MEMORANDUM

TO: Planning Board
FROM: Sloane Walbert, Case Manager
DATE: March 14, 2016
SUBJECT: Call-Up Item: SITE REVIEW AND NONCONFORMING USE REVIEW for the reconfiguration of 96 existing apartment units at the Cavalier Apartments at 2900 E. Aurora Ave. and an associated 16 percent parking reduction (case nos. LUR2015-00107 and LUR2016-00009). The project site is zoned Residential - High 5 (RH-5). The call-up period expires on **March 21, 2016**.

Background. The 4.6-acre project site is located south of and adjacent to E. Aurora Ave., between 28th and 30th Streets. The property is located approximately a quarter mile from the University of Colorado campus with easy access via an underpass of U.S. 36 and multi-use path at the westernmost terminus of E. Aurora Ave. The southeast section of campus contains the law, engineering and business buildings. Refer to **Figure 1** for a Vicinity Map.

Figure 1: Vicinity Map

The project site is located in the Residential - High 5 (RH-5) zone district, which is defined as *"high density residential areas primarily used for a variety of types of attached residential units, including, without limitation, apartment buildings, and where complementary uses may be allowed"* (section 9-5-2(c)(1)(F), B.R.C. 1981). Refer to **Figure 2** on the following page. At the time of development, the property was zoned MR-3 (Multi-Family Residence District). Subsequently, the property was zoned HR-E (High Density Residential - Established).

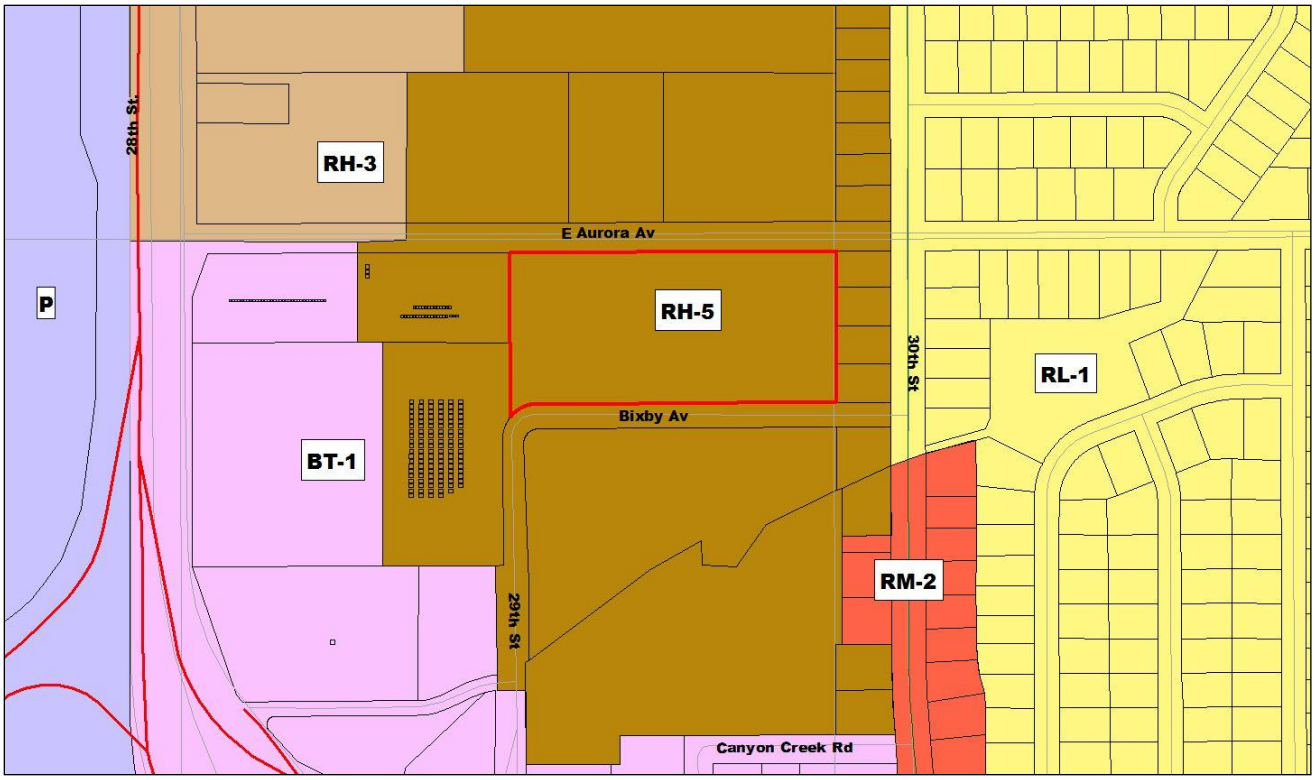


Figure 2: Zoning Map

In 2004, the area to the northwest along the 28th Street frontage road was rezoned from Transitional Business – Developing (TB-D) to Residential - High 3 (RH-3). The RH-3 zone was established as a new zoning district in 2004 to implement strategies from Resolution 922 adopted by City Council at the culmination of the Jobs/Population study that would permit higher housing densities on parcels adjoining the University of Colorado. In addition, RH-3 was established to meet the city goal of providing more housing in the community, particularly in this case for students.

The character of the area is identifiably high-density residential with a variety of multi-family, high density residential developments surrounding the project site, including the Spanish Towers (805 29th St.) to the southwest, Kensington Apartments (2950 Bixby Ave.) to the south, Montclair Court Condos (2850 E. Aurora Ave.) to the west, Blue Sky Lofts (2905 E. Aurora Ave.) to the northwest and the Sterling University Peaks Apartments (2985 E. Aurora Ave) to the northeast. Refer to **Attachment E** for a survey of surrounding uses.

The property consists of two developments built at separate times (refer to **Figure 3**). According to permit records, a building permit was issued in 1964 for 144 units at 2900 E. Aurora Ave. Another developer took over the project in 1965 and constructed 149 units with 148 on-site parking spaces. Subsequently, a building permit was issued in 1971 for the property at 2898 E Aurora Ave. for a 72-unit apartment building with 108 on-site parking spaces. Documentation from 1975 describes both properties as legal nonconforming uses. Ninety six of the existing units are considered efficiency living units. An efficiency living unit is defined as *"a dwelling unit that contains a bathroom and kitchen and does not exceed a maximum floor area hundred seventy five square feet"* (section 9-16, B.R.C. 1981).

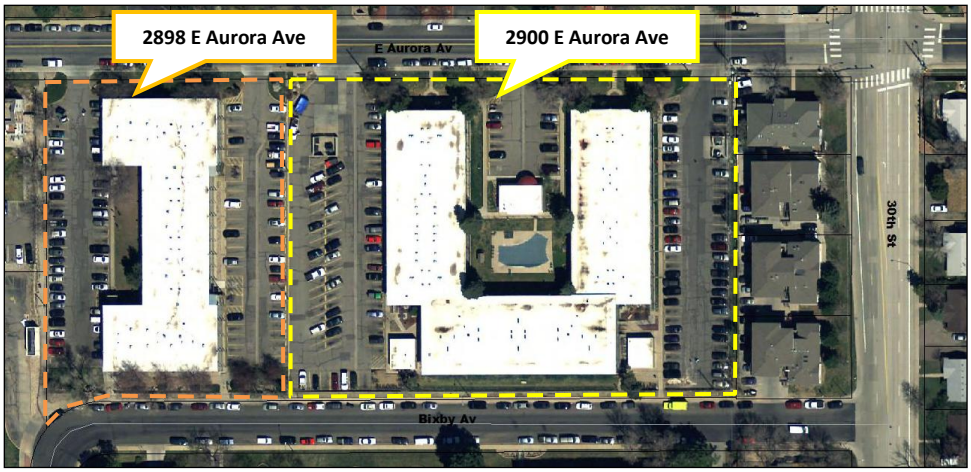


Figure 3: Development Addressing

For the purposes of applying the intensity standards in the land use code, two ELUs are equivalent to one dwelling unit per the land use code section 9-8-7, B.R.C. 1981. The existing development is considered a legal "nonconforming use" because the use of the site was approved and developed prior to the current zoning standards and does not meet current residential density requirements. The property exceeds the maximum permitted density in the RH-5 zone district with 37 dwelling units per acre where 27.2 units per acre are permitted. Additionally, the property does not meet the minimum useable open space per dwelling unit with 433 square feet of open space per dwelling unit where 600 square feet are required. The city's code recognizes and allows for the continuance and expansion of legal nonconforming uses as discussed in the "Process" section below.

Figure 4: East Building

Figure 5: West Building

Project Proposal. The applicant is proposing to renovate the existing apartment units at the Cavalier Apartments, including the reconfiguration of 96 existing units. The following changes to the existing floor plans are part of the proposal:

- Conversion of 36 one-bedroom units in the east building to two-bedroom, one-bath units;
- Conversion of 12 two-bedroom units in the east building to three-bedroom, two-bath units;
- Conversion of 48 one-bedroom units in the west building to two-bedroom, one-bath units.

In total, 96 bedrooms and 12 new bathrooms will be added to the buildings. All units within the development will receive new interior finishes. All proposed conversions are internal and no additional units or floor area will be added to the site. The units proposed for reconfiguration currently contain long galley-style rooms (refer to **Figure 6** below). Many of the subject bedrooms currently contain room separators that informally separate the rooms. The proposal would improve the function of these units.

Figure 6: Proposed Changes to Floor Plans

Note that the occupancy restrictions in section 9-8-5, B.R.C. 1981 are based on dwelling unit, not bedrooms. Members of a family plus one or two roomers or up to four unrelated persons may occupy a unit in the RH-5 zone district. Up to two people may occupy an efficiency living unit (section 9-8-7, B.R.C. 1981). Since the number of efficiency living units will not increase with the proposal, the allowable occupancy of the property will not increase.

In order to meet the criteria for modifications to nonconforming uses and the site review criteria, the development proposal also includes several site improvements (refer to **Attachment D** for the applicant's proposed plans).

The following is included in the proposal:

- Life safety upgrades to the apartment buildings, including a new fire sprinkler system;
- Conversion of two existing maintenance buildings and six internal utility/laundry rooms to provide 336 long-term, secure bike parking spaces on grid style and vertical racks. This amount of bike parking exceeds the total requirement of 330 spaces;
- Provision of 186 short-term, public bike parking spaces dispersed throughout the site on inverted "u" racks. This amount of bike parking exceeds the total requirement of 110 spaces;
- Closure of one of the five curb cuts and drive accesses onto E. Aurora Ave. Reconfiguration of the parking lot to eliminate the western driveway and curb cut, which results in the removal of 3 parking spaces. The area of the removed access will be converted to landscaping with 4 new trees;
- Conversion of the existing leasing office structure to a clubhouse for use by residents of the property with a small office/work space and workout area. The conversion will add 1,025 square feet of usable interior open space meeting the requirements of section 9-9-11(f), "Special Open Space Requirements Applicable to Residential Uses," B.R.C. 1981;
- Provision of a new trash and recycling enclosure on the northwest corner of the property with screening that is consistent with the current code requirements pursuant to section 9-9-18, "Trash Storage and Recycling Areas," B.R.C. 1981. Two existing trash and recycling enclosures will be upgraded with compatible new metal gates to provide full screening;
- Replacement of the existing 4.5-foot sidewalk on E. Aurora Avenue with a 6-foot attached sidewalk, which can accommodate the existing power line poles and is consistent with surrounding properties;
- Updating the landscape to provide additional parking lot landscaping, parking lot screening, street trees and trash screening pursuant to sections 9-9-12, "*Landscaping and Screening Requirements*" and 9-9-13, "*Streetscape Design Standards*," B.R.C. 1981. The proposal includes the addition of 36 new trees;
- Upgrading site lighting to meet the outdoor lighting standards of section 9-9-16, B.R.C. 1981. A comprehensive photometric analysis and plan were prepared to demonstrate full compliance with the standards;
- Maintenance of building exterior façades elements, including new windows and paint; and
- A robust Transportation Demand Management (TDM) Plan, which includes unbundled parking and the provision of excess bicycle parking, Eco Passes and a transportation information center within the community center.

Review Process. As noted above, the project site is considered a legal nonconforming use with respect to density. The development proposal is considered an expansion of a nonconforming use as defined in chapter 9-16, "Definitions," B.R.C. 1981, because the proposal will increase the required parking and will add bedrooms.

> *"Expansion of nonconforming use" means any change or modification to a nonconforming use that constitutes:*
>
> *(1) An increase in the occupancy, floor area, required parking, traffic generation, outdoor storage, or visual, noise, or air pollution;*

(2) *Any change in the operational characteristics which may increase the impacts or create adverse impacts to the surrounding area including, without limitation, the hours of operation, noise, or the number of employees;*
(3) *The addition of bedrooms to a dwelling unit, except a single-family detached dwelling unit; or*
(4) *The addition of one or more dwelling units."*

Pursuant to section 9-10-3(c)(2), "Standards for Changes to Nonstandard Buildings, Structures and Lots, and Nonconforming Uses," B.R.C. 1981, applications for Nonconforming Use Review are reviewed for consistency with the criteria set forth in subsection 9-2-15(e) and (f), B.R.C. 1981. Generally, the Nonconforming Use Review criteria are focused on minimizing adverse impacts to surrounding properties, maintaining consistency surrounding uses as well as area character, and improving the appearance of the property and decreasing the level of nonconformity of the site.

The proposal increases the required parking to 288 spaces where 242 are proposed to be provided. Per section 9-9-6(f)(2), "Residential Parking Reductions," B.R.C. 1981, parking reductions for residential projects may only be granted as part of a Site Review approval under section 9-2-14, "Site Review," B.R.C. 1981. The addition of bedrooms to the nonconforming use are analyzed and documented through Use Review and the proposed parking reduction is analyzed and documented through the Site Review.

Analysis. The proposal was found to be consistent with the Use Review criteria pursuant to subsections 9-2-15(e) "*Criteria for Review*" and (f) *"Additional Criteria for Modifications to Nonconforming Uses"* and the Site Review criteria pursuant to subsection 9-2-14(h) *"Criteria for Review,"* B.R.C. 1981. The proposed renovation of the buildings will have minimal negative impact on the use of nearby properties and is compatible with the surrounding area. The property is located less than a quarter mile from the University of Colorado campus. The addition of bedrooms will not change the character of the area, a high density zoning district that currently has a number of apartment buildings primarily rented to university students. The changes proposed to the site provide quality bike parking, upgraded site lighting, and additional landscaping and usable open space. The site upgrades will improve the physical appearance of the site.

In terms of the requested parking reduction, the submitted TDM Plan, parking study and traffic impact analysis demonstrate that potential traffic increases can be accommodated within the existing transportation network and that any additional parking demand can be accommodated on the site. Staff finds the request for a 16 percent parking reduction to be acceptable given the nature of occupancy, the site's proximity to the University of Colorado and major transit corridors, and the applicant's proposed Transportation Demand Management (TDM) plan. The proposal is consistent with several comprehensive plan policies, in particular policy 6.10 *"Managing Parking Supply."* Refer to **Attachments B and C** for staff's complete criteria analysis.

Public Comment. Required public notice was given in the form of written notification mailed to all property owners within 600 feet of the subject property and a sign posted on the property for at least 10 days. Separate notices were mailed for the Nonconforming Use Review, on Nov. 4, 2015, and the Site Review, on Jan. 20, 2016. All notice requirements of section 9-4-3, "*Public Notice Requirements*," B.R.C. 1981 have been met. In response to the required public notice, numerous comments have been received (refer to **Attachment F**). Generally, the comments express concerns regarding:

- Area is already overcrowded and overburdened by student rental units. Density should not be increased;
- Increased traffic in an area that is already congested;

- Street parking is already limited. A parking reduction would put pressure on the street parking, making the current situation worse.
- Proposal would have detrimental effect on the neighborhood's quality of life with increased traffic, crime, parking problems, trash and noise issues.

The applicant held a meeting with the Spanish Towers Home Owner's Association on Feb. 10, 2016 to discuss their concerns. After the applicant presented their proposal, members of the HOA in attendance expressed enthusiasm about the proposed investment in the property but voiced concerns about the lack of on-street parking, crime and trash management.

Conclusion. Staff finds that the proposed project meets the relevant criteria of section 9-2-15, "Use Review" and section 9-2-14(h)(2), "Site Review," B.R.C. 1981, specifically subsection K, "Additional Criteria for Parking Reductions." Refer to **Attachments B and C** for a complete analysis of the Use Review and Site Review criteria.

Parking reductions under 50 percent do not require Planning Board review. Thus, the applications are subject to a staff level decision and 14-day Planning Board call-up period. The proposal was **approved** by Planning and Development Services staff on **March 7, 2016** and the decision may be called up before Planning Board on or before **March 21, 2016**. There is one Planning Board hearing scheduled during the required 14-day call-up period on **March 17, 2016.** Questions about the project or decision should be directed to the Case Manager, Sloane Walbert at (303) 441-4231 or at walberts@bouldercolorado.gov.

Attachments:

A. Disposition of Approval
B. Analysis of Use Review Criteria
C. Analysis of Site Review Criteria
D. Applicant's Proposed Plans
E. Surrounding Uses
F. Public Comment

CITY OF BOULDER
Planning and Development Services

1739 Broadway, Third Floor • P.O. Box 791, Boulder, CO 80306-0791
phone 303-441-1880 • fax 303-441-3241 • email plandevelop@bouldercolorado.gov
www.boulderplandevelop.net

CITY OF BOULDER PLANNING DEPARTMENT NOTICE OF DISPOSITION

You are hereby advised that the following action was taken by the Planning Department based on the standards and criteria of the Land Use Regulations as set forth in Chapter 9-2, B.R.C. 1981, as applied to the proposed development.

DECISION:	**APPROVED WITH CONDITIONS**
PROJECT NAME:	**CAVALIER APARTMENTS**
DESCRIPTION:	**SITE REVIEW AND NON-CONFORMING USE REVIEW for the reconfiguration of 96 existing apartment units at the Cavalier Apartments and an associated 16 percent parking reduction. Included in this approval is the conversion of 84 one-bedroom units to two-bedroom units and the conversion of 12 two-bedroom units to three-bedroom units. In total, 96 bedrooms and 12 new bathrooms will be added to the buildings. No additional units or floor area will be added to the site. Also included in this approval is the conversion of the current leasing office structure into community center for the use of the residents and conversion of existing maintenance buildings into long-term bike storage.**
LOCATION:	**2898 AND 2900 E AURORA AVE**
COOR:	**N01W04**
LEGAL DESCRIPTION:	**See Exhibit A**
APPLICANT:	**Jeff Dawson, Trestle Strategy**
OWNER:	**2900 Boulder LLC, a Colorado limited liability company**
APPLICATION:	**NONCONFORMING USE REVIEW, LUR2015-00107** **SITE REVIEW, LUR2016-00009**
ZONING:	**Residential - High 5 (RH-5)**
CASE MANAGER:	**Sloane Walbert**

VESTED PROPERTY RIGHT: NO; the owner has waived the opportunity to create such right under Section 9-2-19, B.R.C. 1981.

APPROVED MODIFICATIONS FROM THE LAND USE REGULATIONS:
Section 9-9-6, "Parking Standards," B.R.C. 1981:

- Parking reduction of 16% (241 spaces provided where 288 are required).

FOR CONDITIONS OF APPROVAL, SEE THE FOLLOWING PAGES OF THIS DISPOSITION.

Approved On: 3/7/2016
Date

By:
David Driskell, Executive Director of Community Planning and Sustainability

This decision may be appealed to the Planning Board by filing an appeal letter with the Planning Department within two weeks of the decision date. If no such appeal is filed, the decision shall be deemed final fourteen days after the date above mentioned.

Appeal to Planning Board expires: 3/21/2016

Final Approval Date: _____

IN ORDER FOR A BUILDING PERMIT APPLICATION TO BE PROCESSED FOR THIS PROJECT, A SIGNED DEVELOPMENT AGREEMENT AND FINAL PLANS FOR CITY SIGNATURE MUST BE SUBMITTED TO THE PLANNING DEPARTMENT WITH DISPOSITION CONDITIONS AS APPROVED SHOWN ON THE FINAL PLANS. IF THE DEVELOPMENT AGREEMENT IS NOT SIGNED WITHIN NINETY (90) DAYS OF THE FINAL DECISION DATE, THE PLANNING DEPARTMENT APPROVAL AUTOMATICALLY EXPIRES.

Pursuant to Section 9-2-12 of the Land Use Regulations (Boulder Revised Code, 1981), the applicant must begin and substantially complete the approved development within three years from the date of final approval. Failure to "substantially complete" (as defined in Section 9-2-12) the development within three years shall cause this development approval to expire.

CONDITIONS OF APPROVAL

SITE REVIEW

1. The Applicant shall ensure that the **development shall be in compliance with all plans prepared by the Applicant** on March 3, 2016 and the Transportation Demand Management (TDM) Plan dated March 1, 2016, on file in the City of Boulder Planning Department, except to the extent that the development may be modified by the conditions of this approval.

2. Prior to issuance of a building permit, the Applicant shall dedicate to the City, at no cost, the following easements meeting the City of Boulder Design and Construction Standards, as part of Technical Document Review applications, the form and final location of which shall be subject to the approval of the City Manager:

   a. A **utility easement** for a new 3-inch water meter vault along E. Aurora Avenue; and

   b. A **public access easement** for the sidewalk/driveway ramps providing access to the site along E. Aurora Avenue.

3. Prior to issuance of a building permit, the Applicant shall submit a **financial guarantee**, in a form acceptable to the Director of Public Works, in an amount equal to the cost of providing seventeen (17) non-student residents of the development local transit passes for three years after the issuance of a certificate of occupancy for each dwelling unit as proposed in the Applicant's Transportation Demand Management (TDM) Plan.

4. Prior to issuance of the first certificate of occupancy for any dwelling unit, the Applicant shall construct and complete, subject to acceptance by the City, an **6-foot wide attached sidewalk** along E. Aurora Ave. serving the site in conformance with the approved engineering plans and meeting the City of Boulder Design and Construction Standards.

USE REVIEW

1. The Applicant shall ensure that the **development shall be in compliance with all plans prepared by the Applicant** on March 3, 2016 and the Applicant's written statement dated October 29, 2015, on file in the City of Boulder Planning Department, except to the extent that the development may be modified by the conditions of this approval.

2. The Applicant **shall not expand or modify the approved use**, except pursuant to subsection 9-2-15(h), B.R.C. 1981.

Exhibit A

Legal Description: 2900 E Aurora Ave Boulder, CO 80303

Parcel One:
The north ½ NE ¼ SE ¼ SW ¼ of section 32, township 1 north, range 70 west of the 6th p.m., except the east 425 feet and except the north 30 feet for East Aurora Avenue,
County of Boulder,
State of Colorado.

Parcel Two:
The east 425 feet of the N ½ NE ¼ SE ¼ SW ¼ of section 32, township 1 north, range 70 west of the 6th p.m., except the north 30 feet for East Aurora Avenue,
County of Boulder,
State of Colorado.

Parcel Three:
A part of the NE ¼ of the SE ¼ of the SW ¼ of section 32, township 1 north, range 70 west of the 6th p.m., County of Boulder, State of Colorado, being more particularly described as follows:

Commencing at the northeast corner of the NE ¼ of the SE ¼ of the SW ¼ of said section 32; thence southerly along the east line of the SW ¼ of said section 32, a distance of 331.44 feet to the southeast corner of the N ½ of the NE ¼ of the SE ¼ of the SW ¼ of said section 32 which point is the true point of beginning; thence westerly along the south line of the N ½ of the NE ¼ of the SE ¼ of the SW ¼ of said section 32, a distance of 660.36 feet to the southwest corner of the N ½ of the NE ¼ of the SE ¼ of the SW ¼ of said section 32, thence southerly along the west line of the NE ¼ of the SE ¼ of the SW ¼ of said section 32, a distance of 4.94 feet to a point on the north line of the south 15 acres of the E ½ of the SE ¼ of the SW ¼ of said section 32; thence easterly along said north line a distance of 660.36 feet to a point on the east line of the SW ¼ of said section 32; thence northerly along said east line a distance of 4.92 feet to the true point of beginning;
County of Boulder,
State of Colorado.

Full Legal Description:
TRACTS 1186 A & B & 1792 & 179 2A 32-1N-70

Subdivision:
TR, NBR 120, 122,830-CENT/MOORES

Section, Township, Range:
32-1N-70

County Assessor Parcel ID #:
146332300026

ATTACHMENT B: Analysis of Use Review Criteria

Overall, the project was found to be consistent with the criteria for Use Review set forth in subsections 9-2-15(e) and (f), B.R.C. 1981.

Section 9-10-3. Changes to Nonstandard Buildings, Structures, and Lots and Nonconforming Uses:

(c) Nonconforming Uses:

(1) Nonconforming Changes to Conforming Use Prohibited: No conforming use may be changed to a nonconforming use, notwithstanding the fact that some of the features of the lot or building are nonstandard or the parking is nonconforming.

(2) Standards for Changes to Nonconforming Uses: The city manager will grant a request for a change of use, which is the replacement of one nonconforming use with another, if the modified or new use does not constitute an expansion of a nonconforming use. Any other change of use that constitutes expansion of a nonconforming use must be reviewed under procedures of section 9-2-15, "Use Review," B.R.C. 1981.

(3) Nonconforming Only as to Parking: The city manager will grant a request to change a use that is nonconforming only because of an inadequate amount of parking to any conforming use allowed in the underlying zoning district upon a finding that the new use will have an equivalent or less parking requirement than the use being replaced.

Section 9-2-15(e), B.R.C. 1981, "Use Review"

No use review application will be approved unless the approving agency finds all of the following:

✓ **(1) Consistency with Zoning and Non-Conformity:** The use is consistent with the purpose of the zoning district as set forth in section 9-5-2(c), "Zoning Districts Purposes," B.R.C. 1981, except in the case of a nonconforming use;

The project site is zoned Residential - High 5 (RH-5), which is defined as "high density residential areas primarily used for a variety of types of attached residential units, including without limitation, apartment buildings, and where complementary uses may be allowed" (section 9-5-2)(c)(1)(F), B.R.C. 1981). The use is nonconforming due to density, as described below under (2)(D).

✓ (2) Rationale: The use either:

N/A (A) Provides direct service or convenience to or reduces adverse impacts to the surrounding uses or neighborhood;

N/A (B) Provides a compatible transition between higher intensity and lower intensity uses;

N/A (C) Is necessary to foster a specific city policy, as expressed in the Boulder Valley Comprehensive Plan, including, without limitation, historic preservation, moderate income housing, residential and non-residential mixed uses in appropriate locations, and group living arrangements for special populations; or

✓ (D) Is an existing legal nonconforming use or a change thereto that is permitted under subsection (f) of this section;

The existing development is considered a "nonconforming use" due to the density, which was established prior to the current zoning standards. The property exceeds the maximum permitted density in the RH-5 zone district with 37 dwelling units per acre where 27.2 units per acre are permitted. Additionally, the property does not meet the minimum useable open space per dwelling unit with 433 square feet of open space per dwelling unit where 600 square feet is required. The proposed renovation constitutes an expansion of a nonconforming use, since it will add bedrooms.

This application for an expansion of an existing legal nonconforming use is permitted under subsection (e). Please see nonconforming use review criteria below for analysis of criteria.

✓ (3) Compatibility: The location, size, design, and operating characteristics of the proposed development or change to an existing development are such that the use will be reasonably compatible with and have minimal negative impact on the use of nearby properties or for residential uses in industrial zoning districts, the proposed development reasonably mitigates the potential negative impacts from nearby properties;

The proposed renovation of the buildings is reasonably compatible with, and has minimal negative impact on, the use of nearby properties. The proposed reconfiguration of units will improve the function of the units and formalize space that is commonly used for two occupants. The allowable occupancy will not increase with the addition of bedrooms. The addition of landscaping, elimination of a curb-cut and addition of dedicated short- and long-term bike parking will reduce impacts.

The proposed addition of bedrooms is compatible with the surrounding area. The property is located approximately a quarter mile from the University of Colorado campus. The character of the area is identifiably residential with a variety of multi-family, high density residential development surrounding the project site. Given that the nonconforming density will remain on the site as is, and that the site is located within an RH-5 zoning district where there are a number of university student rentals, the expansion of the nonconforming use in terms of number of bedrooms with equivalent occupancy will be compatible in the context.

✓ (4) Infrastructure: As compared to development permitted under section 9-6-1, "Schedule of Permitted Land Uses," B.R.C. 1981, in the zone, or as compared to the existing level of impact of a nonconforming use, the proposed development will not significantly adversely affect the infrastructure of the surrounding area, including, without limitation, water, wastewater, and storm drainage utilities and streets;

The proposed expansion will not affect the existing infrastructure compared to the existing level of impact of the nonconforming use. The occupancy on the site will remain the same and the proposed expansion would have a negligible impact on existing infrastructure.

✓ (5) Character of Area: The use will not change the predominant character of the surrounding area;

The development proposal will not change the predominant character of the area. The character of the area is identifiably residential with a variety of multi-family, high density residential development surrounding the project site, including the Spanish Towers (805 29th St.) to the southwest, Kensington Apartments (2950 Bixby Ave.) to the south, Montclair Court Condos (2850 E. Aurora Ave.) to the west, Blue Sky Lofts (2905 E. Aurora Ave.) to the northwest and the Sterling University Peaks Apartments (2985 E. Aurora Ave) to the northeast. In addition, the project site is in proximity to the redevelopment of the Outlook Hotel located at 800 28th St., the Lotus Building located at 900 28th Street, the Province located at 950 28th St., and Landmarks Lofts II located at 970 28th St., all of which are

student oriented developments ranging in density from 22 dwelling units per acre to 64 dwelling units per acre.

The addition of bedrooms will not change the character of the area, a high density zoning district that currently has a number of apartment buildings primarily rented to university students.

N/A (6) Conversion of Dwelling Units to Non-Residential Uses: There shall be a presumption against approving the conversion of dwelling units in the residential zoning districts set forth in subsection 9-5-2(c)(1)(a), B.R.C. 1981, to non-residential uses that are allowed pursuant to a use review, or through the change of one nonconforming use to another nonconforming use. The presumption against such a conversion may be overcome by a finding that the use to be approved serves another compelling social, human services, governmental, or recreational need in the community including, without limitation, a use for a day care center, park, religious assembly, social service use, benevolent organization use, art or craft studio space, museum, or an educational use.

Not applicable, the proposal does not include the conversion of dwelling units.

(f) "Additional Criteria for Modifications to Nonconforming Uses": No application for a change to a nonconforming use shall be granted unless all of the following criteria are met in addition to the criteria set forth above:

✓ (1) Reasonable Measures Required: The applicant has undertaken all reasonable measures to reduce or alleviate the effects of the nonconformity upon the surrounding area, including, without limitation, objectionable conditions, glare, adverse visual impacts, noise pollution, air emissions, vehicular traffic, storage of equipment, materials, and refuse, and on-street parking, so that the change will not adversely affect the surrounding area.

The changes proposed to the site provide quality bike parking and additional landscaping. The conversion of two existing maintenance buildings and six internal utility/laundry rooms will provide 336 long term, secure bike parking spaces. In addition, 186 short term, public bike parking spaces will be dispersed throughout the site on inverted "u" racks. The removal of one of the existing curb-cuts, addition of landscaping to serve as screening and upgraded outdoor lighting will reduce impacts on adjacent properties. Overall, landscape improvements will alleviate the effects of the nonconforming upon the surrounding area. Additionally, the conversion of the existing leasing office structure to a clubhouse for use by residents will provide additional quality open space for residents. A new trash enclosure with screening should reduce refuse and/or junk on the property. These improvements are considered reasonable measures given the constraints of the existing site layout.

✓ (2) Reduction in Nonconformity/Improvement of Appearance: The proposed change or expansion will either reduce the degree of nonconformity of the use or improve the physical appearance of the structure or the site without increasing the degree of nonconformity.

The project site is nonconforming as to density. No dwelling units are being added to the property, there is no change to the use category (attached housing), and the allowable occupancy of the property will not change. Hence, the degree of nonconformity is not increasing. The provision of short- and long-term bike parking will exceed the current code requirements. Upgrades to the site lighting will meet the outdoor lighting standards of section 9-9-16, B.R.C. 1981. While full compliance with the landscape standards is not possible given the constraints of the current site design, removing the cobble and planting appropriate low maintenance drought tolerant vegetation is a significant site improvement. All parking lots will be screened from the street and adjacent properties and contain additional interior lot landscaping. These measures will reduce the degree of nonconformity of the use.

Additionally, the site upgrades will improve the physical appearance of the site. The changes will provide additional usable outdoor space for residents, quality bike parking and additional landscaping. The proposal includes the addition of a trash enclosure, which is compatible with the existing enclosures, and upgraded outdoor lighting. The renovation will include exterior maintenance of the buildings like new paint and windows.

✓ (3) Compliance With This Title/Exceptions: The proposed change in use complies with all of the requirements of this title:

N/A (A) Except for a change of a nonconforming use to another nonconforming use; and

Not Applicable. The existing apartment use will remain.

N/A (B) Unless a variance to the setback requirements has been granted pursuant to section 9-2-3, "Variances and Interpretations," B.R.C. 1981, or the setback has been varied through the application of the requirements of section 9-2-14, "Site Review," B.R.C. 1981.

✓ (4) Cannot Reasonably Be Made Conforming: The existing building or lot cannot reasonably be utilized or made to conform to the requirements of chapter 9-6, "Use Standards," 9-7, "Form and Bulk Standards," 9-8, "Intensity Standards," or 9-9, "Development Standards," B.R.C. 1981.

The existing nonconforming use cannot reasonable be made to conform to the intensity standards of chapter 9-8. The scope and cost of demolishing the nonconforming use that has been operated in this manner for decades is not proportional to the proposal being requested.

N/A (5) No Increase in Floor Area over Ten Percent: The change or expansion will not result in a cumulative increase in floor area of more than ten percent of the existing floor area.

Not applicable, there is no increase in floor area as part of the proposal.

N/A (6) Approving Authority May Grant Zoning Variances: The approving authority may grant the variances permitted by subsection 9-2-3(d), B.R.C. 1981, upon finding that the criteria set forth in subsection 9-2-3(h), B.R.C. 1981, have been met.

Modifications are requested to the parking standards, under review through the Site Review criteria.

Section 9-9-6(f) Motor Vehicle Parking Reductions:

(2) Residential Parking Reductions: Parking reductions for residential projects may be granted as part of a site review approval under Section 9-2-14, "Site Review," B.R.C. 1981.

Section 9-2-14(h), B.R.C. 1981, "Site Review"

No site review application shall be approved unless the approving agency finds that:

(1) Boulder Valley Comprehensive Plan:

✓ **(A)** The proposed site plan is consistent with the land use map and the service area map and, on balance, the policies of the Boulder Valley Comprehensive Plan.

The BVCP designates this site as HR – High Density Residential. The proposal is consistent with the land use map and service area plan and is consistent with the following policies of the BVCP:

- *2.03 Compact Development Pattern*
- *2.09 Neighborhoods as Building Blocks*
- *2.10 Preservation and Support for Residential Neighborhoods*
- *2.16 Mixed Use and Higher Density Development*
- *2.32 Physical Design for People*
- *2.35 Outdoor Lighting/Light Pollution*
- *2.37 Enhanced Design for Private Sector Projects*
- *6.08 Transportation Impact*
- *6.10 Managing Parking Supply*
- *7.06 Mixture of Housing Types*
- *7.07 Preserve Existing Housing Stock*
- *7.09 Housing for a Full Range of Households*
- *7.10 Balancing Housing Supply with Employment Base*

Resolution 922 was adopted by the City Council in 2003 in part to "consider the potential for higher housing densities on parcels adjoining the University of Colorado". The land use designation of several properties to the northwest were changed in the early 2000s from Transitional Business to High Density Residential land use to implement this policy. There is a desire on the city's part to see additional high density housing in this area.

When assessing parking demand related to a request for a parking reduction, staff looks to the BVCP criteria for the city's values regarding parking, which are expressed in the Boulder Valley Comprehensive Plan (BVCP) policy 6.10, Managing Parking Supply that states, "Providing for vehicular parking will be considered as a component of a total access system of all modes of transportation - bicycle, pedestrian, transit and vehicular - and will be consistent with the desire to reduce single occupant vehicle travel, limit congestion, balance the use of public spaces and consider the needs of residential and commercial areas. Parking demand will be accommodated in

the most efficient way possible with the minimal necessary number of new spaces. The city will promote parking reductions through parking maximums, shared parking, unbundled parking, parking districts and transportation demand management programs."

N/A (B) The proposed development shall not exceed the maximum density associated with the Boulder Valley Comprehensive Plan residential land use designation. Additionally, if the density of existing residential development within a three-hundred-foot area surrounding the site is at or exceeds the density permitted in the Boulder Valley Comprehensive Plan, then the maximum density permitted on the site shall not exceed the lesser of:

The comprehensive plan designation of High Density Residential includes an intent statement of density for "more than 14 dwelling units per acre." The development is a legal nonconforming use that exceeds density standards. The proposed project does not include additional dwelling units. However, since the existing density on the site is a legal nonconforming use and this proposal does not add any additional density to the site, this subparagraph is inapplicable.

N/A (i) The density permitted in the Boulder Valley Comprehensive Plan, or,

N/A (ii) The maximum number of units that could be placed on the site without waiving or varying any of the requirements of Chapter 9-8, "Intensity Standards," B.R.C. 1981.

✓ **(C)** The proposed development's success in meeting the broad range of BVCP policies considers the economic feasibility of implementation techniques require to meet other site review criteria.

The development would not be rendered infeasible in meeting the BVCP policies or the site review criteria based upon the requirements and recommendations made within these comments.

(2) Site Design: Projects should preserve and enhance the community's unique sense of place through creative design that respects historic character, relationship to the natural environment, multi-modal transportation connectivity and its physical setting. Projects should utilize site design techniques which are consistent with the purpose of site review in subsection (a) of this section and enhance the quality of the project. In determining whether this subsection is met, the approving agency will consider the following factors:

✓ **(A) Open Space:** Open space, including, without limitation, parks, recreation areas, and playgrounds:

✓ **(i)** Useable open space is arranged to be accessible and functional and incorporates quality landscaping, a mixture of sun and shade and places to gather;

Today, the project site is limited in its open space amenities and landscape quality and quantity. As part of the development proposal, the applicant will bring the project site closer into compliance with the landscape standards as well as create a new functional open space in the form of a new community center. Existing open space areas will be improved with new landscaping.

N/A (ii) Private open space is provided for each detached residential unit;

Not applicable, the proposed development will not incorporate detached residential units.

✓ **(iii)** The project provides for the preservation of or mitigation of adverse impacts to natural features, including, without limitation, healthy long-lived trees, significant plant communities, ground and surface water, wetlands, riparian areas, drainage areas and species on the federal Endangered Species List, "Species of Special Concern in Boulder County" designated by Boulder County, or prairie dogs (Cynomys ludiovicianus), which is a species of local concern, and their habitat;

There are no environmentally sensitive species or habitats on the site. The site is primarily paved. The proposed landscaping will be an improvement over what exists today and will provide for a significant increase in the amount of trees onsite.

✓ **(iv)** The open space provides a relief to the density, both within the project and from surrounding development;

The proposed open space on-site provides a relief to the proposed project density for all residents and will serve both active and passive recreational activities with a combination of open areas including a dog park, picnic areas, and a swimming pool with patio. The proposal will provide screening for the parking lots from the street and adjacent properties, which will provide a relief to the density.

✓ **(v)** Open space designed for active recreational purposes is of a size that it will be functionally useable and located in a safe and convenient proximity to the uses to which it is meant to serve;

The proposed open space will serve both active and passive recreational activities with a combination of open areas, formal and informal planting areas, as well as communal, grade level open spaces. Additionally, the conversion of the existing leasing office structure to a clubhouse for use by residents will provide additional quality open space for residents. A fitness center will provide indoor recreation opportunities for the residents.

N/A **(vi)** The open space provides a buffer to protect sensitive environmental features and natural areas; and

Not applicable, there are no environmentally sensitive species or habitats on the site.

N/A **(vii)** If possible, open space is linked to an area- or city-wide system.

Not applicable. There is no established area-wide or city-wide open space system in the area.

N/A **(B)** ***Open Space in Mixed Use Developments (Developments that contain a mix of residential and non-residential uses)***

✓ **(C)** ***Landscaping***

✓ **(i)** The project provides for aesthetic enhancement and a variety of plant and hard surface materials, and the selection of materials provides for a variety of colors and contrasts and the preservation or use of local native vegetation where appropriate;

Today the project site is limited in the quantity and quality of its existing landscape, not meeting many of the current standards, including interior parking lot landscaping and screening standards, and street tree requirements. As part of the development proposal, the applicant will provide interior parking lot landscaping and screening that will also provide relief to the site paving and soften the parking area as well as provide a buffer to the surrounding development. The proposed landscape will provide for a variety of plant and hard surface materials.

N/A **(ii)** Landscape design attempts to avoid, minimize or mitigate impacts on and off site to important native species, healthy, long lived trees, plant communities of special concern, threatened and endangered species and habitat by integrating the existing natural environment into the project;

Not applicable. There are no known threatened and endangered species existing on-site.

✓ **(iii)** The project provides significant amounts of plant material sized in excess of the landscaping requirements of Sections 9-9-12, "Landscaping and Screening Standards," and 9-9-13, "Streetscape Design Standards," B.R.C. 1981; and

Overall, the proposed landscape is an improvement over the existing dilapidated site conditions that will provide an aesthetic enhancement. The proposal will bring the site closer into compliance with the landscape standards. To provide plantings in excess of the landscaping requirements would require the removal of a significant amount of parking.

✓ **(iv)** The setbacks, yards and useable open space along public rights of way are landscaped to provide attractive streetscapes, to enhance architectural features and to contribute to the development of an attractive site plan.

The proposed landscape and streetscape plans will be a significant improvement over what currently exists onsite and will provide for a variety of plant and hard surface materials to provide a pleasant pedestrian environment.

✓ **(D)** ***Circulation:*** Circulation, including, without limitation, the transportation system that serves the property, whether public or private and whether constructed by the developer or not:

✓ **(i)** High speeds are discouraged or a physical separation between streets and the project is provided;

✓ **(ii)** Potential conflicts with vehicles are minimized;

✓ **(iii)** Safe and convenient connections are provided that support multi-modal mobility through and between properties, accessible to the public within the project and between the project and the existing and proposed transportation systems, including, without limitation, streets, bikeways, pedestrianways and trails;

Connections to transportation systems, streets, bikeways and pedestrian ways are safe, convenient, and accessible through the site through a series of pedestrian paths as well as a designated bike route on E. Aurora Ave. The proposal includes the replacement of the existing attached 4.5-foot sidewalk on E. Aurora Ave. with a 6-foot wide sidewalk.

✓ **(iv)** Alternatives to the automobile are promoted by incorporating site design techniques, land use patterns, and supporting infrastructure that supports and encourages walking, biking, and other alternatives to the single-occupant vehicle;

Alternatives to the automobile are being promoted through a Transportation Demand Management Plan, installation of bike racks, covered and secure bike storage, the provision of convenient pedestrian connections throughout the site to surrounding properties as well as to the nearby pedestrian underpass connection underneath 28th Street to the university. There are a total of 522 bike parking spaces proposed to be provided on the site: 186 short-term spaces and 336 interior long-term bike storage spaces.

✓ **(v)** Where practical and beneficial, a significant shift away from single-occupant vehicle use to alternate modes is promoted through the use of travel demand management techniques;

The proposed TDM will provide a shift away from single-occupant vehicle use to alternate modes with the installation of bike racks and the provision of Eco Passes to encourage alternate modes of transit. The proposal also includes unbundled parking and a transportation information center within the leasing office.

✓ **(vi)** On-site facilities for external linkage are provided with other modes of transportation, where applicable;

Visitor bike racks are planned on site to encourage external pedestrian and bicycle linkages.

✓ **(vii)** The amount of land devoted to the street system is minimized; and

There is no significant street system within the project. Curb cuts have been minimized to provide only necessary access to the existing parking areas.

✓ **(viii)** The project is designed for the types of traffic expected, including, without limitation, automobiles, bicycles, and pedestrians, and provides safety, separation from living areas, and control of noise and exhaust.

The site has been well-designed for the expected traffic needs. Based on the proximity of the site to the university and the pedestrian underpass, a great deal of bicycle and pedestrian traffic is anticipated to continue through and around the site.

✓ **(E)*Parking***

✓ **(i)** The project incorporates into the design of parking areas measures to provide safety, convenience, and separation of pedestrian movements from vehicular movements;

The parking area that serves the development is existing on the project site. Today, the existing parking area does not meet the interior parking lot landscape or screening standards. While the parking area is existing and its general layout will not be altered, the development proposal does includes improvements to the existing parking area, including eliminating a curb cut, reconfiguring one of the parking areas, and additional screening.

✓ **(ii)** The design of parking areas makes efficient use of the land and uses the minimum amount of land necessary to meet the parking needs of the project;

✓ **(iii)** Parking areas and lighting are designed to reduce the visual impact on the project, adjacent properties, and adjacent streets; and

The parking is located where existing parking is located. The reorganization of the parking area and closure of a curb cut will reduce the visual impact that exists today.

✓ **(iv)** Parking areas utilize landscaping materials to provide shade in excess of the requirements in Subsection 9-9-6(d), and Section 9-9-14, "Parking Lot Landscaping Standards," B.R.C. 1981.

As described above, to provide plantings in excess of the landscaping requirements would require the removal of a significant amount of parking.

✓ (F) ***Building Design, Livability, and Relationship to the Existing or Proposed Surrounding Area***

N/A **(i)** The building height, mass, scale, orientation, architecture and configuration are compatible with the existing character of the area or the character established by adopted design guidelines or plans for the area;

The building height, mass, scale, orientation is not being altered as part of the development proposal. The existing building will remain.

N/A **(ii)** The height of buildings is in general proportion to the height of existing buildings and the proposed or projected heights of approved buildings or approved plans or design guidelines for the immediate area;

The building height, mass, scale, orientation is not being altered as part of the development proposal. The existing building will remain.

N/A **(iii)** The orientation of buildings minimizes shadows on and blocking of views from adjacent properties;

The building height, mass, scale, orientation is not being altered as part of the development proposal. The existing building will remain.

✓ **(iv)** If the character of the area is identifiable, the project is made compatible by the appropriate use of color, materials, landscaping, signs, and lighting;

The property is located less than a quarter mile from the University of Colorado campus. The character of the area is identifiably residential with a variety of multi-family, high density residential development surrounding the project site. No major changes are proposed to the building facades. The renovation will include exterior maintenance of the buildings like new paint and windows.

✓ **(v)** Projects are designed to a human scale and promote a safe and vibrant pedestrian experience through the location of building frontages along public streets, plazas, sidewalks and paths, and through the use of building elements, design details and landscape materials that include, without limitation, the location of entrances and windows, and the creation of transparency and activity at the pedestrian level;

Although the scope of the redevelopment of the project site is limited, improvements will occur to the building exterior, including windows and repainting, and site, including landscape improvements. The applicant is proposing closing a curb cut along E. Aurora Ave., upgrading the existing sidewalk on E. Aurora to a 6-foot attached sidewalk, as well as parking lot and streetscape improvements. All of the aforementioned improvements will create a safer, more vibrant pedestrian experience that is well connected and where pedestrian/vehicular conflicts are minimized.

N/A **(vi)** To the extent practical, the project provides public amenities and planned public facilities;

✓ **(vii)** For residential projects, the project assists the community in producing a variety of housing types, such as multifamily, townhouses and detached single family units, as well as mixed lot sizes, number of bedrooms and sizes of units;

The project will reconfigure 96 existing units to provide 96 additional bedrooms in an area that has a high demand for student residential. This will provide additional housing opportunities by increasing the variety in number of bedrooms provided in each unit. The

proposed reconfiguration of units will improve the function of the units and formalize space that is commonly used for two occupants. The allowable occupancy will not increase with the addition of bedrooms.

✓ **(viii)** For residential projects, noise is minimized between units, between buildings, and from either on-site or off-site external sources through spacing, landscaping, and building materials;

The development proposal includes landscape improvements including along the side yards which will provide a buffer between the adjacent properties and the project site.

✓ **(ix)** A lighting plan is provided which augments security, energy conservation, safety, and aesthetics;

A lighting plan has been provided which includes upgrading the site lighting to meet the outdoor lighting standards of section 9-9-16, B.R.C. 1981. The upgrades will augment security, energy conservation, safety, and aesthetics on the site.

N/A **(x)** The project incorporates the natural environment into the design and avoids, minimizes, or mitigates impacts to natural systems;

✓ **(xi)** Buildings minimize or mitigate energy use; support on-site renewable energy generation and/or energy management systems; construction wastes are minimized; the project mitigates urban heat island effects; and the project reasonably mitigates or minimizes water use and impacts on water quality.

The addition of landscaping will mitigate urban heat island effects.

✓ **(xii)** Exteriors or buildings present a sense of permanence through the use of authentic materials such as stone, brick, wood, metal or similar products and building material detailing;

Although the development proposal includes improvements and updates to the existing building exterior, the exterior materials will remain the same, including brick and lap siding.

N/A **(xiii)** Cut and fill are minimized on the site, the design of buildings conforms to the natural contours of the land, and the site design minimizes erosion, slope instability, landslide, mudflow or subsidence, and minimizes the potential threat to property caused by geological hazards;

There will be no grading as a result of the development proposal.

N/A **(xiv)** In the urbanizing areas along the Boulder Valley Comprehensive Plan boundaries between Area II and Area III, the building and site design provide for a well-defined urban edge; and

The project site is not located within an urbanizing area; it is located in Area I.

N/A **(xv)** In the urbanizing areas located on the major streets shown on the map in Appendix A of this title near the Boulder Valley Comprehensive Plan boundaries between Area II and Area III, the buildings and site design establish a sense of entry and arrival to the City by creating a defined urban edge and a transition between rural and urban areas.

N/A **(G)** ***Solar Siting and Construction:*** For the purpose of ensuring the maximum potential for utilization of solar energy in the City, all applicants for residential site reviews shall place streets, lots, open spaces, and buildings so as to maximize the potential for the use of solar energy in accordance with the following solar siting criteria:

N/A **(i)** *Placement of Open Space and Streets:* Open space areas are located wherever practical to protect buildings from shading by other buildings within the development or from buildings on adjacent properties. Topography and other natural features and constraints may justify deviations from this criterion.

N/A **(ii)** *Layout and Building Siting:* Lots are oriented and buildings are sited in a way which maximizes the solar potential of each principal building. Lots are designed to facilitate siting a structure which is unshaded by other nearby structures. Wherever practical, buildings are sited close to the north lot line to increase yard space to the south for better owner control of shading.

N/A **(iii)** *Building Form:* The shapes of buildings are designed to maximize utilization of solar energy. Buildings shall meet the solar access protection and solar siting requirements of Section 9-9-17, "Solar Access," B.R.C. 1981.

N/A **(iv)** *Landscaping:* The shading effects of proposed landscaping on adjacent buildings are minimized.

N/A **(H)** ***Additional Criteria for Poles Above the Permitted Height:*** No site review application for a pole above the permitted height will be approved unless the approving agency finds all of the following:

N/A **(i)** The light pole is required for nighttime recreation activities, which are compatible with the surrounding neighborhood, or the light or traffic signal pole is required for safety, or the electrical utility pole is required to serve the needs of the city; and

N/A **(ii)** The pole is at the minimum height appropriate to accomplish the purposes for which the pole was erected and is designed and constructed so as to minimize light and electromagnetic pollution.

N/A **(I)** ***Land Use Intensity Modifications***

N/A **(i)** *Potential Land Use Intensity Modifications:*

(a) The density of a project may be increased in the BR-1 district through a reduction of the lot area requirement or in the Downtown (DT), BR-2, or MU-3 districts through a reduction in the open space requirements.

(b) The open space requirements in all Downtown (DT) districts may be reduced by up to one hundred percent.

(c) The open space per lot requirements for the total amount of open space required on the lot in the BR-2 district may be reduced by up to fifty percent.

(d) Land use intensity may be increased up to 25 percent in the BR-1 district through a reduction of the lot area requirement.

N/A **(ii)** *Additional Criteria for Land Use Intensity Modifications:* A land use intensity increase will be permitted up to the maximum amount set forth below if the approving agency finds that the criteria in paragraph (h)(1) through subparagraph (h)(2)(H) of this section and following criteria have been met:

N/A **(J)** ***Additional Criteria for Floor Area Ratio Increase for Buildings in the BR-1 District***

✓ **(K)** ***Additional Criteria for Parking Reductions:*** **The off-street parking requirements of Section 9-7-1, "Schedule of Form and Bulk Standards," B.R.C. 1981, may be modified as follows:**

✓ **(i)** Process: The city manager may grant a parking reduction not to exceed fifty percent of the required parking. The planning board or city council may grant a reduction exceeding fifty percent.

The proposed parking reduction is 16 percent.

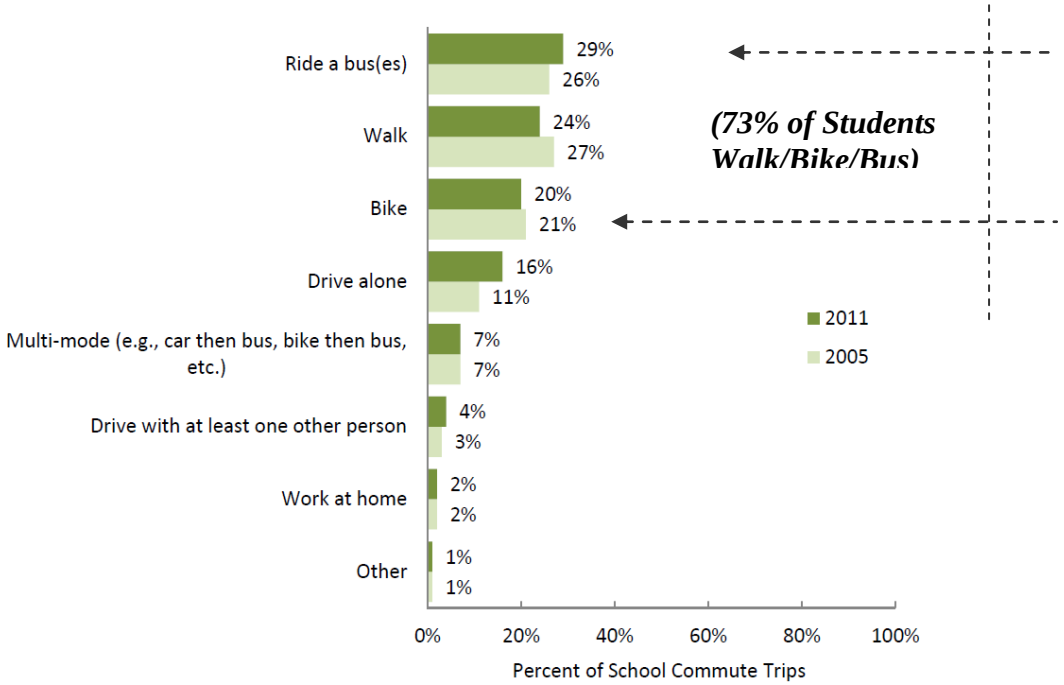
(ii) Criteria: Upon submission of documentation by the applicant of how the project meets the following criteria, the approving agency may approve proposed modifications to the parking requirements of Section 9-9-6, "Parking Standards," B.R.C. 1981 (see tables 9-1, 9-2, 9-3 and 9-4), if it finds that:

✓ **(a)** For residential uses, the probable number of motor vehicles to be owned by occupants of and visitors to dwellings in the project will be adequately accommodated;

The nature of the occupancy is primarily student renters. The nature of occupancy for student rentals in Boulder is such that there is a known need for long-term storage of vehicles owned by student renters rather than a need for daily-use parking. In addition, the site is located in an area that affords numerous non-auto opportunities for travel. The University of Colorado campus is located a quarter mile to the west of the site with access via the Aurora Avenue underpass at US 36. The site is located in close proximity to the 30th Street and 29th Street multimodal corridors, including the 28th Street multi-use path, 30th Street on-street bicycle lanes, and various transit routes. Given these non-auto travel opportunities, it is expected that many residents of this site do not need to rely on automobiles for a significant portion of their daily trips.

The addition of bedrooms will have minimal effects on parking generation. Findings of a regularly updated student survey prepared by the University of Colorado's Transportation and Parking Services Department support the claim that most students walk or bike to classes, particularly when in close proximity to campus. As summarized in the table on the following page, which is taken from the most recent survey, 73 percent of students surveyed walked, biked or rode the bus to campus daily.

The applicant has submitted a robust Transportation Demand Management (TDM) Plan as part of the proposal, which includes unbundled parking and the provision of excess short-term and long-term bicycle parking, Eco Passes and a transportation information center within the community center. These measures would meet the needs of the proposed occupants while also addressing a number of comprehensive plan policies such as provision on higher density residential along transit corridors, ensuring a commitment to a walkable city, and managing the parking supply. A parking study conducted as part of the TDM indicates that all site-generated parking demand can be accommodated on the site. Refer to the TDM and Traffic Impact Analysis in ***Attachment D*** *for more information.*



CU Student Commuting Patterns
University of Colorado Student Survey

N/A **(b)** The parking needs of any nonresidential uses will be adequately accommodated through on-street parking or off-street parking;

Not applicable; the development proposal is solely residential.

N/A **(c)** A mix of residential with either office or retail uses is proposed, and the parking needs of all uses will be accommodated through shared parking;

Not applicable; the development proposal is solely residential.

N/A **(d)** If joint use of common parking areas is proposed, varying time periods of use will accommodate proposed parking needs; and

Not applicable; the development proposal is solely residential.

✓ **(e)** If the number of off-street parking spaces is reduced because of the nature of the occupancy, the applicant provides assurances that the nature of the occupancy will not change.

The nature of occupancy is anticipated to be student rentals, which have a well documented need for auto storage more than frequent parking turnover. As described above, the student population has a high use of alternative modes of transit particularly during the weekday hours when school is in session, nearly 75 percent. Similarly, it has been found that some students do not own cars in this close proximity to campus. Given the proximity to campus, the nature of occupancy is not likely to change.

N/A **(L)** ***Additional Criteria for Off-Site Parking:*** The parking required under Section 9-9-6, "Parking Standards," B.R.C. 1981, may be located on a separate lot if the following conditions are met:

(i) The lots are held in common ownership;

(ii) The separate lot is in the same zoning district and located within three hundred feet of the lot that it serves; and

(iii) The property used for off-site parking under this subparagraph continues under common ownership or control.

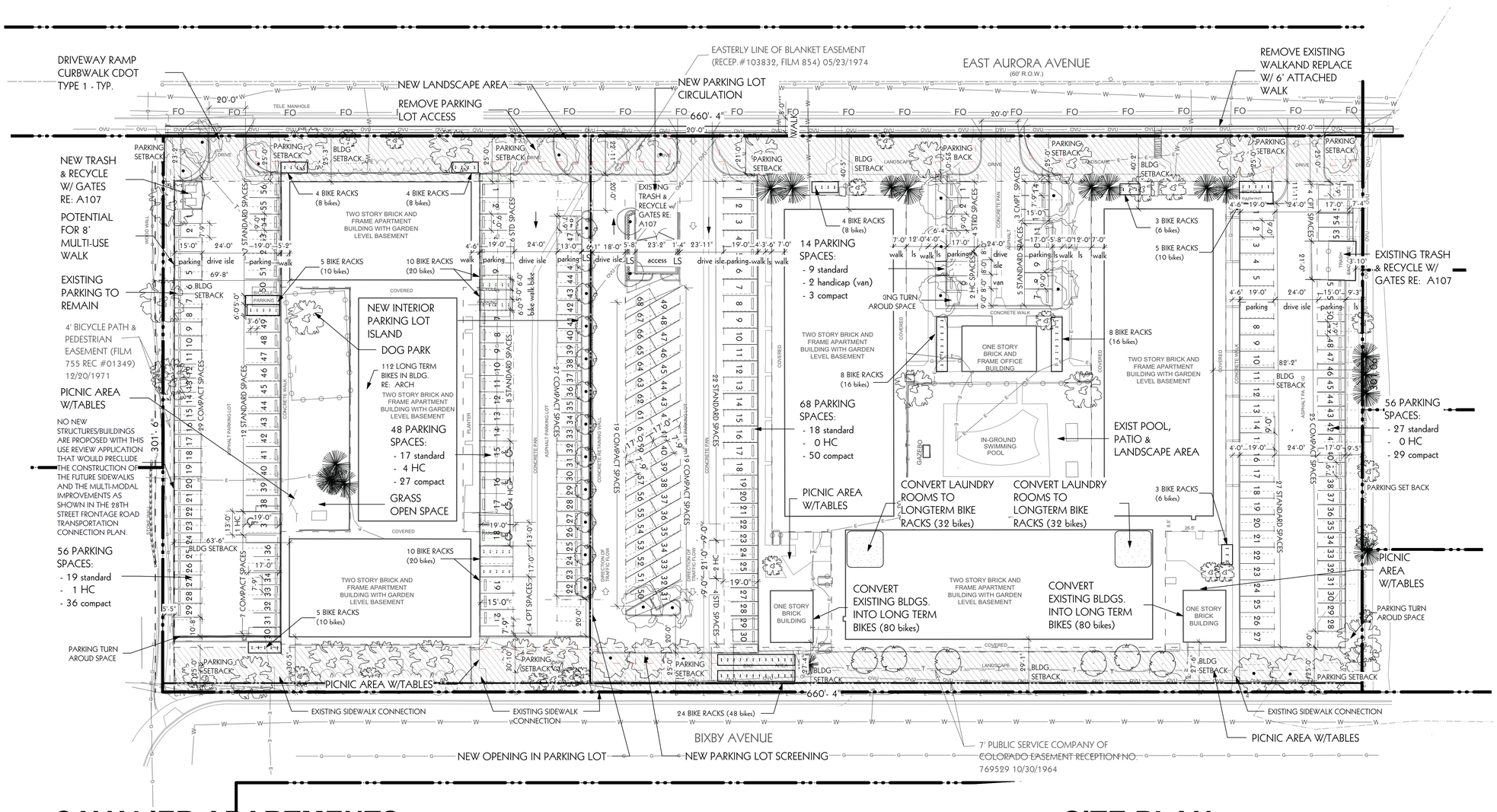
ATTACHMENT D

2900 AURORA - CAVALIER APTS. PARKING SUMMARY							
3/2/16							
REQUIRED PARKING			288				
EXISTING PARKING			245				
PROVIDED PARKING:			242				
			(46)	-16.0%	reduction		
REQUIRED BIKE PARKING:			440				
			330	long term			
			110	short term			
PROPOSED NEW PARKING:							
	STANDARD	COMPACT	HC	TOTAL CAR PARKING SPACES	SHORT TERM BIKE	LONG TERM BIKE	
WEST LOT - 2898 E. Aurora Ave.							
	19	36	1	56	28	56	
MAIN - UPPER WEST - 2898 E Aurora Ave							
	17	27	4	48	48	56	
MAIN - EAST 2900 E Aurora Ave.							
	18	50	0	68	56	112	
OFFICE LOT							
	9	3	2	14	32		
FAR EAST LOT - 2900 E. Aurora Ave.							
	27	29	0	56	22	112	
	90	145	7		186	336	
TOTAL PARKING:				242	186	336	522
				TOTAL CARS	SHORT TERM BIKE	LONG TERM BIKE	TOTAL BIKES

OPEN SPACE: 3/2/16

Site Area	202,328	SF
Open Space Required:	103,200	SF
Number of Units	220	
Standard Dwelling Units:	124	
Effeciency Living Units:	96	
Total Number of Dwelling Units:	172	
Minimum Open Space per Dwelling	600	SF
Proposed Open Space per Dwelling	432.75	SF

Open Space Provided:	74,433	SF
Site Landscape	45,112	SF
Parking Landscape	1,632	SF
Hardscape	26,664	SF
Indoor Space	1,025	SF



CAVALIER APARTMENTS

2900 AURORA LLC

2900 EAST AURORA
BOULDER, CO 80303

SITE PLAN

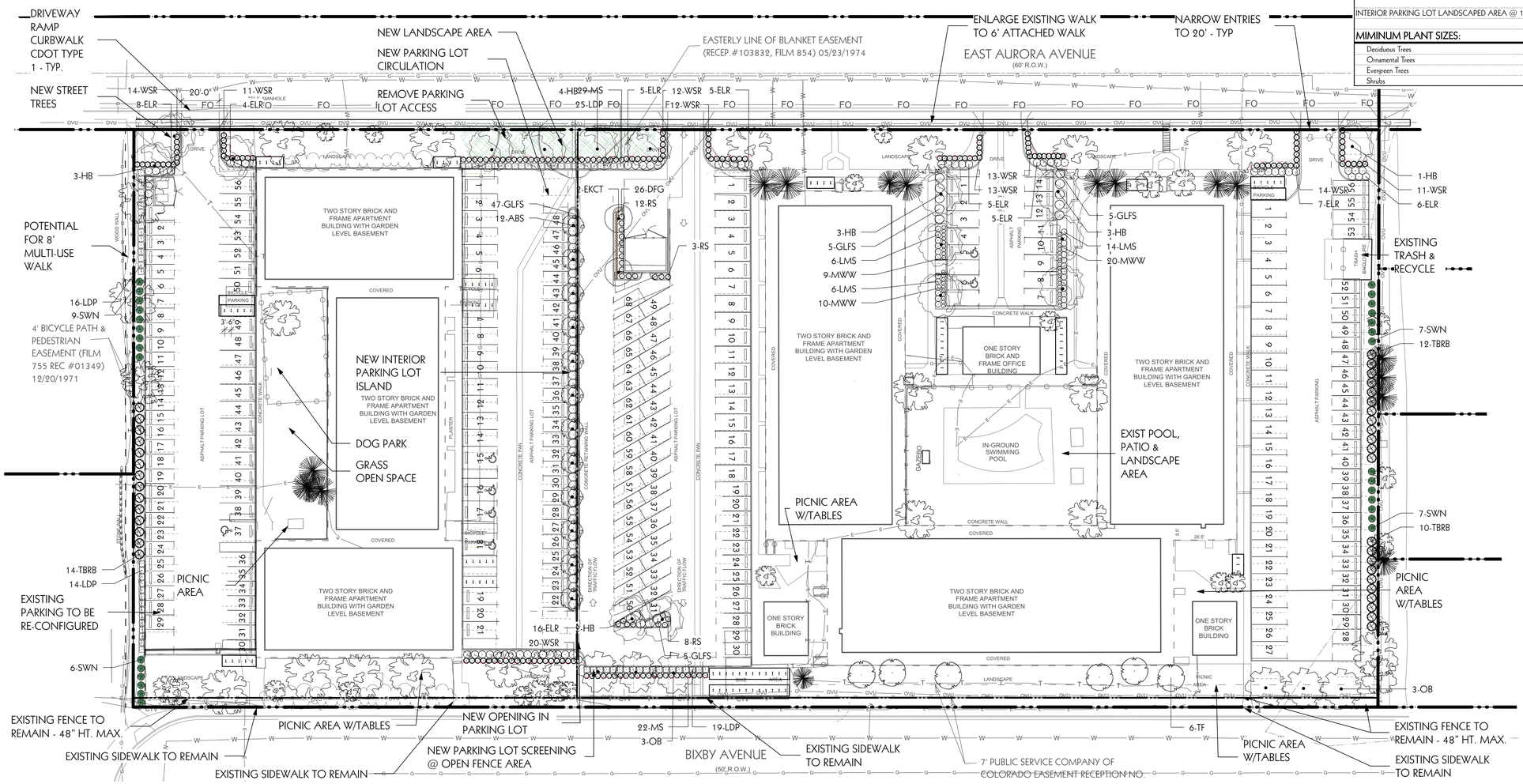
BOULDER, CO

NON-CONFORMING USE REVIEW
03/02/16

A101

STUDIO architecture
1350 Pine st. Suite 1
Boulder, CO 80302
866.529.9130
CVLR
DRAWN BY:osla
thestudioarchitecture.com
866.529.9130

LANDSCAPE REQUIREMENTS: 09/16/16			
OVERALL SITE	**REQUIRED**		**PROVIDED/COMMENTS**
LOT AREA *	202,328	~~198,730~~ SF	
Existing Buildings	50,319	SF	
Parking Lot & Drive Isles	73,890	SF	
Open Space	74,433	~~69,810~~ SF	does not include 4' walks behind back of curb or interior open space
~~* Parcels 1 & 2 only. Parcel # 3 not part of this ownership group.~~			
STREETSCAPE:	**REQUIRED**		**PROVIDED/COMMENTS**
Attached Sidewalk - East Aurora	1 tree/30' - 40': 660 LF = 17 -22 trees		9 existing +8 proposed behind back of walk = 17 total
Attached Sidewalk - Bixby	1 tree/30' - 40': 660 LF = 17-22 trees		12 existing trees +12 along property edge where utilities permit
PARKING LOT SCREENING:			
FROM ADJACENT PROPERTIES			
Height & Opacity	Landscape Material 42" ht.		
Width	6' Buffer		6' Ornamental + 10 Upright Evergreen trees provided on north side and fenced where less than 6' (north end between garages)
Trees	210 LF @ 1 tree/25 = 9		5 small trees provided along north buffer (existing building and fencing to screens remaining portions + new SS line found with new survey in NW corner eliminates trees in this area)
PARKING:			
TOTAL NUMBER OF PARKING STALLS	288 REQUIRED, 245 EXISTING		242 provided - 16% PARKING REDUCTION REQUESTED
TOTAL NUMBER BIKE RACKS	1/750 SF=440 BIKE RACKS		
	330 LONG TERM		336 LONG TERM
	110 SHORT TERM	186	~~138~~ SHORT TERM
	440 BIKES	522	~~474~~ TOTAL
INTERIOR PARKING LOT LANDSCAPED AREA @ 10%	73,865 sf parking area @ 10% = 7,386 sf		1,632 sf (2.2% - not meeting minimum standards)
MIMINUM PLANT SIZES:	**1 tree & 5 shrubs/1500 sf =93,892 sf = 63 trees + 313 shrubs**		
Deciduous Trees	2" cal.		23 existing trees +18 new
Ornamental Trees	1.5" cal.		20 existing + 18 new
Evergreen Trees	6' ht.		18 existing
Shrubs	5 gallon container		520 new + existing shrub beds



LEGEND:

- EXISTING TREES (to be REMAIN)
- PROPOSED SHADE TREES
- PROPOSED ORNAMENTAL TREES
- PROPOSED SHRUBS
- STEEL EDGER
- DROUGHT TOLERANT TURF
- INVERTED-U BIKE RACKS

0 30 60 FT

SCALE: 1"=30'-0"

CAVALIER APARTMENTS

EXISTING TREE & LANDSCAPE PLAN

L101

2900 AURORA LLC

BOULDER, CO

2900 EAST AURORA
BOULDER, CO 80303

NON-CONFORMING USE REVIEW
03/02/16

STUDIO architecture
1350 Pine st. Suite 1
Boulder, CO 80302
866.529.9130
CVLR

DRAWN BY:osla

PLANT LIST: 01/27/16					
KEY	QTY	COMMON NAME	SCIENTIFIC NAME	SIZE	o.c. SPACING
SHADE TREES:					
EKCT	2	Espresso Kentucky Coffeetree	Gymnocladus dioicus 'Espresso'	2" cip.	as shown
HB	16	Hackberry	Celtis occidentalis	2" cip.	as shown
OB	6	Ohio Buckeye	Aesculus glabra	2" cip.	as shown
TOTAL:	18				
ORNAMENTAL TREES:					
ABS	12	'Autumn Brilliance Serviceberry	Amelanchier x grandiflora 'Autumn Brilliance'	1.5" cip.	as shown
TF	6	Turkish Filbert	Corylus colurna	1.5" cip.	as shown
TOTAL:	18				
DECIDUOUS SHRUBS:					
ELR	61	Easy Livin' Rose	Rosa x Livin' Easy	5 gallon	4' o.c.
GLFS	62	Gro-Low fragrant Sumac	Rhus aromatica 'Gro-Low'	5 gallon	5' o.c.
LDP	74	Lodense Privet	Ligustrum vulgare 'Lodense'	5 gallon	3.5' o.c.
LMS	26	Limemound Spirea	Spiraea x bumalda 'Monhub'	5 gallon	3' o.c.
MS	51	Mixed Spirea	Spiraea japonica	5 gallon	3' o.c.
MWW	39	Midnight Wine Weigela	Weigela florida 'Elvera'	5 gallon	3' o.c.
RS	23	Russian Sage	Perovskia atriplicifolia	5 gallon	3.5' o.c.
SWN	30	Summer Wine Ninebark	Physocarpus opulifolius 'Summer Wine'	5 gallon	4' o.c.
TBRB	36	Tall Blue Rabbitbrush	Ericameria nauseosa ssp. nauseosa var. speciosa	5 gallon	5' o.c.
WSR	119	White Meidiland Landscape Rose	Rosa Meidiland White	5 gallon	4' o.c.
TOTAL:	521				
ORNAMENTAL GRASSES:					
DFG	26	Dwarf Fountain Grass	Pennisetum alopecuroides 'Hamelin'	1 gallon	18" o.c.
TOTAL:	26				

PLANT NOTES:

1. All plant material shall meet specifications of the American Association of Nurserymen (AAN) for number one grade. All trees shall be balled and burlapped or equivalent. All plant materials shall have all wire, twine or other containment materials, except for burlap, removed from trunk and root ball of the plant prior to planting.

2. Trees shall not be planted closer 10 feet to any sewer or water line. Tree planting shall be coordinated with Xcel Energy Company. Locations of all utilities shall be verified in the field prior to planting.

3. All shrubs shall be planted no less than 3' from any sidewalk or curb.

4. Grades shall be set to allow for proper drainage away from structures. Grades shall maintain smooth profiles and be free of surface debris, bumps, and depressions.

5. Developers shall ensure that the landscape plan is coordinated with the plans done by other consultants so that the proposed grading, storm drainage, or other constructions does not conflict nor preclude installation and maintenance of landscape elements on this plan.

6. All shrub bed areas shall be mulched with a 4" layer of wood bark mulch. Perennials and groundcover areas shall be mulched with a 4" layer of shredded bark mulch. No fabric to be installed in any ornamental areas, perennial or groundcover areas.

7. Prior to installation of plant materials, areas that have been compacted or disturbed by construction activity shall be thoroughly loosened, organic soil amendments shall be incorporated at the rate of at least three (3) cubic yards per 1000 square feet of landscape area in all turf and shrub beds. Incorporate only 1.5 CY in seed areas.

8. All lawn areas will be sodded with a fescue blend. Perimeter seed areas to be Low Grow Seed Mix as per Arkansas Valley Seed or equal. Drainage channel to be seeded with wetland seed mix.

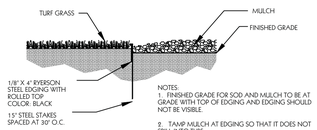
9. All landscape (plant materials and grass) will be irrigated with an automatic system. Turf areas will have a spray zone. Plants with like water requirements are shown together in order to have an efficient use of water. See Irrigation Plans for detailed information. (to be completed during Tec Docs).

10. Contractor shall verify all material quantities prior to installation. Actual number of plant symbols shall have priority over the quantity designated.

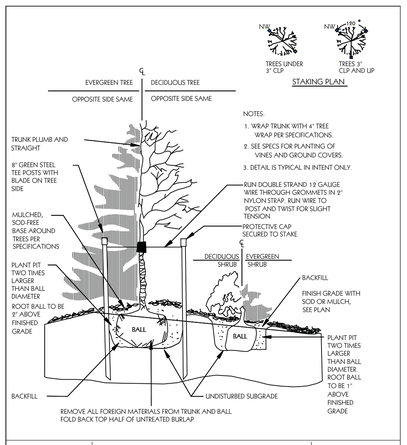
11. Refer to the City of Boulder Design and Construction Streetscaping Standards for all work within public areas, including tree protection standards. The developer will make every effort possible to protect trees within the site using the same standards.

12. Refer to the Civil Engineer Drawings for Grading and Utility information.

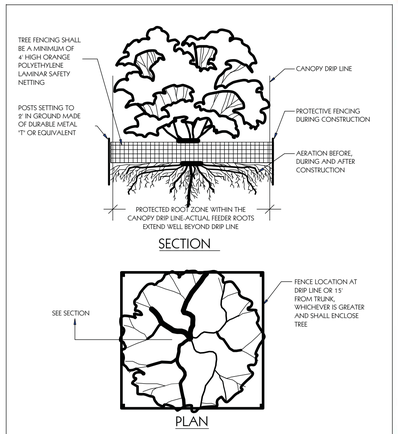
13. This plan meets or exceeds City of Boulder landscape code requirements when trees are planted behind back of walk.



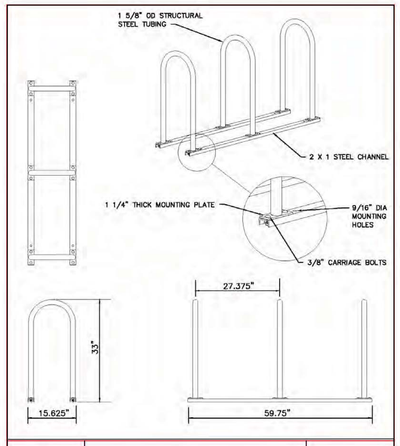
STEEL EDGER



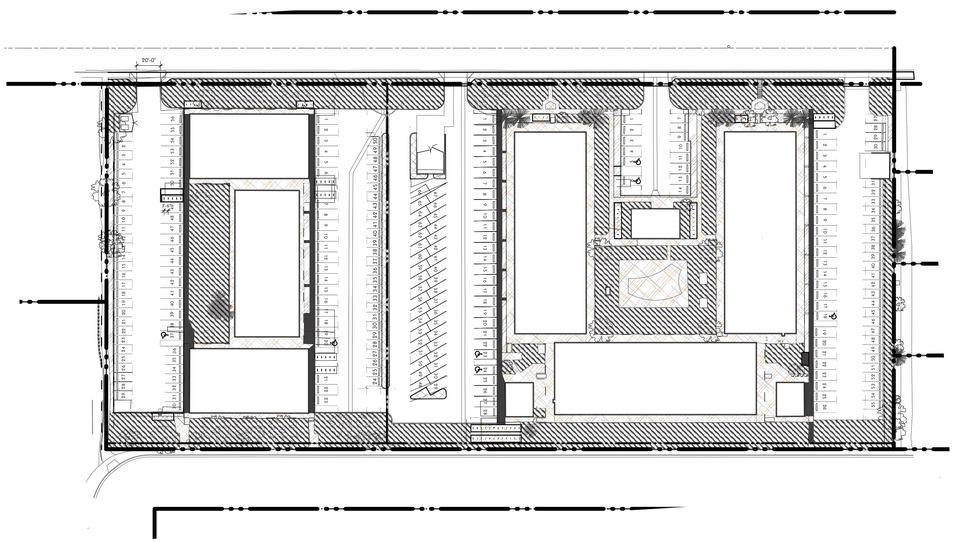
DRAWN BY: JSH CHECKED BY: SRW APPROVED BY: DIRECTOR OF PUBLIC WORKS	CITY OF BOULDER, COLORADO PLANTING DETAIL	ISSUED: JULY 2, 1998 REVISED: OCT. 17, 2000 DRAWING NO. 3.02	



DRAWN BY: JSH CHECKED BY: RJH APPROVED BY: DIRECTOR OF PUBLIC WORKS	CITY OF BOULDER, COLORADO PROTECTED ROOT ZONE AND DRIP LINE	ISSUED: JULY 2, 1998 REVISED: OCT. 17, 2000 DRAWING NO. 3.12	



DRAWN BY: BC CHECKED BY: MR APPROVED BY: DIRECTOR OF PUBLIC WORKS	CITY OF BOULDER, COLORADO INVERTED "U" BICYCLE RACKS ON RAILS	ISSUED: DEC. 6, 2014 REVISED: DRAWING NO. 2.53	



OPEN SPACE:

- LANDSCAPE AREA (meets code)
- HARDSCAPE
- PARKING LOT LANDSCAPE
- WALKS NOT INCLUDED
- ADDITIONAL LANDSCAPE AREA (size does not meet code)

SITE OPEN SPACE DIAGRAM
SCALE: 1" = 60'-0"

CAVALIER APARTMENTS

2900 AURORA LLC

2900 EAST AURORA
BOULDER, CO 80303

LANDSCAPE NOTES & DETAILS

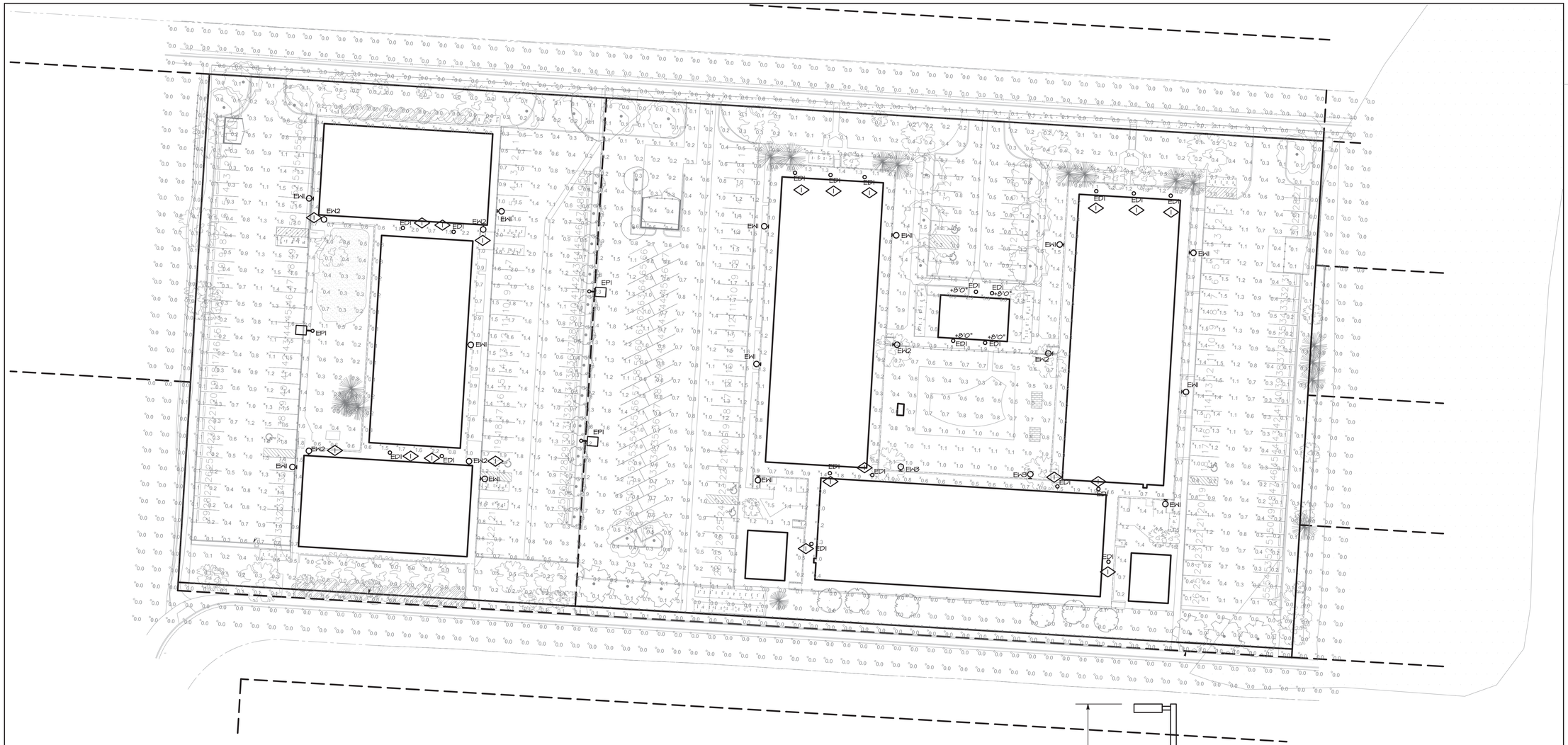
L102

BOULDER, CO

NON-CONFORMING USE REVIEW
03/02/16

STUDIO architecture
1350 Pine st. Suite 1
Boulder, CO 80302
866.529.9130
CVLR

DRAWN BY:osla



1 | ELECTRICAL SITE LIGHTING / PHOTOMETRIC PLAN

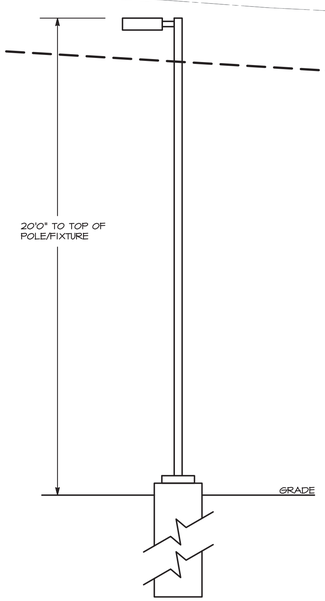
ES1.0 | SCALE: 1"=30'0"

GENERAL NOTES	
A.	ALL CALCULATIONS TAKEN AT GRADE LEVEL.
B.	CALCULATION GRADE ON 10' X 10' SPACING.
C.	ALL LIGHT LOSS FACTORS TAKEN AT 1.0.

KEYNOTE LEGEND	
KEY VALUE	
◇	
1.	FIXTURE TYPICAL ALL THREE LEVELS.

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Center Parking Lot	✳	0.9 fc	2.3 fc	0.0 fc	N/A	N/A
East Bldg Walkways	✳	0.8 fc	1.9 fc	0.0 fc	N/A	N/A
East Parking Lot	✳	0.7 fc	1.5 fc	0.0 fc	N/A	N/A
Leasing Office Entry	✳	3.6 fc	3.8 fc	3.5 fc	1.1:1	1.0:1
Leasing Office Parking Lot	✳	0.8 fc	2.1 fc	0.1 fc	21.0:1	8.0:1
Overall Site	◇	0.5 fc	3.8 fc	0.0 fc	N/A	N/A
Property Line	+	0.0 fc	0.2 fc	0.0 fc	N/A	N/A
West Bldg Walkways	✳	0.8 fc	2.2 fc	0.0 fc	N/A	N/A
West Parking Lot	✳	0.9 fc	2.0 fc	0.1 fc	20.0:1	9.0:1



2 | FIXTURE 'EP1' POLE/BASE DETAIL

ES1.0 | SCALE: N.T.S.

STUDIO architecture

STUDIO ARCHITECTURE
1350 Pine Street, Suite 1
Boulder, CO 80302
thestudioarchitecture.com
866.529.9130

1900 Wazee Street, Suite #350
Denver, Colorado 80202
303.296.3034 VOICE
303.296.3035 FAX
aedesign@aedesign-inc.com
www.aedesign-inc.com
ARCHITECTURAL ENGINEERING DESIGN GROUP, INC.
AEDG JOB# 3206.00

CAVALIER APARTMENTS

2900 EAST AURORA
BOULDER, CO 80303

STUDIO Project No: CVLR

Sheet Issue & Revision Log

No	Date	Description
●	01/29/16	NON-CONFORMING USE REVIEW RESUBMITTAL
	03/03/16	NON-CONFORMING USE REVIEW RESUBMITTAL

It is the client's responsibility prior to or during construction to notify the architect in writing of any perceived errors or omissions in the plans and specifications of which a contractor thoroughly knowledgeable with the building codes and methods of construction should reasonably be aware. Written instructions addressing such perceived errors or omissions shall be received from the architect prior to the client or client's subcontractors proceeding with the work. The client shall be responsible for any defects in construction if these procedures are not followed.

PHOTOMETRIC PLAN

ES1.00

PLOT DATE:

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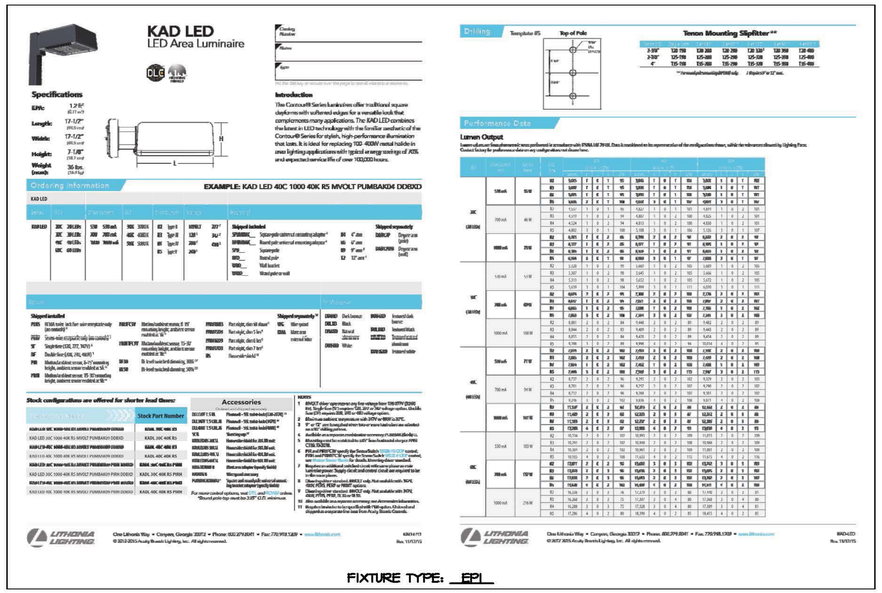

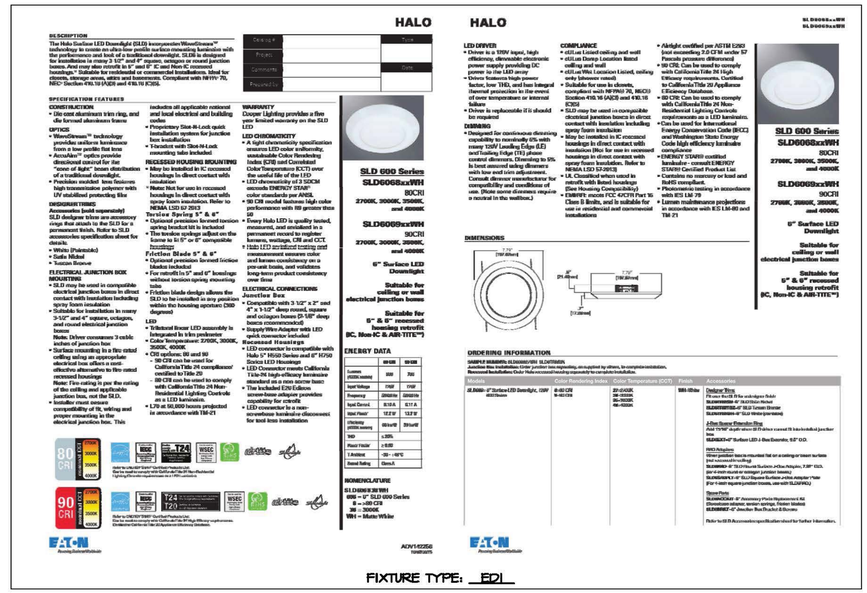

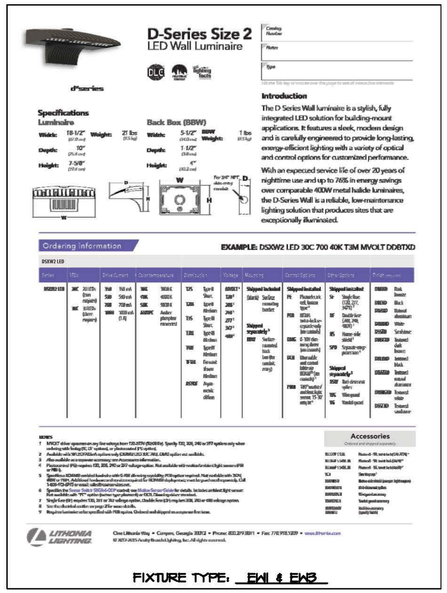

Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Distribution	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage
	ED1	20	EATON - HALO (FORMER COOPER LIGHTING)	SLD606840WH	HALO 6 INCH SURFACE LED DOWNLIGHT	FULL CUT-OFF	LED 80CRI / 4000K CCT ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET	1	800.0142	1	12.2
	EW1	13	Lithonia Lighting	DSXW2 LED 30C 700 40K T3S MVOLT	DSXW2 LED WITH 3 LIGHT ENGINES, 30 LED's, 700mA DRIVER, 4000K LED, TYPE 3 SHORT OPTIC	FULL CUT-OFF TYPE III	LED	1	6430.978	1	71
	EW2	6	Lithonia Lighting	DSXW1 LED 10C 350 40K T3M MVOLT	DSXW1 LED WITH (1) 10 LED LIGHT ENGINES, TYPE T3M OPTIC, 4000K, @ 350mA.	FULL CUT-OFF TYPE III	LED	1	1348.205	1	13.3
	EW3	2	Lithonia Lighting	DSXW2 LED 20C 530 30K T3S MVOLT	DSXW2 LED WITH 2 LIGHT ENGINES, 20 LED's, 530mA DRIVER, 3000K LED, TYPE 3 SHORT OPTIC	FULL CUT-OFF TYPE III	LED	1	3978.083	1	36
	EP1	3	Lithonia Lighting	KAD LED 30C 530 40K R3 MVOLT	KAD LED, 30 LED, 530mA MVOLT DRIVER, 4000K, TYPE 3 OPTICS.	FULL CUT-OFF TYPE III	LED	1	6594.045	1	54

STUDIO
architecture

STUDIO ARCHITECTURE
1350 Pine Street, Suite 1
Boulder, CO 80302
thestudioarchitecture.com
866.529.9130

1900 Wazee Street, Suite #350
Denver, Colorado 80202
303.296.3034 VOICE
303.296.3035 FAX
aedesign@aedesign-inc.com
www.aedesign-inc.com
ARCHITECTURAL ENGINEERING DESIGN GROUP, INC.
AEDG JOB# 3206.00

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BOULDER, CO 80303

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It is the client's responsibility prior to or during construction to notify the architect in writing of any perceived errors or omissions in the plans and specifications of which a contractor thoroughly knowledgeable with the building codes and methods of construction should reasonably be aware. Written instructions and correcting such perceived errors or omissions shall be received from the architect prior to the client or client's subcontractors proceeding with the work. The client shall be responsible for any defects in construction if these procedures are not followed.

SCHEDULE & CUTSHEETS

ES2.00

PLOT DATE:

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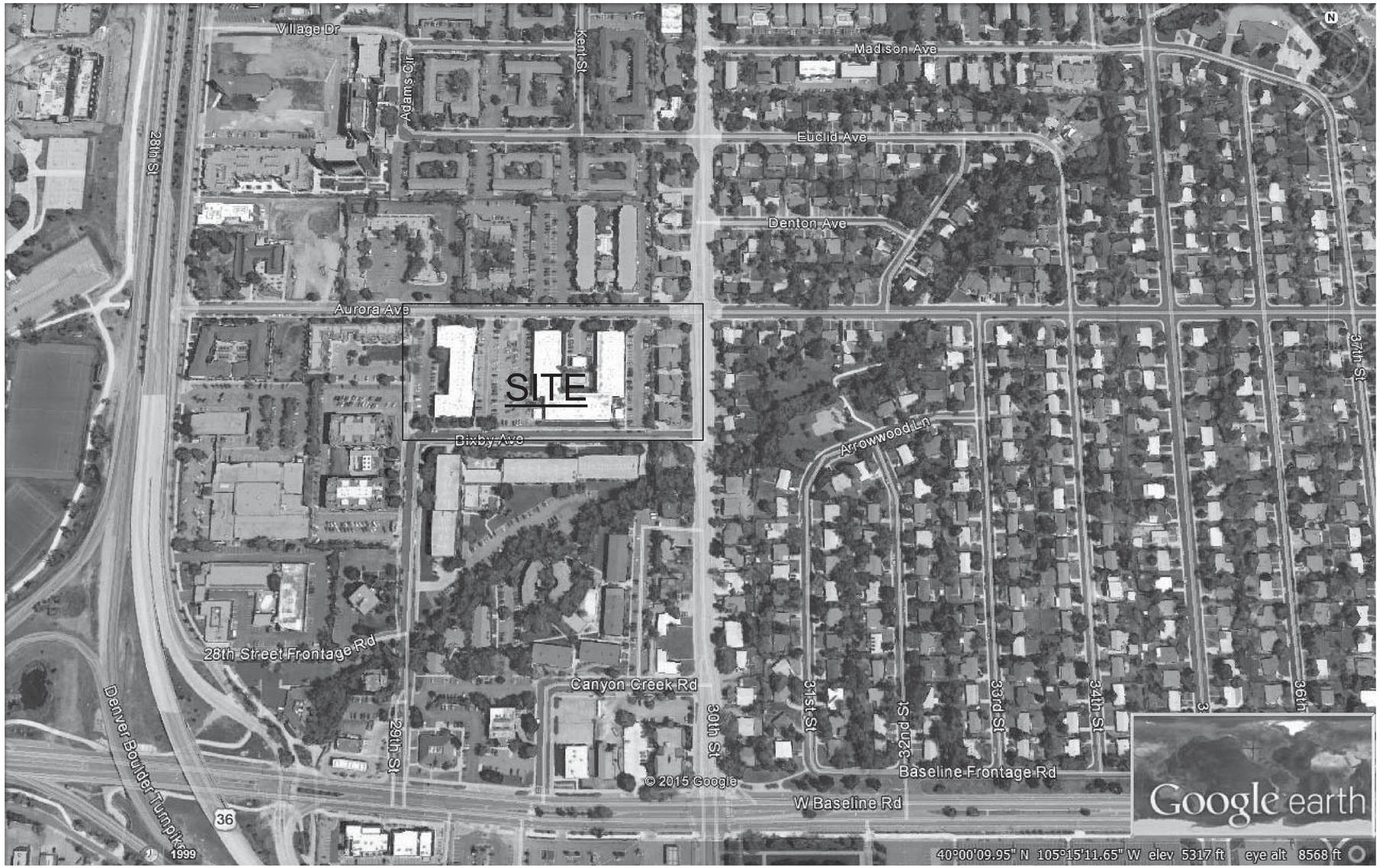

GENERAL

A100 COVER SHEET
A101 SITE PLAN

CIVIL

C0.1 PRELIMINARY ABBREVIATIONS, LEGENDS AND NOTES
C1.0 PRELIMINARY UTILITY PLAN
CD1.0 PRELIMINARY UTILITY PLAN DETAILS
CD1.1 PRELIMINARY 3" WATER METER DETAILS

EAST BUILDING

A102 EAST BUILDING 1ST FLOOR PLANS
A103 EAST BUILDING 2ND & 3RD FLOOR PLANS

WEST BUILDING

A104 WEST BUILDING 1ST FLOOR PLAN
A105 WEST BUILDING 2ND & 3RD FLOOR PLANS

UNITS / ENLARGED PLANS

A106 UNIT PLANS
A107 LONG TERM BIKE PARKING

LANDSCAPE

L101 EXISTING TREE & LANDSCAPE PLAN
L102 LANDSCAPE NOTES & DETAILS

CAVALIER APARTMENTS

2900 AURORA LLC

303.444.3081
2900 EAST AURORA
BOULDER, CO 80303

COVER SHEET

BOULDER, CO

NON-CONFORMING USE REVIEW
03/02/16

A100

STUDIO architecture
1350 Pine st. Suite 1
Boulder, CO 80302
866.529.9130
CVLR

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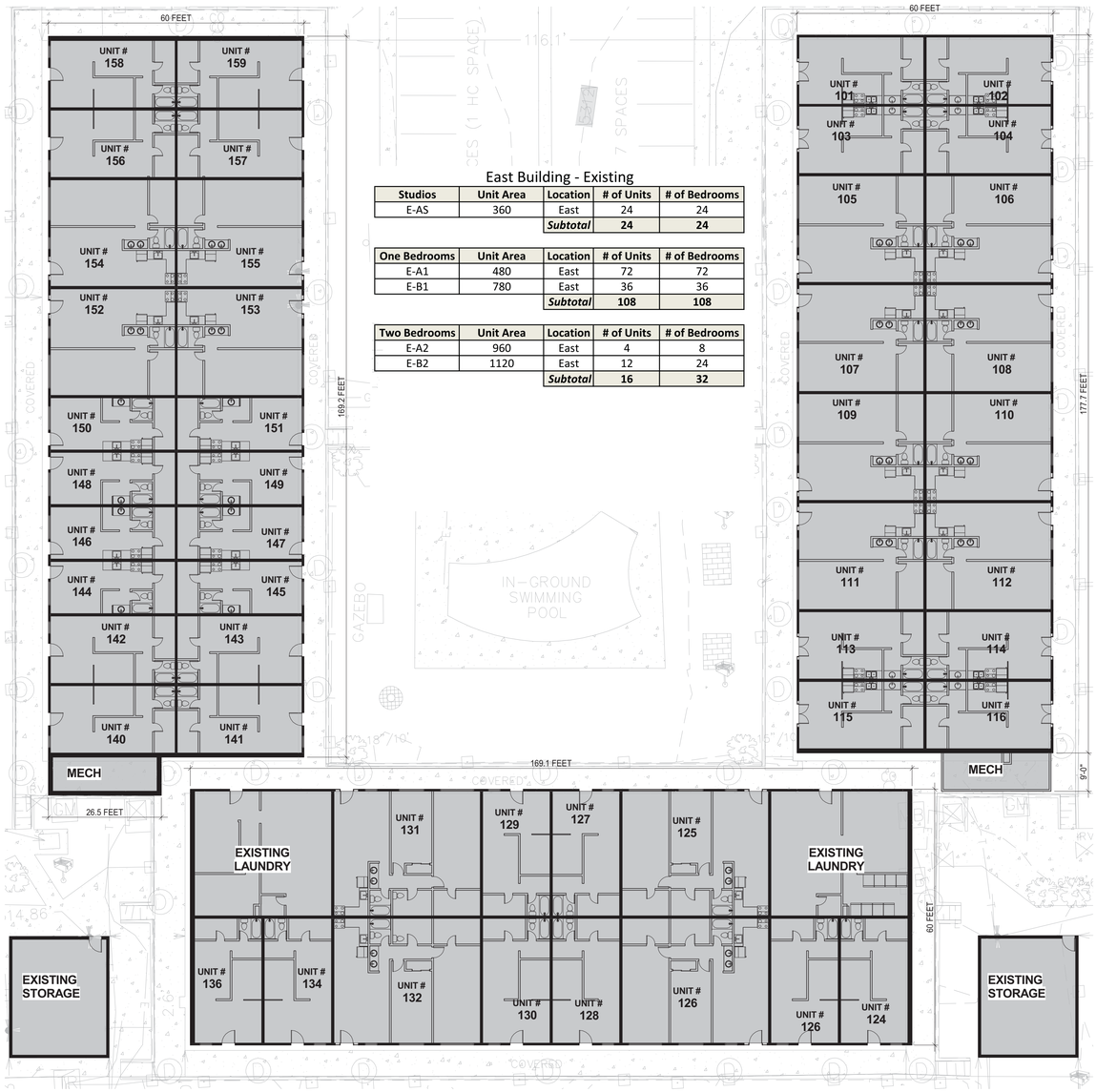
STUDIO architecture
thestudioarchitecture.com 866.529.9130



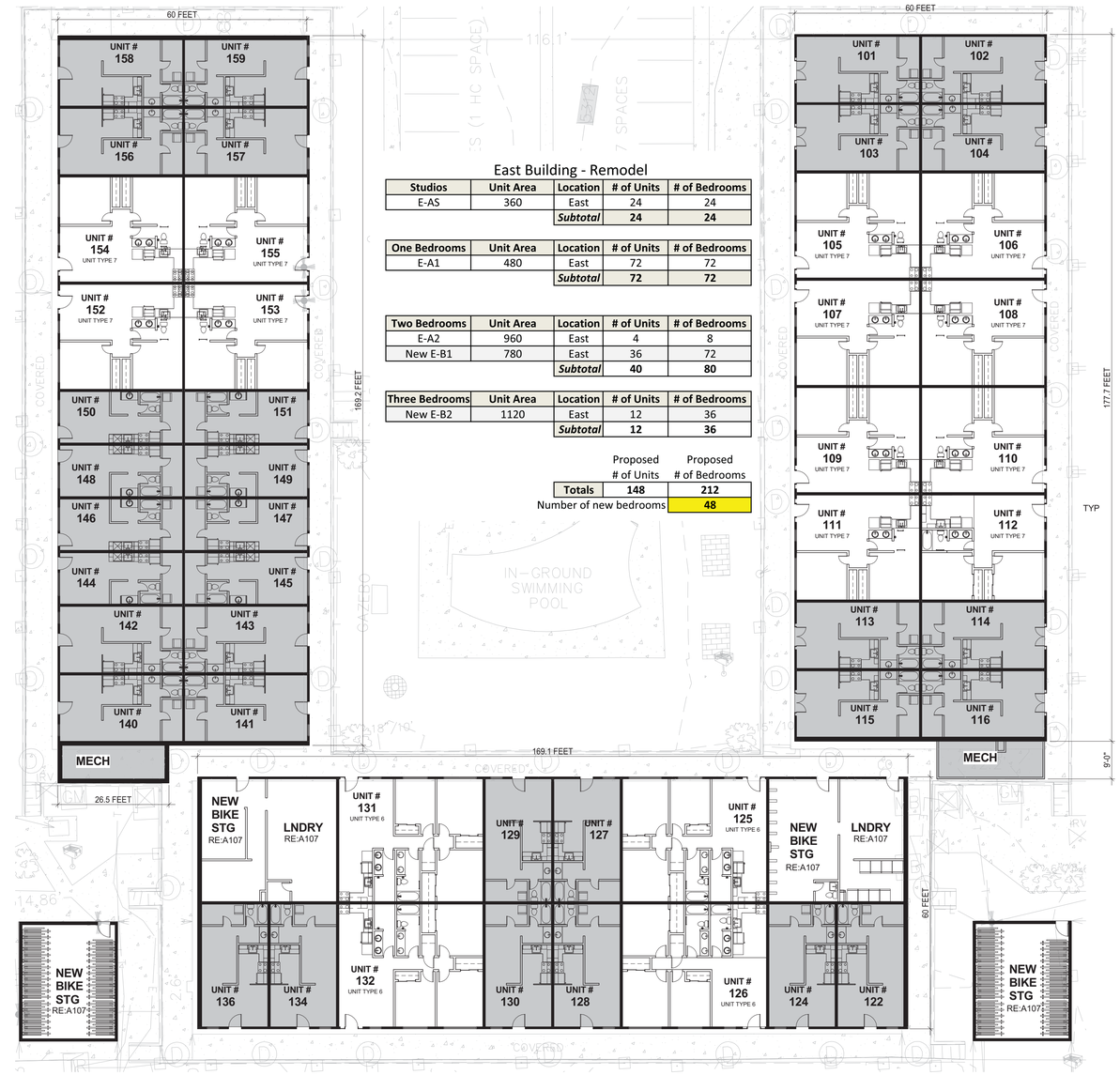
East Building - Existing

Studios	Unit Area	Location	# of Units	# of Bedrooms
E-AS	360	East	24	24
		Subtotal	**24**	**24**

One Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
E-A1	480	East	72	72
E-B1	780	East	36	36
		Subtotal	**108**	**108**

Two Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
E-A2	960	East	4	8
E-B2	1120	East	12	24
		Subtotal	**16**	**32**

EAST BUILDING EXISTING FIRST FLOOR PLAN



East Building - Remodel

Studios	Unit Area	Location	# of Units	# of Bedrooms
E-AS	360	East	24	24
		Subtotal	**24**	**24**

One Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
E-A1	480	East	72	72
		Subtotal	**72**	**72**

Two Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
E-A2	960	East	4	8
New E-B1	780	East	36	72
		Subtotal	**40**	**80**

Three Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
New E-B2	1120	East	12	36
		Subtotal	**12**	**36**

	Proposed # of Units	Proposed # of Bedrooms
Totals	**148**	**212**
Number of new bedrooms		**48**

EAST BUILDING MODIFIED FIRST FLOOR PLAN

*NOTE:
A FIRE SPRINKLER SYSTEM WILL BE INSTALLED AS REQUIRED BY THE CITY OF BOULDER TO DEMONSTRATE THAT THE PROPOSED INUNI ALTERATIONS SHOWN IN THE USE REVIEW ARE CODE COMPLIANT

PLAN SYMBOLS AND HATCH LEGEND

UNMODIFIED

MODIFIED

GRAPHIC SCALE 1/16"=1'-0"

0 16' 32' 48' 64'

CAVALIER APARTMENTS

2900 AURORA LLC

2900 EAST AURORA
BOULDER, CO 80303

EAST BUILDING 1ST FLOOR PLANS

A102

BOULDER, CO

NON-CONFORMING USE REVIEW
03/02/16

STUDIO architecture
1350 Pine st. Suite 1
Boulder, CO 80302
866.529.9130
CVLR
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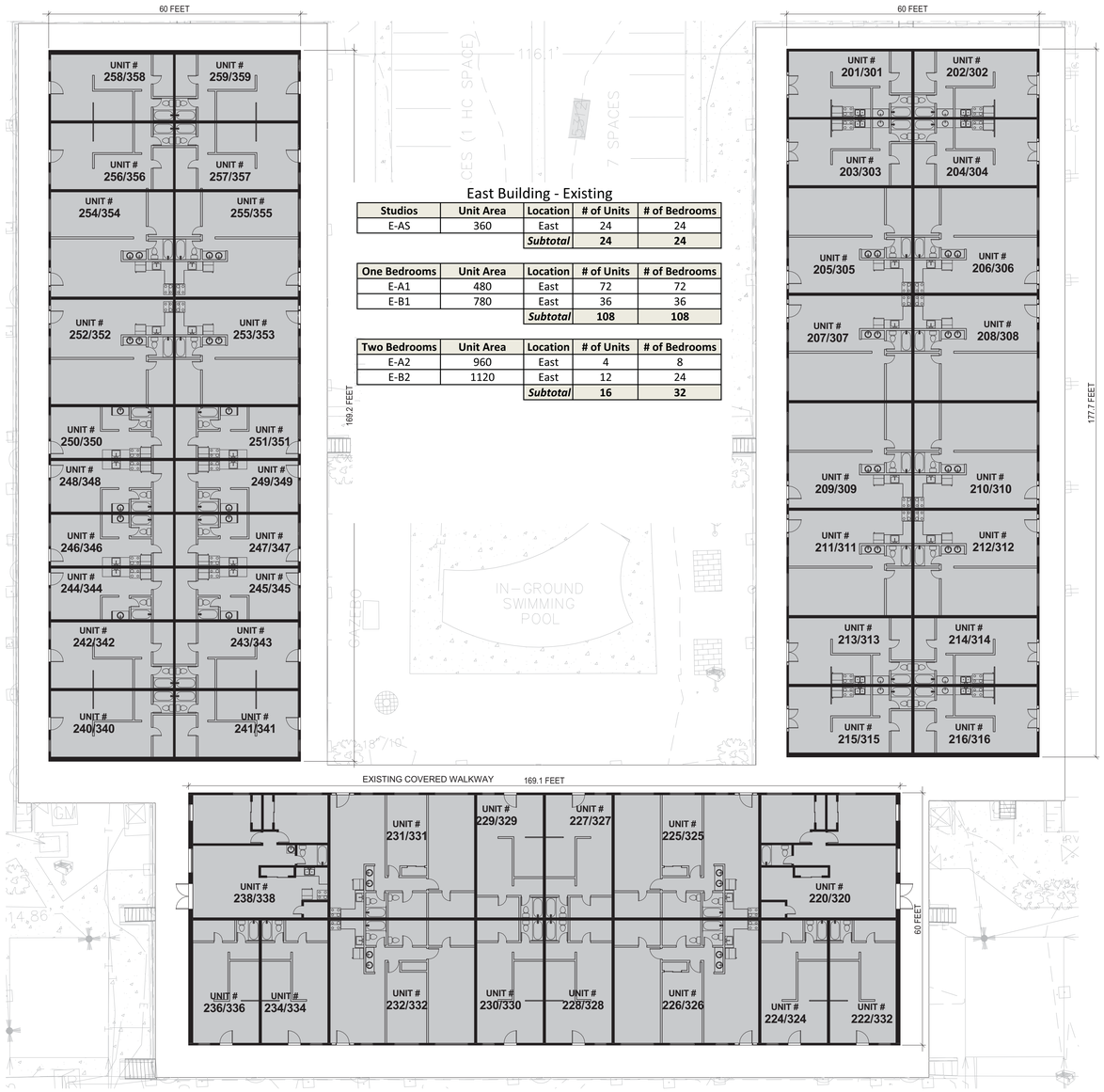
STUDIO architecture
thestudioarchitecture.com 866.529.9130



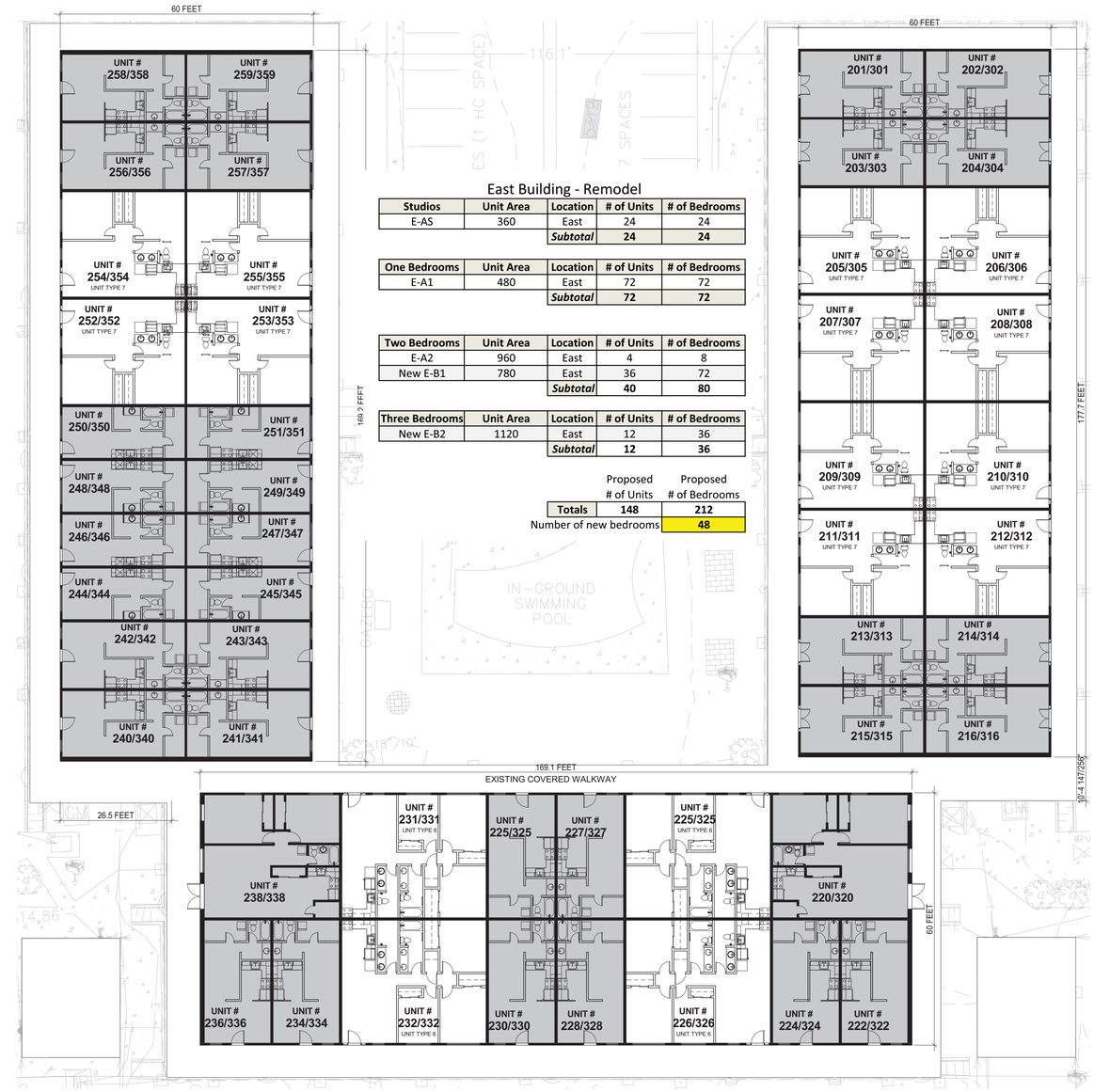
East Building - Existing

Studios	Unit Area	Location	# of Units	# of Bedrooms
E-AS	360	East	24	24
		Subtotal	**24**	**24**

One Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
E-A1	480	East	72	72
E-B1	780	East	36	36
		Subtotal	**108**	**108**

Two Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
E-A2	960	East	4	8
E-B2	1120	East	12	24
		Subtotal	**16**	**32**

EAST BUILDING EXISTING PLAN
SECOND AND THIRD FLOOR TYPICAL



East Building - Remodel

Studios	Unit Area	Location	# of Units	# of Bedrooms
E-AS	360	East	24	24
		Subtotal	**24**	**24**

One Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
E-A1	480	East	72	72
		Subtotal	**72**	**72**

Two Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
E-A2	960	East	4	8
New E-B1	780	East	36	72
		Subtotal	**40**	**80**

Three Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
New E-B2	1120	East	12	36
		Subtotal	**12**	**36**

	Proposed # of Units	Proposed # of Bedrooms
Totals	**148**	**212**
Number of new bedrooms		**48**

EAST BUILDING MODIFIED PLAN
SECOND AND THIRD FLOOR TYPICAL

*NOTE:
A FIRE SPRINKLER SYSTEM WILL BE INSTALLED AS REQUIRED BY THE CITY OF BOULDER TO DEMONSTRATE THAT THE PROPOSED INUNI ALTERATIONS SHOWN IN THE USE REVIEW ARE CODE COMPLIANT

PLAN SYMBOLS AND HATCH LEGEND

UNMODIFIED

MODIFIED

CAVALIER APARTMENTS

2900 AURORA LLC

2900 EAST AURORA
BOULDER, CO 80303

GRAPHIC SCALE 1/16"=1'-0"
0 16' 32' 48' 64'

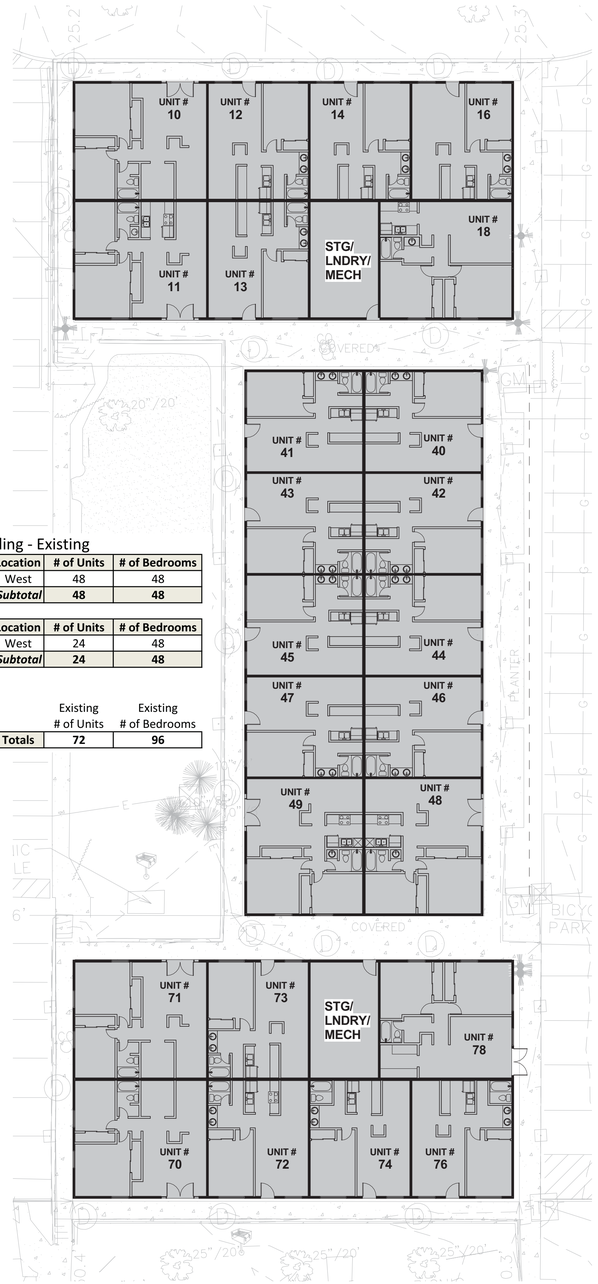
EAST BUILDING 2ND & 3RD FLOOR PLANS

A103

BOULDER, CO

NON-CONFORMING USE REVIEW
03/02/16

STUDIO architecture
1350 Pine st. Suite 1
Boulder, CO 80302
866.529.9130
CVLR
DRAWN BY:BMB
thestudioarchitecture.com 866.529.9130



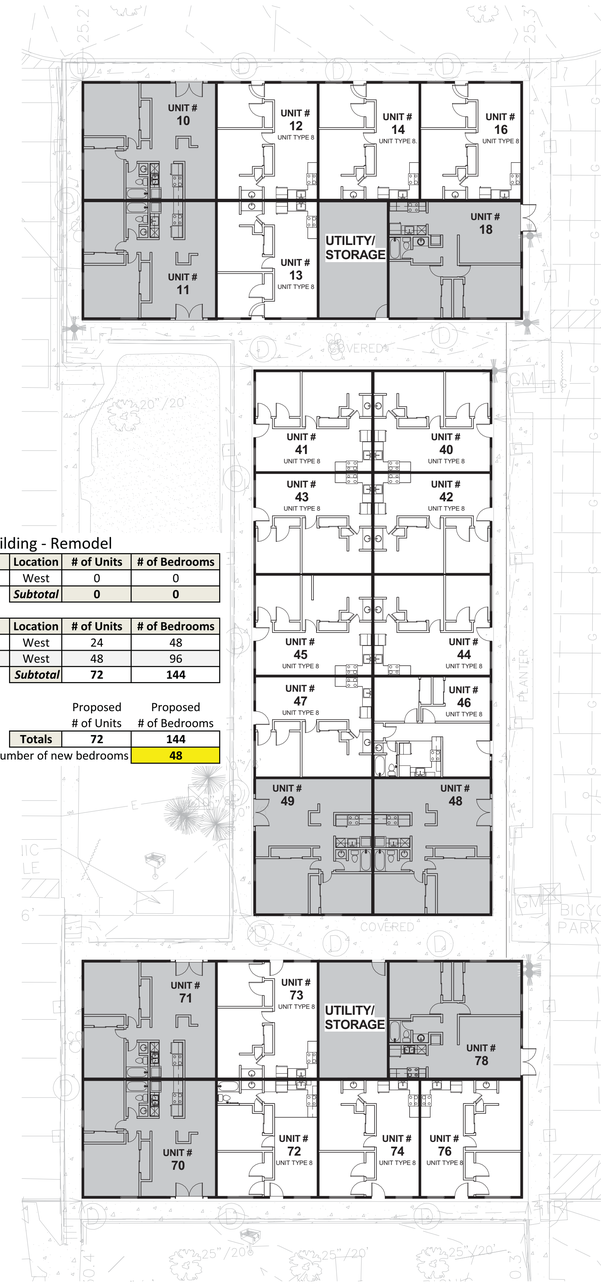
West Building - Existing

One Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
W-A1	610	West	48	48
		Subtotal	**48**	**48**

Two Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
W-A2	780	West	24	48
		Subtotal	**24**	**48**

	Existing # of Units	Existing # of Bedrooms
Totals	**72**	**96**

WEST BUILDING EXISTING PLAN
TYPICAL OF ALL FLOORS



West Building - Remodel

One Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
NA	NA	West	0	0
		Subtotal	**0**	**0**

Two Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
W-A2	780	West	24	48
New W-A1	610	West	48	96
		Subtotal	**72**	**144**

	Proposed # of Units	Proposed # of Bedrooms
Totals	**72**	**144**
Number of new bedrooms		**48**

WEST BUILDING MODIFIED PLAN
TYPICAL OF ALL FLOORS

*NOTE:
A FIRE SPRINKLER SYSTEM WILL BE INSTALLED AS REQUIRED BY THE CITY OF BOULDER TO DEMONSTRATE THAT THE PROPOSED INUNI ALTERATIONS SHOWN IN THE USE REVIEW ARE CODE COMPLIANT

PLAN SYMBOLS AND HATCH LEGEND

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GRAPHIC SCALE 1/16"=1'-0"

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WEST BUILDING 1ST FLOOR PLAN

A104

BOULDER, CO

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03/02/16

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1350 Pine st. Suite 1
Boulder, CO 80302
866.529.9130
CVLR
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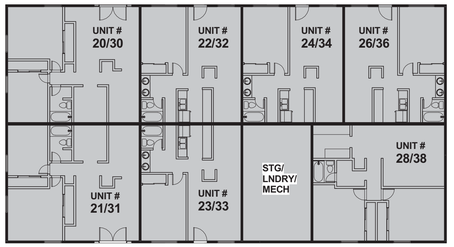
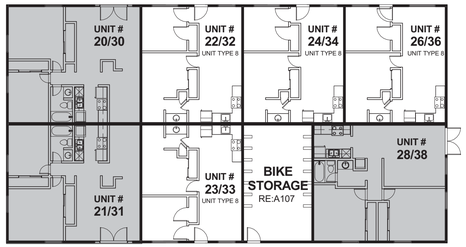


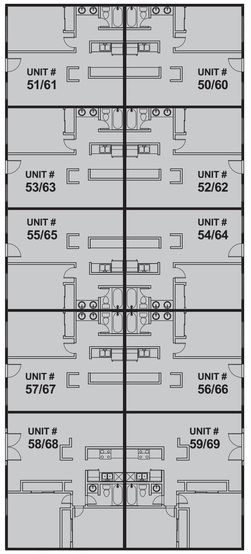


West Building - Existing

One Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
W-A1	610	West	48	48
		Subtotal	**48**	**48**

Two Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
W-A2	780	West	24	48
		Subtotal	**24**	**48**

	Existing # of Units	Existing # of Bedrooms
Totals	**72**	**96**

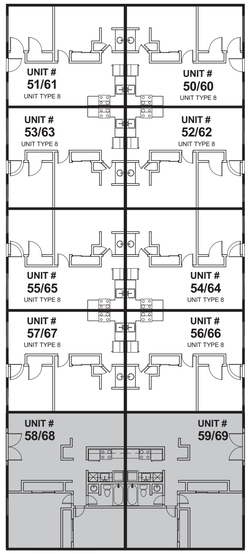


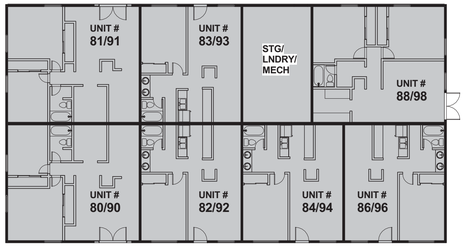
West Building - Remodel

One Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
NA	NA	West	0	0
		Subtotal	**0**	**0**

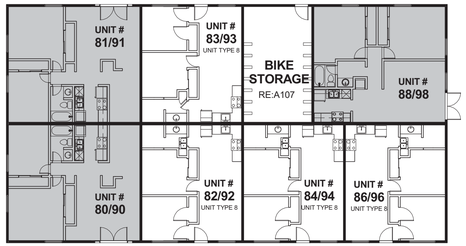
Two Bedrooms	Unit Area	Location	# of Units	# of Bedrooms
W-A2	780	West	24	48
New W-A1	610	West	48	96
		Subtotal	**72**	**144**

	Proposed # of Units	Proposed # of Bedrooms
Totals	**72**	**144**
Number of new bedrooms		**48**





WEST BUILDING EXISTING PLAN
TYPICAL OF ALL FLOORS



WEST BUILDING MODIFIED PLAN
TYPICAL OF ALL FLOORS

*NOTE:
A FIRE SPRINKLER SYSTEM WILL BE INSTALLED AS REQUIRED BY THE CITY OF BOULDER TO DEMONSTRATE THAT THE PROPOSED INUNI ALTERATIONS SHOWN IN THE USE REVIEW ARE CODE COMPLIANT

PLAN SYMBOLS AND HATCH LEGEND	
	UNMODIFIED
	MODIFIED

CAVALIER APARTMENTS

2900 AURORA LLC

2900 EAST AURORA
BOULDER, CO 80303

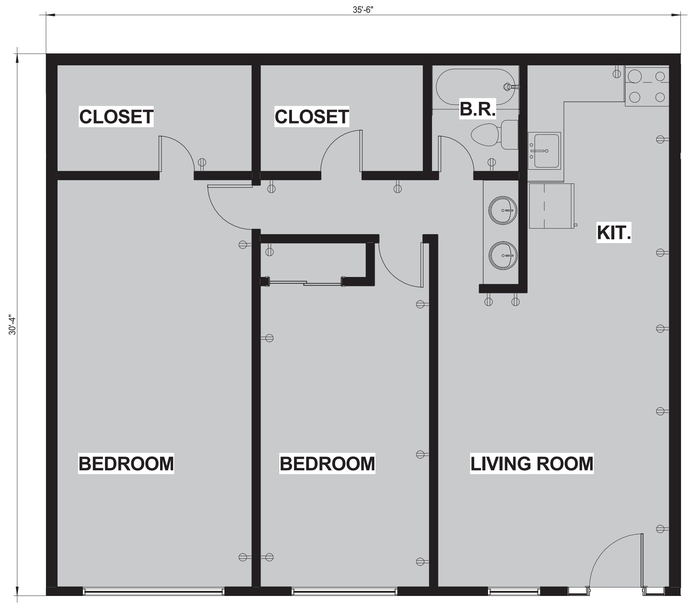
WEST BUILDING 2ND & 3RD FLOOR PLANS

A105

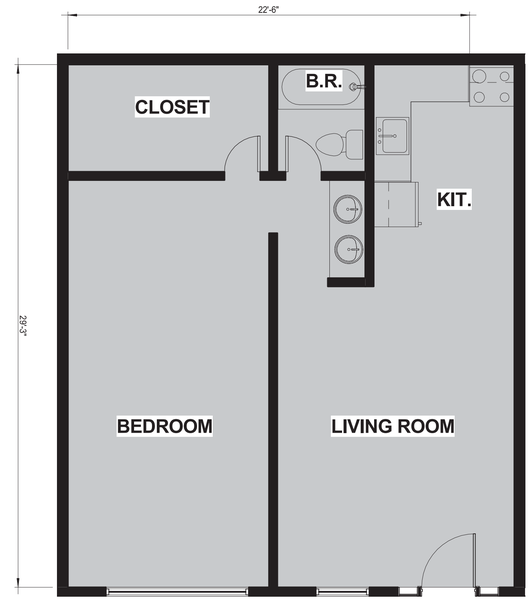
BOULDER, CO

NON-CONFORMING USE REVIEW
03/02/16

STUDIO architecture
1350 Pine st. Suite 1
Boulder, CO 80302
866.529.9130
CVLR
DRAWN BY:Author
thestudioarchitecture.com 866.529.9130

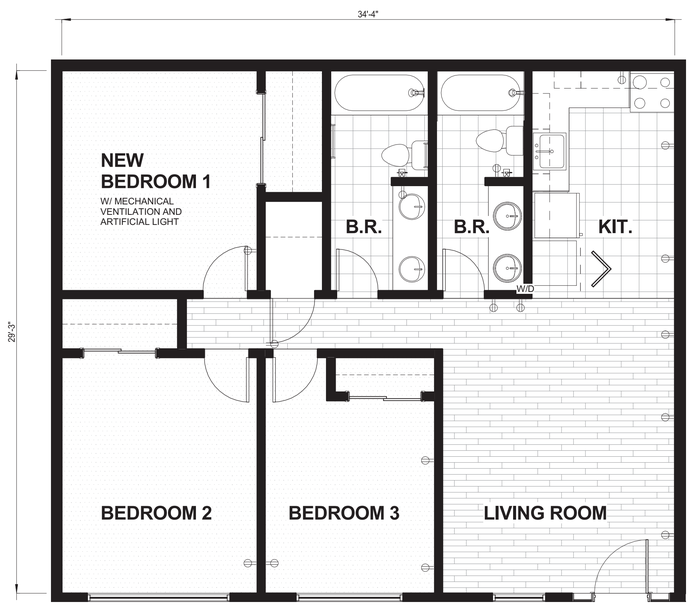


EXISTING UNIT TYPE 6 - 2BD/1BA (1,120 SF)

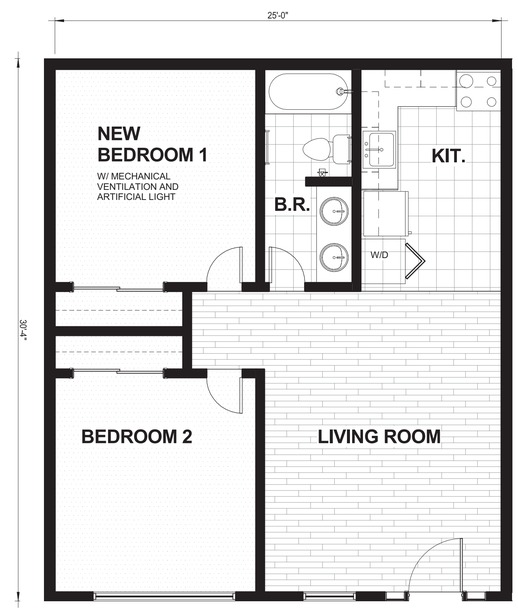


EXISTING UNIT TYPE 7 - 1BD/1BA (780 SF)

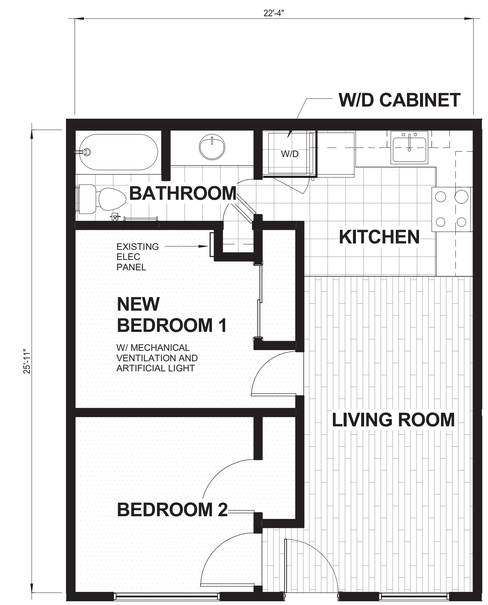
EXISTING UNIT TYPE 8 - 1BD/1BA



MODIFIED UNIT TYPE 6 - 3BD/2BA (1,120 SF)



MODIFIED UNIT TYPE 7 - 2BD/1BA (780 SF)



MODIFIED UNIT TYPE 8 - 2BD/1BA

GRAPHIC SCALE 1/4"=1'-0"
0 4' 8' 12' 16'

CAVALIER APARTMENTS

UNIT PLANS

A106

2900 AURORA LLC

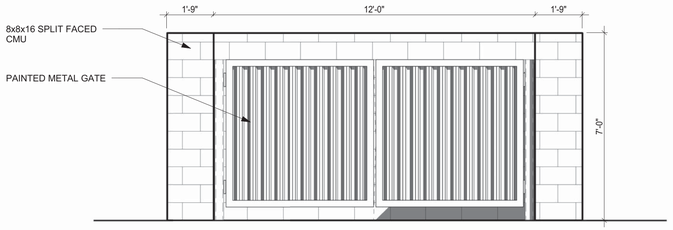
2900 EAST AURORA
BOULDER, CO 80303

BOULDER, CO

NON-CONFORMING USE REVIEW
03/02/16

STUDIO architecture
1350 Pine st. Suite 1
Boulder, CO 80302
866.529.9130
CVLR
DRAWN BY:BMB

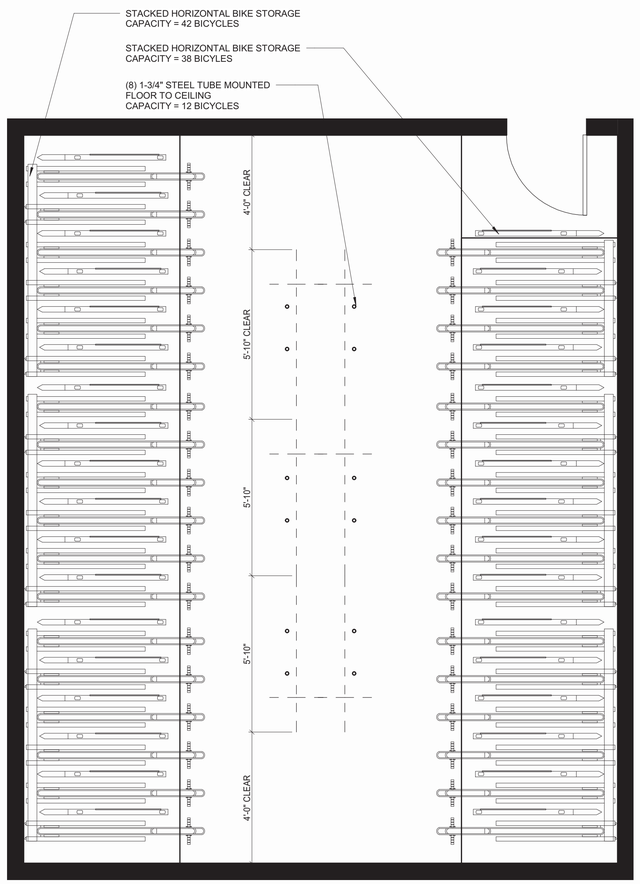
STUDIO architecture
thestudioarchitecture.com 866.529.9130



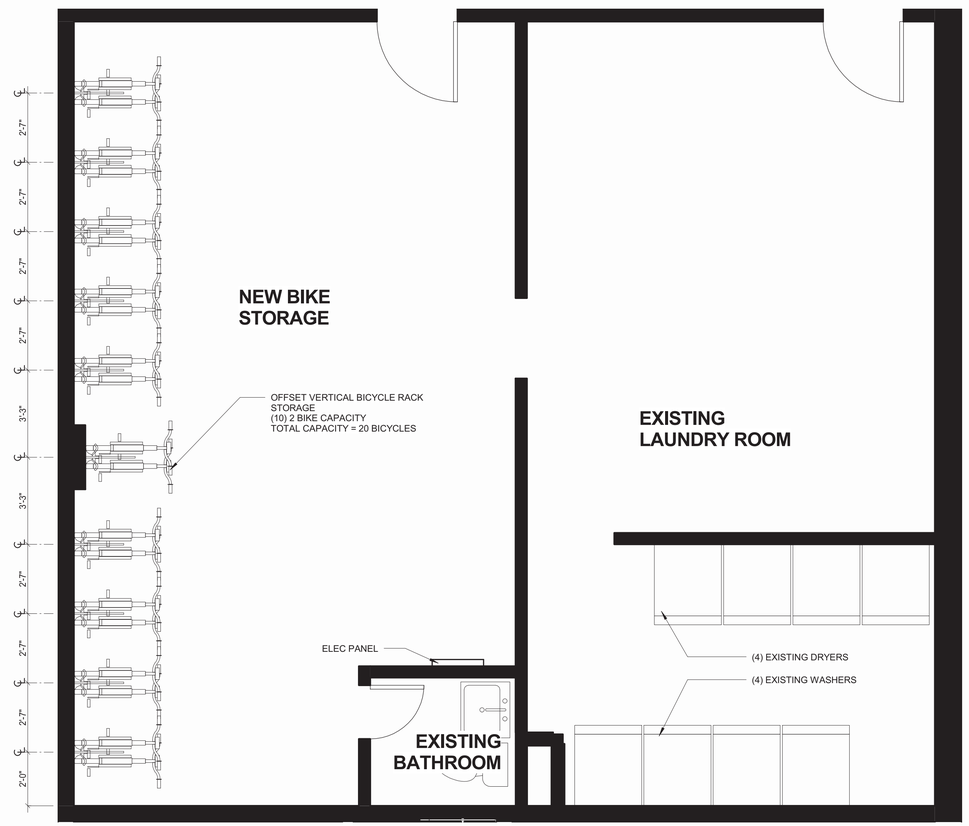
NEW TRASH ENCLOSURE ELEVATION

LONG TERM BIKE PARKING SUMMARY

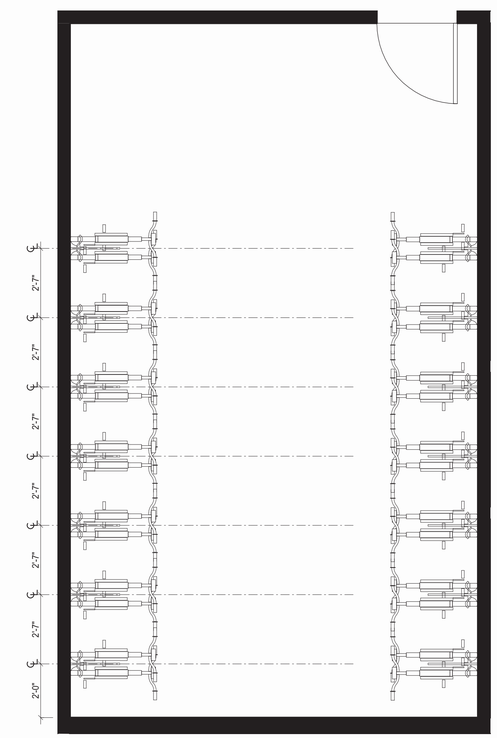
		LONG TERM BICYCLE RACKS PROVIDED
EAST BUILDING	EXISTING BRICK BUILDING S/W	92
	EXISTING BRICK BUILDING S/E	92
	EXISTING UTILITY/LAUNDRY	20
	EXISTING UTILTY/LAUNDRY	20
	TOTAL WEST BUILDING	224
WEST BUILDING	EXISTING LAUNDRY SECOND FLOOR	28
	EXISTING UTILITY SECOND FLOOR	28
	EXISTING LAUNDRY THIRD FLOOR	28
	EXISTING UTILITY THIRD FLOOR	28
	TOTAL EAST BUILDING	112
	TOTAL LONG TERM SPACES	**336**



TYPICAL BIKE STORAGE LAYOUT IN (2) EXISTING SINGLE STORY ACCESSORY BUILDINGS



TYPICAL NEW BIKE STORAGE LAYOUT IN (2) EXISTING LAUNDRY ROOMS EAST BUILDING



TYPICAL NEW BIKE STORAGE LAYOUT IN (4) EXISTING 2ND/3RD FLOOR LAUNDRY/UTILITY WEST BUILDING

CAVALIER APARTMENTS

2900 AURORA LLC

2900 EAST AURORA
BOULDER, CO 80303

GRAPHIC SCALE 3/8"=1'-0"
0 2'-8" 5'-4" 8'-0" 10'-8"

LONG TERM BIKE PARKING

BOULDER, CO

NON-CONFORMING USE REVIEW
03/02/16

A107

STUDIO architecture
1350 Pine st. Suite 1
Boulder, CO 80302
866.529.9130
CVLR
DRAWN BY:Author
STUDIO architecture
thestudioarchitecture.com 866.529.9130

ALTA/NSPS LAND TITLE SURVEY

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 1 NORTH, RANGE 70 WEST OF THE 6TH P.M., COUNTY OF BOULDER, STATE OF COLORADO

SHEET 1 OF 2

TOTAL AREA = 202,328 SQ FT, OR 4.64 ACRES, MORE OR LESS

Parcel Description

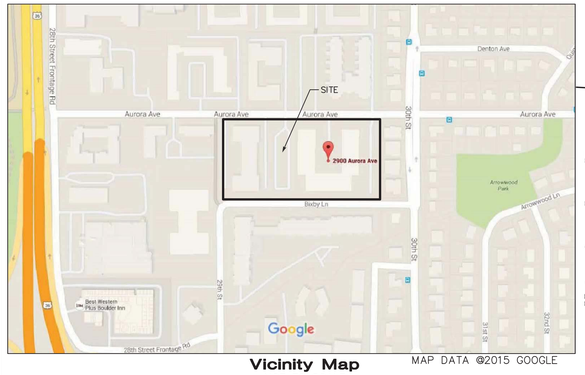
(PROVIDED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY)
DEED RECORDED ON 01/06/1975 AT REC. NO. 126080

PARCEL ONE:
THE NORTH 1/2 NE 1/4 SE 1/4 SW 1/4 OF SECTION 32, TOWNSHIP 1 NORTH, RANGE 70 WEST OF THE 6TH P.M., EXCEPT THE EAST 425 FEET AND EXCEPT THE NORTH 30 FEET FOR EAST AURORA AVENUE,
COUNTY OF BOULDER,
STATE OF COLORADO.

PARCEL TWO:
THE EAST 425 FEET OF THE N 1/2 NE 1/4 SE 1/4 SW 1/4 OF SECTION 32, TOWNSHIP 1 NORTH, RANGE 70 WEST OF THE 6TH P.M., EXCEPT THE NORTH 30 FEET FOR EAST AURORA AVENUE,
COUNTY OF BOULDER,
STATE OF COLORADO.

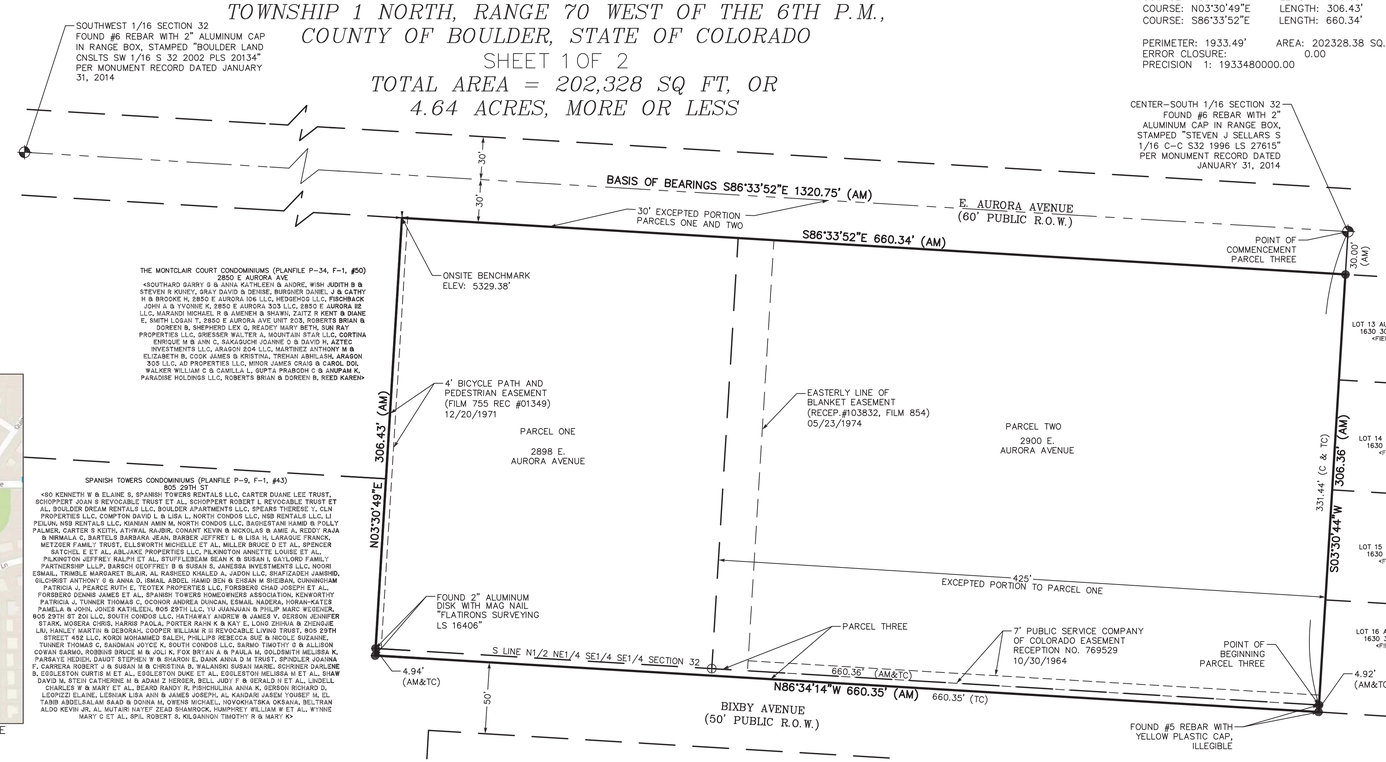
PARCEL THREE:
A PART OF THE NE ¼ OF THE SE ¼ OF THE SW ¼ OF SECTION 32, TOWNSHIP 1 NORTH, RANGE 70 WEST OF THE 6TH P.M., COUNTY OF BOULDER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF THE NE ¼ OF THE SE ¼ OF THE SW ¼ OF SAID SECTION 32; THENCE SOUTHERLY ALONG THE EAST LINE OF THE SW ¼ OF SAID SECTION 32, A DISTANCE OF 331.44 FEET TO THE SOUTHEAST CORNER OF THE N ½ OF THE NE ¼ OF THE SE ¼ OF THE SW ¼ OF SAID SECTION 32 WHICH POINT IS THE TRUE POINT OF BEGINNING; THENCE WESTERLY ALONG THE SOUTH LINE OF THE N ½ OF THE NE ¼ OF THE SE ¼ OF THE SW ¼ OF SAID SECTION 32, A DISTANCE OF 660.36 FEET TO THE SOUTHWEST CORNER OF THE N ½ OF THE NE ¼ OF THE SE ¼ OF THE SW ¼ OF SAID SECTION 32; THENCE SOUTHERLY ALONG THE WEST LINE OF THE NE ¼ OF THE SE ¼ OF THE SW ¼ OF SAID SECTION 32, A DISTANCE OF 4.94 FEET TO A POINT ON THE NORTH LINE OF THE SOUTH 15 ACRES OF THE E ½ OF THE SE ¼ OF THE SW ¼ OF SAID SECTION 32; THENCE EASTERLY ALONG SAID NORTH LINE A DISTANCE OF 660.36 FEET TO A POINT ON THE EAST LINE OF THE SW ¼ OF SAID SECTION 32; THENCE NORTHERLY ALONG SAID EAST LINE A DISTANCE OF 4.92 FEET TO THE TRUE POINT OF BEGINNING;
COUNTY OF BOULDER,
STATE OF COLORADO.



Vicinity Map
NOT TO SCALE

MAP DATA ©2015 GOOGLE



Boundary Closure Report

COURSE: S03°30'44"W	LENGTH: 306.36'
COURSE: N86°34'14"W	LENGTH: 660.35'
COURSE: N03°30'49"E	LENGTH: 306.43'
COURSE: S86°33'52"E	LENGTH: 660.34'

PERIMETER: 1933.49' AREA: 202328.38 SQ. FT.
ERROR CLOSURE: 0.00
PRECISION 1: 1933480000.00

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

Notes

1. FIDELITY NATIONAL TITLE INSURANCE COMPANY COMMITMENT NUMBER 508-F0532061-017-TLM, AMENDMENT NO. 1, DATED OCTOBER 30, 2015 AT 7:00 A.M., WAS ENTIRELY RELIED UPON FOR RECORDED INFORMATION REGARDING RIGHTS-OF-WAY, EASEMENTS AND ENCUMBRANCES IN THE PREPARATION OF THIS SURVEY. THE PROPERTY SHOWN AND DESCRIBED HEREON IS ALL OF THE PROPERTY DESCRIBED IN SAID TITLE COMMITMENT.
2. 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.
3. THIS ALTA/NSPS LAND TITLE SURVEY WAS PREPARED FOR THE EXCLUSIVE USE OF BRICKSTONE PARTNERS, INC., 2900 BOULDER, LLC, A COLORADO LIMITED LIABILITY COMPANY, KINNICKINNIC REALTY CO., A COLORADO CORPORATION, STATE FARM LIFE INSURANCE COMPANY, AN ILLINOIS CORPORATIONS, ITS SUCCESSORS AND/OR ASSIGNS, A COLORADO LIMITED LIABILITY COMPANY AND FIDELITY NATIONAL TITLE INSURANCE COMPANY, NAMED IN THE STATEMENT HEREON. SAID STATEMENT DOES NOT EXTEND TO ANY UNNAMED PERSON WITHOUT AN EXPRESS STATEMENT BY THE SURVEYOR NAMING SAID PERSON.
4. THIS SURVEY IS VALID ONLY IF PRINT HAS SEAL AND SIGNATURE OF SURVEYOR.
5. BASIS OF BEARINGS: AN ASSUMED BEARING OF S86°33'52"E ALONG THE NORTH LINE OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF SECTION 32, BETWEEN A FOUND #6 REBAR WITH 2" ALUMINUM CAP IN RANGE BOX, STAMPED "BOULDER LAND CNSLTS SW 1/16 S 32 2002 PLS 20134" AT THE SOUTHWEST 1/16 SECTION 32 AND A FOUND #6 REBAR WITH 2" ALUMINUM CAP IN RANGE BOX, STAMPED "STEVEN J SELLARS S 1/16 C-C S32 1996 LS 27615" AT THE CENTER-SOUTH 1/16 SECTION 32 AS SHOWN HEREON. ALL BEARINGS SHOWN HEREON ARE RELATIVE THERETO.
6. WITH REGARD TO TABLE A, ITEM 11, SOURCE INFORMATION FROM PLANS AND MARKINGS HAVE BEEN COMBINED WITH OBSERVED EVIDENCE OF UTILITIES PURSUANT TO SECTION 5.E.iv. TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES. HOWEVER LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE. A PRIVATE UTILITY LOCATER WAS HIRED FOR THE PREPARATION OF THIS SURVEY. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES AND STRUCTURES. ALL UNDERGROUND UTILITIES MUST BE FIELD LOCATED BY THE APPROPRIATE AGENCY OR UTILITY COMPANY PRIOR TO ANY EXCAVATION, PURSUANT TO C.R.S. SEC. 9-1.5-103. (ALTA/NSPS LAND TITLE SURVEY TABLE A, OPTIONAL SURVEY RESPONSIBILITIES AND SPECIFICATIONS, ITEM 11)
7. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT AND/OR BOUNDARY MONUMENT OR ACCESSORY, COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE C.R.S. SEC 18-4-508. WHOEVER WILLFULLY DESTROYS, DEFACES, CHANGES, OR REMOVES TO ANOTHER PLACE ANY SECTION CORNER, QUARTER-SECTION CORNER, OR MEANDER POST, ON ANY GOVERNMENT LINE OF SURVEY, OR WILLFULLY CUTS DOWN ANY WITNESS TREE OR ANY TREE BLAZED TO MARK THE LINE OF A GOVERNMENT SURVEY, OR WILLFULLY DEFACES, CHANGES, OR REMOVES ANY MONUMENT OR BENCH MARK OF ANY GOVERNMENT SURVEY, SHALL BE FINED UNDER THIS TITLE OR IMPRISONED NOT MORE THAN SIX MONTHS, OR BOTH. 18 U.S.C. § 1858.
8. THE DISTANCE MEASUREMENTS SHOWN HEREON ARE U.S. SURVEY FOOT.
9. THE CONTOURS REPRESENTED HEREON WERE INTERPOLATED BY AUTOCAD CIVIL 3D (DIGITAL TERRAIN MODELING) SOFTWARE BETWEEN ACTUAL MEASURED SPOT ELEVATIONS. DEPENDING ON THE DISTANCE FROM A MEASURED SPOT ELEVATION AND LOCAL VARIATIONS IN TOPOGRAPHY, THE CONTOUR SHOWN MAY NOT BE AN EXACT REPRESENTATION OF THE SITE TOPOGRAPHY. THE PURPOSE OF THIS TOPOGRAPHIC MAP IS FOR SITE EVALUATION AND TO SHOW SURFACE DRAINAGE FEATURES. ADDITIONAL TOPOGRAPHIC OBSERVATIONS MAY BE NECESSARY IN SPECIFIC AREAS OF DESIGN. TOPOGRAPHY SHOWN HEREON COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS.
10. BENCHMARK INFORMATION: ELEVATIONS BASED ON CITY OF BOULDER POINT G-18, WITH A PUBLISHED ELEVATION OF 5304.08 FEET (NAVD88), BEING A CHISELED BOX IN TOP OF CURB LOCATED AT THE SOUTH CORNER OF THE INTERSECTION OF 30TH STREET AND EAST AURORA AVENUE. AN ONSITE BENCHMARK AT THE NORTHWEST CORNER OF THE SUBJECT PROPERTY, BEING A CHISELED "X" IN CONCRETE WITH AN ELEVATION OF 5329.38' FEET.
11. SUBSURFACE BUILDINGS, IMPROVEMENTS OR STRUCTURES ARE NOT NECESSARILY SHOWN. BUILDINGS AND OTHER IMPROVEMENTS OR STRUCTURES ON ADJACENT PROPERTIES THAT ARE MORE THAN FIVE (5) FEET FROM ANY OF THE PROPERTY LINES OF THE SUBJECT PROPERTY ARE NOT NECESSARILY SHOWN.
12. FLOOD INFORMATION: THE SUBJECT PROPERTY IS LOCATED IN ZONE X SHADED, AREAS DETERMINED TO BE 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 FLOODPLAIN AND IN ZONE X UNSHADED, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AND/OR ZONE D, AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE, ACCORDING TO THE FEMA FLOOD INSURANCE RATE MAP; COMMUNITY-PANEL NO. 08013C-0394 J, DATED DECEMBER 18, 2012. THE MAP DOES NOT DIFFERENTIATE BETWEEN ZONE X UNSHADED AND ZONE D. FLOOD INFORMATION IS SUBJECT TO CHANGE.
13. DATES OF FIELD WORK: AUGUST 4-6 AND OCTOBER 23-27, 2015 (THIS SURVEY), JANUARY 02, 2008 (FSI JOB #07-53,937) AND SEPTEMBER 3, 1997 (FSI JOB #97-30,554).
14. THE FOLLOWING DOCUMENTS ARE MENTIONED IN THE ABOVE REFERENCED TITLE COMMITMENT AND APPEAR TO AFFECT THE SUBJECT PROPERTY BUT CANNOT BE SHOWN GRAPHICALLY. THE FOLLOWING LIST CONTAINS THE TITLE COMMITMENT EXCEPTION NUMBER, DATE RECORDED, RECEPTION NUMBER AND/OR BOOK AND PAGE..

#09	JAN. 17, 1962	BOOK 1216, PAGE 283	COVENANTS, CONDITIONS AND RESTRICTIONS (AFFECTS PARCEL TWO)
#13	JUN. 04, 1984	REC. NO. 624924	LEASE
	AUG 04, 1992	REC. NO. 1208173	ABSTRACT OF EXTENDED LEASE
	AUG. 10, 2001	REC. NO. 2184251	ABSTRACT OF EXTENDED LEASE
	OCT. 03, 2003	REC. NO. 2511654	ABSTRACT OF EXTENDED LEASE
	OCT. 05, 2007	REC. NO. 2881108	ABSTRACT OF EXTENDED LEASE
	APR. 08, 2003	REC. NO. 2421704	AMENDMENT TO LEASE
	APR. 09, 2003	REC. NO. 2422405	RELEASE OF LIEN IN CONNECTION WITH LEASE
#14	NO DATE GIVEN	NO RECORDING INFO	DITCH AND WATER RIGHTS

15. THE FOLLOWING DOCUMENTS ARE MENTIONED IN THE ABOVE REFERENCED TITLE COMMITMENT AND ARE SHOWN GRAPHICALLY HEREON. THE FOLLOWING LIST CONTAINS THE TITLE COMMITMENT EXCEPTION NUMBER, DATE RECORDED, RECEPTION NUMBER AND/OR BOOK AND PAGE.

#10	OCT. 30, 1964	REC. NO. 769529	PUBLIC SERVICE COMPANY OF COLORADO EASEMENT
#11	DEC. 20, 1971	REC. NO. 01349	4' BICYCLE PATH AND PEDESTRIAN WAY
#12	MAY 23, 1974	REC. NO. 103832	PUBLIC SERVICE COMPANY OF COLORADO EASEMENT (AFFECTS PARCEL TWO)

16. THE WORD "CERTIFY" AS SHOWN AND USED HEREON MEANS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THE FACTS OF THIS SURVEY AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED.
17. THE TOTAL AREA OF THE SUBJECT PROPERTY IS 202,328 SQ. FT. OR 4.64 ACRES, MORE OR LESS. AREA AS SHOWN HEREON IS A RESULTANT FACTOR, NOT A DETERMINATIVE FACTOR, AND MAY CHANGE SIGNIFICANTLY WITH MINOR VARIATIONS IN FIELD MEASUREMENTS OR THE SOFTWARE USED TO PERFORM THE CALCULATIONS. FOR THIS REASON, THE AREA IS SHOWN AS A "MORE OR LESS" FIGURE, AND IS NOT TO BE RELIED UPON AS AN ACCURATE FACTOR FOR REAL ESTATE SALES PURPOSES (ALTA/NSPS LAND TITLE SURVEY TABLE A, OPTIONAL SURVEY RESPONSIBILITIES AND SPECIFICATIONS, ITEM 4).
18. THERE ARE 247 REGULAR PARKING SPACES, 2 HANDICAP SPACES, AND 0 MOTORCYCLE SPACES ON THE SUBJECT PROPERTY FOR A TOTAL OF 249 PAINTED PARKING STALLS ON THE SUBJECT PROPERTY (ALTA/NSPS LAND TITLE SURVEY TABLE A, OPTIONAL SURVEY RESPONSIBILITIES AND SPECIFICATIONS, ITEM 9).
19. OWNERSHIP INFORMATION IS PER THE BOULDER COUNTY WEBSITE AS RESEARCHED ON MARCH 2, 2016 AND IS SUBJECT TO CHANGE (ALTA/NSPS LAND TITLE SURVEY TABLE A, OPTIONAL SURVEY RESPONSIBILITIES AND SPECIFICATIONS, ITEM 13).
20. THERE WAS NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK (ALTA/NSPS LAND TITLE SURVEY TABLE A, OPTIONAL SURVEY RESPONSIBILITIES AND SPECIFICATIONS, ITEM 16).
21. THERE WAS NO INFORMATION MADE AVAILABLE TO THE SURVEYOR BY THE CONTROLLING JURISDICTION REGARDING PROPOSED CHANGES IN STREET RIGHT OF WAY LINES. THERE WAS NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK (ALTA/NSPS LAND TITLE SURVEY TABLE A, OPTIONAL SURVEY RESPONSIBILITIES AND SPECIFICATIONS, ITEM 17).
22. RECITIFIED ORTHOPHOTOGRAPHY, PHOTOGRAMMETRIC MAPPING AND/OR AIRBORNE/MOBILE LASER SCANNING WERE NOT USED IN THE PREPARATION OF THIS SURVEY. (ALTA/NSPS LAND TITLE SURVEY TABLE A, OPTIONAL SURVEY RESPONSIBILITIES AND SPECIFICATIONS, ITEM 15).
23. THE MAJORITY OF FOUND MONUMENTS FALL WITHIN MEASUREMENT TOLERANCES.
24. FENCES ARE NOT COINCIDENT WITH PROPERTY LINES, AS SHOWN HEREON.
25. ZONING INFORMATION: THERE WAS NO INFORMATION PROVIDED BY INSURER. THE SUBJECT PROPERTY IS ZONED RH-5, RESIDENTIAL HIGH, PER THE CITY OF BOULDER, AS RESEARCHED ON NOVEMBER 4, 2015 (ALTA/NSPS LAND TITLE SURVEY TABLE A, OPTIONAL SURVEY RESPONSIBILITIES AND SPECIFICATIONS, ITEM 6). THE RESTRICTIONS ARE AS FOLLOWS:
FRONT SETBACK: 25' SIDE SETBACK: 12.5' REAR SETBACK: 25' INTERIOR LOT LINE SETBACK: 10'
MAXIMUM BUILDING HEIGHT: 35'
FLOOR SPACE AREA: N/A
26. UTILITY LINE CROSSES PARCEL ONE WITHOUT APPARENT BENEFIT OF EASEMENT.
27. THERE WERE NO PARTY WALLS DESIGNATED BY THE CLIENT. (ALTA/NSPS LAND TITLE SURVEY TABLE A, OPTIONAL SURVEY RESPONSIBILITIES AND SPECIFICATIONS, ITEM 10).
28. NO OFFSITE EASEMENTS OR SERVITUDES BENEFITTING THE SUBJECT PROPERTY WERE DISCLOSED IN THE COURSE OF THIS SURVEY. (ALTA/NSPS LAND TITLE SURVEY TABLE A, OPTIONAL SURVEY RESPONSIBILITIES AND SPECIFICATIONS, ITEM 19).

Legend

	FOUND ALIQUOT MONUMENT AS DESCRIBED
	FOUND CHISELED CROSS
	FOUND MONUMENT AS DESCRIBED
	FOUND BRASS TAG, STAMPED "LS 2132"
(AM)	AS MEASURED AT TIME OF SURVEY
(C)	CALCULATED FROM RECORD AND AS MEASURED INFORMATION
(TC)	AS PER DESCRIPTION IN TITLE COMMITMENT (SEE NOTE 1)

Depositing Certificate

SUBMITTED TO BOULDER COUNTY LAND USE FOR RECORDING ON THIS ____
DAY OF _____, 20__.

Surveyor's Certificate

TO BRICKSTONE PARTNERS, INC., 2900 BOULDER, LLC, A COLORADO LIMITED LIABILITY COMPANY, KINNICKINNIC REALTY CO., A COLORADO CORPORATION, STATE FARM LIFE INSURANCE COMPANY, AN ILLINOIS CORPORATIONS, ITS SUCCESSORS AND/OR ASSIGNS, A COLORADO LIMITED LIABILITY COMPANY AND FIDELITY NATIONAL TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1-5, 6(a), 6(b), 7(a), 7(b1), 7(c), 8, 9, 10(a) 11, 13, 14, 15-17, 19 AND 20 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON OCTOBER 26, 2015.

PURSUANT TO COLORADO STATE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS RULE 6.2.2 THE UNDERSIGNED FURTHER CERTIFIES THAT THIS MAP OR PLAT WAS PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, IS ACCURATE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, IS IN ACCORDANCE WITH APPLICABLE STANDARDS OF PRACTICE AND IS NOT A GUARANTY OR WARRANTY, EITHER EXPRESSED OR IMPLIED.

JOHN B. GUYTON COLORADO P.L.S. #16406
CHAIRMAN & CEO, FLATIRONS, INC.

REVISION	DATE
1 ADDITIONAL TABLE A ITEMS PER COMMENTS	M. VOYLES 11/5/2015
2 REVISED FOR UPDATED TITLE WORK	M. VOYLES 11/11/2015
3 ADD ZONING INFORMATION	M. VOYLES 11/13/2015
4 ADD PARCEL, UPDATED TO 2016 NSPS	M. VOYLES 03/02/2016
5	
6	
7	
8	
9	

ALTA/NSPS LAND TITLE SURVEY
PREPARED FOR
BRICKSTONE PARTNERS, INC.
&
OTHERS (SEE NOTE #3)

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Flatirons, Inc.
Surveying, Engineering & Geomatics
www.FlatironsInc.com
655 FOURTH AVE
LONGMONT, CO 80501
PH: (303) 776-1733
FAX: (303) 776-4355
3825 IRIS AVE, STE 395
BOULDER, CO 80301
PH: (303) 443-7001
FAX: (303) 443-9830
3660 DOWNING ST
UNIT E
DENVER, CO 80205
PH: (303) 936-6997

COLORADO LICENSED
16406
JOHN B. GUYTON
3/2/16
PROFESSIONAL LAND SURVEYOR

JOB NUMBER: 15-66244
DATE: 10-30-2015
DRAWN BY: M. VOYLES
CHECKED BY: ETB/JJG/NV

SHEET 1 OF 2

BY:MVOYLES FILE:66244_ALTA-NSPS-TOPO.DWG DATE:3/2/2016 3:14 PM

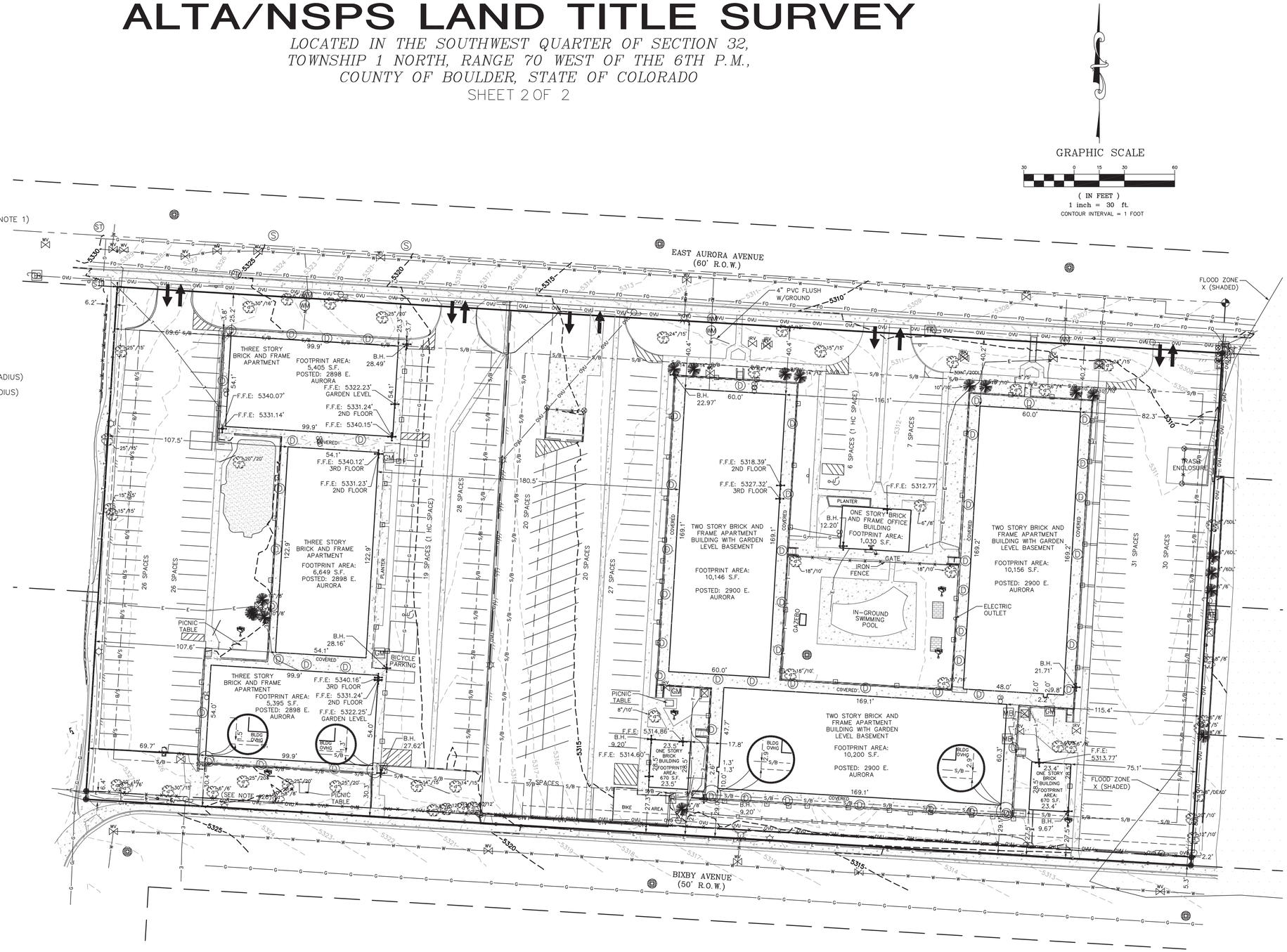
ALTA/NSPS LAND TITLE SURVEY

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 32,
TOWNSHIP 1 NORTH, RANGE 70 WEST OF THE 6TH P.M.,
COUNTY OF BOULDER, STATE OF COLORADO

SHEET 2 OF 2

Legend

- FOUND ALIQUOT MONUMENT AS DESCRIBED
- FOUND CHISELED CROSS
- FOUND MONUMENT AS DESCRIBED
- FOUND BRASS TAG, STAMPED "LS 2132"
- (AM) AS MEASURED AT TIME OF SURVEY
- (C) CALCULATED FROM RECORD AND AS MEASURED INFORMATION
- (TC) AS PER DESCRIPTION IN TITLE COMMITMENT (SEE NOTE 1)
- F.F.E. FINISHED FLOOR ELEVATION
- B.H.. BUILDING HEIGHT
- CONCRETE
- EDGE OF ASPHALT
- GRAVEL
- BRICK
- FENCE
- HAND RAIL
- SIGN
- BOLLARD
- X"/X' CONIFEROUS TREE (TRUNK DIAMETER/DRIP LINE RADIUS)
- X"/X' DECIDUOUS TREE (TRUNK DIAMETER/DRIP LINE RADIUS)
- HANDICAP PARKING
- NO PARKING
- WATER LINE
- W(m) WATER LINE SCALED FROM MAPS
- WATER VALVE
- WM WATER METER
- FIRE HYDRANT
- SPIGOT
- IRRIGATION VALVE
- S SANITARY SEWER MANHOLE
- CLEANOUT
- ST STORM DRAINAGE MANHOLE
- D AREA DRAIN
- E ELECTRICAL LINE
- ELECTRICAL TRANSFORMER
- EM ELECTRICAL METER
- EV ELECTRIC VAULT
- LIGHT POLE
- OVU OVERHEAD UTILITY LINE
- UTILITY POLE
- GUY WIRE
- CTV CABLE TV LINE
- CV CABLE/FIBEROPTIC VAULT
- FO FIBEROPTIC LINE
- T TELEPHONE LINE
- TR TELEPHONE RISER
- G GAS LINE
- GM GAS METER
- UNIDENTIFIED MANHOLE
- INDICATION OF ACCESS
- LOCATION OF BUILDING HEIGHT/FINISHED FLOOR
- MB MAILBOX
- BBQ GRILL
- FLOOD ZONE X (SHADED)
- BIKE RACK
- BENCH
- S/B SETBACK LINE



REVISION		DATE
1 ADDITIONAL TABLE A ITEMS PER COMMENTS	M. VOYLES	11/5/2015
2 REVISED FOR UPDATED TITLE WORK	M. VOYLES	11/13/2015
3 REVISED FOR CLIENT COMMENTS	M. VOYLES	12/3/2015
4 ADD PARCEL, UPDATED TO 2016 NSPS	M. VOYLES	03/02/2016
5		
6		
7		
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ALTA/NSPS LAND TITLE SURVEY
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www.FlatironsInc.com
655 FOURTH AVE.
LONGMONT, CO 80501
PH: (303) 776-1733
FAX: (303) 776-4355
3825 IRIS AVE, STE 395
BOULDER, CO 80301
PH: (303) 443-7001
FAX: (303) 443-9830
3660 DOWNING ST
UNIT E
DENVER, CO 80205
PH: (303) 936-6997

COLORADO LICENSED
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3/2/16
PROFESSIONAL LAND SURVEYOR
SEAL

JOB NUMBER:	15-66244
DATE:	10-30-2015
DRAWN BY:	M. VOYLES
CHECKED BY:	ETB/JZG/NV

SHEET 2 OF 2

BY:MVOYLES FILE:66244_ALTA-NSPS-TOPO.DWG DATE:3/2/2016 5:15 PM

MEMORANDUM

To: City of Boulder Planning and Development Services

From: Steve Tuttle, PE, PTOE

Date: March 1, 2016

Project: 2900 E. Aurora Avenue

Subject: Transportation Demand Management Plan

The Fox Tuttle Transportation Group has completed a traffic impact analysis for the proposed 2900 E. Aurora project in the City of Boulder. We understand that the project proposes to renovate the existing 220-unit Cavalier Apartments buildings to include interior and exterior improvements and to increase the total bedroom count from 260 bedrooms to 356 bedrooms. The unit count will remain at 220. The ratio of bedrooms to unit will increase from 1.18 to 1.61. Per the Traffic Impact Analysis prepared for this project, the project could result in an increase in site trip generation with an increase in bedroom count and potentially more residents. In accordance with the City of Boulder site review process, a Transportation Demand Management (TDM) Plan is required which outlines strategies to mitigate traffic impacts created by the any additional trips and implementable measures for promoting alternate modes of travel and reduction of single-occupancy vehicle travel.

The site is located in an area that affords numerous non-auto opportunities for travel. The existing and anticipated future resident population includes many University of Colorado students who walk or bike to the campus which begins a quarter mile to the west of the site with access via the Aurora Avenue underpass at US 36. The site also has excellent access to the 30th Street and 29th Street multimodal corridors, including the 28th Street multi-use path, 30th Street on-street bicycle lanes, and 209, 209G, BOUND, S. HX, 225, and 225E transit routes. CU students are provided with RTD Eco Passes which would promote transit use for many residents of this project. There also exist numerous mixed-use developments with restaurants and retail located within a quarter mile walking and biking distance.

The following text discusses specific TDM measures proposed within the context of site planning and programming:

Management and Parking Strategies:

- 90 standard, 145 compact, and 7 accessible parking spaces (242 total) are proposed on site in four parking lots with separate access points from Aurora Avenue. One existing parking lot access is proposed to be removed. The parking provision of 242 spaces represents a 16% reduction City of Boulder parking requirement of 288 spaces for RH-5 zoning based on the unit types, # of bedrooms, and number of units proposed.

- It is proposed that all parking will be unbundled. Parking spaces will be available for lease separately from the lease of the units themselves at 2900 E. Aurora. If residents choose to lease a parking space, a separate line item will be charged in their lease at an amount to be determined and their parking access will be defined in a parking addendum to the lease. Residents will receive a parking sticker when a space is leased, and parking will be monitored by the on-site management. A parking space that is leased by a resident will not designated or reserved to a unit or resident. A small number of spaces adjacent to the leasing office will be designated for short-term visitor/"future resident" parking.

Facilities and Design:

- *Bicycle Parking*: Pursuant to section 9-9-6 (8)(g)(1), B.R.C. 1981, off-street bicycle parking is required as follows:

  - Residential: 2 per unit, with 75% long-term and 25% short-term parking
  - With 220 dwelling units, 440 bicycle parking spaces are required (330 long-term and 110 short-term).

  The project proposes to provide ~~138~~ 186 short-term and 336 long-term (~~474~~ 522 total) bicycle parking spaces with distribution throughout the site and adjacent to entrances to provide convenient access for residents and guests. This exceeds the City code bicycle parking requirement by ~~34~~ 82 spaces.

  Bicycle Access: Bicycle access to the site is provided from Aurora Avenue, which connects to the 28th Street one-street bicycle lanes to the west, the US 36 underpass and City/campus off-street multi-use path system to the west, and the 30th Street on-street bicycle lanes to the east.

Incentives Strategies:

- *Residential Eco-Passes:* Many residents are anticipated to be University of Colorado students who already received RTD Eco-Passes. For non-student residents, local passes ($99/month) will be purchased for up to 17 residents for a period of three years.

- *Transportation Information Center:* The applicant will maintain a Transportation Information Center at the leasing office. This center can take a variety of forms, but must serve as means to providing residents with important travel information including transit maps and schedules, bicycle maps, local and regional marketing campaigns, and information on the benefits provided to residents.

Marketing Strategies:

- *Orientation packets*: Applicant will provide Go Boulder Orientation Packets to residents that will include bus/bike maps and other information on transportation projects.

- *TDM Plan evaluation*: Applicant will facilitate the distribution of GO Boulder-provided periodic surveys of resident behavior to evaluate the TDM Plan. The survey is designed to collect anonymous travel information and takes less than 10 minutes to complete.

Parking Analysis

On-Street parking in the site vicinity is in high demand throughout the day and night with this demand created largely by residents in the area as well as students and visitors to the nearby CU campus. Per discussions with City staff, a parking study was conducted as part of this TDM plan to address impacts of TDM measures on parking demand as well as to evaluate the feasibility of the proposed parking reductions.

A field parking study was conducted which documented parking inventory and peak demand on typical weekdays. This occurred in late January and early February 2016 during two overnight periods (3-4~~pm~~ am) and one daytime period (1-2pm). The field parking study found the following:

- There are approximately 105 legal parking spaces on-street along Aurora Avenue between 30th Street and the 28th Street Frontage. During both overnight periods and during the daytime period observed, there were no less than 104 vehicles parked, indicating full or near-full use of on-street parking on this street.

- There are approximately 61 legal parking spaces along Bixby Avenue between 30th Street and 29th Street along the south border of the project site. Observed occupancy ranged from 55% to 62%.

The high overnight parking utilization, particularly on E. Aurora Avenue adjacent to the project site, indicates that these on-street spaces are in high demand by local residents and that this project should seek to accommodate site-generated parking demand within the off-street, private parking areas on the site to reduce additional pressure on on-street parking.

An analysis of the potential peak parking demand was conducted using Institute of Transportation Engineer (ITE) parking data, consistent with Section 9-9-6(d)(6), B.R.C. 1981. ITE parking data for Land Use #221: "Low/Mid-Rise Apartment" for urban conditions was utilized. Suburban data was revised but determined not consistent with this site given the non-auto opportunities for travel at this site that a typical suburban site does not have (transit, land use mix, walkability and bikeability). The ITE data and formulas are based on a compilation of peak parking demand field studies conducted throughout the United States and by methodology incorporates resident parking, guest parking, and any other parking activity that would typically occur at an apartment use. The ITE data sheets are provided, for reference. The following summarizes the ITE peak parking demand data and application to the proposed 242 parking spaces:

- ITE data for 40 different apartment sites with an average of 1.9 bedrooms per unit showed that the peak parking demand can be estimated by the formula: $P = 0.92x + 4$, where x = the number of dwelling units.

- Using the ITE formula above, the projected peak parking demand for this site as proposed would be 206 parking spaces.

The project proposes 220 units with a total of 355 bedrooms, or 1.61 bedrooms per unit. Thus, the ITE formula would conservatively apply to this project, as the data is based on a higher average bedroom per unit ratio (1.9 vs. 1.61). Based on application of the ITE data, the project can accommodate peak parking demand on site with the proposed 242 parking spaces. Accommodation of parking demand on-site will reduce any additional pressure on the heavily utilized on-street parking in the area.

/SGT

Attachments:

ITE Parking Data

Land Use: 221
Low/Mid-Rise Apartment

Description

Low/mid-rise apartments are rental dwelling units located within the same building with at least three other dwelling units: for example, quadraplexes and all types of apartment buildings. The study sites in this land use have one, two, three, or four levels. High-rise apartment (Land Use 222) is a related use.

Database Description

The database consisted of a mix of suburban and urban sites. Parking demand rates at the suburban sites differed from those at urban sites and, therefore, the data were analyzed separately.

- Average parking supply ratio: 1.4 parking spaces per dwelling unit (68 study sites). This ratio was the same at both the suburban and urban sites.
- Suburban site data: average size of the dwelling units at suburban study sites was 1.7 bedrooms, and the average parking supply ratio was 0.9 parking spaces per bedroom (three study sites).
- Urban site data: average size of the dwelling units was 1.9 bedrooms with an average parking supply ratio of 1.0 space per bedroom (11 study sites).

Saturday parking demand data were only provided at two suburban sites. One site with 1,236 dwelling units had a parking demand ratio of 1.33 vehicles per dwelling unit based on a single hourly count between 10:00 and 11:00 p.m. The other site with 55 dwelling units had a parking demand ratio of 0.92 vehicles per dwelling unit based on counts between the hours of 12:00 and 5:00 a.m.

Sunday parking demand data were only provided at two urban sites. One site with 15 dwelling units was counted during consecutive hours between 1:00 p.m. and 5:00 a.m. The peak parking demand ratio at this site was 1.00 vehicle per dwelling unit. The peak parking demand occurred between 12:00 and 5:00 a.m. The other site with 438 dwelling units had a parking demand ratio of 1.10 vehicles per dwelling unit based on a single hourly count between 11:00 p.m. and 12:00 a.m.

Four of the urban sites were identified as affordable housing.

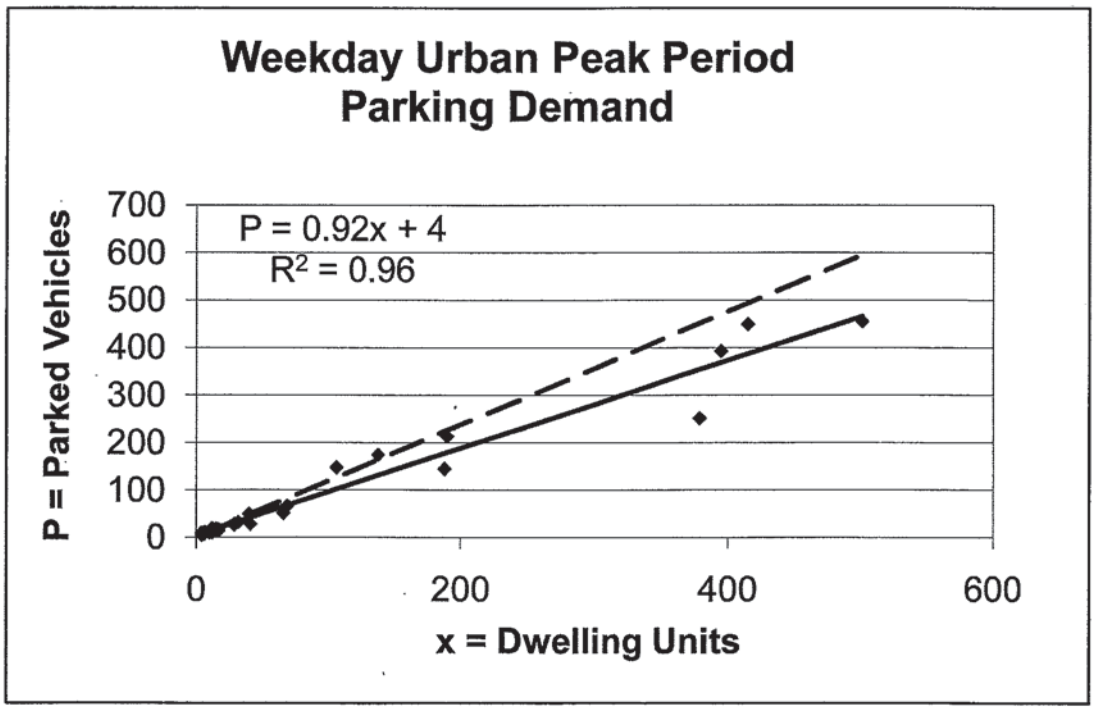
Several of the suburban study sites provided data regarding the number of bedrooms in the apartment complex. Although these data represented only a subset of the complete database for this land use, they demonstrated a correlation between number of bedrooms and peak parking demand. Study sites with an average of less than 1.5 bedrooms per dwelling unit in the apartment complex reported peak parking demand at 92 percent of the average peak parking demand for all study sites with bedroom data. Study sites with less than 2.0 but greater than or equal to 1.5 bedrooms per dwelling unit reported peak parking demand at 98 percent of the average. Study sites with an average of 2.0 or greater bedrooms per dwelling unit reported peak parking demand at 13 percent greater than the average.

For the urban study sites, the parking demand data consisted of single or discontinuous hourly counts and therefore a time-of-day distribution was not produced. The following table presents a time-of-day distribution of parking demand at the suburban study sites.

Land Use: 221
Low/Mid-Rise Apartment

Average Peak Period Parking Demand vs. Dwelling Units
On a: Weekday
Location: Urban

Statistic	Peak Period Demand
Peak Period	10:00 p.m.–5:00 a.m.
Number of Study Sites	40
Average Size of Study Sites	70 dwelling units
Average Peak Period Parking Demand	1.20 vehicles per dwelling unit
Standard Deviation	0.42
Coefficient of Variation	35%
95% Confidence Interval	1.07–1.33 vehicles per dwelling unit
Range	0.66–2.50 vehicles per dwelling unit
85th Percentile	1.61 vehicles per dwelling unit
33rd Percentile	0.93 vehicles per dwelling unit



◆ Actual Data Points ——— Fitted Curve - - - - Average Rate

MEMORANDUM

To: City of Boulder Planning and Development Services

From: Steve Tuttle, PE, PTOE

Date: March 1, 2016

Project: 2900 E. Aurora Avenue

Subject: Traffic Impact Analysis

The Fox Tuttle Transportation Group has completed a traffic impact analysis for the proposed 2900 E. Aurora project in the City of Boulder. We understand that the project proposes to renovate the existing 220-unit Cavalier Apartments buildings to include interior and exterior improvements and to increase the total bedroom count from 260 bedrooms to 355 bedrooms. The unit count will remain at 220. The purpose of this memorandum is to quantify the potential increase in vehicular traffic associated with the higher bedroom count, analyze any potential operational impacts related to new traffic on the existing roadway and intersection network, and to identify potential improvements necessary to mitigate any impacts.

Project Description

The 2900 E. Aurora project, also known as the Cavalier Apartments, currently has 220 units with a total of 260 bedrooms. Existing access is via five (5) curb cuts along the south side of E. Aurora Avenue just west of 30th Street serving private, off-street parking. A vicinity map is shown on **Figure 1**. The project is proposing to renovate the interior and exterior of the existing structures, provide landscaping improvements, restripe/reconfigure parking areas, and consolidate access by removing one of the five curb cuts so that four will remain. The total number of bedrooms is proposed to be increased from 260 to 355, though the 220 unit count will remain the same. The project site plan is provided on **Figure 2**.

Existing Transportation Network

Roadways that service the site include arterial, collector, and local streets and are described as follows:

30th Street is a four-lane, north-south arterial roadway that extends from Williams Village area on the south end to Diagonal Highway (SH 119) on the north end. 30th Street serves residential and commercial uses through this area and services approximately 19,000 vehicles per day (vpd). The posted speed limit is 35 miles per hour (mph) in the project vicinity. 30th Street has on-street bicycle lanes, four to five-foot wide attached sidewalks, and is serviced by the 209, 209G, and BOUND transit routes near the project.

E. Aurora Avenue is a two-lane, east-west collector roadway that extends from the 28th Street Frontage Road east to Mohawk Drive, providing access to mostly residential uses. Aurora Avenue services approximately 1,500 vpd adjacent to the project site. The posted speed limit is 25 mph in the project vicinity. Aurora Avenue is a designated bike route and has on-street parking. The intersection of 30th Street with Aurora Avenue is signalized with northbound and southbound exclusive left-turn lanes.

28th Street Frontage Road is a two lane collector roadway that runs parallel to 28th Street and provides direct access to commercial and residential uses along 28th Street. The posted speed limit is 25 mph. The intersection of the 28th Street Frontage Road with Aurora Avenue is controlled with a stop sign on the Aurora Avenue (westbound) approach.

Existing transit services within the study area include the following:

- 209, 209G, and BOUND routes serviced along 30th Street and Aurora Avenue east of 30th Street. Transit stop for all directions exist within 300' of the 30th Street & Aurora Avenue intersection adjacent to the site.
- 225 and 225E routes are serviced along Baseline Road at the 30th Street & Baseline Road intersection, approximately ¼-mile north of the project site.
- J and Stampede routes are serviced at the Colorado Avenue & 30th Street intersection, approximately ¼-mile north of the project site.
- S and HX routes are serviced at the College Avenue & 28th Street Frontage Road, approximately 0.40 north and west of the project site.

Existing bicycle and pedestrian facilities in the study area include:

- Attached sidewalk network along Aurora Avenue and 30th Street
- Detached sidewalks along the 28th Street Frontage Road

- On-street bicycle lanes on 30th Street and on Baseline Road
- Aurora Avenue designated bicycle route
- Pedestrian underpasses to the CU campus and multi-use path network located at the 28th Street Frontage Road & Aurora Avenue intersection and the 28th Street Frontage Road & College Avenue intersection

Existing Traffic Volumes and Traffic Operations

Existing traffic volumes were compiled from City traffic data and some were collected specifically for this project. The data includes both AM and PM peak hour turning movement counts at study area intersections and daily traffic volumes. The existing traffic count data is summarized on **Figure 3**. Count data sheets are provided in the Appendix. Note that the driveway volumes for the project site were included only to provide an estimate of site traffic distribution (east vs. west along Aurora Avenue) but do not represent volumes at full occupancy of the site.

In determining the operational characteristics of an intersection, "Levels of Service" (LOS) A through F are applied, with LOS A indicating very good operations and LOS F indicating congested operations. The intersection LOS is represented as a delay in seconds per vehicle for the intersection as a whole and for each turning movement. A more detailed discussion of LOS methodology is contained in the Appendix for reference. Criteria contained in the Highway Capacity Manual (HCM) was applied for these analyses in order to determine existing levels of service during peak hour periods.

The results of the LOS calculations performed using Synchro software for all intersections and lane groups are summarized in **Table 1**. The Synchro worksheets are attached in the Appendix. The data in the tables show that all study area intersections are operating acceptably overall with all intersections at LOS C or better and all individual movements at LOS D or better. No existing capacity deficiencies were identified.

Future Background Growth

In order to review potential future traffic growth in the project area, the following information was reviewed:

- City of Boulder Arterial Count Program Data for 30th Street
- City of Boulder Development Review information relative to other area projects

The site area around 30th Street and Aurora Avenue has been built out for many years and this is reflected in the arterial count program data. City of Boulder historic count data along 30th Street

just south of Aurora Avenue provides field count data and regression analysis for every year since 1983 up to 2015. Based on this data, traffic volumes along 30th Street have been in the 18,000 to 21,000 range since 2001. Long-term traffic growth, based on regression analysis of the field data, suggests a long term growth rate of less than 1% annually.

As the area is built out, potential traffic growth along Aurora Avenue would largely be driven by redevelopment projects that would increase land use densities. Current nearby land use projects and applications were reviewed based on data provided by the City of Boulder. Discussions with City staff relative to this project included the 2985 Aurora Avenue project and the American Campus project (820 28th Street). The information provided with these projects showed no impacts to study area volumes relevant to this analysis. Traffic increases due to other recent projects that have been built would be represented in the traffic data that was collected for this study.

Given the relatively low background traffic growth in the area, minimal additional planned/permitted redevelopment, and within the context of the size of this project, a long-term traffic growth scenario was not performed. Intersection Levels of Service within the study area are expected to be similar to existing conditions for future-year scenarios. Given that the background traffic volumes would be expected to be unchanged within the next year when this project is completed, this study focuses on the "existing-plus-project" scenario of existing traffic with site-added traffic volumes.

Project Trip Generation

In order to estimate vehicular trips for development projects, City of Boulder Design and Construction Standards require use of trip rates and equations contained in the Institute of Transportation Engineers (ITE) Trip Generation manual. For the "Apartment" land use categories, rates are only provided by dwelling units or for number of persons (residents), independent of bedroom count per unit. As the number of units is remaining the same, the any increase in site traffic would only be due to an increase in residents.

The existing site has 260 bedrooms in 220 total units, or 1.18 bedrooms per unit. The project proposes to increase the total number of bedrooms from 260 to 255 (95 additional bedrooms) by converting large existing bedrooms to two separate bedrooms. Per discussions with the applicant, we understand that many of these large bedrooms were being occupied by multiple tenants with informal dividers breaking up these rooms. Thus, the conversion of bedrooms may not be expected to increase the total number of residents or site trips. However, for the purposes of providing a conservative estimate of site traffic impacts, trip generation analysis for this study assumed that the additional 96 bedrooms would result in an increase in 96 residents.

Using ITE rates on a "person" unit basis and assuming a new resident for each new bedroom, the additional 96 bedrooms could generate the following trips:

Land Use	Size	Unit	Non-Auto Use	Daily				AM Peak Hour				PM Peak Hour			
				Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total	In	Out
Proposed ITE 220 - Apartments	+96	Persons	30%	3.31	+222	+111	+111	0.28	+19	+4	+15	0.40	+27	+18	+9

Source: ITE Trip Generation 9th Edition, 2012.

Non-Auto Use Trip Reductions

The auto trip estimates above are based on ITE rates from predominately suburban residential studies and do not reflect the high non-auto trip characteristics of the site resident demographic and transit, walking, and biking opportunities. The existing and anticipated future resident population includes many University of Colorado students who walk or bike to the campus which begins a quarter mile to the west of the site with access via the Aurora Avenue underpass at US 36. The CU-Boulder Transportation Master Plan (LSC, 2011) showed that CU students are much more like to walk, bike, or ride with a 77% typical non-auto travel mode split for their travel choices.

The site has excellent access to the 30th Street and 29th Street multimodal corridors, including the 28th Street multi-use path, 30th Street on-street bicycle lanes, and 209, 209G, BOUND, S. HX, 225, and 225E transit routes. CU students are provided with RTD Eco Passes which would promote transit use for many residents of this project. There also exist numerous mixed-use developments with restaurants and retail located within a quarter mile walking and biking distance. The project also proposes a Transportation Demand Management Plan that would purchase Eco-Passes for a number of non-student residents as well as other measures to increase non-auto mode share.

Given these non-auto travel opportunities, it is expected that many residents of this site do not need to rely on automobiles for a significant portion of their daily trips, perhaps as much as 50% or 60% reduction from ITE rates based on our experience with similar projects. However, to provide a conservative estimate for the purposes of this study, only a 30% reduction was applied.

Trip Distribution and Assignment

Trip distribution was estimated for the project based on existing trips exiting the site driveways and existing traffic distributions at the study area intersections. The estimated added trips were distributed and assigned to the existing roadway network as shown on **Figure 4**, attached. As shown on **Figure 4**, with the conservative trip estimates discussed in this memorandum, it is likely

that no single turning movement at any off-site intersections would experience an increase of more than 7 vehicles per hour. This is likely within the daily variability of these intersections and movements and would be expected to be accommodated with negligible effects on traffic operations.

Traffic Operations with Project Added Traffic

The projected site-added traffic volumes were added to the existing area traffic volumes to determine any impact associated with these volumes. These volumes are shown on **Figure 5**. The HCM methodology for previously described was utilized to determine Level of Service with the project-added volumes. The results of the LOS calculations performed using Synchro software for all intersections and lane groups are summarized in **Table 1**. The Synchro worksheets are attached in the Appendix.

The data summarized in **Table 1** shows that all study area intersections and movements will continue to operate acceptably with addition of the potential increase in trips for this project. No capacity deficiencies were identified.

Conclusions

The 2900 E. Aurora Avenue project proposes to renovate the existing 220-unit Cavalier Apartments buildings to include interior and exterior improvements and to increase the total bedroom count from 260 bedrooms to 355 bedrooms. The unit count will remain at 220.

This study analyzed existing and existing-plus-project traffic operations on roadways and intersections near the project site. Potential new trips generated by the site were conservatively estimated for this analysis by assuming that 96 bedrooms could generate 96 new residents and that only a 30% non-auto use reduction from national trip rates was applied. It was determined that even with this conservative approach the potential traffic increases could be accommodated on the existing roadway and intersection network with negligible effects. No off-site improvements are necessary to support this project.

A separate memo addressing Transportation Demand Management (TDM) strategies to reduce automobile trips to and from the site has been prepared in accordance with City of Boulder requirements. The TDM memo also provides information relative to on-site and off-street parking demand.

Please contact me if you have any questions or would like to discuss our analysis in more detail.

/SGT

Attachments:
Table 1 - Intersection Level of Service Summary
Figure 1 - Vicinity Map
Figure 2 - Site Plan
Figure 3 - Existing Traffic Volumes
Figure 4 - New Site Trips
Figure 5 - Existing + New Site Trips

Appendix:
LOS Definitions
Synchro Worksheets
Traffic Count Data

FOX TUTTLE HERNANDEZ
TRANSPORTATION GROUP

Table 1 - Intersection Level of Service Summary

Intersection and Lane Groups	Existing				Existing + Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
SIGNAL CONTROL								
30th Street & Baseline Road	**31.6**	**C**	**25.8**	**C**	**31.6**	**C**	**25.9**	**C**
Eastbound Left	*51.5*	*D*	*16.2*	*B*	*51.6*	*D*	*16.4*	*B*
Eastbound Through+Right	*17.8*	*B*	*17.6*	*B*	*17.8*	*B*	*17.6*	*B*
Westbound Left	*22.3*	*C*	*20.1*	*C*	*22.3*	*C*	*20.2*	*C*
Westbound Through	*38.7*	*D*	*30.1*	*C*	*38.7*	*D*	*30.2*	*C*
Westbound Right	*28.2*	*C*	*24.7*	*C*	*28.2*	*C*	*24.8*	*C*
Northbound Left	*23.6*	*C*	*33.0*	*C*	*23.6*	*C*	*33.0*	*C*
Northbound Through+Right	*26.4*	*C*	*37.7*	*D*	*26.4*	*C*	*37.7*	*D*
Southbound Left	*22.0*	*C*	*27.3*	*C*	*22.0*	*C*	*27.3*	*C*
Southbound Through	*25.9*	*C*	*34.6*	*C*	*25.9*	*C*	*34.6*	*C*
Southbound Right	*16.4*	*B*	*32.9*	*C*	*16.5*	*B*	*33.1*	*C*
30th Street & E. Aurora Ave	**12.3**	**B**	**9.3**	**A**	**12.6**	**B**	**9.4**	**A**
Eastbound Left+Through+Right	*37.9*	*D*	*43.3*	*D*	*40.3*	*D*	*43.9*	*D*
Westbound Left+Through+Right	*40.0*	*D*	*41.1*	*D*	*40.0*	*D*	*41.4*	*D*
Northbound Left	*4.3*	*A*	*6.1*	*A*	*4.4*	*A*	*6.4*	*A*
Northbound Through+Right	*7.2*	*A*	*6.3*	*A*	*7.2*	*A*	*6.3*	*A*
Southbound Left	*19.6*	*B*	*4.6*	*A*	*19.6*	*B*	*4.6*	*A*
Southbound Through+Right	*4.0*	*A*	*4.7*	*A*	*4.0*	*A*	*4.7*	*A*
STOP CONTROL								
E. Aurora Ave & 28th Street Frontage Rd	**3.4**	**A**	**5.3**	**A**	**3.6**	**A**	**5.4**	**A**
Westbound Left+Through	*10.7*	*B*	*10.6*	*B*	*10.8*	*B*	*10.7*	*B*
Northbound Right+Through	*0.0*	*A*	*0.0*	*A*	*0.0*	*A*	*0.0*	*A*
Southbound Left+Through	*3.4*	*A*	*3.4*	*A*	*3.5*	*A*	*3.7*	*A*

Note: Delay represented in average seconds per vehicle.

15063_LOS.xls

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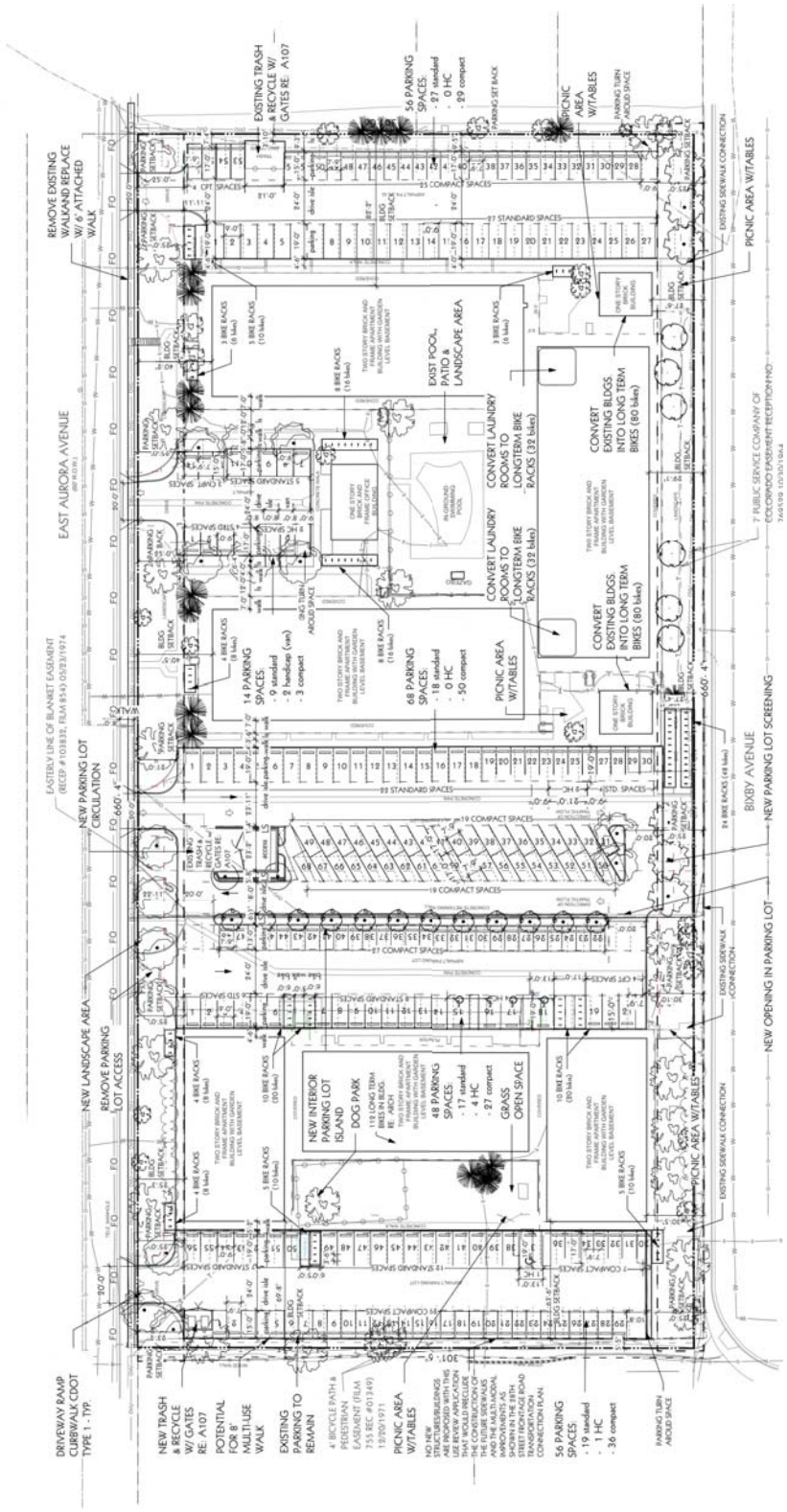
2900 E. AURORA AVENUE TRAFFIC IMPACT ANALYSIS

VICINITY MAP

Project #	15063	Original Scale	1"=500'	Date	2/12/16	Drawn by	SGT	Figure #	1



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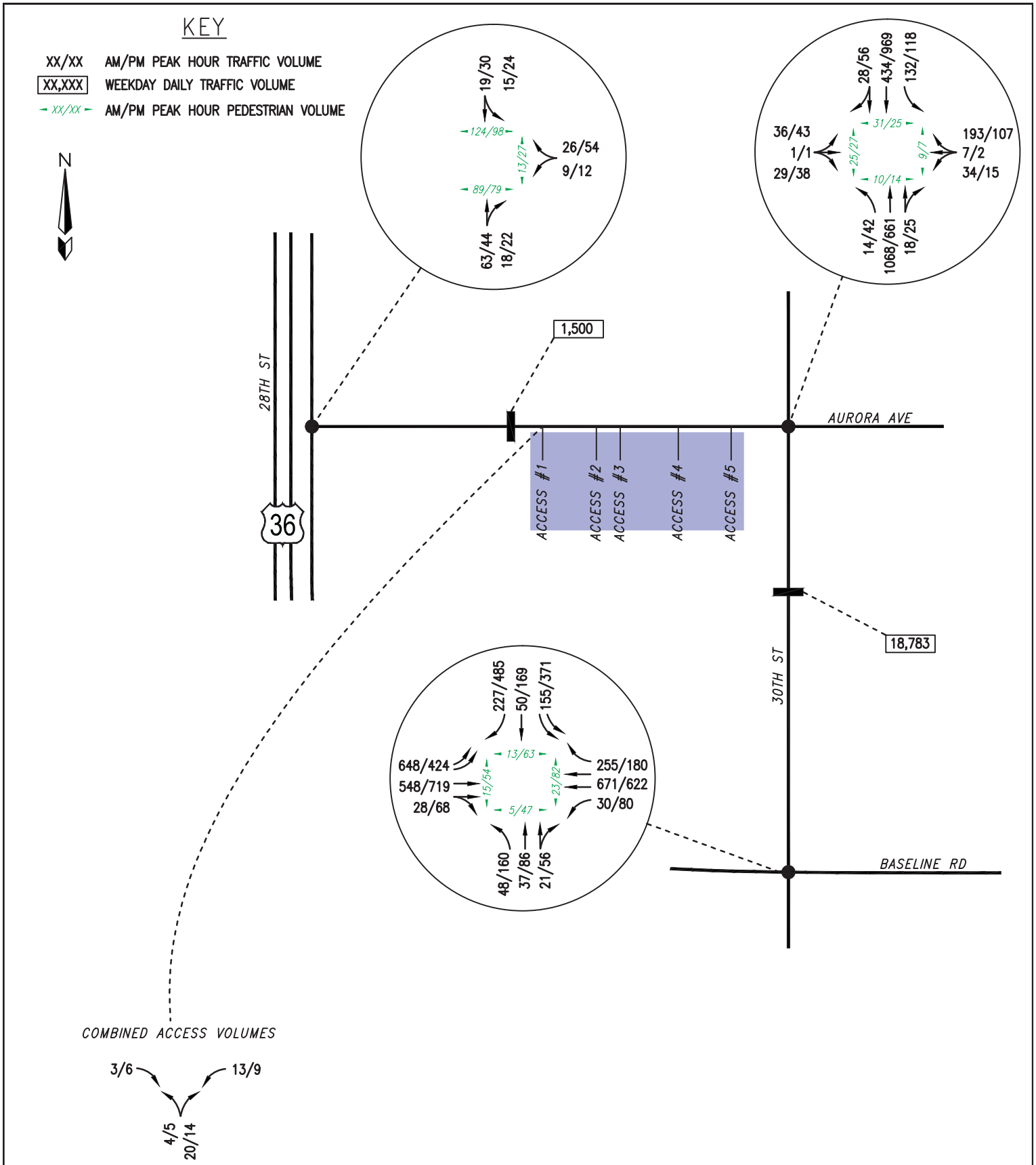
2900 E. AURORA AVENUE TRAFFIC IMPACT ANALYSIS

SITE PLAN

Project #	15063	Original Scale	1"=100'	Date	2/12/16	Drawn by	SGT	Figure #	2



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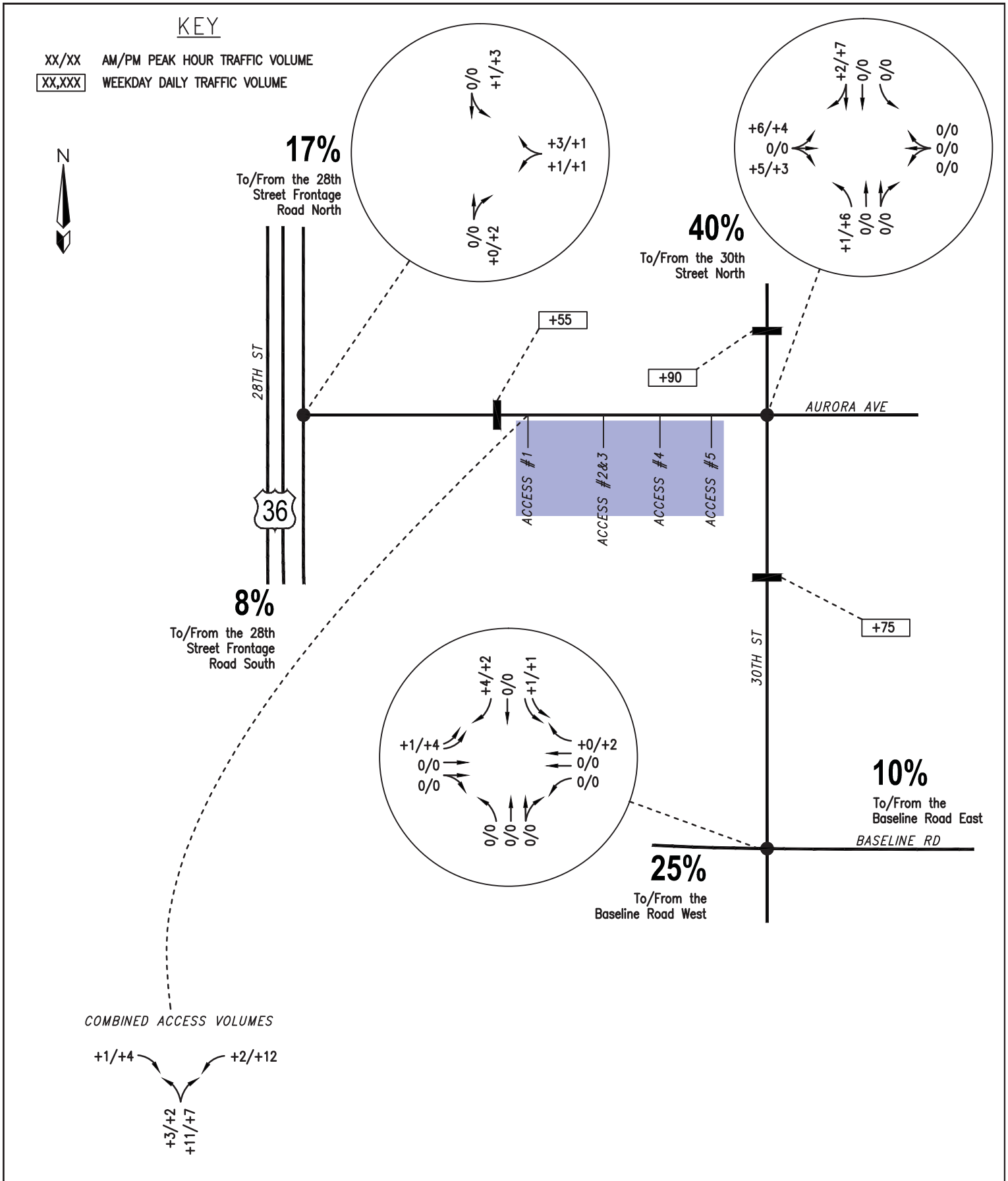
2900 E. AURORA AVENUE TRAFFIC IMPACT ANALYSIS

EXISTING TRAFFIC VOLUMES

Project #	15063	Original Scale	NTS	Date	2/12/16	Drawn by	SGT	Figure #	3



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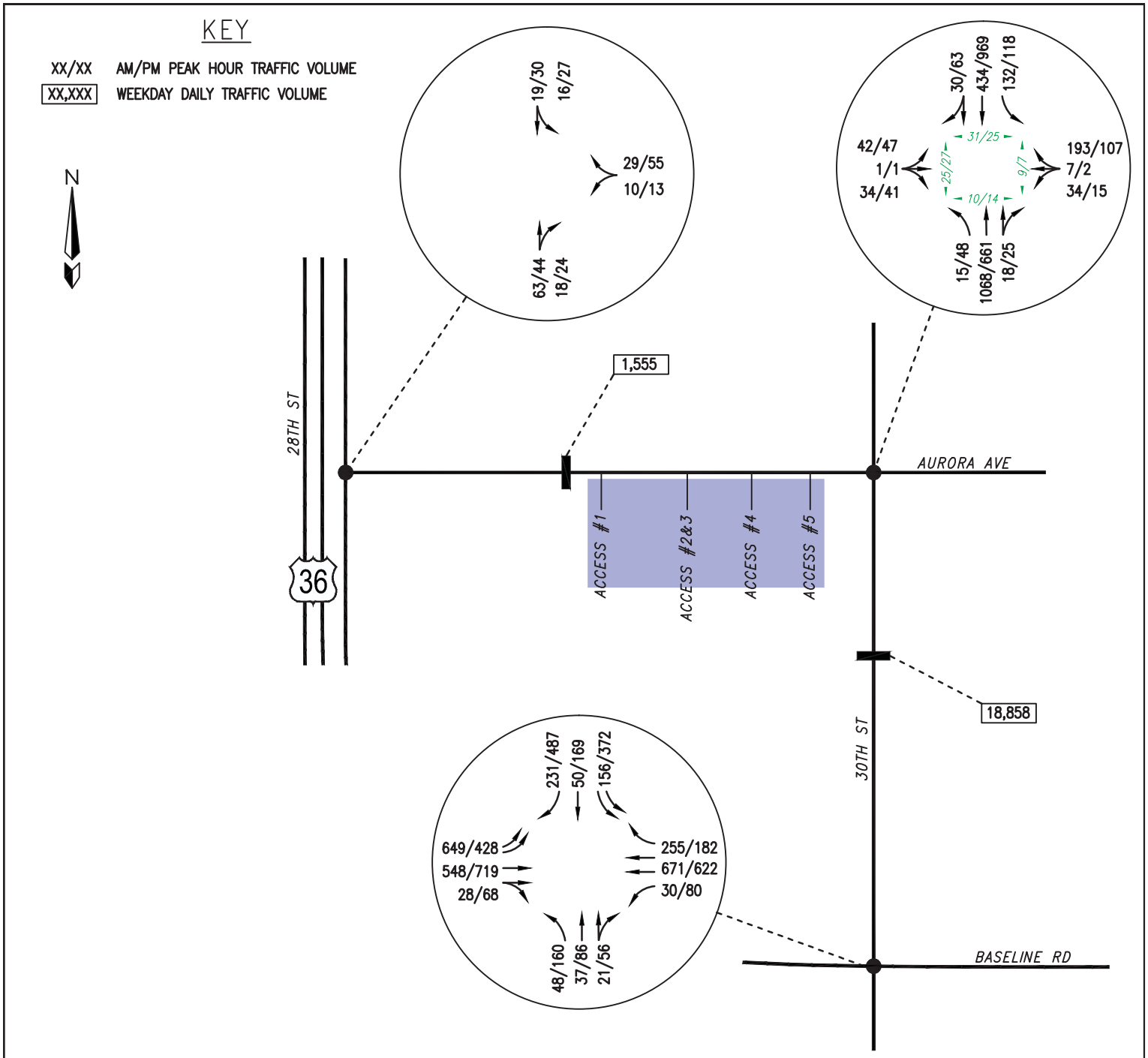
2900 E. AURORA AVENUE TRAFFIC IMPACT ANALYSIS

NEW SITE TRIPS

Project #	15063	Original Scale	NTS	Date	2/12/16	Drawn by	SGT	Figure #	4



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2900 E. AURORA AVENUE TRAFFIC IMPACT ANALYSIS

EXISTING + NEW SITE TRIPS

Project #	15063	Original Scale	NTS	Date	2/12/16	Drawn by	SGT	Figure #	5

LEVEL OF SERVICE DEFINITIONS

In rating roadway and intersection operating conditions with existing or future traffic volumes, "Levels of Service" (LOS) A through F are used, with LOS A indicating very good operation and LOS F indicating poor operation. Levels of service at signalized and unsignalized intersections are closely associated with vehicle delays experienced in seconds per vehicle. More complete level of service definitions and delay data for signal and stop sign controlled intersections are contained in the following table for reference.

Level of Service Rating	Delay in seconds per vehicle *(a)*		Definition
	Signalized	Unsignalized	
A	0.0 to 10.0	0.0 to 10.0	Low vehicular traffic volumes; primarily free flow operations. Density is low and vehicles can freely maneuver within the traffic stream. Drivers are able to maintain their desired speeds with little or no delay.
B	10.1 to 20.0	10.1 to 15.0	Stable vehicular traffic volume flow with potential for some restriction of operating speeds due to traffic conditions. Vehicle maneuvering is only slightly restricted. The stopped delays are not bothersome and drivers are not subject to appreciable tension.
C	20.1 to 35.0	15.1 to 25.0	Stable traffic operations, however the ability for vehicles to maneuver is more restricted by the increase in traffic volumes. Relatively satisfactory operating speeds prevail, but adverse signal coordination or longer vehicle queues cause delays along the corridor.
D	35.1 to 55.0	25.1 to 35.0	Approaching unstable vehicular traffic flow where small increases in volume could cause substantial delays. Most drivers are restricted in ability to maneuver and selection of travel speeds due to congestion. Driver comfort and convenience are low, but tolerable.
E	55.1 to 80.0	35.1 to 50.0	Traffic operations characterized by significant approach delays and average travel speeds of one-half to one-third the free flow speed. Vehicular flow is unstable and there is potential for stoppages of brief duration. High signal density, extensive vehicle queuing, or corridor signal progression/timing are the typical causes of vehicle delays at signalized corridors.
F	> 80.0	> 50.0	Forced vehicular traffic flow and operations with high approach delays at critical intersections. Vehicle speeds are reduced substantially and stoppages may occur for short or long periods of time because of downstream congestion.

(a) Delay ranges based on 2010 Highway Capacity Manual criteria.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	648	548	28	30	671	255	48	37	21	155	50	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	0.95		0.97	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3502		1770	3539	1583	1770	3352		3433	1863	1583
Flt Permitted	0.12	1.00		0.37	1.00	1.00	0.72	1.00		0.67	1.00	1.00
Satd. Flow (perm)	437	3502		692	3539	1583	1345	3352		2426	1863	1583
Peak-hour factor, PHF	0.93	0.80	0.54	0.50	0.80	0.69	0.67	0.84	0.88	0.67	0.92	0.79
Adj. Flow (vph)	697	685	52	60	839	370	72	44	24	231	54	287
RTOR Reduction (vph)	0	6	0	0	0	245	0	17	0	0	0	0
Lane Group Flow (vph)	697	731	0	60	839	125	72	51	0	231	54	287
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases	6			2		2	4			8		8
Actuated Green, G (s)	51.4	41.9		32.6	28.1	28.1	30.8	26.4		34.0	28.0	46.3
Effective Green, g (s)	52.4	43.5		34.6	29.7	29.7	32.8	28.0		36.0	29.6	48.3
Actuated g/C Ratio	0.52	0.44		0.35	0.30	0.30	0.33	0.28		0.36	0.30	0.48
Clearance Time (s)	5.0	5.6		5.0	5.6	5.6	5.0	5.6		5.0	5.6	5.0
Vehicle Extension (s)	2.0	2.5		1.5	2.5	2.5	0.5	2.0		1.5	2.0	2.0
Lane Grp Cap (vph)	807	1523		298	1051	470	464	938		943	551	764
v/s Ratio Prot	c0.17	0.21		0.01	0.24		0.01	0.02		c0.02	0.03	c0.07
v/s Ratio Perm	c0.29			0.06		0.08	0.04			0.07		0.11
v/c Ratio	0.86	0.48		0.20	0.80	0.27	0.16	0.05		0.24	0.10	0.38
Uniform Delay, d1	26.2	20.2		22.1	32.4	26.8	23.5	26.3		22.0	25.5	16.3
Progression Factor	1.64	0.83		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.4	1.0		0.1	6.3	1.4	0.1	0.1		0.0	0.4	0.1
Delay (s)	51.5	17.8		22.3	38.7	28.2	23.6	26.4		22.0	25.9	16.4
Level of Service	D	B		C	D	C	C	C		C	C	B
Approach Delay (s)		34.2			34.9			25.0			19.6	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	31.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	1	29	34	7	193	14	1068	18	132	434	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.94			0.89		1.00	1.00		1.00	0.99	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1706			1644		1770	3530		1770	3507	
Flt Permitted		0.53			0.95		0.43	1.00		0.18	1.00	
Satd. Flow (perm)		934			1568		806	3530		333	3507	
Peak-hour factor, PHF	0.63	0.63	0.63	0.88	0.88	0.88	0.85	0.85	0.85	0.83	0.83	0.83
Adj. Flow (vph)	57	2	46	39	8	219	16	1256	21	159	523	34
RTOR Reduction (vph)	0	26	0	0	87	0	0	1	0	0	4	0
Lane Group Flow (vph)	0	79	0	0	179	0	16	1276	0	159	553	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		21.0			21.0		76.5	76.5		76.5	76.5	
Effective Green, g (s)		22.0			22.0		78.0	78.0		78.0	78.0	
Actuated g/C Ratio		0.20			0.20		0.72	0.72		0.72	0.72	
Clearance Time (s)		5.0			5.0		5.5	5.5		5.5	5.5	
Vehicle Extension (s)		2.0			2.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		190			319		582	2549		240	2532	
v/s Ratio Prot								0.36			0.16	
v/s Ratio Perm		0.08			c0.11		0.02			c0.48		
v/c Ratio		0.41			0.56		0.03	0.50		0.66	0.22	
Uniform Delay, d1		37.4			38.7		4.3	6.5		8.0	4.9	
Progression Factor		1.00			1.00		1.00	1.00		0.92	0.78	
Incremental Delay, d2		0.5			1.4		0.1	0.7		12.2	0.2	
Delay (s)		37.9			40.0		4.3	7.2		19.6	4.0	
Level of Service		D			D		A	A		B	A	
Approach Delay (s)		37.9			40.0			7.2			7.5	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	9	26	63	18	15	19
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.63	0.63	0.67	0.67	0.63	0.63
Hourly flow rate (vph)	14	41	94	27	24	30
Pedestrians	13		89			124
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	1		7			10
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	287	244			134	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	287	244			134	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	94			98	
cM capacity (veh/h)	633	705			1435	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	56	121	54
Volume Left	14	0	24
Volume Right	41	27	0
cSH	685	1700	1435
Volume to Capacity	0.08	0.07	0.02
Queue Length 95th (ft)	7	0	1
Control Delay (s)	10.7	0.0	3.4
Lane LOS	B		A
Approach Delay (s)	10.7	0.0	3.4
Approach LOS	B		

Intersection Summary			
Average Delay	3.4		
Intersection Capacity Utilization	28.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	424	719	68	80	622	180	160	86	56	371	169	485
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	0.95		0.97	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3490		1770	3539	1583	1770	3331		3433	1863	1583
Flt Permitted	0.24	1.00		0.30	1.00	1.00	0.48	1.00		0.60	1.00	1.00
Satd. Flow (perm)	852	3490		559	3539	1583	898	3331		2160	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.85	0.80	0.89	0.90	0.96	0.82	0.82	0.85	0.87	0.92
Adj. Flow (vph)	461	782	80	100	699	200	167	105	68	436	194	527
RTOR Reduction (vph)	0	6	0	0	0	118	0	53	0	0	0	0
Lane Group Flow (vph)	461	856	0	100	699	82	167	120	0	436	194	527
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases	6			2		2	4			8		8
Actuated Green, G (s)	68.8	56.9		51.0	44.1	44.1	34.1	25.0		35.9	25.9	45.6
Effective Green, g (s)	69.8	58.5		53.0	45.7	45.7	36.1	26.6		37.9	27.5	47.6
Actuated g/C Ratio	0.58	0.49		0.44	0.38	0.38	0.30	0.22		0.32	0.23	0.40
Clearance Time (s)	5.0	5.6		5.0	5.6	5.6	5.0	5.6		5.0	5.6	5.0
Vehicle Extension (s)	2.0	2.0		1.5	2.5	2.5	0.5	2.0		1.5	2.0	2.0
Lane Grp Cap (vph)	940	1701		326	1347	602	343	738		798	426	627
v/s Ratio Prot	0.08	c0.25		0.02	0.20		0.04	0.04		c0.05	0.10	c0.14
v/s Ratio Perm	0.20			0.12		0.05	0.11			0.12		0.19
v/c Ratio	0.49	0.50		0.31	0.52	0.14	0.49	0.16		0.55	0.46	0.84
Uniform Delay, d1	14.4	20.9		19.9	28.7	24.3	32.6	37.7		32.3	39.8	32.8
Progression Factor	1.12	0.80		1.00	1.00	1.00	1.00	1.00		0.83	0.86	0.73
Incremental Delay, d2	0.1	1.0		0.2	1.4	0.5	0.4	0.0		0.4	0.3	8.9
Delay (s)	16.2	17.6		20.1	30.1	24.7	33.0	37.7		27.3	34.6	32.9
Level of Service	B	B		C	C	C	C	D		C	C	C
Approach Delay (s)		17.1			28.0			35.4			31.1	
Approach LOS		B			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	1	38	15	2	107	42	661	25	118	969	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.94			0.88		1.00	0.99		1.00	0.99	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1701			1635		1770	3520		1770	3510	
Flt Permitted		0.71			0.96		0.23	1.00		0.36	1.00	
Satd. Flow (perm)		1234			1580		427	3520		671	3510	
Peak-hour factor, PHF	0.75	0.75	0.75	0.93	0.93	0.93	0.95	0.95	0.95	0.93	0.93	0.93
Adj. Flow (vph)	57	1	51	16	2	115	44	696	26	127	1042	60
RTOR Reduction (vph)	0	26	0	0	94	0	0	2	0	0	4	0
Lane Group Flow (vph)	0	83	0	0	39	0	44	720	0	127	1099	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		21.0			21.0		88.5	88.5		88.5	88.5	
Effective Green, g (s)		22.0			22.0		90.0	90.0		90.0	90.0	
Actuated g/C Ratio		0.18			0.18		0.75	0.75		0.75	0.75	
Clearance Time (s)		5.0			5.0		5.5	5.5		5.5	5.5	
Vehicle Extension (s)		2.0			2.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		226			289		320	2640		503	2632	
v/s Ratio Prot								0.20			c0.31	
v/s Ratio Perm		c0.07			0.02		0.10			0.19		
v/c Ratio		0.37			0.14		0.14	0.27		0.25	0.42	
Uniform Delay, d1		42.9			41.0		4.2	4.7		4.6	5.5	
Progression Factor		1.00			1.00		1.26	1.28		0.77	0.78	
Incremental Delay, d2		0.4			0.1		0.9	0.2		1.1	0.4	
Delay (s)		43.3			41.1		6.1	6.3		4.6	4.7	
Level of Service		D			D		A	A		A	A	
Approach Delay (s)		43.3			41.1			6.3			4.7	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	12	54	44	22	24	30
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.66	0.66	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	18	82	51	26	28	35
Pedestrians	27		79			98
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	2		7			8
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	261	189			104	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	261	189			104	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	89			98	
cM capacity (veh/h)	652	766			1454	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	100	77	63
Volume Left	18	0	28
Volume Right	82	26	0
cSH	742	1700	1454
Volume to Capacity	0.13	0.05	0.02
Queue Length 95th (ft)	12	0	1
Control Delay (s)	10.6	0.0	3.4
Lane LOS	B		A
Approach Delay (s)	10.6	0.0	3.4
Approach LOS	B		

Intersection Summary			
Average Delay	5.3		
Intersection Capacity Utilization	29.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	649	548	28	30	671	255	48	37	21	156	50	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	0.95		0.97	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3502		1770	3539	1583	1770	3352		3433	1863	1583
Flt Permitted	0.12	1.00		0.37	1.00	1.00	0.72	1.00		0.67	1.00	1.00
Satd. Flow (perm)	437	3502		692	3539	1583	1345	3352		2426	1863	1583
Peak-hour factor, PHF	0.93	0.80	0.54	0.50	0.80	0.69	0.67	0.84	0.88	0.67	0.92	0.79
Adj. Flow (vph)	698	685	52	60	839	370	72	44	24	233	54	292
RTOR Reduction (vph)	0	6	0	0	0	245	0	17	0	0	0	0
Lane Group Flow (vph)	698	731	0	60	839	125	72	51	0	233	54	292
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases	6			2		2	4			8		8
Actuated Green, G (s)	51.4	41.9		32.6	28.1	28.1	30.8	26.4		34.0	28.0	46.3
Effective Green, g (s)	52.4	43.5		34.6	29.7	29.7	32.8	28.0		36.0	29.6	48.3
Actuated g/C Ratio	0.52	0.44		0.35	0.30	0.30	0.33	0.28		0.36	0.30	0.48
Clearance Time (s)	5.0	5.6		5.0	5.6	5.6	5.0	5.6		5.0	5.6	5.0
Vehicle Extension (s)	2.0	2.5		1.5	2.5	2.5	0.5	2.0		1.5	2.0	2.0
Lane Grp Cap (vph)	807	1523		298	1051	470	464	938		943	551	764
v/s Ratio Prot	c0.17	0.21		0.01	0.24		0.01	0.02		c0.02	0.03	c0.07
v/s Ratio Perm	c0.29			0.06		0.08	0.04			0.07		0.11
v/c Ratio	0.86	0.48		0.20	0.80	0.27	0.16	0.05		0.25	0.10	0.38
Uniform Delay, d1	26.2	20.2		22.1	32.4	26.8	23.5	26.3		22.0	25.5	16.4
Progression Factor	1.64	0.83		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.4	1.0		0.1	6.3	1.4	0.1	0.1		0.1	0.4	0.1
Delay (s)	51.6	17.8		22.3	38.7	28.2	23.6	26.4		22.0	25.9	16.5
Level of Service	D	B		C	D	C	C	C		C	C	B
Approach Delay (s)		34.2			34.9			25.0			19.6	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	31.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	1	34	34	7	193	15	1068	18	132	434	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.94			0.89		1.00	1.00		1.00	0.99	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1706			1644		1770	3530		1770	3505	
Flt Permitted		0.50			0.94		0.43	1.00		0.18	1.00	
Satd. Flow (perm)		883			1563		805	3530		333	3505	
Peak-hour factor, PHF	0.63	0.63	0.63	0.88	0.88	0.88	0.85	0.85	0.85	0.83	0.83	0.83
Adj. Flow (vph)	67	2	54	39	8	219	18	1256	21	159	523	36
RTOR Reduction (vph)	0	26	0	0	87	0	0	1	0	0	5	0
Lane Group Flow (vph)	0	97	0	0	179	0	18	1276	0	159	554	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		21.0			21.0		76.5	76.5		76.5	76.5	
Effective Green, g (s)		22.0			22.0		78.0	78.0		78.0	78.0	
Actuated g/C Ratio		0.20			0.20		0.72	0.72		0.72	0.72	
Clearance Time (s)		5.0			5.0		5.5	5.5		5.5	5.5	
Vehicle Extension (s)		2.0			2.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		179			318		581	2549		240	2531	
v/s Ratio Prot								0.36			0.16	
v/s Ratio Perm		0.11			c0.11		0.02			c0.48		
v/c Ratio		0.54			0.56		0.03	0.50		0.66	0.22	
Uniform Delay, d1		38.5			38.7		4.3	6.5		8.0	4.9	
Progression Factor		1.00			1.00		1.00	1.00		0.92	0.78	
Incremental Delay, d2		1.8			1.4		0.1	0.7		12.2	0.2	
Delay (s)		40.3			40.0		4.4	7.2		19.6	4.0	
Level of Service		D			D		A	A		B	A	
Approach Delay (s)		40.3			40.0			7.2			7.5	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	10	29	63	18	16	19
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.63	0.63	0.67	0.67	0.63	0.63
Hourly flow rate (vph)	16	46	94	27	25	30
Pedestrians	13		89			124
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	1		7			10
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	290	244			134	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	290	244			134	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	93			98	
cM capacity (veh/h)	630	705			1435	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	62	121	56
Volume Left	16	0	25
Volume Right	46	27	0
cSH	684	1700	1435
Volume to Capacity	0.09	0.07	0.02
Queue Length 95th (ft)	7	0	1
Control Delay (s)	10.8	0.0	3.5
Lane LOS	B		A
Approach Delay (s)	10.8	0.0	3.5
Approach LOS	B		

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	28.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	428	719	68	80	622	182	160	86	56	372	169	487
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	0.95		0.97	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	3490		1770	3539	1583	1770	3331		3433	1863	1583
Flt Permitted	0.24	1.00		0.30	1.00	1.00	0.48	1.00		0.60	1.00	1.00
Satd. Flow (perm)	850	3490		560	3539	1583	898	3331		2160	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.85	0.80	0.89	0.90	0.96	0.82	0.82	0.85	0.87	0.92
Adj. Flow (vph)	465	782	80	100	699	202	167	105	68	438	194	529
RTOR Reduction (vph)	0	6	0	0	0	120	0	53	0	0	0	0
Lane Group Flow (vph)	465	856	0	100	699	82	167	120	0	438	194	529
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases	6			2		2	4			8		8
Actuated Green, G (s)	68.8	56.9		50.9	44.0	44.0	34.1	25.0		35.9	25.9	45.7
Effective Green, g (s)	69.8	58.5		52.9	45.6	45.6	36.1	26.6		37.9	27.5	47.7
Actuated g/C Ratio	0.58	0.49		0.44	0.38	0.38	0.30	0.22		0.32	0.23	0.40
Clearance Time (s)	5.0	5.6		5.0	5.6	5.6	5.0	5.6		5.0	5.6	5.0
Vehicle Extension (s)	2.0	2.0		1.5	2.5	2.5	0.5	2.0		1.5	2.0	2.0
Lane Grp Cap (vph)	942	1701		326	1344	601	343	738		798	426	629
v/s Ratio Prot	0.09	c0.25		0.02	0.20		0.04	0.04		c0.05	0.10	c0.15
v/s Ratio Perm	0.20			0.11		0.05	0.11			0.12		0.19
v/c Ratio	0.49	0.50		0.31	0.52	0.14	0.49	0.16		0.55	0.46	0.84
Uniform Delay, d1	14.4	20.9		20.0	28.7	24.3	32.6	37.7		32.4	39.8	32.7
Progression Factor	1.13	0.80		1.00	1.00	1.00	1.00	1.00		0.83	0.86	0.74
Incremental Delay, d2	0.1	1.0		0.2	1.4	0.5	0.4	0.0		0.4	0.3	8.9
Delay (s)	16.4	17.6		20.2	30.2	24.8	33.0	37.7		27.3	34.6	33.1
Level of Service	B	B		C	C	C	C	D		C	C	C
Approach Delay (s)		17.2			28.1			35.4			31.2	
Approach LOS		B			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	1	41	15	2	107	48	661	25	118	969	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.94			0.88		1.00	0.99		1.00	0.99	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1701			1635		1770	3520		1770	3507	
Flt Permitted		0.69			0.96		0.23	1.00		0.36	1.00	
Satd. Flow (perm)		1201			1578		423	3520		671	3507	
Peak-hour factor, PHF	0.75	0.75	0.75	0.93	0.93	0.93	0.95	0.95	0.95	0.93	0.93	0.93
Adj. Flow (vph)	63	1	55	16	2	115	51	696	26	127	1042	68
RTOR Reduction (vph)	0	26	0	0	94	0	0	2	0	0	4	0
Lane Group Flow (vph)	0	93	0	0	39	0	51	720	0	127	1106	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		21.0			21.0		88.5	88.5		88.5	88.5	
Effective Green, g (s)		22.0			22.0		90.0	90.0		90.0	90.0	
Actuated g/C Ratio		0.18			0.18		0.75	0.75		0.75	0.75	
Clearance Time (s)		5.0			5.0		5.5	5.5		5.5	5.5	
Vehicle Extension (s)		2.0			2.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		220			289		317	2640		503	2630	
v/s Ratio Prot								0.20			c0.32	
v/s Ratio Perm		c0.08			0.02		0.12			0.19		
v/c Ratio		0.42			0.14		0.16	0.27		0.25	0.42	
Uniform Delay, d1		43.4			41.0		4.3	4.7		4.6	5.5	
Progression Factor		1.00			1.00		1.27	1.28		0.77	0.78	
Incremental Delay, d2		0.5			0.1		1.0	0.2		1.1	0.5	
Delay (s)		43.9			41.1		6.4	6.3		4.6	4.7	
Level of Service		D			D		A	A		A	A	
Approach Delay (s)		43.9			41.1			6.3			4.7	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	13	55	44	24	27	30
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.66	0.66	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	20	83	51	28	31	35
Pedestrians	27		79			98
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	2		7			8
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	269	190			106	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	269	190			106	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	89			98	
cM capacity (veh/h)	644	765			1452	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	103	79	66
Volume Left	20	0	31
Volume Right	83	28	0
cSH	738	1700	1452
Volume to Capacity	0.14	0.05	0.02
Queue Length 95th (ft)	12	0	2
Control Delay (s)	10.7	0.0	3.7
Lane LOS	B		A
Approach Delay (s)	10.7	0.0	3.7
Approach LOS	B		

Intersection Summary			
Average Delay	5.4		
Intersection Capacity Utilization	29.6%	ICU Level of Service	A
Analysis Period (min)	15		

COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: FRONTAGE RD
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : FRONAURO
Site Code : 00000013
Start Date : 2/3/2016
Page No : 1

Groups Printed- VEHICLES

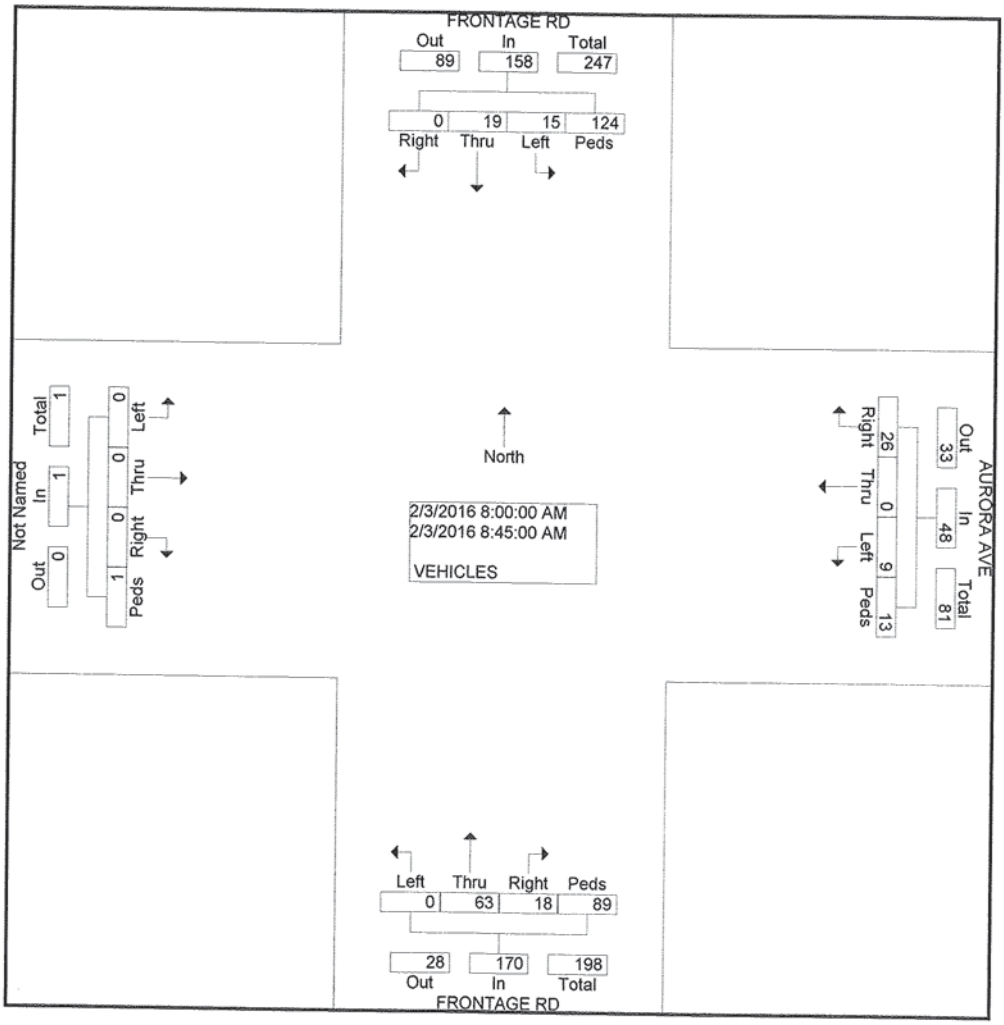
	FRONTAGE RD Southbound				AURORA AVE Westbound				FRONTAGE RD Northbound				Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	2	5	0	4	1	0	2	0	0	5	1	0	0	0	0	0	20
07:15 AM	3	1	0	5	1	0	2	3	0	4	0	6	0	0	0	0	25
07:30 AM	1	3	0	15	0	0	2	1	0	3	0	12	0	0	0	0	37
07:45 AM	0	6	0	30	0	0	3	3	0	8	6	19	0	0	0	0	75
Total	6	15	0	54	2	0	9	7	0	20	7	37	0	0	0	0	157
08:00 AM	3	4	0	20	1	0	3	3	0	10	6	6	0	0	0	1	57
08:15 AM	3	6	0	15	1	0	3	0	0	12	2	15	0	0	0	0	57
08:30 AM	5	6	0	51	2	0	11	5	0	18	4	41	0	0	0	0	143
08:45 AM	4	3	0	38	5	0	9	5	0	23	6	27	0	0	0	0	120
Total	15	19	0	124	9	0	26	13	0	63	18	89	0	0	0	1	377
04:00 PM	9	8	0	32	4	0	10	4	0	4	4	26	0	0	0	0	101
04:15 PM	11	8	0	29	1	0	9	4	0	11	5	12	0	0	0	0	90
04:30 PM	5	11	0	26	7	0	7	2	0	13	8	20	0	0	0	0	99
04:45 PM	5	8	0	21	1	0	16	4	0	6	3	26	0	0	0	0	90
Total	30	35	0	108	13	0	42	14	0	34	20	84	0	0	0	0	380
05:00 PM	10	8	0	26	0	0	10	4	0	15	6	21	0	0	0	0	100
05:15 PM	4	7	0	33	4	0	12	7	0	11	6	15	0	0	0	0	99
05:30 PM	5	7	0	18	7	0	16	12	0	12	7	17	0	0	0	0	101
05:45 PM	12	15	0	27	3	0	12	4	0	18	3	17	0	0	0	0	111
Total	31	37	0	104	14	0	50	27	0	56	22	70	0	0	0	0	411
Grand Total	82	106	0	390	38	0	127	61	0	173	67	280	0	0	0	1	1325
Apprch %	14.2	18.3	0.0	67.5	16.8	0.0	56.2	27.0	0.0	33.3	12.9	53.8	0.0	0.0	0.0	100.0	
Total %	6.2	8.0	0.0	29.4	2.9	0.0	9.6	4.6	0.0	13.1	5.1	21.1	0.0	0.0	0.0	0.1	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: FRONTAGE RD
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : FRONAURO
Site Code : 00000013
Start Date : 2/3/2016
Page No : 2

	FRONTAGE RD Southbound					AURORA AVE Westbound					FRONTAGE RD Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 07:00 AM to 09:00 AM - Peak 1 of 1																					
Intersection	08:00 AM																				
Volume	15	19	0	124	158	9	0	26	13	48	0	63	18	89	170	0	0	0	1	1	377
Percent	9.5	12.0	0.0	78.5		18.8	0.0	54.2	27.1		0.0	37.1	10.6	52.4		0.0	0.0	0.0	100.0		
08:30 Volume	5	6	0	51	62	2	0	11	5	18	0	18	4	41	63	0	0	0	0	0	143
Peak Factor																					0.659
High Int.	08:30 AM					08:45 AM					08:30 AM					08:00 AM					
Volume	5	6	0	51	62	5	0	9	5	19	0	18	4	41	63	0	0	0	1	1	
Peak Factor					0.637					0.632					0.675					0.250	

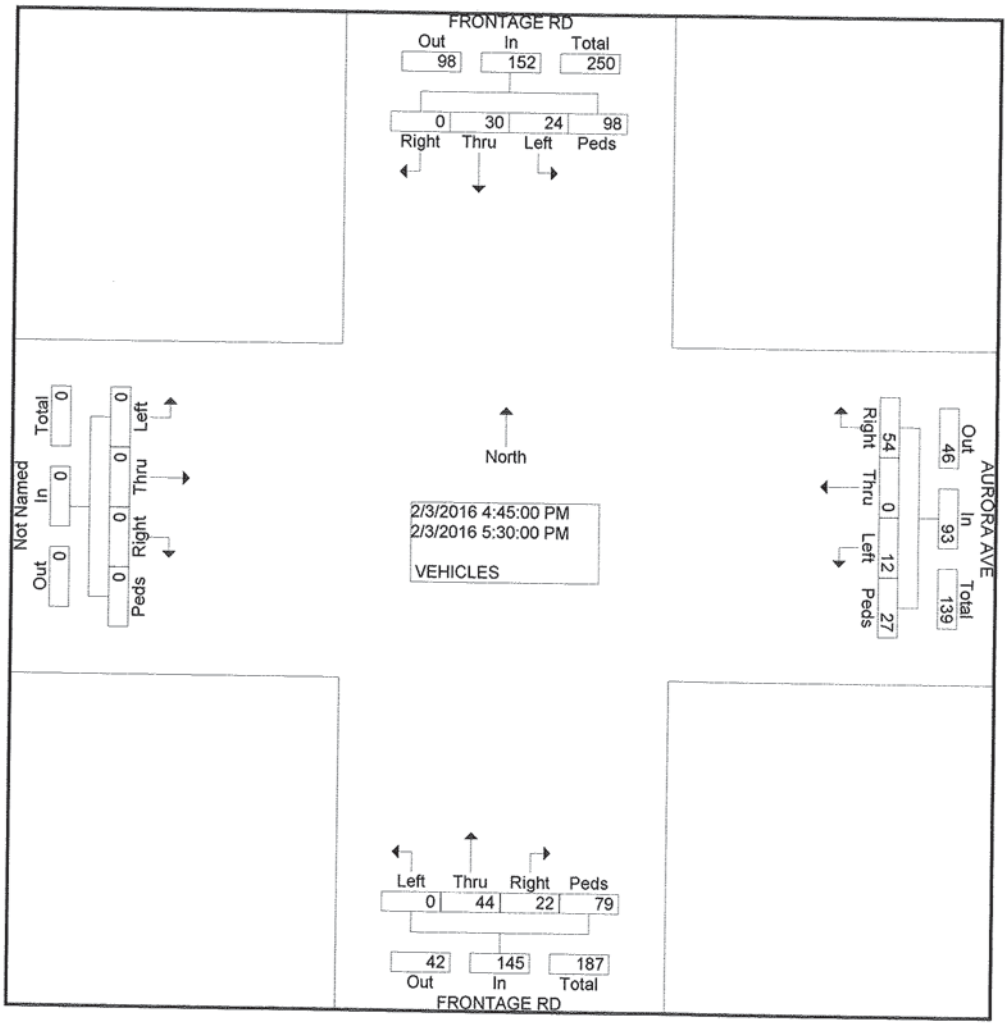


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: FRONTAGE RD
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : FRONAURO
Site Code : 00000013
Start Date : 2/3/2016
Page No : 2

	FRONTAGE RD Southbound					AURORA AVE Westbound					FRONTAGE RD Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:45 PM to 05:30 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	24	30	0	98	152	12	0	54	27	93	0	44	22	79	145	0	0	0	0	0	390
Percent	15.8	19.7	0.0	64.5		12.9	0.0	58.1	29.0		0.0	30.3	15.2	54.5		0.0	0.0	0.0	0.0		
05:30 Volume	5	7	0	18	30	7	0	16	12	35	0	12	7	17	36	0	0	0	0	0	101
Peak Factor																					0.965
High Int.	05:00 PM					05:30 PM					05:00 PM										
Volume	10	8	0	26	44	7	0	16	12	35	0	15	6	21	42						
Peak Factor					0.864					0.664					0.863						



COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CAVALIER ACCESS #1
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : CAVAAURA
Site Code : 00000005
Start Date : 2/3/2016
Page No : 1

Groups Printed- CAVALIER ACCESS #1

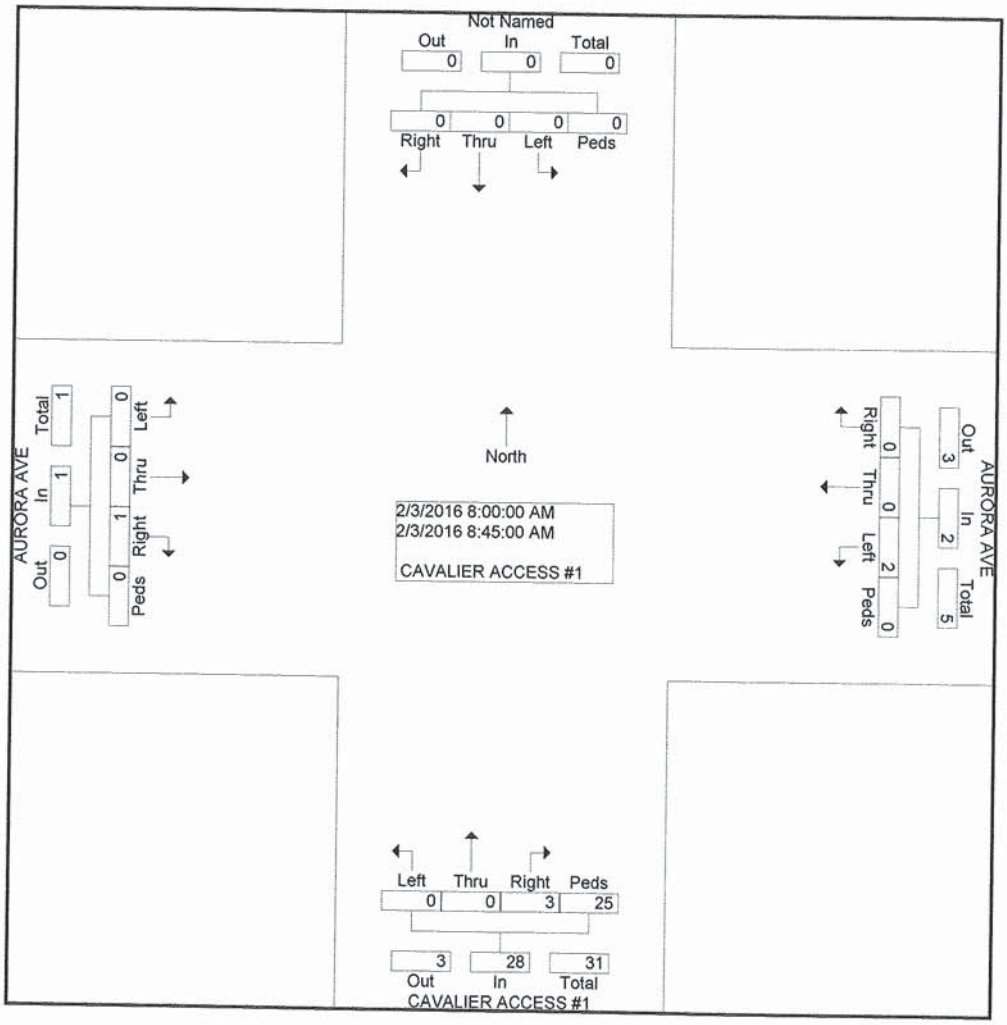
	Southbound				AURORA AVE Westbound				CAVALIER ACCESS #1 Northbound				AURORA AVE Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
Total	0	0	0	0	0	0	0	0	1	0	4	5	0	0	0	0	10
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	10	0	0	1	0	11
08:30 AM	0	0	0	0	2	0	0	0	0	0	3	9	0	0	0	0	14
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
Total	0	0	0	0	2	0	0	0	0	0	3	25	0	0	1	0	31
04:00 PM	0	0	0	0	1	0	0	0	2	0	0	2	0	0	0	0	5
04:15 PM	0	0	0	0	0	0	0	0	1	0	0	2	0	0	1	0	4
04:30 PM	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
Total	0	0	0	0	2	0	0	0	3	0	0	10	0	0	1	0	16
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	1	8	0	0	0	0	9
05:30 PM	0	0	0	0	2	0	0	0	0	0	0	5	0	0	0	0	7
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
Total	0	0	0	0	2	0	0	0	0	0	1	19	0	0	0	0	22
Grand Total	0	0	0	0	6	0	0	0	4	0	8	59	0	0	2	0	79
Apprch %	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	5.6	0.0	11.3	83.1	0.0	0.0	100.0	0.0	
Total %	0.0	0.0	0.0	0.0	7.6	0.0	0.0	0.0	5.1	0.0	10.1	74.7	0.0	0.0	2.5	0.0	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CAVALIER ACCESS #1
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : CAVAAURA
Site Code : 00000005
Start Date : 2/3/2016
Page No : 2

	Southbound					AURORA AVE Westbound					CAVALIER ACCESS #1 Northbound					AURORA AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 08:00 AM to 08:45 AM - Peak 1 of 1																					
Intersection	08:00 AM																				
Volume	0	0	0	0	0	2	0	0	0	2	0	0	3	25	28	0	0	1	0	1	31
Percent	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	10.7	89.3		0.0	0.0	100.0	0.0		
08:30 Volume	0	0	0	0	0	2	0	0	0	2	0	0	3	9	12	0	0	0	0	0	14
Peak Factor																					0.554
High Int.						08:30 AM					08:30 AM					08:15 AM					
Volume	0	0	0	0	0	2	0	0	0	2	0	0	3	9	12	0	0	1	0	1	
Peak Factor										0.250					0.583					0.250	

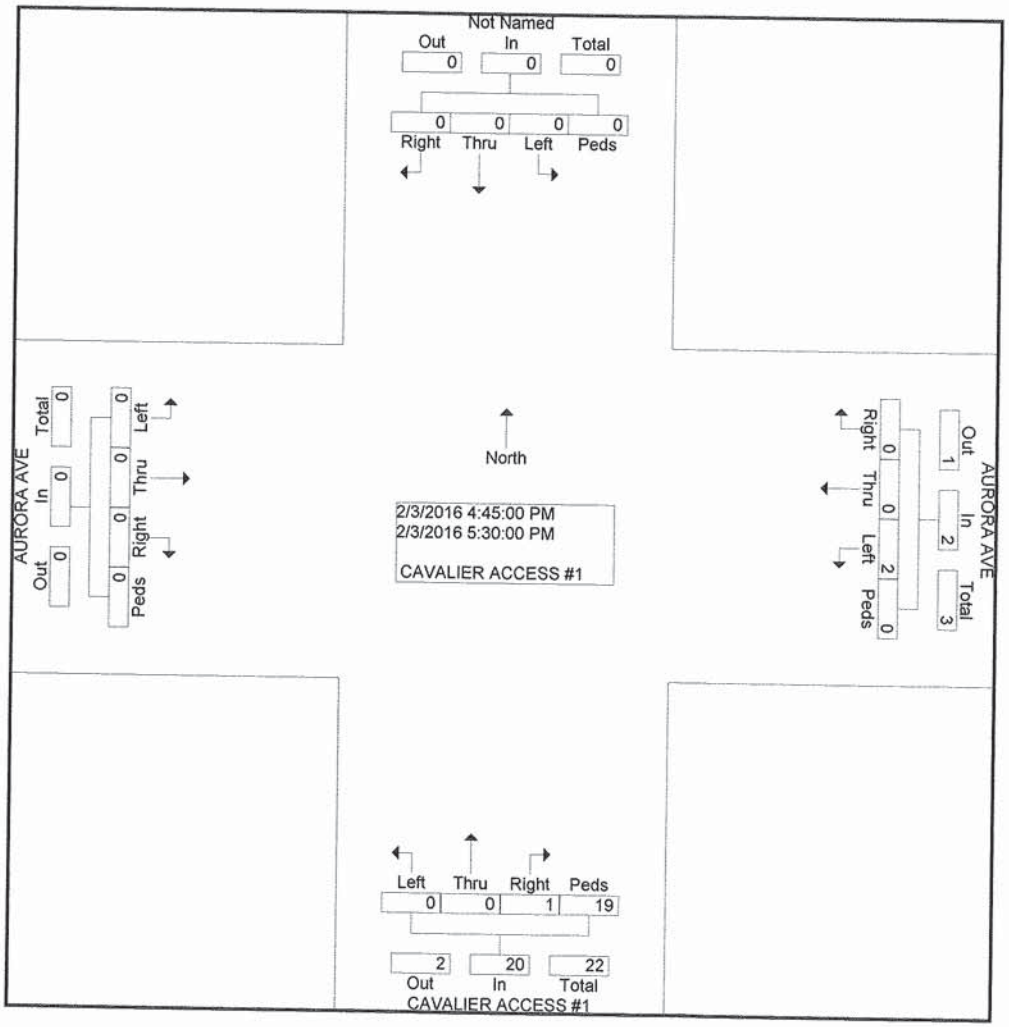


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CAVALIER ACCESS #1
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : CAVAAURA
Site Code : 00000005
Start Date : 2/3/2016
Page No : 2

	Southbound					AURORA AVE Westbound					CAVALIER ACCESS #1 Northbound					AURORA AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	0	0	0	0	0	2	0	0	0	2	0	0	1	19	20	0	0	0	0	0	22
Percent	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	5.0	95.0		0.0	0.0	0.0	0.0		
05:15 Volume	0	0	0	0	0	0	0	0	0	0	0	0	1	8	9	0	0	0	0	0	9
Peak Factor																					0.611
High Int. Volume	0	0	0	0	0	05:30 PM 2	0	0	0	2	05:15 PM 0	0	1	8	9						
Peak Factor										0.250					0.556						



COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CAVALIER ACCESS #2
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : CAVAAURA
Site Code : 00000005
Start Date : 2/3/2016
Page No : 1

Groups Printed- CAVALIER ACCESS #2

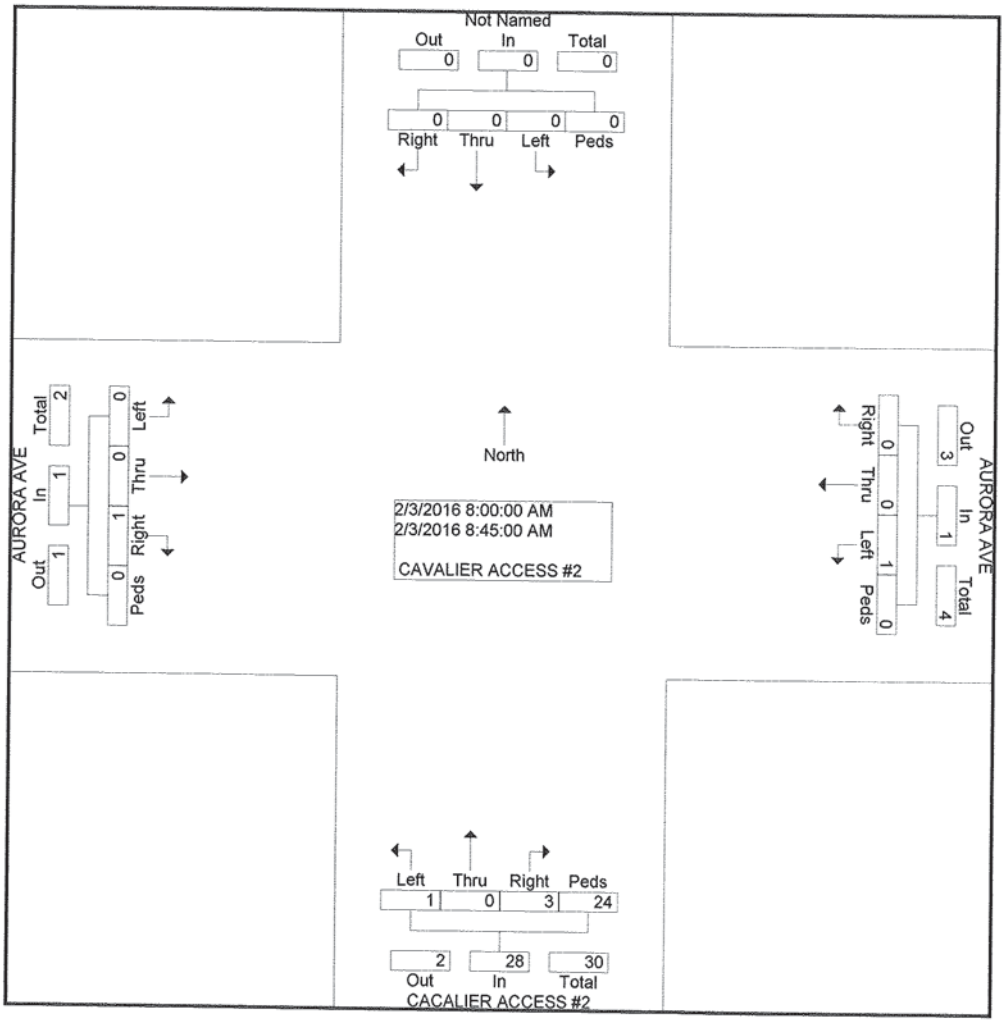
	Southbound				AURORA AVE Westbound				CACALIER ACCESS #2 Northbound				AURORA AVE Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	1	8	0	0	0	0	9
Total	0	0	0	0	0	0	0	0	0	0	3	9	0	0	1	0	13
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	3
08:15 AM	0	0	0	0	1	0	0	0	0	0	1	10	0	0	0	0	12
08:30 AM	0	0	0	0	0	0	0	0	1	0	1	9	0	0	1	0	12
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
Total	0	0	0	0	1	0	0	0	1	0	3	24	0	0	1	0	30
04:00 PM	0	0	0	0	2	0	0	0	1	0	2	3	0	0	0	0	8
04:15 PM	0	0	0	0	2	0	0	0	0	0	1	3	0	0	0	0	6
04:30 PM	0	0	0	0	1	0	0	0	0	0	1	2	0	0	0	0	4
04:45 PM	0	0	0	0	1	0	0	0	0	0	2	4	0	0	0	0	7
Total	0	0	0	0	6	0	0	0	1	0	6	12	0	0	0	0	25
05:00 PM	0	0	0	0	1	0	0	0	0	0	1	2	0	0	1	0	5
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	7	0	0	1	0	8
05:30 PM	0	0	0	0	1	0	0	0	0	0	0	5	0	0	0	0	6
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	2	0	6
Total	0	0	0	0	2	0	0	0	0	0	1	18	0	0	4	0	25
Grand Total	0	0	0	0	9	0	0	0	2	0	13	63	0	0	6	0	93
Apprch %	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	2.6	0.0	16.7	80.8	0.0	0.0	100.0	0.0	
Total %	0.0	0.0	0.0	0.0	9.7	0.0	0.0	0.0	2.2	0.0	14.0	67.7	0.0	0.0	6.5	0.0	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CAVALIER ACCESS #2
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : CAVAAURA
Site Code : 00000005
Start Date : 2/3/2016
Page No : 2

	Southbound					AURORA AVE Westbound					CACALIER ACCESS #2 Northbound					AURORA AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 08:00 AM to 08:45 AM - Peak 1 of 1																					
Intersection	08:00 AM																				
Volume	0	0	0	0	0	1	0	0	0	1	1	0	3	24	28	0	0	1	0	1	30
Percent	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		3.6	0.0	10.7	85.7		0.0	0.0	100.0	0.0		
08:30 Volume	0	0	0	0	0	0	0	0	0	0	1	0	1	9	11	0	0	1	0	1	12
Peak Factor																					0.625
High Int.						08:15 AM					08:15 AM					08:30 AM					
Volume	0	0	0	0	0	1	0	0	0	1	0	0	1	10	11	0	0	1	0	1	
Peak Factor										0.250					0.636					0.250	

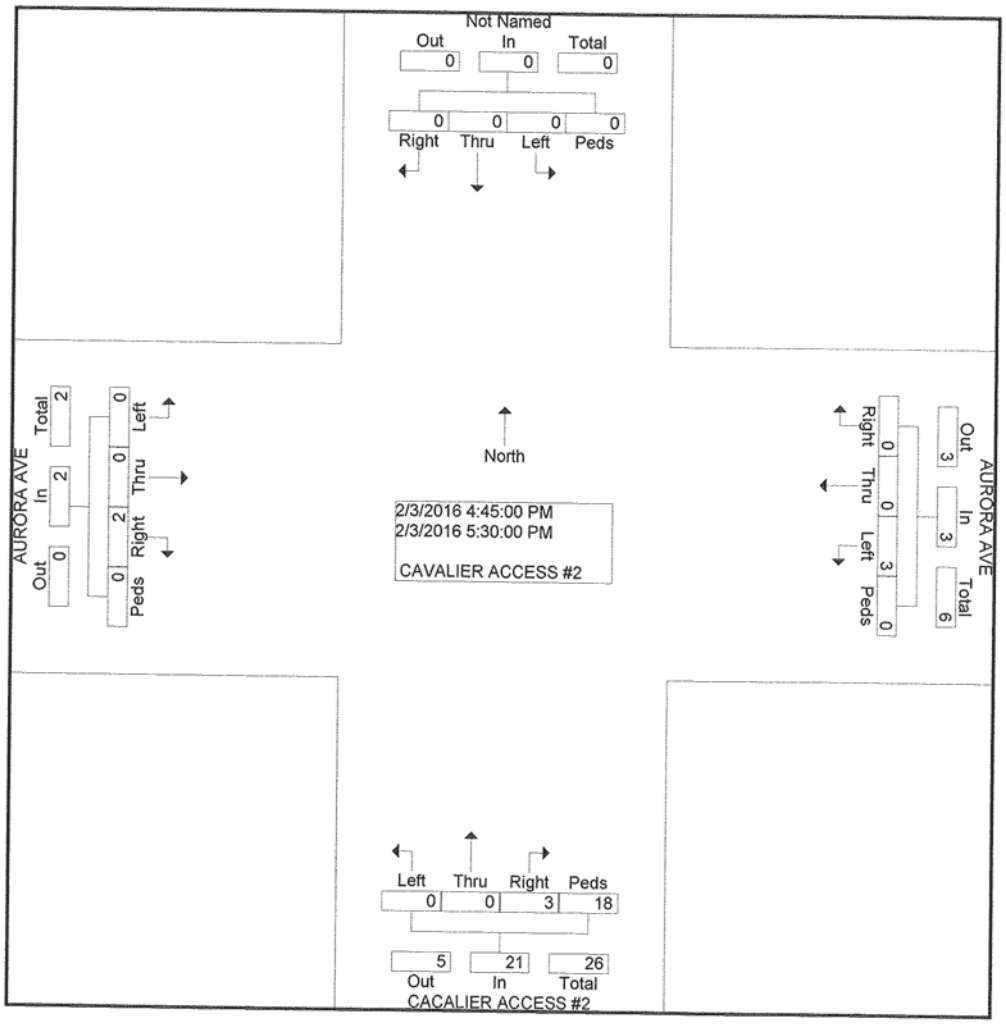


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CAVALIER ACCESS #2
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : CAVAAURA
Site Code : 00000005
Start Date : 2/3/2016
Page No : 2

	Southbound					AURORA AVE Westbound					CACALIER ACCESS #2 Northbound					AURORA AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	0	0	0	0	0	3	0	0	0	3	0	0	3	18	21	0	0	2	0	2	26
Percent	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	14.3	85.7		0.0	0.0	100.0	0.0		
05:15 Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0	1	0	1	8
Peak Factor																					0.813
High Int.						04:45 PM					05:15 PM					05:00 PM					
Volume	0	0	0	0	0	1	0	0	0	1	0	0	0	7	7	0	0	1	0	1	
Peak Factor										0.750					0.750					0.500	



COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CAVALIER ACCESS #3
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : CAVAAURA
Site Code : 00000005
Start Date : 2/3/2016
Page No : 1

Groups Printed- CAVALIER ACCESS #3

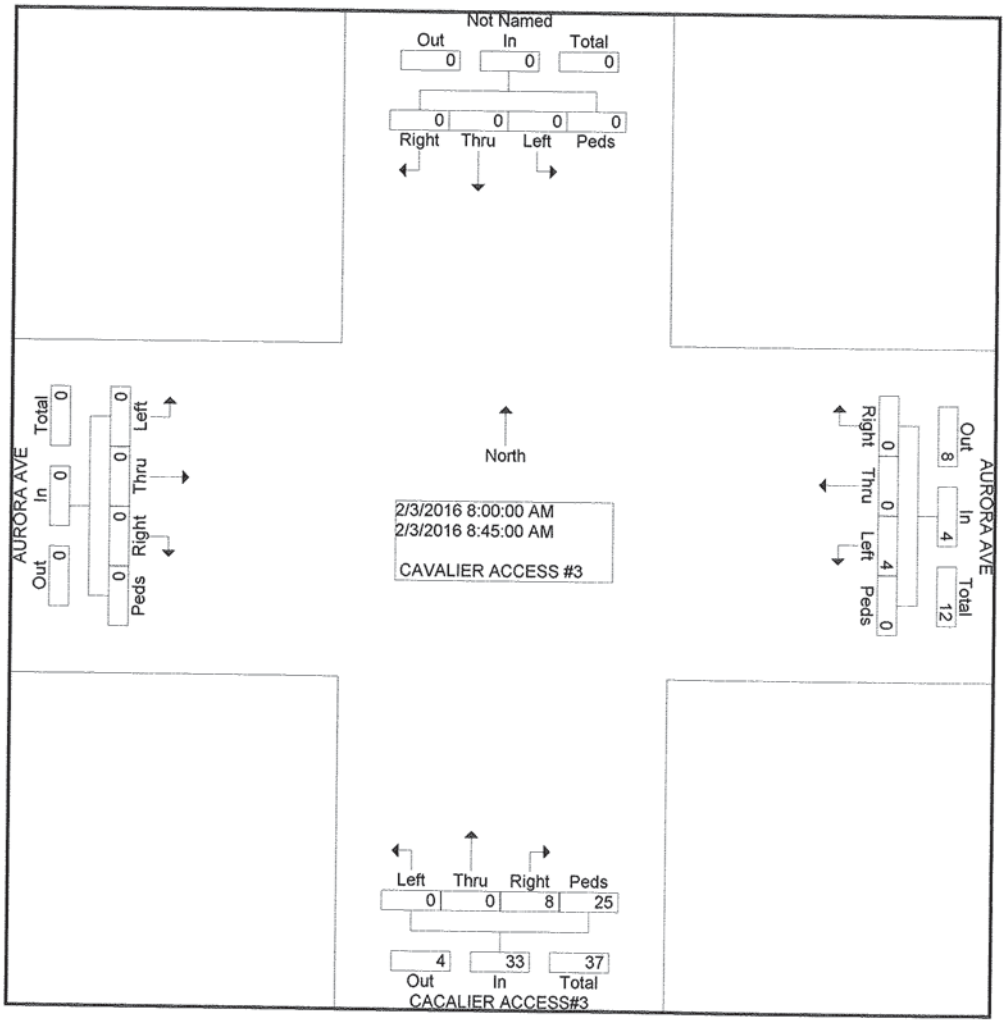
	Southbound				AURORA AVE Westbound				CACALIER ACCESS#3 Northbound				AURORA AVE Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
07:30 AM	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5
Total	0	0	0	0	1	0	0	0	0	0	1	6	0	0	0	0	8
08:00 AM	0	0	0	0	1	0	0	0	0	0	3	2	0	0	0	0	6
08:15 AM	0	0	0	0	0	0	0	0	0	0	2	9	0	0	0	0	11
08:30 AM	0	0	0	0	3	0	0	0	0	0	1	10	0	0	0	0	14
08:45 AM	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0	0	6
Total	0	0	0	0	4	0	0	0	0	0	8	25	0	0	0	0	37
04:00 PM	0	0	0	0	2	0	0	0	1	0	0	4	0	0	0	0	7
04:15 PM	0	0	0	0	3	0	0	0	0	0	1	4	0	0	1	0	9
04:30 PM	0	0	0	0	1	0	0	0	0	0	0	2	0	0	1	0	4
04:45 PM	0	0	0	0	1	0	0	0	0	0	2	4	0	0	0	0	7
Total	0	0	0	0	7	0	0	0	1	0	3	14	0	0	2	0	27
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	1	6	0	0	0	0	7
05:30 PM	0	0	0	0	0	0	0	0	0	0	2	4	0	0	1	0	7
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6
Total	0	0	0	0	0	0	0	0	0	0	3	19	0	0	2	0	24
Grand Total	0	0	0	0	12	0	0	0	1	0	15	64	0	0	4	0	96
Apprch %	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	1.3	0.0	18.8	80.0	0.0	0.0	100.0	0.0	
Total %	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0	1.0	0.0	15.6	66.7	0.0	0.0	4.2	0.0	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CAVALIER ACCESS #3
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : CAVAAURA
Site Code : 00000005
Start Date : 2/3/2016
Page No : 2

	Southbound					AURORA AVE Westbound					CACALIER ACCESS#3 Northbound					AURORA AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 08:00 AM to 08:45 AM - Peak 1 of 1																					
Intersection	08:00 AM																				
Volume	0	0	0	0	0	4	0	0	0	4	0	0	8	25	33	0	0	0	0	0	37
Percent	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	24.2	75.8		0.0	0.0	0.0	0.0		
08:30 Volume	0	0	0	0	0	3	0	0	0	3	0	0	1	10	11	0	0	0	0	0	14
Peak Factor																					0.661
High Int. Volume	0	0	0	0	0	08:30 AM 3	0	0	0	3	08:15 AM 0	0	2	9	11						
Peak Factor										0.333					0.750						

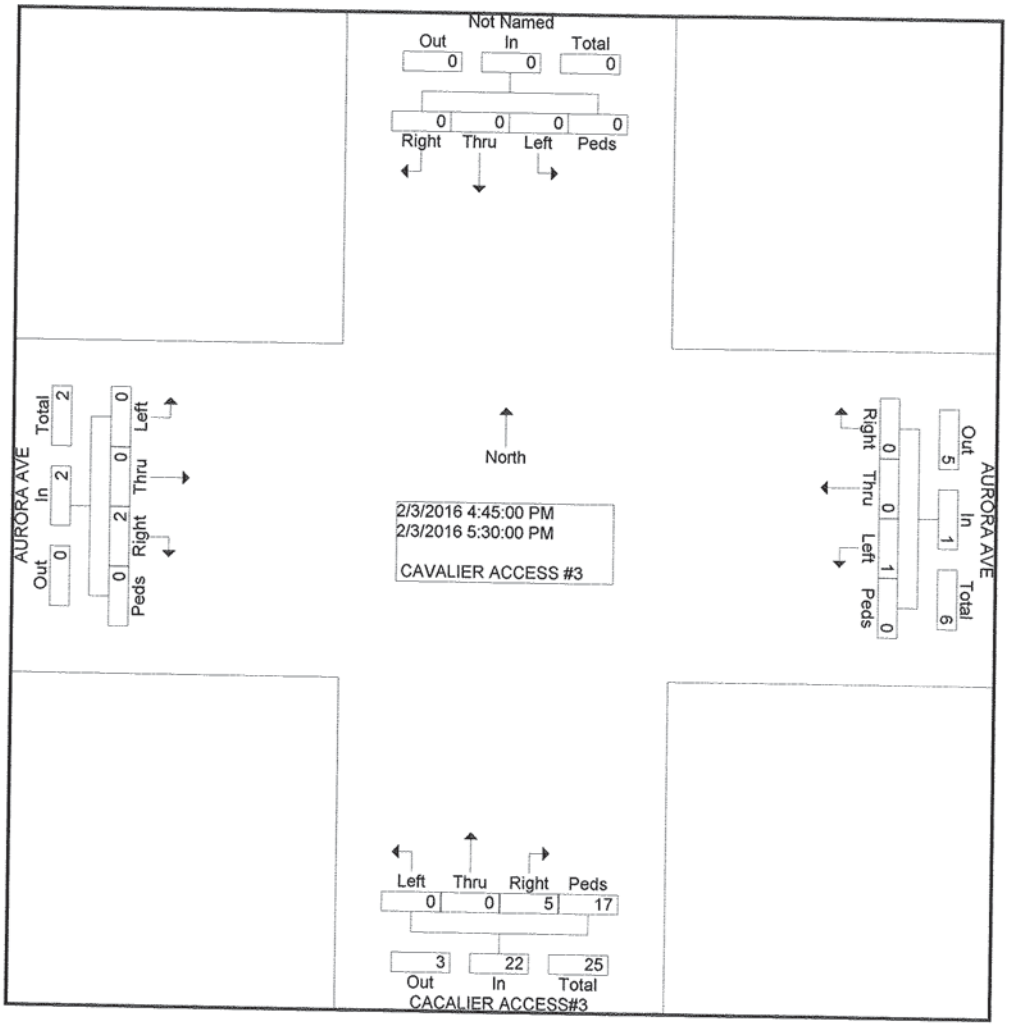


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CAVALIER ACCESS #3
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : CAVAAURA
Site Code : 00000005
Start Date : 2/3/2016
Page No : 2

	Southbound					AURORA AVE Westbound					CACALIER ACCESS#3 Northbound					AURORA AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:45 PM to 05:30 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	0	0	0	0	0	1	0	0	0	1	0	0	5	17	22	0	0	2	0	2	25
Percent	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	22.7	77.3		0.0	0.0	100.0	0.0		
05:30 Volume	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	0	0	1	0	1	7
Peak Factor																					0.893
High Int.						04:45 PM					05:15 PM					05:00 PM					
Volume	0	0	0	0	0	1	0	0	0	1	0	0	1	6	7	0	0	1	0	1	
Peak Factor										0.250					0.786					0.500	



COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CAVALIER ACCESS #4
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : CAVAAURA4-5
Site Code : 00000002
Start Date : 2/3/2016
Page No : 1

Groups Printed- CAVALIER ACCESS #4

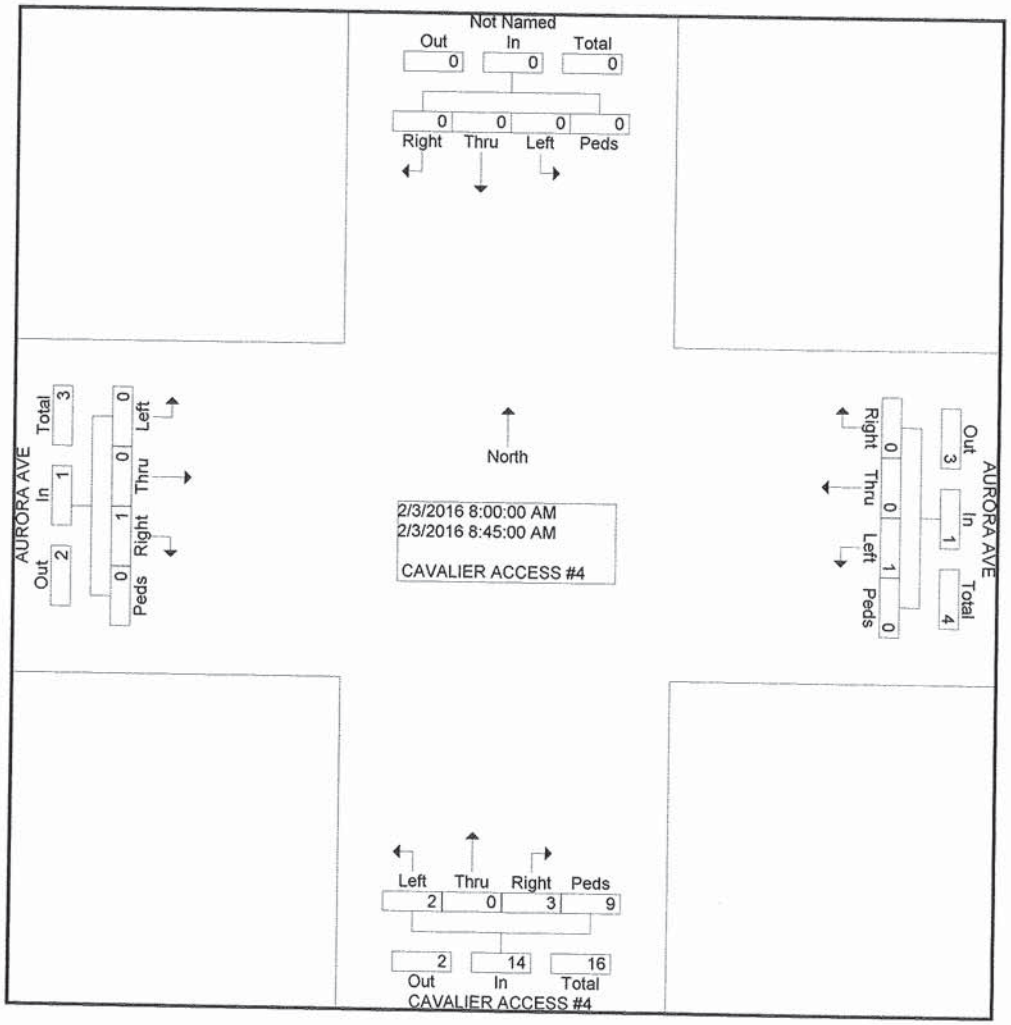
	Southbound				AURORA AVE Westbound				CAVALIER ACCESS #4 Northbound				AURORA AVE Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
Total	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
08:30 AM	0	0	0	0	1	0	0	0	0	0	1	2	0	0	0	0	4
08:45 AM	0	0	0	0	0	0	0	0	2	0	1	7	0	0	0	0	10
Total	0	0	0	0	1	0	0	0	2	0	3	9	0	0	1	0	16
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8
Total	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8
04:00 PM	0	0	0	0	0	0	0	2	1	0	1	5	0	0	1	0	10
04:15 PM	0	0	0	0	0	0	0	3	0	0	0	5	0	0	0	4	12
04:30 PM	0	0	0	0	3	0	0	1	0	0	2	1	0	0	0	0	7
04:45 PM	0	0	0	0	0	0	0	0	2	0	0	6	0	0	1	0	9
Total	0	0	0	0	3	0	0	6	3	0	3	17	0	0	2	4	38
05:00 PM	0	0	0	0	0	0	0	0	1	0	1	7	0	0	0	2	11
05:15 PM	0	0	0	0	0	0	0	1	0	0	0	8	0	0	0	0	9
05:30 PM	0	0	0	0	1	0	0	1	0	0	0	3	0	0	0	0	5
05:45 PM	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	3
Total	0	0	0	0	1	0	0	4	1	0	1	19	0	0	0	2	28
Grand Total	0	0	0	0	5	0	0	10	6	0	7	59	0	0	3	6	96
Apprch %	0.0	0.0	0.0	0.0	33.3	0.0	0.0	66.7	8.3	0.0	9.7	81.9	0.0	0.0	33.3	66.7	
Total %	0.0	0.0	0.0	0.0	5.2	0.0	0.0	10.4	6.3	0.0	7.3	61.5	0.0	0.0	3.1	6.3	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CAVALIER ACCESS #4
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : CAVAAURA4-5
Site Code : 00000002
Start Date : 2/3/2016
Page No : 2

	Southbound					AURORA AVE Westbound					CAVALIER ACCESS #4 Northbound					AURORA AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 08:00 AM to 08:45 AM - Peak 1 of 1																					
Intersection	08:00 AM																				
Volume	0	0	0	0	0	1	0	0	0	1	2	0	3	9	14	0	0	1	0	1	16
Percent	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		14.3	0.0	21.4	64.3		0.0	0.0	100.0	0.0		
08:45 Volume	0	0	0	0	0	0	0	0	0	0	2	0	1	7	10	0	0	0	0	0	10
Peak Factor																					0.400
High Int. Volume	0	0	0	0	0	08:30 AM 1	0	0	0	1	08:45 AM 2	0	1	7	10	08:00 AM 0	0	1	0	1	
Peak Factor										0.250					0.350					0.250	

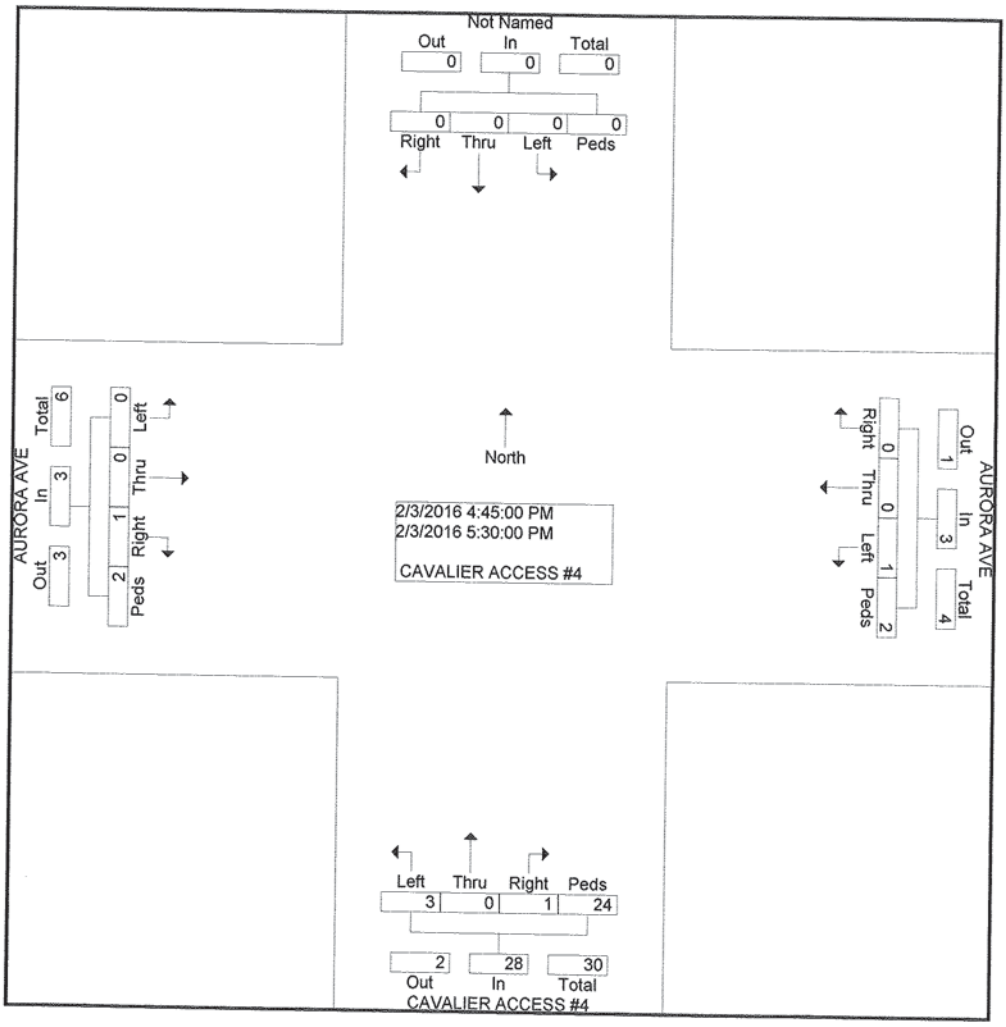


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CAVALIER ACCESS #4
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : CAVAAURA4-5
Site Code : 00000002
Start Date : 2/3/2016
Page No : 2

	Southbound					AURORA AVE Westbound					CAVALIER ACCESS #4 Northbound					AURORA AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:45 PM to 05:30 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	0	0	0	0	0	1	0	0	2	3	3	0	1	24	28	0	0	1	2	3	34
Percent	0.0	0.0	0.0	0.0		33.3	0.0	0.0	66.7		10.7	0.0	3.6	85.7		0.0	0.0	33.3	66.7		
05:00 Volume	0	0	0	0	0	0	0	0	0	0	1	0	1	7	9	0	0	0	2	2	11
Peak Factor																					0.773
High Int.						05:30 PM					05:00 PM					05:00 PM					
Volume	0	0	0	0	0	1	0	0	1	2	1	0	1	7	9	0	0	0	2	2	
Peak Factor										0.375					0.778					0.375	



COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CAVALIER ACCESS #5
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : CAVAAURA4-5
Site Code : 00000002
Start Date : 2/3/2016
Page No : 1

Groups Printed- CAVALIER ACCESS #5

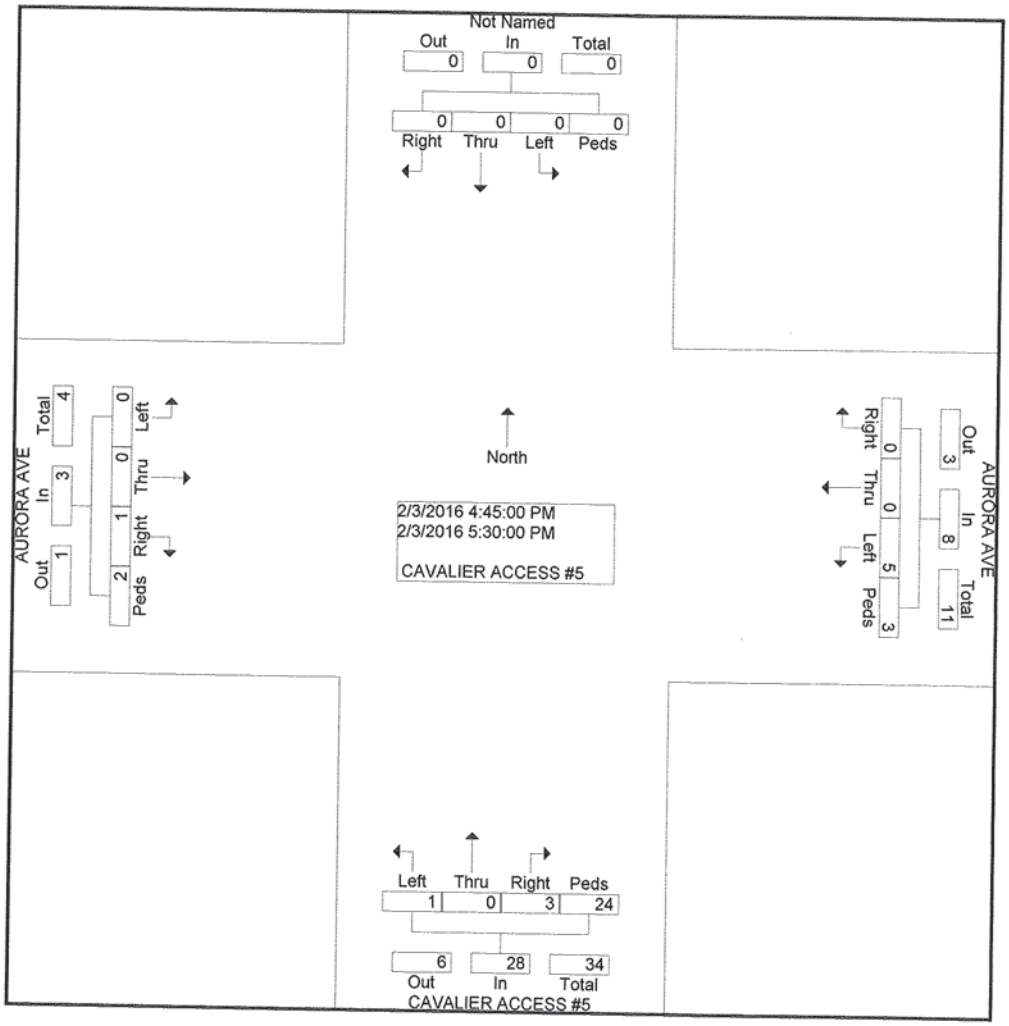
	Southbound				AURORA AVE Westbound				CAVALIER ACCESS #5 Northbound				AURORA AVE Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
07:30 AM	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	1	0	1	5	0	0	0	0	7
Total	0	0	0	0	1	0	0	0	1	0	2	6	0	0	0	0	10
08:00 AM	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	3
08:30 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	4
08:45 AM	0	0	0	0	2	0	0	0	1	0	0	7	0	0	0	0	10
Total	0	0	0	0	2	0	0	0	2	0	4	9	0	0	0	0	17
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5
04:15 PM	0	0	0	0	1	0	0	0	0	0	3	6	0	0	0	1	11
04:30 PM	0	0	0	0	2	0	0	1	0	0	3	3	0	0	0	0	9
04:45 PM	0	0	0	0	2	0	0	0	0	0	1	8	0	0	0	0	11
Total	0	0	0	0	5	0	0	1	0	0	7	22	0	0	0	1	36
05:00 PM	0	0	0	0	0	0	0	3	0	0	1	4	0	0	1	0	9
05:15 PM	0	0	0	0	1	0	0	0	0	0	1	9	0	0	0	1	12
05:30 PM	0	0	0	0	2	0	0	0	1	0	0	3	0	0	0	1	7
05:45 PM	0	0	0	0	4	0	0	0	0	0	0	1	0	0	0	0	5
Total	0	0	0	0	7	0	0	3	1	0	2	17	0	0	1	2	33
Grand Total	0	0	0	0	15	0	0	4	4	0	15	64	0	0	1	3	106
Apprch %	0.0	0.0	0.0	0.0	78.9	0.0	0.0	21.1	4.8	0.0	18.1	77.1	0.0	0.0	25.0	75.0	
Total %	0.0	0.0	0.0	0.0	14.2	0.0	0.0	3.8	3.8	0.0	14.2	60.4	0.0	0.0	0.9	2.8	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CAVALIER ACCESS #5
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : CAVAAURA4-5
Site Code : 00000002
Start Date : 2/3/2016
Page No : 2

	Southbound					AURORA AVE Westbound					CAVALIER ACCESS #5 Northbound					AURORA AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:45 PM to 05:30 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	0	0	0	0	0	5	0	0	3	8	1	0	3	24	28	0	0	1	2	3	39
Percent	0.0	0.0	0.0	0.0		62.5	0.0	0.0	37.5		3.6	0.0	10.7	85.7		0.0	0.0	33.3	66.7		
05:15 Volume	0	0	0	0	0	1	0	0	0	1	0	0	1	9	10	0	0	0	1	1	12
Peak Factor																					0.813
High Int.						05:00 PM					05:15 PM					05:00 PM					
Volume	0	0	0	0	0	0	0	0	3	3	0	0	1	9	10	0	0	1	0	1	
Peak Factor										0.667					0.700					0.750	

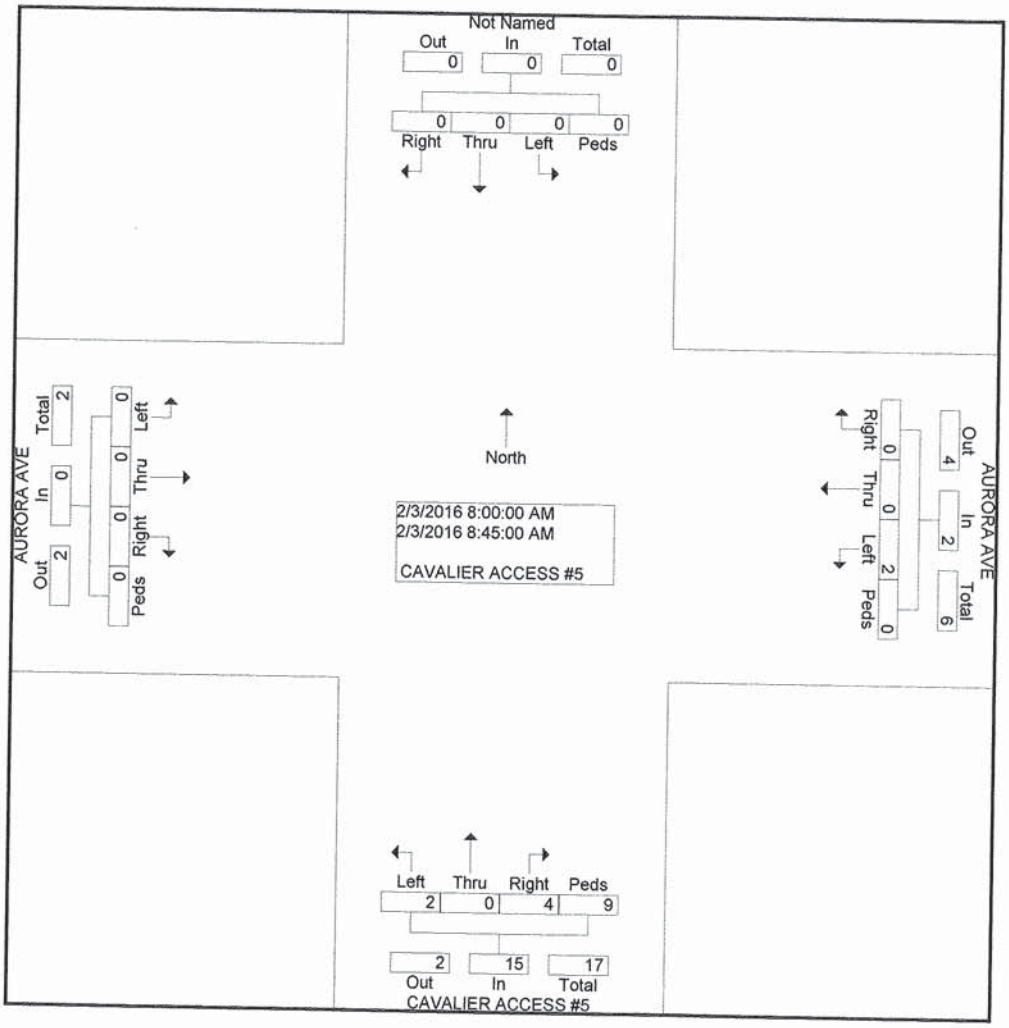


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: CAVALIER ACCESS #5
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : CAVAAURA4-5
Site Code : 00000002
Start Date : 2/3/2016
Page No : 2

	Southbound					AURORA AVE Westbound					CAVALIER ACCESS #5 Northbound					AURORA AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 08:00 AM to 08:45 AM - Peak 1 of 1																					
Intersection	08:00 AM																				
Volume	0	0	0	0	0	2	0	0	0	2	2	0	4	9	15	0	0	0	0	0	17
Percent	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		13.3	0.0	26.7	60.0		0.0	0.0	0.0	0.0		
08:45 Volume	0	0	0	0	0	2	0	0	0	2	1	0	0	7	8	0	0	0	0	0	10
Peak Factor																					0.425
High Int. Volume	0	0	0	0	0	08:45 AM 2	0	0	0	2	08:45 AM 1	0	0	7	8						
Peak Factor										0.250					0.469						



COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: 30TH ST
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : 30THAURO
Site Code : 00000016
Start Date : 2/3/2016
Page No : 1

Groups Printed- VEHICLES

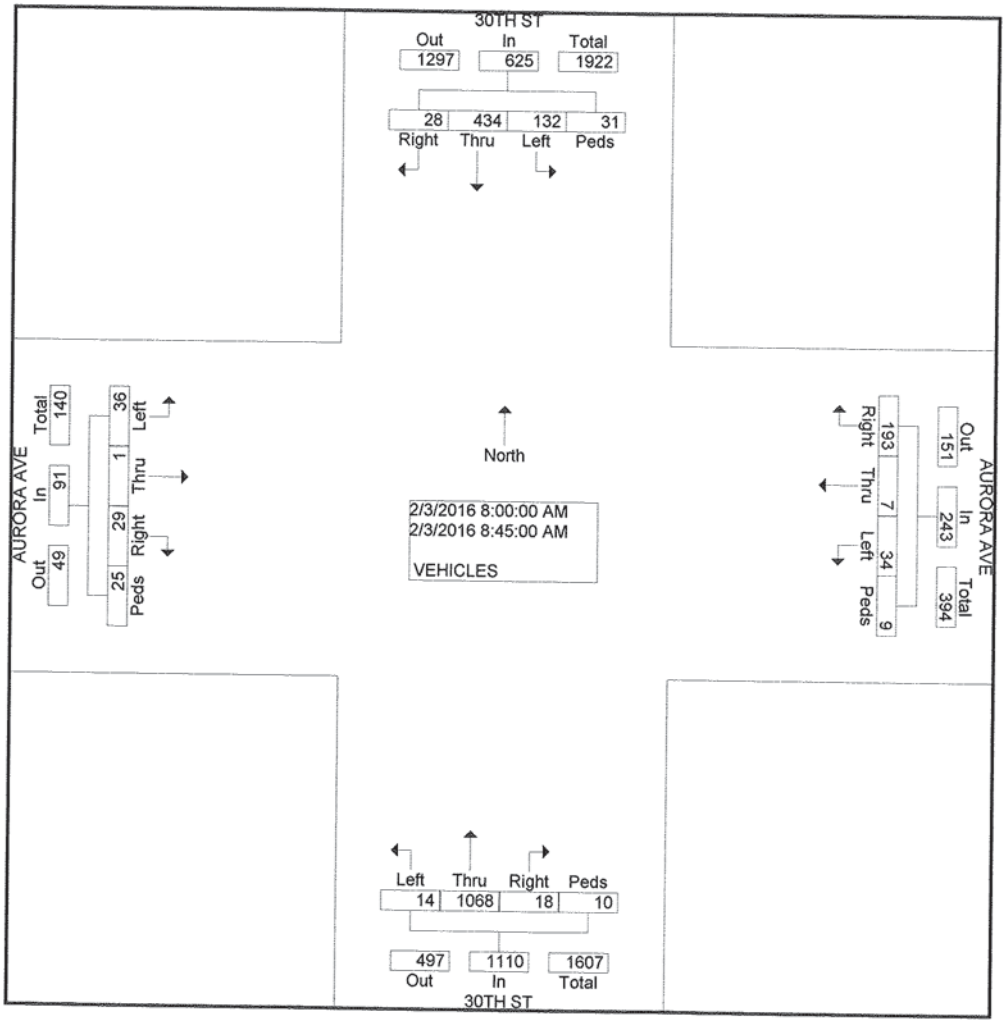
	30TH ST Southbound				AURORA AVE Westbound				30TH ST Northbound				AURORA AVE Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	6	32	3	3	0	0	7	0	2	87	2	1	0	0	3	1	147
07:15 AM	14	53	2	4	3	0	13	0	0	105	2	1	2	0	5	4	208
07:30 AM	21	70	3	6	3	0	18	4	4	140	3	1	4	0	4	5	286
07:45 AM	32	86	1	8	4	1	24	0	3	234	4	1	7	0	5	3	413
Total	73	241	9	21	10	1	62	4	9	566	11	4	13	0	17	13	1054
08:00 AM	50	128	5	5	12	4	39	4	3	242	6	1	9	1	8	6	523
08:15 AM	52	111	8	8	11	2	53	3	1	227	6	3	7	0	6	3	501
08:30 AM	18	115	8	11	8	1	59	1	7	281	3	5	12	0	11	13	553
08:45 AM	12	80	7	7	3	0	42	1	3	318	3	1	8	0	4	3	492
Total	132	434	28	31	34	7	193	9	14	1068	18	10	36	1	29	25	2069
04:00 PM	21	199	16	5	3	1	30	6	11	155	2	1	4	1	13	16	484
04:15 PM	20	187	11	9	5	0	16	0	6	169	0	0	8	0	12	10	453
04:30 PM	20	192	9	4	3	2	23	2	10	145	4	0	8	0	15	4	441
04:45 PM	20	224	12	8	6	1	22	3	13	151	8	1	7	0	13	4	493
Total	81	802	48	26	17	4	91	11	40	620	14	2	27	1	53	34	1871
05:00 PM	24	254	18	7	5	0	30	0	6	174	6	1	7	0	7	7	546
05:15 PM	37	261	9	6	1	1	25	4	10	169	4	11	11	1	6	10	566
05:30 PM	37	230	17	4	3	0	30	0	13	167	7	1	18	0	12	6	545
05:45 PM	32	201	11	3	4	3	17	4	5	164	0	4	11	1	18	7	485
Total	130	946	55	20	13	4	102	8	34	674	17	17	47	2	43	30	2142
Grand Total	416	2423	140	98	74	16	448	32	97	2928	60	33	123	4	142	102	7136
Apprch %	13.5	78.7	4.5	3.2	13.0	2.8	78.6	5.6	3.1	93.9	1.9	1.1	33.2	1.1	38.3	27.5	
Total %	5.8	34.0	2.0	1.4	1.0	0.2	6.3	0.4	1.4	41.0	0.8	0.5	1.7	0.1	2.0	1.4	

COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: 30TH ST
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : 30THAURO
Site Code : 00000016
Start Date : 2/3/2016
Page No : 2

	30TH ST Southbound					AURORA AVE Westbound					30TH ST Northbound					AURORA AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 07:00 AM to 09:00 AM - Peak 1 of 1																					
Intersection	08:00 AM																				
Volume	132	434	28	31	625	34	7	193	9	243	14	1068	18	10	1110	36	1	29	25	91	2069
Percent	21.1	69.4	4.5	5.0		14.0	2.9	79.4	3.7		1.3	96.2	1.6	0.9		39.6	1.1	31.9	27.5		
08:30 Volume	18	115	8	11	152	8	1	59	1	69	7	281	3	5	296	12	0	11	13	36	553
Peak Factor																					0.935
High Int.	08:00 AM					08:15 AM					08:45 AM					08:30 AM					
Volume	50	128	5	5	188	11	2	53	3	69	3	318	3	1	325	12	0	11	13	36	
Peak Factor					0.831					0.880					0.854					0.632	

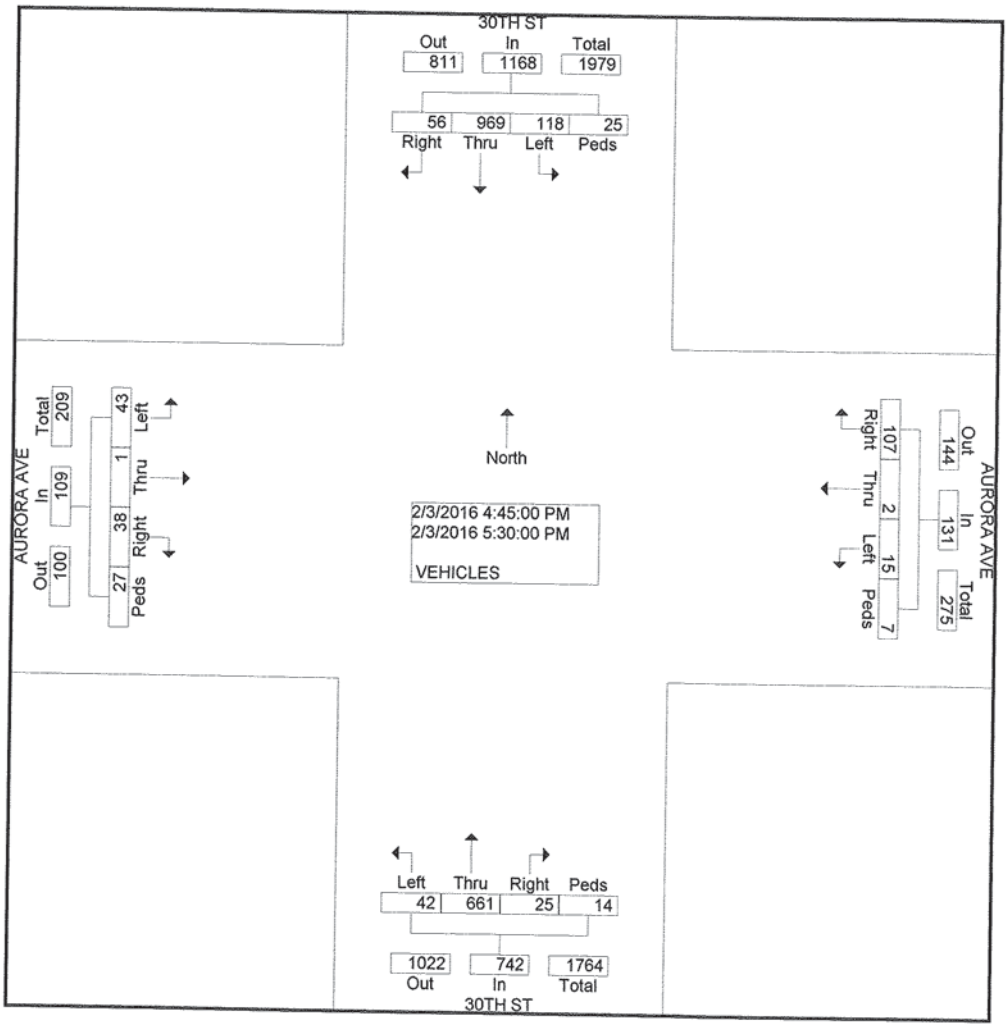


COUNTER MEASURES INC.
1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: 30TH ST
E/W STREET: AURORA AVE
CITY: BOULDER
COUNTY: BOULDER

File Name : 30THAURO
Site Code : 00000016
Start Date : 2/3/2016
Page No : 2

	30TH ST Southbound					AURORA AVE Westbound					30TH ST Northbound					AURORA AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	118	969	56	25	1168	15	2	107	7	131	42	661	25	14	742	43	1	38	27	109	2150
Percent	10.1	83.0	4.8	2.1		11.5	1.5	81.7	5.3		5.7	89.1	3.4	1.9		39.4	0.9	34.9	24.8		
05:15 Volume	37	261	9	6	313	1	1	25	4	31	10	169	4	11	194	11	1	6	10	28	566
Peak Factor																					0.950
High Int.	05:15 PM					05:00 PM					05:15 PM					05:30 PM					
Volume	37	261	9	6	313	5	0	30	0	35	10	169	4	11	194	18	0	12	6	36	
Peak Factor					0.933					0.936					0.956					0.757	



Station No. 24 - 30th Street North of Baseline Road Linear Regression Analysis

Year	Field	Regression
1983	14,385	15,316
1984	13,731	15,464
1985	15,630	15,611
1986	16,068	15,759
1987	16,102	15,906
1988	17,419	16,054
1989	15,625	16,201
1990	15,430	16,349
1991	16,204	16,496
1992	17,136	16,644
1993	16,999	16,791
1994	17,419	16,939
1995	16,609	17,086
1996	16,526	17,234
1997	17,057	17,381
1998	17,457	17,529
1999	17,822	17,676
2000	17,834	17,824
2001	19,286	17,971
2002	21,018	18,119
2003	20,384	18,267
2004	18,234	18,414
2005	20,062	18,562
2006	19,489	18,709
2007	19,277	18,857
2008	18,061	19,004
2009	17,746	19,152
2010	18,070	19,299
2011	17,954	19,447
2012	19,547	19,594
2013	19,994	19,742
2014	19,965	19,889
2015	18,783	20,037
2035		22,987

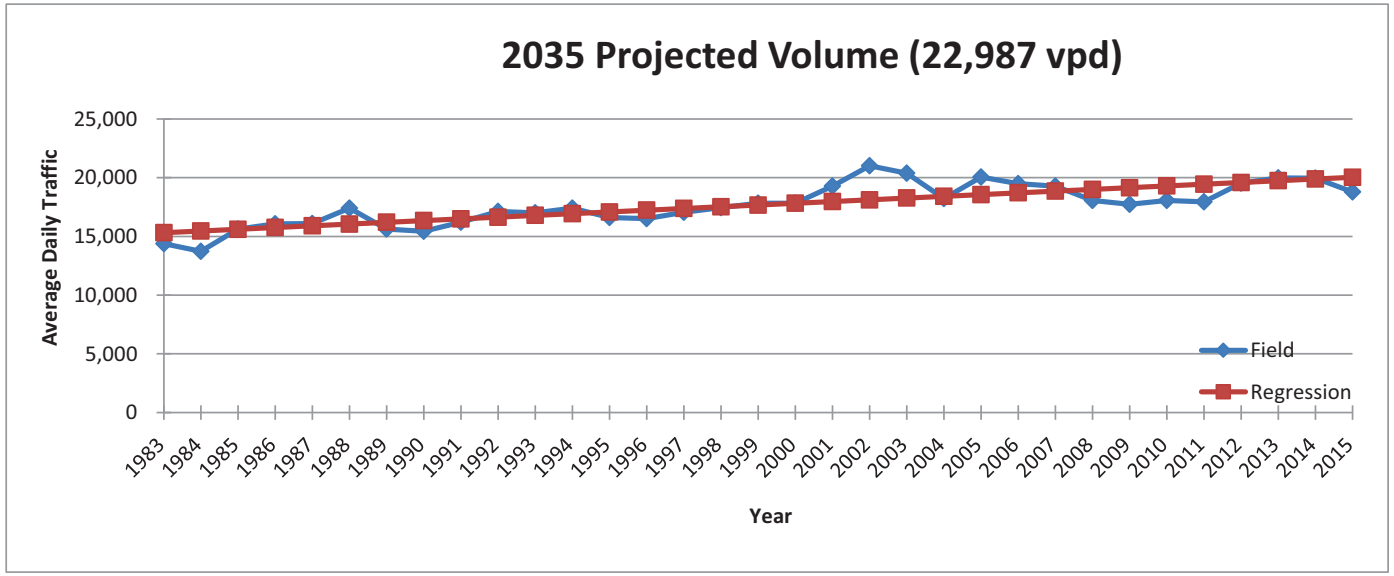
Regression Statistics	
Multiple R	0.808755584
R Square	0.654085595
Adjusted R Square	0.642927066
Standard Error	1053.969102
Observations	33

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	65115351.64	65115351.64	58.6175458	1.23662E-08
Residual	31	34436376.91	1110850.868		
Total	32	99551728.54			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*.ower 95.0%*	*Jpper 95.0%*
Intercept	-277222.839	38518.09551	-7.19721043	4.3022E-08	-355781.0125	-198665	-355781	-198665
X Variable 1	147.5233957	19.2684635	7.656209624	1.2366E-08	108.2251053	186.8217	108.2251	186.8217

Linear Regression Growth Rate: **0.83%**



To: City of Boulder's Land Use Review Staff
From: Jeff Dawson, Trestle Strategy Group
Subject: 2900 E Aurora Ave – Written Statement for Non-Conformance Use Review
Date: Oct. 29, 2015

SUMMARY

Existing Building and Land Use

The property includes two, 3 story multifamily apartment buildings and one single story leasing building located on 4.64 acres of RH-5 zoned land. There are a total of 220 rentals consisting of a variety of studio, one bedroom, and two bedroom units. The eastern apartment building includes 148 dwelling units. The leasing building and pool are in the east building's courtyard. The west apartment building consists of 72 dwelling units. Access to all dwelling units is from an outdoor walkway around the perimeter of each building. There are no internal hallways. There are four different parking lots with a total of 253 parking spaces on the property, as well as 221 existing bicycle spaces. The property includes outdoor landscaping scattered throughout the site with the majority of the useable open space located in the west lawn of the west building and the central courtyard of the east building.

Proposed Building and Land Use

No dwelling units or floor area will be added to the site with our proposal. The primary use of the site will remain multifamily residential. The small leasing office will be converted to an accessory building consisting of a small office, workout room and community room for residents.

Of the 148 units in the East building, 36 one bedroom units will be converted to two bedroom units and 12 two bedroom units will be converted to three bedroom/two bathroom units. Of the 72 units in the west building, 48 one bedroom units will be converted into two bedroom units. In summary, a total of 96 bedrooms and 12 new bathrooms will be added to the buildings.

The parking lot in the middle of the site will be reconfigured to eliminate the western driveway and curb cut along E. Aurora Avenue. This area will be converted to open space and new landscaping will be installed in this location. The parking will be striped to provide 95 standard spaces, 160 compact spaces and 7 handicapped spaces for a total of 262 parking spaces which is no more nonconforming than the current condition on site.

The existing maintenance buildings on either side of the east building will be converted to long term bike storage. We will be able to provide a total of approximately 160 bikes in these structures. This buildings will be locked and monitored by security cameras 24/7. The existing laundry rooms located on the bottom floor of the building will be

converted to long term bike storage. We will provide a total of 128 short term bicycle spaces and approximately 224 long term, secure parking spaces.

Existing Hours of Operation and Number of Employees
The professional/leasing office hours are:
M-F: 9am - 6pm
Sat: 10am - 4pm
Sun: Closed
The property currently operates with a full-time staff consisting of a property manager, an assistant manager, and a maintenance manager.

Proposed Hours of Operation and Number of Employees
Property will be managed off-site by Four Star Realty. Future number of employees are yet to be determined.

Existing Estimated number of Trips to Site Per Day
Due to the proximity to the CU campus it is anticipated that vehicle trips will be minimal during the school year. Primary modes of transportation will be walking and bicycling. See Fox Tuttle's attached memo outlining anticipated trip generation changes caused by the proposed remodel.

Adjacent Properties
All adjacent and surrounding properties are also multifamily student apartments.

Project Narrative
Our proposal includes:

- Conversion of 36 of the 148 east building units from one bedroom/one bathroom units (780 SF) to two bedroom/one bath units.
- In addition, 12 two bedroom/one bathroom units (1,120 SF) will be converted to three bedroom/two bathroom units.
- 48 one bedroom units (610 SF) in the west building will be converted to two bedroom units.

All 220 units in the project will receive new interior finishes including new kitchen appliances, a new dishwasher if one does not exist, and a new condensing, ventless all-in-one washer/dryer.

The existing professional/leasing office will be converted into a clubhouse for the property and will include a small office/work space and a small workout area.

Our proposal will be completed without reduction to the current building setbacks or any other significant change of use that might affect the property's classification within the RH-5 zone.

There are no changes in the proposed work that would:

- Change in the perimeter of the building footprint or increase floor area
- Increase the number of dwelling units
- Change in the existing use

Impacts of Proposed Change

Unit Count

- There is no change to the number of dwelling units on the site

Parking

- Currently there are 253 spaces on site including 4 handicap spaces.
- Under current parking requirements, on the existing site there are 24 efficiency, 156 one bedroom, and 40 two bedroom units, so a total of 279 parking spaces are required; however, 253 total spaces are provided. Property is minimally non-conforming (26 spaces deficient or 9% deficient) in terms of the number of spaces provided on site.
- We will create 95 standard, 160 compact and 7 handicapped spaces for a total 262 parking spaces. The property will still be minimally nonconforming (26 spaces deficient or 9% deficient) in terms of the number of spaces provided on site.
- The proposed project will not increase the level of parking nonconformity.

Open Space

- In RH-5 a minimum of 600 SF/DU of open space is required for 220 units and would require 132,000 SF or approximately 3 acres of useable open space.
- There is currently 69,367 SF of open space on site.
- By eliminating one curb cut on E. Aurora and reducing the width of the second driveway in the middle of the site we will be adding 5,233 SF of open space for a total 74,590 SF.

Site Utilities

- Initial discussions with staff indicate that a new 3" domestic water service tap and meter will be required in the east building to accommodate new washers/dryers and bathrooms.
- Due to the addition of 96 new bedrooms without access to exterior windows the building department has advised that we will require a new fire sprinkler system for the buildings. Therefore, a new 4" or 6" fire tap will be provided and the fire riser will be placed in one of the mechanical rooms in the south wing of each building.
- The county assessor's actual value for the property is listed at $34,200,000. BRC 9-9-16 (c)(1)(A) requires that, "when development or redevelopment exceeds twenty-five percent of the value of the existing structure, then all existing

unshielded exterior light fixtures shall be retrofitted with shielding to prevent light trespass." We do not believe the cost of the improvements proposed with this nonconforming use review application will trigger these upgrades, however, we will make these improvements if determined necessary prior to building permit.

Landscape

- New landscaping will be provided where the existing drive is eliminated and landscape upgrades will be provided in the courtyard around the leasing office/community building.
- After discussing the installation of new landscape in the parking lots with Elizabeth Lokocz during our preapplication process, she recommended we focus on eliminating parking in the setbacks and landscaping these areas to eliminate avoid further reduction in parking given the current nonconformance.
- We have provided a landscape plan illustrating new planings in the areas where pavement is being eliminated.

Photometric Analysis

- A pre-application review comment strongly suggests a comprehensive photometric analysis and plan for the site.
- Applicant intends to complete these prior to seeking a building permit, if necessary.

Side Walk Rights-of-Way

- Applicant intends to expand sidewalk adjacent to E Aurora Ave from its current 4-5 foot widths to 8 foot width.
- An expanded walk is also being proposed along the west property line.

Interior Bedrooms

- We intend to provide artificial light and mechanical ventilation for interior bedrooms without exterior windows per the International Mechanical Code and additional details on the system will be provided during building permit.

Green Building and Green Points Program

- Applicant intends to meet all the requirements of Green Building and Green Points Program as part of the building permit process.

Exterior Building Elevations

- Applicant will not be modifying the exterior of the building other than replacing existing window units and painting the existing materials.

The site is considered non-conforming due to the following conditions:

- Density because the number of units per acre is not met (220 units where 126 units are permitted)
- Open space because the minimum open space per dwelling unit is not provided at 600 SF/unit or 132,000 SF total.
- Parking because the required parking is not provided on site; 279 spaces are required and 253 spaces are provided resulting in a 10% deficiency

However, our proposal does not increase the existing level of nonconformity with respect to density, open space, or parking.

CRITERIA FOR REVIEW

1. **Consistency with Zoning and Non-conformity.** *The use is consistent with the purpose of the zoning district as set forth in Section 9-5-2, "Zoning Districts Established", B.R.C. 1981, except in the case of a non-conforming use;*

The project site is zoned Residential-High 5(RH-5) which is defined as "High density residential areas primarily used for a variety of types of attached residential units, including without limitation, apartment buildings, and where complementary uses may be allowed" (Section 9-5-2(C)(1)(F) B.R.C.)

2. **Rationale.** *The use either:*
   a. *Provides a direct service or convenience to or reduces adverse impacts to the surrounding uses or neighborhood;*
   b. *Provides a compatible transition between higher intensity and lower intensity uses;*
      i. The property is located in a RH-5 zoning area between BT-1 and RL-1 and RM-2
   c. *Is necessary to foster a specific city policy, as expressed in the BVCP, including without limitation, historic preservation, moderate income housing, residential and non-residential mixed uses in appropriate location, and group living arrangements for special populations; OR*
      i. The property provides moderate income housing serving primarily CU students in an appropriate location, i.e. less than one block from the university campus.
   d. *Is an existing legal non-conforming use or a change thereto that is permitted under subsection (e) of this section*.

3. **Compatibility.** *The location, size, design, and operating characteristics of the proposed development or change to an existing development are such that the use will be reasonably compatible with and have minimal negative impact on the use of the nearby properties;*

The proposed use, location, size, design, and operating characteristics of the property

will remain as is and will continue to be compatible with the surrounding area. Nearby properties will not experience any negative impacts from the proposed project since the level of nonconformity is not being increased.

4. **Infrastructure.** *As compared to development permitted under Section 9-6-1, "Permitted Uses of Land", B.R.C. 1981, in the zone, or as compared to the existing level of impact of a nonconforming use, the proposed development will not significantly or adversely affect the infrastructure of the surrounding area, including without limitation, water, wastewater, and storm draining utilities and streets.*

   The proposed work for the project will not have any significant impact on existing water, wastewater or storm drainage infrastructure.

5. **Character of Area.** *The use will not change the predominant character of the surrounding area.*

   The change in unit configuration will not change the character of the area which currently consists of numerous student oriented, high density apartment buildings.

6. **Conversion of Dwelling Units to Non-Residential Uses.** *Conversion of Dwelling Units to Non- Residential Uses: There shall be a presumption against approving the conversion of dwelling units in the residential zoning districts set forth in Subsection 9-6-1(d), B.R.C. 1981, to non-residential uses that are allowed pursuant to a use review, or through the change of one non-conforming use to another non-conforming use.*

   No existing dwelling units will be converted to non-residential uses.

ADDITIONAL CRITERIA FOR MODIFICATION TO NON-CONFORMING USES:

1. **Reasonable Measures Required:** *The applicant has undertaken all reasonable measures to reduce or alleviate the effects of the non-conformity upon the surrounding area, including without limitation objectionable conditions, glare, visual pollution, noise pollution, air emissions, vehicular traffic, storage of equipment, materials and refuse, and on-street parking, so that the change will not adversely affect the surrounding area;*

Changes made to the property will have no significant impact to the surrounding community as it relates to the items listed above. See attached trip generation letter for more information on traffic. The proposal eliminates on current driveway and curb cut. These areas will be landscaped thereby improving the appearance of the property from the street. A more efficient parking layout is included in the plan thereby minimizing the amount of paving per vehicle. A significant increase (approx. 50%) in bike parking, primarily in long term storage, will also be added to the site as part of

our proposal.

2. **Reduction in Non-Conformity / Improvement of Appearance:** *The proposed change or expansion will either reduce the degree of non-conformity of the use or improve the physical appearance of the structure or the site without increasing the degree of non-conformity;*

See statements above. The reduction in pavement and the increase in long term bike storage will help improve the function and appearance of the existing property.

3. **Compliance with this Title / Exceptions**: *The proposed change in use complies with all of the requirements of this title:*

    a. *Except for a change of a non-conforming use to another non-conforming use; and*

    The nonconformity of the current use is not increased with the proposal.

    b. *Unless a variance to the setback requirements has been granted pursuant to Section 9-2-3, "Variances", B.R.C. 1981, or the setback has been varied through the application of the requirements of Section 9-2-14, "Site Review", B.R.C. 1981; and*

    Not Applicable

4. **Cannot Reasonably be Made Conforming:** *The existing building or lot cannot be utilized or made to conform to the requirements of Chapters 9-6, 9-7, 9-8, and 9-9, "Use Standards", "Form and Bulk Standards", "Intensity Standards", and "Development Standards", B.R.C. 1981; and*

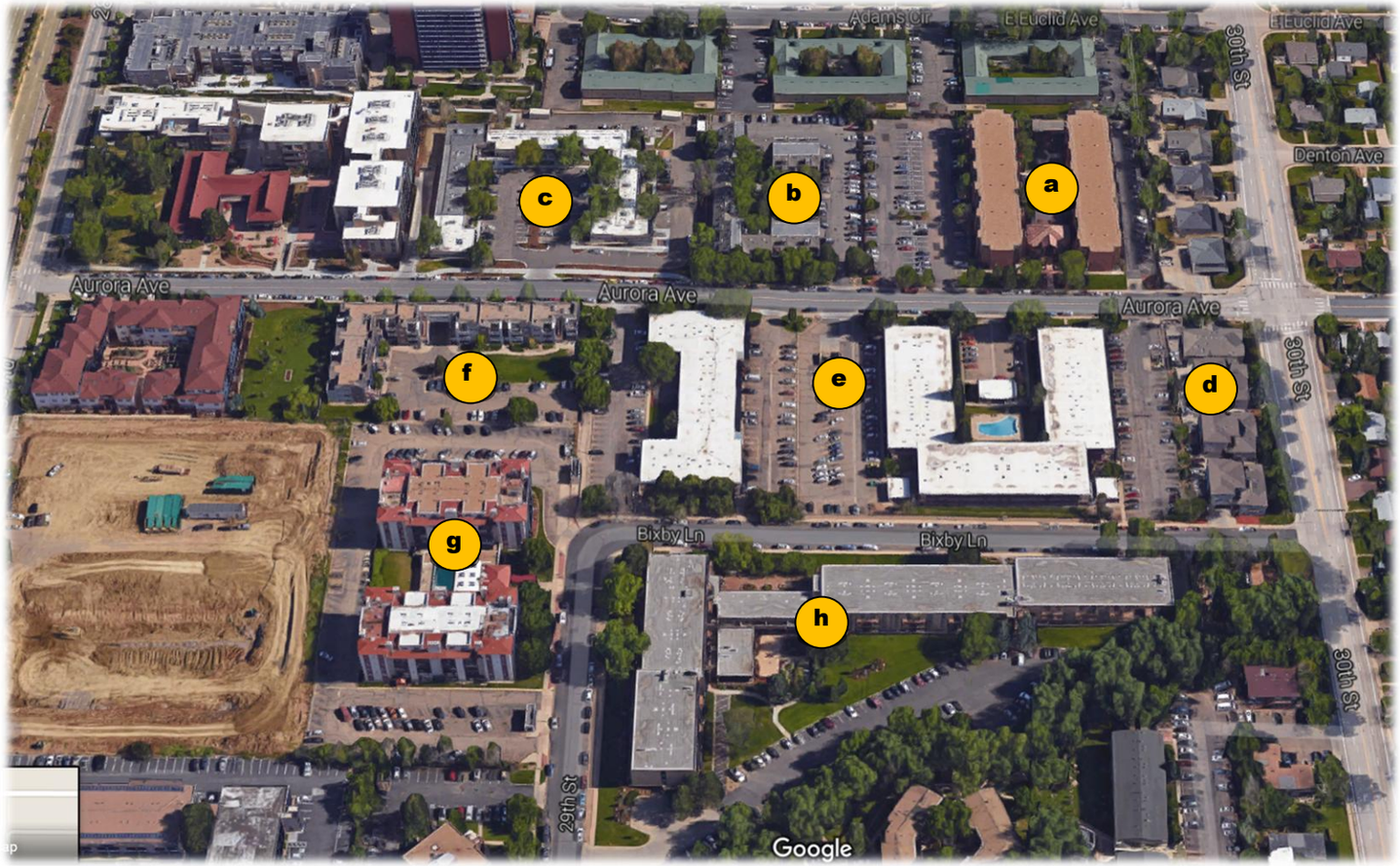
    The existing building and lot cannot be made conforming.

5. **No Increase in Floor Area Over Ten Percent:** *The change or expansion will not result in an increase in floor area of more than ten percent of the existing floor area*.

    The proposed work will not increase the overall floor area of any of the structures.

6. **Approving Authority May Grant Zoning Variances:** *The approving authority may grant the variances permitted by Subsection 9-2-3(d), B.R.C. 1981, upon finding that the criteria set forth in Subsection 9-2- 3(h), B.R.C. 1981, have been met.*

    Not applicable.



Note: Estimated dwelling units per acre is based on Boulder County Assessor information and city records.

a 2985 E Aurora Ave
Sterling University Peaks
40 du/a

b 2905 E Aurora Ave
Blue Sky Lofts
75 du/a

c 2885 E Aurora Ave
East Village Flats
18 du/a

d 2990 E Aurora to 825 30th St
4-plex & 5-plex buildings
25 du/a

e SUBJECT PROPERTY
2900 E Aurora Ave
Cavalier Apartments
37 du/a

f 2850 E Aurora Ave
Montclair Court
29 du/a

g 805 29th St
Spanish Towers
50 du/a

h 2950 Bixby Ln
Kensington Apartments
40 du/a

From: Chris Donnally
To: Walbert, Sloane
Subject: 2900 E Aurora Avenue // LUR2015-00107
Date: Sunday, November 15, 2015 9:59:39 PM

Sloane:

I am writing to you about the application to add 108 new bedrooms to the apartment community at 2900 E. Aurora Ave. I am against this application because it does not add additional parking or provide any information as to how parking will be allocated or improved. In counting up the parking spaces, it doesn't appear that there will be anywhere close to 1 space per bedroom for what is likely to be 80% plus student housing.

Therefore, the overflow parking is likely to impact surrounding residential single family home neighborhoods. As an owner of a single family home in the baseline neighborhood, I have serious concerns.

I also do not like the fact that this application appears to go for maximum density without remodeling the exterior of what is an eyesore building. It just seems like low investment improvements to take advantage of a hot student rental market. The information provided does not propose any mitigating factors to reassure long-term concerns from the surrounding neighborhoods.

Please contact me with any questions and I would like to be informed on the planning board's final decision.

Regards,
Chris Donnally
Owner of 745 31st Street
720.216.7287

From: Bart Manchester
To: Walbert, Sloane
Subject: 2900 E aurora
Date: Monday, November 16, 2015 5:19:44 PM

Hello - I writing to ask a question about the proposed project and also request notice of further decisions and activity.
I need to read the criteria linked in the mail to us, but one of my largest concerns is around parking. The parking in our area and aurora is already atrocious, adding ~100 more people to that street with no change or perhaps reduced parking sounds brutal.

Please include me in the list of people interested in updates and please forward any information you can about the proposal.

Thanks,
Earl Manchester
#113 2800 aurora

From: Philip Wegener
To: Walbert, Sloane
Subject: Concerning 2900 E. Aurora
Date: Tuesday, November 17, 2015 8:56:02 AM

Hello Sloane,

I received your letter concerning the property at 2900 E. Aurora. I personally do not know this building but reading the letter it seems like a good thing. We need to increase density close to CU because it is too hard to find rentals for students.

Thanks, Philip Wegener and Juanjuan Yu
--
PHILIP WEGENER
PHOTOGRAPHY & VIDEO
PO BOX 1151, BOULDER, CO 80306
303-444-8414/ Cell 303-641-6122
philip@philipwegener.com http://cp.mcafee.com/d/k-Kr4xASyMMevojd7ar9KVJWX3yr2pJWX3yrWpJeXb3b1EVjhhdFEITjhhuuodCdf8v6t0kgGSuxYrIfH7kaYhGpdAaJDEv6RjWNR2L4qCjuLnIeosvW_efcIT7nWZOWqbOf8IzCrETjWyaqRQRrLcsG7DR8OJMddECQjt-d7abP2bzzbMUSyr01b4V7Omcuh-7NVsSIjAv9o5b4V7Omcuh-7NVsSyMC-r4GMJYoiwhd42pEVLsQg3n6y0grzmeCQTPt4Lt1dh6WtI0

From: Jeff Barber
To: Walbert, Sloane
Subject: Cavalier Apartments nonconforming use
Date: Sunday, January 24, 2016 8:57:14 AM

Sloane,
As owners of a condo in Spanish Towers, my wife and I would like to voice an opinion of the subject project request for approval from the city's planning department of a non-conforming use application.

Of particular concern is the useable open space and reduction of parking space. This project boarders Bixby Av and is adjacent to 29th street. These streets are full of cars already and parking can be difficult for those living in the area. The combined effect of reducing the parking spaces on this property and increase in population by ~100 people (average per bedroom population will likely be higher than a 1:1) will put severe pressure on the street parking which is already full a large part of the time. Add visitors to the mix and the car count will likely reach, or exceed 100. This is not a good idea and one which will never be reversed, should it be approved.

The planning board should conduct an "environmental" parking assessment by studying the current % of occupied parking positions and superimpose 100 more cars that will need to park on the street. I think you will see quickly this is not in the best interest of the Boulder residents.

We respectfully request further study be conduction, should the planning board show initial favorable opinion towards approval. The results of which might prevent a bad situation from being approved.

Thank you for considering our opinion and request.

Jeff & Lisa Barber

From: Chris Donnally
To: Walbert, Sloane
Subject: Re: 2900 E Aurora Avenue // LUR2015-00107 & LUR2016-00009
Date: Monday, January 25, 2016 11:10:58 PM

Sloane:

I received an updated application announcement for Cavalier Apartments. I see that a site review will now be completed with regard to the parking reduction. That is an improvement...I think.

However, I just want to reemphasize that I am against the proposed parking plan and reduction allowance because:
* This is a student oriented housing complex where students, either admittedly or not, are likely to own vehicle.
* The new bedrooms have the potential to add up to 100 new vehicles to an already crowded situation.
* The lack of parking will overflow onto the surrounding neighborhoods and hurt already tenuous street parking.
* The applicant is going to get a hefty rental revenue increase out of the proposed addition. I'd estimate it at around $900K a year. The least they can do is do some significant capital expenditure to improve the parking situation so that it doesn't impact the surrounding neighborhoods. I don't know if that looks like a parking garage or underground parking, etc. If they aren't willing to do the capital expenditure, I don't believe the City of Boulder should give them a free pass.
* The applicant notes in their narrative that they are not changing the current parking non-conformity (9%) but this is disingenuous at best considering the bedroom expansion and the intended tenant audience of students.

Regard,
Chris Donnally
Owner of 745 31st Street
720.216.7287

From: Walbert, Sloane <WalbertS@bouldercolorado.gov>
Sent: Monday, November 23, 2015 12:17 PM
To: Chris Donnally

Subject: RE: 2900 E Aurora Avenue // LUR2015-00107

Dear Chris,

My sincere apologies for the delay in responding. I was out sick for a week and now I am playing catch up. Thank you for your input. It will be considered in staff's analysis and will be forwarded to the Planning Board for consideration. I will also be sure to include in all project updates.

The proposal is to remodel the buildings and provide additional bedrooms in some of the units. The proposal also includes converting the current leasing office structure into community center and existing maintenance buildings into long-term bike storage. The proposal will not add floor area or additional units. Technically, occupancy restrictions in the city are based on dwelling unit, not bedrooms, and the allowable occupancy of the property will not increase. That said they are undergoing a nonconforming use review to ensure that the proposal will not substantially adversely affect the surrounding area.

The applicant is currently proposing the addition of parking spaces. However, they would still be below the required amount. In general, the city supports parking reductions when the occupancy is primarily that of students. There is a well documented alternative transportation mode use by students, especially in this site's context within biking and walking distance to campus. The applicant is proposing to close one of the access points on Aurora Ave., increase landscaping and provide additional bike storage.

If you are interested, you can view the applicant's plans at http://gisweb.bouldercolorado.gov/agswebsites/pds/development-review/. Enter the case number (LUR2015-00107) or address (2900 E AURORA) in the upper right hand corner. Double click on the property and the application materials will be listed in the left column.

Current Development Review Cases in Boulder

gisweb.bouldercolorado.gov

The city uses the Development Review Process to evaluate proposed land uses and developments. Boulder community members have opportunities to comment on ...

Please let me know if you have additional questions or would like to provide additional input.

Regards,

Sloane Walbert
Planner I, Department of Community Planning and Sustainability
City of Boulder
1739 Broadway, 3rd Floor
P.O. Box 791
Boulder, CO 80306-0791
(303) 441-4231 Direct
WalbertS@bouldercolorado.gov

From: Chris Donnally [mailto:cdonnally@hotmail.com]
Sent: Sunday, November 15, 2015 10:00 PM
To: Walbert, Sloane
Subject: 2900 E Aurora Avenue // LUR2015-00107

Sloane:

I am writing to you about the application to add 108 new bedrooms to the apartment community at 2900 E. Aurora Ave. I am against this application because it does not add additional parking or provide any information as to how parking will be allocated or improved. In counting up the parking spaces, it doesn't appear that there will be anywhere close to 1 space per bedroom for what is likely to be 80% plus student housing.

Therefore, the overflow parking is likely to impact surrounding residential single family home neighborhoods. As an owner of a single family home in the baseline neighborhood, I have serious concerns.

I also do not like the fact that this application appears to go for maximum density without remodeling the exterior of what is an eyesore building. It just seems like low investment improvements to take advantage of a hot student rental market. The information provided does not propose any mitigating factors to reassure long-term concerns from the surrounding neighborhoods.

Please contact me with any questions and I would like to be informed on the planning board's final decision.

Regards,
Chris Donnally
Owner of 745 31st Street
720.216.7287

From:	Paul Eltabib
To:	Walbert, Sloane
Subject:	Cavalier Appartments
Date:	Tuesday, January 26, 2016 7:21:55 PM

Please beware that any approval to increase bedrooms will creat a parking disaster, increase noise and crimes and reduce the property value in the area.
Best Regards,
Paul
303-641-4005

Sent from my iPad

From: Anna P
To: Walbert, Sloane; Spanish Towers HOA David Property Manager
Subject: Cavalier Apartments Unit Expansion
Date: Wednesday, January 27, 2016 8:33:47 AM

Dear City of Boulder Council,

I would like to express my opinion and rejection in regards to Cavalier Apartments redesign and expansion of unit number. As one of the owners in Spanish Towers, I do see risks and issues associated with the redesign and increase in numbers of units of the Cavalier site proposed by Brickstone partners and Sloane Walbert.

First, I would like to note that the site already does not conform with current zoning. The area where Cavalier lies is zoned RH-5, which is intended for high-density residential. Cavalier already includes 220 units on a 4.64-acre piece of land on which current zoning would allow only 126 units. Brickstone's plan is to increase this number of units by converting one-bedroom to two-bedroom and two-bedroom to three bedrooms. Note, that there is no plan to add additional parking in the project.

Secondly, I think such approach will results in significant increase in traffic and might cause parking issues in the area, which already rather densely populated. The project also encompasses the removal of some walk passes from this complex to Bixby and 29th, which could results in increase in noise and even crime issues, considering mostly student population in the area.

To summarize I would strongly encourage the city of boulder to disapprove Cavalier unit increase.

Thank you for your consideration,

Kind Regards,

Anna Pishchulina

+1 (720) 507 6027

From: Polly Palmer
To: Walbert, Sloane
Subject: changes to Cavalier Apartments
Date: Wednesday, January 27, 2016 3:11:54 AM

Dear Mr. Walbert,

My husband and I own a unit in Spanish Towers (805 29th Street, Boulder) and want to register a strong protest against the redevelopment of and proposed changes to the Cavalier Apartments northeast of Spanish Towers.

Adding 96 bedrooms to the complex and reducing parking by 8% will pose too many problems to our area -- none the least is the lowering of the quality of life for residents of the Cavalier Apartments. Cramming more people into smaller and smaller units has the potential for fueling mental health issues as residents begin to feel more like animals in a cage than joyful human beings living in pleasant surroundings. With an increase in density also comes the potential for higher crime rates in the area, congested traffic flow, and another dip in quality of life.

We have owned our apartment in Spanish Towers for over 30 years and definitely consider it a special property. Please reconsider any changes to the Cavalier Apartments which negatively impacts the high quality of life which this portion of the city now enjoys.

Thank you for your kind consideration of our opinion,

Polly Palmer and Hamid Baghestani

From: MSN
To: Walbert, Sloane
Subject: Opposition to Expansion of Cavalier Apartments
Date: Wednesday, January 27, 2016 5:42:45 AM

To whom it may concern:

I would like to express my sincere and strong opposition to the proposed expansion of the Cavalier Apartments. I am an owner in Spanish Towers at 29th and Bixby, and have strong concerns in changing the zoning to increase the density in this area. This proposed expansion will, undoubtably, increase congestion, traffic, crime, along with reduced parking availability contributing to all of the above. The area around 29th and Bixby currently has issues involving high density to include crime and parking. To change existing zoning would further exacerbate those current problems, increase costs to the city, reduce the quality of life in that area for the current residents, and diminish property values to the current property owners. I ask you take these issues into account and decline the request to change zoning for the Cavalier Apartments.

Sincerely,
Al Berlinberg
805 29th St Unit 554
Boulder, CO 80303

Sent from my iPad

From: Stephen Daudt
To: Walbert, Sloane
Subject: Cavalier Apartments
Date: Wednesday, January 27, 2016 6:47:04 AM

Dear Boulder Planning Department,

I am troubled by the planned expansion of the Cavalier Apartments. I need to park in the area about twice a month (for 10 years) and have found the available parking more and limited each year. If buildings are increased in density they must provide reasonable options for transportation to their facility.

The city must provide better roadways and transit; the property must provide more storage for any projected and increase in vehicles. The costs to do so must be carried by those who benefit from the change. Unless this is done the City and the properties are harming the residents, safety and quality of life in the City. The cities response of let the increase occur and people will reduce their driving is ignoring the problem not confronting it.

Stephen Daudt
720 236 0900

From:	Tom Tunner
To:	Walbert, Sloane
Cc:	Spanish Towers office; Dave Shaw - ST HOA President 1/9/2012
Subject:	2900 E Aurora Apartments zoning variance
Date:	Wednesday, January 27, 2016 8:47:22 AM

Dear Sloane Walbert,

I'm an owner at 805 29th Street (Spanish Towers) near this project and I'm writing to express my concern about the potential zoning variance at 2900 E Aurora. My concern is parking. Parking is already congested and the new building currently under construction (another zoning variance) next to Spanish Towers is going to congest parking even further. Meanwhile 2900 E Aurora is going to add 96 new bedrooms and, although I don't quite understand the letter that was sent, it appears they're even proposing to reduce parking?!?!

I understand developers want to maximize their investments, often with no regard for the surrounding community, but that's why the city has zoning laws. If every requested zoning variance is approved by the city then why do we even have zoning laws?

Tom Tunner

805 29th Street

Boulder, CO 80303

tunner@sprintmail.com

303-808-4133

From: Paul Eltabib
To: Walbert, Sloane
Subject: Re: Cavalier Appartments
Date: Wednesday, January 27, 2016 10:40:16 AM

Thank you Sloane so much for your kind email and action
We all care and love the wonderful city of Boulder and we all try our best to improve the quality of life here.
We already have a huge apartment building in process on the 28 set frontage road west of Spanish towers and God knows what kind of impact will place on the area we need no more Please
Regards,
Paul

Sent from my iPad

On Jan 27, 2016, at 8:54 AM, Walbert, Sloane <WalbertS@bouldercolorado.gov> wrote:

Dear Paul,

Thank you for the feedback. Your comments will be taken into consideration during staff's review and will be forwarded to the Planning Board.

If you are interested, you can view the plans for the proposal at http://gisweb.bouldercolorado.gov/agswebsites/pds/development-review/. Input the address or case number in the upper right hand corner to search for the application. Once you select the property, the application materials and plans will be listed on the left hand side.

I will be sure to keep you updated as the projects progresses. Thank you,

Sloane Walbert, AICP
Planner I, Department of Planning, Housing and Sustainability
City of Boulder
1739 Broadway, 3rd Floor
P.O. Box 791
Boulder, CO 80306-0791
(303) 441-4231 Direct
WalbertS@bouldercolorado.gov

-----Original Message-----
From: Paul Eltabib [mailto:drsolom@aol.com]
Sent: Tuesday, January 26, 2016 7:22 PM
To: Walbert, Sloane
Subject: Cavalier Appartments

From: Maggi Trimble
To: Walbert, Sloane
Subject: Cavalier Apartments Review Comments
Date: Wednesday, January 27, 2016 9:24:23 AM

Dear Sloane Walbert,

I am writing to you regarding the notice I recently received in the mail detailing proposed changes to the Cavalier Apartments. I am the owner of a unit in Spanish Towers, a nearby apartment complex. I am very opposed to the concept of having an additional 96 bedrooms in this complex while decreasing the amount of parking provided by the building. It is shocking to me that the city is even considering a plan like this. The parking in this area is already very crowded and has been for many years. I feel like the city is once again taking advantage of this area of Boulder and attempting to crowd a huge amount of people into a small area to raise their own tax income at the detriment of the residents. Adding this many residents to such a small area will increase crime in the area and decrease property values. Property values are already being negatively impacted by other apartment complexes being added and enlarged in the area. The other additional complexes are going to negatively impact parking problems in the area as well. My main concern though is the impact on the quality of life in the area by increasing parking problems, crime rates, and noise issues with such a huge influx in residences in the area.

It is also concerning that the city of Boulder thinks it is okay to continue to cram students in increasingly small spaces at a premium price. The fact that the city would consider a plan where two bedroom units are a total of 610 square feet is disturbing to me and clearly shows the lack of touch with reality of how small 610 square feet is. Before approving this plan, you should go into a 610 square foot apartment and visualize it as a two bedroom and you will see how ridiculous a concept this is. I understand that rent is high in Boulder but adding these bedrooms will not save money for students, it will just make more money for landlords. Boulder housing problems already take advantage of students as it is and setting a precedent by approving this plan will not help students. It will only help landlords.

Thank you for taking the time to hear my complaints.

I hope you reject the proposal for adding bedrooms to this already overcrowded and over-priced apartment complex. I also hope the city will not continue to review proposals which are so out of code. The zoning rules are there for a reason and should be enforced by the city.

Thank you.

Maggi Trimble
Owner of Spanish Towers Unit 304

From:	Susan Walanski
To:	Walbert, Sloane
Cc:	Spanish Towers; Mia Borderie
Subject:	Proposed zoning changes for the cavalier apartments
Date:	Wednesday, January 27, 2016 11:56:07 AM

Definitely not for the proposed update that will allow more residents and less parking at the Cavalier Apartments.

As a 20-year resident-owner at the Spanish Towers next door, I feel this area has been more than maxed out with the new condos up and down 28th st/frontage road including the very ugly, overly tall apartments going up where the Outlook Hotel once stood.

Frankly I think the builders in this area have been given way too many zone/ordinance exceptions for both height and occupancy over the last 10-15 years and I'd really like to see the Boulder City Planning board stick to the rules they created but seem to routinely ignore.

Thank you for the opportunity to submit my comments.

-- Susan Walanski
http://SusansBakeryBoulder.com
720-722-1137
orders@SusansBakeryBoulder.com

http://Facebook.com/susansbakery

From: Don
To: Walbert, Sloane
Subject: Cavalier Apartmentswal
Date: Wednesday, January 27, 2016 2:24:00 PM

Hi Sloane,
I left a message for you to call me. I am in complete opposition to the nonconforming use being proposed as well as numerous owners at Spanish Towers. Parking is the main issue. Adding 96 beds obvious means more residents with vehicles. Already, there is an issue with parking along Bixby and 29th and this nonconformance is even implying a reduction of off street parking making the current situation significantly worst. Recently Spanish Towers owners were overruled with the construction of over 300 student beds to their west in some cases blocking incredible views of the front range. There is even talk of allowing stair access to the east of this construction that will provide additional parking pressure on Bixby and 29th. When are the hearings on this proposal scheduled?
Don

Sent from Mail for Windows 10

From: Brian Field
To: Walbert, Sloane
Subject: Cavalier apartments redevelopment
Date: Thursday, January 28, 2016 3:57:50 PM

Sloane,

I'm writing in regards to the proposed redevelopment of the Cavalier Apartments. I"m the neighboring property owner to the east along the entire property line. I developed and own the four properties just east of Cavalier Apartments. I'm opposed to allowing Cavalier to redevelop for a few reasons.

First the traffic on E. Aurora St. is getting very busy at the intersection of E. Aurora and 30th. St. My driveway is often blocked by the traffic traveling east on Aurora which makes for a very dangerous west turn on to Aurora when traveling south on 30th st. Turning west on to Aurora trying to get in to my driveway is a real problem and sometimes backs up traffic on to 30th st. The four buildings East of Cavalier has a total of 19 units, so this traffic problem is occurring on a regular basis. As you are aware the 30th st & Aurora intersection is already considered one of Boulder's most dangerous intersection before adding additional density to this block. Parking is a problem as well. The Cavalier Apartments have a very restrictive parking policy forcing many of their residents to park on the street. With all of the new development at the Frontage road at the West end of this block, the parking problem is getting bad. Additionally, the residents of this neighborhood are trying to use my property as a driving short cut, driving on my private property trying to avoid the traffic on 30th st. Again a very dangerous situation as some vehicles race through my property. There has been more than one accident on my private property due to this traffic. One accident that required evacuation of my building.

Also I find this consideration of allowing an already nonconforming property to become more nonconforming to be unfair. It was very difficult for me to develop my four buildings along 30th when I was going through this process. By allowing this already large property to become larger is just not right.

I just want to write to voice my opposition on this proposed project. At the very least I would like to make it a requirement for the redevelopment of the Cavalier Apartments to construct a permanent Fence, or Wall between our properties. The original fence was removed by the Cavalier Apartments a few years ago allowing their residents to trespass on to my property to use my garbage service and the garbage service of the neighbors across Bixby. Garbage service is privately paid for in Boulder and it is illegal for improper dumping. The Cavalier residents do not like to walk to their own trash service area so they use the closest dumpster in the neighborhood.

Thank you for taking the time to read my email and I hope my view will be taken in to consideration.

Brian Field

From: joannaindenver@hotmail.com on behalf of Joanna F. Johnson
To: Walbert, Sloane
Subject: Cavalier Apartments - use & site review
Date: Thursday, January 28, 2016 10:22:34 AM

Dear Sloane Walbert,

As a long-time condominium owner at 805 29th Street (Spanish Towers), I am writing to you to express my opinion that the City of Boulder's planning board should NOT allow a change to the occupancy/density rate of the Cavalier Apartments property.

This small section of the City is already very dense and adding additional bedrooms to the Cavalier Apartments property will only increase tension, parking problems, noise, trash and, in my opinion, a decrease to existing property values.

I encourage you and the City of Boulder Planning Department NOT to allow greater density/bedrooms at this property during your upcoming "NONCONFORMING USE REVIEW AND SITE REVIEW".

Thank you,

Joanna F. Johnson

P 303-522.3686 F 270.513.3686 E joanna@e2businessgifts.com

From: Jmfuww
To: Walbert, Sloane
Subject: CAVALIER APARTMENTS
Date: Friday, January 29, 2016 9:47:11 AM

REFERENCE # LUR2015-00107 and LUR2016-00009

Mr Walbert,

Good Morning. My name is John Faraone and my wife and I have owned a condominium at The Flat Irons at 2800 E. Aurora, next to the Cavalier Apartments since 2004. We are concerned about this potential project for a number of reasons. To start, if I read the notice correctly, the Cavalier is already "non conforming" use because it exceeds the maximum permitted density in the RH-5 zone District and useable open space per dwelling unit". Adding 96 Bedrooms with the potential of an additional 1.5 people per new unit (college students) that could equate to up to an additional 144 people within the complex.
Parking is already a challenge on Aurora with the Student population as it is. With the additional 96 units and the increase in cars to support those units along with a parking reduction of 8% in the residential zone district we believe is not a good overall decision.
We are all for the improvement to the surrounding area, but feel that building units just to maximize space with no plan to accommodate parking is not in the best interest and integrity of the Boulder Area. Therefore are asking that you deny this request.
If you would like to contact me, please feel free to email me or call me at 213 361 4531
Thank you
John Faraone
Owner
2800 E. Aurora Ave
Boulder Colorado
#202

From: Mike Sandham
To: Walbert, Sloane
Subject: remodel of Cavalier Apartments
Date: Friday, January 29, 2016 10:39:53 AM

Mr. Walbert,

I just received a notice that there is a proposal by the Cavalier Apartments to add additional 96 bedrooms to that facility. I am a native of Boulder and have witnessed the recent development of the area east of the University of Colorado campus. It has exploded. if you walk or drive through this area, you will become aware of how incredibly crowded it has become along 28th, 29th, and Bixby streets not only with new apartments but with the availability of parking spaces for the residents and workers in the area.

The zoning board instituted regulations for this area for a reason, so I am not sure why this regulation is even being considered for any changes!

I would think that adding more bedrooms to what already exists could jeopardize the safety of the area in terms of increased crime, increased traffic, and lack of already crowded parking.

I strongly oppose this proposal.

Sincerely

Joyce Sandham
Property Owner at Spanish Towers

From: Monique
To: Walbert, Sloane
Subject: Cavalier Apartments - Protest
Date: Saturday, January 30, 2016 1:38:18 PM

Dear Mr. Walberts
I am writing in regards to information that I just received detailing the proposed changes to the Cavalier Apartments just to the northeast of Spanish Towers.
I have several rental units in Spanish Towers and am contacting you to beseech you to not let this continue. The changes that include adding 96 bedrooms but reducing the parking to not conform to the current zoning use! This will greatly impact our property by increasing traffic, parking, and noise issues. Please do not let this proceed!
We already suffered with the rebuilding at the Outlook Hotel location.
Thank you for your consideration
Sincerely
R. Monique Simons
NSB Rentals LLC

From: Family Shaw
To: Walbert, Sloane
Subject: Cavalier Apartments review request
Date: Sunday, January 31, 2016 3:15:46 PM

To Planning & Development Services
Attn: Sloane Walbert

I am writing this letter to state my objections to the review requests by Cavalier Apartments (review # LUR2015-00107 and LUR2016-00009).

I believe these requests should be denied because of the negative impact to the well being of the neighborhood. Providing a variance so that the developer can make a better return for his investment does not help the neighborhood or the city. The neighborhood and city should have top priority. Spanish Towers and Kensington Apartments charge tenants to use the apartment's parking so some tenants choose to park along Bixby and 29th Street. The ACC complex along 28th Street is constructing stairs and walkways so that tenants can leave the ACC complex and cut through the Spanish Tower's parking lot in order to access their parked cars along Bixby and 29th Streets. It is a given that if the Cavalier Apartment requests are granted, Cavalier tenants will have more impact to the parking along Bixby and 29th Streets. Adding 96 additional tenants and reducing the parking at the Cavalier Apartment complex does not make sense. Providing a long term bike storage for Cavalier tenants would not do enough to balance the very negative impact on the neighborhood's well being.

Besides the neighborhood's well being, the quality of life and living environment for the tenants should be considered. The Cavalier Apartments should not provide another dormitory for the University of Colorado. The Cavalier Apartments should provide rental options for the general public. The city should recognize that by packing renters into smaller units with more tenants in the building, the quality of life and living conditions deteriorates. (More trash, noise, congestion)

I strongly object to granting these requests and hope that they are denied for the sake of the neighborhood's well being and the quality of life for the tenants. This would be in the best interest for our city.

Sincerely,
Alice Shaw

From:	Kent & Diane Zaitz
To:	Walbert, Sloane
Cc:	zaitz@q.com
Subject:	Cavalier Apartments Nonconforming Use Review
Date:	Monday, February 01, 2016 9:49:47 AM

To: City of Boulder Planning and Development
Re: Nonconforming Use Review and Site Review for 2900 E. Aurora Ave, Cavalier Apartments

Hello Sloane,
We appreciate the opportunity to address the Cavalier Apartments proposed changes. This request to add 96 additional bedrooms to a complex that is *already above the maximum permitted density* currently is of grave concern to us. This area is already congested and parking is an ongoing issue. Converting to higher density *is not warranted or allowed* from a zoning perspective, and will impact and add additional stress to the area and surrounding property values and quality of living.

As a homeowners at Montclair Court Condominiums, we consider this to be a zoning, property right and quality of life violation. Please do not grant this nonconforming use, and note that our neighborhood adamantly opposes this application. We trust that this will not be approved.

Thank you for your time and efforts,
Kent and Diane Zaitz
Montclair Court Condominiums
2850 E. Aurora Ave #309
303-444-7591
zaitz@q.com

From:	Scott Barton
To:	Walbert, Sloane
Subject:	Nonforming use notice- Cavalier Apartments- 2900 E. Aurora Ave- Review # LUR2015-00107 and LUR2016-00009
Date:	Wednesday, February 03, 2016 7:41:23 AM
Attachments:	image003.png

Mr. Walberts,
We received a letter of non-conforming use review with the above review numbers and address.
Jeff Lawson is the applicant.
However, we do not own Cavalier Apartments.

We own The Province at Boulder and The Lotus, both of which are nearby but have different addresses.

Is this notice being sent to us as a nearby property owner?

Sincerely,
Scott

Scott Barton
VP of Acquisitions and Development

999 South Shady Grove Road, Suite 600
Memphis, TN 38120
(NYSE: EDR)
(901) 259-2582
www.EdRtrust.com

John Schott

Voicemail

Proposal is against the zoning.

He is against the proposal.

They should actually add parking.

David Bright

Voicemail

Opposed to proposal. Area is already overcrowded.

From: Dave Bright
To: Walbert, Sloane
Subject: Comments on Cavalier Apartment Reconfiguration
Date: Thursday, February 04, 2016 5:56:15 PM

Ms. Walbert:

I am an owner of Unit 202 in the Montclair Court Condominiums, and I received your call on Feb 4, 2016, in response to the voice mail I left you on Jan 25.

I am adamantly opposed to the application for increasing the density of units and reducing the parking at the Cavalier Apartments at 2900 E. Aurora Ave.

The City of Boulder has already approved substantial increases in the density of student rental units in this area without adequate associated parking and supporting amenities, at the Outlook Hotel Redevelopment, and the 2885 E Aurora Ave student housing projects. Approving yet another high density redevelopment project in this area would be irresponsible, would substantially overload the market with rental units, would further exacerbate the already inadequate parking, and would undoubtedly degrade property values.

The City of Boulder Planning Department is charged with developing and enforcing reasonable zoning requirements that ensure the quality of new developments and the interests of existing property owners. As such, it should not grant variances to established zoning requirements for redevelopment proposals such as the Cavalier Apartments, which essentially subdivide existing properties into much higher density projects without adding parking and amenities that would improve the values and quality of a neighborhood, rather than degrade them.

Please contact me at (970) 349-6190, or dbright@roadrunner.com if you would like further input from me on this issue.

David Bright

From: Kent & Diane Zaitz
To: Walbert, Sloane
Subject: Re: Cavalier Apartments Nonconforming Use Review
Date: Tuesday, February 16, 2016 10:50:28 AM

Sloane,

Thank you for responding to my phone message. I went on your site and also looked at the floor plans. I am sure there are many questions, but one thing that jumps out is that the interior bedrooms do not have any windows. Is that allowable? I still think the density is going to be way too great for the area as the past management practices have demonstrated. The area has students and local workers packed into the complex. At what stage in the process is the application at this time?

Thank you for your time,

Kent

From: "Sloane Walbert" <WalbertS@bouldercolorado.gov>
To: "Kent & Diane Zaitz" <zaitz@q.com>
Sent: Thursday, February 4, 2016 3:35:18 PM
Subject: RE: Cavalier Apartments Nonconforming Use Review

Dear Kent,

In response to your voicemail, a Nonconforming Use Review is a staff level decision with a 14-day call-up period in which a member of the Planning Board or a member of the public can "call-up" the application for a public hearing. If the application is called-up for a public hearing I will schedule a hearing during a regularly scheduled Planning Board meeting and the Board will make the final decision on the proposal. I will be sure to keep you updated up the progress of the proposal. Also, I can accept public comment up until the final decision. Let me know if you have any questions or need clarification. Thank you,

Sloane Walbert, AICP
Planner I, Department of Planning, Housing and Sustainability
City of Boulder
1739 Broadway, 3rd Floor
P.O. Box 791
Boulder, CO 80306-0791
(303) 441-4231 Direct
WalbertS@bouldercolorado.gov

From: Walbert, Sloane
Sent: Thursday, February 04, 2016 2:36 PM
To: 'Kent & Diane Zaitz'
Subject: RE: Cavalier Apartments Nonconforming Use Review

Dear Kent and Diane,

Thank you for the feedback. A full traffic study and parking study are currently being done for the proposal. The parking study should demonstrate the amount of parking currently being used by the development and what parking would be necessary for the proposal. It should also discuss the current parking situation on the surrounding streets.

The plans for the proposal at http://gisweb.bouldercolorado.gov/agswebsites/pds/development-review/. Input the address or case number in the upper right hand corner to search for the application. Once you select the property, the application materials and plans will be listed on the left hand side. I will post the traffic study and parking study to the website once city staff receives them.

I will be sure to keep you updated as the projects progresses. Thank you,

Sloane Walbert, AICP
Planner I, Department of Planning, Housing and Sustainability
City of Boulder
1739 Broadway, 3rd Floor
P.O. Box 791
Boulder, CO 80306-0791
(303) 441-4231 Direct
WalbertS@bouldercolorado.gov

From: Kent & Diane Zaitz [mailto:zaitz@q.com]
Sent: Monday, February 01, 2016 9:50 AM
To: Walbert, Sloane
Cc: zaitz@q.com
Subject: Cavalier Apartments Nonconforming Use Review

To: City of Boulder Planning and Development
Re: Nonconforming Use Review and Site Review for 2900 E. Aurora Ave, Cavalier Apartments

Hello Sloane,
We appreciate the opportunity to address the Cavalier Apartments proposed changes. This request to add 96 additional bedrooms to a complex that is *already above the maximum permitted density* currently is of grave concern to us. This area is already congested and parking is an ongoing issue. Converting to higher density *is not warranted or allowed* from a zoning perspective, and will impact and add additional stress to the area and surrounding property values and quality of living.

As a homeowners at Montclair Court Condominiums, we consider this to be a zoning, property right and quality of life violation. Please do not grant this nonconforming use, and note that our neighborhood adamantly opposes this application. We trust that this will not be approved.

Thank you for your time and efforts,
Kent and Diane Zaitz
Montclair Court Condominiums