

## Tracking Sheet for Floodplain Delineation Revisions

Revision No	001/2011
Date of Revision	3 June 2011
Watercourse	Kemptville Creek South Branch
Location	South Branch from Cross-section 14+730 to 10+652; shallow overland flow from Branch Road to County Road 18
No of Revised Map Sheets	13, 14, 15, 16
Nature of Change	HEC-RAS model, estimated flood elevation, flood limit lines, spot heights
Original Report	RVCA (2009). Kemptville Creek Flood Risk Mapping – Hydraulic Modeling and Map Production. 27 March 2009.
Note	This Revision represents Addendum No. 1 to, and should be read in conjunction with, the Original Report noted above
Revision Approved by	Ferdous Ahmed, Ph.D., P.Eng.

### Description of changes made under this Revision:

- Labeling of spot elevations on Diamond Road, Branch Road and County Road 18 was revised based on information obtained from Base Mapping Company (correspondence dated March 10 and May 25, 2011). There was no change to the contour lines. The corrected base map file is: SPT-HTS\_points\_update2011.shp.
- Additional information on the private road bridge (between cross-sections 12+207 and 12+182) and better representation of ineffective flow areas were used to re-compute the flood levels. The flood levels generally dropped upstream of the bridge. The modified version of the HEC-RAS model is in file: Kempt\_R1.prj.
- Flood line delineation along Branch Road upstream of River Cross-Section 12+236 was revised based on corrected road surface elevations. The road surface was found to be above the Kemptville Creek flood level.
- Characterization of the secondary floodway (shallow surface overflow) from Branch Road to County Road 18 was re-assessed based on field surveys of County Road 18 culvert, field inspection of the fields in north half of Lot 13 Con 9, and consideration of potential for eastward diversion of flow from the tributary in Lot 15 Con 9 (the Streight Drain) when Kemptville Creek is at 1:100 year stage. Six existing culverts under Branch Road would allow flood water from the Kemptville Creek to flow north and then northeast to County Road 18.
- Upon review, County Road 18 culverts and road profile are considered to be the most restrictive cross-section for flows spilling across Lot 13, Con 9, setting up a headwater level of approximately 100.50 m on the west side of the road based on an estimated flow of 4.65 cms, a tailwater level of 99.81 m and using MTO culvert design nomographs.
- Flood lines along the secondary floodway have been adjusted based on the revised headwater level at County Road 18, as now shown in Flood Risk Maps No. 14 (rev.1) and 15 (rev.1).
- The revised flood elevations (Tables 4 and 5, rev. 1), longitudinal profiles and cross-sections (Appendix A, rev. 1) from the hydraulic model are now posted on RVCA website and should be read in conjunction with this map revision.