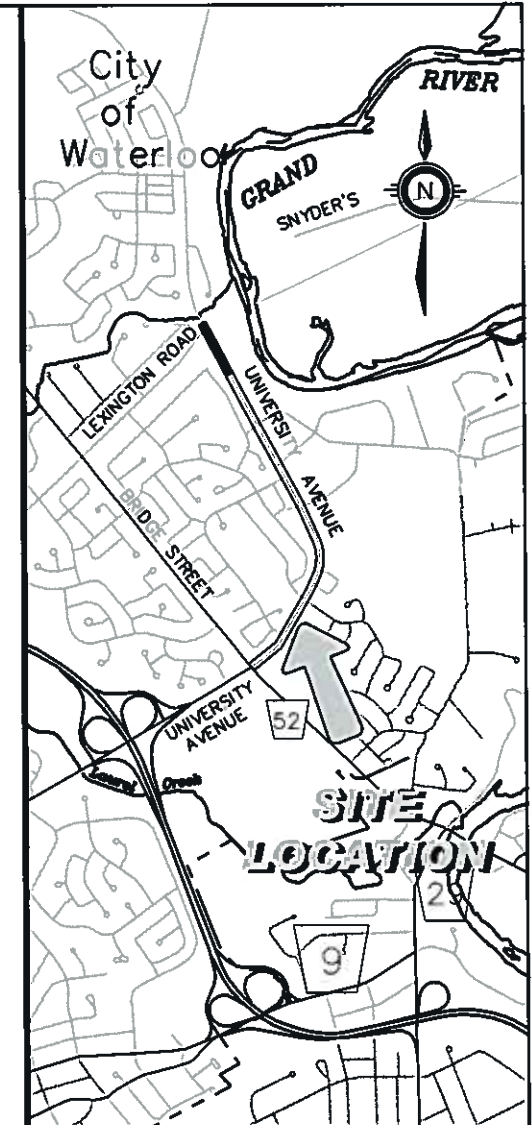
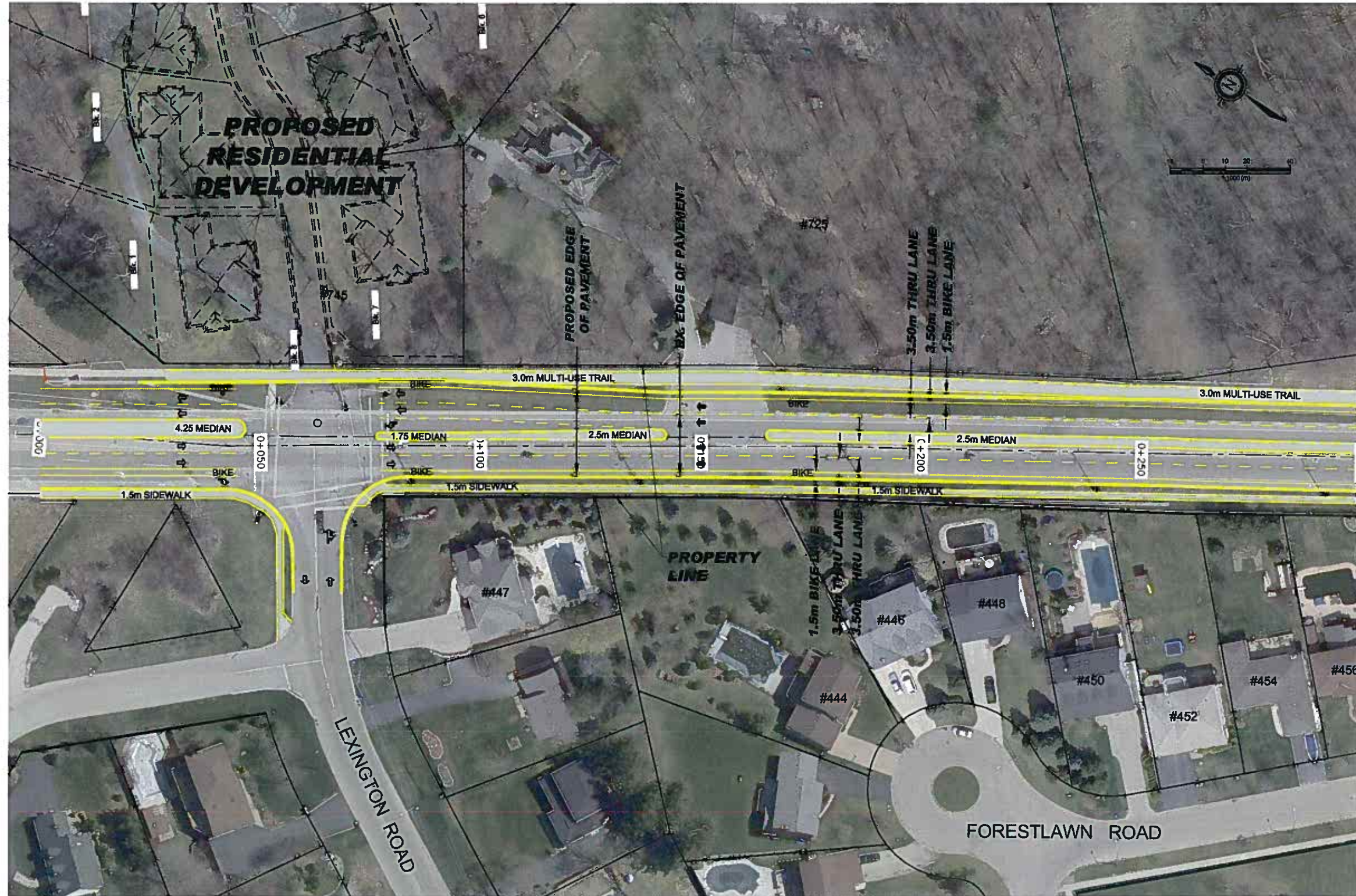


## APPENDIX E

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### **FUNCTIONAL DESIGN DRAWINGS**



MATCHLINE  
STATION 0+300.000

**UNIVERSITY AVENUE**  
(STA.0+000.00 TO STA.0+300.000)

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SCALE	1:0000
DATE	2009 08 17
PROJECT No.	K-24495

ALTERNATIVE 4A  
FOUR LANES  
WITH  
CONTINUOUS  
MEDIAN

UNIVERSITY AVENUE  
CITY OF WATERLOO

CLASS ENVIRONMENTAL  
ASSESSMENT

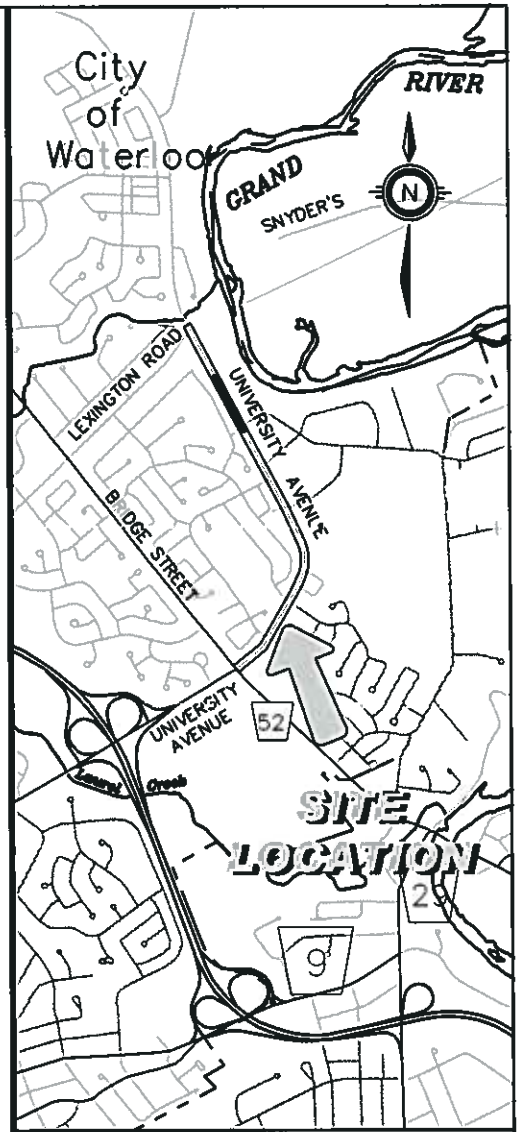
FIGURE 1



STATION 0+300.000  
MATCHLINE

MATCHLINE  
STATION 0+600.000

**UNIVERSITY AVENUE**  
(STA.0+300.000 TO STA.0+600.000)



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WITH  
CONTINUOUS  
MEDIAN

UNIVERSITY AVENUE  
CITY OF WATERLOO

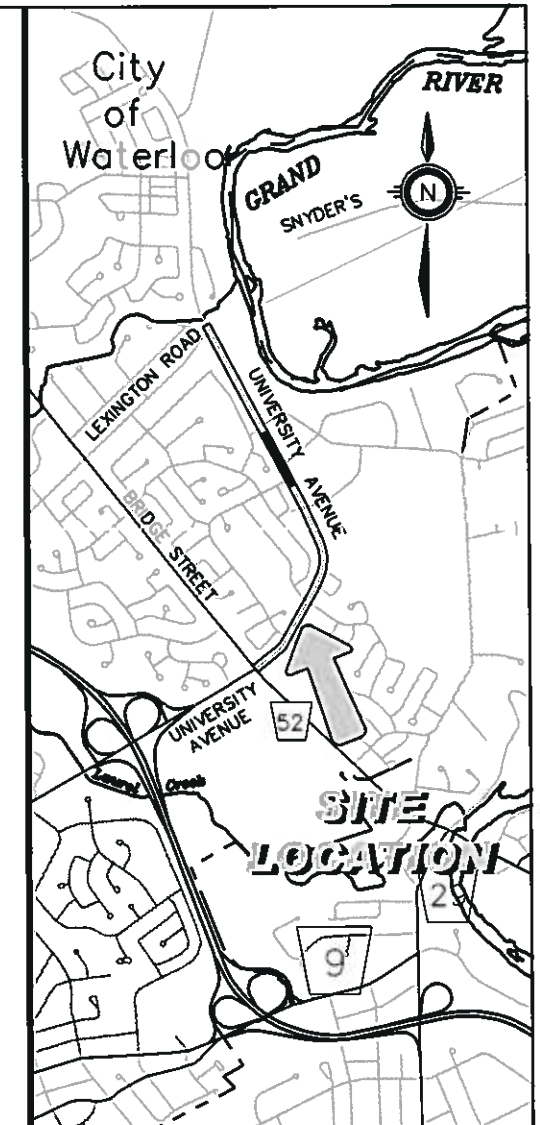
CLASS ENVIRONMENTAL  
ASSESSMENT

FIGURE 2

STATION 0+600.000  
MATCHLINE



MATCHLINE  
STATION 0+900.000



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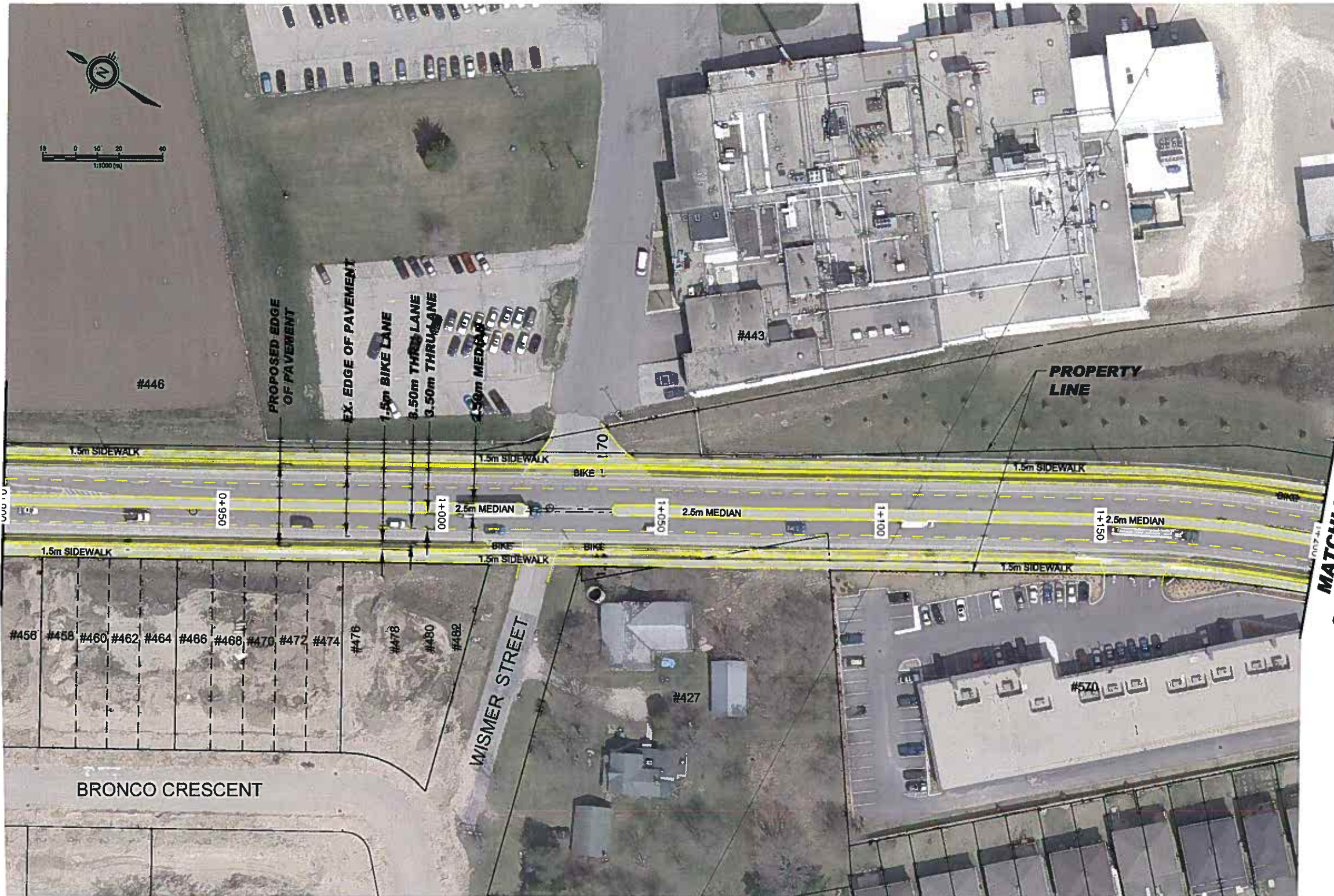
ALTERNATIVE 4A  
FOUR LANES  
WITH  
CONTINUOUS  
MEDIAN

UNIVERSITY AVENUE  
CITY OF WATERLOO

CLASS ENVIRONMENTAL  
ASSESSMENT

FIGURE 3

**UNIVERSITY AVENUE**  
(STA.0+600.000 TO STA.0+900.000)

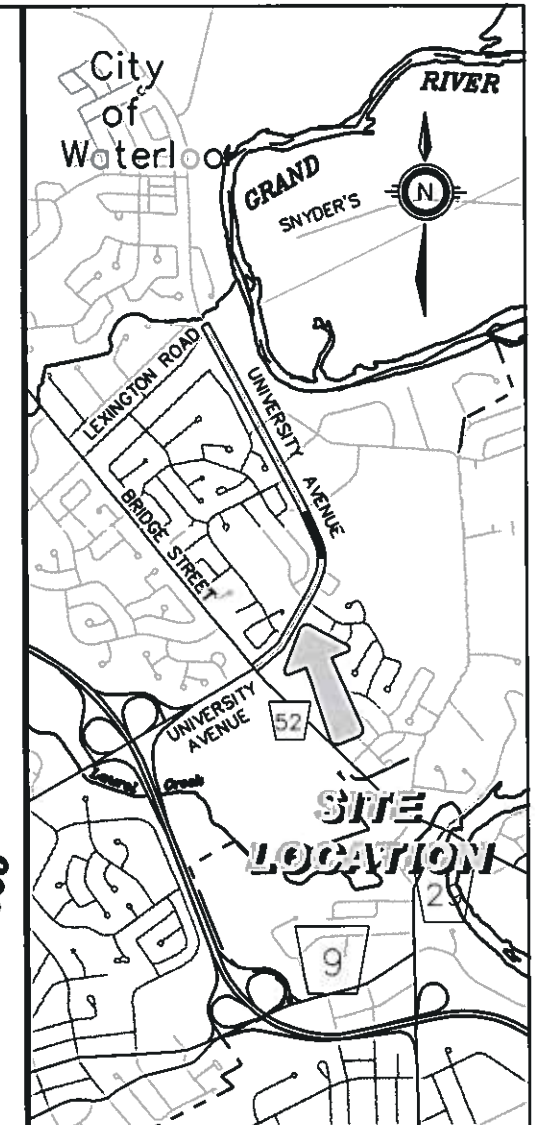


STATION 0+900.000  
MATCHLINE

MATCHLINE  
STATION 1+200.000

# UNIVERSITY AVENUE

(STA. 0+900.000 TO STA. 1+200.000)



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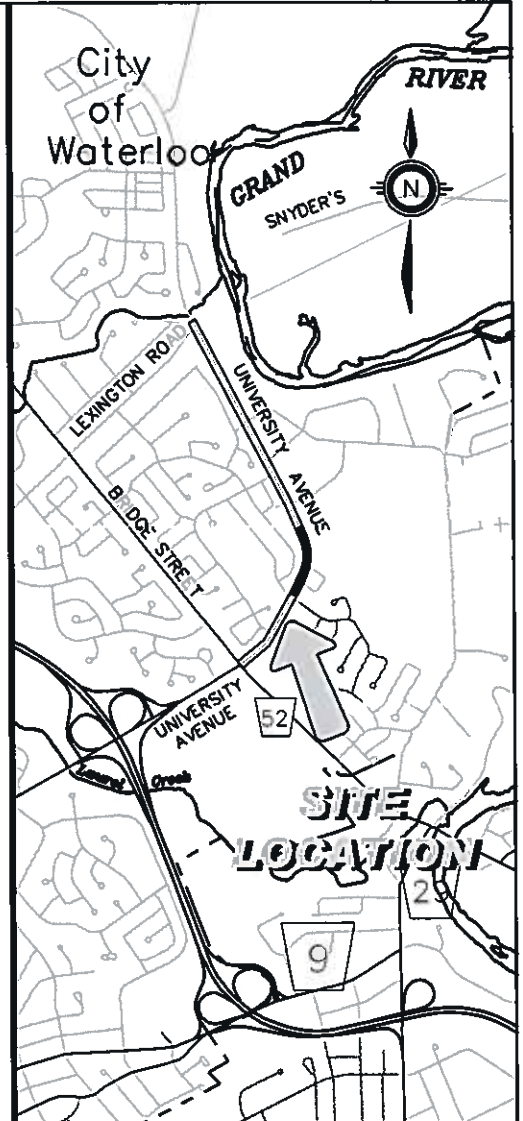
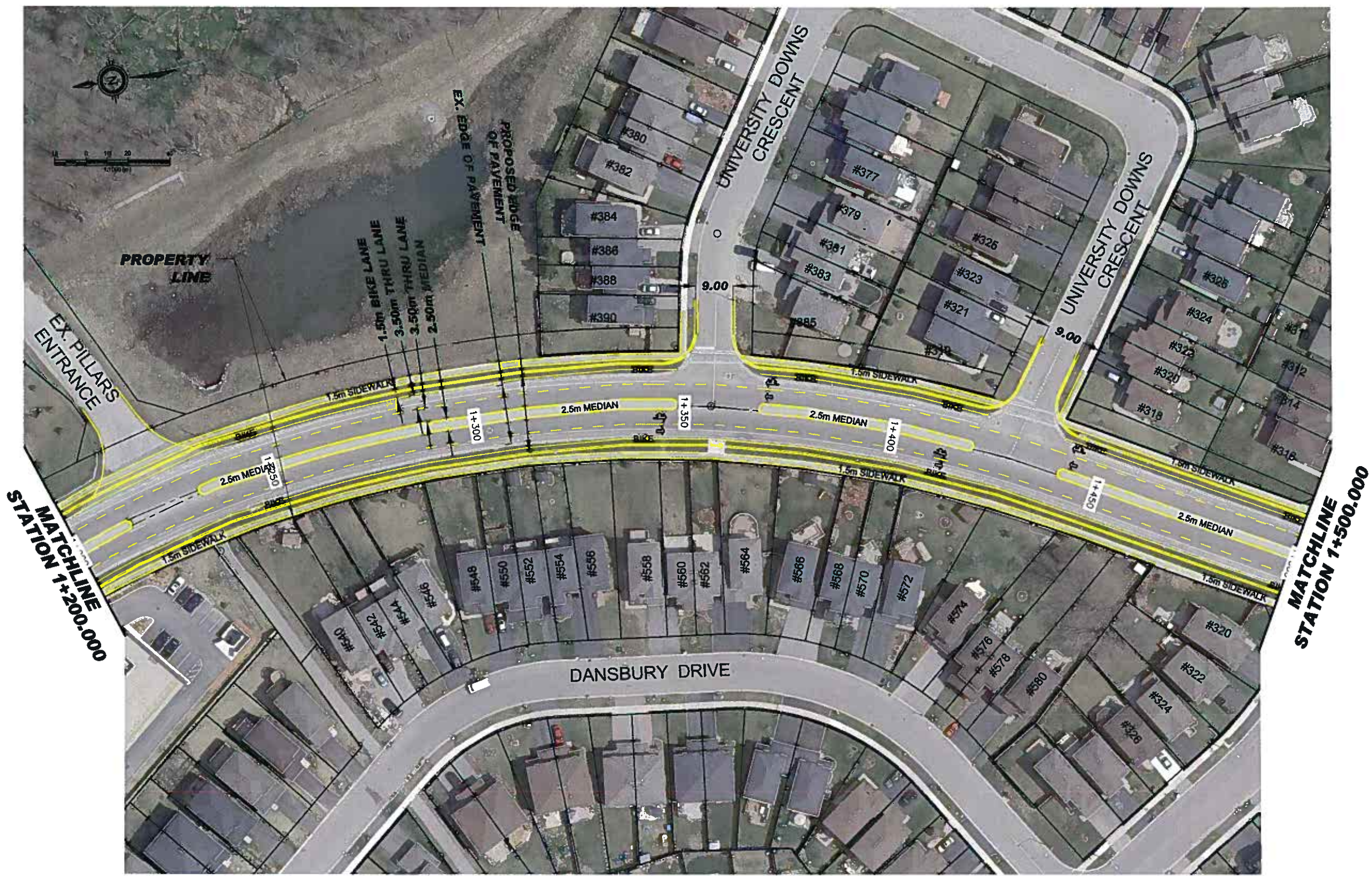
SCALE 1:0000  
DATE 2009 08 17  
PROJECT No. K-24495

ALTERNATIVE 4A  
FOUR LANES  
WITH  
CONTINUOUS  
MEDIAN

UNIVERSITY AVENUE  
CITY OF WATERLOO

CLASS ENVIRONMENTAL  
ASSESSMENT

FIGURE 4



**IBI GROUP**

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ALTERNATIVE 4A  
 FOUR LANES  
 WITH  
 CONTINUOUS  
 MEDIAN

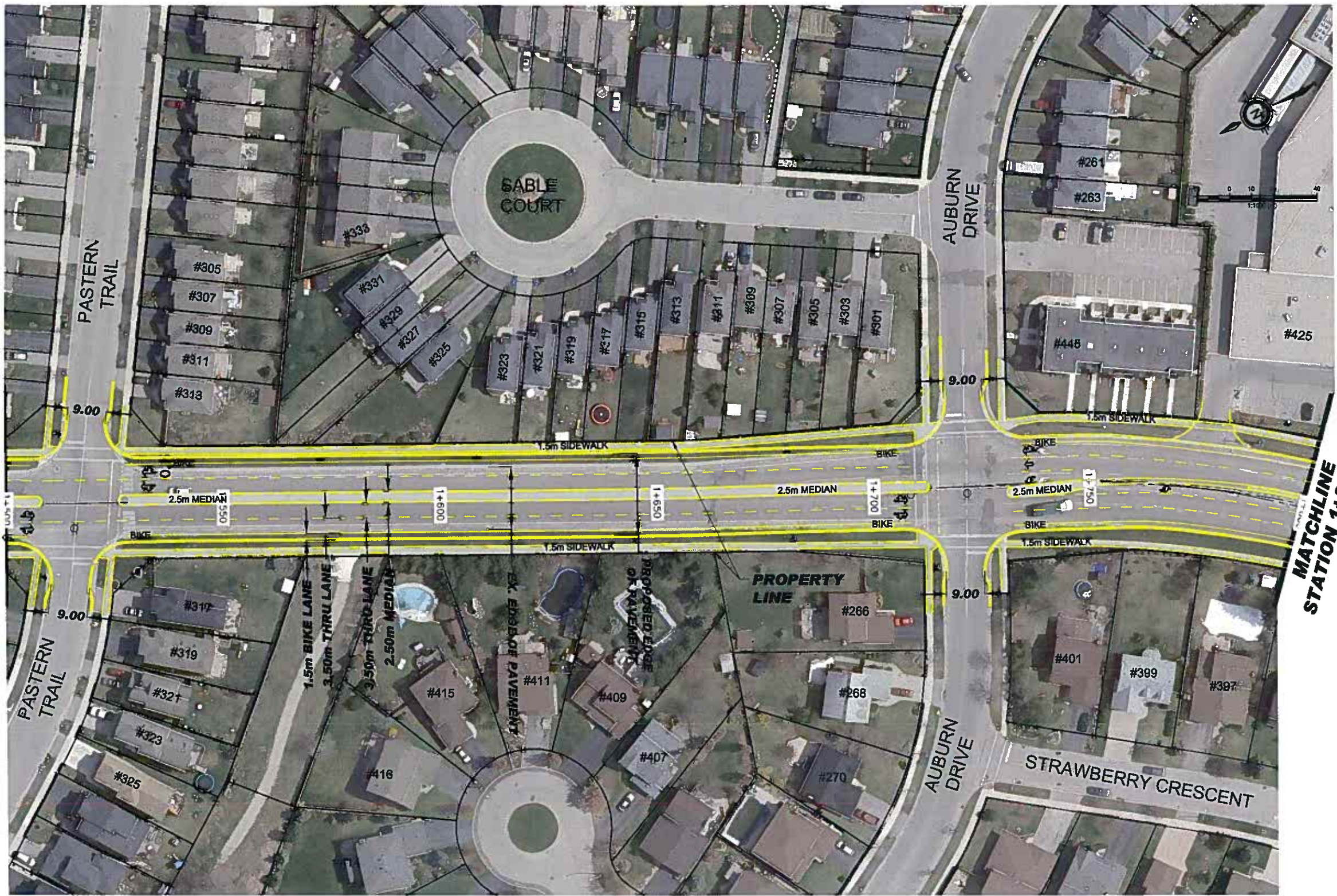
UNIVERSITY AVENUE  
 CITY OF WATERLOO

CLASS ENVIRONMENTAL  
 ASSESSMENT

FIGURE 5

**UNIVERSITY AVENUE**  
 (STA. 1+200.000 TO STA. 1+500.000)

STATION 1+500.000  
MATCHLINE



MATCHLINE  
STATION 1+800.000

**UNIVERSITY AVENUE**  
(STA. 1+500.000 TO STA. 1+970.560)



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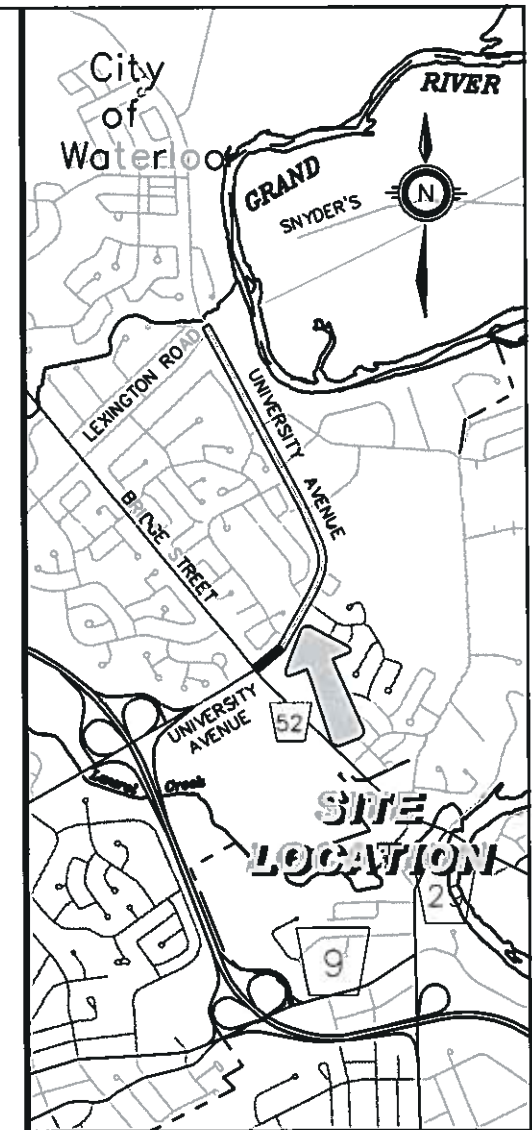
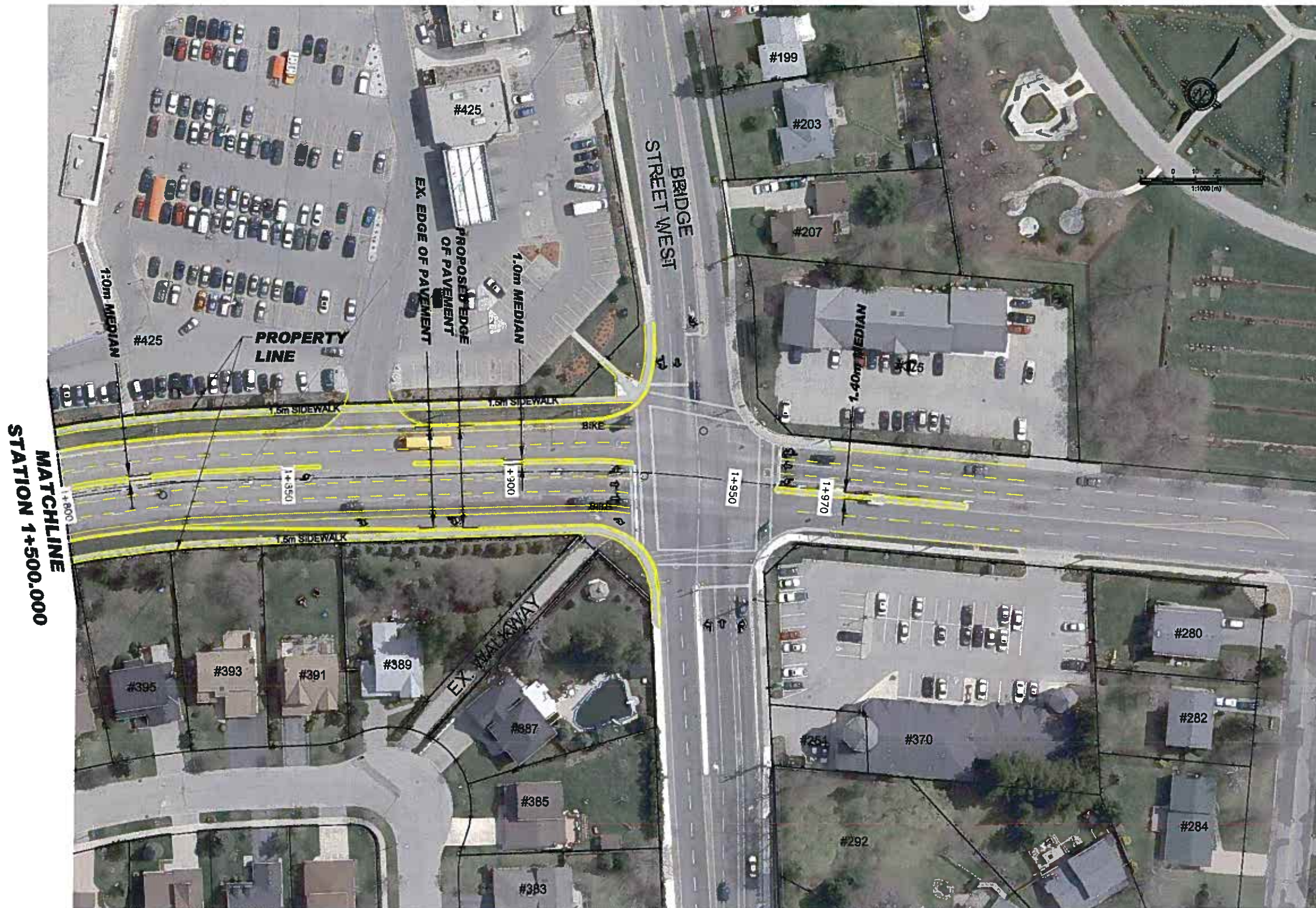
SCALE 1:0000  
DATE 2009 08 17  
PROJECT No. K-24495

ALTERNATIVE 4A  
FOUR LANES  
WITH  
CONTINUOUS MEDIAN  
(STA. 1+800.000 TO STA. 1+970.560)

UNIVERSITY AVENUE  
CITY OF WATERLOO

CLASS ENVIRONMENTAL  
ASSESSMENT

FIGURE 6

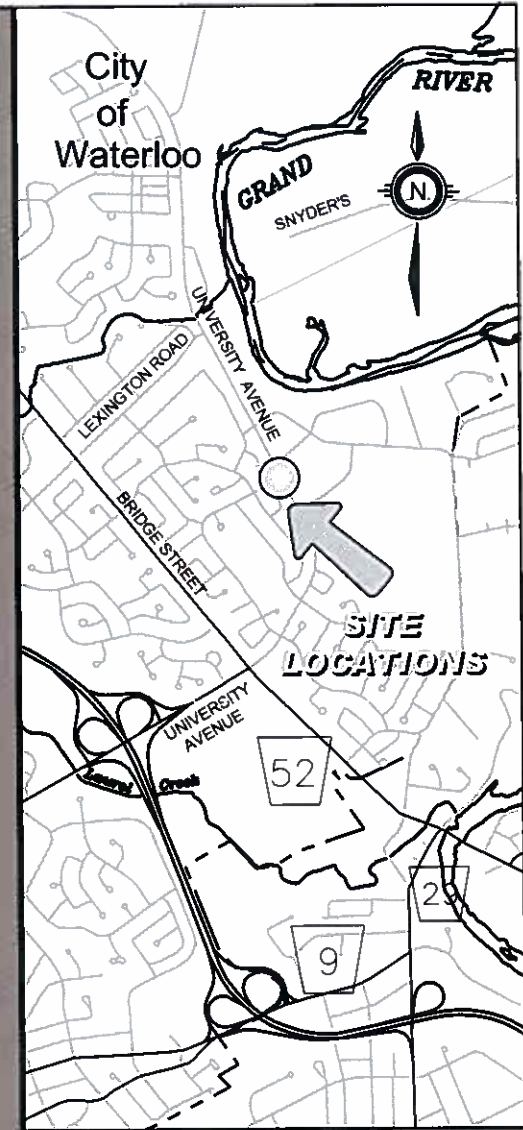
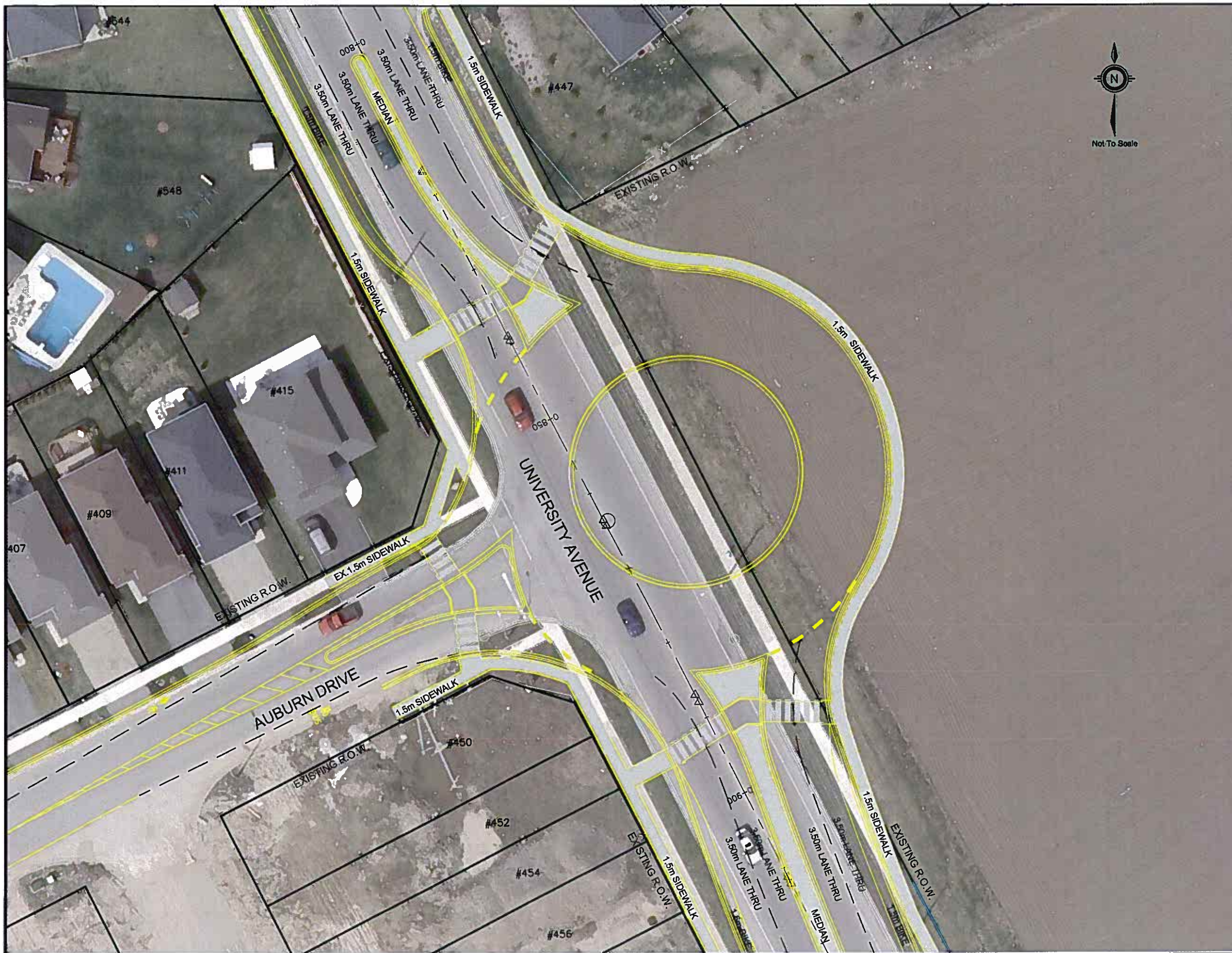


**MATCHLINE**  
**STATION 1+500.000**

# UNIVERSITY AVENUE

(STA.1+800.000 TO 1+970.550)

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PROJECT No.	K-24495
ALTERNATIVE 4A FOUR LANES WITH CONTINUOUS MEDIAN	
UNIVERSITY AVENUE CITY OF WATERLOO	
CLASS ENVIRONMENTAL ASSESSMENT	
FIGURE 7	



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SCALE N.T.S.  
 DATE 2009 08 17  
 PROJECT No. K-24495

ALTERNATIVE 4A  
 FOUR LANES  
 WITH  
 CONTINUOUS  
 MEDIAN

UNIVERSITY AVENUE  
 AUBURN NORTH /UNIVERSITY AVE.

CLASS ENVIRONMENTAL  
 ASSESSMENT

FIGURE 8