MEMORANDUM

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

P8/122636

July 1, 2016

TO: Interested Parties

Edwin Quinonez

FROM: Edwin E. Quinonez, Engineering Project Manager, Project Planning Section

RE: District Accepted Software

CURRENTLY ACCEPTED SOFTWARE
(SEE NOTES 1 AND 2)

FIRM	HYDROLOGY	HYDRAULICS	HYDROMODIFICATION
Hydraulic Engineering Center (HEC) See Note 3	HEC-HMS Latest Release with District HEC-HMS Preprocessor	HEC-RAS Latest Release	-----
Advanced Engineering Software (AES)	Rational Method Version 5.9D Synthetic Unit Hydrograph Version 2.0A	Miscellaneous Normal Depth Features of Hele 1 or 2 See Note 4	-----
Civil Design (Bonadiman)	Rational – Hydrology, Riverside County, Version 8.0 and up. Unit Hydrograph Hydrology, Riverside County, Version 8.1 and up. Hydrograph Routing Version 7.0 and up.	WSPGW (Los Angeles County Flood Control District) Version 14.0 and up General Hydraulics Version 6.0 and up.	-----
Flo-2D Software, Inc.	-----	Flo-2D Basic and Pro	-----
Jack P. Norris	Rational Tabling RMH-RC Version 9.42	------	-----
Bentley See Note 5	------	FlowMaster Version V8i (for sizing length of Catch Basin only)	-----
Clear Creek Solutions	------	------	Santa Margarita Regional Hydrology Model Latest Version
Environmental Protection Agency	------	------	Storm Water Management Tools (SWMM) Latest Release

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NOTES:

1.   Versions of release dates noted are those accepted on the date of this memorandum. Earlier versions are <u>not</u> acceptable. Any questions regarding the software and versions listed should be directed to the District's Plan Check or Project Planning staff at 951.955.1200 prior to first submittal. Acceptance is subject to revocation without prior notice.

2.   District acceptance of listed software does not constitute a formal approval or endorsement. Engineers using these software products are responsible for verifying their suitability for a given application. The District provides no warranty expressed or implied with respect to their use.

3.   The District HEC-HMS Preprocessor and User Manual are available on the District website: http://rcflood.org/hechms

     a.   If warranted, HEC-1 and HEC-2, which are now superseded by HEC-HMS and HEC-RAS, respectively, may be deemed acceptable on a case by case basis. Contact your reviewer prior to first submittal.

4.   Only the miscellaneous features of AES Hele 1 and 2 are accepted by the District. The WSPG and HGL calculations must be submitted on an accepted version of HEC-RAS or WSPG, as is appropriate.

5.   Bentley FlowMaster Version V8i will only be accepted for sizing catch basin length. Design equations used in curb opening and combination inlet worksheets in FlowMaster are based on Federal Highway Administration's Hydraulic Engineering Circular No. 22 (HEC-22). These equations have been established as the accepted methodology for sizing the length of the following catch basins:

     a.   District Standards: Catch Basin No. 1 (CB100), Catch Basin No. 4 (CB101), and Catch Basin No. 6 (CB102).

     b.   Riverside County Transportation Department Standards: 300, 301, 302, 304, 305, 311 and 312.

EEQ:MHW:bjp