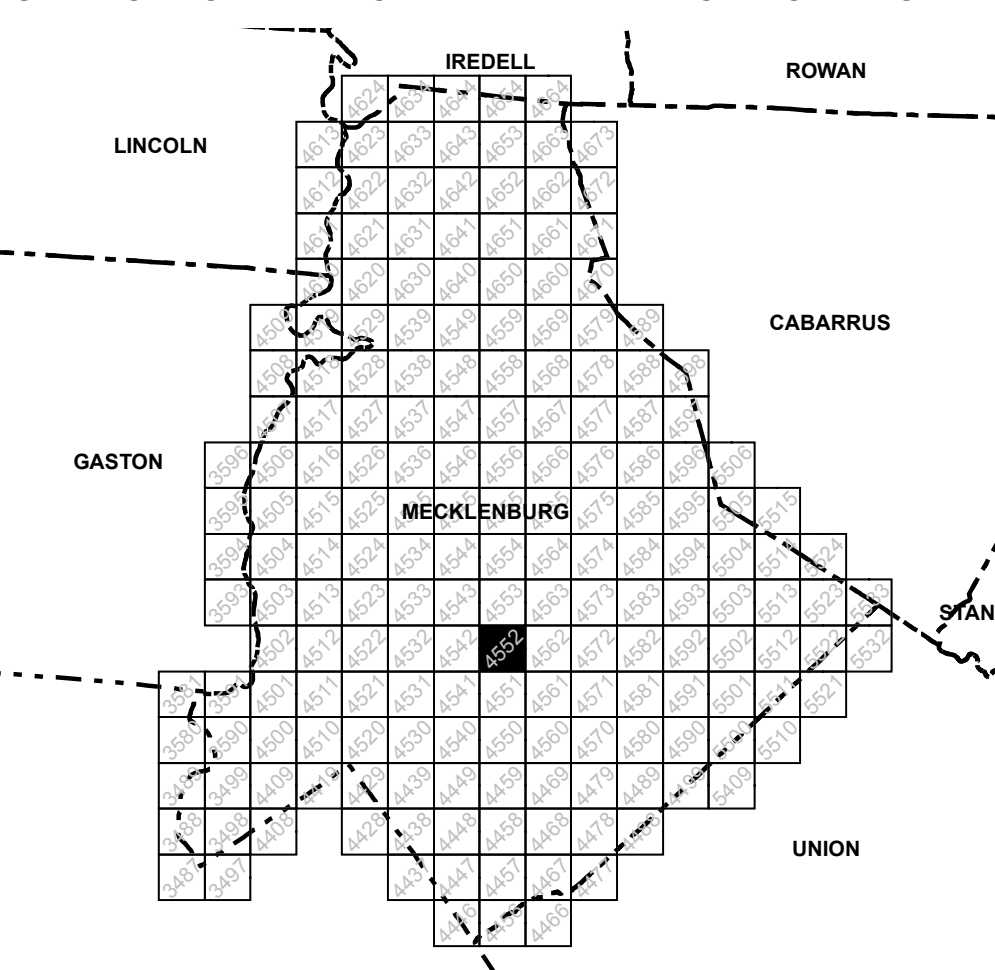


STATE OF NORTH CAROLINA FIRM PANEL LOCATOR DIAGRAM



DATUM INFORMATION

The projection used in the preparation of this map was the North Carolina State Plane (FIPSZONE 3200). The horizontal datum was the North American Datum of 1983, GRS80 ellipsoid. Differences in datum, ellipsoid, projection, or Universal Transverse Mercator zones used in the production of FIRM for adjacent jurisdictions may result in slight positional differences in map features across jurisdictional boundaries. These differences do not affect the accuracy of this FIRM. All coordinates on this map are in U.S. Survey Feet, where 1 U.S. Survey Foot = 1200/3937 Meters.

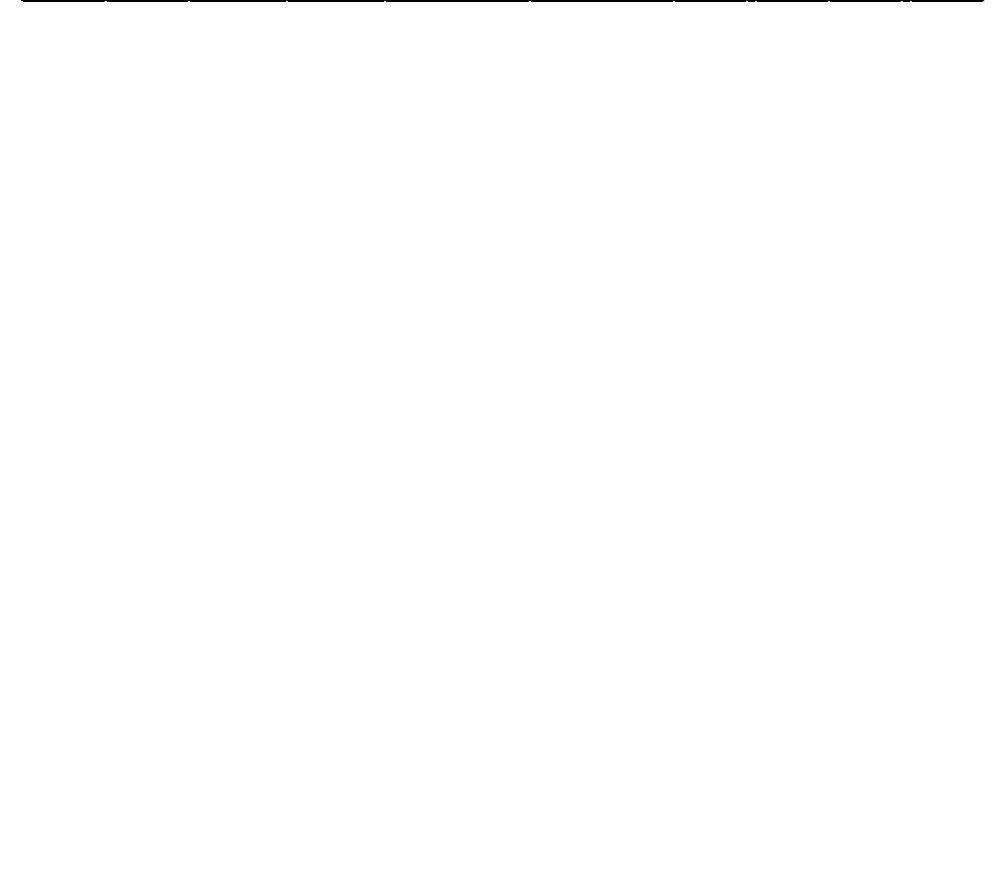
Flood elevations on this map are referenced to the North American Vertical Datum of 1988 (NAVD 88). These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. An average offset between NAVD 88 and the National Geodetic Vertical Datum of 1929 (NGVD 29) has been computed for each North Carolina county. This offset was then applied to the NGVD 29 flood elevations that were not revised during the creation of this statewide format FIRM. The offsets for each county shown on this FIRM panel are shown in the vertical datum offset table below. Where a county boundary and a flooding source with un-revised NGVD 29 flood elevations are coincident, an individual offset has been calculated and applied during the creation of this statewide format FIRM. See Section 6.1 of the accompanying Flood Insurance Study report to obtain further information on the conversion of elevations between NAVD 88 and NGVD 29 to obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the North Carolina Geodetic Survey at the address shown below. You may also contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

County	Vertical Datum Offset (ft)
Mecklenburg	0.74

Example: NAVD 88 = NGVD 29 + (0.74)

All streams listed in the Flood Hazard Data Table below were studied by detailed methods using field survey. Other flood hazard data shown on this map may have been derived using either a coastal analysis or limited detailed Riverine analysis. More information on the flooding sources studied by these analyses is contained in the Flood Insurance Study report.

Cross Section	Flood Elevations (ft)		Water Surface Elevation (ft) (WSE)		Channel & Real Flood Center of Stream		Comments/Encroachment
	Bank Line	Future Land Use	Bank Line	Future Land Use	Channel	Real Flood Center	
001	1.842	4.882	4.882	4.882	4.882	4.882	20.29



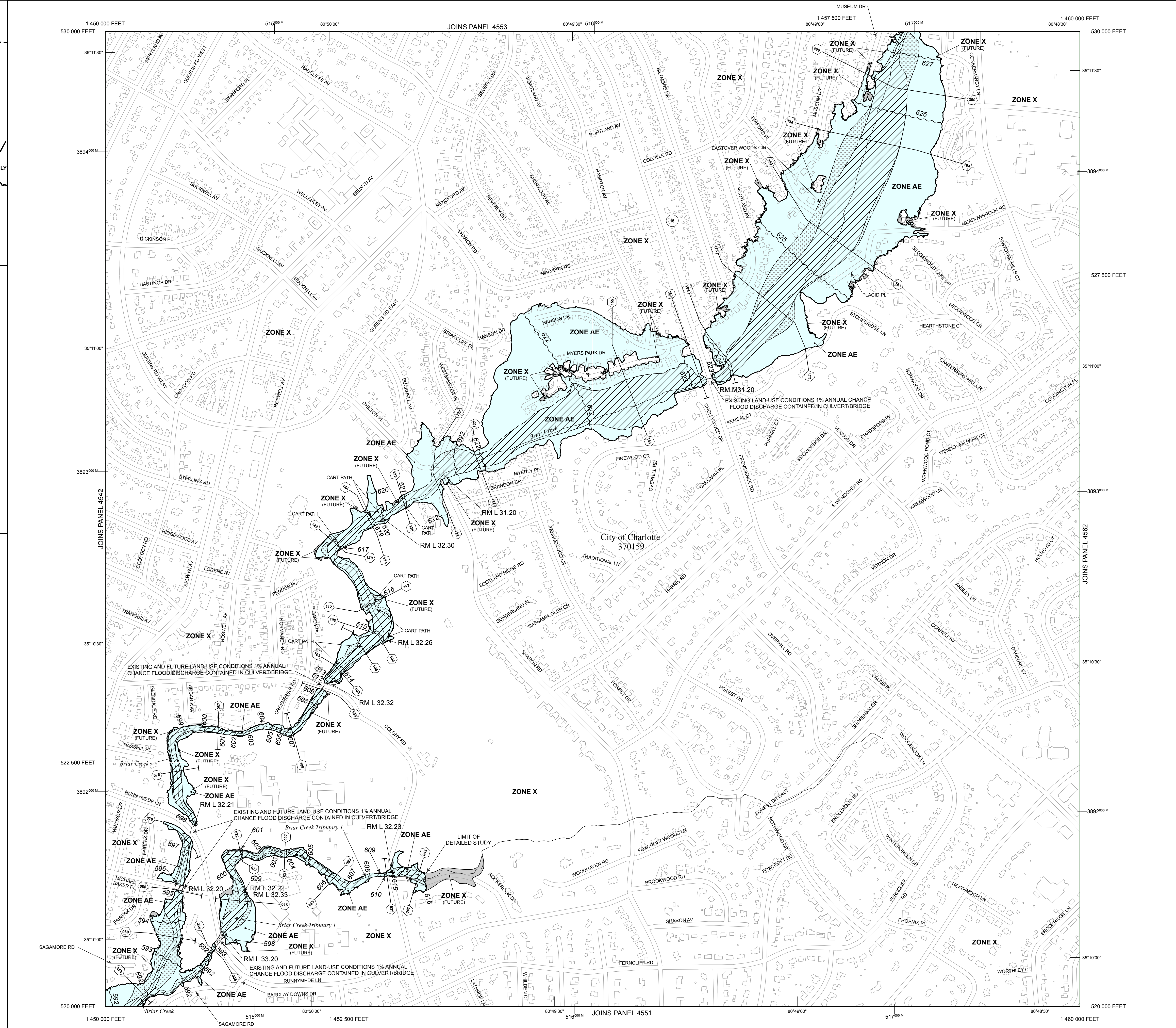
NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, users are encouraged to consult the Flood Profiles, Floodway Data, Limited Detailed Flood Hazard Data, and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM report are rounded whole foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of regulatory floodways shown on the FIRM for flooding sources studied by detailed methods were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data for flooding sources studied by detailed methods as well as non-encroachment widths for flooding sources studied by limited detailed methods are provided in the Flood Insurance Study (FIS) report for this jurisdiction. The FIS report also provides instructions for determining a floodway using non-encroachment widths for flooding sources studied by limited detailed methods.

<http://stormwater.charmeck.org>



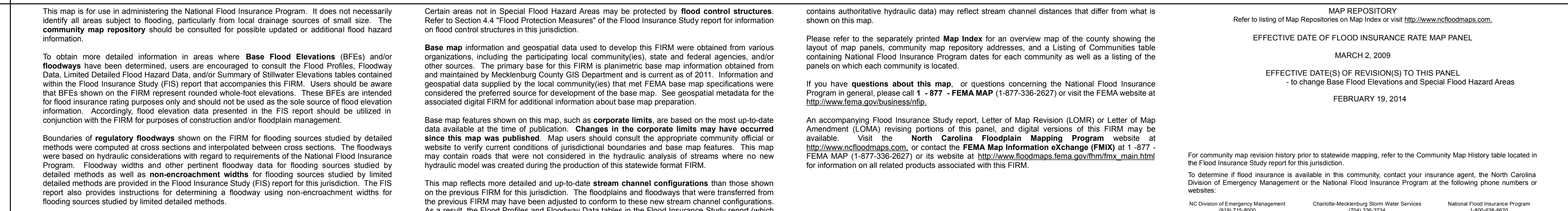
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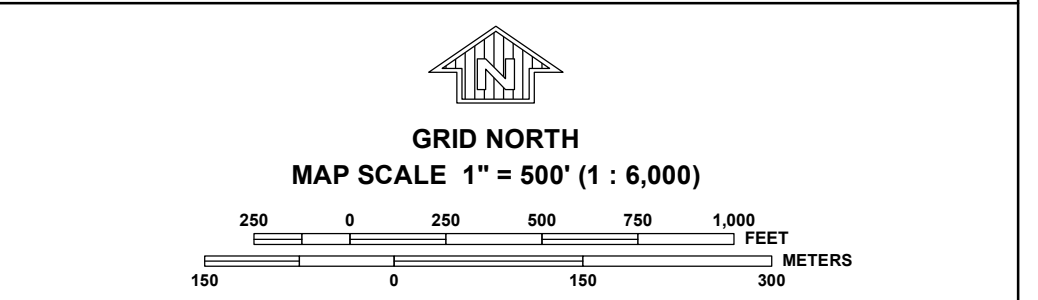
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<http://stormwater.charmeck.org>



LEGEND

- SPECIAL FLOOD HAZARD AREAS (SFHAS) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**
- ZONE A**: No Base Flood Elevation determined.
- ZONE AE**: Base Flood Elevations determined.
- ZONE AH**: Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO**: Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR**: Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently deteriorated. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99**: Areas to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE VE**: Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.
- FLOODWAY AREAS IN ZONE AE**: The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.
- COMMUNITY ENCROACHMENT AREAS (Mecklenburg County)**
- OTHER FLOOD AREAS**: Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- OTHER FLOOD AREAS (Mecklenburg County)**: Areas of future conditions 1% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- OTHER AREAS**: Areas determined to be outside the 0.2% annual chance floodplain; areas outside future conditions 1% annual chance floodplain.
- ZONE D**: Areas in which flood hazards are undetermined, but possible.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**
- OTHERWISE PROTECTED AREAS (OPAs)**: CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
 - 1% annual chance floodplain boundary (Mecklenburg County)
 - 1% annual chance floodplain boundary
 - 1% annual chance future conditions floodplain boundary (Mecklenburg County)
 - 0.2% annual chance floodplain boundary
 - Floodway boundary
 - Community encroachment boundary (Mecklenburg County)
 - Zone D boundary
 - CBRS and OPA boundary
 - Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
 - Base Flood Elevation line and value; elevation in feet* (EL 987)
 - Base Flood Elevation value where uniform within zone; elevation in feet*
 - Referenced to the North American Vertical Datum of 1988
 - Cross section line
 - Transect line
 - Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
 - 1000-meter Universal Transverse Mercator grid ticks, zone 17
 - 2500-foot grid values: North Carolina State Plane coordinate system (FIPSZONE 3200; State Plane NAD 83 Feet)
 - North Carolina Geodetic Survey bench mark (for more information visit <http://www.ncgs.state.nc.us>)
 - National Geodetic Survey bench mark (for more information visit <http://www.ngs.noaa.gov>)
 - NCS-SS GPS 2-5 cm Vertical Control Marks or Contractor-Established NCPMP Bench Marks (for more information visit <http://www.ncgs.state.nc.us>)
 - Mecklenburg County bench mark (for more information visit <http://www.mecklenburgcounty.com/water/firm-reference-marks>)
 - River Mile



PANEL 4552K

FIRM
FLOOD INSURANCE RATE MAP
NORTH CAROLINA

PANEL 4552
(SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:
COMMUNITY: 370159
CITY OF: 4552
MECKLENBURG COUNTY: 370158 4552 K

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index or visit <http://www.ncfloodmaps.com>.

EFFECTIVE DATE OF FLOOD INSURANCE RATE MAP PANEL: MARCH 2, 2009

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL: FEBRUARY 19, 2014

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP REVISED: FEBRUARY 19, 2014
MAP NUMBER: 3710455200K

State of North Carolina
Federal Emergency Management Agency

