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Townhomes at Bradley Crossroads
Traffic Impact Study
(LSC #194210)
March 22, 2019

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.

COLORADO LICENSED
JEFFREY C. HODSDON
31684
3-22-19
PROFESSIONAL ENGINEER

Developer's Statement

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

3/25/19
Date

Add PCD File No. PPR1846 2

1

Engineering Documents
Reviewed By:
Daniel Torres
danieltorres@elpasoco.com
EPC Planning & Community
Development Department

Summary of Comments on Working File - LSC Responses to TIS Redline comments.pdf

Page: 1

Number: 1 Author: Daniel Torres Subject: EPC ENG Approval Date: 4/24/2019 4:39:57 PM

Number: 2 Author: Daniel Torres Subject: Text Box Date: 4/23/2019 10:31:08 AM

Add PCD File No. PPR1846

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:31:10 AM

LSC Response: Added as requested.

Should this be 2006? I couldn't find a 2016 study for the Lincoln Commons townhomes 2

Please verify this date. Per the records I found the original study for the entire Lincoln Plaza site was in 2004 with an update in 2005. 1

Four existing access points to the arterial streets will be used by the property, with two on Bradley Road and two on Main Street. All are currently two-way stop-sign-controlled (TWSC):

- Bradley Road/Lincoln Plaza Drive intersection
- Three-quarter access on Bradley Road (800 feet west of Hancock Expressway/Bradley Road)
- RIRO access on Main Street (410 feet south of Hancock Expressway/Bradley Road)
- Main Street/Gladiator Drive intersection.

Note that there are also reports in 2008 and 2010 for the Bradley Crossroads site which includes this lot. 3

PREVIOUS AREA TRAFFIC REPORTS

The previous report by LSC for this site was dated May 10, 2006. This 2006 study was for the entire Lincoln Plaza development, which included this site plus all other adjacent parcels (some of which have since been developed). LSC prepared a report for the adjacent townhome development (dated May 10, 2016) and the Bradley Storage Time development (dated June 1, 2017) for the site located on the north side of the intersection of Lincoln Plaza Drive/Bradley Road. The LSC study for the Proby/Hancock Commercial center (dated January 26, 2015) was also utilized, in part, to estimate the background traffic volumes at the Bradley/Hancock/Main Street intersection. 4

Please include descriptions of Gladiator Drive and Service Road.

ROAD AND TRAFFIC CONDITIONS

Figure 1 shows the streets adjacent to and in the vicinity of the site. Adjacent streets serving the site are identified below followed by a brief description of each:

four-lane Principal Arterial 5

Bradley Road extends from just west of Academy Boulevard to Goldfield Drive. Bradley Road is classified as a Principal Arterial on the El Paso County *Major Transportation Corridors Plan (MTCP)*. Adjacent to the site, Bradley Road is a two-lane roadway with left-turn lanes and right-turn lanes at Lincoln Plaza Drive and a posted speed limit of 40 miles per hour (mph). The 2016 updated to the MTCP shows expansion of Bradley Road to a four-lane roadway by 2040.

Hancock Expressway is a Principal Arterial that extends north from Bradley Road and west to Fountain Boulevard, where it becomes Union Boulevard. South of Bradley Road, Hancock Expressway becomes Main Street. The intersection of Hancock/Main/Bradley is signalized with raised medians and left-turn lanes. Adjacent to the site, Hancock Expressway is a four-lane street with a raised median and a posted speed limit of 40 mph.

Lincoln Plaza Drive is a 40-foot-wide, two-lane Urban Local street that extends south from Bradley Road to Witches Hollow Lane.

Existing Traffic Volumes

Vehicular turning movement counts were conducted at the following intersections:

Page: 4

Number: 1 Author: Daniel Torres Subject: Callout Date: 4/24/2019 1:41:44 PM

Please verify this date. Per the records I found the original study for the entire Lincoln Plaza site was in 2004 with an update in 2005.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:30:18 AM

LSC Response: This paragraph has been updated in the revised TIS report.

Number: 2 Author: Daniel Torres Subject: Callout Date: 4/24/2019 1:40:41 PM

Should this be 2006? I couldn't find a 2016 study for the Lincoln Commons townhomes

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:30:47 AM

LSC Response: This paragraph has been updated in the revised TIS report.

Number: 3 Author: Daniel Torres Subject: Text Box Date: 4/25/2019 7:19:57 AM

Note that there are also reports in 2008 and 2010 for the Bradley Crossroads site which includes this lot.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:32:21 AM

LSC Response: This paragraph has been updated in the revised TIS report. The updated paragraph includes references to these 2008 and 2010 reports.

Number: 4 Author: Daniel Torres Subject: Callout Date: 4/25/2019 7:26:08 AM

Please include descriptions of Gladiator Drive and Service Road.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:32:47 AM

LSC Response: Added as requested.

Number: 5 Author: Daniel Torres Subject: Callout Date: 4/24/2019 7:08:53 AM

four-lane Principal Arterial

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:32:56 AM

LSC Response: Added as requested.

- Hancock Expressway/Bradley Road
  - Wednesday, March 6, 2019 from 6:30-8:30 a.m.
  - Wednesday, March 6, 2019 from 4:00-6:00 p.m.
- Bradley Road/Lincoln Plaza Drive
  - Tuesday, March 12, 2019 from 6:30-8:30 a.m.
  - 2 Monday, March 18, 2019 from 4:00-6:00 p.m.
- Main Street/right-in/right-out (RIRO) access
  - Tuesday, March 12, 2019 from 6:30-8:30 a.m.
  - 4 Monday, March 18, 2019 from 4:00-6:00 p.m.

1 Per ECM Section B.3.1.A counts shall be obtained on Tuesday, Wednesday or Thursday.

3 Provide counts for Gladiator/Main St.

Figure 3 shows these turning movement volumes, as well as the average weekday traffic volumes (estimated based on factored peak-hour count data) on the study area streets. Raw count data are attached.

TRIP GENERATION

Estimates of the vehicle-trips projected to be generated by the Townhomes at Bradley Crossroads residential development have been made using the nationally published trip generation rates from *Trip Generation, 10th Edition, 2017* by the Institute of Transportation Engineers (ITE). ITE Land Use Category 220 – "Multi-Family Housing (Low-Rise)," along with corresponding trip generation rates, have been used to develop the trip generation estimates for site buildout. The site plan, shown in Figure 2, shows 78 dwelling units within the proposed residential development.

Table 1 below presents a summary of the estimated site trip generation. A detailed trip generation estimate for the development, including ITE rates for the proposed land uses, is presented in Table 7 (attached).

The proposed Townhomes at Bradley Crossroads residential development is projected to generate about 549 vehicle-trips on the average weekday during a 24-hour period, with approximately half entering and half exiting the site. During the morning peak hour, approximately 9 entering vehicles and 29 exiting vehicles would be generated. Approximately 30 entering and 18 exiting vehicles would be generated by the site during the evening peak hour.

Table 1: Estimated Site Vehicle-Trip Generation

Analysis Period	Weekday		
	In	Out	Total
Morning Peak Hour	9	29	38
Evening Peak Hour	30	18	48
Daily/24-hour	275	275	549

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Number: 1 Author: Daniel Torres Subject: Callout Date: 4/25/2019 7:23:05 AM

Per ECM Section B.3.1.A counts shall be obtained on Tuesday, Wednesday or Thursday.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:34:50 AM

LSC Response: New counts have been collected to address this comment.

Number: 2 Author: Daniel Torres Subject: Highlight Date: 4/25/2019 7:23:33 AM

Monday, March 18, 2019 from 4:00-6:00 p.m

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 11:49:13 PM

LSC Response: New counts have been collected.

Number: 3 Author: Daniel Torres Subject: Text Box Date: 4/25/2019 7:30:32 AM

Provide counts for Gladiator/Main St.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:35:25 AM

LSC Response: New counts have been collected to address this comment.

Number: 4 Author: Daniel Torres Subject: Highlight Date: 4/25/2019 7:23:38 AM

Monday, March 18, 2019 from 4:00-6:00 p.m.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 11:52:43 PM

LSC Response: The report has been updated to address this comment. The Monday PM count is no longer referenced.

TRIP DISTRIBUTION AND ASSIGNMENT

Trip Directional Distribution

Estimating the directional distribution of site-generated vehicle-trips to the study area roads and intersections is a necessary component in determining the site's traffic impacts. Figure 4 shows the percentages of the site-generated vehicle-trips projected to be oriented to and from the site's major approaches. Estimates have been based on the following factors: the proposed new land use, the area street and road system serving the site, and the site's geographic location relative to unincorporated El Paso County and the City of Colorado Springs.

Please include Gladiator Drive in all your traffic volume analysis. 1

Site-Generated Traffic

Site-generated traffic volumes at the proposed site access points on Bradley Road and Main Street have been calculated by applying the directional distribution percentages estimated by LSC (from Figure 4) to the trip generation estimates (from Table 7). Figure 5 shows the projected site-generated traffic volumes for the weekday morning and evening peak hours.

Existing-Plus-Site-Generated Traffic Volumes

Figure 6 shows the sum of the existing traffic volumes (from Figure 3) and site-generated peak-hour traffic volumes (shown in Figure 5). These volumes represent the projected short-term total traffic following site buildout.

Estimated Future 2040 Background Traffic Volumes

Figure 7 shows the projected 20-year background traffic volumes for the year 2040. Background volumes include increases in through traffic and trips generated by other area future development, but do **not** include projected traffic to be generated by the proposed Townhomes at Bradley Crossroads residential development. Estimated 2040 background traffic volumes on Bradley Road and Main Street have been based in-part on estimates from the Bradley Storage Time report (which were based on projected 2040 volumes in the MTCP) with adjustments given the current traffic data. Background traffic volumes include estimates of additional trips to be generated by the remaining adjacent commercial parcels (which are currently vacant).

Future 2040 Total Traffic Volumes

Figure 8 shows the projected 2040 total traffic volumes, which are the sum of 2040 background traffic volumes (from Figure 7) plus the site-generated traffic volumes (from Figure 5).

Page: 6

Number: 1 Author: Daniel Torres Subject: Text Box Date: 4/25/2019 7:45:13 AM

Please include Gladiator Drive in all your traffic volume analysis.

Include Gladiator Drive/Main St. analysis.

LEVEL OF SERVICE ANALYSIS

The following intersections have been analyzed to determine the projected intersection levels of service for short- and long-term traffic scenarios for the morning and evening peak-hour time periods:

- Bradley Road/Lincoln Plaza Drive
- Three-quarter access on Bradley Road
- RIRO access on Main Street
- Bradley Road/Main Street

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection and is indicated on a scale from "A" to "F." LOS A is indicative of little congestion or delay. LOS F indicates a high level of congestion or delay. Table 2 shows the level of service delay ranges for signalized and unsignalized intersections.

Table 2: Intersection Levels of Service Delay Ranges

Level of Service	Signalized Intersections		Unsignalized Intersections
	Average Control Delay (seconds per vehicle)	V/C(1)	Average Control Delay (seconds per vehicle)(2)
A	10.0 sec or less	Less than 0.60	10.0 sec or less
B	10.1-20.0 sec	0.60-0.69	10.1-15.0 sec
C	20.1-35.0 sec	0.70-0.79	15.1-25.0 sec
D	35.1-55.0 sec	0.80-0.89	25.1-35.0 sec
E	55.1-80.0 sec	0.90-0.99	35.1-50.0 sec
F	80.1 sec or more	1.00 and greater	50.1 sec or more

(1) Source: Transportation Research Circular 212
(2) 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.

Unsignalized Intersections

A summary of LOS during the weekday morning and evening peak hours for the following unsignalized intersections is shown in Table 3. Detailed Synchro and SimTraffic reports are attached.

- Bradley Road/Lincoln Plaza Drive
- Bradley Road/three-quarter access
- Main Street/RIRO access

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Number: 1 Author: Daniel Torres Subject: Callout Date: 4/25/2019 7:49:04 AM

Include Gladiator Drive/Main St. analysis.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:39:36 AM

LSC Response: Included in the updated TIS report as requested.

1

Please separate the turn movement results, specifically the left turn movements. Per the provided calculations there are LOS of E and F indicated. Please address this in the text and discuss what steps can be taken to bring them to a satisfactory level.

Table 3: Intersection Level of Service Analysis Results (Unsignalized)

Scenario	Bradley Rd/Lincoln Plaza Dr*					RI/RO Access		Bradley + 3/4 Access		
	Traffic Control	EBL	WBL	NB	SB	Traffic Control	NBL	Traffic Control	NBL	WBL
A.M. Peak Hour										
2019 Existing	TWSC	-	A	C	-	TWSC	B	TWSC	A	A
2019 Existing + Site										
2040 Background		A	A	C	B		C		A	A
2040 Background + Site		B			C				B	
P.M. Peak Hour										
2019 Existing	TWSC	-	A	C	-	TWSC	B	TWSC	A	A
2019 Existing + Site									B	B
2040 Background		A	A	D	C		B		B	B
2040 Background + Site										

* SimTraffic analysis results shown in place of Synchro output for this intersection only. SimTraffic simulations indicated sufficient gaps would be created due to signalized intersection of Main St/Bradley Rd. This would allow several NBL turning vehicles to exit at a time.
TWSC = two-way stop sign control
EBL = eastbound left, WBL = westbound left, NBL = northbound left, SBL = southbound left

As shown in Table 3, all turning movements/intersection approaches at all proposed site access intersections with Bradley Road and Main Street are projected to operate at LOS D or better during both peak periods through the 20-year horizon if they are to remain two-way stop-sign-controlled (TWSC).

Signalized Intersection

A summary of LOS for all short- and long-term traffic scenarios during the weekday morning and evening peak hours is shown in Table 3. Detailed Synchro reports are attached.

2

Table 4 shows the signalized LOS results.

Page: 8

Number: 1 Author: Daniel Torres Subject: Callout Date: 4/25/2019 9:00:44 AM

Please separate the turn movement results, specifically the left turn movements. Per the provided calculations there are LOS of E and F indicated. Please address this in the text and discuss what steps can be taken to bring them to a satisfactory level.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:45:06 AM

LSC Response: This comment has been addressed in the updated table. The calculation sheets showing E and F levels of service based on the HCM method of analysis have been removed to avoid confusion and because the LOS results were not based on the HCM method of analysis. The report explains the methodology used to calculate the level of service (real-time simulation) and the applicable supporting SimTraffic analysis technical reports are attached.

Number: 2 Author: Daniel Torres Subject: Callout Date: 4/25/2019 8:20:03 AM

Table 4 shows the signalized LOS results.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:45:43 AM

LSC Response: The table references have been updated.

Table 4: Intersection Level of Service Analysis Results (Signalized)

Scenario	Main St/Bradley Road					
	Traffic Control	Overall	EBL	WBL	NBL	SBL
A.M. Peak Hour						
2019 Existing	Signal	B	B	C	B	B
2019 Existing + Site				D		
2040 Background		C	C	C	C	B
2040 Background + Site						
P.M. Peak Hour						
2019 Existing	Signal	B	B	B	B	C
2019 Existing + Site						
2040 Background		C	C	D	B	C
2040 Background + Site						

EBL = eastbound left, WBL = westbound left,
NBL = northbound left, SBL = southbound left

For all individual turning movements and overall, the signalized intersection of Bradley Road/Main Street are projected to operate at LOS D or better during both peak hours through the 2040 horizon year.

TRAFFIC SIGNAL WARRANT ANALYSIS

Please discuss whether or not any of the other traffic signal warrant analysis would apply such as the crash experience warrant. 1

The intersection of Bradley Road/Lincoln Plaza Drive has the potential to meet a warrant(s) for a traffic control signal in the future. The combination of major street approach volumes (includes the sum of northbound and southbound approach volumes) and minor street left-turn volumes (eastbound approach) were analyzed to determine **if** the combination would exceed the threshold criteria for Four-Hour Vehicular Volume Traffic Signal Warrants in the *2009 Manual on Uniform Traffic Control Devices (MUTCD)*.

Four separate one-hour periods within the following morning and late afternoon/evening periods have been analyzed:

- 6:30 a.m. – 8:30 a.m.
- 4:00 p.m. – 6:30 p.m.

Warrant No. 2 - Four-Hour Vehicular Warrant

The MUTCD Warrant 2 (Four-Hour Vehicular Volume) contains a graph with threshold curves based on major and minor street traffic volumes, the number of intersection approach lanes on

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Number: 1 Author: Daniel Torres Subject: Text Box Date: 4/25/2019 10:49:16 AM

Please discuss whether or not any of the other traffic signal warrant analysis would apply such as the crash experience warrant.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:46:10 AM

LSC Response: The updated TIS report addresses this comment.

the major and minor streets, and the speed of the major street. This graph is shown in MUTCD Figure 4C-1.

Based on the figure below it does not appear that any fell above the threshold. Please revise statement.

2019 Existing Plus Site-Generated Traffic

Results from the four-hour traffic signal warrant analysis for the short-term background plus site-generated traffic scenario are shown in the Warrant 2, Four-Hour Vehicular Volume (MUTCD Figure 4C-1) signal warrant chart in Figure 9. Fewer than four separate major/minor street volumes fell above the minimum threshold curve for an intersection with one lane for the major approach and one lane for the minor (northbound) approach. As a result, the Four-Hour Vehicular Volume Traffic Signal Warrant threshold at the intersection of Bradley Road/Lincoln Plaza Drive is **not** projected to be exceeded during the morning or evening peak periods based on the 2019 existing plus site-generated traffic scenario.

Note: Northbound right turns have not been included in the side-street volumes.

Figure 9: MUTCD Warrant 2, Four-Hour Vehicular Volume (2019 Existing + Site)

Major and minor street volumes shown in Figure 9 above are summarized in Table 5 below.

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Number: 1 Author: Daniel Torres Subject: Callout Date: 4/25/2019 9:26:54 AM

Based on the figure below it does not appear that any fell above the threshold. Please revise statement.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:46:39 AM

LSC Response: Revised in the updated TIS report as requested.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:47:44 AM

LSC Response: This paragraph/statement has been revised in the updated TIS report as requested.

Please address in the text. 1

Major and minor street volumes shown in Figure 10 above are summarized in Table 6 below.

Table 6: Major/Minor Volumes for 4-Hour Volume Signal Warrants (2040 Background + Site)

Start	End	Major Street Volume	Minor Street Volume	8-Hour Warrant Threshold Met?
6:30	7:30	1411	102	Yes
7:30	8:30	997	107	Yes
4:00	5:00	1499	73	No
5:00	6:00	1495	66	No

AUXILIARY TURN LANE ANALYSIS

Auxiliary left- and right-turn lanes already have been constructed on Bradley Road between the intersections of Bradley Road/Lincoln Plaza Drive and Bradley Road/Hancock/Main Street in anticipation of future buildout of all these undeveloped parcels. These lane improvements were approved and constructed as part of the overall/greater Lincoln Plaza development

CONCLUSIONS

- The site is projected to generate about 549 new driveway vehicle-trips on the average weekday.
- During the weekday morning peak hour of adjacent street traffic, 9 vehicles would enter the site while 30 vehicles would exit.
- During the weekday evening peak hour of adjacent street traffic, 30 vehicles would enter the site while 18 vehicles would exit.
- All individual turning movements and approaches at all studied intersections are projected to operate at LOS D or better during both peak hours through the 2040 horizon year.
- As this project is part of a larger previously approved and partially completed development, the offsite and onsite roadway infrastructure is already in-place.
- Projected future volumes at the currently unsignalized intersection of Bradley Road/Lincoln Plaza Drive would not exceed the MUTCD threshold criteria for Four-Hour Vehicular Volume Traffic Signal Warrants.

-State what the current applicable Transportation Impact Fees are and what option the developer will be selecting for payment

The previous report (June 10, 2008) for the site indicated that this area was to be a mini-warehouse. The current proposal has a greater traffic impact than the mini-warehouse. Is the infrastructure(auxiliary turn lanes, lengths, taper, storage,etc.)that was previously completed still adequate? Are the roads (Gladiator, Service rd, Lincoln plaza, etc.) still adequate due to the impact of this development? Please address this in your report. 2

Number: 1 Author: Daniel Torres Subject: Cloud+ Date: 4/25/2019 9:30:22 AM

Please address in the text.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:47:07 AM

LSC Response: Revised in the updated TIS report as requested.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:47:57 AM

LSC Response: This paragraph/statement has been revised in the updated TIS report as requested.

Number: 2 Author: Daniel Torres Subject: Callout Date: 4/25/2019 10:48:19 AM

The previous report (June 10, 2008) for the site indicated that this area was to be a mini-warehouse. The current proposal has a greater traffic impact than the mini-warehouse. Is the infrastructure(auxiliary turn lanes, lengths, taper, storage,etc.)that was previously completed still adequate? Are the roads (Gladiator, Service rd, Lincoln plaza, etc.) still adequate due to the impact of this development? Please address this in your report.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:52:34 AM

LSC Response: This comment and these questions have been addressed in the revised in the updated TIS report as requested. The updated report includes a "trip generation comparison" for the area of original Bradley Crossroads site. The updated report and analysis accounts for the best available land use information and updated trip generation rates. This is explained in the updated report. The adjacent streets, auxiliary turn lane infrastructure are adequate to accommodate anticipated buildout traffic generated by this townhome site and the remainder of the undeveloped adjacent Bradley Crossroads Filing

Comments from page 12 continued on next page

Please address in the text.

Major and minor street volumes shown in Figure 10 above are summarized in Table 6 below.

Table 6: Major/Minor Volumes for 4-Hour Volume Signal Warrants (2040 Background + Site)

Start	End	Major Street Volume	Minor Street Volume	8-Hour Warrant Threshold Met?
6:30	7:30	1411	102	Yes
7:30	8:30	997	107	Yes
4:00	5:00	1499	73	No
5:00	6:00	1495	66	No

AUXILIARY TURN LANE ANALYSIS

Auxiliary left- and right-turn lanes already have been constructed on Bradley Road between the intersections of Bradley Road/Lincoln Plaza Drive and Bradley Road/Hancock/Main Street in anticipation of future buildout of all these undeveloped parcels. These lane improvements were approved and constructed as part of the overall/greater Lincoln Plaza development

CONCLUSIONS

- The site is projected to generate about 549 new driveway vehicle-trips on the average weekday.
- During the weekday morning peak hour of adjacent street traffic, 9 vehicles would enter the site while 30 vehicles would exit.
- During the weekday evening peak hour of adjacent street traffic, 30 vehicles would enter the site while 18 vehicles would exit.
- All individual turning movements and approaches at all studied intersections are projected to operate at LOS D or better during both peak hours through the 2040 horizon year.
- As this project is part of a larger previously approved and partially completed development, the offsite and onsite roadway infrastructure is already in-place.
- Projected future volumes at the currently unsignalized intersection of Bradley Road/Lincoln Plaza Drive would not exceed the MUTCD threshold criteria for Four-Hour Vehicular Volume Traffic Signal Warrants.

-State what the current applicable Transportation Impact Fees are and what option the developer will be selecting for payment

The previous report (June 10, 2008) for the site indicated that this area was to be a mini-warehouse. The current proposal has a greater traffic impact than the mini-warehouse. Is the infrastructure(auxiliary turn lanes, lengths, taper, storage,etc.)that was previously completed still adequate? Are the roads (Gladiator, Service rd, Lincoln plaza, etc.) still adequate due to the impact of this development? Please address this in your report.

__A commercial lots.

Number: 3 Author: Daniel Torres Subject: Text Box Date: 4/25/2019 9:48:28 AM

-State what the current applicable Transportation Impact Fees are and what option the developer will be selecting for payment

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:53:05 AM

LSC Response: This has been included in the updated TIS report as requested.

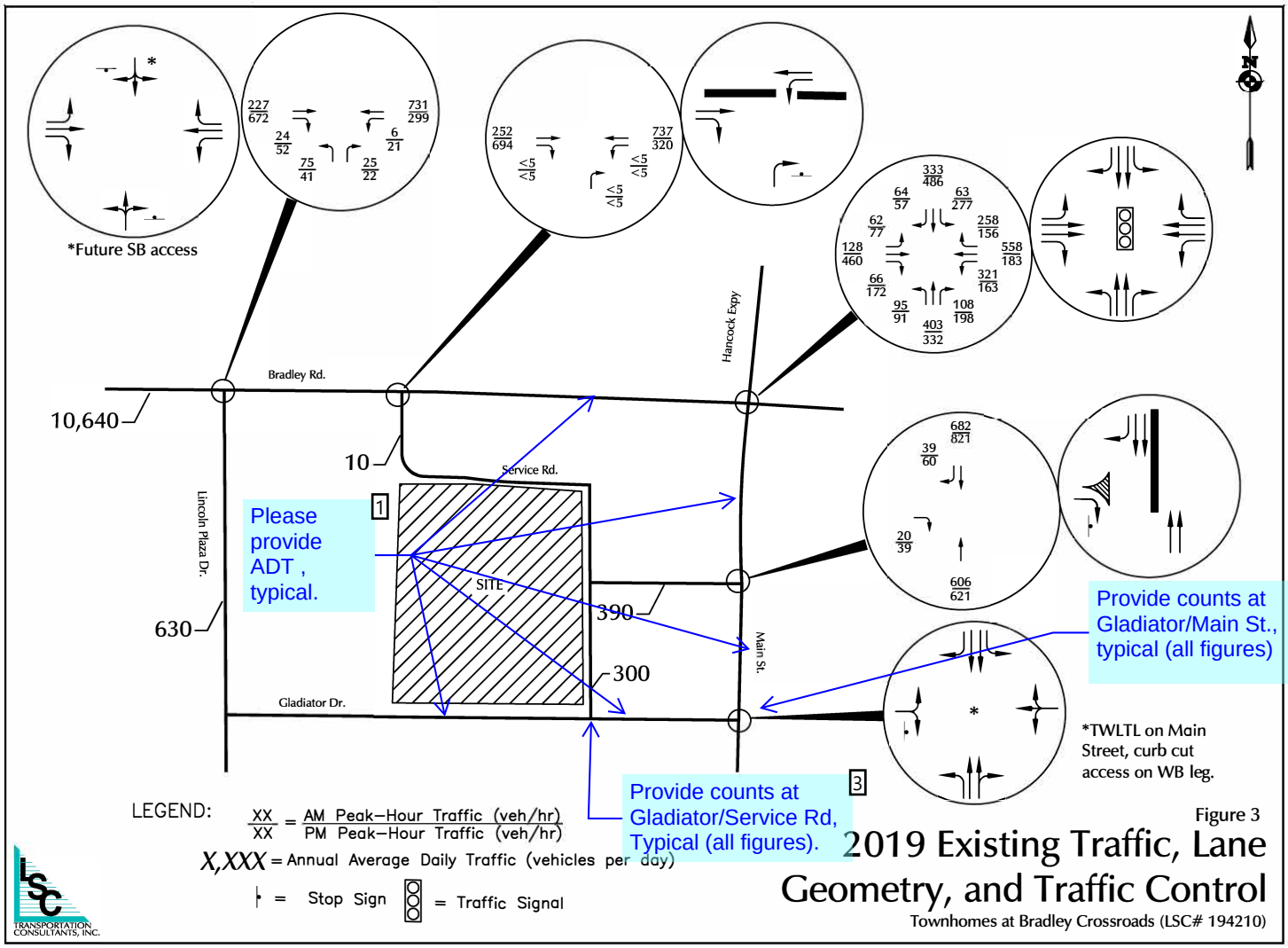

Figure 3

2019 Existing Traffic, Lane Geometry, and Traffic Control

Townhomes at Bradley Crossroads (LSC# 194210)

Page: 17

Number: 1 Author: Daniel Torres Subject: Callout Date: 4/25/2019 10:52:14 AM

Please provide ADT , typical.

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:53:23 AM

LSC Response: Included as requested.

Number: 2 Author: Daniel Torres Subject: Callout Date: 4/25/2019 12:16:31 PM

Provide counts at Gladiator/Main St., typical (all figures)

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:53:34 AM

LSC Response: Included as requested.

Number: 3 Author: Daniel Torres Subject: Callout Date: 4/25/2019 12:16:41 PM

Provide counts at Gladiator/Service Rd, Typical (all figures).

Author: jchodsdon Subject: Sticky Note Date: 5/21/2019 10:53:40 AM

LSC Response: Included as requested.