Document: GD-P-01 Requirements for Drainage Design Bureau approval of Access Permits
Date: July 16, 2024
To: Public Distribution
From: Steven Morgenstern, NMDOT Drainage Design Bureau Chief

The NMDOT procedure for approval of a driveway or access permit is for the applicant to get approval from the Drainage Design Bureau (DDB) for the drainage portion of the access permit. Formal application to the District Traffic Engineer can be made after receiving a Site Grading and Drainage approval letter from the DDB and a separate Environmental/Cultural Resources Clearance letter from NMDOT Environmental. The DDB typically allows two weeks for our review.

For all access and development plans affecting the drainage within NMDOT right-of-way (ROW), or reviewed by the NMDOT, the applicant needs to submit runoff calculations demonstrating compliance with criteria listed below. These runoff calculations are typically accompanied by an existing conditions site/survey plan, proposed grading and development plan, and proposed drainage plan. These documents are typically signed and stamped by an engineer/surveyor. At the DDB discretion, this may not be needed, depending on the size and complexity of your project.

For drainage and runoff analysis, use the design and check storms appropriate for the NMDOT roadway adjacent to your property. See Section 203 in the Drainage Design Manual, and the NMDOT Roadway Functional Class online map (weblink: Roadway Functional Class (arcgis.com)) to determine the appropriate values from the tables in Section 203.

There are two main items that the DDB looks for during review: 1) no increase in runoff from applicant's site, and 2) the entrance incorporates a waterstop if the roadway the site accesses has curb and gutter. See below for more information. See Section 803 in the NMDOT Drainage Design Manual, 2018 for formal text.

1. **General Requirements**:
   - 1.A. Provide precise location information about both your property boundaries and the requested location of your driveway/access. This may be a Google Earth screen capture with markups, or KMZ file. Ensure enough information is provided so we know which NMDOT roadway is accessed, and where in the state your property is located.
   - 1.B. No ponds, sub-surface detention areas, or water quality features are permitted inside of NMDOT ROW.
   - 1.C. Below-ground tie-ins to NMDOT owned and operated storm drains are not allowed.
   - 1.D. All drainage calculations must conform to the latest NMDOT Drainage Criteria and Manual, or local entity requirements if they are more stringent.
   - 1.E. "Pre-construction" refers to the conditions on your site for the previous 10 years. If the conditions on your site have changed within the past 10 years, contact the DDB. This generally refers to the amount of pervious and impervious conditions on your site.
   - 1.F. Depending on local conditions within the Right-of-way, we may require a culvert under your driveway. If this is needed, the minimum pipe diameter allowed is 18", but 24" is preferred if it will fit.
2. **No Increase In Runoff From Applicants Site**. This can be demonstrated by either of the following methods:

2.A. The post-construction peak flow calculations need to show that pre-construction flow rates are not exceeded. No additional flows other than the historic flows are permitted inside of NMDOT ROW. For smaller sites, this is typically done using the Rational Method, but other methods may be accepted (check with DDB).

2.B. Determine the 100-yr runoff volume for both existing conditions and post-development conditions. The difference between these two runoff volumes must be retained on the applicant's site. The retention pond must drain within 96 hours to comply with the requirements of the State Engineer.

B.i Runoff volumes are most easily determined using Equations 2-3 and 2-4 from USDA's *TR-55 Urban Hydrology for Small Watersheds*.

3. **Waterstop requirement.** If the roadway the site accesses has curb and gutter, then the driveway/entrance must include a Waterstop. All turnouts to NMDOT roadways with curb and gutter must be constructed with waterstops (humps), matching the height of the adjacent curb and gutter. The intent of this requirement is to prevent concentrated gutter flow from entering the driveway and off-site property, or to prevent runoff from the off-site property driveway entering the roadway in an uncontrolled manner. Turnouts or driveways may discharge runoff to the NMDOT ROW provided that the contributing runoff is included in design calculations for the roadway and storm drain system.

3.A. Below are two examples of a waterstop. Figure 1 shows both a plan and profile view of a waterstop. Note that this example shows a relatively flat top. A flat top is not required, and Figure 2 shows the plan view of a waterstop (blue line) that does not have a flat top. Either style is acceptable.

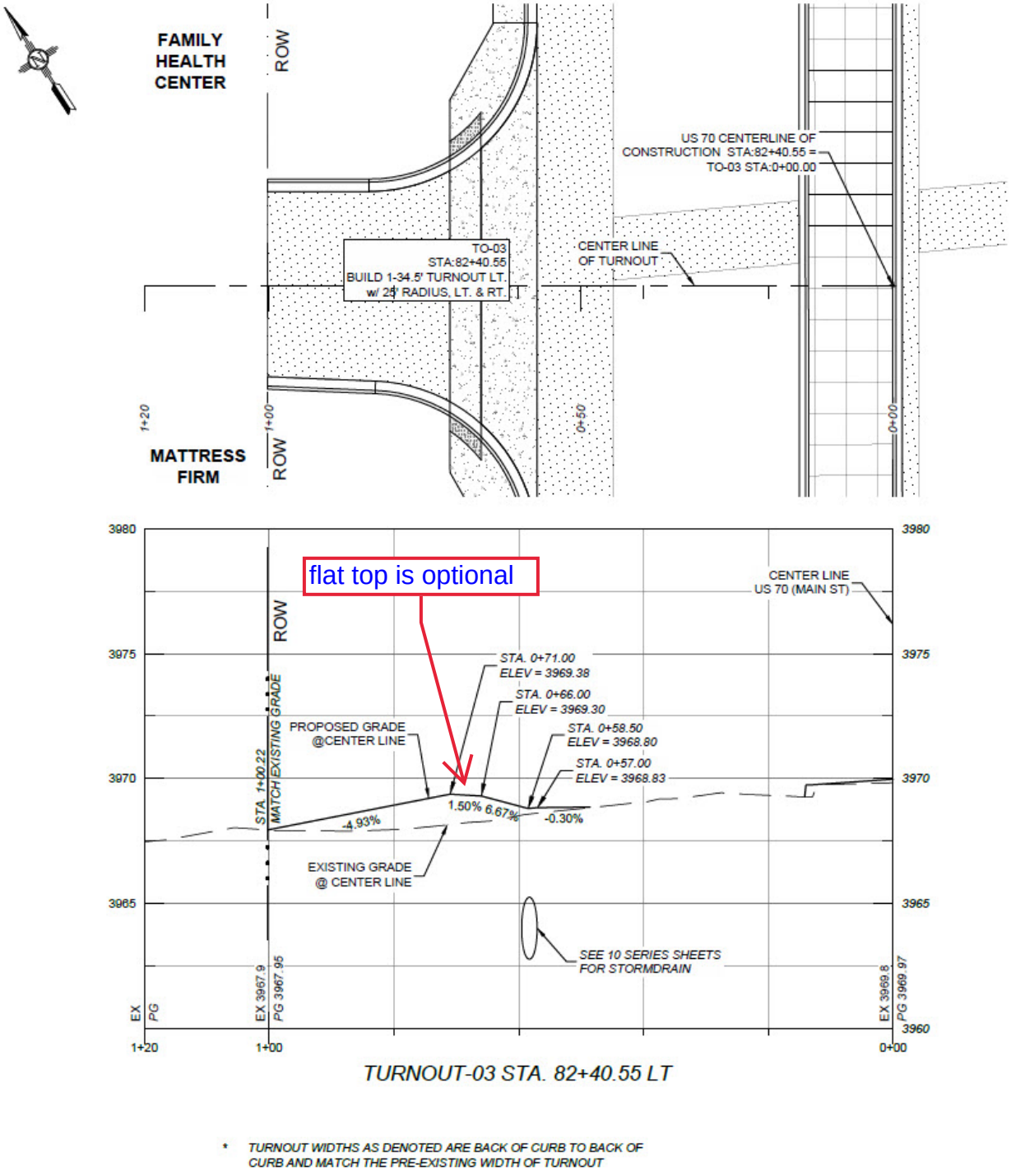

Figure 1 Waterstop plan and profile

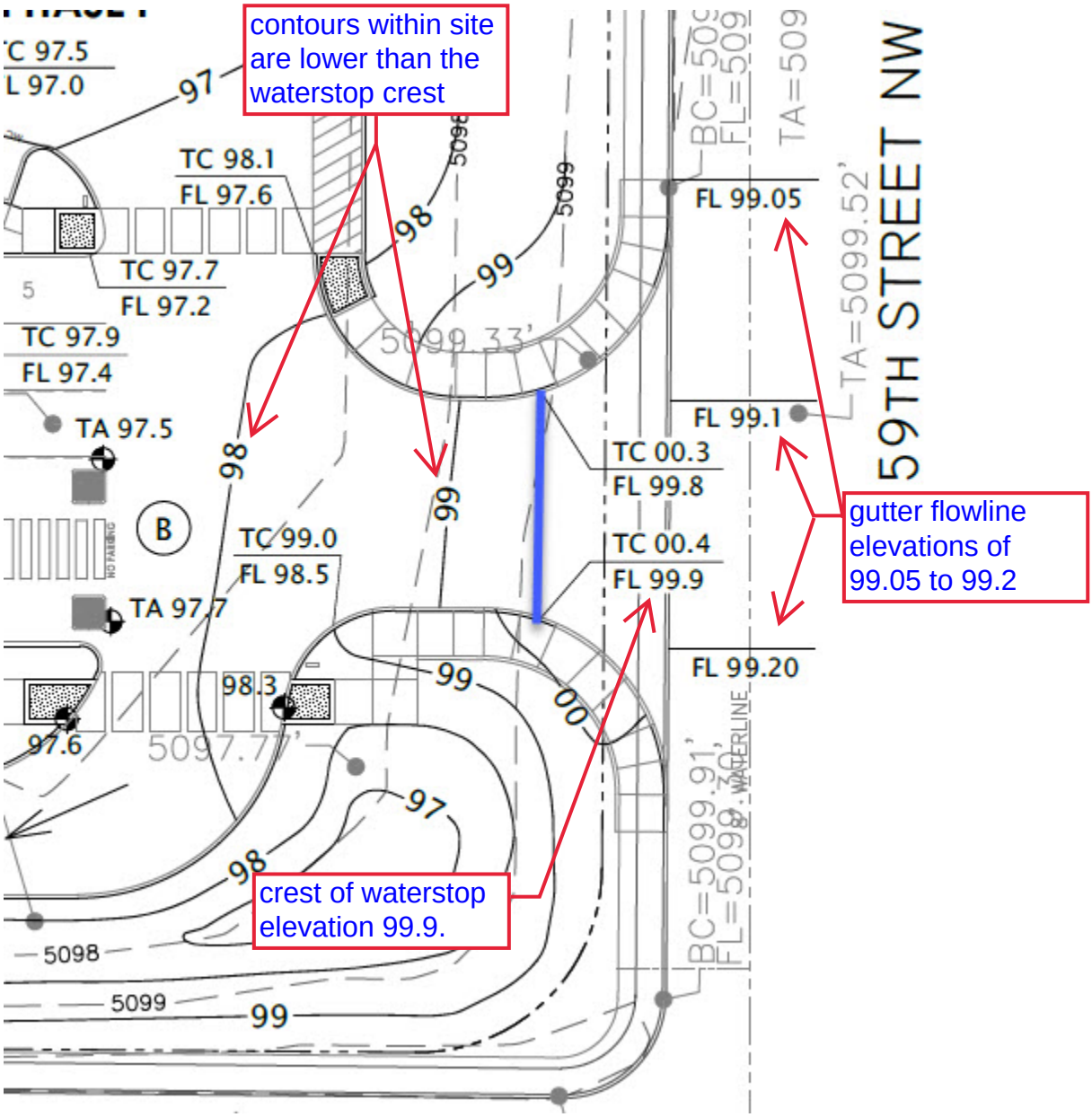

Figure 2 Plan view of waterstop, shown as blue line