



MERO Report

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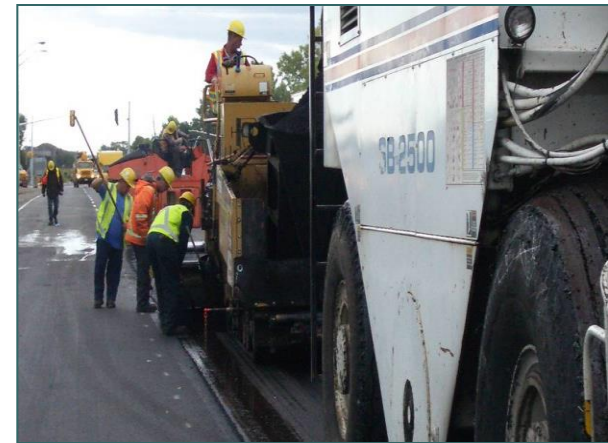


Outline

- Warm Mix Asphalt (WMA)
- Stone Mastic Asphalt (SMA)
- Asphalt Cement Testing
- Payment by Square Metre
- Inertial Profiler
- GreenPave

Warm Mix Asphalt (WMA)

- MTO's WMA contracts have been successful, with 500,000 tonnes paved to date
- Compared to HMA, WMA:
 - Improves compaction and joint quality
 - Facilitates late season paving
 - Reduces cracking potential
 - Reduces fuel consumption
 - Reduces emissions at asphalt plant and paving site
- MTO permits WMA wherever HMA is specified
- Additionally, MTO expects to specify use of an estimated 400,000 tonnes of WMA on 2014 contracts to assist contractors in becoming comfortable with the technology
- WMA Task Group is working to update mix design procedures





Stone Mastic Asphalt (SMA)

- The temporary pause placed on use of SMA due to concerns with early age friction has been lifted
- New SMA surface courses will require a grit coated with asphalt cement (1%), embedded on the surface
- SMA trials have proven this to be an effective method to significantly improve early age friction
- One contract completed in WR, one underway in CR
- Moving forward with additional contracts for 2014

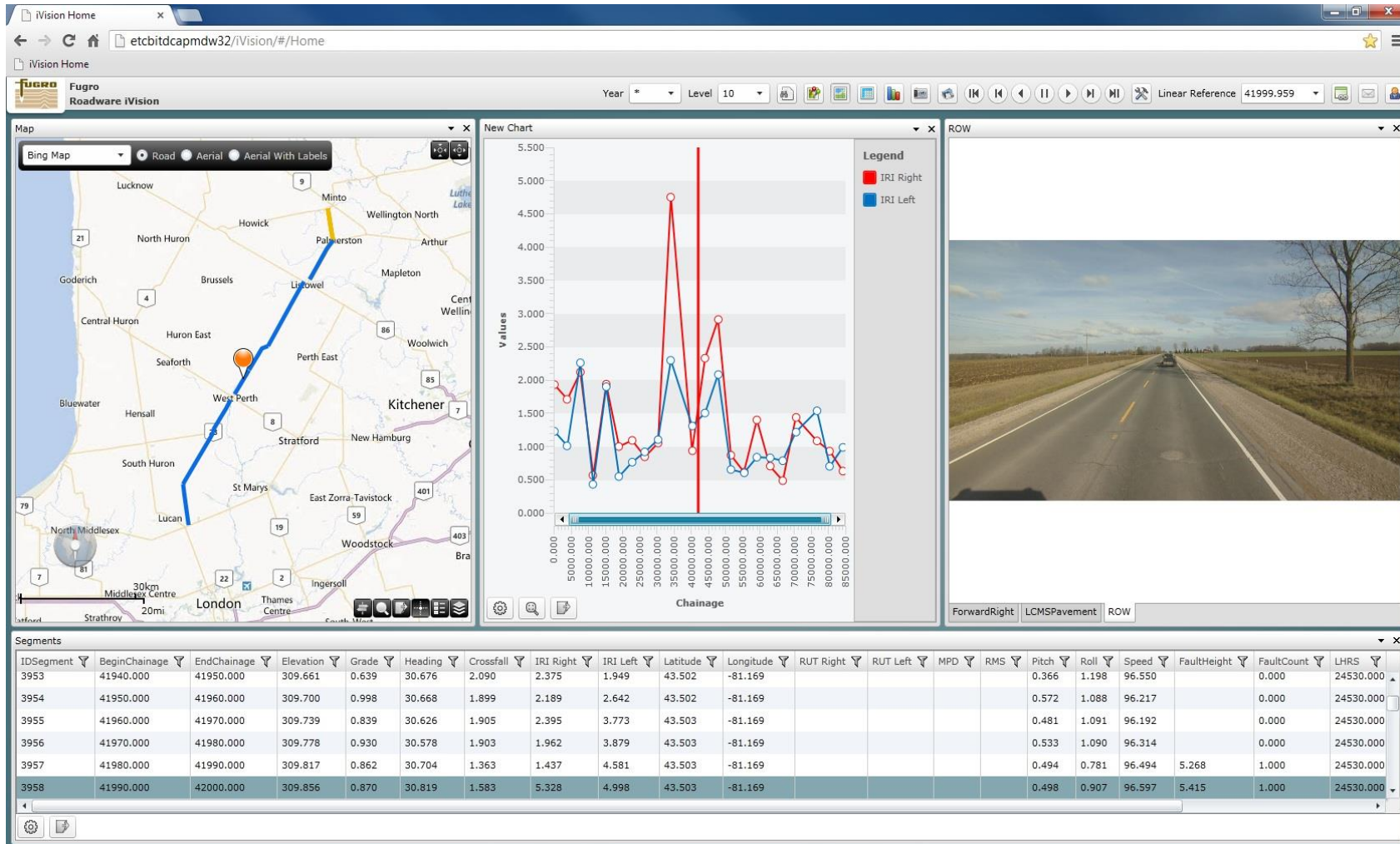




Asphalt Cement Testing

- Collaboration with our stakeholders resulted in leading edge solutions to better characterize asphalt cement for cracking
- Test results since 2011, show asphalt cement suppliers are able to meet additional testing criteria inserted on contracts:
 - Multiple Stress Creep Recovery (MSCR)
 - Double Edge Notched Tension Test (DENT)
 - Extended Bending Beam Rheometer (Extended BBR) and
 - Ash Content
- For all completed 2011 trial contracts, performance is being reviewed using 2013 iVision data; have completed collection of available mix designs, ERS data and samples.
- East Region expected to invoke ExBBR criteria on 1-2 contracts

iVision – IRI Pavement Performance Chart





Payment by Square Metre

- Surface course payment by square metre specification is updated to include binder and surface course
- Assessment made at end of paving of all square metre item lifts
- Clarification provided for rejectable sub-lots including repair, assessment for penalty and what the penalty would be if left in place instead of repaired.
- SP103S52 that provided measurement conversions for Non-Payment References in Contract Documents replaced with a formula to convert from tonnes to square metres within SP313F51



Inertial Profiler

- Eight consultant and 4 contractor profilers were certified in 2013
- 2014 inertial profiler correlation to be first week of June in Burlington
- On average 3 referee requests per year
- California profilograph correlation to be held early May (there is at least one asphalt paving contract requiring the use of this test)



GreenPave

- Over 90 design projects assessed using MTO developed simple points-based rating system for sustainability of pavement design and construction alternatives
- Point awarding system in relation to construction methods and activities being finalized for:
 - Actual mass of recycled materials
 - Pollution reduction due to retrofitted equipment/ alternative fuels
 - Sustainable practices / innovations beyond project requirements
 - Improvements to conventional processes



GreenPave

- GreenPave launch to include information sessions and on-line availability of promotional materials - Overview Presentation, GreenPave Reference Guide and GreenPave Worksheet
- External training strategy using webinar format under development
- Planning to include GreenPave in three contracts for 2014



Concluding Remarks

- Ministry is also working on variety of other projects to encourage contractor innovation
- Ministry staff are working closely with the industry to implement these initiatives
- This consultation process is working well
- Will continue to work closely with OHMPA to achieve our common goals