



Updated Submittal Requirements for MAAPnext & LOMRs

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In February 2019, the Harris County Flood Control District (District) kicked off the Modeling, Assessment, and Awareness Project (MAAPnext), a countywide restudy of floodplains that will result in the issuance of new Flood Insurance Rate Maps (FIRMs) by FEMA. In support of this project, LiDAR was obtained throughout the region from January 12 through March 22, 2018. Any changes to the terrain (fill, excavation, grading) that have occurred since January 12, 2018 were likely not captured in the 2018 LiDAR. A digital elevation model (DEM) of the terrain surface was developed from the LiDAR and will be used for modeling and mapping purposes.

Eligible terrain updates completed since the LiDAR was flown can be incorporated into the MAAPnext modeling and mapping effort if submitted before the designated cut-off date, January 1, 2020. These updates will be made through the submittal of certified survey and updated DEMs to the District. The models and maps under development by MAAPnext are based on 2D modeling techniques that require a terrain surface, and therefore as-built ground survey or other elevation products must be converted into a DEM before the data can successfully be incorporated. This DEM must reflect surveyed bare earth conditions and match specifications in Table 1 below.

Table 1. DEM & Survey Specifications

Projection:	Texas State Plane, South Central Zone
Horizontal Datum:	NAD83(2011), EPOCH 2010.00
Horizontal Units:	US Survey Feet
Vertical Datum:	NAVD88 using GEOID12B
Vertical Units:	US Survey Feet
Cell Size:	3ft
Format:	IMG
DEM must be populated with metadata which includes specifications, dates collected, project manager contact info, and any relevant project specific information.	

Vertical Accuracy of Surveyed elevations used in DEM creation= +/- 0.15'

Project or development data should be submitted as soon as it is available to better ensure successful incorporation into MAAPnext. Following the January 1st, 2020 cut-off date, all projects going forward will be incorporated into new FIRMs by utilizing the LOMR process currently in place. Due to the nature of the modeling and mapping products under development in connection with MAAPnext, these requests will now require a DEM to be submitted in support of the certified as-built or survey information.

For consideration of your project to be incorporated into MAAPnext, please submit the following:

1. Project Narrative - Must describe the scope of work. The narrative should provide the reader with a general idea of what the project included.
2. Certified survey with the following statement.
I, _____, a (Registered Professional Land Surveyor or Licensed Professional Engineer) in the State of Texas, do hereby certify that all coordinates are referenced to the Texas State Plane Coordinate System of 1983, South Central Zone (4204), North American Datum (NAD 83)(2011 ADJ)(EPOCH 2010.0000) and all elevations are referenced to the North American Vertical Datum of 1988 (NAVD88) GEOID 12B. All horizontal and vertical units are U.S. survey feet. This survey represents an on-the-ground survey and based on field work conducted on date.
(seal)

(name and registration/license number)

3. Terrain surface representation of survey (DEM)
Survey Deliverables: Texas Coordinate System- South Central Zone (FIPS 4204) "Grid" in both LandXML and DEM (GeotTIFF) file format.

For more information, full survey guidelines and requirements can be found at www.hcfcd.org, "Technical Manuals", "LandSurveyGuidelines.pdf". Submit required files electronically to Brian Edmondson (Brian.Edmondson@hcfcd.hctx.net). To stay informed on future updates on the MAAPnext project including the data incorporation cut-off date, please sign up at <http://maapnext.org/contact/>.