

## **Appendix O:**

Updated Transportation Analysis Exhibits  
August 2006



## **Appendix O:**

### **Updated Transportation Analysis Exhibits**

**T-1A Turning Movement Volume Summary of Counts**

**T-1B Traffic Counts**

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## Exhibit T-1A

### Turning Movement Volume Summary

**Project:** 04007.00 Wood Trails  
**Scenario:** AM Peak Hour- Proposed Action

#### Actual Counts

<p>Count Date: 12/1/2004            Count Source: Trafficcount            EB WB NB SB Total            %HV 0% 0% 3% 3%            PHF 0.93  <b>Peak Hour Used:</b>            From 730 To 830</p>	<p style="text-align: center;">1 2004 156th Ave NE/ NE 203rd PL</p> <p style="text-align: center;">↑ N</p> <p style="text-align: center;">balanced Thru-Movements</p>
<p>Count Date: 12/1/2004            Count Source: Traffic Count            EB WB NB SB Total            %HV 0% 0% 3% 4%            PHF 0.94  <b>Peak Hour Used:</b>            From 715 To 815</p>	<p style="text-align: center;">2 2004 156th Ave NE/ NE 202nd St</p> <p style="text-align: center;">↑ N</p> <p style="text-align: center;">balanced Thru-Movements</p>
<p>Count Date: 12/1/2004            Count Source: Traffic Count            EB WB NB SB Total            %HV 22% 0% 4% 1%            PHF 0.92  <b>Peak Hour Used:</b>            From 715 To 815</p>	<p style="text-align: center;">3 2004 156th Ave NE/ NE 201st St</p> <p style="text-align: center;">↑ N</p> <p style="text-align: center;">balanced Thru-Movements</p>
<p>Count Date: 12/1/2004            Count Source: Traffic Count            EB WB NB SB Total            %HV 5% 0% 5% 3%            PHF 0.96  <b>Peak Hour Used:</b>            From 730 To 830</p>	<p style="text-align: center;">4 2004 156th Ave NE/ NE 198th St</p> <p style="text-align: center;">↑ N</p> <p style="text-align: center;">balanced Thru-Movements</p>
<p>Count Date: 12/1/2004            Count Source: Traffic Count            EB WB NB SB Total            %HV 0% 12% 6% 3%            PHF 0.96  <b>Peak Hour Used:</b>            From 730 To 830</p>	<p style="text-align: center;">5 2004 156th Ave NE/ NE 195th St</p> <p style="text-align: center;">↑ N</p> <p style="text-align: center;">balanced Thru-Movements</p>
<p>Count Date: 12/1/2004            Count Source: Traffic Count            EB WB NB SB Total            %HV 11% 2% 0% 4%            PHF 0.99  <b>Peak Hour Used:</b>            From 700 To 800</p>	<p style="text-align: center;">6 2004 156th Ave NE/ Woodinville-Duvall Rd</p> <p style="text-align: center;">↑ N</p> <p style="text-align: center;">balanced Thru-Movements</p>

### Turning Movement Volume Summary

**Project:** 04007.00 Wood Trails  
**Scenario:** PM Peak Hour- Proposed Action

#### Actual Counts

<p>Count Date: 12/8/2004            Count Source: Traffic Count            EB WB NB SB Total            %HV 0% 0% 1% 3%            PHF 0.94  <b>Peak Hour Used:</b>            From 1630 To 1730</p>	<p style="text-align: center;">1 2004 156th Ave NE/ NE 203rd PL</p> <p style="text-align: center;">↑ N</p> <p style="text-align: center;">balanced Thru-Movements</p>
<p>Count Date: 1/13/2004            Count Source: TC2            EB WB NB SB Total            %HV 0% 0% 0% 0%            PHF 0.92  <b>Peak Hour Used:</b>            From 1630 To 1730</p>	<p style="text-align: center;">2 2004 156th Ave NE/ NE 202nd St</p> <p style="text-align: center;">↑ N</p> <p style="text-align: center;">balanced Thru-Movements</p>
<p>Count Date: 1/13/2004            Count Source: TC2            EB WB NB SB Total            %HV 0% 0% 0% 0%            PHF 0.89  <b>Peak Hour Used:</b>            From 1630 To 1730</p>	<p style="text-align: center;">3 2004 156th Ave NE/ NE 201st St</p> <p style="text-align: center;">↑ N</p> <p style="text-align: center;">balanced Thru-Movements</p>
<p>Count Date: 6/1/2004            Count Source: Trafficcount            EB WB NB SB Total            %HV 0% 0% 1% 1%            PHF 0.88  <b>Peak Hour Used:</b>            From 1630 To 1730</p>	<p style="text-align: center;">4 2004 156th Ave NE/ NE 198th St</p> <p style="text-align: center;">↑ N</p> <p style="text-align: center;">balanced Thru-Movements</p>
<p>Count Date: 3/4/2004            Count Source: TrafficSmithy            EB WB NB SB Total            %HV 0% 8% 3% 3%            PHF 0.92  <b>Peak Hour Used:</b>            From 1615 To 1715</p>	<p style="text-align: center;">5 2004 156th Ave NE/ NE 195th St</p> <p style="text-align: center;">↑ N</p> <p style="text-align: center;">balanced Thru-Movements</p>
<p>Count Date: 5/20/2003            Count Source: King County            EB WB NB SB Total            %HV 1% 3% 3%            PHF 0.97 0.93 0.91  <b>Peak Hour Used:</b>            From 1600 To 1700</p>	<p style="text-align: center;">6 2003 156th Ave NE/ Woodinville-Duvall Rd</p> <p style="text-align: center;">↑ N</p> <p style="text-align: center;">balanced Thru-Movements</p>

### Turning Movement Volume Summary

Project: 04007.00 Wood Trails  
 Scenario: AM Peak Hour- Proposed Action

#### Actual Counts

Count Date: 12/1/2004 Count Source: Traffic Count EB WB NB SB Total %HV 7% 1% 6% 0% PHF 0.94 <b>Peak Hour Used:</b> From 700 To 800		7 2004 Woodinville-Duvall Rd/ NE North Woodinville Way ↑ N 
Count Date: 12/1/2004 Count Source: Traffic Count EB WB NB SB Total %HV 7% 4% 14% 12% PHF 0.98 <b>Peak Hour Used:</b> From 700 To 800		8 2004 Woodinville-Snohomish Rd/ NE 195th St ↑ N 
Count Date: 12/1/2004 Count Source: Traffic Count EB WB NB SB Total %HV 7% 4% 1% 9% PHF 0.90 <b>Peak Hour Used:</b> From 745 To 845		9 2004 168th Avenue NE NE Woodinville-Duvall Rd ↑ N 

### Turning Movement Volume Summary

Project: 04007.00 Wood Trails  
 Scenario: PM Peak Hour- Proposed Action

#### Actual Counts

Count Date: 5/20/2003 Count Source: King County EB WB NB SB Total %HV 0% 0% 0% 2% PHF 0.92 0.96 0.89 <b>Peak Hour Used:</b> From 1600 To 1700		7 2003 Woodinville-Duvall Rd/ NE North Woodinville Way ↑ N 
Count Date: 3/4/2004 Count Source: Trafficcount EB WB NB SB Total %HV 3% 3% 4% 3% PHF 0.96 <b>Peak Hour Used:</b> From 1615 To 1715		8 2004 Woodinville-Snohomish Rd/ NE 195th St ↑ N 
Count Date: 3/4/2004 Count Source: TrafficSmithy EB WB NB SB Total %HV 1% 3% 4% PHF 0.92 <b>Peak Hour Used:</b> From 1615 To 1715		10 2004 SR 522 NB Off-Ramp/ NE 195th St ↑ N <p>balanced Thru-Movements</p>
Count Date: 3/4/2004 Count Source: TrafficSmithy EB WB NB SB Total %HV 0% 0% 0% 0% PHF 0.88 <b>Peak Hour Used:</b> From 1615 To 1715		11 2004 SR 522 SB On-Ramp/ NE 195th St ↑ N 
Count Date: 4/6/2006 Count Source: TC2 EB WB NB SB Total %HV 0% 1% 0% 0% PHF 0.90 <b>Peak Hour Used:</b> From 1630 To 1730		101 2004 156th Ave NE/ 240th St ↑ N 
Count Date: 4/6/2006 Count Source: TC2 EB WB NB SB Total %HV 0% 1% 1% 2% PHF 0.96 <b>Peak Hour Used:</b> From 1630 To 1730		102 2006 SR 9 240th St ↑ N 

**Exhibit T-1B  
TRAFFICCOUNT, INC.**

PMB 195 4820 YELM HWY SE STE B  
LACEY, WA 98503  
360-491-8116

WOODINVILLE, WASHINGTON  
156TH AVE NE  
E 203RD PL  
LOC# 08A TPG04335M

File Name : TPG33608A  
Site Code : 00000008  
Start Date : 12/01/2004  
Page No : 1

Groups Printed- PRIMARY

Start Time	156TH AVE NE From North					NE 203RD PL From East					156TH AVE NE From South					From West					Exclu. Total	Inclu. Total	Int. Total	
	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total				
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0					
07:00 AM	0	29	1	0	30	1	0	2	0	3	1	20	0	0	21	0	0	0	0	0	0	0	54	54
07:15 AM	0	32	0	0	32	1	0	2	0	3	2	23	0	1	25	0	0	0	0	0	1	60	61	
07:30 AM	0	49	0	2	49	0	0	1	0	1	0	20	0	1	20	0	0	0	0	0	3	70	73	
07:45 AM	0	54	0	0	54	1	0	2	0	3	1	22	0	0	23	0	0	0	0	0	0	80	80	
Total	0	164	1	2	165	3	0	7	0	10	4	85	0	2	89	0	0	0	0	0	4	264	268	
08:00 AM	0	46	2	1	48	3	0	0	0	3	3	31	0	2	34	0	0	0	0	0	3	85	88	
08:15 AM	0	58	1	4	59	1	0	2	0	3	1	23	0	0	24	0	0	0	0	0	4	86	90	
08:30 AM	0	24	2	0	26	7	0	5	1	12	2	15	0	0	17	0	0	0	0	0	1	55	56	
08:45 AM	0	32	1	0	33	0	0	0	0	0	0	13	0	1	13	0	0	0	0	0	1	46	47	
Total	0	160	6	5	166	11	0	7	1	18	6	82	0	3	88	0	0	0	0	0	9	272	281	
Grand Total	0	324	7	7	331	14	0	14	1	28	10	167	0	5	177	0	0	0	0	0	13	536	549	
Approch %	0.0	97.9	2.1			50.0	0.0	50.0			5.6	94.4	0.0			0.0	0.0	0.0			2.4	97.6		
Total %	0.0	60.4	1.3		61.8	2.6	0.0	2.6		5.2	1.9	31.2	0.0		33.0	0.0	0.0	0.0		0.0				

Start Time	156TH AVE NE From North				NE 203RD PL From East				156TH AVE NE From South				From West				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	07:30 AM																
Volume	0	207	3	210	5	0	5	10	5	96	0	101	0	0	0	0	321
Percent	0.0	98.6	1.4		50.0	0.0	50.0		5.0	95.0	0.0		0.0	0.0	0.0		
08:15 Volume	0	58	1	59	1	0	2	3	1	23	0	24	0	0	0	0	86
Peak Factor																	0.933
High Int.	08:15 AM				07:45 AM				08:00 AM				6:45:00 AM				
Volume	0	58	1	59	1	0	2	3	3	31	0	34					
Peak Factor	0.890				0.833				0.743								
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
By Approach	07:30 AM				07:45 AM				07:15 AM				07:00 AM				
Volume	0	207	3	210	12	0	9	21	6	96	0	102	0	0	0	0	
Percent	0.0	98.6	1.4		57.1	0.0	42.9		5.9	94.1	0.0		-	-	-	-	
High Int.	08:15 AM				08:30 AM				08:00 AM								
Volume	0	58	1	59	7	0	5	12	3	31	0	34					
Peak Factor	0.890				0.438				0.750								

# TRAFFICCOUNT, INC.

PMB 195 4820 YELM HWY SE STE B

LACEY, WA 98503

360-491-8116

WOODINVILLE, WASHINGTON

156TH AVE NE

NE 203RD PL

IC# 08ATPG04335M

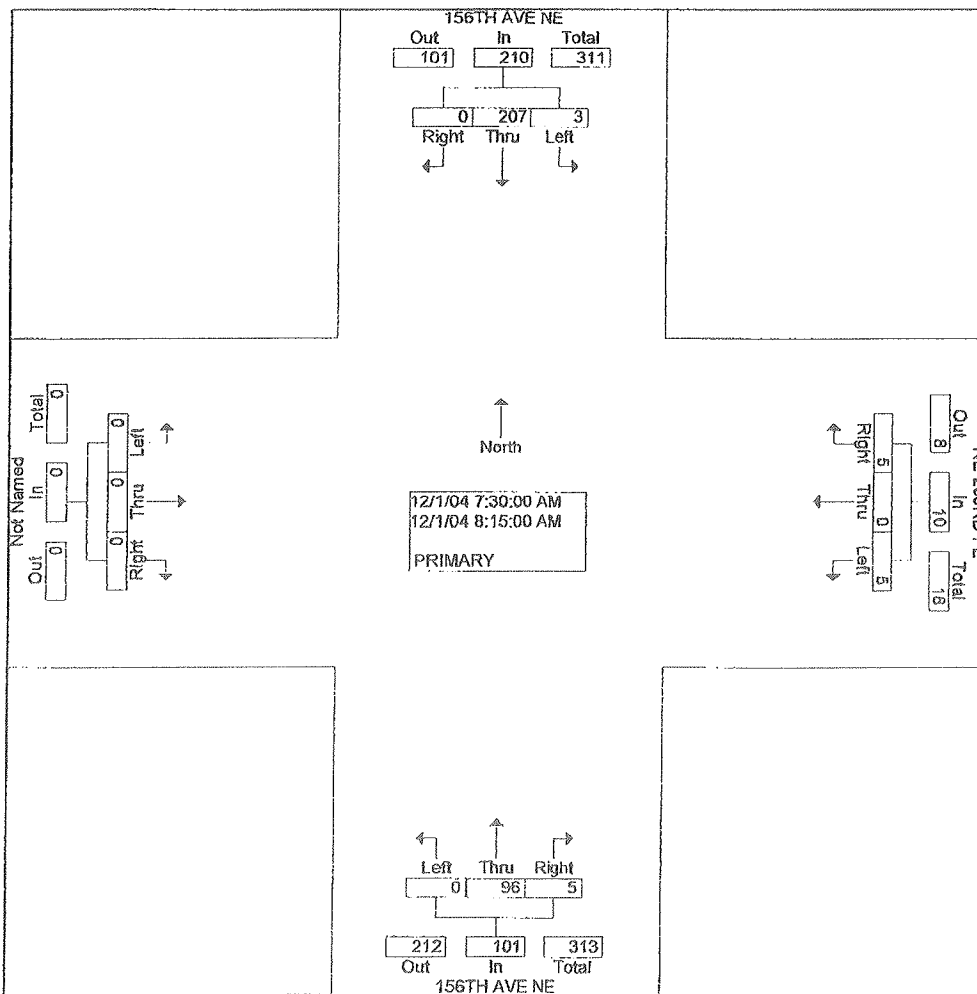
File Name : TPG33608A

Site Code : 00000008

Start Date : 12/01/2004

Page No : 2

Start Time	156TH AVE NE From North				NE 203RD PL From East				156TH AVE NE From South				From West				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	07:30 AM																
Volume	0	207	3	210	5	0	5	10	5	96	0	101	0	0	0	0	321
Percent	0.0	98.6	1.4		50.0	0.0	50.0		5.0	95.0	0.0		0.0	0.0	0.0		
08:15 Volume	0	58	1	59	1	0	2	3	1	23	0	24	0	0	0	0	86
Peak Factor	0.933																
High Int.	08:15 AM				07:45 AM				08:00 AM				6:45:00 AM				
Volume	0	58	1	59	1	0	2	3	3	31	0	34					
Peak Factor	0.890								0.833								



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**PMB 195 4820 YELM HWY SE STE B**  
**LACEY, WA 98503**  
**360-491-8116**

**V ILLIAMS, WASHINGTON**  
**156TH AVE NE**  
**NE 203RD PL**  
**LOC# 01P TPG04341M**

**File Name : TPG34301P**  
**Site Code : 00000001**  
**Start Date : 12/08/2004**  
**Page No : 1**

Groups Printed- PRIMARY

Start Time	156TH AVE NE From North					NE 203RD PL From East					156TH AVE NE From South					From West				Exclu. Total	Inclu. Total	Int. Total		
	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck				App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0					
04:00 PM	0	34	1	0	35	0	0	4	0	4	2	52	0	0	54	0	0	0	0	0	0	0	93	93
04:15 PM	0	25	0	0	25	1	0	0	0	1	4	34	0	0	38	0	0	0	0	0	0	0	64	64
04:30 PM	0	40	1	1	41	1	0	1	0	2	4	51	0	1	56	0	0	0	0	0	2	98	100	100
04:45 PM	0	39	2	2	41	3	0	1	0	4	4	53	0	0	57	0	0	0	0	0	2	102	104	104
<b>Total</b>	<b>0</b>	<b>138</b>	<b>4</b>	<b>3</b>	<b>142</b>	<b>5</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>11</b>	<b>14</b>	<b>190</b>	<b>0</b>	<b>1</b>	<b>204</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>357</b>	<b>381</b>	<b>381</b>
05:00 PM	0	40	2	0	42	0	0	1	0	1	3	64	0	1	67	0	0	0	0	0	1	110	111	111
05:15 PM	0	37	0	1	37	0	0	0	0	0	3	63	0	1	66	0	0	0	0	0	2	103	105	105
05:30 PM	0	27	3	0	30	1	0	2	0	3	1	58	0	0	59	0	0	0	0	0	0	92	92	92
05:45 PM	0	32	0	0	32	2	0	2	0	4	2	31	0	0	33	0	0	0	0	0	0	69	69	69
<b>Total</b>	<b>0</b>	<b>136</b>	<b>5</b>	<b>1</b>	<b>141</b>	<b>3</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>8</b>	<b>9</b>	<b>216</b>	<b>0</b>	<b>2</b>	<b>225</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>374</b>	<b>377</b>	<b>377</b>
<b>Grand Total</b>	<b>0</b>	<b>274</b>	<b>9</b>	<b>4</b>	<b>283</b>	<b>8</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>19</b>	<b>23</b>	<b>406</b>	<b>0</b>	<b>3</b>	<b>429</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>731</b>	<b>738</b>	<b>738</b>
Approch %	0.0	96.8	3.2			42.1	0.0	57.9			5.4	94.6	0.0			0.0	0.0	0.0			0.0	99.1		
Total %	0.0	37.5	1.2		38.7	1.1	0.0	1.5		2.6	3.1	55.5	0.0		58.7	0.0	0.0	0.0		0.0	0.9	99.1		

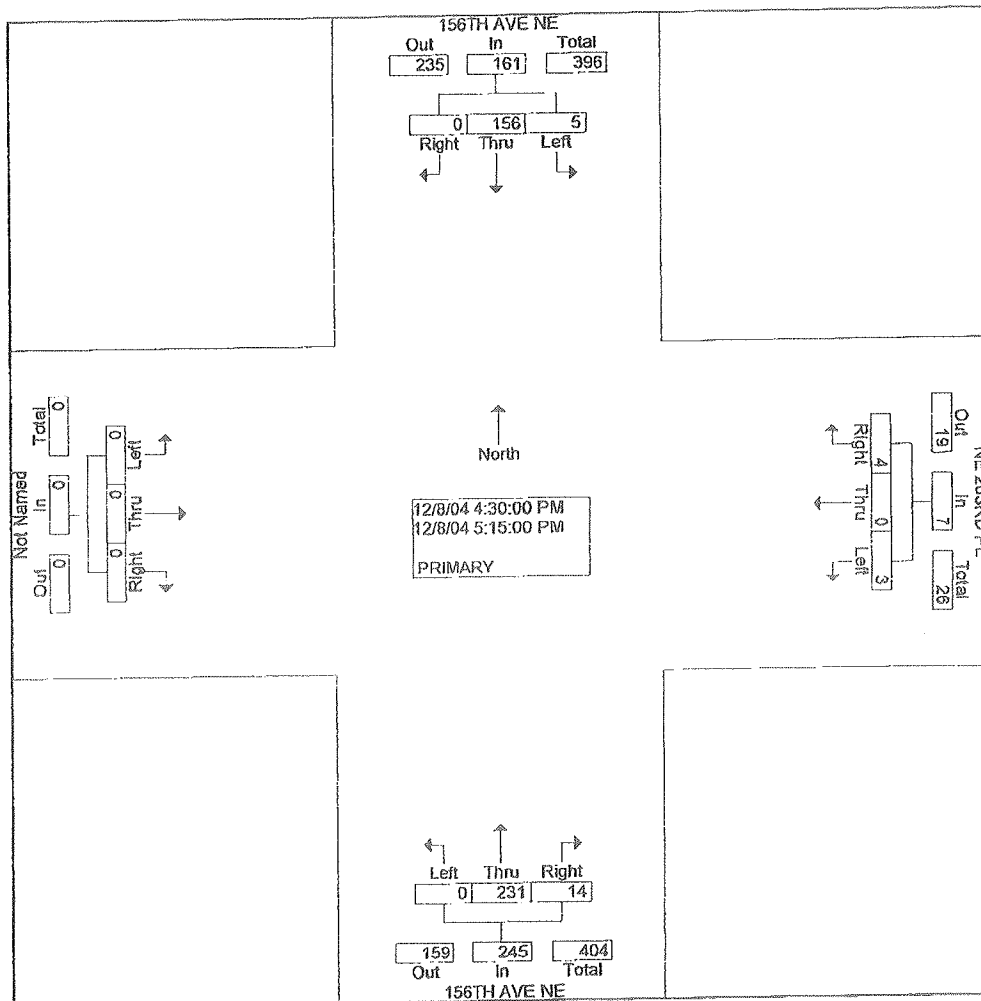
Start Time	156TH AVE NE From North				NE 203RD PL From East				156TH AVE NE From South				From West				Int. Total	
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total		
<b>Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1</b>																		
Intersection	04:30 PM																	
Volume	0	156	5	161	4	0	3	7	14	231	0	245	0	0	0	0	0	413
Percent	0.0	96.9	3.1		57.1	0.0	42.9		5.7	94.3	0.0		0.0	0.0	0.0			
15:00 Volume	0	40	2	42	0	0	1	1	3	64	0	67	0	0	0	0	0	110
Peak Factor																	0.939	
High Int.	05:00 PM				04:45 PM				05:00 PM				3:45:00 PM					
Volume	0	40	2	42	3	0	1	4	3	64	0	67						
Peak Factor	0.958								0.438				0.914					
<b>Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1</b>																		
By Approach	04:30 PM				04:00 PM				04:45 PM				04:00 PM					
Volume	0	156	5	161	5	0	6	11	11	230	0	249	0	0	0	0	0	
Percent	0.0	96.9	3.1		45.5	0.0	54.5		4.4	95.6	0.0		-	-	-	-		
High Int.	05:00 PM				04:00 PM				05:00 PM									
Volume	0	40	2	42	0	0	4	4	3	64	0	67	-	-	-	-	-	
Peak Factor	0.958								0.688				0.929					

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 360-491-8116

WOODINVILLE, WASHINGTON  
 156TH AVE NE  
 NE 203RD PL  
 LOC# 01P TPG04341M

File Name : TPG34301P  
 Site Code : 00000001  
 Start Date : 12/08/2004  
 Page No : 2

Start Time	156TH AVE NE From North				NE 203RD PL From East				156TH AVE NE From South				From West				Int. Total	
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total		
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																		
Intersection	04:30 PM																	413
Volume	0	156	5	161	4	0	3	7	14	231	0	245	0	0	0	0		
Percent	0.0	96.9	3.1		57.1	0.0	42.9		5.7	94.3	0.0		0.0	0.0	0.0			
05:00 Volume	0	40	2	42	0	0	1	1	3	64	0	67	0	0	0	0		110
Peak Factor																		0.939
High Int.	05:00 PM				04:45 PM				05:00 PM				3:45:00 PM					
Volume	0	40	2	42	3	0	1	4	3	64	0	67						
Peak Factor				0.958				0.438				0.914						



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PMB 195 4820 YELM HWY SE STE B

LACEY, WA 98503

360-491-8116

WOODINVILLE, WASHINGTON

156TH AVE NE

E 202ND ST

LOC# 01ATPG04335M

File Name : TPG33601A

Site Code : 0000001

Start Date : 12/01/2004

Page No : 1

Groups Printed- PRIMARY

Start Time	156TH AVE NE From North					NE 202ND ST From East					156TH AVE NE From South					NE 202ND ST From West					Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
07:00 AM	0	34	0	0	34	1	0	0	0	1	0	20	0	1	20	5	0	0	0	5	1	60	61
07:15 AM	0	45	0	2	45	0	0	0	0	0	0	22	2	1	24	1	0	0	0	1	3	70	73
07:30 AM	0	56	0	0	56	4	0	0	0	4	0	21	2	0	23	3	0	0	0	3	0	86	86
07:45 AM	0	44	0	1	44	1	0	0	0	1	0	34	2	2	36	1	0	1	0	2	3	83	86
Total	0	179	0	3	179	6	0	0	0	6	0	97	6	4	103	10	0	1	0	11	7	299	306
08:00 AM	3	52	0	5	55	3	0	0	0	3	1	19	0	0	20	3	0	2	0	5	5	83	88
08:15 AM	0	30	0	0	30	0	0	1	0	1	0	24	2	0	26	1	0	0	0	1	0	58	58
08:30 AM	0	36	1	1	37	0	0	0	0	0	0	13	1	2	14	1	0	0	0	1	3	52	55
08:45 AM	0	35	0	0	35	0	0	0	0	0	0	16	0	1	16	1	0	1	0	2	1	53	54
Total	3	153	1	6	157	3	0	1	0	4	1	72	3	3	76	6	0	3	0	9	9	246	255
Grand Total	3	332	1	9	336	9	0	1	0	10	1	169	9	7	179	16	0	4	0	20	16	545	561
Approch %	0.9	98.8	0.3			90.0	0.0	10.0			0.6	94.4	5.0			80.0	0.0	20.0					
Total %	0.6	60.9	0.2		61.7	1.7	0.0	0.2		1.8	0.2	31.0	1.7		32.8	2.9	0.0	0.7		3.7	2.9	97.1	

Start Time	156TH AVE NE From North				NE 202ND ST From East				156TH AVE NE From South				NE 202ND ST From West				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	07:15 AM				07:30 AM				07:45 AM				08:00 AM				
Volume	3	197	0	200	8	0	0	8	1	96	6	103	8	0	3	11	322
Percent	1.5	98.5	0.0		100.0	0.0	0.0		1.0	93.2	5.8		72.7	0.0	27.3		
07:30 Volume	0	56	0	56	4	0	0	4	0	21	2	23	3	0	0	3	86
Peak Factor													0.936				
High Int.	07:30 AM				07:30 AM				07:45 AM				08:00 AM				
Volume	0	56	0	56	4	0	0	4	0	34	2	36	3	0	2	5	
Peak Factor	0.893				0.500				0.715				0.550				
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
By Approach	07:15 AM				07:30 AM				07:30 AM				07:00 AM				
Volume	3	197	0	200	8	0	1	9	1	98	6	105	10	0	1	11	
Percent	1.5	98.5	0.0		88.9	0.0	11.1		1.0	93.3	5.7		90.9	0.0	9.1		
High Int.	07:30 AM				07:30 AM				07:45 AM				07:00 AM				
Volume	0	56	0	56	4	0	0	4	0	34	2	36	5	0	0	5	
Peak Factor	0.893				0.563				0.729				0.550				

# TRAFFICCOUNT, INC.

PMB 195 4820 YELM HWY SE STE B

LACEY, WA 98503

360-491-8116

WOODINVILLE, WASHINGTON

156TH AVE NE

NE 202ND ST

C# 01A TPG04335M

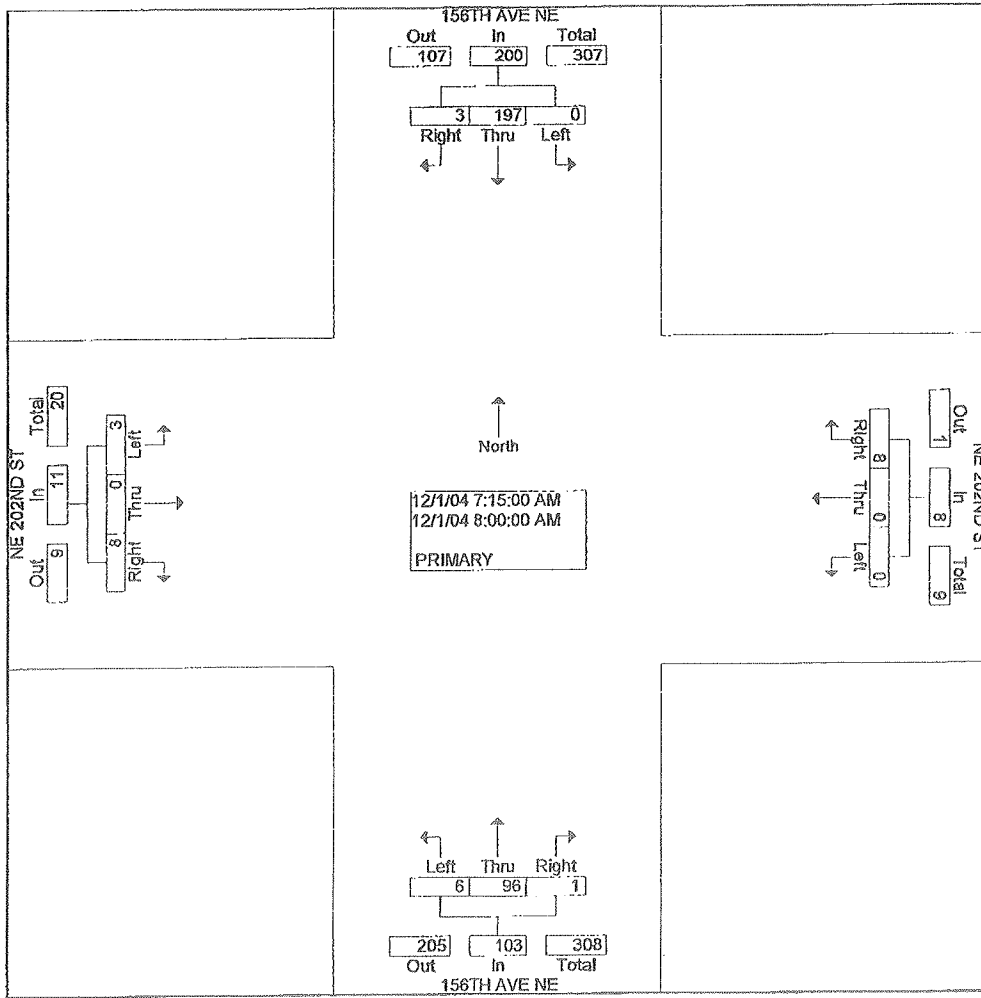
File Name : TPG33601A

Site Code : 00000001

Start Date : 12/01/2004

Page No : 2

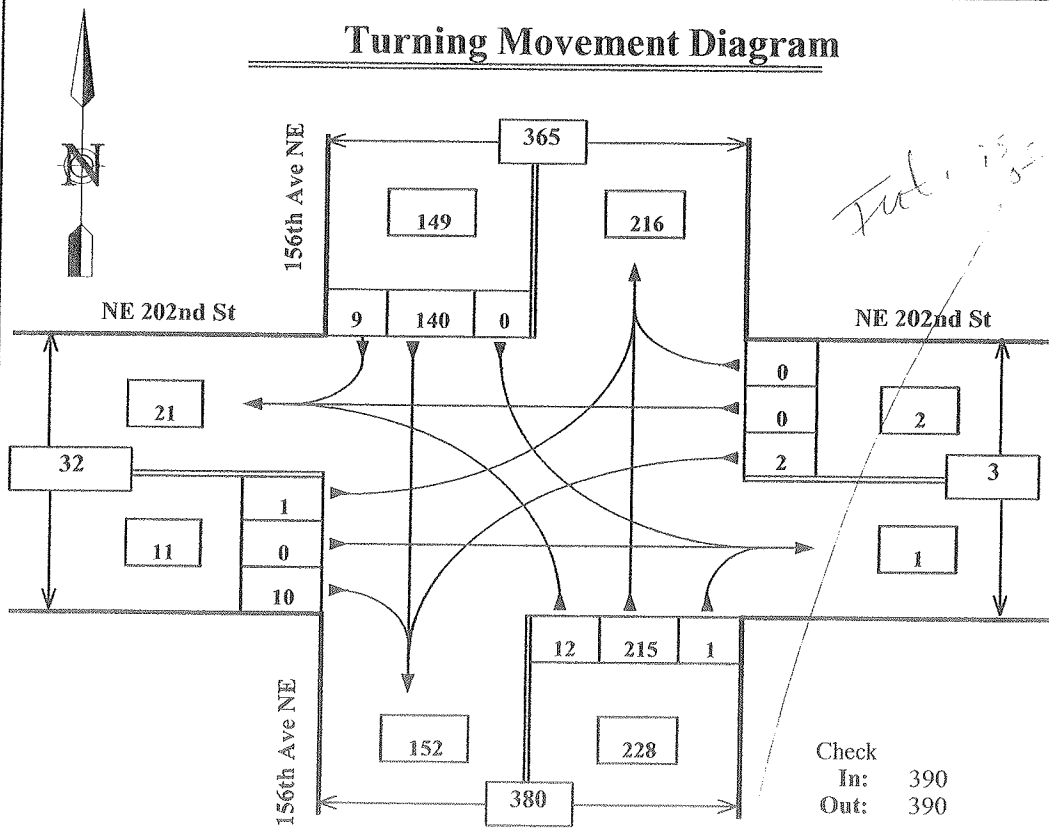
Start Time	156TH AVE NE From North				NE 202ND ST From East				156TH AVE NE From South				NE 202ND ST From West				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	07:15 AM																
Volume	3	197	0	200	8	0	0	8	1	96	6	103	8	0	3	11	322
Percent	1.5	98.5	0.0		100.0	0.0	0.0		1.0	93.2	5.8		72.7	0.0	27.3		
07:30 Volume	0	56	0	56	4	0	0	4	0	21	2	23	3	0	0	3	86
Peak Factor	0.936																
High Int.	07:30 AM				07:30 AM				07:45 AM				08:00 AM				
Volume	0	56	0	56	4	0	0	4	0	34	2	36	3	0	2	5	
Peak Factor	0.893				0.500				0.715				0.550				



156th Ave NE  
NE 202nd St  
12/1/04



**Turning Movement Diagram**



Intersection: 156th Ave NE @ NE 202nd St  
 Location: Woodinville  
 Date of Count: Tues 1/13/04  
 Peak Period: 4:30 P - 5:30 P  
 Checked By: LBP

	%HV PHF	
EB	0.0%	0.55
WB	0.0%	0.25
NB	0.4%	0.88
SB	0.0%	0.85
Intersection	0.3%	0.92

Prepared For: The Transpo Group

**Vehicle Volume Summary**

**Intersection:** 156th Ave NE @ NE 202nd St  
**Location:** Woodinville

**Date of Count:** Tues 1/13/04  
**Checked By:** LBP

Time Interval Ending at	From North on (SB) 156th Ave NE				From South on (NB) 156th Ave NE				From East on (WB) NE 202nd St				From West on (EB) NE 202nd St				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	0	40	2	0	1	61	0	1	0	0	1	0	0	0	0	105
4:30 P	0	0	38	1	0	2	52	1	0	0	0	0	0	1	0	3	98
4:45 P	0	0	41	3	1	4	44	1	0	0	0	0	0	1	0	2	96
5:00 P	0	0	32	2	0	6	44	0	0	0	0	0	0	0	0	1	85
5:15 P	0	0	33	4	0	2	62	0	0	0	0	0	0	0	0	2	103
5:30 P	0	0	34	0	0	0	65	0	0	2	0	0	0	0	0	5	106
5:45 P	0	0	38	1	0	4	40	0	0	0	0	0	0	1	0	1	85
6:00 P	0	0	27	2	0	3	43	1	0	0	0	0	0	0	0	4	80
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	283	15	1	22	411	3	1	2	0	1	0	3	0	18	758

**4:30 P to 5:30 P Peak Hour Summary**

Total	0	0	140	9	1	12	215	1	0	2	0	0	0	1	0	10	390
Approach	149				228				2				11				390
%HV	0%				0%				0%				0%				0%
PHF	0.85				0.88				0.25				0.55				0.92

**Legend:** T= Number of heavy vehicles (greater than 4 wheels)  
 L= Left-Turn  
 S= Straight  
 R= Right-Turn  
 HV= Heavy Vehicles  
 PHF= Peak hour Factor (Peak hour volume / (4\*Highest 15 minutes))

**Prepared For:** The Transpo Group

# TRAFFICOUNT, INC.

PMB 195 4820 YELM HWY SE STE B

LACEY, WA 98503

360-491-8116

WOODINVILLE, WASHINGTON  
156TH AVE NE  
E 201ST ST  
LOC# 02A TPG04335M

File Name : TPG33602A  
Site Code : 0000002  
Start Date : 12/01/2004  
Page No : 1

Groups Printed- PRIMARY

Start Time	156TH AVE NE From North					From East					156TH AVE NE From South					NE 201ST ST From West					Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
07:00 AM	1	38	0	0	39	0	0	0	0	0	0	19	2	0	21	2	0	2	1	4	1	64	65
07:15 AM	0	41	0	0	41	0	0	0	0	0	0	22	2	1	24	7	0	0	0	7	1	72	73
07:30 AM	0	60	0	1	60	0	0	0	0	0	0	20	3	2	23	3	0	2	4	5	7	88	95
07:45 AM	1	48	0	0	49	0	0	0	0	0	0	28	4	0	32	4	0	0	0	4	0	85	85
<b>Total</b>	<b>2</b>	<b>187</b>	<b>0</b>	<b>1</b>	<b>189</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>89</b>	<b>11</b>	<b>3</b>	<b>100</b>	<b>16</b>	<b>0</b>	<b>4</b>	<b>5</b>	<b>20</b>	<b>9</b>	<b>309</b>	<b>318</b>
08:00 AM	0	52	0	1	52	0	0	0	0	0	0	23	2	1	25	2	0	0	0	2	2	79	81
08:15 AM	1	29	0	0	30	0	0	0	0	0	0	26	4	0	30	6	0	5	0	11	0	71	71
08:30 AM	5	41	0	2	46	0	0	0	0	0	0	16	6	2	22	6	0	3	0	9	4	77	81
08:45 AM	6	42	0	2	48	0	0	0	0	0	0	16	5	2	21	5	0	3	2	8	6	77	83
<b>Total</b>	<b>12</b>	<b>164</b>	<b>0</b>	<b>5</b>	<b>176</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>81</b>	<b>17</b>	<b>5</b>	<b>98</b>	<b>19</b>	<b>0</b>	<b>11</b>	<b>2</b>	<b>30</b>	<b>12</b>	<b>304</b>	<b>316</b>
<b>Grand Total</b>	<b>14</b>	<b>351</b>	<b>0</b>	<b>6</b>	<b>365</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>170</b>	<b>28</b>	<b>8</b>	<b>198</b>	<b>35</b>	<b>0</b>	<b>15</b>	<b>7</b>	<b>50</b>	<b>21</b>	<b>613</b>	<b>634</b>
Approch %	3.8	96.2	0.0			0.0	0.0	0.0			0.0	85.9	14.1			70.0	0.0	30.0					
Total %	2.3	57.3	0.0		59.5	0.0	0.0	0.0		0.0	0.0	27.7	4.6		32.3	5.7	0.0	2.4		8.2	3.3	96.7	

Start Time	156TH AVE NE From North				From East				156TH AVE NE From South				NE 201ST ST From West				App. Total	Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total		
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																		
Intersection	07:15 AM																	
Volume	1	201	0	202	0	0	0	0	0	93	11	104	10	0	2	18	324	
Percent	0.5	99.5	0.0		0.0	0.0	0.0		0.0	89.4	10.6		88.9	0.0	11.1			
07:30 Volume	0	60	0	60	0	0	0	0	0	20	3	23	3	0	2	5	88	
Peak Factor																		0.920
High Int.	07:30 AM				6:45:00 AM				07:45 AM				07:15 AM					
Volume	0	60	0	60	0	0	0	0	0	28	4	32	7	0	0	7		
Peak Factor	0.842												0.813					0.643

Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																		
By Approach	07:15 AM				07:00 AM				07:30 AM				08:00 AM					
Volume	1	201	0	202	0	0	0	0	0	97	13	110	19	0	11	30		
Percent	0.5	99.5	0.0		-	-	-		0.0	88.2	11.8		63.3	0.0	36.7			
High Int.	07:30 AM								07:45 AM				08:15 AM					
Volume	0	60	0	60	-	-	-	-	0	28	4	32	6	0	5	11		
Peak Factor	0.842												0.859					0.682

# TRAFFICCOUNT, INC.

PMB 195 4820 YELM HWY SE STE B

LACEY, WA 98503

360-491-8116

WOODINVILLE, WASHINGTON

156TH AVE NE

NE 201ST ST

C# 02A TPG04335M

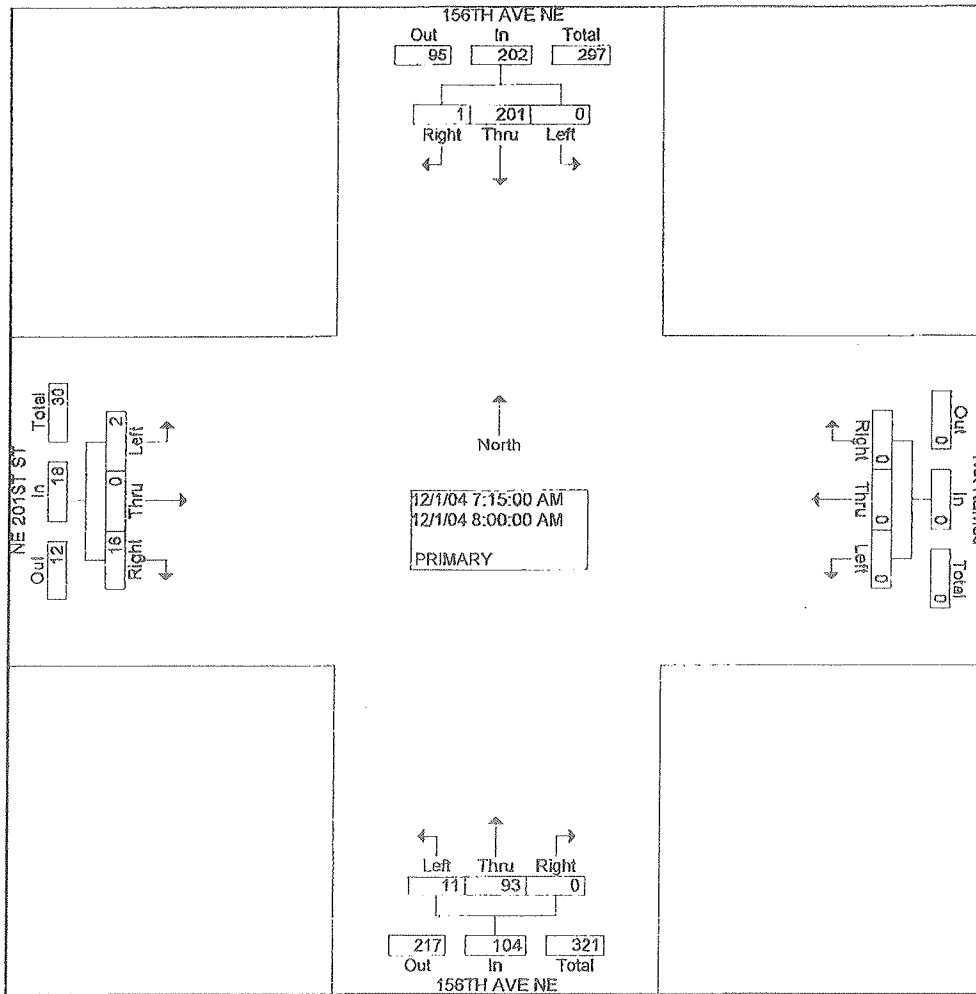
File Name : TPG33602A

Site Code : 00000002

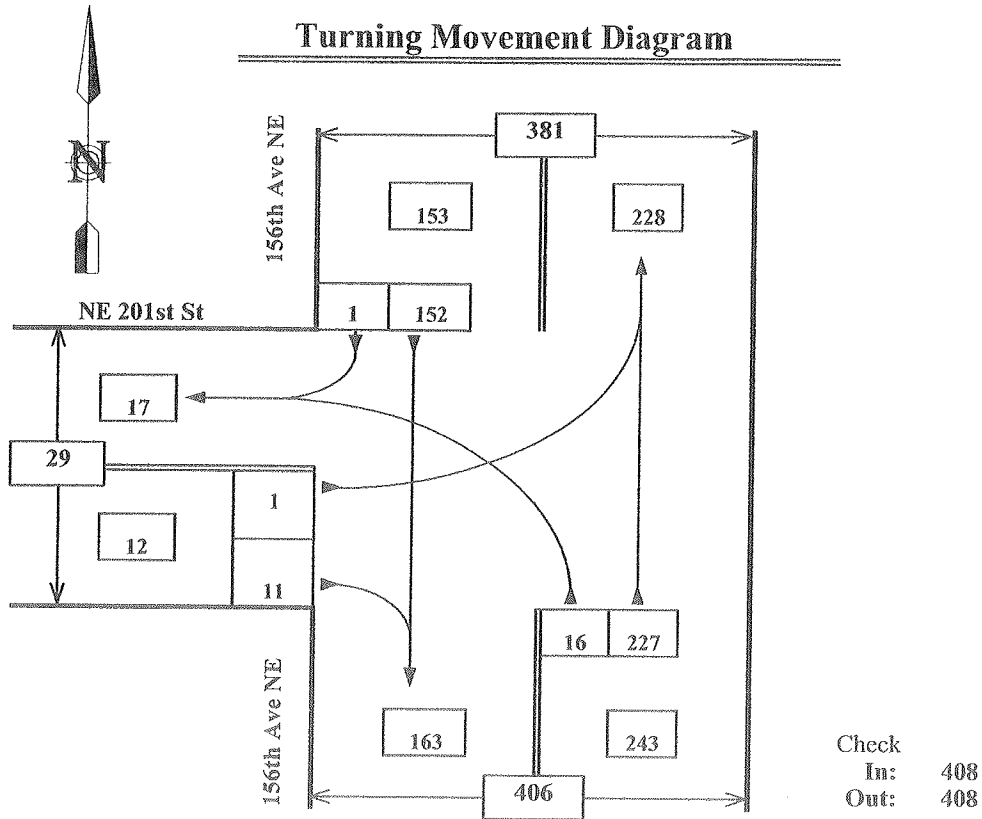
Start Date : 12/01/2004

Page No : 2

Start Time	156TH AVE NE From North				From East				156TH AVE NE From South				NE 201ST ST From West				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	07:15 AM																
Volume	1	201	0	202	0	0	0	0	0	93	11	104	16	0	2	18	324
Percent	0.5	99.5	0.0		0.0	0.0	0.0		0.0	89.4	10.6		88.9	0.0	11.1		88
07:30 Volume	0	60	0	60	0	0	0	0	0	20	3	23	3	0	2	5	88
Peak Factor																	0.920
High Int.	07:30 AM				6:45:00 AM				07:45 AM				07:15 AM				
Volume	0	60	0	60	0	0	0	0	0	28	4	32	7	0	0	7	7
Peak Factor	0.842												0.813				0.643



**Turning Movement Diagram**



Intersection: 156th Ave NE @ NE 201st St  
 Location: Woodinville  
 Date of Count: Tues 1/13/04  
 Peak Period: 4:30 P - 5:30 P  
 Checked By: LBP

	%HV	PHF
EB	0.0%	0.75
WB	n/a	n/a
NB	0.4%	0.78
SB	0.0%	0.85
Intersection	0.2%	0.89

Prepared For: The Transpo Group

**Vehicle Volume Summary**

**Intersection:** 156th Ave NE @ NE 201st St  
**Location:** Woodinville

**Date of Count:** Tues 1/13/04  
**Checked By:** LBP

Time Interval	From North on (SB) 156th Ave NE				From South on (NB) 156th Ave NE				From East on (WB) n/a				From West on (EB) NE 201st St				Interval Total	
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R		
4:15 P	0	0	34	0	0	0	46	0	0	0	0	0	0	0	0	0	4	84
4:30 P	0	0	42	0	0	2	50	0	0	0	0	0	0	0	0	0	4	98
4:45 P	0	0	45	0	1	4	46	0	0	0	0	0	0	0	0	0	3	98
5:00 P	0	0	35	0	0	4	51	0	0	0	0	0	0	0	0	0	4	94
5:15 P	0	0	38	0	0	4	56	0	0	0	0	0	0	1	0	0	3	102
5:30 P	0	0	34	1	0	4	74	0	0	0	0	0	0	0	0	0	1	114
5:45 P	0	0	37	1	0	6	40	0	0	0	0	0	0	0	0	0	3	87
6:00 P	0	0	33	1	0	4	58	0	0	0	0	0	0	0	0	0	2	98
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	298	3	1	28	421	0	0	0	0	0	0	1	0	24		775

4:30 P to 5:30 P Peak Hour Summary																		
Total	0	0	152	1	1	16	227	0	0	0	0	0	0	1	0	11		408
Approach	153				243				0				12				408	
%HV	0%				0%				n/a				0%				0%	
PHF	0.85				0.78				n/a				0.75				0.89	

**Legend:**  
 T= Number of heavy vehicles (greater than 4 wheels)  
 L= Left -Turn  
 S= Straight  
 R= Right-Turn  
 HV= Heavy Vehicles  
 PHF= Peak hour Factor (Peak hour volume / (4\*Highest 15 minutes))

TRAFFICOUNT, INC.

PMB 195 4820 YELM HWY SE STE B

LACEY, WA 98503

360-491-8116

WOODINVILLE, WASHINGTON

156TH AVE NE

E 198TH ST

LOC# 03A TPG04335M

File Name : TPG33603A

Site Code : 00000003

Start Date : 12/01/2004

Page No : 1

Groups Printed- PRIMARY

Start Time	156TH AVE NE From North					NE 198TH ST From East					156TH AVE NE From South					NE 198TH ST From West					Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
07:00 AM	0	34	0	0	34	0	0	7	0	7	0	20	0	1	20	2	0	2	0	4	1	65	66
07:15 AM	2	48	0	0	50	0	0	4	0	4	1	22	1	5	24	3	0	1	0	4	5	82	87
07:30 AM	0	66	5	2	71	1	1	3	0	5	1	20	2	0	23	7	1	1	1	9	3	108	111
07:45 AM	0	57	3	1	60	3	0	6	0	9	1	34	0	3	35	2	0	1	0	3	4	107	111
Total	2	205	8	3	215	4	1	20	0	25	3	96	3	9	102	14	1	5	1	20	13	362	375
08:00 AM	0	50	2	3	52	4	2	10	0	16	5	25	0	1	30	3	1	0	0	4	4	102	106
08:15 AM	0	54	6	1	60	6	0	10	0	16	5	22	1	2	28	7	0	0	1	7	4	111	115
08:30 AM	0	49	3	0	52	3	0	9	0	12	4	23	0	2	27	4	0	1	0	5	2	96	98
08:45 AM	1	46	3	1	52	5	1	10	0	16	5	21	1	1	27	3	1	1	0	5	2	100	102
Total	1	201	14	5	216	18	3	39	0	60	19	91	2	6	112	17	2	2	1	21	12	409	421
Grand Total	3	406	22	8	431	22	4	59	0	85	22	187	5	15	214	31	3	7	2	41	25	771	796
Approch %	0.7	94.2	5.1			25.9	4.7	69.4			10.3	87.4	2.3			75.6	7.3	17.1			3.1	96.9	
Total %	0.4	52.7	2.9		55.9	2.9	0.5	7.7		11.0	2.9	24.3	0.6		27.8	4.0	0.4	0.9		5.3			

Start Time	156TH AVE NE From North				NE 198TH ST From East				156TH AVE NE From South				NE 198TH ST From West				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	07:30 AM																
Volume	0	227	18	243	14	3	29	46	12	101	3	116	19	2	2	23	428
Percent	0.0	93.4	6.6		30.4	6.5	63.0		10.3	87.1	2.6		82.6	8.7	8.7		
08:15 Volume	0	54	6	60	6	0	10	16	5	22	1	28	7	0	0	7	111
Peak Factor																	0.964
High Int.	07:30 AM				08:00 AM				07:45 AM				07:30 AM				
Volume	0	66	5	71	4	2	10	16	1	34	0	35	7	1	1	9	
Peak Factor	0.856				0.719				0.829				0.639				

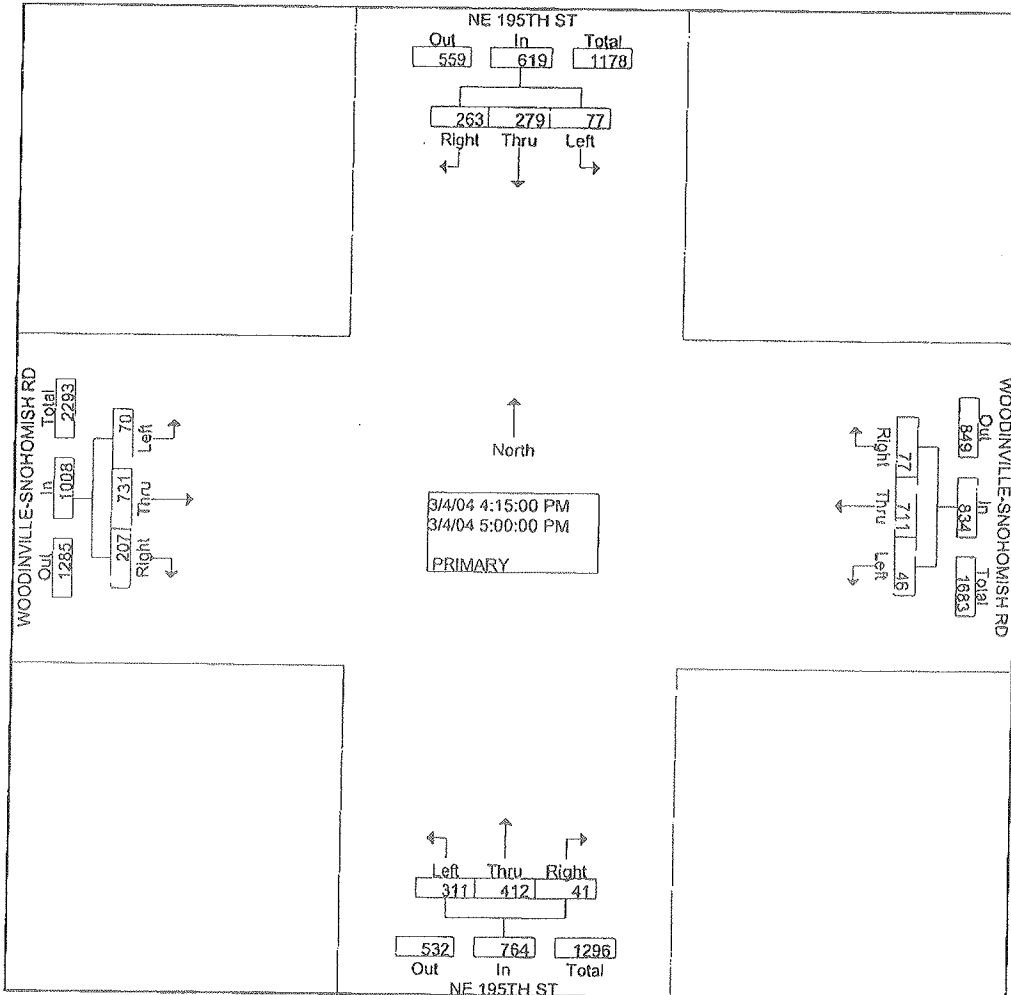
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
By Approach	07:30 AM				08:00 AM				07:45 AM				07:30 AM				
Volume	0	227	16	243	18	3	39	60	15	104	1	120	19	2	2	23	
Percent	0.0	93.4	6.6		30.0	5.0	65.0		12.5	86.7	0.8		82.6	8.7	8.7		
High Int.	07:30 AM				08:00 AM				07:45 AM				07:30 AM				
Volume	0	66	5	71	4	2	10	16	1	34	0	35	7	1	1	9	
Peak Factor	0.856				0.938				0.857				0.639				

**TRAFFICOUNT, INC.**  
 PMB 195 4820 YELM HWY SE STE B  
 LACEY, WA 98503  
 360-491-8116

WOODINVILLE, WASHINGTON  
 195TH ST  
 WOODINVILLE-SNOHOMISH RD  
 LOC# 01 TPG04064M

File Name : TPG06401P  
 Site Code : 00000001  
 Start Date : 03/04/2007  
 Page No : 2

Start Time	NE 195TH ST From North				WOODINVILLE-SNOHOMISH RD From East				NE 195TH ST From South				WOODINVILLE-SNOHOMISH RD From West				InL Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	04:15 PM																
Volume	263	279	77	619	77	711	46	834	41	412	311	764	207	731	70	1008	3225
Percent	42.5	45.1	12.4		9.2	85.3	5.5		5.4	53.9	40.7		20.5	72.5	6.9		
04:30 Volume	101	59	19	179	17	187	19	223	8	97	87	192	53	181	14	248	842
Peak Factor																	
High Int.	04:30 PM				05:00 PM				05:00 PM				04:45 PM				0.958
Volume	101	59	19	179	22	192	10	224	11	124	82	217	52	200	15	267	
Peak Factor					0.865				0.931				0.880				0.944







# TRAFFICOUNT, INC.

PMB 195 4820 YELM HWY SE STE B

LACEY, WA 98503

360-491-8116

WOODINVILLE, WASHINGTON

156TH AVE NE

.98TH ST

LOC# 01P TPG04149M

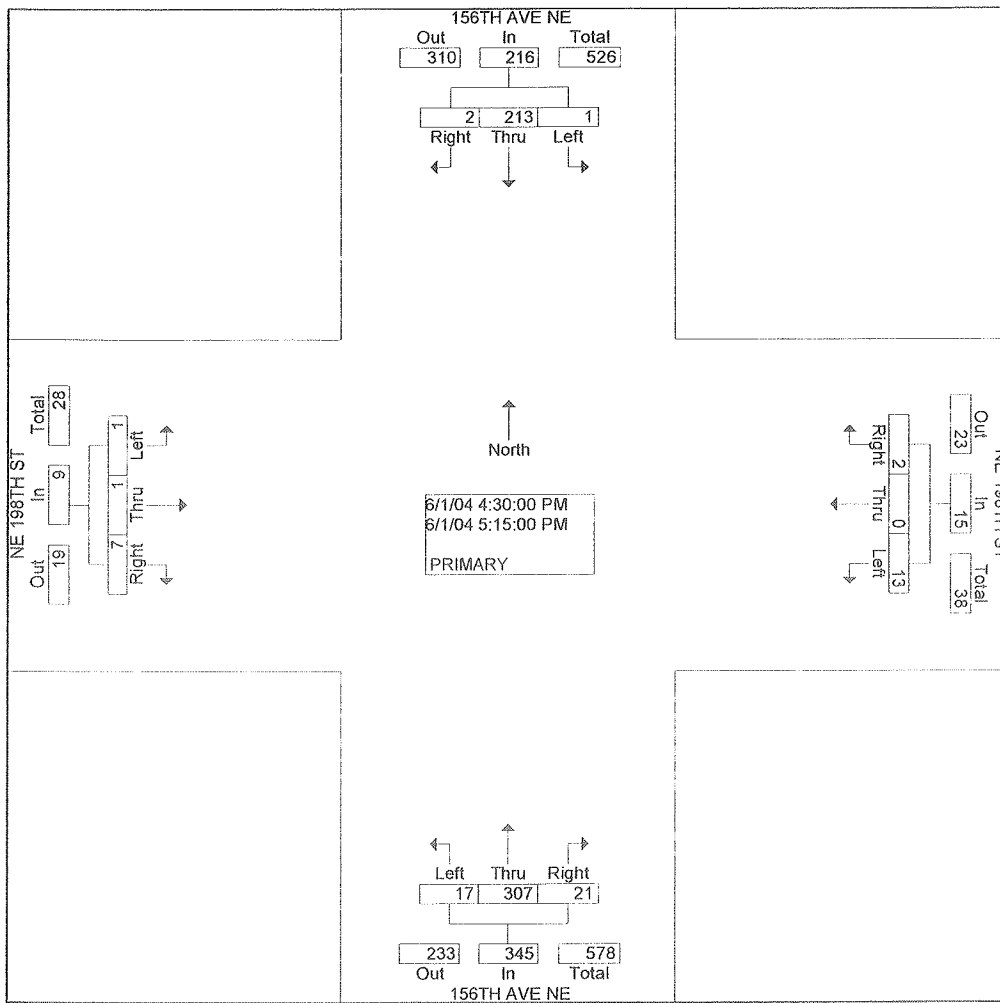
File Name : TPG15301P

Site Code : 0000001

Start Date : 06/01/2004

Page No : 2

Start Time	156TH AVE NE From North				NE 198TH ST From East				156TH AVE NE From South				NE 198TH ST From West				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection																	
Volume	0	213	1	216	2	0	13	15	21	307	17	345	7	1	1	9	585
Percent	0	98.6	0.5		13.3	0.0	86.7		6.1	89.0	4.9		77.8	11.1	11.1		
05:15 Volume	0	64	0	64	1	0	1	2	6	83	7	96	3	1	0	4	166
Peak Factor																	0.881
High Int.	05:15 PM				05:00 PM				05:15 PM				05:15 PM				
Volume	0	64	0	64	0	0	6	6	6	83	7	96	3	1	0	4	
Peak Factor				0.844				0.625				0.898				0.563	



**TRAFFICCOUNT, INC.**  
**PMB 195 4820 YELM HWY SE STE B**  
**LACEY, WA 98503**  
**360-491-8116**

**WOODINVILLE, WASHINGTON**  
**156TH AVE NE**  
**NE 195TH ST**  
**LOC# 04A TPG04335M**

**File Name : TPG33604A**  
**Site Code : 00000004**  
**Start Date : 12/01/2004**  
**Page No : 1**

Groups Printed- PRIMARY

Start Time	156TH AVE NE From North					NE 195TH ST From East					156TH AVE NE From South					NE 195TH ST From West					Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
07:00 AM	0	36	1	0	37	0	0	6	0	6	3	19	1	0	23	3	1	1	0	5	0	71	71
07:15 AM	0	49	2	0	51	1	0	6	0	7	6	22	2	0	30	3	0	2	0	5	0	93	93
07:30 AM	0	65	1	2	66	0	0	8	1	8	7	24	2	1	33	5	0	1	0	6	4	113	117
07:45 AM	0	59	2	0	61	0	0	9	0	9	4	28	0	2	32	4	0	0	0	4	2	106	108
Total	0	209	6	2	215	1	0	29	1	30	20	93	5	3	118	15	1	4	0	20	6	383	389
08:00 AM	0	62	2	1	64	0	0	8	1	8	7	36	2	4	45	2	0	0	0	2	6	119	125
08:15 AM	0	78	1	5	79	2	0	6	2	8	2	24	0	1	26	1	0	3	0	4	8	117	125
08:30 AM	0	53	1	0	54	0	0	4	0	4	0	23	0	0	23	5	0	3	0	8	0	89	89
08:45 AM	0	46	0	1	46	1	1	7	1	9	4	20	2	2	26	3	1	0	0	4	4	85	89
Total	0	239	4	7	243	3	1	25	4	29	13	109	4	7	120	11	1	6	0	18	18	410	428
Grand Total	0	448	10	9	458	4	1	54	5	59	33	196	9	10	238	26	2	10	0	38	24	793	817
Approch %	0.0	97.8	2.2			6.8	1.7	91.5			13.9	82.4	3.8			68.4	5.3	26.3					
Total %	0.0	56.5	1.3		57.8	0.5	0.1	6.8		7.4	4.2	24.7	1.1		30.0	3.3	0.3	1.3		4.8	2.9	97.1	

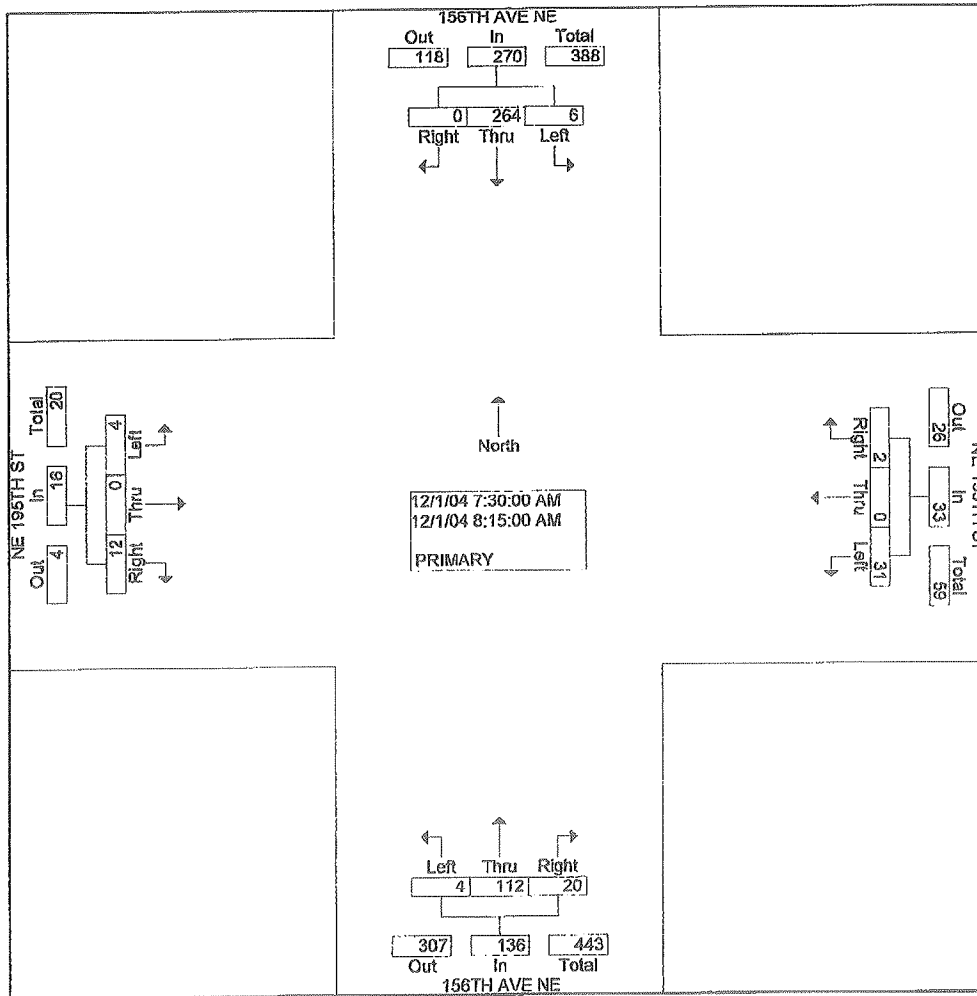
Start Time	156TH AVE NE From North				NE 195TH ST From East				156TH AVE NE From South				NE 195TH ST From West				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	07:30 AM																
Volume	0	264	6	270	2	0	31	33	20	112	4	136	12	0	4	16	455
Percent	0.0	97.8	2.2		6.1	0.0	93.9		14.7	82.4	2.9		75.0	0.0	25.0		
08:00 Volume	0	62	2	64	0	0	8	8	7	36	2	45	2	0	0	2	119
Peak Factor																	0.956
High Int.	08:15 AM				07:45 AM				08:00 AM				07:30 AM				
Volume	0	78	1	79	0	0	9	9	7	36	2	45	5	0	1	6	
Peak Factor	0.854								0.917				0.756				0.667
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
By Approach	07:30 AM				07:30 AM				07:15 AM				07:00 AM				
Volume	0	264	6	270	2	0	31	33	24	110	6	140	15	1	4	20	
Percent	0.0	97.8	2.2		6.1	0.0	93.9		17.1	78.6	4.3		75.0	5.0	20.0		
High Int.	08:15 AM				07:45 AM				08:00 AM				07:30 AM				
Volume	0	78	1	79	0	0	9	9	7	36	2	45	5	0	1	6	
Peak Factor	0.854				0.917				0.778				0.833				

**TRAFFICOUNT, INC.**  
**PMB 195 4820 YELM HWY SE STE B**  
**LACEY, WA 98503**  
**360-491-8116**

**WOODINVILLE, WASHINGTON**  
**156TH AVE NE**  
**NE 195TH ST**  
**C# 04A TPG04335M**

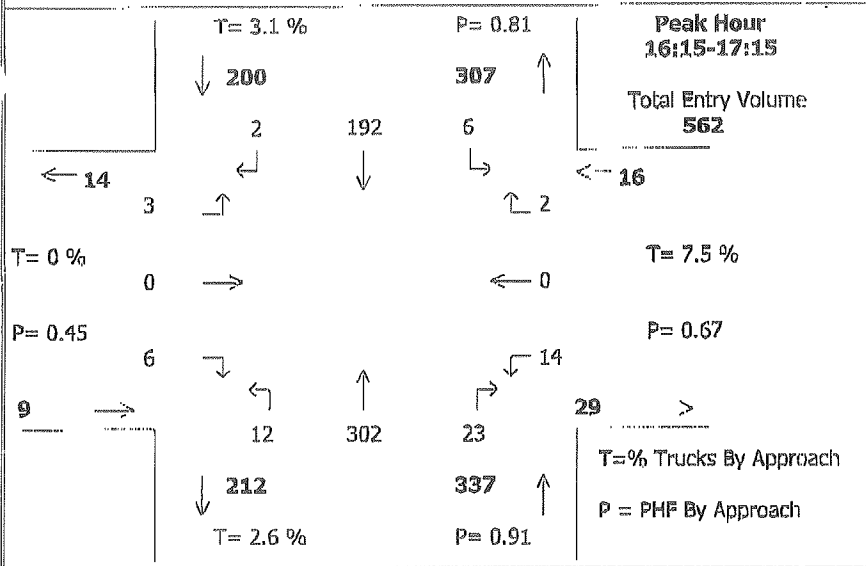
**File Name : TPG33604A**  
**Site Code : 00000004**  
**Start Date : 12/01/2004**  
**Page No : 2**

Start Time	156TH AVE NE From North				NE 195TH ST From East				156TH AVE NE From South				NE 195TH ST From West				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection:	07:30 AM																
Volume	0	264	6	270	2	0	31	33	20	112	4	136	12	0	4	16	455
Percent	0.0	97.8	2.2		6.1	0.0	93.9		14.7	82.4	2.9		75.0	0.0	25.0		119
08:00 Volume	0	62	2	64	0	0	8	8	7	36	2	45	2	0	0	2	0.956
Peak Factor																	
High Int.	08:15 AM				07:45 AM				08:00 AM				07:30 AM				
Volume	0	78	1	79	0	0	9	9	7	36	2	45	5	0	1	6	0.667
Peak Factor	0.854				0.917				0.756								



**INTERSECTION TURN MOVEMENT SUMMARY REPORT**

File: Ecds



**LOCATION:**

NE 195TH STREET AT 156TH AVENUE NE  
 WOODINVILLE

Date: **03/04/04** Day: **THU**  
 Time: **16:00 - 18:00**

Report Prepared for:  
 THE TRANSP GROUP

Surveyed By:  
**TRAFFIC SMITHY, INC**  
 626- 120TH AVENUE NE SUITE B102  
 BELLEVUE, WA 98005  
 PHONE- 425-688-7888 FAX- 425-688-7784

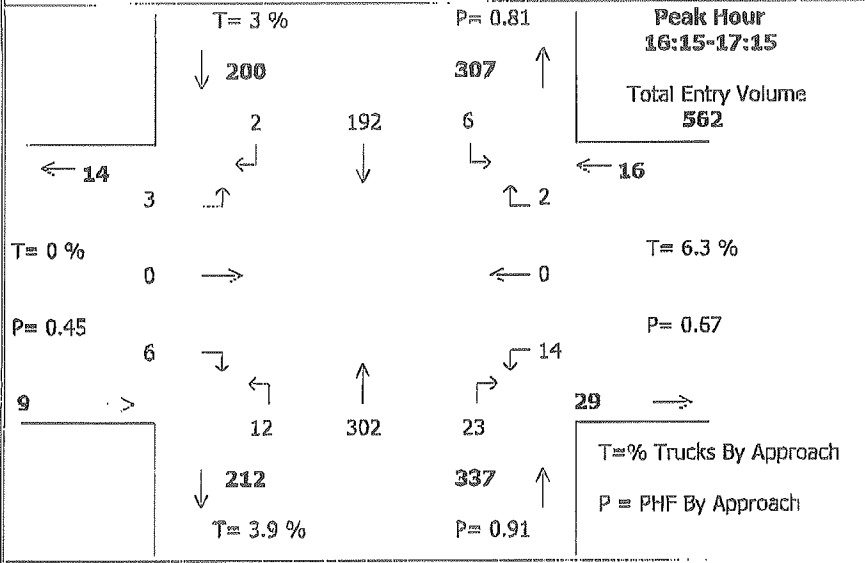
Report Reviewed by: GC

TIME PERIOD	EASTBOUND			SOUTHBOUND			NORTHBOUND			WESTBOUND			ALL
	↘	→	↑	↙	↓	↘	↙	↑	↘	↙	↑		
16:00-16:05	0	0	0	0	12	0	2	21	3	1	0	0	39
16:05-16:10	2	0	0	0	16	0	0	19	2	1	0	0	40
16:10-16:15	3	0	1	0	21	0	1	21	0	3	0	1	51
16:15-16:20	2	0	1	0	16	0	1	27	2	0	0	0	49
16:20-16:25	2	0	0	2	13	1	1	31	3	0	0	0	53
16:25-16:30	0	0	0	0	13	0	2	20	6	1	0	0	42
16:30-16:35	0	0	0	0	14	0	1	20	1	1	0	0	37
16:35-16:40	1	0	0	0	13	0	2	18	0	2	0	1	37
16:40-16:45	0	0	0	0	15	0	1	27	0	2	0	0	45
16:45-16:50	0	0	0	0	19	0	2	31	1	1	0	0	54
16:50-16:55	0	0	0	0	22	0	0	26	1	2	0	0	51
16:55-17:00	1	0	0	0	9	1	0	29	1	1	0	0	42
17:00-17:05	0	0	0	0	16	1	0	25	5	0	0	0	47
17:05-17:10	0	0	2	0	19	2	2	24	2	3	0	0	54
17:10-17:15	0	0	0	0	23	1	0	24	1	1	0	1	51
17:15-17:20	1	0	0	0	10	1	2	27	1	1	0	0	43
17:20-17:25	1	0	0	0	16	0	0	15	2	2	0	1	37
17:25-17:30	0	0	0	1	13	0	0	26	2	0	0	0	42
17:30-17:35	0	0	0	0	13	0	0	32	3	2	0	0	50
17:35-17:40	0	0	0	0	15	0	1	24	1	0	0	0	41
17:40-17:45	0	0	0	1	17	1	0	22	1	1	0	0	43
17:45-17:50	1	0	0	0	18	1	0	14	1	1	1	0	37
17:50-17:55	1	0	0	1	21	1	1	16	0	1	0	4	46
17:55-18:00	0	0	1	2	10	0	1	20	1	4	0	0	39

TOTALS	15	0	5	7	374	10	20	559	40	31	1	8	1070
PHF	0.38	0	0.38	0.25	0.83	0.38	0.6	0.88	0.52	0.7	0	0.5	0.92
% Trucks	0	0	0	14.3	2.7	10	0	2.7	2.5	6.5	0	12.5	2.9
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians		1			0			0		0		0	

**INTERSECTION TURN MOVEMENT PEAK HOUR REPORT**

File: Ecds



**LOCATION:**

NE 195TH STREET AT 156TH AVENUE NE  
WOODINVILLE

Date: **03/04/04** Day: **THU**  
Time: **16:00 - 18:00**

Report Prepared for:  
THE TRANSP GROUP

Surveyed By:  
**TRAFFIC SMITHY, INC**  
626- 120TH AVENUE NE SUITE B102  
BELLEVUE, WA 98005  
PHONE- 425-688-7888 FAX- 425-688-7784

Report Reviewed by: GC

TIME PERIOD	EASTBOUND			SOUTHBOUND			NORTHBOUND			WESTBOUND			ALL
	↘	→	↗	↙	↓	↘	↖	↑	↗	↓	←	↖	
<b>ALL VEHICLES</b>													
16:15-16:30	4	0	1	2	42	1	4	78	11	1	0	0	144
16:30-16:45	1	0	0	0	42	0	4	65	1	5	0	1	119
16:45-17:00	1	0	0	0	50	1	2	86	3	4	0	0	147
17:00-17:15	0	0	2	0	58	4	2	73	8	4	0	1	152
<b>LIGHT TRUCKS (SINGLE UNIT 2 AXLES)</b>													
16:15-16:30	0	0	0	0	1	1	0	5	1	0	0	0	8
16:30-16:45	0	0	0	0	0	0	0	5	0	1	0	0	6
16:45-17:00	0	0	0	0	2	0	0	1	0	0	0	0	3
17:00-17:15	0	0	0	0	1	0	0	1	0	0	0	0	2
<b>MEDIUM TRUCKS (SINGLE UNIT &gt;2 AXLES)</b>													
16:15-16:30	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30-16:45	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45-17:00	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00-17:15	0	0	0	0	1	0	0	0	0	0	0	0	1
<b>HEAVY TRUCKS (SEMI-TRACTOR TRAILER)</b>													
16:15-16:30	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30-16:45	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45-17:00	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00-17:15	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>BICYCLES</b>													
16:15-16:30	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30-16:45	0	0	0	0	0	0	0	1	0	0	0	0	1
16:45-17:00	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00-17:15	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>PEDESTRIANS</b>													
Crosswalk	SOUTH			WEST			EAST			NORTH			ALL
16:15-16:30	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30-16:45	1	0	0	0	0	0	0	0	0	0	0	0	1
16:45-17:00	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00-17:15	0	0	0	0	0	0	0	0	0	0	0	0	0

**Peak Hour By Movement**

PHF	0.38	0	0.38	0.25	0.83	0.38	0.75	0.88	0.52	0.7	0	0.5	0.92
% Trucks(All)	0	0	0	0	2.6	16.7	0	4	4.3	7.1	0	0	3.6
% Trucks(M+H)	0	0	0	0	0.5	0	0	0	0	0	0	0	0.2
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0

**Hourly Totals**

16:00-17:00	11	0	2	2	183	2	13	290	20	15	0	2	540
16:15-17:15	6	0	3	2	192	6	12	302	23	14	0	2	562
16:30-17:30	4	0	2	1	189	6	10	292	17	16	0	3	540
16:45-17:45	3	0	2	2	192	7	7	305	21	14	0	2	555
17:00-18:00	4	0	3	5	191	8	7	269	20	16	1	6	530

**TRAFFICCOUNT, INC.**  
**PMB 195 4820 YELM HWY SE STE B**  
**LACEY, WA 98503**  
**360-491-8116**

**WOODINVILLE, WASHINGTON**  
**156TH AVE NE**  
**WOODINVILLE-DUVALL RD**  
**LOC# 05A TPG04335M**

**File Name : TPG33605A**  
**Site Code : 00000005**  
**Start Date : 12/01/2004**  
**Page No : 1**

Groups Printed- PRIMARY

Start Time	156TH AVE NE From North					WOODINVILLE-DUVALL RD From East					From South					WOODINVILLE-DUVALL RD From West					Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
07:00 AM	64	0	20	2	84	2	271	0	2	273	0	0	0	0	0	0	99	19	26	118	30	475	505
07:15 AM	52	0	25	3	77	1	247	0	7	248	0	0	0	0	0	0	131	19	9	150	19	475	494
07:30 AM	51	0	42	5	93	0	222	0	3	222	0	0	0	0	0	0	141	18	16	159	24	474	498
07:45 AM	49	0	39	3	88	6	234	0	7	240	0	0	0	0	0	0	114	17	8	131	18	459	477
Total	216	0	126	13	342	9	974	0	19	983	0	0	0	0	0	0	485	73	59	558	91	1883	1974
08:00 AM	41	0	25	7	66	2	233	0	7	235	0	0	0	0	0	0	112	25	4	137	18	438	456
08:15 AM	53	0	38	5	91	4	192	0	2	196	0	0	0	0	0	0	153	21	9	174	16	461	477
08:30 AM	55	0	23	0	78	3	217	0	6	220	0	0	0	0	0	0	135	9	12	144	18	442	460
08:45 AM	48	0	30	0	78	2	218	0	9	220	0	0	0	0	0	0	100	18	6	118	15	416	431
Total	197	0	116	12	313	11	860	0	24	871	0	0	0	0	0	0	500	73	31	573	67	1757	1824
Grand Total	413	0	242	25	655	20	1834	0	43	1854	0	0	0	0	0	0	985	146	90	1131	158	3640	3798
Apprch %	63.1	0.0	36.9			1.1	98.9	0.0			0.0	0.0	0.0			0.0	87.1	12.9					
Total %	11.3	0.0	6.6		18.0	0.5	50.4	0.0		50.9	0.0	0.0	0.0		0.0	0.0	27.1	4.0		31.1	4.2	95.8	

Start Time	156TH AVE NE From North				WOODINVILLE-DUVALL RD From East				From South				WOODINVILLE-DUVALL RD From West				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	07:00 AM																
Volume	216	0	126	342	9	974	0	983	0	0	0	0	0	485	73	559	1883
Percent	63.2	0.0	36.8		0.9	99.1	0.0		0.0	0.0	0.0		0.0	86.9	13.1		
07:15 Volume	52	0	25	77	1	247	0	248	0	0	0	0	0	131	19	150	475
Peak Factor																	0.991
High Int.	07:30 AM				07:00 AM				6:45:00 AM				07:30 AM				
Volume	51	0	42	93	2	271	0	273	0	0	0	0	0	141	18	159	
Peak Factor	0.919				0.900								0.877				
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
By Approach	07:00 AM				07:00 AM				07:00 AM				07:30 AM				
Volume	216	0	126	342	9	974	0	983	0	0	0	0	0	520	81	601	
Percent	63.2	0.0	36.8		0.9	99.1	0.0		-	-	-		0.0	86.5	13.5		
High Int.	07:30 AM				07:00 AM								08:15 AM				
Volume	51	0	42	93	2	271	0	273	-	-	-	-	0	153	21	174	
Peak Factor	0.919				0.900								0.864				

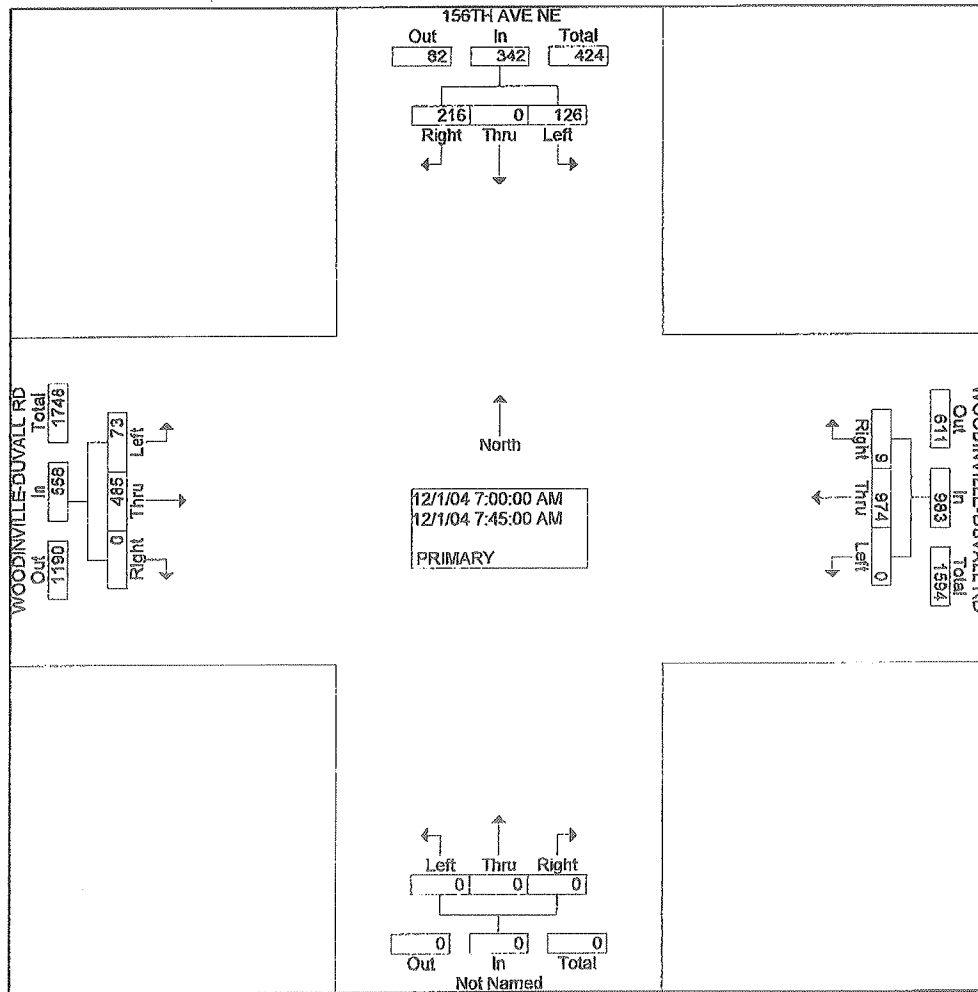
**TRAFFICOUNT, INC.**  
**PMB 195 4820 YELM HWY SE STE B**

**WOODINVILLE, WASHINGTON**  
**156TH AVE NE**  
**WOODINVILLE-DUVAL RD**  
**IC# 05A TPG04335M**

**LACEY, WA 98503**  
**360-491-8116**

File Name : TPG33605A  
 Site Code : 00000005  
 Start Date : 12/01/2004  
 Page No : 2

Start Time	156TH AVE NE From North				WOODINVILLE-DUVAL RD From East				From South				WOODINVILLE-DUVAL RD From West				Int. Total		
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total			
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																			
Intersection	07:00 AM																		
Volume	216	0	126	342	9	974	0	983	0	0	0	0	0	485	73	558	1883		
Percent	63.2	0.0	36.8		0.9	99.1	0.0		0.0	0.0	0.0		0.0	86.9	13.1				
07:15 Volume	52	0	25	77	1	247	0	248	0	0	0	0	0	131	19	150	475		
Peak Factor																	0.991		
High Int.	07:30 AM																		
Volume	51	0	42	93	07:00 AM	2	271	0	273	6:45:00 AM	0	0	0	0	07:30 AM	0	141	18	159
Peak Factor				0.919				0.900									0.877		







Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	311	1076	771	23	162	141
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.93	0.93	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	

Intersection Summary

TRAFFICCOUNT, INC.

PMB 195 4820 YELM HWY SE STE B

LACEY, WA 98503

360-491-8116

WOODINVILLE, WASHINGTON  
NE WOODINVILLE WAY  
NE WOODINVILLE-DUVALL RD  
JC# 06A TPG04335M

File Name : TPG33606A  
Site Code : 00000006  
Start Date : 12/01/2004  
Page No : 1

Groups Printed- PRIMARY

Start Time	From North					NE WOODINVILLE WAY From East					NE WOODINVILLE-DUVALL RD From South					NE WOODINVILLE WAY From West					Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
07:00 AM	0	0	0	0	0	0	288	53	1	341	25	0	25	2	50	8	104	0	17	112	20	503	523
07:15 AM	0	0	0	0	0	0	227	52	2	279	17	0	6	0	23	16	139	0	6	155	8	457	465
07:30 AM	0	0	0	0	0	0	211	81	4	292	20	0	17	6	37	17	149	0	15	166	25	495	520
07:45 AM	0	0	0	0	0	0	177	101	5	278	21	0	13	1	34	10	114	0	2	124	8	436	444
Total	0	0	0	0	0	0	903	287	12	1190	83	0	61	9	144	51	506	0	40	557	61	1891	1952
08:00 AM	0	0	0	0	0	0	196	83	2	279	29	0	10	4	39	14	105	0	3	119	9	437	446
08:15 AM	0	0	0	0	0	0	181	81	4	262	47	0	13	4	60	18	128	0	2	146	10	468	478
08:30 AM	0	0	0	0	0	0	198	96	7	294	29	0	21	3	50	14	123	0	4	137	14	481	495
08:45 AM	0	0	0	0	0	0	200	101	8	301	32	0	14	1	46	23	95	0	1	118	10	465	475
Total	0	0	0	0	0	0	775	361	21	1136	137	0	58	12	195	69	451	0	10	520	43	1851	1894
Grand Total	0	0	0	0	0	0	1678	648	33	2326	220	0	119	21	339	120	957	0	50	1077	104	3742	3846
Approch %	0.0	0.0	0.0			0.0	72.1	27.9			64.9	0.0	35.1			11.1	88.9	0.0			2.7	97.3	
Total %	0.0	0.0	0.0		0.0	0.0	44.8	17.3		62.2	5.9	0.0	3.2		9.1	3.2	25.6	0.0		28.8			

Start Time	From North				NE WOODINVILLE WAY From East				NE WOODINVILLE-DUVALL RD From South				NE WOODINVILLE WAY From West				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	07:00 AM																
Volume	0	0	0	0	0	903	287	1190	83	0	61	144	51	506	0	557	1891
Percent	0.0	0.0	0.0		0.0	75.9	24.1		57.6	0.0	42.4		9.2	90.8	0.0		
07:00 Volume	0	0	0	0	0	288	53	341	25	0	25	50	8	104	0	112	503
Peak Factor																	0.940
High Int.	6:45:00 AM				07:00 AM				07:00 AM				07:30 AM				
Volume	0	0	0	0	0	288	53	341	25	0	25	50	17	149	0	166	
Peak Factor					0.872								0.720				0.839
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
By Approach	07:00 AM				07:00 AM				08:00 AM				07:15 AM				
Volume	0	0	0	0	0	903	287	1190	137	0	58	195	57	507	0	564	
Percent	-	-	-		0.0	75.9	24.1		70.3	0.0	29.7		10.1	89.9	0.0		
High Int.	-				07:00 AM				08:15 AM				07:30 AM				
Volume	-	-	-	-	-	288	53	341	47	0	13	60	17	149	0	166	
Peak Factor					0.872				0.813								0.849

# TRAFFICOUNT, INC.

PMB 195 4820 YELM HWY SE STE B

LACEY, WA 98503

360-491-8116

WOODINVILLE, WASHINGTON  
 NE WOODINVILLE WAY  
 NE WOODINVILLE-DUVALL RD  
 )C# 06A TPG04335M

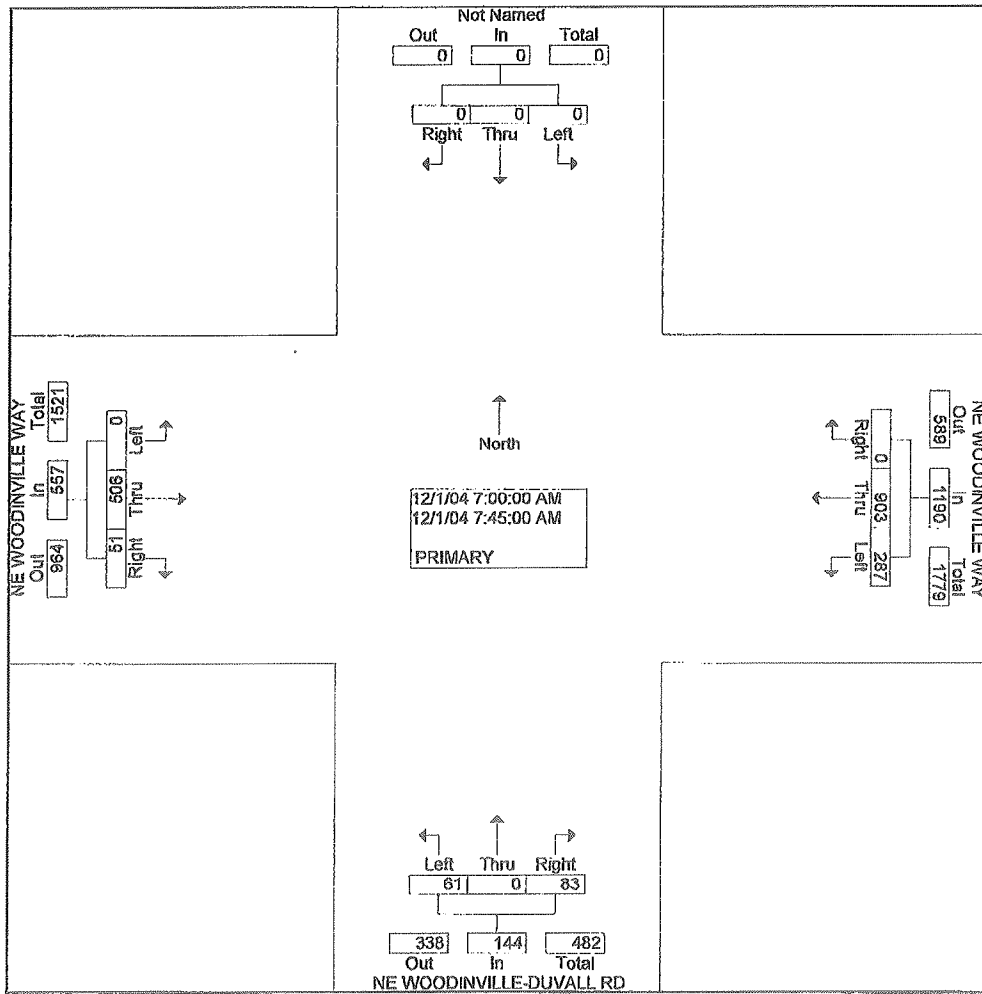
File Name : TPG33606A

Site Code : 0000006

Start Date : 12/01/2004

Page No : 2

Start Time	From North				NE WOODINVILLE WAY From East				NE WOODINVILLE-DUVALL RD From South				NE WOODINVILLE WAY From West				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	07:00 AM																
Volume	0	0	0	0	0	903	287	1190	83	0	61	144	51	506	0	557	1891
Percent	0.0	0.0	0.0	0	0.0	75.9	24.1		57.6	0.0	42.4		9.2	90.8	0.0		
07:00 Volume	0	0	0	0	0	288	53	341	25	0	25	50	8	104	0	112	503
Peak Factor																	0.940
High Int.	6:45:00 AM				07:00 AM				07:00 AM				07:30 AM				
Volume	0	0	0	0	0	288	53	341	25	0	25	50	17	149	0	166	
Peak Factor					0.872				0.720				0.839				



	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	1006	97	296	719	71	511
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.96	0.96	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
<b>Intersection Summary</b>						

TRAFFICCOUNT, INC.

PMB 195 4820 YELM HWY SE STE B

LACEY, WA 98503

360-491-8116

WOODINVILLE, WASHINGTON  
 WOODINVILLE-SNOHOMISH RD  
 NE 195TH ST/ NE WOODINVILLE WAY  
 LOC# 07A TPG04335M

File Name : TPG33607A  
 Site Code : 00000007  
 Start Date : 12/01/2004  
 Page No : 1

Groups Printed- PRIMARY

Start Time	WOODINVILLE-SNOHOMISH RD From North					NE WOODINVILLE WAY From East					WOODINVILLE-SNOHOMISH RD From South					NE 195TH ST From West					Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
07:00 AM	18	89	28	20	135	8	263	1	11	272	1	24	48	5	73	42	149	40	33	231	69	711	780
07:15 AM	21	107	24	16	152	9	224	1	5	234	3	33	54	13	90	45	141	40	12	226	46	702	748
07:30 AM	20	78	29	13	127	13	198	4	14	215	4	43	32	16	79	43	177	51	15	271	58	692	750
07:45 AM	21	84	33	18	138	13	215	8	10	236	8	33	16	9	57	56	180	51	12	287	49	718	767
Total	80	358	114	67	552	43	900	14	40	957	16	133	150	43	299	186	647	182	72	1015	222	2823	3045
08:00 AM	24	105	22	16	151	9	170	3	9	182	3	31	19	9	53	53	193	50	12	296	46	682	728
08:15 AM	23	77	23	9	123	9	191	4	10	204	3	24	32	6	59	38	167	43	9	248	34	634	668
08:30 AM	19	100	26	8	145	11	166	5	7	182	5	29	26	7	60	57	142	35	21	234	43	621	664
08:45 AM	24	101	24	17	149	14	190	10	13	214	4	29	30	6	63	60	142	38	16	240	52	666	718
Total	90	383	95	50	568	43	717	22	39	782	15	113	107	28	235	208	644	166	58	1018	175	2603	2778
Grand Total	170	741	209	117	1120	86	1617	36	79	1739	31	246	257	71	534	394	1291	348	130	2033	397	5426	5823
Approch %	15.2	66.2	18.7			4.9	93.0	2.1			5.8	46.1	48.1			19.4	63.5	17.1					
Total %	3.1	13.7	3.9		20.6	1.6	29.8	0.7		32.0	0.6	4.5	4.7		9.8	7.3	23.8	6.4		37.5	6.8	93.2	

Start Time	WOODINVILLE-SNOHOMISH RD From North				NE WOODINVILLE WAY From East				WOODINVILLE-SNOHOMISH RD From South				NE 195TH ST From West				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection 07:00 AM																	
Volume	80	358	114	552	43	900	14	957	16	133	150	299	186	647	182	1015	2823
Percent	14.5	64.9	20.7		4.5	94.0	1.5		5.4	44.5	50.2		18.3	63.7	17.9		
07:45 Volume	21	84	33	138	13	215	8	236	8	33	16	57	56	180	51	287	718
Peak Factor																	0.983
High Int.	07:15 AM				07:00 AM				07:15 AM				07:45 AM				
Volume	21	107	24	152	8	263	1	272	3	33	54	90	56	180	51	287	
Peak Factor				0.908				0.880				0.831				0.884	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
By Approach 07:15 AM																	
Volume	86	374	108	568	43	900	14	957	16	133	150	299	190	717	195	1102	
Percent	15.1	65.8	19.0		4.5	94.0	1.5		5.4	44.5	50.2		17.2	65.1	17.7		
High Int.	07:15 AM				07:00 AM				07:15 AM				08:00 AM				
Volume	21	107	24	152	8	263	1	272	3	33	54	90	53	183	50	296	
Peak Factor				0.934				0.880				0.831				0.931	

# TRAFFICCOUNT, INC.

PMB 195 4820 YELM HWY SE STE B

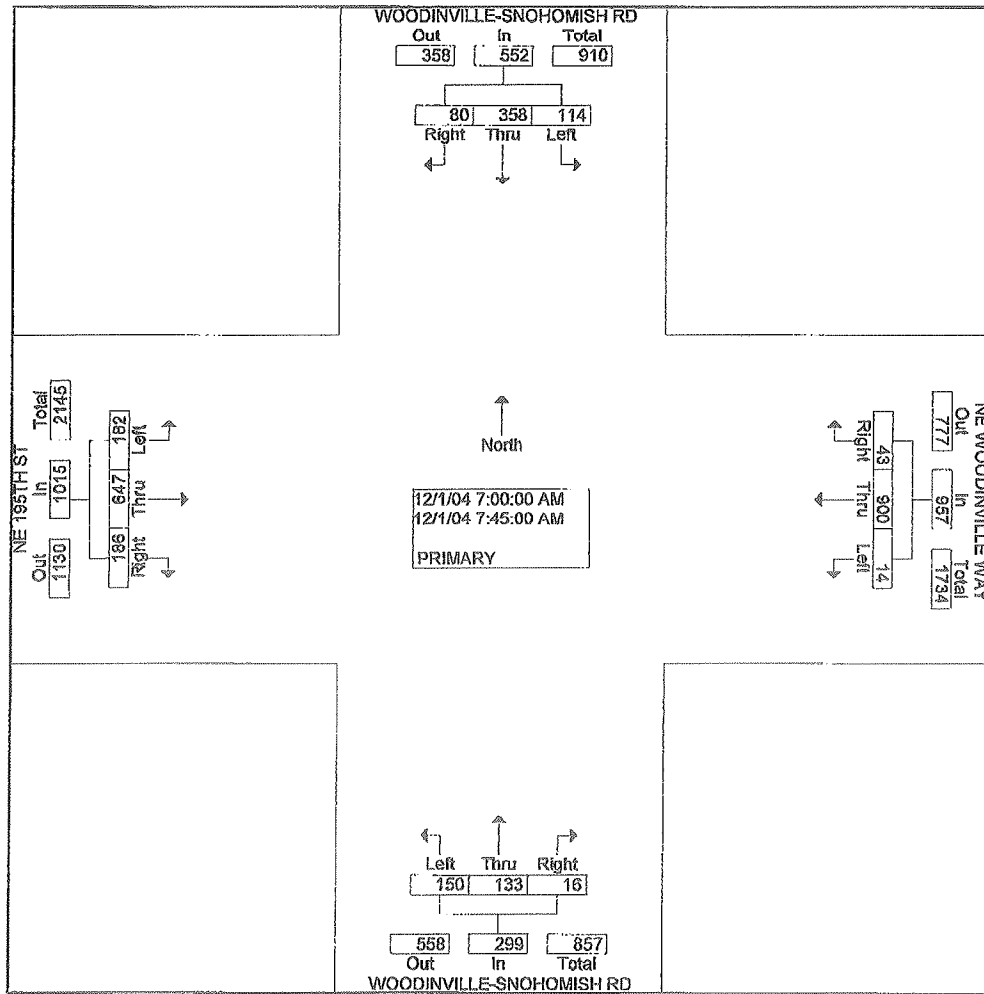
LACEY, WA 98503

360-491-8116

WOODINVILLE, WASHINGTON  
 WOODINVILLE-SNOHOMISH RD  
 NE 195TH ST/ NE WOODINVILLE WAY  
 JC# 07A TPG04335M

File Name : TPG33607A  
 Site Code : 00000007  
 Start Date : 12/01/2004  
 Page No : 2

Start Time	WOODINVILLE-SNOHOMISH RD From North				NE WOODINVILLE WAY From East				WOODINVILLE-SNOHOMISH RD From South				NE 195TH ST From West				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	07:00 AM																
Volume	80	358	114	552	43	900	14	957	16	133	150	299	186	647	182	1015	2823
Percent	14.5	64.9	20.7		4.5	94.0	1.5		5.4	44.5	50.2		18.3	63.7	17.9		
07:45 Volume	21	84	33	138	13	215	8	236	8	33	16	57	56	180	51	287	718
Peak Factor	0.983																
High Int.	07:15 AM				07:00 AM				07:15 AM				07:45 AM				
Volume	21	107	24	152	8	263	1	272	3	39	54	90	56	180	51	287	
Peak Factor	0.908								0.831				0.884				



TRAFFICOUNT, INC.

PMB 195 4820 YELM HWY SE STE B

LACEY, WA 98503

360-491-8116

File Name : TPG06401P

Site Code : 0000001

Start Date : 03/04/2004

Page No : 1

WOODINVILLE, WASHINGTON  
NE 195TH ST  
WOODINVILLE-SNOHOMISH RD  
LOC# 01 TPG04064M

Groups Printed- PRIMARY

Start Time	NE 195TH ST From North					WOODINVILLE-SNOHOMISH RD From East					NE 195TH ST From South					WOODINVILLE-SNOHOMISH RD From West					Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total	Right	Thru	Left	Truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
04:00 PM	45	63	8	4	116	19	164	11	9	194	12	122	79	5	213	44	149	19	11	212	29	735	764
04:15 PM	62	67	15	9	144	21	173	8	11	202	12	102	71	9	185	44	172	30	7	246	36	777	815
04:30 PM	101	59	19	4	179	17	187	19	5	223	8	97	87	4	192	53	181	14	10	248	23	842	865
04:45 PM	46	82	29	4	157	17	159	9	4	185	10	89	71	6	170	52	200	15	5	267	19	779	798
Total	254	271	71	21	596	74	683	47	29	804	42	410	308	24	760	193	702	78	33	973	107	3133	3240
05:00 PM	54	71	14	4	139	22	192	10	5	224	11	124	82	10	217	58	178	11	4	247	23	827	850
05:15 PM	29	72	7	1	108	24	166	10	6	200	7	99	75	4	181	42	168	14	8	224	19	713	732
05:30 PM	37	52	16	2	105	17	157	14	4	188	5	100	80	4	185	52	202	7	5	261	15	739	754
05:45 PM	26	72	14	1	112	16	122	5	1	143	11	115	67	3	193	64	178	10	7	252	12	700	712
Total	146	267	51	8	464	79	637	39	16	755	34	438	304	21	776	216	726	42	24	984	69	2979	3048
Grand Total	400	538	122	29	1060	153	1320	86	45	1559	76	848	612	45	1536	409	1428	120	57	1957	176	6112	6288
Approch %	37.7	50.8	11.5			9.8	84.7	5.5			4.9	55.2	39.8			20.9	73.0	6.1					
Total %	6.5	8.8	2.0		17.3	2.5	21.6	1.4		25.5	1.2	13.9	10.0		25.1	6.7	23.4	2.0		32.0	2.8	97.2	

Start Time	NE 195TH ST From North					WOODINVILLE-SNOHOMISH RD From East					NE 195TH ST From South					WOODINVILLE-SNOHOMISH RD From West					Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total					
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:15 PM																				
Volume	263	279	77	619	77	711	46	834	41	412	311	764	207	731	70	1008	3225				
Percent	42.5	45.1	12.4	9.2	85.3	5.5	5.4	53.9	40.7	20.5	72.5	6.9	0.958								
04:30 Volume	101	59	19	179	17	187	19	223	8	97	87	192	53	181	14	248	812				
Peak Factor																					
High Int.	04:30 PM					05:00 PM					05:00 PM					04:45 PM					
Volume	101	59	19	179	22	192	10	224	11	124	82	217	52	200	15	267	0.944				
Peak Factor	0.865					0.931					0.880					0.944					

Start Time	NE 195TH ST From North					WOODINVILLE-SNOHOMISH RD From East					NE 195TH ST From South					WOODINVILLE-SNOHOMISH RD From West					Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total					
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
By Approach	04:15 PM					04:15 PM					05:00 PM					04:15 PM					
Volume	263	279	77	619	77	711	46	834	34	438	304	776	207	731	70	1008					
Percent	42.5	45.1	12.4	9.2	85.3	5.5	4.4	56.4	39.2	20.5	72.5	6.9	0.944								
High Int.	04:30 PM					05:00 PM					05:00 PM					04:45 PM					
Volume	101	59	19	179	22	192	10	224	11	124	82	217	52	200	15	267					
Peak Factor	0.865					0.931					0.894					0.944					

**TRAFFICOUNT, INC.**

PMB 195 4820 YELM HWY SE STE B

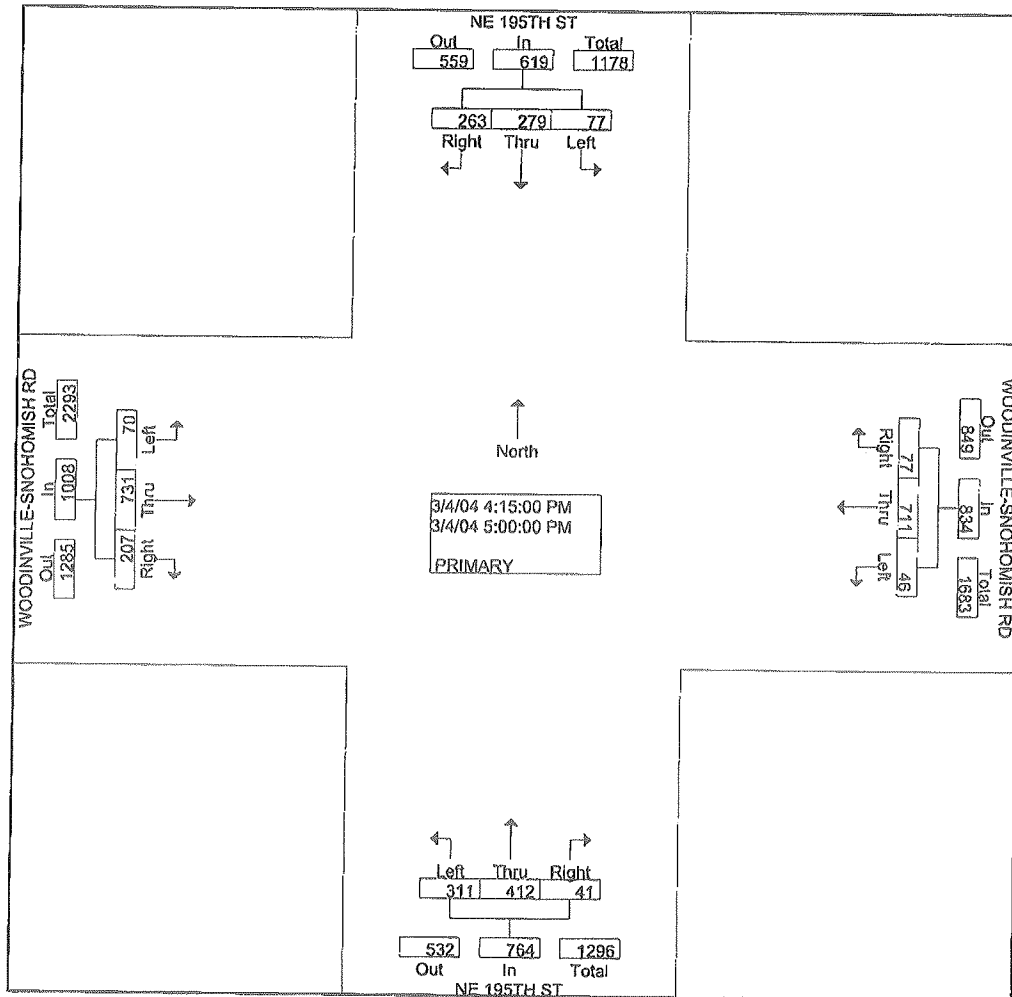
LACEY, WA 98503

360-491-8116

WOODINVILLE, WASHINGTON  
195TH ST  
WOODINVILLE-SNOHOMISH RD  
LOC# 01 TPG04064M

File Name : TPG06401P  
Site Code : 0000001  
Start Date : 03/04/2004  
Page No : 2

Start Time	NE 195TH ST From North				WOODINVILLE-SNOHOMISH RD From East				NE 195TH ST From South				WOODINVILLE-SNOHOMISH RD From West				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	04:15 PM																
Volume	263	279	77	619	77	711	46	834	41	412	311	764	207	731	70	1008	3225
Percent	42.5	45.1	12.4		9.2	85.3	5.5		5.4	53.9	40.7		20.5	72.5	6.9		
04:30 Volume	101	59	19	179	17	187	19	223	8	97	87	192	53	181	14	248	642
Peak Factor																	0.958
High Int.	04:30 PM				05:00 PM				05:00 PM				04:45 PM				
Volume	101	59	19	179	22	192	10	224	11	124	82	217	52	200	15	267	
Peak Factor	0.865				0.931				0.880				0.944				





## Exhibit T-2

### Highway Capacity Manual, 2000

**Signalized intersection** level of service (LOS) is defined in terms of the average total vehicle delay of all movements through an intersection. Vehicle delay is a method of quantifying several intangible factors, including driver discomfort, frustration, and lost travel time. Specifically, LOS criteria are stated in terms of average delay per vehicle during a specified time period (for example, the PM peak hour). Vehicle delay is a complex measure based on many variables, including signal phasing (i.e., progression of movements through the intersection), signal cycle length, and traffic volumes with respect to intersection capacity. Table 1 shows LOS criteria for signalized intersections, as described in the *Highway Capacity Manual* (Transportation Research Board, Special Report 209, 2000).

**Table 1. Level of Service Criteria for Signalized Intersections**

Level of Service	Average Control Delay (sec/veh)	General Description (Signalized Intersections)
A	≤10	Free Flow
B	>10 - 20	Stable Flow (slight delays)
C	>20 - 35	Stable flow (acceptable delays)
D	>35 - 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55 - 80	Unstable flow (intolerable delay)
F	>80	Forced flow (jammed)

**Unsignalized intersection** LOS criteria can be further reduced into two intersection types: all-way stop-controlled and two-way stop-controlled. All-way, stop-controlled intersection LOS is expressed in terms of the average vehicle delay of all of the movements, much like that of a signalized intersection. Two-way, stop-controlled intersection LOS is defined in terms of the average vehicle delay of an individual movement(s). This is because the performance of a two-way, stop-controlled intersection is more closely reflected in terms of its individual movements, rather than its performance overall. For this reason, LOS for a two-way, stop-controlled intersection is defined in terms of its individual movements. With this in mind, total average vehicle delay (i.e., average delay of all movements) for a two-way, stop-controlled intersection should be viewed with discretion. Table 2 shows LOS criteria for unsignalized intersections (both all-way and two-way, stop-controlled).

**Table 2. Level of Service Criteria for Unsignalized Intersections**

Level of Service	Average Control Delay (sec/veh)
A	0 - 10
B	>10 - 15
C	>15 - 25
D	>25 - 35
E	>35 - 50
F	>50

## Exhibit T-3a Queue Observations and Calibration

WOODINVILLE, WASHINGTON  
156TH AVE NE  
WOODINVILLE-DUVALL RD

TPG04335M  
SB QUEUE OBSERVATIONS

TIME	SB RIGHT TURN	SB LEFT TURN
7:00:05	6	2
7:01:58	9	1
7:03:44	5	3
7:05:33	3	5
7:07:25	11	2
7:09:13	6	4
7:11:00	5	0
7:12:55	6	2
7:14:40	7	2
7:16:35	10	4
7:18:25	4	2
7:20:20	3	4
7:22:05	5	3
7:23:55	0	4
7:25:45	6	1
7:27:30	2	3
7:29:23	1	5
7:31:11	4	5
7:33:03	2	6
7:34:54	5	7
7:36:44	4	4
7:38:36	0	2
7:40:22	7	7
7:42:15	4	7
7:44:03	4	3
7:45:54	3	5
7:47:44	3	6
7:49:34	1	7
7:51:24	4	2
7:53:12	0	3
7:55:00	0	2
7:56:55	0	4
7:58:55	0	1
8:00:35	6	1
8:02:22	2	5
8:04:13	1	3
8:06:04	1	4
8:07:53	5	2
8:09:44	3	3
8:11:34	3	5
8:13:25	5	2
8:15:15	2	2
8:17:05	0	2
8:18:55	1	7
8:20:45	0	6
8:22:35	3	3
8:24:23	2	3
8:26:13	9	5
8:28:05	1	5
8:29:55	4	0
8:31:45	8	1
8:33:35	5	2
8:35:23	5	6
8:37:14	2	3
8:39:03	4	4
8:40:55	2	1
8:42:44	2	2
8:44:33	4	1
8:46:23	1	7
8:48:13	8	3
8:50:04	5	2
8:51:55	2	2
8:53:45	5	1
8:55:33	2	5
8:57:23	1	4
8:59:13	2	0
95th% Queue	<b>8.75</b>	<b>7</b>

## Exhibit T-3b Queue Observations and Calibration

	EXISTING				NO ACTION		PROPOSED ACTION		R-1 ZONING ALT.		ATTACHED HOUSING ALT.		
	Existing AM Peak Synchro 95th% (feet)	Existing AM Peak 95th % Observed (vehicles)	Existing AM Peak 95th % Observed (feet) <sup>1</sup>	Calibration Factor	Calibrated Existing 95th% Queue (feet)	Synchro 95th% Queue	Calibrated 95th% Queue (feet)	Synchro 95th% Queue	Calibrated 95th% Queue (feet)	Synchro 95th% Queue	Calibrated 95th% Queue (feet)	Synchro 95th% Queue	Calibrated 95th% Queue (feet)
SB Left	101	8.75	175	1.73	175	108	187	122	211	112	194	118	204
SB Right	138	7	140	1.01	140	147	149	170	172	154	156	166	168

<sup>1</sup> - Based on on 20 foot average vehicle length/spacing (per field observations)

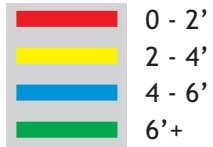
Exhibit T-4

KING COUNTY  
RECOMMENDED LINK TYPE CAPACITY VALUES

TYPE	Number of Lanes	Area	Pavement Type	Width of Traffic Lane	Intersection Control	Other Information	ADT Capacity		Peak Cap. One Direc.
							Two Direc.	One Direc.	
1	Centroid connector						100,000	50,000	5,000
<b>Arterials</b>									
2	Two Lane	Rural	Oil mat Paved	Less than 20'	Stop sign	Minimal shoulders	7,400	3,700	740
3	Two Lane	Rural or Urban	Paved	18'-20'	Stop sign	Minimal shoulders	9,520	4,760	740
4	Two Lane	Rural or Urban	Paved	20'-22'	Any type	Long Dist. Btw Cont. Intersec.	19,000	9,500	1,240
5	Two Lane	Urban	Paved	22'-24'	Stop Sign	Adequate Shoulders	11,620	5,810	760
6	Two Lane	Urban	Paved	22'-24'	Traffic Signal	Adequate Shoulders	13,200	6,600	760
7	Two Lane	Urban	Paved	22'-24'	Any Type	Long Dist. Btw Cont. Intersec.	21,120	10,560	1,320
8	Two Lane/ turn channel	Urban	Paved	32'-36' at intersection	Traffic Signal	Channel at Intersection	16,900	8,450	1,030
9	Three Lane	Urban	Paved	32'-40'	Traffic Signal	Two Way Turn Lane	19,220	9,610	1,030
10	Four Lane	Urban	Paved	40'-44'	Traffic Signal		25,380	12,690	1,930
11	Four Lane	Urban	Paved	40'-48'	Any Type	Long Dist. Btw Cont. Intersec.	38,000	19,000	2,600
12	Four Lane/ turn channel	Urban	Paved	56'-60' at intersection	Traffic Signal		30,560	15,280	2,160
13	Five Lane Section	Urban	Paved	56'-60'	Traffic Signal		34,240	17,120	2,160
14	Six Lane	Urban	Paved	60'-72'	Traffic Signal		35,880	17,940	2,850
15	Six Lane/turn chan.	Urban	Paved	78'-84'	Traffic Signal		40,100	20,050	3,060
16	Four Lane/turn chan. Transit/carpool	Urban	Paved	60'-72'	Traffic Signal		31,280	15,640	2,450
<b>Freeways</b>									
17	Two Lane controlled access	Urban	Paved	24'	Interchange		27,500	13,750	1,925
18	Four Lane frwy	Urban	Paved	48'	Interchange	Full access control	72,600	36,300	3,960
19	Six Lane frwy	Urban	Paved	72'	Interchange	Full access control	103,500	51,750	6,210
20	Eight Lane frwy	Urban	Paved	96'	Interchange	Full access control	138,000	69,000	8,280
21	Four Lane frwy/ w/Transit/carpool	Urban	Paved	60' include shoulder	Interchange	Full access control	74,940	37,470	5,460
22	Six Lane frwy w/ Transit/carpool	Urban	Paved	88' include shoulder	Interchange	Full access control	105,040	52,520	7,710
<b>External Links</b>									
23	Four-Six Lane Arterial	Urban	Paved	88'+	Traffic Signal	20-25 MPH	50,660	25,330	3,800
24	Two Lane Arterial	Rural	Paved		Long Distance		19,000	9,500	1,240
25	Two Lane Arterial	Rural	Paved				9,520	4,760	740
26	Two Lane Arterial	Urban	Paved				13,720	6,860	760
27	Four Lane Arterial	Rural	Paved		Long Distance		38,000	19,000	7,600
28	Four Lane Arterial	Rural	Paved				25,380	12,690	1,930
29	Four Lane Arterial	Rural	Paved				33,720	16,860	2,160
30	Four Lane Arterial	Urban	Paved				42,200	21,100	3,060
31	Six Lane Arterial	Urban	Paved				50,660	25,330	3,800
31	Eight Lane Arterial Freeway on/off	Urban	Paved				230,000	115,000	8,280

Source: King County Department of Transportation, Transportation System Planning Section, as reviewed and recommended by the KJS & Associates in 1995.

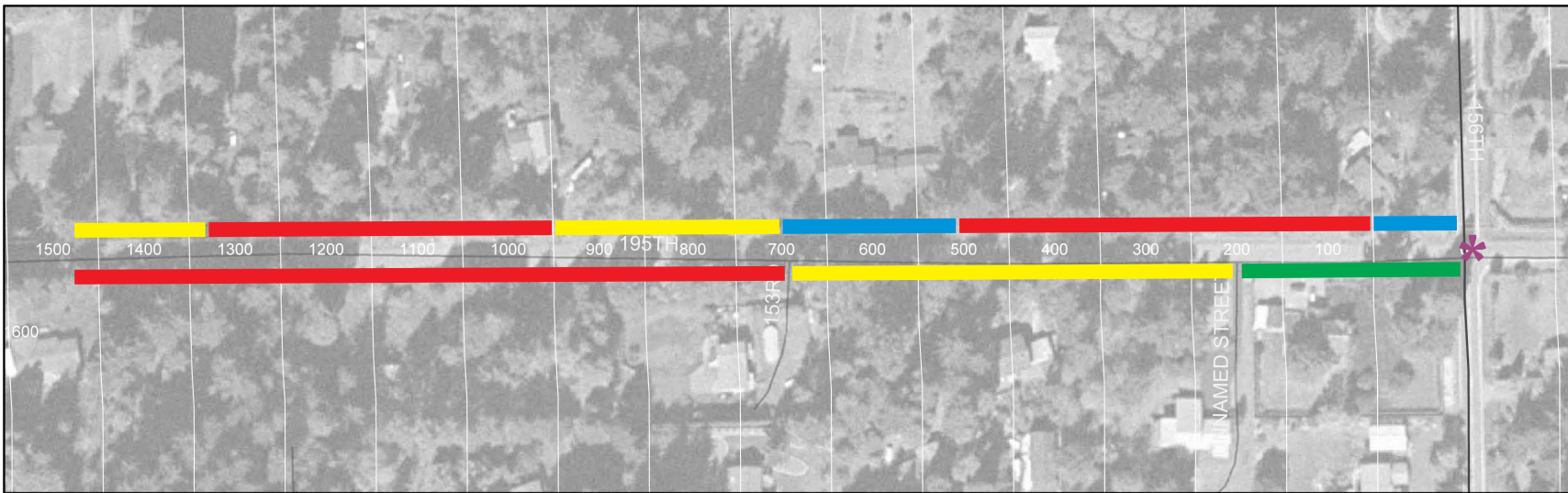
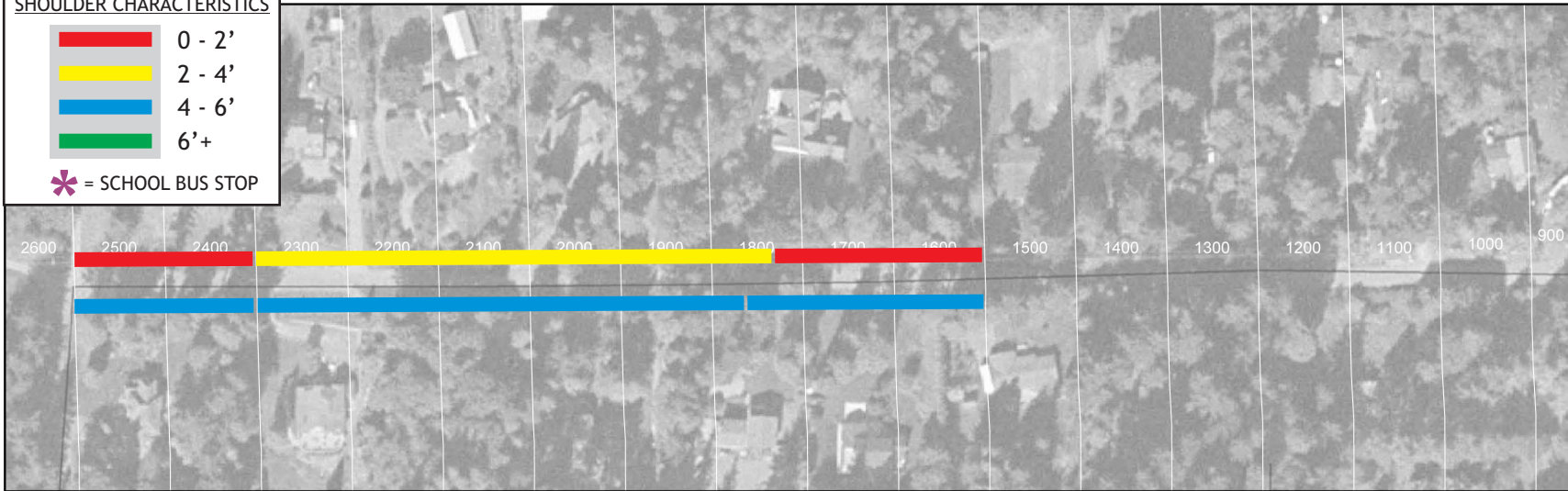
SHOULDER CHARACTERISTICS



\* = SCHOOL BUS STOP



NOT TO SCALE



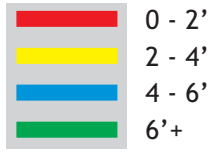
**Exhibit T-5a**  
Roadway Shoulder Inventory (195th Street)

Wood Trails



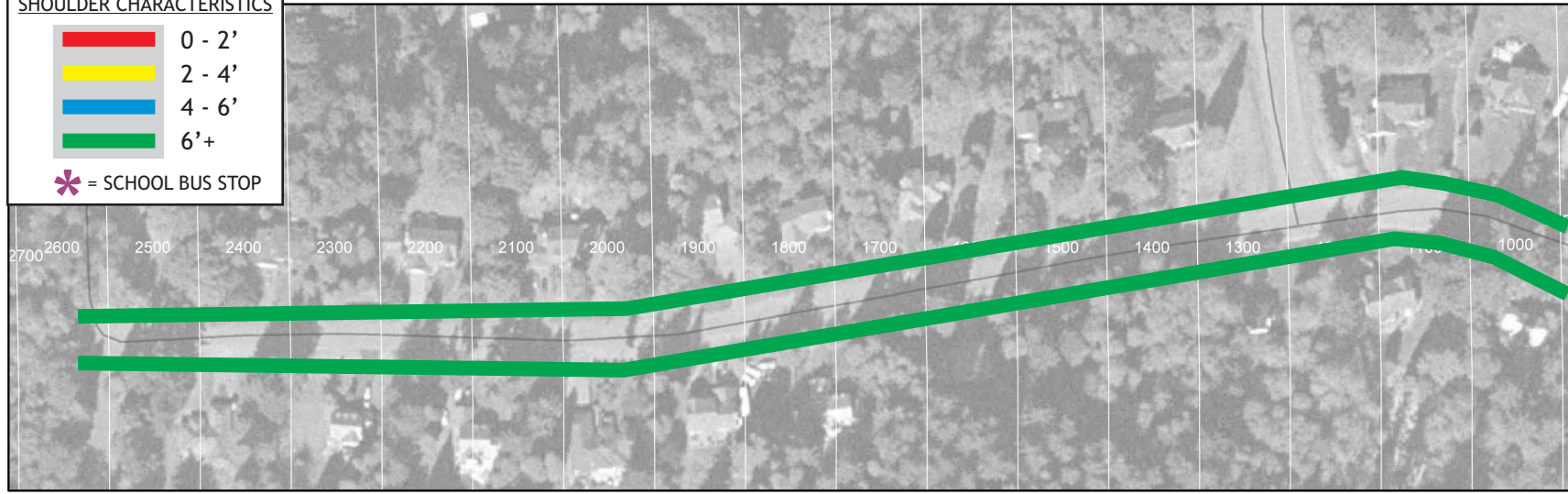
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**SHOULDER CHARACTERISTICS**



✱ = SCHOOL BUS STOP

↑  
N  
NOT TO SCALE



**Exhibit T-5b**  
Roadway Shoulder Inventory (198th Street)

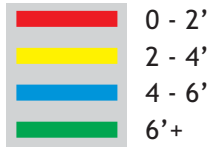
*Wood Trails & Montevallo*



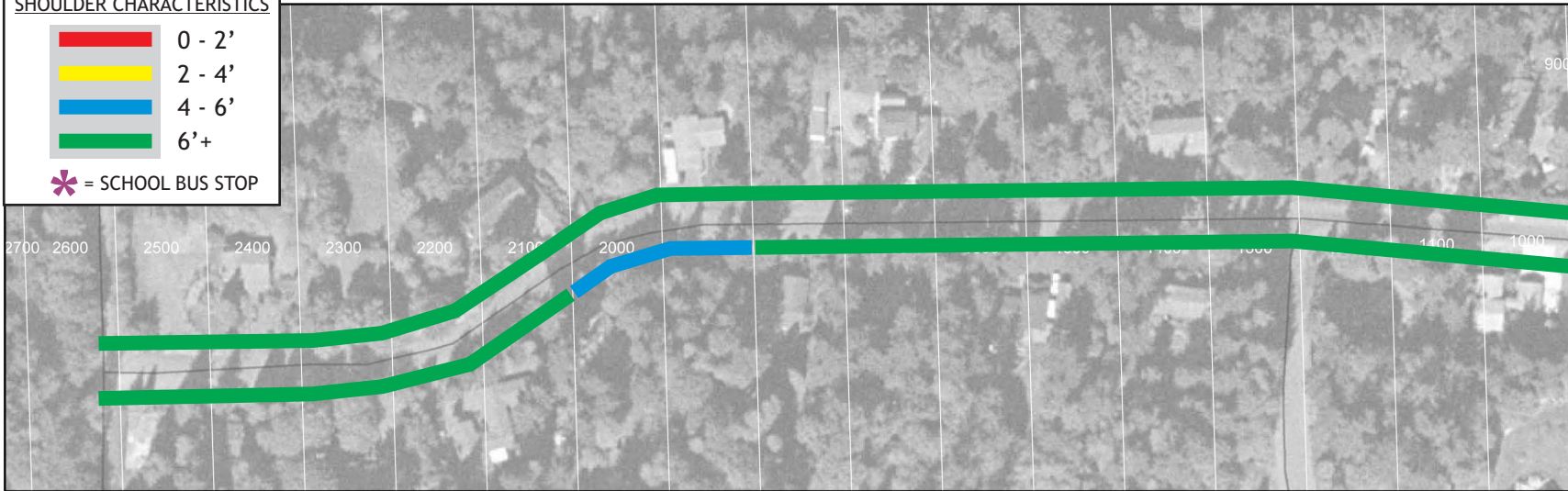
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**SHOULDER CHARACTERISTICS**



\* = SCHOOL BUS STOP



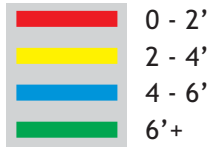
**Exhibit T-5c**  
**Roadway Shoulder Inventory (201st Street)**

*Wood Trails & Montevallo*



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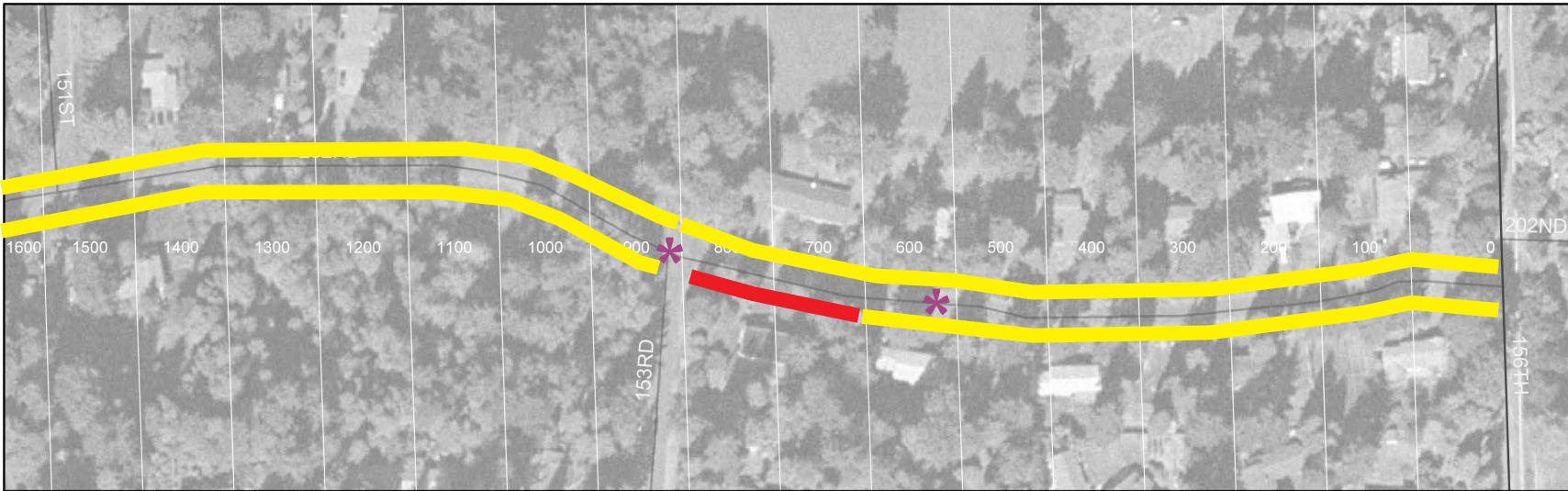
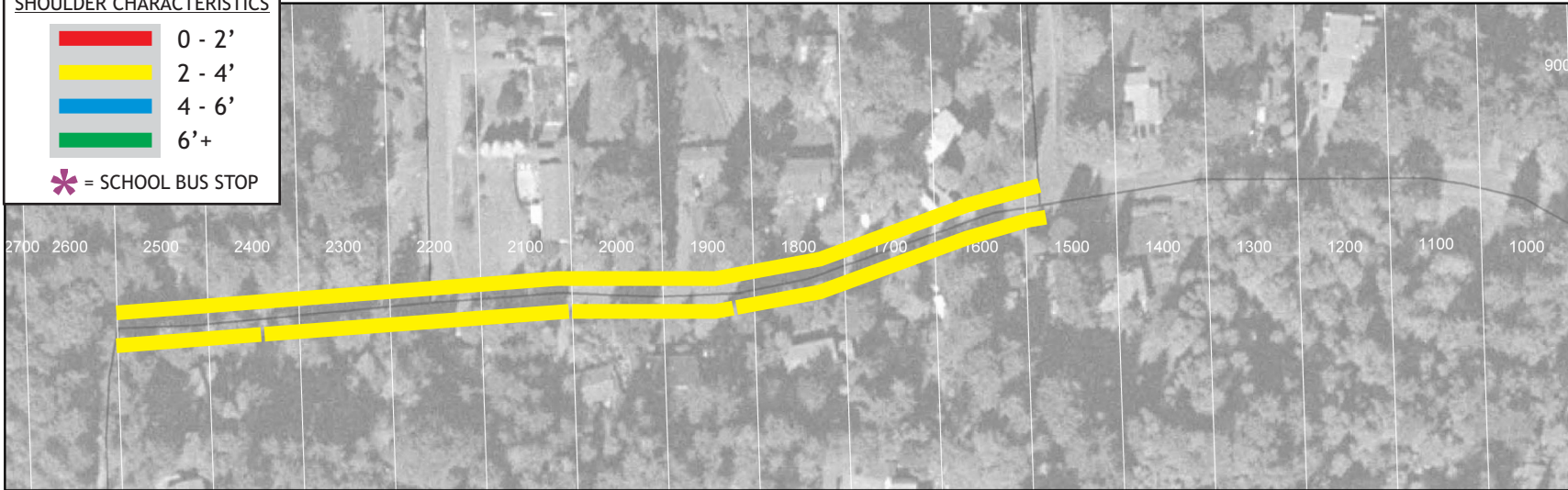
**SHOULDER CHARACTERISTICS**



✱ = SCHOOL BUS STOP



NOT TO SCALE



**Exhibit T-5d**  
Roadway Shoulder Inventory (202nd Street)

Wood Trails



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## EXHIBIT T-6: TECHNICAL MEMORANDUM

<b>To:</b>	File	<b>Date:</b>	February 15, 2005
<b>From:</b>	Mike Swenson, P.E., P.T.O.E. Brandon Moen, AICP	<b>TG:</b>	04007.00
<b>Subject:</b>	Wood Trails/Montevallo EIS: Sight Distance Conditions		

The purpose of this technical memorandum is to provide a summary of the stopping sight distance conditions of local residential roadways in the area of the proposed developments, particularly the roadways that could connect the Wood Trails site to 156<sup>th</sup> Avenue NE, including:

- NE 202<sup>nd</sup> Street
- NE 201<sup>st</sup> Street
- NE 198<sup>th</sup> Street
- NE 195<sup>th</sup> Street

The estimated stopping sight distance along each roadway is discussed below.

### Sight Distance

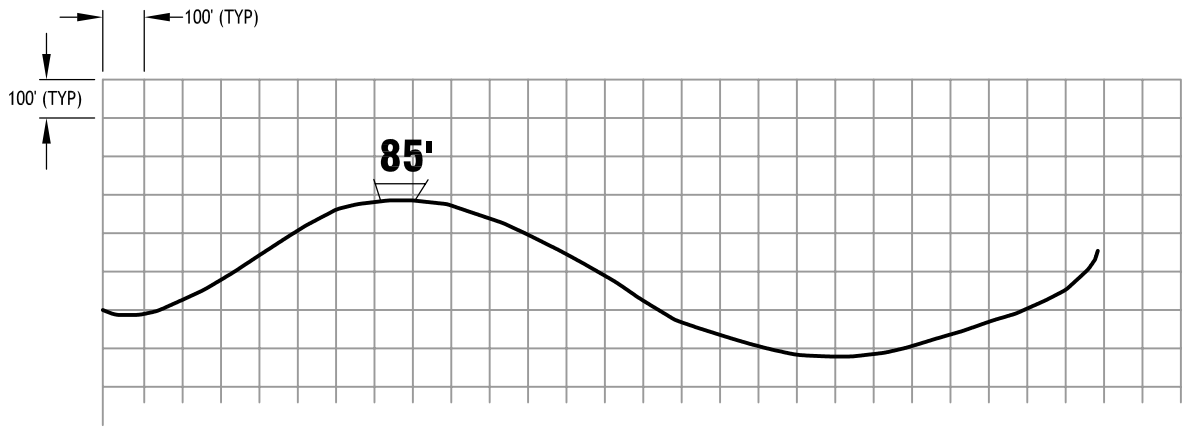
Stopping sight distance along NE 202<sup>nd</sup> Street, NE 201<sup>st</sup> Street, NE 198<sup>th</sup> Street, and NE 195<sup>th</sup> Street was calculated using information obtained through field collection efforts. Existing roadway profiles were estimated using Global Positioning System (GPS) technology. All four roadways were traveled multiple times while collecting GPS data using a handheld GPS unit. This GPS unit has an accuracy within one to two meters depending on the positioning of the satellites and current coverage. The roadway profiles and subsequent sight distance calculations reflect only the vertical alignment of the roadway. If a horizontal curve exists (such as on the west end of NE 201<sup>st</sup> Street) that would influence the SSD, it is not reflected in these calculations. Observations in the field indicated both horizontal curves and vertical curves at the west end of NE 201<sup>st</sup> Street.

The calculated sight distance measurements were then compared to City of Woodinville sight distance requirements, which are based on American Association of State Highways and Transportation Officials (AASHTO) standards. The design speed of the roadway used in the calculations was assumed to be the posted speed limit (25 mph) plus eight mph, per City of Woodinville standards. Using these assumptions, City of Woodinville stopping sight distance standards are met at all locations along NE 201<sup>st</sup> Street with the exception of the west end of the road, near the connection to the proposed development. Along NE 198<sup>th</sup> Street only one location, extending 85 feet, is shown to be deficient in the estimated stopping sight distance. Along NE 195<sup>th</sup> Street, one segment of 468 feet in length is shown to be deficient. Along NE 202<sup>nd</sup> Street, two segments are shown to be deficient, each extending 357 feet and 389 feet

in length. A graphical representation of the most restricted stopping sight distance location along NE 198<sup>th</sup> Street and NE 201<sup>st</sup> Street are shown in Figure C-5a, while Figure C-5b shows the same information for NE 195<sup>th</sup> Street and NE 202<sup>nd</sup> Street.

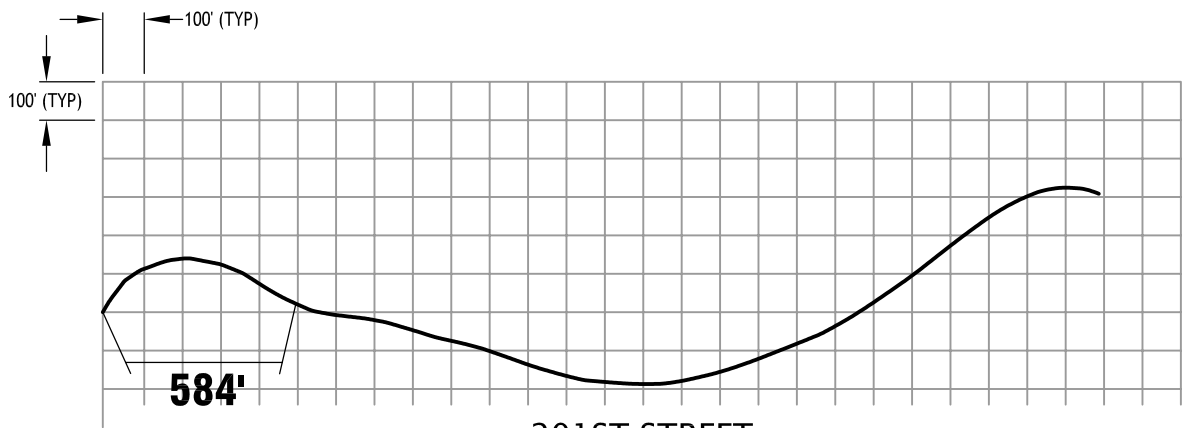
As noted, the roadway profiles generated for this analysis are not exact and were not surveyed. Thus, the precise location and extents of the sight distance restrictions are provided for general information only.

A review of historic accident records along each roadway over the past three complete years of which data is available (2001-2003), shows that two accidents were reported along these four roadways. However, neither accident appears to have been affected by sight distance limitations. One of the accidents involved a vehicle striking a pole, which likely wasn't affected by sight distance. The other accident occurred 150 feet west of the 156<sup>th</sup> Avenue NE/NE 201<sup>st</sup> Street intersection, which has not been identified as an area with a sight distance deficiency. Therefore, the accident records provided suggest that no accident history directly attributable to sight distance limitations exists along these four local roadways.



198TH STREET

← WEST EAST →



201ST STREET

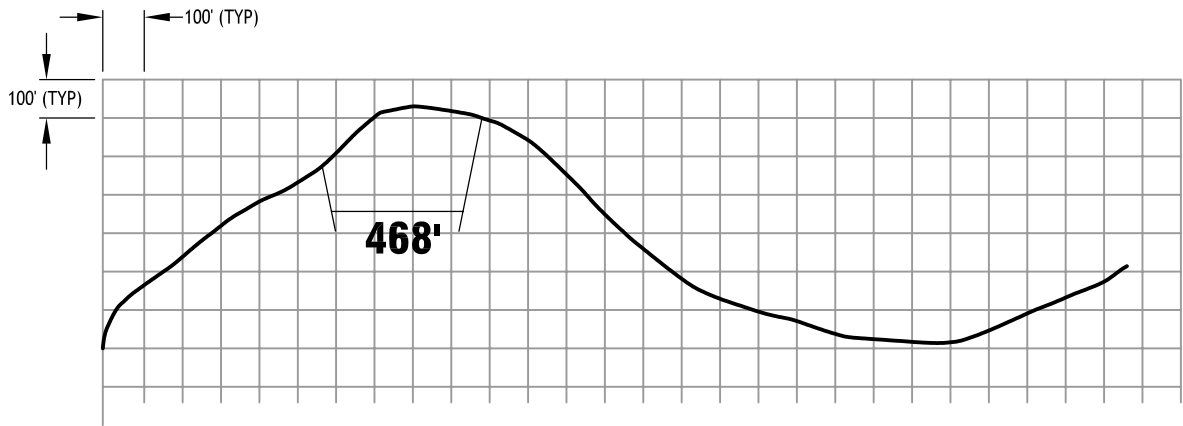
← WEST EAST →

**LEGEND**  
**XX'** = LENGTH OF ROADWAY WITH A SIGHT DISTANCE LIMITATION (FEET)



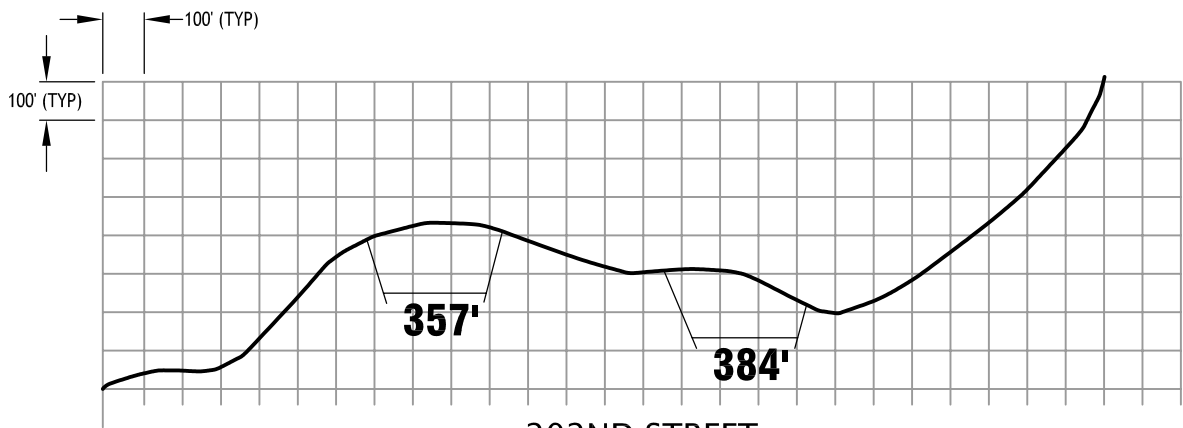
**Exhibit T-6a**  
 Stopping Sight Distance - Roadway Profiles  
 Wood Trails & Montevallo





195TH STREET

← WEST EAST →



202ND STREET

← WEST EAST →

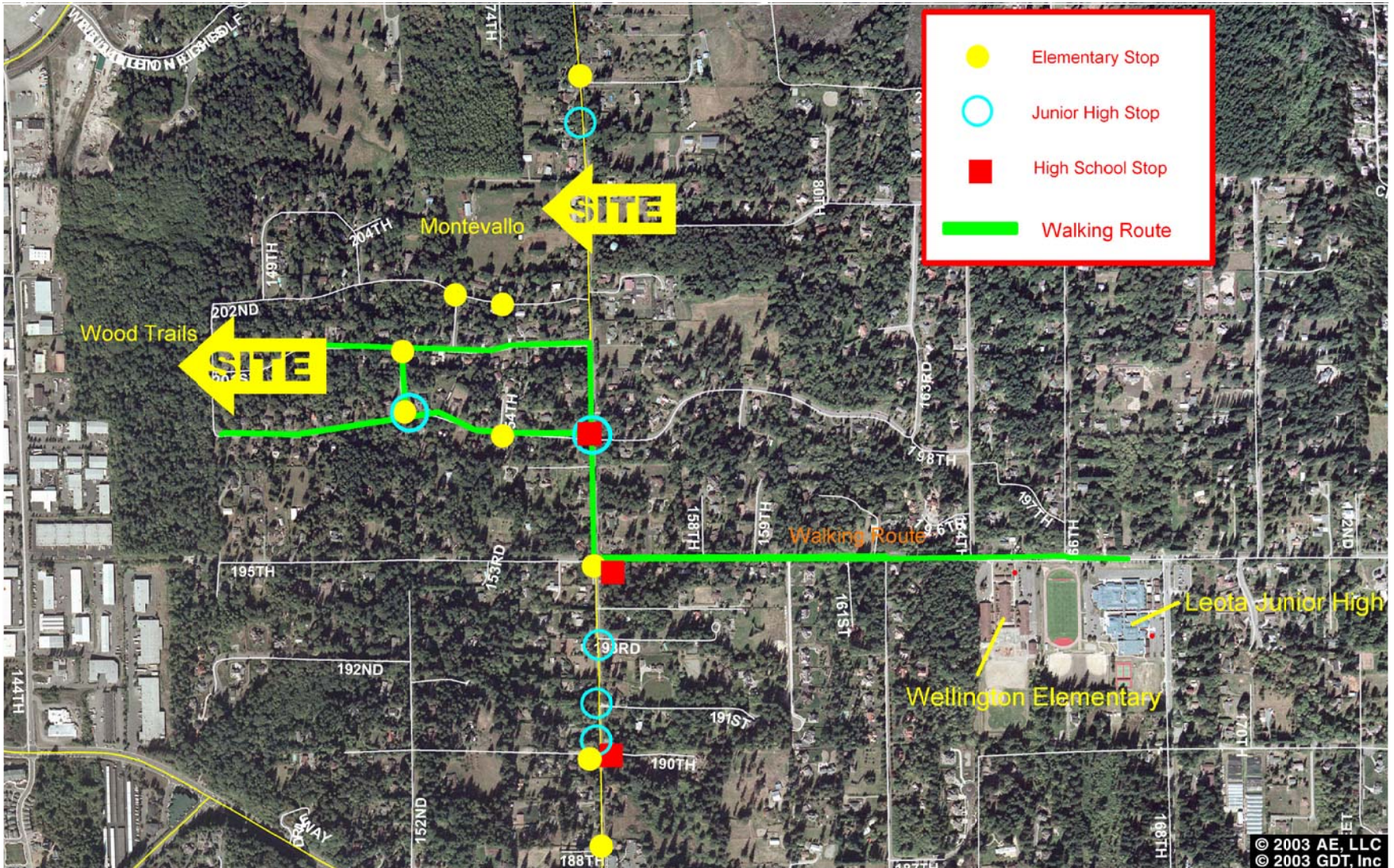
**LEGEND**  
**XX'** = LENGTH OF ROADWAY WITH A SIGHT DISTANCE LIMITATION (FEET)




**Exhibit T-6b**  
 Stopping Sight Distance - Roadway Profiles  
 Wood Trails & Montevallo







  
 NOT TO SCALE

# Exhibit T-7

## School Bus Stop Locations

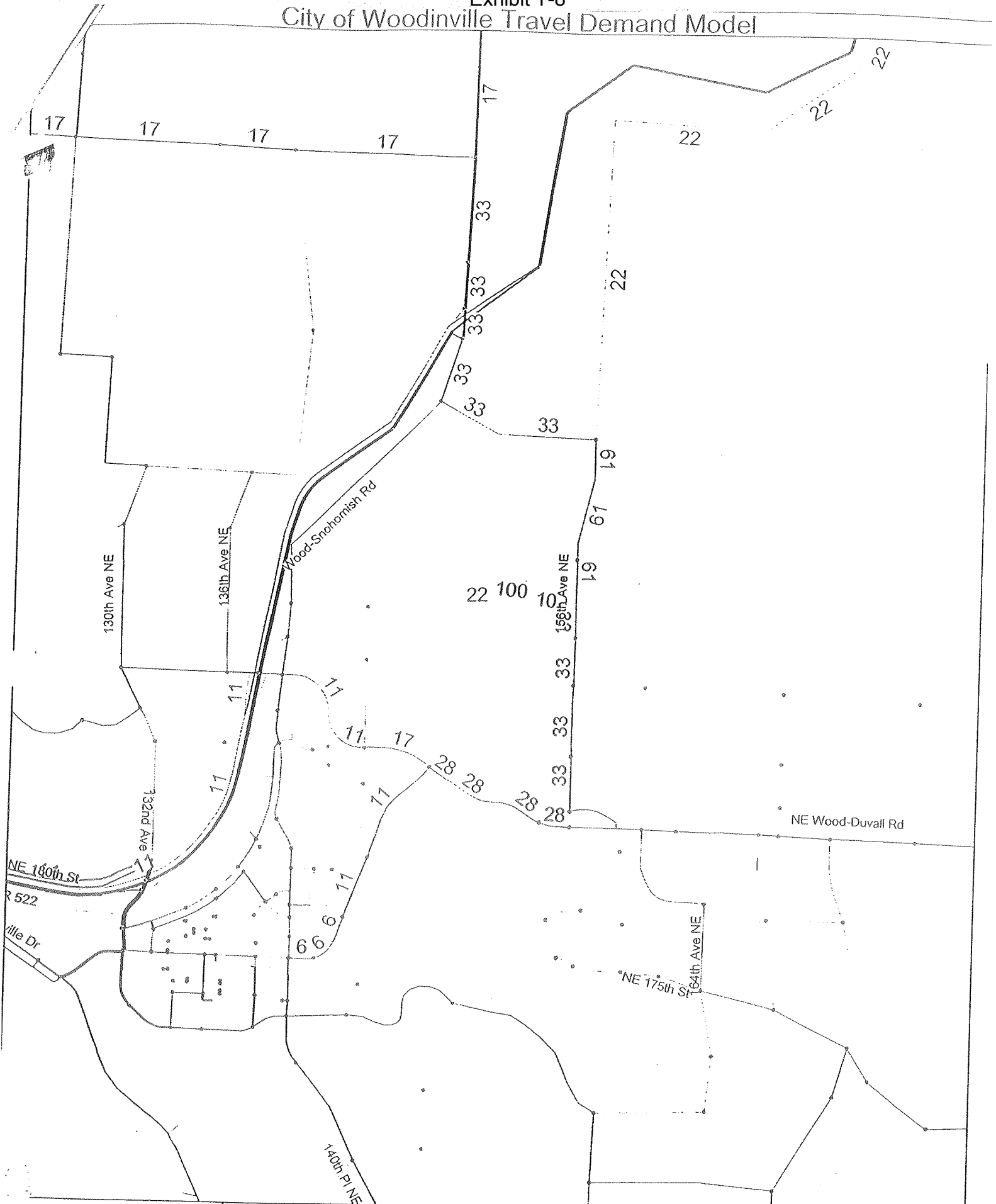
Wood Trails & Montevillo



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# City of Woodinville Travel Demand Model



VISUM 8.10 PTV AG

Transpo

WD\_Master\_2012HE (Wood

Date:01/23/04

2000 Travel Assignment

1: 16967





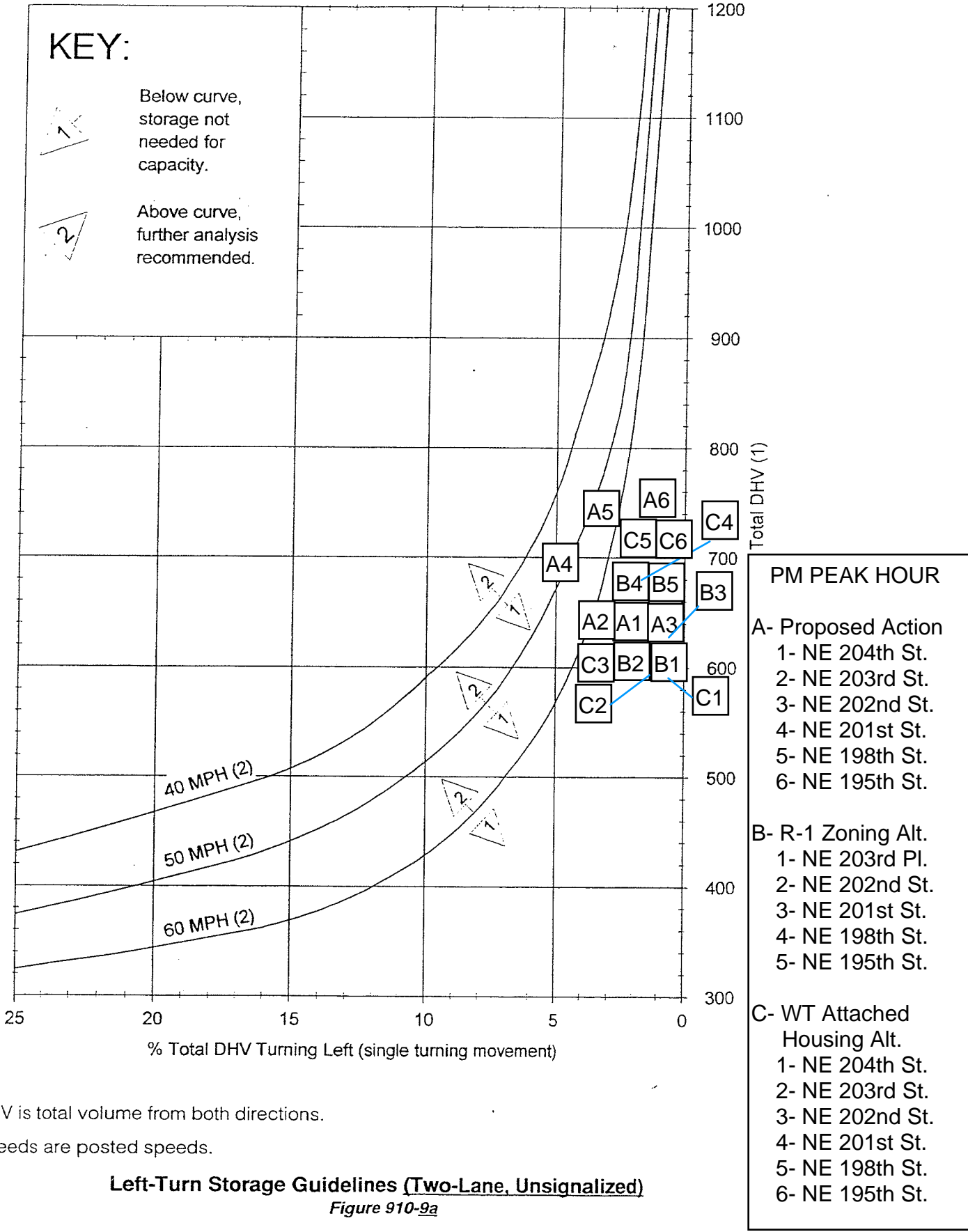
**EXHIBIT T-9: Development LOS Summary**

Weekday AM Peak Hour	20068 No Action Conditions			20068 with Proposed Action			20068 with R-1 Zoning			20068 with Attached Housing		
	LOS <sup>1</sup>	Delay <sup>2</sup>	WM or V/C <sup>3</sup>	LOS	Delay	WM OR V/C	LOS	Delay	WM OR V/C	LOS	Delay	WM OR V/C
156 <sup>th</sup> Ave NE/NE 203 <sup>rd</sup> Pl	B	10.0	WB App.	B	10.2	WB App.	B	10.7	EB App.	B	10.2	WB App.
156 <sup>th</sup> Ave NE/NE 202 <sup>nd</sup> St	B	10.1	EB App.	B	10.3	EB App.	B	10.2	EB App.	B	10.3	EB App.
156 <sup>th</sup> Ave NE/NE 201 <sup>st</sup> St	B	10.5	EB App.	B	11.1	EB App.	B	10.6	EB App.	B	10.9	EB App.
156 <sup>th</sup> Ave NE/NE 198 <sup>th</sup> St	B	11.7	WB App.	B	12.6	WB App.	B	11.9	WB App.	B	12.3	WB App.
156 <sup>th</sup> Ave NE/NE 195 <sup>th</sup> St	B	12.5	WB App.	B	13.1	WB App.	B	12.7	WB App.	B	13.1	WB App.
156 <sup>th</sup> Ave NE/NE Woodinville-Duvall Rd	C	20.5	0.79	C	21.6	0.82	C	20.9	0.80	C	21.4	0.81
NE Woodinville-Duvall Rd/NE Woodinville Wy	A	6.9	0.45	A	7.0	0.46	A	6.9	0.45	A	6.9	0.46
NE Woodinville-Snohomish Rd/NE 195 <sup>th</sup> St	C	29.8	0.91	C	30.0	0.91	C	29.8	0.91	C	30.0	0.91
Weekday PM Peak Hour	20068 No Action Conditions			20068 with Proposed Action			20068 with R-1 Zoning			20068 with Attached Housing		
	LOS <sup>1</sup>	Delay <sup>2</sup>	WM or V/C <sup>3</sup>	LOS	Delay	WM OR V/C	LOS	Delay	WM OR V/C	LOS	Delay	WM OR V/C
156 <sup>th</sup> Ave NE/NE 203 <sup>rd</sup> Pl	B	11.3	WB App.	B	11.7	WB App.	B	12.3	EB App.	B	11.5	WB App.
156 <sup>th</sup> Ave NE/NE 202 <sup>nd</sup> St	B	11.0	EB App.	B	11.4	EB App.	B	11.3	EB App.	B	11.5	EB App.
156 <sup>th</sup> Ave NE/NE 201 <sup>st</sup> St	B	11.3	EB App.	B	12.2	EB App.	B	11.5	EB App.	B	11.9	EB App.
156 <sup>th</sup> Ave NE/NE 198 <sup>th</sup> St	C	15.3	WB App.	C	17.9	WB App.	C	15.8	WB App.	C	16.9	WB App.
156 <sup>th</sup> Ave NE/NE 195 <sup>th</sup> St	C	15.3	WB App.	C	17.2	WB App.	C	15.9	WB App.	C	16.8	WB App.
<u>240<sup>th</sup> St. SE/75<sup>th</sup> Ave. SE</u>	<u>B</u>	<u>12.2</u>	<u>EB App.</u>	<u>B</u>	<u>12.7</u>	<u>EB App.</u>	<u>B</u>	<u>12.3</u>	<u>EB App.</u>	<u>B</u>	<u>12.5</u>	<u>EB App.</u>
156 <sup>th</sup> Ave NE/NE Woodinville-Duvall Rd	C	26.3	0.93	C	32.7	0.97	C	27.5	0.94	C	30.7	0.94
NE Woodinville-Duvall Rd/NE Woodinville Wy	C	28.8	0.83	C	30.3	0.85	C	29.2	0.83	C	29.9	0.85
NE Woodinville-Snohomish Rd/NE 195 <sup>th</sup> St	C	30.0	0.81	C	30.7	0.82	C	30.2	0.81	C	30.6	0.82
<u>240<sup>th</sup> St. SE/SR-9</u>	<u>B</u>	<u>11.5</u>	<u>0.51</u>	<u>B</u>	<u>12.0</u>	<u>0.52</u>	<u>B</u>	<u>11.6</u>	<u>0.52</u>	<u>B</u>	<u>11.8</u>	<u>0.52</u>

1. Level of Service.
2. Average vehicle delay (seconds).
3. Worst movement reported at unsignalized intersections; volume to capacity ratio at signalized intersections.

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Exhibit T-10



(1) DHV is total volume from both directions.  
 (2) Speeds are posted speeds.

**Left-Turn Storage Guidelines (Two-Lane, Unsignalized)**

Figure 910-9a

Equation 17-3 is also used for major-street left-turn movements

$$c_{p,x} = v_{c,x} \frac{e^{-v_{c,x}t_{c,x}/3600}}{1 - e^{-v_{c,x}t_{f,x}/3600}} \quad (17-3)$$

where

- $c_{p,x}$  = potential capacity of minor movement x (veh/h),
- $v_{c,x}$  = conflicting flow rate for movement x (veh/h),
- $t_{c,x}$  = critical gap (i.e., the minimum time that allows intersection entry for one minor-stream vehicle) for minor movement x (s), and
- $t_{f,x}$  = follow-up time (i.e., the time between the departure of one vehicle from the minor street and the departure of the next under a continuous queue condition) for minor movement x (s).

The potential capacity of a movement is denoted as  $c_{p,x}$  (for movement x) and is defined as the capacity for a specific movement, assuming the following base conditions:

- Traffic from nearby intersections does not back up into the subject intersection.
- A separate lane is provided for the exclusive use of each minor-street movement.
- An upstream signal does not affect the arrival pattern of the major-street traffic.
- No other movements of Rank 2, 3, or 4 impede the subject movement.

**MOVEMENT CAPACITY**

The potential capacity,  $c_{p,x}$ , of minor-street movements is given in Exhibit 17-6 for a two-lane major street and in Exhibit 17-7 for a four-lane major street. These figures show the application of Equation 17-3 with the values presented in Exhibit 17-5. The potential capacity is expressed as vehicles per hour (veh/h). The exhibits indicate that the potential capacity is a function of the conflicting flow rate  $v_{c,x}$  expressed as an hourly rate, as well as the minor-street movement.

Potential capacity defined

EXHIBIT 17-6. POTENTIAL CAPACITY FOR TWO-LANE STREETS

