



August 23rd, 2017

Daniel Boulanger
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Re: 144 Renfrew Avenue - Addendum to Noise Impact Assessment Study dated 31 March 2017

1. Introduction

At the request of TC United Group, Swallow Acoustic Consultants Ltd. (SACL) is pleased to present this memorandum which addresses comments made by the City of Ottawa on the Noise Impact Assessment Study for 144 Renfrew Avenue, dated 31 March 2017. Comment #31 in the City's 11 August letter requests the following for the Noise Assessment Report:

"Provide sketches for every receiver that clearly show the distance and related angle that were used as input data to Stamson."

The attached figures are provided to fulfil this request. Of note, for PoA 'E' in the post-mitigation scenario (see attached Figures 8 and 10), due to varying angles and barrier layouts associated with both Bronson Avenue and Highway 417, the barrier-to-receiver distance is approximated as 3m for Bronson Avenue, and 4m for Highway 417.

2. Concluding Remarks

We trust that these general recommendations meet the needs of the current phase of the design.

Please do not hesitate to contact us if there are any questions.

Yours Truly,

Swallow Acoustic Consultants Ltd.

Martin Villeneuve, P.Eng.

Senior Engineer



Figure 1: PoA 'A' – Distances and Angles Associated with Bronson Avenue.



Figure 2: PoA 'B' – Distances and Angles Associated with Bronson Avenue.



Figure 3: PoA 'C' – Distances and Angles Associated with Bronson Avenue.

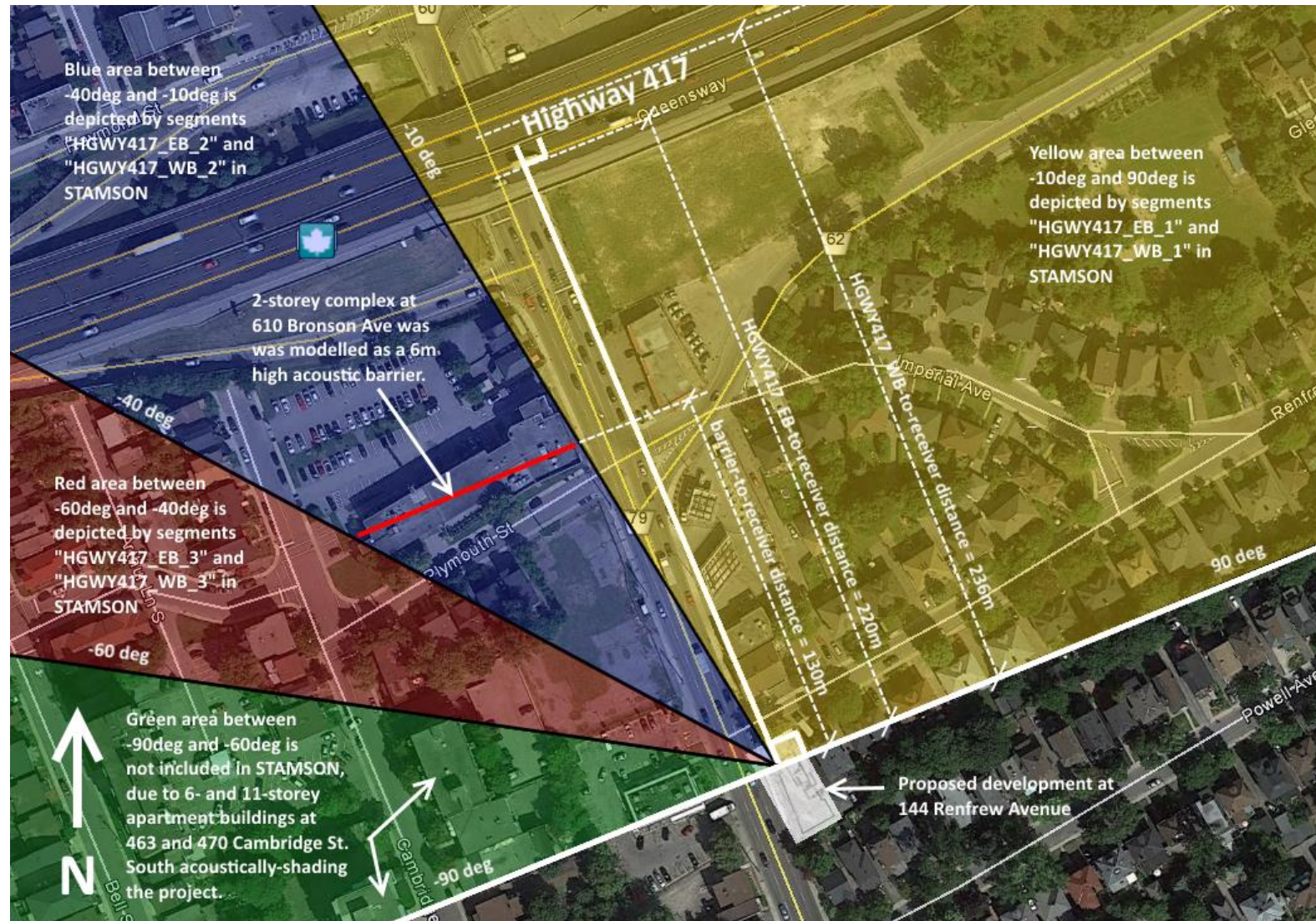


Figure 4: PoA 'A', 'B' and 'C' – Distances and Angles Associated with Highway 417.



Figure 5: PoA 'D' – Distances and Angles Associated with Highway 417.

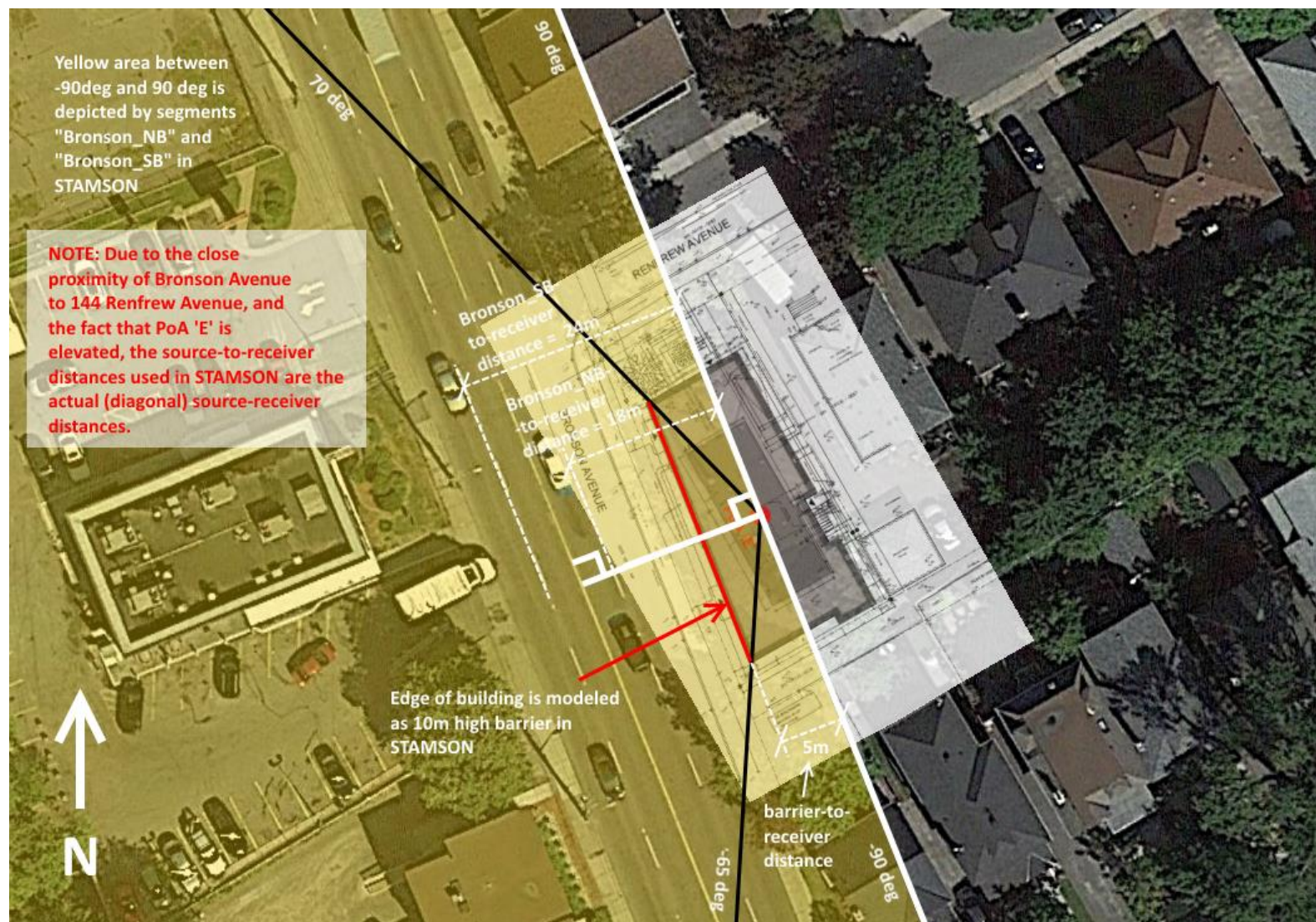


Figure 6: PoA 'E' – Distances and Angles Associated with Bronson Avenue. (Pre-Mitigation)

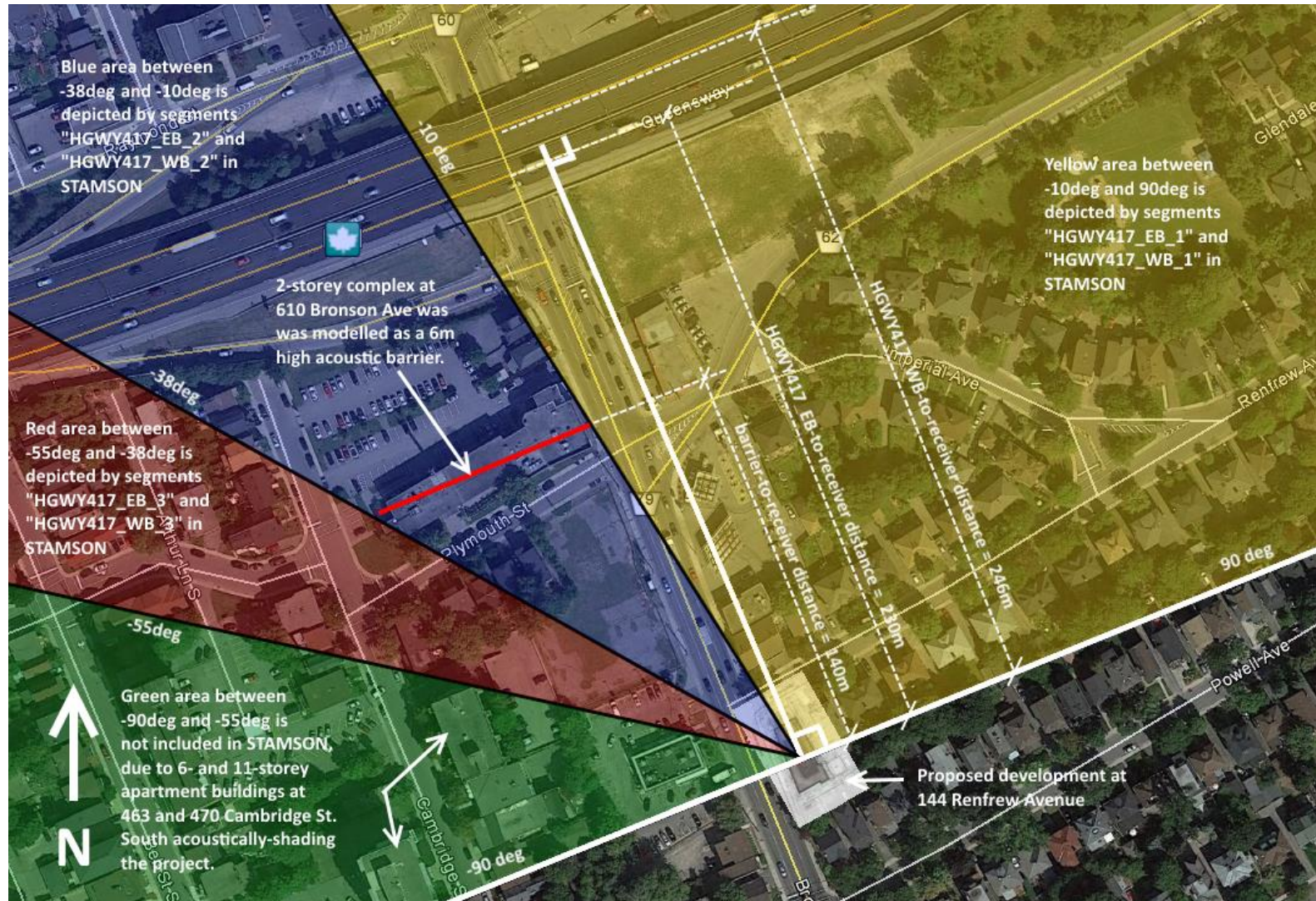


Figure 7: PoA 'E' – Distances and Angles Associated with Highway 417. (Pre-Mitigation)

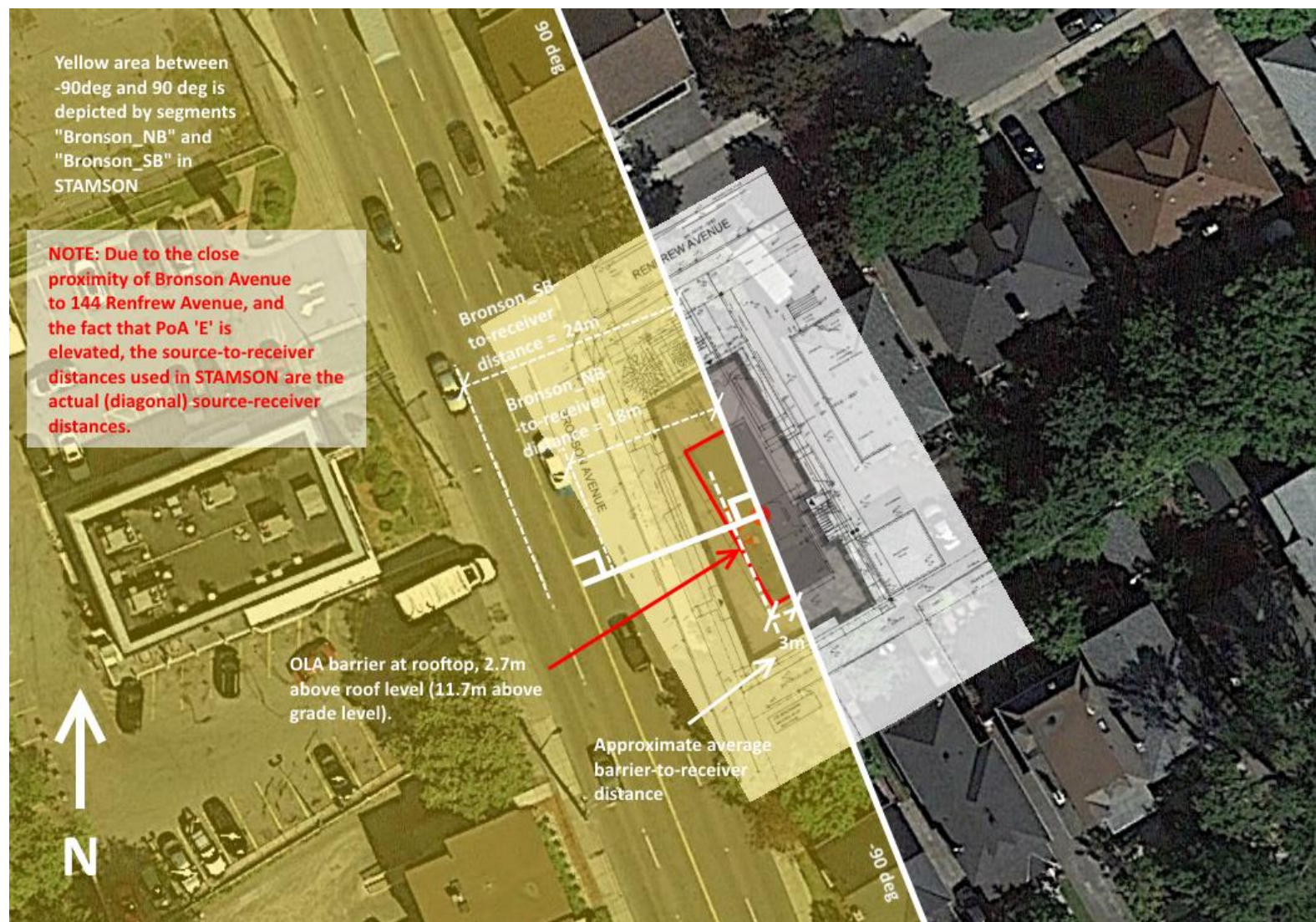


Figure 8: PoA 'E' – Distances and Angles Associated with Bronson Avenue. (Post-Mitigation)

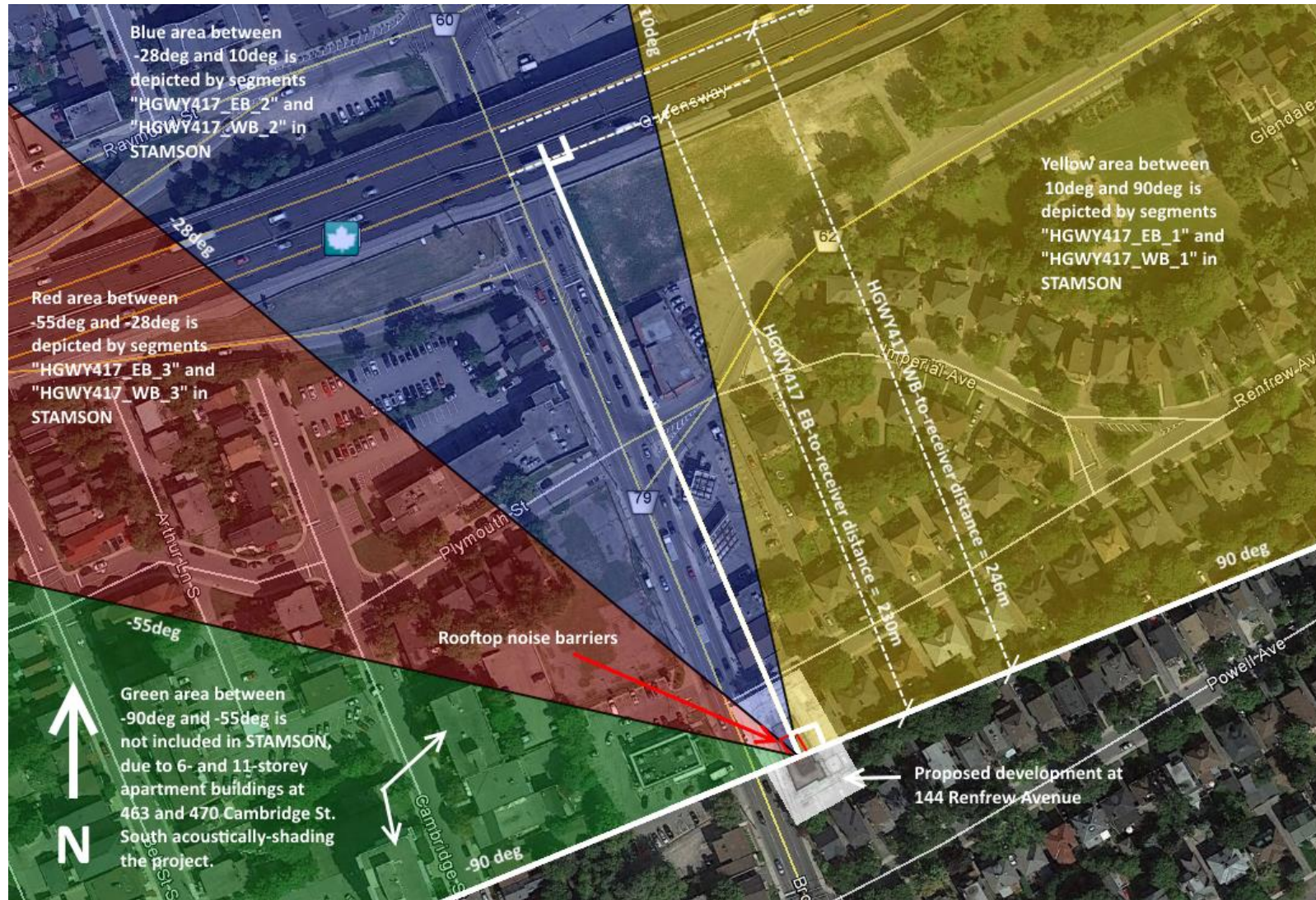


Figure 9: PoA 'E' – Distances and Angles Associated with Highway 417. (Post-Mitigation)

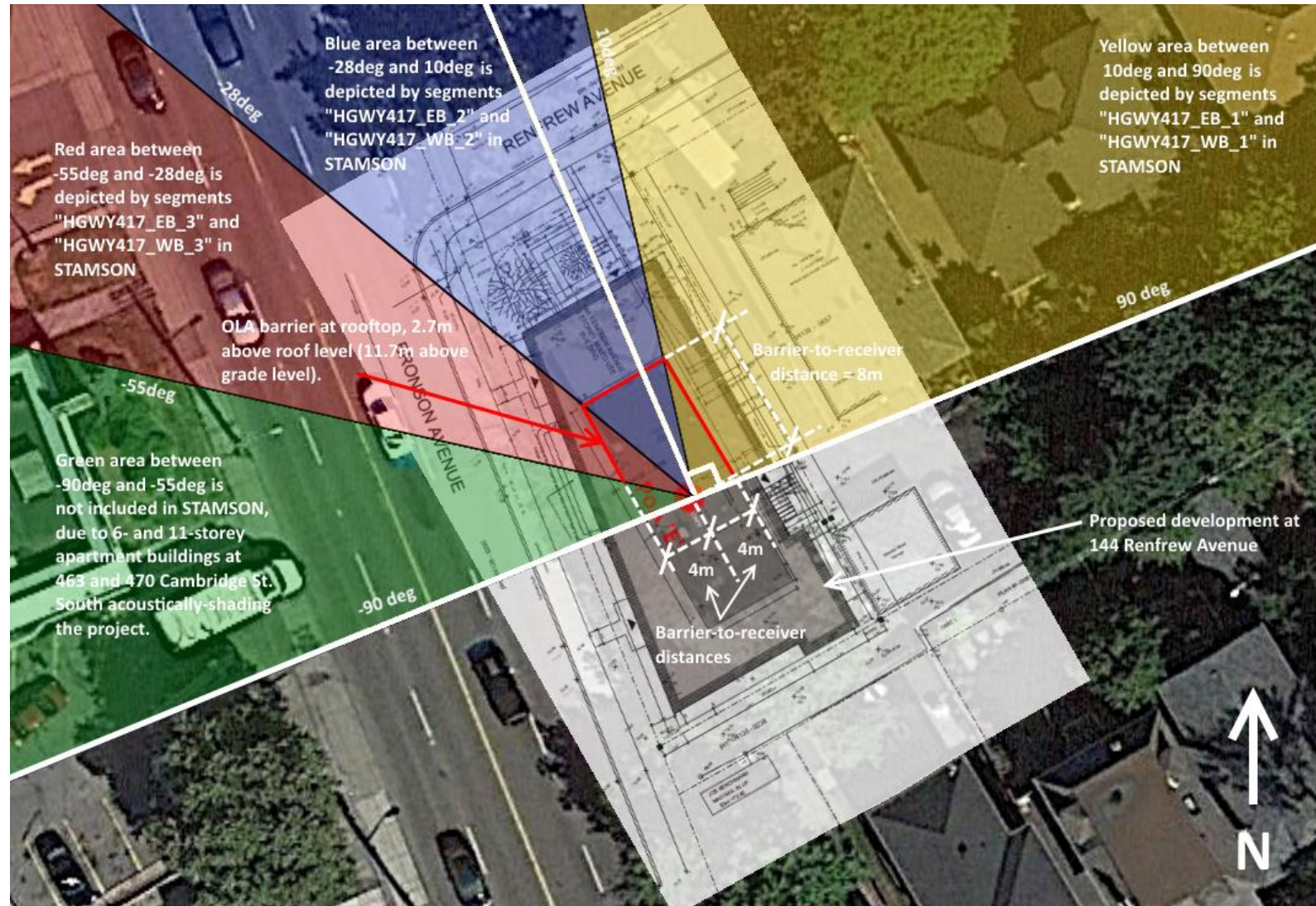


Figure 10: PoA 'E' – Distances and Angles Associated with Highway 417, Magnified to See Rooftop Barrier. (Post-Mitigation)