## § 102-1.2. Name and description in relation to the North American Terrestrial Reference Frame of 2022.

From and after the date and time the North Carolina Geodetic Survey Section in the Division of Emergency Management of the Department of Public Safety receives from the National Oceanic and Atmospheric Administration's National Geodetic Survey (NGS) official notice of a complete, published definition of the North American Terrestrial Reference Frame of 2022 (NATRF2022), including the State plane coordinate constants applicable to North Carolina, the official survey base for North Carolina shall be a system of plane coordinates to be known as the "North Carolina Coordinate System of 2022," said system being defined as a one-parallel Lambert conformal conic projection of the "Geodetic Reference System (GRS 80) ellipsoid" having a central meridian of 79° - 00' west from the prime meridian and a central parallel of latitude of 35° - 15' north of the equator, along which parallel the scale shall be exactly 0.999 96 or 1 part in 25,000 smaller than unity. All coordinates of the system are expressed in meters, the east or x coordinate being measured easterly along the grid and the north or y coordinate being measured northerly along the grid. The International Foot, 1 foot = 0.3048 meter exactly, shall be used as a conversion factor. The origin of the coordinates is hereby established at the intersection of the central meridian and the central parallel, such origin being given the coordinates of east or x = 1,000,000 meters and north or y = 200,000 meters. The precise position of said system shall be as marked on the ground by geodetic monuments and Continuously Operating Reference Stations (CORSs) established in conformity with the standards adopted by NGS, whose geodetic positions have been adjusted on NATRF2022, and whose plane coordinates have been computed on the system defined. Whenever plane coordinates are used in the description or identification of surface area or location within this State, the coordinates shall be identified as "NATRF2022," indicating North American Terrestrial Reference Frame of 2022, or as "NAD 83," indicating North American Datum of 1983, or as "NAD 27," indicating North American Datum of 1927. (2023-92, s. 2(b).)

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