



Drainage Impact Study Requirements

The following items are required elements of any drainage impact study submitted for review. The Town of Sorrento or their Engineering Review Agency may require additional information if warranted by unusual site conditions.

1. Site Location – Describe location of subject property; locate by Section(s), Township and Range; identify all adjacent developments, major drainage outfalls, streets, highways and provide vicinity map.
2. Site Description – Describe the predominant existing land use and future land use, proposed development, soil types, vegetative cover, estimated pre- and post-developed impervious area and provide photos of site, existing channels, ditches, natural drains and drainage structures.
3. FEMA FIRMette – Indicate location of the site on a FEMA FIRMette with base flood elevation noted.
4. Watershed Map – Delineate existing drainage boundaries of off-site watersheds tributary to project area stormwater conveyance elements, indicate acreage and the exit point of each basin. The map should indicate the location of pertinent existing channels, ditches and natural drains. The USGS seven and one-half minute quadrangle map may be used as the base for the map, however, the latest LIDAR contours available for the area shall control for delineating watersheds.
5. Concept Plan or Site Plan – The drainage study shall include a copy of the proposed developments concept plan or site plan.
6. Pre-Developed Sub-Basin Map – Provide a sub-basin map for the existing condition of the site to include on- and off-site sub-basins tributary to the project area. All discharge points into and out of the site should be noted with peak ten (10) year, 24-hour flow (8.5” rainfall) rates.
7. Post-Developed Sub-Basin Map – Provide a sub-basin map for the proposed condition of the site to include on- and off-site sub-basins tributary to the project area. All discharge points into and out of the site should be noted with peak ten (10) year, 24-hour flow rates.
8. Floodplain Mitigation Considerations – Provide an estimate of the volume of fill required to be placed in special flood hazard areas and the proposed method to provide floodplain mitigation.
9. Conclusions and Recommendation – The study shall clearly identify the results and conclusions of the analysis and provide recommendations of any required action(s) so that surrounding properties experience no adverse impact. The conclusions should also clearly indicate how the proposed design is meeting the requirements of the Town of Sorrento Drainage Ordinance.
10. Supporting Calculations – Provide in appendices, pertinent calculations referenced in study. Provide supporting documentation for all design parameter used in calculating and modeling flows (include TOC flow paths, CN tables, all routing model input and output, detention volume calculations, etc.)