



LSC TRANSPORTATION CONSULTANTS, INC.  
2504 East Pikes Peak Avenue, Suite 304  
Colorado Springs, CO 80909  
(719) 633-2868  
FAX (719) 633-5430  
E-mail: [lsc@lsctrans.com](mailto:lsc@lsctrans.com)  
Website: <http://www.lsctrans.com>

Ellicott Sand and Gravel  
Traffic Impact Analysis  
PCD File No. AL2014, PPR234  
(LSC #194980)  
September 14, 2023

Traffic Engineer's Statement

This traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.



Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

Christina Wilson

9/14/23  
Date

# Ellicott Sand and Gravel Site Development Plan Traffic Impact Analysis

Prepared for:  
Christine Wilson  
Ellicott Sand & Gravel  
c/o Mr. Steve O'Brian  
<via email>

PCD File No.: AL2014, PPR234

SEPTEMBER 14, 2023

---

LSC Transportation Consultants  
Prepared by: Jeffrey C. Hodsdon, P.E.

LSC #194980



**CONTENTS**

- REPORT CONTENTS ..... 1
- SAND & GRAVEL PIT SITE LOCATION & ACCESS..... 2
- PROPOSED DAILY OPERATIONS..... 3
  - Initial/Short Term (2023/2024) ..... 3
  - Potential Intermediate & Long Term – About 2 to 5 Years After Startup ..... 4
    - Projected Timeline ..... 4
    - Projected Truck-Trip Generation ..... 5
- APPLICANT-PROPOSED HAUL ROUTE ..... 5
- SIGHT DISTANCE..... 6
- ROADWAYS AND TRAFFIC CONDITIONS..... 6
  - Area Roadways..... 6
  - Existing Traffic Volumes ..... 7
- TRIP GENERATION..... 7
  - Short Term ..... 7
  - Trip Distribution and Assignment..... 9
  - Site-Generated Traffic..... 10
    - Short Term ..... 10
    - Intermediate & Long Term ..... 10
  - Existing-Plus-Site-Generated Traffic Volumes ..... 10
  - Long-Term Background Traffic Volumes ..... 10
  - 2043 Background Plus-Site-Generated Traffic Volumes..... 10
- LEVEL OF SERVICE ANALYSIS ..... 11
  - State Highway 94/Baggett Road..... 12
    - Short-Term ..... 12
    - Long-Term ..... 12
  - Baggett Road/Site Access..... 12
- AUXILIARY TURN-LANE NEEDS EVALUATION ..... 12
  - State Highway 94/Baggett Road..... 12
    - Passenger-Car-Equivalent Peak-Hour Turning Movements..... 12
    - Short-Term ..... 13
    - Long-Term ..... 13
  - Baggett Road Intersections/Access Point..... 13

AVERAGE DAILY TRAFFIC IMPACTS RELATIVE TO ROADWAY DESIGN ADT BY CLASSIFICATION .....	13
El Paso County Roadway Segments.....	13
Baggett Road.....	14
Existing/Short Term.....	14
Long Term .....	14
Sanborn Road.....	14
DESIGN-VEHICLE ACCOMMODATION AT HAUL-ROUTE INTERSECTIONS AND ALONG ROADWAYS .....	15
Intersections .....	15
SH 94/Baggett Road .....	15
Baggett Road/Proposed Site Access.....	15
FINDINGS AND CONCLUSIONS .....	16
Land Use (Applicant-Provided Programming Information) .....	16
Trip Generation Estimate .....	16
Proposed Haul Route .....	16
Level of Service Analysis.....	16
Auxiliary Turn Lanes .....	16
Average Daily Traffic Impacts Relative to Roadway Design ADT (by Classification).....	17
Baggett Road .....	17
Sanborn Road .....	17
Haul-Vehicle (Design Vehicle) Accommodation .....	17
El Paso County Roadway Improvement Fee Program .....	18
LIST OF DEVIATIONS REQUESTED.....	18
Enclosures:.....	19

Figure 1 – Figure 14

Traffic Count Reports

LOS Synchro Reports

Appendix A (Pueblo County Pit Trip Generation Data)



LSC TRANSPORTATION CONSULTANTS, INC.  
2504 East Pikes Peak Avenue, Suite 304  
Colorado Springs, CO 80909  
(719) 633-2868  
FAX (719) 633-5430  
E-mail: [lsc@lsctrans.com](mailto:lsc@lsctrans.com)  
Website: <http://www.lsctrans.com>

September 14, 2023

Christine Wilson  
Ellicott Sand & Gravel  
c/o Mr. Steve O'Brian  
<via email>

RE: Ellicott Sand and Gravel  
Site Development Plan  
El Paso County, CO  
Traffic Impact Analysis  
LSC #194980  
PCD File No. AL2014, PPR234

Dear Ms. Wilson,

LSC Transportation Consultants, Inc. has prepared this traffic impact study for the proposed Schubert Ranch/Ellicott Sand & Gravel extraction operation in El Paso County, Colorado. The site is located west of Baggett Road and north (and south) of Sanborn Road. One access is proposed to Baggett Road about 3,550 feet south of the intersection of Baggett Road/Handle Road.

The proposed haul route would have trucks utilize State Highway (SH) 94 to/from the west and Baggett Road between SH 94 and the proposed access point. Initially and in the short term, an average of about 30 truck trips per day is anticipated to be generated during the peak summer season.

This updated transportation memorandum has been prepared for submittal to the El Paso County Planning and Community Development department. This is an update to the most recent prior version of this traffic impact analysis which was submitted for this site, dated October 20, 2022.

## REPORT CONTENTS

The report contains the following:

- Existing roadway and traffic conditions adjacent to and in the vicinity of the site, including the intersection lane geometries, traffic controls, posted speed limits, functional classifications, intersection spacing and alignment, sight distances, etc.;
- Existing peak-hour turning-movement traffic counts at the intersections of SH 94/Baggett Road;

- Estimates of the proposed mineral extraction operation's peak-hour and daily trip generation for the short term, including trips by vehicle type;
- Estimated directional distribution of mine-generated trips on roadways to be used for hauling. An employee distribution is also provided;
- Estimated assignment of peak-hour and daily site-generated traffic volumes on the study-area roadways providing access to/from the site, including the following intersections:
  - State Highway 94/Baggett Road
  - Baggett Road/proposed site access
- Resulting traffic impacts of the proposed sand and gravel operation on the roadways along the haul route, relative to the El Paso County's *Engineering Criteria Manual (ECM)* "design ADTs";
- Intersection levels of service analysis at intersections along the proposed haul route:
  - State Highway 94/Baggett Road
  - Baggett Road/proposed site access
- Auxiliary right-/left-turn lane analysis at the following intersections, based on the projected volumes and criteria in the *ECM* and the *State Highway Access Code*:
  - State Highway 94/Baggett Road
  - Baggett Road/proposed site access
- AutoTurn analysis at State Highway 94/Baggett Road and Baggett Road/proposed site access to determine the radii necessary to accommodate the design vehicle (WB-40); and
- Findings and recommendations

### **SAND & GRAVEL PIT SITE LOCATION & ACCESS**

As shown in Figure 1 and Figure 2, the proposed Schubert Ranch/Ellicott Sand & Gravel extraction operation in El Paso County, Colorado is located west of Baggett Road and north (and south) of Sanborn Road. The 783-acre site is within the larger parcel identified by El Paso County parcel ID No. 2400000276 and the 40-acre smaller parcel (parcel ID no. 2400000275).

The proposed access to Baggett Road would be located approximately 3,550 feet south of the intersection of Baggett Road/Handle Road. This access is for Stage I of the operation. The applicant may request different access points in the future as the active mining areas change in the future (subsequent "Stages"). The applicant would be required to obtain a new driveway permit from El Paso County for any future access. Future access for future stages may require a transportation memorandum.

LSC has utilized a comparable land use (an existing, operating similar mining land use) with data and known operating characteristics for trip-generation estimating purposes. This similar land use is the Pueblo County mine – in general.

The estimated annual production for the Schubert Sand Mine and the typical production at the Pueblo County mine (250,000 tons per year) are similar. Both the proposed mine and the Pueblo County mine extract sand.

The total mining areas are not similar, nor are the mining methods, since the deposits are not similar. Approximately 35 acres of the 1,440 acres available for mining have been affected during the Pueblo County mine's 37 years of operation.

Under a Regular (112) Operation Construction Material Permit, an operator is not limited to an annual production. The only limit is the amount of surface disturbance allowed, based on the amount of reclamation bond posted and the affected area approved for mining.

As an additional point, construction-materials production is seasonal, based on weather, and demand for the product mined. Typically, the construction season is variable by year and geographical location. For example, the Pueblo area has a slightly longer construction season than the Colorado Springs area. Therefore, the Colorado Springs demand for construction materials may result in a lower production.

## **PROPOSED DAILY OPERATIONS**

### **Initial/Short Term (2023/2024)**

Hours of operation for the mine will remain from 7:00 a.m. – 7:00 p.m. **or sunrise-to-sunset**, depending on time of year. Empty haul vehicles would begin arriving around 7:00 a.m. each weekday and depart shortly after being loaded. Drivers would transport raw materials to the west via SH 94. Initially and in the short-term future, the pit would be operated in a manner similar to the mine in Pueblo County. The applicant has provided truck trip-generation data recorded for July and August 2020. The complete data set is attached for reference in Appendix A.

Based on the Pueblo County pit data, an average of 15 empty trucks would arrive at the site for loading each day and up to 15 loaded trucks would leave the mine each day.

Table 1 below summarizes the initial and short-term average entering truck trips by hour of the day, based on the Pueblo County pit data. The initial and short-term truck-trip counts at the proposed Ellicott site are anticipated to be comparable to the Pueblo County mine site, although shifted to begin at 7:00 a.m. for this El Paso County pit.

**Table 1: Initial/Short-Term Entering Trucks by Hour of the Day**

Hourly Period		Short Term Trucks to Enter the Site
Start Time	End Time	Entering Trucks (Average)
7:00	8:00	2
8:00	9:00	2
9:00	10:00	2
10:00	11:00	1
11:00	12:00	2
12:00	13:00	1
13:00	14:00	2
14:00	15:00	1
15:00	16:00	1
16:00	17:00	1
17:00	18:00	0
18:00	19:00	0
<b>Total Daily Entering Trucks</b>		<b>15</b>

No trucks (empty or loaded) would be parked on-site overnight. Thus, haul vehicles would originate from offsite location(s) each morning and return to offsite location(s) each afternoon.

Per the applicant, up to 6 employees (including 2 loaders, 2 operators, 1 crusher, and another staff member) would remain on-site throughout the day. These employees would drive to the proposed mine each morning using their personal vehicles and leave during the late afternoon using their personal vehicles. Employee personal vehicles are anticipated to arrive slightly before heavy vehicles would arrive to begin preparing for the day's workload.

**Potential Intermediate & Long Term – About 2 to 5 Years After Startup**

Projected Timeline

Typically, it takes several months to years for a mining operation to reach full production. It is estimated that it will take this site six months to start mining and up to two years to reach the target annual production estimates. Acquiring the necessary air permits often takes up to six months as well. Therefore, a total of 1.3 mini phases will be mined during the first 12-month period.

Stage 1 (Stage 1 mining area, not trip levels) is projected to last 10-15 years, according to page 9, Exhibit D of the approved mining plan. Within a stage will be mini phases of 1.15 acres, each of which are expected to provide 96,220 tons of material during a 4-5-month time period. Development of the remaining future stages will only occur as mining in the previous stage is completed. For instance, mining in Stage 2 will not begin until essentially all material is removed from Stage 1. The proposed operational stage should not cause an increase in trucks, as the applicant's goal is to ensure a smooth continuation of the mining operation across stages.



Projected Truck-Trip Generation

Potentially, the trip generation may increase in the future to an average of 47 empty trucks arriving at the site for loading each day, with 47 loaded trucks departing the mine each day. The estimated timing to potentially reach this level of trip generation is about four to five years after startup.

Table 2 shows the potential intermediate and long-term average number of trucks arriving by hour of the day.

**Table 2: Intermediate and Long-Term Entering Trucks by Hour of the Day**

Hourly Period		Trucks that Potentially may enter the site
Start Time	End Time	Entering Trucks (Average)
7:00	8:00	5
8:00	9:00	5
9:00	10:00	5
10:00	11:00	4
11:00	12:00	5
12:00	13:00	5
13:00	14:00	4
14:00	15:00	5
15:00	16:00	4
16:00	17:00	3
17:00	18:00	1
18:00	19:00	1
<b>Total Daily Entering Trucks</b>		<b>47</b>

**APPLICANT-PROPOSED HAUL ROUTE**

The haul route described below (and shown in Figure 3) is proposed by the applicant. Approximately half of the haul trips (loaded and empty) would be controlled by Ellicott, while the other half would be operated by outside hauling companies. The applicant will direct the trucking company and outside hauling companies to use this specific route when departing the site, which may be used for truck loads up to 75,000 pounds gross vehicle weight (GVW):

1. From the mine entrance, turn left and continue northbound on Baggett Road to SH 94.
2. Turn left onto State Highway 94 and travel west. Note: there may be rare instances where the trucks turn east, to deliver to jobs east of the mine site.

Truck drivers would be required to travel to the site using this route in the reverse direction.

## SIGHT DISTANCE

Access sight distance is acceptable at the proposed entrance on Baggett Road, meeting all sight-distance requirements in the *ECM*. No horizontal or vertical sight-distance issues exist at key intersections along the proposed haul route, including:

- Baggett Road/proposed site access
- State Highway 94/Baggett Road

Based on a 45-mile-per-hour (mph) posted speed limit, sight distances for both approaches on Baggett Road from the proposed site-access location exceed the required 680-foot requirement for multi-unit trucks, per *ECM* Table 2-35. The sight distance is over a quarter mile in each direction.

## ROADWAYS AND TRAFFIC CONDITIONS

### Area Roadways

Major roadways in the site vicinity are shown in Figure 1 and identified below, followed by a brief description of each. Roadway functional classifications are shown in Figure 4, while detailed existing roadway conditions are shown in Figure 5.

**State Highway (SH) 94** is a two-lane, paved rural highway with a posted speed limit of 65 miles per hour (mph) in the vicinity of Baggett Road. The highway extends east from US Highway (Hwy) 24 near Peterson Air Force Base about 85 miles to Highway 287 in Cheyenne County. CDOT classifies SH 94 as an NR-A highway west of Ellicott Highway and R-A east of Ellicott Highway. CDOT has identified the governing document with respect to access management for SH 94 in the vicinity of the site as the *State Highway 94 Access Management Plan (2012)*. The El Paso County 2040 *Major Transportation Corridors Plan (MTCP)* identifies SH 94 as a two-lane Principal Arterial in the Ellicott area. The *MTCP 2060 Corridor Preservation Plan* identifies SH 94 as a future four-lane Principal Arterial. However, future right-of-way (ROW) needs will be identified by CDOT.

**Baggett Road** is classified as a two-lane Rural Local roadway on the 2040 El Paso County *MTCP*. No auxiliary lanes currently exist at the TWSC intersection of Baggett Road/SH 94. Currently, Baggett Road is a 24-foot-wide gravel roadway with 4-foot shoulders and 60 feet of ROW. The posted speed limit on Baggett Road is 45 mph.

**Ellicott Highway** is classified as a two-lane Minor Arterial on the 2040 El Paso County *MTCP*. The posted speed limit on Ellicott Highway south of SH 94 is 45 mph. Auxiliary left-turn lanes currently exist on the eastbound and westbound approaches at the two-way stop-controlled (TWSC) intersection of Ellicott Highway/SH 94.

**Sanborn Road** is classified as a two-lane Collector on the 2040 El Paso County *MTCP*. No auxiliary lanes currently exist at the TWSC intersections of Baggett Road/Sanborn Road and Sanborn Road/Ellicott Highway. Currently, Sanborn Road is a 32-foot-wide gravel roadway with 4-foot shoulders and 90 feet of ROW. The posted speed limit on Sanborn Road is 45 mph. (Please note, Sanborn Road is no longer proposed as part of the haul route).

**Handle Road** is classified as a two-lane Rural Local street on the 2040 El Paso County *MTCP*. No auxiliary lanes currently exist at the TWSC intersection of Handle Road/Baggett Road. Currently, Handle Road is a 24-foot-wide gravel roadway with 4-foot shoulders and a 60-foot ROW. The posted speed limit on Handle Road is 45 mph. Handle Road will not be used by haul vehicles, except in the unusual case of a local delivery to a customer located on this roadway.

**Ellicott Road** is classified as a two-lane Rural Local roadway on the 2040 El Paso County *MTCP*. No auxiliary lanes currently exist at the TWSC intersections of Handle Road/Ellicott Road and Sanborn Road/Ellicott Road. Currently, Ellicott Road is paved north of Handle Road and has a gravel roadway surface to the south. A 24-foot-wide roadway with 4-foot shoulders and a 60-foot ROW, Ellicott Road has a posted speed limit of 45 mph. Ellicott Road will not be used by haul vehicles, except in the unusual case of a local delivery to a customer located on this roadway.

### Existing Traffic Volumes

Vehicular turning-movement counts were conducted at the following intersections:

- SH 94/Baggett Road
  - Wednesday, June 7, 2023 from 6:30 a.m. to 8:30 a.m.
  - Wednesday, June 7, 2023 from 4:00 p.m. to 6:00 p.m.

Existing morning and evening weekday peak-hour traffic volumes at these intersections are shown in Figure 6. Raw count reports are attached.

### TRIP GENERATION

#### Short Term

Typically, site-generated vehicle trips for proposed land uses are estimated using the nationally-published trip-generation rates from *Trip Generation, 10th Edition, 2017* by the Institute of Transportation Engineers (ITE). ITE Land use 140-Manufacturing has been selected to estimate the trip generation for this mining operation. Rates based on “acres” have been selected for the trip-generation estimate. The anticipated area of active mining and processing has been used – estimated at about 1.15 acres. Although the proposed haul route has changed since the previous submittal, no modifications were made to short-term trip-generation estimates, as shown in Table 3.

To verify the trip-generation estimate, the resulting calculated estimate was compared to the actual trip generation from the Pueblo County mine. Minor adjustments to the ITE rates for manufacturing were made, based on these actual mining data. Appendix A contains the raw data from the Pueblo site and calculation tables converting truck-scale data to trip-generation estimates.

The projected area of mining disturbance is less than 1.15 acres. Each of the five stages will consist of mini phases of approximately 1.15 acres (500 feet long by 100 feet wide). Assuming an annual production of 250,000 tons per year starting in year 2, the 1.15 acres of disturbance per mini phase will result in approximately 4.6 months of production. Therefore, a total of 3.0 acres are estimated to be affected by mining during the second full 12 months of production (2.6 mini phases). This assumes no decrease in production during limited-construction winter months.

The applicant has indicated that this pit will operate similarly to the one in Pueblo County, with comparable trip generation – at least in the short term. There will be a difference in operating hours, with this El Paso County pit beginning operations at 7:00 a.m.

- Thirty (30) haul-truck trips per day are expected in the short term on the average weekday (half entering and exiting every 24 hours).
- Approximately 45 total vehicle trips (haul trips and employee trips combined) are expected in the short term on the average weekday (half entering and exiting every 24 hours).
- During the morning peak hour, 3 total vehicles are projected to enter the mine site, while 2 total vehicles are projected to exit.
- Approximately 2 vehicles would enter, and 3 total vehicles would exit the mine site during the afternoon peak hour.

**Table 3: Estimated Site Vehicle-Trip Generation**

ITE		Value	Units	Trip Generation Rates <sup>1</sup>					Driveway Trips Generated					
Code	Description			Average Weekday	A.M.		P.M.		Average Weekday	A.M.		P.M.		
				In	Out	In	Out		In	Out	In	Out		
<b>Existing (Pueblo Site)</b>														
				Existing Average Truck Trips -- Count Data				30	2	2	0	0		
				Existing Estimated Other Trips -- Estimated by LSC				12	1	0	1	4		
				<b>Pueblo Site -- Current Total Trips</b>				<b>42</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>4</b>		
<b>Short-Term (Ellicott Site)</b>														
<b>Trip Generation Estimate (Short Term - Initial Operation) - ITE Rates</b>														
140	Manufacturing	1.150	Acres	39.53	4.12	0.67	1.95	3.04	45	5	1	2	3	
<b>Trip Generation Estimate (Short Term - Initial Operation) - w/ Minor Adjustments to ITE Rates</b>														
<b>140</b>	<b>Manufacturing</b>	<b>1.150</b>	<b>Acres</b>	<b>39.53</b>	<b>2.40</b>	<b>1.60</b>	<b>1.60</b>	<b>2.40</b>	<b>45</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>3</b>	
									Short-Term -- Trucks	30	2	2	1	1
									Short-Term -- Passenger Vehicles	15	1	0	1	2
<b>Potential Future -- Intermediate/Long-Term (Ellicott Site)</b>														
<b>Trip Generation Estimate (Intermediate/Long Term - Optimistic Full Operation) - ITE Rates</b>														
140	Manufacturing	2.783	Acres	39.53	4.12	0.67	1.95	3.04	110	11	2	5	8	
<b>Trip Generation Estimate (Intermediate/Long Term - Optimistic Full Operation) - w/ Minor Adjustments to ITE Rates</b>														
<b>140</b>	<b>Manufacturing</b>	<b>2.783</b>	<b>Acres</b>	<b>39.53</b>	<b>2.40</b>	<b>1.60</b>	<b>1.60</b>	<b>2.40</b>	<b>110</b>	<b>7</b>	<b>6</b>	<b>3</b>	<b>7</b>	
									Long-Term -- Trucks	94	5	5	2	2
									Intermediate & Long-Term -- Passenger Vehicles	16	2	0	1	5

<sup>1</sup> Source: Trip Generation, 11th Edition, 2021, by the Institute of Transportation Engineers (ITE)

Rev. 9/15/2023

### Trip Distribution and Assignment

An estimate of directional distribution of site-generated vehicle trips to the study-area roads is a necessary component in determining the site's traffic impacts. Figure 7 shows the estimated distribution/proportion of mine-generated trips on the area roadway network. Haul-vehicle distribution and passenger-vehicle distribution splits are shown separately.

Note: Previous directional-distribution estimates were adjusted, based on the new haul route, as all trucks would access the site via Baggett Road.

Estimates were based on the following factors: the proposed haul route provided by the applicant and estimates of employee trip routing by LSC, the area roadway system that will provide access to the site, and the site's geographic location. The truck distribution reflects the applicant's requirement for haul-vehicle drivers to utilize the proposed designated haul route.

## **Site-Generated Traffic**

### Short Term

The short-term mine-generated traffic volumes at the following intersections have been calculated by applying the distribution percentages (from Figure 7) to the short-term trip-generation estimates (from Figure 8).

- Baggett Road/proposed site access
- State Highway 94/Baggett Road

Figure 8 shows the short-term projected mine-generated daily traffic volumes at these intersections for the weekday morning and evening peak hours. The figure also shows the projected mine-generated average daily volumes during the peak summer months.

### Intermediate & Long Term

Figure 9 shows the potential intermediate and long-term projected mine-generated peak-hour and average daily traffic volumes. These are based on the same distribution from Figure 7 and the intermediate and long-term trip-generation estimates from Table 3.

## **Existing-Plus-Site-Generated Traffic Volumes**

Figure 10 shows the sum of the existing traffic volumes (from Figure 6) and short-term site-generated peak-hour and daily traffic volumes (shown in Figure 8). These volumes represent the projected short-term total traffic. Also shown (at the intersection of SH 94/Baggett Road) are applicable projected short-term total “passenger-car-equivalent” turning-movement traffic volumes.

## **Long-Term Background Traffic Volumes**

Figure 11 shows the projected 2043 background traffic volumes. Background traffic on SH 94 has been based on CDOT growth factors and estimates by LSC. Long-term background growth estimates on Baggett Road were made using projections based on the *MTCP* and estimates by LSC, respectively, as noted in the legend in Figure 11. Traffic volumes to be generated by the proposed mining operation are not included in the volumes shown in this figure.

## **2043 Background Plus-Site-Generated Traffic Volumes**

Figure 12 shows the sum of the 2043 Background traffic volumes (from Figure 11) and intermediate and long-term site-generated peak-hour and daily traffic volumes (shown in Figure 9). These volumes represent the potential long-term total traffic.

**LEVEL OF SERVICE ANALYSIS**

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection and is indicated on a scale from “A” to “F.” LOS A is indicative of little congestion or delay. LOS F indicates a high level of congestion or delay. Please refer to the Synchro reports (attached) for additional details. Table 4 shows the level of service delay ranges for signalized and unsignalized intersections.

**Table 4: Intersection Levels of Service Delay Ranges**

Level of Service	Signalized Intersections	Unsignalized Intersections
	Average Control Delay (seconds per vehicle)	Average Control Delay (seconds per vehicle) <sup>(1)</sup>
A	10.0 sec or less	10.0 sec or less
B	10.1-20.0 sec	10.1-15.0 sec
C	20.1-35.0 sec	15.1-25.0 sec
D	35.1-55.0 sec	25.1-35.0 sec
E	55.1-80.0 sec	35.1-50.0 sec
F	80.1 sec or more	50.1 sec or more

(1) For unsignalized intersections if V/C ratio is greater than 1.0 the level of service is LOS F regardless of the projected average control delay per vehicle.

The following intersections have been analyzed to determine the projected short-term (following the opening of mining operations) LOS for the key intersection turning movements:

- Baggett Road/proposed site access
- State Highway 94/Baggett Road

Summaries of existing and existing-plus-site traffic scenario levels of service during the weekday morning and evening peak hours are shown in the following figures:

- Figure 6: Existing Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 10: Existing + Site Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 11: 2043 Background Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 12: 2043 Background + Site Traffic, Lane Geometry, Traffic Control, and LOS

Please refer to the Synchro reports (attached) for additional details.

## **State Highway 94/Baggett Road**

### Short-Term

All individual turning movements and minor street single-lane approaches currently operate at and are projected to remain at LOS B or better with the addition of the projected short-term, mine-generated traffic.

### Long-Term

All individual turning movements and minor-street single-lane approaches currently operate at and are projected to remain at LOS B or better based on 2043 Total (2043 background plus intermediate/long term, mine-generated) traffic.

### **Baggett Road/Site Access**

All single-lane approaches at the proposed site access on Baggett Road are projected to operate at LOS B or better through the 2043 horizon. For purposes of this level of service analysis, stop-sign control on the eastbound approach is assumed.

## **AUXILIARY TURN-LANE NEEDS EVALUATION**

### **State Highway 94/Baggett Road**

According to criteria in the *State Highway Access Code*, exclusive deceleration auxiliary turn lanes shall be provided for any access on an R-A highway with a projected peak-hour ingress exceeding the following turning volume thresholds:

- Left-turn deceleration lane – 10 vehicles per hour (vph) or greater
- Right-turn deceleration lane – 25 vph or greater

### Passenger-Car-Equivalent Peak-Hour Turning Movements

Passenger-car-equivalent (PCE) turning movements at the State Highway intersection have been calculated per Section 2.3.4.e of the Colorado State Highway Access Code by applying a factor of 3 to the projected site-generated volumes **for trucks only**. These PCE volumes have been calculated as required by CDOT for traffic volumes at the intersection controlled by CDOT (specifically, for vehicles turning from State Highway 94 onto Baggett Road). The PCE factor of 3 was **not** applied to trips associated with workers accessing the site using their personal vehicles.



### Short-Term

The projected morning peak hour volumes are not projected to exceed the 25 vph right-turn lane threshold at which a right turn lane is required per the *State Highway Access Code*.

Approximately 17 vehicles per hour (passenger car equivalent volume of 22) are projected to make an eastbound right-turning movement during the afternoon peak hour, which does **not** exceed the 25 vph right-turn lane threshold in the *State Highway Access Code*. Therefore, based on existing volumes plus the projected short-term, site-generated volume, an eastbound right-turn deceleration lane **would not be required in the short-term**.

### Long-Term

Background traffic volumes in the study area are anticipated to grow over time due to additional background development.

The long-term peak-hour **background** projections are 5 (a.m. peak) and 35 (p.m. peak) eastbound right-turning vehicles. The totals (background plus the **intermediate/long-term** site-generated turning volumes) are projected at 12 and 38 vehicles per hour during the morning and afternoon peak hours, respectively (passenger-car-equivalent volumes are 22 and 47, respectively). An eastbound right-turn lane would be required, based on the 2043 PM peak projection and the *Access Code* turning-volume threshold for right-turn lanes.

### **Baggett Road Intersections/Access Point**

According to criteria in the *Engineering Criteria Manual*, exclusive auxiliary turn lanes shall be provided at intersections/access points on a Collector-and-below roadways with a projected peak-hour ingress exceeding the following turning-volume thresholds:

- Left-turn lane – 25 vehicles per hour (vph)
- Right-turn lane – 50 vph or greater

No auxiliary right- or left-turn lanes would be required at the proposed site-access point on Baggett Road, based on projected site-generated traffic volumes and criteria in the *ECM*.

### **AVERAGE DAILY TRAFFIC IMPACTS RELATIVE TO ROADWAY DESIGN ADT BY CLASSIFICATION**

#### **El Paso County Roadway Segments**

Note: The County *ECM* does not specify a requirement to adjust for passenger-car equivalents when calculating ADTs for use in evaluating against the design ADT by classification.

The projected buildout average daily traffic (ADT) impacts have been compared to the roadway design ADTs shown in Tables 2-4 and 2-5 of the *ECM*. Figure 4 shows existing roadway classifications along the haul route and has been provided as a general reference. The actual current roadway capacities for specific roadway segments may differ from these *ECM*-identified "Design ADT" values for County-standard roadways by classification.

Please refer to Figure 10 which presents the estimated short-term total ADTs along the haul route.

## **Baggett Road**

### Existing/Short Term

Baggett Road is a Local, gravel roadway. The *ECM* design ADT for this type of roadway is 200 ADT. Figure 6 and Figure 10 show the existing and existing plus short-term site-generated peak-hour and ADT volumes, respectively, on the section south of SH 94 and on the section just south of Handle Road. With the addition of projected short-term site-generated trips to the roadway, the section south of Highway 94 Road and the section just south of Handle Road are likely to remain under the 200 ADT threshold in the short term.

### Long Term

The 2040 *MTCP* shows residential household growth in the general area north of Sanborn Road. Figure 12 shows LSC's estimates of 2043 volumes on Baggett Road. Future volumes may vary significantly depending on location of the growth, development access points, and area roadway conditions.

The section of Baggett Road just south of SH 94, at 356 projected vehicles per day, would exceed the 200 ADT threshold in the long term. The section south of Handle Road is also projected to exceed 200 ADT based on projected background traffic (due to area development and growth). The projected total would be 356 ADT in the long term.

## **Sanborn Road**

Based on recent 2021 traffic data on Sanborn Road just east of Ellicott Highway, this gravel road already exceeds the 200 ADT threshold (design ADT of a Rural Gravel roadway). The site-generated traffic would add **negligible** traffic to this roadway (one to two passenger vehicle trips per day for the short-term or long term). This is because the proposed haul route does not include Sanborn Road.

## **DESIGN-VEHICLE ACCOMMODATION AT HAUL-ROUTE INTERSECTIONS AND ALONG ROADWAYS**

### **Intersections**

The largest anticipated haul vehicles should be considered the “design vehicle” for purposes of evaluating the geometry of proposed site-access intersection and existing intersections along the anticipated haul route (SH 94/Baggett Road). The intersection of SH 94/Baggett Road has been analyzed to determine if corner-radius and potentially other geometric improvements would be needed to meet criteria 2.3.7.G of the El Paso County *Engineering Criteria Manual*.

LSC has completed this analysis using AutoTurn to determine the radii necessary to accommodate the design vehicle (WB-40). Detailed AutoTurn Figure 13 and Figure 14 are attached, which depict the turning vehicle-movement wheel and overhang paths. The criteria for truck turning paths at intersections are included in the *ECM*.

### **SH 94/Baggett Road**

Based on the AutoTurn results shown in Figure 13,

- The southwest corner radius will likely need to be improved to accommodate eastbound to southbound, right-turning, multi-unit-truck haul vehicles. This would likely entail grading and paving of a compound radius and potentially pavement markings.
- If there is the potential for haul trucks to turn to the east on SH 94, the southeast corner radius should also accommodate northbound-to-eastbound right turns by multi-unit trucks. It is our understanding that this would be rare.

### **Baggett Road/Proposed Site Access**

The AutoTurn results shown in Figure 14 should be used in the design of the proposed access intersection.

- The northwest corner radius will need to be designed to accommodate southbound right-turning, WB-40 multi-unit-truck haul vehicles entering the site.
- The eastbound to northbound left-turning movement by WB-40, multi-unit trucks, is also shown in the exhibit as the current haul route shows all trucks exiting to the north on Baggett Road.

## **FINDINGS AND CONCLUSIONS**

### **Land Use (Applicant-Provided Programming Information)**

The applicant has provided LSC with operations information including the anticipated number of haul trucks per day, hours and days of operation, and employee counts. This trip-generation estimate has been verified with this information.

### **Trip Generation Estimate**

No modifications to the previous short-term trip-generation estimate have been made since the previous submittal for this site, dated December 6, 2021:

- The proposed mining operation would generate an average of 30 haul-truck trips on the average weekday (one-half entering and one-half exiting in a 24-hour period).
- Per information provided by the applicant, an average of 15 empty trucks will arrive at the site for loading each day and 15 loaded trucks will leave the mine each day.
- Additionally, about 14 passenger-vehicle trips (employees, visitors, etc.) are projected.
- Most employees will arrive prior to the morning peak hour and the trips estimate assumes more dispersed exiting employee trips in the afternoon/early evening - depending on demand daily variability.
- This report also includes estimates of potential **intermediate & long-term** trip generation – potentially an average of 110 total trips (truck trips plus employee-/passenger-vehicle trips).

### **Proposed Haul Route**

Please refer to Figure 3 for a map detailing the proposed haul route between the mine and destinations west of the site (which is the direction of the major, potential market).

### **Level of Service Analysis**

All individual turning movements/approaches at the following intersection(s) currently operate at and are projected to remain at LOS B or better through the short term, with or without the addition of site-generated traffic:

- State Highway 94/Baggett Road
- Baggett Road/proposed site access

### **Auxiliary Turn Lanes**

Please refer to the “Auxiliary Turn-Lane Needs Evaluation” section above for a detailed auxiliary turn-lane needs assessment. No auxiliary turn lanes would be needed at the study-area intersections in the short term.

Based on long-term background traffic (and resulting total traffic) projection for the PM peak hour, the CDOT threshold for an eastbound right-turn lane would be exceeded (based on the *Access Code* turning-volume threshold for right-turn lanes). As actual future background volumes may vary from projections, the need for the right-turn lane could be revisited/verified at the time of expansion to Stage Two with updated traffic-volume counts and any potential refinements to site-generated projections at that time.

### **Average Daily Traffic Impacts Relative to Roadway Design ADT (by Classification)**

The following summarizes our findings. Please refer to the above section for additional details.

#### **Baggett Road**

Baggett Road is a Local, gravel roadway. The *ECM* design ADT for this type of roadway is 200 ADT. Based on projected existing-plus-short-term mine-generated traffic, the section south of SH 94 and the section between Handle Road and the site access would remain under the 200 ADT threshold in the short term.

LSC projects 2043 total ADT volume of about 350 vpd on Baggett Road, depending on the segment (as shown in Figure 12). These would exceed 200 ADT and future mitigation may be needed. Note: 20-year, future volumes may vary significantly from these estimates.

#### **Sanborn Road**

Based on recent 2021 traffic data on Sanborn Road just east of Ellicott Highway, this gravel road already exceeds the 200 ADT threshold (design ADT of a Rural Gravel roadway). The site-generated traffic would add **negligible** traffic to this roadway (one to two passenger vehicle trips per day for the short-term or long term). This is because the proposed haul route does not include Sanborn Road.

### **Haul-Vehicle (Design Vehicle) Accommodation**

Please refer to the section “Design-Vehicle Accommodation at Haul-Route Intersections and Along Roadways” for evaluation of intersection corner radii and recommended improvements to accommodate the multi-unit haul trucks. The intersection of SH 94/Baggett Road and the site-access intersection on Baggett Road have been evaluated.

### El Paso County Roadway Improvement Fee Program

This development will be subject to participation in the El Paso County Roadway Improvement Fee Program. TIS comments indicated the following:

*The County would recommend that the fee be calculated based on the ITE land use (140) of Manufacturing with the units of measure being per acre. Since the proposed mining land use is not directly in the ITE manual a determination from the County administrator would be required. Per the Road impact fee implementation document the timing and payment obligation is triggered by the final land use approval required (i.e., at the site development plan application). Staff recommends that the final calculation be provided at that stage as we will know exactly what will be proposed with the first phase of development and a determination can be made at that time by the County Administrator. Alternatively, a request may be made to the County Administrator as to whether an independent study per the road implementation document would be allowed to be submitted.*

A preliminary calculation is based on 1.15 acres as the predictor variable. The 1.15 acres represents the approximate active working area at any given time.

$$1.15 \text{ acres} \times 39.53 \text{ trips/acre/day} = 45 \text{ trips per day (short term)}$$

The cost per trip is \$398.55, therefore the total fee obligation would be **\$17,935**.

### LIST OF DEVIATIONS REQUESTED

No Deviations are requested as part of this application.

\* \* \* \* \*

The fee shall be based on the trip generation at full operation which is 110 trips. Additionally the developer would need to agree and a condition of approval would be needed that indicates that the development would not exceed the 2.783 acres of active mining (i.e 110 trips).

Please contact me if you have any questions regarding this report.

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

By: Jeffrey C. Hodsdon, P.E.  
Principal

JCH/JAB:jas

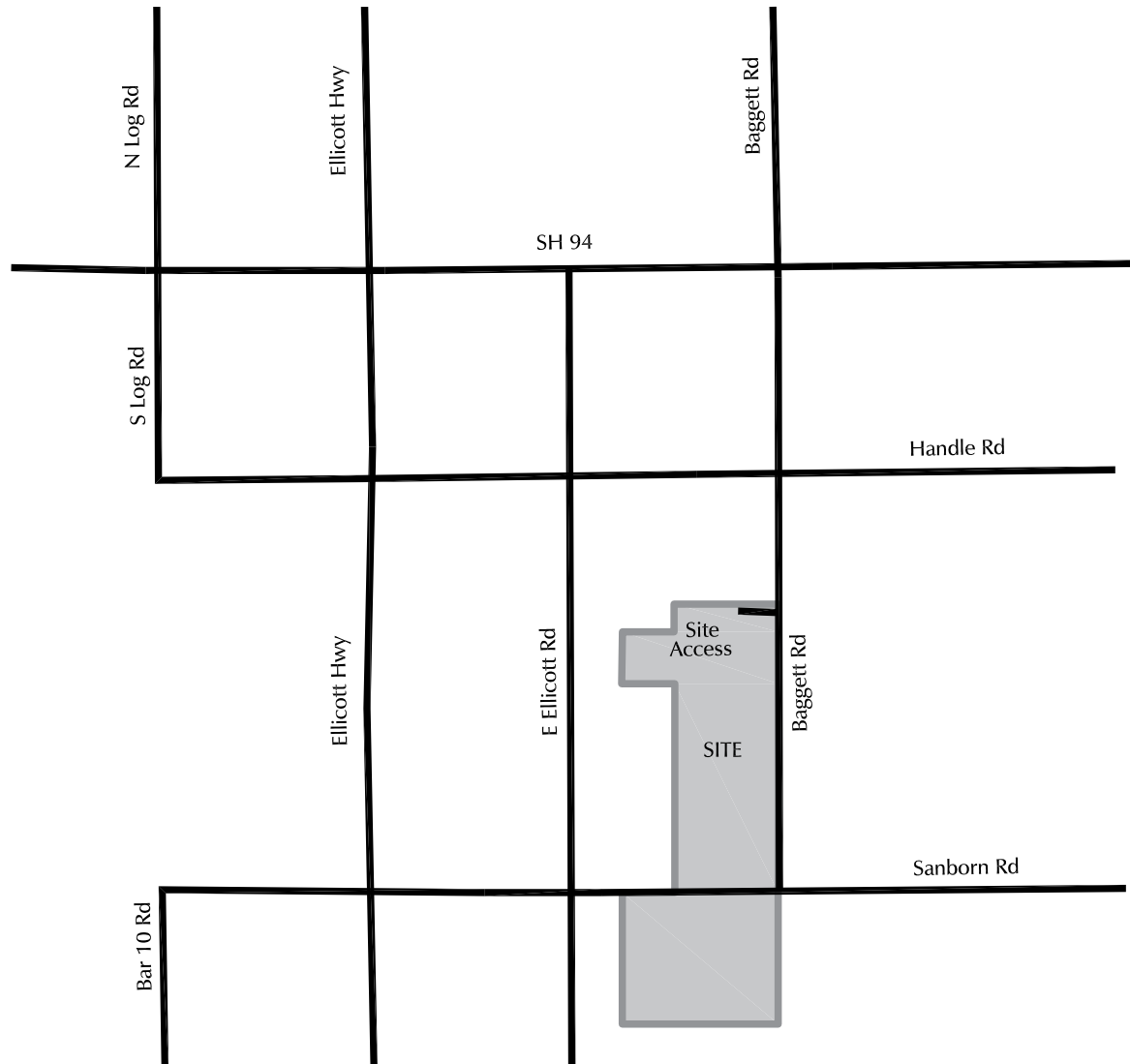
Enclosures: Figure 1 – Figure 14  
Traffic Count Reports  
LOS Synchro Reports  
Appendix A (Pueblo County Pit Trip Generation Data)

# Figures 1-14

---



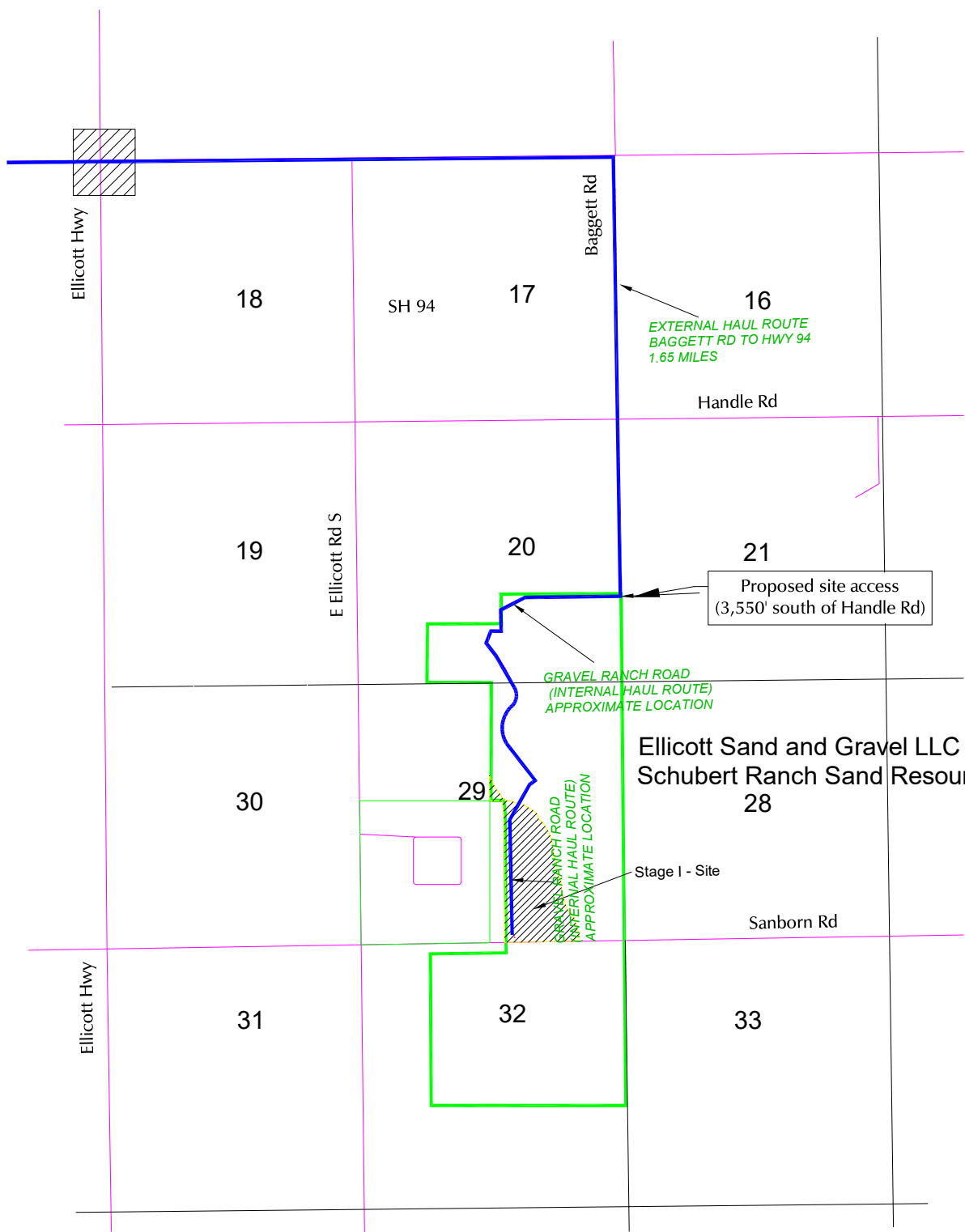




Not to scale

Figure 1  
**Vicinity Map**

Ellicott Sand and Gravel (LSC# 194980)



Ellicott Sand and Gravel LLC  
Schubert Ranch Sand Resource  
28

Stage I - Site

GRAVEL RANCH ROAD  
(INTERNAL HAUL ROUTE)  
APPROXIMATE LOCATION

GRAVEL RANCH ROAD  
(INTERNAL HAUL ROUTE)  
APPROXIMATE LOCATION

EXTERNAL HAUL ROUTE  
BAGGETT RD TO HWY 94  
1.65 MILES

Proposed site access  
(3,550' south of Handle Rd)



Figure 2  
**Site Plan**

Ellicott Sand and Gravel (LSC# 194980)

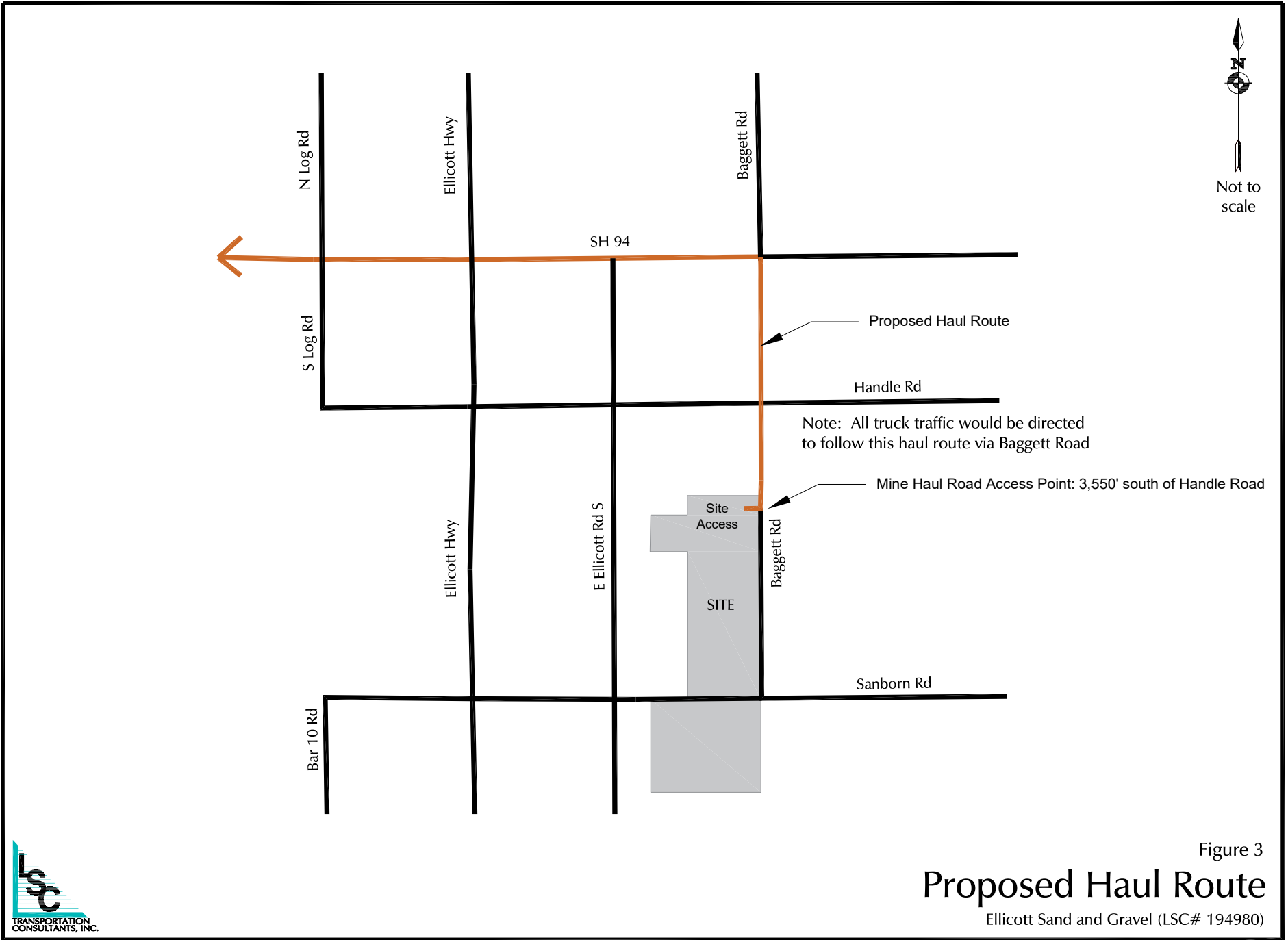
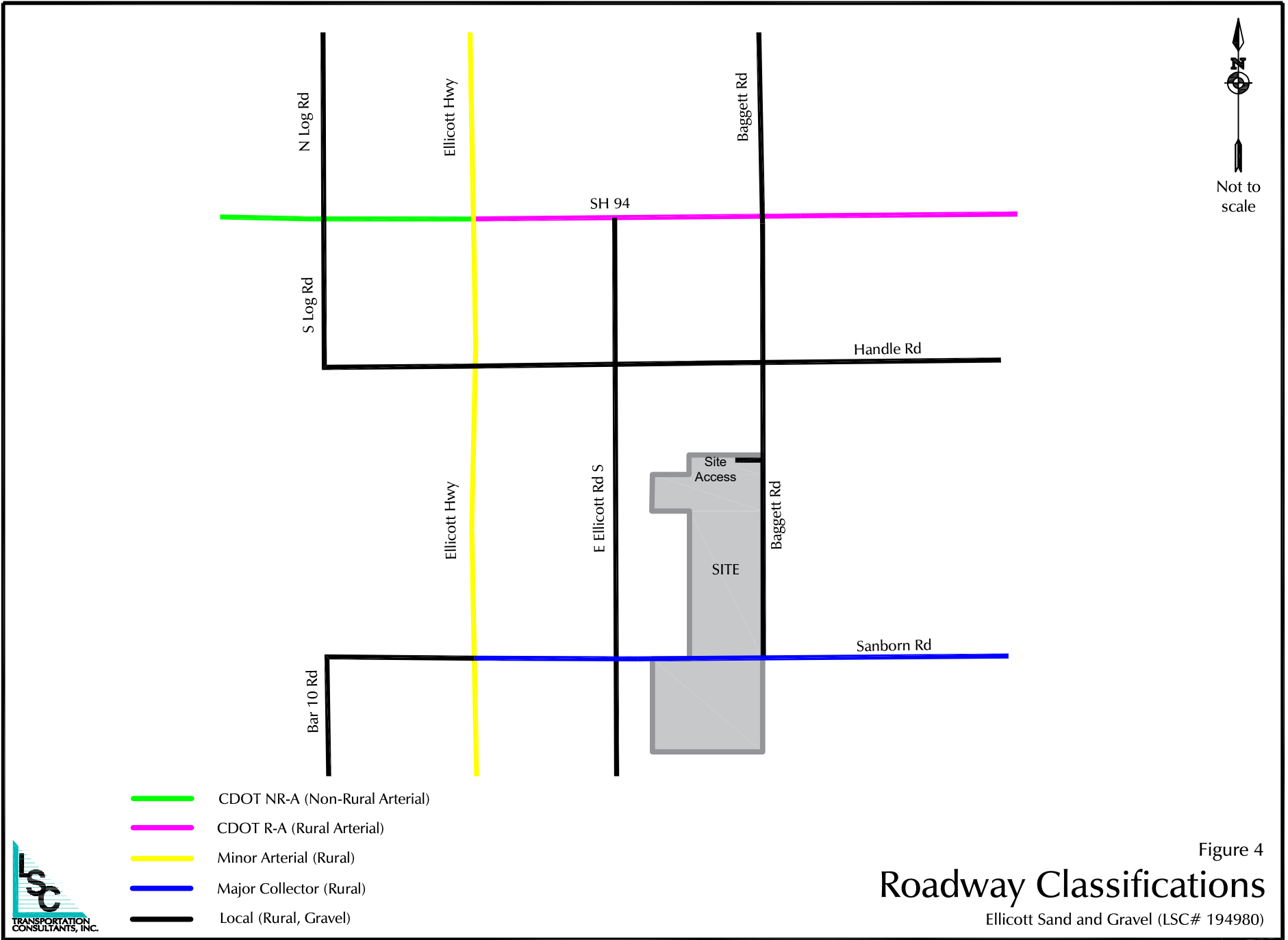


Figure 3  
**Proposed Haul Route**  
 Ellicott Sand and Gravel (LSC# 194980)



- CDOT NR-A (Non-Rural Arterial)
- CDOT R-A (Rural Arterial)
- Minor Arterial (Rural)
- Major Collector (Rural)
- Local (Rural, Gravel)

Figure 4  
**Roadway Classifications**  
 Ellicott Sand and Gravel (LSC# 194980)



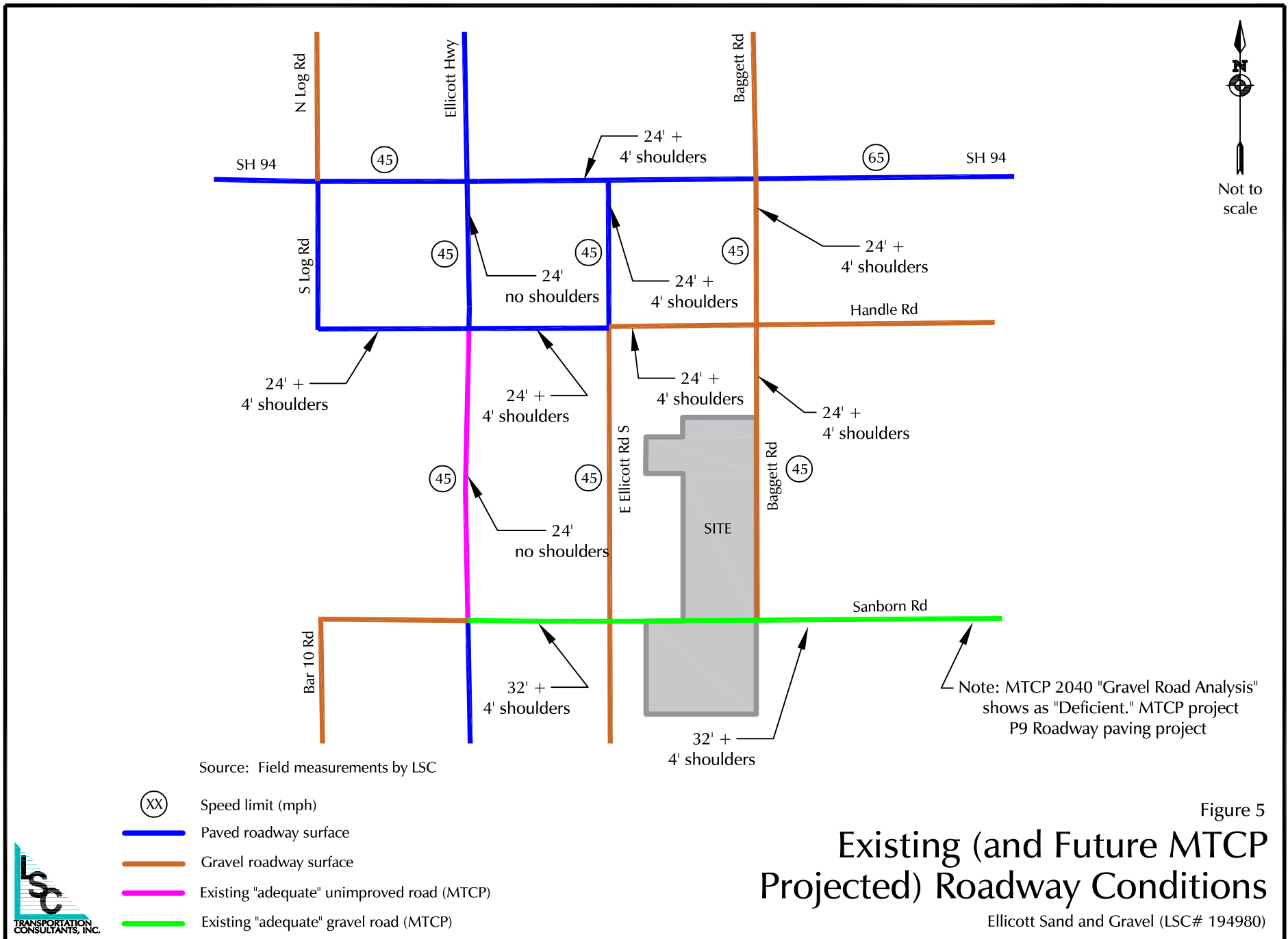


Figure 5  
**Existing (and Future MTCP Projected) Roadway Conditions**  
 Ellicott Sand and Gravel (LSC# 194980)



- \* CDOT AADT
- \*\* EPC traffic volumes from 1996-2009 publication
- \*\*\* 2021 average weekday traffic volumes (based on 2021 traffic counts)
- \*\*\*\* 2023 traffic count data by LSC

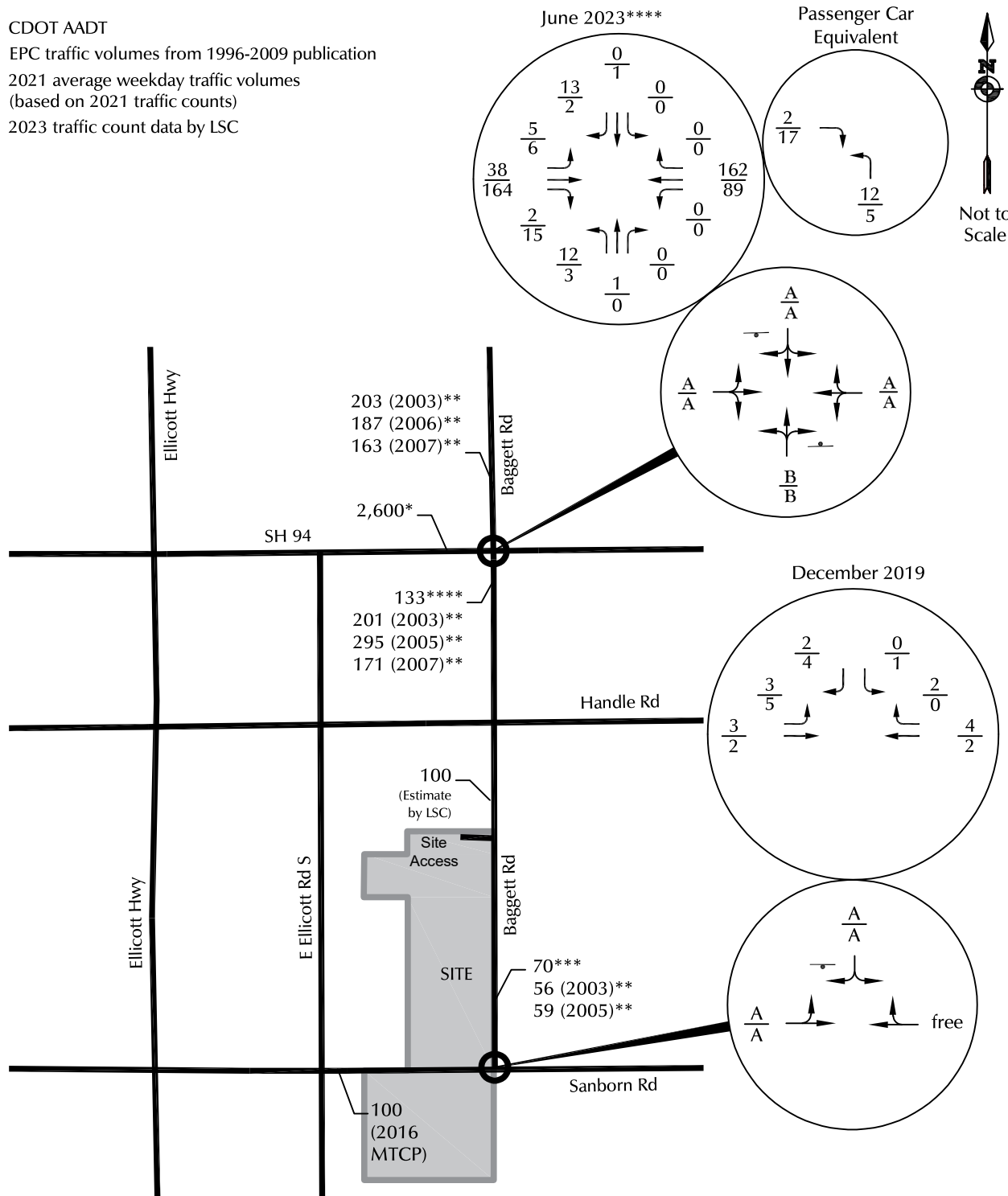


Figure 6  
**Existing Traffic Volumes, Lane Geometry, Traffic Control, and LOS**  
 Ellicott Sand and Gravel (LSC# 194980)



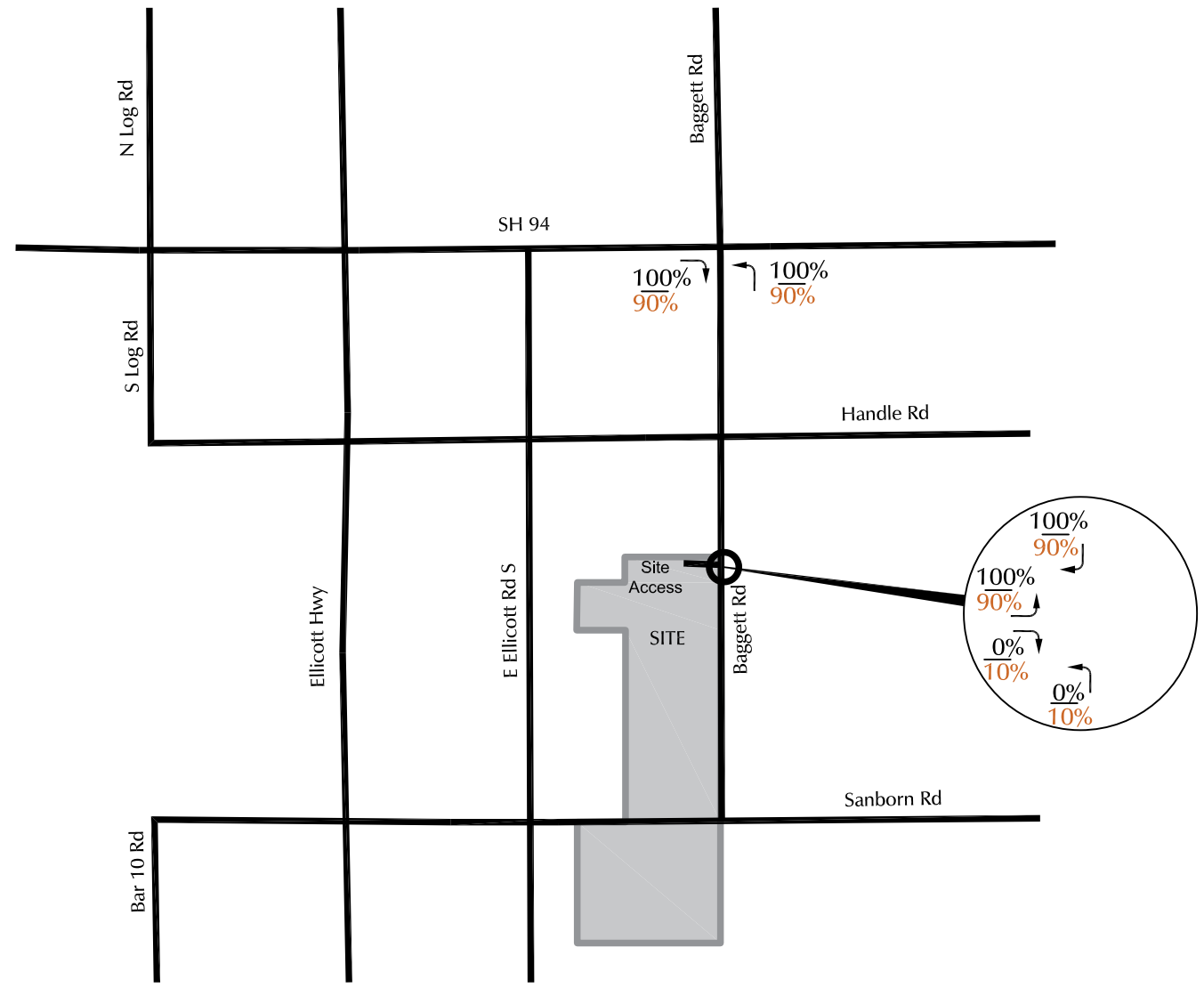
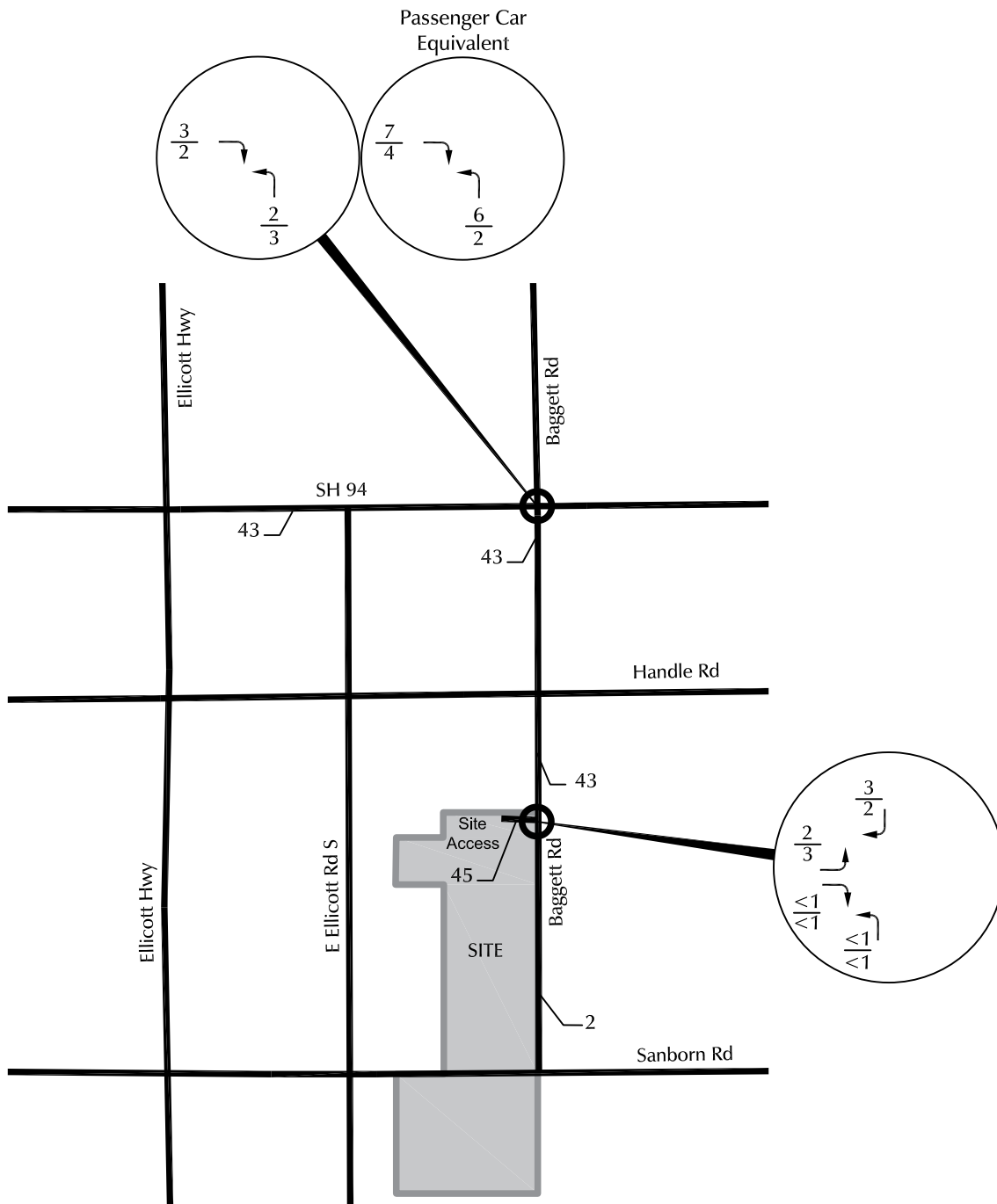


Figure 7  
**Estimated Directional Distribution**  
 Ellicott Sand and Gravel (LSC# 194980)



$$\frac{XX\%}{XX\%} = \frac{\text{Peak-Hour Directional Distribution (Truck Trips)}}{\text{Peak-Hour Directional Distribution (Employee Trips)}}$$



Notes: All exiting truck traffic would be directed to turn left onto northbound Baggett Road.

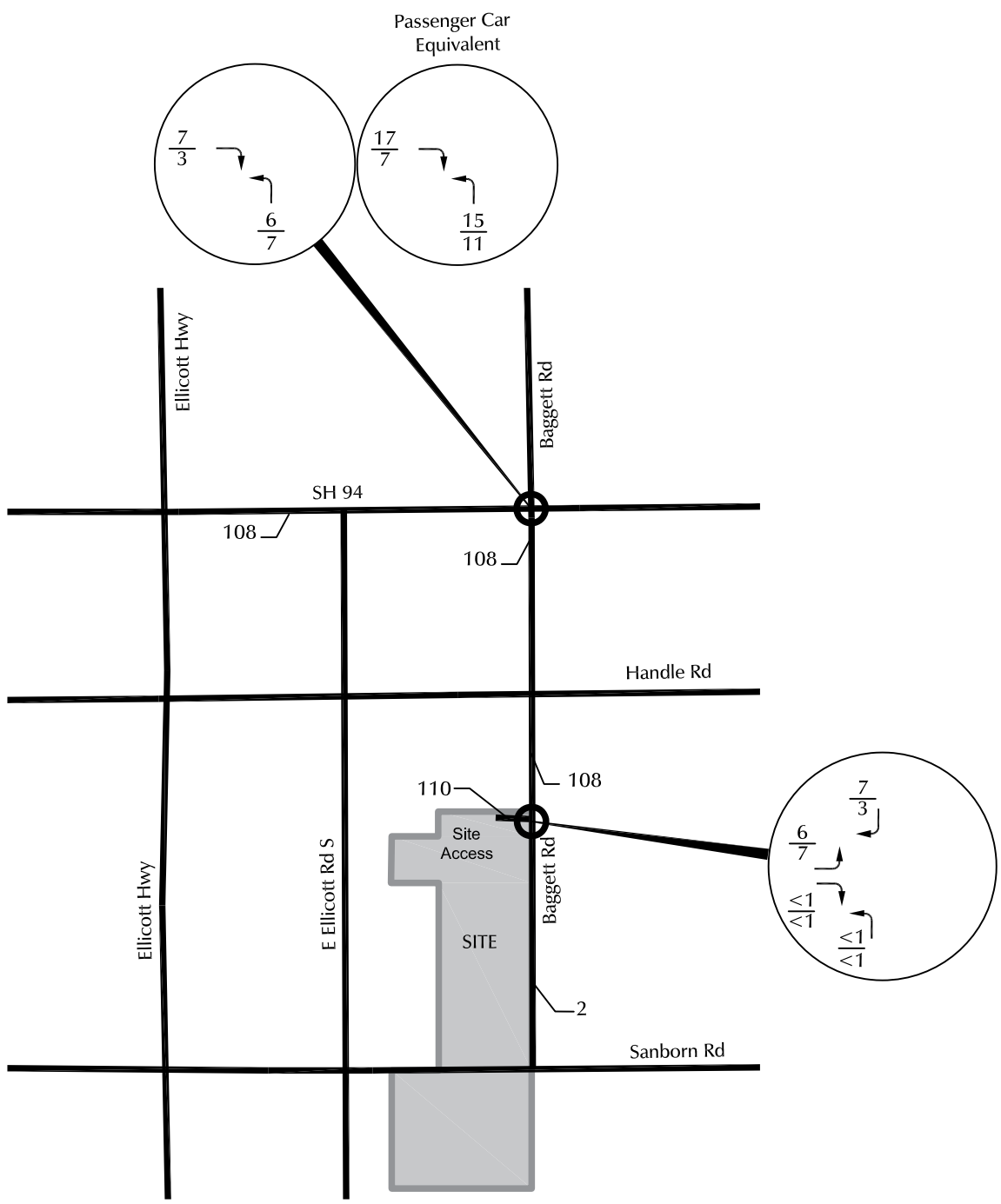
Figure 8  
**Short-Term  
 Site-Generated  
 Traffic Volumes**

Ellicott Sand and Gravel (LSC# 194980)



$\frac{XX}{XX}$  = AM Weekday Peak-Hour Traffic (vehicles per hour)  
 $\frac{XX}{XX}$  = PM Weekday Peak-Hour Traffic (vehicles per hour)  
 X,XXX = Average Daily Traffic (vehicles per day)





Notes: All exiting truck traffic would be directed to turn left onto northbound Baggett Road.

- $\frac{XX}{XX}$  = AM Weekday Peak-Hour Traffic (vehicles per hour)
- $\frac{XX}{XX}$  = PM Weekday Peak-Hour Traffic (vehicles per hour)
- X,XXX = Average Daily Traffic (vehicles per day)

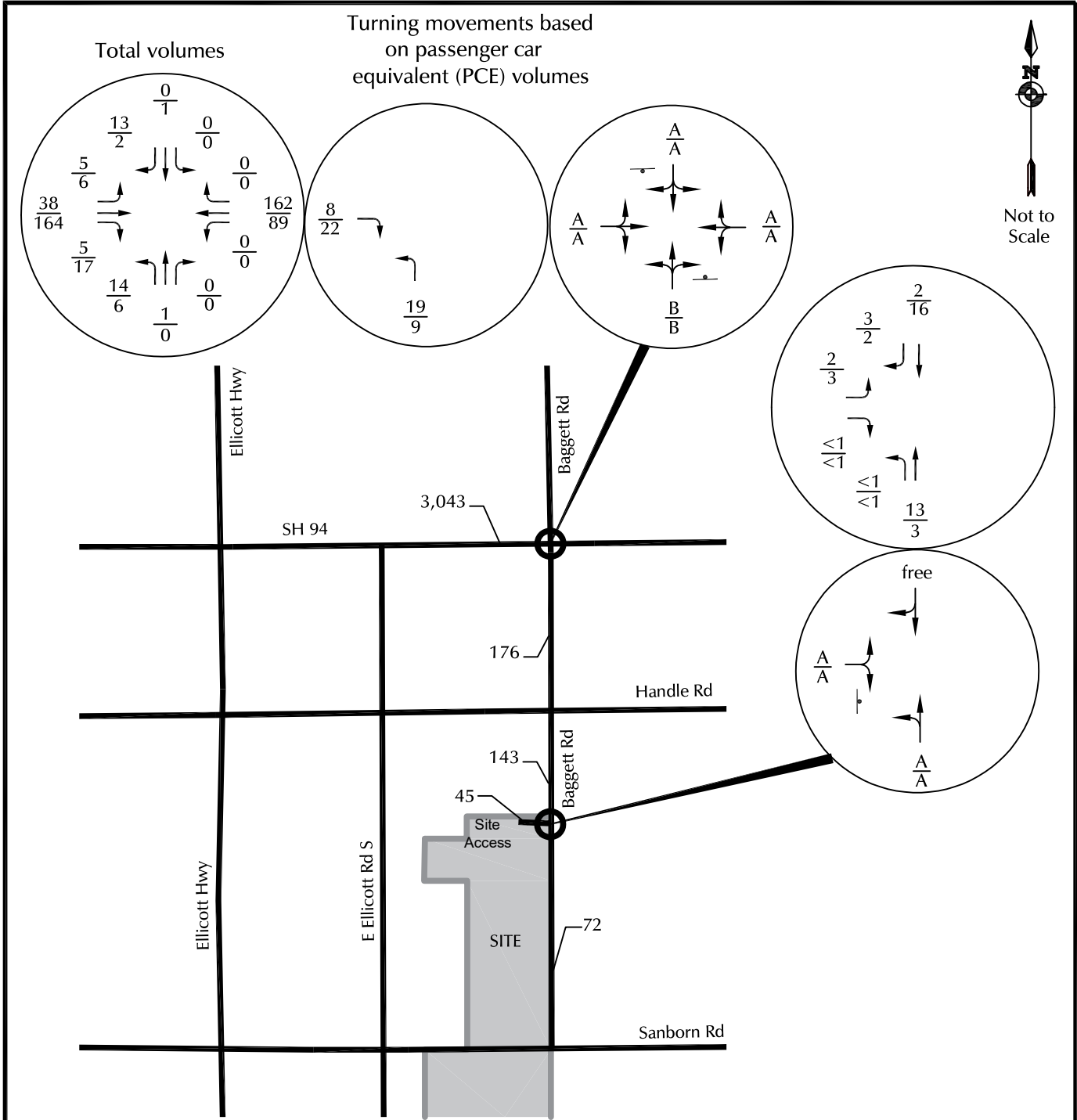
\*These represent Average Site-Generated volumes with potential increases over short-term volumes depending on pit operations, demand, etc.

Figure 9

## Potential Intermediate/ Long-Term Site-Generated Traffic Volumes\*

Ellicott Sand and Gravel (LSC# 194980)

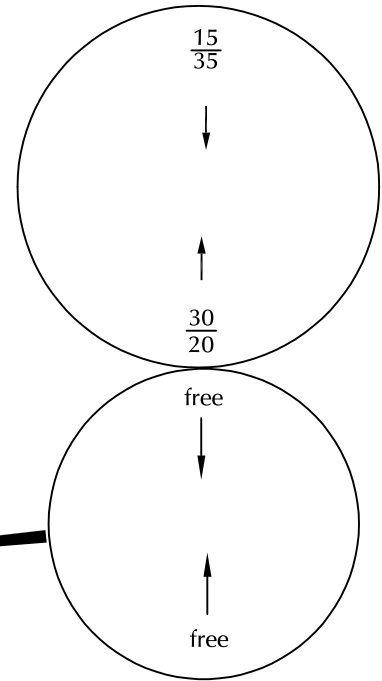
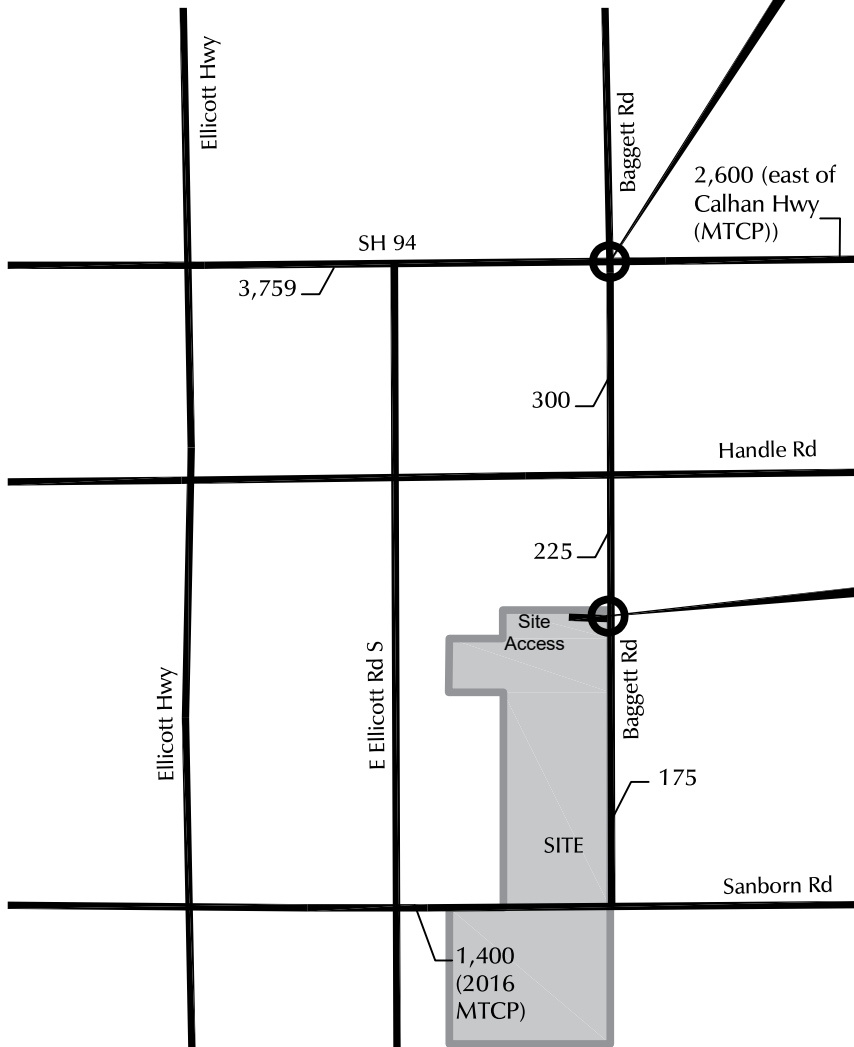
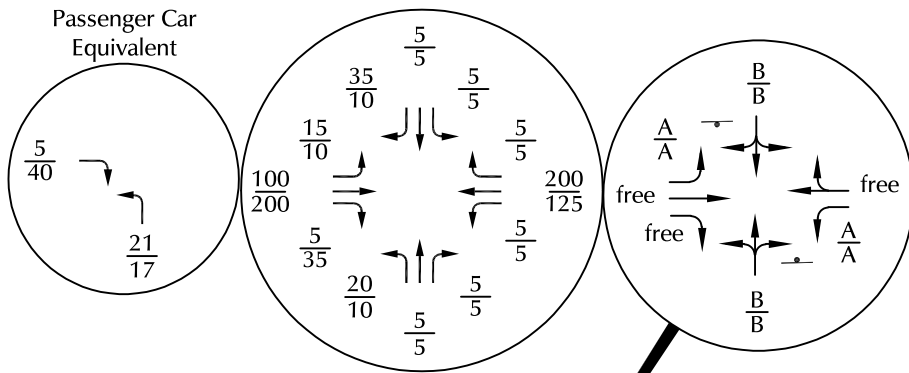




- $\frac{XX}{XX}$  = AM Weekday Peak-Hour Traffic (veh/hour)
- $\frac{XX}{XX}$  = PM Weekday Peak-Hour Traffic (veh/hour)
- X,XXX = Average Daily Traffic (vehicles per day)
- $\frac{X}{X}$  = AM Individual Movement Peak-Hour LOS
- $\frac{X}{X}$  = PM Individual Movement Peak-Hour LOS
- ⊥ = Stop Sign

Figure 10  
**Existing + Short-Term Site-Generated Traffic, Lane Geometry, Traffic Control, and LOS**

Ellicott Sand and Gravel (LSC# 194980)



- $\frac{XX}{XX}$  = AM Weekday Peak-Hour Traffic (vehicles per hour)
- $\frac{XX}{XX}$  = PM Weekday Peak-Hour Traffic (vehicles per hour)
- X,XXX = Average Daily Traffic (vehicles per day)
- $\frac{X}{X}$  = AM Individual Movement Peak-Hour LOS
- $\frac{X}{X}$  = PM Individual Movement Peak-Hour LOS
- ⊥ = Stop Sign

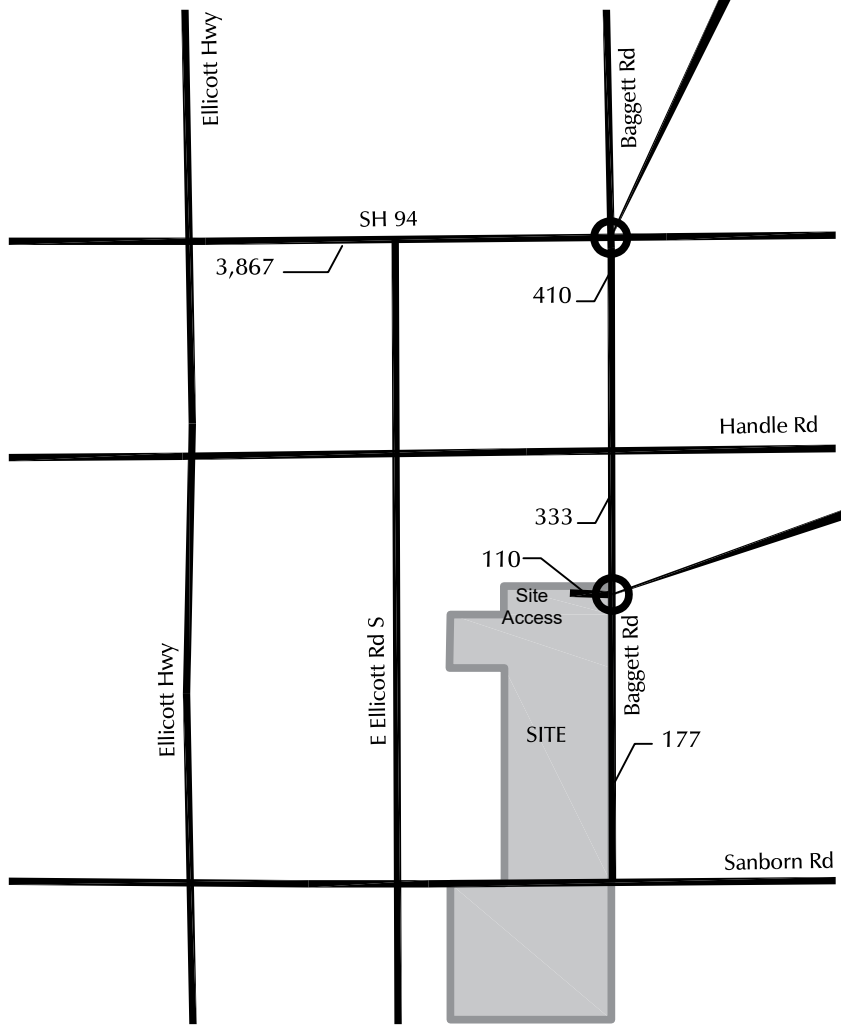
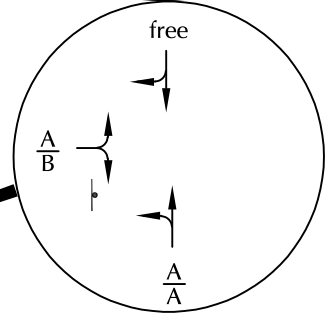
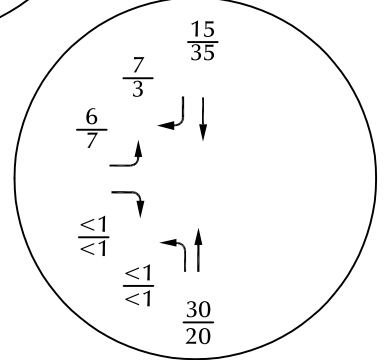
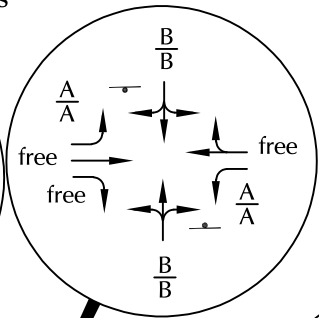
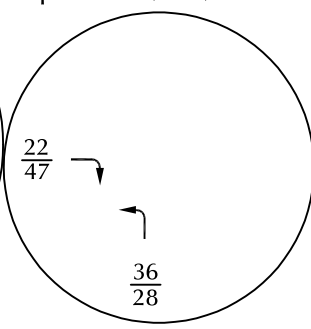
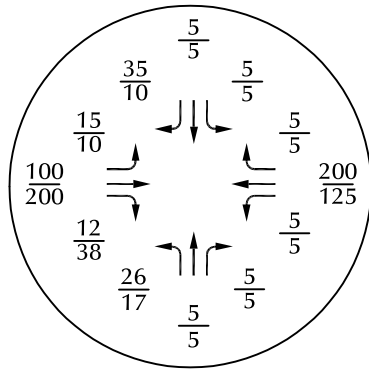
Figure 11

# 2043 Background Traffic, Lane Geometry, Traffic Control, and LOS

Ellicott Sand and Gravel (LSC# 194980)



Turning movements based on passenger car equivalent (PCE) volumes



- $\frac{XX}{XX}$  = AM Weekday Peak-Hour Traffic (vehicles per hour)
- $\frac{XX}{XX}$  = PM Weekday Peak-Hour Traffic (vehicles per hour)
- X,XXX = Average Daily Traffic (vehicles per day)
- $\frac{X}{X}$  = AM Individual Movement Peak-Hour LOS
- $\frac{X}{X}$  = PM Individual Movement Peak-Hour LOS
- = Stop Sign

\* Potential Intermediate/Long-Term Site-Generated Traffic

Figure 12

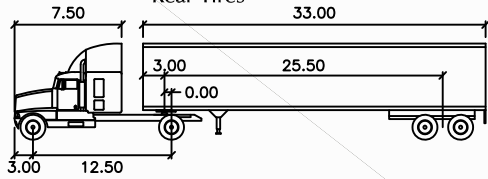
# 2043 Background + Site Traffic\*, Lane Geometry, Traffic Control, and LOS

Ellicott Sand and Gravel (LSC# 194980)



**LEGEND:**

- = Vehicle Body Clearance (1 foot) (Dot)
- = Vehicle Body
- = Front Tires
- = Rear Tires



WB-40

feet			
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.00	Steering Angle	: 20.3
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.00		

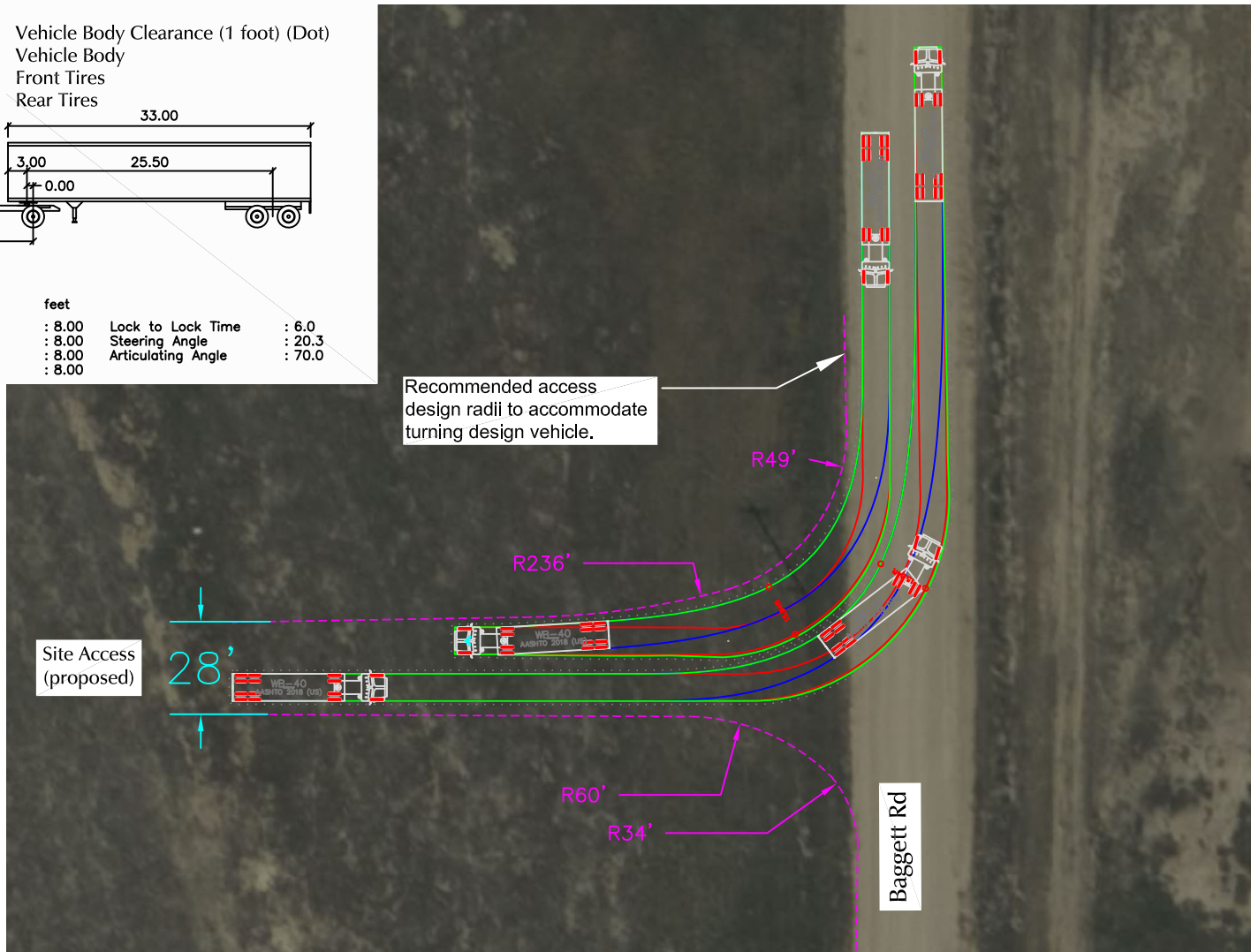
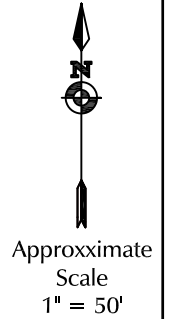
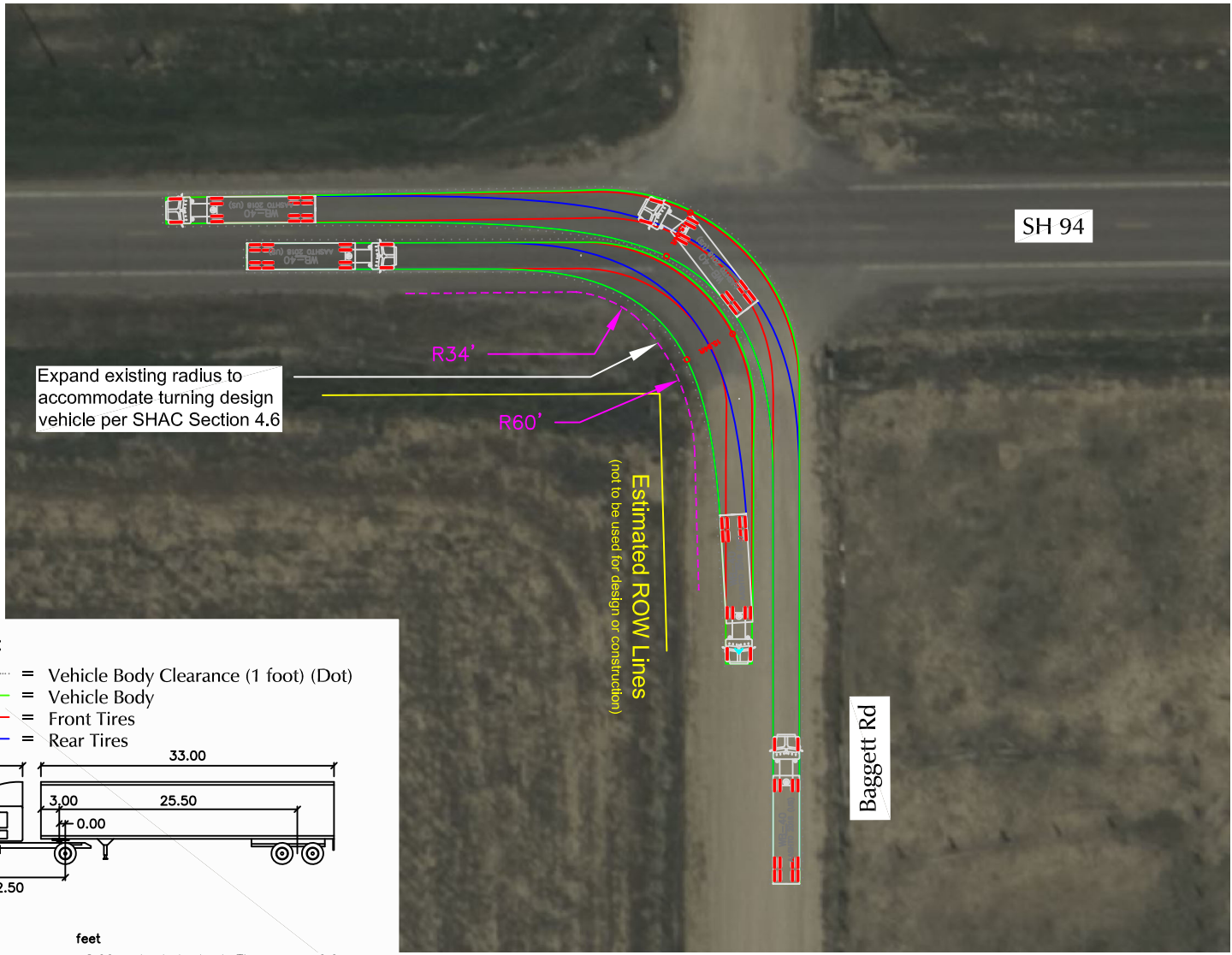



Figure 13  
**WB-40 AutoTurn Movements &  
 Access Design Recommendations**

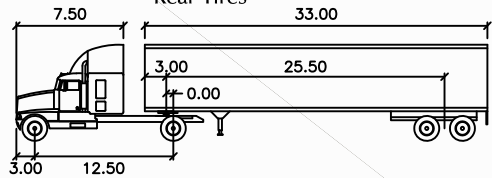
Ellicott Sand and Gravel (LSC# 194980)



  
 Approximate  
 Scale  
 1" = 50'

**LEGEND:**

- = Vehicle Body Clearance (1 foot) (Dot)
- = Vehicle Body
- = Front Tires
- = Rear Tires



WB-40

feet			
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.00	Steering Angle	: 20.3
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.00		

## WB-40 AutoTurn Movements & Intersection Radius Improvement Recommendations

Figure 14

Ellicott Sand and Gravel (LSC# 194980)

# Traffic Counts

---



Default Report Title  
 Use Preferences to Define Titles

Site Code: 00194980  
 Station ID:  
 Location 1:  
 Location 2:  
 Location 3:  
 Location 4:

Comment 1:  
 Comment 2:  
 Comment 3:  
 Comment 4:  
 Latitude: 0.000000  
 Longitude: 0.000000

3/15/2023	Unknown, 1	Unknown, 2	Total
Time			
12:00 AM	*	*	0
1:00	*	*	0
2:00	*	*	0
3:00	*	*	0
4:00	*	*	0
5:00	*	*	0
6:00	*	*	0
7:00	*	*	0
8:00	*	*	0
9:00	*	*	0
10:00	*	*	0
11:00	*	*	0
12:00 PM	*	*	0
1:00	*	*	0
2:00	*	*	0
3:00	*	*	0
4:00	*	*	0
5:00	*	*	0
6:00	*	*	0
7:00	6	1	7
8:00	3	0	3
9:00	0	0	0
10:00	0	0	0
11:00	2	0	2
Total	11	1	12
Percent	91.7%	8.3%	
AM Peak			
Volume			
PM Peak	7:00	7:00	7:00
Volume	6	1	7



Default Report Title  
 Use Preferences to Define Titles

Site Code: 00194980  
 Station ID:  
 Location 1:  
 Location 2:  
 Location 3:  
 Location 4:

Comment 1:  
 Comment 2:  
 Comment 3:  
 Comment 4:  
 Latitude: 0.000000  
 Longitude: 0.000000

3/16/2023	Unknown, 1	Unknown, 2	Total
Time			
12:00 AM	1	0	1
1:00	0	0	0
2:00	0	0	0
3:00	0	1	1
4:00	0	1	1
5:00	0	4	4
6:00	2	8	10
7:00	6	13	19
8:00	1	3	4
9:00	5	1	6
10:00	1	1	2
11:00	2	1	3
12:00 PM	3	4	7
1:00	1	2	3
2:00	5	2	7
3:00	2	4	6
4:00	8	5	13
5:00	10	2	12
6:00	4	0	4
7:00	3	1	4
8:00	2	2	4
9:00	3	4	7
10:00	2	0	2
11:00	0	0	0
Total	61	59	120
Percent	50.8%	49.2%	
AM Peak	7:00	7:00	7:00
Volume	6	13	19
PM Peak	5:00	4:00	4:00
Volume	10	5	13

Default Report Title  
 Use Preferences to Define Titles

Site Code: 00194980  
 Station ID:  
 Location 1:  
 Location 2:  
 Location 3:  
 Location 4:

Comment 1:  
 Comment 2:  
 Comment 3:  
 Comment 4:  
 Latitude: 0.000000  
 Longitude: 0.000000

3/17/2023	Unknown, 1	Unknown, 2	Total
Time			
12:00 AM	1	0	1
1:00	0	0	0
2:00	0	0	0
3:00	0	1	1
4:00	1	3	4
5:00	0	3	3
6:00	1	8	9
7:00	1	9	10
8:00	1	2	3
9:00	3	4	7
10:00	4	6	10
11:00	2	5	7
12:00 PM	1	5	6
1:00	4	2	6
2:00	8	5	13
3:00	6	3	9
4:00	7	4	11
5:00	5	4	9
6:00	8	3	11
7:00	4	1	5
8:00	3	0	3
9:00	5	1	6
10:00	1	0	1
11:00	1	0	1
Total	67	69	136
Percent	49.3%	50.7%	
AM Peak	10:00	7:00	7:00
Volume	4	9	10
PM Peak	2:00	12:00 PM	2:00
Volume	8	5	13

Default Report Title  
 Use Preferences to Define Titles

Site Code: 00194980  
 Station ID:  
 Location 1:  
 Location 2:  
 Location 3:  
 Location 4:

Comment 1:  
 Comment 2:  
 Comment 3:  
 Comment 4:  
 Latitude: 0.000000  
 Longitude: 0.000000

3/18/2023	Unknown, 1	Unknown, 2	Total
Time			
12:00 AM	3	0	3
1:00	1	0	1
2:00	1	1	2
3:00	0	0	0
4:00	0	0	0
5:00	0	2	2
6:00	0	2	2
7:00	0	2	2
8:00	0	2	2
9:00	5	0	5
10:00	3	7	10
11:00	5	5	10
12:00 PM	2	4	6
1:00	4	6	10
2:00	2	3	5
3:00	6	1	7
4:00	3	5	8
5:00	7	1	8
6:00	2	3	5
7:00	1	1	2
8:00	2	3	5
9:00	6	2	8
10:00	0	0	0
11:00	3	0	3
Total	56	50	106
Percent	52.8%	47.2%	
AM Peak	9:00	10:00	10:00
Volume	5	7	10
PM Peak	5:00	1:00	1:00
Volume	7	6	10

Default Report Title  
 Use Preferences to Define Titles

Site Code: 00194980  
 Station ID:  
 Location 1:  
 Location 2:  
 Location 3:  
 Location 4:

Comment 1:  
 Comment 2:  
 Comment 3:  
 Comment 4:  
 Latitude: 0.000000  
 Longitude: 0.000000

3/19/2023	Unknown, 1	Unknown, 2	Total
Time			
12:00 AM	0	0	0
1:00	1	0	1
2:00	1	1	2
3:00	1	2	3
4:00	0	0	0
5:00	0	1	1
6:00	0	0	0
7:00	0	2	2
8:00	1	1	2
9:00	1	6	7
10:00	1	3	4
11:00	6	5	11
12:00 PM	5	6	11
1:00	2	4	6
2:00	2	2	4
3:00	3	4	7
4:00	5	2	7
5:00	2	1	3
6:00	1	2	3
7:00	5	5	10
8:00	5	2	7
9:00	1	0	1
10:00	1	0	1
11:00	1	0	1
Total	45	49	94
Percent	47.9%	52.1%	
AM Peak	11:00	9:00	11:00
Volume	6	6	11
PM Peak	12:00 PM	12:00 PM	12:00 PM
Volume	5	6	11

Default Report Title  
 Use Preferences to Define Titles

Site Code: 00194980  
 Station ID:  
 Location 1:  
 Location 2:  
 Location 3:  
 Location 4:

Comment 1:  
 Comment 2:  
 Comment 3:  
 Comment 4:  
 Latitude: 0.000000  
 Longitude: 0.000000

3/20/2023	Unknown, 1	Unknown, 2	Total
Time			
12:00 AM	0	0	0
1:00	0	0	0
2:00	0	1	1
3:00	0	0	0
4:00	0	2	2
5:00	0	5	5
6:00	3	9	12
7:00	6	11	17
8:00	1	4	5
9:00	2	3	5
10:00	4	4	8
11:00	3	5	8
12:00 PM	3	1	4
1:00	2	4	6
2:00	3	3	6
3:00	5	5	10
4:00	5	6	11
5:00	9	0	9
6:00	10	2	12
7:00	6	1	7
8:00	4	1	5
9:00	2	1	3
10:00	1	0	1
11:00	1	0	1
Total	70	68	138
Percent	50.7%	49.3%	
AM Peak	7:00	7:00	7:00
Volume	6	11	17
PM Peak	6:00	4:00	6:00
Volume	10	6	12

Default Report Title  
 Use Preferences to Define Titles

Site Code: 00194980  
 Station ID:  
 Location 1:  
 Location 2:  
 Location 3:  
 Location 4:

Comment 1:  
 Comment 2:  
 Comment 3:  
 Comment 4:  
 Latitude: 0.000000  
 Longitude: 0.000000

3/21/2023	Unknown, 1	Unknown, 2	Total
Time			
12:00 AM	0	0	0
1:00	0	0	0
2:00	0	1	1
3:00	0	0	0
4:00	0	1	1
5:00	0	5	5
6:00	1	11	12
7:00	3	11	14
8:00	5	2	7
9:00	3	6	9
10:00	6	2	8
11:00	2	8	10
12:00 PM	3	3	6
1:00	6	3	9
2:00	3	4	7
3:00	5	0	5
4:00	7	3	10
5:00	9	1	10
6:00	10	4	14
7:00	4	3	7
8:00	4	1	5
9:00	0	0	0
10:00	1	0	1
11:00	0	0	0
Total	72	69	141
Percent	51.1%	48.9%	
AM Peak	10:00	6:00	7:00
Volume	6	11	14
PM Peak	6:00	2:00	6:00
Volume	10	4	14

Default Report Title  
 Use Preferences to Define Titles

Site Code: 00194980  
 Station ID:  
 Location 1:  
 Location 2:  
 Location 3:  
 Location 4:

Comment 1:  
 Comment 2:  
 Comment 3:  
 Comment 4:  
 Latitude: 0.000000  
 Longitude: 0.000000

3/22/2023	Unknown, 1	Unknown, 2	Total
Time			
12:00 AM	0	0	0
1:00	0	0	0
2:00	0	0	0
3:00	0	1	1
4:00	0	1	1
5:00	0	8	8
6:00	0	8	8
7:00	3	5	8
8:00	2	9	11
9:00	3	0	3
10:00	0	2	2
11:00	4	2	6
12:00 PM	7	3	10
1:00	4	6	10
2:00	2	5	7
3:00	4	2	6
4:00	11	3	14
5:00	4	8	12
6:00	11	4	15
7:00	3	1	4
8:00	6	1	7
9:00	0	1	1
10:00	3	1	4
11:00	1	0	1
Total	68	71	139
Percent	48.9%	51.1%	
AM Peak	11:00	8:00	8:00
Volume	4	9	11
PM Peak	4:00	5:00	6:00
Volume	11	8	15

Default Report Title  
 Use Preferences to Define Titles

Site Code: 00194980  
 Station ID:  
 Location 1:  
 Location 2:  
 Location 3:  
 Location 4:

Comment 1:  
 Comment 2:  
 Comment 3:  
 Comment 4:  
 Latitude: 0.000000  
 Longitude: 0.000000

3/23/2023	Unknown, 1	Unknown, 2	Total
Time			
12:00 AM	2	0	2
1:00	0	0	0
2:00	0	1	1
3:00	0	0	0
4:00	0	1	1
5:00	0	7	7
6:00	1	4	5
7:00	1	5	6
8:00	*	*	0
9:00	*	*	0
10:00	*	*	0
11:00	*	*	0
12:00 PM	*	*	0
1:00	*	*	0
2:00	*	*	0
3:00	*	*	0
4:00	*	*	0
5:00	*	*	0
6:00	*	*	0
7:00	*	*	0
8:00	*	*	0
9:00	*	*	0
10:00	*	*	0
11:00	*	*	0
Total	4	18	22
Percent	18.2%	81.8%	
AM Peak	12:00 AM	5:00	5:00
Volume	2	7	7
PM Peak			
Volume			
Grand Total	454	454	908
Percent	50.0%	50.0%	
ADT		ADT: 124	AADT: 124



# COUNTER MEASURES INC.

Location: BAGGETT ROAD N-O SANBORN ROAD  
 City: ELICOTT  
 County: EL PASO  
 Direction: NORTH/SOUTH

1889 YORK STREET  
 DENVER, COLORADO 80206  
 303-333-7409

Site Code: 212920  
 Station ID: 212920

Start Time	02-Feb-21 Tue		NORTHBOUND		SOUTHBOUND		Combined		03-Feb Wed		NORTHBOUND		SOUTHBOUND		Combined	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	0	2	0	1	0	3	0	0	0	0	0	1	0	1		
12:15	0	0	0	0	0	0	0	0	0	0	0	1	0	1		
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
12:45	0	1	0	1	0	2	0	0	0	0	1	0	1			
01:00	0	3	0	0	0	3	0	2	0	1	0	3				
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
01:30	0	2	0	0	0	2	0	0	0	1	0	1				
01:45	0	0	0	2	0	2	0	1	0	0	0	1				
02:00	0	2	0	0	0	2	0	0	0	0	0	0	0	0		
02:15	0	0	0	0	0	0	0	*	0	*	0	*	0	*		
02:30	0	1	0	1	0	2	0	*	0	*	0	*	0	*		
02:45	0	1	0	0	0	1	0	*	0	*	0	*	0	*		
03:00	0	0	0	1	0	1	0	*	0	*	0	*	0	*		
03:15	0	0	0	1	0	1	0	*	0	*	0	*	0	*		
03:30	0	1	0	0	0	1	0	*	0	*	0	*	0	*		
03:45	0	1	0	1	0	2	0	*	0	*	0	*	0	*		
04:00	0	2	0	3	0	5	0	*	0	*	0	*	0	*		
04:15	0	1	0	0	0	1	0	*	0	*	0	*	0	*		
04:30	0	4	0	0	0	4	0	*	0	*	0	*	0	*		
04:45	0	1	0	2	0	3	0	*	0	*	0	*	0	*		
05:00	0	1	0	1	0	2	0	*	0	*	0	*	0	*		
05:15	0	2	0	1	0	3	0	*	0	*	0	*	0	*		
05:30	0	1	0	0	0	1	0	*	0	*	0	*	0	*		
05:45	0	1	0	0	0	1	1	*	1	*	2	*	2	*		
06:00	1	0	1	0	2	0	0	*	0	*	0	*	0	*		
06:15	0	0	0	0	0	0	0	0	*	0	*	0	*	0	*	
06:30	0	0	0	0	0	0	0	0	*	1	*	1	*	1	*	
06:45	0	0	1	0	1	0	2	*	0	*	2	*	2	*		
07:00	2	0	2	0	4	0	1	*	1	*	2	*	2	*		
07:15	0	1	2	1	2	2	0	*	0	*	0	*	0	*		
07:30	0	1	0	1	0	2	0	*	0	*	0	*	0	*		
07:45	0	0	2	0	2	0	1	*	0	*	1	*	1	*		
08:00	0	0	3	0	3	0	0	*	1	*	1	*	1	*		
08:15	2	0	0	0	2	0	1	*	0	*	1	*	1	*		
08:30	1	0	0	0	1	0	0	*	1	*	1	*	1	*		
08:45	0	0	0	0	0	0	0	*	0	*	0	*	0	*		
09:00	0	0	0	0	0	0	0	*	0	*	0	*	0	*		
09:15	0	0	0	0	0	0	1	*	0	*	1	*	1	*		
09:30	1	0	0	0	1	0	0	*	1	*	1	*	1	*		
09:45	1	0	1	0	2	0	1	*	0	*	1	*	1	*		
10:00	1	0	0	0	1	0	0	*	0	*	0	*	0	*		
10:15	0	1	0	0	0	1	1	*	1	*	2	*	2	*		
10:30	0	0	0	0	0	0	0	*	0	*	0	*	0	*		
10:45	0	0	0	0	0	0	0	*	0	*	0	*	0	*		
11:00	1	0	0	0	1	0	0	*	1	*	1	*	1	*		
11:15	0	0	1	0	1	0	0	*	0	*	0	*	0	*		
11:30	0	0	0	0	0	0	0	*	0	*	0	*	0	*		
11:45	0	0	0	0	0	0	0	*	0	*	0	*	0	*		
<b>Total</b>	10	30	13	17	23	47	9	3	8	5	17	8				
<b>Day Total</b>	40		30		70		12		13		25					
<b>% Total</b>	14.3%	42.9%	18.6%	24.3%			36.0%	12.0%	32.0%	20.0%						
<b>Peak</b>	-	07:45	03:45	07:15	03:15	07:00	04:00	-	06:15	01:00	05:45	12:00	06:15	00:15		
<b>Vol.</b>	-	3	8	7	5	8	13	-	3	3	2	3	5	5		
<b>P.H.F.</b>		0.375	0.500	0.583	0.417	0.500	0.650		0.375	0.375	0.500	0.750	0.625	0.417		
<b>ADT</b>	ADT 48		AADT 48													





# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Baggett Rd - Hwy 94 AM  
 Site Code : 00194980  
 Start Date : 6/7/2023  
 Page No : 1

### Groups Printed- Unshifted

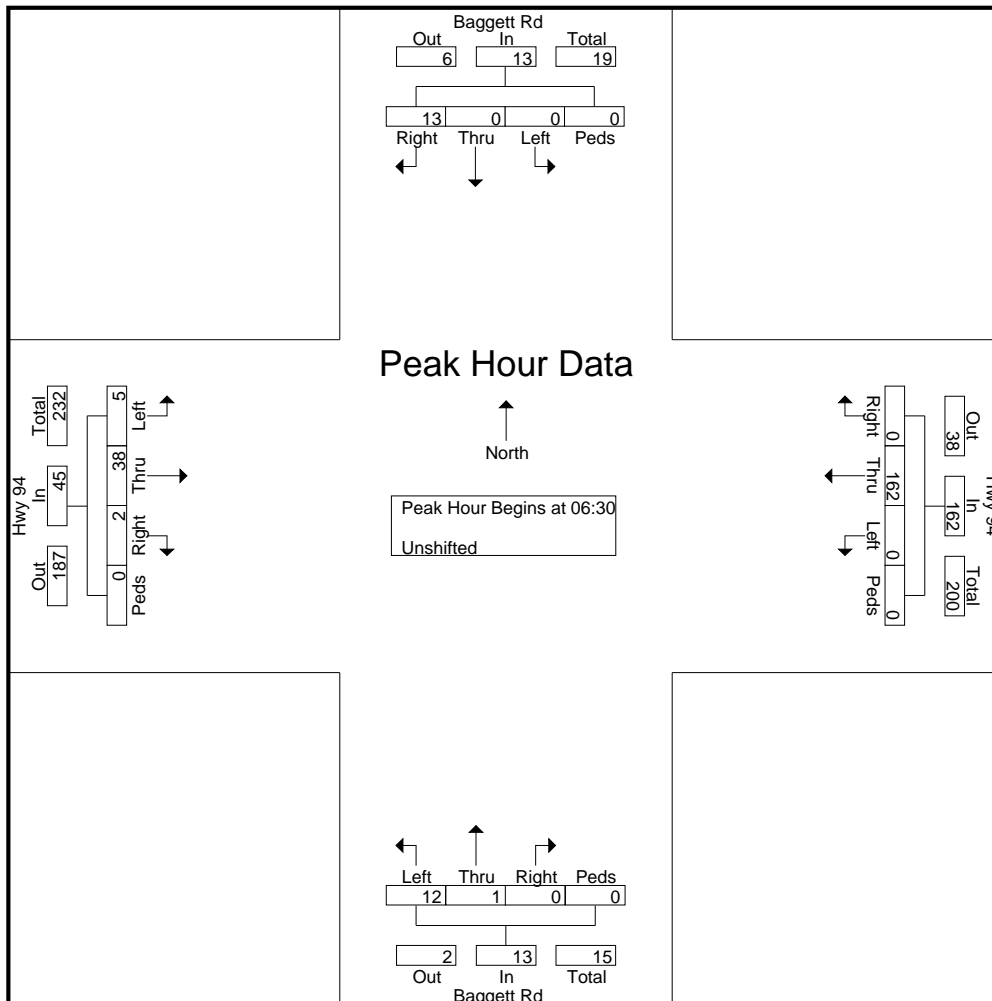
Start Time	Baggett Rd Southbound					Hwy 94 Westbound					Baggett Rd Northbound					Hwy 94 Eastbound					Int. Total	
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total		
06:30	0	0	0	0	0	0	17	0	0	17	0	0	1	0	1	0	4	0	0	4	4	22
06:35	1	0	0	0	1	0	13	0	0	13	0	0	0	0	0	0	4	0	0	4	4	18
06:40	0	0	0	0	0	0	9	0	0	9	0	0	2	0	2	0	2	1	0	3	3	14
06:45	0	0	0	0	0	0	15	0	0	15	0	0	4	0	4	0	1	0	0	1	1	20
06:50	2	0	0	0	2	0	8	0	0	8	0	0	0	0	0	0	2	2	0	4	4	14
06:55	1	0	0	0	1	0	13	0	0	13	0	0	0	0	0	0	1	1	0	2	2	16
<b>Total</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>75</b>	<b>0</b>	<b>0</b>	<b>75</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>14</b>	<b>4</b>	<b>0</b>	<b>18</b>	<b>18</b>	<b>104</b>
07:00	0	0	0	0	0	0	25	0	0	25	0	0	0	0	0	0	1	0	0	1	1	26
07:05	1	0	0	0	1	0	11	0	0	11	0	0	2	0	2	0	7	0	0	7	7	21
07:10	1	0	0	0	1	0	10	0	0	10	0	0	1	0	1	1	6	0	0	7	7	19
07:15	1	0	0	0	1	0	17	0	0	17	0	0	1	0	1	0	2	1	0	3	3	22
07:20	3	0	0	0	3	0	14	0	0	14	0	0	0	0	0	0	3	0	0	3	3	20
07:25	3	0	0	0	3	0	10	0	0	10	0	1	1	0	2	1	5	0	0	6	6	21
07:30	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	5	0	0	5	5	12
07:35	3	0	0	0	3	0	7	0	0	7	0	0	0	0	0	0	8	0	0	8	8	18
07:40	1	0	0	0	1	0	7	0	0	7	0	0	0	0	0	0	5	1	0	6	6	14
07:45	1	0	0	0	1	0	13	0	0	13	0	0	2	0	2	0	4	0	0	4	4	20
07:50	0	0	0	0	0	0	9	0	0	9	0	0	1	0	1	0	4	0	0	4	4	14
07:55	0	0	0	0	0	0	14	0	0	14	0	0	1	0	1	1	10	0	0	11	11	26
<b>Total</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>144</b>	<b>0</b>	<b>0</b>	<b>144</b>	<b>0</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>10</b>	<b>3</b>	<b>60</b>	<b>2</b>	<b>0</b>	<b>65</b>	<b>65</b>	<b>233</b>
08:00	1	0	0	0	1	0	6	0	0	6	0	0	1	0	1	0	5	0	0	5	5	13
08:05	1	0	0	0	1	0	7	0	0	7	0	0	1	0	1	1	6	0	0	7	7	16
08:10	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	2	0	0	2	2	16
08:15	1	0	0	0	1	0	9	0	0	9	0	0	0	0	0	1	7	0	0	8	8	18
08:20	1	0	0	0	1	0	10	0	0	10	0	0	0	0	0	0	3	1	0	4	4	15
08:25	1	0	0	0	1	0	12	0	0	12	0	0	3	0	3	0	3	0	0	3	3	19
<b>Grand Total</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>277</b>	<b>0</b>	<b>0</b>	<b>277</b>	<b>0</b>	<b>1</b>	<b>21</b>	<b>0</b>	<b>22</b>	<b>5</b>	<b>100</b>	<b>7</b>	<b>0</b>	<b>112</b>	<b>112</b>	<b>434</b>
<b>Apprch %</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>4.5</b>	<b>95.5</b>	<b>0</b>		<b>4.5</b>	<b>89.3</b>	<b>6.2</b>	<b>0</b>			
<b>Total %</b>	<b>5.3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5.3</b>	<b>0</b>	<b>63.8</b>	<b>0</b>	<b>0</b>	<b>63.8</b>	<b>0</b>	<b>0.2</b>	<b>4.8</b>	<b>0</b>	<b>5.1</b>	<b>1.2</b>	<b>23</b>	<b>1.6</b>	<b>0</b>	<b>25.8</b>		

# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Baggett Rd - Hwy 94 AM  
 Site Code : 00194980  
 Start Date : 6/7/2023  
 Page No : 2

Start Time	Baggett Rd Southbound					Hwy 94 Westbound					Baggett Rd Northbound					Hwy 94 Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:30 to 08:25 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:30																					
06:30	0	0	0	0	0	0	17	0	0	17	0	0	1	0	1	0	4	0	0	4	22
06:35	1	0	0	0	1	0	13	0	0	13	0	0	0	0	0	0	4	0	0	4	18
06:40	0	0	0	0	0	0	9	0	0	9	0	0	2	0	2	0	2	1	0	3	14
06:45	0	0	0	0	0	0	15	0	0	15	0	0	4	0	4	0	1	0	0	1	20
06:50	2	0	0	0	2	0	8	0	0	8	0	0	0	0	0	0	2	2	0	4	14
06:55	1	0	0	0	1	0	13	0	0	13	0	0	0	0	0	0	1	1	0	2	16
07:00	0	0	0	0	0	0	25	0	0	25	0	0	0	0	0	0	1	0	0	1	26
07:05	1	0	0	0	1	0	11	0	0	11	0	0	2	0	2	0	7	0	0	7	21
07:10	1	0	0	0	1	0	10	0	0	10	0	0	1	0	1	1	6	0	0	7	19
07:15	1	0	0	0	1	0	17	0	0	17	0	0	1	0	1	0	2	1	0	3	22
07:20	3	0	0	0	3	0	14	0	0	14	0	0	0	0	0	0	3	0	0	3	20
07:25	3	0	0	0	3	0	10	0	0	10	0	1	1	0	2	1	5	0	0	6	21
Total Volume	13	0	0	0	13	0	162	0	0	162	0	1	12	0	13	2	38	5	0	45	233
% App. Total	100	0	0	0		0	100	0	0		0	7.7	92.3	0		4.4	84.4	11.1	0		
PHF	.361	.000	.000	.000	.361	.000	.540	.000	.000	.540	.000	.083	.250	.000	.271	.167	.452	.208	.000	.536	.747

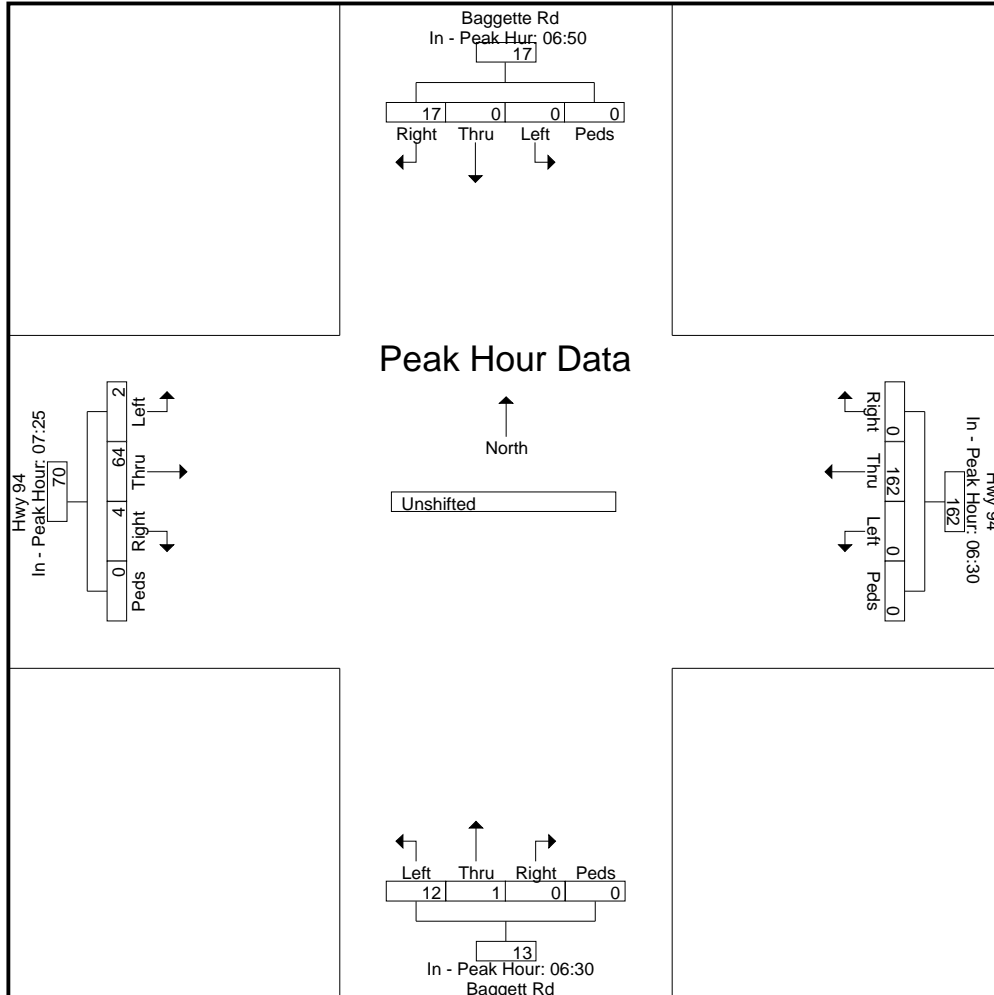


# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Baggett Rd - Hwy 94 AM  
 Site Code : 00194980  
 Start Date : 6/7/2023  
 Page No : 3

Start Time	Baggett Rd Southbound					Hwy 94 Westbound					Baggett Rd Northbound					Hwy 94 Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:30 to 08:25 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	06:50					06:30					06:30					07:25					
+0 mins.	2	0	0	0	2	0	17	0	0	17	0	0	1	0	1	1	5	0	0	6	
+5 mins.	1	0	0	0	1	0	13	0	0	13	0	0	0	0	0	0	5	0	0	5	
+10 mins.	0	0	0	0	0	0	9	0	0	9	0	0	2	0	2	0	8	0	0	8	
+15 mins.	1	0	0	0	1	0	15	0	0	15	0	0	4	0	4	0	5	1	0	6	
+20 mins.	1	0	0	0	1	0	8	0	0	8	0	0	0	0	0	0	4	0	0	4	
+25 mins.	1	0	0	0	1	0	13	0	0	13	0	0	0	0	0	0	4	0	0	4	
+30 mins.	3	0	0	0	3	0	25	0	0	25	0	0	0	0	0	1	10	0	0	11	
+35 mins.	3	0	0	0	3	0	11	0	0	11	0	0	2	0	2	0	5	0	0	5	
+40 mins.	0	0	0	0	0	0	10	0	0	10	0	0	1	0	1	1	6	0	0	7	
+45 mins.	3	0	0	0	3	0	17	0	0	17	0	0	1	0	1	0	2	0	0	2	
+50 mins.	1	0	0	0	1	0	14	0	0	14	0	0	0	0	0	1	7	0	0	8	
+55 mins.	1	0	0	0	1	0	10	0	0	10	0	1	1	0	2	0	3	1	0	4	
Total Volume	17	0	0	0	17	0	162	0	0	162	0	1	12	0	13	4	64	2	0	70	
% App. Total	100	0	0	0		0	100	0	0		0	7.7	92.3	0		5.7	91.4	2.9	0		
PHF	.472	.000	.000	.000	.472	.000	.540	.000	.000	.540	.000	.083	.250	.000	.271	.333	.533	.167	.000	.530	



# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Baggett Rd - Hwy 94 PM  
 Site Code : 00194980  
 Start Date : 6/7/2023  
 Page No : 1

### Groups Printed- Unshifted

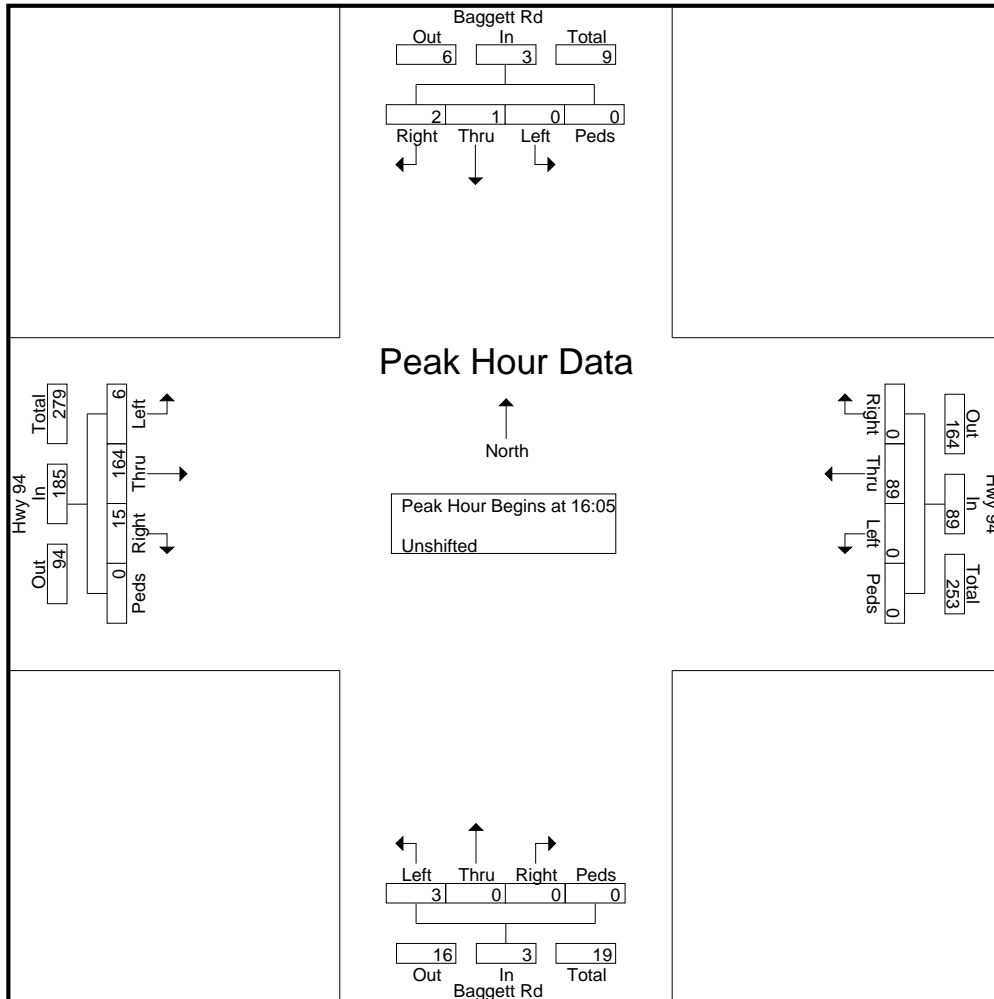
Start Time	Baggett Rd Southbound					Hwy 94 Westbound					Baggett Rd Northbound					Hwy 94 Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
16:00	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	2	0	7	9
16:05	0	1	0	0	1	0	4	0	0	4	0	0	0	0	0	3	11	0	0	14	19
16:10	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	2	9	0	0	11	22
16:15	2	0	0	0	2	0	8	0	0	8	0	0	0	0	0	0	14	0	0	14	24
16:20	0	0	0	0	0	0	6	0	0	6	0	0	1	0	1	1	17	1	0	19	26
16:25	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	17	0	0	17	27
16:30	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	2	17	0	0	19	27
16:35	0	0	0	0	0	0	9	0	0	9	0	0	1	0	1	0	17	0	0	17	27
16:40	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	1	11	1	0	13	15
16:45	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	2	16	2	0	20	28
16:50	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	2	11	2	0	15	24
16:55	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	10	0	0	10	15
<b>Total</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>82</b>	<b>0</b>	<b>0</b>	<b>82</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>13</b>	<b>155</b>	<b>8</b>	<b>0</b>	<b>176</b>	<b>263</b>
17:00	0	0	0	0	0	0	9	0	0	9	0	0	1	0	1	2	14	0	0	16	26
17:05	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	9	1	0	10	17
17:10	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	2	14	0	0	16	22
17:15	0	0	0	0	0	0	5	0	0	5	0	0	1	0	1	0	13	0	0	13	19
17:20	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	1	13	1	0	15	20
17:25	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	22	1	0	23	30
17:30	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	1	5	0	0	6	14
17:35	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	12	0	0	12	22
17:40	1	0	0	0	1	0	4	0	0	4	0	0	1	0	1	2	22	4	0	28	34
17:45	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	1	13	0	0	14	23
17:50	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	1	12	2	0	15	20
17:55	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	1	8	0	0	9	13
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>78</b>	<b>0</b>	<b>0</b>	<b>78</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>11</b>	<b>157</b>	<b>9</b>	<b>0</b>	<b>177</b>	<b>260</b>
<b>Grand Total</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>160</b>	<b>0</b>	<b>0</b>	<b>160</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>24</b>	<b>312</b>	<b>17</b>	<b>0</b>	<b>353</b>	<b>523</b>
<b>Apprch %</b>	<b>80</b>	<b>20</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>		<b>6.8</b>	<b>88.4</b>	<b>4.8</b>	<b>0</b>		
<b>Total %</b>	<b>0.8</b>	<b>0.2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>30.6</b>	<b>0</b>	<b>0</b>	<b>30.6</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>4.6</b>	<b>59.7</b>	<b>3.3</b>	<b>0</b>	<b>67.5</b>	

# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Baggett Rd - Hwy 94 PM  
 Site Code : 00194980  
 Start Date : 6/7/2023  
 Page No : 2

Start Time	Baggett Rd Southbound					Hwy 94 Westbound					Baggett Rd Northbound					Hwy 94 Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 16:00 to 17:55 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:05																					
16:05	0	1	0	0	1	0	4	0	0	4	0	0	0	0	0	3	11	0	0	14	19
16:10	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	2	9	0	0	11	22
16:15	2	0	0	0	2	0	8	0	0	8	0	0	0	0	0	0	14	0	0	14	24
16:20	0	0	0	0	0	0	6	0	0	6	0	0	1	0	1	1	17	1	0	19	26
16:25	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	17	0	0	17	27
16:30	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	2	17	0	0	19	27
16:35	0	0	0	0	0	0	9	0	0	9	0	0	1	0	1	0	17	0	0	17	27
16:40	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	1	11	1	0	13	15
16:45	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	2	16	2	0	20	28
16:50	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	2	11	2	0	15	24
16:55	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	10	0	0	10	15
17:00	0	0	0	0	0	0	9	0	0	9	0	0	1	0	1	2	14	0	0	16	26
Total Volume	2	1	0	0	3	0	89	0	0	89	0	0	3	0	3	15	164	6	0	185	280
% App. Total	66.7	33.3	0	0		0	100	0	0		0	0	100	0		8.1	88.6	3.2	0		
PHF	.083	.083	.000	.000	.125	.000	.674	.000	.000	.674	.000	.000	.250	.000	.250	.417	.804	.250	.000	.771	.833



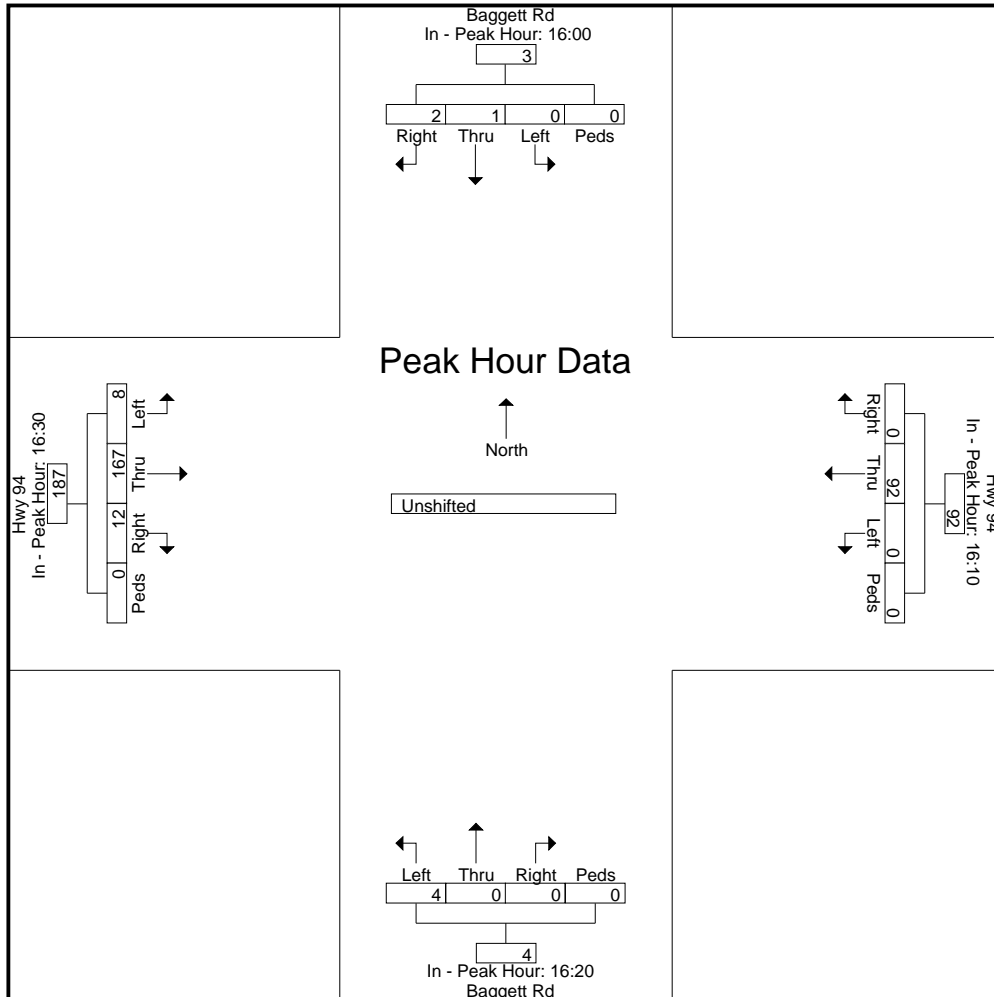


# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Baggett Rd - Hwy 94 PM  
 Site Code : 00194980  
 Start Date : 6/7/2023  
 Page No : 3

	Baggett Rd Southbound					Hwy 94 Westbound					Baggett Rd Northbound					Hwy 94 Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 16:00 to 17:55 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	16:00					16:10					16:20					16:30					
+0 mins.	0	0	0	0	0	0	11	0	0	11	0	0	1	0	1	2	17	0	0	19	
+5 mins.	0	1	0	0	1	0	8	0	0	8	0	0	0	0	0	0	17	0	0	17	
+10 mins.	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	1	11	1	0	13	
+15 mins.	2	0	0	0	2	0	10	0	0	10	0	0	1	0	1	2	16	2	0	20	
+20 mins.	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	2	11	2	0	15	
+25 mins.	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	10	0	0	10	
+30 mins.	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2	14	0	0	16	
+35 mins.	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	9	1	0	10	
+40 mins.	0	0	0	0	0	0	9	0	0	9	0	0	1	0	1	2	14	0	0	16	
+45 mins.	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	13	0	0	13	
+50 mins.	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	1	13	1	0	15	
+55 mins.	0	0	0	0	0	0	7	0	0	7	0	0	1	0	1	0	22	1	0	23	
Total Volume	2	1	0	0	3	0	92	0	0	92	0	0	4	0	4	12	167	8	0	187	
% App. Total	66.7	33.3	0	0		0	100	0	0		0	0	100	0		6.4	89.3	4.3	0		
PHF	.083	.083	.000	.000	.125	.000	.697	.000	.000	.697	.000	.000	.333	.000	.333	.500	.633	.333	.000	.678	



# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Baggett Rd - Hwy 94 Trucks AM  
 Site Code : 00194980  
 Start Date : 6/7/2023  
 Page No : 1

### Groups Printed- Bank 1

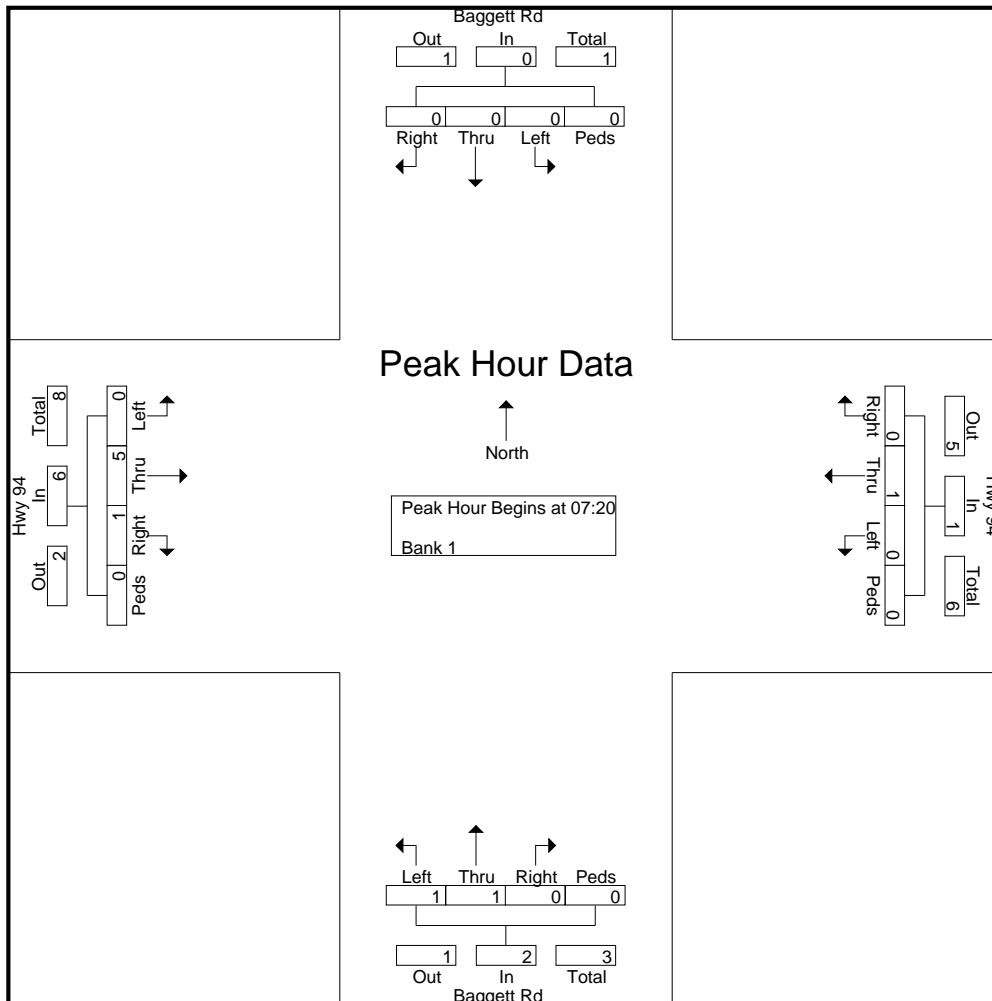
Start Time	Baggett Rd Southbound					Hwy 94 Westbound					Baggett Rd Northbound					Hwy 94 Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
*** BREAK ***																					
06:40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
*** BREAK ***																					
06:50	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:55	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	4
*** BREAK ***																					
07:05	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
*** BREAK ***																					
07:20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:25	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	2
*** BREAK ***																					
07:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
*** BREAK ***																					
07:55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
Total	0	0	0	0	0	0	2	0	0	2	0	1	1	0	2	0	4	0	0	4	8
*** BREAK ***																					
08:05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
*** BREAK ***																					
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
*** BREAK ***																					
08:25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Grand Total	0	0	0	0	0	0	4	0	0	4	0	1	1	0	2	1	8	0	0	9	15
Apprch %	0	0	0	0		0	100	0	0		0	50	50	0		11.1	88.9	0	0		
Total %	0	0	0	0	0	0	26.7	0	0	26.7	0	6.7	6.7	0	13.3	6.7	53.3	0	0	60	

# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Baggett Rd - Hwy 94 Trucks AM  
 Site Code : 00194980  
 Start Date : 6/7/2023  
 Page No : 2

Start Time	Baggett Rd Southbound					Hwy 94 Westbound					Baggett Rd Northbound					Hwy 94 Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:30 to 08:25 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:20																					
07:20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:25	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
07:50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
08:10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total Volume	0	0	0	0	0	0	1	0	0	1	0	1	1	0	2	1	5	0	0	6	9
% App. Total	0	0	0	0	0	0	100	0	0		0	50	50	0		16.7	83.3	0	0		
PHF	.000	.000	.000	.000	.000	.000	.083	.000	.000	.083	.000	.083	.083	.000	.167	.083	.139	.000	.000	.167	.250



# LSC Transportation Consultants, Inc.

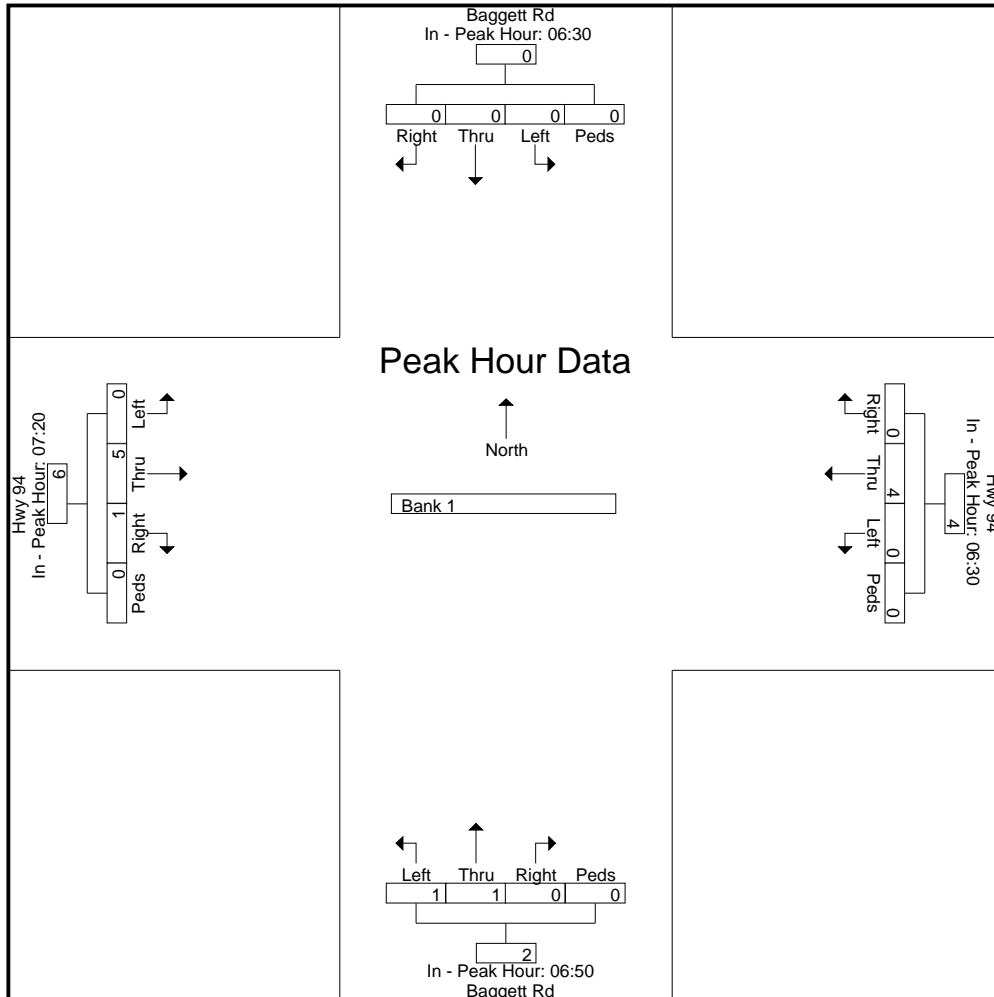
2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Baggett Rd - Hwy 94 Trucks AM  
 Site Code : 00194980  
 Start Date : 6/7/2023  
 Page No : 3

Start Time	Baggett Rd Southbound					Hwy 94 Westbound					Baggett Rd Northbound					Hwy 94 Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 06:30 to 08:25 - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	06:30					06:30					06:50					07:20				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
+5 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+10 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+20 mins.	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
+25 mins.	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+35 mins.	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	3	0	0	3
+40 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
+50 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+55 mins.	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1
Total Volume	0	0	0	0	0	0	4	0	0	4	0	1	1	0	2	1	5	0	0	6
% App. Total	0	0	0	0	0	0	100	0	0	0	0	50	50	0	0	16.7	83.3	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.333	.000	.000	.333	.000	.083	.083	.000	.167	.083	.139	.000	.000	.167



# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Baggett Rd - Hwy 94 Trucks PM  
 Site Code : 00194980  
 Start Date : 6/7/2023  
 Page No : 1

### Groups Printed- Bank 1

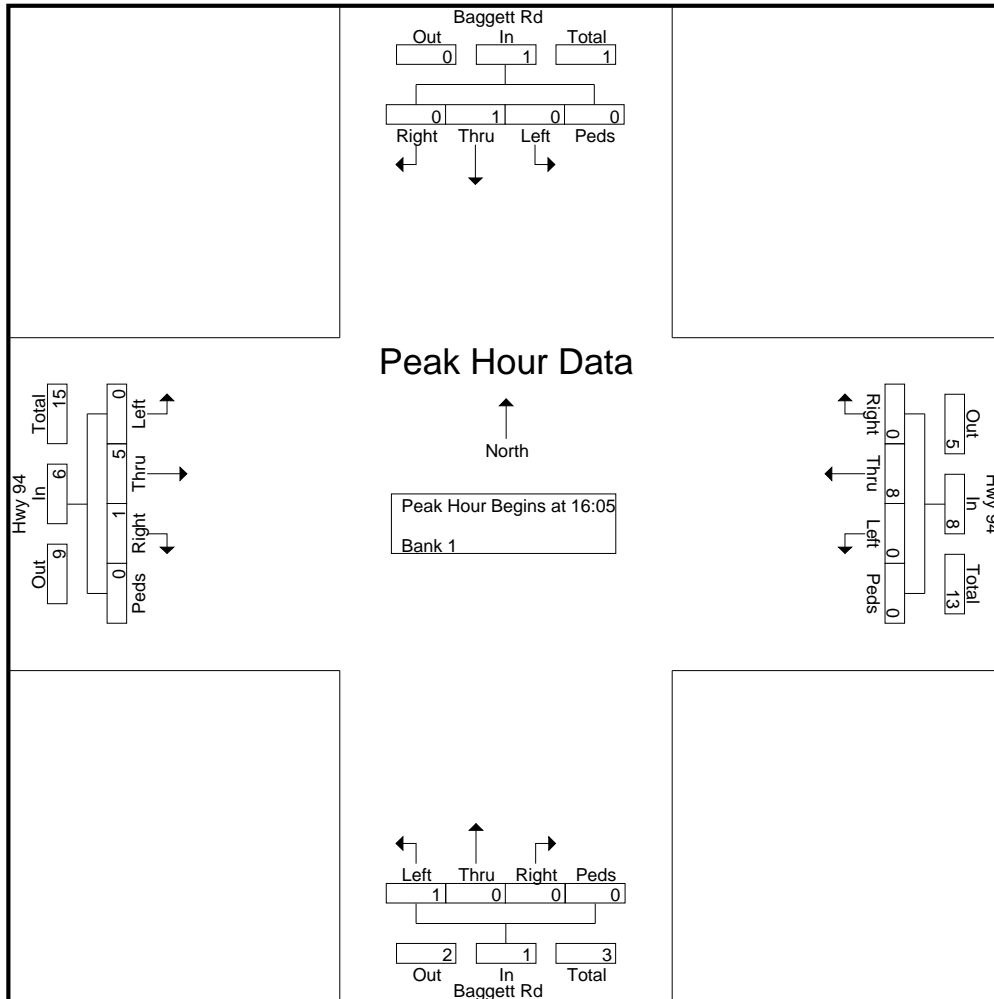
Start Time	Baggett Rd Southbound					Hwy 94 Westbound					Baggett Rd Northbound					Hwy 94 Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
*** BREAK ***																					
16:05	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
16:10	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	4
16:15	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
16:20	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
*** BREAK ***																					
16:30	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
*** BREAK ***																					
16:45	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
16:50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
*** BREAK ***																					
Total	0	1	0	0	1	0	8	0	0	8	0	0	1	0	1	1	4	0	0	5	15
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
*** BREAK ***																					
17:20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
17:25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
*** BREAK ***																					
17:40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
*** BREAK ***																					
17:55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	6
Grand Total	0	1	0	0	1	0	8	0	0	8	0	0	1	0	1	1	10	0	0	11	21
Apprch %	0	100	0	0		0	100	0	0		0	0	100	0		9.1	90.9	0	0		
Total %	0	4.8	0	0	4.8	0	38.1	0	0	38.1	0	0	4.8	0	4.8	4.8	47.6	0	0	52.4	

# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Baggett Rd - Hwy 94 Trucks PM  
 Site Code : 00194980  
 Start Date : 6/7/2023  
 Page No : 2

Start Time	Baggett Rd Southbound					Hwy 94 Westbound					Baggett Rd Northbound					Hwy 94 Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 16:00 to 17:55 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:05																					
16:05	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
16:10	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	4
16:15	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
16:20	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
16:25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
16:35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
16:50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
16:55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total Volume	0	1	0	0	1	0	8	0	0	8	0	0	1	0	1	1	5	0	0	6	16
% App. Total	0	100	0	0		0	100	0	0		0	0	100	0		16.7	83.3	0	0		
PHF	.000	.083	.000	.000	.083	.000	.222	.000	.000	.222	.000	.000	.083	.000	.083	.083	.417	.000	.000	.500	.333



# LSC Transportation Consultants, Inc.

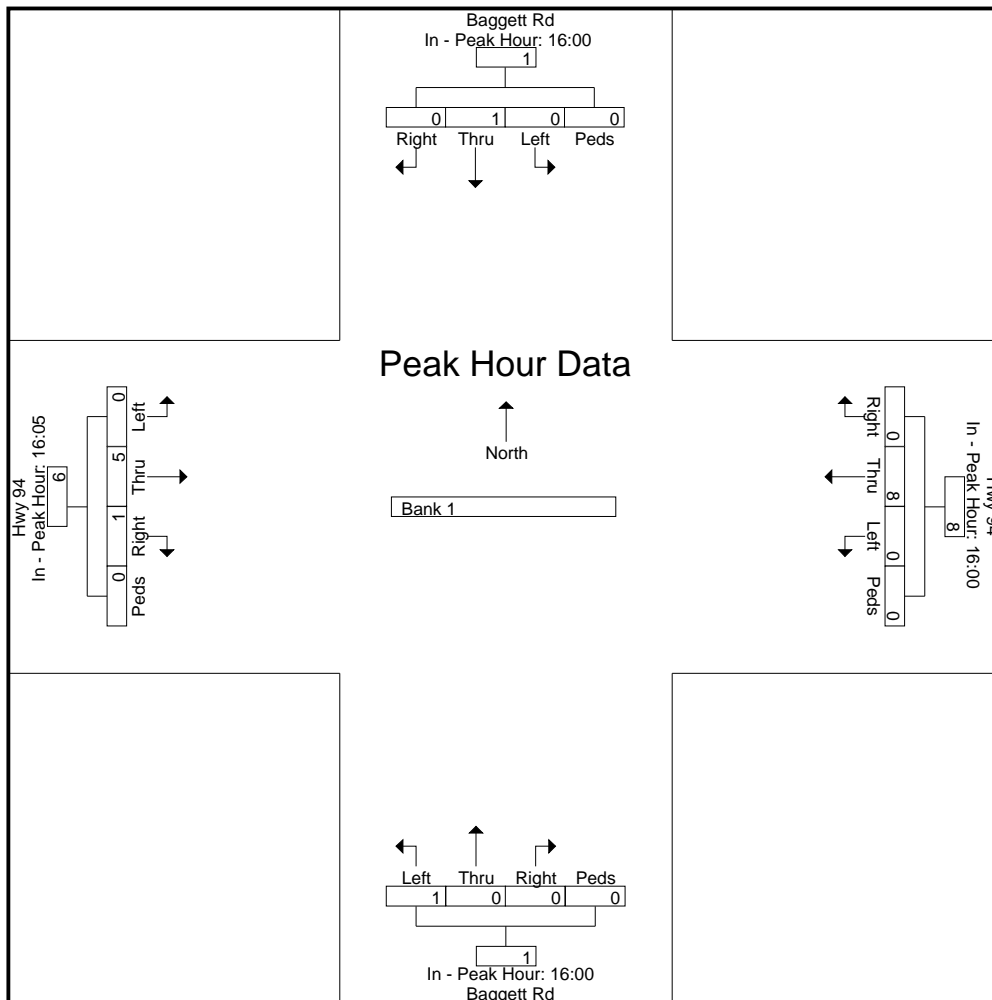
2504 E. Pikes Peak Ave, Suite 304  
 Colorado Springs, CO 80909  
 719-633-2868

File Name : Baggett Rd - Hwy 94 Trucks PM  
 Site Code : 00194980  
 Start Date : 6/7/2023  
 Page No : 3

Start Time	Baggett Rd Southbound					Hwy 94 Westbound					Baggett Rd Northbound					Hwy 94 Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 16:00 to 17:55 - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	16:00					16:00					16:00					16:05				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
+5 mins.	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
+10 mins.	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1
+15 mins.	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
+20 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
+25 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
+30 mins.	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0
+35 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+40 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1
+50 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+55 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Total Volume	0	1	0	0	1	0	8	0	0	8	0	0	1	0	1	1	5	0	0	6
% App. Total	0	100	0	0		0	100	0	0		0	0	100	0		16.7	83.3	0	0	
PHF	.000	.083	.000	.000	.083	.000	.222	.000	.000	.222	.000	.000	.083	.000	.083	.083	.417	.000	.000	.500



# Levels of Service

---





Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	38	2	0	162	0	12	1	0	0	0	13
Future Vol, veh/h	5	38	2	0	162	0	12	1	0	0	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	87	87	87	78	78	78	78	78	78
Heavy Vehicles, %	2	7	50	2	7	2	50	2	2	2	2	2
Mvmt Flow	6	46	2	0	186	0	15	1	0	0	0	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	186	0	0	48	0	0	254	245	47	246	246	186
Stage 1	-	-	-	-	-	-	59	59	-	186	186	-
Stage 2	-	-	-	-	-	-	195	186	-	60	60	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.6	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.95	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1388	-	-	1559	-	-	611	657	1022	708	656	856
Stage 1	-	-	-	-	-	-	845	846	-	816	746	-
Stage 2	-	-	-	-	-	-	708	746	-	951	845	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1388	-	-	1559	-	-	598	654	1022	704	653	856
Mov Cap-2 Maneuver	-	-	-	-	-	-	598	654	-	704	653	-
Stage 1	-	-	-	-	-	-	842	843	-	813	746	-
Stage 2	-	-	-	-	-	-	694	746	-	946	842	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.8			0			11.2			9.3		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	602	1388	-	-	1559	-	-	856
HCM Lane V/C Ratio	0.028	0.004	-	-	-	-	-	0.019
HCM Control Delay (s)	11.2	7.6	0	-	0	-	-	9.3
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	164	15	0	89	0	3	0	0	0	1	2
Future Vol, veh/h	6	164	15	0	89	0	3	0	0	0	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	83	83	83	78	78	78	78	78	78
Heavy Vehicles, %	2	7	50	2	7	2	50	2	2	2	2	2
Mvmt Flow	7	189	17	0	107	0	4	0	0	0	1	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	107	0	0	206	0	0	321	319	198	319	327	107
Stage 1	-	-	-	-	-	-	212	212	-	107	107	-
Stage 2	-	-	-	-	-	-	109	107	-	212	220	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.6	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.95	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1484	-	-	1365	-	-	549	598	843	634	591	947
Stage 1	-	-	-	-	-	-	693	727	-	898	807	-
Stage 2	-	-	-	-	-	-	792	807	-	790	721	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1484	-	-	1365	-	-	545	595	843	631	588	947
Mov Cap-2 Maneuver	-	-	-	-	-	-	545	595	-	631	588	-
Stage 1	-	-	-	-	-	-	690	723	-	894	807	-
Stage 2	-	-	-	-	-	-	789	807	-	786	717	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0			11.7			9.6		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	545	1484	-	-	1365	-	-	787
HCM Lane V/C Ratio	0.007	0.005	-	-	-	-	-	0.005
HCM Control Delay (s)	11.7	7.4	0	-	0	-	-	9.6
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	38	6	0	162	0	13	1	0	0	0	13
Future Vol, veh/h	5	38	6	0	162	0	13	1	0	0	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	87	87	87	78	78	78	78	78	78
Heavy Vehicles, %	2	7	50	2	7	2	50	2	2	2	2	2
Mvmt Flow	6	46	7	0	186	0	17	1	0	0	0	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	186	0	0	53	0	0	257	248	50	248	251	186
Stage 1	-	-	-	-	-	-	62	62	-	186	186	-
Stage 2	-	-	-	-	-	-	195	186	-	62	65	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.6	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.95	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1388	-	-	1553	-	-	608	655	1018	706	652	856
Stage 1	-	-	-	-	-	-	841	843	-	816	746	-
Stage 2	-	-	-	-	-	-	708	746	-	949	841	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1388	-	-	1553	-	-	595	652	1018	702	649	856
Mov Cap-2 Maneuver	-	-	-	-	-	-	595	652	-	702	649	-
Stage 1	-	-	-	-	-	-	838	840	-	813	746	-
Stage 2	-	-	-	-	-	-	694	746	-	944	838	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0	11.2	9.3
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	599	1388	-	-	1553	-	-	856
HCM Lane V/C Ratio	0.03	0.004	-	-	-	-	-	0.019
HCM Control Delay (s)	11.2	7.6	0	-	0	-	-	9.3
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	0	0	13	2	3
Future Vol, veh/h	2	0	0	13	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	100	2	2	7	7	100
Mvmt Flow	3	0	0	17	3	4

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	22	5	7	0	0
Stage 1	5	-	-	-	-
Stage 2	17	-	-	-	-
Critical Hdwy	7.4	6.22	4.12	-	-
Critical Hdwy Stg 1	6.4	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-
Follow-up Hdwy	4.4	3.318	2.218	-	-
Pot Cap-1 Maneuver	793	1078	1614	-	-
Stage 1	813	-	-	-	-
Stage 2	802	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	793	1078	1614	-	-
Mov Cap-2 Maneuver	793	-	-	-	-
Stage 1	813	-	-	-	-
Stage 2	802	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1614	-	793	-	-
HCM Lane V/C Ratio	-	-	0.003	-	-
HCM Control Delay (s)	0	-	9.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	164	17	0	89	0	6	0	0	0	1	2
Future Vol, veh/h	6	164	17	0	89	0	6	0	0	0	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	83	83	83	78	78	78	78	78	78
Heavy Vehicles, %	2	7	50	2	7	2	50	2	2	2	2	2
Mvmt Flow	7	189	20	0	107	0	8	0	0	0	1	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	107	0	0	209	0	0	322	320	199	320	330	107
Stage 1	-	-	-	-	-	-	213	213	-	107	107	-
Stage 2	-	-	-	-	-	-	109	107	-	213	223	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.6	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.95	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1484	-	-	1362	-	-	548	597	842	633	589	947
Stage 1	-	-	-	-	-	-	692	726	-	898	807	-
Stage 2	-	-	-	-	-	-	792	807	-	789	719	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1484	-	-	1362	-	-	544	594	842	630	586	947
Mov Cap-2 Maneuver	-	-	-	-	-	-	544	594	-	630	586	-
Stage 1	-	-	-	-	-	-	689	722	-	894	807	-
Stage 2	-	-	-	-	-	-	789	807	-	785	715	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0			11.7			9.6		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	544	1484	-	-	1362	-	-	786
HCM Lane V/C Ratio	0.014	0.005	-	-	-	-	-	0.005
HCM Control Delay (s)	11.7	7.4	0	-	0	-	-	9.6
HCM Lane LOS		B	A	A	-	A	-	A
HCM 95th %tile Q(veh)		0	0	-	-	0	-	0

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	0	0	3	16	2
Future Vol, veh/h	3	0	0	3	16	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	100	2	2	7	7	100
Mvmt Flow	4	0	0	4	21	3

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	27	23	24	0	0
Stage 1	23	-	-	-	-
Stage 2	4	-	-	-	-
Critical Hdwy	7.4	6.22	4.12	-	-
Critical Hdwy Stg 1	6.4	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-
Follow-up Hdwy	4.4	3.318	2.218	-	-
Pot Cap-1 Maneuver	787	1054	1591	-	-
Stage 1	796	-	-	-	-
Stage 2	814	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	787	1054	1591	-	-
Mov Cap-2 Maneuver	787	-	-	-	-
Stage 1	796	-	-	-	-
Stage 2	814	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1591	-	787	-	-
HCM Lane V/C Ratio	-	-	0.005	-	-
HCM Control Delay (s)	0	-	9.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	100	5	5	200	5	20	5	5	5	5	35
Future Vol, veh/h	15	100	5	5	200	5	20	5	5	5	5	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	87	87	87	78	78	78	78	78	78
Heavy Vehicles, %	2	7	50	2	7	2	50	2	2	2	2	2
Mvmt Flow	18	120	6	6	230	6	26	6	6	6	6	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	236	0	0	126	0	0	430	407	123	410	407	233
Stage 1	-	-	-	-	-	-	159	159	-	245	245	-
Stage 2	-	-	-	-	-	-	271	248	-	165	162	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.6	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.95	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1331	-	-	1460	-	-	461	533	928	552	533	806
Stage 1	-	-	-	-	-	-	742	766	-	759	703	-
Stage 2	-	-	-	-	-	-	641	701	-	837	764	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1331	-	-	1460	-	-	425	522	928	535	522	806
Mov Cap-2 Maneuver	-	-	-	-	-	-	425	522	-	535	522	-
Stage 1	-	-	-	-	-	-	731	755	-	748	699	-
Stage 2	-	-	-	-	-	-	597	697	-	812	753	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			0.2			13.1			10.4		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	484	1331	-	-	1460	-	-	722
HCM Lane V/C Ratio	0.079	0.014	-	-	0.004	-	-	0.08
HCM Control Delay (s)	13.1	7.7	0	-	7.5	0	-	10.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.3

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗			↕			↕	
Traffic Vol, veh/h	10	200	35	5	125	5	10	5	5	5	5	10
Future Vol, veh/h	10	200	35	5	125	5	10	5	5	5	5	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	500	500	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	83	83	83	78	78	78	78	78	78
Heavy Vehicles, %	2	7	50	2	7	2	50	2	2	2	2	2
Mvmt Flow	11	230	40	6	151	6	13	6	6	6	6	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	157	0	0	270	0	0	428	421	230	444	458	154
Stage 1	-	-	-	-	-	-	252	252	-	166	166	-
Stage 2	-	-	-	-	-	-	176	169	-	278	292	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.6	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.95	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1423	-	-	1293	-	-	463	524	809	524	499	892
Stage 1	-	-	-	-	-	-	657	698	-	836	761	-
Stage 2	-	-	-	-	-	-	726	759	-	728	671	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1423	-	-	1293	-	-	448	517	809	510	493	892
Mov Cap-2 Maneuver	-	-	-	-	-	-	448	517	-	510	493	-
Stage 1	-	-	-	-	-	-	652	692	-	829	757	-
Stage 2	-	-	-	-	-	-	706	755	-	710	666	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.3			12.2			10.8		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	524	1423	-	-	1293	-	-	642
HCM Lane V/C Ratio	0.049	0.008	-	-	0.005	-	-	0.04
HCM Control Delay (s)	12.2	7.5	-	-	7.8	-	-	10.8
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1



Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑	↗	↙	↗			↕			↕	
Traffic Vol, veh/h	15	100	12	5	200	5	26	5	5	5	5	35
Future Vol, veh/h	15	100	12	5	200	5	26	5	5	5	5	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	500	500	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	78	78	78	78	78	78
Heavy Vehicles, %	2	7	50	2	7	2	50	2	2	2	2	2
Mvmt Flow	17	115	14	6	230	6	33	6	6	6	6	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	236	0	0	129	0	0	420	397	115	407	408	233
Stage 1	-	-	-	-	-	-	149	149	-	245	245	-
Stage 2	-	-	-	-	-	-	271	248	-	162	163	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.6	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.95	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1331	-	-	1457	-	-	469	540	937	555	533	806
Stage 1	-	-	-	-	-	-	752	774	-	759	703	-
Stage 2	-	-	-	-	-	-	641	701	-	840	763	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1331	-	-	1457	-	-	433	531	937	539	524	806
Mov Cap-2 Maneuver	-	-	-	-	-	-	433	531	-	539	524	-
Stage 1	-	-	-	-	-	-	742	764	-	749	700	-
Stage 2	-	-	-	-	-	-	597	698	-	817	753	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.9			0.2			13.3			10.4		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	481	1331	-	-	1457	-	-	723
HCM Lane V/C Ratio	0.096	0.013	-	-	0.004	-	-	0.08
HCM Control Delay (s)	13.3	7.7	-	-	7.5	-	-	10.4
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.3

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	6	0	0	30	15	7
Future Vol, veh/h	6	0	0	30	15	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	100	2	2	7	7	100
Mvmt Flow	8	0	0	38	19	9

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	62	24	28	0	0
Stage 1	24	-	-	-	-
Stage 2	38	-	-	-	-
Critical Hdwy	7.4	6.22	4.12	-	-
Critical Hdwy Stg 1	6.4	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-
Follow-up Hdwy	4.4	3.318	2.218	-	-
Pot Cap-1 Maneuver	748	1052	1585	-	-
Stage 1	796	-	-	-	-
Stage 2	783	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	748	1052	1585	-	-
Mov Cap-2 Maneuver	748	-	-	-	-
Stage 1	796	-	-	-	-
Stage 2	783	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1585	-	748	-	-
HCM Lane V/C Ratio	-	-	0.01	-	-
HCM Control Delay (s)	0	-	9.9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗			↕			↕	
Traffic Vol, veh/h	10	200	38	5	125	5	17	5	5	5	5	10
Future Vol, veh/h	10	200	38	5	125	5	17	5	5	5	5	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	500	-	500	500	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	83	83	83	78	78	78	78	78	78
Heavy Vehicles, %	2	7	50	2	7	2	50	2	2	2	2	2
Mvmt Flow	11	230	44	6	151	6	22	6	6	6	6	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	157	0	0	274	0	0	428	421	230	446	462	154
Stage 1	-	-	-	-	-	-	252	252	-	166	166	-
Stage 2	-	-	-	-	-	-	176	169	-	280	296	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.6	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.95	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1423	-	-	1289	-	-	463	524	809	523	497	892
Stage 1	-	-	-	-	-	-	657	698	-	836	761	-
Stage 2	-	-	-	-	-	-	726	759	-	727	668	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1423	-	-	1289	-	-	448	517	809	509	491	892
Mov Cap-2 Maneuver	-	-	-	-	-	-	448	517	-	509	491	-
Stage 1	-	-	-	-	-	-	652	692	-	829	757	-
Stage 2	-	-	-	-	-	-	706	755	-	709	663	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.3			12.7			10.9		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	502	1423	-	-	1289	-	-	641
HCM Lane V/C Ratio	0.069	0.008	-	-	0.005	-	-	0.04
HCM Control Delay (s)	12.7	7.5	-	-	7.8	-	-	10.9
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	0	0	20	35	3
Future Vol, veh/h	7	0	0	20	35	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	100	2	2	7	7	100
Mvmt Flow	9	0	0	26	45	4

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	73	47	49	0	0
Stage 1	47	-	-	-	-
Stage 2	26	-	-	-	-
Critical Hdwy	7.4	6.22	4.12	-	-
Critical Hdwy Stg 1	6.4	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-
Follow-up Hdwy	4.4	3.318	2.218	-	-
Pot Cap-1 Maneuver	736	1022	1558	-	-
Stage 1	774	-	-	-	-
Stage 2	794	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	736	1022	1558	-	-
Mov Cap-2 Maneuver	736	-	-	-	-
Stage 1	774	-	-	-	-
Stage 2	794	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1558	-	736	-	-
HCM Lane V/C Ratio	-	-	0.012	-	-
HCM Control Delay (s)	0	-	10	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

# Appendix A

## Pueblo County Pit Trip Generation Data



Hourly Period		Pueblo Pit Data - Average Number of Entering Trucks		
Start Time	End Time	Average	July	August
5:00	6:00	1.3	1.6	0.9
6:00	7:00	2.1	2.1	2.2
7:00	8:00	2.0	1.9	2.1
8:00	9:00	1.1	0.6	1.6
9:00	10:00	1.9	1.4	2.3
10:00	11:00	0.8	0.6	1.1
11:00	12:00	2.0	1.1	2.8
12:00	13:00	1.1	0.9	1.2
13:00	14:00	2.1	1.7	2.4
14:00	15:00	0.8	0.6	1.0

Hourly Period		Pueblo Pit Data - Average Number of Trucks Entering and Exiting		
Start Time	End Time	Average	July	August
5:00	6:00	2.6	3.3	1.9
6:00	7:00	4.3	4.1	4.4
7:00	8:00	3.9	3.8	4.1
8:00	9:00	2.2	1.2	3.2
9:00	10:00	3.7	2.7	4.7
10:00	11:00	1.7	1.2	2.1
11:00	12:00	3.9	2.2	5.6
12:00	13:00	2.1	1.8	2.4
13:00	14:00	4.2	3.4	4.9
14:00	15:00	1.7	1.3	2.0

Hourly Period		Pueblo Pit Data - Average Number of Entering Trucks
Start Time	End Time	
5:00	6:00	1
6:00	7:00	2
7:00	8:00	2
8:00	9:00	1
9:00	10:00	2
10:00	11:00	1
11:00	12:00	2
12:00	13:00	1
13:00	14:00	2
14:00	15:00	1
<b>Daily Average July &amp; Aug.</b>		<b>15</b>
*Pueblo Actual Recorded Data		
Note: These are just data tables. This table is not the same as Table 1 in the report		