Appendix B

Traffic Forecasts

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Table B-1
Summary of MDT QRS-II Model Volumes
Shiloh Interchange - Exit 443

Location	Existing ADT Volumes [1] (veh/day)	MDT Results from Billings QRS Forecast Model							
		2002 Daily Volumes (veh/day)	2027 Daily Volumes (veh/day)	Annual Volume Growth (veh/day)	Interpolated 2003 Daily Volumes (veh/day)	Interpolated 2023 Daily Volumes (veh/day)	2003-2023 Total Vol. Growth (veh/day)	2003-2023 Total Growth Factor	2003-2023 Annual Growth Factor
Shiloh Rd N of Zoo Dr	9,138	10,792	21,035	410	11,202	19,396	8,194	1.732	1.028
Shiloh Rd S of Zoo Dr	**4,300**	3,602	8,639	201	3,803	7,833	4,030	2.059	1.037
Zoo Dr E of Shiloh	8,480	9,185	14,066	195	9,380	13,285	3,905	1.416	1.018
Zoo Dr E of Gabel / Pierce	8,480	9,185	13,361	167	9,352	12,693	3,341	1.357	1.015
Gabel Rd N of Zoo Dr	0	0	13,283	531	531	11,158	10,626	21.000	1.164
Pierce Pkwy S of Zoo Dr	0	0	3,001	120	120	2,521	2,401	21.000	1.164
Zoo Dr N of I-90	8,480	9,218	28,329	764	9,982	25,271	15,289	2.532	1.048
I-90 WB on-ramp	2,108	2,329	5,884	142	2,471	5,315	2,844	2.151	1.039
I-90 WB off-ramp	2,317	3,503	8,230	189	3,692	7,474	3,782	2.024	1.036
Zoo Dr. between I-90 ramps	5,637	6,507	17,833	453	6,960	16,021	9,061	2.302	1.043
I-90 EB off-ramp	2,176	2,064	5,535	139	2,203	4,980	2,777	2.261	1.042
I-90 EB on-ramp	2,252	3,265	7,559	172	3,437	6,872	3,435	2.000	1.035
Zoo Dr. N of S.Frontage Rd.	2,641	5,323	9,554	169	5,492	8,877	3,385	1.616	1.024
S. Frontage Rd W of Zoo Dr.	3,038	3,742	9,707	239	3,981	8,753	4,772	2.199	1.040
S. Frontage Rd E of Zoo Dr.	2,492	2,813	7,083	171	2,984	6,400	3,416	2.145	1.039
I-90 EB W of ramps	11,636	8,824	13,232	176	9,000	12,527	3,526	1.392	1.017
I-90 EB between ramps	9,460	6,760	7,696	37	6,797	7,546	749	1.110	1.005
I-90 EB E of ramps	11,712	10,025	15,256	209	10,234	14,419	4,185	1.409	1.017
I-90 WB E of ramps	11,820	10,684	15,859	207	10,891	15,031	4,140	1.380	1.016
I-90 WB between ramps	9,503	7,180	7,629	18	7,198	7,557	359	1.050	1.002
I-90 WB W of ramps	11,610	9,510	13,513	160	9,670	12,873	3,202	1.331	1.014

[1] Based on SEH tube counts or MDT permanent count stations on I-90 factored to ADT weekday with MDT monthly factors
[**Bold** ADT volume obtained from Transportation Master Plan for Shiloh Interchange - North Side Properties]

Table B-2
Summary of MDT QRS-II Model Volumes
S. Billings Blvd Interchange - Exit 447

Location	Existing ADT Volumes [1] (veh/day)	MDT Results from Billings QRS Forecast Model							
		2002 Daily Volumes (veh/day)	2027 Daily Volumes (veh/day)	Annual Volume Growth (veh/day)	Interpolated 2003 Daily Volumes (veh/day)	Interpolated 2023 Daily Volumes (veh/day)	2003-2023 Total Vol. Growth (veh/day)	2003-2023 Total Growth Factor	2003-2023 Annual Growth Factor
S Billings Blvd N of King Ave	7,135	5,493	7,724	89	5,582	7,367	1,785	1.320	1.014
King Ave W of Southgate Dr	2,550	3,089	4,477	56	3,145	4,255	1,110	1.353	1.015
King Ave W of S. Billings Blvd	6,473	3,089	4,477	56	3,145	4,255	1,110	1.353	1.015
King Ave E of S. Billings Blvd	6,521	7,638	9,519	75	7,713	9,218	1,505	1.195	1.009
Southgate Dr S of King Ave	2,697	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
S. Billings Blvd S of King Ave	12,626	9,352	12,683	133	9,485	12,150	2,665	1.281	1.012
I-90 WB on-ramp	3,824	3,885	6,033	86	3,971	5,689	1,718	1.433	1.018
S. Billings Blvd between I-90 ramps	10,087	7,822	17,732	396	8,218	16,146	7,928	1.965	1.034
I-90 WB off ramp	1,937	1,325	3,623	92	1,417	3,255	1,838	2.297	1.042
I-90 EB off-ramp	3,737	4,062	6,208	86	4,148	5,865	1,717	1.414	1.017
I-90 EB on-ramp	1,796	1,047	3,596	102	1,149	3,188	2,039	2.775	1.052
S. Billings Blvd S of I-90	11,538	6,724	23,307	663	7,387	20,654	13,266	2.796	1.053
S Frontage Rd E of S Billings Rd	2,747	1,016	3,042	81	1,097	2,718	1,621	2.477	1.046
Midland Blvd W of S Billings Rd	0	0	4,843	194	194	4,068	3,874	21.000	1.164
S Billings Blvd S of S. Frontage Rd.	8,921	5,777	18,618	514	6,291	16,563	10,273	2.633	1.050
I-90 EB W of ramps	14,120	12,840	15,516	107	12,947	15,088	2,141	1.165	1.008
I-90 EB between ramps	10,382	8,778	9,308	21	8,799	9,223	424	1.048	1.002
I-90 EB E of ramps	12,178	9,826	12,904	123	9,949	12,412	2,462	1.247	1.011
I-90 WB E of ramps	11,943	11,515	13,937	97	11,612	13,549	1,938	1.167	1.008
I-90 WB between ramps	10,006	10,190	10,313	5	10,195	10,293	98	1.010	1.000
I-90 WB W of ramps	13,830	14,075	16,347	91	14,166	15,983	1,818	1.128	1.006

[1] Based on SEH tube counts or MDT permanent count stations on I-90 factored to ADT weekday with MDT monthly factors

Table B-3
Summary of MDT QRS-II Model Volumes
27th Street Interchange - Exit 450

Location	Existing ADT Volumes [1] (veh/day)	MDT Results from Billings QRS Forecast Model							
		2002 Daily Volumes (veh/day)	2027 Daily Volumes (veh/day)	Annual Volume Growth (veh/day)	Interpolated 2003 Daily Volumes (veh/day)	Interpolated 2023 Daily Volumes (veh/day)	2003-2023 Total Vol. Growth (veh/day)	2003-2023 Total Growth Factor	2003-2023 Annual Growth Factor
State Ave W of 27th St	6,559	4,718	5,649	37	4,755	5,500	745	1.157	1.007
27th St NW of State Ave	11,780	11,678	13,699	81	11,759	13,376	1,617	1.137	1.006
27th St NW of I-90	12,541	15,687	17,954	91	15,778	17,591	1,814	1.115	1.005
I-90 WB on-ramp	3,137	2,299	2,828	21	2,320	2,743	423	1.182	1.008
I-90 WB off-ramp	2,496	5,790	6,233	18	5,808	6,162	354	1.061	1.003
27th St between I-90 ramps	8,709	8,197	9,444	50	8,247	9,244	998	1.121	1.006
I-90 EB off-ramp	3,153	1,633	2,763	45	1,678	2,582	904	1.539	1.022
I-90 EB on-ramp	2,162	6,180	6,667	19	6,199	6,589	390	1.063	1.003
27th St E of I-90	2,938	1,014	746	-11	1,003	789	-214	0.786	0.988
Garden Ave N of 27th St	**1,824**	304	597	12	316	550	234	1.742	1.028
Garden Ave S of 27th St	**1,250**	718	740	1	719	736	18	1.024	1.001
I-90 EB W of ramps	12,178	9,826	12,904	123	9,949	12,412	2,462	1.247	1.011
I-90 EB between ramps	9,026	8,192	10,140	78	8,270	9,828	1,558	1.188	1.009
I-90 EB E of ramps	11,188	14,373	16,808	97	14,470	16,418	1,948	1.135	1.006
I-90 WB E of ramps	11,303	15,006	17,342	93	15,099	16,968	1,869	1.124	1.006
I-90 WB between ramps	8,807	9,216	11,108	76	9,292	10,805	1,514	1.163	1.008
I-90 WB W of ramps	11,943	11,515	13,937	97	11,612	13,549	1,938	1.167	1.008

[1] Based on SEH tube counts or MDT permanent count stations on I-90 factored to ADT weekday with MDT monthly factors
[**Bold** ADT volumes are estimates based on project turning movement count data and adjacent 27th Street project ADT volumes

Table B-4
Summary of MDT QRS-II Model Volumes
US 87 Lockwood Interchange - Exit 452

Location	Existing ADT Volumes [1] (veh/day)	MDT Results from Billings QRS Forecast Model							
		2002 Daily Volumes (veh/day)	2027 Daily Volumes (veh/day)	Annual Volume Growth (veh/day)	Interpolated 2003 Daily Volumes (veh/day)	Interpolated 2023 Daily Volumes (veh/day)	2003-2023 Total Vol. Growth (veh/day)	2003-2023 Total Growth Factor	2003-2023 Annual Growth Factor
US 87 NW of Lockwood Rd	21,062	19,880	25,409	221	20,101	24,524	4,423	1.220	1.010
N Frontage / Lockwood N of US 87	6,918	3,137	5,096	78	3,215	4,783	1,567	1.487	1.020
N Frontage Rd E of Lockwood Rd	2,773	1,112	4,349	129	1,241	3,831	2,590	3.086	1.058
Lockwood Rd NE of N Frontage Rd	**4,145**	1,840	2,513	27	1,867	2,405	538	1.288	1.013
US 87 NW of I-90 WB ramps	20,311	19,473	25,860	255	19,728	24,838	5,110	1.259	1.012
I-90 WB on-ramp	3,465	6,873	8,171	52	6,925	7,963	1,038	1.150	1.007
I-90 WB off-ramp	4,234	2,095	3,432	53	2,148	3,218	1,070	1.498	1.020
US 87 between I-90 ramps	16,034	15,849	22,653	272	16,121	21,564	5,443	1.338	1.015
I-90 EB off-ramp	4,433	5,962	6,813	34	5,996	6,677	681	1.114	1.005
I-90 EB on-ramp	3,196	2,866	3,720	34	2,900	3,583	683	1.236	1.011
US 87 SE of I-90 EB ramps	11,212	12,913	20,359	298	13,211	19,168	5,957	1.451	1.019
US 87 SE of Coburn Rd	9,584	9,920	14,588	187	10,107	13,841	3,734	1.369	1.016
Coburn Rd S of US 87	**1,700**	3,181	5,898	109	3,290	5,463	2,174	1.661	1.026
Coburn Rd S of Rosebud Ln	556	1,532	2,316	31	1,563	2,191	627	1.401	1.017
I-90 EB W of ramps	11,188	14,373	16,808	97	14,470	16,418	1,948	1.135	1.006
I-90 EB between ramps	6,756	8,410	9,994	63	8,473	9,741	1,267	1.150	1.007
I-90 EB E of ramps	9,952	11,277	13,715	98	11,375	13,325	1,950	1.171	1.008
I-90 WB E of ramps	12,072	10,229	12,603	95	10,324	12,223	1,899	1.184	1.008
I-90 WB between ramps	7,838	8,133	9,171	42	8,175	9,005	830	1.102	1.005
I-90 WB W of ramps	11,303	15,006	17,342	93	15,099	16,968	1,869	1.124	1.006

[1] Based on SEH tube counts or MDT permanent count stations on I-90 factored to ADT weekday with MDT monthly factors
[**Bold** ADT volumes are estimates based on project turning movement count data and adjacent project ADT volumes

Table B-5
Summary of MDT QRS-II Model Volumes
Johnson Lane Interchange - Exit 455

Location	Existing ADT Volumes [1] (veh/day)	MDT Results from Billings QRS Forecast Model							
		2002 Daily Volumes (veh/day)	2027 Daily Volumes (veh/day)	Annual Volume Growth (veh/day)	Interpolated 2003 Daily Volumes (veh/day)	Interpolated 2023 Daily Volumes (veh/day)	2003-2023 Total Vol. Growth (veh/day)	2003-2023 Total Growth Factor	2003-2023 Annual Growth Factor
Johnson Lane N of N Frontage Rd	658	912	995	3	915	982	66	1.073	1.004
N Frontage Rd W of Johnson Lane	2,531	585	3,631	122	707	3,144	2,437	4.447	1.077
N Frontage Rd E of Johnson Lane	348	691	1,437	30	721	1,318	597	1.828	1.031
Johnson Ln N of I-90 WB ramps	2,817	1,556	5,233	147	1,703	4,645	2,942	2.727	1.051
I-90 WB on-ramp	4,092	4,423	4,230	-8	4,415	4,261	-154	0.965	0.998
I-90 WB off-ramp	1,150	605	2,072	59	664	1,837	1,174	2.768	1.052
Johnson Lane between I-90 ramps	7,930	4,565	7,332	111	4,676	6,889	2,214	1.473	1.020
I-90 EB off-ramp	**4,180**	5,013	4,672	-14	4,999	4,727	-273	0.945	0.997
I-90 EB on-ramp	1,634	605	2,088	59	664	1,851	1,186	2.786	1.053
Johnson Lane S of I-90 EB ramps	13,576	9,476	11,129	66	9,542	10,865	1,322	1.139	1.007
Old Hardin Rd W of Johnson Lane	5,991	1,622	4,301	107	1,729	3,872	2,143	2.239	1.041
Old Hardin Rd E of Johnson Lane	10,298	8,378	9,589	48	8,426	9,395	969	1.115	1.005
Old Hardin Rd E of Becraft Lane	6,276	4,888	5,172	11	4,899	5,127	227	1.046	1.002
Johnson Lane S of Old Hardin Rd	2,230	1,929	2,955	41	1,970	2,791	821	1.417	1.018
Becraft Lane S of Old Hardin Rd	3,912	3,506	4,473	39	3,545	4,318	774	1.218	1.010
I-90 EB W of ramps	9,952	11,277	13,715	98	11,375	13,325	1,950	1.171	1.008
I-90 EB between ramps	5,772	6,264	9,042	111	6,375	8,598	2,222	1.349	1.015
I-90 EB E of ramps	7,406	6,869	11,131	170	7,039	10,449	3,410	1.484	1.020
I-90 WB E of ramps	9,130	6,411	10,445	161	6,572	9,800	3,227	1.491	1.020
I-90 WB between ramps	7,980	5,805	8,373	103	5,908	7,962	2,054	1.348	1.015
I-90 WB W of ramps	12,072	10,229	12,603	95	10,324	12,223	1,899	1.184	1.008

[1] Based on SEH tube counts or MDT permanent count stations on I-90 factored to ADT weekday with MDT monthly factors
[**Bold** ADT volumes are estimates based on project turning movement count data and adjacent project ADT volumes

Table B-6
Summary of Volumes from Other Studies
Shiloh Interchange - Exit 443

Location	Source	Most Recent Traffic Count (veh / day)	Historic Average		
			Annual Growth [1] Volume (veh / day)	Factor	20 Year Growth Factor [2]
Shiloh Rd N of Zoo Dr	2001 ADT - Shiloh Study - Engineering Inc	9,560			
Shiloh Rd S of Zoo Dr	2001 ADT - Shiloh Study - Engineering Inc	4,300			
Zoo Dr E of Shiloh	2001 ADT - Shiloh Study - Engineering Inc	6,650			
Zoo Dr E of Gabel / Pierce					
Gabel Rd N of Zoo Dr					
Pierce Pkwy S of Zoo Dr					
Zoo Dr N of I-90					
I-90 WB on-ramp	2003 MDT tube counts	2,240			
I-90 WB off-ramp	2003 MDT tube counts	2,430			
Zoo Dr. between I-90 ramps	2003 MDT tube counts	5,360			
I-90 EB off-ramp	2003 MDT tube counts	2,080			
I-90 EB on-ramp	2003 MDT tube counts	2,270			
Zoo Dr. N of S.Frontage Rd.					
S. Frontage Rd W of Zoo Dr.	2001 ADT - Shiloh Study - Engineering Inc	3,255			
S. Frontage Rd E of Zoo Dr.	2001 ADT - Shiloh Study - Engineering Inc	2,735			
I-90 EB W of ramps	2002 - City of Billings (1975-2002)	11,145	215	1.019	1.465
I-90 EB between ramps					
I-90 EB E of ramps					
I-90 WB E of ramps					
I-90 WB between ramps					
I-90 WB W of ramps	2002 - City of Billings (1975-2002)	11,145	215	1.019	1.465

[1] Based on Trendline analysis of MDT / City of Billings historic daily traffic count data
[2] Based on Extrapolated 20 year growth divided by Most Recent count data

Table B-7
Summary of Volumes from Other Studies
S. Billings Blvd Interchange - Exit 447

Location	City of Billings / MDT Count Program or Other Traffic Studies				
	Source	Most Recent Traffic Count (veh / day)	Historic Average		
			Annual Growth [1] Volume (veh / day)	Annual Growth [1] Factor	20 Year Growth Factor [2]
S Billings Blvd N of King Ave	2001 - City of Billings (1975-2002)	6,170	197	1.032	1.875
King Ave W of Southgate Dr					
King Ave W of S. Billings Blvd	2003 AADT - City Ops Study - Eng. Inc.	6,778			
King Ave E of S. Billings Blvd	2001 - City of Billings (1975-2002)	6,506	174	1.027	1.695
Southgate Dr S of King Ave					
S. Billings Blvd S of King Ave	2003 AADT - City Ops Study - Eng. Inc.	11,328			
I-90 WB on-ramp	2003 AADT - City Ops Study - Eng. Inc.	4,012			
S. Billings Blvd between I-90 ramps	2003 AADT - City Ops Study - Eng. Inc.	11,204			
I-90 WB off ramp	2003 AADT - City Ops Study - Eng. Inc.	2,498			
I-90 EB off-ramp	2003 AADT - City Ops Study - Eng. Inc.	4,160			
I-90 EB on-ramp	2003 AADT - City Ops Study - Eng. Inc.	2,196			
S. Billings Blvd S of I-90	2003 AADT - City Ops Study - Eng. Inc.	10,856			
S Frontage Rd E of S Billings Rd	2003 AADT - City Ops Study - Eng. Inc.	2,497			
Midland Blvd W of S Billings Rd					
S Billings Blvd S of S. Frontage Rd.	2002 - City of Billings (1975-2002)	8,840	197	1.022	1.554
I-90 EB W of ramps					
I-90 EB between ramps					
I-90 EB E of ramps	2002 - City of Billings (1975-2002)	11,625	335	1.029	1.765
I-90 WB E of ramps	2002 - City of Billings (1975-2002)	11,625	335	1.029	1.765
I-90 WB between ramps					
I-90 WB W of ramps					

[1] Based on Trendline analysis of MDT / City of Billings historic daily traffic count data
[2] Based on Extrapolated 20 year growth divided by Most Recent count data

Table B-8
Summary of Volumes from Other Studies
27th Street Interchange - Exit 450

Location	City of Billings / MDT Count Program or Other Traffic Studies				
	Source	Most Recent Traffic Count (veh / day)	Historic Average		
			Annual Growth [1] Volume (veh / day)	Factor	20 Year Growth Factor [2]
State Ave W of 27th St	2002 - City of Billings (1975-2002)	6,897	70	1.010	1.224
27th St NW of State Ave					
27th St NW of I-90	2002 - City of Billings (1975-2002)	12,290	208	1.017	1.399
I-90 WB on-ramp					
I-90 WB off-ramp					
27th St between I-90 ramps					
I-90 EB off-ramp					
I-90 EB on-ramp					
27th St E of I-90					
Garden Ave N of 27th St					
Garden Ave S of 27th St					
I-90 EB W of ramps	2002 - City of Billings (1975-2002)	11,625	335	1.029	1.765
I-90 EB between ramps					
I-90 EB E of ramps					
I-90 WB E of ramps					
I-90 WB between ramps					
I-90 WB W of ramps	2002 - City of Billings (1975-2002)	11,625	335	1.029	1.765

[1] Based on Trendline analysis of MDT / City of Billings historic daily traffic count data
[2] Based on Extrapolated 20 year growth divided by Most Recent count data

Table B-9
Summary of Volumes from Other Studies
US 87 Lockwood Interchange - Exit 452

Location	City of Billings / MDT Count Program or Other Traffic Studies				
	Source	Most Recent Traffic Count (veh / day)	Historic Average		
			Annual Growth [1] Volume (veh / day)	Factor	20 Year Growth Factor [2]
US 87 NW of Lockwood Rd					
N Frontage / Lockwood N of US 87					
N Frontage Rd E of Lockwood Rd					
Lockwood Rd NE of N Frontage Rd					
US 87 NW of I-90 WB ramps					
I-90 WB on-ramp					
I-90 WB off-ramp					
US 87 between I-90 ramps					
I-90 EB off-ramp					
I-90 EB on-ramp					
US 87 SE of I-90 EB ramps					
US 87 SE of Coburn Rd					
Coburn Rd S of US 87					
Coburn Rd S of Rosebud Ln	2001 - City of Billings (1975-2002)	676	11	1.016	1.381
I-90 EB W of ramps					
I-90 EB between ramps					
I-90 EB E of ramps	2002 - City of Billings (1975-2002)	10,605	330	1.031	1.846
I-90 WB E of ramps	2002 - City of Billings (1975-2002)	10,605	330	1.031	1.846
I-90 WB between ramps					
I-90 WB W of ramps					

[1] Based on Trendline analysis of MDT / City of Billings historic daily traffic count data
[2] Based on Extrapolated 20 year growth divided by Most Recent count data

Table B-10
Summary of Volumes from Other Studies
Johnson Lane Interchange - Exit 455

Location	City of Billings / MDT Count Program or Other Traffic Studies				
	Source	Most Recent Traffic Count (veh / day)	Historic Average		
			Annual Growth [1] Volume (veh / day)	Factor	20 Year Growth Factor [2]
Johnson Lane N of N Frontage Rd					
N Frontage Rd W of Johnson Lane	2002 - City of Billings (1975-2002)	3,126	163	1.052	2.764
N Frontage Rd E of Johnson Lane					
Johnson Ln N of I-90 WB ramps					
I-90 WB on-ramp					
I-90 WB off-ramp					
Johnson Lane between I-90 ramps					
I-90 EB off-ramp					
I-90 EB on-ramp					
Johnson Lane S of I-90 EB ramps	2001 - City of Billings (1975-2002)	12,144	732	1.060	3.224
Old Hardin Rd W of Johnson Lane	2001 - City of Billings (1975-2002)	7,524	64	1.009	1.185
Old Hardin Rd E of Johnson Lane					
Old Hardin Rd E of Becraft Lane	2002 - City of Billings (1975-2002)	5,710	21	1.004	1.076
Johnson Lane S of Old Hardin Rd	2001 - City of Billings (1975-2002)	1,939	103	1.053	2.816
Becraft Lane S of Old Hardin Rd	2002 - City of Billings (1975-2002)	3,768	81	1.021	1.530
I-90 EB W of ramps	2002 - City of Billings (1975-2002)	10,605	330	1.031	1.846
I-90 EB between ramps					
I-90 EB E of ramps	2002 - City of Billings (1975-2002)	8,345	155	1.019	1.445
I-90 WB E of ramps	2002 - City of Billings (1975-2002)	8,345	155	1.019	1.445
I-90 WB between ramps					
I-90 WB W of ramps	2002 - City of Billings (1975-2002)	10,605	330	1.031	1.846

[1] Based on Trendline analysis of MDT / City of Billings historic daily traffic count data
[2] Based on Extrapolated 20 year growth divided by Most Recent count data

Table B-11
Summary of Adjusted and Final Forecasts
Shiloh Interchange - Exit 443

Location	ADT Count / QRS Vol Ratio [Existing 2003]	ADT Count - QRS Vol Difference Ex 2003 (veh / hr)	Adjusted 2023 Forecasts		FINAL FORECASTS				
			ADT Volume (veh/hr)	ADT Annual Growth Rate (%)	Annual Growth Rate (%)	2008 Total Growth Rate (%)	2023 Total Growth Rate (%)	2008 ADT Volume (veh/hr)	2023 ADT Volume (veh/hr)
Shiloh Rd N of Zoo Dr	0.816	(2,064)	16,580	1.030	1.030	1.161	1.814	10,610	16,580
Shiloh Rd S of Zoo Dr	1.131	497	8,590	1.035	1.035	1.189	1.998	5,110	8,590
Zoo Dr E of Shiloh	0.904	(900)	12,200	1.018	1.018	1.095	1.439	9,290	12,200
Zoo Dr E of Gabel / Pierce	0.907	(872)	11,660	1.016	**1.030**	**1.159**	**1.806**	**9,830**	**15,320**
Gabel Rd N of Zoo Dr	n/a	n/a	11,158	n/a	**n/a**	**n/a**	**n/a**	**6,000**	**14,000**
Pierce Pkwy S of Zoo Dr	n/a	n/a	2,521	n/a	**n/a**	**n/a**	**n/a**	**2,000**	**6,000**
Zoo Dr N of I-90	0.849	(1,503)	22,620	1.050	1.050	1.278	2.667	10,840	22,620
I-90 WB on-ramp	0.853	(364)	4,740	1.041	1.041	1.225	2.249	2,580	4,740
I-90 WB off-ramp	0.627	(1,375)	5,390	1.043	1.043	1.235	2.327	2,860	5,390
Zoo Dr. between I-90 ramps	0.810	(1,323)	13,840	1.046	1.046	1.252	2.455	7,060	13,840
I-90 EB off-ramp	0.988	(27)	4,940	1.042	1.042	1.227	2.270	2,670	4,940
I-90 EB on-ramp	0.655	(1,185)	5,100	1.042	1.042	1.227	2.265	2,760	5,100
Zoo Dr. N of S.Frontage Rd.	0.481	(2,852)	5,150	1.034	1.034	1.182	1.950	3,120	5,150
S. Frontage Rd W of Zoo Dr.	0.763	(943)	7,250	1.044	1.044	1.243	2.386	3,780	7,250
S. Frontage Rd E of Zoo Dr.	0.835	(492)	5,630	1.042	1.042	1.226	2.259	3,060	5,630
I-90 EB W of ramps	1.293	2,635	15,680	1.015	**1.020**	**1.104**	**1.486**	**12,850**	**17,290**
I-90 EB between ramps	1.392	2,662	10,360	1.005	**1.013**	**1.069**	**1.306**	**10,180**	**12,350**
I-90 EB E of ramps	1.144	1,477	16,200	1.016	**1.020**	**1.105**	**1.490**	**12,940**	**17,450**
I-90 WB E of ramps	1.085	929	16,140	1.016	**1.021**	**1.109**	**1.514**	**13,100**	**17,900**
I-90 WB between ramps	1.320	2,305	9,920	1.002	**1.014**	**1.071**	**1.316**	**10,240**	**12,510**
I-90 WB W of ramps	1.201	1,940	15,130	1.013	**1.020**	**1.104**	**1.486**	**12,820**	**17,250**

Note - **Bold** values represent estimates which are different than MDT QRS-II model forecasts

Table B-12
Summary of Adjusted and Final Forecasts
S. Billings Blvd Interchange - Exit 447

Location	ADT Count / QRS Vol Ratio [Existing 2003]	ADT Count - QRS Vol Difference Ex 2003 (veh / hr)	Adjusted 2023 Forecasts		FINAL FORECASTS				
			ADT Volume (veh/hr)	ADT Annual Growth Rate (%)	Annual Growth Rate (%)	2008 Total Growth Rate (%)	2023 Total Growth Rate (%)	2008 ADT Volume (veh/hr)	2023 ADT Volume (veh/hr)
S Billings Blvd N of King Ave	1.278	1,553	9,170	1.013	1.013	1.065	1.285	7,600	9,170
King Ave W of Southgate Dr	0.811	(595)	3,560	1.017	1.017	1.087	1.396	2,770	3,560
King Ave W of S. Billings Blvd	2.058	3,328	8,170	1.012	1.012	1.060	1.262	6,860	8,170
King Ave E of S. Billings Blvd	0.845	(1,192)	7,910	1.010	1.010	1.049	1.213	6,840	7,910
Southgate Dr S of King Ave	n/a	n/a	n/a	n/a	**1.020**	**1.107**	**1.500**	**2,980**	**4,050**
S. Billings Blvd S of King Ave	1.331	3,141	15,730	1.011	1.011	1.056	1.246	13,340	15,730
I-90 WB on-ramp	0.963	(147)	5,510	1.018	1.018	1.096	1.441	4,190	5,510
S. Billings Blvd between I-90 ramps	1.227	1,869	18,920	1.032	1.032	1.170	1.876	11,800	18,920
I-90 WB off ramp	1.367	520	4,110	1.038	1.038	1.207	2.122	2,340	4,110
I-90 EB off-ramp	0.901	(411)	5,370	1.018	1.018	1.095	1.437	4,090	5,370
I-90 EB on-ramp	1.563	647	4,410	1.046	1.046	1.252	2.456	2,250	4,410
S. Billings Blvd S of I-90	1.562	4,150	28,530	1.046	1.046	1.254	2.473	14,470	28,530
S Frontage Rd E of S Billings Rd	2.504	1,650	5,590	1.036	1.036	1.194	2.035	3,280	5,590
Midland Blvd W of S Billings Rd	n/a	n/a	4,068	n/a	n/a	n/a	n/a	**2,000**	**5,000**
S Billings Blvd S of S. Frontage Rd.	1.418	2,630	21,340	1.045	1.045	1.244	2.392	11,090	21,340
I-90 EB W of ramps	1.091	1,173	16,360	1.007	**1.020**	**1.103**	**1.482**	**15,620**	**20,920**
I-90 EB between ramps	1.180	1,583	10,840	1.002	**1.020**	**1.106**	**1.498**	**11,530**	**15,550**
I-90 EB E of ramps	1.224	2,229	14,920	1.010	**1.025**	**1.131**	**1.639**	**13,780**	**19,960**
I-90 WB E of ramps	1.029	331	13,910	1.008	**1.025**	**1.131**	**1.639**	**13,510**	**19,570**
I-90 WB between ramps	0.981	(189)	10,100	1.000	**1.022**	**1.115**	**1.545**	**11,170**	**15,460**
I-90 WB W of ramps	0.976	(336)	15,630	1.006	**1.021**	**1.110**	**1.516**	**15,360**	**20,970**

Note - **Bold** values represent estimates which are different than MDT QRS-II model forecasts

Table B-13
Summary of Adjusted and Final Forecasts
27th Street Interchange - Exit 450

Location	ADT Count / QRS Vol Ratio [Existing 2003]	ADT Count - QRS Vol Difference Ex 2003 (veh / hr)	Adjusted 2023 Forecasts		FINAL FORECASTS				
			ADT Volume (veh/hr)	ADT Annual Growth Rate (%)	Annual Growth Rate (%)	2008 Total Growth Rate (%)	2023 Total Growth Rate (%)	2008 ADT Volume (veh/hr)	2023 ADT Volume (veh/hr)
State Ave W of 27th St	1.379	1,804	7,450	1.006	1.006	1.032	1.136	6,770	7,450
27th St NW of State Ave	1.002	21	13,400	1.006	1.006	1.033	1.138	12,170	13,400
27th St NW of I-90	0.795	(3,236)	14,170	1.006	1.006	1.031	1.130	12,930	14,170
I-90 WB on-ramp	1.352	816	3,630	1.007	**1.010**	**1.051**	**1.220**	**3,300**	**3,830**
I-90 WB off-ramp	0.430	(3,311)	2,750	1.005	1.005	1.024	1.102	2,560	2,750
27th St between I-90 ramps	1.056	462	9,730	1.006	1.006	1.028	1.117	8,950	9,730
I-90 EB off-ramp	1.879	1,474	4,450	1.017	**1.015**	**1.077**	**1.347**	**3,400**	**4,250**
I-90 EB on-ramp	0.349	(4,037)	2,430	1.006	1.006	1.030	1.124	2,230	2,430
27th St E of I-90	2.929	1,935	2,520	0.992	**1.002**	**1.010**	**1.041**	**2,970**	**3,060**
Garden Ave N of 27th St	5.777	1,508	2,620	1.018	**1.002**	**1.010**	**1.041**	**1,840**	**1,900**
Garden Ave S of 27th St	1.739	531	1,270	1.001	**1.002**	**1.010**	**1.041**	**1,260**	**1,300**
I-90 EB W of ramps	1.224	2,229	14,920	1.010	**1.025**	**1.131**	**1.639**	**13,780**	**19,960**
I-90 EB between ramps	1.091	756	10,660	1.008	**1.028**	**1.149**	**1.741**	**10,380**	**15,710**
I-90 EB E of ramps	0.773	(3,282)	12,920	1.007	**1.024**	**1.128**	**1.621**	**12,610**	**18,140**
I-90 WB E of ramps	0.749	(3,796)	12,940	1.007	**1.025**	**1.131**	**1.636**	**12,770**	**18,490**
I-90 WB between ramps	0.948	(485)	10,280	1.008	**1.029**	**1.156**	**1.787**	**10,210**	**15,740**
I-90 WB W of ramps	1.029	331	13,910	1.008	**1.025**	**1.131**	**1.639**	**13,510**	**19,570**

Note - **Bold** values represent estimates which are different than MDT QRS-II model forecasts

Table B-14
Summary of Adjusted and Final Forecasts
US 87 Lockwood Interchange - Exit 452

Location	ADT Count / QRS Vol Ratio [Existing 2003]	ADT Count - QRS Vol Difference Ex 2003 (veh / hr)	Adjusted 2023 Forecasts		FINAL FORECASTS				
			ADT Volume (veh/hr)	ADT Annual Growth Rate (%)	Annual Growth Rate (%)	2008 Total Growth Rate (%)	2023 Total Growth Rate (%)	2008 ADT Volume (veh/hr)	2023 ADT Volume (veh/hr)
US 87 NW of Lockwood Rd	1.048	961	25,590	1.010	1.010	1.050	1.215	22,110	25,590
N Frontage / Lockwood N of US 87	2.152	3,703	9,390	1.015	1.015	1.079	1.357	7,470	9,390
N Frontage Rd E of Lockwood Rd	2.234	1,532	6,960	1.047	1.047	1.259	2.510	3,490	6,960
Lockwood Rd NE of N Frontage Rd	2.220	2,278	5,010	1.010	1.010	1.048	1.209	4,350	5,010
US 87 NW of I-90 WB ramps	1.030	582	25,500	1.011	1.011	1.059	1.256	21,500	25,500
I-90 WB on-ramp	0.500	(3,460)	4,240	1.010	1.010	1.051	1.220	3,640	4,230
I-90 WB off-ramp	1.971	2,086	5,820	1.016	**1.010**	**1.051**	**1.220**	**4,450**	**5,170**
US 87 between I-90 ramps	0.995	(87)	21,460	1.015	1.015	1.076	1.338	17,250	21,460
I-90 EB off-ramp	0.739	(1,563)	5,020	1.006	1.006	1.030	1.127	4,570	5,000
I-90 EB on-ramp	1.102	296	3,910	1.010	**1.016**	**1.083**	**1.374**	**3,460**	**4,390**
US 87 SE of I-90 EB ramps	0.849	(1,999)	16,720	1.020	1.020	1.105	1.491	12,390	16,720
US 87 SE of Coburn Rd	0.948	(522)	13,220	1.016	1.016	1.084	1.379	10,390	13,220
Coburn Rd S of US 87	0.517	(1,590)	3,350	1.034	1.034	1.185	1.971	2,010	3,350
Coburn Rd S of Rosebud Ln	0.355	(1,008)	980	1.029	1.029	1.152	1.764	640	980
I-90 EB W of ramps	0.773	(3,282)	12,920	1.007	**1.024**	**1.128**	**1.621**	**12,610**	**18,140**
I-90 EB between ramps	0.797	(1,718)	7,890	1.008	**1.034**	**1.181**	**1.945**	**8,040**	**13,140**
I-90 EB E of ramps	0.875	(1,423)	11,780	1.008	**1.029**	**1.152**	**1.762**	**11,500**	**17,530**
I-90 WB E of ramps	1.169	1,749	14,130	1.008	**1.024**	**1.126**	**1.609**	**13,580**	**19,430**
I-90 WB between ramps	0.959	(336)	8,650	1.005	**1.030**	**1.161**	**1.819**	**9,130**	**14,260**
I-90 WB W of ramps	0.749	(3,796)	12,940	1.007	**1.025**	**1.131**	**1.636**	**12,770**	**18,490**

Note - **Bold** values represent estimates which are different than MDT QRS-II model forecasts

Table B-15
Summary of Adjusted and Final Forecasts
Johnson Lane Interchange - Exit 455

Location	ADT Count / QRS Vol Ratio [Existing 2003]	ADT Count - QRS Vol Difference Ex 2003 (veh / hr)	Adjusted 2023 Forecasts		FINAL FORECASTS				
			ADT Volume (veh/hr)	ADT Annual Growth Rate (%)	Annual Growth Rate (%)	2008 Total Growth Rate (%)	2023 Total Growth Rate (%)	2008 ADT Volume (veh/hr)	2023 ADT Volume (veh/hr)
Johnson Lane N of N Frontage Rd	0.719	(257)	720	1.005	1.005	1.023	1.094	670	720
N Frontage Rd W of Johnson Lane	3.581	1,825	8,110	1.060	**1.050**	**1.276**	**2.653**	**3,230**	**6,720**
N Frontage Rd E of Johnson Lane	0.482	(373)	790	1.042	1.042	1.228	2.271	430	790
Johnson Ln N of I-90 WB ramps	1.654	1,113	6,720	1.044	1.044	1.243	2.386	3,500	6,720
I-90 WB on-ramp	0.927	(323)	3,940	0.998	**1.005**	**1.025**	**1.105**	**4,200**	**4,520**
I-90 WB off-ramp	1.733	486	2,750	1.045	1.045	1.244	2.391	1,430	2,750
Johnson Lane between I-90 ramps	1.696	3,254	10,910	1.016	1.016	1.083	1.376	8,590	10,910
I-90 EB off-ramp	0.836	(820)	3,930	0.997	**1.005**	**1.025**	**1.105**	**4,290**	**4,620**
I-90 EB on-ramp	2.459	969	3,690	1.042	1.042	1.226	2.259	2,000	3,690
Johnson Lane S of I-90 EB ramps	1.423	4,034	15,180	1.006	**1.015**	**1.077**	**1.347**	**14,630**	**18,290**
Old Hardin Rd W of Johnson Lane	3.464	4,261	10,770	1.030	**1.020**	**1.104**	**1.486**	**6,610**	**8,900**
Old Hardin Rd E of Johnson Lane	1.222	1,871	11,370	1.005	**1.015**	**1.077**	**1.347**	**11,090**	**13,870**
Old Hardin Rd E of Becraft Lane	1.281	1,377	6,540	1.002	**1.004**	**1.020**	**1.083**	**6,400**	**6,800**
Johnson Lane S of Old Hardin Rd	1.132	260	3,100	1.017	**1.025**	**1.131**	**1.639**	**2,520**	**3,650**
Becraft Lane S of Old Hardin Rd	1.104	368	4,730	1.010	**1.015**	**1.077**	**1.347**	**4,210**	**5,270**
I-90 EB W of ramps	0.875	(1,423)	11,780	1.008	**1.029**	**1.152**	**1.762**	**11,500**	**17,530**
I-90 EB between ramps	0.905	(603)	7,890	1.016	**1.041**	**1.223**	**2.237**	**7,210**	**12,910**
I-90 EB E of ramps	1.052	366	10,900	1.020	**1.041**	**1.224**	**2.242**	**9,210**	**16,600**
I-90 WB E of ramps	1.389	2,558	12,990	1.018	**1.034**	**1.179**	**1.934**	**10,810**	**17,660**
I-90 WB between ramps	1.351	2,072	10,390	1.013	**1.032**	**1.169**	**1.868**	**9,380**	**14,910**
I-90 WB W of ramps	1.169	1,749	14,130	1.008	**1.024**	**1.126**	**1.609**	**13,580**	**19,430**

Note - **Bold** values represent estimates which are different than MDT QRS-II model forecasts

Table B-16
Summary of Alternate "High Growth" 2023 Forecasts
Shiloh Interchange - Exit 443

Location	"High Growth" Scenario FINAL FORECASTS Annual Growth Rate (%)	2023 Total Growth Rate (%)	2023 ADT Volume (veh/hr)
Shiloh Rd N of Zoo Dr	**1.040**	**2.191**	**20,020**
Shiloh Rd S of Zoo Dr	1.035	1.998	8,590
Zoo Dr E of Shiloh	**1.030**	**1.806**	**15,320**
Zoo Dr E of Gabel / Pierce	**1.040**	**2.191**	**18,580**
Gabel Rd N of Zoo Dr	**n/a**	**n/a**	**18,000**
Pierce Pkwy S of Zoo Dr	n/a	n/a	6,000
Zoo Dr N of I-90	**1.065**	**3.524**	**29,880**
I-90 WB on-ramp	**1.070**	**3.870**	**8,160**
I-90 WB off-ramp	**1.065**	**3.524**	**8,160**
Zoo Dr. between I-90 ramps	**1.065**	**3.524**	**19,860**
I-90 EB off-ramp	**1.065**	**3.524**	**7,670**
I-90 EB on-ramp	**1.075**	**4.248**	**9,570**
Zoo Dr. N of S.Frontage Rd.	**1.100**	**6.727**	**17,760**
S. Frontage Rd W of Zoo Dr.	**1.060**	**3.207**	**9,740**
S. Frontage Rd E of Zoo Dr.	**1.070**	**3.870**	**9,640**
Zoo Drive S of S Frontage Rd	**n/a**	**n/a**	**12,000**
I-90 EB W of ramps	**1.028**	**1.721**	**20,020**
I-90 EB between ramps	1.013	1.306	12,350
I-90 EB E of ramps	**1.032**	**1.872**	**21,920**
I-90 WB E of ramps	**1.028**	**1.749**	**20,670**
I-90 WB between ramps	1.014	1.316	12,510
I-90 WB W of ramps	**1.029**	**1.780**	**20,670**

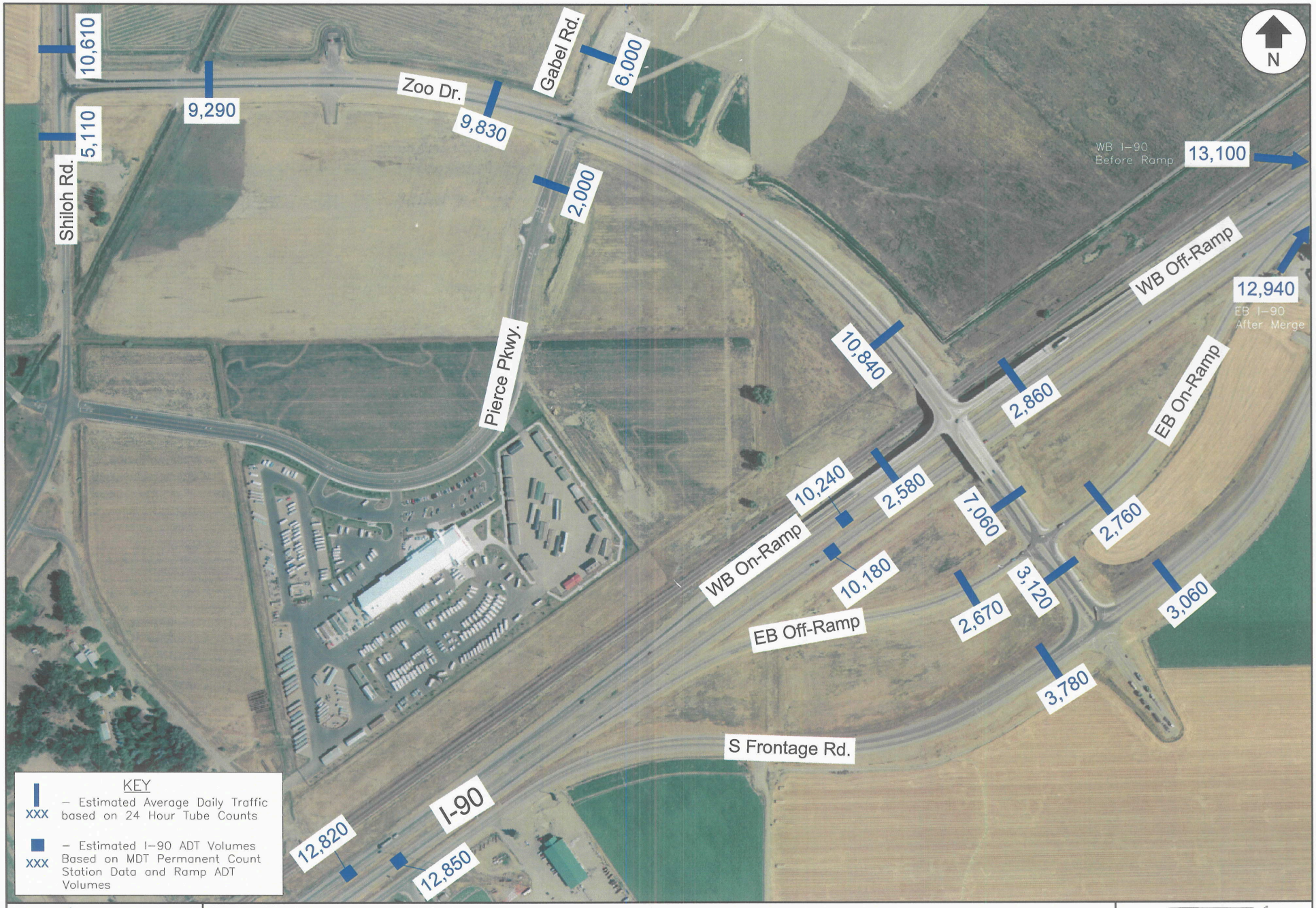
Notes:

1) **Bold** forecasts are different than Base FINAL Forecasts in **Table B-11**
2) Based on Shiloh Interchange - North Side Properties Transportation Master Plan, Engineering Inc., January, 2001

Table B-17
Summary of ADT Forecasts
I-90 Mainline

Location	2008 Forecasts				2023 Forecasts			
		Peak Hour				Peak Hour		
	Daily Volume (veh/day)	AM Volume (veh/hr)	Noon Volume (veh/hr)	PM Volume (veh/hr)	Daily Volume (veh/day)	AM Volume (veh/hr)	Noon Volume (veh/hr)	PM Volume (veh/hr)
I-90 EB								
W of Zoo / Shiloh	12,850	1,070	780	770	17,290	1,450	1,040	1,040
Under Zoo / Shiloh	10,180	880	580	580	12,350	1,070	710	710
E of Zoo / Shiloh	12,940	1,110	750	790	17,450	1,490	1,020	1,060
W of S Billings Blvd	15,620	810	990	1,280	20,920	1,090	1,330	1,710
Under S Billings Blvd	11,530	630	700	930	15,550	850	950	1,260
S Billings Blvd - 27th St	13,780	790	840	1,120	19,960	1,150	1,220	1,620
Under 27th St	10,380	570	610	920	15,710	870	920	1,390
27th St - US 87 (Lockwood)	12,610	700	760	1,160	18,140	1,010	1,100	1,670
Under US 87 (Lockwood)	8,040	460	480	720	13,140	750	790	1,170
US 87 (Lockwood) - Johnson Ln	11,500	600	690	1,070	17,530	920	1,060	1,640
Over Johnson Ln	7,210	480	460	650	12,910	860	830	1,170
E of Johnson Ln	9,210	570	600	820	16,600	1,020	1,090	1,480
I-90 WB								
E of Johnson Ln	10,810	670	720	1,020	17,660	1,100	1,180	1,670
Over Johnson Ln	9,380	570	600	900	14,910	920	950	1,430
US 87 (Lockwood) - Johnson Ln	13,580	1,070	860	1,150	19,430	1,530	1,240	1,650
Under US 87 (Lockwood)	9,130	750	580	740	14,260	1,180	910	1,160
27th St - US 87 (Lockwood)	12,770	1,000	800	960	18,490	1,450	1,160	1,390
Under 27th St	10,210	730	640	780	15,740	1,130	990	1,200
S Billings Blvd - 27th St	13,510	900	880	1,090	19,570	1,310	1,270	1,580
Under S Billings Blvd	11,170	720	730	880	15,460	990	1,010	1,220
W of S Billings Blvd	15,360	1,040	1,010	1,190	20,970	1,420	1,380	1,620
E of Zoo / Shiloh	13,100	630	840	1,290	17,900	860	1,150	1,770
Under Zoo / Shiloh	10,240	410	650	1,010	12,510	500	800	1,230
W of Zoo / Shiloh	12,820	520	830	1,290	17,250	700	1,120	1,740

Note: Assumes existing 2003 peak hour share of daily traffic remains the same in future years



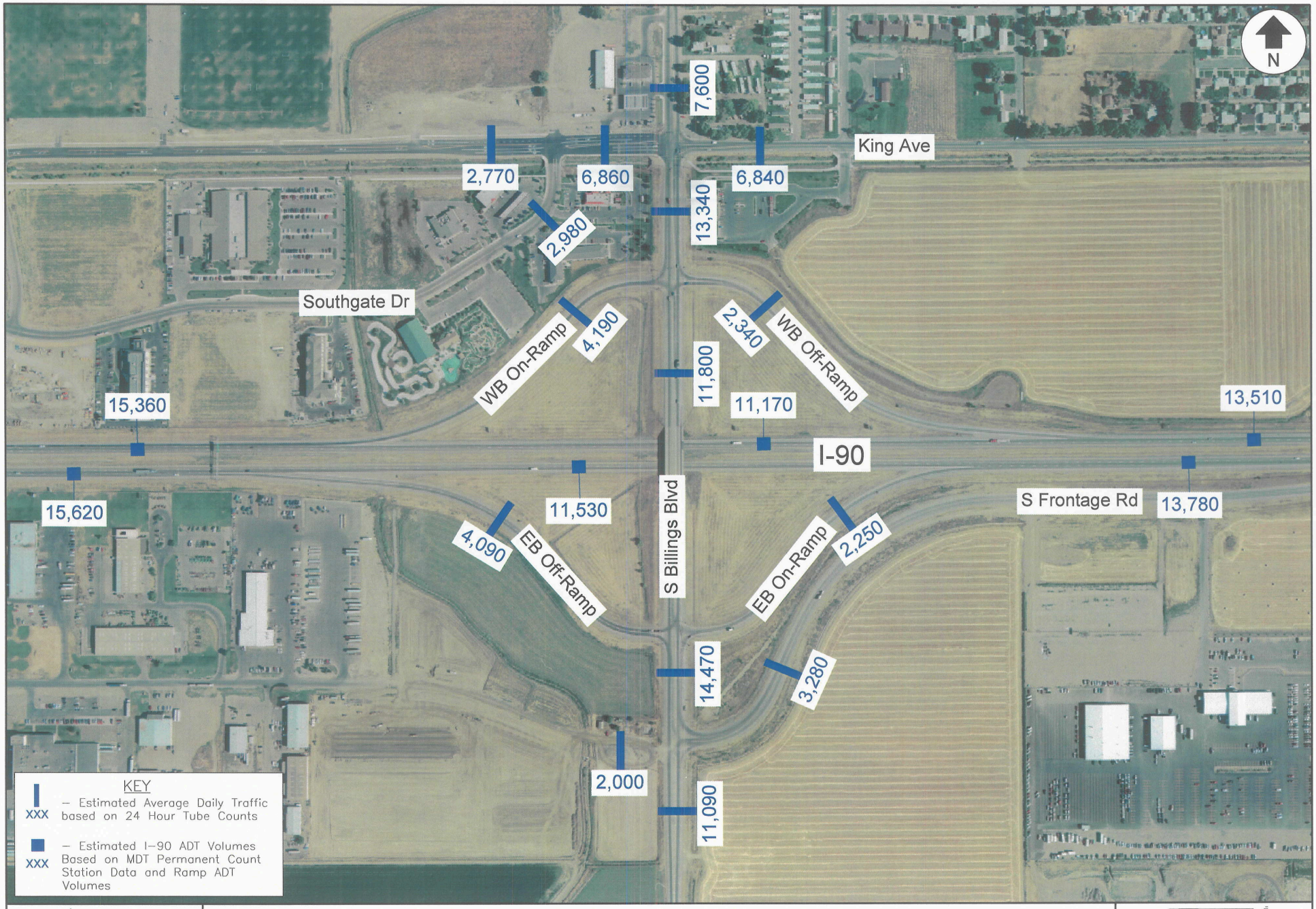
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Project # AMTDOT0306

BILLINGS I-90 INTERCHANGE STUDY

SHORT TERM 2008 ADT FORECASTS - SHILOH INTERCHANGE EXIT 443

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-1

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BILLINGS I-90 INTERCHANGE STUDY



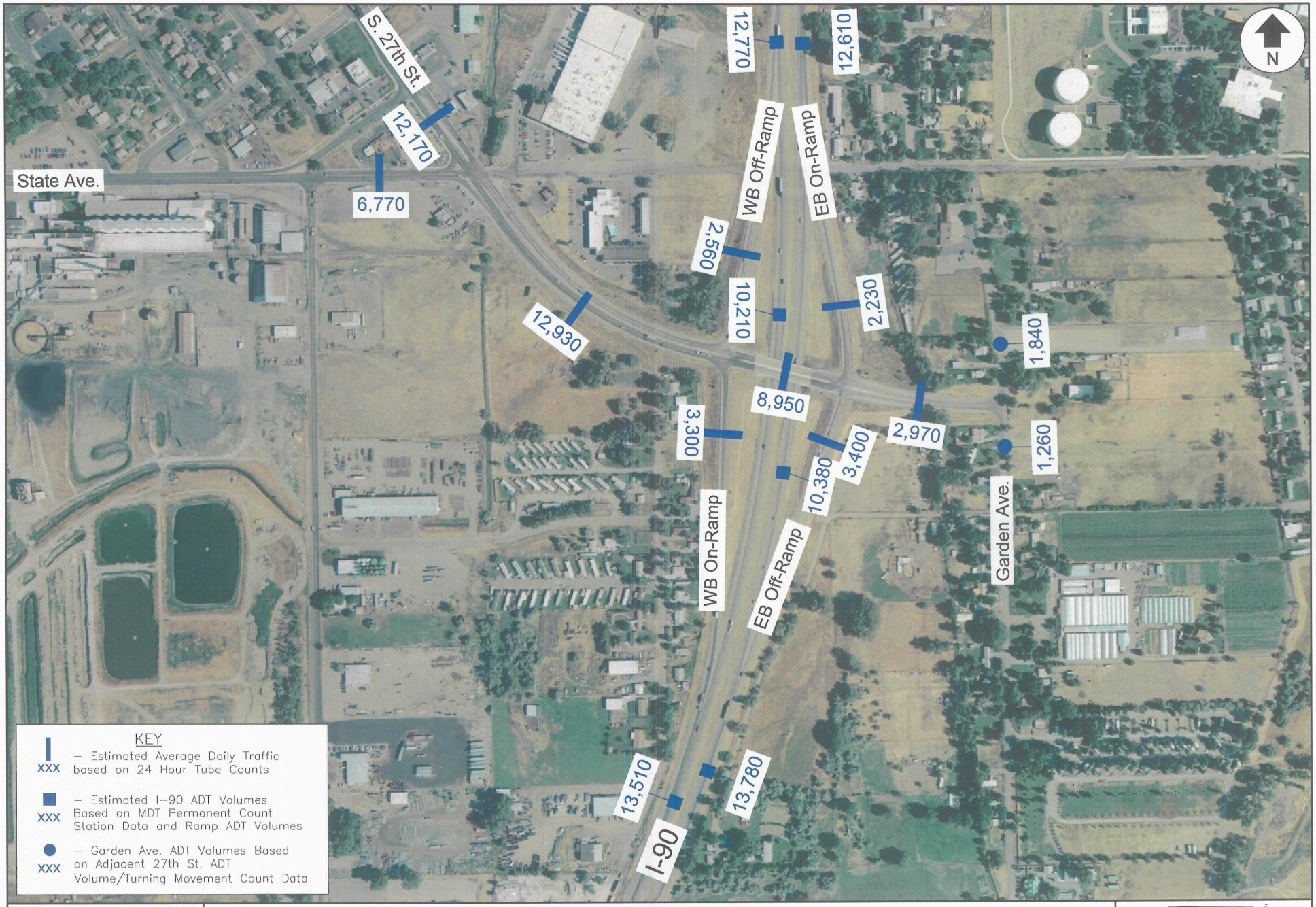
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Project # AMTDOT0306

BILLINGS I-90 INTERCHANGE STUDY

SHORT TERM 2008 ADT FORECASTS-SOUTH BILLIINGS BOULEVARD INTERCHANGE EXIT 447

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-2

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BILLINGS I-90 INTERCHANGE STUDY

SHORT TERM 2008 ADT FORECASTS - 27TH STREET INTERCHANGE EXIT 450

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-3

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BILLINGS I-90 INTERCHANGE STUDY

SHORT TERM 2008 ADT FORECASTS - US 87 LOCKWOOD INTERCHANGE EXIT 455

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-4

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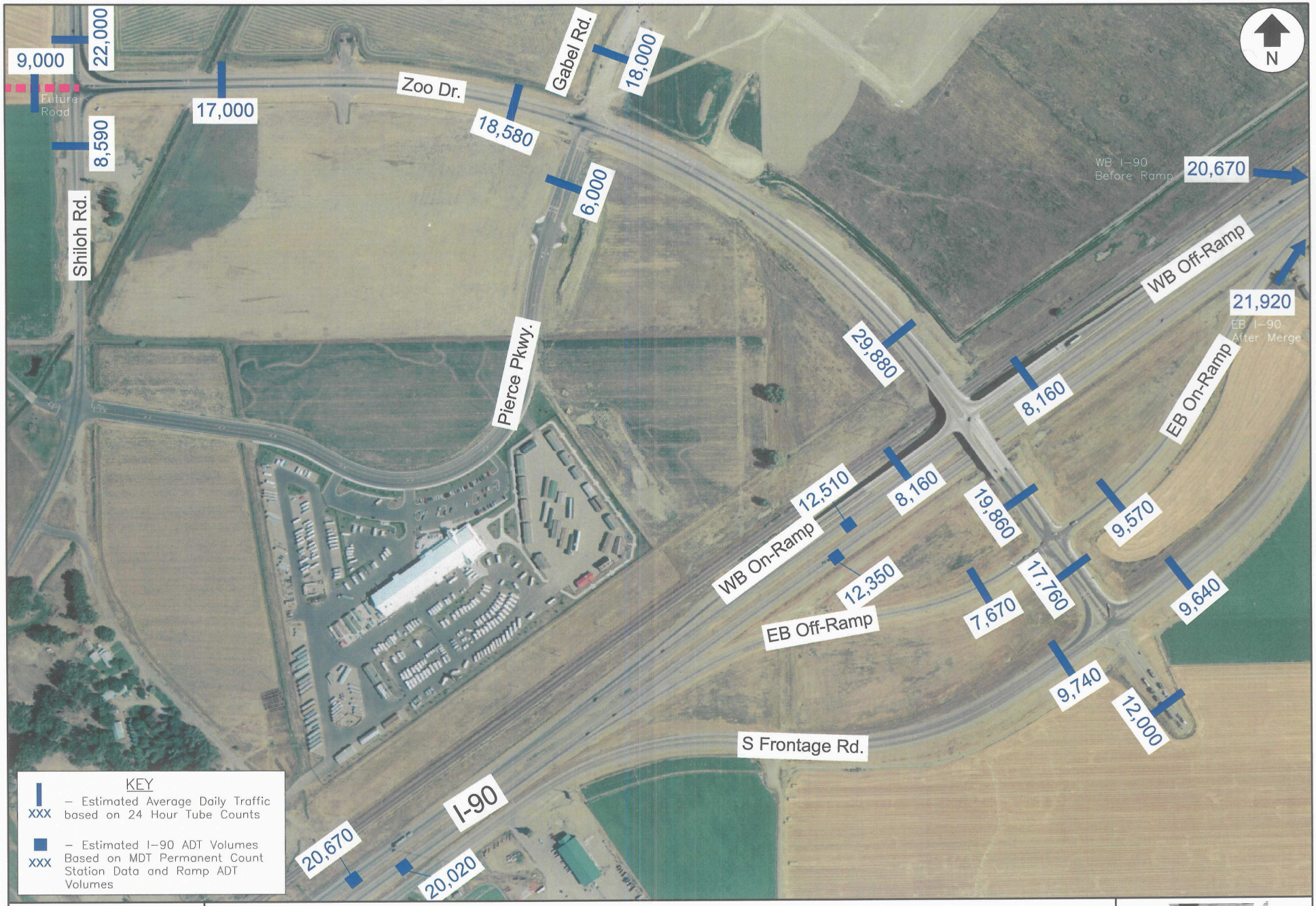
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Project # AMTDOT0306

BILLINGS I-90 INTERCHANGE STUDY

SHORT TERM 2008 ADT FORECASTS - JOHNSON LANE INTERCHANGE EXIT 455

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-5

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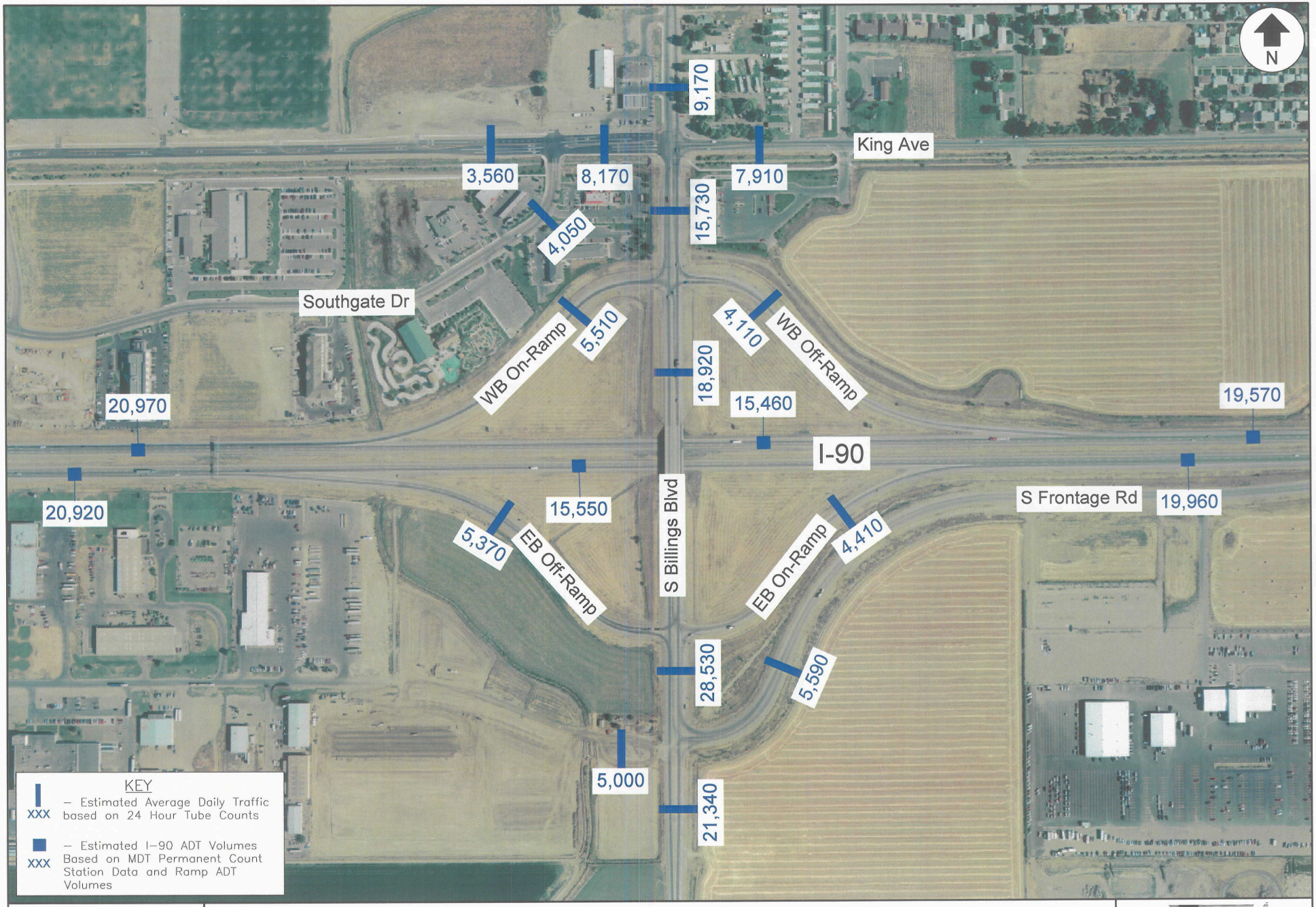
BILLINGS I-90 INTERCHANGE STUDY

LONG TERM 2023 ADT FORECASTS - SHILOH INTERCHANGE EXIT 443

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-6

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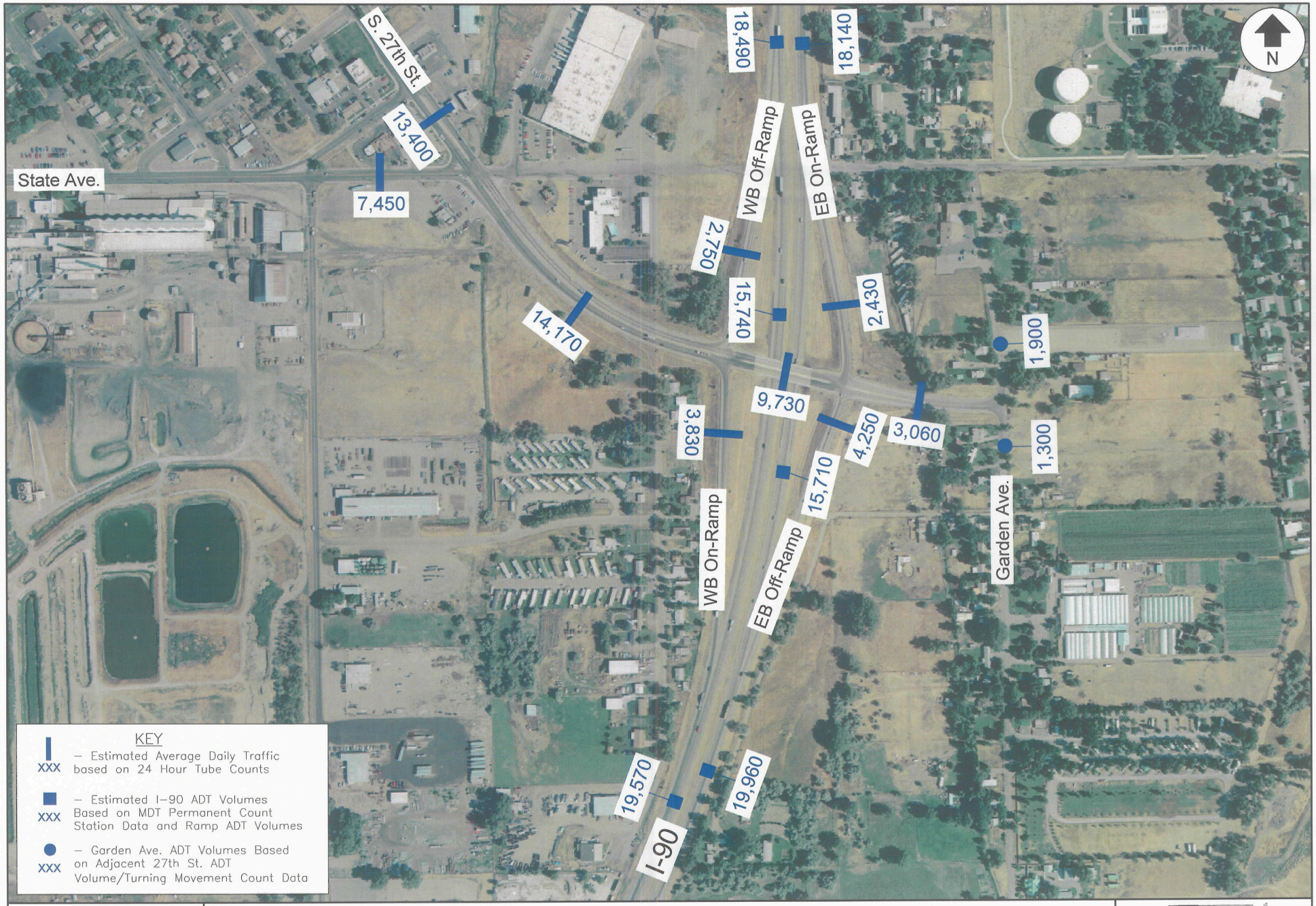
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BILLINGS I-90 INTERCHANGE STUDY

LONG TERM 2023 ADT FORECASTS - SOUTH BILLINGS BOULEVARD INTERCHANGE EXIT 447

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-7

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BILLINGS I-90 INTERCHANGE STUDY

LONG TERM 2023 ADT FORECASTS - 27TH STREET INTERCHANGE EXIT 450

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-8

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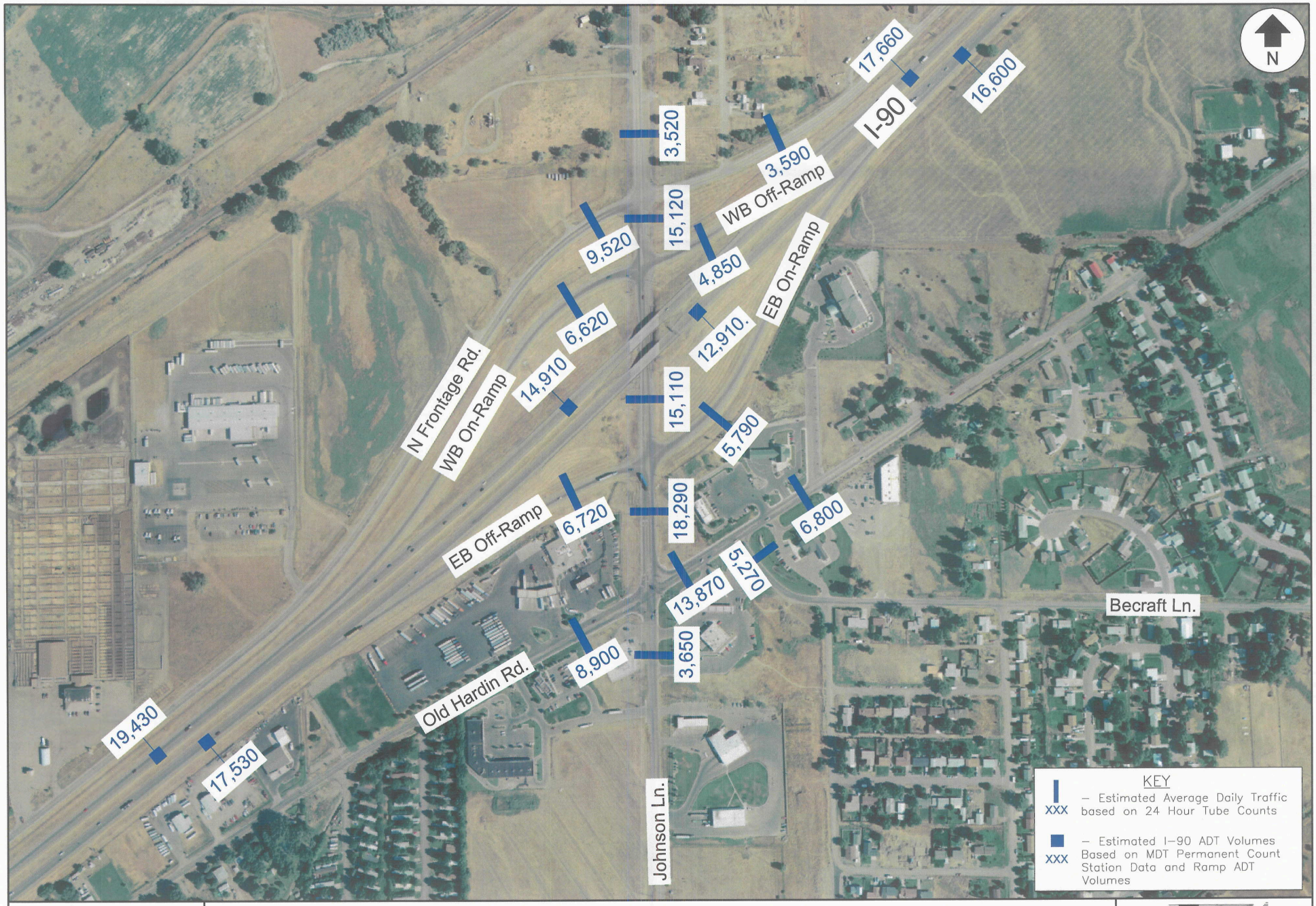
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Project # AMTDOT0306

BILLINGS I-90 INTERCHANGE STUDY

LONG TERM 2023 ADT FORECASTS - US 87 LOCKWOOD INTERCHANGE EXIT 452

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-9

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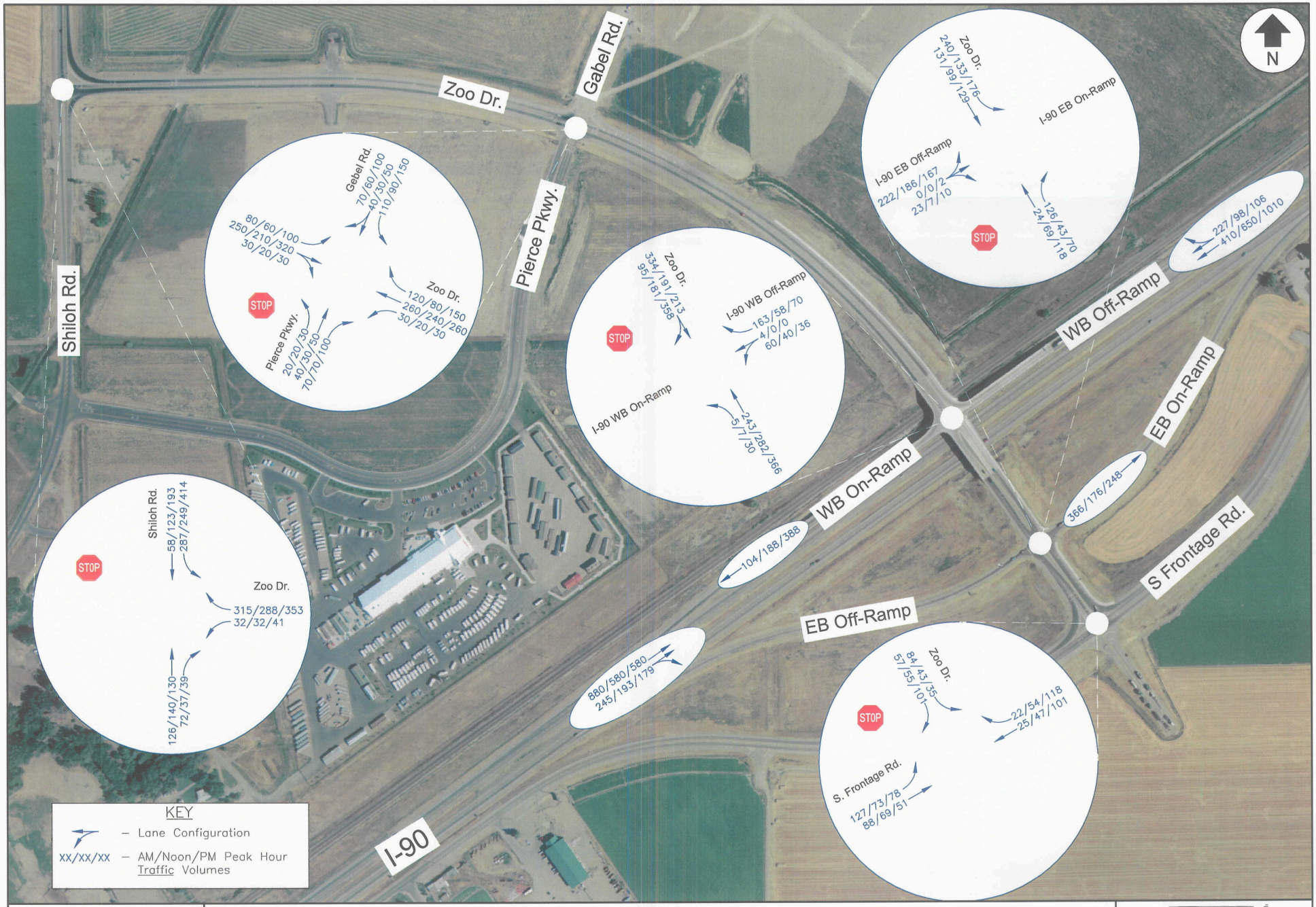
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BILLINGS I-90 INTERCHANGE STUDY

LONG TERM 2023 ADT FORECASTS - JOHNSON LANE INTERCHANGE EXIT 455

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-10

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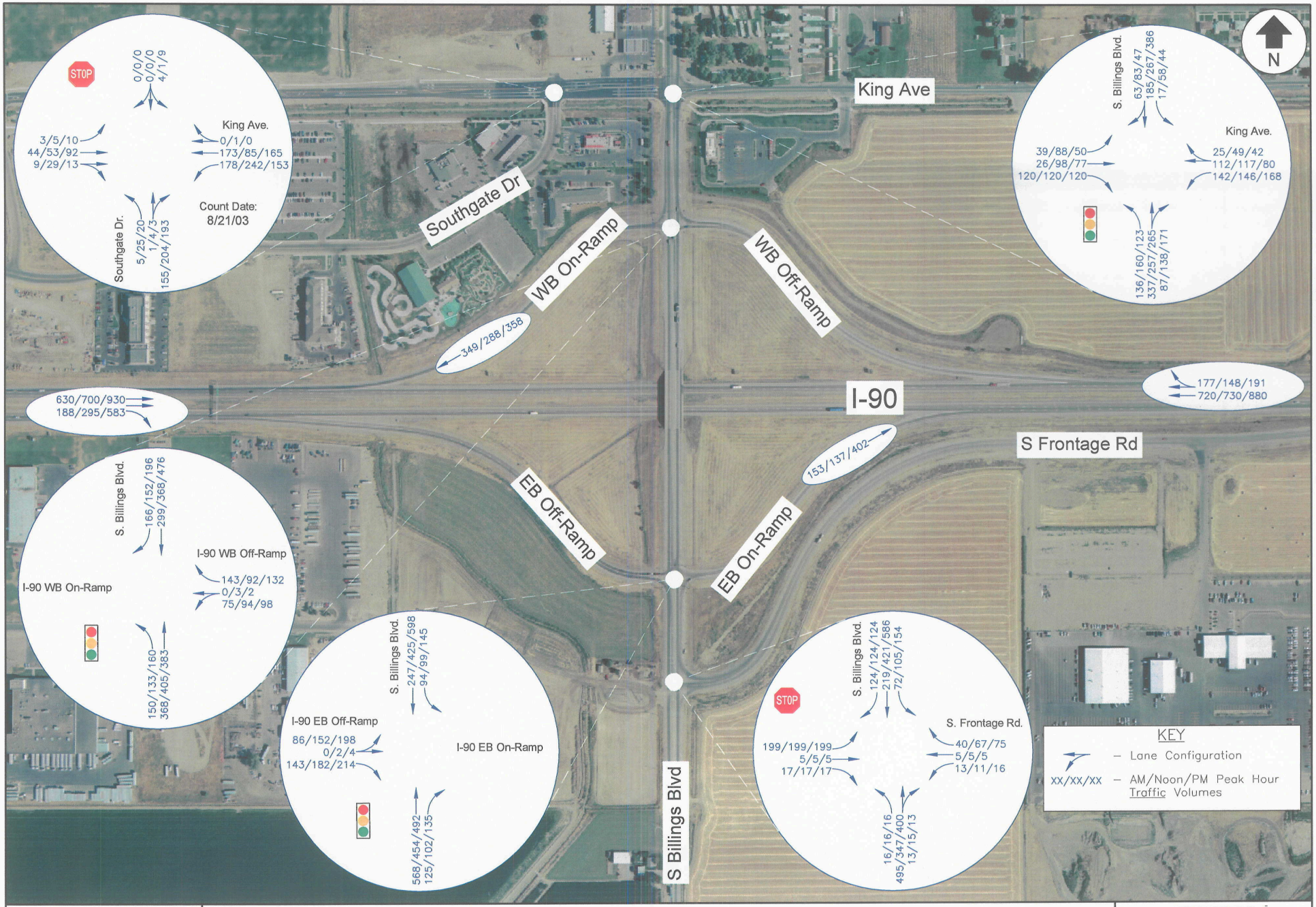
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BILLINGS I-90 INTERCHANGE STUDY

SHORT TERM 2008 TURNING MOVEMENT FORECASTS - SHILOH INTERCHANGE EXIT 443

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-11

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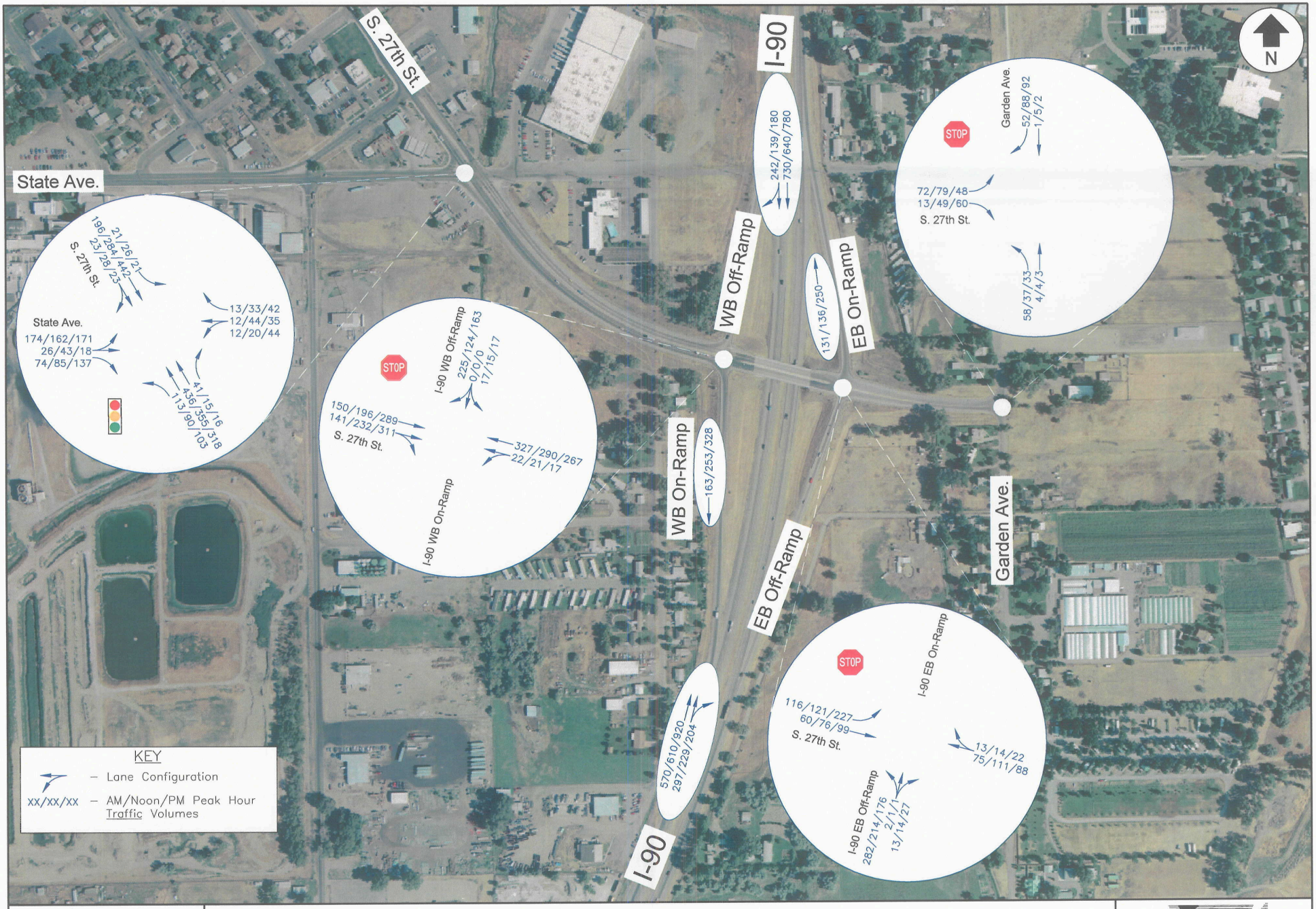
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BILLINGS I-90 INTERCHANGE STUDY

SHORT TERM 2008 TURNING MOVEMENT FORECASTS - S. BILLINGS BLVD. INTERCHANGE EXIT 447

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-12

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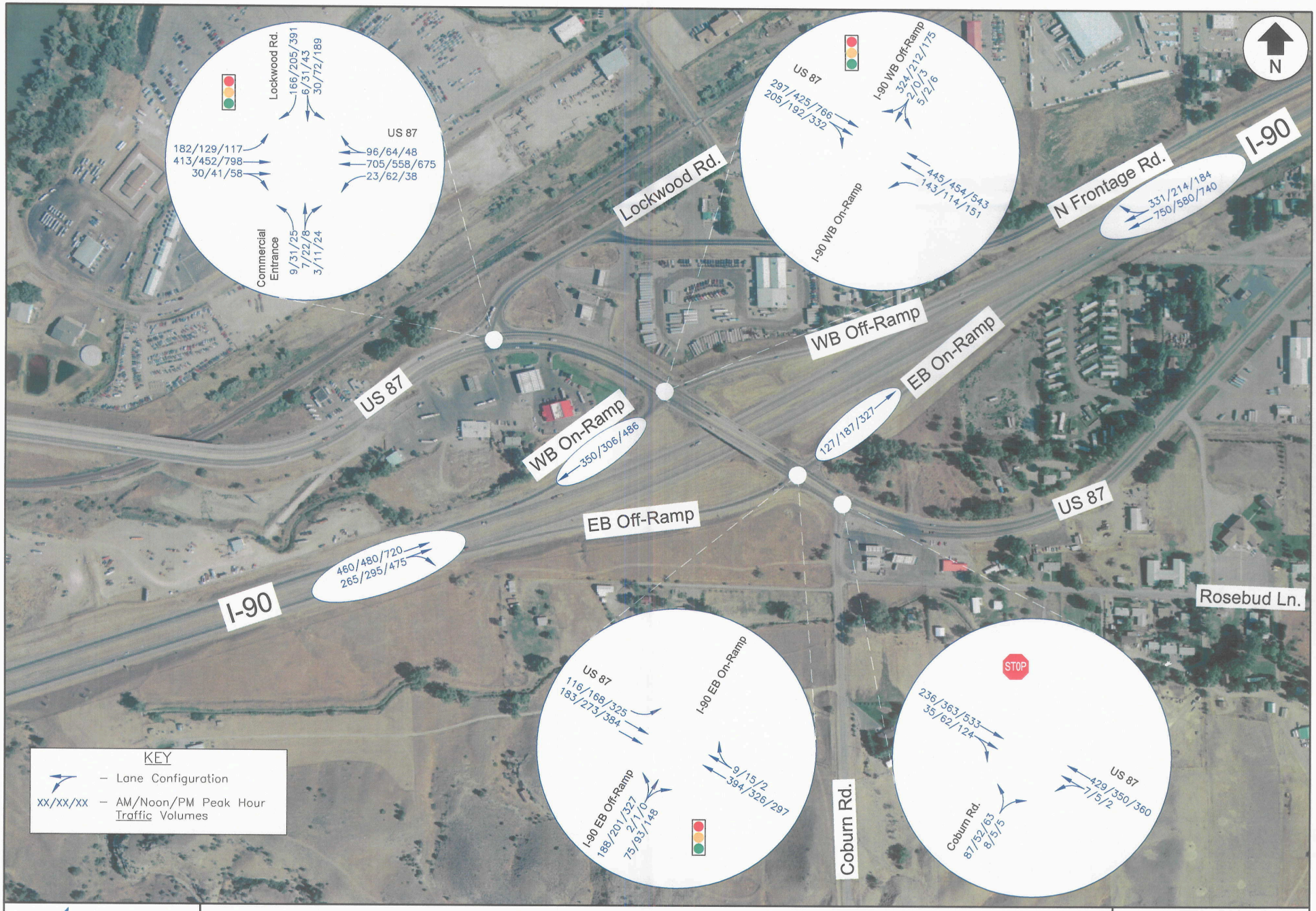
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Project # AMTDOT0306

BILLINGS I-90 INTERCHANGE STUDY

SHORT TERM 2008 TURNING MOVEMENT FORECASTS - 27TH ST. INTERCHANGE EXIT 450

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-13

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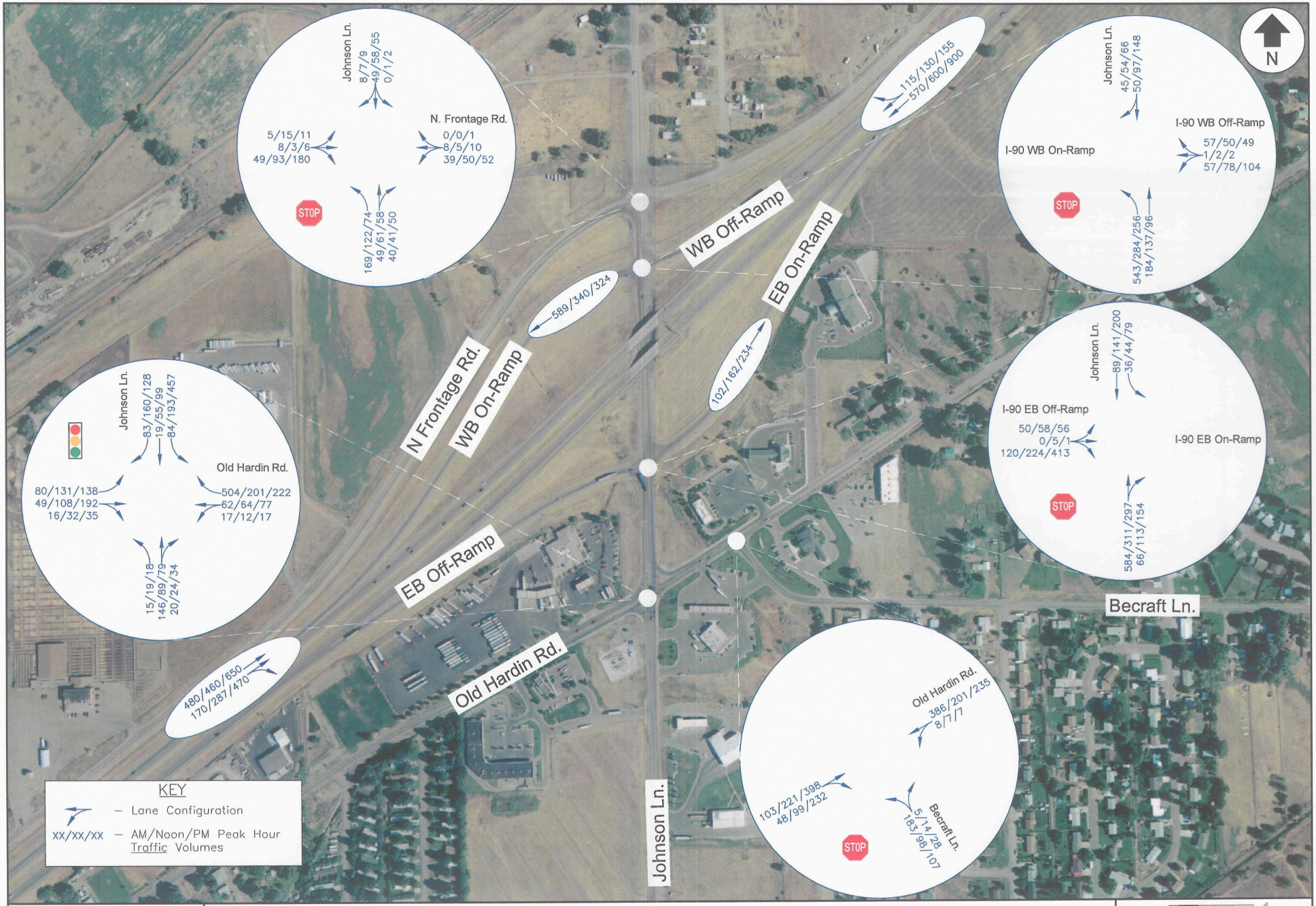
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BILLINGS I-90 INTERCHANGE STUDY

SHORT TERM 2008 TURNING MOVEMENT FORECASTS - US87 LOCKWOOD INTERCHANGE EXIT 452

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-14

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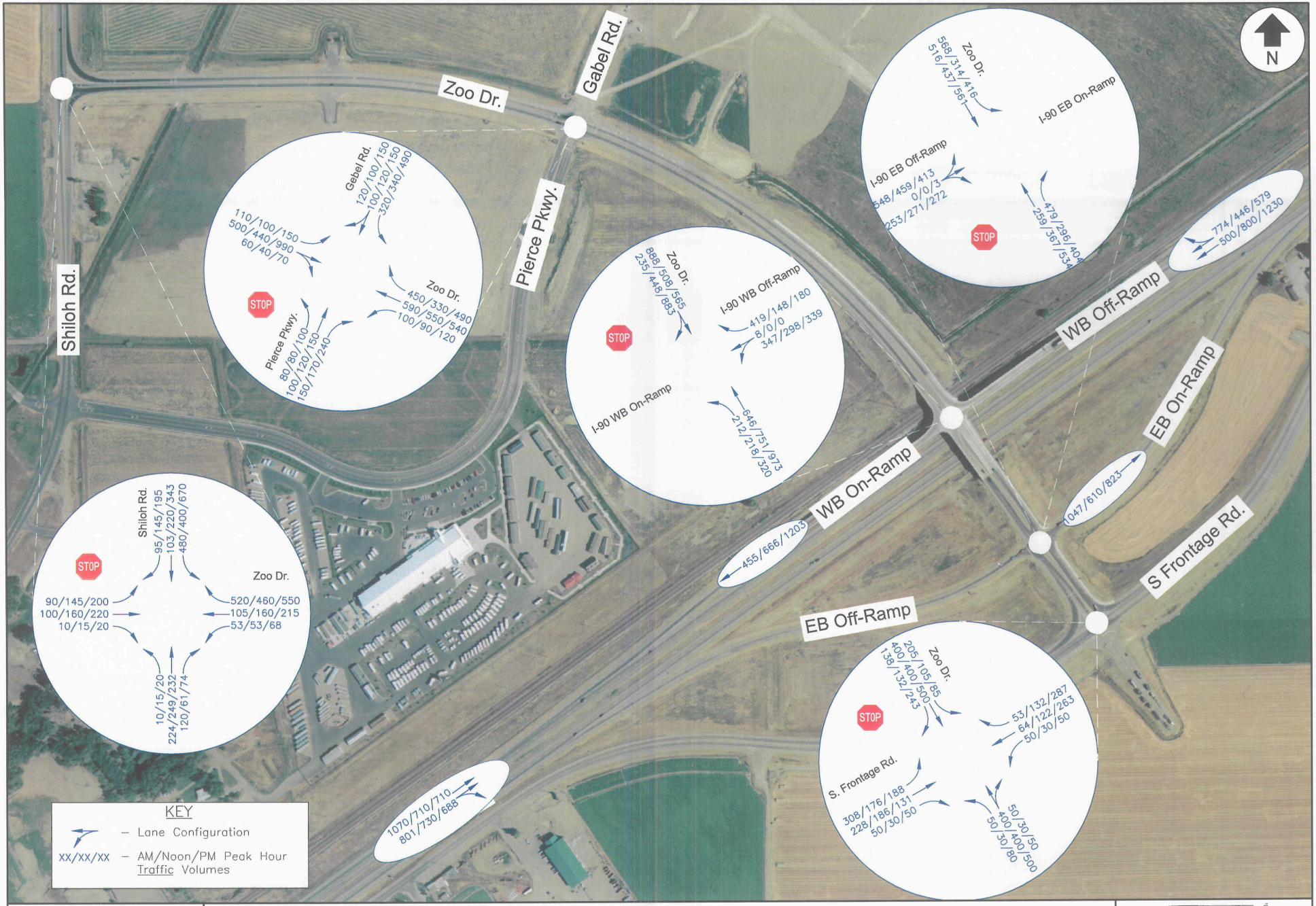
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BILLINGS I-90 INTERCHANGE STUDY

SHORT TERM 2008 TURNING MOVEMENT FORECASTS - JOHNSON LN. INTERCHANGE EXIT 455

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-15

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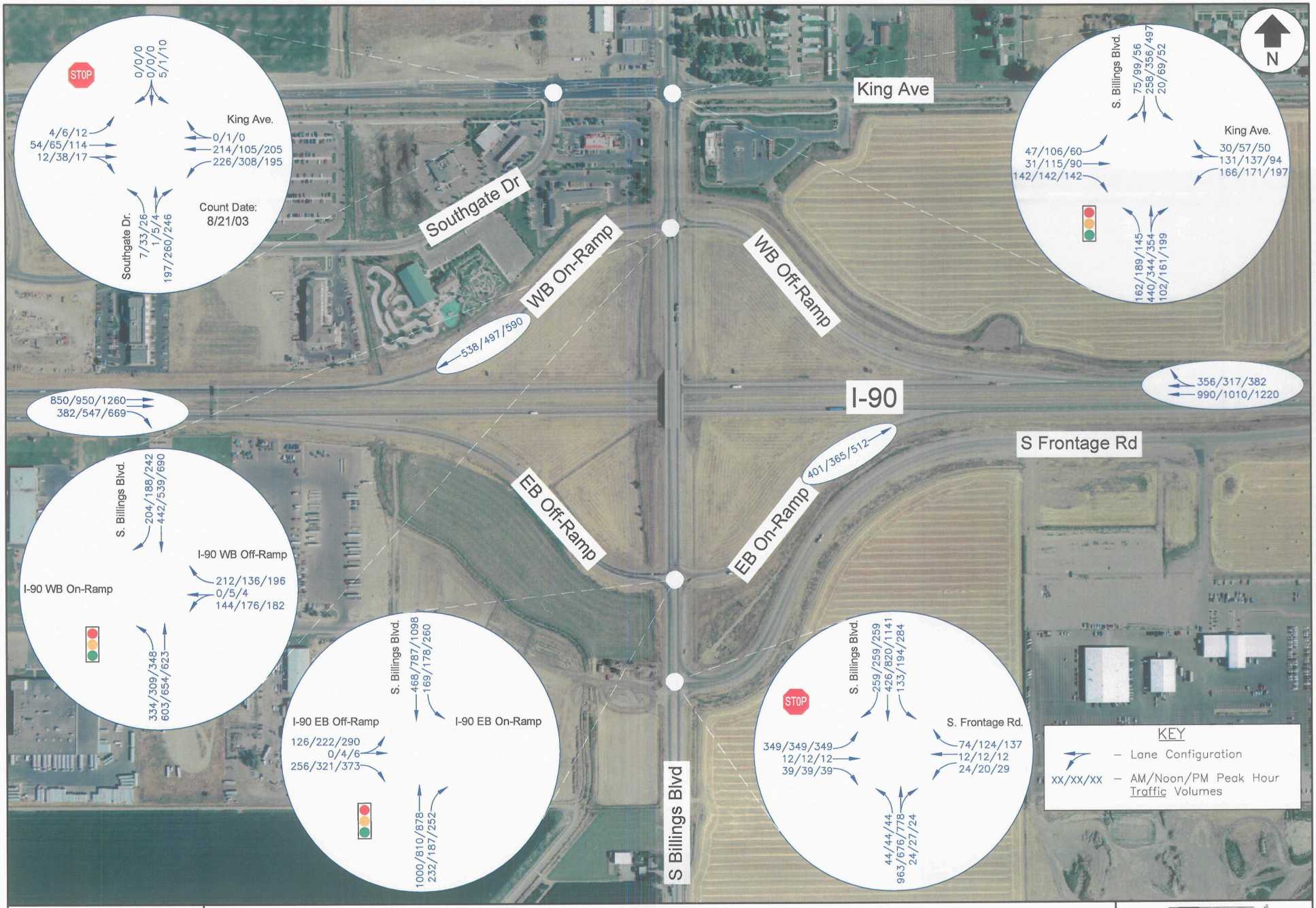
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BILLINGS I-90 INTERCHANGE STUDY

LONG TERM 2023 TURNING MOVEMENT FORECASTS - SHILOH INTERCHANGE EXIT 443

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-16

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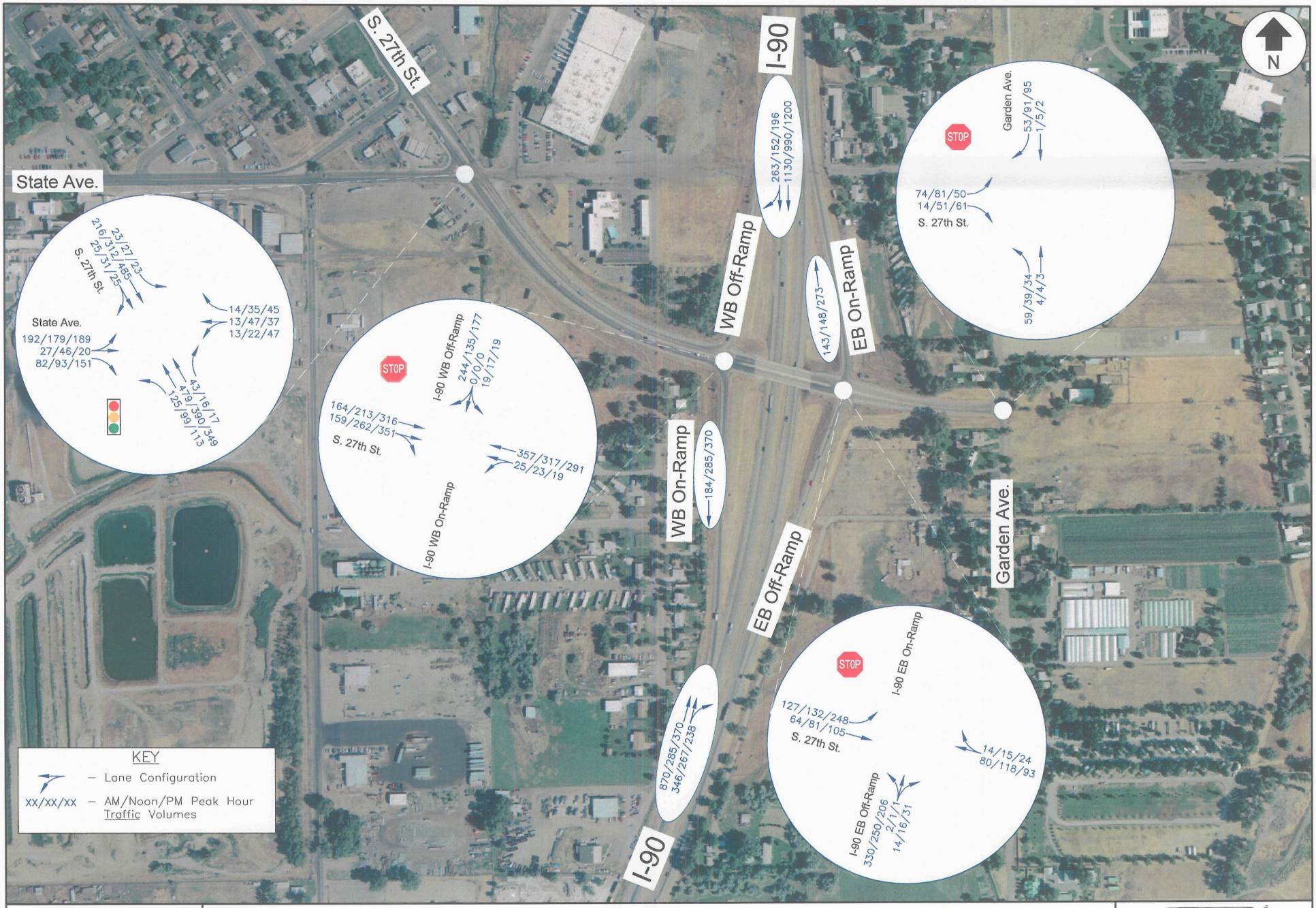
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BILLINGS I-90 INTERCHANGE STUDY

LONG TERM 2023 TURNING MOVEMENT FORECASTS - S. BILLINGS BOULEVARD INTERCHANGE EXIT 447

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-17

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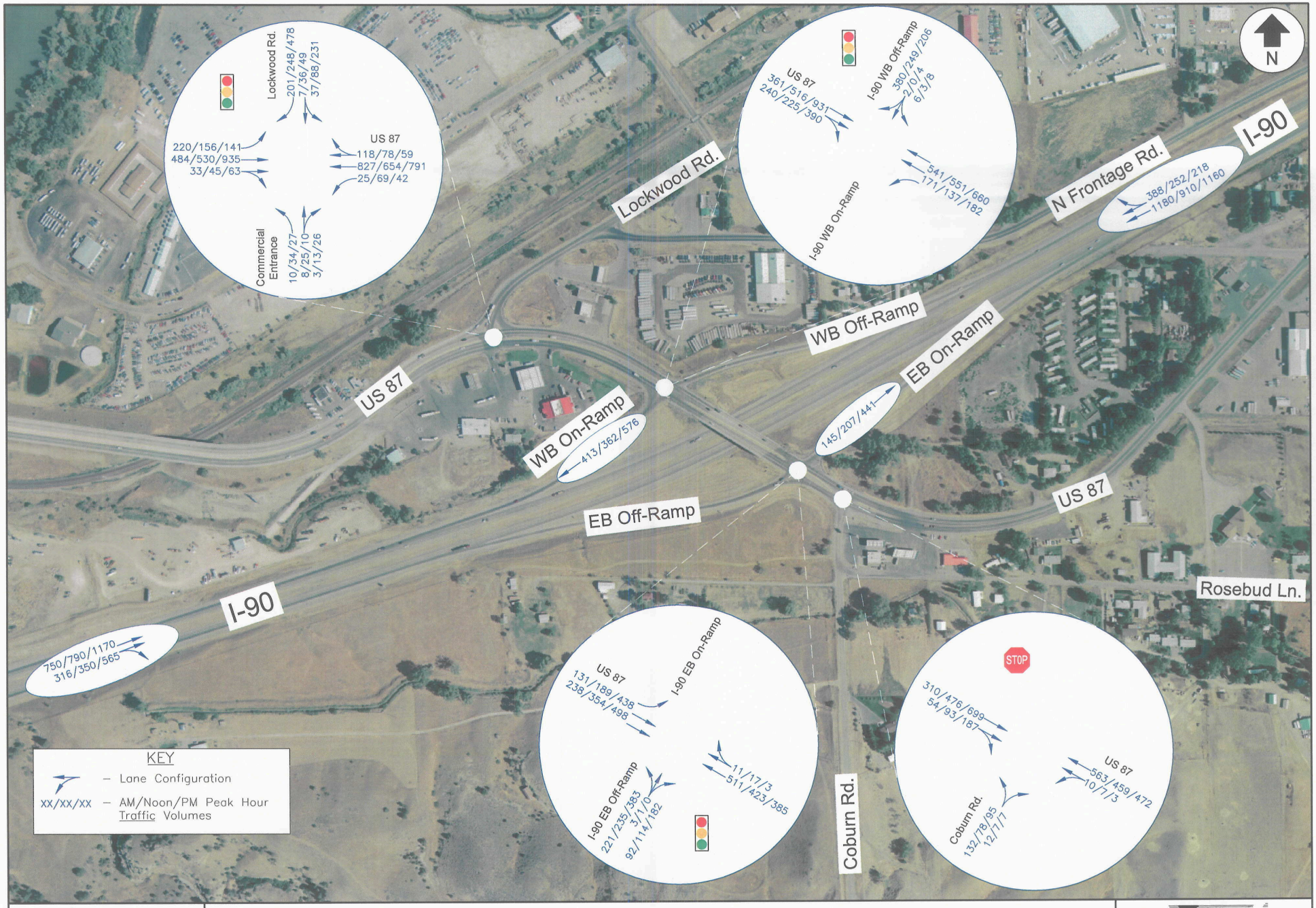
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BILLINGS I-90 INTERCHANGE STUDY

LONG TERM 2023 TURNING MOVEMENT FORECASTS - 27TH ST. INTERCHANGE EXIT 450

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-18

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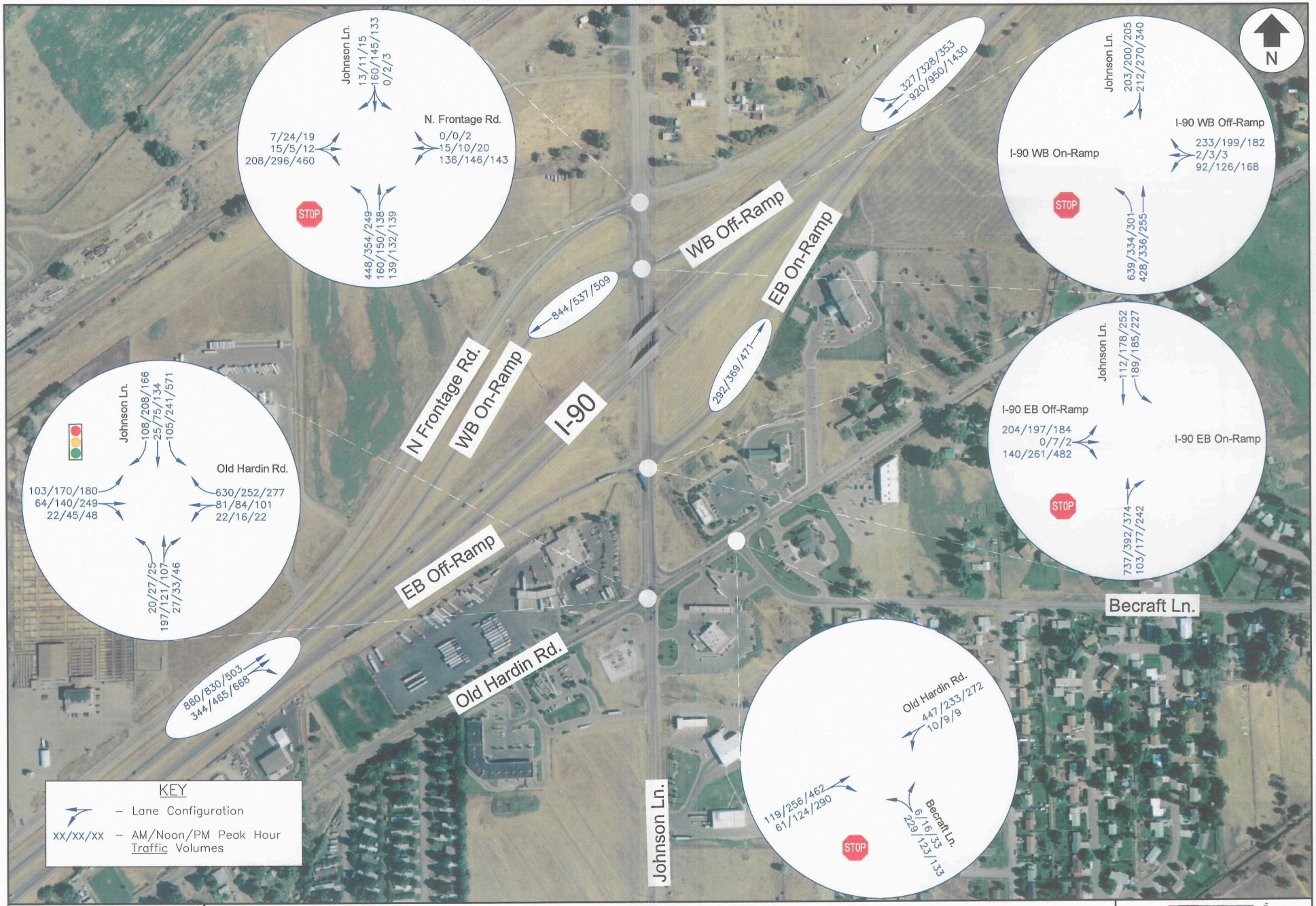
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BILLINGS I-90 INTERCHANGE STUDY

LONG TERM 2023 TURNING MOVEMENT FORECASTS - US87 LOCKWOOD INTERCHANGE EXIT 452

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-19

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BILLINGS I-90 INTERCHANGE STUDY

LONG TERM 2023 TURNING MOVEMENT FORECASTS - JOHNSON LN. INTERCHANGE EXIT 455

Scale	1"=500'	Date	March 2006	Drawn by	RAC	Figure	B-20

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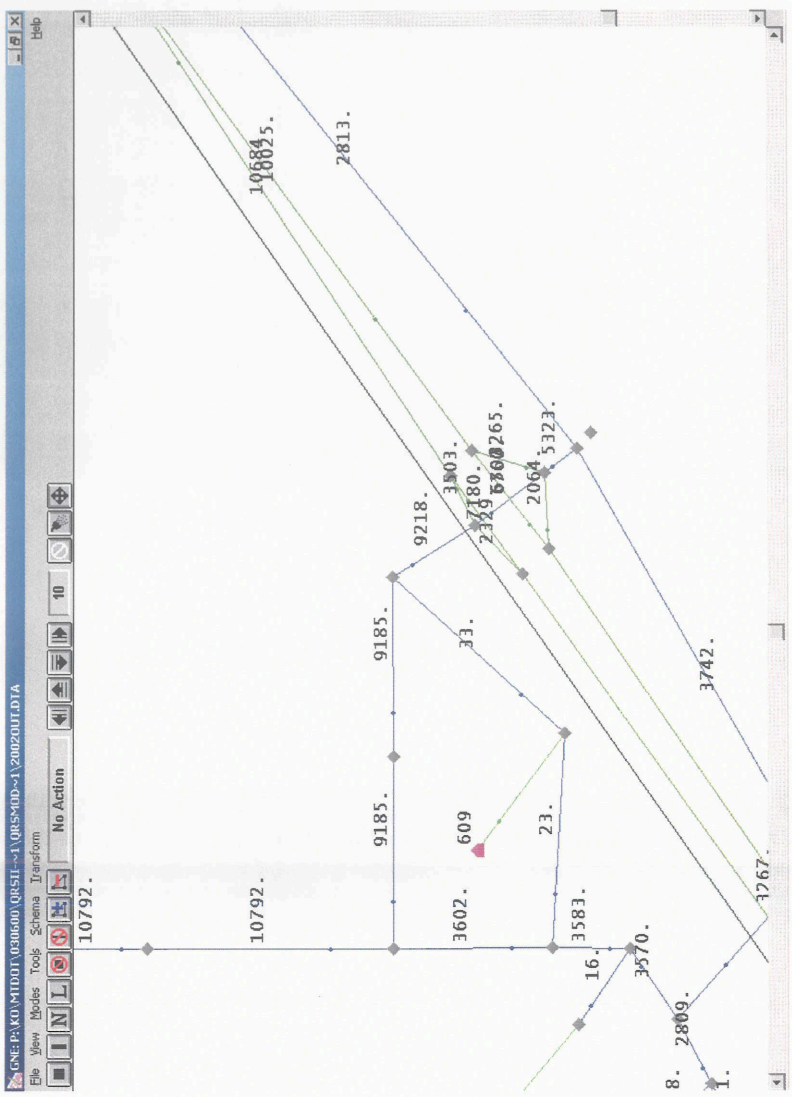
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Project # AMTDOT0306

BILLINGS I-90 INTERCHANGE STUDY

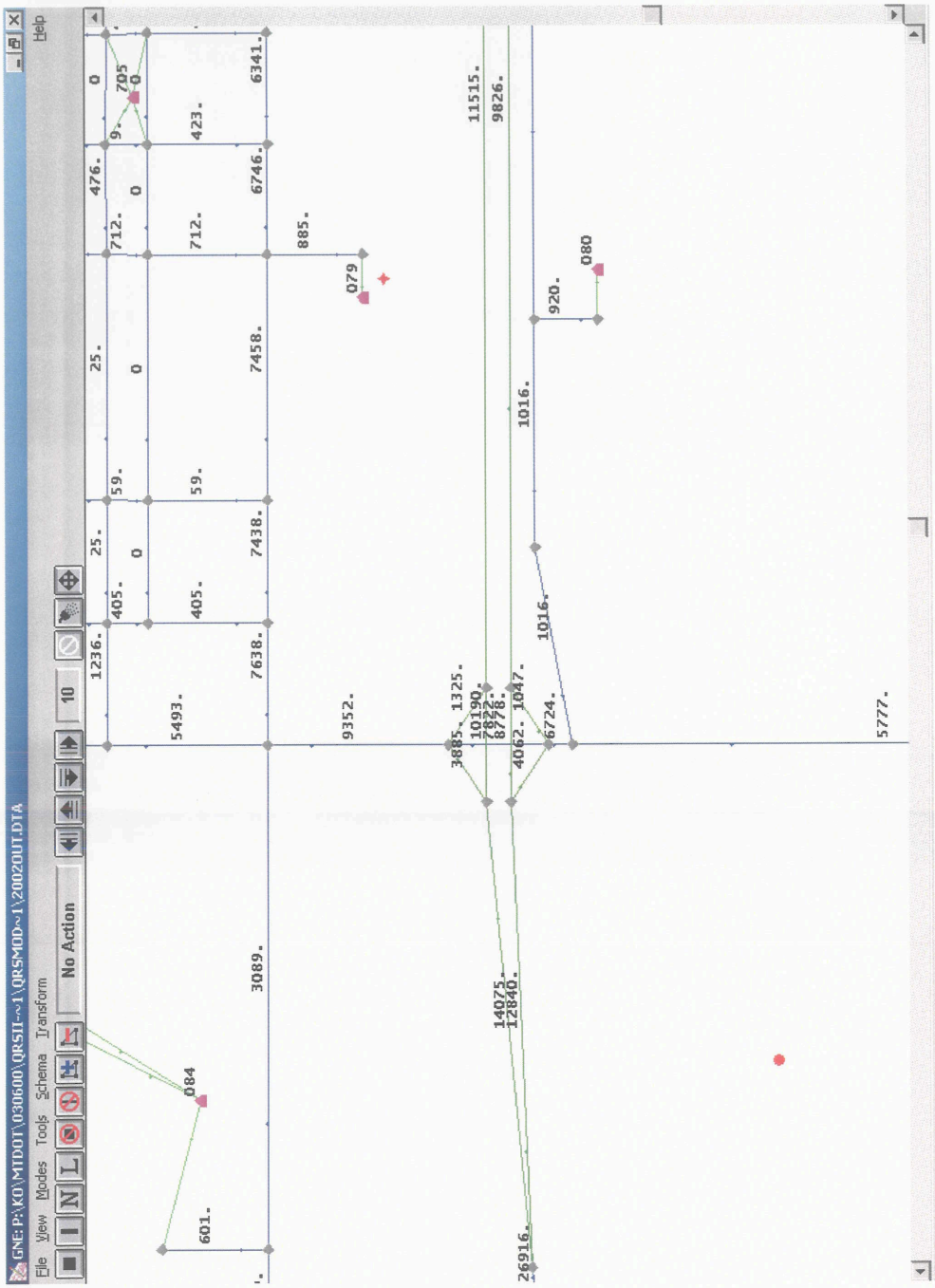
LANE WIDTHS & TAPER LENGTHS - SHILOH INT. EXIT 443

Scale	1"=100'	Date	March 2006	Drawn by	RAC	Figure	C-1A

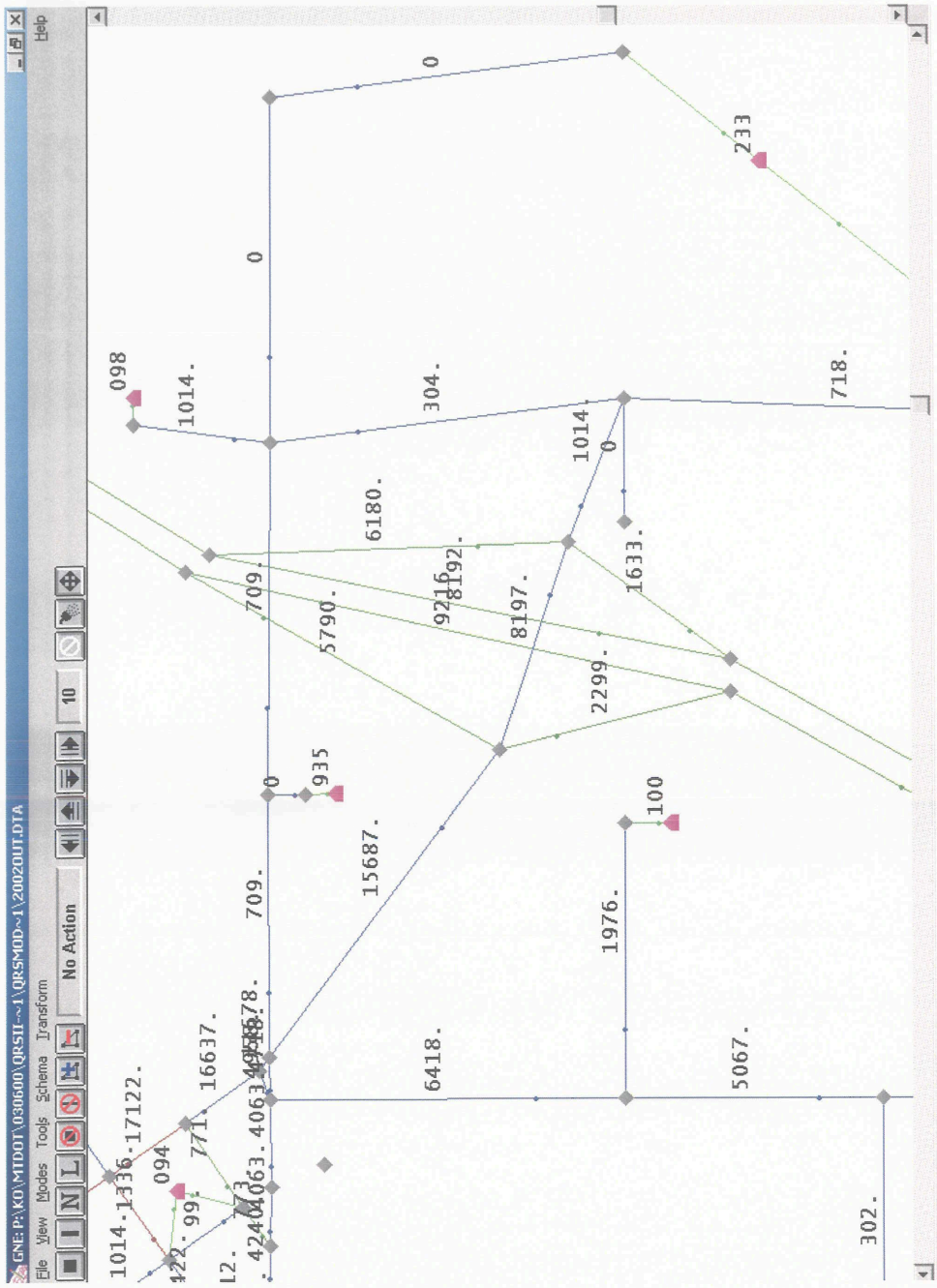
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BILLINGS I-90 INTERCHANGE STUDY



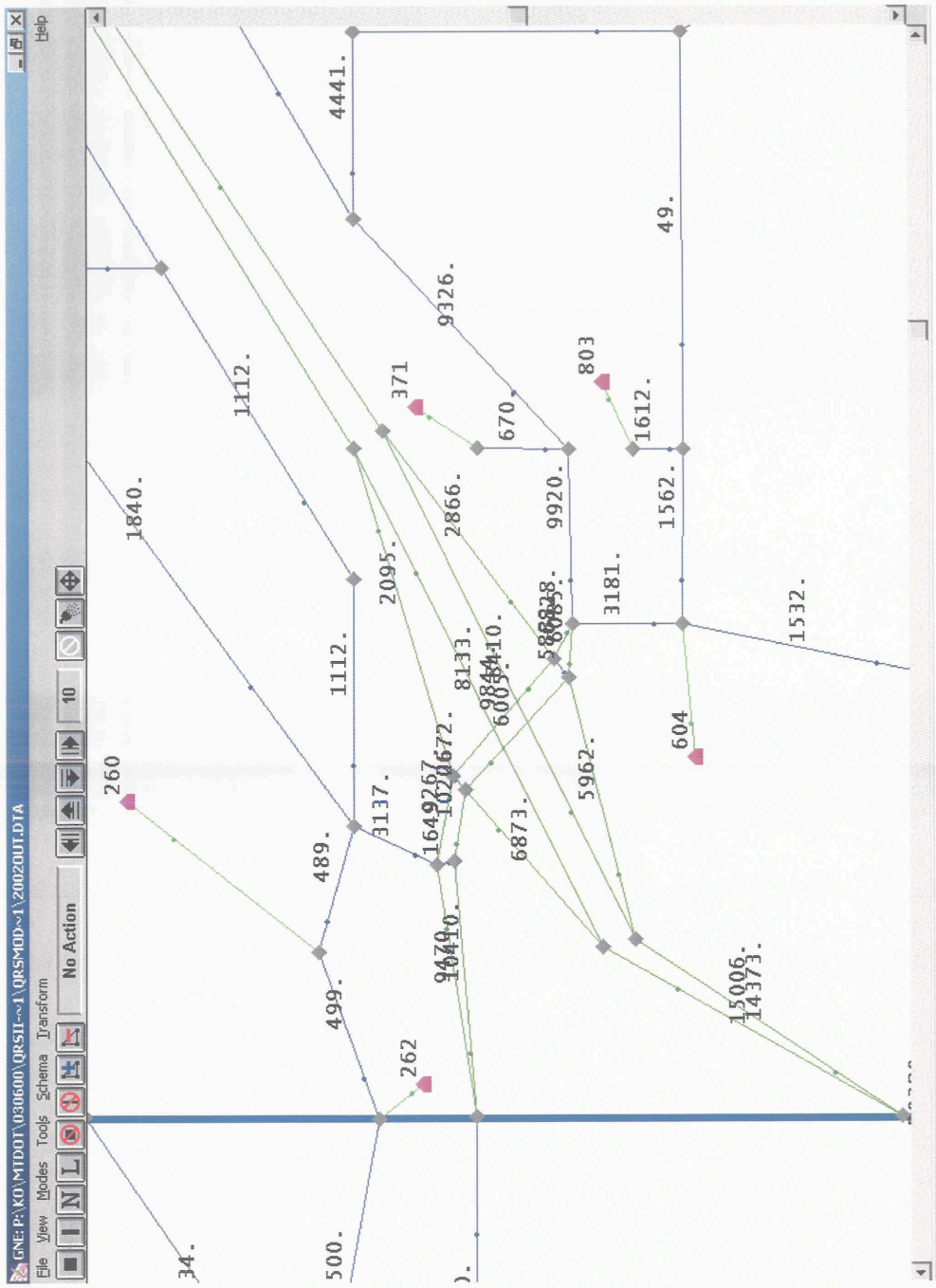
MDT QRS-II Existing 2002 Model Volumes – Shiloh Interchange Exit 443



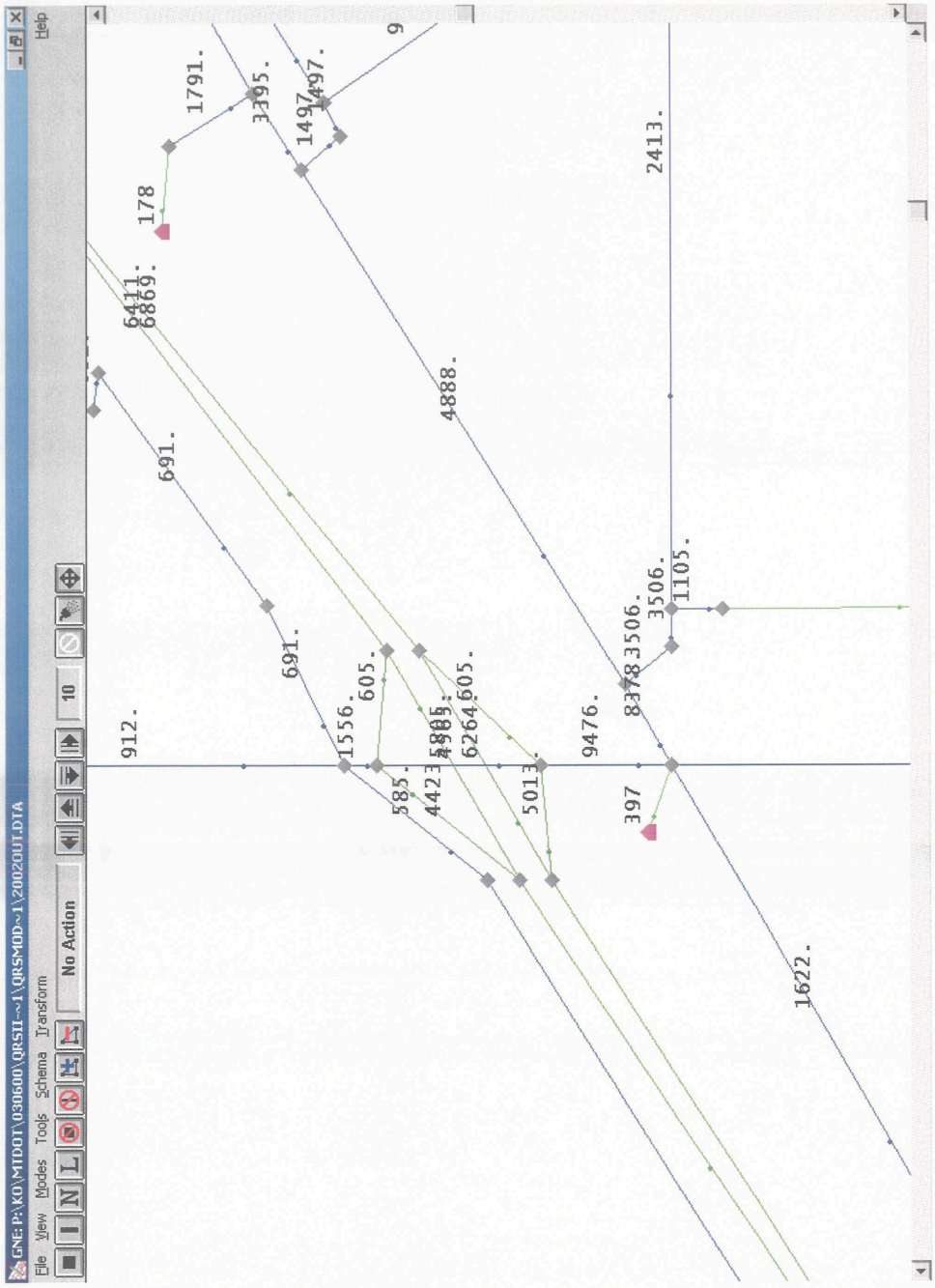
MDT QRS-II Existing 2002 Model Volumes – South Billings Boulevard Interchange Exit 447



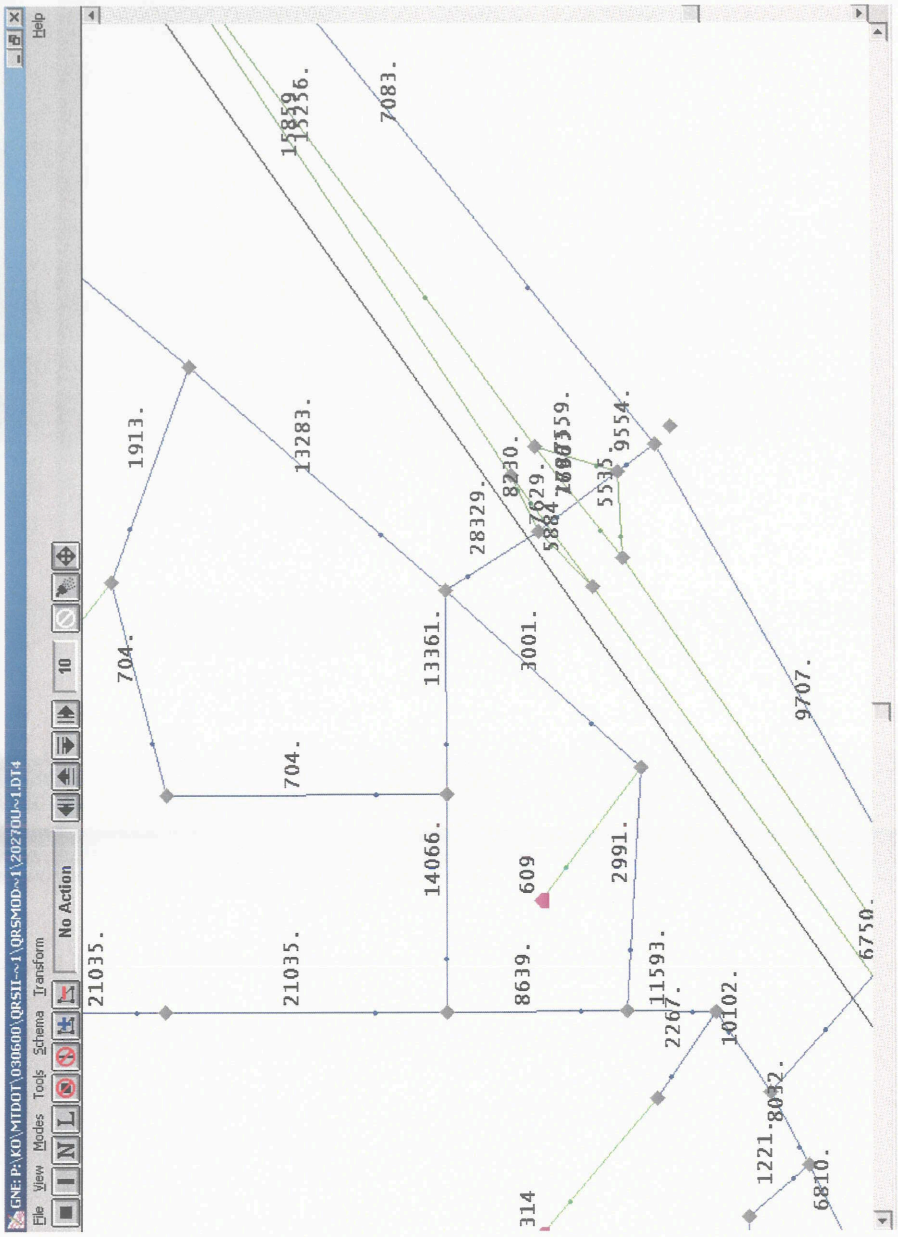
MDT QRS-II Existing 2002 Model Volumes – 27th Street Interchange Exit 450



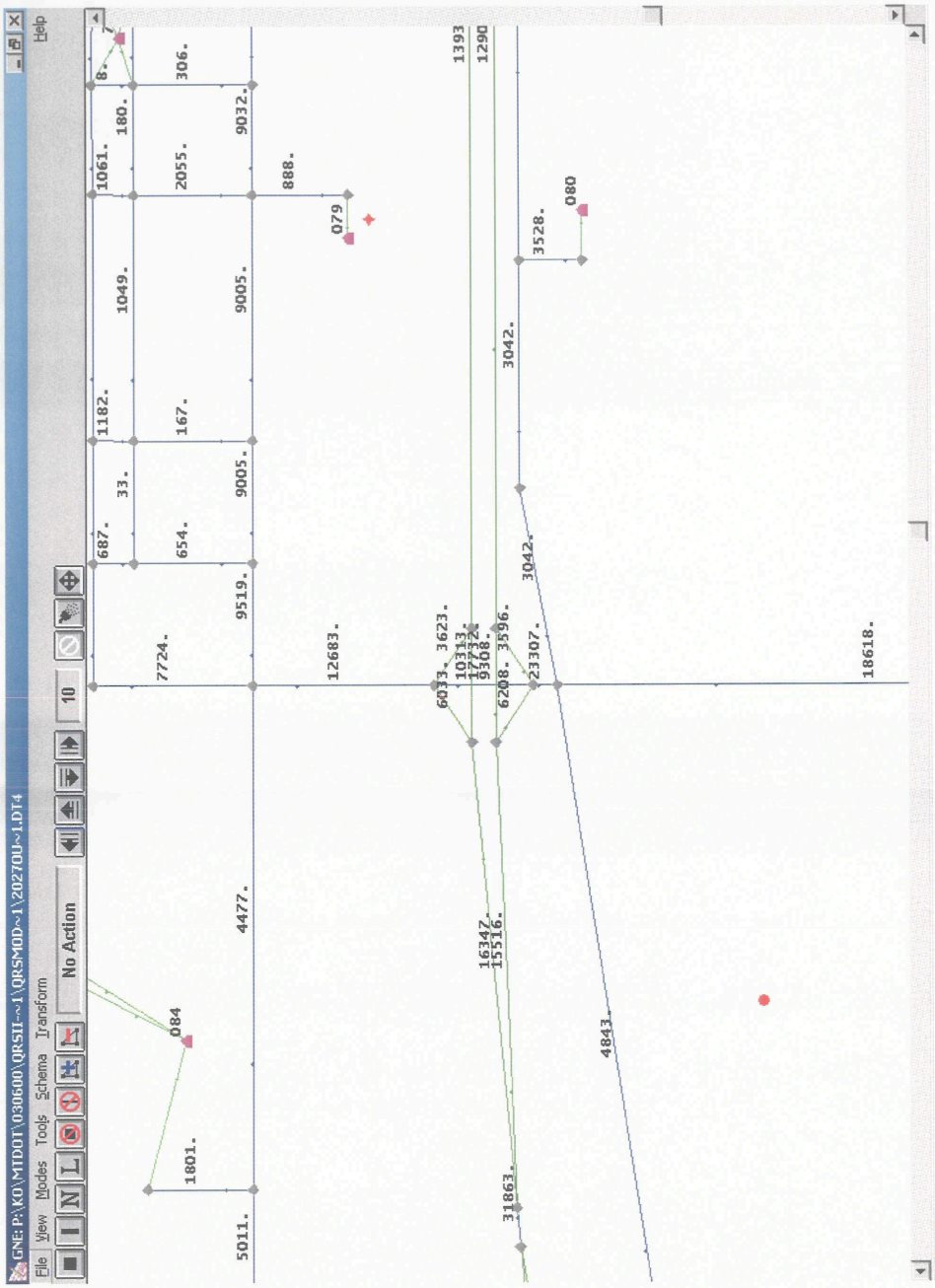
MDT QRS-II Existing 2002 Model Volumes – US 87 Lockwood Interchange Exit 452



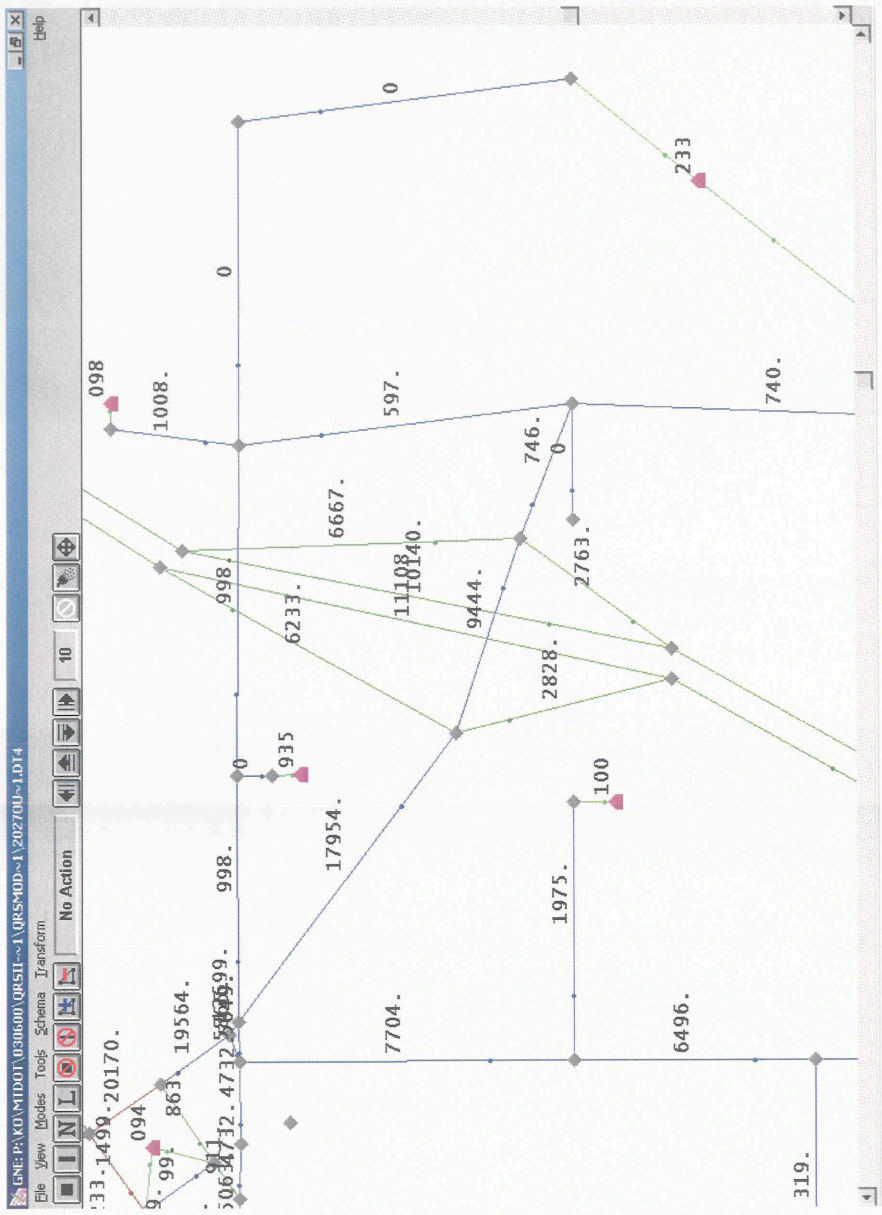
MDT QRS-II Existing 2002 Model Volumes – Johnson Lane Interchange Exit 455



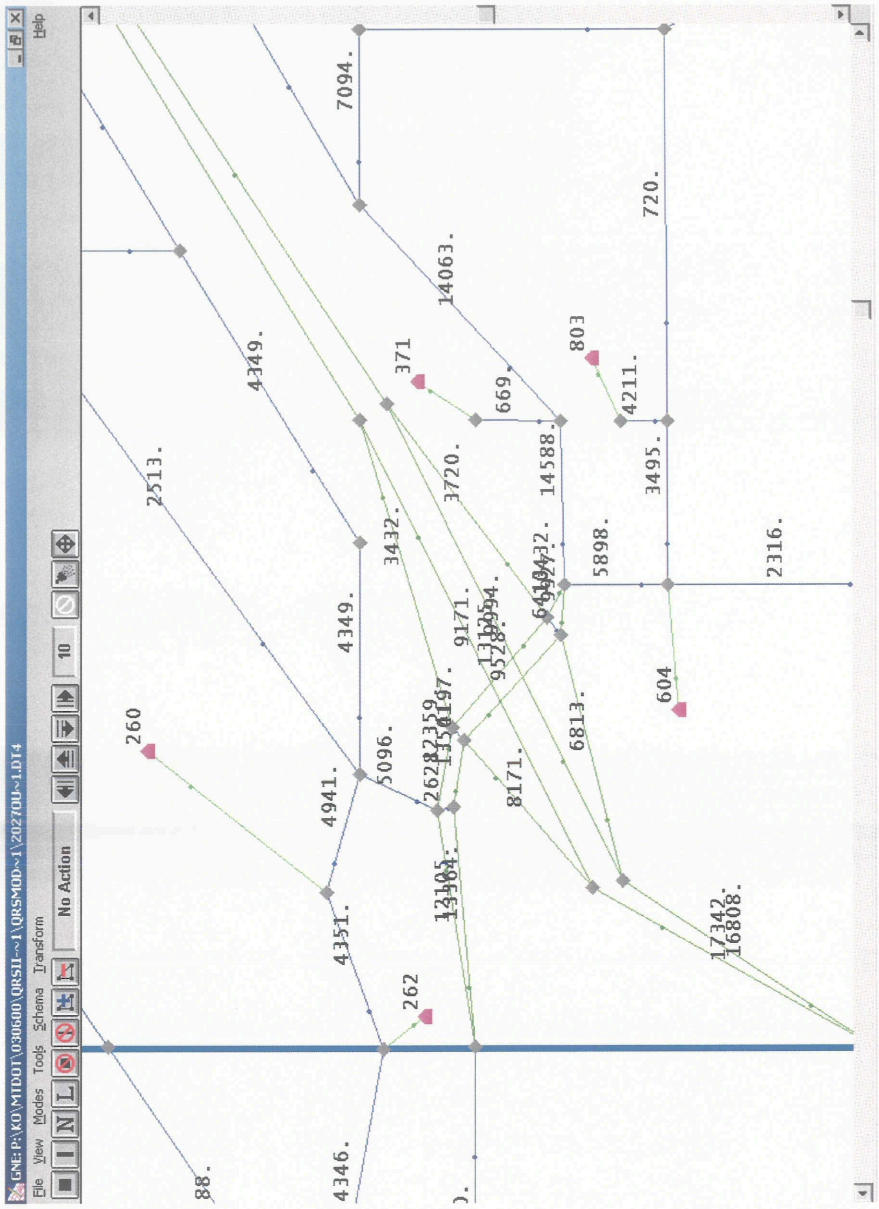
MDT QRS-II Future 2027 Model Forecasts – Shiloh Interchange Exit 443



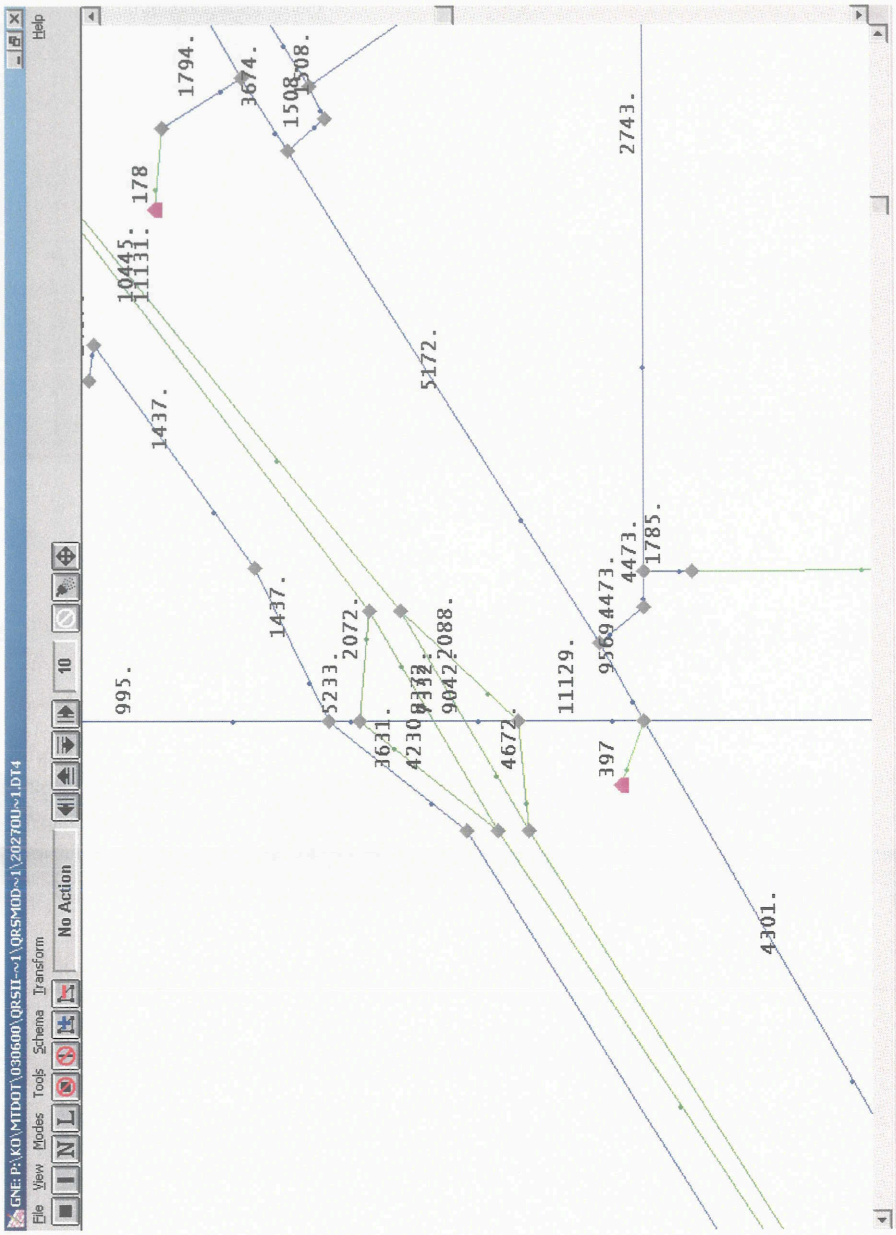
MDT QRS-II Future 2027 Model Forecasts – South Billings Boulevard Interchange Exit 447



MDT QRS-II Future 2027 Model Forecasts – 27th Street Interchange Exit 450



MDT QRS-II Future 2027 Model Forecasts – US 87 Lockwood Interchange Exit 452



MDT QRS-II Future 2027 Model Forecasts – Johnson Lane Interchange Exit 455