# CITY OF FORT COLLINS <br> TYPE 1 ADMINISTRATIVE HEARING FINDINGS AND DECISION 

HEARING DATE:
PROJECT NAME:

CASE NUMBER:
APPLICANT:

OWNER:

March 18, 2014
Brinkman Headquarters Project Development Plan/Final Plan

FDP130050
Dave Derbes
3003 E. Harmony Road, Suite 300
Fort Collins, CO 80528
Brinkman Capital, LLC
Kevin Brinkman
3003 E. Harmony Road, Suite 300
Fort Collins, CO 80528
Kendra L. Carberry
PROJECT DESCRIPTION: This is a request for approval of a combined Project
Development Plan and Final Plan (PDP/FP) for Brinkman Headquarters, located at the northwest corner of Lady Moon Drive and Precision Drive. The property contains approximately 70,500 square feet (1.62 acres). The PDP/FP includes a two-story office building of approximately 30,850 square feet. The PDP/FP includes 6 fixed bicycle spaces, 4 enclosed bicycle spaces, and a parking lot containing 95 vehicle parking stalls.

SUMMARY OF DECISION: Approved
ZONE DISTRICT:
Low Density Mixed-Use Neighborhood (L-M-N)

HEARING: The Hearing Officer opened the hearing at approximately 5:45 p.m. on January 30, 2014, in Conference Room A, 281 North College Avenue, Fort Collins, Colorado.

EVIDENCE: During the hearing, the Hearing Officer accepted the following evidence: (1) Planning Department Staff Report; (2) application, plans, maps and other supporting documents submitted by the applicant; and (3) a copy of the public notice (the formally promulgated polices of the City are all considered part of the record considered by the Hearing Officer).

TESTIMONY: The following persons testified at the hearing:
From the City: Noah Beals
From the Applicant: Dave Derbes
From the Public: N/A

## FINDINGS

1. Evidence presented to the Hearing Officer established the fact that the hearing was properly posted, legal notices mailed and notice published.
2. The PDP/FP complies with the applicable General Development Standards contained in Article 3 of the Code.
a. The PDP/FP complies with Section 3.2.1, Landscaping and Tree Protection, because: the City Forester approved the tree mitigation plan; full tree stocking is provided on all four sides and within landscaped areas 50' from the building; and trees are planted in the parking lot interior and perimeter in the required landscape islands and landscape setbacks.
b. The PDP/FP complies with Section 3.2.2, Access, Circulation and Parking, because: sidewalk connections from the public sidewalk to the main entrance of the building are provided from both Lady Moon Drive and Precision Drive; the 10 bicycle parking spaces exceed the required minimum; and the parking lot is accessed by a single driveway from Precision Drive to reduce conflicts with the bicycle lanes and sidewalks.
c. The PDP/FP complies with Section 3.2.4, Site Lighting, because the photometric plan shows a minimum average 1 foot-candle for the parking lot areas, and all the lighting fixtures are down-directional and fully shielded with cut-off capability.
d. The PDP/FP complies with Section 3.4.1, Natural Habitats and Features, because: the PDP/FP does not include any natural areas, habitats and features on the property or within 500' of its boundaries; and any prairie dogs found within the site will be humanely eradicated in accordance with the Division of Parks and Wildlife standards.
e. The PDP/FP complies with Section 3.5.3, Commercial Buildings, because the PDP/FP incorporates human-scale urban design through the use of the following: a 15 ' setback from the property lines along Lady Moon Drive and Precision Drive; building façades composed of at least 3 distinct vertical planes; and a main entrance distinguished by direct connecting walkways with sidewalks that are 5 ' in width.
f. The PDP/FP complies with Section 3.6.3, Street Pattern and Connectivity Standards, because the PDP/FP includes no new streets, but there is a cross access easement for future development to the north and west, and the Transportation Impact Study demonstrates that the impacts created by the PDP/FP are acceptable.
g. The PDP/FP complies with Section 3.6.4, Transportation Level of Service Requirements, because the Traffic Operations and Engineering Departments have reviewed the Transportation Impact Study and determined that the vehicular, pedestrian and bicycle facilities are consistent with the standards contained in Part II of the City of Fort Collins Multimodal Transportation Level of Service Manual.
3. The PDP/FP complies with the applicable standards contained in Article 4 of the Code for the H -C zone district.
a. The PDP/FP complies with Section 4.26(A) and (B), Permitted Uses, because the proposed office land use is consistent with creating a mixed-use neighborhood with a strong employment base, and provides employment opportunities directly across from a multi-family residential use.
b. The PDP/FP complies with Section 4.26(D), Land Use Standards, because the building is 2 stories in height, below the 6 stories allowed.
c. The PDP/FP complies with Section 4.26(E)(1), H-C Development Standards, because the PDP/FP complies with the H-C District Plan and the Harmony Technology ODP.
d. The PDP/FP complies with Section 4.26(E)(2), Site Design, because: the PDP/FP achieves compliance through its adherence to the Harmony Technology ODP and proposed cross-connection access to adjacent parcels outside of the boundaries of the PDP/FP; the residential area across Lady Moon Drive includes multi-family buildings that are 3 stories in height, so there is no drastic change in scale and height; and the PDP/FP does not include outdoor uses.

## DECISION

Based on the foregoing findings, the Hearing Officer hereby enters the following rulings:

1. The PDP/FP is approved as submitted.

DATED this $26^{\text {th }}$ day of March, 2014.


Kendra L. Carberry
Hearing Officer

## STAFF REPORT

| PROJECT: | Brinkman Headquarters combined Project Development Plan a Final Plan, FDP130050 |
| :---: | :---: |

APPLICANT: Dave Derbes
3003 E. Harmony Road, Suite 300
Fort Collins, CO 80528

OWNER: Brinkman Capital, LLC - Kevin Brinkman
3003 E. Harmony Road, Suite 300
Fort Collins, CO 80528

## PROJECT DESCRIPTION:

This is a request for approval of a combined Project Development Plan (PDP) and Final Plan (FP) for Brinkman Headquarters. The project is located at the northwest corner of Lady Moon Drive and Precision Drive. The site contains over 70,500 square feet or 1.62 acres of land. The proposed development includes a two-story office building with an approximate total of 30,850 square feet. The site is accessed through side walk connections and a vehicle drive-way to the public right of way. Also the site has reserved cross connections to the properties both to the north and west. The project proposes 6 fixed bicycle spaces, 4 enclosed bicycle spaces, and a parking lot containing 95 vehicle parking stalls.

RECOMMENDATION: Staff recommends approval of Brinkman Headquarters combined Project Development Plan and Final Plan, FDP130050.

## EXECUTIVE SUMMARY:

The approval of Brinkman Headquarters combined PDP/FP complies with the applicable requirements of the City of Fort Collins Land Use Code (LUC), more specifically:

- The combined PDP/FP complies with process requirements located in Division 2.2 - Common Development Review Procedures for Development Applications of Article 2 - Administration.
- The combined PDP/FP is in conformance with the Harmony Technology Overall Development Plan approved by the Planning and Zoning Board in September 2000 and Minor Amendment approved in August of 2013.
- The combined PDP/FP complies with relevant standards located in Article 3 General Development Standards.
- The combined PDP/FP complies with relevant standards located in Division 4.26, Harmony Corridor District ( $\mathrm{H}-\mathrm{C}$ ) of Article 4 - Districts.


## COMMENTS:

## 1. Background:

Historically the following approvals have been granted to the property:

- Harmony Farm Annexation, City Council - May 1994
- Harmony Technology Park ODP, Planning and Zoning Board - Sept 2000
- Amendment to Harmony Technology Park ODP, August 2013

Today the property is vacant land vegetated by natural grasses. The site does include minimal improvements of curb and gutter along Lady Moon and Precision Drive.

## Zoning History:

- In 1994 upon annexation the entire Harmony Farm Annexation property was zoned Employment Park District.
- At the time of adoption of the Fort Collins Land Use Code in 1997 the property was rezoned to the Harmony Corridor District.

The current surrounding zoning and land uses are as follows:

| Direction | Zone District | Existing Land Use |
| :--- | :--- | :--- |
| North | Harmony Corridor (H-C) | Vacant Land in Harmony Technology ODP |
|  |  |  |
|  | Harmony Corridor (H-C) | Light Industrial: Custom Blending |
|  | Harmony Corridor (H-C) | Vacant Land in Harmony Technology ODP |
|  | Harmony Corridor (H-C) | Public Right-of-Way: Precision Drive |
|  |  |  |
| East | Harmony Corridor (H-C) | Approved Multi-Family: Terra Vida II |
|  | Harmony Corridor (H-C) | Public Right-of-Way: Ladymoon Drive |
|  |  |  |

## 2. Compliance with Article 4 of the Land Use Code - Harmony Corridor (H-C):

The project complies with all applicable Article 4 standards as follows:

## A. Section 4.26(A) and (B) - Permitted Uses

The purpose of the Harmony Corridor District is to create a mixed-use neighborhood with strong employment base. The Brinkman Headquarters proposed office land use is consistent with the purposes, as it provides employment opportunities directly across from a multi-family residential use.
B. Section 4.26(D) - Land Use Standards

1) Section $4.26(D)(3)(a)$ describes a maximum building height of 6 stories. The proposed building is 2 stories with an overall height of 36 feet, therefore in compliance with the standard.

## C. Section 4.26(E) - Development Standards

1) Section 4.26(E)(1) requires that all development in the H-C Harmony Corridor District shall also comply with the applicable Harmony Corridor design standards. The project is in compliance with all applicable design standards as follows:

- At least 35\% of the plant material used in the setback along local and collector streets within a half-mile of Harmony Road were selected from the Oak palette
- Offices are a permitted use in Basic Industrial and Non-Retail Employment Activity Center, which this site is located in.

2) Section $4.26(E)(2)(a)$ is a standard for multiple parcel ownership, requiring an integrated pattern of streets, outdoor spaces, building styles, and land uses. Although this standard does not necessarily apply to this single parcel development it achieves a level of compliance through its adherence to the Harmony Technology Overall Development Plan and proposed cross connection access to adjacent parcels outside of the boundaries of the development (see attached plat and Overall Development plan).
3) Section 4.26(E)(2)(b) requires that employment uses that abut residential areas do not cause a drastic abrupt change in scale and height of buildings.

Across Ladymoon Drive there is an approved plan for a residential area consisting of multi-family buildings containing 24 to 36 units that are 3 stories in height. Two of the three multi-family buildings that face Lady Moon Drive are approximately 65 feet $\times 120$ feet with the long portion of the building facing the street. This results in a majority of the block face of the residential side to be fronted by buildings.

The Brinkman Headquarters building is proposed at 2 stories in height. Along its Lady Moon frontage the Brink Headquarters proposes the building to front the majority of the block face. In comparison with the residential use there is no drastic abrupt changing in scale and height.
4) Section $4.26(E)(2)(c)$ is a standard that regulates commercial/retail uses, which includes offices. This standard requires such uses to be conducted entirely within a completely enclosed structure or building. The proposed Brinkman Headquarters combined PDP/FP does not include outdoor uses and therefore, in compliance with the standard.

## 3. Compliance with Article 3 of the Land Use Code - General Development Standards

The project complies with all applicable General Development Standards; with the following relevant comments:

## A. Division 3.2 - Site Planning and Design Standards

1) 3.2.1 Landscaping and Tree Protection:

- A detailed tree mitigation plan is provided with this combined PDP/FP. This plan was designed with the coordination and has received approval by the City Forester. In order to provide maximum benefit the street trees provided with this project will be upsized to meet the mitigation requirements;
- "Full Tree Stocking" is provided on all four sides and within landscape areas 50ft from the building;
- Trees are planted in the parking lot interior and perimeter in the required landscape islands and landscape setbacks. These trees locations provide adequate shading and screening of the parking lot.

2) 3.2.2 Access, Circulation and Parking:

By design the Land Use Code encourages multi-modal access and use of the site. This is accomplished by requiring sidewalk connections, bicycle accommodations, and limiting the number of off-street vehicle parking spaces for a non-residential use. The proposed project is in compliance with these standards through the following:

- Sidewalk connections from the public sidewalk to the main entrance of the building are provided both from the right-of-way of Lady Moon Drive and Precision Drive. These sidewalk connections are 5 ft and are a direct path to the entrance;
- 10 Bicycle parking spaces being provided exceed the required minimum number of 8 . These spaces are provided on site near the building separate from the vehicle parking area. The bike spaces can be accessed through the sidewalk connections or the driveway. There two set of bike racks one set outside the building and one set that will be located inside the building. The zoning department will verify the exact location inside the building during the review of the Building Permit;
- The parking lot is accessed by a single driveway from Precision Drive to reduce the conflict with the bike-lanes and sidewalks. There are 95 vehicle spaces at this time. When future development occurs to the north and east at least 4 of these spaces will be eliminated. This change will be possible by the proposed access easement on the plat.

3) 3.2.4 Site Lighting:

- A photometric plan was submitted for the project. Lighting levels in the parking area meet the average minimum standard of 1 foot-candle. The proposed light sources are concealed and fully shielded with cutoff capability in compliance with standard.
B. Division 3.4 - Environmental, Natural Area, Recreational and Cultural Resource Protection Standards

1) 3.4.1 Natural Habitats and Features:

- The Brinkman Headquarters site does not include any natural areas, habitats, and features within and 500 feet outside of its boundaries.
- In addition the applicant has acknowledged that any prairie dogs found within the site will be humanely eradicated in accordance with the Division of Parks and Wildlife standards.


## C. Division 3.5 - Building Standards

## 1) 3.5.3 Commercial Buildings:

The purpose of this section is to further enhance the pedestrian environment by setting standards that contribute to a human scale. These standards provided visual interest along walkways, articulation to structures, and identifiable entrances to buildings.

- The proposed building is setback 15 feet from the property lines along Lady Moon Drive and Precision Drive. This setback provides the maximum allowed space between the sidewalk and the building to create visual interest and engagement from the right of way.
- Along Precision Drive and Lady Moon Drive the building façades are composed of at least three distinct vertical planes. These planes provide overhangs and recesses that divide the façade into smaller distinct masses. To further emphasize the human scale, a pattern of windows are designed into the distinct masses (see attached elevations).
- The main entrance to the building is on the west side. This entrance is punctuated by a break in the pattern of building materials with an increase in glazing. Although the entrance does not face either Lady Moon Drive or Precision drive its location is distinguished by direct connecting walkways from both sidewalks. These connecting sidewalks are 5 feet in width and include landscaping on one side.
D. Division 3.6 - Transportation and Circulation

1) 3.6.3 Street Pattern and Connectivity Standards:

- The project continues to comply with the general framework established with the Overall Development Plan. There are no new streets proposed with this project but cross access easement for future development to the north and west will be established.
- The City Traffic Operations have reviewed and accepted the Transportation Impact Study provided by the applicant. The study
demonstrated the impacts created by Brinkman Headquarters are at an acceptable level and do not need any further mitigation.

2) 3.6.4 Transportation Level of Service Requirements:

- The Traffic Operations and Engineering Departments have reviewed the Transportation Impact Study that was submitted to the City for review and have determined that the vehicular, pedestrian and bicycle facilities proposed with this combined PDP/FP are consistent with the standards contained in Part II of the City of Fort Collins Multi-modal Transportation Level of Service Manual.


## 4. Findings of Fact/Conclusion

In evaluating the request for the Brinkman Headquarters combined Project Plan and Final Plan, FDP130050, Staff makes the following findings of fact:
A. The Brinkman Headquarters combined PDP/FP complies with process located in Division 2.2 - Common Development Review Procedures for Development Applications of Article 2 - Administration.
B. The Brinkman Headquarters combined PDP/FP is in conformance with the Harmony Technology Park Overall Development Plan approved by the Planning and Zoning Board in September 2000 and latest Minor Amendment approved in August of 2013.
C. The Brinkman Headquarters combined PDP/FP complies with relevant standards located in Article 3 - General Development Standards.
D. The Brinkman Headquarters combined PDP/FP complies with relevant standards located in Division 4.26, Harmony Corridor District (H-C) of Article 4 - Districts.

## RECOMMENDATION:

Staff recommends approval of the Brinkman Headquarters combined Project Development Plan and Final Plan, FDP130050.

## ATTACHMENTS:

1. Statement of Planning Objectives
2. Harmony Technology Overall Development Plan
3. Site Plan
4. Landscape Plans
5. Building Elevations
6. Traffic Impact Statement

# BRINKMAN 

## Statement of Planning Objectives

## Brinkman Headquarters

Corner of Precision Drive and Lady Moon Drive
PDP/FDP Combined Submittal
(i) Statement of appropriate City Plan Principles and Policies achieved by the proposed plan. The undeveloped lot sits on the corner of Lady Moon Drive and Precision Drive within the Harmony Technology Park with approx. 340' of frontage along Precision drive and approx. 210' of frontage along Lady Moon Dr. The site currently has no adjacent construction but the sites narrow frontage along Lady Moon Dr. will encourage a higher future building density along this drive with internal, campus style, connections. The building mass forms an L configuration with the long elevation running parallel to Lady Moon forming a strong urban edge with $100 \%$ of the building elevations with street frontages within the build-to zone. The building holds the site corner at the intersection that is projected to have the most pedestrian activity. Car access to the site is provided off Precision Drive because of its lower speed and traffic volume, creating a safer entrance and exit sequence. Site parking in the future can be easily connected to future development. The internal entrance further reinforces campus style development while keeping the majority of pedestrian activity off the heavily trafficked Lady Moon Drive. The entrance is clearly defined by a large pedestrian plaza and façade treatment.
(ii) Description of proposed open space, wetlands, natural habitats and features, landscaping, circulation, transition areas, and associated buffering on site and in the general vicinity of the project.
The site is on an undeveloped parcel of the overall Harmony Technology Park. The site does not contain any wetlands, natural habitat or notable features. The landscape around the building, plazas and parking area utilize native species. Landscape is provided around the parking area to provide required buffering. Vegetation buffer is also provided on the northern side of the northern plaza for privacy. People can access the site from Lady Moon Drive and Precision Drive sidewalks. The main entrance to the building is located on the western side of the building. People can circulate into the entrance plaza from the sidewalks and also directly from the parking lot. The entrance plaza provides gathering spaces for visitors and the northern plaza space provides areas of outdoor working spaces, and conference room as well as function space for tenants.
(iii) Statement of proposed ownership and maintenance of public and private open space areas; applicant's intentions with regard to future ownership of all or portions of the project development plan.
The proposed project site is currently owned by Harmony Technology Park, LLC and is in the process of transferring ownership to Brinkman Capital, LLC. The site is set to close in February of 2014. Once ownership has transferred to Brinkman Capital, LLC, they will assume maintenance of the site.
(iv) Estimate of number of employees for business, commercial, and industrial uses. Estimated range of 125-175 employees.
(v) Description of rationale behind the assumptions and choices made by the applicant.

The only area that we are aware that we have varied from the allowable criteria is in the parking ratio. The allowable ratio of 3:1,000 is slightly elevated from an allowable of 93 spaces ( $30,850 \mathrm{gsf} \times 3=93$ spaces). We currently show 95 spaces, which is to account for the future connection to north and east parcels. While this provision makes the site slightly over parked, 4 stalls will be eliminated when the new drive aisles are added, therefore the future parking ratio will be slightly below the maximum allowable.
(vi) The applicant shall submit as evidence of successful completion of the applicable criteria, the completed documents pursuant to these regulations for each proposed use. The Planning Director may require, or the applicant may choose to submit, evidence that is beyond what is required in that section. Any variance from the criteria shall be described.
We are not currently requesting any variances for this project.
(vii) Narrative description of how conflicts between land uses or disturbances to wetlands, natural habitats and features and or wildlife are being avoided to the maximum extent feasible or are mitigated. Not Applicable
(viii) Written narrative addressing each concern/issue raised at the neighborhood meeting(s), if a meeting has been held.
Neighborhood Meeting is not required for this project.
(ix) Name of the project as well as any previous name the project may have had during Conceptual Review. The current project name is Brinkman Headquarters. It went by "Ladymoon $\operatorname{Dr} \&$ Precision $\operatorname{Dr}$ - Office" at the time of Conceptual Review.

SIXTH AMENDMENT TO HARMONYTECHNOLOGY PARK
LICEND


PROJECT DEVELOPMENT PLAN - SITE SUBMITTAL BRINKMAN HEADQUARTERS OFFICE - HARMONY TECHNOLOGY PARK




architect:

LOT 1, HARMONY TECHNOLOGY PARK FOURTH FILING, BEING LOCATED IN THE NORTHWEST ONE-QUARTER OF SECTION 4,
TOWNSHIP 6 NORTH, RANGE 68 WEST OF THE 6TH P.M., CITY OF FORT COLLINS, COUNTY OF LARIMER, STATE OF COLORADO.

## SHEET INDEX

| LP001 | COVER |
| :--- | :--- |
| LP101 | LANDSCAPE PLAN |
| LP401 | LANDSCAPE ENLARGEMENT PLAN |
| LP501 | LANDSCAPE DETAILS |

LP501 LANDSCAPE DETAILS
BRINKMAN HEADQUARTERS OFFICE - HARMONY TECHNOLOGY PARK







## LUMINAIRE SCHEDULE





|  |
| :--- | :--- | :--- | :--- |

$-\quad{ }^{-1}$




| Statistics |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{\text {Dosastipion }}$ | s smbol | avg | max | min | maxmin | Avgmin |
| Patios tot | + | ${ }^{1416}$ | 296 | 0.110 | $2{ }^{20.1}$ | ${ }^{1401}$ |
| Patowest Enty | + | 2110 | 8.0 | 0.016 | N/A | N/A |
| PLLe20 | + | 0210 | 2010 | 0.00 | N/A | N/A |
|  |  | 0.66 | 4440 | 0.010 | N/A |  |



1 of 2



2272 Glen Haven Drive Loveland, Colorado 80538
Phone: (970) 669-2061 Fax: (970) 669-5034

## MEMORANDUM



## SUBJECT: Brinkman Office Building Transportation Impact Study

(File: 1387ME01)
This memorandum addresses the transportation impacts of the proposed Brinkman Office Building within the Harmony Tech Park. The Brinkman Office Building site is located in the northwest quadrant of the Lady Moon/Precision intersection in Fort Collins. The site location is shown in Figure 1. The Brinkman Office Building is proposed to be approximately 33,000 square feet. The scope of this study was discussed with the Fort Collins Traffic Operations Engineer. A brief memorandum was requested. The Base Assumptions form is provided in Appendix A.

Figure 2 shows the current geometry at the Lady Moon/Precision intersection. There are sidewalks along both sides of Lady Moon Drive between Rock Creek Drive and Precision Drive. There are sidewalks along both sides of Rock Creek Drive between Technology Parkway and Lady Moon Drive. There are also sidewalks along the south side of Precision Drive between the existing Custom Blending site and Lady Moon Drive. There are bicycle lanes along Lady Moon Drive, Rock Creek Drive, and the existing short segment of Technology Parkway.

Figure 3 shows recent peak hour counts at the Lady Moon/Precision intersection. Raw traffic data is provided in Appendix B. Table 1 shows the current morning and afternoon peak hour operation of the Lady Moon/Precision intersection. Calculation forms are provided in Appendix C. A description of level of service for unsignalized intersections from the 2010 Highway Capacity Manual and a table showing the Fort Collins Motor Vehicle LOS Standards (Intersections) are also provided in Appendix C. The Lady Moon/Precision intersection operates acceptably during the peak hours with existing control and geometry.

Figure 4 shows the site plan for the Brinkman Office Building. The Brinkman Office Building will be approximately 33,000 square feet (actual - 30,622 square feet). Access to the site will be primarily via a full-movement access to/from Precision Drive. Trip Generation, $9^{\text {th }}$ Edition, ITE was used as the reference document in calculating the trip generation. Land use code 710, General Office was used for the Brinkman Office

Building. Table 2 shows the trip generation for the Brinkman Office Building. The Brinkman Office Building is expected to generate 364 daily trip ends, 51 morning peak hour trip ends, and 49 afternoon peak hour trip ends.

Directional distribution of the generated trips was determined for the Brinkman Office Building site and is shown in Figure 5. Figure 6 shows the site generated peak hour traffic assignment of the Brinkman Office Building.

Figure 7 shows the short range (2018) background morning and afternoon peak hour traffic at the key intersections. Background traffic volume forecasts for the short range (2018) future were obtained by reviewing traffic studies for other developments in this area and reviewing historic counts in the area. Traffic volumes from the Banner Health Medical Campus, 5043 Technology Parkway, Custom Blending Expansion, and Terra Vida II were used in the traffic forecasts. Table 3 shows the short range (2018) background morning and afternoon peak hour operation at the key intersections. Calculation forms are provided in Appendix D. The key intersections will operate acceptably with the existing control and geometry in the short range (2018) background future.

Figure 8 shows the short range (2018) total morning and afternoon peak hour traffic at the key intersections. Table 4 shows the short range (2018) total morning and afternoon peak hour operation at the key intersections. Calculation forms are provided in Appendix E. The key intersections will operate acceptably during the morning and afternoon peak hours with the existing control and geometry.

The Brinkman Office Building site is in an area within which the City requires pedestrian and bicycle level of service evaluations. Appendix $F$ shows a map of the area that is within 1320 feet of the Brinkman Office Building site. The Brinkman Office Building site is located within an area termed as "other," which sets the pedestrian level of service threshold at LOS C for all measured categories. There are two destination areas within 1320 feet of the proposed Brinkman Office Building: 1) the residential apartments to the east and 2) the residential neighborhood to the southeast. Appendix F contains a Pedestrian LOS Worksheet.

Based upon Fort Collins bicycle LOS criteria, there are no destination areas within 1320 feet of the Brinkman Office Building site.

Currently, this area is served by Transfort Routes 16 and 17. The transit service is acceptable.

It is concluded that, with full development of the Brinkman Office Building, the future level of service at the key intersections will be acceptable. The Brinkman Office Building can be built without additional geometry or other street improvements.


SCALE: 1"=1000'
SITE LOCATION

Figure 1
Brinkman Office Building TIS, October 2013


$\simeq$ AM/PM

| Current Peak Hour Operation |  |  |  |
| :--- | :---: | :---: | :---: |
| Intersection | Movement | Level of Service |  |
|  |  | AM | PM |
| Lady Moon/Precision <br> (stop sign) | $\mathrm{EB} \mathrm{LT/T/RT}$ | A | A |
|  | $\mathrm{WB} \mathrm{LT} / \mathrm{T} / \mathrm{RT}$ | A | A |
|  | NB LT | A | A |
|  | SB LT | A | A |



| TABLE 2 <br> Trip Generation |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Code | Use | Size | AWDTE |  | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  |
|  |  |  | Rate | Trips | Rate | In | Rate | Out | Rate | In | Rate | Out |
| 710 | Office | 33.0 KSF | 11.03 | 364 | 1.37 | 45 | 0.19 | 6 | 0.25 | 8 | 1.24 | 41 |



$\simeq$ - AM/PM

## SITE GENERATED



SHORT RANGE (2018) BACKGROUND PEAK HOUR TRAFFIC

| Short Range (2018)TABLE 3 <br> Background Peak Hour Operation |  |  |  |
| :--- | :---: | :---: | :---: |
| Intersection | Movement | Level of Service |  |
|  |  | AM | PM |
|  | $\mathrm{EB} \mathrm{LT/T/RT}$ | B | B |
|  | $\mathrm{WB} \mathrm{LT/T/RT}$ | B | B |
|  | NB LT | A | A |
|  | SB LT | A | A |


| Short Range (2018) Total Peak Hour Operation |  |  |  |
| :--- | :---: | :---: | :---: |
| Intersection | Movement | AM | PM |
|  |  | B | B |
|  | $\mathrm{EB} \mathrm{LT/T/RT}$ | B | B |
|  | $\mathrm{WB} \mathrm{LT} / \mathrm{T} / \mathrm{RT}$ | A | A |
|  | NB LT | A | A |
|  | SB LT | A | A |
| Precision/Site Access <br> (stop sign) | $\mathrm{SB} \mathrm{LT/RT}$ | A | A |


$\simeq$ - AM/PM

APPENDIX A

## Attachment $A$ Transportation Impact Study Base Assumptions



Date:
October 16,2013
Traffic Engineer: $\frac{D E L 1 C H \text { ASSOCIATES }}{\text { He cal Entity Engineer: AE/ 10/17/13 }}$

<



TRIP DISTRIBUTEON

Trip Generation (T.G., $\left.9^{x}\right)_{\sim 33.0 \mathrm{kSF}}$
DALLY (11.03) $=364$ T.E.

$$
\begin{aligned}
& \operatorname{AM}(1.36)=51 \quad \text { T.E. } \quad \ln (88 \%)=45 \\
& \operatorname{OUT}(12 \%)=6 \\
& \operatorname{PM}(1.49)=49 \quad \text { TE. } \quad \operatorname{cn}(17 \%)=8 \\
& \\
& \\
& \operatorname{out}(83 \%)=41
\end{aligned}
$$

Preliminary Assignnent (above T.G.)


APPENDIX B

## TABULAR SUMMARY OF VEHICLE COUNTS

Date: 11-28-12
Day: Wednesday

Observer: Joe
Jurisdiction: Fort Collins
$R=$ right turn
$\mathrm{S}=$ straight
$\mathrm{L}=$ left turn

| Time | Northbound: |  |  | Lady Moon | Southbound: |  |  | Lady Moon | Total north/south | Eastbound: |  |  | Precision | Westbound: |  |  | Precision | Total east/west | Total All |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Begins | L | S | R | Total | L | S | R | Total |  | L | S | R | Total | L | S | R | Total |  |  |
| 7:30 | 0 | 25 | 0 | 25 | 1 | 16 | 0 | 17 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 6 | 48 |
| 7:45 | 0 | 26 | 0 | 26 | 1 | 15 | 1 | 17 | 43 | 1 | 0 | 0 | 1 | 0 | 0 | 6 | 6 | 7 | 50 |
| 8:00 | 1 | 24 | 0 | 25 | 1 | 19 | 1 | 21 | 46 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 5 | 5 | 51 |
| 8:15 | 0 | 18 | 0 | 18 | 1 | 7 | 0 | 8 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 6 | 32 |


| 7:30-8:30 | 1 | 93 | 0 | 94 | 4 | 57 | 2 | 63 | 157 | 1 | 0 | 0 | 1 | 1 | 0 | 22 | 23 | 24 | 181 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHF | 0.25 | 0.89 | n/a | 0.9 | 1 | 0.75 | 0.5 | 0.75 |  | 0.25 | n/a | n/a | 0.25 | 0.25 | n/a | 0.92 | 0.96 |  | 0.89 |


| 4:30 | 0 | 11 | 0 | 11 | 1 | 21 | 0 | 22 | 33 | 1 | 0 | 0 | 1 | 0 | 0 | 4 | 4 | 5 | 38 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4:45 | 0 | 26 | 0 | 26 | 5 | 23 | 0 | 28 | 54 | 2 | 0 | 0 | 2 | 0 | 0 | 2 | 2 | 4 | 58 |
| 5:00 | 0 | 16 | 0 | 16 | 2 | 33 | 0 | 35 | 51 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 2 | 3 | 54 |
| 5:15 | 0 | 18 | 1 | 19 | 5 | 26 | 1 | 32 | 51 | 1 | 0 | 1 | 2 | 0 | 0 | 2 | 2 | 4 | 55 |


| 4:30-5:30 | 0 | 71 | 1 | 72 | 13 | 103 | 1 | 117 | 189 | 5 | 0 | 1 | 6 | 1 | 0 | 9 | 10 | 16 | 205 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHF | n/a | 0.68 | 0.25 | 0.69 | 0.65 | 0.78 | 0.25 | 0.84 |  | 0.63 | n/a | 0.25 | 0.75 | 0.25 | n/a | 0.56 | 0.63 |  | 0.88 |

## APPENDIX C

| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intersection Delay, s/veh | 1.4 |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Vol, veh/h | 1 | 0 | 0 | 1 | 0 | 22 | 1 | 93 | 0 | 4 | 57 | 2 |
| 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 | - | - | - | - | - | - | 100 | - | - | 100 | - |  |
| Veh in Median Storage, \# | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 |  |
| Grade, \% | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 |  |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mumt Flow | 1 | 0 | 0 | 1 | 0 | 25 | 1 | 104 | 0 | 4 | 64 | 2 |


| Major/Minor | Minor2 | Minor1 |  |  |  | Major1 |  |  | Major2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | 193 | 181 | 65 | 181 | 182 | 104 | 66 | 0 | 0 | 104 | 0 | 0 |
| Stage 1 | 74 | 74 | - | 107 | 107 | - | - | - | - | - | - |  |
| Stage 2 | 119 | 107 | - | 74 | 75 | - | - | - | - | - | - |  |
| Follow-up Headway | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Capacity-1 Maneuver | 767 | 713 | 999 | 781 | 712 | 951 | 1536 | - | - | 1488 | - |  |
| Stage 1 | 935 | 833 | - | 898 | 807 | - | - | - | - | - | - |  |
| Stage 2 | 885 | 807 | - | 935 | 833 | - | - | - | - | - | - |  |
| Time blocked-Platoon, \% |  |  |  |  |  |  |  | - | - |  | - |  |
| Mov Capacity-1 Maneuver | 745 | 711 | 999 | 779 | 710 | 951 | 1536 | - | - | 1488 | - | - |
| Mov Capacity-2 Maneuver | 745 | 711 | - | 779 | 710 | - | - | - | - | - | - |  |
| Stage 1 | 934 | 831 | - | 897 | 806 | - | - | - | - | - | - |  |
| Stage 2 | 861 | 806 | - | 932 | 831 | - | - | - | - | - | - |  |


| Approach | EB | WB | NB | SB |
| :--- | ---: | ---: | ---: | :--- |
| HCM Control Delay, s | 9.8 | 8.9 | 0.1 | 0.5 |
| HCM LOS | A | A |  |  |


| Minor Lane / Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Capacity (veh/h) | 1536 | - | - | 745 | 942 | 1488 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.002 | 0.027 | 0.003 | - | - |
| HCM Control Delay (s) | 7.345 | - | - | 9.8 | 8.9 | 7.427 | - | - |
| HCM Lane LOS | A |  |  | A | A | A |  |  |
| HCM 95th \%tile Q(veh) | 0.002 | - | - | 0.005 | 0.085 | 0.009 | - | - |
| Notes |  |  |  |  |  |  |  |  |

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined

| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intersection Delay, s/veh | 1.2 |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Vol, veh/h | 5 | 0 | 1 | 1 | 0 | 9 | 0 | 71 | 1 | 13 | 103 | 1 |
| 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 | - | - | - | - | - | - | 100 | - | - | 100 | - |  |
| Veh in Median Storage, \# | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 |  |
| Grade, \% | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 |  |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mumt Flow | 6 | 0 | 1 | 1 | 0 | 10 | 0 | 81 | 1 | 15 | 117 | 1 |


| Major/Minor | Minor2 |  | Minor1 |  |  | Major1 |  |  | Major2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | 233 | 229 | 118 | 229 | 229 | 81 | 118 | 0 | 0 | 82 | 0 | 0 |
| Stage 1 | 147 | 147 | - | 81 | 81 | - | - | - | - | - | - |  |
| Stage 2 | 86 | 82 | - | 148 | 148 | - | - | - | - | - | - |  |
| Follow-up Headway | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - |  |
| Pot Capacity-1 Maneuver | 722 | 671 | 934 | 726 | 671 | 979 | 1470 | - | - | 1515 | - |  |
| Stage 1 | 856 | 775 | - | 927 | 828 | - | - | - | - | - | - | - |
| Stage 2 | 922 | 827 | - | 855 | 775 | - | - | - | - | - | - |  |
| Time blocked-Platoon, \% |  |  |  |  |  |  |  | - | - |  | - |  |
| Mov Capacity-1 Maneuver | 709 | 664 | 934 | 720 | 664 | 979 | 1470 | - | - | 1515 | - |  |
| Mov Capacity-2 Maneuver | 709 | 664 | - | 720 | 664 | - | - | - | - |  | - |  |
| Stage 1 | 856 | 767 | - | 927 | 828 | - | - | - | - | - | - |  |
| Stage 2 | 912 | 827 | - | 846 | 767 | - | - | - | - | - | - | - |


| Approach | EB | WB | NB | SB |
| :--- | ---: | ---: | ---: | :--- |
| HCM Control Delay, S | 9.9 | 8.9 | 0 | 0.8 |
| HCM LOS | A | A |  |  |


| Minor Lane / Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Capacity (veh/h) | 1470 | - | - | 739 | 945 | 1515 | - | - |
| HCM Lane V/C Ratio | - | - | - | 0.009 | 0.012 | 0.01 | - | - |
| HCM Control Delay (s) | 0 | - | - | 9.9 | 8.9 | 7.4 | - | - |
| HCM Lane LOS | A |  |  | A | A | A |  |  |
| HCM 95th \%ttile Q(veh) | 0 | - | - | 0.028 | 0.037 | 0.03 | - | - |
| Notes |  |  |  |  |  |  |  |  |

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined

## UNSIGNALIZED INTERSECTIONS

| Level-of-Service | Average Total Delay <br> sec/veh |
| :---: | :---: |
| A | $\leq 10$ |
| B | $>10$ and $\leq 15$ |
| C | $>15$ and $\leq 25$ |
| D | $>25$ and $\leq 35$ |
| E | $>35$ and $\leq 50$ |
| F | $>50$ |

## Table 4-3 <br> Fort Collins (City Limits) Motor Vehicle LOS Standards (Intersections)

| Intersection type | Land Use (from structure plan) |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Commercial <br> corridors | Mixed use <br> districts | Low density <br> mixed use <br> residential | All other <br> areas |
|  |  | E* | D | D |
| Any Leg | E | E | D | E |
| Any Movement | E | E | D | E |
| Stop sign control <br> (arterial/collector or local- <br> any approach leg) | N/A | F** | F** | E |
| Stop sign control <br> (collector/local-any <br> approach leg) | N/A | C | C | C |
| * mitigating measures required <br> ** considered normal in an urban environment |  |  |  |  |

## APPENDIX D

| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intersection Delay, s/veh | 2.6 |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Vol, veh/h | 7 | 0 | 1 | 27 | 1 | 47 | 4 | 179 | 6 | 17 | 92 | 29 |
| 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 | - | - | - | - | - | - | 100 | - | - | 100 | - |  |
| Veh in Median Storage, \# | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 |  |
| Grade, \% | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 |  |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mumt Flow | 8 | 0 | 1 | 30 | 1 | 53 | 4 | 201 | 7 | 19 | 103 | 33 |



| Approach | EB | WB | NB | SB |
| :--- | ---: | ---: | ---: | :--- |
| HCM Control Delay, S | 11.7 | 10.7 | 0.2 | 0.9 |
| HCM LOS | B | B |  |  |


| Minor Lane / Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Capacity (veh/h) | 1448 | - | - | 549 | 716 | 1363 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | - | 0.016 | 0.118 | 0.014 | - | - |
| HCM Control Delay (s) | 7.494 | - | - | 11.7 | 10.7 | 7.679 | - | - |
| HCM Lane LOS | A |  |  | $B$ | B | A |  |  |
| HCM 95th \%otile Q(veh) | 0.009 | - | - | 0.05 | 0.398 | 0.043 | - | - |
| Notes |  |  |  |  |  |  |  |  |

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined

| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intersection Delay, s/veh | 3.1 |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Vol, veh/h | 35 | 1 | 4 | 14 | 0 | 21 | 0 | 123 | 6 | 63 | 179 | 7 |
| 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 | - | - | - | - | - | - | 100 | - | - | 100 | - |  |
| Veh in Median Storage, \# | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, \% | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 40 | 1 | 5 | 16 | 0 | 24 | 0 | 140 | 7 | 72 | 203 | 8 |



| Minor Lane / Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Capacity (veh/h) | 1360 | - | - | 469 | 654 | 1435 | - | - |
| HCM Lane V/C Ratio | - | - | - | 0.097 | 0.061 | 0.05 | - | - |
| HCM Control Delay (s) | 0 | - | - | 13.5 | 10.9 | 7.64 | - | - |
| HCM Lane LOS | A |  |  | B | B | A |  |  |
| HCM 95th \%otile Q(veh) | 0 | - | - | 0.32 | 0.194 | 0.157 | - | - |
| Notes |  |  |  |  |  |  |  |  |

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined

APPENDIX E

| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intersection Delay, s/veh | 2.6 |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Vol, veh/h | 12 | 0 | 1 | 27 | 2 | 47 | 7 | 179 | 6 | 17 | 92 | 63 |
| 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 | - | - | - | - | - | - | 100 | - | - | 100 | - |  |
| Veh in Median Storage, \# | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 |  |
| Grade, \% | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 |  |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mumt Flow | 13 | 0 | 1 | 30 | 2 | 53 | 8 | 201 | 7 | 19 | 103 | 71 |


| Major/Minor | Minor2 | Minor1 |  |  |  | Major1 |  |  | Major2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | 425 | 401 | 139 | 398 | 432 | 204 | 174 | 0 | 0 | 208 | 0 | 0 |
| Stage 1 | 177 | 177 | - | 220 | 220 | - | - | - | - | - | - |  |
| Stage 2 | 248 | 224 | - | 178 | 212 | - | - | - | - | - | - |  |
| Follow-up Headway | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Capacity-1 Maneuver | 540 | 538 | 909 | 562 | 516 | 837 | 1403 | - | - | 1363 | - | - |
| Stage 1 | 825 | 753 | - | 782 | 721 | - | - | - | - | - | - | - |
| Stage 2 | 756 | 718 | - | 824 | 727 | - | - | - | - | - | - | - |
| Time blocked-Platoon, \% |  |  |  |  |  |  |  | - | - |  | - | - |
| Mov Capacity-1 Maneuver | 497 | 527 | 909 | 553 | 506 | 837 | 1403 | - | - | 1363 | - |  |
| Mov Capacity-2 Maneuver | 497 | 527 | - | 553 | 506 | - | - | - | - | - | - |  |
| Stage 1 | 820 | 743 | - | 778 | 717 | - | - | - | - | - | - |  |
| Stage 2 | 702 | 714 | - | 812 | 717 | - | - | - | - | - | - | - |


| Approach | EB | WB | NB | SB |
| :--- | ---: | ---: | ---: | :--- |
| HCM Control Delay, S | 12.2 | 10.9 | 0.3 | 0.8 |
| HCM LOS | B | B |  |  |


| Minor Lane / Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Capacity (veh/h) | 1403 | - | - | 515 | 698 | 1363 | - | - |
| HCM Lane V/C Ratio | 0.006 | - | - | 0.028 | 0.122 | 0.014 | - | - |
| HCM Control Delay (s) | 7.58 | - | - | 12.2 | 10.9 | 7.679 | - | - |
| HCM Lane LOS | A |  |  | B | B | A |  |  |
| HCM 95th \%tile Q(veh) | 0.017 | - | - | 0.087 | 0.416 | 0.043 | - | - |
| Notes |  |  |  |  |  |  |  |  |

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined

| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intersection Delay, s/veh | 4 |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Vol, veh/h | 66 | 2 | 7 | 14 | 0 | 21 | 0 | 123 | 6 | 63 | 179 | 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 | - | - | - | - | - | - | 100 | - | - | 100 | - |  |
| Veh in Median Storage, \# | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 |  |
| Grade, \% | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 |  |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mumt Flow | 75 | 2 | 8 | 16 | 0 | 24 | 0 | 140 | 7 | 72 | 203 | 15 |



| Minor Lane / Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Capacity (veh/h) | 1352 | - | - | 465 | 648 | 1435 | - | - |
| HCM Lane V/C Ratio | - | - | - | 0.183 | 0.061 | 0.05 | - | - |
| HCM Control Delay (s) | 0 | - | - | 14.5 | 10.9 | 7.64 | - | - |
| HCM Lane LOS | A |  |  | $B$ | B | A |  |  |
| HCM 95th \%otile Q(veh) | 0 | - | - | 0.664 | 0.196 | 0.157 | - | - |
| Notes |  |  |  |  |  |  |  |  |

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined

| Intersection |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intersection Delay, s/veh | 1.1 |  |  |  |  |  |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Vol, veh/h | 7 | 8 | 34 | 38 | 5 | 1 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, \# | - | 0 | 0 | - | 0 | - |
| Grade, \% | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 8 | 9 | 40 | 45 | 6 | 1 |



| Approach | EB | WB | SB |
| :--- | :---: | :---: | :---: |
| HCM Control Delay, s | 3.5 | 0 | 8.9 |
| HCM LOS |  |  | A |


| Minor Lane / Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Capacity (veh/h) | 1512 | - | - | - | 923 |
| HCM Lane V/C Ratio | 0.005 | - | - | - | 0.008 |
| HCM Control Delay (s) | 7.394 | 0 | - | - | 8.9 |
| HCM Lane LOS | A | A |  |  | A |
| HCM 95th \%tile Q(veh) | 0.016 | - | - | - | 0.023 |
| Notes |  |  |  |  |  |

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Intersection Delay, s/veh | 4 |  |  |  |  |  |
|  |  | EBL | EBT | WBT | WBR | SBL |
| Movement | 2 | 40 | 7 | 6 | 35 | SBR |
| Vol, veh/h | 0 | 0 | 0 | 0 | 0 | 0 |
| Conflicting Peds, \#/hr | Free | Free | Free | Free | Stop | Stop |
| Sign Control | - | None | - | None | - | None |
| RT Channelized | - | - | - | 0 | - |  |
| Storage Length | - | 0 | - | 0 | - |  |
| Veh in Median Storage, \# | - | 0 | 0 | - | 0 | - |
| Grade, \% | - | 0 | 85 | 85 | 85 | 85 |
| Peak Hour Factor | 85 | 85 | 2 | 2 | 2 | 2 |
| Heavy Vehicles, \% | 2 | 2 | 8 | 7 | 41 | 7 |


| Major/Minor | Major1 | Major2 | Minor2 |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Conflicting Flow All | 15 | 0 | - | 0 | 64 |
| Stage 1 | - | - | - | - | 12 |
| Stage 2 | - | - | - | - | 52 |
| Follow-up Headway | 2.218 | - | - | - | 3.518 |
| Pot Capacity-1 Maneuver | 1603 | - | - | - | 942 |
| Stage 1 | - | - | - | - | 1011 |
| Stage 2 | - | - | - | - | 970 |
| Time blocked-Platoon, \% |  | - | - | - |  |
| Mov Capacity-1 Maneuver | 1603 | - | - | - |  |
| Mov Capacity-2 Maneuver | - | - | - | 941 | 1069 |
| Stage 1 | - | - | - | 941 | - |
| Stage 2 | - | - | - | 1011 | - |
|  |  | - | 969 | - |  |


| Approach | EB | WB | SB |
| :--- | :---: | :---: | :---: |
| HCM Control Delay, S | 0.3 | 0 | 9 |
| HCM LOS |  |  | A |


| Minor Lane / Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Capacity (veh/h) | 1603 | - | - | - | 958 |
| HCM Lane V/C Ratio | 0.001 | - | - | - | 0.05 |
| HCM Control Delay (s) | 7.249 | 0 | - | - | 9 |
| HCM Lane LOS | A | A |  |  | A |
| HCM 95th \%ttile Q(veh) | 0.004 | - | - | - | 0.159 |
| Notes |  |  |  |  |  |

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined

## APPENDIX F



SCALE: 1"=500'

## PEDESTRIAN INFLUENCE AREA


Brinkman Office Building TIS, October 2013

| Pedestrian LOS Worksheet |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Project Location Classification: Other |  |  |  |  |  |  |  |  |
|  | Description of Applicable Destination Area Within 1320' | Destination Area Classification |  | Level of Service (minimum based on project location classification) |  |  |  |  |
|  |  |  |  | Directness | Continuity | $\begin{gathered} \text { Street } \\ \text { Crossings } \end{gathered}$ | Visual Interest \& Amenities | Security |
|  | Neighborhood to the east of the site | Residential | Minimum | C | C | C | C | C |
| 1 |  |  | Actual | A | B | B | B | B |
| 2 |  |  | Proposed | A | B | B | B | B |
|  | Neighborhood to the southeast of the site | Residential | Minimum | C | C | C | C | C |
|  |  |  | Actual | A | B | B | B | B |
|  |  |  | Proposed | A | B | B | B | B |
|  |  |  | Minimum |  |  |  |  |  |
| 3 |  |  | Actual |  |  |  |  |  |
|  |  |  | Proposed |  |  |  |  |  |
|  |  |  | Minimum |  |  |  |  |  |
| 4 |  |  | Actual |  |  |  |  |  |
|  |  |  | Proposed |  |  |  |  |  |
|  |  |  | Minimum |  |  |  |  |  |
| 5 |  |  | Actual |  |  |  |  |  |
|  |  |  | Proposed |  |  |  |  |  |
|  |  |  | Minimum |  |  |  |  |  |
| 6 |  |  | Actual |  |  |  |  |  |
|  |  |  | Proposed |  |  |  |  |  |
|  |  |  | Minimum |  |  |  |  |  |
| 7 |  |  | Actual |  |  |  |  |  |
|  |  |  | Proposed |  |  |  |  |  |
|  |  |  | Minimum |  |  |  |  |  |
| 8 |  |  | Actual |  |  |  |  |  |
|  |  |  | Proposed |  |  |  |  |  |
|  |  |  | Minimum |  |  |  |  |  |
| 9 |  |  | Actual |  |  |  |  |  |
|  |  |  | Proposed |  |  |  |  |  |
|  |  |  | Minimum |  |  |  |  |  |
| 10 |  |  | Actual |  |  |  |  |  |
|  |  |  | Proposed |  |  |  |  |  |

