

Walmart Supercenter – Wyoming Mall

(Northeastern Blvd. / Wyoming Blvd.)

Traffic Study



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Walmart Supercenter
(Northeastern Blvd. / Wyoming Blvd.)
TRAFFIC STUDY

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**Walmart Supercenter
(Northeastern Blvd. / Wyoming Blvd.)
TRAFFIC STUDY**

STUDY PURPOSE

The study is being conducted in conjunction with a request for approval of a site development plan proposing a new commercial center containing a Walmart Supercenter as shown conceptually in the Appendix (Page A-3) of this report. The purpose of this study is to address site access issues associated with the development of this project in accordance with the criterion established at the scoping meeting with the City of Albuquerque. This study is being prepared to meet the requirements of the City of Albuquerque Transportation Development Section.

STUDY PROCEDURES

A scoping meeting was held on Wednesday, June 23, 2004 with City of Albuquerque staff prior to beginning the study to discuss scope and methodology to be utilized within the report. Tony Loyd summarized the meeting and defined the requirements and procedures for the study in letter dated June xx, 2004 (See Pages Z-1 thru Z-3 in Appendix Z).

The basic procedure followed is described as follows:

- 1) Calculate the generated trips for the proposed development consisting of the land uses defined on the conceptual site plan on Page A-3 in the Appendix. The trip generation considerations for this project will be on two different basis. Trips generated under the new plan will be compared to the trips generated under the currently approved site development plan for the Wyoming Mall in order to determine whether or not the project meets the threshold for a full Traffic Impact Study. It was determined that the new Walmart Supercenter plan will not generated sufficient additional trips above the previous Wyoming Mall plan to warrant a full Traffic Impact Study. Instead, a Traffic Study is being required to address concerns in the immediate vicinity of the project as well as site access issues. The second basis upon which the trip generation rate for the new plan will be considered is to compare those new rates to the actual trip generation rate for the current Wyoming Mall under it current condition (based on current occupancy and vacancies). Recent traffic count data for this study is governed to some degree by the volume of traffic actually being generated at the Wyoming Mall at this time. Existing building uses will be taken into account when determining the new trip generated by this facility.
- 2) Calculate trip distribution for the newly generated trips by this development. The new commercial trips will be distributed based on year 2006 population within an irregularly-shaped boundary around proposed site as shown on Page C-1 in Appendix "C" of this report. The boundary was determined by plotting other adjacent Walmart Supercenter sites on a map and determining a reasonable boundary of area that this new Walmart Supercenter would serve.
- 3) Determine Trip Assignments for the newly generated trips based on the results of the Trip Distribution Analysis and logical routing to and from the site.
- 4) Acquire new traffic counts for the intersections of Indian School Rd. / Wyoming Blvd., Northeastern Blvd. / Wyoming Blvd, and Menaul Blvd. / Wyoming Blvd. from the City of Albuquerque.

- 5) Conduct AM and PM Peak Hour traffic counts for the existing intersection of Menaul Blvd. / Lester Rd. and Northeastern Blvd. / Lester Rd. (Snowheights Blvd.).
- 6) Calculate growth rate for each of the approaches to the intersections targeted for analysis.
- 7) Determine 2006 NO BUILD Volumes by growing the existing turning movement counts to the year 2006 utilizing the calculated annual historic growth rate for the area.
- 8) Add in data from Trip Assignments Maps and Tables to the 2006 NO BUILD Volumes to obtain 2006 BUILD Volumes for this project.
- 9) Provide signalized and / or unsignalized intersection analyses for the following intersections:

INTERSECTION	TYPE CONTROL	NO BUILD	BUILD
1) Indian School Rd. / Wyoming Blvd.	Traffic Signal	2006	2006
2) Northeastern Blvd. / Wyoming Blvd.	Traffic Signal	2006	2006
3) Menaul Blvd. / Wyoming Blvd.	Traffic Signal	2006	2006
4) Driveway "A" / Wyoming Blvd.	Stop Sign	N/A	2006
5) Menaul Blvd. / Lester Rd.	Stop Sign	2006	2006
6) Wyoming Pl. (Driveway "B") / Wyoming Blvd.	Stop Sign	N/A	2006
7) Apache Ave. (Driveway "C") / Wyoming Blvd.	Stop Sign	N/A	2006
8) Northeastern Blvd. / Driveway "D"	Stop Sign	N/A	2006
9) Northeastern Blvd. / Driveway "E"	Stop Sign	N/A	2002

The proposed Driveway "A" on this project is currently a signalized access into the existing Wyoming Mall. This intersection will be evaluated to see if a traffic signal at that location will still be warranted.

PREVIOUS RELATED TRAFFIC IMPACT STUDIES

There are no other previously approved projects which will generate new trips in this area that need to be considered in the background traffic volumes for this study. The Traffic Impact Study for the proposed Bradford Center (Snowheights Shopping Center) located at the southwest corner of Menaul Blvd. / Eubank Blvd. was performed in mid-2000. Four years later, the project has not progressed and, generally, the City of Albuquerque considers the Traffic Impact Studies to be valid for a period of four years. Therefore, trips from the Bradford Center were not incorporated into this study.

GENERAL AREA CHARACTERISTICS

The proposed Walmart Supercenter Commercial Development is located at the northeast corner of Northeastern Blvd. / Wyoming Blvd. The Vicinity Map in Appendix A on Page A-1 of this report depicts the location of the subject property. Existing zoning and land uses in the immediate site area are also shown on the Vicinity Map. Conceptual plans for the development of the Tract under consideration in this report are shown in Appendix A, Page A-3.

The subject property is currently an existing shopping center. There are existing single family homes to the southeast of this property in the Snow Heights Addition. The property immediately west of Wyoming Blvd. and south of Northeastern Blvd. fronting the proposed project is developed as various commercial and office land uses.

The subject project will have access from Wyoming Blvd. (on which there are three driveways proposed) and from Northeastern Blvd. (on which there are two driveways proposed). A sixth minor driveway is proposed on the east side of the property onto Lester Rd. Each of the six driveways are proposed as full access driveways. The three driveways on Wyoming Blvd. will utilize existing median cuts (possibly modified) to facilitate left turn movements. All driveways

except Driveway "A" are proposed to be controlled by stop signs for the driveways themselves. Driveway "A" currently exists as a signalized intersection and will be evaluated in this study to see if the projected volumes there meet the minimum warrant for a traffic signal.

AREA STREET NETWORK

Menaul Blvd. is classified as a Principal Arterial Roadway on the Long Range Roadway System Plan for the Albuquerque Urban Area. It is generally a six lane paved urban street with curbs and gutters on both sides of the street and raised medians. The posted speed limit on Menaul Blvd. from Wyoming Blvd. to Eubank Blvd. is 40 to 45 MPH.

Wyoming Blvd. is classified as a Principal Arterial Roadway on the Long Range Roadway System Plan for the Albuquerque Urban Area. It is a six lane paved urban street with curbs and gutters on both sides of the street. The posted speed limit on Wyoming Blvd. from Central Ave. to Academy is 40 MPH.

Indian School Rd. is classified as a collector street on the Long Range Roadway System Plan for the Albuquerque Urban Area. It is a four lane paved urban facility with curbs and gutters on both sides of the street. The posted speed limit on Indian School Rd. from Wyoming Blvd. to Tramway Blvd. is 35 MPH.

Northeastern Blvd. is not classified on the Long Range Roadway System Plan for the Albuquerque Urban Area. It is a major local residential paved street with curbs and gutters on both sides of the street.

EXISTING TRAFFIC VOLUMES

2003 Average Weekday Traffic Volumes (AWDT) for major streets in the site plan area are shown on Appendix A, Page A-6.

Recent AM and PM peak hour turning movement counts were provided by the City of Albuquerque for the following intersections:

Indian School Rd. / Wyoming Blvd.
Northeastern Blvd. / Wyoming Blvd.
Menaul Blvd. / Wyoming Blvd.

Additionally, Existing AM and PM peak hour turning movement counts were obtained for the existing unsignalized intersections of Menaul Blvd. / Lester Rd. and Northeastern Blvd. / Lester Rd. (Snowheights Blvd.) by the consultant.

The counts are included in Appendix Z.

EXISTING (2004) LEVELS OF SERVICE

The Highway Capacity Manual defines Level of Service (LOS) for signalized intersections in terms of average controlled delay per vehicle as follows:

LOS A	10.0" or less	Most Vehicles do not stop
LOS B	10.1 to 20.0"	Some Vehicles stop
LOS C	20.1 to 35.0"	Significant number of vehicles stop
LOS D	35.1 to 55.0"	Many vehicles stop.
LOS E	55.1 to 80.0"	Limit of acceptable delay.
LOS F	> 80.0"	Unacceptable delay.

Level of Service D is generally considered acceptable in urban areas and is the desirable base condition for analysis in a traffic study.

Existing levels of service were calculated from data collected by the City using TEAPAC's Signal 2000 software. The results are summarized in the following table:

<u>INTERSECTION</u>	<u>AM PEAK HOUR</u>	<u>PM PEAK HOUR</u>
Indian School Rd. / Wyoming Blvd.	C – 32.2	<i>F – 97.2</i>
Northeastern Blvd. / Wyoming Blvd.	A – 4.6	A – 6.8
Menaul Blvd. / Wyoming Blvd.	<i>D – 47.7</i>	<i>E – 57.3</i>

D – 46.6 : Bold Italicized Level-of-Service designation indicates that one or more individual turning movements in the analysis is experiencing level-of-service "E" or worse.

EXISTING TRANSIT SERVICE

There is currently regularly scheduled bus route service on Menaul Blvd. and on Wyoming Blvd.

PROPOSED DEVELOPMENT

The subject tracts of land total approximately 30 acres in size. Proposed land use for the project is demonstrated by the Conceptual Site Plan for this project shown on Page A-3 in the Appendix of this report.

The project consists of a new approximately 225,000 S.F. Walmart Supercenter (Lease Lot 3), a 12,000 S.F. Retail Commercial building (Lease Lot 1), an approximately 11,700 S.F. Furr's Cafeteria (relocated – Lease Lot 2), an approximately 20,000 S.F. Petsmart building (Lease Lot 4), and an approximately 14,500 S.F. Dollar Tree Store (Lease Lot 5). Also, there is an existing 12,150 S.F. Black Angus Restaurant and an existing 5,600 S.F. Bank facility on site (which will remain).

Construction of this project will segregate the existing Wyoming Mall so that the buildings north of the existing Black Angus Restaurant will be somewhat separated from the Walmart Supercenter site. Trips generated by the Walmart Supercenter and its associated uses will utilize the driveways along Wyoming Blvd. south of the existing Black Angus Restaurant and the new driveways along Northeastern Blvd. The remaining commercial uses north of Black Angus will utilize existing driveways north of the Black Angus Restaurant along Wyoming Blvd. and existing driveways along Menaul Blvd.

TRIP GENERATION

Projected trips were calculated from data in the Institute of Transportation Engineers Trip Generation report (7th Edition, 1997).

The resulting number of trip generation rates calculated for the proposed development plan are summarized in the following table:

Walmart Supercenter (Northeastern Blvd. / Wyoming Blvd.) **Trip Generation Data**

COMMENT	USE (ITE CODE)	24 HR VOL	A. M. PEAK HR.			P. M. PE
	DESCRIPTION		GROSS	ENTER	EXIT	ENTER
Summary Sheet		Units				
Walmart - Lot 3	Free-Standing Discount Superstore (813)	225.00	12,700	211	203	438
Lot 1	Shopping Center (820)	12.00	1,712	27	17	74
Furrs - Lot 2	High Turnover (Sit-Down) Restaurant (832)	11.70	1,525	56	52	76
Petsmart - Lot 4	Electronics Superstore (863)	20.00	901	3	3	44
Black Angus	High Turnover (Sit-Down) Restaurant (832)	12.20	1,590	59	54	79
Lot 5	Shopping Center (820)	14.50	1,936	30	19	84
Bank	Walk-In Bank (911)	5.60	2,352	60	60	118
Village Inn	High Turnover (Sit-Down) Restaurant (832)	6.00	782	29	27	39
Existing Retail North	Shopping Center (820)	50.00	4,328	63	40	191
Subtotal			27,826	538	475	1,143
Trips Generated to Walmart Driveways			22,716	446	408	913
Trips Generated to non-Walmart Driveways			5,110	92	67	230
New Trips Generated to Walmart Driveway			17,249	271	242	640

The above table shows total trips generated by the proposed site, and not the increase in trips above that currently generated by the existing shopping center. The existing shopping center is not generating as much traffic as it could be if it was fully occupied by thriving retail business establishments. A recent traffic count at the existing shopping center was conducted to determine the approximate volume of traffic generated by the existing uses during the AM and the PM Peak Hour. Those volumes were subtracted from the total trips generated under the new plan when determining the additional traffic that will impact the signalized intersections analyzed in this report. However, when determining the driveway volumes for this project, the total volumes generated by the new project were utilized.

Additionally, adjustments were made for pass-by trips on this project.

See Appendix "C" for individual Trip Generation Worksheets.

TRIP DISTRIBUTION

Primary and Diverted Linked Trips:

Trips were distributed as follows:

Commercial Land Use

Primary and diverted linked trips for the both the commercial land use development were distributed proportionally to the 2006 projected population of Data Analysis Subzones within the market area of the proposed development. The market area for the new Walmart Supercenter was determined by plotting nearby adjacent Walmart Supercenters on a map and determining a market area approximately midway between this project and the nearest adjacent Walmart Supercenter site. Population data for the years 2005 and 2015 were taken from the 2020 Socioeconomic Forecasts for Data Analysis Subzones in State Planning and Development District 3, TR-125 (March, 1997), Appendix C and Appendix D, supplied by the Mid-Region Council of Governments (MRCOG). Population data from the years 2005 and 2015 was interpolated linearly to obtain 2006 population data to utilize for this analysis. Population Subzones were grouped based on the most likely major street(s) or route(s) to the subject development. The trip distribution worksheets and associated map of subareas and data analysis subzones is shown in Appendix C.

TRIP ASSIGNMENT

Trip assignments are first made on a percentage basis derived from data established in the trip distribution determination process and logical routing. Those percentages are then applied to the projected trips to determine individual traffic movements. Percentage trip assignments are shown in Appendix C.

BACKGROUND TRAFFIC GROWTH

Background traffic growth rates were considered for the collective study area that was targeted for analysis based on data from the 1999, 2000, 2001, 2002 and 2003 Traffic Flow maps prepared by the Mid-Region Council of Governments. Most of the Traffic Flow Data for the years 1999, 2000, 2001, 2002 and 2003 taken from the MRCOG Traffic Flow Maps were Standard Data. The data from those years for each approach was plotted on a graph and a linear "regression trend line" calculated using the equation format $y=mx+b$. The growth rate was determined by calculating the average volume increase per year during the time period considered and dividing that volume into the most recent AWDT used in the analysis from which future volumes will be calculated. The rate of growth of that trend line was utilized as the growth rate for each approach if that calculated rate appeared feasible. However, there may be some instances where the rate indicated a negative growth trend or appeared to be unreasonably high or low. In those cases, an appropriate growth rate from an adjacent segment of the same roadway was used, a shorter time span was used to determine the growth rate, or the growth rate was considered to be zero or a generic 3% if appropriate. Due to the potential for growth in the area, it was believed that a zero percent growth rate was appropriate for this study. Additionally, if the R^2 value of the trend line was low, other means of establishing a probable growth rate from the data accumulated was considered. Historical Growth Rate Graphs with linear regression trendlines are shown in Appendix D. A growth rate map is shown at the end of Appendix "D". Additionally, the growth rate utilized for each approach to an intersection is printed at the top of the Turning Movement sheets for each intersection (Appendix E).

PROJECTED PEAK HOUR TURNING MOVEMENTS FOR 2006 BUILDOUT

The calculated growth rates were applied to the most recent peak hour traffic counts furnished by the City of Albuquerque or the consultant to establish the 2006 background traffic volumes. Subsequently, the trips generated by this development were added to obtain 2002 BUILD volumes for the intersection analyses. See Appendix "E" for further information regarding turning movement counts.

INTERSECTION CAPACITY ANALYSIS

Intersection capacity analyses were performed in accordance with the procedures for signalized and unsignalized intersections in the Highway Capacity Manual, Transportation Research Board, 2000, using TEAPAC Signal 2000 Signalized Intersection Capacity Analysis software for signalized intersections and HiCAP 2000 Software for unsignalized intersections. For signalized intersections, the operational method of analysis was used for implementation year (2006) conditions (NO BUILD and BUILD). Occasionally, the 1985 Planning Method of analysis was utilized to establish and define improvements to the intersection that would be the most beneficial to the operation of the intersection. There is no Horizon Year Analysis required for this phase of the Traffic Impact Study.

Capacity analyses were performed for the following traffic conditions.

- Implementation Year (2006) - NO BUILD
- Implementation Year (2006) - BUILD

2006 NO BUILD Volumes, Trips Generated, and 2006 BUILD Volumes are shown on the Projected Turning Movements Summary table (Appendix E), on the Individual Intersection Projected Turning Movement Worksheets (Appendix E), and on the Turning Movement Maps (End of Appendix E).

The results of the implementation year (2006) capacity analyses are summarized in the following sections - *Results and Discussion of Intersection Capacity Analyses*.

RESULTS AND DISCUSSION OF INTERSECTION CAPACITY ANALYSES

SIGNALIZED INTERSECTIONS:

Indian School Rd. / Wyoming Blvd. – Appendix F

The results of the analysis of the signalized intersection of Indian School Rd. / Wyoming Blvd. are summarized in the following table:

Indian School Rd. / Wyoming Blvd.	AM Peak Hour		PM Peak Hour	
2006	NO BUILD	BUILD	NO BUILD	BUILD
Existing Geometry	C - 33.6	C - 39.8	<i>F - 103</i>	<i>F - 179</i>
Exist. Geom. – Add Dual EB LT Lanes				<i>F - 143</i>
Exist. Geom. – Add Dual EB LT / EB Thru Lanes				<i>F - 121</i>
Mitigated Geometry				<i>D - 54.0</i>

D - 33.2 - Bold Italicized LOS denotes that one or more movements in the analysis run operated at Level-of-Service “E” or worse.

The study projects that the intersection of Indian School Rd. / Wyoming Blvd. will operate at level-of-service “F” during the 2006 PM Peak Hour NO BUILD and BUILD Conditions. As demonstrated earlier, the intersection operates at level-of-service “F” for the existing PM Peak Hour Conditions. The critical movements in the PM Peak Hour analysis are the eastbound left turns (2006 BUILD Volume = 443 vph), the westbound thru / right turn movements (2006 BUILD Volume = 325 thru + 276 rights), the northbound thru / right turn movements (2006 BUILD Volume = 1,906 thru + 160 rights), and the southbound left turns (2006 BUILD Volume = 287). The v/c ratios for those movements are in the range of approximately 1.148 to 1.442.

Existing Geometry (Indian School Rd. / Wyoming Blvd.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Indian School Rd.	1	0	1	1	0
WB Indian School Rd.	1	0	1	1	0
NB Wyoming Blvd.	1	0	2	1	0
SB Wyoming Blvd.	1	0	2	0	1

Mitigated Geometry (Indian School Rd. / Wyoming Blvd.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Indian School Rd.	2	0	2	1	0
WB Indian School Rd.	1	0	2	0	1
NB Wyoming Blvd.	1	0	3	1	0
SB Wyoming Blvd.	1	0	2	0	1

There is insufficient existing right-of-way currently to construct the mitigated geometry. However, this analysis will provide a means to make provision for additional right-of-way in the future as redevelopment occurs on each of the quadrants of the intersection of Indian School Rd. / Wyoming Blvd.

The Queuing Analysis for this intersection results in the lanes length changes summarized in the following table:

Queueing Analysis Summary Sheet

Project:
Intersection:

Walmart Superstore - Wyoming Mall
Indian School Rd. / Wyoming Blvd.

Eastbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	1	82	100	2	134	N/A	2	137	125	0	38	0
AM NO BUILD Queue	1	84	125	2	137	125	2	137	125	0	39	75
AM BUILD Queue	1	121	175	2	852	N/A	2	869	600	0	39	75
<i>Existing Lane Length</i>	1	349	100	2	869	600	2	869	600	0	77	0
PM NO BUILD Queue	1	356	475	2	869	600	2	869	600	0	79	150
PM BUILD Queue	1	443	575	2	869	600	2	869	600	0	79	150

Westbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	1	141	100	2	538	N/A	2	549	350	0	101	0
AM NO BUILD Queue	1	144	200	2	549	350	2	549	350	0	103	150
AM BUILD Queue	1	144	200	2	319	N/A	2	325	275	0	159	225
<i>Existing Lane Length</i>	1	106	100	2	325	275	2	325	275	0	141	0
PM NO BUILD Queue	1	108	175	2	325	275	2	325	275	0	144	225
PM BUILD Queue	1	108	175	2	325	275	2	325	275	0	276	375

Northbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	1	58	125	3	980	N/A	3	980	450	0	58	0
AM NO BUILD Queue	1	59	100	3	1,000	450	3	1,016	450	0	59	100
AM BUILD Queue	1	59	100	3	1,832	N/A	3	1,869	875	0	59	100
<i>Existing Lane Length</i>	1	96	125	3	1,906	875	3	1,906	875	0	157	0
PM NO BUILD Queue	1	98	175	3	1,906	875	3	1,906	875	0	160	250
PM BUILD Queue	1	98	175	3	1,906	875	3	1,906	875	0	160	250

Southbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	1	78	75	2	1,251	N/A	2	1,341	775	1	132	0
AM NO BUILD Queue	1	84	125	2	1,341	775	2	1,355	775	1	142	200
AM BUILD Queue	1	134	200	2	1,204	N/A	2	1,291	850	1	175	225
<i>Existing Lane Length</i>	1	138	75	2	1,330	875	2	1,330	875	1	159	0
PM NO BUILD Queue	1	148	225	2	1,330	875	2	1,330	875	1	170	250
PM BUILD Queue	1	287	400	2	1,330	875	2	1,330	875	1	262	375

AM **PM**
 Cycle Length: 110 130

Northeastern Blvd. / Wyoming Blvd. – Appendix F

The results of the analysis of the signalized intersection of Northeastern Blvd. / Wyoming Blvd. are summarized in the following table:

Northeastern Blvd. / Wyoming Blvd.	AM Peak Hour		PM Peak Hour	
2006	<u>NO BUILD</u>	<u>BUILD</u>	<u>NO BUILD</u>	<u>BUILD</u>
Existing Geometry	A – 4.6	A – 4.8	A – 7.0	A – 9.1

D - 33.2 - Bold Italicized LOS denotes that one or more movements in the analysis run operated at Level-of-Service “E” or worse.

Existing Geometry (Northeastern Blvd. / Wyoming Blvd.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Northeastern Blvd.	0	0	0	0	0
WB Northeastern Blvd.	1	0	0	0	1
NB Wyoming Blvd.	0	0	2	1	0
SB Wyoming Blvd.	1	0	3	0	0

The Queuing Analysis for this intersection results in the lanes length changes summarized in the following table:

Queueing Analysis Summary Sheet

Project: Walmart Superstore - Wyoming Mall
 Intersection: **Northeastern Blvd. / Wyoming Blvd.**

Eastbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	1	0	0	1	0	N/A	1	0	N/A	0	1	0
AM NO BUILD Queue	1	0	0	1	0	0	1	0	0	0	1	0
AM BUILD Queue	1	0	0	1	0	0	1	0	0	0	1	0
<i>Existing Lane Length</i>	1	0	0	1	0	N/A	1	0	N/A	0	0	0
PM NO BUILD Queue	1	0	0	1	0	0	1	0	0	0	0	0
PM BUILD Queue	1	0	0	1	0	0	1	0	0	0	0	0

Westbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	1	32	100	1	3	N/A	1	3	N/A	1	65	0
AM NO BUILD Queue	1	32	75	1	3	0	1	3	0	1	66	125
AM BUILD Queue	1	49	100	1	3	0	1	3	0	1	66	125
<i>Existing Lane Length</i>	1	73	100	1	0	N/A	1	0	N/A	1	79	0
PM NO BUILD Queue	1	74	150	1	0	0	1	0	0	1	80	150
PM BUILD Queue	1	121	200	1	0	0	1	0	0	1	80	150

Northbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	1	2	0	3	810	N/A	3	810	N/A	0	54	0
AM NO BUILD Queue	1	2	0	3	839	375	3	839	375	0	56	100
AM BUILD Queue	1	2	0	3	928	425	3	928	425	0	75	125
<i>Existing Lane Length</i>	1	0	0	3	1,385	N/A	3	1,385	N/A	0	80	0
PM NO BUILD Queue	1	0	0	3	1,435	675	3	1,435	675	0	83	150
PM BUILD Queue	1	0	0	3	1,646	775	3	1,646	775	0	128	200

Southbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	1	17	150	3	1,535	N/A	3	1,535	N/A	0	9	0
AM NO BUILD Queue	1	18	50	3	1,590	650	3	1,590	650	0	9	25
AM BUILD Queue	1	18	50	3	1,670	675	3	1,670	675	0	9	25
<i>Existing Lane Length</i>	1	80	150	3	1,536	N/A	3	1,536	N/A	0	0	0
PM NO BUILD Queue	1	83	150	3	1,591	750	3	1,591	750	0	0	0
PM BUILD Queue	1	83	150	3	1,813	850	3	1,813	850	0	0	0

Cycle Length: **AM** 110 **PM** 130

Menaul Blvd. / Wyoming Blvd. – Appendix F

The results of the analysis of the signalized intersection of Menaul Blvd. / Wyoming Blvd. are summarized in the following table:

Menaul Blvd. / Wyoming Blvd.	AM Peak Hour		PM Peak Hour		
	2006	<u>NO BUILD</u>	<u>BUILD</u>	<u>NO BUILD</u>	<u>BUILD</u>
Existing Geometry		<i>D - 49.5</i>	<i>E - 56.7</i>	<i>E - 60.1</i>	<i>E - 77.7</i>
Mitigated Geometry			D - 45.6		<i>E - 61.8</i>

D - 33.2 - Bold Italicized LOS denotes that one or more movements in the analysis run operated at Level-of-Service “E” or worse.

Existing Geometry (Menaul Blvd. / Wyoming Blvd.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Menaul Blvd.	2	0	3	0	1*
WB Menaul Blvd.	2	0	2	1	0
NB Wyoming Blvd.	2	0	2	1	0
SB Wyoming Blvd.	2	0	2	0	1

1* - right turn lane is a free right – by-passes the signal.

Mitigated Geometry (Menaul Blvd. / Wyoming Blvd.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Menaul Blvd.	2	0	3	0	1*
WB Menaul Blvd.	2	0	2	1	0
NB Wyoming Blvd.	2	0	3	1	0
SB Wyoming Blvd.	2	0	3	0	1

1* - right turn lane is a free right – by-passes the signal.

The intersection of Menaul Blvd. / Wyoming Blvd. is projected to operate at level-of-service “E” during the projected 2006 BUILD AM Peak Hour and 2006 NO BUILD PM Peak Hour Conditions based on the forecast volumes in this study. There appears to be more opportunity to widen Wyoming Blvd. than to widen Menaul Blvd. at the intersection. Therefore, an additional northbound and southbound thru lane on Wyoming Blvd. was assumed to be added to the analysis to attempt to mitigate the less-than-desirable levels-of-service at the intersection even though it is unlikely that the new lanes will be constructed in the near future.

The Queuing Analysis for this intersection results in the lanes length changes summarized in the following table:

Queueing Analysis Summary Sheet

Project: Walmart Superstore - Wyoming Mall
 Intersection: Menaul Blvd. / Wyoming Blvd.

Eastbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	2	100	125	2	388	N/A	2	388	N/A	0	11	0
AM NO BUILD Queue	2	101	100	2	392	275	2	392	275	0	11	25
AM BUILD Queue	2	101	100	2	392	275	2	392	275	0	37	75
<i>Existing Lane Length</i>	2	371	125	2	1,261	N/A	2	1,261	N/A	0	31	0
PM NO BUILD Queue	2	375	300	2	1,274	850	2	1,274	850	0	31	75
PM BUILD Queue	2	375	300	2	1,274	850	2	1,274	850	0	93	175
Westbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	2	123	175	2	1,498	N/A	2	1,498	N/A	0	65	0
AM NO BUILD Queue	2	124	125	2	1,513	850	2	1,513	850	0	66	125
AM BUILD Queue	2	179	150	2	1,513	850	2	1,513	850	0	66	125
<i>Existing Lane Length</i>	2	155	175	2	1,026	N/A	2	1,026	N/A	0	85	0
PM NO BUILD Queue	2	157	150	2	1,036	700	2	1,036	700	0	86	150
PM BUILD Queue	2	286	250	2	1,036	700	2	1,036	700	0	86	150
Northbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	2	254	300	3	849	N/A	3	849	N/A	0	50	0
AM NO BUILD Queue	2	263	200	3	880	400	3	880	400	0	52	100
AM BUILD Queue	2	286	225	3	931	425	3	931	425	0	101	150
<i>Existing Lane Length</i>	2	282	300	3	1,467	N/A	3	1,467	N/A	0	109	0
PM NO BUILD Queue	2	292	250	3	1,520	725	3	1,520	725	0	113	200
PM BUILD Queue	2	357	300	3	1,663	775	3	1,663	775	0	249	350
Southbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	2	117	150	2	905	N/A	2	905	N/A	1	389	0
AM NO BUILD Queue	2	118	125	2	914	550	2	914	550	1	393	450
AM BUILD Queue	2	118	125	2	972	575	2	972	575	1	393	450
<i>Existing Lane Length</i>	2	196	150	2	826	N/A	2	826	N/A	1	238	0
PM NO BUILD Queue	2	198	175	2	834	600	2	834	600	1	240	350
PM BUILD Queue	2	198	175	2	970	675	2	970	675	1	240	350

Cycle Length: AM 110 PM 130

UNSIGNALIZED INTERSECTIONS:

Driveway "A" / Wyoming Blvd. – Appendix G

The results of the analysis of the unsignalized intersection of Driveway "A" / Wyoming Blvd. are summarized in the following table:

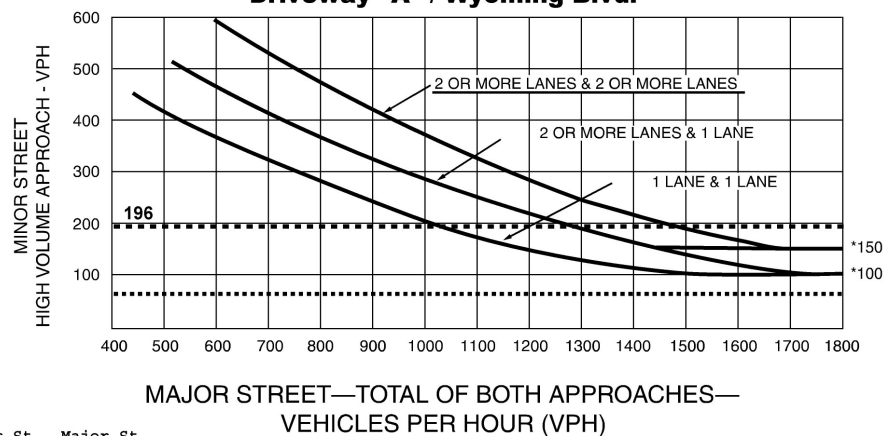
	BUILD	
	AM	PM
2006		
Driveway "A" / Wyoming Blvd.		
Minor Street (Driveway "A")		
WB Left	E – 38	F – *
WB Right	B – 11	C – 18
Major Street (Wyoming Blvd.)		
WB Left	B – 12	E – 44

As stated earlier, Driveway "A" is currently a signalized access point into the Wyoming Mall Center. The projected volumes at this driveway based on the proposed Walmart Supercenter plan indicates that the volumes generated at Driveway "A" will still generate sufficient volumes so as to warrant a traffic signal at this location. Following is the Peak Hour Warrant Graph depicting the volumes that are projected at Driveway "A" in this study:

December 2000

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**Figure 4C-3. Warrant 3, Peak Hour
Driveway "A" / Wyoming Blvd.**



2006 Volumes:

	Minor St.	Major St.
AM BUILD	71	2,727
PM BUILD	196	3,682

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

As a signalized intersection, Driveway "A" will operate as follows:

Driveway "A" / Wyoming Blvd.	BUILD	
2006	<u>NO BUILD</u>	<u>BUILD</u>
Proposed Geometry	A - 5.9	B - 14.6

Proposed geometry for the intersection of Driveway "A" / Wyoming Blvd. is summarized in the following table:

Proposed Geometry (Driveway "A" / Wyoming Blvd.)					
Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Driveway "A"	0	0	0	0	0
WB Driveway "A"	2	0	0	0	1
NB Wyoming Blvd.	0	0	2	1	0
SB Wyoming Blvd.	1	0	3	0	0

Dual westbound left turn lanes are recommended to minimize the green time required for the side street.

The Queuing Analysis for this intersection results in the lanes length changes summarized in the following table:

Queueing Analysis Summary Sheet

Project: Walmart Superstore - Wyoming Mall
 Intersection: Drive 'A' / Wyoming Blvd.

Eastbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	1	0	N/A	1	0	N/A	1	0	N/A	1	0	N/A
AM NO BUILD Queue	1	0	0	1	0	0	1	0	0	1	0	0
AM BUILD Queue	1	0	0	1	0	0	1	0	0	1	0	0
<i>Existing Lane Length</i>	1	0	N/A	1	0	N/A	1	0	N/A	1	0	N/A
PM NO BUILD Queue	1	0	0	1	0	0	1	0	0	1	0	0
PM BUILD Queue	1	0	0	1	0	0	1	0	0	1	0	0

Westbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	2	0	N/A	1	0	N/A	1	0	N/A	1	0	N/A
AM NO BUILD Queue	2	0	0	1	0	0	1	0	0	1	0	0
AM BUILD Queue	2	51	75	1	0	0	1	0	0	1	39	75
<i>Existing Lane Length</i>	2	0	N/A	1	0	N/A	1	0	N/A	1	0	N/A
PM NO BUILD Queue	2	0	0	1	0	0	1	0	0	1	0	0
PM BUILD Queue	2	141	150	1	0	0	1	0	0	1	109	175

Northbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	1	0	N/A	3	875	N/A	3	875	N/A	0	0	N/A
AM NO BUILD Queue	1	0	0	3	907	400	3	907	400	0	0	0
AM BUILD Queue	1	0	0	3	967	425	3	967	425	0	30	75
<i>Existing Lane Length</i>	1	0	N/A	3	1,464	N/A	3	1,464	N/A	0	0	N/A
PM NO BUILD Queue	1	0	0	3	1,517	725	3	1,517	725	0	0	0
PM BUILD Queue	1	0	0	3	1,658	775	3	1,658	775	0	70	125

Southbound				Left Turns			Thru Movements			Right Turns		
Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
<i>Existing Lane Length</i>	1	0	N/A	3	1,561	N/A	3	1,561	N/A	0	0	N/A
AM NO BUILD Queue	1	0	0	3	1,617	650	3	1,617	650	0	0	0
AM BUILD Queue	1	84	125	3	1,646	675	3	1,646	675	0	0	0
<i>Existing Lane Length</i>	1	0	N/A	3	1,616	N/A	3	1,616	N/A	0	0	N/A
PM NO BUILD Queue	1	0	0	3	1,674	775	3	1,674	775	0	0	0
PM BUILD Queue	1	199	300	3	1,755	825	3	1,755	825	0	0	0

AM
PM
 Cycle Length: 110 130

Menaul Blvd. / Lester St. – Appendix G

The results of the analysis of the unsignalized intersection of Menaul Blvd. / Lester St. are summarized in the following table:

	AM Peak Hour		PM Peak Hour	
2006	NO BUILD	BUILD	NO BUILD	BUILD
Menaul Blvd. / Lester St.				
Minor Street (Lester St.)				
NB Left	D – 25.9	D – 28.2	F – 151.2	F – 229.3
NB Right	B – 10.2	B – 10.4	C – 16.4	C – 18.8
Major Street (Menaul Blvd.)				
WB Left	A – 9.8	B – 10.1	C – 21.9	D – 28.3

The undesirable level-of-service for the exiting northbound left turn movements from the driveway will likely be somewhat better than what is shown in the above table since there is an existing traffic signal approximately 1,100 feet west of the intersection and another existing signal approximately 1,500 feet to the east. The signals will create gaps in the eastbound and westbound traffic on Menaul Blvd., thus improving the conditions for the northbound traffic to enter onto Menaul Blvd. In addition, it is projected that there will be insufficient volumes of traffic at the intersection of Menaul Blvd. / Lester St. to warrant a traffic signal. The northbound left turn volume forecast for the 2006 BUILD condition is 16 vph during the AM Peak Hour and 38 vph during the PM Peak Hour. These side street volumes clearly are not sufficient to warrant a traffic signal. Therefore, a traffic signal is not recommended at the intersection of Menaul Blvd. / Lester St.

Northeastern Blvd. / Lester St. – Appendix G

The results of the analysis of the unsignalized intersection of Northeastern Blvd. / Lester St. are summarized in the following table:

	AM Peak Hour		PM Peak Hour	
2006	NO BUILD	BUILD	NO BUILD	BUILD
Northeastern Blvd. / Lester St.				
Minor Street (Snowheights Blvd.)				
NB Left	B – 10.4	B – 10.9	B – 11.8	B – 13.8
NB Thru	B – 10.4	B – 10.9	B – 11.8	B – 13.8
NB Right	B – 10.4	B – 10.9	B – 11.8	B – 13.8
Minor Street (Lester St.)				
SB Left	A – 9.5	A – 9.6	B – 10.7	B – 11.4
SB Thru	A – 9.5	A – 9.6	B – 10.7	B – 11.4
SB Right	A – 9.5	A – 9.6	B – 10.7	B – 11.4
Major Street (Northeastern Blvd.)				
EB Left	A – 7.4	A – 7.5	A – 7.4	A – 7.5
WB Left	A – 7.3	A – 7.3	A – 7.6	A – 7.6

Driveway "B" / Wyoming Blvd. – Appendix G

The results of the analysis of the unsignalized intersection of Driveway "B" / Wyoming Blvd are summarized in the following table:

	BUILD	
2006	AM	PM
Driveway "B" / Wyoming Blvd.		
Minor Street (Driveway "B")		
WB Left	C – 24.4	F - *
WB Thru	C – 24.4	F - *
WB Right	C – 24.4	F - *
Minor Street (Driveway "B")		
EB Left	E – 47.4	D – 31.2
EB Thru	E – 47.4	D – 31.2
EB Right	E – 47.4	D – 31.2
Major Street (Wyoming Blvd.)		
NB Left	C – 16.9	C – 19.5
SB Left	B – 11.5	D – 28.7

The undesirable level-of-service for the exiting eastbound movements from the driveway will likely be significantly better than what is shown in the above table since there is an existing traffic signal approximately 300 feet south of the driveway and another existing signal approximately 1,300 feet to the north. The signals will create gaps in the northbound and southbound traffic on Wyoming Blvd., thus improving the conditions for the westbound traffic to enter onto Wyoming Blvd.

Driveway "C" / Wyoming Blvd. – Appendix G

The results of the analysis of the unsignalized intersection of Driveway "C" / Wyoming Blvd are summarized in the following table:

	BUILD	
2006	AM	PM
Driveway "C" / Wyoming Blvd.		
Minor Street (Driveway "C")		
WB Left	D – 28.2	F – 72
WB Thru	B – 12.0	C – 17.2
WB Right	B – 12.0	C – 17.2
Minor Street (Driveway "C")		
EB Left	E – 42.2	F - 63
EB Thru	E – 42.2	F - 63
EB Right	E – 42.2	F - 63
Major Street (Wyoming Blvd.)		
NB Left	C – 17.6	C – 21.7
SB Left	B – 10.4	B – 15.0

The undesirable level-of-service for the exiting eastbound movements from the driveways will likely be significantly better than what is shown in the above table since there is an existing

traffic signal approximately 700 feet south of the driveway and another existing signal approximately 900 feet to the north. The signals will create gaps in the northbound and southbound traffic on Wyoming Blvd., thus improving the conditions for the westbound traffic to enter onto Wyoming Blvd.

Northeastern Blvd. / Driveway "D" – Appendix G

The results of the analysis of the unsignalized intersection of Northeastern Blvd. / Driveway "D" are summarized in the following table:

	BUILD	
2006	AM	PM
Northeastern Blvd. / Driveway "D"		
Minor Street (Driveway "D")		
SB Left	A – 9.6	B – 11.2
SB Right	A – 9.6	B – 11.2
Major Street (Wyoming Blvd.)		
EB Left	A – 7.5	A – 7.7

Northeastern Blvd. / Driveway "E" – Appendix G

The results of the analysis of the unsignalized intersection of Northeastern Blvd. / Driveway "D" are summarized in the following table:

	BUILD	
2006	AM	PM
Northeastern Blvd. / Driveway "E"		
Minor Street (Driveway "D")		
SB Left	A – 9.4	B – 10.8
SB Right	A – 9.4	B – 10.8
Major Street (Wyoming Blvd.)		
EB Left	A – 7.5	A – 7.7

It should be noted that Levels of Service (LOS) for unsignalized intersections cannot be compared directly with Levels of Service for signalized intersections.

LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

<u>Average Delay</u> <u>(secs)</u>	<u>Level-of-Service</u>
≤ 10	A
> 10 and ≤ 15	B
> 15 and ≤ 25	C
> 25 and ≤ 35	D
> 35 and ≤ 50	E

Generally speaking, a Level-of-Service D or better is an acceptable parameter for design purposes.

CONCLUSIONS

The proposed Walmart Supercenter Commercial Development is being constructed to replace an existing shopping center component of the Wyoming Mall in an established area of Albuquerque. Background traffic growth rates are expected to be small. Therefore, the 2006 Peak Hour volumes should be slightly more than the current volumes at the intersections evaluated in this area. The development of the Walmart Supercenter should rejuvenate the facility and attract more traffic than what is currently being generated. The potential trip generation rate of the previously approved Wyoming Mall at its prime years approaches that of the proposed Walmart Supercenter. When compared to the potential trip generation rate for the approved Wyoming Mall, the Walmart Supercenter Commercial Development does not generate a significantly higher volume of trips. However, the trip generation rate for the Wyoming Mall has dropped significantly over the past three or four years, primarily due to the closing of the Service Merchandise store.

Only the signalized intersection closest to this project were analyzed to determine the 2006 NO BUILD and BUILD Conditions. Two signalized intersections operate at less-than-satisfactory levels-of-service for both the 2006 NO BUILD and 2006 BUILD Conditions. Those intersections are Indian School Rd. / Wyoming Blvd. and Menaul Blvd. / Wyoming Blvd. Options to widen the intersections to provide additional laneage are limited since this is an older, built-up area of Albuquerque. Limited right-of-way and existing structures preclude many improvements that might be needed to address the capacity problems at the intersection. Nonetheless, this study analyzed some alternate geometries that would improve the capacities of the intersections even though those improvements might be impossible to construct at this time. As properties re-develop in the future, the City of Albuquerque might consider acquiring additional right-of-way at the intersection and / or approve designs of sites that permit improvements to the intersections that would improve capacity.

This study also addressed site access. The five primary proposed driveways onto Wyoming Blvd. and onto Northeastern Blvd. were evaluated to determine projected 2006 AM and PM Peak Hour BUILD levels-of-service and recommendations will be made regarding access.

RECOMMENDATIONS

The following are recommendations for site access resulting from this study that should be implemented:

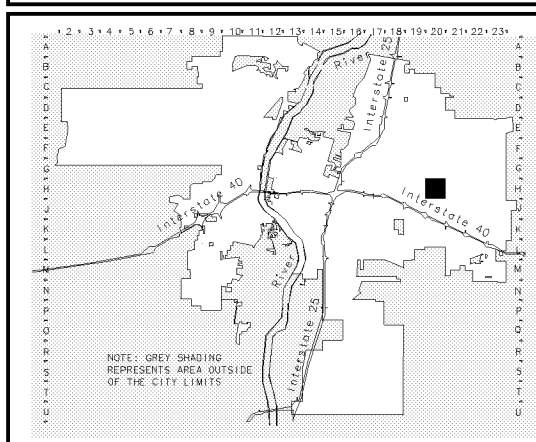
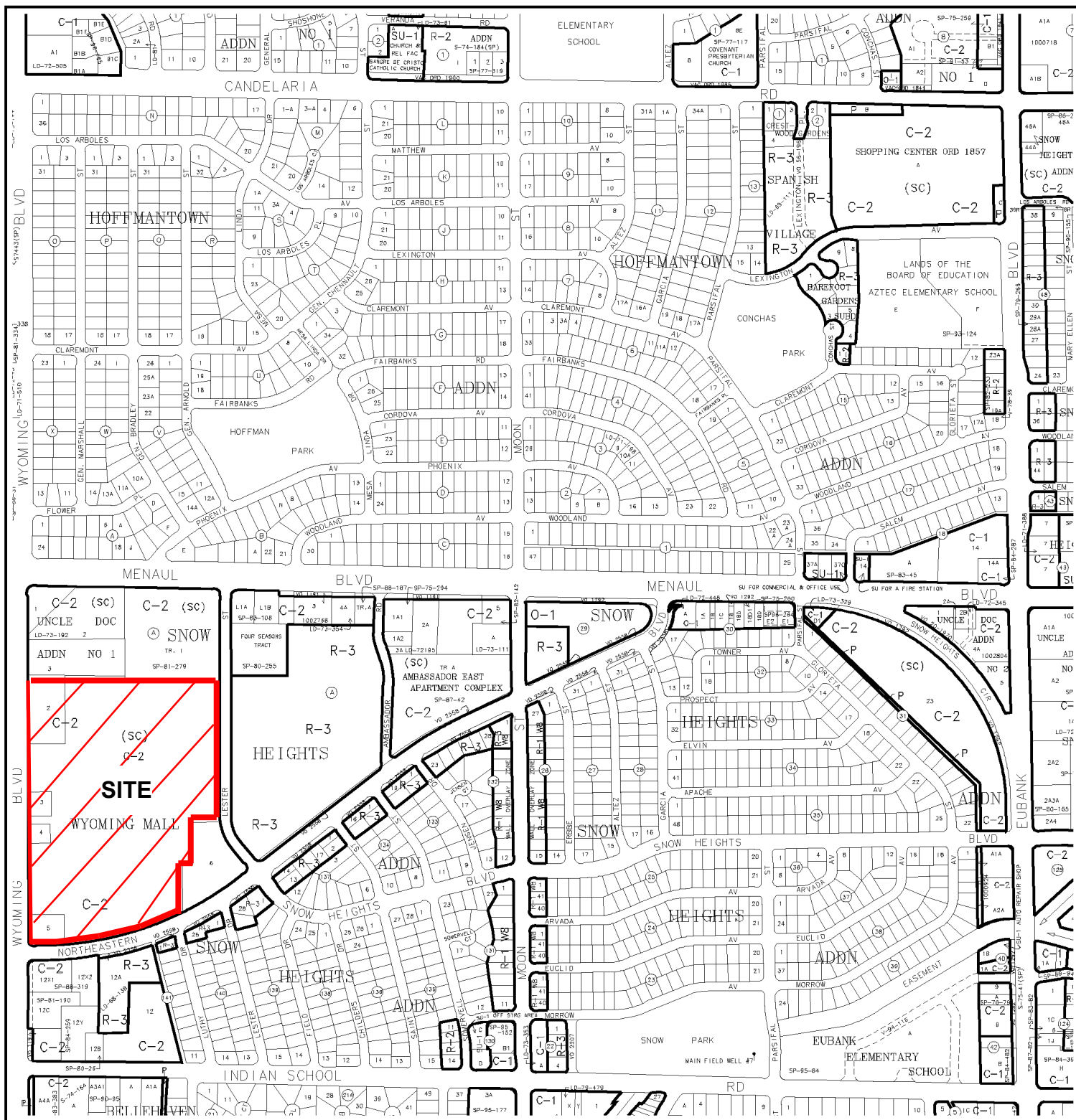
- * **Driveway "A" / Wyoming Blvd.** – Driveway "A" should be constructed as a full access signalized driveway with three exiting lanes (dual westbound left turn lanes and one westbound right turn lane) and one entering lane in accordance with Chapter 23, Section 6.B.9 of the City of Albuquerque D.P.M. Driveway "A" should be constructed to be the primary access to the site from Wyoming Blvd.
 - * Construct a southbound left turn lane on Wyoming Blvd. at Driveway "A". The left turn lane queue length is calculated to be 300 feet long.
- * **Driveway "B" / Wyoming Blvd.** – Driveway "B" should be constructed as a full access unsignalized driveway with two exiting lanes (one for left turns and one for thru / right turns, and one entering lane in accordance with Chapter 23, Section 6.B.9 of the City of Albuquerque D.P.M. Driveway "B" should be constructed to be the secondary access to the site from Wyoming Blvd.
 - * Utilize existing southbound left turn lane on Wyoming Blvd. at Driveway "B".

- * **Driveway “C” / Wyoming Blvd.** – Driveway “C” should be constructed as a full access unsignalized driveway with two exiting lanes (one for left turns and one for thru / right turns, and one entering lane in accordance with Chapter 23, Section 6.B.9 of the City of Albuquerque D.P.M. Driveway “C” should be constructed to be the secondary access to the site from Wyoming Blvd.
 - * Utilize existing southbound left turn lane on Wyoming Blvd. at Driveway “C”.
- * **Northeastern Blvd. / Driveway “D”** – Driveway “D” should be constructed as a full access unsignalized driveway with a minimum of one exiting lane and one entering lane in accordance with Chapter 23, Section 6.B.9 of the City of Albuquerque D.P.M. Driveway “D” should be constructed to be a primary access to the site from Northeastern Blvd.
 - * Construct an eastbound left turn lane on Northeastern Blvd. at Driveway “D”. The left turn lane should be a minimum of 100 feet in length plus the transition if possible.
- * **Northeastern Blvd. / Driveway “E”** – Driveway “E” should be constructed as a full access unsignalized driveway with a minimum of one exiting lane and one entering lane in accordance with Chapter 23, Section 6.B.9 of the City of Albuquerque D.P.M. Driveway “D” should be constructed to be a secondary access to the site from Northeastern Blvd.
 - * Construct an eastbound left turn lane on Northeastern Blvd. at Driveway “E”. The left turn lane should be a minimum of 100 feet in length plus the transition if possible.
- * All new driveways should be constructed utilizing a minimum of 25 feet radius returns.
- * Design and construction of the site should maintain adequate sight distances at the driveways and intersections along Wyoming Blvd. and along Northeastern Blvd.

Appendix

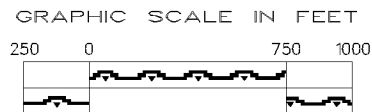
<u>Appendix A</u>	<u>SITE INFORMATION</u>	
	Vicinity Map	A-1
	Street Network Map	A-2
	Conceptual Site Plan	A-3
	Long Range Roadway Plan for the Albuquerque Metropolitan Area	A-4 thru A-5
	2003 Traffic Flow Map (from MRGCOG)	A-6
<u>Appendix B</u>	<u>TRIP GENERATION</u>	
	Trip Generation Summary Sheet	
	Trip Generation Worksheets for Individual Land Uses	
<u>Appendix C</u>	<u>TRIP DISTRIBUTION</u>	
	Trip Distribution DASZ Map	
	Trip Distribution Worksheets	
	Trip Assignments Map (% Entering)	
	Trip Assignments Map (% Exiting)	
	Trip Assignments Map – Driveways (% Entering)	
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<u>Appendix D</u>	<u>BACKGROUND TRAFFIC GROWTH CALCULATIONS</u>	
	Historic Growth Data Summary Table	
	AWDT Data Graphs and Trendlines	
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<u>Appendix E</u>	<u>TURNING MOVEMENTS</u>	
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APPENDIX



Albuquerque Geographic Information System
PLANNING DEPARTMENT

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Map Amended through September 01, 2004

