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River Bend Crossing Updated Traffic Impact and Access Analysis (LSC #184143) October 21, 2025

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.

Date

River Bend Crossing

Updated Traffic Impact and Access Analysis

Prepared for:
Mr. Alan Toth
Avatar Fountain LP
c/o Avatar Equities
6800 Jericho Turnpike, Suite 120W
Syosset, NY 11791

OCTOBER 21, 2025

LSC Transportation Consultants, Inc.
Prepared by: Jeff

LSC #184143



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October 21, 2025

Mr. Alan Toth
Avatar Fountain LP
c/o Avatar Equities
6800 Jericho Turnpike, Suite 120W
Syosset, NY 11791

RE: River Bend Crossing
El Paso County & City of Fountain, Colorado
Updated Traffic Impact and Access Analysis
LSC #184140

Dear Mr. Toth:

LSC Transportation Consultants, Inc. has prepared this 2025 update to the August 17, 2020 traffic impact and access analysis for the proposed River Bend Crossing development to be located generally southwest of US Highway (Hwy) 85-87 (US 85-87) and Main Street in the City of Fountain and unincorporated El Paso County, Colorado. The proposed **commercial redevelopment** is planned on the site of the former Fountain Valley Shopping Center. The previous shopping center buildings and parking areas have since been removed and the land is currently vacant. The proposed **residential development** site is located just to the west of the commercial development site. Figure 1 shows the site location (both projects).

This report addresses the traffic impacts of both the proposed commercial redevelopment (City of Fountain) and residential (unincorporated El Paso County) projects.

REPORT CONTENTS

The report contains the following:

- The proposed land uses for the site;
- The roadways in the study area including the number of lanes, classifications, posted speed limits, existing and proposed intersection/access spacing, lane geometries, traffic controls, etc.;
- The existing traffic volumes at the intersections of US Hwy 85-87/Main Street and US Hwy 85-87/Southmoor Drive;
- The projected future peak-hour traffic volumes for the site-access points and the key area intersections;

- The resulting traffic impacts: The traffic impacts have been quantified by determining the future levels of service at the study-area intersections; and
- Findings and recommendations.

SITE LAND USE AND ACCESS

The commercial redevelopment site is located within the city limits of Fountain, CO and the residential development site is located to the west outside the city limits in unincorporated El Paso County.

Commercial Development (City of Fountain)

The former Fountain Valley Shopping Center site is located west of US Hwy 85-87 and Main Street. The former shopping center has been razed and the land is currently vacant. The site is planned for redevelopment with new retail/shopping development with a mixed-commercial uses, totaling about 61,600 square feet of floor space.

The commercial site plan has not changed. Figure 2 shows the commercial site context and access points and the most recent site plan for the commercial project is shown in an attached exhibit following the report figures. Please refer to the latest 2025 design plans by Galloway which show the **latest version of the Main Street (entry-drive) traffic laneage**. The existing full-movement signalized access to US Hwy 85-87 (aligning with Main Street) is planned to remain, with modifications.

The two historical access points to Southmoor Drive will be replaced with a single, full-movement access about 520 feet southwest of US Hwy 85-87 (centerline to centerline) and about 75 feet northwest of the existing Fountain Valley Senior Center entrance. Figure 3 shows the existing and proposed spacing of access points on Southmoor Drive.

A 15,625-square-foot parcel located northwest of the intersection of US Hwy 85-87 and Main Street is not included in this development. The existing gas station with convenience market located on this parcel is under different ownership and is not part of this site or redevelopment. A right-in/right-out-only access point for the gas station to US Hwy 85-87 just north of Main Street is also outside the property boundary of this site. As required by CDOT, the applicant has updated the site plan to show a vehicular connection to/from this outparcel. This would allow for vehicular access to/from this outparcel if CDOT were to close that parcel's direct access to US Hwy 85/87 in the future.

Residential Development (El Paso County)

A 53-acre parcel located adjacent to and southwest of the planned commercial site is planned to be developed with 209 lots for single-family homes. Two subdivision filings were approved previously. Note: the most recent site plan for the residential project is shown in an attached exhibit following the report figures. The residential development would have access to the signalized intersection of US Hwy 85-87/Main Street via a new Community Collector street that

will extend through the redeveloped commercial parcel. An additional full-movement site access is proposed to Southmoor Drive about 925 feet south of US Hwy 85-87.

EXISTING ROADWAY AND TRAFFIC CONDITIONS

Area Roadways

The roadways in the study area are shown in Figure 1 and are described below.

- **US Highway 85-87** is a major north/south route serving Fountain Valley. Adjacent to the site, US Hwy 85-87 has two through lanes in each direction and a posted speed limit of 50 miles per hour (mph). US Hwy 85-87 is classified by the Colorado Department of Transportation as a Rural Highway (NR-B) south of Main Street and a Non-Rural Principal Highway (NR-A) north of Main Street. The intersection of Main Street/US Hwy 85-87 is currently signal controlled.
- **Southmoor Drive** forms a loop on the west side of US Hwy 85-87 from just north of Mesa Ridge Parkway to just south of Main Street [note: Summer 2025 – a segment of the road is currently closed about one-quarter mile south of Walmart. This is an El Paso County Roadway from US Highway 85-87 to Lovitt Lane. South of Lovitt Lane, it is a City of Fountain street]. Access to this site will be to the El Paso County-owned section. The El Paso County roadway inventory identifies Southmoor Drive as an Urban Collector (FC-17). Fountain classifies Southmoor Drive as a two-lane Community Collector. The north intersection of Southmoor Drive and US Hwy 85-87 is an unsignalized, “three-quarter-movement” intersection and is restricted to left-in/right-in/right-out only. The eastbound approach to the state highway is stop-sign controlled. The posted speed limit is 30 mph.

INTERSECTION ACCESS SIGHT DISTANCE

Figure 4 shows the sight distance requirements at the proposed relocated (and consolidated) full-movement access point for the commercial portion of the development to Southmoor Drive. Based on a posted speed limit of 30 miles per hour, the El Paso County required sight distance for a driveway is 300 feet for passenger cars and pickup trucks, 390 feet for single-unit trucks, and 510 feet for multi-unit trucks. As shown in Figure 4, this access would meet El Paso County sight distance criteria.

Figure 5 shows the sight distance requirements at the proposed residential full-movement intersection to Southmoor Drive. Based on a design speed of 40 miles per hour, the El Paso County required public-street intersection sight distance is 445 feet. As shown in Figure 5, this access would meet El Paso County sight-distance criteria.

August 2025 – Aside from growth in roadside vegetation, no changes have occurred along the west side of Southmoor Drive that would change the 2020 sight-distance analysis. Existing roadside vegetation is expected to be removed from the property with the development.

PEDESTRIAN AND BICYCLE ROUTE ANALYSIS

Figure 6 shows a pedestrian and bicycle route analysis for the development. The local elementary, junior high, and high schools which will serve this development are all located east of US Hwy 85-87.

Existing Traffic Conditions

Current 2025 Traffic Counts

Figure 7 shows the results of current traffic-count data collected in July 2025 at the intersections of US Hwy 85-87/Main, US Hwy 85-87/Southmoor Drive during the morning and afternoon peak hours.

Previous Report Count Data (for Reference)

The previous version of Figure 7 is attached, for reference, in Appendix A. The traffic volumes in this previous version were based on counts conducted by LSC in February 2018. Counts at the intersections of US Hwy 85-87/Main, US Hwy 85-87/Southmoor, and the existing east Fountain Valley Shopping Center access to Southmoor Drive (prior to demolition of the previous shopping center). Description contained in the previous report, for reference:

As the existing commercial site access points to Southmoor Drive are proposed to be closed [August 2025 - now closed] all movements from both site access points to Southmoor Drive were counted as a single intersection (i.e., the southbound right-turn volumes shown include vehicles that turned right at either the north or south access point). The traffic counts at the access points were used to determine the through traffic volumes on Southmoor Drive at the new access location and to estimate the volume of existing traffic that currently uses the Fountain Valley Shopping Center parking to travel to and from Southmoor Drive to the traffic signal at US Hwy 85-87/Main. The traffic count reports are attached.

Existing Levels of Service

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection. Level of service is indicated on a scale from "A" to "F." LOS A represents control delay of less than 10 seconds for unsignalized and signalized intersections. LOS F represents control delay of more than 50 seconds for unsignalized intersections and more than 80 seconds for signalized intersections. Table 1 shows the level of service delay ranges.

Table 1: Level of Service Delay Ranges

Level of Service	Signalized Intersections	Unsignalized Intersections
	Average Control Delay (seconds per vehicle)	Average Control Delay (seconds per vehicle) ⁽¹⁾
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
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 study-area intersections were analyzed using Synchro to determine the existing levels of service. Figure 7 shows the updated level of service analysis results. The level of service (LOS) reports are attached.

All movements at the signalized intersection of US Hwy 85-87 are currently operating at LOS D or better during the morning and afternoon peak hours.

All movements at the three-quarter-movement intersection of US Hwy 85-87/Southmoor are currently operating at LOS B or better during the morning and afternoon peak hours.

TRIP GENERATION

Estimates of the vehicle trips expected to be generated by the residential and commercial developments were originally included in the August 2020 TIS report and were based on nationally published trip-generation rates found in *Trip Generation, 10th Edition, 2017* by the Institute of Transportation Engineers (ITE). Although there are no land-use changes from the August 2020 TIS, the attached Table 2 shows an updated version of the trip-generation estimates. The table has been revised based on the current version of *Trip Generation*.

The residential and commercial land-use plans have not changed and LSC land-use assumptions for the trip-generation estimate have not changed, except to update some commercial uses to reflect ITE's recategorization of some ITE Land Use categories. The updated trip-generation estimate uses the current ITE Land Use categories and trip-generation rates.

The shopping center will be a "replacement" shopping center for the previous, since-razed, Fountain Valley Shopping Center. Note: the gas station outparcel is not a part of this project.

The estimated total number of vehicle trips to be generated by the land uses has been reduced to account for the internal vehicle trips made within the site between land uses, without use of

the external streets surrounding the site. Table 2 shows the number of internal trips assumed for each land use. The internal trip **percentages from the 2020 TIS report have been used in this report.** The internal trip reduction is an estimate by LSC based on National Highway Cooperative Highway Research Program (NCHRP) Report 684 Enhancing Internal Trip Capture Estimation for Mixed-Use Developments. Table 2 shows about 9 percent of the morning peak-hour trips and 24 percent of the afternoon peak-hour trips assumed to be internal to the site. The results of the internal capture spreadsheet model are attached.

The total number of vehicle trips generated also includes pass-by trips. A pass-by trip is made by a motorist who would already be on the adjacent roadways regardless of the proposed development, but who stops in at the site while passing by. The motorist would then continue on his or her way to a final destination in the original direction. The pass-by percentages shown in Table 2 are from the *Trip Generation Handbook - An ITE Proposed Recommended Practice, 3rd Edition, 2017* by ITE.

Shopping Center/Non-Residential Portion of the Site

The **shopping center**/non-residential portion of the site is projected to generate about 2,757 non-pass-by, external vehicle-trips on the average weekday, with about half entering and half exiting this portion of the site during a 24-hour period.

During the morning peak hour, which generally occurs for one hour between 6:30 a.m. and 8:30 a.m., about 171 vehicles would enter and 142 vehicles would exit this portion of the site. During the afternoon peak hour, which generally occurs for one hour between 4:15 p.m. and 6:15 p.m., about 172 vehicles would enter and 162 vehicles would exit this portion of the site.

Residential Portion of the Site

The **residential** portion of the site is projected to generate about 1,888 external vehicle trips on the average weekday, with about half entering and half exiting this portion of the site during a 24-hour period.

During the morning peak hour, which generally occurs for one hour between 6:30 a.m. and 8:30 a.m., about 36 vehicles would enter and 102 vehicles would exit this portion of the site. During the afternoon peak hour, which generally occurs for one hour between 4:15 p.m. and 6:15 p.m., about 118 vehicles would enter and 70 vehicles would exit this portion of the site.

TRIP DISTRIBUTION AND ASSIGNMENT

Commercial Trip Distribution

The estimated directional distribution of the site-generated traffic volumes on the adjacent roadways is an important factor in determining the site's traffic impacts. Figure 8 shows the directional distribution estimates for the primary site-generated traffic projected to be generated by the shopping center/non-residential portion of the site. The estimates have been based on the following factors: the site land uses; the site location with respect to the nearby residential, employment, commercial, and activity centers; the street and roadway system serving the site; and the existing/projected traffic volumes. The non-pass-by-trip directional distribution reflects the estimated market area of the shopping center with the highest percentage to/from the east on Main Street. This represents a significant number of "rooftops" within a relatively short travel distance.

The split to the south on Highway 85 includes traffic from residential areas accessed via Fontaine Boulevard (Widefield), Fountain (via Highway 85), and other commercial areas to the south along Highway 85. The split to the north on Highway 85 accounts for trips from Stratmoor Valley and Stratmoor Hills, plus a much larger number of housing units within a reasonable driving time to the site via South Academy Boulevard and Highway 85. The site is also reasonably close to the South Academy Boulevard interchange to draw some diverted trips.

Appendix Figure 1 shows commercial trip-path assumptions used to assign the site-generated traffic projected to be generated by the shopping center/non-residential portion of the site by lot and/or tract to each of the access points.

Figure 9 shows the directional distribution estimates for the **pass-by** site-generated trips. The pass-by trips were assigned based in large part on the magnitude and direction of the existing and projected background traffic volumes on the adjacent roadways.

Residential Trip Distribution

Figure 10 shows the directional distribution estimates for the site-generated traffic projected to be generated by the residential portion of the site. The estimates have been based on the following factors: the site land uses; the site location with respect to the nearby schools, employment, commercial, and activity centers; the street and roadway system serving the site; and the existing/projected traffic volumes.

The residential distribution reflects the highest trip percentage oriented to/from the north on Highway 85 up to Academy Boulevard which provides road connections to destinations north and west. The percentage to/from Main Street takes into account the Main Street connection up to Hancock Expressway. From Hancock Expressway, there is quick access to Powers Boulevard North. Main Street split also includes area schools and other commercial centers as trip destinations. The splits to the south account for trip destinations in Fountain (including the commercial to the south), Widefield, the south part of Fort Carson (via Highway 16), and Pueblo.

Appendix Figure 2 shows residential trip-path assumptions used to assign the site-generated traffic projected to be generated by the residential portion of the site to each of the access points.

Site-Generated Traffic Volumes

Figure 11 shows the shopping center/non-residential site-generated traffic volumes. Figure 12 shows the projected traffic volumes on the area roadways to trips to be generated by the 209-dwelling-unit, 53-acre residential development.

The volumes shown in Figure 11 have been transferred from the previous TIS and used in the analysis. The land-use plan has not changed and LSC land-use assumptions for the trip-generation estimate have not changed, except to update some uses to reflect ITE's recategorization of some ITE Land Use categories. The updated trip-generation estimate using the current ITE Land Use categories and trip-generation rates shows **fewer trips generated** for the same land-use plan.

Figure 12 has been updated to reflect 209 lots (previous figure accounted for 221 lots) and current trip-generation rates.

BASELINE (BACKGROUND) TRAFFIC

Baseline traffic is the traffic estimated to be on the adjacent roadways and at adjacent intersections without the proposed development's trip generation and site-generated traffic volumes. Background traffic includes short-term and long-term estimates of through traffic and the traffic volumes at the study-area intersections without considering site-generated traffic volumes estimated for the River Bend shopping center/non-residential and residential developments.

The baseline traffic volumes also do not include any traffic estimated to be previously currently generated by the Fountain Valley Shopping Center, as all buildings have since been razed. The baseline traffic volumes include traffic estimated to be generated by the existing gas station located northwest of the intersection of US Hwy 85-87 and Main Street and an estimate of "cut-through" traffic traveling between Southmoor and the traffic signal at Main/US Hwy 85-87 through the site.

Figure 13a shows the estimated short-term baseline traffic volumes. The short-term baseline traffic volumes are based primarily on traffic-count data, with many of the prior report baseline turning-movement volume estimates used instead of 2025 volume counts, because the prior report volumes were higher. A Southmoor Drive Road closure to the south and road construction on South Academy Boulevard to the north are likely having some effect on current study-area traffic volumes.

Figure 14a shows the estimated 2045 baseline traffic volumes. These 20-year-horizon volume estimates are primarily the same as the long term from the previous report for several reasons. The current volumes are lower than pre-2020 counts, the short-term baseline volumes are primarily the same as the previous report, the application of the current CDOT 20-year growth factors to the **short-term** baseline volumes results in volume estimates consistent with the prior

20-year volumes. The current Colorado Department of Transportation (CDOT) 20-year growth factor is 1.26 for US Hwy 85-87 north of Fontaine Boulevard.

TOTAL TRAFFIC

Figure 15a shows the projected short-term total traffic volumes at the site-access points and key adjacent intersections. The short-term total traffic volumes are the sum of the short-term baseline traffic volumes from Figure 13a plus the site-generated traffic volumes due to development of the shopping center/non-residential portion of the site (from Figure 11) plus the site-generated traffic estimated to be generated by development of the residential portion of the site (from Figure 12). The volumes shown in Figure 15a represent the projected short-term impacts of both developments.

Figure 16a shows the projected 2045 total traffic volumes at the site-access points and key adjacent intersections. The 2045 total traffic volumes are the sum of the 2045 baseline traffic volumes from Figure 14a plus the site-generated traffic volumes due to development of the shopping center/non-residential portion of the site from (Figure 11) plus site-generated traffic estimated to be generated by development of the residential portion of the site (from Figure 12).

PROJECTED LEVELS OF SERVICE

Intersection Levels of Service

The site-access points and key area intersections were analyzed to determine the projected levels of service for the short-term and 2045 baseline and total traffic volumes. Figures 13b through 16b show the level of service analysis results.

- Figure 13b shows the lane geometry, traffic control, and level of service results at the study intersections based on the short-term baseline volumes.
- Figure 14b shows the lane geometry, traffic control, and level of service at the key intersections based on the 2045 baseline volumes.
- Figure 15b shows the lane geometry, traffic control, and level of service at the key intersections based on the short-term total volumes.
- Figure 16b shows the lane geometry, traffic control, and level of service at the key intersections based on the 2045 total volumes.

The signalized intersection of US Hwy 85-87 was analyzed using Synchro. The intersection of US Hwy 85-87/Southmoor Drive and the site-access points to Southmoor Drive were analyzed using the unsignalized/two-way, stop-sign-controlled intersection method of analysis procedures found in the *Highway Capacity Manual, 7th Edition* by the Transportation Research Board. The level of service (LOS) reports are attached.

US Highway 85-87/Main Street

Short Term

All movements at the signalized intersection of US Hwy 85-87 Main are projected to operate at LOS D or better during the peak hours, based on the projected short-term total traffic volumes.

Long Term

Overall, the intersection of US 85-87/Main Street is projected to operate at LOS C during both 2045 Total peak hours. Based on existing signal timings, the southbound-left/through turning movement is projected to operate at LOS E during the long-term PM peak hour with the addition of site-generated traffic. Analysis indicates that although LOS for this turning movement would be E, the volume-to-capacity (v/c) ratio would be below 1.00 (v/c of 0.93). All other individual turning movements at this intersection are projected to operate at LOS D or better in 2045, with or without the addition of site-generated traffic.

US Highway 85-87/Southmoor Drive

All movements at the three-quarter movement (left-in/right-in/right-out-only) intersection of US Hwy 85-87/Southmoor are projected to operate at LOS C or better during the peak hours, based on the projected short-term and 2045 total traffic volumes.

Site Access Points

The site-access points to Southmoor Drive are projected to operate at LOS B or better for all movements as two-way, stop-sign-controlled intersections, based on the projected short-term and 2045 total traffic volumes.

QUEUING ANALYSIS

A queuing analysis was performed as part of the 2020 TIS report using Synchro/SimTraffic to determine if the proposed laneage for the main access to US Hwy 85-87 will be sufficient to accommodate the projected queues based on the total traffic volumes. The future total volume estimates have not changed significantly from the prior report. The long-term total morning and afternoon peak-hour traffic volumes were entered into the Synchro model. The simulation was run five times and the results were averaged. The queueing reports are attached. A separate simulation was also run which assumed a signal preemption due to a railroad crossing Main Street just east of US Hwy 85-87 during the peak hours. The analysis assumed the railroad crossing gates would be down for four minutes during which only northbound through and left-turning traffic, southbound through and right-turning traffic and eastbound left and right-turning traffic could occur.

Based on the projected long-term total traffic volumes, the projected maximum eastbound left-turn queue at the main access approaching US Hwy 85-87 during a typical peak hour was about

143 feet long during the morning peak hour and 131 feet long during the afternoon peak hour. If a signal preemption occurs during the peak hour, the projected maximum eastbound left-turn queue is 150 feet during the morning peak hour and 130 feet during the afternoon peak hour. This estimate is likely conservative as the Synchro modeling software only allows for one eastbound left-turn phase during the 240 second preemption time. The attached site plan shows the proposed lane geometry for the proposed Collector street through the site. The projected maximum queue may extend into the painted taper area about two percent of the morning peak hour and one percent of the afternoon peak hour, assuming typical traffic-signal timings. If a railroad crossing occurs during the morning peak hour, the queue may back into the painted taper area up to nine percent of the peak hour (again, this estimate is likely conservative as the Synchro modeling software only allows for one eastbound left-turn phase during the 240 second preemption time). The queue is not projected to extend into the first interior parking lot access point.

The projected maximum northbound left-turn queue on US Hwy 85-87 is about 262 feet long during the morning peak hour and 109 feet long during the afternoon peak hour. The existing northbound left-turn lane at this intersection is about 335 feet long. Based on the criteria contained in The Colorado State Highway Access Code for a roadway with a classification of NR-B and a posted speed limit greater than 40 mph, the required turn-lane length for the northbound left-turn lane would be 320 feet plus a 180-foot taper.

STREET CLASSIFICATIONS

Figure 17 shows the existing and recommended street classifications in the vicinity of the site.

CONCLUSIONS AND RECOMMENDATIONS

Trip Generation

- The shopping center/non-residential portion of the site is projected to generate about 2,757 new external vehicle-trips on the average weekday, with about half entering and half exiting this portion of the site during a 24-hour period. During the morning peak hour, about 171 vehicles would enter and 142 vehicles would exit this portion of the site. During the afternoon peak hour, about 172 vehicles would enter and 162 vehicles would exit this portion of the site. The shopping center will not be a new “greenfield” development, rather redevelopment of an existing shopping center. This trip-generation estimate for the shopping center redevelopment represents the post-redevelopment trip generation with current trips generated removed. Note: the gas station outparcel is not a part of this project.
- The residential portion of the site is projected to generate about 1,888 external vehicle trips on the average weekday, with about half entering and half exiting this portion of the site during a 24-hour period. During the morning peak hour, which generally occurs for one hour between 6:30 a.m. and 8:30 a.m., about 36 vehicles would enter and 102 vehicles would exit this portion of the site. During the afternoon peak hour, which

generally occurs for one hour between 4:15 p.m. and 6:15 p.m., about 118 vehicles would enter and 70 vehicles would exit this portion of the site.

Projected Levels of Service

- All movements at the signalized intersection of US Hwy 85-87 are projected to operate at LOS D or better during the peak hours, based on the projected short-term total traffic volumes.
- Overall, the intersection of US 85-87/Main Street is projected to operate at LOS C during both 2045 Total peak hours. Based on existing signal timings, the southbound-left/through turning movement is projected to operate at LOS E (with a v/c of 0.93) during the long-term PM peak hour, with the addition of site-generated traffic. All other individual turning movements at this intersection are projected to operate at LOS D or better in 2045, with or without the addition of site-generated traffic.
- All movements at the three-quarter movement (left-in/right-in/right-out only) intersection of US Hwy 85-87/Southmoor are projected to operate at LOS C or better during the peak hours, based on the projected short-term and 2045 total traffic volumes.
- The site-access points to Southmoor Drive are projected to operate at a satisfactory level of service for all movements as two-way stop-sign-controlled intersections, based on the projected short-term and 2045 total traffic volumes.

Access Permitting

El Paso County

- The proposed relocated (and consolidated) site access for the shopping center/non-residential portion of the site on Southmoor Drive will require El Paso County approval. Although the land-use plan has not changed, it is our understanding that the access plan is subject to re-review of this TIS report, construction drawings of the access and associated work/improvements in the County ROW, and other submittal documents required by EPC.
- Although the plat was previously approved for the proposed residential development, and the plan is essentially the same, it is our understanding that the plat (including the proposed access points) is subject to re-review and approval of the current submittal.

CDOT

- Colorado State Highway Access Permit offer No. 219038 (CDOT Form #101) is current but will expire soon.. The notice-to-proceed (NTP) has NOT been issued, but the permittee is working to obtain the NTP.

Recommendations

- The applicant is planning to upgrade one-half of Southmoor Drive (the project side/west side of the street) to El Paso County-standard Urban Non-Residential Collector cross section adjacent to the site. Figure 18 shows the proposed cross sections for Southmoor Drive. This improvement is not likely reimbursable under the El Paso County Roadway Improvement Fee Program, based on the current MTCP plan Note: If the residential development (with accompanying residential access to Southmoor Drive) precedes the phase of the commercial development responsible for upgrading Southmoor Drive (per El Paso County comments, and reflected in Figure 18), LSC recommends that, if applicable, the residential developer/applicant post assurances for the fair-share amount portion of the overall west-side half section in lieu of actually constructing improvements to Southmoor Drive.
- Based on projected 2045 total traffic volumes and the criteria contained in the El Paso County *Engineering Criteria Manual (ECM)*, a northbound left-turn deceleration lane would not be required on Southmoor Drive approaching the proposed residential full-movement site-access point, as the projected turning volume is below the *ECM* threshold volume requiring a left-turn deceleration lane. However, Figure 18 shows the recommendation to extend the Non-Residential Collector cross section to a short distance south of the access point. With the Non-Residential Collector improvements (see previous bullet for timing recommendation) and the resulting cross section extended south of the access, a short northbound left-turn bay suitable for northbound left-turn vehicle stacking and alignment with the southbound left-turn lane would be striped as part of the cross section of the street. The lane-transition taper could be embedded within the redirect tapers south of the intersection.
- Based on projected 2045 total traffic volumes and the criteria contained in the El Paso County *Engineering Criteria Manual (ECM)*, a northbound left-turn deceleration lane would be required on Southmoor Drive approaching the proposed relocated full-movement site-access point for the shopping center/non-residential portion of the site. With required upgrade to Southmoor Drive as shown in Figure 18, deceleration (155 feet required by the *ECM*), stacking (50 feet required by the *ECM*), and taper (160 feet required by the *ECM*) distances could be met, as the road would be widened for a center painted median to a point just south of the residential access. However, given numerous driveways on the east side of Southmoor Drive, the cross section shows this left-turn lane striped as a center, two-way, left-turn lane.
- Based on projected 2045 total traffic volumes and the criteria contained in the El Paso County *Engineering Criteria Manual (ECM)* a southbound right-turn deceleration lane would not be required on Southmoor Drive approaching the proposed relocated full-movement site access point for the shopping center/non-residential portion of the site and approaching the proposed full-movement intersection for the residential portion of the site.
- Please refer to the latest 2025 design plans by Galloway for the proposed laneage for the main access.

- Signal modifications will be needed to the existing traffic signal at the intersection of US 85-87/Main Street to accommodate the recommended modifications to the site access (west leg). As required in the terms and conditions of the State Highway Access Permit, a signal-modification plan was prepared and submitted to CDOT previously. CDOT provided a new set of plan redlines. The plans have been revised to address those recent redlines and will be resubmitted to CDOT for approval. Design plans for the west-leg intersection improvements have also been revised and will be resubmitted to CDOT for approval. These will need to be approved by CDOT prior to issuance of a Notice-to-Proceed (NTP).
- There are existing northbound left-turn lanes on US Hwy 85-87 approaching both the Southmoor Drive and Main Street intersections. These lanes meet the criteria contained in the Colorado State Highway Access Code, based on a classification of NR-B with a posted speed limit greater than 40 mph.
- There are existing continuous right-turn acceleration/deceleration lanes on US Hwy 85-87 between the right-in/right-out access just north of Main Street to Mesa Ridge Parkway. There is an existing 305-foot southbound right-turn deceleration lane, plus a 185-foot taper, on US Hwy 85-87 approaching the Main Street intersection. The existing right-in/right-out access just north of Main Street is about 250 feet south of the beginning of the southbound right turn lane taper.
- Per recent plan redlines provided by CDOT, the intersection design and signal-modification plans for the intersection of Highway 85/Main Street have been revised to show the addition of new curbed right-turn islands and reconfigured pedestrian ramps on the northwest and southwest corners.
- Some signal modifications will be necessary, please refer to the updated traffic-signal modification plan (August 2025).

El Paso County Roadway Improvement Fee Program

- The residential portion of the project will be required to participate in the El Paso County Road Improvement Fee Program. They will join the ten-mil PID. The current ten-mil PID building permit fee portion associated with this option is \$293 per single-family dwelling unit. Based on 209 lots, the total building permit fee for both Filing Nos. 1 and 2 would be \$61,237.

* * * * *

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

Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.

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

JCH/KDF/JAB:jas

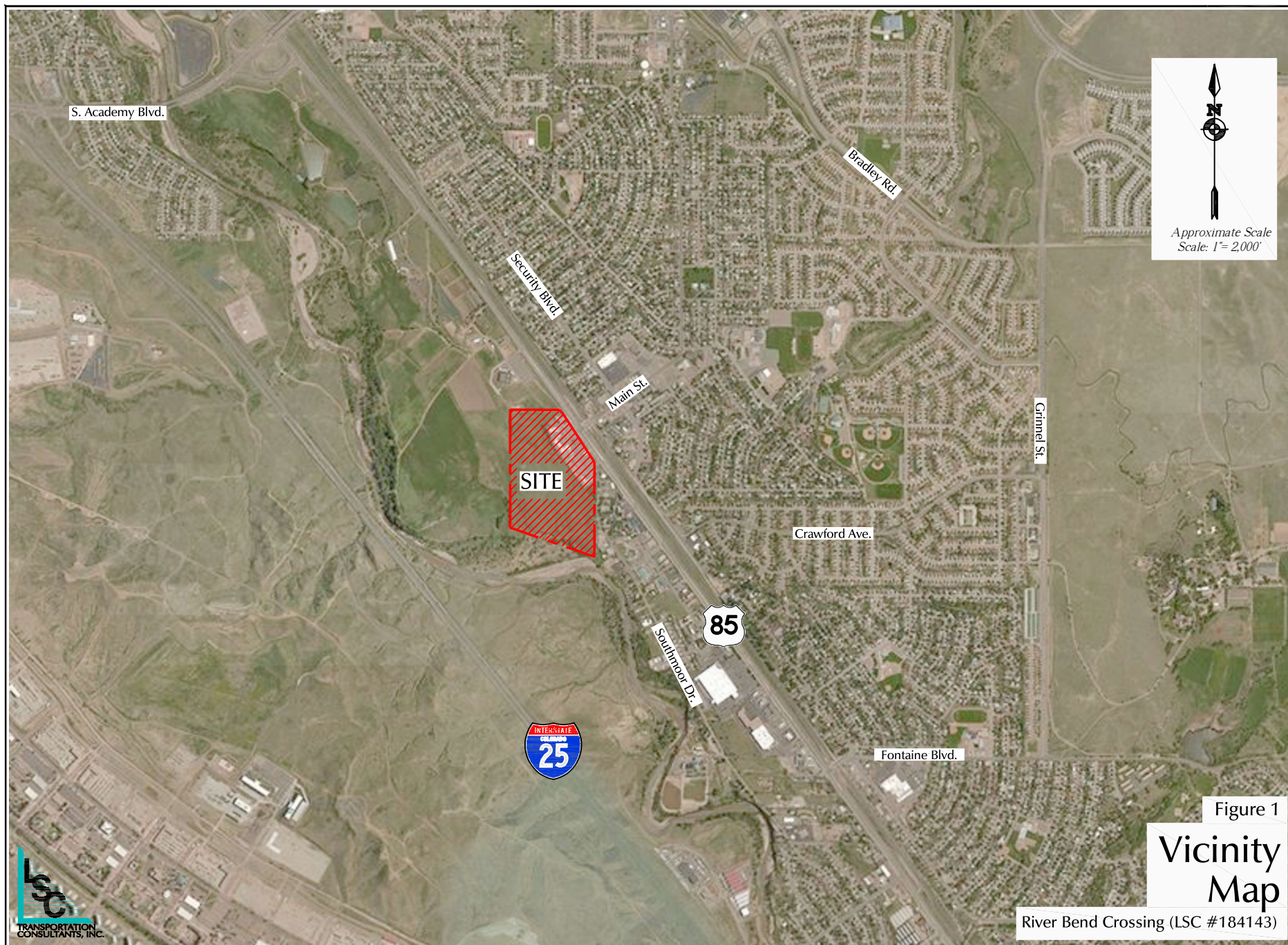
Enclosures: Table 2
Figures 1-18
Traffic Count Reports (2025 Counts)
Level of Service Reports
Commercial Site Plan Exhibit
Residential Site Plan Exhibit
Residential Filing No. 1 Plat (from EDARP)
Residential Filing No. 2 Plat (from EDARP)
Internal Trip Capture Estimate (from the 2020 Report)
Appendix Figures 1-2 (from the 2020 Report)
Traffic Count Reports (from the 2020 Report)
Queuing Reports (from the 2020 Report)

Table 2

Table 2: Detailed Trip Generation Estimate

Tract/ Lot	ITE		Value	Units ¹	Trip Generation Rates ²				Total Trips Generated				% Internal Trips ⁵	Internal Trips Generated				External Trips Generated				% Pass-By Trips	New External Trips Generated						
					Average Weekday	A.M.		P.M.		Average Weekday	A.M.			P.M.		Average Weekday	A.M.		P.M.		Average Weekday		A.M.		P.M.		Average Weekday		
	Code	Description			(In + Out)	In	Out	In	Out	(In + Out) ³	In	Out	In	Out	(In + Out) ³	In	Out	In	Out	(In + Out) ³	In	Out	In	Out	(In + Out) ³				
Commercial Land Uses																													
A	821	Strip Retail Plaza (40 KSF - 150 KSF)	18.330	KSF	67.52	1.07	0.66	2.54	2.65	1,238	20	12	47	49	20%	248	3	3	10	9		990	17	9	37	40	34%	653	
A	937	Coffee/Donut Shop w/ Drive-Through Window	0.860	KSF	533.57	43.80	42.08	19.50	19.50	459	38	36	17	17	22%	101	3	2	8	9		357	35	34	9	8	89%	39	
1	934	Fast-Food Restaurant w/ Drive-Through Window	2.999	KSF	467.48	22.75	21.86	17.18	15.85	1,402	68	66	52	48	23%	317	7	7	16	20		1,085	62	59	35	27	50%	543	
2	821	Strip Retail Plaza (40 KSF - 150 KSF)	7.700	KSF	67.52	1.07	0.66	2.54	2.65	520	8	5	20	20	16%	83	1	1	4	3		437	8	5	16	17	34%	288	
B	932	High-Turnover (Sit-Down) Restaurant	4.900	KSF	107.20	5.26	4.31	5.52	3.53	525	26	21	27	17	19%	101	2	2	5	7		424	24	19	22	11	43%	242	
B	821	Strip Retail Plaza (40 KSF - 150 KSF)	9.310	KSF	67.52	1.07	0.66	2.54	2.65	629	10	6	24	25	21%	134	2	1	6	5		495	8	5	18	20	34%	327	
C	821	Strip Retail Plaza (40 KSF - 150 KSF)	8.750	KSF	67.52	1.07	0.66	2.54	2.65	591	9	6	22	23	19%	114	1	1	5	5		477	8	5	17	18	34%	315	
4	821	Strip Retail Plaza (40 KSF - 150 KSF)	9.750	KSF	67.52	1.07	0.66	2.54	2.65	658	10	6	25	26	19%	127	1	1	6	5		532	9	6	19	20	34%	351	
										Total	6,021	189	158	232	224	Total	1,225	18	16	60	63	Total	4,797	171	142	172	162	Total	2,757
Residential Land Uses																													
-	210	Single-Family (Detached) Housing	209	DU	9.51	0.18	0.52	0.60	0.35	1,988	38	108	125	74	5%	100	2	6	7	4		1,888	36	102	118	70	0%	1,888	
Commercial Land Uses																													
					Previously-Approved Site Plan from August 2020					6,564	236	186	263	260		1,337	24	20	67	70		5,227	212	166	196	190		2,933	
					Currently-Proposed Site Plan					6,021	189	158	232	224		1,225	18	16	60	63		4,797	171	142	172	162		2,757	
					Change in Trip Generation					-543	-47	-28	-31	-36	Change	-112	-6	-4	-7	-7	Change	-430	-41	-24	-24	-28	Change	-176	
Residential Land Uses																													
					Previously-Approved Site Plan from August 2020					1,973	39	116	130	77		99	2	6	7	4		1,874	37	110	123	73		1,874	
					Currently-Proposed Site Plan					1,988	38	108	125	74		100	2	6	7	4		1,888	36	102	118	70		1,888	
					Change in Trip Generation					15	-1	-8	-5	-3	Change	1	0	0	0	0	Change	14	-1	-8	-5	-3	Change	14	
¹ KSF = 1,000 square feet; DU = dwelling units																													
² Source: <i>Trip Generation, 11th Edition (2021)</i> by the Institute of Transportation Engineers (ITE)																													
³ Units = vehicle-trips per day																													
⁴ Units = vehicle-trips per hour																													
⁵ Source: <i>Trip Generation Handbook - an ITE Proposed Recommended Practice, 3rd Edition (2017)</i> by ITE																													
August 4, 2025																													

Figures 1-18



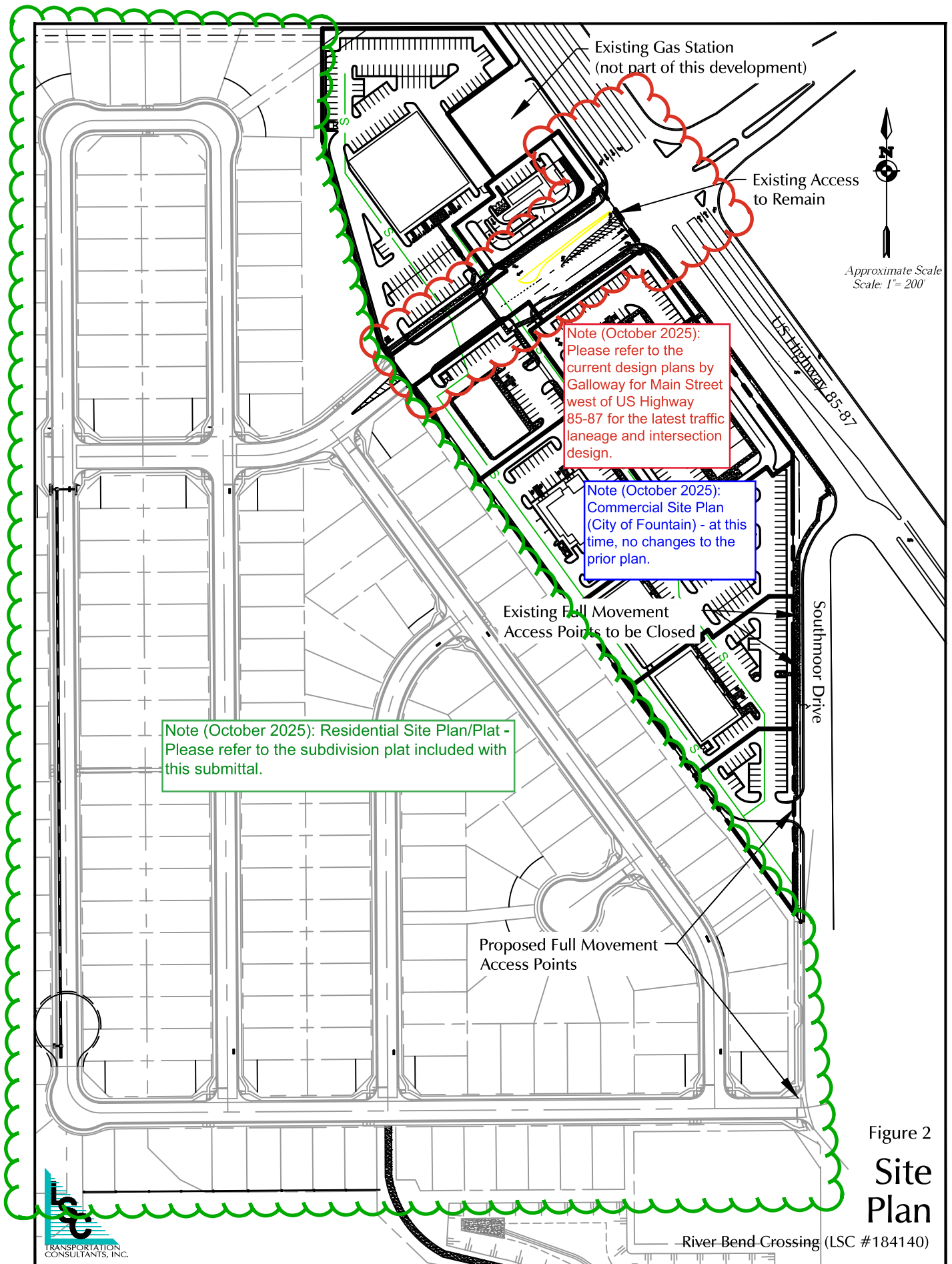


Figure 2
Site
Plan

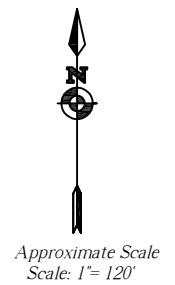
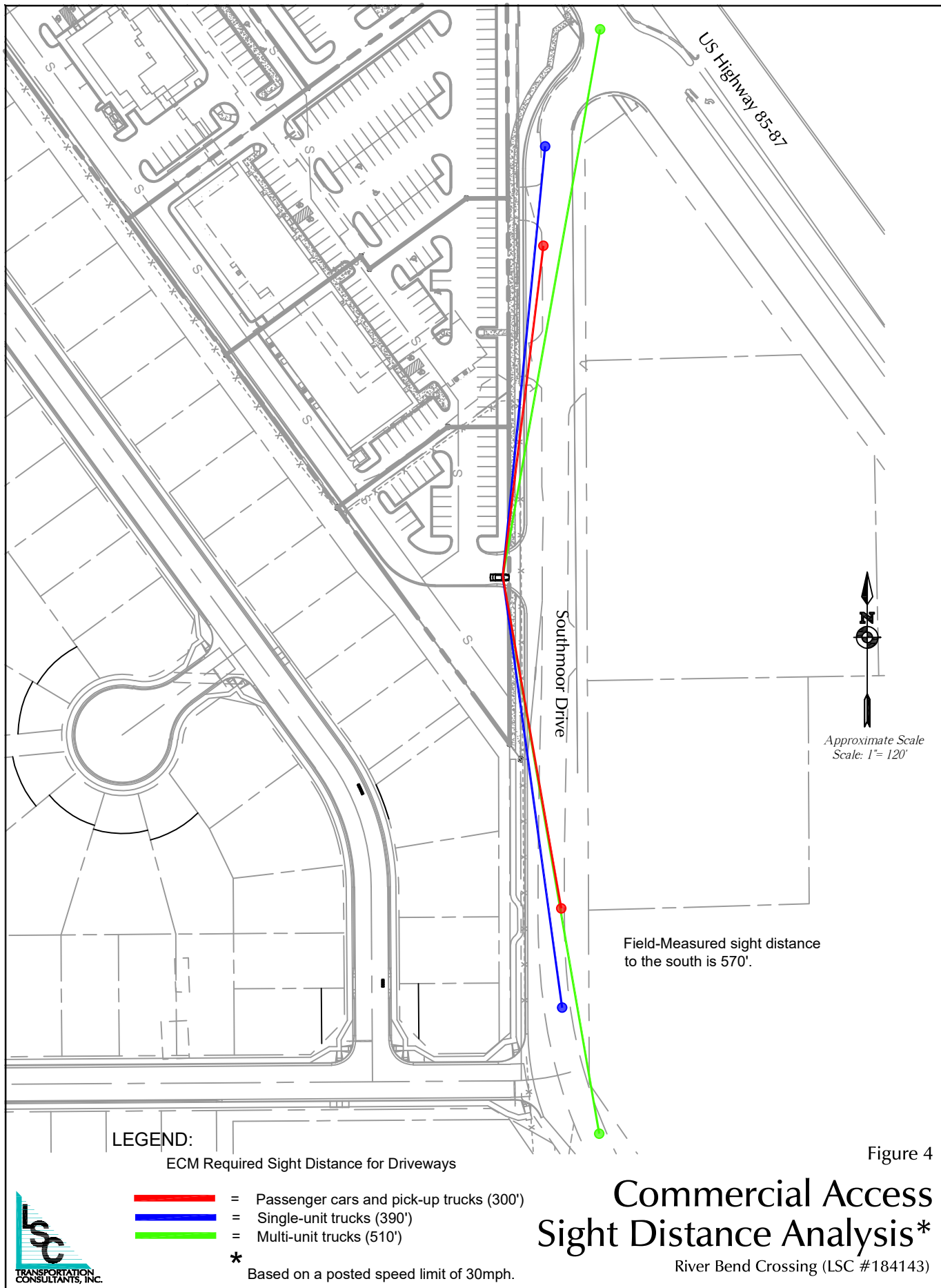
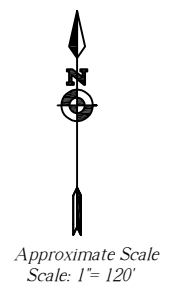


Figure 3
Access Spacing
Exhibit Southmoor Drive
 River Bend Crossing (LSC #184143)





Provided existing vegetation is removed (anticipated with project construction), and the site improvements do not add any obstructions that would block the line of sight, more than adequate lines of sight exists to the north and south from the driver's eye location on the proposed public street.

* Based on a design speed of 40mph.

Figure 5

Residential Access Sight Distance Analysis*

River Bend Crossing (LSC #184143)

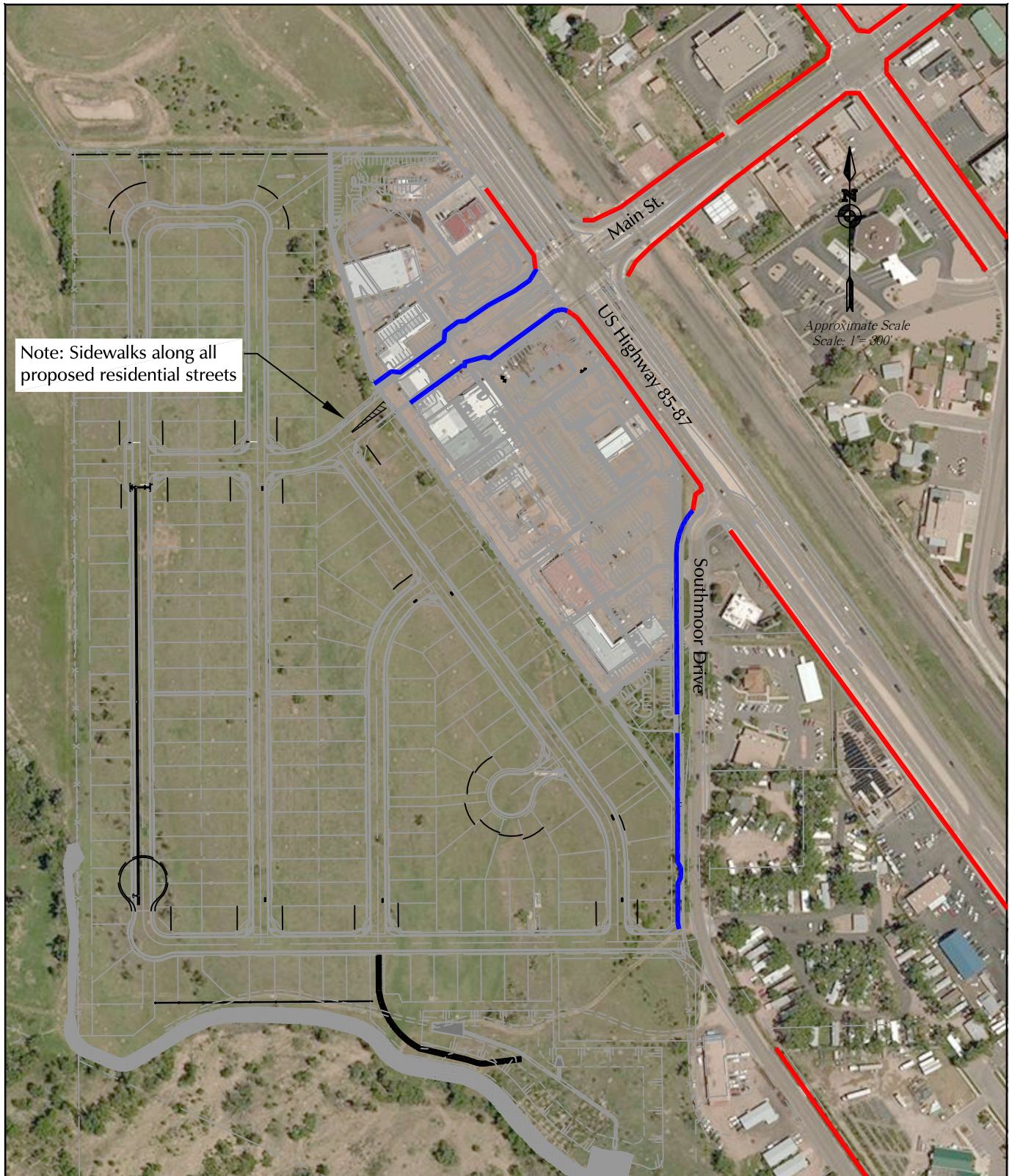


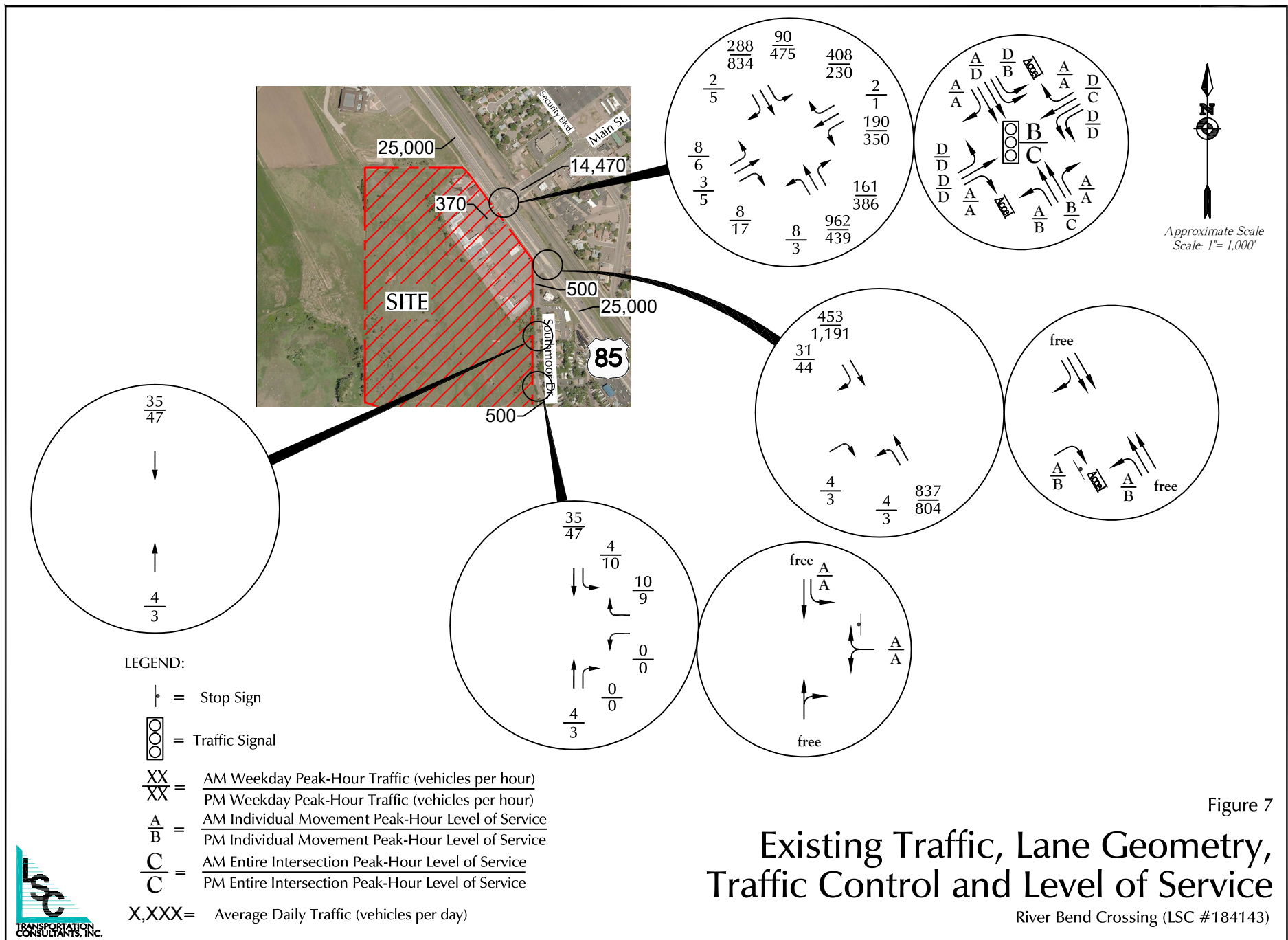
Figure 6

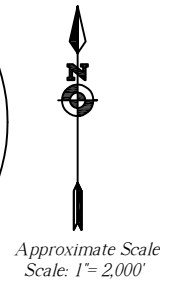
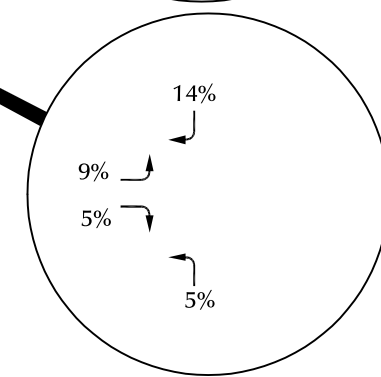
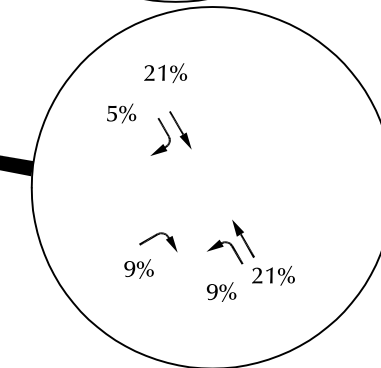
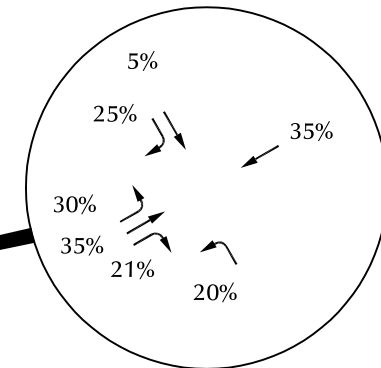
LEGEND:

- = Existing Sidewalk
- = Proposed Sidewalk

Pedestrian Route Analysis

River Bend Crossing (LSC #184143)





LEGEND:

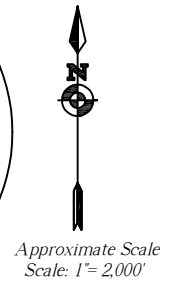
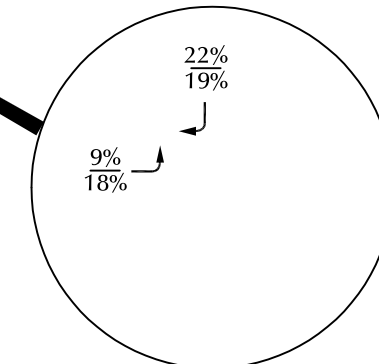
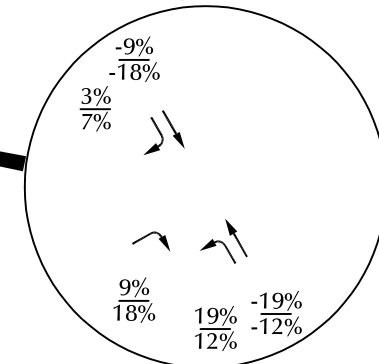
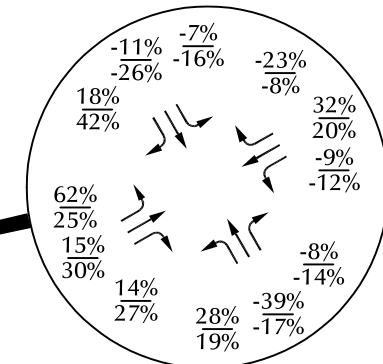
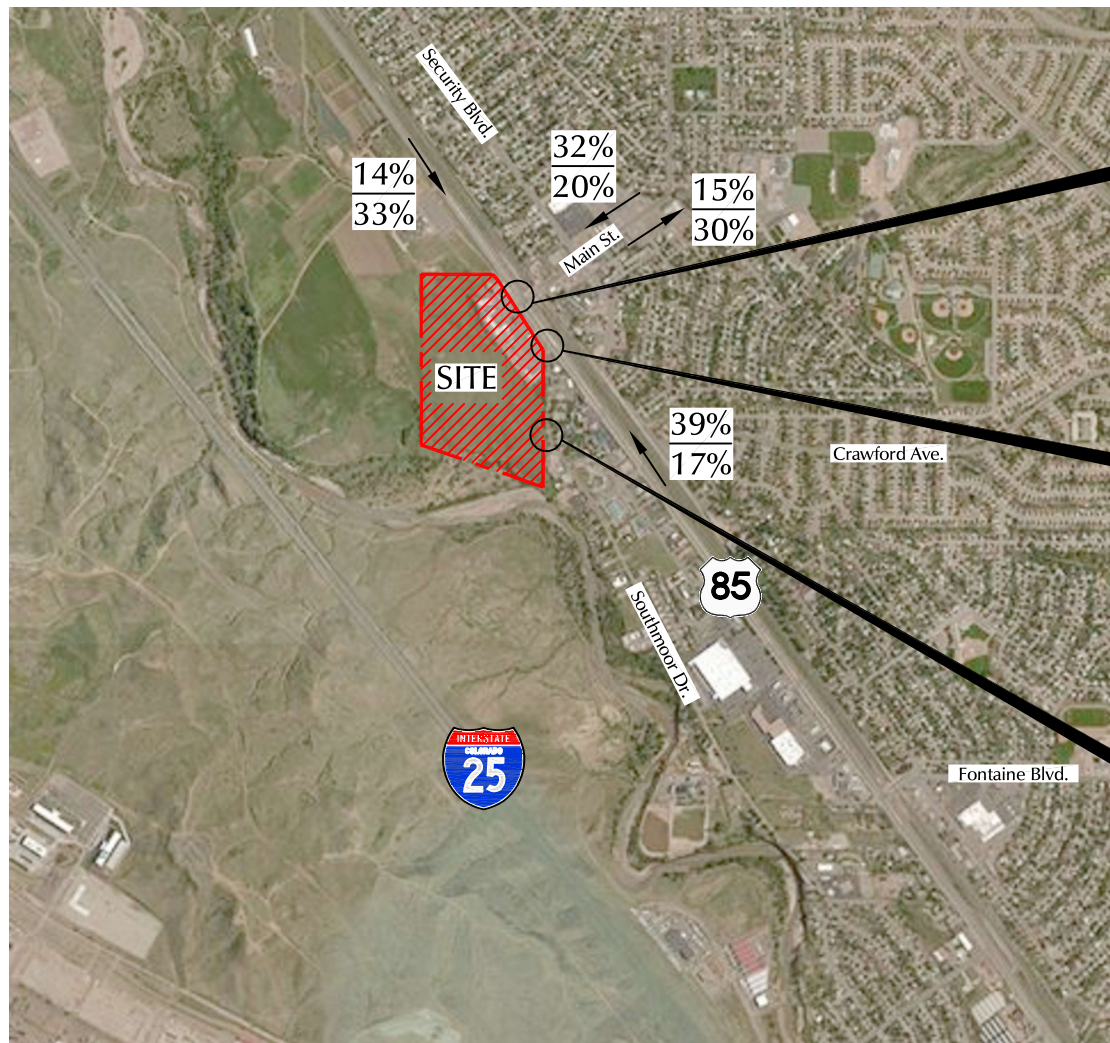


XX% = Commercial Percent Directional Distribution of Primary Trips
(Note: includes diverted trips from South Academy Boulevard and I-25)

Notes: See Appendix Figure 1 for detailed trip path assumptions.
See Table 2 for Internal Trip assumptions



Figure 8
**Directional Distribution of
Primary Commercial Site-Generated Traffic**
River Bend Crossing (LSC #184143)



Note: See Appendix Figure 1 for detailed trip path assumptions.

Figure 9

Directional Distribution of Pass-by Commercial Site-Generated Traffic

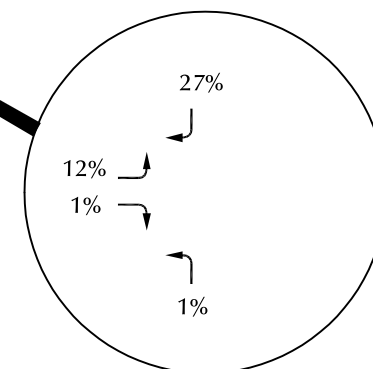
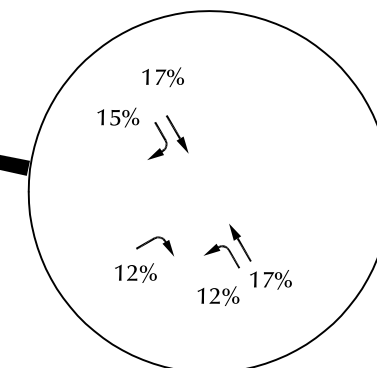
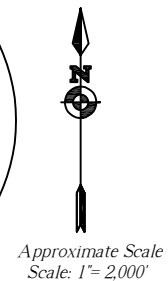
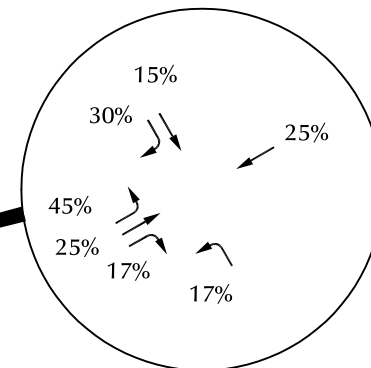
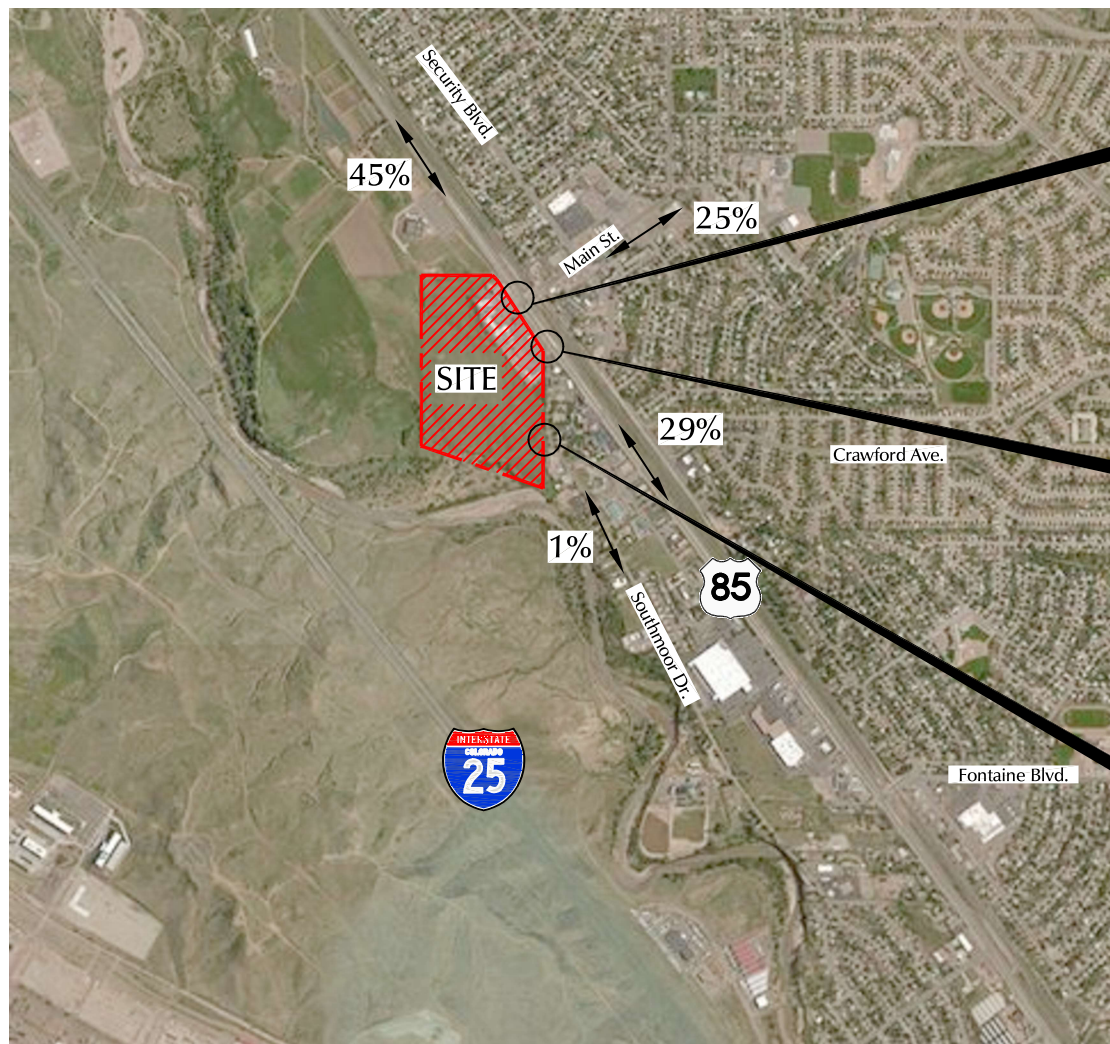
River Bend Crossing (LSC #184143)



LEGEND:



XX% = AM Commercial Percent Directional Distribution
XX% = PM Commercial Percent Directional Distribution



Note: See Appendix Figure 2 for detailed trip path assumptions.

Figure 10

Directional Distribution of Residential Site-Generated Traffic

River Bend Crossing (LSC #184143)



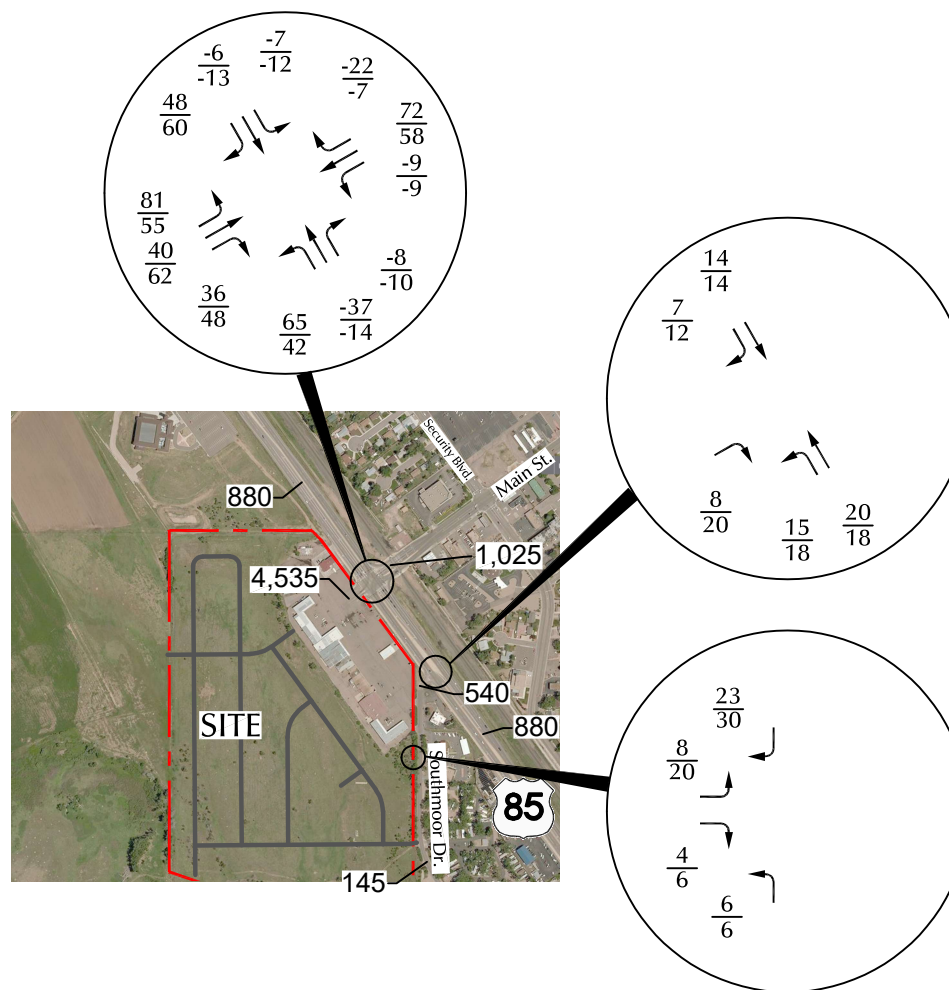
LEGEND:



XX% = Residential Percent Directional Distribution



Approximate Scale
Scale: 1" = 1,000'



LEGEND:

$\frac{XX}{XX}$ = AM Weekday Peak-Hour Traffic (vehicles per hour)
 $\frac{XX}{XX}$ = PM Weekday Peak-Hour Traffic (vehicles per hour)

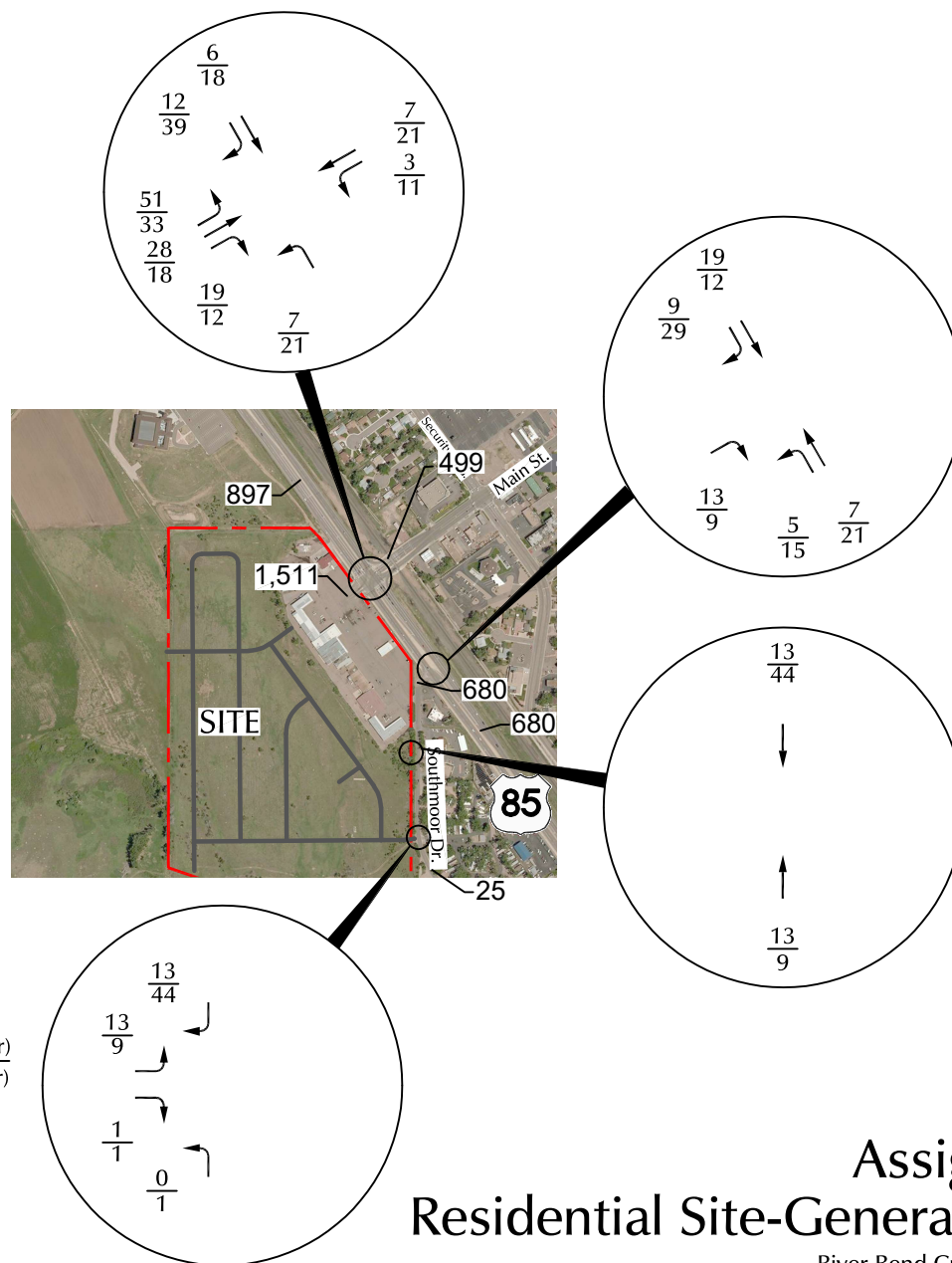
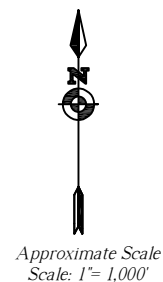
X,XXX= Average Daily Traffic (vehicles per day)



Assignment of Commercial Site-Generated Traffic

River Bend Crossing (LSC #184143)

Figure 11



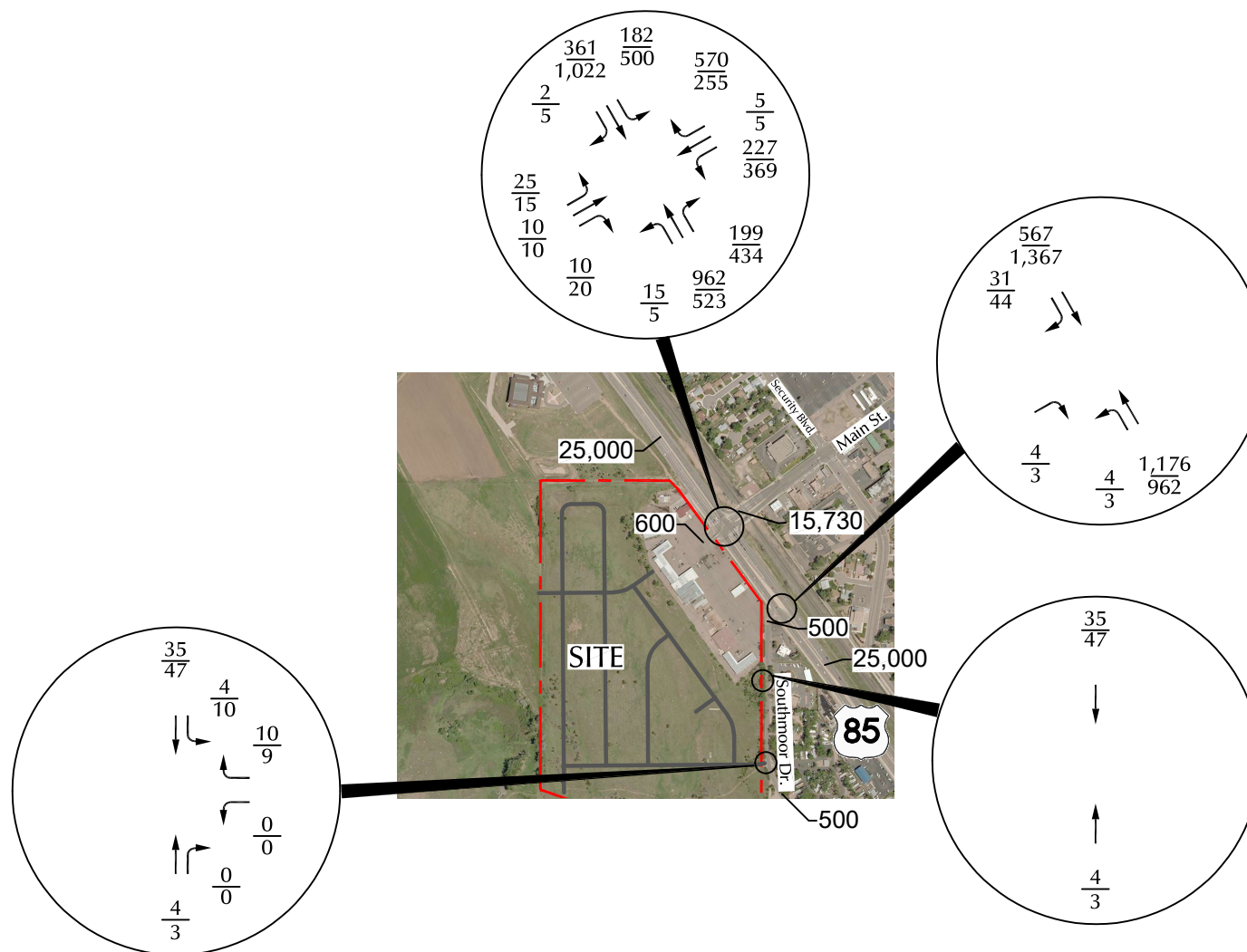
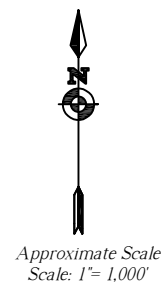
LEGEND:

$\frac{XX}{XX}$ = 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)



Figure 12
**Assignment of
 Residential Site-Generated Traffic**
 River Bend Crossing (LSC #184143)



LEGEND:

$\frac{XX}{XX}$ = AM Weekday Peak-Hour Traffic (vehicles per hour)
 $\frac{XX}{XX}$ = PM Weekday Peak-Hour Traffic (vehicles per hour)

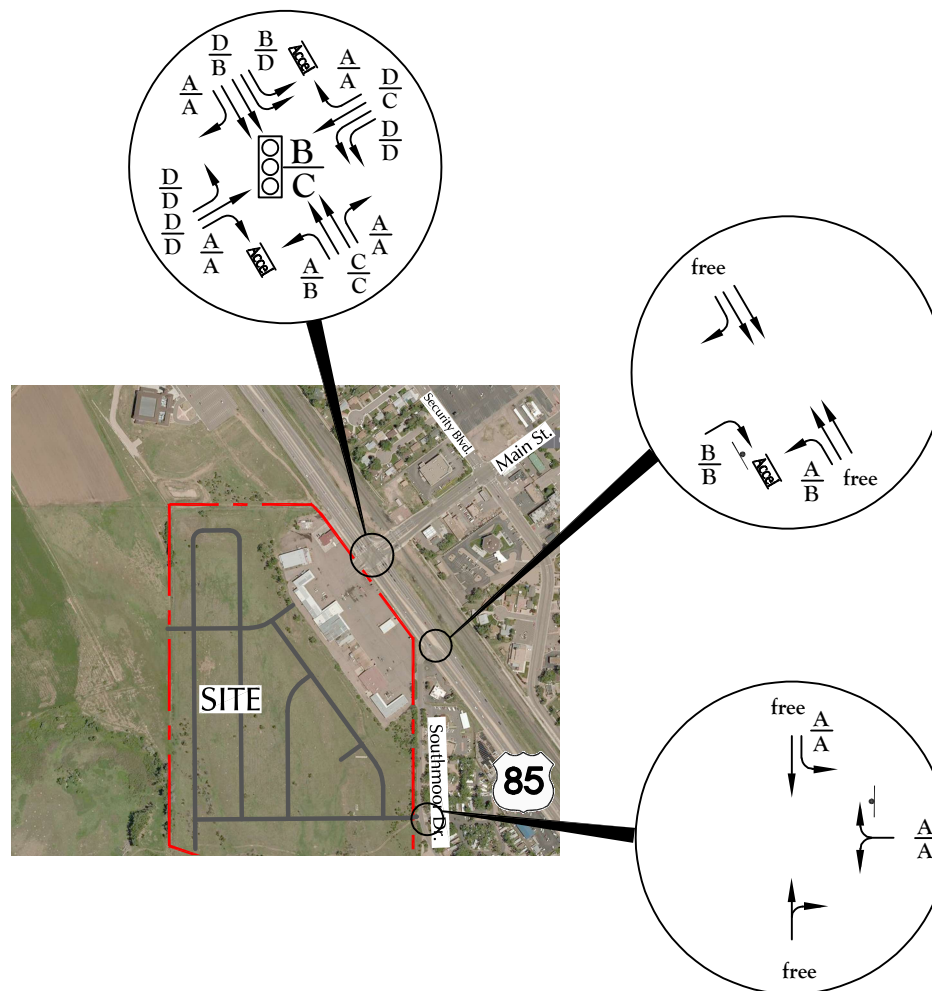
X,XXX= Average Daily Traffic (vehicles per day)



Figure 13a
**Short-Term
 Baseline Traffic**
 River Bend Crossing (LSC #184143)



Approximate Scale
Scale: 1" = 1,000'



LEGEND:

 = Stop Sign

 = Traffic Signal

$\frac{A}{B}$ = $\frac{\text{AM Individual Movement Peak-Hour Level of Service}}{\text{PM Individual Movement Peak-Hour Level of Service}}$

$\frac{C}{C}$ = $\frac{\text{AM Entire Intersection Peak-Hour Level of Service}}{\text{PM Entire Intersection Peak-Hour Level of Service}}$



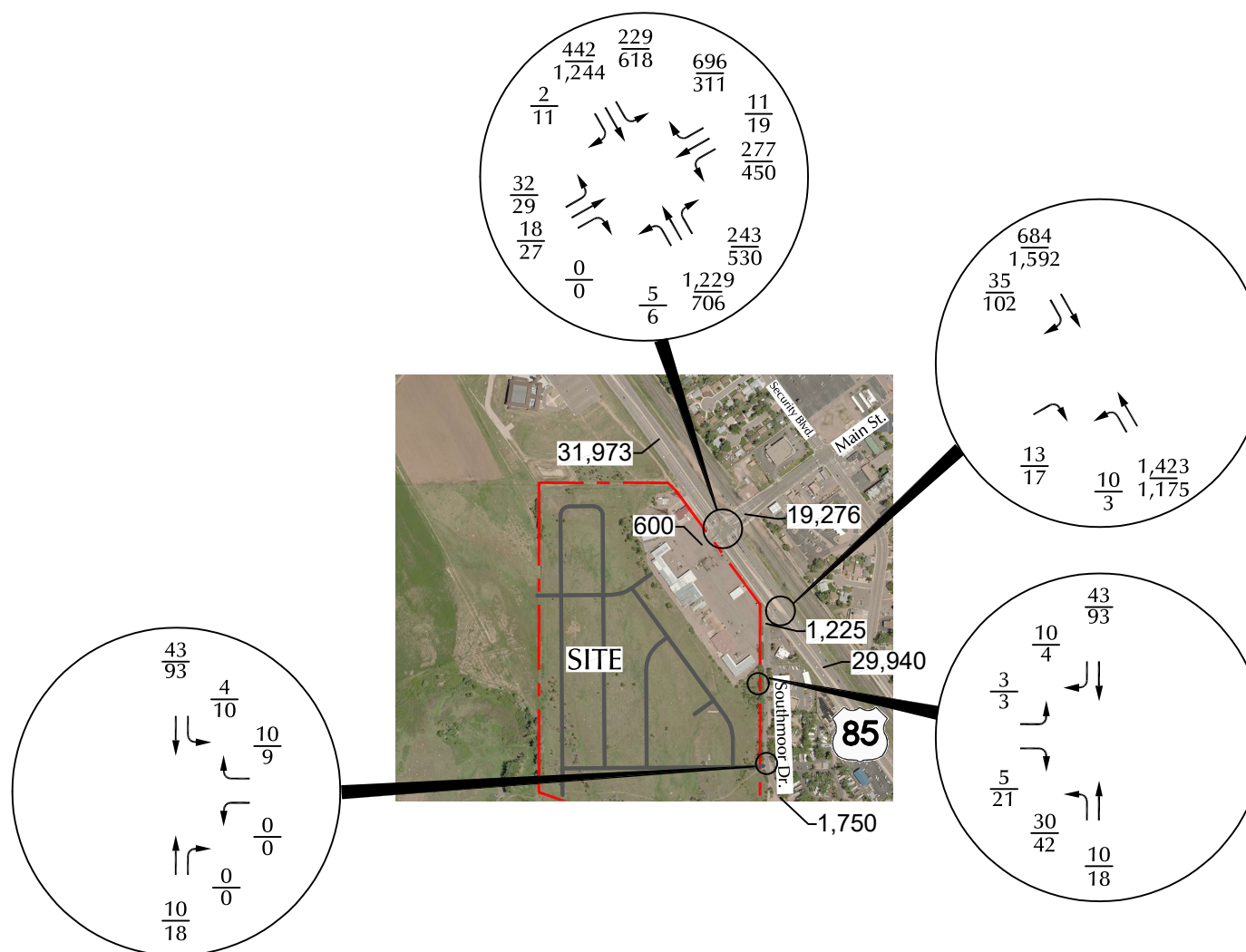
Short-Term Baseline Lane Geometry, Traffic Control and Level of Service

River Bend Crossing (LSC #184143)

Figure 13b



Approximate Scale
Scale: 1" = 1,000'



LEGEND:

$\frac{XX}{XX}$ = AM Weekday Peak-Hour Traffic (vehicles per hour)
 $\frac{XX}{XX}$ = PM Weekday Peak-Hour Traffic (vehicles per hour)

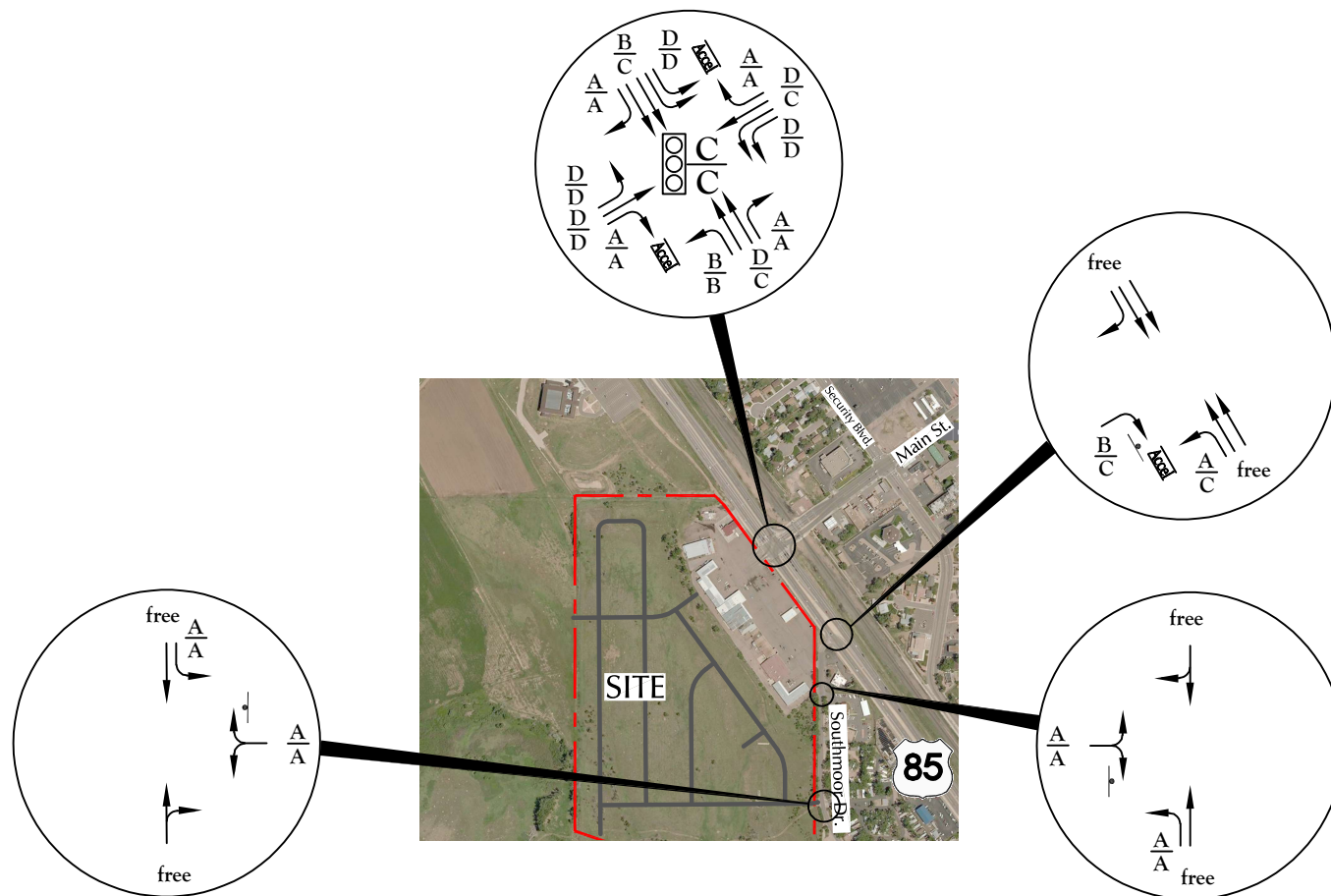
X,XXX= Average Daily Traffic (vehicles per day)



Figure 14a
Year 2045
Background Traffic
 River Bend Crossing (LSC #184143)



Approximate Scale
Scale: 1" = 1,000'



LEGEND:

⊥ = Stop Sign

⬢ = Traffic Signal

$\frac{A}{B}$ = $\frac{\text{AM Individual Movement Peak-Hour Level of Service}}{\text{PM Individual Movement Peak-Hour Level of Service}}$

$\frac{C}{C}$ = $\frac{\text{AM Entire Intersection Peak-Hour Level of Service}}{\text{PM Entire Intersection Peak-Hour Level of Service}}$



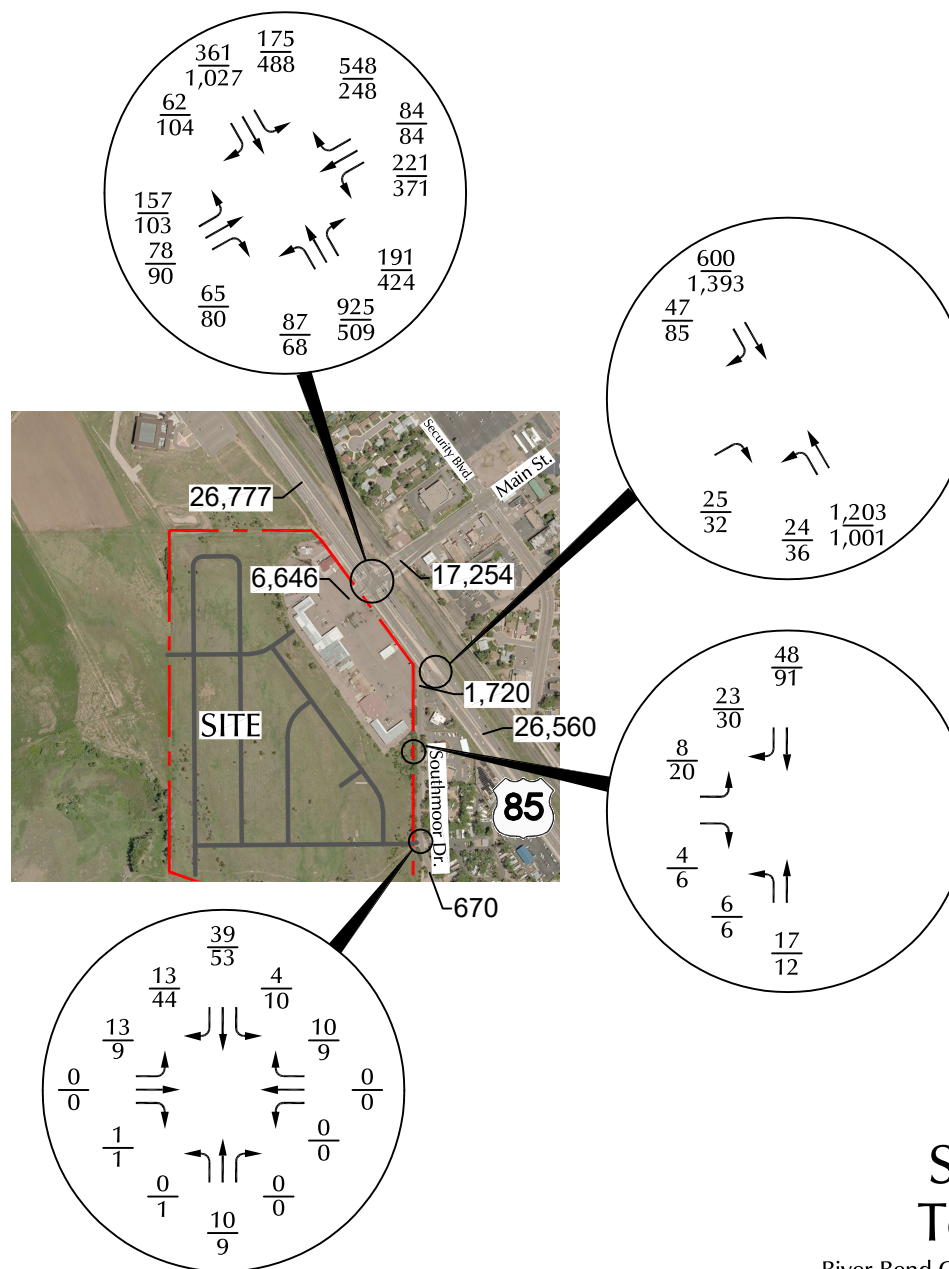
Year 2045 Background Lane Geometry, Traffic Control and Level of Service

Figure 14b

River Bend Crossing (LSC #184143)



Approximate Scale
Scale: 1" = 1,000'



LEGEND:

$\frac{XX}{XX}$ = AM Weekday Peak-Hour Traffic (vehicles per hour)
PM Weekday Peak-Hour Traffic (vehicles per hour)

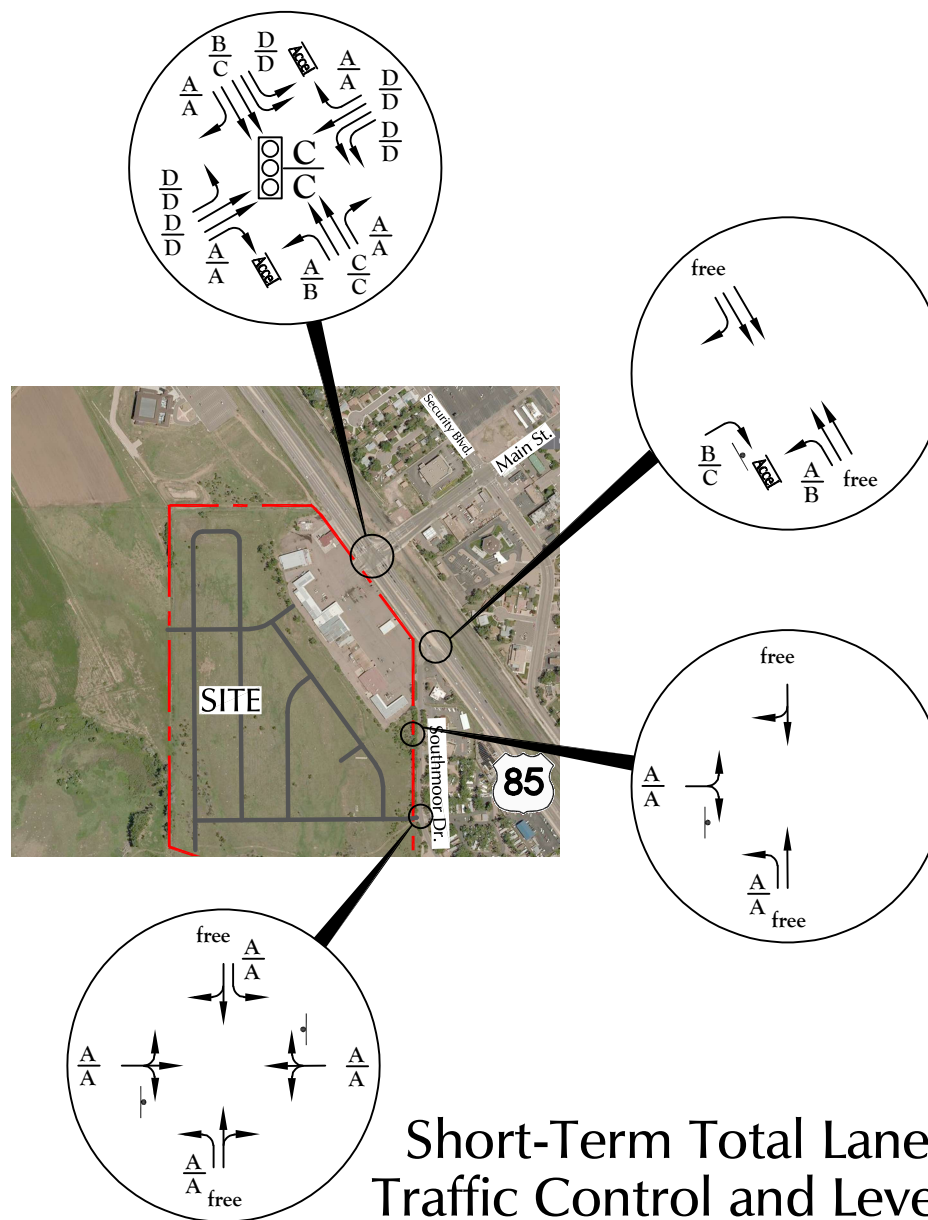
X,XXX = Average Daily Traffic (vehicles per day)



Figure 15a
**Short-Term
Total Traffic**
River Bend Crossing (LSC #184143)



Approximate Scale
Scale: 1" = 1,000'



LEGEND:

 = Stop Sign

 = Traffic Signal

$\frac{A}{B}$ = $\frac{\text{AM Individual Movement Peak-Hour Level of Service}}{\text{PM Individual Movement Peak-Hour Level of Service}}$

$\frac{C}{C}$ = $\frac{\text{AM Entire Intersection Peak-Hour Level of Service}}{\text{PM Entire Intersection Peak-Hour Level of Service}}$



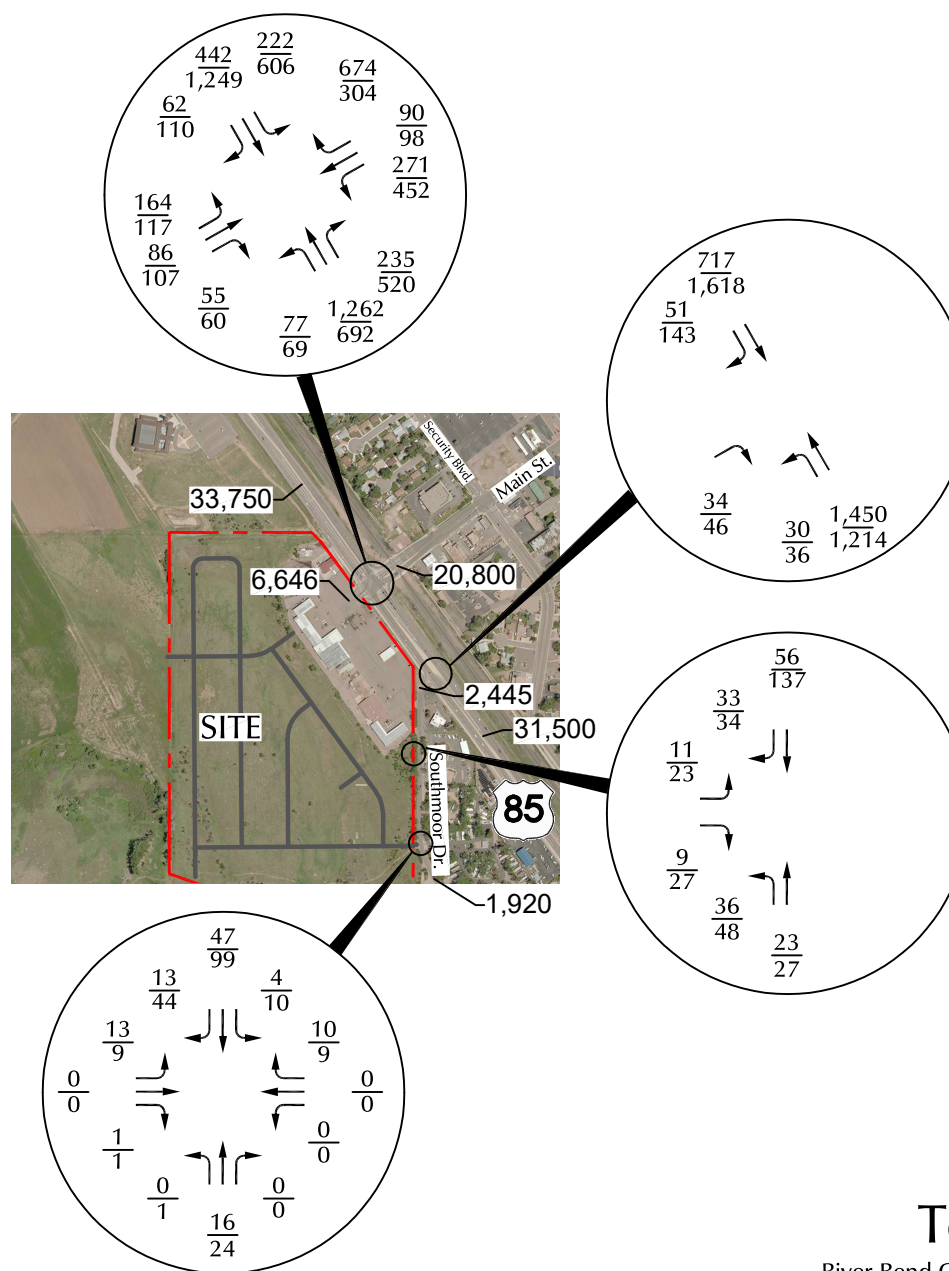
Short-Term Total Lane Geometry, Traffic Control and Level of Service

Figure 15b

River Bend Crossing (LSC #184143)



Approximate Scale
Scale: 1" = 1,000'



LEGEND:

$\frac{XX}{XX}$ = 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)



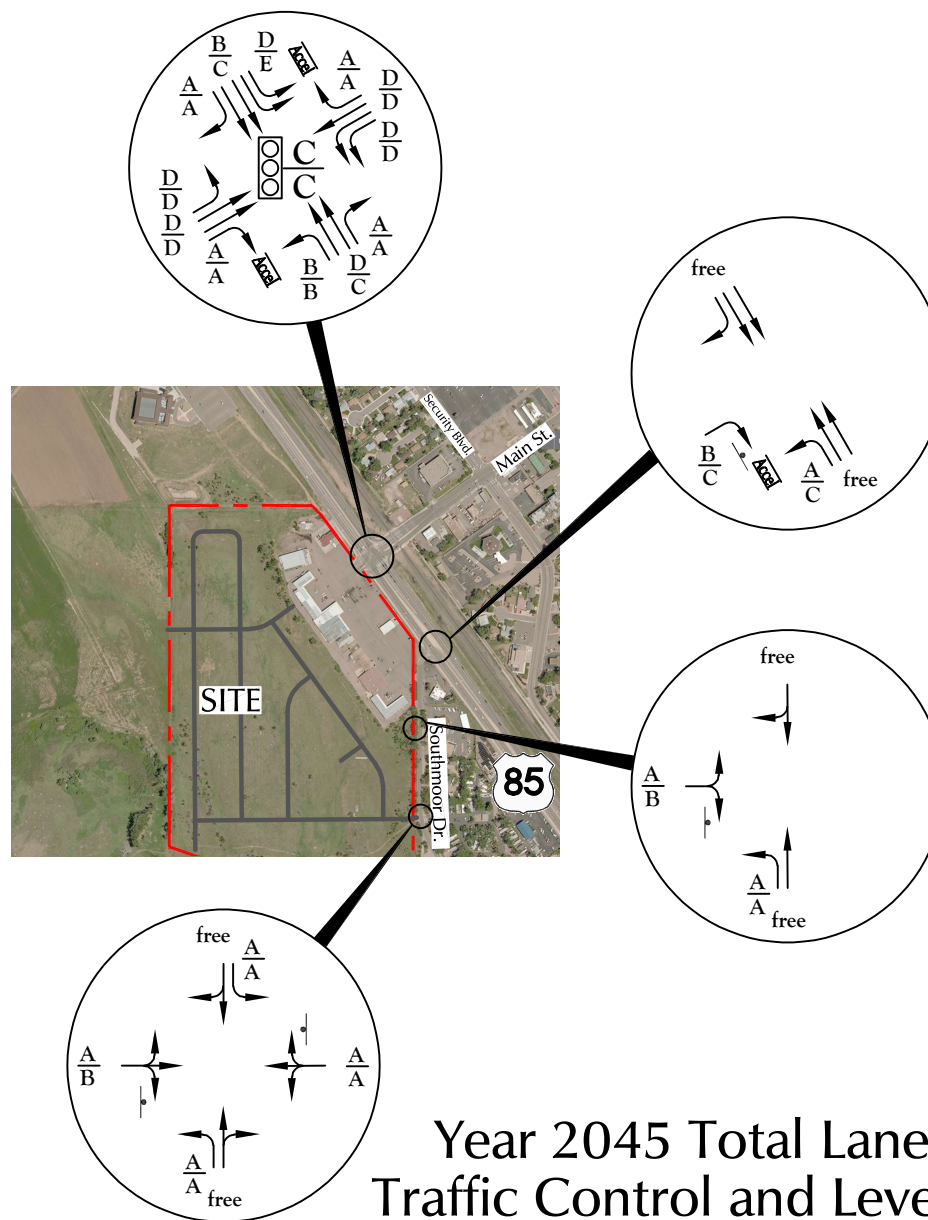
Figure 16a

Year 2045
Total Traffic

River Bend Crossing (LSC #184143)



Approximate Scale
Scale: 1" = 1,000'



LEGEND:

⊥ = Stop Sign

⊞ = Traffic Signal

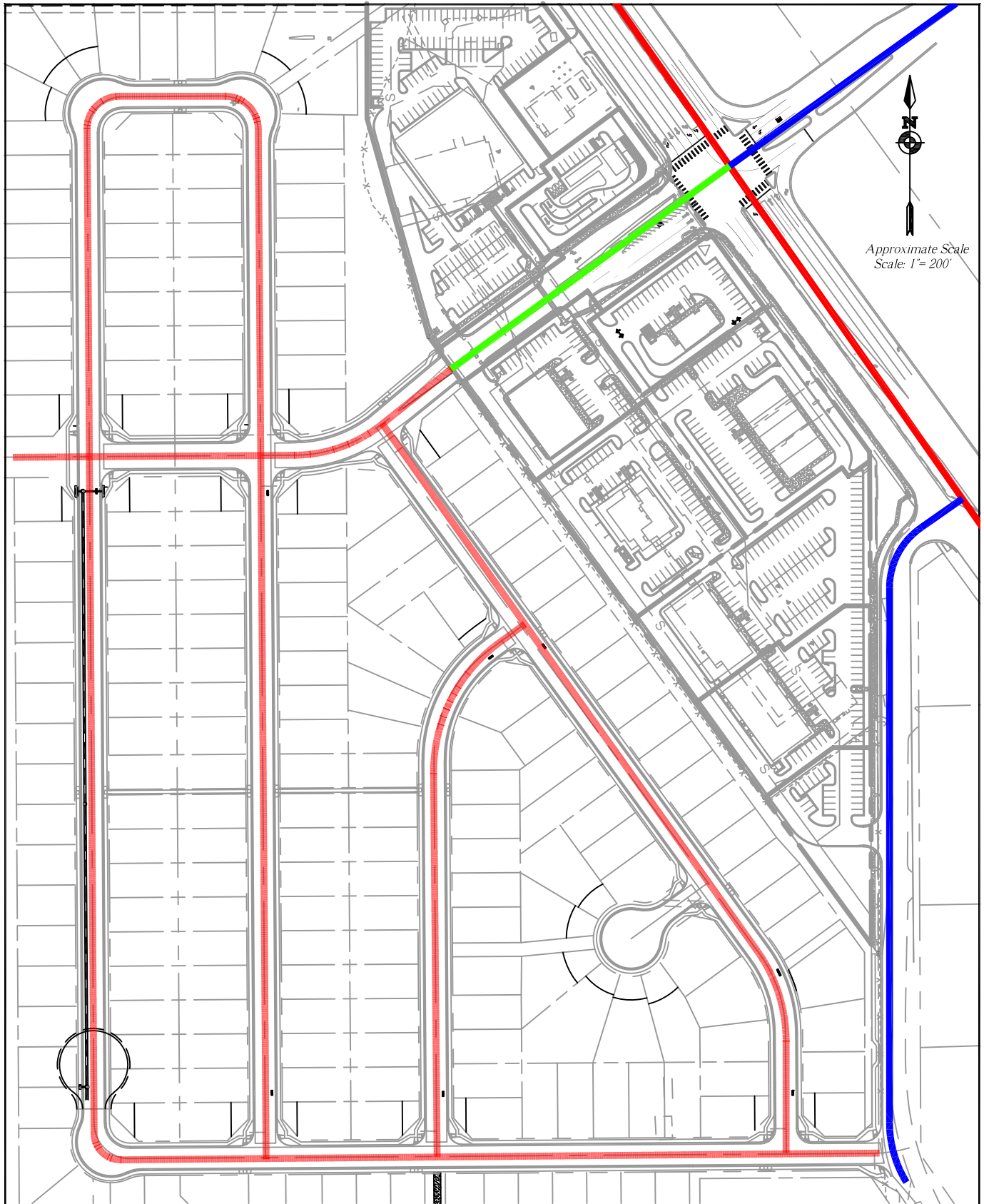
$\frac{A}{B}$ = $\frac{\text{AM Individual Movement Peak-Hour Level of Service}}{\text{PM Individual Movement Peak-Hour Level of Service}}$

$\frac{C}{C}$ = $\frac{\text{AM Entire Intersection Peak-Hour Level of Service}}{\text{PM Entire Intersection Peak-Hour Level of Service}}$

Year 2045 Total Lane Geometry, Traffic Control and Level of Service

River Bend Crossing (LSC #184143)

Figure 16b



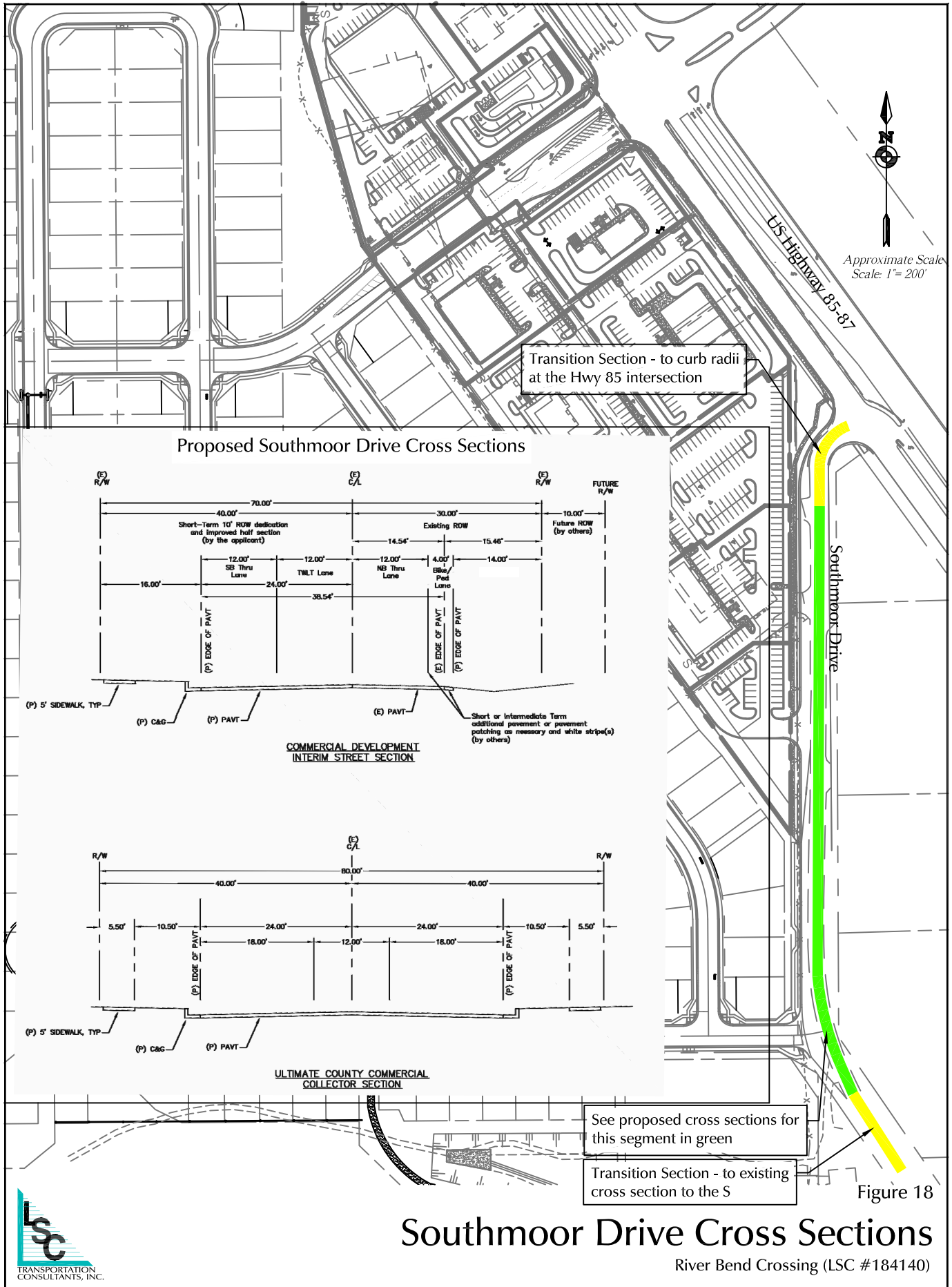
LEGEND:

- = Non-Rural Principal Highway (NR-A CDOT)
- = Urban Non-Residential Collector (El Paso County)
- = Community Collector (City of Fountain)
- = Urban Local (El Paso County)

Figure 17

Street Classifications

River Bend Crossing (LSC #184140)



Traffic Counts (2025 Counts)

LSC Transportation Consultants, Inc.

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

File Name : Hwy 85-87 - Main St AM 7-29-25

Site Code : S184143

Start Date : 7/29/2025

Page No : 1

Groups Printed- Unshifted

	Hwy 85/87 Southbound					Main St Westbound					Hwy 85/87 Northbound					Conoco Access Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:30	0	18	2	0	20	38	0	13	0	51	10	41	2	0	53	1	1	0	0	2	126
06:35	0	17	14	0	31	42	0	16	0	58	11	51	0	0	62	0	0	1	0	1	152
06:40	0	10	0	0	10	31	0	17	0	48	9	42	0	0	51	0	1	2	0	3	112
06:45	0	18	8	0	26	22	0	12	0	34	12	52	3	0	67	0	0	0	0	0	127
06:50	0	22	4	0	26	39	0	21	0	60	8	38	0	0	46	1	0	1	0	2	134
06:55	0	12	12	0	24	42	0	15	0	57	6	32	1	0	39	2	0	0	0	2	122
Total	0	97	40	0	137	214	0	94	0	308	56	256	6	0	318	4	2	4	0	10	773
07:00	2	26	6	0	34	46	0	19	0	65	14	45	2	0	61	2	0	1	0	3	163
07:05	0	15	8	0	23	27	0	10	0	37	10	54	0	0	64	2	0	1	0	3	127
07:10	0	18	3	0	21	38	0	18	0	56	16	58	1	0	75	1	0	0	0	1	153
07:15	0	27	6	0	33	44	0	11	0	55	8	76	1	0	85	0	1	0	0	1	174
07:20	0	24	9	0	33	31	0	13	0	44	13	48	1	0	62	1	1	1	0	3	142
07:25	0	15	8	1	24	35	0	10	0	45	15	54	0	0	69	0	1	1	0	2	140
07:30	0	21	4	0	25	41	0	24	0	65	13	53	1	0	67	0	0	0	0	0	157
07:35	0	29	4	0	33	40	0	16	0	56	13	72	0	0	85	0	0	0	0	0	174
07:40	0	30	12	0	42	36	2	18	0	56	16	71	0	0	87	0	0	1	0	1	186
07:45	0	25	10	0	35	23	0	18	0	41	16	69	0	0	85	0	0	2	0	2	163
07:50	0	37	7	0	44	22	0	17	0	39	16	41	1	0	58	0	0	1	0	1	142
07:55	0	21	13	0	34	25	0	16	0	41	11	36	1	0	48	2	0	0	0	2	125
Total	2	288	90	1	381	408	2	190	0	600	161	677	8	0	846	8	3	8	0	19	1846
08:00	0	23	9	0	32	21	0	21	0	42	16	41	0	0	57	1	0	0	0	1	132
08:05	0	21	13	0	34	26	0	14	0	40	13	45	0	0	58	0	0	0	0	0	132
08:10	0	18	15	0	33	27	1	18	0	46	11	36	0	0	47	1	0	0	0	1	127
08:15	0	28	10	0	38	32	2	21	0	55	13	36	0	0	49	1	1	1	0	3	145
08:20	0	22	11	0	33	22	0	14	0	36	11	47	0	0	58	3	0	1	0	4	131
08:25	0	24	14	0	38	31	0	14	0	45	14	40	2	0	56	0	0	0	0	0	139
Grand Total	2	521	202	1	726	781	5	386	0	1172	295	1178	16	0	1489	18	6	14	0	38	3425
Apprch %	0.3	71.8	27.8	0.1		66.6	0.4	32.9	0		19.8	79.1	1.1	0		47.4	15.8	36.8	0		
Total %	0.1	15.2	5.9	0	21.2	22.8	0.1	11.3	0	34.2	8.6	34.4	0.5	0	43.5	0.5	0.2	0.4	0	1.1	

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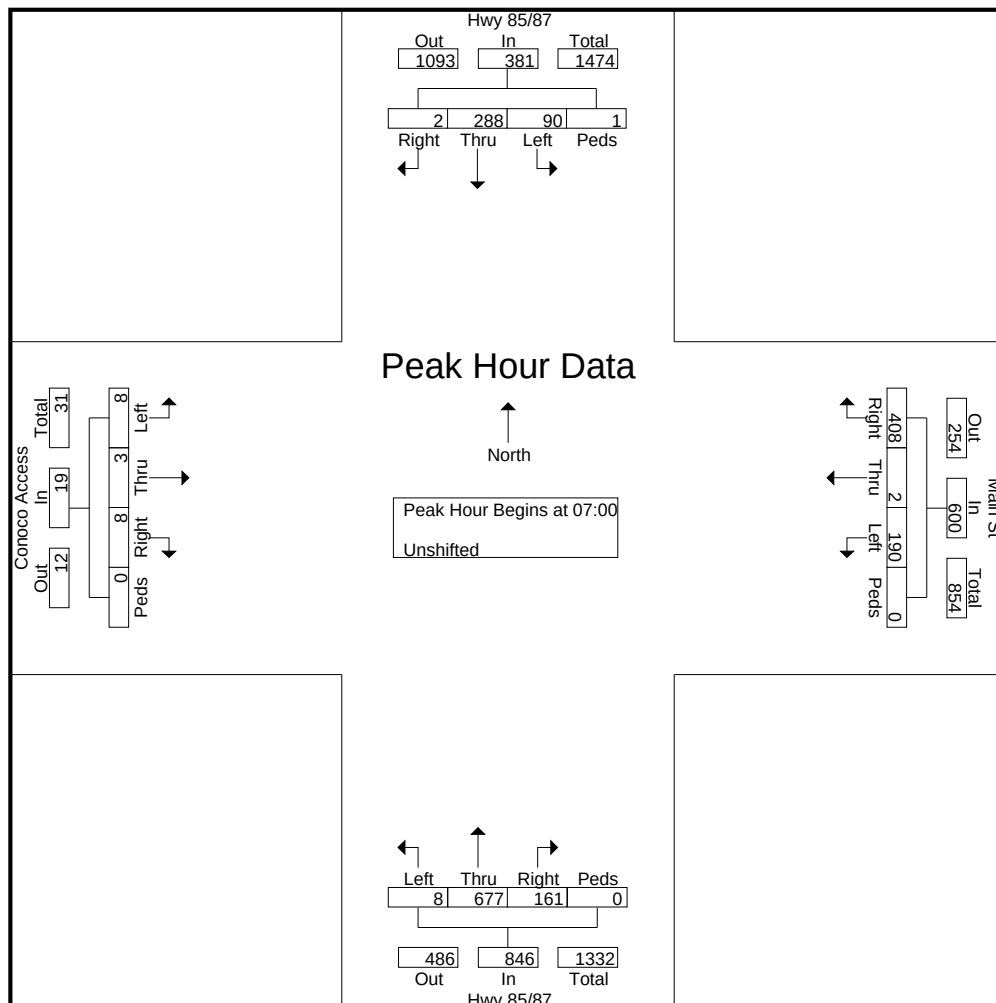
File Name : Hwy 85-87 - Main St AM 7-29-25

Site Code : S184143

Start Date : 7/29/2025

Page No : 2

	Hwy 85/87 Southbound					Main St Westbound					Hwy 85/87 Northbound					Conoco Access Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 to 08:25 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00																					
07:00	2	26	6	0	34	46	0	19	0	65	14	45	2	0	61	2	0	1	0	3	163
07:05	0	15	8	0	23	27	0	10	0	37	10	54	0	0	64	2	0	1	0	3	127
07:10	0	18	3	0	21	38	0	18	0	56	16	58	1	0	75	1	0	0	0	1	153
07:15	0	27	6	0	33	44	0	11	0	55	8	76	1	0	85	0	1	0	0	1	174
07:20	0	24	9	0	33	31	0	13	0	44	13	48	1	0	62	1	1	1	0	3	142
07:25	0	15	8	1	24	35	0	10	0	45	15	54	0	0	69	0	1	1	0	2	140
07:30	0	21	4	0	25	41	0	24	0	65	13	53	1	0	67	0	0	0	0	0	157
07:35	0	29	4	0	33	40	0	16	0	56	13	72	0	0	85	0	0	0	0	0	174
07:40	0	30	12	0	42	36	2	18	0	56	16	71	0	0	87	0	0	1	0	1	186
07:45	0	25	10	0	35	23	0	18	0	41	16	69	0	0	85	0	0	2	0	2	163
07:50	0	37	7	0	44	22	0	17	0	39	16	41	1	0	58	0	0	1	0	1	142
07:55	0	21	13	0	34	25	0	16	0	41	11	36	1	0	48	2	0	0	0	2	125
Total Volume	2	288	90	1	381	408	2	190	0	600	161	677	8	0	846	8	3	8	0	19	1846
% App. Total	0.5	75.6	23.6	0.3		68	0.3	31.7	0		19	80	0.9	0		42.1	15.8	42.1	0		
PHF	.083	.649	.577	.083	.722	.739	.083	.660	.000	.769	.839	.742	.333	.000	.810	.333	.250	.333	.000	.528	.827



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2504 E. Pikes Peak Ave, Suite 304
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719-633-2868

File Name : Hwy 85-87 - Main St AM 7-29-25

Site Code : S184143

Start Date : 7/29/2025

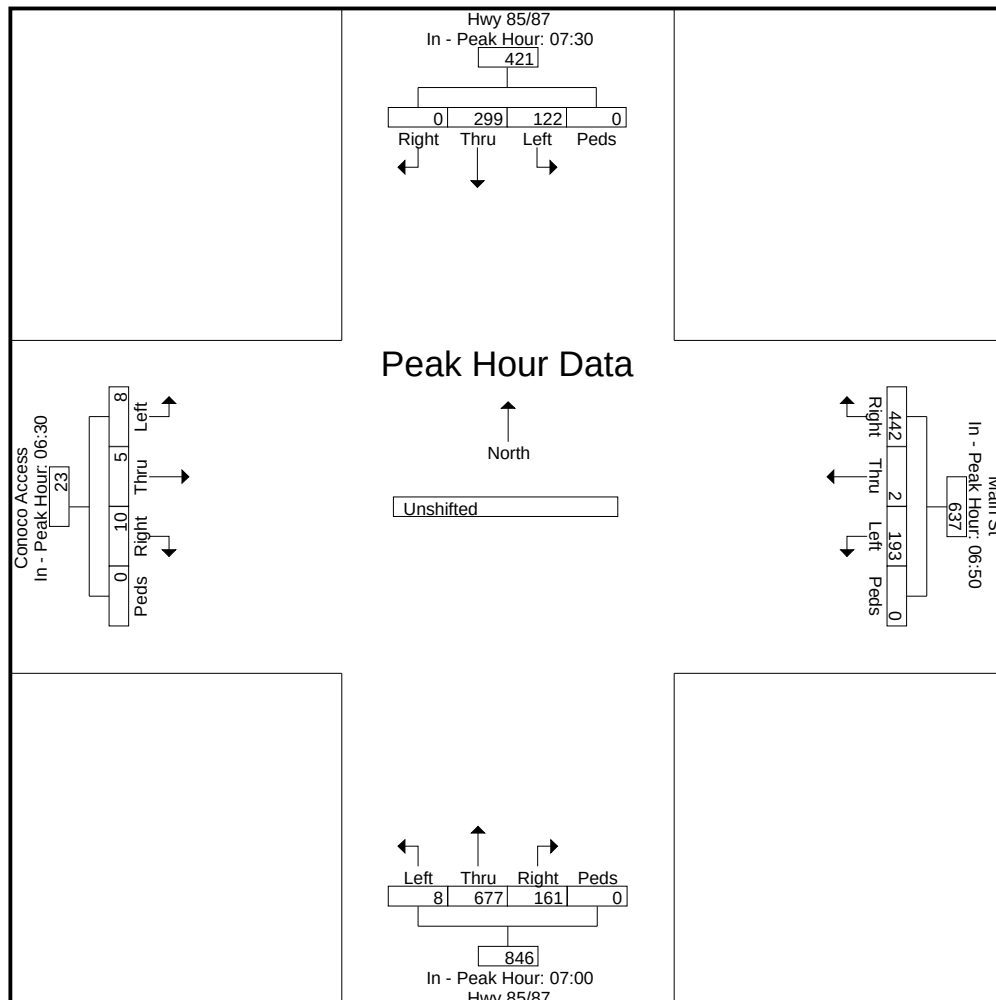
Page No : 3

	Hwy 85/87 Southbound					Main St Westbound					Hwy 85/87 Northbound					Conoco Access Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total

Peak Hour Analysis From 06:30 to 08:25 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30					06:50					07:00					06:30				
+0 mins.	0	21	4	0	25	39	0	21	0	60	14	45	2	0	61	1	1	0	0	2
+5 mins.	0	29	4	0	33	42	0	15	0	57	10	54	0	0	64	0	0	1	0	1
+10 mins.	0	30	12	0	42	46	0	19	0	65	16	58	1	0	75	0	1	2	0	3
+15 mins.	0	25	10	0	35	27	0	10	0	37	8	76	1	0	85	0	0	0	0	0
+20 mins.	0	37	7	0	44	38	0	18	0	56	13	48	1	0	62	1	0	1	0	2
+25 mins.	0	21	13	0	34	44	0	11	0	55	15	54	0	0	69	2	0	0	0	2
+30 mins.	0	23	9	0	32	31	0	13	0	44	13	53	1	0	67	2	0	1	0	3
+35 mins.	0	21	13	0	34	35	0	10	0	45	13	72	0	0	85	2	0	1	0	3
+40 mins.	0	18	15	0	33	41	0	24	0	65	16	71	0	0	87	1	0	0	0	1
+45 mins.	0	28	10	0	38	40	0	16	0	56	16	69	0	0	85	0	1	0	0	1
+50 mins.	0	22	11	0	33	36	2	18	0	56	16	41	1	0	58	1	1	1	0	3
+55 mins.	0	24	14	0	38	23	0	18	0	41	11	36	1	0	48	0	1	1	0	2
Total Volume	0	299	122	0	421	442	2	193	0	637	161	677	8	0	846	10	5	8	0	23
% App. Total	0	71	29	0		69.4	0.3	30.3	0		19	80	0.9	0		43.5	21.7	34.8	0	
PHF	.000	.673	.678	.000	.797	.801	.083	.670	.000	.817	.839	.742	.333	.000	.810	.417	.417	.333	.000	.639



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2504 E. Pikes Peak Ave, Suite 304
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719-633-2868

File Name : Hwy 85-87 - Main St PM 7-29-25

Site Code : S184143

Start Date : 7/29/2025

Page No : 1

Groups Printed- Unshifted

	Hwy 85/87 Southbound					Main St Westbound					Hwy 85/87 Northbound					Conoco Access Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
16:00	1	61	34	0	96	16	0	36	0	52	31	47	2	0	80	0	0	0	0	0	228
16:05	1	80	42	0	123	18	0	30	0	48	22	37	1	0	60	0	0	1	0	1	232
16:10	0	75	41	0	116	23	0	29	0	52	27	46	1	0	74	1	2	1	0	4	246
16:15	0	83	39	0	122	19	1	27	0	47	32	43	0	0	75	2	1	0	0	3	247
16:20	0	64	42	0	106	20	1	23	0	44	22	29	1	0	52	1	0	0	0	1	203
16:25	0	70	38	0	108	11	2	33	0	46	37	31	0	0	68	1	0	0	0	1	223
16:30	0	71	37	0	108	13	0	20	0	33	29	37	1	0	67	0	1	0	0	1	209
16:35	0	60	37	0	97	25	0	32	0	57	30	44	0	0	74	3	0	1	0	4	232
16:40	0	71	38	0	109	21	0	25	0	46	31	45	0	0	76	3	0	0	0	3	234
16:45	1	78	40	0	119	14	0	29	0	43	50	35	0	0	85	1	1	0	0	2	249
16:50	2	57	47	0	106	14	0	25	0	39	34	29	0	0	63	4	0	0	0	4	212
16:55	0	60	36	0	96	18	0	24	0	42	24	29	1	0	54	2	2	0	0	4	196
Total	5	830	471	0	1306	212	4	333	0	549	369	452	7	0	828	18	7	3	0	28	2711
17:00	0	59	34	0	93	14	0	34	1	49	23	35	0	0	58	1	1	1	0	3	203
17:05	1	74	40	0	115	30	0	28	0	58	30	34	0	0	64	0	0	1	0	1	238
17:10	0	80	41	0	121	21	0	19	0	40	32	42	0	0	74	1	0	0	0	1	236
17:15	1	65	41	0	107	18	0	38	0	56	31	32	2	0	65	1	0	1	0	2	230
17:20	0	90	39	0	129	17	0	17	0	34	37	35	0	0	72	1	1	1	0	3	238
17:25	0	51	44	0	95	19	1	44	0	64	33	43	0	0	76	0	0	1	0	1	236
17:30	0	89	38	0	127	19	0	35	0	54	31	36	0	0	67	0	0	0	0	0	248
17:35	0	69	30	0	99	16	0	32	0	48	29	29	2	0	60	0	0	1	0	1	208
17:40	0	70	36	0	106	18	0	24	0	42	26	32	0	0	58	2	1	0	0	3	209
17:45	0	61	20	0	81	12	0	27	0	39	41	27	1	0	69	0	0	1	0	1	190
17:50	0	37	27	0	64	18	0	27	0	45	17	22	0	0	39	1	0	0	0	1	149
17:55	0	54	28	0	82	13	0	26	0	39	21	33	0	0	54	0	0	0	0	0	175
Total	2	799	418	0	1219	215	1	351	1	568	351	400	5	0	756	7	3	7	0	17	2560
Grand Total	7	1629	889	0	2525	427	5	684	1	1117	720	852	12	0	1584	25	10	10	0	45	5271
Apprch %	0.3	64.5	35.2	0		38.2	0.4	61.2	0.1		45.5	53.8	0.8	0		55.6	22.2	22.2	0		
Total %	0.1	30.9	16.9	0	47.9	8.1	0.1	13	0	21.2	13.7	16.2	0.2	0	30.1	0.5	0.2	0.2	0	0.9	

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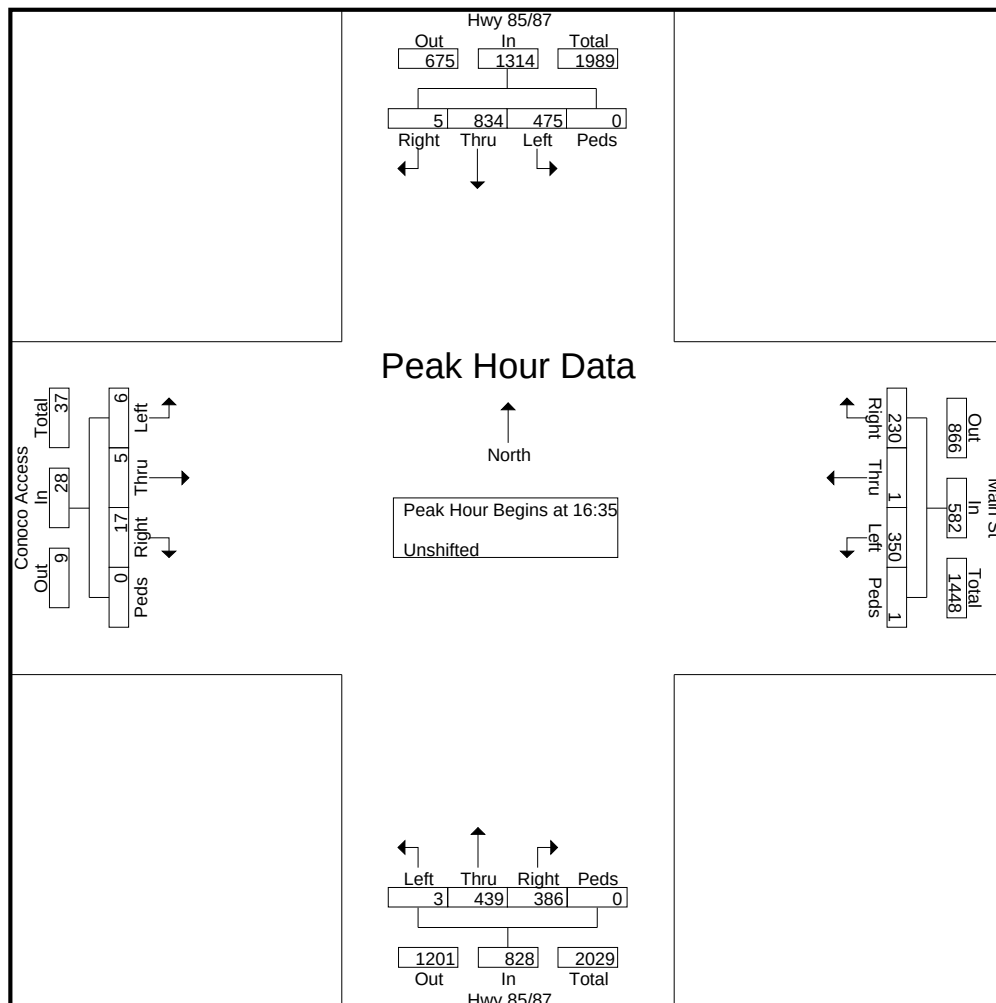
File Name : Hwy 85-87 - Main St PM 7-29-25

Site Code : S184143

Start Date : 7/29/2025

Page No : 2

	Hwy 85/87 Southbound					Main St Westbound					Hwy 85/87 Northbound					Conoco Access Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:55 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:35																					
16:35	0	60	37	0	97	25	0	32	0	57	30	44	0	0	74	3	0	1	0	4	232
16:40	0	71	38	0	109	21	0	25	0	46	31	45	0	0	76	3	0	0	0	3	234
16:45	1	78	40	0	119	14	0	29	0	43	50	35	0	0	85	1	1	0	0	2	249
16:50	2	57	47	0	106	14	0	25	0	39	34	29	0	0	63	4	0	0	0	4	212
16:55	0	60	36	0	96	18	0	24	0	42	24	29	1	0	54	2	2	0	0	4	196
17:00	0	59	34	0	93	14	0	34	1	49	23	35	0	0	58	1	1	1	0	3	203
17:05	1	74	40	0	115	30	0	28	0	58	30	34	0	0	64	0	0	1	0	1	238
17:10	0	80	41	0	121	21	0	19	0	40	32	42	0	0	74	1	0	0	0	1	236
17:15	1	65	41	0	107	18	0	38	0	56	31	32	2	0	65	1	0	1	0	2	230
17:20	0	90	39	0	129	17	0	17	0	34	37	35	0	0	72	1	1	1	0	3	238
17:25	0	51	44	0	95	19	1	44	0	64	33	43	0	0	76	0	0	1	0	1	236
17:30	0	89	38	0	127	19	0	35	0	54	31	36	0	0	67	0	0	0	0	0	248
Total Volume	5	834	475	0	1314	230	1	350	1	582	386	439	3	0	828	17	5	6	0	28	2752
% App. Total	0.4	63.5	36.1	0		39.5	0.2	60.1	0.2		46.6	53	0.4	0		60.7	17.9	21.4	0		
PHF	.208	.772	.842	.000	.849	.639	.083	.663	.083	.758	.643	.813	.125	.000	.812	.354	.208	.500	.000	.583	.921



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2504 E. Pikes Peak Ave, Suite 304
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719-633-2868

File Name : Hwy 85-87 - Main St PM 7-29-25

Site Code : S184143

Start Date : 7/29/2025

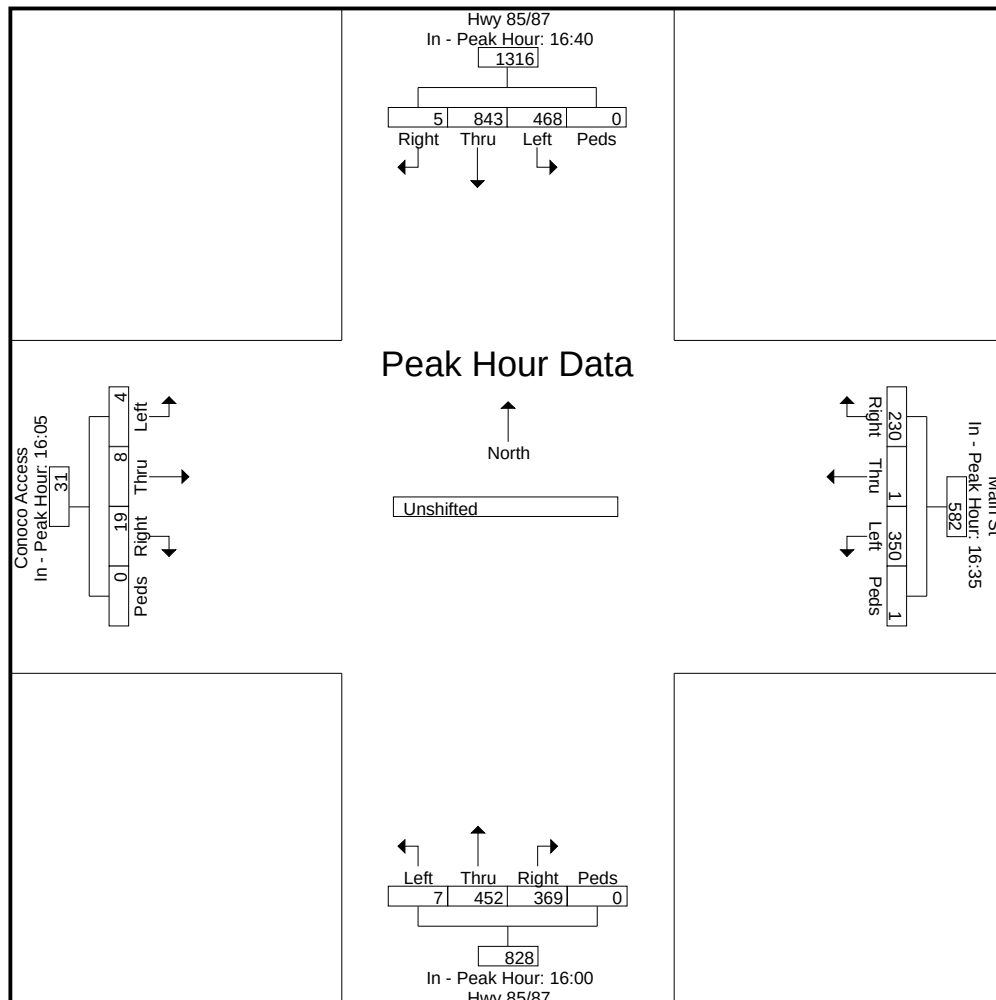
Page No : 3

	Hwy 85/87 Southbound					Main St Westbound					Hwy 85/87 Northbound					Conoco Access Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total

Peak Hour Analysis From 16:00 to 17:55 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:40					16:35					16:00					16:05				
+0 mins.	0	71	38	0	109	25	0	32	0	57	31	47	2	0	80	0	0	1	0	1
+5 mins.	1	78	40	0	119	21	0	25	0	46	22	37	1	0	60	1	2	1	0	4
+10 mins.	2	57	47	0	106	14	0	29	0	43	27	46	1	0	74	2	1	0	0	3
+15 mins.	0	60	36	0	96	14	0	25	0	39	32	43	0	0	75	1	0	0	0	1
+20 mins.	0	59	34	0	93	18	0	24	0	42	22	29	1	0	52	1	0	0	0	1
+25 mins.	1	74	40	0	115	14	0	34	1	49	37	31	0	0	68	0	1	0	0	1
+30 mins.	0	80	41	0	121	30	0	28	0	58	29	37	1	0	67	3	0	1	0	4
+35 mins.	1	65	41	0	107	21	0	19	0	40	30	44	0	0	74	3	0	0	0	3
+40 mins.	0	90	39	0	129	18	0	38	0	56	31	45	0	0	76	1	1	0	0	2
+45 mins.	0	51	44	0	95	17	0	17	0	34	50	35	0	0	85	4	0	0	0	4
+50 mins.	0	89	38	0	127	19	1	44	0	64	34	29	0	0	63	2	2	0	0	4
+55 mins.	0	69	30	0	99	19	0	35	0	54	24	29	1	0	54	1	1	1	0	3
Total Volume	5	843	468	0	1316	230	1	350	1	582	369	452	7	0	828	19	8	4	0	31
% App. Total	0.4	64.1	35.6	0		39.5	0.2	60.1	0.2		44.6	54.6	0.8	0		61.3	25.8	12.9	0	
PHF	.208	.781	.830	.000	.850	.639	.083	.663	.083	.758	.615	.801	.292	.000	.812	.396	.333	.333	.000	.646



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2504 E. Pikes Peak Ave, Suite 304
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719-633-2868

File Name : Hwy 85-87 - Southmoor Dr AM 7-31-25

Site Code : S184143

Start Date : 7/31/2025

Page No : 1

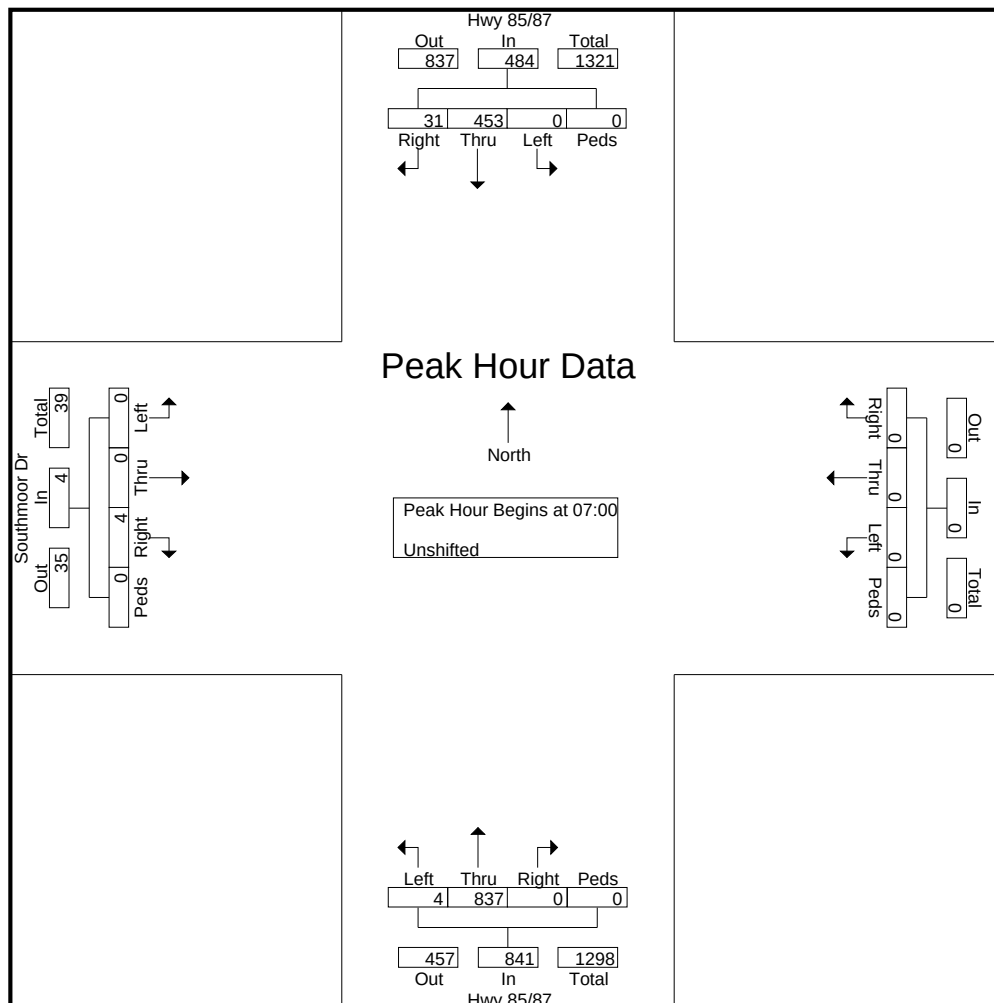
Groups Printed- Unshifted

	Hwy 85/87 Southbound					Westbound					Hwy 85/87 Northbound					Southmoor Dr Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:30	0	22	0	0	22	0	0	0	0	0	0	48	1	0	49	0	0	0	0	0	71
06:35	4	24	0	0	28	0	0	0	0	0	0	45	0	0	45	0	0	0	0	0	73
06:40	2	25	0	0	27	0	0	0	0	0	0	58	0	0	58	0	0	0	0	0	85
06:45	4	43	0	0	47	0	0	0	0	0	0	59	0	0	59	0	0	0	0	0	106
06:50	4	29	0	0	33	0	0	0	0	0	0	66	0	0	66	1	0	0	0	1	100
06:55	4	28	0	0	32	0	0	0	0	0	0	40	1	0	41	1	0	0	0	1	74
Total	18	171	0	0	189	0	0	0	0	0	0	316	2	0	318	2	0	0	0	2	509
07:00	4	36	0	0	40	0	0	0	0	0	0	80	0	0	80	0	0	0	0	0	120
07:05	0	25	0	0	25	0	0	0	0	0	0	70	1	0	71	1	0	0	0	1	97
07:10	0	43	0	0	43	0	0	0	0	0	0	53	0	0	53	0	0	0	0	0	96
07:15	3	32	0	0	35	0	0	0	0	0	0	53	0	0	53	0	0	0	0	0	88
07:20	2	47	0	0	49	0	0	0	0	0	0	57	0	0	57	0	0	0	0	0	106
07:25	2	44	0	0	46	0	0	0	0	0	0	82	1	0	83	0	0	0	0	0	129
07:30	2	24	0	0	26	0	0	0	0	0	0	73	0	0	73	0	0	0	0	0	99
07:35	0	45	0	0	45	0	0	0	0	0	0	72	0	0	72	1	0	0	0	1	118
07:40	4	42	0	0	46	0	0	0	0	0	0	92	0	0	92	0	0	0	0	0	138
07:45	7	40	0	0	47	0	0	0	0	0	0	68	0	0	68	0	0	0	0	0	115
07:50	5	36	0	0	41	0	0	0	0	0	0	74	0	0	74	1	0	0	0	1	116
07:55	2	39	0	0	41	0	0	0	0	0	0	63	2	0	65	1	0	0	0	1	107
Total	31	453	0	0	484	0	0	0	0	0	0	837	4	0	841	4	0	0	0	4	1329
08:00	4	33	0	0	37	0	0	0	0	0	0	52	0	0	52	2	0	0	0	2	91
08:05	2	38	0	0	40	0	0	0	0	0	0	57	1	0	58	0	0	0	0	0	98
08:10	3	41	0	0	44	0	0	0	0	0	0	64	0	0	64	1	0	0	0	1	109
08:15	1	31	0	0	32	0	0	0	0	0	0	55	0	0	55	0	0	0	0	0	87
08:20	3	40	0	0	43	0	0	0	0	0	0	51	0	0	51	0	0	0	0	0	94
08:25	6	41	0	0	47	0	0	0	0	0	0	48	1	0	49	0	0	0	0	0	96
Grand Total	68	848	0	0	916	0	0	0	0	0	0	1480	8	0	1488	9	0	0	0	9	2413
Apprch %	7.4	92.6	0	0		0	0	0	0	0	0	99.5	0.5	0		100	0	0	0		
Total %	2.8	35.1	0	0	38	0	0	0	0	0	0	61.3	0.3	0	61.7	0.4	0	0	0	0.4	

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	Hwy 85/87 Southbound					Westbound					Hwy 85/87 Northbound					Southmoor Dr Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 to 08:25 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00																					
07:00	4	36	0	0	40	0	0	0	0	0	0	80	0	0	80	0	0	0	0	0	120
07:05	0	25	0	0	25	0	0	0	0	0	0	70	1	0	71	1	0	0	0	1	97
07:10	0	43	0	0	43	0	0	0	0	0	0	53	0	0	53	0	0	0	0	0	96
07:15	3	32	0	0	35	0	0	0	0	0	0	53	0	0	53	0	0	0	0	0	88
07:20	2	47	0	0	49	0	0	0	0	0	0	57	0	0	57	0	0	0	0	0	106
07:25	2	44	0	0	46	0	0	0	0	0	0	82	1	0	83	0	0	0	0	0	129
07:30	2	24	0	0	26	0	0	0	0	0	0	73	0	0	73	0	0	0	0	0	99
07:35	0	45	0	0	45	0	0	0	0	0	0	72	0	0	72	1	0	0	0	1	118
07:40	4	42	0	0	46	0	0	0	0	0	0	92	0	0	92	0	0	0	0	0	138
07:45	7	40	0	0	47	0	0	0	0	0	0	68	0	0	68	0	0	0	0	0	115
07:50	5	36	0	0	41	0	0	0	0	0	0	74	0	0	74	1	0	0	0	1	116
07:55	2	39	0	0	41	0	0	0	0	0	0	63	2	0	65	1	0	0	0	1	107
Total Volume	31	453	0	0	484	0	0	0	0	0	0	837	4	0	841	4	0	0	0	4	1329
% App. Total	6.4	93.6	0	0		0	0	0	0			99.5	0.5	0		100	0	0	0		
PHF	.369	.803	.000	.000	.823	.000	.000	.000	.000	.000	.000	.758	.167	.000	.762	.333	.000	.000	.000	.333	.803



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File Name : Hwy 85-87 - Southmoor Dr AM 7-31-25

Site Code : S184143

Start Date : 7/31/2025

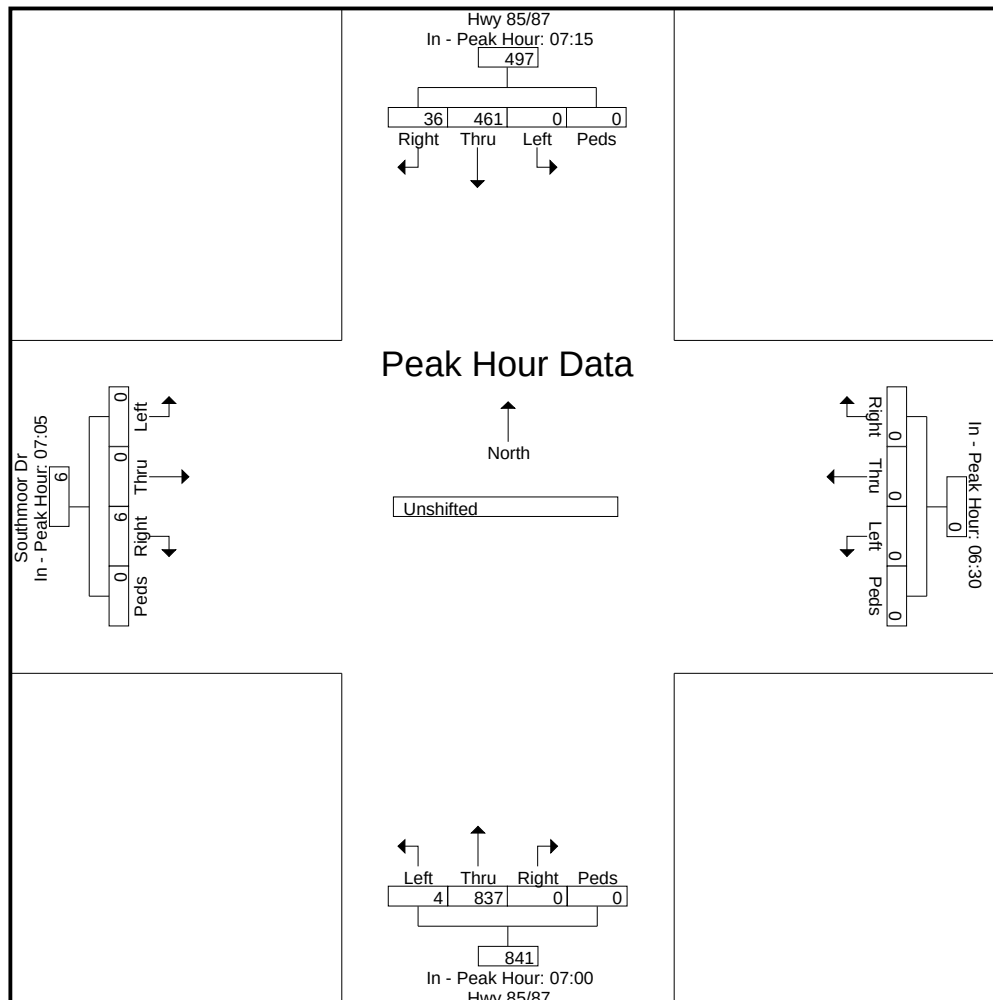
Page No : 3

	Hwy 85/87 Southbound					Westbound					Hwy 85/87 Northbound					Southmoor Dr Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total

Peak Hour Analysis From 06:30 to 08:25 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15					06:30					07:00					07:05				
+0 mins.	3	32	0	0	35	0	0	0	0	0	0	80	0	0	80	1	0	0	0	1
+5 mins.	2	47	0	0	49	0	0	0	0	0	0	70	1	0	71	0	0	0	0	0
+10 mins.	2	44	0	0	46	0	0	0	0	0	0	53	0	0	53	0	0	0	0	0
+15 mins.	2	24	0	0	26	0	0	0	0	0	0	53	0	0	53	0	0	0	0	0
+20 mins.	0	45	0	0	45	0	0	0	0	0	0	57	0	0	57	0	0	0	0	0
+25 mins.	4	42	0	0	46	0	0	0	0	0	0	82	1	0	83	0	0	0	0	0
+30 mins.	7	40	0	0	47	0	0	0	0	0	0	73	0	0	73	1	0	0	0	1
+35 mins.	5	36	0	0	41	0	0	0	0	0	0	72	0	0	72	0	0	0	0	0
+40 mins.	2	39	0	0	41	0	0	0	0	0	0	92	0	0	92	0	0	0	0	0
+45 mins.	4	33	0	0	37	0	0	0	0	0	0	68	0	0	68	1	0	0	0	1
+50 mins.	2	38	0	0	40	0	0	0	0	0	0	74	0	0	74	1	0	0	0	1
+55 mins.	3	41	0	0	44	0	0	0	0	0	0	63	2	0	65	2	0	0	0	2
Total Volume	36	461	0	0	497	0	0	0	0	0	0	837	4	0	841	6	0	0	0	6
% App. Total	7.2	92.8	0	0		0	0	0	0		0	99.5	0.5	0		100	0	0	0	
PHF	.429	.817	.000	.000	.845	.000	.000	.000	.000	.000	.000	.758	.167	.000	.762	.250	.000	.000	.000	.250



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File Name : Hwy 85-87 - Southmoor Dr PM 7-29-25

Site Code : S184143

Start Date : 7/29/2025

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Groups Printed- Unshifted

	Hwy 85/87 Southbound					Westbound					Hwy 85/87 Northbound					Southmoor Dr Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
16:00	11	311	0	0	322	0	0	0	0	0	0	211	1	0	212	0	0	0	0	0	534
16:15	8	300	0	0	308	0	0	0	0	0	0	195	1	0	196	5	0	0	0	5	509
16:30	6	277	0	0	283	0	0	0	0	0	0	216	0	0	216	1	0	0	0	1	500
16:45	17	273	0	0	290	0	0	0	0	0	0	201	0	0	201	0	0	0	0	0	491
Total	42	1161	0	0	1203	0	0	0	0	0	0	823	2	0	825	6	0	0	0	6	2034
17:00	13	294	0	0	307	0	0	0	0	0	0	196	0	0	196	1	0	0	0	1	504
17:15	6	305	0	0	311	0	0	0	0	0	0	213	2	0	215	2	0	0	0	2	528
17:30	8	319	0	0	327	0	0	0	0	0	0	194	1	0	195	0	0	0	0	0	522
17:45	7	232	0	0	239	0	0	0	0	0	0	161	2	0	163	4	0	0	0	4	406
Total	34	1150	0	0	1184	0	0	0	0	0	0	764	5	0	769	7	0	0	0	7	1960
Grand Total	76	2311	0	0	2387	0	0	0	0	0	0	1587	7	0	1594	13	0	0	0	13	3994
Apprch %	3.2	96.8	0	0		0	0	0	0		0	99.6	0.4	0		100	0	0	0		
Total %	1.9	57.9	0	0	59.8	0	0	0	0	0	0	39.7	0.2	0	39.9	0.3	0	0	0	0.3	

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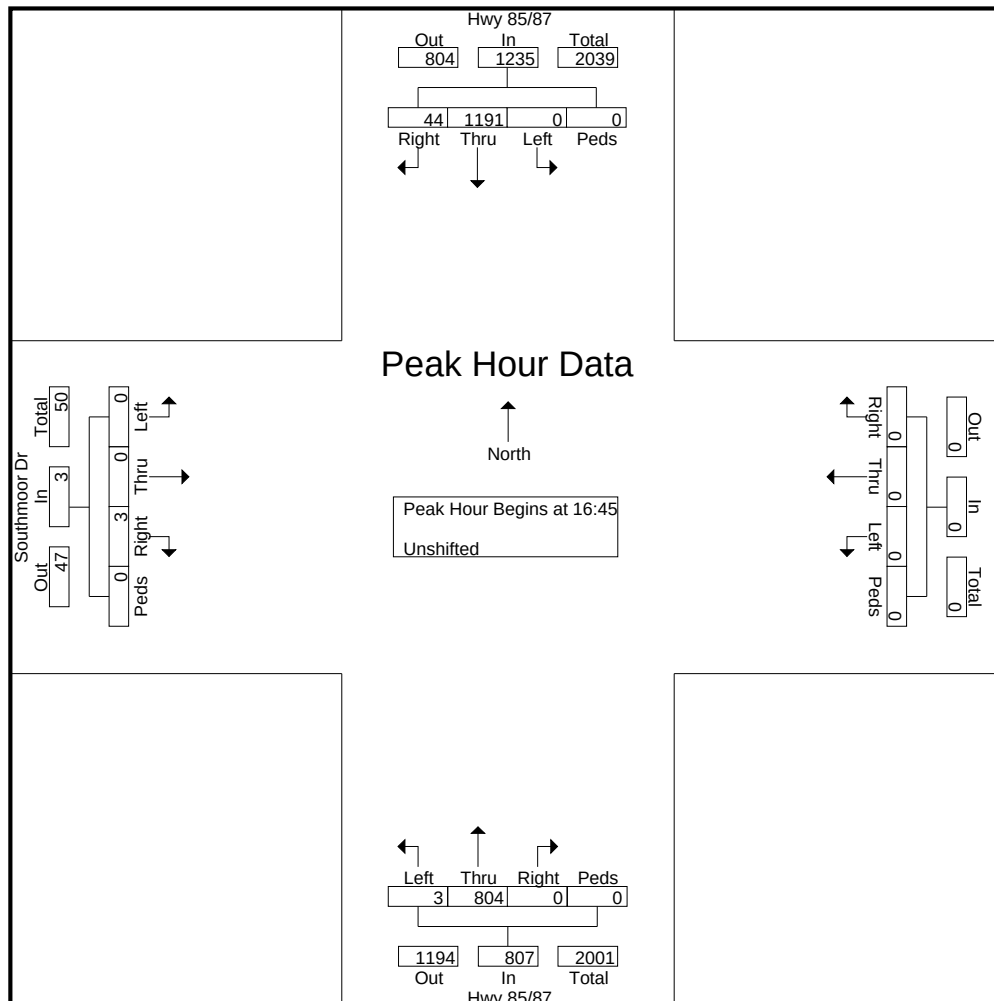
File Name : Hwy 85-87 - Southmoor Dr PM 7-29-25

Site Code : S184143

Start Date : 7/29/2025

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	Hwy 85/87 Southbound					Westbound					Hwy 85/87 Northbound					Southmoor Dr Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:45																					
16:45	17	273	0	0	290	0	0	0	0	0	0	201	0	0	201	0	0	0	0	0	491
17:00	13	294	0	0	307	0	0	0	0	0	0	196	0	0	196	1	0	0	0	1	504
17:15	6	305	0	0	311	0	0	0	0	0	0	213	2	0	215	2	0	0	0	2	528
17:30	8	319	0	0	327	0	0	0	0	0	0	194	1	0	195	0	0	0	0	0	522
Total Volume	44	1191	0	0	1235	0	0	0	0	0	0	804	3	0	807	3	0	0	0	3	2045
% App. Total	3.6	96.4	0	0		0	0	0	0		0	99.6	0.4	0		100	0	0	0		
PHF	.647	.933	.000	.000	.944	.000	.000	.000	.000	.000	.000	.944	.375	.000	.938	.375	.000	.000	.000	.375	.968



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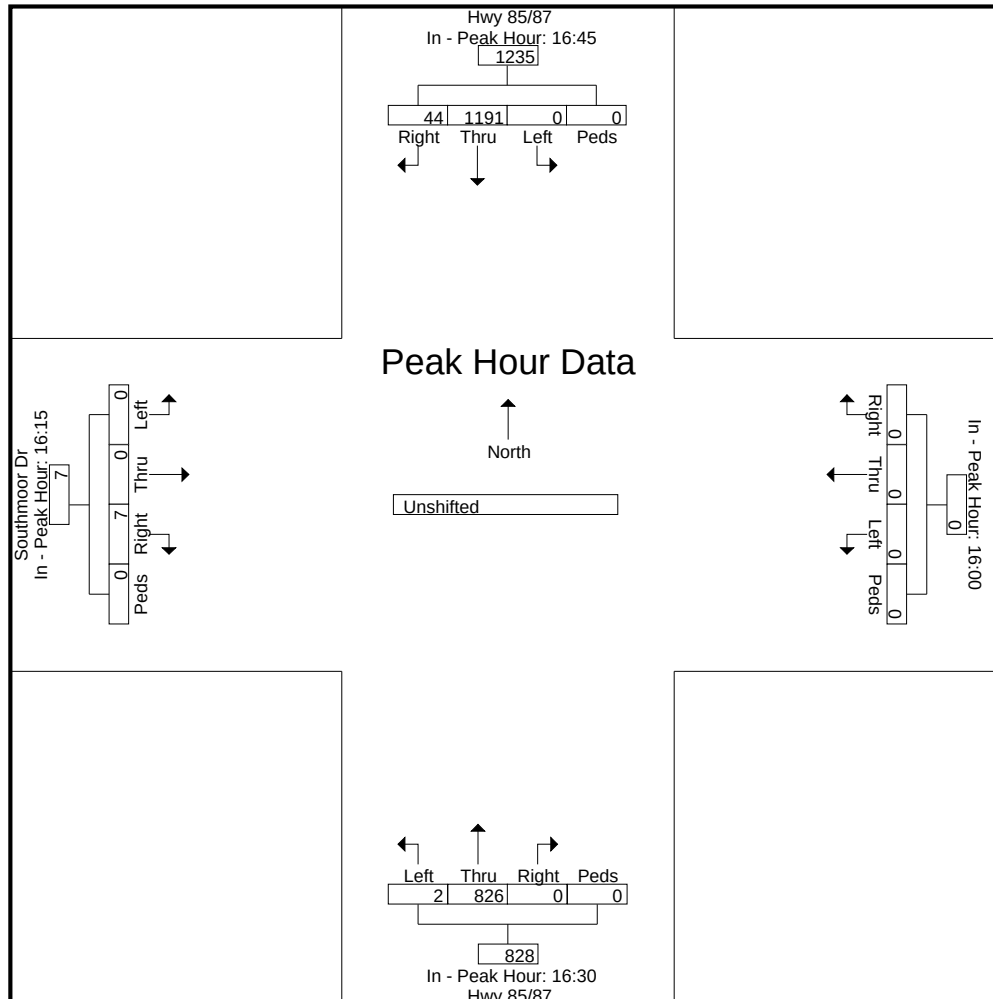
File Name : Hwy 85-87 - Southmoor Dr PM 7-29-25

Site Code : S184143

Start Date : 7/29/2025

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	Hwy 85/87 Southbound					Westbound					Hwy 85/87 Northbound					Southmoor Dr Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	16:45					16:00					16:30					16:15					
+0 mins.	17	273	0	0	290	0	0	0	0	0	0	216	0	0	216	5	0	0	0	5	
+15 mins.	13	294	0	0	307	0	0	0	0	0	0	201	0	0	201	1	0	0	0	1	
+30 mins.	6	305	0	0	311	0	0	0	0	0	0	196	0	0	196	0	0	0	0	0	
+45 mins.	8	319	0	0	327	0	0	0	0	0	0	213	2	0	215	1	0	0	0	1	
Total Volume	44	1191	0	0	1235	0	0	0	0	0	0	826	2	0	828	7	0	0	0	7	
% App. Total	3.6	96.4	0	0		0	0	0	0		0	99.8	0.2	0		100	0	0	0		
PHF	.647	.933	.000	.000	.944	.000	.000	.000	.000	.000	.000	.956	.250	.000	.958	.350	.000	.000	.000	.350	



Level of Service Reports



Lanes, Volumes, Timings
1: US 85+87 & Main St

2025 Existing
AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	3	8	190	2	408	8	962	161	90	288	2
Future Volume (vph)	8	3	8	190	2	408	8	962	161	90	288	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	230		230	335		0	775		300
Storage Lanes	1		1	1		1	1		1	2		1
Taper Length (ft)	25			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.562			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1863	1583	1047	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			218			439			207			153
Link Speed (mph)		30			30			50			50	
Link Distance (ft)		352			437			584			1115	
Travel Time (s)		8.0			9.9			8.0			15.2	
Peak Hour Factor	0.78	0.78	0.78	0.93	0.93	0.93	0.95	0.95	0.95	0.92	0.92	0.92
Adj. Flow (vph)	10	4	10	204	2	439	8	1013	169	98	313	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	4	10	204	2	439	8	1013	169	98	313	2
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	Right	L NA	Left	R NA	L NA	Left	R NA
Median Width(ft)		24			40			33			33	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm	Split	NA	Free	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			Free	2		2			6

Lanes, Volumes, Timings
1: US 85+87 & Main St

2025 Existing
AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	18.0	18.0	5.0	18.0	18.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		10.0	25.0	25.0	10.0	27.0	27.0
Total Split (s)	15.0	15.0	15.0	25.0	25.0		12.0	37.0	37.0	23.0	48.0	48.0
Total Split (%)	15.0%	15.0%	15.0%	25.0%	25.0%		12.0%	37.0%	37.0%	23.0%	48.0%	48.0%
Maximum Green (s)	9.0	9.0	9.0	19.0	19.0		7.0	30.0	30.0	18.0	41.0	41.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	31.0	31.0	31.0	32.0	32.0			23.0	23.0		32.0	32.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0	0		0	0
Act Effect Green (s)	6.2	6.2	6.2	11.2	11.2	100.0	66.2	59.6	59.6	8.2	68.4	68.4
Actuated g/C Ratio	0.06	0.06	0.06	0.11	0.11	1.00	0.66	0.60	0.60	0.08	0.68	0.68
v/c Ratio	0.09	0.04	0.03	0.53	0.01	0.28	0.01	0.48	0.16	0.35	0.13	0.00
Control Delay	45.6	44.3	0.2	46.6	37.5	0.4	6.9	15.1	1.6	46.3	7.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.6	44.3	0.2	46.6	37.5	0.4	6.9	15.1	1.6	46.3	7.8	0.0
LOS	D	D	A	D	D	A	A	B	A	D	A	A
Approach Delay		26.5			15.2			13.1			16.9	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)	6	2	0	64	1	0	1	162	0	30	22	0
Queue Length 95th (ft)	20	12	0	97	8	0	7	330	22	55	84	0
Internal Link Dist (ft)		272			357			504			1035	
Turn Bay Length (ft)				230		230	335			775		300
Base Capacity (vph)	159	167	340	652	353	1583	754	2109	1027	617	2420	1130
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.02	0.03	0.31	0.01	0.28	0.01	0.48	0.16	0.16	0.13	0.00

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 80 (80%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 14.5

Intersection LOS: B

Intersection Capacity Utilization 57.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: US 85+87 & Main St



Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗	↘	↑↑↑	↑↑	↗
Traffic Vol, veh/h	0	4	4	837	453	31
Future Vol, veh/h	0	4	4	837	453	31
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	400	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	93	93	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	5	4	900	492	34
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	246	526	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	754	1037	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	754	1037	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.8	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1037	-	754	-	-	
HCM Lane V/C Ratio	0.004	-	0.007	-	-	
HCM Control Delay (s)	8.5	-	9.8	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th TWSC
3: Southmoor & Fountain Valley Shopping Ctr

2025 Existing
AM

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	4	35	0
Future Vol, veh/h	0	0	0	4	35	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	5	45	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	50	45	45	0	-	0
Stage 1	45	-	-	-	-	-
Stage 2	5	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	959	1025	1563	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	1018	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	959	1025	1563	-	-	-
Mov Cap-2 Maneuver	959	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	1018	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1563	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	10	0	4	0	4	35	0
Future Vol, veh/h	0	0	0	0	0	10	0	4	0	4	35	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	13	0	5	0	5	45	0
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	67	60	45	60	60	5	45	0	0	5	0	0
Stage 1	55	55	-	5	5	-	-	-	-	-	-	-
Stage 2	12	5	-	55	55	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	926	831	1025	936	831	1078	1563	-	-	1616	-	-
Stage 1	957	849	-	1017	892	-	-	-	-	-	-	-
Stage 2	1009	892	-	957	849	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	913	829	1025	934	829	1078	1563	-	-	1616	-	-
Mov Cap-2 Maneuver	913	829	-	934	829	-	-	-	-	-	-	-
Stage 1	957	846	-	1017	892	-	-	-	-	-	-	-
Stage 2	997	892	-	954	846	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	0		8.4			0			0.7			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1563	-	-	-	1078	1616	-	-				
HCM Lane V/C Ratio	-	-	-	-	0.012	0.003	-	-				
HCM Control Delay (s)	0	-	-	0	8.4	7.2	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-				

Lanes, Volumes, Timings
1: US 85+87 & Main St

2025 Existing
PM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	5	17	350	1	230	3	439	386	475	834	5
Future Volume (vph)	6	5	17	350	1	230	3	439	386	475	834	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	230		230	335		0	775		300
Storage Lanes	1		1	1		1	1		1	2		1
Taper Length (ft)	25			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.323			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1863	1583	602	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			218			284			415			153
Link Speed (mph)		30			30			50			50	
Link Distance (ft)		352			437			584			1115	
Travel Time (s)		8.0			9.9			8.0			15.2	
Peak Hour Factor	0.78	0.78	0.78	0.93	0.93	0.93	0.93	0.93	0.93	0.95	0.95	0.95
Adj. Flow (vph)	8	6	22	376	1	247	3	472	415	500	878	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	6	22	376	1	247	3	472	415	500	878	5
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	Right	L NA	Left	R NA	L NA	Left	R NA
Median Width(ft)		24			40			33			33	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm	Split	NA	Free	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			Free	2		2			6

Lanes, Volumes, Timings
1: US 85+87 & Main St

2025 Existing
PM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	18.0	18.0	5.0	18.0	18.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		10.0	25.0	25.0	10.0	27.0	27.0
Total Split (s)	15.0	15.0	15.0	25.0	25.0		12.0	37.0	37.0	23.0	48.0	48.0
Total Split (%)	15.0%	15.0%	15.0%	25.0%	25.0%		12.0%	37.0%	37.0%	23.0%	48.0%	48.0%
Maximum Green (s)	9.0	9.0	9.0	19.0	19.0		7.0	30.0	30.0	18.0	41.0	41.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	31.0	31.0	31.0	32.0	32.0			23.0	23.0		32.0	32.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0	0		0	0
Act Effect Green (s)	6.1	6.1	6.1	16.3	16.3	100.0	46.6	39.0	39.0	19.3	61.1	61.1
Actuated g/C Ratio	0.06	0.06	0.06	0.16	0.16	1.00	0.47	0.39	0.39	0.19	0.61	0.61
v/c Ratio	0.07	0.05	0.07	0.67	0.00	0.16	0.01	0.34	0.48	0.76	0.41	0.00
Control Delay	45.5	44.8	0.5	45.3	32.0	0.2	11.7	25.2	5.1	45.8	13.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.5	44.8	0.5	45.3	32.0	0.2	11.7	25.2	5.1	45.8	13.3	0.0
LOS	D	D	A	D	C	A	B	C	A	D	B	A
Approach Delay		17.9			27.4			15.8			25.0	
Approach LOS		B			C			B			C	
Queue Length 50th (ft)	5	4	0	118	1	0	1	119	0	155	149	0
Queue Length 95th (ft)	17	14	0	156	5	0	5	185	74	207	285	0
Internal Link Dist (ft)		272			357			504			1035	
Turn Bay Length (ft)				230		230	335			775		300
Base Capacity (vph)	159	167	340	666	361	1583	370	1405	879	681	2161	1026
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.04	0.06	0.56	0.00	0.16	0.01	0.34	0.47	0.73	0.41	0.00

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 80 (80%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 22.6

Intersection LOS: C

Intersection Capacity Utilization 60.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: US 85+87 & Main St



Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗	↘	↑↑↑	↑↑	↗
Traffic Vol, veh/h	0	3	3	804	1191	44
Future Vol, veh/h	0	3	3	804	1191	44
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	400	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	93	93	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	3	865	1254	46

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	627	1300
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	4.14
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	2.22
Pot Cap-1 Maneuver	0	426	529
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	426	529
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	529	-	426	-	-
HCM Lane V/C Ratio	0.006	-	0.009	-	-
HCM Control Delay (s)	11.8	-	13.5	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

HCM 6th TWSC
3: Southmoor & Fountain Valley Shopping Ctr

2025 Existing
PM

Intersection

Int Delay, s/veh 0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	3	47	0
Future Vol, veh/h	0	0	0	3	47	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	4	60	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	64	60	60
Stage 1	60	-	-
Stage 2	4	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	942	1005	1544
Stage 1	963	-	-
Stage 2	1019	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	942	1005	1544
Mov Cap-2 Maneuver	942	-	-
Stage 1	963	-	-
Stage 2	1019	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1544	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	9	0	3	0	10	47	0
Future Vol, veh/h	0	0	0	0	0	9	0	3	0	10	47	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	12	0	4	0	12	57	0
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	91	85	57	85	85	4	57	0	0	4	0	0
Stage 1	81	81	-	4	4	-	-	-	-	-	-	-
Stage 2	10	4	-	81	81	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	893	805	1009	901	805	1080	1547	-	-	1618	-	-
Stage 1	927	828	-	1018	892	-	-	-	-	-	-	-
Stage 2	1011	892	-	927	828	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	878	799	1009	896	799	1080	1547	-	-	1618	-	-
Mov Cap-2 Maneuver	878	799	-	896	799	-	-	-	-	-	-	-
Stage 1	927	821	-	1018	892	-	-	-	-	-	-	-
Stage 2	1000	892	-	920	821	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	0		8.4			0			1.3			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1547	-	-	-	1080	1618	-	-				
HCM Lane V/C Ratio	-	-	-	-	0.011	0.007	-	-				
HCM Control Delay (s)	0	-	-	0	8.4	7.2	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-				

Lanes, Volumes, Timings
1: US 85+87 & Main St

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	10	10	227	5	570	15	962	199	182	361	2
Future Volume (vph)	25	10	10	227	5	570	15	962	199	182	361	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	230		230	335		0	775		300
Storage Lanes	1		1	1		1	1		1	2		1
Taper Length (ft)	25			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.520			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1863	1583	969	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			218			584			209			153
Link Speed (mph)		30			30			50			50	
Link Distance (ft)		352			437			584			1115	
Travel Time (s)		8.0			9.9			8.0			15.2	
Peak Hour Factor	0.78	0.78	0.78	0.93	0.93	0.93	0.95	0.95	0.95	0.92	0.92	0.92
Adj. Flow (vph)	32	13	13	244	5	613	16	1013	209	198	392	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	13	13	244	5	613	16	1013	209	198	392	2
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	Right	L NA	Left	R NA	L NA	Left	R NA
Median Width(ft)		24			40			33			33	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm	Split	NA	Free	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			Free	2		2			6

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Lanes, Volumes, Timings
1: US 85+87 & Main St

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	18.0	18.0	5.0	18.0	18.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		10.0	25.0	25.0	10.0	27.0	27.0
Total Split (s)	15.0	15.0	15.0	25.0	25.0		12.0	37.0	37.0	23.0	48.0	48.0
Total Split (%)	15.0%	15.0%	15.0%	25.0%	25.0%		12.0%	37.0%	37.0%	23.0%	48.0%	48.0%
Maximum Green (s)	9.0	9.0	9.0	19.0	19.0		7.0	30.0	30.0	18.0	41.0	41.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	31.0	31.0	31.0	32.0	32.0			23.0	23.0		32.0	32.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0	0		0	0
Act Effect Green (s)	7.2	7.2	7.2	12.4	12.4	100.0	58.0	50.1	50.1	11.1	61.6	61.6
Actuated g/C Ratio	0.07	0.07	0.07	0.12	0.12	1.00	0.58	0.50	0.50	0.11	0.62	0.62
v/c Ratio	0.25	0.10	0.04	0.57	0.02	0.39	0.03	0.57	0.23	0.52	0.18	0.00
Control Delay	48.1	44.1	0.2	46.5	36.8	0.7	8.8	21.6	3.7	46.6	11.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.1	44.1	0.2	46.5	36.8	0.7	8.8	21.6	3.7	46.6	11.3	0.0
LOS	D	D	A	D	D	A	A	C	A	D	B	A
Approach Delay		36.5			13.9			18.4			23.1	
Approach LOS		D			B			B			C	
Queue Length 50th (ft)	20	8	0	76	3	0	3	252	0	62	52	0
Queue Length 95th (ft)	42	23	0	111	13	0	13	374	46	94	112	0
Internal Link Dist (ft)		272			357			504			1035	
Turn Bay Length (ft)				230		230	335			775		300
Base Capacity (vph)	159	167	340	652	353	1583	628	1771	896	617	2179	1033
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.08	0.04	0.37	0.01	0.39	0.03	0.57	0.23	0.32	0.18	0.00

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 80 (80%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 18.4

Intersection LOS: B

Intersection Capacity Utilization 59.9%

ICU Level of Service B

Analysis Period (min) 15

Lanes, Volumes, Timings
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Splits and Phases: 1: US 85+87 & Main St



Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗	↘	↑↑↑	↑↑	↗
Traffic Vol, veh/h	0	4	4	1176	567	31
Future Vol, veh/h	0	4	4	1176	567	31
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	400	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	95	95	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	5	4	1238	610	33
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	305	643	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	691	938	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	691	938	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.2	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	938	-	691	-	-	
HCM Lane V/C Ratio	0.004	-	0.007	-	-	
HCM Control Delay (s)	8.9	-	10.2	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th TWSC
3: Southmoor & Fountain Valley Shopping Ctr

ST Baseline
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Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	4	35	0
Future Vol, veh/h	0	0	0	4	35	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	5	45	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	50	45	45	0	-	0
Stage 1	45	-	-	-	-	-
Stage 2	5	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	959	1025	1563	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	1018	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	959	1025	1563	-	-	-
Mov Cap-2 Maneuver	959	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	1018	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1563	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	10	0	4	0	4	35	0
Future Vol, veh/h	0	0	0	0	0	10	0	4	0	4	35	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	13	0	5	0	5	45	0
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	67	60	45	60	60	5	45	0	0	5	0	0
Stage 1	55	55	-	5	5	-	-	-	-	-	-	-
Stage 2	12	5	-	55	55	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	926	831	1025	936	831	1078	1563	-	-	1616	-	-
Stage 1	957	849	-	1017	892	-	-	-	-	-	-	-
Stage 2	1009	892	-	957	849	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	913	829	1025	934	829	1078	1563	-	-	1616	-	-
Mov Cap-2 Maneuver	913	829	-	934	829	-	-	-	-	-	-	-
Stage 1	957	846	-	1017	892	-	-	-	-	-	-	-
Stage 2	997	892	-	954	846	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	0		8.4			0			0.7			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1563	-	-	-	1078	1616	-	-				
HCM Lane V/C Ratio	-	-	-	-	0.012	0.003	-	-				
HCM Control Delay (s)	0	-	-	0	8.4	7.2	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-				

Lanes, Volumes, Timings
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	10	20	369	5	255	5	523	434	500	1022	5
Future Volume (vph)	15	10	20	369	5	255	5	523	434	500	1022	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	230		230	335		0	775		300
Storage Lanes	1		1	1		1	1		1	2		1
Taper Length (ft)	25			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.266			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1863	1583	495	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			218			284			467			153
Link Speed (mph)		30			30			50			50	
Link Distance (ft)		352			437			584			1115	
Travel Time (s)		8.0			9.9			8.0			15.2	
Peak Hour Factor	0.78	0.78	0.78	0.93	0.93	0.93	0.93	0.93	0.93	0.95	0.95	0.95
Adj. Flow (vph)	19	13	26	397	5	274	5	562	467	526	1076	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	13	26	397	5	274	5	562	467	526	1076	5
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	Right	L NA	Left	R NA	L NA	Left	R NA
Median Width(ft)		24			40			33			33	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm	Split	NA	Free	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			Free	2		2			6

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Lanes, Volumes, Timings
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	18.0	18.0	5.0	18.0	18.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		10.0	25.0	25.0	10.0	27.0	27.0
Total Split (s)	15.0	15.0	15.0	25.0	25.0		12.0	37.0	37.0	23.0	48.0	48.0
Total Split (%)	15.0%	15.0%	15.0%	25.0%	25.0%		12.0%	37.0%	37.0%	23.0%	48.0%	48.0%
Maximum Green (s)	9.0	9.0	9.0	19.0	19.0		7.0	30.0	30.0	18.0	41.0	41.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	31.0	31.0	31.0	32.0	32.0			23.0	23.0		32.0	32.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0	0		0	0
Act Effect Green (s)	6.7	6.7	6.7	16.6	16.6	100.0	45.6	37.9	37.9	19.5	60.2	60.2
Actuated g/C Ratio	0.07	0.07	0.07	0.17	0.17	1.00	0.46	0.38	0.38	0.20	0.60	0.60
v/c Ratio	0.16	0.10	0.08	0.70	0.02	0.17	0.02	0.42	0.53	0.79	0.51	0.00
Control Delay	46.5	45.0	0.6	46.0	33.0	0.2	11.8	26.6	5.1	47.8	15.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.5	45.0	0.6	46.0	33.0	0.2	11.8	26.6	5.1	47.8	15.1	0.0
LOS	D	D	A	D	C	A	B	C	A	D	B	A
Approach Delay		25.6			27.4			16.8			25.8	
Approach LOS		C			C			B			C	
Queue Length 50th (ft)	12	8	0	124	3	0	1	151	0	162	204	0
Queue Length 95th (ft)	29	23	0	169	13	0	7	210	74	#253	372	0
Internal Link Dist (ft)		272			357			504			1035	
Turn Bay Length (ft)				230		230	335			775		300
Base Capacity (vph)	159	167	340	658	357	1583	321	1370	899	682	2129	1013
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.08	0.08	0.60	0.01	0.17	0.02	0.41	0.52	0.77	0.51	0.00

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 80 (80%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 23.3

Intersection LOS: C

Intersection Capacity Utilization 64.6%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: US 85+87 & Main St



Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗	↘	↑↑↑	↑↑	↗
Traffic Vol, veh/h	0	3	3	962	1367	44
Future Vol, veh/h	0	3	3	962	1367	44
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	400	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	93	93	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	3	1034	1439	46

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	720	1485
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	4.14
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	2.22
Pot Cap-1 Maneuver	0	370	449
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	370	449
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	449	-	370	-	-
HCM Lane V/C Ratio	0.007	-	0.01	-	-
HCM Control Delay (s)	13.1	-	14.8	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

HCM 6th TWSC
3: Southmoor & Fountain Valley Shopping Ctr

ST Baseline
PM

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	3	47	0
Future Vol, veh/h	0	0	0	3	47	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	4	60	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	64	60	60	0	-	0
Stage 1	60	-	-	-	-	-
Stage 2	4	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	942	1005	1544	-	-	-
Stage 1	963	-	-	-	-	-
Stage 2	1019	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	942	1005	1544	-	-	-
Mov Cap-2 Maneuver	942	-	-	-	-	-
Stage 1	963	-	-	-	-	-
Stage 2	1019	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1544	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

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	9	0	1	0	0	0	1	6	0	0	6	44
Future Vol, veh/h	9	0	1	0	0	0	1	6	0	0	6	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	1	0	0	0	1	8	0	0	7	53
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	44	44	34	44	70	8	60	0	0	8	0	0
Stage 1	34	34	-	10	10	-	-	-	-	-	-	-
Stage 2	10	10	-	34	60	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	958	848	1039	958	821	1074	1544	-	-	1612	-	-
Stage 1	982	867	-	1011	887	-	-	-	-	-	-	-
Stage 2	1011	887	-	982	845	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	957	847	1039	956	820	1074	1544	-	-	1612	-	-
Mov Cap-2 Maneuver	957	847	-	956	820	-	-	-	-	-	-	-
Stage 1	981	867	-	1010	886	-	-	-	-	-	-	-
Stage 2	1010	886	-	981	845	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	8.8		0			1			0			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1544	-	-	965	-	1612	-	-				
HCM Lane V/C Ratio	0.001	-	-	0.013	-	-	-	-				
HCM Control Delay (s)	7.3	0	-	8.8	0	0	-	-				
HCM Lane LOS	A	A	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-				

Lanes, Volumes, Timings
1: US 85+87 & Main St

ST Baseline + Site
AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	78	65	221	84	548	87	925	191	175	361	62
Future Volume (vph)	157	78	65	221	84	548	87	925	191	175	361	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		105	230		230	335		0	775		300
Storage Lanes	2		1	1		1	1		1	2		1
Taper Length (ft)	50			100			100			100		
Lane Util. Factor	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.520			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	1863	1583	969	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			218			508			207			153
Link Speed (mph)		30			30			50			50	
Link Distance (ft)		265			437			584			1115	
Travel Time (s)		6.0			9.9			8.0			15.2	
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.95	0.95	0.95	0.92	0.92	0.92
Adj. Flow (vph)	171	85	71	238	90	589	92	974	201	190	392	67
Shared Lane Traffic (%)												
Lane Group Flow (vph)	171	85	71	238	90	589	92	974	201	190	392	67
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	Right	L NA	Left	R NA	L NA	Left	R NA
Median Width(ft)		24			40			33			33	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		30			30			16			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm	Split	NA	Free	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			Free	2		2			6

Lanes, Volumes, Timings
1: US 85+87 & Main St

ST Baseline + Site
AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	18.0	18.0	5.0	18.0	18.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		10.0	25.0	25.0	10.0	27.0	27.0
Total Split (s)	15.0	15.0	15.0	25.0	25.0		12.0	37.0	37.0	23.0	48.0	48.0
Total Split (%)	15.0%	15.0%	15.0%	25.0%	25.0%		12.0%	37.0%	37.0%	23.0%	48.0%	48.0%
Maximum Green (s)	9.0	9.0	9.0	19.0	19.0		7.0	30.0	30.0	18.0	41.0	41.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	31.0	31.0	31.0	32.0	32.0			23.0	23.0		32.0	32.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0	0		0	0
Act Effect Green (s)	8.7	8.7	8.7	12.4	12.4	100.0	53.7	44.1	44.1	10.8	49.5	49.5
Actuated g/C Ratio	0.09	0.09	0.09	0.12	0.12	1.00	0.54	0.44	0.44	0.11	0.50	0.50
v/c Ratio	0.57	0.28	0.21	0.56	0.39	0.37	0.16	0.62	0.25	0.51	0.22	0.08
Control Delay	51.9	45.0	1.4	46.0	44.6	0.7	9.5	24.9	3.6	46.6	16.3	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.9	45.0	1.4	46.0	44.6	0.7	9.5	24.9	3.6	46.6	16.3	0.2
LOS	D	D	A	D	D	A	A	C	A	D	B	A
Approach Delay		39.1			16.7			20.4			23.5	
Approach LOS		D			B			C			C	
Queue Length 50th (ft)	54	26	0	74	54	0	22	245	0	59	75	0
Queue Length 95th (ft)	89	51	0	108	98	0	47	358	43	91	120	0
Internal Link Dist (ft)		185			357			504			1035	
Turn Bay Length (ft)	130		105	230		230	335			775		300
Base Capacity (vph)	309	319	340	652	353	1583	586	1560	813	617	1750	860
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.27	0.21	0.37	0.25	0.37	0.16	0.62	0.25	0.31	0.22	0.08

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 80 (80%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 21.9

Intersection LOS: C

Intersection Capacity Utilization 58.5%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: US 85+87 & Main St



Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗	↘	↑↑↑	↑↑	↗
Traffic Vol, veh/h	0	25	24	1203	600	47
Future Vol, veh/h	0	25	24	1203	600	47
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	400	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	95	95	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	32	25	1266	645	51
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	323	696	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	673	896	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	673	896	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.6	0.2		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	896	-	673	-	-	
HCM Lane V/C Ratio	0.028	-	0.048	-	-	
HCM Control Delay (s)	9.1	-	10.6	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-	

HCM 6th TWSC
3: Southmoor & Fountain Valley Shopping Ctr

ST Baseline + Site
AM

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	4	6	17	48	23
Future Vol, veh/h	8	4	6	17	48	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	5	8	22	58	28
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	110	72	86	0	-	0
Stage 1	72	-	-	-	-	-
Stage 2	38	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	887	990	1510	-	-	-
Stage 1	951	-	-	-	-	-
Stage 2	984	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	883	990	1510	-	-	-
Mov Cap-2 Maneuver	883	-	-	-	-	-
Stage 1	946	-	-	-	-	-
Stage 2	984	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9	1.9		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1510	-	916	-	-	
HCM Lane V/C Ratio	0.005	-	0.017	-	-	
HCM Control Delay (s)	7.4	0	9	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

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	13	0	1	0	0	10	0	10	0	4	39	13
Future Vol, veh/h	13	0	1	0	0	10	0	10	0	4	39	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	0	1	0	0	13	0	13	0	5	47	16
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	85	78	55	79	86	13	63	0	0	13	0	0
Stage 1	65	65	-	13	13	-	-	-	-	-	-	-
Stage 2	20	13	-	66	73	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	901	812	1012	910	804	1067	1540	-	-	1606	-	-
Stage 1	946	841	-	1007	885	-	-	-	-	-	-	-
Stage 2	999	885	-	945	834	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	888	810	1012	906	802	1067	1540	-	-	1606	-	-
Mov Cap-2 Maneuver	888	810	-	906	802	-	-	-	-	-	-	-
Stage 1	946	838	-	1007	885	-	-	-	-	-	-	-
Stage 2	987	885	-	941	831	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.1		8.4			0			0.5			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1540	-	-	896	1067	1606	-	-				
HCM Lane V/C Ratio	-	-	-	0.02	0.012	0.003	-	-				
HCM Control Delay (s)	0	-	-	9.1	8.4	7.2	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-				

Lanes, Volumes, Timings
1: US 85+87 & Main St

ST Baseline + Site
PM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	90	80	371	84	248	68	509	424	488	1027	104
Future Volume (vph)	103	90	80	371	84	248	68	509	424	488	1027	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		105	230		230	335		0	775		300
Storage Lanes	2		1	1		1	1		1	2		1
Taper Length (ft)	50			100			100			100		
Lane Util. Factor	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.220			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	1863	1583	410	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			218			284			456			153
Link Speed (mph)		30			30			50			50	
Link Distance (ft)		265			437			584			1115	
Travel Time (s)		6.0			9.9			8.0			15.2	
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.93	0.93	0.93	0.95	0.95	0.95
Adj. Flow (vph)	112	98	87	399	90	267	73	547	456	514	1081	109
Shared Lane Traffic (%)												
Lane Group Flow (vph)	112	98	87	399	90	267	73	547	456	514	1081	109
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	Right	L NA	Left	R NA	L NA	Left	R NA
Median Width(ft)		24			40			33			33	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		30			30			16			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm	Split	NA	Free	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			Free	2		2			6

Lanes, Volumes, Timings
1: US 85+87 & Main St

ST Baseline + Site
PM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	18.0	18.0	5.0	18.0	18.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		10.0	25.0	25.0	10.0	27.0	27.0
Total Split (s)	15.0	15.0	15.0	25.0	25.0		12.0	37.0	37.0	23.0	48.0	48.0
Total Split (%)	15.0%	15.0%	15.0%	25.0%	25.0%		12.0%	37.0%	37.0%	23.0%	48.0%	48.0%
Maximum Green (s)	9.0	9.0	9.0	19.0	19.0		7.0	30.0	30.0	18.0	41.0	41.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	31.0	31.0	31.0	32.0	32.0			23.0	23.0		32.0	32.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0	0		0	0
Act Effect Green (s)	8.1	8.1	8.1	16.6	16.6	100.0	41.9	33.2	33.2	18.1	46.7	46.7
Actuated g/C Ratio	0.08	0.08	0.08	0.17	0.17	1.00	0.42	0.33	0.33	0.18	0.47	0.47
v/c Ratio	0.40	0.34	0.27	0.70	0.29	0.17	0.28	0.47	0.55	0.83	0.65	0.13
Control Delay	47.8	46.5	2.0	46.1	38.3	0.2	14.7	28.9	5.4	52.0	24.4	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.8	46.5	2.0	46.1	38.3	0.2	14.7	28.9	5.4	52.0	24.4	1.5
LOS	D	D	A	D	D	A	B	C	A	D	C	A
Approach Delay		34.0			29.0			18.0			31.2	
Approach LOS		C			C			B			C	
Queue Length 50th (ft)	35	31	0	123	50	0	20	152	0	159	293	0
Queue Length 95th (ft)	62	57	0	170	95	0	42	204	73	#244	381	14
Internal Link Dist (ft)		185			357			504			1035	
Turn Bay Length (ft)	130		105	230		230	335			775		300
Base Capacity (vph)	308	318	340	652	353	1583	269	1178	831	637	1653	821
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.31	0.26	0.61	0.25	0.17	0.27	0.46	0.55	0.81	0.65	0.13

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 80 (80%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 27.3

Intersection LOS: C

Intersection Capacity Utilization 64.8%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: US 85+87 & Main St



Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗	↘	↑↑↑	↑↑	↗
Traffic Vol, veh/h	0	32	36	1001	1393	85
Future Vol, veh/h	0	32	36	1001	1393	85
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	400	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	93	93	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	41	39	1076	1466	89
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	733	1555	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	363	422	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	363	422	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	16.2	0.5		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	422	-	363	-	-	
HCM Lane V/C Ratio	0.092	-	0.113	-	-	
HCM Control Delay (s)	14.4	-	16.2	-	-	
HCM Lane LOS	B	-	C	-	-	
HCM 95th %tile Q(veh)	0.3	-	0.4	-	-	

HCM 6th TWSC
3: Southmoor & Fountain Valley Shopping Ctr

ST Baseline + Site
PM

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	6	6	12	91	30
Future Vol, veh/h	20	6	6	12	91	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	8	8	15	110	36
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	159	128	146	0	-	0
Stage 1	128	-	-	-	-	-
Stage 2	31	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	832	922	1436	-	-	-
Stage 1	898	-	-	-	-	-
Stage 2	992	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	827	922	1436	-	-	-
Mov Cap-2 Maneuver	827	-	-	-	-	-
Stage 1	893	-	-	-	-	-
Stage 2	992	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.4	2.5		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1436	-	847	-	-	
HCM Lane V/C Ratio	0.005	-	0.039	-	-	
HCM Control Delay (s)	7.5	0	9.4	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	0	1	0	0	9	1	9	0	10	53	44
Future Vol, veh/h	9	0	1	0	0	9	1	9	0	10	53	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	1	0	0	12	1	12	0	12	64	53
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	135	129	91	129	155	12	117	0	0	12	0	0
Stage 1	115	115	-	14	14	-	-	-	-	-	-	-
Stage 2	20	14	-	115	141	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	836	762	967	844	737	1069	1471	-	-	1607	-	-
Stage 1	890	800	-	1006	884	-	-	-	-	-	-	-
Stage 2	999	884	-	890	780	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	821	755	967	837	730	1069	1471	-	-	1607	-	-
Mov Cap-2 Maneuver	821	755	-	837	730	-	-	-	-	-	-	-
Stage 1	889	794	-	1005	883	-	-	-	-	-	-	-
Stage 2	987	883	-	882	774	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	9.4		8.4		0.7		0.7					
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1471	-	-	834	1069	1607	-	-				
HCM Lane V/C Ratio	0.001	-	-	0.015	0.011	0.007	-	-				
HCM Control Delay (s)	7.4	0	-	9.4	8.4	7.3	0	-				
HCM Lane LOS	A	A	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-				

Lanes, Volumes, Timings
1: US 85+87 & Main St

2045 Background
AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	18	0	277	11	696	5	1299	243	229	442	2
Future Volume (vph)	32	18	0	277	11	696	5	1299	243	229	442	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	230		230	335		0	775		300
Storage Lanes	1		1	1		1	1		1	2		1
Taper Length (ft)	25			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt						0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1863	3433	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.480			0.950		
Satd. Flow (perm)	1770	1863	1863	3433	1863	1583	894	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						572			207			153
Link Speed (mph)		30			30			50			50	
Link Distance (ft)		352			437			584			1115	
Travel Time (s)		8.0			9.9			8.0			15.2	
Peak Hour Factor	0.83	0.83	0.83	0.93	0.93	0.93	0.95	0.95	0.95	0.93	0.93	0.93
Adj. Flow (vph)	39	22	0	298	12	748	5	1367	256	246	475	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	39	22	0	298	12	748	5	1367	256	246	475	2
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	Right	L NA	Left	R NA	L NA	Left	R NA
Median Width(ft)		24			40			33			33	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm	Split	NA	Free	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			Free	2		2			6

Lanes, Volumes, Timings
1: US 85+87 & Main St

2045 Background
AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	18.0	18.0	5.0	18.0	18.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		10.0	25.0	25.0	10.0	27.0	27.0
Total Split (s)	15.0	15.0	15.0	25.0	25.0		12.0	37.0	37.0	23.0	48.0	48.0
Total Split (%)	15.0%	15.0%	15.0%	25.0%	25.0%		12.0%	37.0%	37.0%	23.0%	48.0%	48.0%
Maximum Green (s)	9.0	9.0	9.0	19.0	19.0		7.0	30.0	30.0	18.0	41.0	41.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	31.0	31.0	31.0	32.0	32.0			23.0	23.0		32.0	32.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0	0		0	0
Act Effct Green (s)	7.5	7.5		14.1	14.1	100.0	52.0	44.4	44.4	12.4	59.6	59.6
Actuated g/C Ratio	0.08	0.08		0.14	0.14	1.00	0.52	0.44	0.44	0.12	0.60	0.60
v/c Ratio	0.30	0.16		0.62	0.05	0.47	0.01	0.87	0.31	0.58	0.23	0.00
Control Delay	49.2	45.2		45.8	35.5	1.0	10.2	35.4	6.7	46.5	11.9	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.2	45.2		45.8	35.5	1.0	10.2	35.4	6.7	46.5	11.9	0.0
LOS	D	D		D	D	A	B	D	A	D	B	A
Approach Delay		47.7			14.0			30.8			23.6	
Approach LOS		D			B			C			C	
Queue Length 50th (ft)	24	13		93	7	0	1	423	18	77	68	0
Queue Length 95th (ft)	52	34		129	22	0	7	#689	81	112	141	0
Internal Link Dist (ft)		272			357			504			1035	
Turn Bay Length (ft)				230		230	335			775		300
Base Capacity (vph)	159	167		652	353	1583	538	1569	817	617	2108	1004
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.13		0.46	0.03	0.47	0.01	0.87	0.31	0.40	0.23	0.00

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 80 (80%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 24.5

Intersection LOS: C

Intersection Capacity Utilization 72.0%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: US 85+87 & Main St



Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗	↘	↑↑↑	↑↑	↗
Traffic Vol, veh/h	0	13	10	1423	684	35
Future Vol, veh/h	0	13	10	1423	684	35
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	400	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	95	95	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	17	11	1498	735	38
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	368	773	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	629	838	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	629	838	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.9	0.1		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	838	-	629	-	-	
HCM Lane V/C Ratio	0.013	-	0.026	-	-	
HCM Control Delay (s)	9.4	-	10.9	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	5	30	10	43	10
Future Vol, veh/h	3	5	30	10	43	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	6	38	13	52	12
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	147	58	64	0	-	0
Stage 1	58	-	-	-	-	-
Stage 2	89	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	845	1008	1538	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	934	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	824	1008	1538	-	-	-
Mov Cap-2 Maneuver	824	-	-	-	-	-
Stage 1	941	-	-	-	-	-
Stage 2	934	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.9	5.6		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1538	-	930	-	-	
HCM Lane V/C Ratio	0.025	-	0.011	-	-	
HCM Control Delay (s)	7.4	0	8.9	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	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	0	0	0	0	0	10	0	10	0	4	43	0
Future Vol, veh/h	0	0	0	0	0	10	0	10	0	4	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	13	0	13	0	5	55	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	85	78	55	78	78	13	55	0	0	13	0	0
Stage 1	65	65	-	13	13	-	-	-	-	-	-	-
Stage 2	20	13	-	65	65	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	901	812	1012	911	812	1067	1550	-	-	1606	-	-
Stage 1	946	841	-	1007	885	-	-	-	-	-	-	-
Stage 2	999	885	-	946	841	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	888	810	1012	909	810	1067	1550	-	-	1606	-	-
Mov Cap-2 Maneuver	888	810	-	909	810	-	-	-	-	-	-	-
Stage 1	946	838	-	1007	885	-	-	-	-	-	-	-
Stage 2	987	885	-	943	838	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	0		8.4		0		0.6					
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1550	-	-	-	1067	1606	-	-				
HCM Lane V/C Ratio	-	-	-	-	0.012	0.003	-	-				
HCM Control Delay (s)	0	-	-	0	8.4	7.2	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-				

Lanes, Volumes, Timings
1: US 85+87 & Main St

2045 Background
PM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	27	0	450	19	311	6	593	530	618	1244	11
Future Volume (vph)	29	27	0	450	19	311	6	593	530	618	1244	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	230		230	335		0	775		300
Storage Lanes	1		1	1		1	1		1	2		1
Taper Length (ft)	25			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt						0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1863	3433	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.191			0.950		
Satd. Flow (perm)	1770	1863	1863	3433	1863	1583	356	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						334			558			153
Link Speed (mph)		30			30			50			50	
Link Distance (ft)		352			437			584			1115	
Travel Time (s)		8.0			9.9			8.0			15.2	
Peak Hour Factor	0.83	0.83	0.83	0.93	0.93	0.93	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	35	33	0	484	20	334	6	624	558	651	1309	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	33	0	484	20	334	6	624	558	651	1309	12
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	Right	L NA	Left	R NA	L NA	Left	R NA
Median Width(ft)		24			40			33			33	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm	Split	NA	Free	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			Free	2		2			6

Lanes, Volumes, Timings
1: US 85+87 & Main St

2045 Background
PM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	18.0	18.0	5.0	18.0	18.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		10.0	25.0	25.0	10.0	27.0	27.0
Total Split (s)	15.0	15.0	15.0	25.0	25.0		12.0	37.0	37.0	23.0	48.0	48.0
Total Split (%)	15.0%	15.0%	15.0%	25.0%	25.0%		12.0%	37.0%	37.0%	23.0%	48.0%	48.0%
Maximum Green (s)	9.0	9.0	9.0	19.0	19.0		7.0	30.0	30.0	18.0	41.0	41.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	31.0	31.0	31.0	32.0	32.0			23.0	23.0		32.0	32.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0	0		0	0
Act Effct Green (s)	7.3	7.3		18.0	18.0	100.0	38.5	30.8	30.8	22.1	55.7	55.7
Actuated g/C Ratio	0.07	0.07		0.18	0.18	1.00	0.38	0.31	0.31	0.22	0.56	0.56
v/c Ratio	0.27	0.24		0.78	0.06	0.21	0.03	0.57	0.64	0.86	0.66	0.01
Control Delay	48.6	47.5		48.6	33.6	0.3	12.0	32.1	6.2	51.8	20.1	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.6	47.5		48.6	33.6	0.3	12.0	32.1	6.2	51.8	20.1	0.0
LOS	D	D		D	C	A	B	C	A	D	C	A
Approach Delay		48.1			29.0			19.8			30.4	
Approach LOS		D			C			B			C	
Queue Length 50th (ft)	21	20		149	10	0	2	177	0	~220	306	0
Queue Length 95th (ft)	48	46		207	31	0	7	235	83	#346	#504	0
Internal Link Dist (ft)		272			357			504			1035	
Turn Bay Length (ft)				230		230	335			775		300
Base Capacity (vph)	159	167		663	359	1583	240	1130	885	758	1971	949
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.20		0.73	0.06	0.21	0.03	0.55	0.63	0.86	0.66	0.01

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 80 (80%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 27.3

Intersection LOS: C

Intersection Capacity Utilization 73.1%

ICU Level of Service D

Analysis Period (min) 15

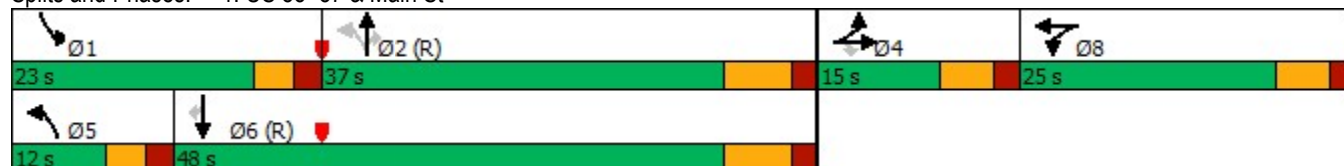
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: US 85+87 & Main St



Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗	↘	↑↑↑	↑↑	↗
Traffic Vol, veh/h	0	17	3	1175	1592	102
Future Vol, veh/h	0	17	3	1175	1592	102
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	400	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	22	3	1237	1676	107
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	838	1783	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	309	344	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	309	344	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	17.5	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	344	-	309	-	-	
HCM Lane V/C Ratio	0.009	-	0.071	-	-	
HCM Control Delay (s)	15.6	-	17.5	-	-	
HCM Lane LOS	C	-	C	-	-	
HCM 95th %tile Q(veh)	0	-	0.2	-	-	

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	21	42	18	93	4
Future Vol, veh/h	3	21	42	18	93	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	27	51	22	112	5

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	239	115	117
Stage 1	115	-	-
Stage 2	124	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	749	937	1471
Stage 1	910	-	-
Stage 2	902	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	723	937	1471
Mov Cap-2 Maneuver	723	-	-
Stage 1	878	-	-
Stage 2	902	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	5.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1471	-	904	-	-
HCM Lane V/C Ratio	0.034	-	0.034	-	-
HCM Control Delay (s)	7.5	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	9	0	18	0	10	93	0
Future Vol, veh/h	0	0	0	0	0	9	0	18	0	10	93	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	12	0	23	0	12	112	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	165	159	112	159	159	23	112	0	0	23	0	0
Stage 1	136	136	-	23	23	-	-	-	-	-	-	-
Stage 2	29	23	-	136	136	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	800	733	941	807	733	1054	1478	-	-	1592	-	-
Stage 1	867	784	-	995	876	-	-	-	-	-	-	-
Stage 2	988	876	-	867	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	786	727	941	802	727	1054	1478	-	-	1592	-	-
Mov Cap-2 Maneuver	786	727	-	802	727	-	-	-	-	-	-	-
Stage 1	867	778	-	995	876	-	-	-	-	-	-	-
Stage 2	977	876	-	860	778	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	0		8.5		0		0.7					
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1478	-	-	-	-	1054	1592	-	-			
HCM Lane V/C Ratio	-	-	-	-	-	0.011	0.008	-	-			
HCM Control Delay (s)	0	-	-	0	8.5	7.3	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-				

Lanes, Volumes, Timings
1: US 85+87 & Main St

2045 Background + Site
AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	164	86	55	271	90	674	77	1262	235	222	442	62
Future Volume (vph)	164	86	55	271	90	674	77	1262	235	222	442	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		105	230		230	335		0	775		300
Storage Lanes	2		1	1		1	1		1	2		1
Taper Length (ft)	50			100			100			100		
Lane Util. Factor	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.480			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	1863	1583	894	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			218			502			207			153
Link Speed (mph)		30			30			50			50	
Link Distance (ft)		265			437			584			1115	
Travel Time (s)		6.0			9.9			8.0			15.2	
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.95	0.95	0.95	0.93	0.93	0.93
Adj. Flow (vph)	178	93	60	291	97	725	81	1328	247	239	475	67
Shared Lane Traffic (%)												
Lane Group Flow (vph)	178	93	60	291	97	725	81	1328	247	239	475	67
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	Right	L NA	Left	R NA	L NA	Left	R NA
Median Width(ft)		24			40			33			33	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		30			30			16			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm	Split	NA	Free	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			Free	2		2			6

Lanes, Volumes, Timings
1: US 85+87 & Main St

2045 Background + Site
AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	18.0	18.0	5.0	18.0	18.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		10.0	25.0	25.0	10.0	27.0	27.0
Total Split (s)	15.0	15.0	15.0	25.0	25.0		12.0	37.0	37.0	23.0	48.0	48.0
Total Split (%)	15.0%	15.0%	15.0%	25.0%	25.0%		12.0%	37.0%	37.0%	23.0%	48.0%	48.0%
Maximum Green (s)	9.0	9.0	9.0	19.0	19.0		7.0	30.0	30.0	18.0	41.0	41.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	31.0	31.0	31.0	32.0	32.0			23.0	23.0		32.0	32.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0	0		0	0
Act Effect Green (s)	8.7	8.7	8.7	14.1	14.1	100.0	50.1	41.0	41.0	12.2	48.2	48.2
Actuated g/C Ratio	0.09	0.09	0.09	0.14	0.14	1.00	0.50	0.41	0.41	0.12	0.48	0.48
v/c Ratio	0.60	0.30	0.18	0.60	0.37	0.46	0.16	0.92	0.32	0.57	0.28	0.08
Control Delay	52.7	45.4	1.2	45.4	42.1	1.0	10.7	40.5	6.5	46.6	17.5	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.7	45.4	1.2	45.4	42.1	1.0	10.7	40.5	6.5	46.6	17.5	0.2
LOS	D	D	A	D	D	A	B	D	A	D	B	A
Approach Delay		41.3			16.2			33.9			24.9	
Approach LOS		D			B			C			C	
Queue Length 50th (ft)	57	29	0	91	57	0	20	411	15	75	96	0
Queue Length 95th (ft)	92	55	0	127	102	0	44	#655	74	110	145	0
Internal Link Dist (ft)		185			357			504			1035	
Turn Bay Length (ft)	130		105	230		230	335			775		300
Base Capacity (vph)	308	318	340	652	353	1583	516	1451	771	617	1707	842
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.29	0.18	0.45	0.27	0.46	0.16	0.92	0.32	0.39	0.28	0.08

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 80 (80%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 27.7

Intersection LOS: C

Intersection Capacity Utilization 70.6%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: US 85+87 & Main St



Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗	↘	↑↑↑	↑↑	↗
Traffic Vol, veh/h	0	34	30	1450	717	51
Future Vol, veh/h	0	34	30	1450	717	51
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	400	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	95	95	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	44	32	1526	771	55
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	386	826	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	612	800	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	612	800	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	11.3	0.2		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	800	-	612	-	-	
HCM Lane V/C Ratio	0.039	-	0.071	-	-	
HCM Control Delay (s)	9.7	-	11.3	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	2.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	9	36	23	56	33
Future Vol, veh/h	11	9	36	23	56	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	12	43	28	67	40
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	201	87	107	0	-	0
Stage 1	87	-	-	-	-	-
Stage 2	114	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	788	971	1484	-	-	-
Stage 1	936	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	765	971	1484	-	-	-
Mov Cap-2 Maneuver	765	-	-	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.4	4.6		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1484	-	846	-	-	
HCM Lane V/C Ratio	0.029	-	0.03	-	-	
HCM Control Delay (s)	7.5	0	9.4	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-	

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	0	1	0	0	10	0	16	0	4	47	13
Future Vol, veh/h	13	0	1	0	0	10	0	16	0	4	47	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	0	1	0	0	13	0	21	0	5	57	16
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	103	96	65	97	104	21	73	0	0	21	0	0
Stage 1	75	75	-	21	21	-	-	-	-	-	-	-
Stage 2	28	21	-	76	83	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	877	794	999	885	786	1056	1527	-	-	1595	-	-
Stage 1	934	833	-	998	878	-	-	-	-	-	-	-
Stage 2	989	878	-	933	826	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	865	792	999	881	784	1056	1527	-	-	1595	-	-
Mov Cap-2 Maneuver	865	792	-	881	784	-	-	-	-	-	-	-
Stage 1	934	831	-	998	878	-	-	-	-	-	-	-
Stage 2	977	878	-	929	824	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.2		8.5			0			0.5			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1527	-	-	873	1056	1595	-	-				
HCM Lane V/C Ratio	-	-	-	0.021	0.012	0.003	-	-				
HCM Control Delay (s)	0	-	-	9.2	8.5	7.3	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-				

Lanes, Volumes, Timings
1: US 85+87 & Main St

2045 Background + Site
PM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	107	60	452	98	304	69	579	520	606	1249	110
Future Volume (vph)	117	107	60	452	98	304	69	579	520	606	1249	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		105	230		230	335		0	775		300
Storage Lanes	2		1	1		1	1		1	2		1
Taper Length (ft)	50			100			100			100		
Lane Util. Factor	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.134			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	1863	1583	250	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			218			327			547			153
Link Speed (mph)		30			30			50			50	
Link Distance (ft)		265			437			584			1115	
Travel Time (s)		6.0			9.9			8.0			15.2	
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	127	116	65	486	105	327	73	609	547	638	1315	116
Shared Lane Traffic (%)												
Lane Group Flow (vph)	127	116	65	486	105	327	73	609	547	638	1315	116
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	Right	L NA	Left	R NA	L NA	Left	R NA
Median Width(ft)		24			40			33			33	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		30			30			16			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm	Split	NA	Free	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			Free	2		2			6

Lanes, Volumes, Timings
1: US 85+87 & Main St

2045 Background + Site
PM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	18.0	18.0	5.0	18.0	18.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		10.0	25.0	25.0	10.0	27.0	27.0
Total Split (s)	15.0	15.0	15.0	25.0	25.0		12.0	37.0	37.0	23.0	48.0	48.0
Total Split (%)	15.0%	15.0%	15.0%	25.0%	25.0%		12.0%	37.0%	37.0%	23.0%	48.0%	48.0%
Maximum Green (s)	9.0	9.0	9.0	19.0	19.0		7.0	30.0	30.0	18.0	41.0	41.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	31.0	31.0	31.0	32.0	32.0			23.0	23.0		32.0	32.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0	0		0	0
Act Effect Green (s)	8.3	8.3	8.3	17.9	17.9	100.0	38.4	29.8	29.8	19.9	45.2	45.2
Actuated g/C Ratio	0.08	0.08	0.08	0.18	0.18	1.00	0.38	0.30	0.30	0.20	0.45	0.45
v/c Ratio	0.44	0.39	0.20	0.79	0.31	0.21	0.37	0.58	0.64	0.93	0.82	0.15
Control Delay	48.6	47.3	1.3	49.2	38.1	0.3	18.3	32.3	6.3	62.8	30.9	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.6	47.3	1.3	49.2	38.1	0.3	18.3	32.3	6.3	62.8	30.9	1.8
LOS	D	D	A	D	D	A	B	C	A	E	C	A
Approach Delay		38.1			30.5			19.9			39.1	
Approach LOS		D			C			B			D	
Queue Length 50th (ft)	40	37	0	152	58	0	21	172	0	~226	405	0
Queue Length 95th (ft)	69	65	0	208	107	0	42	230	81	#336	#547	18
Internal Link Dist (ft)		185			357			504			1035	
Turn Bay Length (ft)	130		105	230		230	335			775		300
Base Capacity (vph)	308	318	340	652	353	1583	203	1061	857	683	1599	799
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.36	0.19	0.75	0.30	0.21	0.36	0.57	0.64	0.93	0.82	0.15

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 80 (80%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 32.1

Intersection LOS: C

Intersection Capacity Utilization 73.3%

ICU Level of Service D

Analysis Period (min) 15

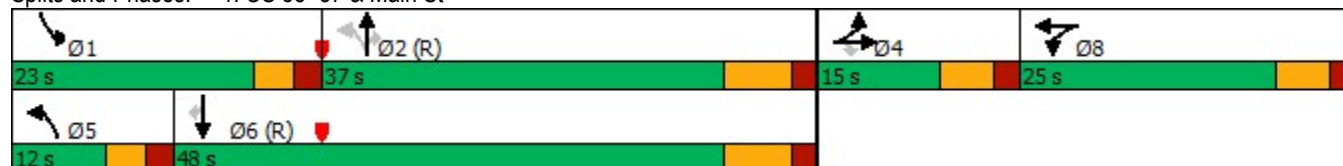
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: US 85+87 & Main St



Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗	↘	↑↑↑	↑↑	↗
Traffic Vol, veh/h	0	46	36	1214	1618	143
Future Vol, veh/h	0	46	36	1214	1618	143
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	400	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	59	38	1278	1703	151
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	852	1854	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	303	323	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	303	323	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	19.7	0.5		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	323	-	303	-	-	
HCM Lane V/C Ratio	0.117	-	0.195	-	-	
HCM Control Delay (s)	17.6	-	19.7	-	-	
HCM Lane LOS	C	-	C	-	-	
HCM 95th %tile Q(veh)	0.4	-	0.7	-	-	

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	27	48	27	137	34
Future Vol, veh/h	23	27	48	27	137	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	33	58	33	165	41

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	335	186	206
Stage 1	186	-	-
Stage 2	149	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	660	856	1365
Stage 1	846	-	-
Stage 2	879	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	632	856	1365
Mov Cap-2 Maneuver	632	-	-
Stage 1	810	-	-
Stage 2	879	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1365	-	736	-	-
HCM Lane V/C Ratio	0.042	-	0.082	-	-
HCM Control Delay (s)	7.8	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

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	9	0	1	0	0	9	1	24	0	10	99	44
Future Vol, veh/h	9	0	1	0	0	9	1	24	0	10	99	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	1	0	0	12	1	31	0	12	119	53
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	209	203	146	203	229	31	172	0	0	31	0	0
Stage 1	170	170	-	33	33	-	-	-	-	-	-	-
Stage 2	39	33	-	170	196	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	748	693	901	755	671	1043	1405	-	-	1582	-	-
Stage 1	832	758	-	983	868	-	-	-	-	-	-	-
Stage 2	976	868	-	832	739	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	735	687	901	749	665	1043	1405	-	-	1582	-	-
Mov Cap-2 Maneuver	735	687	-	749	665	-	-	-	-	-	-	-
Stage 1	831	752	-	982	867	-	-	-	-	-	-	-
Stage 2	964	867	-	824	733	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	9.9		8.5		0.3		0.5					
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1405	-	-	749 1043	1582	-	-					
HCM Lane V/C Ratio	0.001	-	-	0.017 0.011	0.008	-	-					
HCM Control Delay (s)	7.6	0	-	9.9 8.5	7.3	0	-					
HCM Lane LOS	A	A	-	A A	A A	-	-					
HCM 95th %tile Q(veh)	0	-	-	0.1 0	0	-	-					

Commercial Site Plan Exhibit



Note (August 2025):
Please refer to the
current design plans
by Galloway for Main
Street west of US
Highway 85-87 for the
latest traffic laneage
and intersection
design.

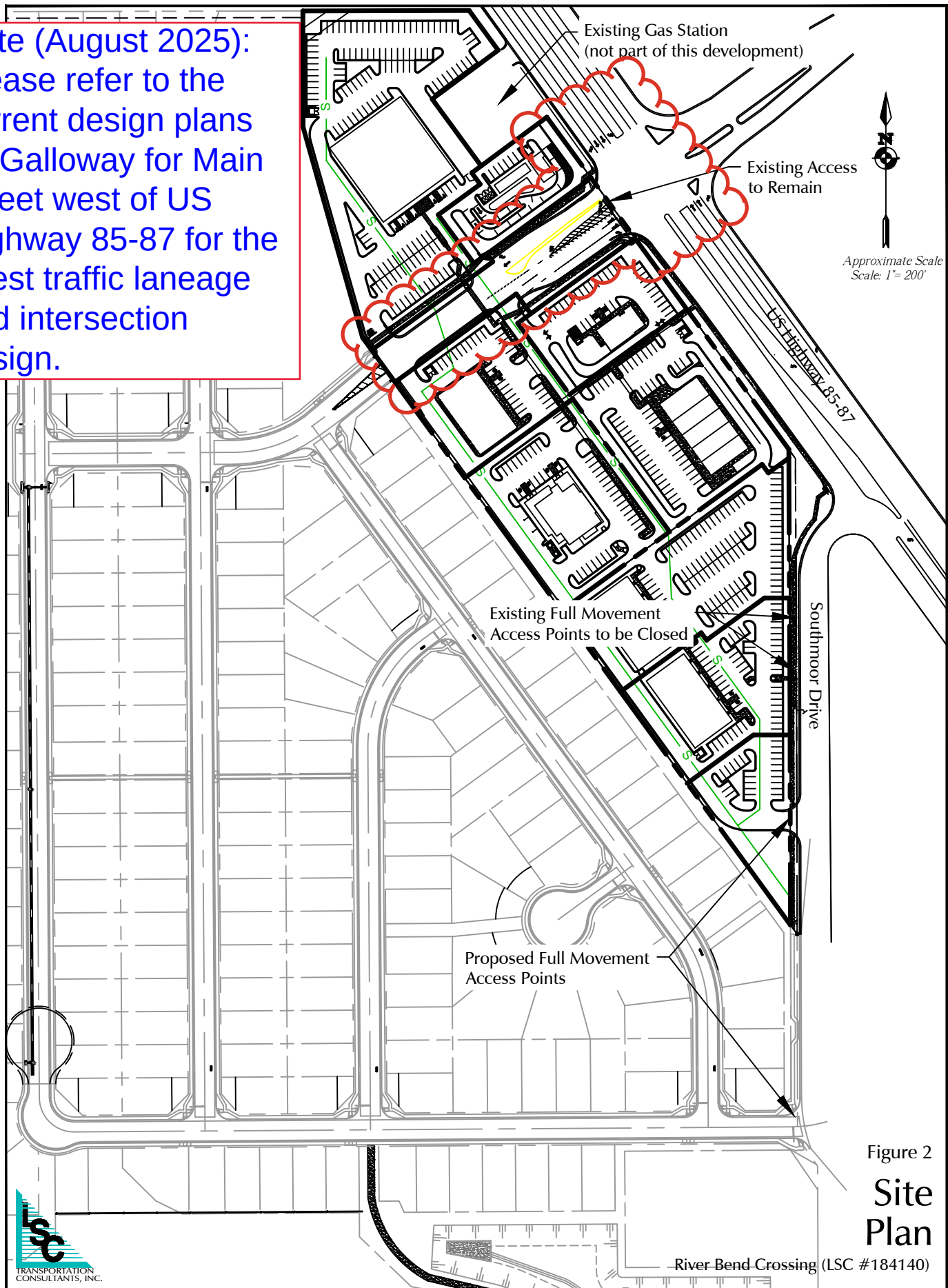
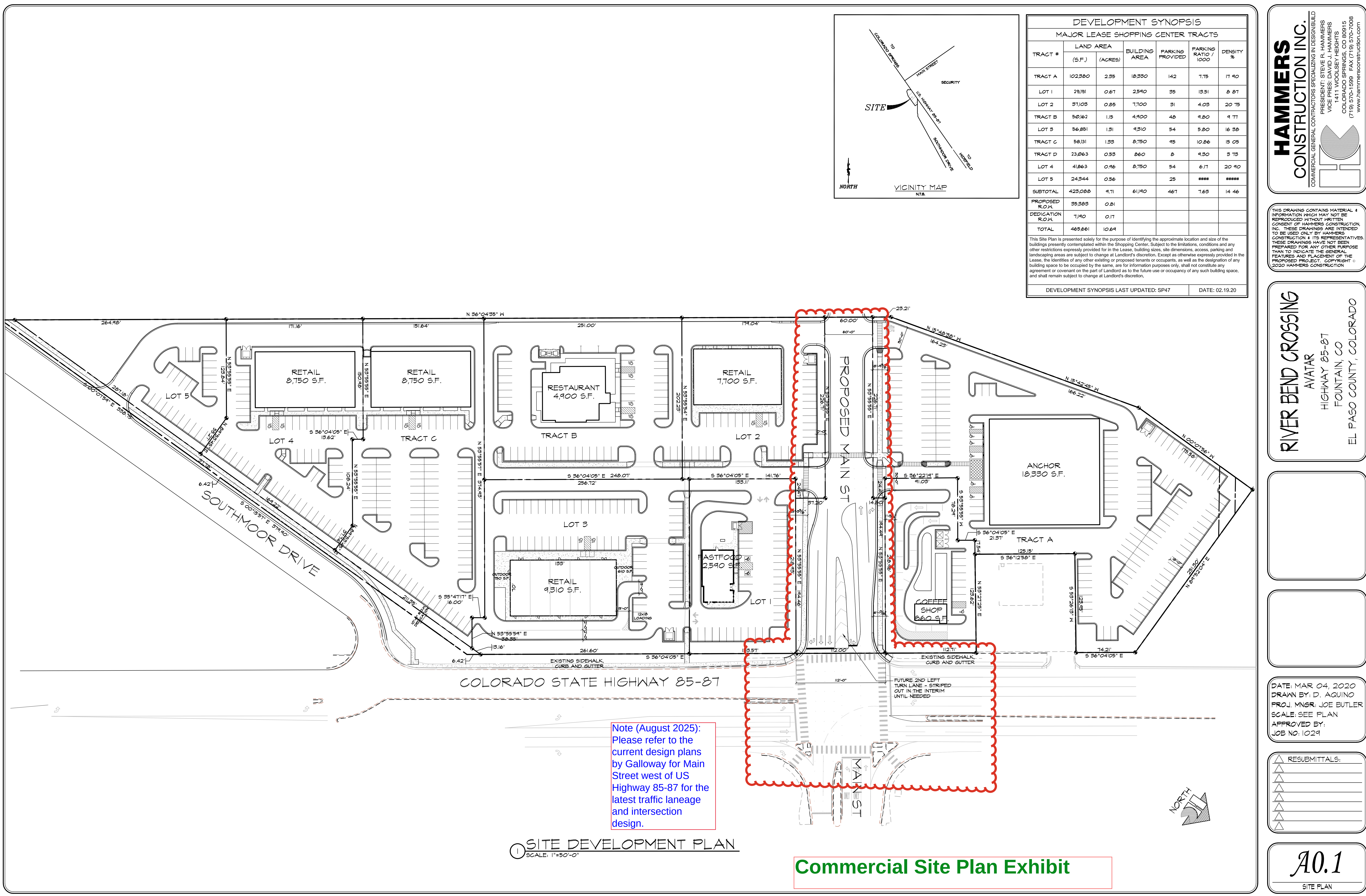


Figure 2
Site
Plan

Commercial Site Plan





HAMMERS
CONSTRUCTION INC.

COMMERCIAL GENERAL CONTRACTORS SPECIALIZING IN DESIGN/BUILD

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VICE PRES: DAVID J. HAMMERS
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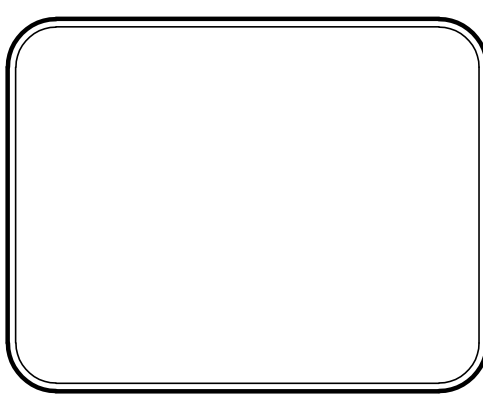
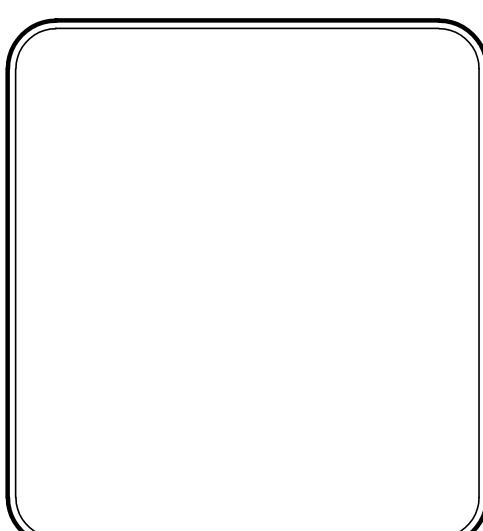
RIVER BEND CROSSING

AVATAR

HIGHWAY 85-87

FOUNTAIN, CO

EL PASO COUNTY, COLORADO



DATE: MAR 04, 2020
DRAWN BY: D. AQUINO
PROJ. MNGR: JOE BUTLER
SCALE: SEE PLAN
APPROVED BY:
JOB NO: 1029

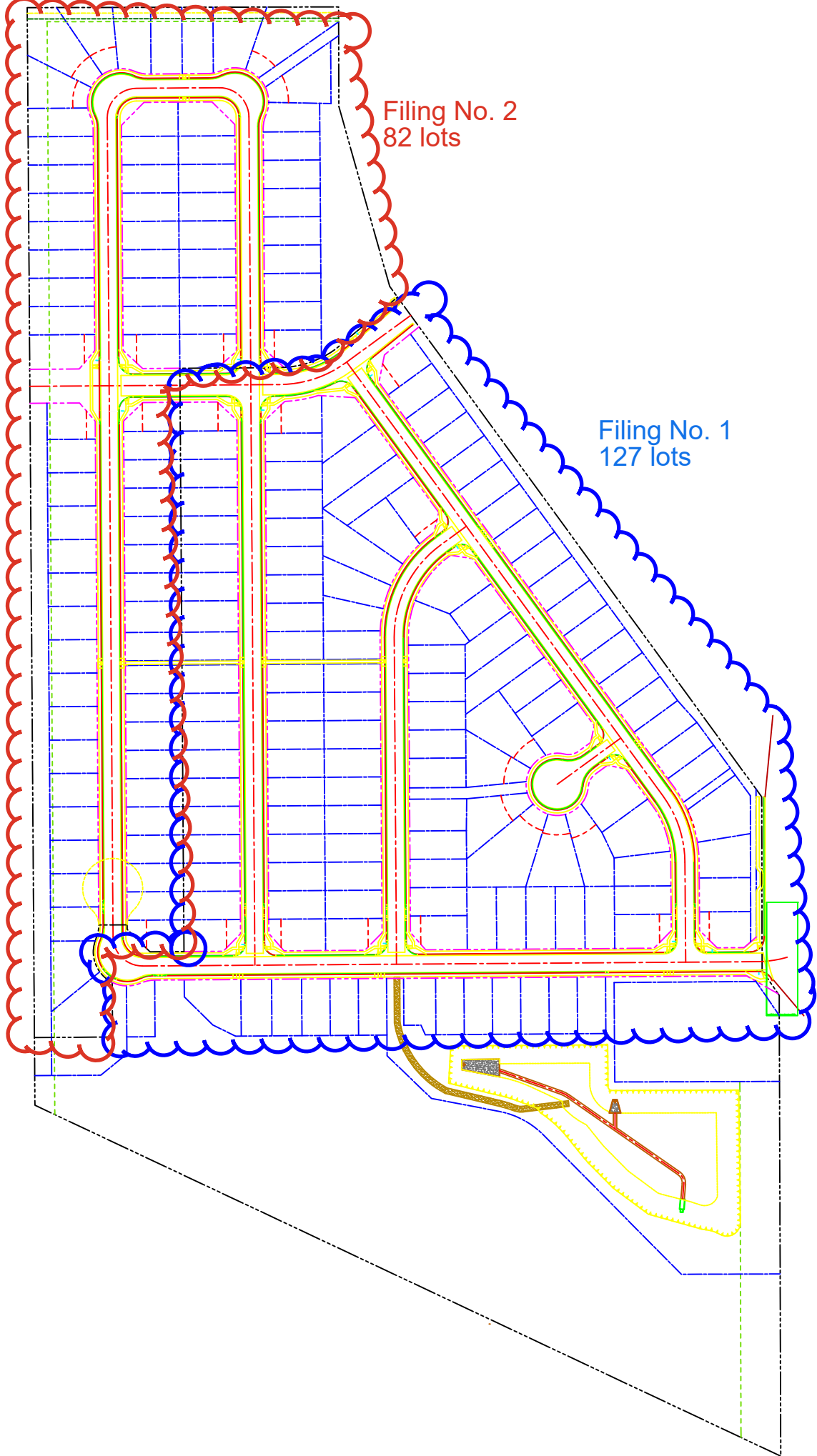
△	RESUBMITTALS:
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△	
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Note (August 2025):
Please refer to the
current design plans
by Galloway for Main
Street west of US
Highway 85-87 for the
latest traffic laneage
and intersection
design.

① SITE DEVELOPMENT PLAN
SCALE: 1"=50'-0"

Residential Site Plan Exhibit





Filing No. 2
82 lots

Filing No. 1
127 lots

Residential Filing No. 1 Plat (from EDARP)



FINAL PLAT

RIVERBEND RESIDENTIAL FILING NO. 1

A PORTION OF THE NORTHEAST QUARTER OF
SECTION 14, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
COUNTY OF EL PASO, STATE OF COLORADO

KNOW ALL MEN BY THESE PRESENTS:

That _____, being the owners of the following described tract of land to wit:

A tract of land being a portion of the West Half (W 1/2) of the Northeast Quarter (NE 1/4) of Section 14, Township 15 South, Range 66 West of the 6th P.M., County of El Paso, State of Colorado, described as follows:
Bearings based on the West line of the Northeast Quarter (NE 1/4) of Section 14, Township 15 South, Range 66 West of the 6th P.M., monumented at the North Quarter (N 1/4) corner with a 3 1/4" aluminum cap, stamped "BARRON LAND 2018 PLS 38141" and at the Center Quarter (C 1/4) corner with a 3 1/4" aluminum cap, stamped "OLIVER E. WATTS 2000 PE-LS 9853" and bears S 00°24'11" E, 2640.42 feet;
COMMENCING at said North Quarter (N 1/4) corner; thence S 00°24'11" E, along the West line of the Northeast Quarter (NE 1/4), a distance of 638.79 feet; thence N 89°35'49" E, a distance of 265.00 feet to the POINT OF BEGINNING.
Thence N 89°35'49" E, a distance of 175.85 feet;
Thence 105.86 feet along the arc of a 170.00 foot radius tangent curve to the left, having a central angle of 35°40'40" with a chord that bears N 71°45'30" E, 104.16 feet;
Thence N 50°00'24" E, a distance of 142.79 feet to a point on the Southwest line of the land described in Warranty Deed recorded in Book 2472 at Page 228, El Paso County Records;
Thence S 38°04'35" E, along said Southwest line and its Southeasterly extension, a distance of 1,091.60 feet to a point on the West right of way line of Southmoor Drive;
Thence S 00°07'59" E, along said West line, a distance of 306.67 feet to an angle point in said Southmoor Drive;
Thence S 34°27'20" E, along the Southwest line of said Southmoor Drive, a distance of 53.43 feet to the Northwest corner of a tract of land described at Reception No. 202040629, El Paso County Records;
Thence S 00°11'18" E along the West line of said tract of land, a distance of 813.74 feet to the Southeasterly end of the common boundary line described in the Boundary Agreement and Quit Claim deed recorded at Reception No. 206153355, El Paso County Records;
Thence N 64°47'25" W, along said boundary line, a distance of 1,396.33 feet;

thence N 00°24'11" W, a distance of 119.54 feet;
thence N 89°35'49" E, a distance of 137.96 feet;
thence N 00°24'11" W, a distance of 96.44 feet;
thence 90.86 feet along the arc of a 60.00 foot radius non--tangent curve to the right, having a central angle of 86°46'06", with a chord that bears N 20°13'50" W, 82.43 feet;
thence 24.67 feet along the arc of a 60.00 foot radius tangent curve to the left, having a central angle of 23°33'23", with a chord that bears N 11°22'31" E, 24.49 feet;
thence N 89°35'49" E, a distance of 50.00 feet;
thence S 00°24'11" E, a distance of 7.96 feet;
thence S 45°24'11" E, a distance of 56.57 feet;
thence N 89°35'49" E, a distance of 60.00 feet to a point 265.00 feet East of the West line of said Northeast Quarter;
thence N 00°24'11" W, parallel with and 265.00 feet East of said West line, a distance of 1,030.00 feet to the POINT OF BEGINNING.

Containing a total calculated area of 1,607,537 square feet (36.904 acres) of land, more or less.

OWNERS CERTIFICATE

Owners Certificate
The undersigned, being all the owners, mortgagees, beneficiaries of deeds of trust and holders of other interests in the land described herein, have laid out, subdivided, and platted said lands into lots, tracts, streets, and easements (use which are applicable) as shown hereon under the name and subdivision of RIVERBEND RESIDENTIAL FILING NO. 1. All public improvements so platted are hereby dedicated to public use and said owner does hereby covenant and agree that the public improvements will be constructed to El Paso County standards and that proper drainage and erosion control for same will be provided at said owner's expense, all to the satisfaction of the Board of County Commissioners of El Paso County, Colorado. Upon acceptance by resolution, all public improvements so dedicated will become matters of maintenance by El Paso County, Colorado. The utility easements shown hereon are hereby dedicated for public utilities and communication systems and other purposes as shown hereon. The entities responsible for providing the services for which the easements are established are hereby granted the perpetual right of ingress and egress from and to adjacent properties for installation, maintenance, and replacement of utility lines and related facilities.

Owners/Mortgagee (Signature) _____

By: _____

Title: _____

ATTEST: (if corporation)

Secretary/Treasurer _____

STATE OF COLORADO)

COUNTY OF _____) SS

Acknowledged before me this _____ day of _____, 20____ by _____ as _____.

My commission expires _____

Witness my hand and official seal _____
Notary Public

BOARD OF COUNTY COMMISSIONERS CERTIFICATE

This plat for Riverbend Residential Filing No. 1 was approved for filing by the El Paso County, Colorado Board of County Commissioners on the _____ day of _____, 20____ subject to any notes specified hereon and any conditions included in the resolution of approval. The dedications of land to the public (streets, tracts and easements), are accepted, but public improvements thereon will not become the maintenance responsibility of El Paso County until preliminary acceptance of the public improvements in accordance with the requirements of the Land Development Code and Engineering Criteria Manual, and the Subdivision Improvements Agreement.

Chair, Board of County Commissioners _____

Date _____

This plat for RIVERBEND RESIDENTIAL FILING NO. 1 was approved for filing by the El Paso County, Colorado Planning and Community Development Department Director on the _____ day of _____, 20____, subject to any notes or conditions specified hereon.

Board of County Commissioners' Director _____

SURVEYOR'S STATEMENT

I Spencer J. Barron, a duly registered Professional Land Surveyor in the State of Colorado, do hereby certify that this plat truly and correctly represents the results of a survey made on date of survey, by me or under my direct supervision and that all monuments exist as shown hereon; that mathematical closure errors are less than 1:10,000 ; and that said plat has been prepared in full compliance with all applicable laws of the State of Colorado dealing with monuments, subdivision, or surveying of land and all applicable provisions of the El Paso County Land Development Code.

I attest the above on this _____ day of _____, 20____.

CLERK AND RECORDER

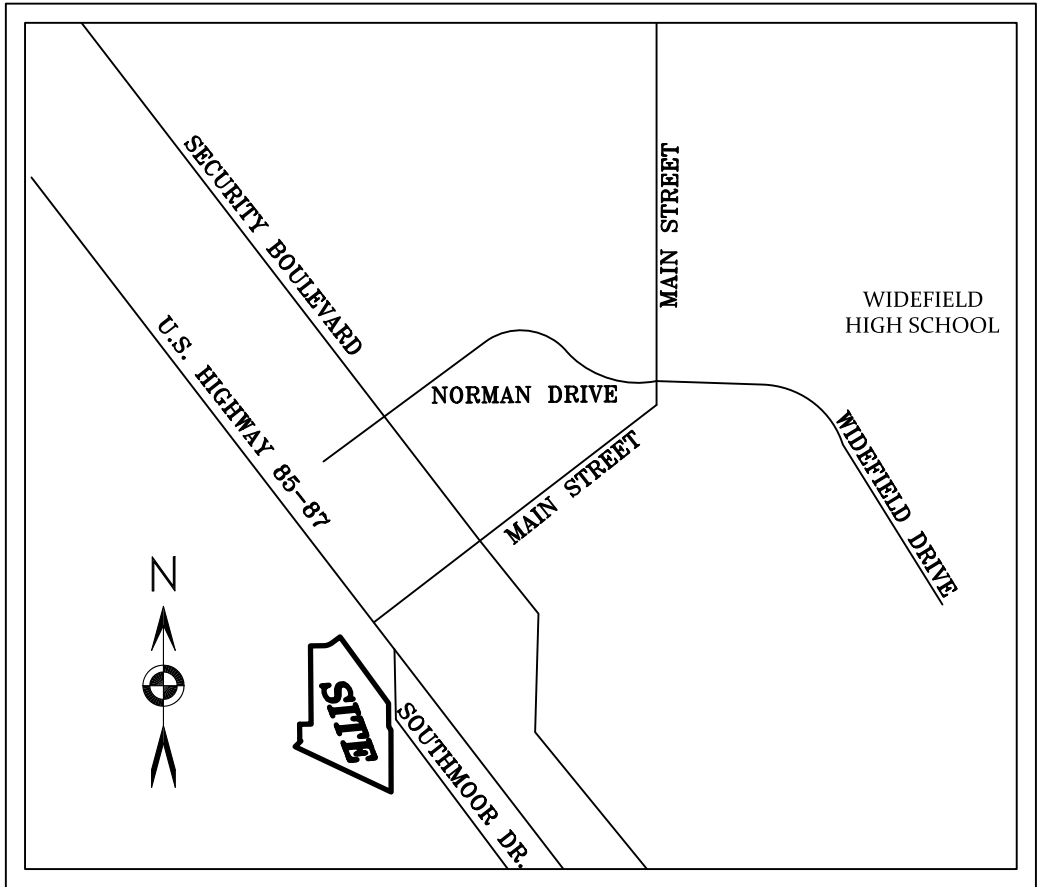
STATE OF COLORADO)

COUNTY OF EL PASO) SS

I hereby certify that this instrument was filed in my office on this _____ day of _____, 202____, and

was recorded at Reception Number _____ of the records of El Paso County

El Paso County Clerk and Recorder _____



VICINITY MAP

(NOT TO SCALE)

ACCEPTANCE CERTIFICATE FOR TRACTS RIVERBEND METRO DISTRICT

The dedication of Tracts A, B, C, D ,E, F and G are hereby accepted for ownership and maintenance by the Riverbend Metro District

By: _____

President _____

STATE OF COLORADO)

COUNTY OF _____) SS

Acknowledged before me this _____ day of _____, 20____ by _____ as _____.

My commission expires _____

Witness my hand and official seal _____
Notary Public

EASEMENT STATEMENT

All lots are hereby platted with the following easements:
All front lot lines are hereby platted with a 5' public utility, drainage and improvements easement.
All side and rear lot lines are hereby platted with a 5' public utility and drainage easement.
All exterior lot lines are hereby platted with a 7' public utility and drainage easement except Lots 20-38 which rear lots are adjacent to rear lots of proposed Riverbend Residential Filing No. 2 being submitted concurrently.

Maintenance of said easements are vested with the property owner.

FEES:

Drainage Fee: _____

School Fee: _____

Bridge Fee: _____

Park Fee: _____

SURVEYOR'S NOTES

1. NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. No action may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

2. Any person who knowingly removes, alters or defaces any public land survey monument or land boundary monument or accessory commits a class 2 misdemeanor pursuant to the Colorado Revised Statute 18-4-508.

3. The lineal units used in this drawing are U.S. Survey Feet.

4. This survey was performed in the field on November 21, 2017.

5. The overall subject parcel contains a calculated area of 1,591,987 square feet (36.547 acres) of land, more or less.

6. This survey does not constitute a title search by Barron Land, LLC to determine ownership or easements of record. For information regarding easements, rights-of-way and title of record, Barron Land, LLC relied upon Title Commitment File Number 45253ECS Amendment No. 2, with an effective date of November 14, 2017 at 7:30 A.M. as provided by Empire Title of Colorado Springs, LLC as agent for Westcor Land Title Insurance Company.

7. Bearings based on the West line of the Northeast Quarter (NE 1/4) of Section 14, Township 15 South, Range 66 West of the 6th P.M., monumented at the North Quarter (N 1/4) corner with a 3 1/4" aluminum cap, stamped "BARRON LAND 2018 PLS 38141" and at the Center Quarter (C 1/4) corner with a 3 1/4" aluminum cap, stamped "OLIVER E. WATTS 2000 PE-LS 9853" and bears S 00°24'11" E, 2640.42 feet.

8. The following reports have been submitted in association with the Preliminary Plan or Final Plat for this subdivision and are on file at the County Development Services Department: Transportation Impact Study; Drainage Report; Water Resources Report; Wastewater Disposal Report; Geology and Soils Report; Fire Protection Report; Wildfire Hazard Report; Natural Features Report; "Avatar River Bend Crossing Commercial and Residential Development Fountain, Colorado", prepared by RMG Engineers, dated April 2, 2018.

9. All property owners are responsible for maintaining proper storm water drainage in and through their property. Public drainage easements as specifically noted on the plat shall be maintained by the individual lot owners unless otherwise indicated. Structures, fences, materials or landscaping that could impede the flow of runoff shall not be placed in drainage easements.

10. Unless otherwise indicated, all side, front, and rear lot lines are hereby platted on either side with a 5 foot public utility and drainage easement, front lot lines also platted with a 5 foot improvement easement, unless otherwise indicated. All exterior subdivision boundaries are hereby platted with a 7 foot public utility and drainage easement. The sole responsibility for maintenance of these easements is hereby vested with the individual property owners.

11. Developer shall comply with federal and state laws, regulations, ordinances, review and permit requirements, and other agency requirements, if any, of applicable agencies including, but not limited to, the Colorado Division of Wildlife, Colorado Department of Transportation, U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service regarding the Endangered Species Act.

12. The addresses exhibited on this plat are for informational purposes only. They are not the legal description and are subject to change.

13. No driveway shall be established unless an access permit has been granted by El Paso County.

14. No lot or interest therein, shall be sold, conveyed, or transferred whether by deed or by contract, nor shall building permits be issued, until and unless either the required public and common development improvements have been constructed and completed and preliminarily accepted in accordance with the Subdivision Improvements Agreement between the applicant/owner and El Paso County as recorded under Reception Number _____. In the Office of the Clerk and Recorder of El Paso County, Colorado or, in the alternative, other collateral is provided to make provision for the completion of said improvements in accordance with the El Paso County Land Development Code and Engineering Criteria Manual. Any such alternative collateral must be approved by the Board of County Commissioners or, if permitted by the Subdivision Improvements Agreement, by the Development Services Department Director and meet the policy and procedure requirements of El Paso County prior to the release by the County of any lots for sale, conveyance or transfer. This plat restriction may be removed or rescinded by the Board of County Commissioners or, if permitted by the Subdivision Improvements Agreement, by the Development Services Department Director upon either approval of an alternative form of collateral or completion and preliminary acceptance by the El Paso Board of County Commissioners of all improvements required to be constructed and completed in accordance with said Subdivision Improvements Agreement. The partial release of lots for sale, conveyance or transfer may only be granted in accordance with any planned partial release of lots authorized by the Subdivision Improvements Agreement.

15. Security Water district will maintain the water for the Lots within this subdivision, and Security Sanitation district will maintain the sewer for the Lots within this subdivision.

16. No structures or fences are permitted within designated "Floodplain" or "Park and Open Space" areas. The Federal Emergency Management Agency, Flood Insurance Rate Map No. 08041C0951C and 08041C0763C, effective date December 7, 2018, indicates a portion of this parcel of land to be located in Zone X Shaded (Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood), Zone AE (Base Flood Elevations determined), and Floodway areas in Zone AE (The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights).

17. Tract A is for public utilities, open space and flood plain purposes. Tract B is for public utility, drainage and landscaping buffer purposes. Tract C is for drainage and landscaping buffer purposes. Tract D is for public access, public utility, private utility, drainage and landscaping buffer purposes. Tract E and F are for public access, drainage and landscaping buffer purposes. Tract G is for public and private utilities purposes. Tract H is for public utility purposes. Tract I is for public and private utilities, drainage and landscaping buffer purposes. Tract J is for public access and landscaping buffer purposes. Tract K is for public and private utilities and detention pond purposes. Tract L is for public access, private utility, drainage and landscaping buffer purposes. Tracts A, B, C, D, E, F, I, J, K, and L will be owned and maintained by Riverbend Crossing Metro District for pedestrian access, drainage, private utilities and landscaping purposes. Tract G will be owned and maintained by Security Water district and Security Sanitation district for public and private utilities purposes. Tract H will be owned by the City of Fountain Electric Department. Tract K within this subdivision is subject to a Private Detention Basin and Stormwater Quality BMP Maintenance Agreement and Easement as recorded at Reception No. _____. El Paso County Records. Riverbend Metro District is responsible for the maintenance of the subject drainage facilities. The detention pond/water quality BMP(s) shall be constructed and completed prior to the issuance of any building permits for the subj lots. The subdivision developer is responsible for providing financial assurances as indicated in the Subdivision Improvements Agreement and Estimate of Guaranteed Funds for all detention ponds/water quality BMPs. All detention ponds/water quality BMPs shall be constructed prior to the release of said financial assurances.

18. Mailboxes shall be installed in accordance with all El Paso County Department of Transportation and United States Postal Service regulations.

19. Special District Disclosure: Riverbend Crossing Metropolitan District. A Title 32 Special District Annual Report and Disclosure Form satisfactory to the Planning and Community Development Department shall be recorded with each plat.

20. The Subdivider(s) agrees on behalf of him/herself and any developer or builder successors and assignees that Subdivider and/or said successors and assigns shall be required to pay traffic impact fees in accordance with the El Paso County Road Impact Fee Program Resolution (Resolution No. 19-471), or any amendments thereto, at or prior to the time of building permit submittals. The fee obligation, if not paid at final plat recording, shall be documented on all sales documents and on plat notes to ensure that a title search would find the fee obligation before sale of the property.

21. Pursuant to Resolution _____, approved by the Board of Directors, El Paso County Public Improvement District _____ and recorded in the records of the El Paso County Clerk and Recorder at Reception Number _____, the parcels within the platted boundaries of (subdivision) are included within the boundaries of the El Paso County Public Improvement District _____ and as such is subject to applicable road impact fees and mill levy.

22. There shall be no direct lot access to Southmoor Drive.

23. The non-revocable public improvement easement shown at the end of Booker Boulevard cul-de-sac is intended for the turn around and emergency response purposes. At such time that Booker Boulevard is extended by the adjacent property owner/developer and accepted by the County, the non-revocable public improvement easement for the cul-de-sac will be vacated, leaving a standard street ROW and the cul-de-sac improvements will be replaced with a standard street section. The easement vacation, cul-de-sac removal and standard street section construction and site restoration is the responsibility of the owner/developer extending Booker Boulevard.

24. CONSTRAINTS & GEOLOGIC HAZARDS NOTE: A "Geology and Soils Report for Riverbend Crossing, Filings No. 1 and 2, Fountain, Colorado", was completed by RMG - Rocky Mountain Group, last amended on September 9, 2021, Job No. 161921. The overall development area has been found to be impacted by these geologic constraints: expansive soils and bedrock, compressive soils, and groundwater. The constraints listed are not considered hazards, nor are they considered unusual for the Front Range region of Colorado. According to the report, conventional shallow foundations consisting of a standard/spread footing/stemwalls are suitable for the proposed residential structures. Expansive soils, bedrock and/or compressive soils will require mitigation as indicated in a site-specific Subsurface Soil investigation. Appropriate surface grading and drainage should be established during construction and maintained (over the life of the structure) by the homeowner. Additional mitigation measures can be found in said report, PUDSP File #SF 1844, available at the El Paso County Planning and Community Development Department.

25. Basements shall not be installed on any lots in within Riverbend Residential Filing No. 1.

PCD FILE # SF 1844

DATE: 08/30/2018		REVISIONS	
No.	Remarks	Date	By
1	Tract config changes, few lot config changes	07/27/20	JLP
2	County comments	10/13/20	JLP
3	County comments	04/20/21	TH
4	Add Geo-hazard note	09/17/21	TH

BARRON  **LAND**

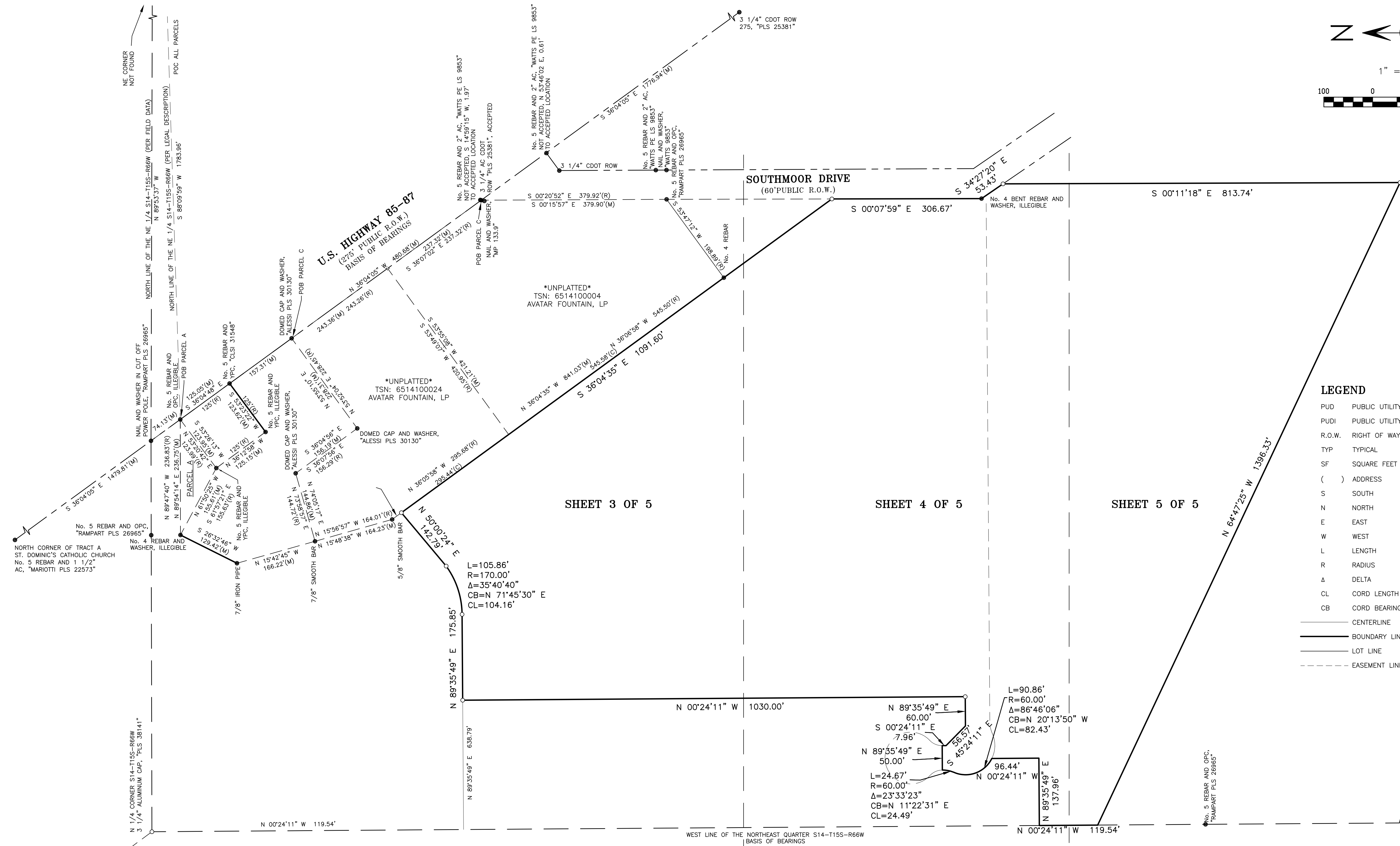
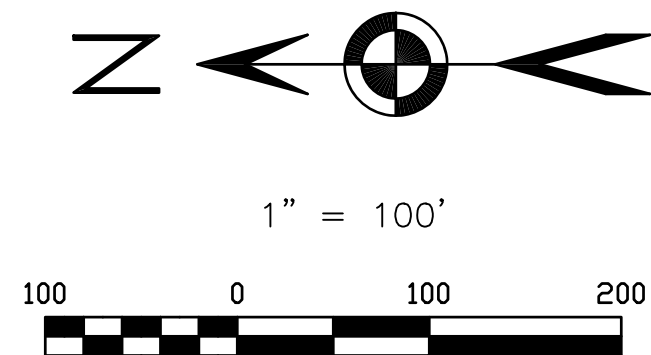
BOUNDARY & MAPPING & SURVEYING & CONSTRUCTION
2790 N. Academy Blvd, Suite 311 P: 719.360.6827
Colorado Springs, CO 80917 F: 719.466.6527
www.BARRONLAND.com

PROJECT No.: 17-054 SHEET 1 OF 5

Spencer J. Barron
State of Colorado Professional Land Surveyor No. 38141
For and on behalf of Barron Land, LLC

FINAL PLAT
RIVERBEND RESIDENTIAL FILING NO. 1
A PORTION OF THE NORTHEAST QUARTER OF
SECTION 14, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
COUNTY OF EL PASO, STATE OF COLORADO

BOUNDARY - MONUMENT EXHIBIT



LEGEND	
PUD	PUBLIC UTILITY AND DRAINAGE EASEMENT
PUDI	PUBLIC UTILITY, DRAINAGE AND IMPROVEMENTS EASEMENT
R.O.W.	RIGHT OF WAY
TYP	TYPICAL
SF	SQUARE FEET
()	ADDRESS
S	SOUTH
N	NORTH
E	EAST
W	WEST
L	LENGTH
R	RADIUS
Δ	DELTA
CL	CORD LENGTH
CB	CORD BEARING
---	CENTERLINE
---	BOUNDARY LINE
---	LOT LINE
---	EASEMENT LINE

PCD FILE # SF 1844

DATE: 08/30/2018		REVISIONS	
No.	Remarks	Date	By
1	County comments	01/31/20	JLP
2	Tract config changes, few lot config changes	07/27/20	JLP
3	County comments	10/13/20	JLP
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BARRON  **LAND**

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PROJECT No.: 17-054 SHEET 2 OF 5

FINAL PLAT
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EASEMENT STATEMENT

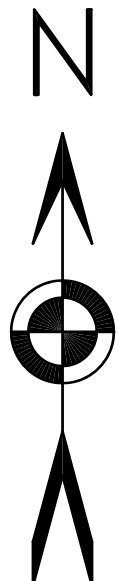
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Lots 20-38 which rear lots are adjacent to rear lots of proposed Riverbend Residential
Filing No. 2 being submitted concurrently.
Maintenance of said easements are vested with the property owner.

LEGEND

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TYP TYPICAL
SF SQUARE FEET
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E EAST
W WEST
L LENGTH
R RADIUS
Δ DELTA
CL CORD LENGTH
CB CORD BEARING
— CENTERLINE
— BOUNDARY LINE
— LOT LINE
- - - EASEMENT LINE

PROPOSED RIVERBEND RESIDENTIAL
FILING NO. 2

PROPOSED MAIN STREET



UNPLATTED

PROPOSED LOTS

N 00°24'11" W 1030.00'

TAK LANE
(50' PUBLIC R.O.W.)

N 00°24'11" W 1055.00'

10' ELECTRIC EASEMENT

UNPLATTED

L=105.86'
R=170.00'
Δ=35°40'40"

L=122.31' Δ=35°56'14" R=195.00'
CB=N 71°37'42" E CL=120.31' 1.57'

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R=170.00'
Δ=35°40'40"

L=122.31' Δ=35°56'14" R=195.00'
CB=N 71°37'42" E CL=120.31' 1.57'

10' ELECTRIC EASEMENT

TAK LANE
(50' PUBLIC R.O.W.)

N 00°24'11" W 1055.00'

10' ELECTRIC EASEMENT

UNPLATTED

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(50' PUBLIC R.O.W.)

N 00°24'11

EASEMENT STATEMENT

All lots are hereby platted with the following easements:
 All front lot lines are hereby platted with a 5' public utility, drainage and improvements easement.
 All side and rear lot lines are hereby platted with a 5' public utility and drainage easement.
 All exterior lot lines are hereby platted with a 7' public utility and drainage easement except
 Lots 20-38 which rear lots are adjacent to rear lots of proposed Riverbend Residential
 Filing No. 2 being submitted concurrently.
 Maintenance of said easements are vested with the property owner.

FINAL PLAT

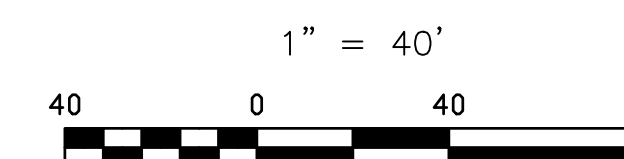
RIVERBEND RESIDENTIAL FILING NO. 1

A PORTION OF THE NORTHEAST QUARTER OF
 SECTION 14, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
 COUNTY OF EL PASO, STATE OF COLORADO

SEE SHEET 3 OF 5



SEE SHEET 5 OF 5



DATE: 08/30/2018		REVISIONS			
No.	Remarks	Date	By		
1	County comments	01/31/20	JLP		
2	Tract config changes, few lot config changes	07/27/20	JLP		
3	County comments	10/13/20	JLP		
4	County comments	04/20/21	TH		

BARRON LAND

BOUNDARY & MAPPING & SURVEYING & CONSTRUCTION
 2790 N. Academy Blvd, Suite 311 P: 719.360.6827
 Colorado Springs, CO 80917 F: 719.466.6527
 www.BARRONLAND.com

PROJECT No.: 17-054 SHEET 4 OF 5

SEE SHEET 4 OF 5

DATE: 08/30/2018		REVISIONS		
No.	Remarks	Date	By	
1	County comments	01/31/20	JLP	BARRON LAND 2790 N. Academy Blvd, Suite 311 Colorado Springs, CO 80917 www.BARRONLAND.com T: 719.360.6827 F: 719.466.6527
2	Tract config changes, few lot config changes	07/27/20	JLP	
3	County comments	10/13/20	JLP	
4	County comments	04/20/21	TH	
PROJECT No.: 17-054				SHEET 5 OF 5

Residential Filing No. 2 Plat (from EDARP)



FINAL PLAT

RIVERBEND RESIDENTIAL FILING NO. 2

A PORTION OF THE NORTHEAST QUARTER OF
SECTION 14, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
COUNTY OF EL PASO, STATE OF COLORADO

KNOW ALL MEN BY THESE PRESENTS:

That _____, being the owners of the following described tract of land to wit:

A tract of land being a portion of the West Half (W 1/2) of the Northeast Quarter (NE 1/4) of Section 14, Township 15 South, Range 66 West of the 6th P.M., County of El Paso, State of Colorado, described as follows:
Bearings based on the West line of the Northeast Quarter (NE 1/4) of Section 14, Township 15 South, Range 66 West of the 6th P.M., monumented at the North Quarter (N 1/4) corner with a 3 1/4" aluminum cap, stamped "BARRON LAND 2018 PLS 38141" and at the Center Quarter (C 1/4) corner with a 3 1/4" aluminum cap, stamped "OLIVER E. WATTS 2000 PE-LS 9853" and bears S 00°24'11" E, 2640.42 feet.
BEGINNING at said North Quarter (N 1/4) corner;
Thence N 89°52'04" E, along the North line of said Northeast Quarter (NE 1/4), a distance of 549.67 feet;
Thence S 00°07'56" E, a distance of 175.58 feet to the most Westerly Northwest corner of the land described in Warranty Deed recorded in Book 2472 at Page 228, El Paso County Records;
Thence along the Westerly and Southwesterly lines of said land the following three (3) courses:
1) S 15°42'45" E, a distance of 166.22 feet;
2) S 15°48'38" E, a distance of 164.23 feet;
3) S 36°04'35" E, a distance of 23.46 feet;
Thence S 50°00'24" W, a distance of 142.79 feet;
Thence 105.86 feet along the arc of a 170.00 foot radius non-tangent curve to the right, having a central angle of 35°40'40" with a chord that bears S 71°45'30" W, 104.16 feet;
Thence S 89°35'49" W, a distance of 175.85 feet to a point 265.00 feet East of the West line of said Northeast Quarter (NE 1/4);
Thence S 00°24'11" E, parallel with and 265.00 feet East of said West line, a distance of 1,030.00 feet;
Thence S 89°35'49" W, a distance of 60.00 feet;
Thence N 43°24'11" W, a distance of 56.67 feet;
Thence N 00°24'11" W, a distance of 7.96 feet;
Thence S 89°35'49" W, a distance of 50.00 feet;
Thence 24.67 feet along the arc of a 60.00 foot radius non-tangent curve to the right, having a central angle of 23°33'23", with a chord that bears S 11°22'31" W, 24.49 feet;
Thence 90.86 feet along the arc of a 60.00 foot radius tangent curve to the left, having a central angle of 86°46'06", with a chord that bears S 20°13'50" E, 82.43 feet;
Thence S 00°24'11" E, a distance of 96.44 feet;
Thence S 89°35'49" W, a distance of 137.96 feet to a point on the West line of said Northeast Quarter;
Thence N 00°24'11" W, along said West line, a distance of 1,818.79 feet to the POINT OF BEGINNING.

Containing a total calculated area of 657,524 square feet (15.095 acres) of land, more or less.

OWNERS CERTIFICATE

Owners Certificate
The undersigned, being all the owners, mortgagees, beneficiaries of deeds of trust and holders of other interests in the land described herein, have laid out, subdivided, and platted said lands into lots, tracts, streets, and easements (use which are applicable) as shown hereon under the name and subdivision of "RIVERBEND RESIDENTIAL FILING NO. 2". All public improvements so platted are hereby dedicated to public use and said owner does hereby covenant and agree that the public improvements will be constructed to El Paso County standards and that proper drainage and erosion control for same will be provided at said owner's expense, all to the satisfaction of the Board of County Commissioners of El Paso County, Colorado. Upon acceptance by resolution, all public improvements so dedicated will become matters of maintenance by El Paso County, Colorado. The utility easements shown hereon are hereby dedicated for public utilities and communication systems and other purposes as shown hereon. The entities responsible for providing the services for which the easements are established are hereby granted the perpetual right of ingress and egress from and to adjacent properties for installation, maintenance, and replacement of utility lines and related facilities.

Owners/Mortgagee (Signature) _____

By: _____

Title: _____

ATTEST: (if corporation)

Secretary/Treasurer _____

STATE OF COLORADO)

COUNTY OF _____) SS

Acknowledged before me this _____ day of _____, 20____ by

_____ as _____

My commission expires _____

Witness my hand and official seal _____

Notary Public

PLANNING DIRECTOR CERTIFICATE

This plat for "RIVERBEND RESIDENTIAL FILING NO. 2" was approved for filing by the El Paso County, Colorado Planning and Community Development Department Director on the _____ day of _____, 20____, subject to any notes or conditions specified hereon. The dedications of land to the public (streets, tracts and easements), are accepted, but public improvements thereon will not become the maintenance responsibility of El Paso County until preliminary acceptance of the public improvements in accordance with the requirements of the Land Development Code and Engineering Criteria Manual, and the Subdivision Improvements Agreement.

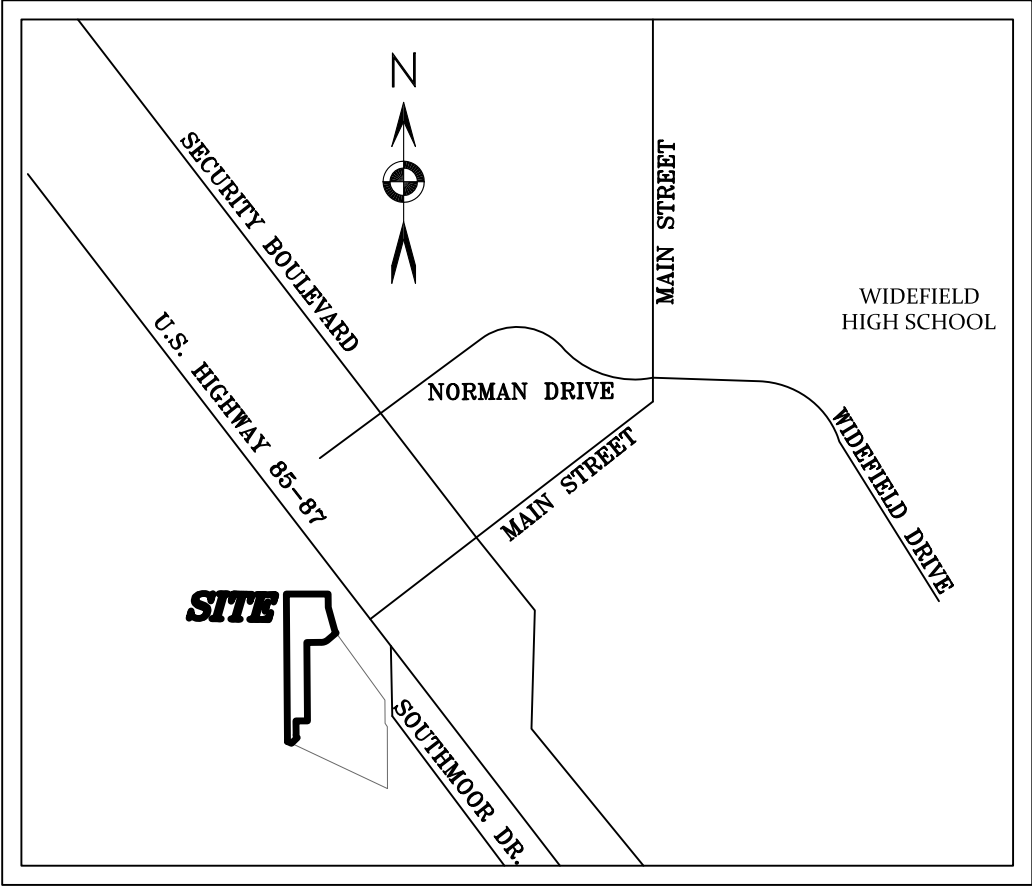
Planning and Community Development Director _____

SURVEYOR'S STATEMENT

I, Spencer J. Barron, a duly registered Professional Land Surveyor in the State of Colorado, do hereby certify that this plat truly and correctly represents the results of a survey made on date of survey, by me or under my direct supervision and that all monuments exist as shown hereon; that mathematical closure errors are less than 1:10,000 ; and that said plat has been prepared in full compliance with all applicable laws of the State of Colorado dealing with monuments, subdivision, or surveying of land and all applicable provisions of the El Paso County Land Development Code.

I attest the above on this ____ day of _____, 20____.

Spencer J. Barron
State of Colorado Professional Land Surveyor No. 38141
For and on behalf of Barron Land, LLC



VICINITY MAP
(NOT TO SCALE)

ACCEPTANCE CERTIFICATE FOR TRACTS RIVERBEND METRO DISTRICT

The dedication of Tract A, B, C and D is hereby accepted for ownership and maintenance by the Riverbend Metro District

By: _____

President _____

STATE OF COLORADO)

COUNTY OF _____) SS

Acknowledged before me this _____ day of _____, 20____ by

_____ as _____

My commission expires _____

Witness my hand and official seal _____

Notary Public

EASEMENT STATEMENT

All lots are hereby platted with the following easements:

All front lot lines and side lot lines adjacent to a public right of way are hereby platted with a 5' public utility, drainage and improvements easement.

All side and rear lot lines are hereby platted with a 5' public utility and drainage easement except side lot lines adjacent to a public right of way.

All exterior lot lines are hereby platted with a 7' public utility and drainage easement except Lots 65-86 which rear lots are adjacent to rear lots of proposed Riverbend Residential Filing No. 1 being submitted concurrently.

Maintenance of said easements are vested with the property owner.

FEES:

Drainage Fee (West Little Johnson Drainage Basin): \$10,742.00

School Fee (Widefield School District No. 3): \$18,423.00

Bridge Fee: _____

Regional Park Fee (Region 4): \$38,270.00

Urban Park Fee (Urban Area 4): \$24,208.00

CLERK AND RECORDER

STATE OF COLORADO)

COUNTY OF EL PASO) SS

I hereby certify that this instrument was filed in my office on this _____ day of _____, 202____, and

was recorded at Reception Number _____ of the records of El Paso County

El Paso County Clerk and Recorder _____

SURVEYOR'S NOTES

1. NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

2. Any person who knowingly removes, alters or defaces any public land survey monument or land boundary monument or accessory commits a class 2 misdemeanor pursuant to the Colorado Revised Statute 18-4-508.

3. The lined units used in this drawing are U.S. Survey Feet.

4. This survey was performed in the field on November 21, 2017.

5. The overall subject parcel contains a calculated area of 1,591,987 square feet (36.547 acres) of land, more or less.

6. This survey does not constitute a title search by Barron Land, LLC to determine ownership or easements of record. For information regarding easements, rights-of-way and title of record, Barron Land, LLC relied upon Title Commitment File Number 45253ECS Amendment No. 2, with an effective date of November 14, 2017 at 7:30 A.M. as provided by Empire Title of Colorado Springs, LLC as agent for Westcor Land Title Insurance Company.

7. Bearings based on the West line of the Northeast Quarter (NE 1/4) of Section 14, Township 15 South, Range 66 West of the 6th P.M., monumented at the North Quarter (N 1/4) corner with a 3 1/4" aluminum cap, stamped "BARRON LAND 2018 PLS 38141" and at the Center Quarter (C 1/4) corner with a 3 1/4" aluminum cap, stamped "OLIVER E. WATTS 2000 PE-LS 9853" and bears S 00°24'11" E, 2640.42 feet.

8. The following reports have been submitted in association with the Preliminary Plan or Final Plat for this subdivision and are on file at the County Development Services Department: Transportation Impact Study; Drainage Report; Water Resources Report; Wastewater Disposal Report; Geology and Soils Report; Fire Protection Report; Wildfire Hazard Report; Natural Features Report; "Avatar River Bend Crossing Commercial and Residential Development Fountain, Colorado", prepared by RMG Engineers, dated April 2, 2018

9. All property owners are responsible for maintaining proper storm water drainage in and through their property. Public drainage easements as specifically noted on the plat shall be maintained by the individual lot owners unless otherwise indicated. Structures, fences, materials or landscaping that could impede the flow of runoff shall not be placed in drainage easements.

10. Unless otherwise indicated, all side, front, and rear lot lines are hereby platted on either side with a 5 foot public utility and drainage easement, front lot lines also platted with a 5 foot improvement easement, unless otherwise indicated. All exterior subdivision boundaries are hereby platted with a 7 foot public utility and drainage easement. The sole responsibility for maintenance of these easements is hereby vested with the individual property owners.

11. Developer shall comply with federal and state laws, regulations, ordinances, review and permit requirements, and other agency requirements, if any, of applicable agencies including, but not limited to, the Colorado Division of Wildlife, Colorado Department of Transportation, U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service regarding the Endangered Species Act.

12. The addresses exhibited on this plat are for informational purposes only. They are not the legal description and are subject to change.

13. No driveway shall be established unless an access permit has been granted by El Paso County.

14. No lot or interest therein, shall be sold, conveyed, or transferred whether by deed or by contract, nor shall building permits be issued, until and unless either the required public and common development improvements have been constructed and completed and preliminarily accepted in accordance with the Subdivision Improvements Agreement, between the applicant/owner and El Paso County as recorded under Reception Number _____ in the Office of the Clerk and Recorder of El Paso County, Colorado or, in the alternative, other collateral is provided to make provision for the completion of said improvements in accordance with the El Paso County Land Development Code and Engineering Criteria Manual. Any such alternative collateral must be approved by the Board of County Commissioners or, if permitted by the Subdivision Improvements Agreement, by the Development Services Department Director and meet the policy and procedure requirements of El Paso County prior to the release by the County of any lots for sale, conveyance or transfer. This plat restriction may be removed or rescinded by the Board of County Commissioners or, if permitted by the Subdivision Improvements Agreement, by the Development Services Department Director upon either approval of an alternative form of collateral or completion and preliminary acceptance by the El Paso Board of County Commissioners of all improvements required to be constructed and completed in accordance with said Subdivision Improvements Agreement. The partial release of lots for sale, conveyance or transfer may only be granted in accordance with any planned partial release of lots authorized by the Subdivision Improvements Agreement.

15. Security Water and Sanitation district will maintain both the sewer and water for the Lots within the subdivision.

16. No structures or fences are permitted within designated "Floodplain" or "Park and Open Space" areas. The Federal Emergency Management Agency, Flood Insurance Rate Map No. 08041C0951G and 08041C0763G, effective date December 7, 2018, indicates a portion of this parcel of land to be located in Zone X Shaded (Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood), Zone AE (Base Flood Elevations determined), and Floodway areas in Zone AE (The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights).

17. Tract A is for public utilities, open space, drainage and landscaping buffer purposes. Tract B is for public utility, drainage, future access and drainage purposes. Tract C is for public access and utility purposes. Tract D is for public access private utilities, drainage and landscaping buffer purposes. Tract E is for public access, drainage and landscaping buffer purposes. All tracts will be owned and maintained Riverbend Crossing Metro District.

18. Mailboxes shall be installed in accordance with all El Paso County Department of Transportation and United States Postal Service regulations.

19. Special District Disclosure: Riverbend Crossing Metropolitan District
A Title 32 Special District Annual Report and Disclosure Form satisfactory to the Planning and Community Development Department shall be recorded with each plat.

20. The Subdivider(s) agrees on behalf of him/herself and any developer or builder successors and assignees that Subdivider and/or said successors and assigns shall be required to pay traffic impact fees in accordance with the El Paso County Road Impact Fee Program Resolution (Resolution No. 19-471), or any amendments thereto, at or prior to the time of building permit submittals. The fee obligation, if not paid at final plat recording, shall be documented on all sales documents and on plat notes to ensure that a title search would find the fee obligation before sale of the property.

21. Pursuant to Resolution No. 19-471, approved by the Board of Directors, El Paso County Public Improvement District 10 mil and recorded in the records of the El Paso County Clerk and Recorder at Reception No. _____, the parcels within the platted boundaries of Riverbend Residential Filing No. 2 are included within the boundaries of the El Paso County Public Improvement District 10 mil and as such is subject to applicable road impact fees and mil levy.

22. There shall be no direct lot access to Southmoor Drive.

23. A Sight Distance Easement on Lot 18 and Lot 19 shall be dedicated to the County. Maintenance of the sight distance easements shall be the responsibility of the property owner or Riverbend Metropolitan District. Any object within the sight distance triangle or easement more than 30 inches above the flowline elevation of the adjacent roadway shall constitute a sight obstruction, and shall be removed or lowered. The objects may include but are not limited to berms, buildings, parked vehicles on private property, cut slopes, hedges, trees, bushes, utility cabinets or tall crops. Driveways shall not be located in the sight distance easement.

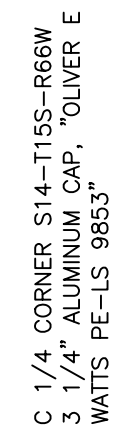
24. CONSTRAINTS & GEOLOGIC HAZARDS NOTE: A "Geology and Soils Report for Riverbend Crossing, Filings No. 1 and 2, Fountain, Colorado", was completed by RMG - Rocky Mountain Group, last amended on September 9, 2021, Job No. 161921. The overall development area has been found to be impacted by these geologic constraints: expansive soils and bedrock, compressive soils, and groundwater. The constraints listed are not considered hazards, nor are they considered unusual for the Front Range region of Colorado. According to the report, conventional shallow foundations consisting of a standard/spread footing/stemwalls are suitable for the proposed residential structures. Expansive soils, bedrock and/or compressive soils will require mitigation as indicated in a site-specific Subsurface Soil investigation. Appropriate surface grading and drainage should be established during construction and maintained (over the life of the structure) by the homeowner. Additional mitigation measures can be found in said report, PUDSF File #SF 1843, available at the El Paso County Planning and Community Development Department.

25. Basements shall not be installed on any lots in within Riverbend Residential Filing No. 2.

PCD FILE # SF 1843

DATE: 09/26/2018 REVISIONS				BARRON LAND	
No.	Remarks	Date	By		
2	County comments	10/13/20	JLP	BOUNDARY ▲ MAPPING ▲ SURVEYING ▲ CONSTRUCTION 2790 N. Academy Blvd, Suite 311 P: 719.360.6827 Colorado Springs, CO 80917 F: 719.466.6527 www.BARRONLAND.com	
3	County comments	04/20/21	TH		
4	Add Geo-hazard note	09/17/21	TH		
5	County comments	07/20/22	KPB		
				PROJECT No.: 17-054	SHEET 1 OF 4

OVERALL PARCEL MAP



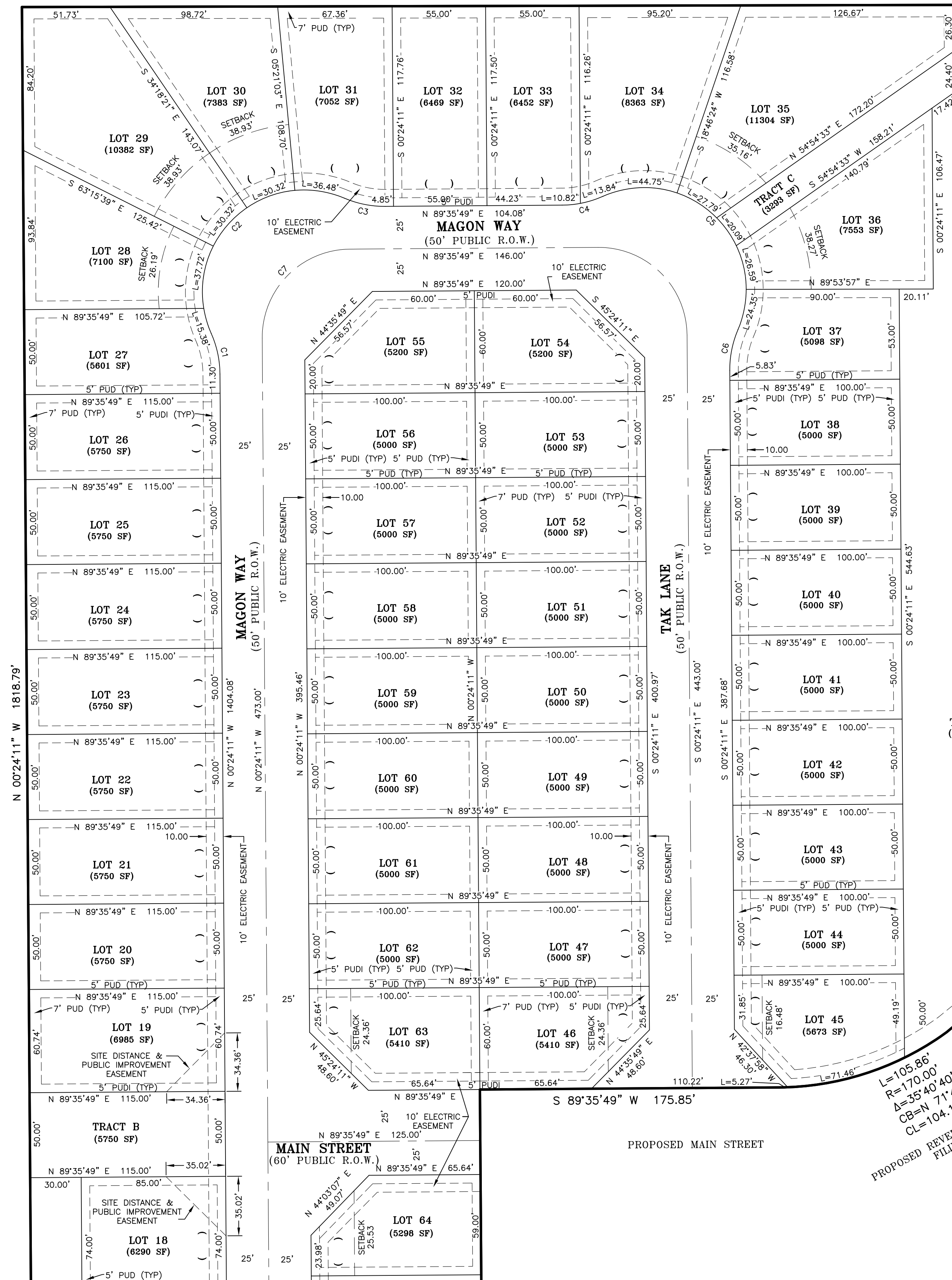
DATE: 09/26/2018		REVISIONS			
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2	County comments	10/13/20	JLP	BOUNDARY Δ MAPPING Δ SURVEYING Δ CONSTRUCTION 2790 N. Academy Blvd, Suite 311 P: 719.360.6827 Colorado Springs, CO 80917 F: 719.466.6527 www.BARRONLAND.com	
3	County comments	04/20/21	TH		
4	Add Geo-hazard note	09/17/21	TH		
5	County comments	07/20/22	KPB		
				PROJECT NO.: 17-054	
				SHEET 2 OF 4	

FINAL PLAT
RIVERBEND RESIDENTIAL FILING NO. 2
A PORTION OF THE NORTHEAST QUARTER OF
SECTION 14, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
COUNTY OF EL PASO, STATE OF COLORADO

ST. DOMINICS CATHOLIC CHURCH

LOT 1
REC NO. 208712743

N 89°52'04" E 549.67'



EASEMENT STATEMENT

All lots are hereby platted with the following easements:

All front lot lines and side lot lines adjacent to a public right of way are hereby platted with a 5' public utility, drainage and improvements easement.

All side and rear lot lines are hereby platted with a 5' public utility and drainage easement except side lot lines adjacent to a public right of way.

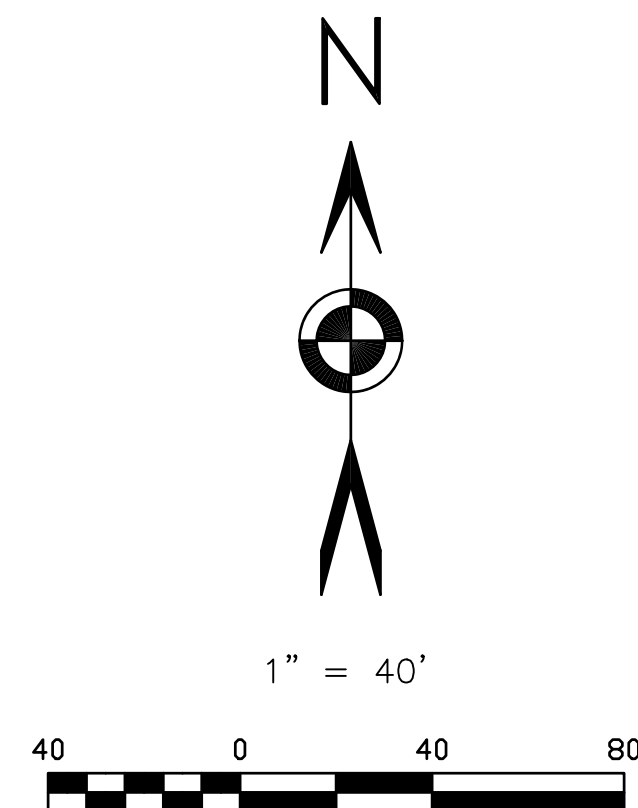
All exterior lot lines are hereby platted with a 7' public utility and drainage easement except Lots 65-86 which rear lots are adjacent to rear lots of proposed Riverbend Residential Filing No. 1 being submitted concurrently.

Maintenance of said easements are vested with the property owner.

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	24.67'	60.00'	23°33'23"	N 12°10'52" W	24.49'
C2	143.58'	60.00'	137°06'47"	N 44°35'49" E	111.69'
C3	24.67'	60.00'	23°33'23"	S 78°37'29" E	24.49'
C4	24.67'	60.00'	23°33'23"	N 77°49'08" E	24.49'
C5	143.58'	60.00'	137°06'47"	S 45°24'11" E	111.69'
C6	24.67'	60.00'	23°33'23"	S 11°22'31" W	24.49'
C7	81.68'	52.00'	90°00'00"	N 44°35'49" E	73.54'

LEGEND

- PUD PUBLIC UTILITY AND DRAINAGE EASEMENT
- PUDI PUBLIC UTILITY, DRAINAGE AND IMPROVEMENTS EASEMENT
- R.O.W. RIGHT OF WAY
- TYP TYPICAL
- SF SQUARE FEET
- () ADDRESS
- S SOUTH
- N NORTH
- E EAST
- W WEST
- L LENGTH
- R RADIUS
- Δ DELTA
- CL CORD LENGTH
- CB CORD BEARING
- CENTERLINE
- BOUNDARY LINE
- LOT LINE
- - - EASEMENT LINE



PCD FILE # SF 1843

DATE: 09/26/2018		REVISIONS	
No.	Remarks	Date	By
2	County comments	10/13/20	JLP
3	County comments	04/20/21	TH
4	Add Geo-hazard note	09/17/21	TH
5	County comments	07/20/22	KPB

BARRON  **LAND**

BOUNDARY Δ MAPPING Δ SURVEYING Δ CONSTRUCTION
2790 N. Academy Blvd, Suite 311 P: 719.360.6827
Colorado Springs, CO 80917 F: 719.466.6527
www.BARRONLAND.com

PROJECT No.: 17-054 SHEET 3 OF 4

SEE SHEET 4

ZONE X

FINAL PLAT
RIVERBEND RESIDENTIAL FILING NO. 2
A PORTION OF THE NORTHEAST QUARTER OF
SECTION 14, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
COUNTY OF EL PASO, STATE OF COLORADO

SEE SHEET 3

EASEMENT STATEMENT

All lots are hereby platted with the following easements:

All front lot lines and side lot lines adjacent to a public right of way are hereby platted with a 5' public utility, drainage and improvements easement.

All side and rear lot lines are hereby platted with a 5' public utility and drainage easement except side lot lines adjacent to a public right of way.

All exterior lot lines are hereby platted with a 7' public utility and drainage easement except Lots 65-86 which rear lots are adjacent to rear lots of proposed Riverbend Residential Filing No. 1 being submitted concurrently.

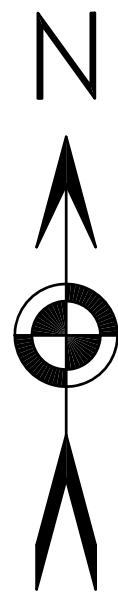
Maintenance of said easements are vested with the property owner.

CURVE	ARC	LENGTH	RADIUS	DELTA	ANGLE	CHORD	BEARING	CHORD	LENGTH
C1	24.67	60.00	23.33	23°	N 12°10'52" W	24.49			
C2	143.58	60.00	137°08'42"	N 44°35'49" E	111.69				
C3	24.67	60.00	23.33	23°	S 78°37'29" E	24.49			
C4	24.67	60.00	23.33	23°	N 77°49'08" E	24.49			
C5	143.58	60.00	137°08'42"	S 45°24'11" E	111.69				
C6	24.67	60.00	23.33	23°	S 11°22'31" W	24.49			
C7	81.68	52.00	90°00'00"	N 44°35'49" E	173.54				

LEGEND

- PUD PUBLIC UTILITY AND DRAINAGE EASEMENT
PUDI PUBLIC UTILITY, DRAINAGE AND IMPROVEMENTS EASEMENT
R.O.W. RIGHT OF WAY
TYP TYPICAL
SF SQUARE FEET
() ADDRESS
S SOUTH
N NORTH
E EAST
W WEST
L LENGTH
R RADIUS
Δ DELTA
CL CORD LENGTH
CB CORD BEARING

- CENTERLINE
— BOUNDARY LINE
— LOT LINE
- - - EASEMENT LINE



1" = 40'



PCD FILE # SF 1843

DATE: 09/26/2018		REVISIONS			
No.	Remarks	Date	By		
2	County comments	10/13/20	JLP		
3	County comments	04/20/21	TH		
4	Add Geo-hazard note	09/17/21	TH		
5	County comments	07/20/22	KPB		

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PROJECT No.: 17-054 SHEET 4 OF 4

Internal Trip Capture Estimate (from the 2020 Report)

NCHRP 684 Internal Trip Capture Estimation Tool					
Project Name:	River Bend Crossing		Organization:	LSC Transportation Consultants, Inc.	
Project Location:	SH 85-87/Main St		Performed By:	KDF	
Scenario Description:	Buildout		Date:	8/29/2019	
Analysis Year:	2040		Checked By:		
Analysis Period:	AM Street Peak Hour		Date:		

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				0	0	0
Retail				178	110	68
Restaurant				245	127	118
Cinema/Entertainment				0	0	0
Residential				0	0	0
Hotel				0	0	0
All Other Land Uses ²				0		
				423	237	186

Table 2-A: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		9	0	0	0
Restaurant	0	9		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	423	237	186
Internal Capture Percentage	9%	8%	10%
External Vehicle-Trips ⁵	387	219	168
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	8%	13%
Restaurant	7%	8%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

¹ Land Use Codes (LUCs) from <i>Trip Generation Manual</i> , published by the Institute of Transportation Engineers.
² Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
³ Enter trips assuming no transit or non-motorized trips (as assumed in <i>ITE Trip Generation Manual</i>).
⁴ Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.
⁵ Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.
⁶ Person-Trips
*Indicates computation that has been rounded to the nearest whole number.
Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool					
Project Name:	River Bend Crossing		Organization:	LSC Transportation Consultants, Inc.	
Project Location:	SH 85-87/Main St		Performed By:	KDF	
Scenario Description:	Buildout		Date:	8/26/2019	
Analysis Year:	2040		Checked By:		
Analysis Period:	PM Street Peak Hour		Date:		

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				0	0	0
Retail				339	163	176
Restaurant				183	99	84
Cinema/Entertainment				0	0	0
Residential				0	0	0
Hotel				0	0	0
All Other Land Uses ²				0	0	0
				522	262	260

Table 2-P: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		29	0	0	0
Restaurant	0	34		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	522	262	260
Internal Capture Percentage	24%	24%	24%
External Vehicle-Trips ⁵	396	199	197
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	0	0	0

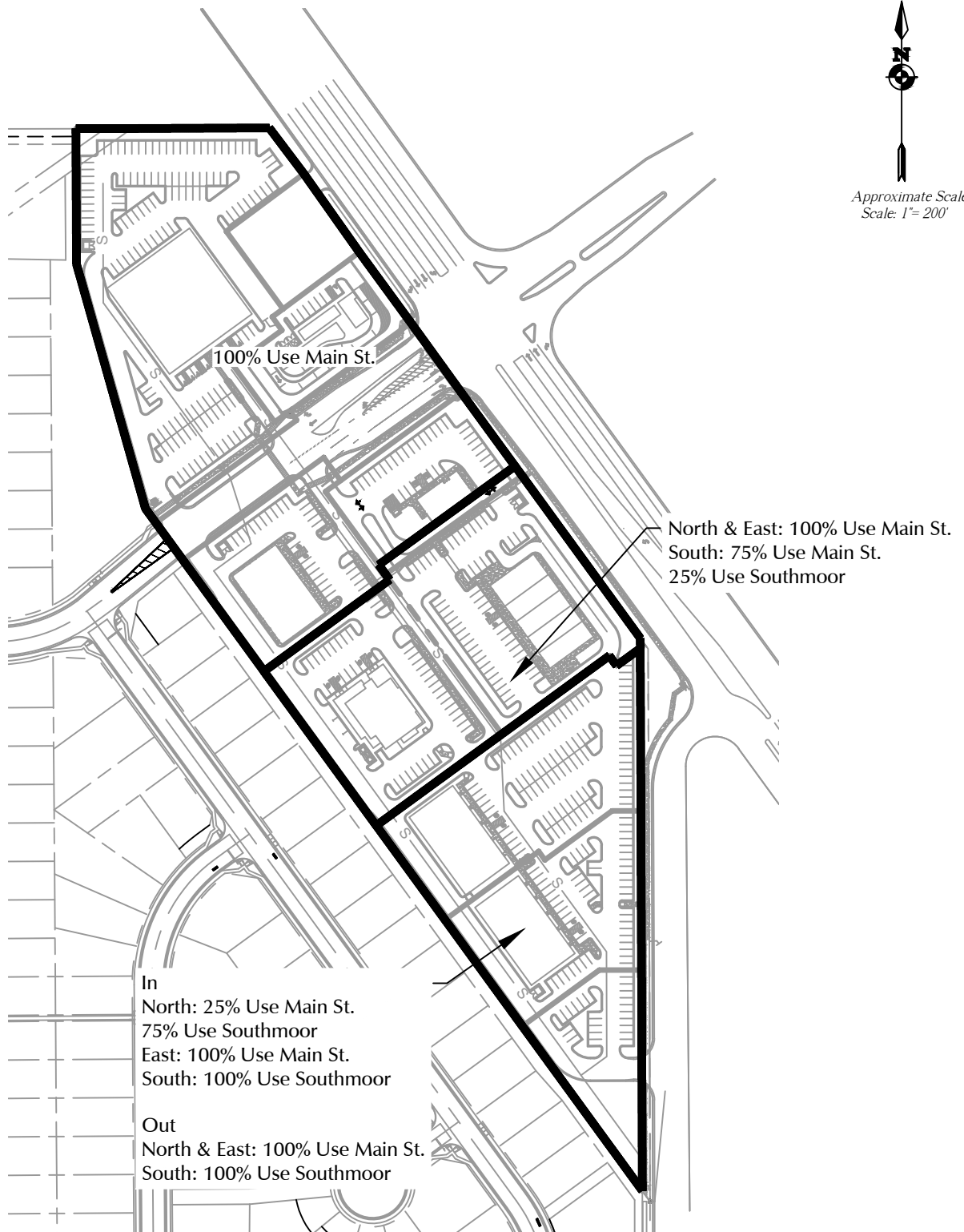
Table 6-P: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	21%	16%
Restaurant	29%	40%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

¹ Land Use Codes (LUCs) from <i>Trip Generation Manual</i> , published by the Institute of Transportation Engineers.
² Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
³ Enter trips assuming no transit or non-motorized trips (as assumed in ITE <i>Trip Generation Manual</i>).
⁴ Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be
⁵ Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.
⁶ Person-Trips
*Indicates computation that has been rounded to the nearest whole number.
Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Appendix Figures 1-2 (from the 2020 Report)



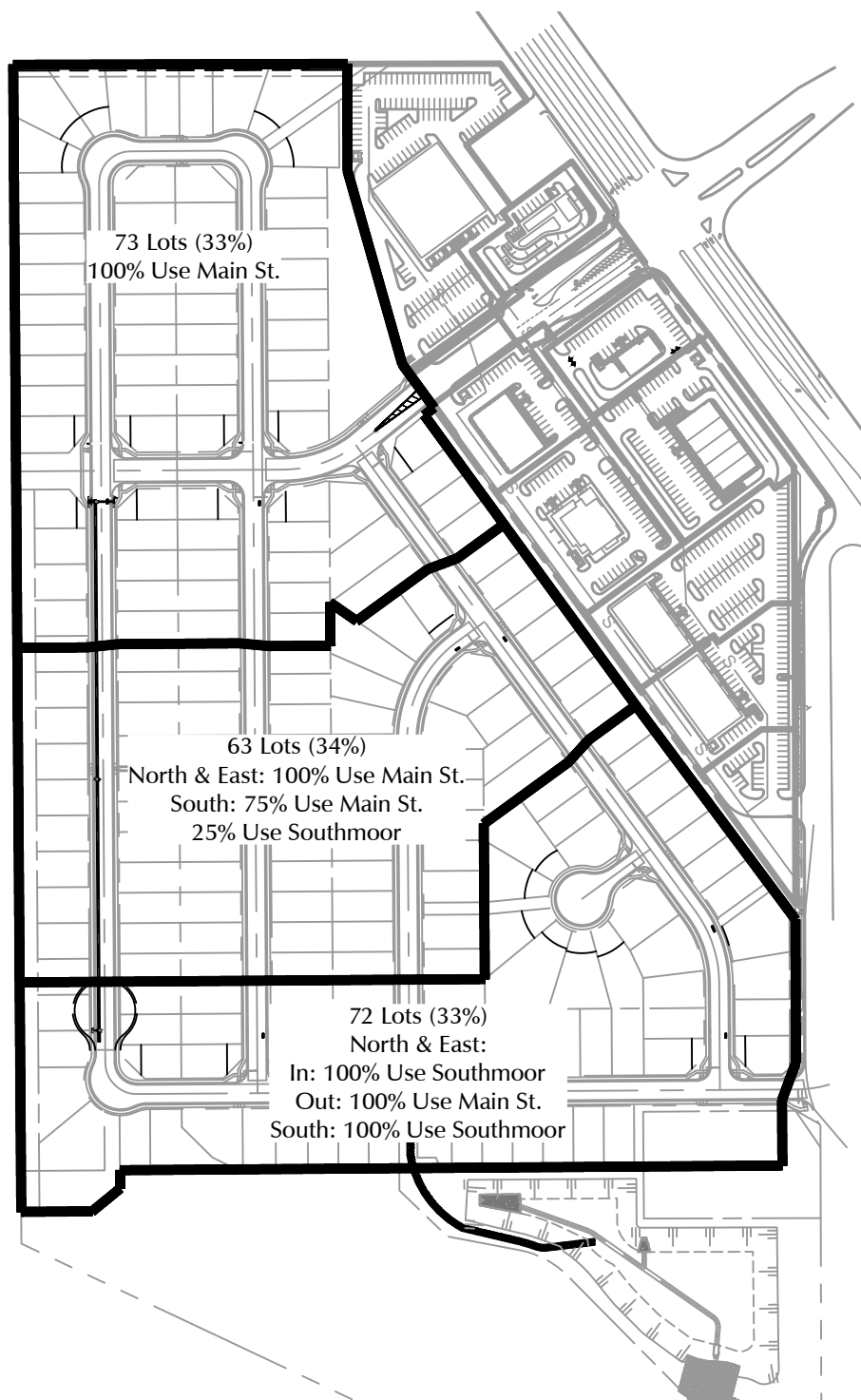
Approximate Scale
Scale: 1"= 200'



Appendix Figure 1

Commercial Trip Paths

River Bend Crossing (LSC #184140)



Approximate Scale
Scale: 1"= 300'

Appendix Figure 2

Residential Trip Paths

River Bend Crossing (LSC #184140)

Traffic Count Reports (from the 2020 Report)



Counts by LSC

LSC Transportation Consultants, Inc.

File Name : Hwy 85 - Main St AM

Site Code : 00184140

Start Date : 02/14/2018

Page No : 1

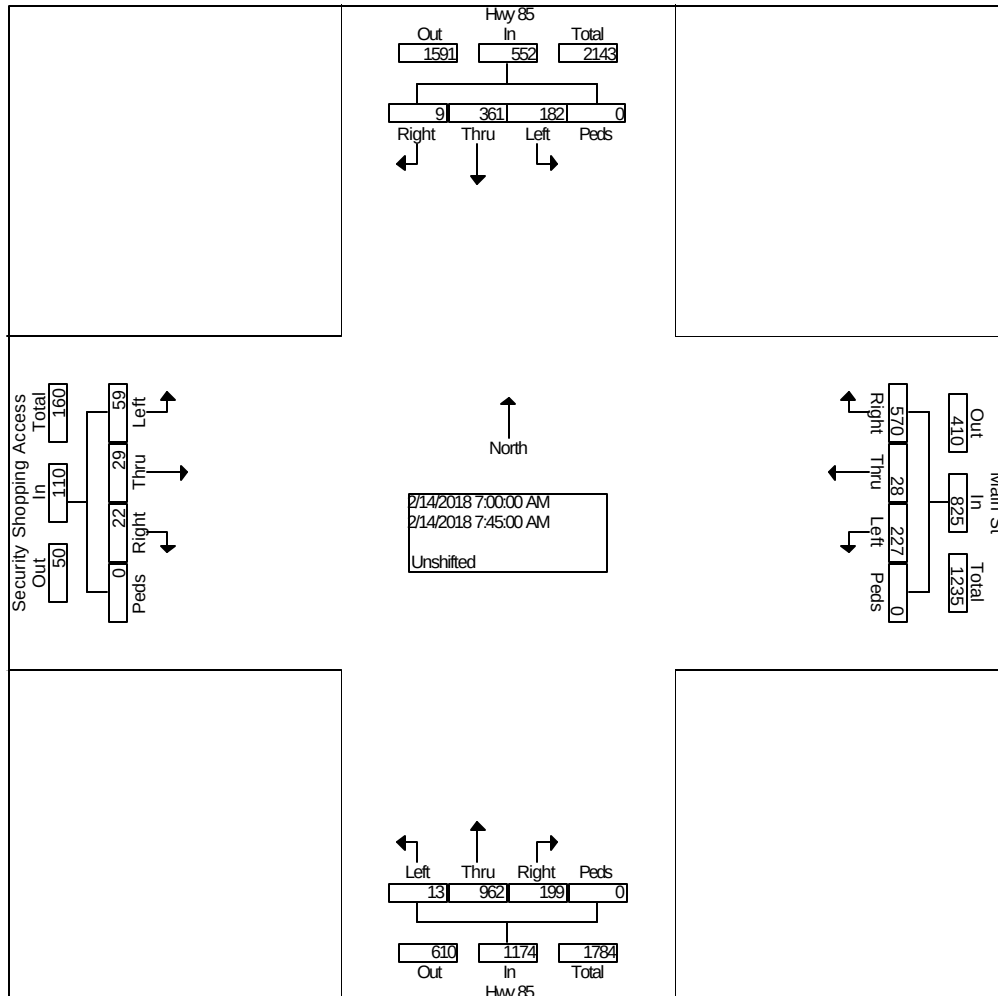
Groups Printed- Unshifted

	Hwy 85 From North				Main St From East				Hwy 85 From South				Security Shopping Access From West				Int. Total
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	1	53	21	0	105	6	42	0	29	193	1	0	8	6	13	0	478
06:45 AM	2	80	31	0	94	6	52	0	32	166	1	0	4	3	14	0	485
Total	3	133	52	0	199	12	94	0	61	359	2	0	12	9	27	0	963
07:00 AM	0	79	59	0	125	8	59	0	49	191	4	0	6	9	12	0	601
07:15 AM	2	86	36	0	144	11	57	0	40	257	7	0	8	8	18	0	674
07:30 AM	5	95	43	0	180	3	66	0	58	317	2	0	4	8	20	0	801
07:45 AM	2	101	44	0	121	6	45	0	52	197	0	0	4	4	9	0	585
Total	9	361	182	0	570	28	227	0	199	962	13	0	22	29	59	0	2661
08:00 AM	2	75	43	0	69	5	49	0	41	154	0	0	1	6	6	0	451
08:15 AM	3	98	33	0	94	4	63	0	44	132	2	0	2	8	6	0	489
Grand Total	17	667	310	0	932	49	433	0	345	1607	17	0	37	52	98	0	4564
Apprch %	1.7	67.1	31.2	0.0	65.9	3.5	30.6	0.0	17.5	81.6	0.9	0.0	19.8	27.8	52.4	0.0	
Total %	0.4	14.6	6.8	0.0	20.4	1.1	9.5	0.0	7.6	35.2	0.4	0.0	0.8	1.1	2.1	0.0	

Counts by LSC

File Name : Hwy 85 - Main St AM
 Site Code : 00184140
 Start Date : 02/14/2018
 Page No : 2

	Hwy 85 From North					Main St From East					Hwy 85 From South					Security Shopping Access From West					
Start Time	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Int. Total
Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Intersection	07:00 AM																				
Volume	9	36	18	0	552	57	28	22	0	825	19	96	13	0	1174	22	29	59	0	110	2661
		1	2			0		7			9	2									
Percent	1.6	65.	33.	0.0		69.	3.4	27.	0.0		17.	81.	1.1	0.0		20.	26.	53.	0.0		
		4	0			1		5			0	9				0	4	6			
07:30																					
Volume	5	95	43	0	143	18	3	66	0	249	58	31	2	0	377	4	8	20	0	32	801
						0						7									
Peak Factor																					0.831
High Int.	07:45 AM					07:30 AM					07:30 AM					07:15 AM					
Volume	2	10	44	0	147	18	3	66	0	249	58	31	2	0	377	8	8	18	0	34	
		1				0						7									
Peak Factor					0.93					0.82					0.77					0.80	
					9					8					9					9	



Counts by LSC

LSC Transportation Consultants, Inc.

File Name : Hwy 85 - Main St PM

Site Code : 00184140

Start Date : 02/13/2018

Page No : 1

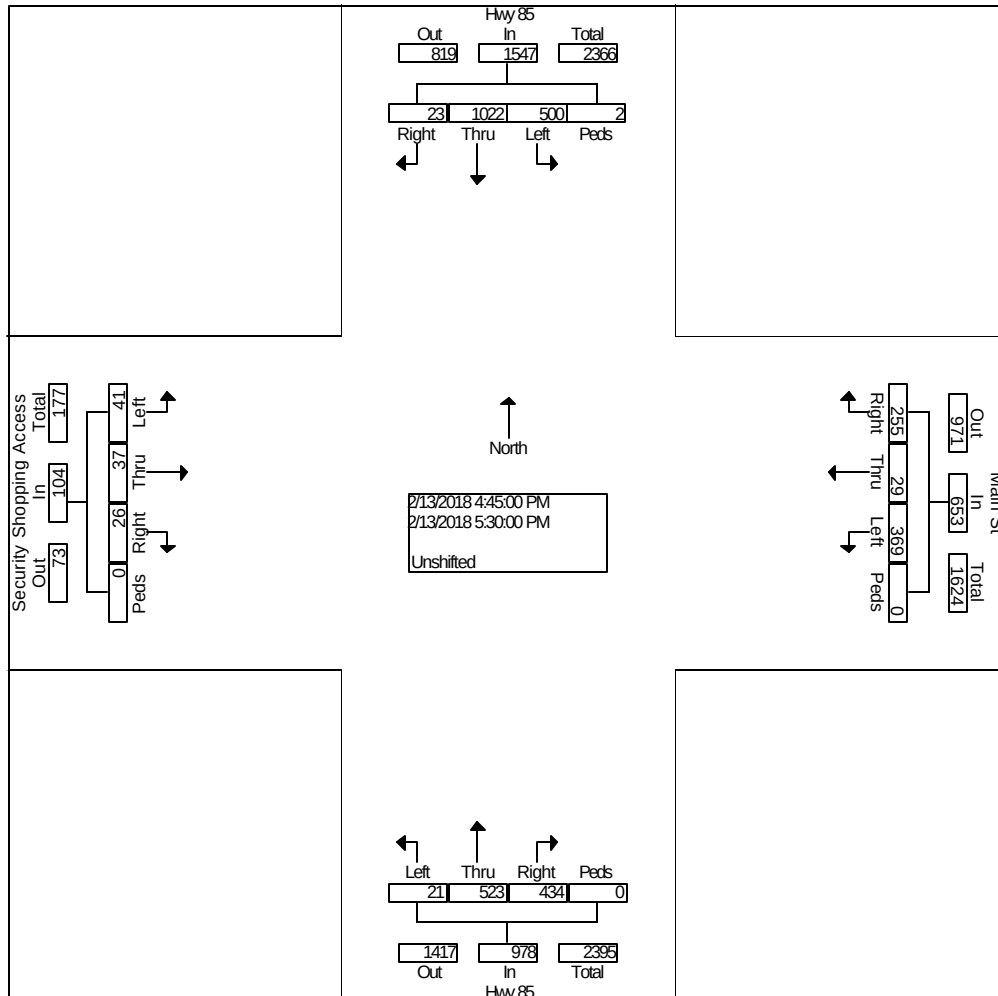
Groups Printed- Unshifted

	Hwy 85 From North				Main St From East				Hwy 85 From South				Security Shopping Access From West				Int. Total
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
04:00 PM	6	244	115	0	55	2	115	0	81	119	4	0	4	13	12	0	770
04:15 PM	7	220	123	0	45	6	91	0	99	105	4	0	11	8	10	0	729
04:30 PM	3	238	124	0	53	8	109	0	88	132	2	1	3	9	10	0	780
04:45 PM	6	264	134	0	65	6	86	0	115	152	3	0	8	7	9	0	855
Total	22	966	496	0	218	22	401	0	383	508	13	1	26	37	41	0	3134
05:00 PM	8	244	123	0	59	4	74	0	116	126	12	0	3	9	10	0	788
05:15 PM	8	282	119	1	70	7	86	0	109	123	1	0	10	11	13	0	840
05:30 PM	1	232	124	1	61	12	123	0	94	122	5	0	5	10	9	0	799
05:45 PM	4	239	129	1	53	4	110	0	129	123	2	0	6	13	5	0	818
Total	21	997	495	3	243	27	393	0	448	494	20	0	24	43	37	0	3245
Grand Total	43	1963	991	3	461	49	794	0	831	1002	33	1	50	80	78	0	6379
Apprch %	1.4	65.4	33.0	0.1	35.4	3.8	60.9	0.0	44.5	53.7	1.8	0.1	24.0	38.5	37.5	0.0	
Total %	0.7	30.8	15.5	0.0	7.2	0.8	12.4	0.0	13.0	15.7	0.5	0.0	0.8	1.3	1.2	0.0	

Counts by LSC

File Name : Hwy 85 - Main St PM
 Site Code : 00184140
 Start Date : 02/13/2018
 Page No : 2

	Hwy 85 From North					Main St From East					Hwy 85 From South					Security Shopping Access From West					
Start Time	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	23	10	50	2	1547	25	29	36	0	653	43	52	21	0	978	26	37	41	0	104	3282
Percent	1.5	66.	32.	0.1		39.	4.4	56.	0.0		44.	53.	2.1	0.0		25.	35.	39.	0.0		
		1	3			1		5			4	5				0	6	4			
04:45		26	13		404						11	15			270					24	855
Volume	6	4	4	0		65	6	86	0	157	5	2	3	0		8	7	9	0		
Peak																					0.960
Factor																					
High Int.	05:15 PM					05:30 PM					04:45 PM					05:15 PM					
Volume	8	28	11	1	410	61	12	12	0	196	11	15	3	0	270	10	11	13	0	34	
		2	9					3			5	2									
Peak					0.94					0.83					0.90					0.76	
Factor					3					3					6					5	



Counts by LSC

LSC Transportation Consultants, Inc.

File Name : Hwy 85 - Southmoor Dr AM

Site Code : 00184140

Start Date : 02/15/2018

Page No : 1

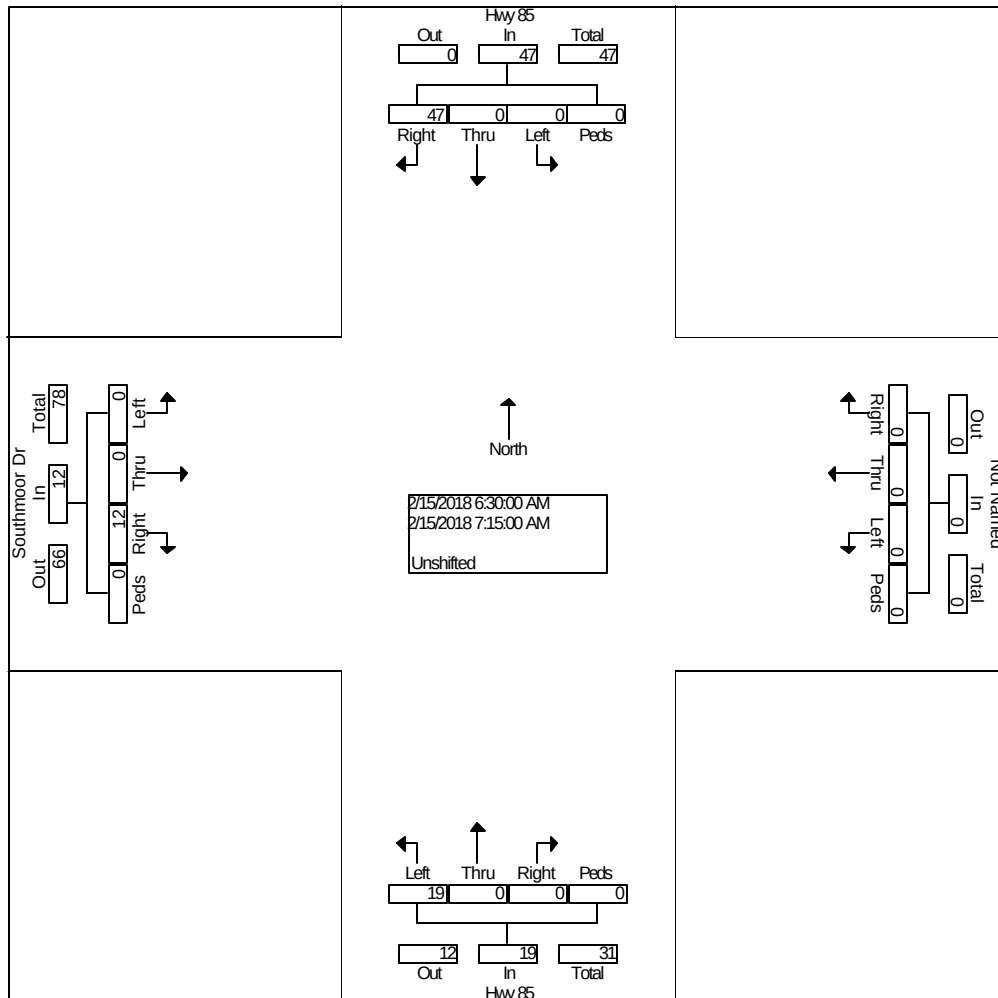
Groups Printed- Unshifted

	Hwy 85 From North				From East				Hwy 85 From South				Southmoor Dr From West				Int. Total
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	12	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	20
06:45 AM	17	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	25
Total	29	0	0	0	0	0	0	0	0	0	8	0	8	0	0	0	45
07:00 AM	6	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	11
07:15 AM	12	0	0	0	0	0	0	0	0	0	7	0	3	0	0	0	22
07:30 AM	8	0	0	0	0	0	0	0	0	0	2	0	6	0	0	0	16
07:45 AM	6	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	14
Total	32	0	0	0	0	0	0	0	0	0	17	0	14	0	0	0	63
08:00 AM	12	0	0	0	0	0	0	0	0	0	5	0	7	0	0	0	24
08:15 AM	7	0	0	0	0	0	0	0	0	0	4	0	3	0	0	0	14
Grand Total	80	0	0	0	0	0	0	0	0	0	34	0	32	0	0	0	146
Apprch %	100. 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100. 0	0.0	100. 0	0.0	0.0	0.0	
Total %	54.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.3	0.0	21.9	0.0	0.0	0.0	

Counts by LSC

File Name : Hwy 85 - Southmoor Dr AM
 Site Code : 00184140
 Start Date : 02/15/2018
 Page No : 2

	Hwy 85 From North					From East					Hwy 85 From South					Southmoor Dr From West					
Start Time	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Int. Total
Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Intersection	06:30 AM																				
Volume	47	0	0	0	47	0	0	0	0	0	0	0	19	0	19	12	0	0	0	12	78
Percent	10	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	10	0.0		10	0.0	0.0	0.0		
	0.0												0.0			0.0					
06:45																					
Volume	17	0	0	0	17	0	0	0	0	0	0	0	4	0	4	4	0	0	0	4	25
Peak																					0.780
Factor																					
High Int.	06:45 AM					6:15:00 AM					07:15 AM					06:30 AM					
Volume	17	0	0	0	17	0	0	0	0	0	0	0	7	0	7	4	0	0	0	4	
Peak																					
Factor	0.69										0.67					0.75					
	1										9					0					



Counts by LSC

LSC Transportation Consultants, Inc.

File Name : Hwy 85 - Southmoor Dr PM

Site Code : 00184140

Start Date : 02/14/2018

Page No : 1

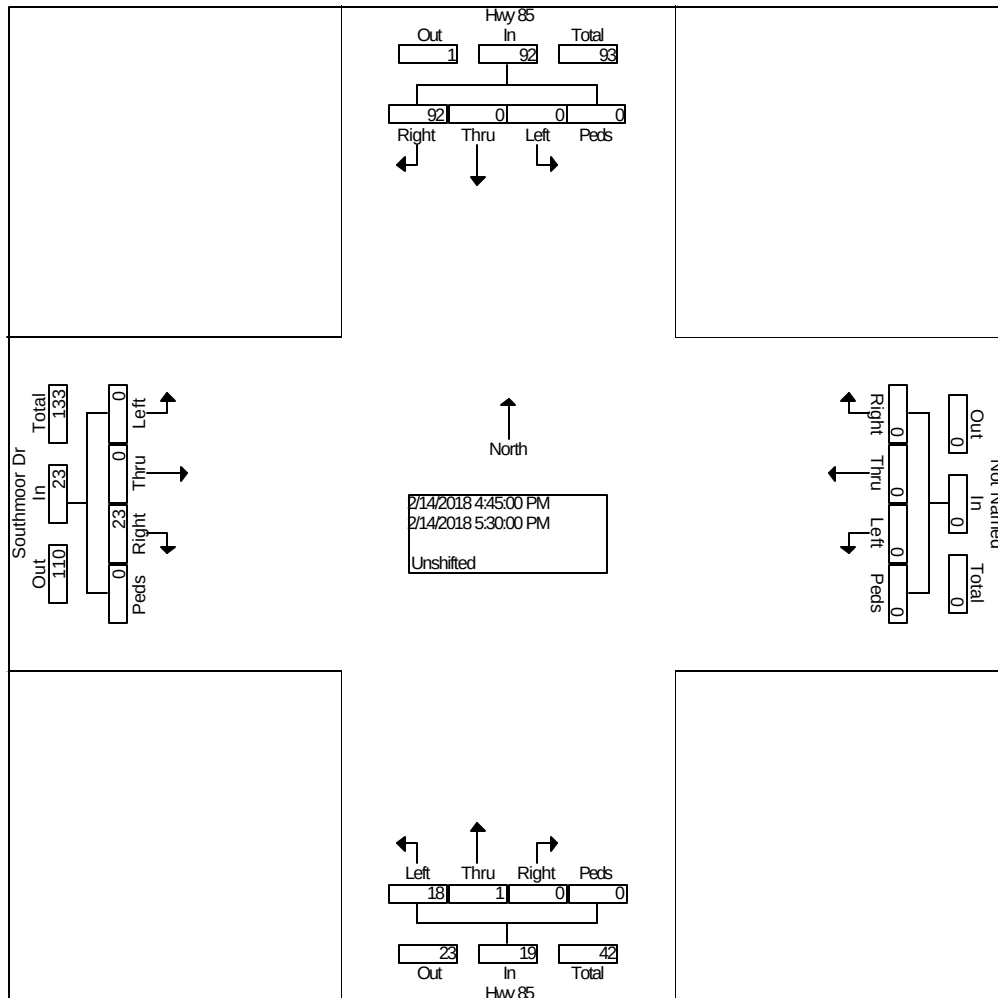
Groups Printed- Unshifted

	Hwy 85 From North				From East				Hwy 85 From South				Southmoor Dr From West				Int. Total
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
04:00 PM	14	0	0	0	0	0	0	0	0	2	2	0	4	0	0	0	22
04:15 PM	21	0	0	0	0	0	0	0	0	1	2	0	16	0	0	0	40
04:30 PM	18	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	22
04:45 PM	15	0	0	0	0	0	0	0	0	1	8	0	9	0	0	0	33
Total	68	0	0	0	0	0	0	0	0	4	15	0	30	0	0	0	117
05:00 PM	24	0	0	0	0	0	0	0	0	0	5	0	7	0	0	0	36
05:15 PM	23	0	0	0	0	0	0	0	0	0	2	0	5	0	0	0	30
05:30 PM	30	0	0	0	0	0	0	0	0	0	3	0	2	0	0	0	35
05:45 PM	19	0	0	0	0	0	0	0	0	0	4	0	9	0	0	0	32
Total	96	0	0	0	0	0	0	0	0	0	14	0	23	0	0	0	133
Grand Total	164	0	0	0	0	0	0	0	0	4	29	0	53	0	0	0	250
Apprch %	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.1	87.9	0.0	100.0	0.0	0.0	0.0	
Total %	65.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	11.6	0.0	21.2	0.0	0.0	0.0	

Counts by LSC

File Name : Hwy 85 - Southmoor Dr PM
 Site Code : 00184140
 Start Date : 02/14/2018
 Page No : 2

	Hwy 85 From North					From East					Hwy 85 From South					Southmoor Dr From West					
Start Time	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	92	0	0	0	92	0	0	0	0	0	0	1	18	0	19	23	0	0	0	23	134
Percent	10	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	5.3	94.7	0.0		10	0.0	0.0	0.0		
05:00	24	0	0	0	24	0	0	0	0	0	0	0	5	0	5	7	0	0	0	7	36
Volume																					
Peak																					0.931
Factor																					
High Int.	05:30 PM					3:45:00 PM					04:45 PM					04:45 PM					
Volume	30	0	0	0	30	0	0	0	0	0	0	1	8	0	9	9	0	0	0	9	
Peak					0.76										0.52					0.63	
Factor					7										8					9	



Counts by LSC

LSC Transportation Consultants, Inc.

File Name : Southmoor Dr - Security Shopping Access AM

Site Code : 00184140

Start Date : 02/15/2018

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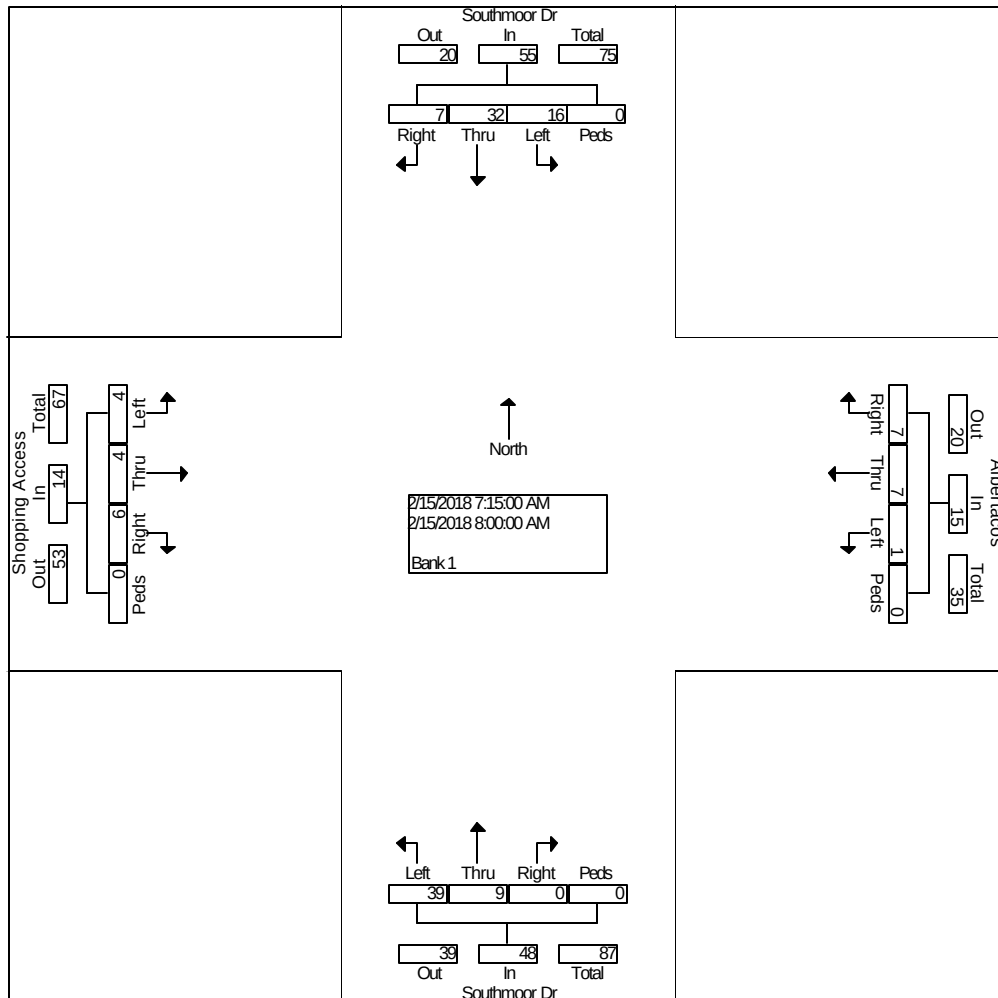
Groups Printed- Bank 1

	Southmoor Dr From North				Albertacos From East				Southmoor Dr From South				Shopping Access From West				Int. Total
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	2	12	2	0	0	0	0	0	0	4	10	0	2	0	0	0	32
06:45 AM	2	17	2	0	3	0	0	0	0	1	5	0	0	1	0	0	31
Total	4	29	4	0	3	0	0	0	0	5	15	0	2	1	0	0	63
07:00 AM	3	4	3	0	1	4	0	0	0	0	0	0	0	1	0	0	16
07:15 AM	3	10	5	0	2	3	0	0	0	1	16	0	1	2	0	0	43
07:30 AM	1	5	3	0	2	1	1	0	0	4	14	0	1	0	0	0	32
07:45 AM	1	8	2	0	1	2	0	0	0	1	3	0	4	0	2	0	24
Total	8	27	13	0	6	10	1	0	0	6	33	0	6	3	2	0	115
08:00 AM	2	9	6	0	2	1	0	0	0	3	6	0	0	2	2	0	33
08:15 AM	1	9	1	0	2	4	1	0	0	1	5	0	0	0	0	0	24
Grand Total	15	74	24	0	13	15	2	0	0	15	59	0	8	6	4	0	235
Apprch %	13.3	65.5	21.2	0.0	43.3	50.0	6.7	0.0	0.0	20.3	79.7	0.0	44.4	33.3	22.2	0.0	
Total %	6.4	31.5	10.2	0.0	5.5	6.4	0.9	0.0	0.0	6.4	25.1	0.0	3.4	2.6	1.7	0.0	

Counts by LSC

File Name : Southmoor Dr - Security Shopping Access AM
 Site Code : 00184140
 Start Date : 02/15/2018
 Page No : 2

	Southmoor Dr From North					Albertacos From East					Southmoor Dr From South					Shopping Access From West					
Start Time	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Int. Total
Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Intersection	07:15 AM																				
Volume	7	32	16	0	55	7	7	1	0	15	0	9	39	0	48	6	4	4	0	14	132
Percent	12.	58.	29.	0.0		46.	46.	6.7	0.0		0.0	18.	81.	0.0		42.	28.	28.	0.0		
	7	2	1			7	7					8	3			9	6	6			
07:15 Volume	3	10	5	0	18	2	3	0	0	5	0	1	16	0	17	1	2	0	0	3	43
Peak Factor																					0.767
High Int.	07:15 AM					07:15 AM					07:30 AM					07:45 AM					
Volume	3	10	5	0	18	2	3	0	0	5	0	4	14	0	18	4	0	2	0	6	
Peak Factor					0.76					0.75					0.66					0.58	
					4					0					7					3	



Counts by LSC

LSC Transportation Consultants, Inc.

File Name : Southmoor Dr - Security Shopping Access PM

Site Code : 00184140

Start Date : 02/14/2018

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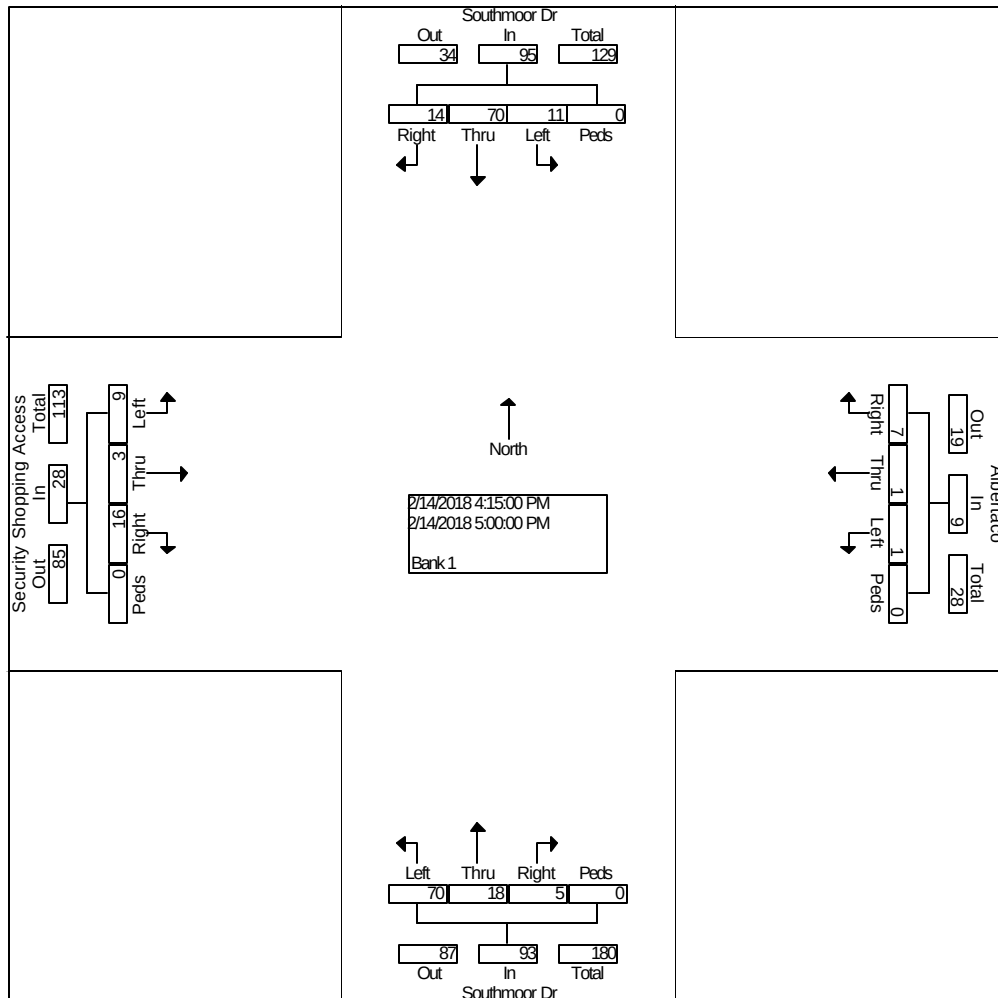
Groups Printed- Bank 1

	Southmoor Dr From North				Albertaco From East				Southmoor Dr From South				Security Shopping Access From West				Int. Total
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
04:00 PM	2	10	4	0	0	0	0	0	0	2	22	0	7	0	0	0	47
04:15 PM	1	19	2	0	5	0	1	0	1	9	26	0	2	1	2	0	69
04:30 PM	3	18	0	0	0	1	0	0	1	0	18	0	2	0	1	0	44
04:45 PM	5	13	5	0	1	0	0	0	0	6	12	0	8	1	4	0	55
Total	11	60	11	0	6	1	1	0	2	17	78	0	19	2	7	0	215
05:00 PM	5	20	4	0	1	0	0	0	3	3	14	0	4	1	2	0	57
05:15 PM	2	22	1	0	2	1	1	0	0	2	10	0	7	1	1	0	50
05:30 PM	3	23	7	0	1	3	0	0	0	0	11	0	4	0	1	0	53
05:45 PM	6	15	4	0	3	2	0	0	0	1	8	0	1	0	5	0	45
Total	16	80	16	0	7	6	1	0	3	6	43	0	16	2	9	0	205
Grand Total	27	140	27	0	13	7	2	0	5	23	121	0	35	4	16	0	420
Apprch %	13.9	72.2	13.9	0.0	59.1	31.8	9.1	0.0	3.4	15.4	81.2	0.0	63.6	7.3	29.1	0.0	
Total %	6.4	33.3	6.4	0.0	3.1	1.7	0.5	0.0	1.2	5.5	28.8	0.0	8.3	1.0	3.8	0.0	

Counts by LSC

File Name : Southmoor Dr - Security Shopping Access PM
 Site Code : 00184140
 Start Date : 02/14/2018
 Page No : 2

	Southmoor Dr From North					Albertaco From East					Southmoor Dr From South					Security Shopping Access From West					
Start Time	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:15 PM																				
Volume	14	70	11	0	95	7	1	1	0	9	5	18	70	0	93	16	3	9	0	28	225
Percent	14.	73.	11.	0.0		77.	11.	11.	0.0		5.4	19.	75.	0.0		57.	10.	32.	0.0		
	7	7	6			8	1	1				4	3			1	7	1			
04:15																					
Volume	1	19	2	0	22	5	0	1	0	6	1	9	26	0	36	2	1	2	0	5	69
Peak																					0.815
Factor																					
High Int.																					
Volume	5	20	4	0	29	5	0	1	0	6	1	9	26	0	36	8	1	4	0	13	
Peak																					
Factor																					0.53
																					8



Queuing Reports (from the 2020 Report)

Queuing and Blocking Report

Intersection: 1: US Highway 85 & Community Collector/Main St

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	L	T	L	T	T	R	L
Maximum Queue (ft)	143	69	73	48	245	288	137	262	466	450	111	161
Average Queue (ft)	78	28	30	18	98	172	65	44	285	257	16	51
95th Queue (ft)	135	59	65	40	229	258	118	139	418	401	65	129
Link Distance (ft)		190	190			380	380		484	484	484	
Upstream Blk Time (%)									1	1		
Queuing Penalty (veh)									3	3		
Storage Bay Dist (ft)	130			130	230			335				775
Storage Blk Time (%)	2				0	2			5			
Queuing Penalty (veh)	1				0	3			4			

Intersection: 1: US Highway 85 & Community Collector/Main St

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	180	197	151	36
Average Queue (ft)	112	76	56	11
95th Queue (ft)	167	150	113	31
Link Distance (ft)		1067	1067	1067
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	775			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: US Highway 85 & Southmoor Dr

Movement	EB	NB	NB	NB
Directions Served	R	L	T	T
Maximum Queue (ft)	43	21	50	21
Average Queue (ft)	19	9	2	1
95th Queue (ft)	44	24	23	10
Link Distance (ft)	117		813	813
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		400		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 4: Southmoor Dr & Site Access

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	30	41
Average Queue (ft)	12	4
95th Queue (ft)	36	22
Link Distance (ft)	86	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		200
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Southmoor Dr & Residential Access

Movement	EB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	13
95th Queue (ft)	37
Link Distance (ft)	201
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 14

Queuing and Blocking Report

Intersection: 1: US Highway 85 & Community Collector/Main St

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	L	T	L	T	T	R	L
Maximum Queue (ft)	131	104	111	73	315	384	302	109	261	236	304	280
Average Queue (ft)	65	36	36	25	208	266	85	46	166	139	134	170
95th Queue (ft)	116	75	77	58	304	376	208	88	237	208	254	257
Link Distance (ft)		190	190			380	380		484	484	484	
Upstream Blk Time (%)						2	0					
Queuing Penalty (veh)						0	0					
Storage Bay Dist (ft)	130			130	230			335				775
Storage Blk Time (%)	1		0		1	21						
Queuing Penalty (veh)	1		0		3	47						

Intersection: 1: US Highway 85 & Community Collector/Main St

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	313	403	462	69
Average Queue (ft)	209	222	247	24
95th Queue (ft)	276	358	390	49
Link Distance (ft)		1067	1067	1067
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	775			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: US Highway 85 & Southmoor Dr

Movement	EB	NB	SB	SB
Directions Served	R	L	T	TR
Maximum Queue (ft)	68	63	20	21
Average Queue (ft)	27	19	1	1
95th Queue (ft)	52	48	11	10
Link Distance (ft)	117		484	484
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		400		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 4: Southmoor Dr & Site Access

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	54	39
Average Queue (ft)	26	9
95th Queue (ft)	51	34
Link Distance (ft)	86	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		200
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Southmoor Dr & Residential Access

Movement	EB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	8
95th Queue (ft)	30
Link Distance (ft)	201
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 51

Queuing and Blocking Report

With Train Crossing

Intersection: 1: US Highway 85 & Main St

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	R	L	T	T	R
Maximum Queue (ft)	150	157	50	26	76	74	117	65	82	271	231	104
Average Queue (ft)	112	73	17	18	69	54	83	59	45	188	159	47
95th Queue (ft)	173	163	55	32	93	98	125	67	96	298	267	132
Link Distance (ft)		282	282		68	68	68			483	483	483
Upstream Blk Time (%)					53	14	14	2				
Queuing Penalty (veh)					181	50	50	0				
Storage Bay Dist (ft)	130			130				230	335			
Storage Blk Time (%)	9						14	2				
Queuing Penalty (veh)	4						97	1				

Intersection: 1: US Highway 85 & Main St

Movement	SB	SB	SB	SB	SB
Directions Served	L	L	T	T	R
Maximum Queue (ft)	173	198	123	109	18
Average Queue (ft)	144	170	60	58	8
95th Queue (ft)	224	223	131	122	22
Link Distance (ft)			1066	1066	1066
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	775	775			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report

With Train Crossing

Intersection: 1: US Highway 85 & Main St

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	R	L	T	T	R
Maximum Queue (ft)	130	152	117	78	99	78	122	68	110	245	210	521
Average Queue (ft)	90	89	44	31	86	74	74	47	53	132	109	380
95th Queue (ft)	138	160	106	75	102	82	117	87	115	230	194	645
Link Distance (ft)		282	282		68	68	68			483	483	483
Upstream Blk Time (%)					88	63	23	1				8
Queuing Penalty (veh)					251	179	65	0				34
Storage Bay Dist (ft)	130			130				230	335			
Storage Blk Time (%)	4	4	0				23	1				
Queuing Penalty (veh)	2	5	0				69	1				

Intersection: 1: US Highway 85 & Main St

Movement	SB	SB	SB	SB	SB
Directions Served	L	L	T	T	R
Maximum Queue (ft)	825	872	1081	1036	64
Average Queue (ft)	691	733	498	405	27
95th Queue (ft)	944	985	1131	940	58
Link Distance (ft)			1066	1066	1066
Upstream Blk Time (%)			13		
Queuing Penalty (veh)			0		
Storage Bay Dist (ft)	775	775			
Storage Blk Time (%)	23	31			
Queuing Penalty (veh)	142	193			