Sixty-ninth
Legislative Assembly
of North Dakota

FIRST ENGROSSMENT

ENGROSSED SENATE BILL NO. 2260

Introduced by

Senators Burckhard, Barta, Roers

Representatives Berg, Satrom

A BILL for an Act to amend and reenact sections 47-20.2-01, 47-20.2-02, 47-20.2-03, 47-20.2-05, and 47-20.2-06 of the North Dakota Century Code, relating to the North Dakota coordinate system zones.

BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:

SECTION 1. AMENDMENT. Section 47-20.2-01 of the North Dakota Century Code is amended and reenacted as follows:

47-20.2-01. North Dakota coordinate system zones defined.

1. The systems of plane coordinates which have been established by the national oceanic and atmospheric administration national ocean survey/national geodetic survey or its successors for defining and stating the geographic positions or locations of points on the surface of the earth within this state are~~, as of July 1, 1989,~~ to be known and designated as the North Dakota coordinate system of 1927 ~~and~~, the North Dakota coordinate system of 1983, the North Dakota statewide coordinate system of 2022, and the North Dakota low-distortion coordinate system of 2022. For the purpose of the use of ~~these~~the North Dakota coordinate systems of 1927 and 1983, the state is divided into a north zone and a south zone:

~~1.~~ a. The area now included in the following counties constitutes the north zone: Divide, Williams, McKenzie, Mountrail, Burke, Renville, Ward, McLean, Bottineau, McHenry, Sheridan, Pierce, Rolette, Towner, Benson, Wells, Foster, Eddy, Ramsey, Cavalier, Pembina, Walsh, Nelson, Grand Forks, Griggs, Steele, Traill.

~~2.~~ b. The area now included in the following counties constitutes the south zone: Dunn, Golden Valley, Slope, Bowman, Adams, Hettinger, Stark, Mercer, Oliver,

Morton, Grant, Sioux, Emmons, Burleigh, Kidder, Logan, McIntosh, Stutsman, Barnes, LaMoure, Dickey, Cass, Ransom, Sargent, Richland.

2. For the purpose of the use of the North Dakota statewide coordinate system of 2022, the state is covered by one, statewide zone.

3. For the purpose of the use of the North Dakota low-distortion coordinate system of 2022, the state has been divided into sixteen, low-distortion projection zones:

   a. Beulah zone, which includes Dunn, McLean, and Mercer counties.

   b. Bismarck zone, which includes Burleigh, Kidder, Morton, and Oliver counties.

   c. Bottineau zone, which includes Bottineau, Cavalier, Rolette, and Towner counties.

   d. Bowman zone, which includes Adams, Bowman, Hettinger, and Slope counties.

   e. Cannon Ball zone, which includes Grant and Sioux counties.

   f. Carrington zone, which includes Eddy, Foster, Griggs, Sheridan, and Wells counties.

   g. Devils Lake zone, which includes Benson, McHenry, Nelson, Pierce, and Ramsey counties.

   h. Dickinson zone, which includes Billings, Golden Valley, and Stark counties.

   i. Fargo zone, which includes Cass, Ransom, Richland, and Sargent counties.

   j. Grand Forks zone, which includes Grand Forks, Pembina, Steele, Traill, and Walsh counties.

   k. Jamestown zone, which includes Barnes and Stutsman counties.

   l. Linton zone, which includes Emmons, Logan, and McIntosh counties.

   m. Minot zone, which includes Renville and Ward counties.

   n. New Town zone, which includes Burke and Mountrail counties.

   o. Oakes zone, which includes Dickey and LaMoure counties.

   p. Williston zone, which includes Divide, McKenzie, and Williams counties.

SECTION 2. AMENDMENT. Section 47-20.2-02 of the North Dakota Century Code is amended and reenacted as follows:

47-20.2-02. North Dakota coordinate system names defined.

1. As established for use in the north zone, the North Dakota coordinate system of 1927 or the North Dakota coordinate system of 1983 is named, and in any land description

in which it is used it must be designated the North Dakota coordinate system of 1927, north zone, or the North Dakota coordinate system of 1983, north zone. As established for use in the south zone, the North Dakota coordinate system of 1927 or the North Dakota coordinate system of 1983 is named, and in any land description in which it is used it must be designated the North Dakota coordinate system of 1927, south zone, or the North Dakota coordinate system of 1983, south zone.

2. As established for use in the statewide zone, the North Dakota statewide coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the North Dakota statewide coordinate system of 2022.

3. As established for use in the:

   a. Beulah zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the Beulah zone of the North Dakota coordinate system of 2022;

   b. Bottineau zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the Bottineau zone of the North Dakota coordinate system of 2022;

   c. Bismarck zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the Bismarck zone of the North Dakota coordinate system of 2022;

   d. Bowman zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the Bowman zone of the North Dakota coordinate system of 2022;

   e. Cannon Ball zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the Cannon Ball zone of the North Dakota coordinate system of 2022;

   f. Carrington zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used it must be designated the Carrington zone of the North Dakota coordinate system of 2022;

   g. Devils Lake zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the Devils Lake zone of the North Dakota coordinate system of 2022;

h. Dickinson zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the Dickinson zone of the North Dakota coordinate system of 2022;

i. Fargo zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the Fargo zone of the North Dakota coordinate system of 2022;

j. Grand Forks zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the Grand Forks zone of the North Dakota coordinate system of 2022;

k. Jamestown zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the Jamestown zone of the North Dakota coordinate system of 2022;

l. Linton zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the Linton zone of the North Dakota coordinate system of 2022;

m. Minot zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the Minot zone of the North Dakota coordinate system of 2022;

n. New Town zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the New Town zone of the North Dakota coordinate system of 2022;

o. Oakes zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the Oakes zone of the North Dakota coordinate system of 2022; and

p. Williston zone, the North Dakota coordinate system of 2022 is named, and in any land description in which it is used, it must be designated the Williston zone of the North Dakota coordinate system of 2022.

SECTION 3. AMENDMENT. Section 47-20.2-03 of the North Dakota Century Code is amended and reenacted as follows:

47-20.2-03. North Dakota coordinate system defined.

The plane coordinate values for a point on the earth's surface, used in expressing the geographic position or location of such point in the appropriate zone of this system, shall consist of two distances, expressed in United States survey feet [meters] and decimals of a foot [meter] when using the North Dakota coordinate system of 1927. One of these distances, to be known as the X-coordinate, shall give the position in an east-west direction; the other, to be known as the Y-coordinate, shall give the position in a north-south direction. These coordinates shall be made to depend upon and conform to plane rectangular coordinate values for the monumented points of the North American horizontal geodetic control network as published by the national ocean survey/national geodetic survey, or its successors, and the plane coordinates which have been computed on the systems defined in this chapter. Any such station may be used for establishing a survey connection to either North Dakota coordinate system. For the purposes of converting coordinates of the North Dakota coordinate ~~system~~systems of 1983 and 2022 from meters to feet, the international ~~survey~~ foot must be used. The conversion factor is: one foot equals 0.3048 meter exactly.

SECTION 4. AMENDMENT. Section 47-20.2-05 of the North Dakota Century Code is amended and reenacted as follows:

47-20.2-05. North Dakota coordinate system origins defined.

1. For the purposes of more precisely defining the North Dakota coordinate system of 1927, the following definitions by the United States coast and geodetic survey are adopted:
   a. The North Dakota coordinate system of 1927, north zone, is a Lambert conformal conic projection of the Clarke spheroid of 1866, having standard parallels at north latitudes, forty-seven degrees twenty-six minutes and forty-eight degrees forty-four minutes along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian one hundred degrees thirty minutes west of Greenwich and the parallel forty-seven degrees zero minutes north latitude. This origin is given the coordinates: x = 2,000,000 feet [609.6 kilometers], and y = 0 feet [0 kilometers].
   b. The North Dakota coordinate system of 1927, south zone, is a Lambert conformal conic projection of the Clarke spheroid of 1866, having standard

parallels at north latitudes forty-six degrees eleven minutes and forty-seven degrees twenty-nine minutes along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian one hundred degrees thirty minutes west of Greenwich and the parallel forty-five degrees forty minutes north latitude. This origin is given the coordinates: x = 2,000,000 feet [609.6 kilometers], and y = 0 feet [0 kilometers].

2. For the purposes of more precisely defining the North Dakota coordinate system of 1983, the following definition by the national ocean survey/national geodetic survey is adopted:

   a. The North Dakota coordinate system of 1983, north zone, is a Lambert conformal conic projection of the North American datum of 1983, having standard parallels at north latitude of forty-seven degrees twenty-six minutes and forty-eight degrees forty-four minutes along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian one hundred degrees thirty minutes west of Greenwich and the parallel forty-seven degrees zero minutes north latitude. This origin is given the coordinates: x = 600,000.0000 meters, and y = 00.0000 meters.

   b. The North Dakota coordinate system of 1983, south zone, is a Lambert conformal conic projection of the North American datum of 1983, having standard parallels at north latitude of forty-six degrees eleven minutes and forty-seven degrees twenty-nine minutes along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian one hundred degrees thirty minutes west of Greenwich and the parallel forty-five degrees forty minutes north latitude. This origin is given the coordinates: x = 600,000.0000 meters, and y = 00.0000 meters.

3. For the purposes of more precisely defining the statewide zone of the North Dakota coordinate system of 2022, the definition by the national ocean survey or national geodetic survey is the North Dakota coordinate system of 2022, statewide zone, a Lambert conformal conic projection of the North American Terrestrial Reference Frame of 2022. The origin of coordinates is at the intersection of the meridian one hundred degrees fifteen minutes west of Greenwich and the parallel forty-seven degrees thirty

minutes north latitude. This origin is given the coordinates: x = 838,200.0000 meters, and y = 342,900.0000 meters.

4. For the purposes of more precisely defining the low-distortion projections as described under subsection 3 of section 47-20.2-01, the following definition by the national ocean survey or national geodetic survey is adopted:

   a. The North Dakota coordinate system of 2022, Beulah zone, is a Lambert conformal conic projection of the North American Terrestrial Reference Frame of 2022, the origin of coordinates is at the intersection of the meridian one hundred one degrees fifty-one minutes west of Greenwich and the parallel forty-seven degrees twenty-seven minutes north latitude. This origin is given the coordinates: x = 2,286,000.0000 meters, and y = 152,400.0000 meters;

   b. The North Dakota coordinate system of 2022, Bismarck zone, is a Lambert conformal conic projection of the North American Terrestrial Reference Frame of 2022, the origin of coordinates is at the intersection of the meridian one hundred degrees forty-five minutes west of Greenwich and the parallel forty-six degrees forty-eight minutes north latitude. This origin is given the coordinates: x = 3,200,400.0000 meters, and y = 114,300.0000 meters;

   c. The North Dakota coordinate system of 2022, Bottineau zone, is a Lambert conformal conic projection of the North American Terrestrial Reference Frame of 2022, the origin of coordinates is at the intersection of the meridian ninety-nine degrees forty-two minutes west of Greenwich and the parallel forty-eight degrees thirty-six minutes north latitude. This origin is given the coordinates: x = 1,371,600.0000 meters, and y = 152,400.0000 meters;

   d. The North Dakota coordinate system of 2022, Bowman zone, is a Lambert conformal conic projection of the North American Terrestrial Reference Frame of 2022, the origin of coordinates is at the intersection of the meridian one-hundred three degrees west of Greenwich and the parallel forty-six degrees eighteen minutes north latitude. This origin is given the coordinates: x = 3,810,000.0000 meters, and y = 114,300.0000 meters;

   e. The North Dakota coordinate system of 2022, Cannon Ball zone, is a Lambert conformal conic projection of the North American Terrestrial Reference Frame of

2022, the origin of coordinates is at the intersection of the meridian one-hundred one degrees eighteen minutes west of Greenwich and the parallel forty-six degrees eighteen minutes north latitude. This origin is given the coordinates: x = 4,114,800.0000 meters, and y = 114,300.0000 meters;

f. The North Dakota coordinate system of 2022, Carrington zone, is a Lambert conformal conic projection of the North American Terrestrial Reference Frame of 2022, the origin of coordinates is at the intersection of the meridian ninety-nine degrees eighteen minutes west of Greenwich and the parallel forty-seven degrees thirty-three minutes north latitude. This origin is given the coordinates: x = 2,590,800.0000 meters, and y = 152,400.0000 meters;

g. The North Dakota coordinate system of 2022, Devils Lake zone, is a Lambert conformal conic projection of the North American Terrestrial Reference Frame of 2022, the origin of coordinates is at the intersection of the meridian ninety-nine degrees twenty-seven minutes west of Greenwich and the parallel forty-eight degrees nine minutes north latitude. This origin is given the coordinates: x = 1,676,400.0000 meters, and y = 152,400.0000 meters;

h. The North Dakota coordinate system of 2022, Dickinson zone, is a Lambert conformal conic projection of the North American Terrestrial Reference Frame of 2022, the origin of coordinates is at the intersection of the meridian one hundred three degrees three minutes west of Greenwich and the parallel forty-seven degrees north latitude. This origin is given the coordinates: x = 2,895,600.0000 meters, and y = 114,300.0000 meters;

i. The North Dakota coordinate system of 2022, Fargo zone, is a transverse mercator projection of the North American Terrestrial Reference Frame of 2022, the origin of coordinates is at the intersection of the meridian ninety-seven degrees twelve minutes west of Greenwich and the parallel forty-five degrees forty-five minutes north latitude. This origin is given the coordinates: x = 4,991,100.0000 meters, and y = 00.0000 meters;

j. The North Dakota coordinate system of 2022, Grand Forks zone, is a transverse mercator projection of the North American Terrestrial Reference Frame of 2022, the origin of coordinates is at the intersection of the meridian ninety-seven

degrees twenty-four minutes west of Greenwich and the parallel forty-six degrees thirty minutes north latitude. This origin is given the coordinates: x = 1,981,200.0000 meters, and y = 00.0000 meters;

k. The North Dakota coordinate system of 2022, Jamestown zone, is a Lambert conformal conic projection of the North American Terrestrial Reference Frame of 2022, the origin of coordinates is at the intersection of the meridian ninety-eight degrees thirty-six minutes west of Greenwich and the parallel forty-six degrees fifty-seven minutes north latitude. This origin is given the coordinates: x = 3,505,200.0000 meters, and y = 114,300.0000 meters;

l. The North Dakota coordinate system of 2022, Linton zone, is a Lambert conformal conic projection of the North American Terrestrial Reference Frame of 2022, the origin of coordinates is at the intersection of the meridian ninety-nine degrees fifty-one minutes west of Greenwich and the parallel forty-six degrees eighteen minutes north latitude. This origin is given the coordinates: x = 4,381,500.0000 meters, and y = 114,300.0000 meters;

m. The North Dakota coordinate system of 2022, Minot zone, is a transverse mercator projection of the North American Terrestrial Reference Frame of 2022, the origin of coordinates is at the intersection of the meridian one hundred one degrees twenty-seven minutes west of Greenwich and the parallel forty-six degrees thirty minutes north latitude. This origin is given the coordinates: x = 1,104,900.0000 meters, and y = 00.0000 meters;

n. The North Dakota coordinate system of 2022, New Town zone, is a transverse mercator projection of the North American Terrestrial Reference Frame of 2022, the origin of coordinates is at the intersection of the meridian one hundred two degrees twenty-seven minutes west of Greenwich and the parallel forty-six degrees thirty minutes north latitude. This origin is given the coordinates: x = 762,000.0000 meters, and y = 00.0000 meters;

o. The North Dakota coordinate system of 2022, Oakes zone, is a transverse mercator projection of the North American Terrestrial Reference Frame of 2022, the origin of coordinates is at the intersection of the meridian ninety-eight degrees eighteen minutes west of Greenwich and the parallel forty-five degrees

forty-five minutes north latitude. This origin is given the coordinates: x = 4,686,300.0000 meters, and y = 00.0000 meters; and

p. The North Dakota coordinate system of 2022, Williston zone, is a transverse mercator projection of the North American Terrestrial Reference Frame of 2022, the origin of coordinates is at the intersection of the meridian one hundred three degrees twenty-seven minutes west of Greenwich and the parallel forty-six degrees thirty minutes north latitude. This origin is given the coordinates: x = 457,200.0000 meters, and y = 00.0000 meters.

SECTION 5. AMENDMENT. Section 47-20.2-06 of the North Dakota Century Code is amended and reenacted as follows:

47-20.2-06. North Dakota coordinate system - Use of term.

The use of the North Dakota coordinate system of 1927 north zone or south zone, ~~or~~ the North Dakota coordinate system of 1983 north zone or south zone, the North Dakota statewide coordinate system of 2022, or the North Dakota low-distortion coordinate system of 2022 on any map, report of survey, or other document must be limited to coordinates based on the North Dakota coordinate systems as defined in this chapter. The map, report, or document must include a statement describing the standard of accuracy, as defined by the national ocean survey/national geodetic survey, maintained in developing the coordinates shown therein. The coordinates must be established in conformity with these standards:

1. No coordinates based on the North Dakota coordinate system, purporting to define the position of a point on a land boundary, may be presented to be recorded in any public records or deed records unless the point is connected to ~~a triangulation or traverse station~~the national spatial reference system and established in conformity with the standards prescribed in this chapter.
2. Coordinate values used in land descriptions under this section must be certified by a duly registered professional land surveyor under the laws of this state.