

MEMORANDUM

To: Parkside CCDC Team

From: Robert B. Schiesel, P.E.

Date: May 18, 2011

Subject: Parkside CCDC – Stopping Sight Distance to Proposed Kenilworth Avenue Driveway

This memorandum presents a response to concerns expressed by the District Department of Transportation (DDOT) at the Stage 2 hearing for CCDC at Parkside on May 5, 2011, regarding safety concerns of the proposed entrance/exit driveway for passenger vehicles on Kenilworth Avenue. In particular, during the hearing DDOT expressed concerns that this type of driveway activity could lead to an increase in rear-end collisions due to limited stopping sight distance.

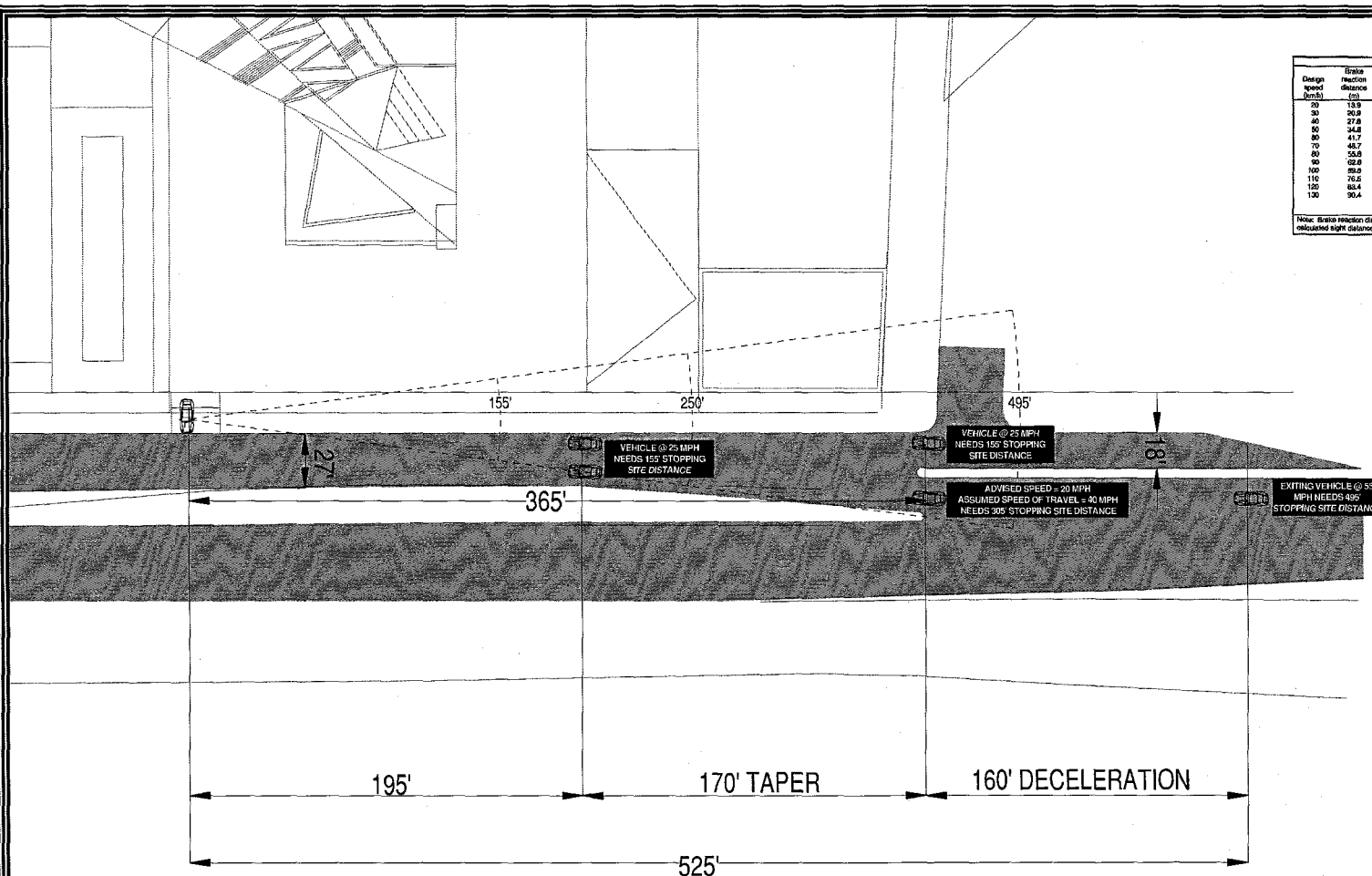
In response to this concern, Gorove/Slade developed the attached graphic, which dimensions distances from the driveway to points along Kenilworth Avenue and the slip ramp from the freeway. Note first that the right-of-way from the highway is two lanes. The dimensions shown on the attached graphic all exceed the required stopping sight distances outlined in exhibit 3.1 within AASHTO's *A Policy of Geometric Design of Highways and Streets*, more commonly known as the 'Green Book'. Thus, whether traffic is approaching the driveway along Kenilworth Avenue or from the slip ramp off the freeway, adequate distance exists to stop before the driveway to the CCDC site. Consequently, the Applicant requests that the commission not preclude use of the entrance/exit on Kenilworth Avenue for passenger vehicles. The Applicant further requests that the Commission allow it to work with DDOT to develop a safe, efficient means of implementing this plan.

ZONING COMMISSION
District of Columbia
CASE NO. D5-28C
EXHIBIT NO. 67

Metric					US Customary				
Design speed (mph)	Brake reaction distance (ft)	Braking distance on level (ft)	Calculated stopping sight distance (ft)	Design (ft)	Design speed (mph)	Brake reaction distance (ft)	Braking distance on level (ft)	Calculated stopping sight distance (ft)	Design (ft)
20	18.9	4.9	23.8	20	15	25.1	21.8	46.9	60
30	28.8	10.9	39.7	30	20	73.5	28.4	101.9	110
40	37.8	18.4	56.2	40	30	118.3	44.4	162.7	200
50	45.7	28.2	73.9	50	40	167.0	73.5	240.5	300
60	52.8	39.4	92.2	60	50	219.5	104.8	324.3	400
70	59.0	51.9	110.9	70	60	275.6	138.9	414.5	500
80	64.3	65.6	130.0	80	70	335.3	176.4	511.7	600
90	68.8	80.9	149.7	90	80	398.5	217.3	615.8	700
100	72.5	97.8	170.3	100	90	465.3	261.5	726.8	800
110	75.5	116.1	191.6	110	100	535.5	309.0	844.5	900
120	77.8	135.8	213.6	120	110	609.0	359.8	968.8	1000
130	79.4	156.8	236.2	130	120	685.6	413.9	1099.5	1100

Note: Brake reaction distance predicted on a time of 2.5 s; deceleration rate of 3.4 m/s² [11.2 ft/s²] used to determine calculated sight distance.

Exhibit 3-1. Stopping Sight Distance



CCDC

Stopping Site Distance - Planned Access Analysis



GOROVE / SLADE

Transportation Planners and Engineers