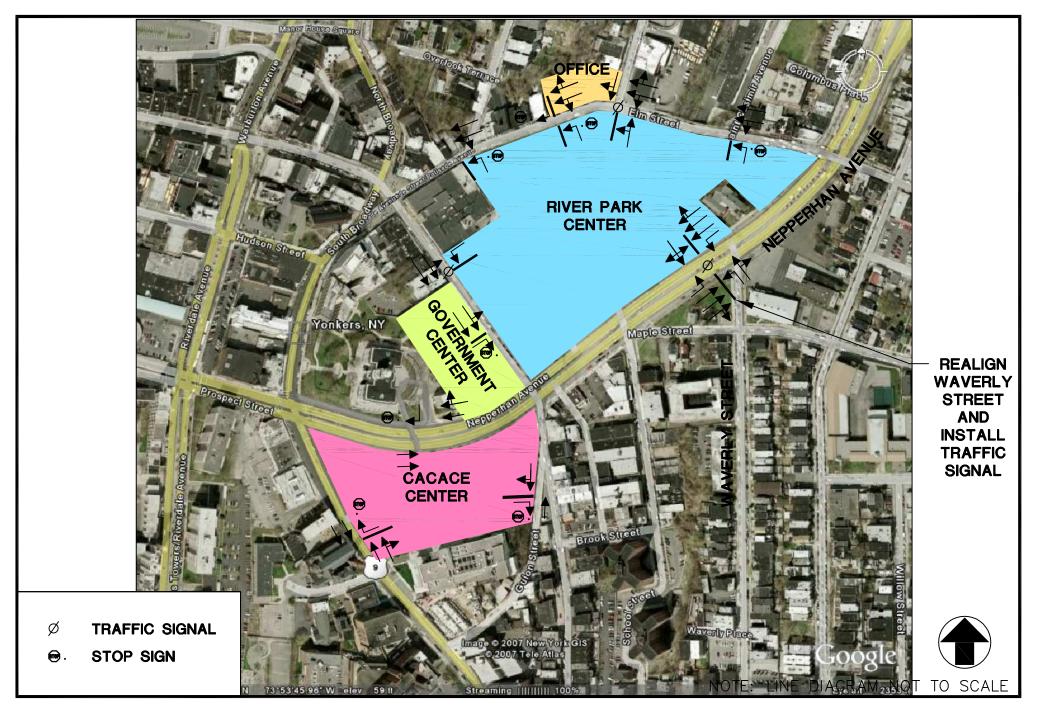
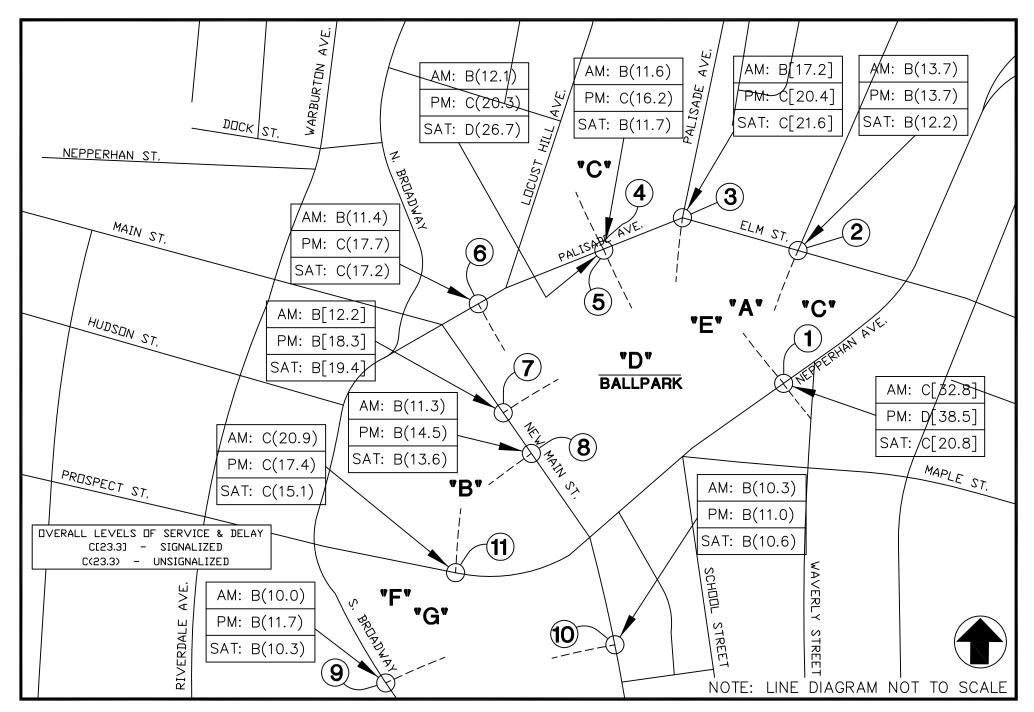
# APPENDIX "H" DRIVEWAY EVALUATION

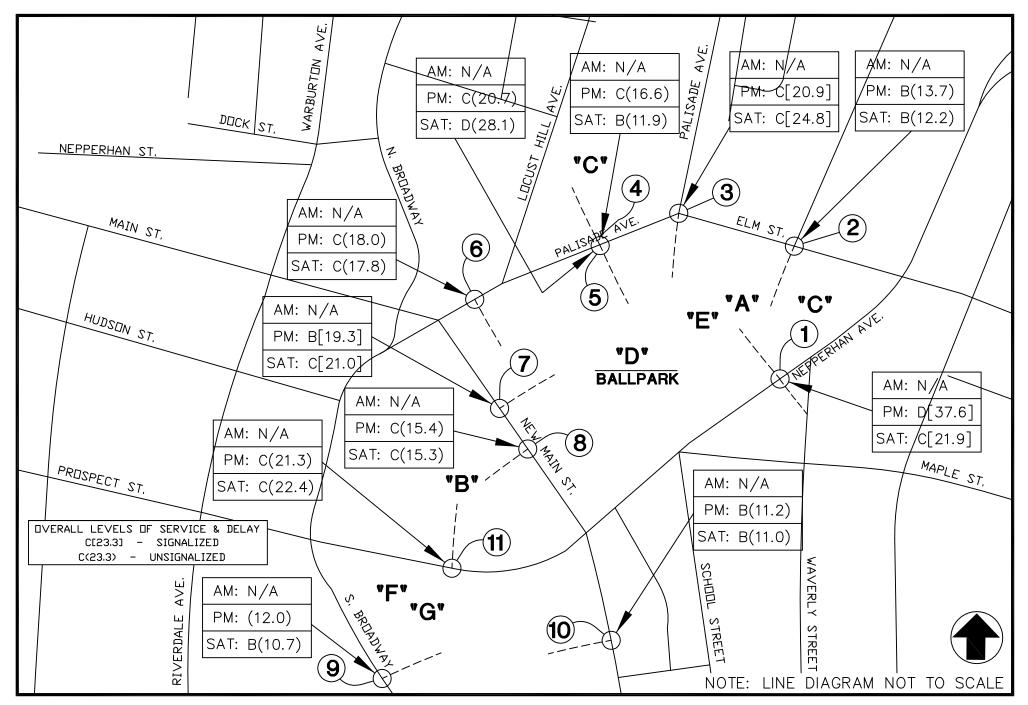


S.F.C. YONKERS YONKERS, NEW YORK DRIVEWAY GEOMETRY AND TRAFFIC CONTROL



SFC YONKERS YONKERS, NEW YORK DRIVEWAY LEVELS OF SERVICE AND DELAYS

JOHN COLLINS ENGINEERS, P.C. HAWTHORNE, NEW YORK



SFC YONKERS YONKERS, NEW YORK DRIVEWAY LEVELS OF SERVICE AND DELAYS
(W/ BALLPARK)

JOHN COLLINS ENGINEERS, P.C. HAWTHORNE, NEW YORK

PROJECT NO. 281 DATE: DEC. 2007

FIG. NO. 8B

# LEVEL OF SERVICE SUMMARY TABLE

# DRIVEWAY ANALYSIS

1	LOCATION  NEPPERHAN AVENUE & PROPOSED SITE ACCESS #1 REALIGNED WAVERLY STREET  SIGNALIZED  EASTBOUND LEFT EASTBOUND THROUGH / RIGHT EASTBOUND APPROACH WESTBOUND THROUGH / RIGHT WESTBOUND THROUGH / RIGHT WESTBOUND THROUGH / RIGHT NORTHBOUND APPROACH NORTHBOUND THROUGH / RIGHT NORTHBOUND THROUGH / RIGHT SOUTHBOUND LEFT THOUSE TO THE STREET OF THE SOUTHBOUND THROUGH / RIGHT SOUTHBOUND LEFT / THROUGH / RIGHT SOUTHBOUND APPROACH  OVERALL INTERSECTION	VEAR WEEKDAY AM PEAK HOUR  D [36.4] C [31.0] D [40.4] C [33.3] C [33.7] C [32.5] C [33.8] C [33.2] D [43.0] D [43.0]	D [42.0] D [49.0] D [49.0] D [48.9] D [46.0] B [14.8] B [16.6] E [62.8] D [35.3] D [53.6] D [38.3]	D [41.6] C [20.5] C [20.7] D [44.1] B [13.9] B [15.5] D [45.1] C [34.6] D [38.2]
1	NEPPERHAN AVENUE & PROPOSED SITE ACCESS #1 REALIGNED WAVERLY STREET  SIGNALIZED  EASTBOUND LEFT EASTBOUND THROUGH / RIGHT EASTBOUND APPROACH WESTBOUND LEFT WESTBOUND THROUGH / RIGHT WESTBOUND APPROACH NORTHBOUND LEFT NORTHBOUND THROUGH / RIGHT NORTHBOUND THROUGH / RIGHT SOUTHBOUND APPROACH SOUTHBOUND LEFT / THROUGH / RIGHT SOUTHBOUND LEFT / THROUGH / RIGHT	D [36.4] C [31.0] C [31.0] D [40.4] C [33.7] C [32.5] C [33.8] C [33.2] D [43.0]	D [42.0] D [49.0] D [48.9] D [46.0] B [14.8] B [16.6] E [62.8] D [35.3] D [53.6] D [38.3]	D [41.6] C [20.5] C [20.7] D [44.1] B [13.9] B [15.5] D [45.1] C [34.6] D [41.6]
1	REALIGNED WAVERLY STREET  SIGNALIZED  EASTBOUND LEFT EASTBOUND THROUGH / RIGHT EASTBOUND APPROACH WESTBOUND LEFT WESTBOUND THROUGH / RIGHT WESTBOUND APPROACH NORTHBOUND LEFT NORTHBOUND THROUGH / RIGHT NORTHBOUND THROUGH / RIGHT NORTHBOUND THROUGH / RIGHT SOUTHBOUND LEFT / THROUGH / RIGHT SOUTHBOUND APPROACH	C [31.0] C [31.0] D [40.4] C [33.3] C [33.7] C [32.5] C [33.8] C [33.2] D [43.0] D [43.0]	D [49.0] D [48.9] D [46.0] B [14.8] B [16.6] E [62.8] D [35.3] D [53.6] D [38.3]	C [20.5] C [20.7] D [44.1] B [13.9] B [15.5] D [45.1] C [34.6] D [41.6]
	EASTBOUND LEFT EASTBOUND THROUGH / RIGHT EASTBOUND APPROACH WESTBOUND LEFT WESTBOUND THROUGH / RIGHT WESTBOUND APPROACH NORTHBOUND LEFT NORTHBOUND THROUGH / RIGHT NORTHBOUND APPROACH SOUTHBOUND APPROACH SOUTHBOUND LEFT / THROUGH / RIGHT SOUTHBOUND APPROACH	C [31.0] C [31.0] D [40.4] C [33.3] C [33.7] C [32.5] C [33.8] C [33.2] D [43.0] D [43.0]	D [49.0] D [48.9] D [46.0] B [14.8] B [16.6] E [62.8] D [35.3] D [53.6] D [38.3]	C [20.5] C [20.7] D [44.1] B [13.9] B [15.5] D [45.1] C [34.6] D [41.6]
	EASTBOUND THROUGH / RIGHT EASTBOUND APPROACH WESTBOUND LEFT WESTBOUND THROUGH / RIGHT WESTBOUND APPROACH NORTHBOUND LEFT NORTHBOUND THROUGH / RIGHT NORTHBOUND THROUGH / RIGHT NORTHBOUND APPROACH SOUTHBOUND LEFT / THROUGH / RIGHT SOUTHBOUND APPROACH	C [31.0] C [31.0] D [40.4] C [33.3] C [33.7] C [32.5] C [33.8] C [33.2] D [43.0] D [43.0]	D [49.0] D [48.9] D [46.0] B [14.8] B [16.6] E [62.8] D [35.3] D [53.6] D [38.3]	C [20.5] C [20.7] D [44.1] B [13.9] B [15.5] D [45.1] C [34.6] D [41.6]
	EASTBOUND APPROACH WESTBOUND LEFT WESTBOUND THROUGH / RIGHT WESTBOUND APPROACH NORTHBOUND LEFT NORTHBOUND THROUGH / RIGHT NORTHBOUND APPROACH SOUTHBOUND LEFT / THROUGH / RIGHT SOUTHBOUND LEFT / THROUGH / RIGHT SOUTHBOUND APPROACH	C [31.0] D [40.4] C [33.3] C [33.7] C [32.5] C [33.8] C [33.2] D [43.0] D [43.0]	D [48.9] D [46.0] B [14.8] B [16.6] E [62.8] D [35.3] D [53.6] D [38.3]	C [20.7] D [44.1] B [13.9] B [15.5] D [45.1] C [34.6] D [41.6]
	WESTBOUND LEFT WESTBOUND THROUGH / RIGHT WESTBOUND APPROACH NORTHBOUND LEFT NORTHBOUND THROUGH / RIGHT NORTHBOUND APPROACH SOUTHBOUND LEFT / THROUGH / RIGHT SOUTHBOUND APPROACH	D [40.4] C [33.3] C [33.7] C [32.5] C [33.8] C [33.2] D [43.0]	D [46.0] B [14.8] B [16.6] E [62.8] D [35.3] D [53.6] D [38.3]	D [44.1] B [13.9] B [15.5] D [45.1] C [34.6] D [41.6]
	WESTBOUND THROUGH / RIGHT WESTBOUND APPROACH NORTHBOUND LEFT NORTHBOUND THROUGH / RIGHT NORTHBOUND APPROACH SOUTHBOUND LEFT / THROUGH / RIGHT SOUTHBOUND APPROACH	C [33.3] C [33.7] C [32.5] C [33.8] C [33.2] D [43.0]	B [14.8] B [16.6] E [62.8] D [35.3] D [53.6] D [38.3]	B [13.9] B [15.5] D [45.1] C [34.6] D [41.6]
	NORTHBOUND LEFT NORTHBOUND THROUGH / RIGHT NORTHBOUND APPROACH SOUTHBOUND LEFT / THROUGH / RIGHT SOUTHBOUND APPROACH	C [32.5] C [33.8] C [33.2] D [43.0] D [43.0]	E [62.8] D [35.3] D [53.6] D [38.3]	D [45.1] C [34.6] D [41.6]
	NORTHBOUND THROUGH / RIGHT NORTHBOUND APPROACH SOUTHBOUND LEFT / THROUGH / RIGHT SOUTHBOUND APPROACH	C [33.8] C [33.2] D [43.0] D [43.0]	D [35.3] D [53.6] D [38.3]	C [34.6] D [41.6]
	NORTHBOUND APPROACH SOUTHBOUND LEFT / THROUGH / RIGHT SOUTHBOUND APPROACH	C [33.2] D [43.0] D [43.0]	D [53.6] D [38.3]	D [41.6]
	SOUTHBOUND APPROACH	D [43.0] D [43.0]	D [38.3]	
			D [38.3]	
	OVERALL INTERSECTION	C [32.8]		D [38.2]
		0 [02.0]	D [38.5]	C [20.8]
2	ELM STREET & PROPOSED SITE ACCESS #2			
	UNSIGNALIZED			
	WESTBOUND LEFT / THROUGH	A (7.4)	A (7.3)	A (7.3)
	NORTHBOUND LEFT	B (13.7)	B (13.7)	B (12.2)
3	PALISADE AVENUE / ELM STREET & PROPOSED SITE ACCESS #3			
	W/ NEW TRAFFIC PATTERN			
	SIGNALIZED			
	WESTBOUND LEFT / THROUGH / RIGHT	B [17.4]	C [20.6]	B [19.3]
	WESTBOUND APPROACH NORTHBOUND LEFT / THROUGH	B [17.4] B [13.2]	C [20.6] C [24.2]	B [19.3] C [33.9]
	NORTHBOUND APPROACH	B [13.2]	C [24.2]	C [33.9]
	SOUTHBOUND THROUGH / RIGHT	B [17.2]	B [16.8]	B [16.4]
	SOUTHBOUND APPROACH	B [17.2]	B [16.8]	B [16.4]
	OVERALL INTERSECTION	B [17.2]	C [20.4]	C [21.6]
4	PALISADE AVENUE & PROPOSED SITE ACCESS #4			
	UNSIGNALIZED			
	OOLITH DOLLAR DIQUIT	D (44.0)	0 (40.0)	D (11 =)
	SOUTHBOUND RIGHT	B (11.6)	C (16.2)	B (11.7)
5	PALISADE AVENUE & PROPOSED SITE ACCESS #5			
	UNSIGNALIZED			
	WESTBOUND LEFT / THROUGH NORTHBOUND LEFT	A ( 7.3) B (12.1)	A ( 7.5) C (20.3)	A ( 7.6) D (26.7)
6	PALISADES AVENUE & PROPOSED SITE ACCESS #6			
	UNSIGNALIZED			
	WESTBOUND LEFT / THROUGH NORTHBOUND LEFT	A ( 7.3) B (11.4)	A ( 7.4) C (17.7)	A (7.4) C (17.2)

#### LEVEL OF SERVICE SUMMARY TABLE

#### DRIVEWAY ANALYSIS

		YEAR 2012 BUILD CONDITIONS		TIONS
	LOCATION	WEEKDAY AM PEAK HOUR	WEEKDAY PM PEAK HOUR	SATURDAY PEAK HOUR
7	NEW MAIN STREET & PROPOSED SITE ACCESS #7 SIGNALIZED			
	WESTBOUND LEFT WESTBOUND APPROACH SOUTHBOUND LEFT/ THROUGH SOUTHBOUND APPROACH	C [20.9] C [20.9] B [11.3] B [11.3]	C [27.4] C [27.4] B [15.9] B [15.9]	C [32.2] C [32.2] B [14.9] B [14.9]
	OVERALL INTERSECTION	B [12.2]	B [18.3]	B [19.4]
8	NEW MAIN STREET & PROPOSED SITE ACCESS #8  UNSIGNALIZED			
	EASTBOUND RIGHT	B (11.3)	B (14.5)	B (13.6)
9	SOUTH BROADWAY & PROPOSED SITE ACCESS #9  UNSIGNALIZED			
	WESTBOUND RIGHT	B (10.0)	B (11.7)	B (10.3)
10	NEW MAIN STREET & PROPOSED SITE ACCESS #10  UNSIGNALIZED			
	EASTBOUND RIGHT	B (10.3)	B (11.0)	B (10.6)
11	NEPPERHAN AVENUE & PROPOSED SITE ACCESS #11  UNSIGNALIZED			
	SOUTHBOUND RIGHT	C (17.4)	C (15.1)	C (20.9)

THE ABOVE REPRESENTS

THE LEVELS OF SERVICE AND VEHICLE DELAY IN SECONDS, B [13.2],
FOR EACH MOVEMENT, FOR EACH APPROACH AS WELL AS FOR THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS
AND THE LEVELS OF SERVICE AND AVERAGE TOTAL DELAY IN SECONDS, B (13.2), FOR THE UNSIGNALIZED INTERSECTIONS

# LEVEL OF SERVICE SUMMARY TABLE

# DRIVEWAY ANALYSIS W/ BALLPARK

	YEAR	2012 BUILD CONDIT	TIONS
		W/ BALLPARK	
	LOCATION	WEEKDAY PM PEAK HOUR	SATURDAY PEAK HOUR
1	NEPPERHAN AVENUE & PROPOSED SITE ACCESS #1 REALIGNED WAVERLY STREET		
	SIGNALIZED		
	EASTBOUND LEFT	D [42.0]	D [41.6]
	EASTBOUND THROUGH / RIGHT	D [49.0]	C [20.5]
	EASTBOUND APPROACH	D [48.9]	C [20.7]
	WESTBOUND LEFT	D [46.0]	D [44.1]
	WESTBOUND THROUGH / RIGHT	B [17.3]	B [18.9]
	WESTBOUND APPROACH NORTHBOUND LEFT	B [18.6] E [62.8]	B [19.8] D [45.1]
	NORTHBOUND THROUGH / RIGHT	D [35.3]	C [34.6]
	NORTHBOUND APPROACH	D [53.6]	D [41.6]
	SOUTHBOUND LEFT / THROUGH / RIGHT	D [38.3]	D [38.2]
	SOUTHBOUND APPROACH	D [38.3]	D [38.2]
	OVERALL INTERSECTION	D [37.6]	C [21.9]
2	ELM STREET & PROPOSED SITE ACCESS #2		
	UNSIGNALIZED		
	WESTBOUND LEFT / THROUGH	A (7.3)	A (7.3)
	NORTHBOUND LEFT	B (13.7)	B (12.2)
3	PALISADE AVENUE / ELM STREET & PROPOSED SITE ACCESS #3		
	W/ NEW TRAFFIC PATTERN		
	SIGNALIZED		
	WESTBOUND LEFT / THROUGH / RIGHT	C [20.6]	B [19.3]
	WESTBOUND APPROACH	C [20.6]	B [19.3]
	NORTHBOUND LEFT / THROUGH	C [26.9]	D [50.0]
	NORTHBOUND APPROACH	C [26.9]	D [50.0]
	SOUTHBOUND THROUGH / RIGHT SOUTHBOUND APPROACH	B [17.5]	B [17.6]
	SOUTHBOUND APPROACH	B [17.5]	B [17.6]
	OVERALL INTERSECTION	C [20.9]	C [24.8]
4	PALISADE AVENUE & PROPOSED SITE ACCESS #4		
	UNSIGNALIZED		
	SOUTHBOUND RIGHT	C (16.6)	B (11.9)
_	DALIGADE AVENUE A DECEDER CONTROL		
5	PALISADE AVENUE & PROPOSED SITE ACCESS #5		
	UNSIGNALIZED	A (7.5)	A ( 7 0)
	WESTBOUND LEFT / THROUGH NORTHBOUND LEFT	A ( 7.5) C (20.7)	A ( 7.6) D (28.1)
6	PALISADES AVENUE & PROPOSED SITE ACCESS #6		
	UNSIGNALIZED		
	WESTBOUND LEFT / THROUGH NORTHBOUND LEFT	A ( 7.4) C (18.0)	A (7.4) C (17.8)

#### LEVEL OF SERVICE SUMMARY TABLE

#### DRIVEWAY ANALYSIS W/ BALLPARK

	YEAR	YEAR 2012 BUILD CONDITIONS W BALLPARK		
	LOCATION	WEEKDAY PM PEAK HOUR	SATURDAY PEAK HOUR	
7	NEW MAIN STREET & PROPOSED SITE ACCESS #7			
	SIGNALIZED			
	WESTBOUND LEFT WESTBOUND APPROACH SOUTHBOUND LEFT/ THROUGH SOUTHBOUND APPROACH	C [27.4] C [27.4] B [17.3] B [17.3]	C [32.2] C [32.2] B [17.7] B [17.7]	
	OVERALL INTERSECTION	B [19.3]	C [21.0]	
8	NEW MAIN STREET & PROPOSED SITE ACCESS #8  UNSIGNALIZED			
	EASTBOUND RIGHT	C (15.4)	C (15.3)	
9	SOUTH BROADWAY & PROPOSED SITE ACCESS #9  UNSIGNALIZED			
	WESTBOUND RIGHT	B (12.0)	B (10.7)	
10	NEW MAIN STREET & PROPOSED SITE ACCESS #10  UNSIGNALIZED			
	EASTBOUND RIGHT	B (11.2)	B (11.0)	
11	NEPPERHAN AVENUE & PROPOSED SITE ACCESS #11  UNSIGNALIZED			
	SOUTHBOUND RIGHT	C (21.3)	C (22.4)	

THE ABOVE REPRESENTS

THE LEVELS OF SERVICE AND VEHICLE DELAY IN SECONDS, B [13.2],

ACH MOVEMENT, FOR EACH APPROACH AS WELL AS FOR THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTION
THE LEVELS OF SERVICE AND AVERAGE TOTAL DELAY IN SECONDS, B (13.2), FOR THE UNSIGNALIZED INTERSECTION

TABLE NO. 7

DRIVEWAY QUEUES

		TRAFFIC	QU	EUE* (# OF VEHICL	ES)
	LOCATION	CONTROL	AM	PM	SAT
1	NEPPERHAN AVENUE & PROPOSED SITE ACCESS #1 REALIGNED WAVERLY STREET	SIGNALIZED	7.5	5.5	6.2
2	ELM STREET & PROPOSED SITE ACCESS #2	UNSIGNALIZED	0.10	0.66	0.08
3	PALISADE AVENUE / ELM STREET & PROPOSED SITE ACCESS #3	SIGNALIZED	1.5	10.9	14.8
4	PALISADE AVENUE & PROPOSED SITE ACCESS #4	UNSIGNALIZED	0.17	1.93	0.18
5	PALISADE AVENUE & PROPOSED SITE ACCESS #5	UNSIGNALIZED	0.19	1.99	3.24
6	PALISADES AVENUE & PROPOSED SITE ACCESS #6	UNSIGNALIZED	0.09	0.85	1.00
7	NEW MAIN STREET & PROPOSED SITE ACCESS #7	SIGNALIZED	2.5	15.6	20.0
8	NEW MAIN STREET & PROPOSED SITE ACCESS #8	UNSIGNALIZED	0.67	0.53	0.57
9	SOUTH BROADWAY & PROPOSED SITE ACCESS #9	UNSIGNALIZED	0.17	0.86	0.23
10	NEW MAIN STREET & PROPOSED SITE ACCESS #10	UNSIGNALIZED	0.02	0.09	0.02
11	NEPPERHAN AVENUE & PROPOSED SITE ACCESS #11	UNSIGNALIZED	0.70	0.55	0.45

W/ BALLPARK QUEUE* (# OF VEHICLES)		
PM	SAT	
5.5	6.2	
0.66	0.08	
11.3	16.9	
1.98	0.18	
2.03	3.42	
0.87	1.05	
15.6	20.0	
0.58	0.68	
0.90	0.25	
0.09	0.02	
0.72	0.76	

\* HCS 95% QUEUE LENGTH REPRESENTED IN NUMBER OF VEHICLES