



## Paquette-Whitson Municipal Drain

Presentation to the Hearing Committee October 3, 2012

by

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## Whitson River

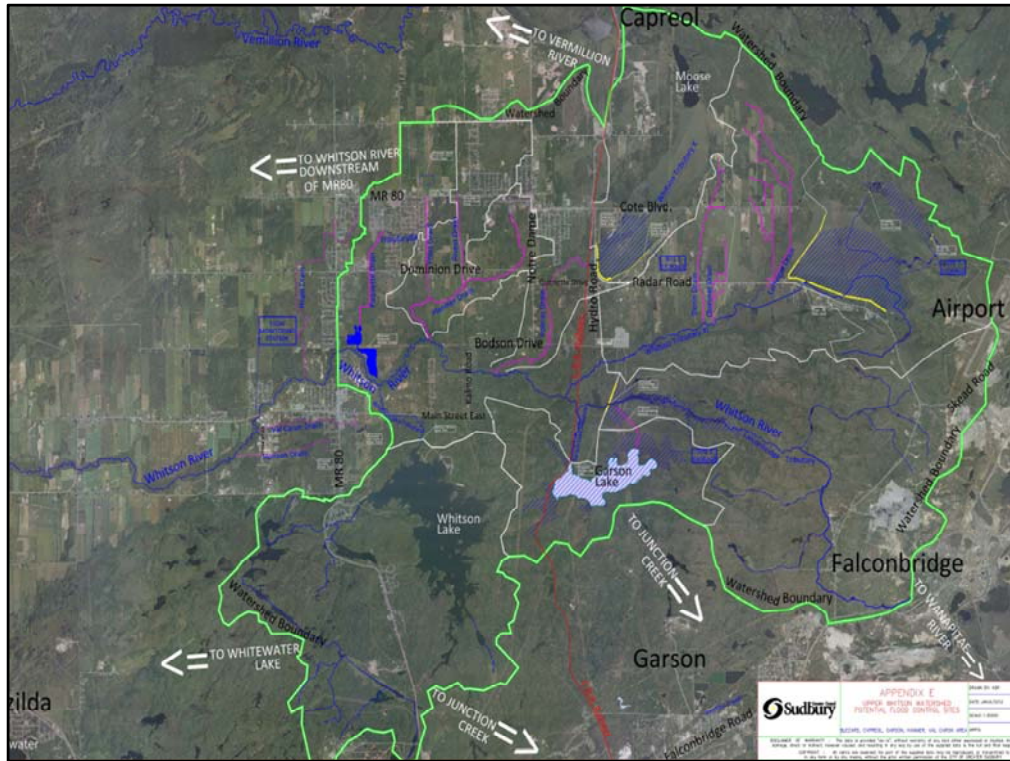
- Main natural watercourse draining westerly from Falconbridge through Hanmer, Val Caron and Chelmsford
- 70 kms long – 324 square kilometre watershed
- ½ of the watershed is east of Val Caron
- 5 of the river's 11 tributaries are east of Val Caron
- River has a very flat slope; 30 inches over 1,000 metres
- River has a relatively small cross-section with limited flow capacity
- Flooding has been common

## Whitson River Historic Flooding

- In its natural state, Whitson River flooded annually and caused problems to farming pioneers
- Recent major floods include the Spring of 1985 and the Spring of 1998
- Normal summer waterflow is minimal
- Spring melt flow increases up to 50 times
- Flooding along the Whitson River impacts future development and existing development
- Flood reduction measures are necessary

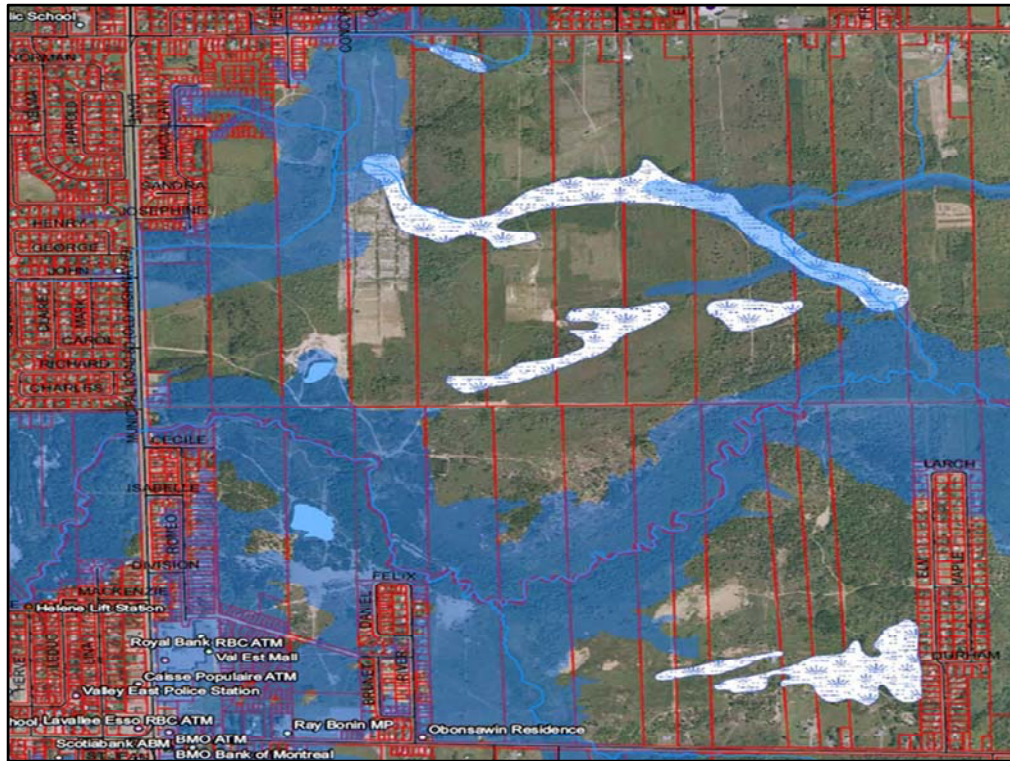






### Tributary 8 A

- Tributary VIII A – a main tributary to the Whitson
- Large project drainage area, 725 hectares
- Former natural watercourse rerouted as past development occurred
- Not a maintained watercourse outlet
- Existing watercourse clogged
- Large Regional Storm Flood Plain south of Dominion Drive
- Existing watercourse cannot convey major storm flood water
- Several businesses and residential developments in progress or pending approval
- Potential flooding restricts development



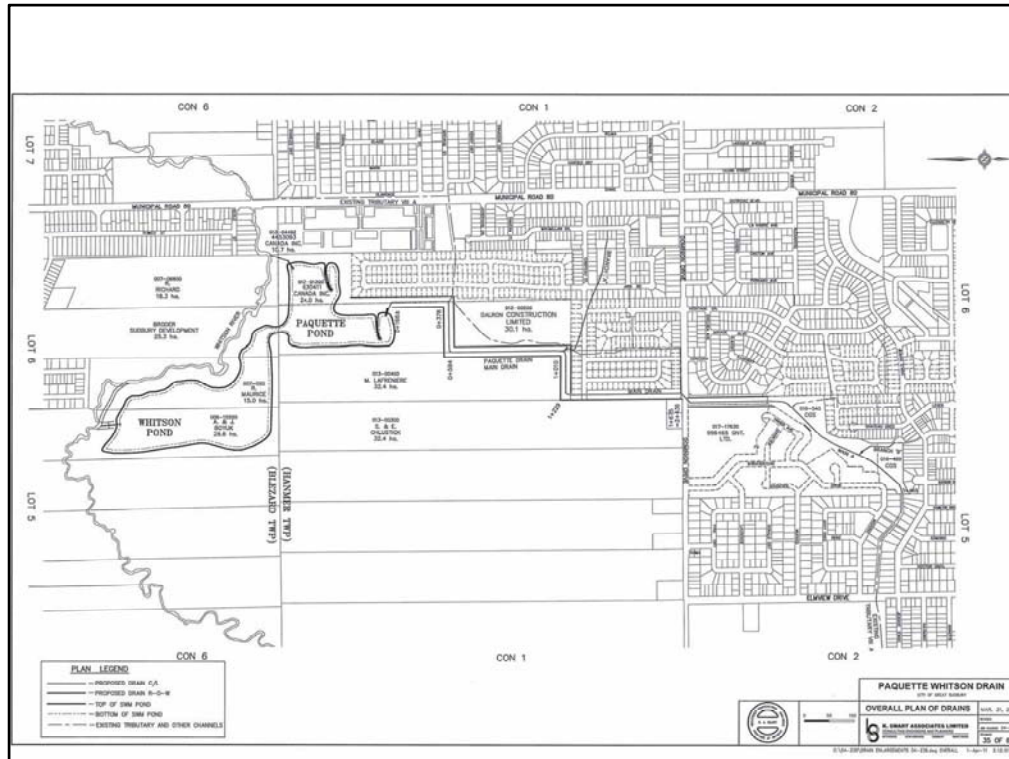


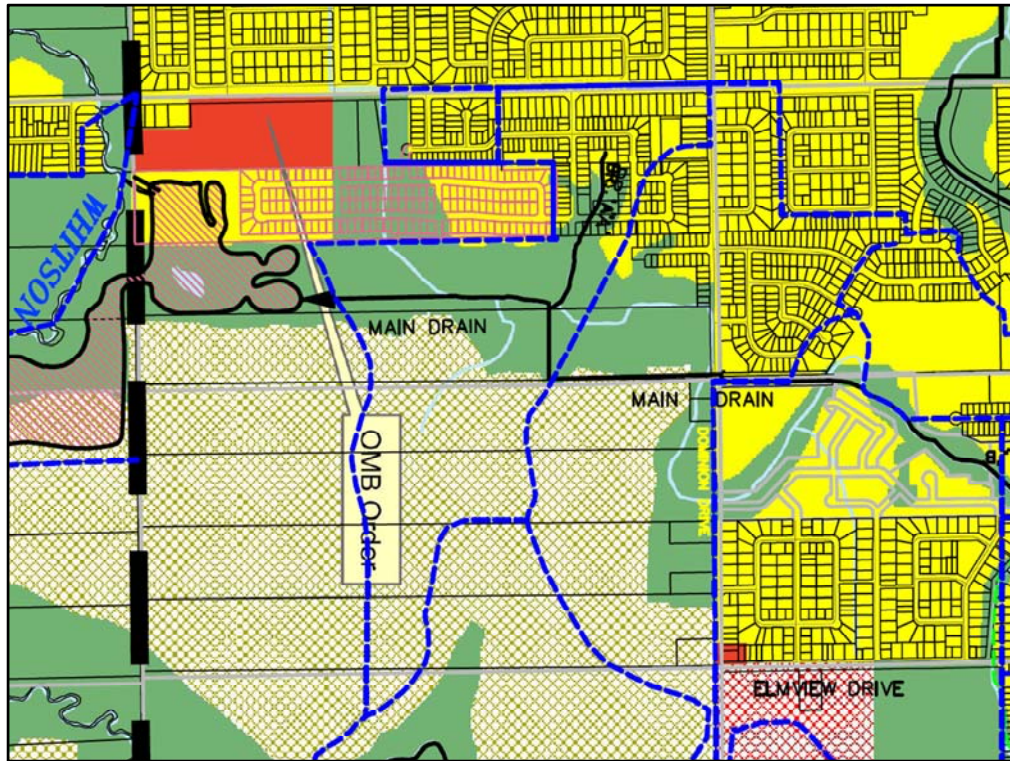
### Paquette-Whitson Municipal Drain

- A complex drainage project
- Proposed 3,000 metres of new and improved drainage channels
- Regional Storm drainage standard of design
- New drainage channel contains Regional Storm flood waters within banks
- 4:1 side slopes – low flow channel
- Will serve 1,300 plus, existing residences
- Will provide drainage outlet for 700 new homes and a large commercial complex
- Major developers Dalron Construction Limited, Lifestyle Homes, Dominion Park Developments, Victoria National
- 30 hectare stormwater quantity and quality pond
- Estimated cost \$7,282,885

### Project Cost Shares

• City cost share	\$5,131,385
• Developer's cost share	\$2,151,500
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Total Project estimated cost:	\$7,282,885





### Paquette-Whitson Municipal Drain

- 2 canal linked large ponds
- 3 stormwater treatment forebays
- Regional storm sized pond to reduce flows to Whitson River
- 5:1 grass side slopes
- Whitson River flood control structure to offload > 20 year storm flows
- Minimum depth 1 metre
- Stop log outflow control chamber
- Substantial recreational potential
- Proposed park-like surrounding lands
- New City centre piece

### Drainage Act Process

- Initiating petition January, 1999, Secondary petition 2004
- Numerous public drainage meetings
- Numerous discussions with developers to integrate the proposed drain to pending and future developments
- Discussions with the Department of Fisheries and Oceans (DFO) and Nickel District Conservation Authority (NDCA)
- Extensive pre-engineering analysis and surveys, geotechnical investigations – water table evaluations, engineering design plans and cost estimates
- Fair and balanced assessment to developer and City taxpayers
- February 2012 Engineer's report
- July 10, 2012 City Council approval of Front Ending Finance Program for developers share of cost
- City to collect back developer's share @ \$2,500 per lot or lot equivalent
- October 3, 2012 Hearing Committee Recommendation

