plats before they are considered "officially filed."

### **Geodetic Control**

The City of Bismarck will make available all Geodetic Control information to be used for survey purposes. The surveyor or engineer preparing the plans shall tie the boundary into at least two points of the survey control network. Any Section Corners or ¼ section corners collected shall be submitted, unless it has previously been submitted. Positional accuracy of any digital submittal should be +/- 1 ft. The basis of the bearing for the plans <u>must</u> be in the following:

Projection: StatePlane Coordinate System
Zone: North Dakota South zone (fips 3302)

Horizontal Datum: North American Datum NAD83 HARN (*adjusted 1986*) Vertical Datum: North American Vertical Datum of 1988 (*NAVD* 88)

Units: International feet

# CITY/ETA SUBDIVISION PLAT SUBMITTAL CHECKLIST

(from Community Development)

g. Basis of bearings, from State Plane Coordinates.

h. Indication of both vertical datum and horizontal datum used for the plat.

m. Ties to a minimum of two accepted State Plane Coordinate monuments based on NAD 83 horizontal datum (adjusted 86), units of measurement international feet,

ND south zone 3302.

### **Data Format Requirements**

The format for digital submission of subdivision plans and plats are the following:

DWG (AutoCad drawing file)
DXF (AutoCad drawing exchange file)

All digital files must be mapped to scale and submitted to the City of Bismarck via email <a href="mailto:jwangler@bismarcknd.gov">jwangler@bismarcknd.gov</a>, <a href="mailto:dnucech@bismarcknd.gov">dnucech@bismarcknd.gov</a>, or <a href="mailto:jauch@bismarcknd.gov">jauch@bismarcknd.gov</a> preferred; or CD/DVD-ROM.

### **Data Layering and Subdivision Requirements**

A. The following table displays the data features that are required in a digital submittal. These are the preferred naming conventions. If another naming convention is to be used, it must be submitted to the City of Bismarck.

PLATBND Plat Boundary Lines

LOTSLot LinesROWRight-of-WayNONACCESSNon-Access LinesESMTEasement LinesSLSection LinesCLStreet Centerlines

- B. Annotation Requirement: Annotation submitted digitally will be identical to annotation submitted on the hard copy maps. Please include all annotations (lot dimensions, measurements, etc.)
- C. Coordinates Displayed as Text Requirement: When displaying x and y coordinates, the whole number for the coordinate will be shown to two (2) decimal positions, i.e., no constants will be applied.
- D. Each layer must have only its element on it. For example, a lot line must be on a lot line layer versus the easement line or setback line layers.

# **Review of Digital Data**

- A. All digital data will be reviewed for the following criteria:
  - 1. Correct layering and naming
  - 2. Closure of the geometry of the boundary
  - 3. Verification that the digital and hardcopy maps are consistent
  - 4. Correct geographical position (i.e. correct coordinate values for final submissions)
- B. The licensed Surveyor/Registered Civil Engineer will be responsible for correcting any errors and will have to resubmit the correct digital file prior to approval by the City of Bismarck.
- C. There will be a 6-month grace period from the first digital submission given to each surveyor/engineering firm in which the City of Bismarck will review the submission and give feedback on whether it meets the new standards. If it does not the surveyor/engineer will be allowed to re-submit with corrections. After the grace period, any submission which does not meet these standard will be rejected.

## **Stages of Submittal**

- A. In an effort to clarify where a plat is in the process of approval, please let us know what is being submitted by using the following terms when forwarding digital data.
  - 1. **"Preliminary Pending"** for digital data that is being submitted with the application for tentative approval of a preliminary plat.
  - 2. "Preliminary Pending Revised" for digital data that would replace previously submitted data for a preliminary plat.
  - 3. **"Final Pending"** for digital data that is being submitted with the application for approval of a final plat, or minor subdivision plat.
  - 4. **"Final Pending Revised"** for digital data that would replace previously submitted data for a final plat, or minor subdivision final plat.
  - 5. **"Final Approved"** for digital data that reflects what has been approved and placed on mylar for recording purposes.