# West Linn 

## STAFF REPORT FOR THE PLANNING COMMISSION

FILE NUMBER: DR-23-01

## HEARING DATE: <br> February 21, 2024

## REQUEST:

The applicant is requesting approval for the demolition of two existing structures, to be replaced with a two-story commercial building with underground parking and a rooftop deck at 1919 and 1949 Willamette Falls Drive.

## APPROVAL

CRITERIA:
Community Development Code (CDC) Chapters 19, 41, 46, 48, 55, 58 , and 99

STAFF REPORT
PREPARED BY:
John Floyd, Associate Planner

Planning Manager's Initials $\qquad$ DSW

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## GENERAL INFORMATION

| OWNER/APPLICANT: | Icon Construction \& Development <br> Attn: Darren Gusdorf <br> 1969 Willamette Falls Drive, Suite 260 <br> West Linn, OR 97068 |
| :---: | :---: |
| CONSULTANTS: | SG Architecture, LLC <br> Attn: Scot Sutton 10940 SW Barnes Road \#364 <br> Portland, OR 97225 |
|  | Theta, LLC <br> Attn: Bruce Goldson <br> PO Box 1345 <br> Lake Oswego, OR 97035 |
| SITE LOCATION: | 1919 \& 1949 Willamette Falls Drive |
| LEGAL |  |
| DESCRIPTION: | Clackamas County Assessor's Map 31E02BA, Tax Lots 4300 \& 4400 Lots 4 through 6, Block 10, Willamette Falls Tract |
| SITE SIZE: | 15,000 square feet + /- |
| ZONING: | GC, General Commercial Willamette Falls Drive Commercial Design District |
| COMP PLAN |  |
| DESIGNATION: | Commercial |
| 120-DAY PERIOD: | This application became complete on May 2, 2023. The 120-day maximum application-processing period initially ended on August 30,2023 . The applicant has provided five extension requests that result in a maximum processing deadline of May 2, 2024 |
| PUBLIC NOTICE: | Public notice was mailed to the Willamette neighborhood association, parties of record, and affected property owners on February 1, 2024. The property was posted with a notice sign on February 8, 2024. The notice was published in the West Linn Tidings on February 7, 2024. The notice requirements of CDC Chapter 99 have been met. |

## EXECUTIVE SUMMARY

## Project Summary:

The application is a Class II Design Review for the construction of a new commercial building within both the General Commercial Zone and Willamette Falls Drive Commercial Design District. The Historic Review Board has twice considered the application and made a recommendation to the Planning Commission regarding the project's compliance with Community Development Code (CDC) Chapter 58, which contains the standards and criteria for new development within the Willamette Falls Drive Commercial Design District (WFDCDD). The Planning Commission is now tasked with making a final decision to approve, conditionally approve, or deny the application based upon the project's compliance with all applicable standards and criteria.


## Site Conditions:

The project site is approximately 15,000 square feet in size and consists of three historic lots located at the southeast corner of Willamette Falls Drive and Twelfth Street (Lots 4 through 6, Block 10, Willamette Falls Tract). Knapps Alley provides access to the rear of the site and creates physical separation from single-family homes to the south.

The site is largely flat with a mild slope to the east, containing two existing structures surrounded by decorative landscaping. No environmental resources are found on the site, and the project area meets the definition of Type IV land. The existing buildings were constructed as single-family homes but have been converted to commercial uses. Neither is located within
the Willamette Historic District, is listed as a local historic resource, or listed on the National Register. Therefore, no historic protections apply per CDC 25.020(A).

## Surrounding Land Use and Zoning:

The site is zoned General Commercial (GC) and is within the boundaries of the Willamette Falls Drive Commercial Design District Overlay (WFDCDD). The project site has been zoned GC at least as far back as 1983, and was included in the boundaries of the WFDCDD when the overlay was created in 1992. Adjacent zoning and land uses are described as follows:

| Direction From Site | Zoning | Land Use |
| :--- | :---: | :--- |
| North (Across Willamette Falls Drive) | GC/WFDCDD | Commercial |
| East | GC/WFDCDD | Commercial |
| West (Across 12 ${ }^{\text {th }}$ Street) | GC/WFDCDD | Religious Institution |
| South (across Knapps Alley) | R-5 | Single-Family Residential |

## Project Description:

The project is similar in design and purpose to the adjacent commercial building to the east (1969 \& 1993 Willamette Falls Drive), which was designed, permitted, and constructed by the same owner/applicant and design team under DR-16-01 and DR-18-02.

The current scope of the project, as amended by the applicant on January 29 ${ }^{\text {th }}$ of this year (Exhibit PC-1.A), includes the following:

- Demolition of two existing commercial structures
- Construction of a two-story commercial building with approximately 26,215 square feet of speculative commercial space. No specific uses or tenants are proposed at this time, but could eventually be tenanted with office, service, retail, and/or restaurant uses.
- Construction of underground parking for 33 automobiles and 14 bicycles, to be accessed through an adjacent underground parking garage located at 1993/1969 Willamette Falls Drive. Vehicular access would occur through the existing driveway fronting $11^{\text {th }}$ street to the east.
- An approximately 745 SF rooftop deck, screened with decorative planters and a 5.5-foot-tall screening wall, and an approximately 605 SF mechanical screening room, located in the approximate center of the roof for the purposes of sound attenuation. The deck and rooftop area would be accessed from a stairwell and elevator.
- Frontage improvements along $12^{\text {th }}$ Street and Knapps Alley, to include four parallel parking spaces along Knapps alley.
- Two Design Exceptions as approved by the Historic Review Board (PC-2.a):
o Use of James Hardie fiber cement in lieu of wood siding and trim; and
o Use of brick masonry in lieu of wood siding along selected portions of the façade.
Design features proposed in the original application (Ehibit PC-1.E) that have been removed or replaced include the following:
- A Design Exception to allow the use support columns for an extended metal awning ove the public sidewalk has been withdrawn, and the canopy redesigned to be fully cantilevered from the building.
- A 2,235 SF lounge on the roof, described by the applicant as a "mezzanine" and defined in the CDC as a third-story, has been removed from the design. This area has been replaced by a 605 SF mechanical equipment space for purposes of screening and noise abatement, and is located in the center of the rooftop to reduce visual impact..
- Rooftop access has been reduced from an elevator and two stairwells, to an elevator and a single stairwell.



3 ROOF PLAN + KNAPPS ALLEY ELEVATION
CONCEPTUALPLANS + ELEVATIONS



## Procedural History and Applicant Response:

June 13, 2023
Historic Review Board considered application for a new commercial building. The application included three design exceptions:

- Use of fiber cement in lieu of horizontal wood siding;
- Use of Hardi-plank in lieu of horizontal wood siding and trim; and
- Use of support posts for a metal awning over the public sidewalk at the corner of Willamette Falls Drive and $12^{\text {th }}$ Street

The issue of building height was a central point of deliberation, including the definition of "story" and whether a proposed rooftop lounge and restroom constituted a mezzanine or a third-story. The definition of story was significant as the WFDCDD limits new construction to no more than two stories.

After substantial discussion, the HRB provided a recommendation of approval, subject to five conditions of approval and a recommendation of "further analysis" of the mezzanine area (aka third-story) by the Planning Commission (Exhibit PC-2a).

## August 15 and September 13, 2023

In response to submitted testimony and deliberations of the June $13^{\text {th }}$ HRB hearing, the applicant submitted revised plans to reduce the visual impact of the third story and supplemental findings to support an additional Design Exception to exceed the two-story limit. Concurrent with that change was a redesign that removed the need for support pillars under the awning (Exhibit PC-1.D). These materials have been withdrawn and superseded by materials provided by the applicant on January 29, 2024 (Exhibits PC-1.A \& B)

## October 4, 2023

The Planning Commission Public Hearing was opened, but testimony was not received, nor deliberations begun at the recommendation of staff and the City Attorney. As noted by lan and Audra Brown in their written testimony (Exhibit PC-3), only the Historic Review Board (HRB) may approve a Design Exception to the WFDCDD Standards, and a new Design Exception had been introduced after the HRB made their recommendation on June $13^{\text {th }}$. Therefore, the Planning Commission voted to remand the new design exception back to the HRB so they could render a decision on the Design Exception to exceed the two-story limit.

## October 23, 2023

On October $23^{\text {rd }}$, the applicant provided additional materials for the remand hearing before the Historic Review board (Exhibit PC-1.C). These materials have been withdrawn and superseded by materials provided by the applicant on January 29, 2024 (Exhibits PC-1.A \& B)

## November 14 ${ }^{\text {th }}, 2023$

The Historic Review Board took up the matter of the added Design Exception to exceed the two-story height limit in the WFDCDD. After receiving testimony and deliberation, the HRB denied the Design Exception on grounds it failed to satisfy the approval criteria (Exhibit PC-2.B).

## January 29 ${ }^{\text {th }}, 2024$

Applicant submits a letter rescinding their application for a Design Exception to exceed the twostory height limit, including associated materials submitted under Exhibit PC-1.C and PC-1.D, and states an intent to move forward with a newly revised design included with the withdrawal letter (Exhibits PC-1.A and 1.B).

The revised design is a direct response to feedback provided by the Historic Review Board on their original application in the June $13^{\text {th }}$ recommendation to the Planning Commission (Exhibit PC-2.A), and public testimony received then and at subsequent hearings described above (Exhibit PC-3).

## Applicable Community Development Code Approval Criteria:

- Chapter 19, General Commercial
- Chapter 41, Building Height
- Chapter 46, Off-Street Parking
- Chapter 48, Access, Egress and Circulation
- Chapter 55, Design Review
- Chapter 58, Willamette Falls Drive Commercial Design District; and
- Chapter 99, Procedures for Decision Making: Quasi-Judicial.


## Public Comments:

Public Comments were submitted by the following individuals aand are included as Exhibit PC3.

- Shannen Knight (05.24.23)
- Ian \& Audra Brown / James Estes \& Kristen Woofter (joint comment letter 06.13.23)
- Albert and Laura Secchi (06.13.23)
- Rachel Goebert (10.03.23)
- Ian \& Audra Brown (10.03.23)
- Jason Hall (10.04.23)
- Dee Deatherage (10.04.23)
- Karie Oakes (10.05.23)
- Shannen Knight (09.23.23)
- Shannen Knight (10.26.23)
- Brenda Bless Russell (11.09.23)
- Robert Beegle (11.12.23)
- Karin Pappin-Obrien (11.13.23)
- Ian \& Audra Brown (11.14.23)
- Nikki Hydes (11.14.23)

One party submitted testimony in support of the application (knight). The remainder of the letters were generally in opposition to the project, with the third story and noise being the principal points of concern and opposition. As described previously in this report and staff findings 46, the building height and number of stories has been reduced subsequent to the receipt of these comments to remove the need for a Design Exception.

As of the publication of this staff report, no additional public comments have been received for the Planning Commission.

## RECOMMENDATION

Staff recommends the Planning Commission approve DR-23-01 based on: 1) the findings submitted by the applicant, which are incorporated by this reference, 2) supplementary staff findings included in the Addendum below, and 3) the addition of conditions of approval below. With these findings, the applicable approval criteria are met. The recommended conditions are as follows:

1. Approved Plans. All alterations and improvements shall substantially conform to all submitted tentative plan sheets and supporting materials contained in Exhibit PC-01.
2. Engineering Standards. All public improvements and facilities associated with the approved site design, including but not limited to street improvements, driveway approaches, curb cuts, utilities, grading, onsite and offsite stormwater, street lighting, easements, easement locations, and connections for future extension of utilities are subject to conformance with the City Municipal Code and Community Development Code. These must be designed, constructed, and completed prior to final building certificate of occupancy. The City may partner with the applicant to fund additional improvements as part of the project.
3. Joint Access. Prior to final building certificate of occupancy, the applicant shall present an easement or other legal evidence of continued joint access and egress between the project site and $11^{\text {th }}$ street through the existing underground parking garage and driveway onto $11^{\text {th }}$ street to the east (1969 \& 1993 Willamette Falls Drive), in compliance with CDC 48.020.E and 48.025.
4. Street Improvements. Prior to final building certificate of occupancy, the applicant shall mitigate any impacts to existing right-of-way improvements along Willamette Falls Drive, 12th Street, and Knapps Alley. The mitigation will include replacement of impacted pavement, curbs, planter strips, street trees, street lights, sidewalks, pedestrian crossings, and street storm drainage.
5. Knapps Alley. The applicant shall improve, including repaving, the portion of Knapps Alley adjacent to the site. This must be completed prior to the issuance of the final building certificate of occupancy.
6. Vertical Breaks. Prior to issuance of building permits, the applicant shall submit building permit plans with revised western and southern elevations that demonstrate compliance with CDC 58.080.C. 7 that requires strong vertical breaks or lines regularly spaced every 25 to 50 feet.
7. Entry Doors \& Pedestrian Level Windows. Prior to issuance of building permits, the applicant shall submit building permit plans with revised elevations and door details that demonstrate compliance the glazing and panel ratios for entry doors in CDC 58.080.C.13, and minimum pedestrian level window sill heights within CDC 58.080.C.15.
8. Awning. Prior to issuance of building permits, the applicant shall submit building permit plans that demonstrate compliance with the 5 -foot minimum awning depth as required in CDC 58.080.C.11.

# ADDENDUM PLANNING COMMISSION STAFF REPORT <br> MEETING DATE: OCTOBER 4, 2023 

## STAFF EVALUATION OF THE PROPOSAL'S COMPLIANCE WITH APPLICABLE CODE CRITERIA

I. CHAPTER 19, GENERAL COMMERCIAL, GC 19.030 PERMITTED USES
The following uses are permitted outright in this zone:
[...]
3. Animal sales and services, grooming.
4. Building maintenance services.
5. Business equipment sales and services.
6. Business support services.
7. Communications services.
8. Consumer repair services.
9. Convenience sales and personal services.
10. Eating and drinking establishments.
11. Drive-through restaurants.
12. Family day care.
13. Financial, insurance and real estate services.
14. Food and beverage retail sales.
15. General retail services.
16. Hotel/motel, including those operating as extended hour businesses.
17. Laundry services.
18. Senior center.
19. Medical and dental services.
20. Parking facilities.
21. Participant sports and recreation, indoor.
22. Personal service facilities.
23. Professional and administrative services.
24. Research services.
25. Utilities, minor.
26. Cultural exhibits and library services.
[...]

Staff Finding 1: The application does not propose a specific tenant, but does anticipate a mixture of restaurant and office/retail uses. As the GC zone permits these and other possible tenants, and specific occupants will be reviewed for conformity with the permitted uses
above as part of regular building permit review and business license administration, this standard will be met.
19.070 DIMENSIONAL REQUIREMENTS, USES PERMITTED OUTRIGHT AND USES PERMITTED UNDER PRESCRIBED CONDITIONS
A. Except as may be otherwise provided by the provisions of this code, the following are the requirements for uses within this zone:

1. The minimum front lot line length or the minimum lot width at the front lot line shall be 35 feet.
2. The average minimum lot width shall be 50 feet.
3. The average minimum lot depth shall not be less than 90 feet.

Staff Finding 2: The application does not propose the creation of new lots. These standards do not apply.
4. Where the use abuts a residential district, except as provided in CDC 58.090(C)(1), the setback distance of the residential zone shall apply.


SETBACK OF ABUTTING HOUSE
DICTATES COMMERCIAL SETBACK
5. The maximum lot coverage shall be 50 percent, except as provided in CDC 58.090(C)(1)(d).
6. The maximum building height shall be two and one-half stories or 35 feet for any structure located within 50 feet of a low or medium density residential zone, and three and one-half stories or 45 feet for any structure located 50 feet or more from a low or medium density residential zone.
7. For lot lines that abut an arterial, there shall be no minimum yard dimensions or minimum building setback area, and the maximum building setback shall be 20 feet. The front setback area between the street and the building line shall consist of landscaping or a combination of non-vehicular hardscape areas (covered with impervious surfaces) and landscaped areas. If there are not street trees within the public right-of-way, the front setback area shall include such trees per the requirements of the City Arborist.
$B$. The requirements of subsections (A)(1) through (5) of this section may be modified for developments under the planned unit development provisions of Chapter 24 CDC.

Staff Finding 3: The application is located within the Willamette Falls Drive Commercial Design District, as described and set forth in CDC Chapter 58 and addressed in staff findings 37 through 66. The standards of this overlay zone establish lot coverage, setback, and height standards that supersede those of the base zone. Therefore, these standards do not apply.

CHAPTER 41, BUILDING HEIGHT, STRUCTURES ON STEEP LOTS, EXCEPTIONS 41.005 DETERMINING HEIGHT OF BUILDING
A. For all zoning districts, building height shall be the vertical distance above a reference datum measured to the highest point of a flat roof or to the deck line of a mansard roof or to the highest gable, ridgeline or peak of a pitched or hipped roof, not including projections above roofs such as cupolas, towers, etc. The reference datum shall be selected by either of the following, whichever yields a greater height of building.

1. For relatively flat sites where there is less than a 10-foot difference in grade between the front and rear of the building, the height of the building shall be measured from grade five feet out from the exterior wall at the front of the building; or
2. For steeper lots where there is more than a 10-foot difference in grade between the front and rear of the building, the height of the building is measured from grade at a point five feet out from the exterior wall on the lowest side (front or rear) of the building. One then measures vertically to the peak or ridgeline of the roof to determine the height.
3. Buildings on cross slopes or side slopes are measured at either the front or rear of the building using methods described in subsections (A)(1) and (2) of this definition only. Even if the cross slope creates a tall elevation on the side, the method of determining height is not modified.

Figure 1.


Height of building on relatively flat lot is measured from grade at front of house to peak of roof.


Height of building on steep lots where there is more than a 10-foot difference in elevation between the front and rear of the building is measured from grade at a point five feet out from the front or rear exterior wall on the lowest side of the house to the peak of the building.
with a cross slope is still measured at
either the front or rear by methods described in subsection (A)(1) or (2) of this definition.
 Projections such as chimneys, spires, domes, elevator shaft nom occupancy are not subject to the building height

Drive Commercial Design 66. These standards using the methodology above PC-1A includes access facilities (stairwe measured and does not establish
addressed in Staff finding 46 .

CHAPTER 42, CLEAR VISION AREAS
42.030 EXCEPT The following described area in Willamette shall which abut Willamette Falls Drive and 11th Street on The units of land zoned General Commercial at the intersection of Willamette on 9 th Avenue to 14 th Street to the 10 th and 16 th Streets. Beginning on 16th Street to 9th Avenue; on th River to 12 th Street; on 12 th Street 7th Avenue to 16 th Street; on 16th Sin River and Willamette 11 th Street to Willamette Falls Drive. This

CHAPTER 46, OFF-STREET PARKING, LOADING AND RESERVOIR AREAS
46.140 EXEMPTIONS TO PARKING REQUIREMENTS

To facilitate the design requirements of Chapter 58 CDC, properties in the Willamette Falls Drive Commercial Design District, located between 10th and 16th Streets, shall be exempt from the minimum parking and off-street loading requirements as identified in this chapter. Any offstreet parking or loading spaces voluntarily provided shall be designed and installed per the dimensional standards of this code.

Staff Finding 6: The application proposes the use of alley and underground parking, to be accessed through an existing underground parking garage located at 1993/1969 Willamette Falls Drive, with driveway access onto $11^{\text {th }}$ street to the east. As the project site is located within the Willamette Falls Drive Commercial Design District and across the Street from Bus Stop 9269 that serves as a stop for TriMet Bus Line 154, it is therefore exempt from providing off-site parking per CDC 46.140 above and OAR-660-0120-0440 (Parking Reform Near Transit Corridors). As described in the staff findings below, the off-street parking voluntarily provided will be installed per the dimensional standards of the code. This standard is met.
46.150 DESIGN AND STANDARDS
and circulation:
A. Design standards.

1. "One standard parking space" means a minimum for a parking stall of eight feet in width and 16 feet in length. These stalls shall be identified as "compact." To accommodate larger cars, 50 percent of the required parking spaces shall have a minimum dimension of nine feet in width and 18 feet in length (nine feet by 18 feet). When multifamily parking stalls back onto a main driveway, the stalls shall be nine feet by 20 feet. Parking for development in water resource areas may have 100 percent compact spaces.
2. Disabled parking and maneuvering spaces shall be consistent with current federal dimensional standards and subsection B of this section and placed nearest to accessible building entryways and ramps.
3. Repealed by Ord. 1622.
4. Service drives shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress, and maximum safety of pedestrians and vehicular traffic on the site.
5. Each parking and/or loading space shall have clear access, whereby the relocation of other vehicles to utilize the parking space is not required.
6. Except for single-family attached and detached residences, any area intended to be used to meet the off-street parking requirements as contained in this chapter shall have all parking spaces clearly marked using a permanent paint. All interior drives and access aisles shall be clearly marked and signed to show direction of flow and maintain vehicular and pedestrian safety. Permeable parking surface spaces may have an alternative delineation for parking spaces.
7. Except for residential parking, and parking for public parks and trailheads, at least 50 percent of all areas used for the parking and/or storage and/or maneuvering of any vehicle, boat and/or trailer shall be improved with asphalt or concrete surfaces according to the same
standards required for the construction and acceptance of City streets. The remainder of the areas used for parking may use a permeable paving surface designed to reduce surface runoff. Parking for public parks or trailheads may use a permeable paving surface designed to reduce surface runoff for all parking areas. Where a parking lot contains both paved and unpaved areas, the paved areas shall be located closest to the use which they serve.
8. Off-street parking spaces for single-family attached and detached residences shall be improved with an asphalt or concrete surface, or a permeable parking surface designed to reduce surface runoff, to specifications as approved by the Building Official. Other parking facilities for single-family homes that are to accommodate additional vehicles, boats, recreational vehicles, and trailers, etc., need not be paved. All parking for multifamily residential development shall be paved with concrete or asphalt. Driveways shall measure at least 20 feet from the back of sidewalk to garage or the end of the parking pad to accommodate cars and sport utility vehicles without the vehicles blocking the public sidewalk.
9. Access drives from the street to off-street parking or loading areas shall be designed and constructed to facilitate the flow of traffic and provide maximum safety for pedestrian and vehicular traffic on the site. The number of access drives shall be limited to the minimum that will allow the property to accommodate and service the anticipated traffic. Access drives shall be clearly and permanently marked and defined through use of rails, fences, walls, or other barriers or markers on frontage not occupied by service drives.
10. Access drives shall have a minimum vision clearance as provided in Chapter 42 CDC, Clear Vision Areas.
11. Parking spaces along the boundaries of a parking lot or adjacent to interior landscaped areas or sidewalks shall be provided with a wheel stop at least four inches high located two feet back from the front of the parking stall. Such parking spaces may be provided without wheel stops if the sidewalks or landscaped areas adjacent the parking stalls are two feet wider than the minimum width.
12. Off-street parking and loading areas shall be drained in accordance with plans and specifications approved by the City Engineer. Storm drainage at commercial sites may also have to be collected to treat oils and other residue.
13. Artificial lighting on all off-street parking facilities shall be designed to deflect all light downward away from surrounding residences and so as not to create a hazard to the public use of any road or street.
14. Directional arrows and traffic control devices which are placed on parking lots shall be identified.
[...]
15. Visitor or guest parking must be identified by painted "GUEST" or "VISITOR."
16. The parking area shall have less than a five percent grade. No drainage across adjacent sidewalks or walkways is allowed.
17. Commercial, office, industrial, and public parking lots may not occupy more than 50 percent of the main lot frontage of a development site. The remaining frontage shall comprise buildings or landscaping. If over 50 percent of the lineal frontage comprises parking lot, the landscape strip between the right-of-way and parking lot shall be increased to 15 feet wide and shall include terrain variations (e.g., one-foot-high berm) plus landscaping. The defensible space of the parking lot should not be compromised.

Staff Finding 7: Staff incorporates applicants' findings for these standards. The application includes alley parking for four vehicles with minimum dimensions of 8 feet by 29 feet, and a basement level garage that includes a mixture of standard and compact spaces that meet the minimum dimensional standards of width and depth. Two accessible parking spaces are located adjacent to the elevator, and a 23 -foot-wide drive aisle will facilitate a safe and comprehensible traffic pattern for vehicles and pedestrians through the use of a one-way traffic pattern. All spaces will be on a concrete surface and marked with clear access and boundaries through the use of paint and architectural features such as support columns. As the lot is interior to the building, standards regarding stormwater, lighting, landscaping, and frontage do not apply. These standards are met.
B. Accessible parking standards for persons with disabilities. If any parking is provided for the public or visitors, or both, the needs of the people with disabilities shall be based upon the following standards or current applicable federal standards, whichever are more stringent:

1. Minimum number of accessible parking space requirements (see following table):

| MINIMUM REQUIRED NUMBER OF TOTAL PARKING SPACES | TOTAL NUMBER OF ACCESSIBLE SPACES | NUMBER OF VANACCESSIBLE SPACES REQUIRED, OF TOTAL | SPACES SIGNED "WHEELCHAIR USE ONLY" |
| :---: | :---: | :---: | :---: |
| [...] |  |  |  |
| 26-50 | 2 | 1 | - |
| [...] |  |  |  |

2. Location of parking spaces. Parking spaces for the individual with a disability that serve a particular building shall be located on the shortest possible accessible circulation route to an accessible entrance to a building. In separate parking structures or lots that do not serve a particular building, parking spaces for the persons with disabilities shall be located on the shortest possible circulation route to an accessible pedestrian entrance of the parking facility.
3. Accessible parking space and aisle shall meet ADA vertical and horizontal slope standards.
4. Where any differences exist between this section and current federal standards, those standards shall prevail over this code section.
5. One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 inches wide.
6. Van-accessible parking spaces shall have an additional sign marked "Van Accessible" mounted below the accessible parking sign. A van-accessible parking space reserved for wheelchair users shall have a sign that includes the words "Wheelchair Use Only." Vanaccessible parking shall have an adjacent eight-foot-wide aisle. All other accessible stalls shall have a six-foot-wide aisle. Two vehicles may share the same aisle if it is between them. The vertical clearance of the van space shall be 96 inches.

Staff Finding 8: The application includes alley parking for approximately 4 vehicles and a basement level garage for 33 parking spaces, resulting in a total of 37 total vehicles. Per the table above, at least two accessible spaces must be provided. In compliance with this standard, the applicant proposes two spaces adjacent to the elevator which provides the shortest possible accessible circulation route to the building. One van accessible space with an 8 foot ( 96 inch wide) is identified on the plans. All spaces will be checked for compliance with federal ADA standards during normal building permit review. These standards are met.
F. (See Figures 1 and 2 below.)

FIGURE 1. MINIMUM STANDARDS FOR PARKING LOT LAYOUT


Figure 2. MINIMUM DISTANCE FOR PARKING STALLS


| ANGLE OF PARKING | DIRECTION OF <br> PARKING | AISLE WIDTH |  | DIMENSION ' ${ }^{\text {' }}$ ' |  | DIMENSION 'B' |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | STALL WIDTH |  | STALL WIDTH |  | STALL WIDTH |  |
|  |  | $9.0{ }^{\prime}$ | 8.0' | $9.0{ }^{\prime}$ | $8.0^{\prime}$ | $9.0{ }^{\prime}$ | 8.0' |
| $30^{\circ}$ | DRIVE-IN | 12.5' | $12.5{ }^{\prime}$ | 16.8' | 13.8' | 18.0' | $16.0^{\prime}$ |
| $45^{\circ}$ | DRIVE-IN | $12.5{ }^{\prime}$ | $12.5{ }^{\prime}$ | 19.1' | $17.0{ }^{\prime}$ | 12.7' | 11.3' |
| $60^{\circ}$ | DRIVE-IN | 19.0' | $18.0{ }^{\prime}$ | 20.1' | 17.8' | 10.4' | $9.2{ }^{\prime}$ |
| $60^{\circ}$ | BACK-IN | $17.0{ }^{\prime}$ | $17.0{ }^{\prime}$ | 20.1' | 17.8' | 10.4' | $9.2{ }^{\prime}$ |
| $90^{\circ}$ | DRIVE-IN | $23.0^{\prime}$ | $23.0^{\prime}$ | 18.0' | $16.0{ }^{\prime}$ | 9.0' | 8.0' |
| $90^{\circ}$ | BACK-IN | 22.0 ' | $22.0^{\prime}$ | 18.0' | 16.0' | $9.0{ }^{\prime}$ | 8.0' |

Staff Finding 8: The application includes a basement level garage that includes a mixture of standard and compact spaces located at a 90-degree angle from the drive aisle. As discussed previously in this report, all standard stalls will meet the 9 by 18 -foot minimum dimension, and all compact spaces the $\mathbf{8}$ by 16 -foot minimum dimensions. The proposed drive aisle width is $\mathbf{2 3}$ feet, which is the minimum required above. Four additional parallel spaces are located along Knapps Alley. These require a $\mathbf{1 5}$-foot drive aisle and have a $\mathbf{2 0}$-foot drive aisle (Knapps Alley). These standards are met.
A. The provisions of this chapter do not apply where the provisions of the Transportation System Plan or land division chapter are applicable and set forth differing standards.
B. All lots shall have access from a public street or from a platted private street approved under the land division chapter.
C. No building or other permit shall be issued until scaled plans are presented to the City and approved by the City as provided by this chapter, and show how the access, egress, and circulation requirements are to be fulfilled. Access to State or County roads may require review, approval, and permits from the appropriate authority.
]...]
E. Owners of two or more uses, structures, lots, parcels, or units of land may agree to utilize jointly the same access and egress when the combined access and egress of both uses, structures, or parcels of land satisfies the requirements as designated in this code; provided, that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases, or contracts to establish joint use. Copies of said instrument shall be placed on permanent file with the City Recorder.
[...]

Staff Finding 9: As shown on scaled plans, the project site fronts three public right of ways (Willamette Falls Drive, $\mathbf{1 2}^{\text {th }}$ Street, and Knapps Alley). Pedestrian Access is provided by all three frontages. Vehicular access to on-site parking is proposed via Knapps Alley and an existing parking garage entrance on $11^{\text {th }}$ Street, that will be connected to the underground parking proposed with this project. While the applicant owns both the project site and the existing structure through which underground garage access will be provided, the application does not include legal evidence of continued access. Therefore, city staff are proposing Condition 3 that requires the presentation of legal evidence of joint access and use prior to final inspection. As conditioned, this standard is met.

### 48.025 ACCESS CONTROL

A. Purpose. The following access control standards apply to public, industrial, commercial and residential developments including land divisions. Access shall be managed to maintain an adequate level of service and to maintain the functional classification of roadways as required by the West Linn Transportation System Plan.
B. Access control standards.

1. Traffic impact analysis requirements. The City or other agency with access jurisdiction may require a traffic study prepared by a qualified professional to determine access, circulation and other transportation requirements. (See also CDC 55.125, Transportation Impact Analysis.)
2. The City or other agency with access permit jurisdiction may require the closing or consolidation of existing curb cuts or other vehicle access points, recording of reciprocal access easements (i.e., for shared driveways), development of a frontage street, installation of traffic control devices, and/or other mitigation as a condition of granting an access permit, to ensure the safe and efficient operation of the street and highway system. Access to and from off-street parking areas shall not permit backing onto a public street.
3. Access options. When vehicle access is required for development (i.e., for off-street parking, delivery, service, drive-through facilities, etc.), access shall be provided by one of the following
methods (planned access shall be consistent with adopted public works standards and TSP). These methods are "options" as approved by the City Engineer.
a) Option 1. Access is from an existing or proposed alley or mid-block lane. If a property has access to an alley or lane, direct access to a public street is not permitted.
b) Option 2. Access is from a private street or driveway connected to an adjoining property that has direct access to a public street (i.e., "shared driveway"). A public access easement covering the driveway shall be recorded in this case to assure access to the closest public street for all users of the private street/drive.
c) Option 3. Access is from a public street adjacent to the development lot or parcel. If practicable, the owner/developer may be required to close or consolidate an existing access point as a condition of approving a new access. Street accesses shall comply with the access spacing standards in subsection (B)(6) of this section.
[...]
4. Access spacing.
a. The access spacing standards found in the adopted Transportation System Plan (TSP) shall be applicable to all newly established public street intersections and non-traversable medians. Deviation from the access spacing standards may be granted by the City Engineer if conditions are met as described in the access spacing variances section in the adopted TSP.
b. Private drives and other access ways are subject to the requirements of CDC 48.060. 7. Number of access points. For single-family (detached and attached), two-family, and duplex housing types, one street access point is permitted per lot or parcel, when alley access cannot otherwise be provided; except that two access points may be permitted corner lots (i.e., no more than one access per street), subject to the access spacing standards in subsection (B)(6) of this section. The number of street access points for multiple family, commercial, industrial, and public/institutional developments shall be minimized to protect the function, safety and operation of the street(s) and sidewalk(s) for all users. Shared access may be required, in conformance with subsection $(B)(8)$ of this section, in order to maintain the required access spacing, and minimize the number of access points.
5. Shared driveways. The number of driveway and private street intersections with public streets shall be minimized by the use of shared driveways with adjoining lots where feasible. The City shall require shared driveways as a condition of land division or site design review, as applicable, for traffic safety and access management purposes in accordance with the following standards:
a. Shared driveways and frontage streets may be required to consolidate access onto a collector or arterial street. When shared driveways or frontage streets are required, they shall be stubbed to adjacent developable parcels to indicate future extension. "Stub" means that a driveway or street temporarily ends at the property line, but may be extended in the future as the adjacent lot or parcel develops. "Developable" means that a lot or parcel is either vacant or it is likely to receive additional development (i.e., due to infill or redevelopment potential).
b. Access easements (i.e., for the benefit of affected properties) shall be recorded for all shared driveways, including pathways, at the time of final plat approval or as a condition of site development approval.
c. Exception. Shared driveways are not required when existing development patterns or physical constraints (e.g., topography, lot or parcel configuration, and similar conditions) prevent extending the street/driveway in the future.

Staff Finding 10: As discussed and conditioned in Staff Finding 9, evidence of continued underground parking access is required prior to final inspection. These standards will be met.
C. Street connectivity and formation of blocks required. In order to promote efficient vehicular and pedestrian circulation throughout the City, land divisions and large site developments shall produce complete blocks bounded by a connecting network of public and/or private streets, in accordance with the following standards:

1. Block length and perimeter. The maximum block length shall not exceed 800 feet or 1,800 feet along an arterial.
2. Street standards. Public and private streets shall also conform to Chapter 92 CDC, Required Improvements, and to any other applicable sections of the West Linn Community Development Code and approved TSP.
3. Exception. Exceptions to the above standards may be granted when blocks are divided by one or more pathway(s), in conformance with the provisions of CDC 85.200(C), Pedestrian and Bicycle Trails, or cases where extreme topographic (e.g., slope, creek, wetlands, etc.) conditions or compelling functional limitations preclude implementation, not just inconveniences or design challenges.

Staff Finding 11: No new blocks are proposed with the application. The existing block length is approximately $\mathbf{1 , 1 0 0}$ feet based upon the centerline of Willamette Falls Drive, $\mathbf{1 2}^{\text {th }}$ Street, Knapps Alley, and $11^{\text {th }}$ Street. As the project fronts Willamette Falls Drive, classified as an Arterial. The applicant is not required to make any improvements to Willamette Falls Drive, but is proposing the construction of a new 8 foot sidewalk and curb along 12 Street, and the paving of Knapps Alley. The applicant is required to construct these and mitigate any impacts to public right-of-way infrastructure, per Conditions 1, 2, 4, and 5. As conditioned, these standards will be met.

CHAPTER 54, LANDSCAPING
54.010 PURPOSE

The purpose of this chapter is to provide for the design, selection, installation, and maintenance of landscaping. The landscaping is intended to provide an attractive natural balance to built areas, to reduce runoff, to provide shade, to screen or buffer uses, and to frame or complement views. The chapter also encourages the selection of plant materials that will provide long-term growth, a balance of year-round coverage and greenery, and a variety of species for a more healthy, disease-resistant plant inventory.

Staff Finding 12: The application is located within the Willamette Falls Drive Commercial Design District (WFDCDD), as described and set forth in CDC Chapter 58 and addressed in Staff Findings 37 through 66. Projects within the WFDCDD are exempt from landscaping standards per CDC 58.080.C.2. Therefore, landscaping standards do not apply.

CHAPTER 55, DESIGN REVIEW
55.020 CLASSES OF DESIGN REVIEW
A. Class I Design Review. The following are subject to Class I Design Review:

1. Modification of an office, commercial, industrial, public or multi-family structure for purposes of enhancing the aesthetics of the building and not increasing the interior usable space (e.g., covered walkways or entryways, addition of unoccupied features such as cupolas, clock towers, etc.).
2. Significant road realignment (when not part of a subdivision or partition plat process). "Significant" shall be defined by the length of the realignment and/or extent of redesign, and/or the natural features or human-made structures that will be impacted or removed.
3. Addition or reduction of less than five percent of total square footage of a commercial, office, public, multi-family, or industrial building.
4. Modification of a landscape plan (including water features, ponds, pergolas, arbors, artwork, sculptings, etc.).
5. Minor modifications and/or upgrades of pump stations, reservoirs, and storm detention facilities.
6. Americans with Disability Act compliance that significantly alters the exterior of the building (ramps are exempt).
7. Freestanding art and statuary over five feet tall.
8. Other land uses and activities may be added if the Planning Director makes written findings that the activity/use will not increase off-site impacts and is consistent with the type and/or scale of activities/uses listed above.
9. No design review is required if the applicant proposes to repair or replace one of the listed items. The Planning Director shall make the determination of whether an applicant is proposing a repair or replacement. However, Class I design review applies when one of the following improvements is part of a minor redesign or remodel.
a. Sidewalks on private property.
b. Loading docks.
c. Addition or reduction of parking stalls.
d. Revised parking alignment.
e. Revised circulation.
f. Revised points of ingress/egress to a site.
g. Heating, ventilation, and air conditioners (HVAC) that are visible from the public right-ofway.
B. Class II Design Review. Class II design review applies to all uses/activities except those uses/activities listed under Class I design review, and the exemptions of CDC 55.025. Class II design review applies to the proposed improvements listed in this section when the proposed improvement (e.g., new sidewalk) is part of a major commercial, office, industrial, public, or multi-family construction project (e.g., a new shopping center).

Staff Finding 13: The application is for a new commercial structure, and is therefore subject to a Class II Design Review. This application is for a Class II Design Review. This standard is met.
55.030 ADMINISTRATION AND APPROVAL PROCESS
A. A pre-application conference is required before submitting a development plan application for design review as provided by CDC 99.030(B).
B. The application shall be submitted by the record owner(s) of the property, authorized agent, or condemnor.
C. Action on the development plan application shall be as provided by Chapter 99 CDC, Procedures for Decision-Making: Quasi-Judicial, and the following:

1. The Planning Director for Class I design review applications, or Planning Commission for Class II design review applications, shall approve, approve with conditions, or deny the application based on findings related to the applicable criteria set forth in CDC 99.110 and this chapter.
[...]
Staff Finding 14: A pre-application was held on May 5, 2022. The application for the Class II Design Review was made by SG Architecture, and bears the signature of Icon Construction \& Development who owns the property. These standards are met.
55.100 APPROVAL STANDARDS - CLASS II DESIGN REVIEW
B. Relationship to the natural and physical environment.
2. The buildings and other site elements shall be designed and located so that all heritage trees, as defined in the municipal code, shall be saved. Diseased heritage trees, as determined by the City Arborist, may be removed at their direction.
3. All heritage trees, as defined in the municipal code, all trees and clusters of trees ("cluster" is defined as three or more trees with overlapping driplines; however, native oaks need not have an overlapping dripline) that are considered significant by the City Arborist, either individually or in consultation with certified arborists or similarly qualified professionals, based on accepted arboricultural standards including consideration of their size, type, location, health, long term survivability, and/or numbers, shall be protected pursuant to the criteria of subsections (B)(2)(a) through ( $f$ ) of this section. In cases where there is a difference of opinion on the significance of a tree or tree cluster, the City Arborist's findings shall prevail. It is important to acknowledge that all trees are not significant and, further, that this code section will not necessarily protect all trees deemed significant.
[...]
Staff Finding 15: No heritage trees are located on the project site, and the city arborist did not identify any significant trees on the project site. These standards do not apply.
4. The topography and natural drainage shall be preserved to the greatest degree possible.
5. The structures shall not be located in areas subject to slumping and sliding. The Comprehensive Plan Background Report's Hazard Map, or updated material as available and as deemed acceptable by the Planning Director, shall be the basis for preliminary determination.

Staff Finding 16: Staff adopts applicant findings. The site is largely flat with a slope of less than $5 \%$ from southwest to northeast. The proposed building footprint will cover $\mathbf{8 2 \%}$ of the project site, or $100 \%$ if inclusive of the underground parking garage, as permitted by the Willamette Falls Drive Commercial Design District Standards. The proposed building will maintain the gentle slope to the east and the buildings will step down in height to that direction. This standard is met.
5. There shall be adequate distance between on-site buildings and on-site and off-site buildings on adjoining properties to provide for adequate light and air circulation and for fire protection.

Staff Finding 17: Staff adopts applicant findings: "On the north, west, and south property boundaries, the proposed building faces onto public ways. On the east property boundary, a $3^{\prime}-0^{\prime \prime}$ setback has been provided (no side yard setback is required in the district), per section 38.020. There will be adequate distance between buildings on adjoining properties to provide adequate light and air circulation and for fire protection." This standard is met.
6. Architecture.
a. The proposed structure(s) scale shall be compatible with the existing structure(s) on site and on adjoining sites. Contextual design is required. Contextual design means respecting and incorporating prominent architectural styles, building lines, roof forms, rhythm of windows, building scale and massing of surrounding buildings in the proposed structure. The materials and colors shall be complementary to the surrounding buildings.
b. While there has been discussion in Chapter 24 CDC about transition, it is appropriate that new buildings should architecturally transition in terms of bulk and mass to work with, or fit, adjacent existing buildings. This transition can be accomplished by selecting designs that "step down" or "step up" from small to big structures and vice versa (see figure below). Transitions may also take the form of carrying building patterns and lines (e.g., parapets, windows, etc.) from the existing building to the new one.
c. Contrasting architecture shall only be permitted when the design is manifestly superior to adjacent architecture in terms of creativity, design, and workmanship, and/or it is adequately separated from other buildings by distance, screening, grade variations, or is part of a development site that is large enough to set its own style of architecture.
d. Human scale is a term that seeks to accommodate the users of the building and the notion that buildings should be designed around the human scale (i.e., their size and the average range of their perception). Human scale shall be accommodated in all designs by, for example, multilight windows that are broken up into numerous panes, intimately scaled entryways, and visual breaks (exaggerated eaves, indentations, ledges, parapets, awnings, engaged columns, etc.) in the facades of buildings, both vertically and horizontally.

The human scale is enhanced by bringing the building and its main entrance up to the edge of the sidewalk. It creates a more dramatic and interesting streetscape and improves the "height and width" ratio referenced in this section.
$e$. The main front elevation of commercial and office buildings shall provide at least 60 percent windows or transparency at the pedestrian level to create more interesting streetscape and window shopping opportunities. One side elevation shall provide at least 30 percent transparency. Any additional side or rear elevation, which is visible from a collector road or greater classification, shall also have at least 30 percent transparency. Transparency on other elevations is optional. The transparency is measured in lineal fashion. For example, a 100-footlong building elevation shall have at least 60 feet ( 60 percent of 100 feet) in length of windows. The window height shall be, at minimum, three feet tall. The exception to transparency would be cases where demonstrated functional constraints or topography restrict that elevation from being used. When this exemption is applied to the main front elevation, the square footage of transparency that would ordinarily be required by the above formula shall be installed on the remaining elevations at pedestrian level in addition to any transparency required by a side elevation, and vice versa. The rear of the building is not required to include transparency. The transparency must be flush with the building elevation.
f. Variations in depth and roof line are encouraged for all elevations.

To vary the otherwise blank wall of most rear elevations, continuous flat elevations of over 100 feet in length should be avoided by indents or variations in the wall. The use of decorative brick, masonry, or stone insets and/or designs is encouraged. Another way to vary or soften this elevation is through terrain variations such as an undulating grass area with trees to provide vertical relief.
g. Consideration of the micro-climate (e.g., sensitivity to wind, sun angles, shade, etc.) shall be made for building users, pedestrians, and transit users, including features like awnings.
$h$. The vision statement identified a strong commitment to developing safe and attractive pedestrian environments with broad sidewalks, canopied with trees and awnings.

Staff Finding 18: Staff adopts applicant findings for these standards. Per CDC 58.020, the standards of the West Linn Commercial Design District pre-empt those of Chapter 55 (Design Review) when there is a conflict. In this case, implementation of the standards of Chapter 58 will ensure contextual compatibility, appropriate architectural transition, variations in depth and roofline, prevent contrasting architecture except in cases of superior design, and ensure human scale and micro-climate. As detailed in Staff Findings 37 through 66, these standards are met.
i. Sidewalk cafes, kiosks, vendors, and street furniture are encouraged. However, at least a four-foot-wide pedestrian accessway must be maintained per Chapter 53 CDC, Sidewalk Use.

Staff Finding 19: Staff adopts applicant findings for these standards. This standard is met.
7. Transportation. The automobile shall be shifted from a dominant role, relative to other modes of transportation, by the following means:
a. Commercial and office development shall be oriented to the street. At least one public entrance shall be located facing an arterial street; or, if the project does not front on an arterial, facing a collector street; or, if the project does not front on a collector, facing the local street with highest traffic levels. Parking lots shall be placed behind or to the side of commercial and office development. When a large and/or multi-building development is occurring on a large undeveloped tract (three plus acres), it is acceptable to focus internally; however, at least 20 percent of the main adjacent right-of-way shall have buildings contiguous to it unless waived per subsection $(B)(7)(c)$ of this section. These buildings shall be oriented to the adjacent street and include pedestrian-oriented transparencies on those elevations...
[...]
c. Commercial, office, and multi-family projects shall be built as close to the adjacent main right-of-way as practical to facilitate safe pedestrian and transit access. Reduced frontages by buildings on public rights-of-way may be allowed due to extreme topographic (e.g., slope, creek, wetlands, etc.) conditions or compelling functional limitations, not just inconveniences or design challenges.

Staff Finding 20: Staff adopts applicant findings for these standards. The proposed building is oriented towards Willamette Falls Drive with multiple entrances and windows facing thereto, with the building contiguous to the right-of-way. The proposed parking area is located along Knapps Alley to the rear and in a basement parking garage accessed from $11^{\text {th }}$ street. This standard is met.
d. Accessways, parking lots, and internal driveways shall accommodate pedestrian circulation and access by specially textured, colored, or clearly defined footpaths at least six feet wide. Paths shall be eight feet wide when abutting parking areas or travel lanes. Paths shall be separated from parking or travel lanes by either landscaping, planters, curbs, bollards, or raised surfaces. Sidewalks in front of storefronts on the arterials and main store entrances on the arterials identified in CDC 85.200(A)(3) shall be 12 feet wide to accommodate pedestrians, sidewalk sales, sidewalk cafes, etc. Sidewalks in front of storefronts and main store entrances in commercial/OBC zone development on local streets and collectors shall be eight feet wide.
e. Paths shall provide direct routes that pedestrians will use between buildings, adjacent rights-of-way, and adjacent commercial developments. They shall be clearly identified. They shall be laid out to attract use and to discourage people from cutting through parking lots and impacting environmentally sensitive areas.
f. At least one entrance to the building shall be on the main street, or as close as possible to the main street. The entrance shall be designed to identify itself as a main point of ingress/egress.
g. Where transit service exists, or is expected to exist, there shall be a main entrance within a safe and reasonable distance of the transit stop. A pathway shall be provided to facilitate a direct connection.
h. Projects shall bring at least part of the project adjacent to or near the main street right-ofway in order to enhance the height-to-width ratio along that particular street. (The "height-towidth ratio" is an architectural term that emphasizes height or vertical dimension of buildings adjacent to streets. The higher and closer the building is, and the narrower the width of the street, the more attractive and intimate the streetscape becomes.) For every one foot in street width, the adjacent building ideally should be one to two feet higher. This ratio is considered ideal in framing and defining the streetscape.
[...]

Staff Finding 21: Staff incorporates applicant findings for these standards. As the building is constructed on the property line along the Willamette Falls Drive and $12^{\text {th }}$ Street frontages, pedestrian access to the building is through public sidewalks recently upgraded to current city standards as part of the Willamette Falls Drive streetscape project. No internal paths will be present on site as the lot is almost entirely taken up by the building footprint. A main entrance to the building will be located at the corner of Willamette Falls Drive and $12^{\text {th }}$ Street, directly across the street from TriMet bus stop 9269. Building height is limited to 35 feet per Chapters 19 and 58. These standards are met.
C. Compatibility between adjoining uses, buffering, and screening.

1. In addition to the compatibility requirements contained in Chapter 24 CDC, buffering shall be provided between different types of land uses; for example, buffering between single-family homes and apartment blocks. However, no buffering is required between single-family homes and duplexes or single-family attached units. The following factors shall be considered in determining the adequacy of the type and extent of the buffer:
a. The purpose of the buffer, for example to decrease noise levels, absorb air pollution, filter dust, or to provide a visual barrier.
b. The size of the buffer required to achieve the purpose in terms of width and height.
c. The direction(s) from which buffering is needed.
d. The required density of the buffering.
e. Whether the viewer is stationary or mobile.
2. On-site screening from view from adjoining properties of such things as service areas, storage areas, and parking lots shall be provided and the following factors will be considered in determining the adequacy of the type and extent of the screening:
a. What needs to be screened?
b. The direction from which it is needed.
c. How dense the screen needs to be.
d. Whether the viewer is stationary or mobile.
e. Whether the screening needs to be year-round.
3. Rooftop air cooling and heating systems and other mechanical equipment shall be screened from view from adjoining properties.

Staff Finding 22: Staff adopts applicant findings for these standards. The project site is surrounded on all three sides by public-right of way and all trash and storage are enclosed by building walls. Parking is to occur within an underground garage and associated entrance approved as part of DR-16-01, with the exception of a parallel parking area along Knapps Alley. A rooftop mechanical equipment enclosure is proposed for HVAC and other equipment. See also Staff Finding 43 regarding rear setback standards in the Willamette Commercial Design District. These standards are met.
D. Privacy and noise.
[...]
3. Structures or on-site activity areas which generate noise, lights, or glare shall be buffered from adjoining residential uses in accordance with the standards in subsection C of this section where applicable.
4. Businesses or activities that can reasonably be expected to generate noise in excess of the noise standards contained in West Linn Municipal Code Section 5.487 shall undertake and submit appropriate noise studies and mitigate as necessary to comply with the code. (See CDC 55.110(B)(11) and 55.120(M).)

If the decision-making authority reasonably believes a proposed use may generate noise exceeding the standards specified in the municipal code, then the authority may require the applicant to supply professional noise studies from time to time during the user's first year of operation to monitor compliance with City standards and permit requirements.

Staff Finding 23: The proposed structure is similar in form and use to other commercial buildings along Willamette Falls Drive. A rooftop deck is proposed as part of this building, but is not expected to generate noise in excess of other uses and street level activities permitted within the Willamette Falls Drive commercial corridor. The design of the rooftop desk is intended to minimize any noise and light impacts as it is centered in the roof, away from the edge of the building and behind 5.5 foot steel panel screenwall and decorative planners, as demonstrated in the project plans contained in PC-1.a. Moreover, activity on the deck is anticipated to be seasonal in nature. These standards are met.
H. Public transit.

1. Provisions for public transit may be required where the site abuts an existing or planned public transit route. The required facilities shall be based on the following:
a. The location of other transit facilities in the area.
b. The size and type of the proposed development.
c. The rough proportionality between the impacts from the development and the required facility.
2. The required facilities shall be limited to such facilities as the following:
a. A waiting shelter with a bench surrounded by a three-sided covered structure, with transparency to allow easy surveillance of approaching buses.
b. A turnout area for loading and unloading designed per regional transit agency standards.
c. Hard-surface paths connecting the development to the waiting and boarding areas.
d. Regional transit agency standards shall, however, prevail if they supersede these standards.
3. The transit stop shall be located as close as possible to the main entrance to the shopping center, public or office building, or multi-family project. The entrance shall not be more than 200 feet from the transit stop with a clearly identified pedestrian link.
4. All commercial business centers (over three acres) and multi-family projects (over 40 units) may be required to provide for the relocation of transit stops to the front of the site if the existing stop is within 200 to 400 yards of the site and the exaction is roughly proportional to the impact of the development. The commercial or multi-family project may be required to provide new facilities in those cases where the nearest stop is over 400 yards away. The transit stop shall be built per subsection (H)(2) of this section.

Staff Finding 24: Staff adopts applicant findings for these standards. An existing transit stop is located across the street from the proposed structure, less than 200 feet from the nearest entrance, and was recently installed as part of the Willamette Falls Drive Streetscape Project. The stop is clearly marked and contains a bench but not shelter. TriMet was notified of the proposed project but did not comment on the application. This standard is met.
I. Public facilities. An application may only be approved if adequate public facilities will be available to provide service to the property prior to occupancy.

1. Streets. Sufficient right-of-way and slope easement shall be dedicated to accommodate all abutting streets to be improved to the City's Improvement Standards and Specifications. The City Engineer shall determine the appropriate level of street and traffic control improvements to be required, including any off-site street and traffic control improvements, based upon the transportation analysis submitted. The City Engineer's determination of developer obligation, the extent of road improvement and City's share, if any, of improvements and the timing of improvements shall be made based upon the City's systems development charge ordinance and capital improvement program, and the rough proportionality between the impact of the development and the street improvements...

Staff Finding 25: The subject property is bordered by Willamette Falls Drive, an arterial classification, and 12th Street, a collector classification. The existing right-of-way width for Willamette Falls Drive is 120 feet and 12th Street is $\mathbf{8 0}$ feet. The required cross-section design for an arterial requires 102 feet of right-of-way. The cross-section design for a collector street with parking on both sides requires 68 feet of right-of-way. No additional right-of-way is needed. As a result of recent streetscape work, the project frontages for Willamette Falls Drive currently meets city standards. The applicant is proposing the construction of a new 8
foot sidewalk and curb along 12 Street, and the paving of Knapps Alley. Conditions of approval are included to ensure this work meets city standards. These standards are met.

## [...]

3. Municipal water. A registered civil engineer shall prepare a plan for the provision of water which demonstrates to the City Engineer's satisfaction the availability of sufficient volume, capacity, and pressure to serve the proposed development's domestic, commercial, and industrial fire flows. All plans will then be reviewed by the City Engineer.

Staff Finding 26: Water is available in 12th Street and Knapps Alley to serve the proposed building. The applicant has submitted a plan prepared by a registered civil engineer and will take water access from Knapps Alley. The City Engineer has confirmed the water system has sufficient water volume and pressure to serve the new building. An existing fire hydrant is located in the public right of way immediately northwest of the site, as noted on the TVF\&R Service Provider Permit. This standard is met.
4. Sanitary sewers. A registered civil engineer shall prepare a sewerage collection system plan which demonstrates sufficient on-site capacity to serve the proposed development. The City Engineer shall determine whether the existing City system has sufficient capacity to serve the development.

Staff Finding 27: The applicant has submitted a plan prepared by a registered civil engineer that will gravity flow to the existing sanitary sewer line in Knapps Alley. The system will be built to appropriate standards. The City Engineer has confirmed the sanitary sewer line and system will have sufficient capacity to service the proposal. This standard is met.
5. Solid waste and recycling storage areas. Appropriately sized and located solid waste and recycling storage areas shall be provided. Metro standards shall be used.

Staff Finding 28: The applicant proposal provides a screened solid waste and recycling area along Knapps Alley that meets Metro standards. This standard is met.
J. Crime prevention and safety/defensible space.

1. Windows shall be located so that areas vulnerable to crime can be surveyed by the occupants.
2. Interior laundry and service areas shall be located in a way that they can be observed by others.
3. Mailboxes, recycling, and solid waste facilities shall be located in lighted areas having vehicular or pedestrian traffic.

Staff Finding 29: The proposed building provides adequate windows along the three facades adjacent to the public rights-of-way for surveying by occupants. No interior laundry is proposed, mailboxes will be in the lobby, and recycling/solid waste facilities are located along Knapps Alley and well lit per the lighting plan in PC-1. These standards are met.
4. The exterior lighting levels shall be selected and the angles shall be oriented towards areas vulnerable to crime.
5. Light fixtures shall be provided in areas having heavy pedestrian or vehicular traffic and in potentially dangerous areas such as parking lots, stairs, ramps, and abrupt grade changes.
6. Fixtures shall be placed at a height so that light patterns overlap at a height of seven feet which is sufficient to illuminate a person. All commercial, industrial, residential, and public facility projects undergoing design review shall use low or high pressure sodium bulbs and be able to demonstrate effective shielding so that the light is directed downwards rather than omni-directional. Omni-directional lights of an ornamental nature may be used in general commercial districts only.

Staff Finding 30: The applicant has provided a proposed lighting plan that illuminates all areas vulnerable to crime. The parking areas and primary pedestrian walkways are fully lighted and meet the seven foot overlap provision. The light fixtures will comply with bulb standards and be directed downward. These standards are met.
7. Lines of sight shall be reasonably established so that the development site is visible to police and residents.
8. Security fences for utilities (e.g., power transformers, pump stations, pipeline control equipment, etc.) or wireless communication facilities may be up to eight feet tall in order to protect public safety. No variances are required regardless of location.

## Staff Finding 31: Staff incorporates applicant findings. These standards are met.

K. Provisions for persons with disabilities.

1. The needs of a person with a disability shall be provided for. Accessible routes shall be provided between all buildings and accessible site facilities. The accessible route shall be the most practical direct route between accessible building entries, accessible site facilities, and the accessible entry to the site. An accessible route shall connect to the public right-of-way and to at least one on-site or adjacent transit stop (if the area is served by transit). All facilities shall conform to, or exceed, the Americans with Disabilities Act (ADA) standards, including those included in the Uniform Building Code.

Staff Finding 32: Staff incorporates applicant findings. These standards are met.
L. Signs.

1. Based on considerations of crime prevention and the needs of emergency vehicles, a system of signs for identifying the location of each residential unit, store, or industry shall be established.
2. The signs, graphics, and letter styles shall be designed to be compatible with surrounding development, to contribute to a sense of project identity, or, when appropriate, to reflect a sense of the history of the area and the architectural style.
3. The sign graphics and letter styles shall announce, inform, and designate particular areas or uses as simply and clearly as possible.
4. The signs shall not obscure vehicle driver's sight distance.
5. Signs indicating future use shall be installed on land dedicated for public facilities (e.g., parks, water reservoir, fire halls, etc.).
6. Signs and appropriate traffic control devices and markings shall be installed or painted in the driveway and parking lot areas to identify bicycle and pedestrian routes.

## Staff Finding 33: Staff incorporates applicant findings. These standards are met.

M. Utilities. The developer shall make necessary arrangements with utility companies or other persons or corporations affected for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting, and cable television, shall be placed underground, as practical. The design standards of Tables 1 and 2 above, and of subsection 5.487 of the West Linn Municipal Code relative to existing high ambient noise levels shall apply to this section.

## Staff Finding 34: Staff incorporates applicant findings. These standards are met.

## [...]

O. Refuse and recycling standards.

1. All commercial, industrial and multi-family developments over five units requiring Class II design review shall comply with the standards set forth in these provisions. Modifications to these provisions may be permitted if the Planning Commission determines that the changes are consistent with the purpose of these provisions and the City receives written evidence from the local franchised solid waste and recycling firm that they are in agreement with the proposed modifications.
2. Compactors, containers, and drop boxes shall be located on a level Portland cement concrete pad, a minimum of four inches thick, at ground elevation or other location compatible with the local franchise collection firm's equipment at the time of construction. The pad shall be designed to discharge surface water runoff to avoid ponding.
3. Recycling and solid waste service areas.
a. Recycling receptacles shall be designed and located to serve the collection requirements for the specific type of material.
b. The recycling area shall be located in close proximity to the garbage container areas and be accessible to the local franchised collection firm's equipment.
c. Recycling receptacles or shelters located outside a structure shall have lids and be covered by a roof constructed of water and insect-resistive material. The maintenance of enclosures, receptacles and shelters is the responsibility of the property owner.
d. The location of the recycling area and method of storage shall be approved by the local fire marshal.
e. Recycling and solid waste service areas shall be at ground level and/or otherwise accessible to the franchised solid waste and recycling collection firm.
f. Recycling and solid waste service areas shall be used only for purposes of storing solid waste and recyclable materials and shall not be a general storage area to store personal belongings of tenants, lessees, property management or owners of the development or premises.
g. Recyclable material service areas shall be maintained in a clean and safe condition.
4. Special wastes or recyclable materials.
a. Environmentally hazardous wastes defined in ORS 466.005 shall be located, prepared, stored, maintained, collected, transported, and disposed in a manner acceptable to the Oregon Department of Environmental Quality.
b. Containers used to store cooking oils, grease or animal renderings for recycling or disposal shall not be located in the principal recyclable materials or solid waste storage areas. These materials shall be stored in a separate storage area designed for such purpose.
5. Screening and buffering.
a. Enclosures shall include a curbed landscape area at least three feet in width on the sides and rear. Landscaping shall include, at a minimum, a continuous hedge maintained at a height of 36 inches.
b. Placement of enclosures adjacent to residentially zoned property and along street frontages is strongly discouraged. They shall be located so as to conceal them from public view to the maximum extent possible.
c. All dumpsters and other trash containers shall be completely screened on all four sides with an enclosure that is comprised of a durable material such as masonry with a finish that is architecturally compatible with the project. Chain link fencing, with or without slats, will not be allowed.
6. Litter receptacles.
a. Location. Litter receptacles may not encroach upon the minimum required walkway widths.
b. Litter receptacles may not be located within public rights-of-way except as permitted through an agreement with the City in a manner acceptable to the City Attorney or their designee.
c. Number. The number and location of proposed litter receptacles shall be based on the type and size of the proposed uses. However, at a minimum, for non-residential uses, at least one external litter receptacle shall be provided for every 25 parking spaces for first 100 spaces, plus one receptacle for every additional 100 spaces.

Staff Finding 35: Staff incorporates applicant findings. The applicant proposes a covered solid waste enclosures along Knapps Alley. The recycling center will be covered, gated, and located on the west end of the rear façade along Knapps Alley. Both are located at ground level and will be kept in a clean and safe condition. The franchised collection firm has access from Knapps Alley. Tualatin Valley Fire and Rescue has approved the location and design under SPP-2023-0010. These standards are met.

### 55.125 TRANSPORTATION ANALYSIS

Certain development proposals required that a Traffic Impact Analysis (TIA) be provided which may result in modifications to the site plan or conditions of approval to address or minimize any adverse impacts created by the proposal. The purpose, applicability and standards of this analysis are found in CDC 85.170(B)(2).

Staff Finding 36: The applicant submitted a traffic impact analysis prepared by a professional traffic engineer (Exhibit PC-1). The report concluded that the intersection of 10th Street at Willamette Falls Drive is projected to operate acceptably once the roundabout construction is completed, which is expected to occur prior to completion of the proposed building. The intersection of 10th Street at 8th Avenue/8th Court is projected to operate better with completion of the planned roadway improvements and the addition of site trips from the proposed development than under existing conditions, and further mitigation will be provided in conjunction with future redevelopment within the properties where a future easement for connection to Willamette Falls Drive will be placed. Based on the detailed analysis, payment of Transportation System Development Charges is projected to be sufficient to offset the impacts of the proposed mixed-use commercial development. No other operational mitigations are necessary or recommended in conjunction with the proposed development. The Oregon Department of Transportation (ODOT) was notified of this project and did not submit comments. This standard is met.

## VIII. CHAPTER 58, WILLAMETTE FALLS DRIVE COMMERCIAL DESIGN DISTRICT

58.010 PURPOSE
A. Implement the goals and policies of the economic element of the Comprehensive Plan relating to the rehabilitation and revitalization of the Willamette Commercial District.
B. Enhance the historic and aesthetic quality of the Commercial District.
C. Increase the attractiveness of the commercial areas to tourists, customers, tenants, business owners, and City residents.
D. Reinforce the commitment to existing commercial buildings of the 1880-1915 period and complement the adjacent residential historic district.
E. Encourage a sense of historic identity for the Willamette area and West Linn as a whole.

Staff Finding 37: This section is a purpose statement describing the intent of the regulations and does not directly regulate a new structure. No finding is required.
58.030 APPLICABILITY
A. The provisions of this chapter shall apply to all new commercial construction, alterations, and remodels on Willamette Falls Drive between 10th and 15th Streets. Properties that are historic resources shall comply with the provisions of Chapter 25 CDC, as applicable. Failure to obtain a permit shall constitute a Class A violation pursuant to CDC 106.050.
B. The type of design review application required is defined in Chapter 25 CDC for properties identified on the West Linn Historic Resource Map and defined in Chapter 55 CDC for all other properties.
C. Boundary limits. The affected area shall be as delineated in Figure 1. Generally, the area is along Willamette Falls Drive between 10th Street and 15th Street.

Figure 1


Staff Finding 38: The project site is for new construction within the boundaries of the Willamette Falls Drive Commercial Design District, as delineated in Figure 1 above. Therefore, this chapter applies. The applicant has requested a Class II Design Review and provided materials and written findings of compliance with the standards. As documented in this report and attached exhibits, these standards are met.

### 58.050 PERMITTED USES

All uses permitted by the underlying General Commercial zone shall be allowed pursuant to CDC 19.030, 19.040, 19.050, and 19.060 and shall require the application of the standards of this chapter. Residential use of the second floor and the rear portion only of the ground floor, with no access onto Willamette Falls Drive, is permitted by application through this chapter. Residential use may only
comprise 50 percent or less of the total square footage of the building combined. Commercial uses shall dominate the first floor. (Ord. 1401, 1997; Ord. 1735 § 4 (Exh. C), 2022)

Staff Finding 39: The application has not identified a specific tenant in the application, and is proposing a speculative building for retail, service, and restaurant uses. Compliance with use standards in CDC Chapter 19 will occur as part of normal building permit review of future tenant improvements and associated business license review. No residential uses are proposed with the application, and commercial uses will occupy 100\% of the first floor. This standard will be met.

### 58.080 STANDARDS

A. Standards are needed to provide a clear and objective list of design elements that are needed to bring new construction and remodels into conformance with 1880-1915 architecture. Buildings of the period saw relatively few deviations in design. Consequently, the Historic Review Board will require conformance with the standards. Deviations or deletions from the standards are addressed in the design exception procedure of this chapter.

Staff Finding 40: Deviations from these standards is addressed in findings pertaining to the specified design exceptions described in Staff Finding 66. As modified through the design exception process, the standards of this chapter will be met.
B. The use of neo-designs or simply contextual designs which only attempt to capture the basic or generalized elements such as building line, massing and form, etc., is not acceptable.

Staff Finding 41: As demonstrated in the applicant's materials included in Exhibit PC-1, the proposed design does not use neo or simply contextualized design. This standard is met.
C. The following standards shall apply to new construction and remodels.

1. Dimensional standards.
a. Front: zero-foot setback. Building may not be set back from the property line unless it is consistent with predominant building line.
b. Side and side street: zero-foot setback. Building may not be set back from the side property line except for side passageway, accessway, or stairway unless fire codes dictate otherwise. The setback shall not exceed six feet.

Staff Finding 42: Staff incorporates applicant findings contained in PC-1. This standard is met.
c. Rear: 20-foot setback. Setbacks between zero and 20 feet are permitted only if the applicant can demonstrate that they can successfully mitigate any impacts associated with the building in current and future uses as they would relate to abutting residential and other properties.

Staff Finding 43: Staff incorporates applicant findings contained in PC-1 which state the following:
"The eastern $80 \%$ of the South (rear) elevation is set back 5' from the property line, with the remainder set on the property line, all fronting on Knapps Alley. The setback was done on the 1969 building also in an agreement with the residential neighbors across the alley. While the neighbor situation is not the same for the 1949 building, this setback maintains a consistent line along the Alley. The alley provides the separation from adjacent properties to mitigate the impact of this project. Access to employee parking and the trash enclosure will occur from Knapp's Alley as well." The Knapp's alley right of way is $\mathbf{2 0}$ feet in width, making for a $\mathbf{2 5}$-foot effective setback when combined with the five-foot setback along the rear of the proposed building, which exceeds the $\mathbf{2 0}$ foot minimum above. This standard is met.
d. Lot coverage: up to 100 percent of lot may be developed depending upon ability to mitigate impacts upon abutting residential and other uses.

Staff Finding 44: Staff incorporates applicant findings contained in PC-1 which states the following:
"The proposed lot coverage based on the street level ground floor occupied area is $\mathbf{8 2 \%}$. Based upon the entire built area (building, parking, and service area) the proposed lot coverage is 100\%."
This standard is met.
2. Minimum landscaping required. Sites in this district are exempt from landscaping requirements as identified in Chapter 54 CDC, Landscaping, with the exception of parking areas.

Staff Finding 45: Staff incorporates applicant findings contained in PC-1. No landscaping is proposed nor required. This standard is met.
3. Building height limitations. Maximum building height shall be 35 feet (as measured by this code), and two stories. A false front shall be considered as the peak of the building if it exceeds the gable roof ridgeline.

MIDPONT BEENVEEM EAVES \& PARAPET


Staff Finding 46: Revised plans submitted on January 29, 20204 (Exhibit PC-1.A) include revised elevations that demonstrate parapet heights and floorplans in compliance with the 35 foot height standard (see Sheets 1 through 4 and Sheet G, prepared for the February 21, 2024 Planning Commission hearing).

Sheet 3 of the same set identifies rooftop improvements that include an unroofed outdoor deck centered in the middle of the rooftop, an elevator, a mechanical equipment area, and a stairwell.

As the rooftop deck does not have a ceiling or roof, it does not qualify as a third story oer CDC 02.030 which defines a story as "That portion of a building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling above."

The elevator and stairwell are proposed for rooftop access, and the mechanical equipment shelter is proposed to attenuate noise from HVAC equipment for the structure. As discussed in Staff Finding 4, staff finds these improvements to exempt from the two-story height standard per CDC 41.030 which states "Projections such as chimneys, spires, domes, elevator shaft housings, towers, aerials, flag poles, and other similar objects not used for human occupancy are not subject to the building height limitations of this code." Stairwells and mechanical rooms are similar in purpose and form as an elevator shaft, and are normal and usual parts of commercial structures, and could therefore be reasonably interpreted as falling within the intent and purview of this exemption. Furthermore, as discussed in Staff Finding 22, CDC 55.100. C3 requires the applicant to screen HVAC and other mechanical equipment from view, and the proposed equipment enclosure serves that purpose.

Therefore, height standards are met.
4. External ground level or first story minimum height. Ten feet to allow transoms.

Staff Finding 47: Staff incorporates applicant findings which states, "The ground level first story height is $13^{\prime} 0$ " A.F.F to allow for window transoms." This standard is met.
5. Roof form. Flat or pitched roofs. Pitched roof ridgeline shall run from the front of the building to the back.

Staff Finding 48: Staff incorporates applicant findings contained in PC-1 which states "All proposed flat sloped roofs run from front to back of the building." This standard is met.
6. Building form, scale and depth. Building shall emphasize the vertical through narrow, tall windows (especially on second floor), vertical awning supports, engaged columns, and exaggerated facades creating a height-to-width ratio of 1.5:1. Building depth shall be flat, only relieved by awning and cornice projections and the indented doorway.


Staff Finding 49: Staff incorporates applicant findings contained in PC-1 which states the following:
"The proposed exterior elevations emphasize many vertical elements using tall windows, cornices, and awnings. The second floor has been provided with many windows that align with the main floor below that enhance the "verticality" of each building elevation. Building reliefs have been incorporated throughout the overall design by off- setting the building footprint and providing awnings and cornice projections."
This standard is met.
7. Visual building breaks. Strong vertical breaks or lines should be regularly spaced every 25 to 50 feet.

Staff Finding 50: Staff incorporates applicant findings contained in HRB-01 which states the following:
"Appropriate spacing and vertical breaks in the building vernacular, have been incorporated into all the building elevations. No vertical spacing exceeds 50'-0" in length (see elevation sheet).
The longest façade plane along Willamette Falls Drive without a vertical break is approximately 45 feet per the conceptual elevations in PC-1. As the primary façade, this is where the variation is most important for maintaining streetscape continuity. Side and rear elevations exceed this standard at 58 feet on the western façade facing $12^{\text {th }}$ street, and 83 feet facing Knapps Alley. To ensure compliance with this standard, a condition of approval has been added requiring the submission of revised plans at the building permit stage that demonstrate compliance with this standard. As conditioned, this standard will be met.
8. Facades. No gables, hipped, or pitched roofs shall be exposed to the street at the front. The "Western false front" shall be the preferred style although variations shall be allowed through a design exception.

Staff Finding 51: Staff incorporates applicant finding which states: "All roofs are 'flat' for the entire building and are concealed by "Western False Front" facades (see elevations sheet)." This standard is met.
9. Cornice. Cornices shall be broad and may include regularly spaced supporting brackets. A cornice is not required, but preferred.

Staff Finding 52: Staff incorporates applicant finding which states: "The cornices along the north elevation are enhanced with supporting brackets. All other cornices are enhanced with framed panel decoration (see elevations \& wall section sheets.)" This standard is met.
10. Building materials and orientation. Horizontal wood siding in one-inch by eight-inch dimensions shall be used, unless brick or other materials are permitted by a design exception obtained only under CDC 58.090.

Staff Finding 53: Staff incorporates applicant findings. The applicant has applied for relief from this standard through a design exception discussed in Staff Finding 66. Proposed primary building materials include the following:

- Primary walls: $1 \times 8$ horizontal fiber cement siding (Hardiplank) - painted
- Other walls: Brick masonry
- Base/Wainscot: Brick masonry
- Cornices/trim: Fiber cement trim (Hardieboard) - painted

With approval of the design exception, this standard will be met.
11. Awnings. All buildings shall have awnings extending out from building face. Awnings are preferred for micro-climate benefits. Ideally, the building will have both transom and awnings, although transoms are not required. Awnings shall be either canvas or vinyl, or similar approved material, supported by an internal metal framework or metal or wood supported by a curved metal support attached to the building.

Awnings shall extend a minimum of five feet from the facade and along 80 percent of a street facing facade to provide appropriate pedestrian coverage and shall meet ADA requirements. The pitch of the awning shall be 10 to 40 degrees. No "bubble-type" awnings are permitted. No backlit awnings are permitted. Canvas or matte-finish vinyl, or similar approved material awnings, may be one color or striped and shall have a free-hanging plain or crenelated valance. Canvas or matte-finish vinyl, or similar approved material awnings, should not be shared between two structures. Each structure should have its own awning.

Staff Finding 54: Staff incorporates applicant findings which state the following:
"Building awnings will be a combination of self-supporting fabric awnings on
the eastern portion of the building, and a self-supporting steel canopy at the central main entry. These awnings and canopy extend approximately 4 feet from the face of the building. A deeper, canopy with metal roofing and decorative columns wraps the western corner and extends south along 12th Street. This canopy will extend out from the building approximately 8-1/2 feet to allow for outdoor seating/dining. All canopies and awnings will be at least 7 feet above the sidewalk.
As the minimum awning standard is five feet in depth, Condition 8 has been included to ensure compliance. As conditioned, this standard is met.
12. Extruded roofs. As a substitute for an awning, extruded roofs have a 10- to 40-degree pitch and extend one to two feet from the building face just above the transom windows where the first and second stories meet. The roof runs along the entire building frontage. Standard roofing materials are used. Transoms are required with extruded roofs.


Staff Finding 55: No extruded roofs are proposed. This standard does not apply.
13. Doors and entryways. The entryway shall be centered in the middle of the building at grade. The buildings on street corners may position their doors on the corner at an angle as depicted in the illustration. The doors may be single or double doors. The doors shall be recessed three to five feet back from the building line. Doors shall have glazing in the upper two-thirds to half of the door. Panels should decorate the lower portions. The entryway shall have windows all the way around at the same level as the other display windows. Wood doors are preferable although alternatives with a dark matte finish may be acceptable.


Staff Finding 56: Staff incorporates applicant findings contained in HRB-01 which states the following:
"Recessed double entrance doors have been provided at the center of the building along with additional recessed entry doors at each end of the building (see elevation and floor plan). The door styles will be full glass light style and will meet the intent of the code.
To ensure the doors meet the design standards above, a condition has been added to require a panel on the lower portion of the entry doors. As conditioned, this standard will be met.
14. Glazing. Clear glass only. No mirrored or tinted glass. No films applied to glass. Lettering on glass is permitted.

Staff Finding 57: The applicant has proposed clear glass with no glazing for all windows and doors. This criterion is met.
15. Display or pedestrian level windows. Shall extend across at least 80 percent of building front. The windows shall start one and one-half to two and one-half feet above grade to a height of seven to eight feet, and shall be level with the top of the height of the adjacent entryway area, excluding transom. A single sheet of glass is not permitted. The window shall be broken up into numerous sections, also known as lights. From 1880 onwards, the number of lights was generally no more than six in a pedestrian-level window. The frames may be wood or vinyl-clad wood, or other materials so long as a matte finish is possible.


Staff Finding 58: Staff incorporates applicant findings contained in HRB-01 as follows: "The proposed street level windows and storefronts extend across the entire front elevation (see elevation sheet). On the east end of the building, where the level of the floor is above the sidewalk, the windows are placed close enough to the floor level to allow pedestrians to view into the building, thereby meeting the intent of the Code to the extent possible."
Windows are broken up into multiple lights and match the top of the adjacent doorway. To ensure minimum sill heights above grade are met, Condition $\mathbf{7}$ has been added requiring
minimum sill heights be specified on the building permit drawings. As conditioned, this standard will be met.
16. Second floor and other windows. Double- and single-hung windows proportionately spaced and centered should be used. Smaller square shaped windows may be permitted (one and onehalf feet to two feet per side). A typical window should have a 3:1 height to width ratio for the glass area. There should be a minimum of two lights: "one over one" of equal size. "Two over one" or "four over one" is appropriate.


Staff Finding 59: Staff incorporates applicant findings contained in HRB-01 which states: "The proposed upper level windows have a double-hung appearance, and are provided individually and in groups in sizes to meet the 3:1 standard." This standard is met.
17. Wainscotting. Wainscotting shall be consistent with primary material of the building, typically wood.

Staff Finding 60: Staff incorporates applicant findings contained in HRB-01. The applicant has applied for relief from this standard through a design exception discussed later in this report, to include alternate brick masonry wainscoting instead of the primary Hardie material proposed for the building. This alternative provides for a more durable building base, and is consistent with other buildings along Willamette Falls Drive. With approval of the design exception, this standard will be met.
18. Shutters. Shutters are not allowed.
19. Balconies. No balconies are permitted except on rear of building.
20. Exterior stairs. Simple stairs are permitted on the rear or side of the building only.

Staff Finding 61: None of the above features exist are proposed and all stairs are enclosed. These standards are not applicable.
21. Roof mounted mechanical equipment. Equipment shall be screened from view on all sides by normal and consistent architectural features of the building. CDC 55.100(D), Privacy and noise, shall apply.
22. Air conditioning. No window types on avenue or street side are permitted. Windowmounted air conditioners are not allowed at rear where abutting residential.

Staff Finding 62: All air conditioning units are proposed for rooftop mounting, and will be located in a mechanical storage room located in the approximate center of the roof and set back from the parapet wall. These standards are met.
23. Exterior lighting fixtures. Any lighting fixtures that can be traced to 1880-1915 period are permitted. Simple modern fixtures that are screened and/or do not attract attention are acceptable. Overly ornate fixtures of the Victorian era are to be discouraged.

Staff Finding 63: Staff incorporates the applicant's findings contained in Exhibit HRB-01 that states: "All exterior light fixtures will meet the intent of the code "period fixtures 1880-1915". A cutsheet of the light fixture [has been] provided to the city for review." This standard is met.
24. Transoms. Transom windows are required with extruded roofs and optional with awnings. Transom windows shall cover the front of the building above, but not beyond, the main display windows and the entryway area. Transoms should be broken up into sections every six inches to three feet in a consistent and equal pattern. Height should not exceed three feet. Transoms may or may not open. False ceilings are allowed behind the transoms.

Staff Finding 64: Staff incorporates applicant findings contained in HRB-01 as follows:
"The storefront windows proposed will have a metal canopies or fabric awnings above their entire width. No upper separate transom windows are proposed, however the window style will have transom influence by the use of grids and mullions. All window sizes will meet the intent of the code (see elevations)."
This standard is met.
26. Paint colors. Body color typically included white, cream, or a light, warm color of low intensity. Accents, trims, windows, etc., should be dark-colored. A palette or color wheel, submitted by the applicant, of acceptable 1880-1915 period colors shall be the basis for color selection. Colors shall be similar to or consistent with existing buildings within the Willamette Commercial District to establish streetscape continuity.

Staff Finding 65: Staff incorporates applicant findings contained in HRB-01 as follows: " $A$ material and color board is included with this application. Selected colors will be submitted for review prior to installation." This standard is met.

### 58.090 DESIGN EXCEPTION PROCEDURES

In those circumstances where a design proposal cannot meet the standards, or proposes an alternative to the standard, the Historic Review Board may grant a design exception in those cases where one of the following criteria is met:
A. The applicant can demonstrate by review of historical records or photographs that the alternative is correct and appropriate to architecture in the region, and especially West Linn, in 1880 - 1915.
B. The applicant is incorporating exceptional 1880-1915 architecture into the building which overcompensates for an omission, deviation, or use of non-period materials. The emphasis is upon superior design, detail, or workmanship.

C. The application is for the restoration or alteration of an existing, out-of-period structure where it can be demonstrated that applicant cannot reasonably comply with the standard due to existing building setbacks, orientation, roof forms, materials, architectural style, functional design, or other existing conditions; and where the exception would further the purpose of this chapter as set forth in CDC 58.010. This exception does not apply when the structure is demolished. (Ord. 1735 § 4 (Exh. C), 2022. Formerly 58.100)

Staff Finding 66: Staff incorporates the applicant's findings contained in Exhibit PC-01. RESPONSE: Design Exceptions are requested for the following:

1. Item: James Hardie (or equal) fiber cement products to substitute for wood siding and trim.
Criteria A: The proposed materials are designed to accurately represent the appearance of the wood they are replacing. Available in wood grained or smooth textures, when painted they provide high quality wood look.
Criteria B: The proposed fiber cement products are a significant upgrade in quality from natural wood, which makes it a superior design choice. Wood checks, twists, splits, and otherwise fails, necessitating near continuous maintenance. This can cause the building to almost always have portions that have unsightly blemishes and defects. Wood will typically require replacement after approximately 10 years. The requested substitute is straight and true, without defects, requires no maintenance beyond regularly scheduled painting, and has a lifespan of more than $\mathbf{2 5}$ years.
2. Item: Brick masonry for the eastern segment of the building, vertical pilasters, the lower portion of the western segment, and portions of the building base/wainscot. Criteria A: Brick was a fairly common material in the 1880-1915 time period, and is well represented in the District, appearing on the fire station, the 2008 building
across the street from the project, the Community of Faith Church at the corner of 12th Street and Willamette Falls Drive, and the 1969 Willamette Falls Drive building adjacent to the project.
Criteria B: Brick is a superior material to wood in terms of durability, longevity, and appearance. Its use on this project helps to emphasize the vertical distinctions in a way that adds interest and human scale while elevating the level of detailing of the façade. In addition, at the base of the building it also provides a more durable surface where the building meets the sidewalk and is at greatest risk of damage from passersby, bicycles, delivery carts, and the like.

With the HRB granting approval of these design exceptions on June 13, 2023 (Exhibit PC-3), the Planning Commission can approve the deviations. These standards are met.
99.060 APPROVAL AUTHORITY
B. Planning Commission authority. The Planning Commission shall have the authority to:
[...]
2. Approve, deny, or approve with conditions the following applications:
(...)
h. Design review, Class II
(...)
D. Historic Review Board authority. The Historic Review Board shall review an application for compliance with Chapters 25 and 58 CDC, as applicable. The Historic Review Board shall have the authority to:
(...)
2. Make recommendations to the approval authority specified in this section regarding the following:
(...)
c. Class I or Class II design review on a property within the Willamette Falls Drive Commercial Design District that is not a historic landmark or within the Willamette Historic District;
(...)

Staff Finding 67: The application was presented to the Historic Review Board on June 21, 2023 for a recommendation of compliance with CDC Chapter 58. The applicant return to the HRB for a second time on November 14, 2023 to request a Design Exception to exceed the two-story height limit. That exception was denied by the HRB and the applicant subsequently withdrew the denied Design Exemption for height from the application. A copy of the recommendation is included as Exhibit PC-2 for consideration as art of the Planning Commission's consideration of the Class II Design Review. This standard is met.
99.080 NOTICE

Notice shall be given in the following ways:
A. Class A Notice. (...)

Staff Finding 68: The applicant proposal has been properly noticed by the City per Exhibit PC6 below. These criteria are met.

## EXHIBIT PC-1.A: APPLICANT SUBMITTAL

## JOHN FLOYD

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SGA PROJECT NO. 20-119
Design Review Application DR-23-01
Design Adjustments in Response to
Comments from June 13 ht , 2023 HRB Meeting

## DEAR MR. FLOYD,

Please find the following written narrative description of design changes we are proposing in response to comments received at the June $13^{\text {th }}$ Historic Review Board Meeting. (In a separate letter, we have requested that our November $14^{\text {th }}$ request to the HRB for a Design Exception be rescinded.)
The concerns from the June $13^{\text {th }}$ HRB meeting were expressed by members of the HRB, as well as neighbors and the City Engineering Department. These concerns are paraphrased in gray below, with our narrative responses following each comment in black. We have attached plans, elevations, and sections which graphically illustrate our revisions.

Per our email discussion we would appreciate your adding this narrative and the attendant drawings to the original drawings as part of your submittal package to the Planning Commission. We have attached both the original June $13^{\text {th }}$ exhibits with the revised drawings for your convenience.

## comments:

1. CONCERN: While the IBC does not consider a mezzanine to be a separate floor, the HRB was not clear if the Willamette Falls Drive Commercial Design District Code (Chapter 58) (WFDCD) would allow for a mezzanine level above the second floor as shown in the 6/13 presentation. Further, the upper row of windows along $12^{\text {th }}$ Street in the original presentation was seen by some as an indication of a 3rd floor that would not be permitted under the standards.

## DESIGN RESPONSE:

1. The windows along 12 th street have been removed and replaced with a redesigned cornice, painted panels, and painted vertical pilasters, breaking up the facade into vertical components. The clerestory windows remain at the corner providing additional natural light to the second floor (See Elevations, Exhibit ELO5.2).
2. The enclosed rooftop lounge, restrooms, second elevator, and stair have been eliminated (See Roof Plan, Exhibit ELO5.3).
3. The outdoor roof deck remains for general use by tenants and guests - with a 5 '- 6 " tall screen surround to reduce potential noise and light issues for our residential neighbors (See Screenwall Detail, Exhibit EL05.3).
4. An enclosed HVAC equipment space was added between the elevator and stairs to help to mitigate noise from rooftop mechanical units (See Roof Plan, Exhibit ELO5.3).
a. Section 55.100.C. 3 of the CDC's Class II Design Review Approval Standards requires that "Rooftop air cooling and heating systems and other mechanical equipment shall be screened from view from adjoining properties". As is shown in Exhibit EL05.4 "Site Sections | View From Adjacent Lots", the building's perimeter parapets provide complete visual screening of rooftop equipment, thereby meeting the requirement of the Section.
b. Because some of the neighbors have raised concerns about noise, we are proposing the additional enclosed Mechanical Equipment space to further mitigate any noise that may come from equipment. To make the space as effective at reducing noise as possible, the space includes walls and a roof.
c. It is possible that an enclosed space with a roof will be considered to be a "third floor", because it has a floor and a roof as described in Section 02.030 "Story".
d. Our proposal takes no opinion on the question of whether the Mechanical Equipment space meets the requirements of a story as described in Section 02.030. We are offering, in a gesture of goodwill and at significant expense, to provide an enclosure intended to benefit the neighbors.
e. Should the Commission conclude that this space is not consistent with the spirit of the Community Development Code or the Willamette Falls Drive Commercial District, we would request a condition of approval - for the removal of the Mechanical Equipment enclosure - be placed on the proposal.
5. CONCERN: There was concern from the residential neighbors across Knapps Alley that the $2^{\text {nd }}$ floor windows on the alley elevation were too large.

## DESIGN RESPONSE:

1. The windows along the Knapps Alley elevation have been re-designed to match the size and spacing of those on the existing building ( 1969 Willamette Falls Drive). Those windows were found by the HRB and these same neighbors to be acceptable during the HRB and Planning Commission review for the 1969 building.
2. CONCERN: The Board was concerned that the drawing showing the Willamette Falls Drive elevation did not show clearly enough that the building elevation meets the 35' height limit required by the Standards. Per Section 41.005 "Determining Height of Building" and Section 58.080.C. 3 of the WFDCD:

SECTION 41.005: "...where there is less than a 10-foot difference in grade between the front and rear of the building, the height of the building shall be measured from grade five feet out from the exterior wall at the front of the building..."
SECTION 58.080.C.3: "Building height limitations. Maximum building height shall be 35 feet (as measured by this code), and two stories. A false front shall be considered as the peak of the building if it exceeds the gable roof ridgeline."


## DESIGN RESPONSE:

1. The height limit in the WFD district is 35 ' per CDC Section $58.080 . B .3$, and is measured at grade, 5 ' from the front elevation per CDC Section 41.005.A.1. Exhibit EL05.1 "Willamette Falls Drive Elevation", Exhibit ELO5.2 "West (12 ${ }^{\text {th }}$ Street) Elevation", and Exhibit ELO5.3 "Knapps Alley Elevation" show heavy dashed red lines indicating the 35' maximum height on those streets/elevations. Note that while 58.080.B. 3 allows parapets to extend above the height maximum, we have nonetheless reduced the parapet heights to fall fully beneath the 35' dimension.
2. Like the parapets, the roof access stairwell and the screen at the mechanical equipment space also fall below the 35' height limit, as shown on Exhibit EL05.1. The ONLY portion of the building that extends above the 35 ' height limit is the elevator shaft, which is expressly allowed per CDC Section 41.030:
a. 41.030 PROJECTIONS NOT USED FOR HUMAN HABITATION

Projections such as chimneys, spires, domes, elevator shaft housings, towers, aerials, flag poles, and other similar objects not used for human occupancy are not subject to the building height limitations of this code. (Ord. 1604 § 44, 2011 ; Ord. 1745 § 1 (Exh. A), 2023) [Emphasis Added]
3. As shown, the proposal is in full compliance with the standards of Chapters 58 and 41.
4. CONCERN: The City Engineering Department expressed concern that cast iron columns shown supporting the canopy that wraps the northwest corner of the building could conflict with utilities located beneath the sidewalk and could perhaps create an accessibility issue for pedestrians using the sidewalk.

## DESIGN RESPONSE:

1. The cast iron columns that were supporting the canopy at the northwest corner have been eliminated. In their place, tie-back rods connecting the top of the canopy to the building will be used to support the canopy. This design is the same as that which was approved by the HRB and neighborhood for the existing 1969 Willamette Falls Drive building.

Please note that the color palette for the revised elevation is the same as what was originally approved by the HRB. Due to time constraints, it is necessary for us to submit our revisions in black and white rather than color renderings as originally presented. We would ask that the Commissioners refer to the original renderings to understand where colors will be applied on the building, including on the revised elevation.

John, thank you for your review and consideration, we look forward to any comments you may have. Please let me know if you have any questions, or if you need any additional information.


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1 GROUND FLOOR PLAN + WILLAMETTE FALLS DRIVE ELEVATION
WILLAMETHE FALIS DRIVE ELEVATION


2 SECOND FLOOR PLAN + EAST \& $12 \dagger$ h STREET ELEVATIONS



4 view from intersection of 12 th + willametie falls drive
VIEW FROM 12th + WFD

CONCEPTUALPLANS + ELEVATIONS

SGA

## EXHIBIT PC-1.B: APPLICANT SUBMITTAL

## JOHN FLOYD

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## SGA PROJECT NO. 20-119

Design Review Application DR-23-01
Rescission of HRB Design Exception Request from November $14^{\text {th }}$

## DEAR MR. FLOYD,

Based upon discussions with the Owner and with your office, I am writing to request that you rescind our application for Design Exception that was filed with the HRB for their November $14^{\text {th }}$ meeting.
Instead, in an effort to more harmoniously coexist in the Willamette Falls Drive Commercial Zone and the surrounding neighborhood, we have elected to make several of the changes that were requested by the HRB and members of the neighborhood.
In a separate submittal we have provided the written narrative and graphical exhibits that will describe the proposed design changes for our upcoming Planning Commission meeting. In summary, in response to comments received at the June $13^{\text {th }}$ Historic Review Board Meeting, we are proposing to:

- Eliminate the roof level windows on $12^{\text {th }}$ Street
- Eliminate the rooftop Lounge, Second Elevator and Stair, and Restrooms
- Enclose the HVAC units to minimize noise from the units
- Add a screen around the outdoor deck to minimize noise and light escape
- Redesign the windows along Knapps Alley to reduce their size and match the size and spacing of those same windows from the 1969 building
- Eliminate the canopy support columns at the request of the Engineering Department
- Reduce the height of parapets to fall fully beneath the $35^{\prime}$ height maximum in the zone.

As you can see, we are making substantial adjustments to help the neighbors with their concerns, including reducing or eliminating features which were in full compliance with the Code.

John, thank you for your help through this process. We appreciate your consideration of this request, as well as your review and comments on our proposal to the Commission.

Please let me know if you have any questions, or if you need any additional information.


## EXHIBIT PC-1.C: APPLICANT SUBMITTAL

JOHN FLOYD<br>Associate Planner<br>Community Development Department|Planning<br>22500 Salamo Road<br>West Linn, OR 97068<br>p: 503-742-6058<br>e: jfloyd@westlinnoregon.org

SGA PROJECT NO. 20-119
Design Review Application DR-23-01
PART 3: Design Adjustments in Response to Comments from October 4th Planning Commission Meeting Remanded to Historic Review Board for Review

DEAR MR. FLOYD,
Please find enclosed our written narrative in response to the Planning Commission's decision to remand our application to the Historic Review Board for further review. Below I have summarized the process thus far, then have provided an updated Design Exception request to allow the rooftop mechanical equipment enclosure and building storage with exhibits attached.

We would greatly appreciate your including this narrative and its attendant exhibits with the submittal package for the Historic Review Board.

## THE PROCESS SO FAR - A SUMMARY:

## 13 JUNE 2023 - HISTORIC REVIEW bOARD HEARING

At the Historic Review Board (HRB) hearing, our application was well received, with the Board in agreeing with Staff's findings and recommendations, including design exceptions for brick masonry, fiber cement siding, and canopy columns. Via public testimony and Board deliberation, the following were discussed:

1. The Board deferred the question of the mezzanine for review by the Planning Commission for their decision.
(SEE EXHIBIT ELO5/3, dated 12-2022)
2. There was concern that the uppermost windows along $12^{\text {th }}$ Street suggested a third story that might be out of the norm for the WFD Design District. (SEE EXHIBIT EL05/2, dated 07-13-2022)
3. Some Knapps Alley neighbors were concerned the windows on that elevation were larger than on the adjacent existing 1969 WFD building. (SEE EXHIBIT ELO5/3, dated 12-2022)
4. The Board felt that the exhibits did not show clearly enough that the north (WFD) building complies with the 35' height limit in the District. (ELO5/1, dated 04-20-2023)
5. West Linn Engineering was concerned that the canopy columns at near the $12^{\text {th }}$ Street intersection would conflict with the utility lines running beneath the sidewalks.
(SEE EXHIBITS ELO5/1, dated 04-20-2023, and EL05/2, dated 07-13-2022)

## 15 AUGUST 2023 - INITIAL DESIGN ADJUSTMENTS

In preparation for the October $4^{\text {th }}$ Planning Commission hearing, we proposed to Staff several design concessions as a gesture of goodwill in response to concerns from the HRB hearing:

1. The enclosed rooftop space was repurposed from lounge to building storage, and the restrooms and western elevator deleted. An HVAC equipment space was added near the remaining elevator. Both spaces will also be unoccupied and unconditioned. The outdoor roof deck remains for general use by tenants and guests.
(SEE EXHIBIT ELO5/3, dated 08-15-2023)
2. The windows along $12^{\text {th }}$ Street were removed and replaced with a redesigned cornice, painted panels, and painted vertical pilasters, breaking up the facade into vertical components. Windows remain at the corner as a clerestory to the second floor.
(SEE EXHIBIT ELO5/2, dated 08-15-2023)
3. The windows on the Knapps Alley elevation were re-designed to match the size and spacing of the same 1969 WFD elevation. These were deemed acceptable during that building's HRB and Planning Commission reviews.
(SEE EXHIBIT ELO5/3, dated 08-15-2023)
4. Per Chapter 58, the 35 ' height limit occurs midway between eave and top of parapet (without a gable, the flat roof line serves as the eave). Per Chapter 41 , height is measured at grade, 5' from the front elevation. A heavy dashed red line shows the 35' height on the WFD elevation. A second red line was added, indicating the flat roof/eave behind the parapet. (SEE EXHIBIT ELO5/1, dated 08-15-2023)
5. The canopy support columns have been eliminated. The canopy will be supported by tieback rods matching those approved on the 1969 WFD building.
(SEE EXHIBITS ELO5/1, dated 08-15-2023 and ELO5/2, dated 08-15-2023)

## 15 SEPTEMBER 2023 - DESIGN ADJUSTMENTS, PART 2

Per Staff recommendation, we generated a Chapter 58 Design Exception for the rooftop storage and HVAC enclosures to be reviewed by the Planning Commission. The narrative and exhibit supported our application with examples of similar spaces existing in the District and an illustration of how the proposed spaces be used.
(SEE EXHIBITS EXO1 \& EX02, dated 09-15-2023)

## 04 OCTOBER 2023 - PLANNING COMMISSION HEARING

At the Planning Commission Hearing, there was no official testimony from either Applicant or Public. However, the following topics were discussed by the Commissioners:

1. In response to neighbors' submitted concerns about the proposed outdoor deck the commission noted that the deck, by definition, does not constitute a third floor, as it is not enclosed and has no roof. They agreed with Staff that the deck is allowed in the District.
2. The neighbors also raised the concern regarding noise emanating from users of the proposed deck. We and the Commissioners noted that any users will be required to observe the City's existing noise ordinances.
3. The Commission did not make a determination regarding the question of whether the storage and HVAC spaces constitute a third story, or the design exception.
4. The Commission agreed that the HRB should have the opportunity to rule on the proposed design exception, and remanded the exception for their evaluation.

## REQUEST FOR DESIGN EXCEPTION

Section 58.090 'Design Exception Procedures', allows that the applicant can either:
a. "...demonstrate by review of historical records or photographs that the alternative is correct and appropriate to architecture in the region, and especially West Linn, in 1880 - 1915." OR
b. "...incorporate[e] exceptional 1880-1915 architecture into the building which overcompensates for an omission, deviation, or use of non-period materials. The emphasis is upon superior design, detail, or workmanship."

## EXISTING CONDITIONS IN THE DESIGN DISTRICT

1. At least 5 of $24(20 \%)$ existing buildings in the WFD Commercial Design District have rooftop spaces, including 1672, 1880,1849, 1914, \& 1980 WFD. There are 7 spaces on the 5 buildings, where 5 appear to be for storage, and 2 (1672 \& 1849) appear to house habitable space. These existing examples are mostly hidden from view from WFD by their western false front facades, although they can be seen from some angles.
(SEE EXHIBIT EXO1, dated 09-15-2023)

## PROPOSED DESIGN EXCEPTION

1. We are proposing a design exception to allow the two roof top spaces shown on the roof plan: one for housing building HVAC systems and one for critically needed building storage. They serve only as support spaces and will be un-occupied and un-conditioned. (SEE EXHIBIT EX02, dated 09-15-2023)
2. Maintaining modern buildings and systems requires substantial amounts of storage - likely more than was commonly needed on buildings built between 1880 and 1915. Onsite storage is also a green alternative, reducing built space, material and fuel consumption, traffic, and other impacts. As well, the HVAC enclosure will reduce noise from the roof.
3. The elevator and stairwells extend from the lower floors to the roof to allow for roof maintenance, access to the rooftop deck, and required exiting from the outdoor patio.
4. Small portions of the proposed roof top spaces are visible in 2D elevation views. The top of the elevator shaft is also visible, but that is expressly allowed under Chapter 41 and does not require a design exception.
(SEE EXHIBITS EX03, EX04, and EX05, dated 11-14-2023)
5. However, a 2D elevation view does not represent what can be seen at street level. We have included sections showing that the proposed rooftop spaces are not visible from WFD, $12^{\text {th }}$ Street, or Knapps Alley - nor even from the second stories across Knapps Alley and WFD. (SEE EXHIBIT EX06, dated 11-14-2023)
We respectfully ask the HRB to approve this Chapter 58 design exception, based upon the precedence of comparable rooftop spaces existing on 20 percent of the buildings in the District. This is by definition a historical record that these spaces are recognized by the City to be appropriate to the architecture in the region along Willamette Falls Drive. Thank you for your consideration.

John, thank you for your review and consideration, we look forward to any comments you may have. Please let me know if you have any questions, or if you need any additional information.

sCOT suttion | SG Architecture, LLC
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Enc: Exhibits as noted in the text.



1 GROUND fLOOR PLAN + WILLAMETtE FALLS DRIVE ELEVATION
WIILAMETHE FALIS DRIVE ELEVATION
ORIGINAL SUBMISSION TO HISTORIC REVIEW BOARD SGA


2 SECOND FLOOR PLAN + EAST \& $12 \dagger$ h STREET ELEVATIONS
ORIGINAL SUBMISSION TO HISTORIC REVIEW BOARD




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01 willamette falls drive - roofscape
REVISED SUBMISSION FOR PLANNING COMMISSION






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## EXHIBIT PC-1.D: APPLICANT SUBMITTAL

## JOHN FLOYD

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SGA PROJECT NO. 20-119
Design Review Application DR-23-01
Design Adjustments in Response to
Comments from June 13th HRB Meeting
DEAR MR. FLOYD,
Please find the following written narrative description of design changes we are proposing in response to comments received at the June $13^{\text {th }}$ Historic Review Board Meeting. These concerns were expressed by members of the public and the HRB, as well as from the City Engineering Department. The concerns are paraphrased in gray below. Our narrative responses follow each comment in black and are represented on the enclosed revised plans/elevations.

Per our email discussion we would appreciate your adding this narrative and the attendant drawings to the original drawings as part of your submittal package to the Planning Commission.

## COMMENTS:

1. CONCERN: While the IBC does not consider a mezzanine to be a separate floor, the HRB was not clear if the Willamette Falls Drive Commercial Design District Code (Chapter 58) (WFDCD) would allow for a mezzanine level above the second floor as shown in the 6/13 presentation. Further, the upper row of windows along $12^{\text {th }}$ Street in the original presentation was seen by some as an indication of a 3rd floor that would not be permitted under the standards.

DESIGN RESPONSE:

- The windows along $12^{\text {th }}$ Street have been replaced with a redesigned cornice and vertical trim pilaster detail that matches closely to the design details along the front Willamette Falls Drive elevation. This was modified to break up and fill in the wall area where the windows were originally shown. Note that the uppermost windows at the northwest corner of the building remain, shedding natural light into a double height atrium-style space above the second floor.
- We have repurposed the enclosed rooftop spaces to be used for storage and mechanical equipment use.
- The outdoor roof deck remains for general use.

2. CONCERN: There was concern from the residential neighbors across Knapps Alley that the $2^{\text {nd }}$ floor windows on the alley elevation were too large.

DESIGN RESPONSE:

- The windows along the Knapps Alley elevation have been re-designed to match the size and spacing of those on the existing building (1969 Willamette Falls Drive). Those windows were found by these same neighbors to be acceptable during the HRB and Planning Commission review for the 1969 building.

3. CONCERN: The Board was concerned that the drawing showing the Willamette Falls Drive elevation did not show clearly enough that the building elevation meets the 35' height limit required by the Standards. Per Section 41.005 "Determining Height of Building" and Section 58.080.C. 3 of the WFDCD:

SECTION 41.005: "...where there is less than a 10 -foot difference in grade between the front and rear of the building, the height of the building shall be measured from grade five feet out from the exterior wall at the front of the building..."
SECTION 58.080.C.3: "Building height limitations. Maximum building height shall be 35 feet (as measured by this code), and two stories. A false front shall be considered as the peak of the building if it exceeds the gable roof ridgeline."


Figure from Section 58.080.C. 3
DESIGN RESPONSE:

- The above Code sections establish that the $35^{\prime}$ maximum height occurs at a point midway between the eave and the top of the parapet (in our case, without a gable roof, the flat roof is the eave line). A heavy dashed red line is shown on the Willamette Falls Drive elevation 35 ' above the adjacent sidewalk grade 5' from the building. As shown, this line is at the top of the parapet across the entire elevation, and therefore is well above the allowable midpoint between eave and parapet. For clarity, we have also shown a heavy dashed red line indicating the flat roof (eave) line behind the parapet to further emphasize that we are fully in compliance with the standard.

4. CONCERN: The City Engineering Department expressed concern that cast iron columns shown supporting the canopy that wraps the northwest corner of the building could conflict with utilities located beneath the sidewalk and could perhaps create an accessibility issue for pedestrians using the sidewalk.

## DESIGN RESPONSE:

- The canopy has been redesigned to be supported by tie-back rods connecting the top of the canopy to the building. This style of canopy support is the same as those used on the existing 1969 Willamette Falls Drive building. By using these supports, we were able to eliminate the cast iron columns.

Please note that the color palette for the revised elevation is the same as what was originally approved by the HRB. Due to time constraints, it is necessary for us to submit our revisions in black and white rather than color renderings as originally presented. We would ask that the Commissioners refer to the original renderings to understand where colors will be applied on the building, including on the revised elevation.

John, thank you for your review and consideration, we look forward to any comments you may have. Please let me know if you have any questions, or if you need any additional information.


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2 SECONDFLOOR PLAN + EAST \& 12 th STREET ELEVATIONS


## 1949 WILLAMETTE FALLS DRIVE - AREA CALCULATIONS

|  | ORIGINAL | REVISED | DELTA |
| :---: | :---: | :---: | :---: |
| GARAGE | 14,100 | 14,100 | 0 |
| GROUND FLOOR | 12,295 | 12,295 | 0 |
| 2ND FLOOR | 13,920 | 13,920 | 0 |
| MEZZANINE (ORIGINAL) | 2,893 | 0 | $(2,893)$ |
| ROOF (REVISED) | 0 | 2,607 | 2,607 |
| TOTAL ABOVE GRADE | 29,108 | 28,822 | (286) |
| GARAGE | 14,100 | 14,100 | 0 |
| TOTAL BUILDING | 43,208 | 42,922 | (286) |
| TOTAL CONDITIONED SPACE | 29,108 | 26,215 | $(2,893)$ |

JOHN FLOYD<br>Associate Planner<br>Community Development Department|Planning<br>22500 Salamo Road<br>West Linn, OR 97068<br>p: 503-742-6058<br>e: jfloyd@westlinnoregon.org

SGA PROJECT NO. 20-119
Design Review Application DR-23-01
PART 2: Design Adjustments in Response to
Comments from June 13th HRB Meeting

## DEAR MR. FLOYD,

Please find written narrative description (PART 2) of additional design changes we are proposing in response to our discussion of August $25^{\text {th }}$. I have paraphrased your concern about the roof top storage areas in gray below, with our narrative response following in black. I have also attached exhibits to illustrate our position.

As with our previous submittal, we would appreciate your adding this narrative and the attendant drawings to the original drawings as part of your submittal package to the Planning Commission.

## COMMENTS:

1. ORIGINAL CONCERN: While the IBC does not consider a mezzanine to be a separate floor, the HRB was not clear if the Willamette Falls Drive Commercial Design District Code (Chapter 58) (WFDCD) would allow for a mezzanine level above the second floor as shown in the 6/13 presentation. Further, the upper row of windows along $12^{\text {th }}$ Street in the original presentation was seen by some as an indication of a 3 rd floor that would not be permitted under the standards.

PART 2: In the previous submittal, the windows along $12^{\text {th }}$ were removed and the cornice line adjusted, and the enclosed roof top spaces were revised to be un-conditioned and unoccupied storage and mechanical spaces. Nonetheless, Staff remains concerned that those enclosed spaces still constitute a third floor.

## DESIGN RESPONSE:

Section 58.090 'Design Exception Procedures', allows that "The applicant can demonstrate by review of historical records or photographs that the alternative is correct and appropriate to architecture in the region, and especially West Linn, in 1880-1915."
The proposed roof top spaces are not visible to the public, making the Chapter 58 criteria of period design and materials difficult to apply or evaluate. However, we feel that the existence of several buildings in the area with similar roof top spaces, including 1672, 1880,1849, 1914, \& 1980 Willamette Falls Drive should qualify the 1949 proposal for an exception to the 2 -story standard.
The five buildings above each have covered roof top spaces for roof access and storage as is proposed for the 1949 project. As with the proposed project, the existing examples of covered spaces are hidden from view behind their western false front facades.

## The existing buildings demonstrate that these spaces have been deemed by the City as appropriate in the region along Willamette Falls Drive.

In the proposed 1949 building, the enclosed spaces will be un-conditioned and unoccupied. They will house mechanical equipment, store furnishings from the outdoor deck, and provide needed additional general building storage. The spaces will be fully hidden from view behind the Willamette Falls Drive and 12 ${ }^{\text {th }}$ Street facades. The stairs and elevator extend from the lower floors to allow roof and deck use, maintain the roof and roof equipment, and provide Code required access to exit routes.
Staff have expressed concern that if approved, these unoccupied spaces could be converted to occupied space in the future. However, per the Code no improvements may be constructed without a building permit. As well, in the case of the 1949 project converting the unoccupied unconditioned storage spaces to occupied conditioned space would constitute a change of use affecting more than $5 \%$ of the existing building area - thereby triggering a Type 2 design review. The applicant is a respected builder in the community and would never jeopardize license or reputation by building without proper approvals and permits.

John, thank you for your review and consideration, we look forward to any comments you may have. Please let me know if you have any questions, or if you need any additional information.


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01 willamette falls drive - roofscape

## EXHIBIT PC-1.E: APPLICANT SUBMITTAL

SG ARCHITECTURE, LLC

21 April, 2023
DESIGN REVIEW APPLICATION|SUPPLEMENTAL INFORMATION

## JOHN FLOYD

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SGA PROJECT NO. 20-119
Design Review Application DR-23-01
Supplemental Information Submittal in
Response to Incomplete Notice
DEAR MR. FLOYD,
Please find the following supplemental submittal items in response to your incomplete finding letter of February $5^{\text {th }}, 2023$. As requested, we have re-submitted the entire application, with supplemental and revised items incorporated into the file.

The following responses describe our specific responses to your comments:

## COMMENTS:

1. Narrative. Please provide a narrative that describes the reason for the replacements and addresses how the project meets each approval criterion. Deficient sections are listed below:
a. a. Please address relevant approval criteria in CDC Chapters 19.030, 19.070, 41.005, 41.020 (if applicable), 41.030, and 46.150.

Additional narrative to address the Chapters noted has been included in the application, entitled: " 1949 MIXED USE. 1949 WILLAMETTE FALLS DRIVE.01.3_CHAPTERS 19, 41, \& 46 DESIGN REVIEW SUPPLEMENTAL NARRATIVE".
2. Building Height. Please call out proposed building heights on all elevations per methodology in CDC 41.005 and 41.030. As a non-habitable projection, Western False Fronts are exempt from the height limit.

The drawing " 1949 MIXED USE. 1949 WILLAMETTE FALLS DRIVE.03_WFD ELEVATION (0420)" has been updated to include illustration of the building's compliance with the 35 ' height limit standard at a point 5' out from the front of the building/property line per Section 41.005.
3. Photometric Plan. Please provide a light coverage plan per CDC 55.070(D)(2).

The drawing " 1949 MIXED USE. 1949 WILLAMETTE FALLS DRIVE.10b_Lighting Photometric" has been added to the application.
4. Material Samples. Please provide a physical sample of the proposed paint colors, fiber cement trim and lap siding, and brick. This is in addition to the electronic samples provided in the application packet.

A material board with physical samples has been delivered to your office under separate cover. Further, an updated material sample exhibit " 1949 MIXED USE. 1949 WILLAMETTE FALLS DRIVE.12_COLORS AND MATERIALS BOARDS (0420)" has been added to the application.
5. TVF\&R Service Provider Permit. Per our email correspondence of January 6, 2023, please provide a TVF\&R Service Provider Permit.

The Exhibit " 1949 MIXED USE. 1949 WILLAMETTE FALLS DRIVE.01b_TVFR Permit 2023-0010" has been added to the application.
6. Traffic Impact Analysis. Due to the trip generation rates of the proposed uses and size of the proposed structure, the project is expected to result in greater than 250 average daily trips. Please provide a Traffic Impact Analysis pursuant to CDC Sections $48.025(B)(1)$ and 55.125 , and Section 5.0014 of the West Linn Public Works Design Standards.
The Exhibit " 1949 MIXED USE. 1949 WILLAMETTE FALLS DRIVE.01c_TRAFFIC IMPACT STUDY" has been added to the application.
7. Proposed Awning Pillars. Please provide the following items of information related to the proposed awnings. For questions regarding these comments, please contact Maryna Asuncion in engineering at 503-722-3436 or MAsuncion@westlinnoregon.gov
a. Awning pillars typically extend to the outside edge of the adjacent sidewalk. We have concerns about the proposed location of the pillars, especially along Willamette Falls Dr. where it looks like the proposed pillars will be in direct conflict with the walking path and the crosswalk. Please demonstrate how the sidewalk will remain ADA accessible.

The canopy posts are typically about 7' $\mathbf{~}^{\prime \prime \prime}$ from the face of the building. This places the posts along Willamette Falls Drive near the middle of the sidewalk, and at the edge of the sidewalk along $1^{\text {th }}$ Street, adjacent to the landscape buffer. The " 1949 MIXED USE. 1949 WILLAMETTE FALLS DRIVE.03_WFD ELEVATION (0420)" exhibit has been updated to show a minimum 4' wide ADA compliant clear access route along both frontages.
b. Due to concerns about potential utility conflicts with the pillars proposed along Willamette Falls Drive, please provide a detail in the plans showing how the posts will be anchored to the sidewalk. Will the posts be embedded in the sidewalk or just anchored/bolted down at the surface of the sidewalk? There may need to be 2 different anchoring details - one for wherever the posts are anchored to concrete and one for where the posts are anchored in landscaped area (i.e. along 12th St.).

The Exhibit " 1949 MIXED USE. 1949 WILLAMETTE FALLS DRIVE.04_12TH STREET ELEVATION (0420)" has been updated to include a footing detail for the canopy posts. The design proposes that the existing sidewalk be removed to the nearest joints, an approximately $3^{\prime} \times 3$ ' x 12 'd. footing be poured, and the sidewalk poured back to match the adjacent.
These footings have been shown on the Ground Floor Plan (see " 1949 MIXED USE. 1949 WILLAMETTE FALLS DRIVE.03_WFD ELEVATION (0420)"), along with the current site utilities. As shown, there should be little chance of conflict. In addition, the bottom of the footings are proposed at approximately 20 " below grade, which should place them well above any utility lines nearby.
Should a conflict between the footings and the site utilities arise, the Owner will coordinate with the City to reach a mutually satisfactory solution.
c. Please provide a proposed outdoor seating layout along both Willamette Falls Drive and 12th Street, including clear demarcation of the ADA path.
The Exhibit " 1949 MIXED USE. 1949 WILLAMETTE FALLS DRIVE.03_WFD ELEVATION (0420)" exhibit has been updated to show a possible outdoor seating layout. Any outdoor seating would be required to conform to the CDC Section 7.950 "Sidewalk Café Program".

Thank you for your review and consideration, we look forward to any comments you may have.
Please let me know if you have any questions, or if you need any additional information.

Sincerely,

scot sutton | SG Architecture, LLC
503-347-4685 | ssutton@sg-arch.net

May 5, 2022
SUTTON|GODWIN|ARCHITECTURE

## Request for NHM

## Kathie Halicki

Willamette NA - President
RE: Lots: 1919 \& 1949 Willamette Falls Drive
Tax Lot No: 31E02BA04300 \& 4400
Pre-Application \#PA-22-09

Dear Kathie,
SG Architecture, LLC would like to request for a Neighborhood Meeting with the Willamette Neighborhood Association on the earliest available agenda.

We look forward to presenting the project to the NHA and the neighbors. If you have questions, please feel free to call me at 503-201-0725.

Sincerely,
SG Architecture, LLC


Kevin M. Godwin | Partner | 503.201.0725 | kgodwin@sg-arch.net

Email CC: John Floyd (City of West Linn), Darren Gusdorf (ICON)

SUTTO IGODWIN |ARCHITECTURE

## NOTICE OF NEIGHBORHOOD MEETING

## Ms. Kathie Halicki

President - Willamette Neighborhood Association
2307 Falcon Drive
West Linn, Oregon 97068

## Ms. Elizabeth Rocchia

Secretary|NA Designee - Willamette Neighborhood Association
957 Willamette Falls Drive
West Linn, Oregon 97068

## REF: 1949 Willamette Falls Drive

Existing Addresses: 1919 \& 1949 Willamette Falls Drive
West Linn, Oregon

## Dear Ms. Halicki and Ms. Rocchia:

Please The following is the text of the letter we are sending to the other WNA officers and neighbors within a 500' radius of the above project location to alert them to our upcoming presentation at the September $14^{\text {th }}$ meeting of the Willamette Neighborhood Association (WNA):

## To whom it may concern,

SG Architecture, LLC is representing the applicant regarding the property located at 1919| 1949 Willamette Falls Drive. In the coming weeks we will be submitting to the City of West Linn a Land Use Application for the construction of a new 2-story building which will house uses allowed in the zone such as office, retail, service, and restaurant.

Prior to submitting the application, we will be presenting more information about the project at the WNA's regularly scheduled meeting at 7:00 PM on September 14th, 2022. Further information regarding time and location of the meeting will be available on the City's website: westlinnoregon.gov/willamette after September $1^{\text {st. }}$. Please note that this item may not be the only item on the agenda for that evening.

You are encouraged to contact the WNA with any questions you wish to relay to the applicant. You may contact WNA President, Kathie Halicki at willamette@westlinoregon.gov, Please note that this will be an informal meeting based upon preliminary design plans. These plans may be modified before the application is submitted.

We look forward to discussing this project with you. If you have questions, but will be unable to attend, please feel free to email me at ssutton@sg-arch.net.


Scot Sutton - Partner

SUTTON IGODWIN IARCHITECTURE

## NOTICE OF NEIGHBORHOOD MEETING

RE: NOTICE OF NEIGHBORHOOD MEETING<br>1949 Willamette Falls Drive<br>Existing Addresses: 1919 \& 1949 Willamette Falls Drive<br>West Linn, Oregon

## To whom it may concern,

SG Architecture, LLC is representing the applicant regarding the property located at 1919| 1949 Willamette Falls Drive. In the coming weeks we will be submitting to the City of West Linn a Land Use Application for the construction of a new 2-story building which will house uses allowed in the zone such as office, retail, service, and restaurant.

Prior to submitting the application, we will be presenting more information about the project at the WNA's regularly scheduled meeting at 7:00 PM on September 14 ${ }^{\text {th }}$, 2022. Further information regarding time and location of the meeting will be available on the City's website: westlinnoregon.gov/willamette after September $1^{\text {st }}$. Please note that this item may not be the only item on the agenda for that evening.

You are encouraged to contact the WNA with any questions you wish to relay to the applicant. You may contact WNA President, Kathie Halicki at willamette@westlinoregon.gov, Please note that this will be an informal meeting based upon preliminary design plans. These plans may be modified before the application is submitted.

We look forward to discussing this project with you. If you have questions, but will be unable to attend, please feel free to email me at ssutton@sg-arch.net.

Sincerely,


Scot Sutton - Partner


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31E02BA06800
Marcus \& Jenny Malcom
1822 5th Ave
West Linn, OR 97068

31E02BA05900
Jennifer \& Vincent Laski
2050 5th Ave
West Linn, OR 97068

31E02BA07200
Trisha Kelly
1898 5th Ave
West Linn, OR 97068

31E02BA01400
Adam \& Shantel Good 19546 Reddaway Ave Oregon City, OR 97045

31E02BA04400
Adam \& Shantel Good 19546 Reddaway Ave Oregon City, OR 97045

## 31E02BA06900

Rebecca Haynes \& Seth Talbot 1870 5th Ave
West Linn, OR 97068

31E02BA00300
Handris Holdings Llc
1980 Willamette Falls Dr STE 200
West Linn, OR 97068

31E02AB05100
Jason \& Heather Hall
2011 5th Ave
West Linn, OR 97068

31E02BA02301
Drd Property Llc 985 SW Long Farm Rd
West Linn, OR 97068

21E35C 02200
City Of West Linn
22500 Salamo Rd STE 100
West Linn, OR 97068

31E02BA03800
Loriaux \& Choate Teresa
1830 6th Ave
West Linn, OR 97068

31E02BA03300
Byong Kim
4401 Omalley Rd
Anchorage, AK 99507

31E02BA04500
Kyle Junk
1549 12th St
West Linn, OR 97068

31E02BA04100
Adam \& Shantel Good
19546 Reddaway Ave
Oregon City, OR 97045

31E02BA04800
David Hydes
1980 6th Ave
West Linn, OR 97068

31E02BA06400
Thomas \& Lisa Haymore
1891 6th Ave
West Linn, OR 97068

31E02BA00900
Edward Handris
2008 Willamette Falls Dr \# B
West Linn, OR 97068

31E02AB05000
Erik \& Jessica Grimm
2041 5th Ave
West Linn, OR 97068

31E02BA06000
Deatherage David W Trustee \&
1521 11th St
West Linn, OR 97068

31E02BA06700
Karen Chadwick
1819 6th Ave
West Linn, OR 97068

31E02BA04900
David Lawrence
Po Box 555
West Linn, OR 97068

31E02BA03000
Kari \& Molly Kenzie
1790 6th Ave
West Linn, OR 97068

31E02BA00500
Jason \& Amy Johnston
1693 12th St
West Linn, OR 97068

31E02BA04300
Adam \& Shantel Good
19546 Reddaway Ave
Oregon City, OR 97045

31E02BA06500
Nicolette Hydes
1847 6th Ave
West Linn, OR 97068

31E02BA00200
Handris Holdings LIc
1980 Willamette Falls Dr STE 200
West Linn, OR 97068

31E02BA03600
Andrew \& Linda White 1980 Willamette Falls Dr STE 200
West Linn, OR 97068

31E02BA04801
James Estes lii \& Kristen Woofter 1992 6th Ave
West Linn, OR 97068

31E02BA05100
Jeffrey Edmondson
2051 Willamette Falls Dr
West Linn, OR 97068

31E02BA01300
West Linn Building Llc
18835 SW Ebberts Ct
Beaverton, OR 97008

21E35C 02500
Willamette Marketplace Llc 810 NW Marshall St STE 300
Portland, OR 97209

31E02BA00800
Willamette Falls Holdings Llc 1980 Willamette Falls Dr STE 200

West Linn, OR 97068

31E02BA07000
Patrick \& B White
1872 5th Ave
West Linn, OR 97068

31E02BA07100
Harold Vail Jr 1882 5th Ave West Linn, OR 97068

31E02BA03100
Steve Tekander
465 SW Borland Rd
West Linn, OR 97068

31E02BA03500
William \& Farzaneh Sloan
1022 SW Stephenson Ct
Portland, OR 97219

31E02BA04000
Chirstopher \& James Rhom
1888 6th Ave
West Linn, OR 97068

31E02BA06401
Anthony Peyla \& Wilson Ralston
1883 6th Ave
West Linn, OR 97068

21E35C 02502
Pacific West Bank
2040 8th Ave
West Linn, OR 97068

31E02BA04001
Eric Mcdonald
1892 6th Ave
West Linn, OR 97068

21E35C 02900
Willamette Marketplace Llc
810 NW Marshall St STE 300
Portland, OR 97209

31E02BA02100
Willamette Falls Holdings Llc
1980 Willamette Falls Dr STE 200
West Linn, OR 97068

31E02BA06300
West Linn-Wils Sch Dist \#3
22210 SW Stafford Rd
Tualatin, OR 97062

31E02BA01100
Tualatin Valley Fire \& Rescue
11945 SW 70th Ave
Portland, OR 97223

31E02BA01000
Dunrobin Properties Llc
Po Box 889
Wilsonville, OR 97070

31E02BA04600
Albert \& Laura Secchi
1920 6th Ave
West Linn, OR 97068

31E02BA06200
Paul \& Yarrow Reim
1541 11th St
West Linn, OR 97068

31E02BA00400
Jennifer Pakula \& Scot Gelfand
2500 Crestview Dr
West Linn, OR 97068

31E02BA05000
Karin \& Peter Obrien
1547 11th St
West Linn, OR 97068

31E02BA06100
Margaret Matthies
1531 11th St
West Linn, OR 97068

31E02BA00600
Willamette Falls Holdings Llc
1980 Willamette Falls Dr STE 200
West Linn, OR 97068

31E02BA03200
Willamette Falls Properties LI 2130 8th Ct
West Linn, OR 97068

31E02BA06600
Jeffrey \& K Werley
1831 6th Ave
West Linn, OR 97068

## 31E02BA02000

Tualatin Valley Fire \& Rescue
11945 SW 70th Ave
Portland, OR 97223

## 31E02BA03400

William \& Farzaneh Sloan
1022 SW Stephenson Ct
Portland, OR 97219

31E02BA03900
Daniel \& Nicole Schreiber 1870 6th Ave
West Linn, OR 97068

31E02BD00100
Jilla \& David Piroozmandi 2545 Po Box
, AM

31E02BA01200
Pazmol Willamette Properties L \& Pamela
1832 Willamette Falls Dr
West Linn, OR 97068

21E35C 02300
Morton Cynthia S Trustee \& Morton Don R
20900 S South End Rd
Oregon City, OR 97045

31E02BA05800
Paul \& Karin Marcus
2062 5th Ave
West Linn, OR 97068

31E02BA04700
Ian \& Audra Brown 1968 6th Ave
West Linn, OR 97068

31E02BA06501
Elien Bates
20020 Marigold Ct APT 20
West Linn, OR 97068

31E02BA03700
Charles \& Sara Ashou
1818 6th Ave
West Linn, OR 97068

31E02BA05201
Maria Blanc-Gonnet
2057 Willamette Falls Dr
West Linn, OR 97068

31E02BA05500
Norman \& Donna Barnes
1542 10th St
West Linn, OR 97068

31E02BANONTL
Non-Taxlot

31E02BA03901
Robert \& Lorraine Beegle
1850 6th Ave
West Linn, OR 97068

31E02BA00100
Bany David C Trustee \& Bany Sarah A
2015 8th Ave
West Linn, OR 97068

21E35C 02900
VPC-OR WEST LINN LIMITED
2020 8TH AVE
West Linn, 97068

## Neighborhood Meeting <br> 1919 \& 1949 Willamette Falls Drive <br> AFFIDAVIT OF MAILING NOTICE

I Scot Sutton, do swear and affirm that I represent the party initiating interest in a proposed two-story building development affecting the land at 1919 \& 1949 Willamette Falls Drive in West Linn, Oregon.

On August $2^{\text {nd }}, 2022$, and pursuant to Community Development Code Section 99, I caused to have mailed to each of the persons on the attached list, a notice of Neighborhood Meeting to discuss the proposed development of the aforementioned property.

I further state that said notices were enclosed in plainly addressed envelopes to said persons and were deposited on the date indicated above at the United States Post Office with postage prepaid thereon.
Dated this $17^{\text {Th }}$ day of frow er 2022 .


Scot Sutton

Subscribed and sworn to or affirmed, before me this $\qquad$ day of $\qquad$ August 2022


Notary Public for the State of Oregon
My Commission Expires: 30 October 2022

## UNITED STATES POSTAL SERVICE.

TIGARD
12210 SW MAIN ST
PORTLAND, OR 97223-6222
(800) 275-8777

08/02/2022
05:47 PM
Product $\quad$ Qty Unit
Price

First-Class Mailo 1
$\$ 0.60$
Letter
West Linn, OR 97068
Weight: 0 lb 0.40 oz
Estimated Delivery Date

- Thu 08/04/2022

Registered Mailo
Amount: $\$ 1.00$
Tracking \#:
Total - RE099430533US

First-Class Mail8 1
Letter
West Linn, OR 97068
Weight: 0 lb 0.40 oz
Estimated Delivery Date
Thu 08/04/2022
Registered Maile

- Amount: $\$ 1.00$

Tracking \#:

- RE099430547US

Total
$\$ 15.85$


| Debit Card Remi tted | $\$ 31.70$ |
| :--- | :--- |
| Card Name: VISA |  |
| Account \#: XXXXXXXXXXXX6504 |  |
| Approval \#: : 093647 |  |
| Transaction \#: 531 |  |
| Receipt \#: 058259 |  |
| Debit Card Purchase: $\$ 31.70$ |  |
| AID: A0000000980840 | Chip |
| AL: US DEBIT |  |
| PIN: Verified |  |

***********************************************
Every household in the U.S. is now eligible to receive a third set of 8 free test kits.


## USPS Tracking ${ }^{\circledR}$

## Track Another Package +

Your item was delivered to an individual at the address at 10:52 am on August 3, 2022 in WEST LINN, OR 97068.

## © Delivered, Left with Individual

August 3, 2022 at 10:52 am
WEST LINN, OR 97068

## Get Updates $\vee$

## Text \& Email Updates

## Tracking History

August 3, 2022, 10:52 am
Delivered, Left with Individual
WEST LINN, OR 97068
Your item was delivered to an individual at the address at 10:52 am on August 3, 2022 in WEST LINN, OR 97068.

August 3, 2022, 8:38 am
Arrived at Post Office
WEST LINN, OR 97068

August 3, 2022, 8:37 am
Out for Delivery
WEST LINN, OR 97068

August 2, 2022, 11:24 pm
Departed USPS Facility

## Track Another Package +

Your item was delivered to an individual at the address at 10:56 am on August 6, 2022 in WEST LINN, OR 97068.

## © Delivered, Left with Individual

August 6, 2022 at 10:56 am
WEST LINN, OR 97068

## Get Updates $\vee$

Text \& Email Updates

## Tracking History

August 6, 2022, 10:56 am
Delivered, Left with Individual
WEST LINN, OR 97068
Your item was delivered to an individual at the address at 10:56 am on August 6, 2022 in WEST LINN, OR 97068.

August 3, 2022, 10:51 am
Notice Left (No Authorized Recipient Available)
WEST LINN, OR 97068

August 3, 2022, 8:37 am
Out for Delivery
WEST LINN, OR 97068

August 3, 2022, 8:26 am
Arrived at Post Office

## Neighborhood Meeting 1919 \& 1949 Willamette Falls Drive AFFIDAVIT OF POSTING NOTICE

I Darren Gusdorf, do swear and affirm that I represent the party initiating interest in a proposed twostory building development affecting the land at 1919 \& 1949 Willamette Falls Drive in West Linn, Oregon.

On August $1^{\text {st }}, 2022$, and pursuant to Community Development Code Section 99, I caused to have posted on the referenced property, a notice of Neighborhood Meeting to discuss the proposed development of the aforementioned property. Photographs of the postings are shown below.
Dated this $8^{\text {th }}$ day of AuGust?, 2022


Subscribed and sworn to or affirmed, before me this $\qquad$ day of August, $202>$


Notary Public for the State of Oregon County of Cucleamad

My Commission Expires: March 7,2023


From:
Sent:
To:
Cc:
Subject:

## Kevin Godwin

Thursday, September 15, 2022 9:26 AM
Elizabeth Rocchia; Kathie Halicki
'Darren Gusdorf'; Scot Sutton
Re: draft WNA minutes 9/14/2022

Thank you, Elizabeth \& Kathie!

Kevin Godwin | SG Architecture, LLC | partner
10940 SW Barnes Road \#364 | Portland, OR 97225 | 503.201.0725
kgodwin@sg-arch.net
This email is confidential, intended only for the named recipient(s) above and may contain information that is privileged work product or exempt from disclosure under applicable law. If you have received this message in error, or are not the named recipient(s), please immediately notify the sender and delete this email message from your computer. Thank you

From: Elizabeth Rocchia [erocchia@comcast.net](mailto:erocchia@comcast.net)
Sent: Thursday, September 15, 2022 8:46 AM
To: Kathie Halicki [khalicki@msn.com](mailto:khalicki@msn.com); Kevin Godwin [kgodwin@sg-arch.net](mailto:kgodwin@sg-arch.net)
Subject: draft WNA minutes 9/14/2022

Willamette NA Minutes September 14, 2022 via Zoom

The meeting was called to order at 7:05 by President, Kathie Halicki.
The Treasury remains at $\$ 3.245 .52$.
The Minutes of the July 13, 2022, meeting were read and approved.
23 persons attending on Zoom.

## ICON Construction

A proposed building design for the corner of 12th and Willamette Falls was presented by Scott Sutton and Kevin Godwin of SGA Architects. Images of a street elevation and a floor plan were shared-screened with design elements explained. There will be underground parking for 35 cars that connects with the adjacent ICON building.
The facade design will be compatible with the adjacent ICON building.
Office space and restaurant areas are included. A second story restaurant space is included with a mezzanine/roof area which will be enclosed.

Q: Noise from restaurant music?
A: All will be contained within walls on alley side. Should be no more than ambient noise from WF Drive.
Q: Delivery trucks in the alley?
A: Deliveries will be made from 12th street side in marked area

## Main Street

Rebecca announced tonight as the last day of the Summer Market.
Next Wednesday, Sept 21, will be a Wine Walk with tickets available as a Main Street fund raiser.
October 1 will be the Arch Bridge Centennial Celebration. West Linn, Oregon City and the Grande Ronde Tribe will each produce art events which will merge at the bridge center.
October 31 will be Halloween events and treats for children. Last year 1300 kids appeared. Volunteers will be welcomed. A donation of $\$ 200$ will be asked of the WNA at the October meeting.
November 1 will be 'Small Business Saturday' and the lighting of street trees.
Also the Historic Review Board is developing an on line walking tour of the Historic District. Calendar and events are described on the Historic Willamette Website.

## Update

Kathie reported two land use applications. Both involve property divisions.
The police station will allow use to use their community room but not their technical equipment.
poll: A vote among those present chose to continue with Zoom and perhaps meet in person twice a year.

The bird scooters are now gone from Willamette.
A Community Attitude Survey is underway: polco.us/westlinn22op
Traffic on Hwy 43 will be reduced to one lane during road improvements thru December.

## October meeting

A candidate forum is planned. Four candidates have responded and will be given 5 minutes to present and 5 minutes for questions.
The new City Manager, John Williams, will describe TIF, Tax Increment Financing
Lean Liu requested support from the WNA for a community pool citing popularity and reasons for the need. Kathie explained that generating petitions was not the purpose of the WNA and perhaps social media would be a better source for support. We were reminded that bond measures for a community pool had been turned down three times because of costs of construction and maintenance
She will bring a presentation to the WNA in the future.
Athey Creek School issues:
The Brandon Place extension needs a solution for adjacent residents.
The expanding width of WF Drive will cause large and extensive retaining walls in both the West and East entrances to Fields Bridge Park. Is this necessary? Is widening the road beyond a required bike lane necessary?
Attendance at a Transportation Committee meeting to voice concerns is urged.
The meeting adjourned at 8:53
Elizabeth Rocchia
secretary

SUTTON|GODWIN|ARCHITECTURE

## Mr. John Floyd

Associate Planner
City of West Linn Planning Department
22500 Salamo Road
West Linn, Oregon 97068

## RE: 1949 Willamette Falls Drive Mixed Use

Project Description
Existing Addresses: 1919 \& 1949 Willamette Falls Drive
West Linn, Oregon

## Dear Mr. Floyd:

Please find the following description of the above referenced 1949 Willamette Falls Drive project as part of our overall Design Review Application:

The 1949 Willamette Falls Drive Mixed Use (WFD) project is a proposed 2-story commercial mixed-use building which will encompass the 1919 \& 1949 lots. The lot(s) fall under the GC General Commercial zone, within the Willamette Falls Drive Commercial Design District Overlay Zone. The proposed building and uses are allowed within both the primary zone and the overlay. The Owner intends to consolidate the lots as part of the development process.

The building will be constructed as a shell structure, with tenants to occupy after completion. Uses are proposed to be commercial retail, office, restaurant, and other uses allowed in the zone. As the project is located in the overlay zone, it will meet the requirements of Chapter 58 as well as Chapter 19, and will meet the requirements for building height, setbacks, parking, etc.

Please refer to the Chapter 55 \& 58 narrative responses to approval criteria, as well as the Architectural and Civil drawings for further description and clarification of the intent of our proposal.

Thank you for your time and consideration, we look forward to discussing this project with you further. If we can answer any questions, please feel free to email me at ssutton@sg-arch.net.

## Sincerely,



Scot Sutton - Partner

Planning \& Development - 22500 Salamo Rd \#1000 • West Linn, Oregon 97068
Telephone 503.656-3535 • westlinnoregon.gov

## Development Review Application

| For Office Use Only |  |  |  |
| :--- | :--- | :--- | :--- |
| STAFF CONTACT | Project No (s). | Pre-APPLICATION No. | TOTAL |
| NONREFUNDABLE FEE (S) | REFUNDABLE DEPOSIT (S) |  |  |

Type of Review (Please check all that apply):

| $\square$ Annexation (ANX) | $\square$ Historic Review | $\square$ Subdivision (SUB) |
| :--- | :--- | :--- |
| $\square$ Appeal and Review (AP) | $\square$ Legislative Plan or Change | $\square$ Temporary Uses |
| $\square$ Code Interpretation | $\square$ Lot Line Adjustment (LLA) | $\square$ Time Extension |
| $\square$ Conditional Use (CUP) | $\square$ Minor Partition (MIP) (Preliminary Plat or Plan) | $\square$ Variance (VAR) |
| $\square$ | $\square$ Modification of Approval | $\square$ Water Resource Area Protection/Single Lot (WAP) |
| $\square$ Tree Easement Vacation | $\square$ Non-Conforming Lots, Uses \& Structures | $\square$ Water Resource Area Protection/Wetland (WAP) |
| $\square$ Final Plat or Plan (FP) | $\square$ Planned Unit Development (PUD) | $\square$ Willamette \& Tualatin River Greenway (WRG) |
| $\square$ Flood Management Area | $\square$ Street Vacation | $\square$ Zone Change |

Pre-Application, Home Occupation, Sidewalk Use, Addressing, and Sign applications require different forms, available on the City website.

## Site Location/Address:

1919 \& 1949 Willamette Falls Drive

Assessor's Map No.: 31E02BA
Tax Lot(s):31E02BA04300 \& 4400
Total Land Area: 15,000 Square Feet +/-

## Brief Description of Proposal:

## COMMERCIAL MIXED USE BUILDING. NEW CONSTRUCTION. 2 FLOORS + MEZZANINE + BELOW GRADE PARKING AREA

Applicant Name: SG ARCHITECTURE, LLC (SCOT SUTTON)
(please print)
Address:
10940 SW Barnes Road \#364
Portland, OR 97225

Phone: 503-347-4685
Email:
SSUTTON@SG-ARCH.NET
Phone: 503.657.0406
Email: darren@iconconstruction.net
1969 Willamette Falls Drive, Suite 260
West Linn, OR 97068

Phone: 503-481-8822
Email:
thetaengllc@gmail.com

State Zip
Lake Oswego, OR 97035

1. All application fees are non-refundable (excluding deposit). Any overruns to deposit will result in additional billing.
2. The owner/applicant or their representative should be present at all public hearings.
3. A decision may be reversed on appeal. The permit approval will not be effective until the appeal period has expired.
4. Submit this form and supporting documents through the Submit a Land Use Application web page: https://westlinnoregon.gov/planning/submit-land-use-application
The undersigned property owner(s) hereby authorizes the filing of this application, and authorizes on site review by authorized staff. I hereby agree to comply with all code requirements applicable to my application. Acceptance of this application does not infer a complete submittal. All amendments to the Community Development Code and to other regulations adopted after the application is approved shall be enforced where applicable. Approved applications and subsequent development is not vested under the provisions in place at the time of the initial application.


Applicant's signature

12-30-2022
Date


# Willamette Falls Mixed Use <br> West Linn, Oregon <br> Design Review Class II-Chapter 55 <br> December 2022 

55.010 PURPOSE AND INTENT - GENERAL

No response required.
55.020 CLASSES OF DESIGN REVIEW

No response required.

### 55.025 EXEMPTIONS

No response required.

### 55.030 ADMINISTRATION AND APPROVAL PROCESS

No response required.
55.040 EXPIRATION OR EXTENSION OF APPROVAL

No response required.

### 55.050 DESIGN REVIEW AMENDMENT TRIGGER

No response required.

### 55.060 STAGED OR PHASED DEVELOPMENT

No response required.

### 55.070 SUBMITTAL REQUIREMENTS

No response required.
55.085 ADDITIONAL INFORMATION REQUIRED AND WAIVER OF REQUIREMENTS

No response required.

### 55.090 APPROVAL STANDARDS - CLASS I DESIGN REVIEW

No response required.

### 55.100 APPROVAL STANDARDS - CLASS II DESIGN REVIEW

The approval authority shall make findings with respect to the following criteria when approving, approving with conditions, or denying a Class II design review application.
A. The provisions of the following chapters shall be met:

1. Chapter 34 CDC, Accessory Structures, Accessory Dwelling Units, and Accessory Uses. RESPONSE: There are no accessory structures included as part of this proposal. The requirements of this chapter do not apply.
2. Chapter 38 CDC, Additional Yard Area Required; Exceptions to Yard Requirements; Storage in Yards; Projections into Yards.
RESPONSE: Per 38.020, where no side yard setback is required. The west wall of the building is set back $3^{\prime} 0$ " from the property line per the standard. The other sections of this chapter do not apply.
3. Chapter 41 CDC, Building Height, Structures on Steep Lots, Exceptions.

RESPONSE: All proposed building heights are at or below the maximum allowable by code (35'0").
4. Chapter 42 CDC, Clear Vision Areas.

RESPONSE: Per section 42.030, this Chapter does not apply in the Willamette Falls Drive Commercial Design District.
5. Chapter 44 CDC, Fences.

RESPONSE: There are no fences or retaining walls planned as part of this proposal. The requirements of this chapter do not apply.
6. Chapter 46 CDC, Off-Street Parking, Loading and Reservoir Areas.

RESPONSE: Per section 46.140, no off-street parking spaces are required in the Willamette Falls Drive Commercial Design District.
7. Chapter 48 CDC, Access, Egress and Circulation.

RESPONSE: The subject property consists of Tax Lots 31EO2BA04300 and 31E02BA04400 and has direct access to 12th Street to the west, a platted alley to the south, and Willamette Falls Drive on the north. Vehicle access is proposed via the alley for street parking as well as a driveway cut to underground parking via the existing 1969 Willamette Falls Drive building. An existing public sidewalk on 11th Street and on Willamette Falls Drive provides pedestrian access. Street parking exists along Willamette Falls Drive and bicycle parking is provided on site.
8. Chapter 52 CDC, Signs.

RESPONSE: All signs will be building wall signs and will be submitted by the tenants under separate permits. All signs will meet the standards for the Willamette Falls Drive Commercial Design District per 52.210.
9. Chapter 54 CDC, Landscaping.

RESPONSE: Per 58.080, projects in the Willamette Falls Drive Commercial Design District are exempt from the requirement of chapter 54.
B. Relationship to the natural and physical environment.

1. The buildings and other site elements shall be designed and located so that all heritage trees, as defined in the municipal code, shall be saved. Diseased heritage trees, as determined by the City Arborist, may be removed at his/her direction. RESPONSE: There are no heritage or otherwise significant trees existing on the site. The standards of this section do not apply.
2. All heritage trees, as defined in the municipal code, all trees and clusters of trees ("cluster" is defined as three or more trees with overlapping driplines; however, native oaks need not have an overlapping dripline) that are considered significant by the City Arborist, either individually or in consultation with certified arborists or similarly qualified professionals, based on accepted arboricultural standards including consideration of their size, type, location, health, long term survivability, and/or numbers, shall be protected pursuant to the criteria of subsections $(B)(2)(a)$ through (f) of this section. In cases where there is a difference of opinion on the significance of a tree or tree cluster, the City Arborist's findings shall prevail. It is important to acknowledge that all trees are not significant and, further, that this code section will not necessarily protect all trees deemed significant.

RESPONSE: There are no heritage or otherwise significant trees existing on the site. The standards of this section do not apply.
a. Non-residential and residential projects on Type I and II lands shall protect all heritage trees and all significant trees and tree clusters by either the dedication of these areas or establishing tree conservation easements. Development of Type I and II lands shall require the careful layout of streets, driveways, building pads, lots, and utilities to avoid heritage trees and significant trees and tree clusters, and other natural resources pursuant to this code. The method for delineating the protected trees or tree clusters ("dripline +10 feet") is explained in subsection $(B)(2)(b)$ of this section. Exemptions of subsections $(B)(2)(c),(e)$, and ( f ) of this section shall apply.
RESPONSE: There are no heritage or otherwise significant trees existing on the site. The standards of this section do not apply.
b. Non-residential and residential projects on non-Type I and II lands shall set aside up to 20 percent of the area to protect trees and tree clusters that are determined to be significant, plus any heritage trees. Therefore, in the event that the City Arborist determines that a significant tree cluster exists at a development site, then up to 20 percent of the non-Type I and II lands shall be devoted to the protection of those trees, either by dedication or easement. The exact percentage is determined by establishing the driplines of the trees or tree clusters that are to be protected. In order to protect the roots which typically extend further, an additional 10 -foot measurement beyond the dripline shall be added. The square footage of the area inside this "dripline plus 10 feet" measurement shall be the basis for calculating the percentage (see figure below). The City Arborist will identify which tree(s) are to be protected. Development of non-Type I and II lands shall also require the careful layout of streets, driveways, building pads, lots, and utilities to avoid significant trees, tree clusters, heritage trees, and other natural resources pursuant to this code. Exemptions of subsections (B) (2) (c), (e), and (f) of this section shall apply. Please note that in the event that more than 20 percent of the non-Type I and II lands comprise significant trees or tree clusters, the developer shall not be required to save the excess trees but is encouraged to do so.
RESPONSE: There are no heritage or otherwise significant trees existing on the site. The standards of this section do not apply.
c. Where stubouts of streets occur on abutting properties, and the extension of those streets will mean the loss of significant trees, tree clusters, or heritage trees, it is understood that tree loss may be inevitable. In these cases, the objective shall be to minimize tree loss. These provisions shall also apply in those cases where access, per construction code standards, to a lot or parcel is blocked by a row or screen of significant trees or tree clusters.
RESPONSE: There are no heritage or otherwise significant trees existing on the site. The standards of this section do not apply.
d. For both non-residential and residential development, the layout shall achieve at leas $\dagger$ 70 percent of maximum density for the developable net area. The developable net area excludes all Type I and II lands and up to 20 percent of the remainder of the site for the purpose of protection of stands or clusters of trees as defined in subsection (B)(2) of this section.
RESPONSE: There are no heritage or otherwise significant trees existing on the site. The standards of this section do not apply.
e. For arterial and collector street projects, including Oregon Department of Transportation street improvements, the roads and graded areas shall avoid tree clusters
where possible. Significant trees, tree clusters, and heritage tree loss may occur, however, but shall be minimized.
RESPONSE: There are no heritage or otherwise significant trees existing on the site. The standards of this section do not apply.
f. If the protection of significant tree(s) or tree clusters is to occur in an area of grading that is necessary for the development of street grades, per City construction codes, which will result in an adjustment in the grade of over or under two feet, which will then threaten the health of the tree(s), the applicant will submit evidence to the Planning Director that all reasonable alternative grading plans have been considered and cannot work. The applicant will then submit a mitigation plan to the City Arborist to compensate for the removal of the tree(s) on an "inch by inch" basis (e.g., a 48-inch Douglas fir could be replaced by 12 trees, each four-inch). The mix of tree sizes and types shall be approved by the City Arborist.
3. The topography and natural drainage shall be preserved to the greatest degree possible. RESPONSE: The site slopes at less than $5 \%$ and generally from southwest to northeast. Since this is a commercial property almost the entire site will be covered with a building no surface flow will exist after construction. The flow from the new impervious roof will be collected and detained on site and meted with a control structure to the pre-development rates and connected to the public system in the same local drainage basin.
4. The structures shall not be located in areas subject to slumping and sliding. The Comprehensive Plan Background Report's Hazard Map, or updated material as available and as deemed acceptable by the Planning Director, shall be the basis for preliminary determination.
RESPONSE: The West Linn geologic hazard maps (SLIDO) indicates no slumping or sliding in this area.
5. There shall be adequate distance between on-site buildings and on-site and off-site buildings on adjoining properties to provide for adequate light and air circulation and for fire protection.
RESPONSE: On the north, west, and south property boundaries, the proposed building faces onto public ways. On the east property boundary, a $3^{\prime}-0^{\prime \prime}$ setback has been provided (no side yard setback is required in the district), per section 38.020. There will be adequate distance between buildings on adjoining properties to provide adequate light and air circulation and for fire protection.
6. Architecture.
a. The proposed structure(s) scale shall be compatible with the existing structure(s) on site and on adjoining sites. Contextual design is required. Contextual design means respecting and incorporating prominent architectural styles, building lines, roof forms, rhythm of windows, building scale and massing of surrounding buildings in the proposed structure. The materials and colors shall be complementary to the surrounding buildings.
RESPONSE: The architecture for this building meets the standards for the Willamette Falls Drive Commercial Design District found in chapter 58 and thus complies with the standards of this section. Please refer to the building elevations.
b. While there has been discussion in Chapter $\underline{24}$ CDC about transition, it is appropriate that new buildings should architecturally transition in terms of bulk and mass to work with, or fit, adjacent existing buildings. This transition can be accomplished by selecting designs that "step down" or "step up" from small to big structures and vice versa (see figure below).

Transitions may also take the form of carrying building patterns and lines (e.g., parapets, windows, etc.) from the existing building to the new one.
RESPONSE: The subject property is adjacent to a single-story commercial structure across $12^{\text {th }}$ Street, two-story commercial buildings across Willamette Falls Drive, and is adjacent to the two-story 1969 Willamette Falls Drive commercial building to the east. The planned building is a sister design to the 1969 building and is similar in style to those structures across Willamette Falls Drive.
c. Contrasting architecture shall only be permitted when the design is manifestly superior to adjacent architecture in terms of creativity, design, and workmanship, and/or it is adequately separated from other buildings by distance, screening, grade variations, or is part of a development site that is large enough to set its own style of architecture. RESPONSE: The building's architecture is in accordance with the standards of chapter 58 and is consistent with other buildings in the Willamette Falls Drive Commercial Design District.
d. Human scale is a term that seeks to accommodate the users of the building and the notion that buildings should be designed around the human scale (i.e., their size and the average range of their perception). Human scale shall be accommodated in all designs by, for example, multi-light windows that are broken up into numerous panes, intimately scaled entryways, and visual breaks (exaggerated eaves, indentations, ledges, parapets, awnings, engaged columns, etc.) in the facades of buildings, both vertically and horizontally.

The human scale is enhanced by bringing the building and its main entrance up to the edge of the sidewalk. It creates a more dramatic and interesting streetscape and improves the "height and width" ratio referenced in this section.
RESPONSE: The project design achieves human scale through the use of multi-light windows, intimately scaled entryways, parapets, awnings, and the building's location at the edge of the sidewalk. The façade is divided into distinct sections that emphasize a pleasing height-to-width ratio.
e. The main front elevation of commercial and office buildings shall provide at least 60 percent windows or transparency at the pedestrian level to create more interesting streetscape and window shopping opportunities. One side elevation shall provide at least 30 percent transparency. Any additional side or rear elevation, which is visible from a collector road or greater classification, shall also have at least 30 percent transparency. Transparency on other elevations is optional. The transparency is measured in lineal fashion. For example, a 100 -foot-long building elevation shall have at least 60 feet ( 60 percent of 100 feet) in length of windows. The window height shall be, at minimum, three feet tall. The exception to transparency would be cases where demonstrated functional constraints or topography restrict that elevation from being used. When this exemption is applied to the main front elevation, the square footage of transparency that would ordinarily be required by the above formula shall be installed on the remaining elevations at pedestrian level in addition to any transparency required by a side elevation, and vice versa. The rear of the building is not required to include transparency. The transparency must be flush with the building elevation.
RESPONSE: The front elevation is 147' long with 104' of windows, or $71 \%$. The west elevation is 100 ' long, with 47 ' of window or other openings, or $47 \%$. The remaining south and east elevations are exempt from the requirement.
f. Variations in depth and roof line are encouraged for all elevations.

To vary the otherwise blank wall of most rear elevations, continuous flat elevations of over 100 feet in length should be avoided by indents or variations in the wall. The use of decorative brick, masonry, or stone insets and/or designs is encouraged. Another way to vary or soften this elevation is through terrain variations such as an undulating grass area with trees to provide vertical relief.
RESPONSE: The rear elevation is divided into four distinct segments through the use of material changes, decorative pilaster trims, and varying parapet heights.
g. Consideration of the micro-climate (e.g., sensitivity to wind, sun angles, shade, etc.) shall be made for building users, pedestrians, and transit users, including features like awnings.
RESPONSE: On the north and west sides, pedestrians are protected by nearly continuous awnings and canopies, with additional awnings on the south side providing shade for building users. Windows on the east side are shaded by the adjacent 1969 building.
h. The vision statement identified a strong commitment to developing safe and attractive pedestrian environments with broad sidewalks, canopied with trees and awnings.
RESPONSE: The existing publicly constructed sidewalks are tree lined with existing street trees. The building has awnings and canopies over the sidewalk.
i. Sidewalk cafes, kiosks, vendors, and street furniture are encouraged. However, at least a four-foot-wide pedestrian accessway must be maintained per Chapter 53 CDC, Sidewalk Use.
RESPONSE: It is not known at this time if there will be a sidewalk café'. However, the existing sidewalks would provide plenty of room for table seating while maintaining at least a 4'0" pedestrian accessway.
7. Transportation Planning Rule (TPR) compliance. The automobile shall be shifted from a dominant role, relative to other modes of transportation, by the following means:
a. Commercial and office development shall be oriented to the street. At least one public entrance shall be located facing an arterial street; or, if the project does not front on an arterial, facing a collector street; or, if the project does not front on a collector, facing the local street with highest traffic levels. Parking lots shall be placed behind or to the side of commercial and office development. When a large and/or multi-building development is occurring on a large undeveloped tract (three plus acres), it is acceptable to focus internally; however, at least 20 percent of the main adjacent right-ofway shall have buildings contiguous to it unless waived per subsection (B)(7) (c) of this section. These buildings shall be oriented to the adjacent street and include pedestrianoriented transparencies on those elevations.

For individual buildings on smaller individual lots, at least 30 lineal feet or 50 percent of the building must be adjacent to the right-of-way unless waived per subsection $(B)(7)(c)$ of this section. The elevations oriented to the right-of-way must incorporate pedestrian-oriented transparency.
RESPONSE: $100 \%$ of the building elevations fronting on streets are located at the lot line, with multiple entry points along the north (front) elevation.
b. Multi-family projects shall be required to keep the parking at the side or rear of the buildings or behind the building line of the structure as it would appear from the right-ofway inside the multi-family project. For any garage which is located behind the building
line of the structure, but still facing the front of the structure, architectural features such as patios, patio walls, trellis, porch roofs, overhangs, pergolas, etc., shall be used to downplay the visual impact of the garage, and to emphasize the rest of the house and front entry.

The parking may be positioned inside small courtyard areas around which the units are built. These courtyard spaces encourage socialization, defensible space, and can provide a central location for landscaping, particularly trees, which can provide an effective canopy and softening effect on the courtyard in only a few years. Vehicular access and driveways through these courtyard areas is permitted.
RESPONSE: This project is not multi-family so this standard does not apply.
c. Commercial, office, and multi-family projects shall be built as close to the adjacent main right-of-way as practical to facilitate safe pedestrian and transit access. Reduced frontages by buildings on public rights-of-way may be allowed due to extreme topographic (e.g., slope, creek, wetlands, etc.) conditions or compelling functional limitations, not just inconveniences or design challenges.
RESPONSE: $100 \%$ of the building elevations fronting onto public rights-of-way are located on the lot lines.
d. Accessways, parking lots, and internal driveways shall accommodate pedestrian circulation and access by specially textured, colored, or clearly defined footpaths at least six feet wide. Paths shall be eight feet wide when abutting parking areas or travel lanes. Paths shall be separated from parking or travel lanes by either landscaping, planters, curbs, bollards, or raised surfaces. Sidewalks in front of storefronts on the arterials and main store entrances on the arterials identified in CDC 85.200 (A) (3) shall be 12 feet wide to accommodate pedestrians, sidewalk sales, sidewalk cafes, etc. Sidewalks in front of storefronts and main store entrances in commercial/OBC zone development on local streets and collectors shall be eight feet wide.
RESPONSE: The public sidewalks at the north and west elevations are existing to remain, constructed to City standards.
e. Paths shall provide direct routes that pedestrians will use between buildings, adjacent rights-of-way, and adjacent commercial developments. They shall be clearly identified. They shall be laid out to attract use and to discourage people from cutting through parking lots and impacting environmentally sensitive areas.
RESPONSE: The pedestrian access walkways along the north and west sides of the site are existing public walks that directly connect to adjacent properties.
f. At least one entrance to the building shall be on the main street, or as close as possible to the main street. The entrance shall be designed to identify itself as a main point of ingress/egress.
RESPONSE: There are three primary entries fronting on Willamette Falls Drive.
g. Where transit service exists, or is expected to exist, there shall be a main entrance within a safe and reasonable distance of the transit stop. A pathway shall be provided to facilitate a direct connection.
RESPONSE: There is a bus stop at the corner of Willamette Falls Drive and $12^{\text {th }}$ Street, as well as at Willamette Falls Drive and $11^{\text {th }}$ Street. Both have direct access to the three main entries on the north elevation.
h. Projects shall bring at least part of the project adjacent to or near the main street right-of-way in order to enhance the height-to-width ratio along that particular street. (The
"height-to-width ratio" is an architectural term that emphasizes height or vertical dimension of buildings adjacent to streets. The higher and closer the building is, and the narrower the width of the street, the more attractive and intimate the streetscape becomes.) For every one foot in street width, the adjacent building ideally should be one to two feet higher. This ratio is considered ideal in framing and defining the streetscape. RESPONSE: The building is located on the lot line along both Willamette Falls Drive and $\mathbf{1 2}^{\text {th }}$ Street. At its tallest point (at the corner of Willamette Falls Drive and $12^{\text {th }}$ Street), the building is $35^{\prime} 0^{\prime \prime}$ tall, which is the height limit allowed in the district.
i. These architectural standards shall apply to public facilities such as reservoirs, water towers, treatment plants, fire stations, pump stations, power transmission facilities, etc. It is recognized that many of these facilities, due to their functional requirements, cannot readily be configured to meet these architectural standards. However, attempts shall be made to make the design sympathetic to surrounding properties by landscaping, setbacks, buffers, and all reasonable architectural means.
RESPONSE: This project is a private mixed-use building. The requirements of this standard do not apply.
j. Parking spaces at trailheads shall be located so as to preserve the view of, and access to, the trailhead entrance from the roadway. The entrance apron to the trailhead shall be marked: "No Parking," and include design features to foster trail recognition.
RESPONSE: This project is not located at a trailhead. The requirements of this standard do not apply.
C. Compatibility between adjoining uses, buffering, and screening.

1. In addition to the compatibility requirements contained in Chapter 24 CDC, buffering shall be provided between different types of land uses; for example, buffering between singlefamily homes and apartment blocks. However, no buffering is required between singlefamily homes and duplexes or single-family attached units. The following factors shall be considered in determining the adequacy of the type and extent of the buffer:
a. The purpose of the buffer, for example to decrease noise levels, absorb air pollution, filter dust, or to provide a visual barrier.
b. The size of the buffer required to achieve the purpose in terms of width and height.
c. The direction(s) from which buffering is needed.
d. The required density of the buffering.
e. Whether the viewer is stationary or mobile.

RESPONSE: This project has public rights-of-way on three sides. The lot to the east is the same land use as the project site.
2. On-site screening from view from adjoining properties of such things as service areas, storage areas, and parking lots shall be provided and the following factors will be considered in determining the adequacy of the type and extent of the screening:
a. What needs to be screened?
b. The direction from which it is needed.
c. How dense the screen needs to be.
d. Whether the viewer is stationary or mobile.
e. Whether the screening needs to be year-round.

RESPONSE: All trash, storage, and parking are screened or enclosed by building walls.
3. Rooftop air cooling and heating systems and other mechanical equipment shall be screened from view from adjoining properties.

RESPONSE: Rooftop HVAC units are screened by parapets on all sides that will keep the units from being visible from the street.
D. Privacy and noise.

1. Structures which include residential dwelling units shall provide private outdoor areas for each ground floor unit which is screened from view from adjoining units.
2. Residential dwelling units shall be placed on the site in areas having minimal noise exposure to the extent possible. Natural-appearing sound barriers shall be used to lessen noise impacts where noise levels exceed the noise standards contained in West Linn Municipal Code Section 5.487.
3. Structures or on-site activity areas which generate noise, lights, or glare shall be buffered from adjoining residential uses in accordance with the standards in subsection $C$ of this section where applicable.
4. Businesses or activities that can reasonably be expected to generate noise in excess of the noise standards contained in West Linn Municipal Code Section 5.487 shall undertake and submit appropriate noise studies and mitigate as necessary to comply with the code.

If the decision-making authority reasonably believes a proposed use may generate noise exceeding the standards specified in the municipal code, then the authority may require the applicant to supply professional noise studies from time to time during the user's first year of operation to monitor compliance with City standards and permit requirements.

RESPONSE: There are no residential dwelling units planned as part of this project. The requirements of parts 1 and 2 of this standard do not apply. There are no businesses or uses proposed at the time of the submittal that are anticipated to generate noise in excess of the allowable in the requirements. Therefore, parts 3 and 4 of this standard do not apply.
E. Private outdoor area. This section only applies to multi-family projects.

1. In addition to the requirements of residential living, unit shall have an outdoor private area (patio, terrace, porch) of not less than 48 square feet in area;
2. The outdoor space shall be oriented towards the sun where possible; and
3. The area shall be screened or designed to provide privacy for the users of the space.
4. Where balconies are added to units, the balconies shall not be less than 48 square feet, if they are intended to be counted as private outdoor areas.
RESPONSE: This project is not multi-family use. The requirements of this standard do not apply.
F. Shared outdoor recreation areas. This section only applies to multi-family projects and projects with 10 or more duplexes or single-family attached dwellings on lots under 4,000 square feet. In those cases, shared outdoor recreation areas are calculated on the duplexes or singlefamily attached dwellings only. It also applies to qualifying PUDs under the provisions of CDC 24.170.
5. In addition to the requirements of subsection E of this section, usable outdoor recreation space shall be provided in residential developments for the shared or common use of all the residents in the following amounts:
a. Studio up to and including two-bedroom units: 200 square feet per unit.
b. Three or more bedroom units: 300 square feet per unit.
6. The required recreation space may be provided as follows:
a. It may be all outdoor space; or
b. It may be part outdoor space and part indoor space; for example, an outdoor tennis court and indoor recreation room; and
c. Where some or all of the required recreation area is indoor, such as an indoor recreation room, then these indoor areas must be readily accessible to all residents of the
development subject to clearly posted restrictions as to hours of operation and such regulations necessary for the safety of minors.
d. In considering the requirements of this subsection $F$, the emphasis shall be on usable recreation space. No single area of outdoor recreational space shall encompass an area of less than 250 square feet. All common outdoor recreational space shall be clearly delineated and readily identifiable as such. Small, marginal, and incidental lots or parcels of land are not usable recreation spaces. The location of outdoor recreation space should be integral to the overall design concept of the site and be free of hazards or constraints that would interfere with active recreation.
7. The shared space shall be readily observable to facilitate crime prevention and safety. RESPONSE: This project is not multi-family use. The requirements of this standard do not apply.
G. Demarcation of public, semi-public, and private spaces. The structures and site improvements shall be designed so that public areas such as streets or public gathering places, semi-public areas, and private outdoor areas are clearly defined in order to establish persons having a right to be in the space, to provide for crime prevention, and to establish maintenance responsibility. These areas may be defined by:
8. A deck, patio, fence, low wall, hedge, or draping vine;
9. A trellis or arbor;
10. A change in level;
11. A change in the texture of the path material;
12. Sign; or
13. Landscaping.

Use of gates to demarcate the boundary between a public street and a private access driveway is prohibited.
RESPONSE: This project is not multi-family use. The requirements of this standard do not apply.
H. Public transit.

1. Provisions for public transit may be required where the site abuts an existing or planned public transit route. The required facilities shall be based on the following:
a. The location of other transit facilities in the area.
b. The size and type of the proposed development.
c. The rough proportionality between the impacts from the development and the required facility.
2. The required facilities shall be limited to such facilities as the following:
a. A waiting shelter with a bench surrounded by a three-sided covered structure, with transparency to allow easy surveillance of approaching buses.
b. A turnout area for loading and unloading designed per regional transit agency standards.
c. Hard-surface paths connecting the development to the waiting and boarding areas.
d. Regional transit agency standards shall, however, prevail if they supersede these standards.
3. The transit stop shall be located as close as possible to the main entrance to the shopping center, public or office building, or multi-family project. The entrance shall not be more than 200 feet from the transit stop with a clearly identified pedestrian link.
4. All commercial business centers (over three acres) and multi-family projects (over 40 units) may be required to provide for the relocation of transit stops to the front of the site if the existing stop is within 200 to 400 yards of the site and the exaction is roughly proportional to the impact of the development. The commercial or multi-family project may be required to provide new facilities in those cases where the nearest stop is over 400 yards away. The transit stop shall be built per subsection $(\mathrm{H})(2)$ of this section.
5. If a commercial business center or multi-family project is adjacent to an existing or planned public transit stop, the parking requirement may be reduced by the multiplier of 0.9 , or 10 percent. If a commercial center is within 200 feet of a multi-family project, with over 80 units and pedestrian access, the parking requirement may be reduced by 10 percent or by a 0.90 multiplier.
6. Standards of CDC 85.200 (D), Transit Facilities, shall also apply.

RESPONSE: There is an existing bus stop at the corner of Willamette Falls Drive and $11^{\text {th }}$ Street, which is immediately adjacent to the main entry of the building at the northeast corner and is within 200 feet of all primary entries to the building. The stop is constructed with a bench, but without a shelter, consistent with other bus stops in the Willamette Falls Drive Commercial Design District. There is no parking requirement in the district, so parts 4 and 5 of the standard do not apply.
I. Public facilities. An application may only be approved if adequate public facilities will be available to provide service to the property prior to occupancy.

1. Streets. Sufficient right-of-way and slope easement shall be dedicated to accommodate all abutting streets to be improved to the City's Improvement Standards and Specifications. The City Engineer shall determine the appropriate level of street and traffic control improvements to be required, including any off-site street and traffic control improvements, based upon the transportation analysis submitted. The City Engineer's determination of developer obligation, the extent of road improvement and City's share, if any, of improvements and the timing of improvements shall be made based upon the City's systems development charge ordinance and capital improvement program, and the rough proportionality between the impact of the development and the street improvements.

In determining the appropriate sizing of the street in commercial, office, multi-family, and public settings, the street should be the minimum necessary to accommodate anticipated traffic load and needs and should provide substantial accommodations for pedestrians and bicyclists. Road and driveway alignment should consider and mitigate impacts on adjacent properties and in neighborhoods in terms of increased traffic loads, noise, vibrations, and glare.
The realignment or redesign of roads shall consider how the proposal meets accepted engineering standards, enhances public safety, and favorably relates to adjacent lands and land uses. Consideration should also be given to selecting an alignment or design that minimizes or avoids hazard areas and loss of significant natural features (drainageways, wetlands, heavily forested areas, etc.) unless site mitigation can clearly produce a superior landscape in terms of shape, grades, and reforestation, and is fully consistent with applicable code restrictions regarding resource areas.
Streets shall be installed per Chapter 85 CDC standards. The City Engineer has the authority to require that street widths match adjacent street widths. Sidewalks shall be installed per CDC 85.200(A)(3) for commercial and office projects, and CDC 8 85.200(A)(16) and $92.010(\mathrm{H})$ for residential projects, and applicable provisions of this chapter. Where streets bisect or traverse water resource areas (WRAs) the street width shall be reduced to the minimum standard of 20 feet (two 10 -foot travel lanes) plus four-foot-wide curb flush sidewalks or alternate configurations which are appropriate to site conditions, minimize WRA disturbance or are consistent with an adopted transportation system plan. The street design shall also be consistent with habitat friendly provisions of CDC $32.060(H)$.
Based upon the City Manager's or Manager's designee's determination, the applicant shall construct or cause to be constructed, or contribute a proportionate share of the costs, for all necessary off-site improvements identified by the transportation analysis commissioned to address CDC 55.125 that are required to mitigate impacts from the proposed development. Proportionate share of the costs shall be determined by the City Manager or Manager's
designee, who shall assume that the proposed development provides improvements in rough proportion to identified impacts of the development.

RESPONSE: All streets adjacent to the project are existing public streets that will remain.
2. Storm detention and treatment and geologic hazards. Per the submittals required by CDC 55.130 and 92.010 (E), all proposed storm detention and treatment facilities must comply with the standards for the improvement of public and private drainage systems located in the West Linn Public Works Design Standards, there will be no adverse off-site impacts caused by the development (including impacts from increased intensity of runoff downstream or constrictions causing ponding upstream), and the applicant must provide sufficient factual data to support the conclusions of the submitted plan.

Per the submittals required by CDC 55.130(E), the applicant must demonstrate that the proposed methods of rendering known or potential hazard sites safe for development, including proposed geotechnical remediation, are feasible and adequate to prevent landslides or other damage to property and safety. The review authority may impose conditions, including limits on type or intensity of land use, which it determines are necessary to mitigate known risks of landslides or property damage.
RESPONSE: Storm detention and treatment design complies with the West Linn Public Works Design Standards, see Civil drawings. The project site is not in an area with geologic hazards.
3. Municipal water. A registered civil engineer shall prepare a plan for the provision of water which demonstrates to the City Engineer's satisfaction the availability of sufficient volume, capacity, and pressure to serve the proposed development's domestic, commercial, and industrial fire flows. All plans will then be reviewed by the City Engineer.
RESPONSE: Water facilities serving the project site are existing and will remain.
4. Sanitary sewers. A registered civil engineer shall prepare a sewerage collection system plan which demonstrates sufficient on-site capacity to serve the proposed development. The City Engineer shall determine whether the existing City system has sufficient capacity to serve the development.
RESPONSE: Sewer facilities serving the project site are existing and will remain.
5. Solid waste and recycling storage areas. Appropriately sized and located solid waste and recycling storage areas shall be provided. Metro standards shall be used.
RESPONSE: An appropriately sized solid waste and recycling storage area is provided inside the southwest corner of the building and is accessed from Knapps Alley.
J. Crime prevention and safety/defensible space.

1. Windows shall be located so that areas vulnerable to crime can be surveyed by the occupants.
RESPONSE: Windows overlook the public walks, Knapps Alley, and the service area to the east adjacent to the 1969 building.
2. Interior laundry and service areas shall be located in a way that they can be observed by others.
RESPONSE: No interior laundry is planned for the project.
3. Mailboxes, recycling, and solid waste facilities shall be located in lighted areas having vehicular or pedestrian traffic.
RESPONSE: Mailboxes and trash containers will be located inside the building lobby.
4. The exterior lighting levels shall be selected and the angles shall be oriented towards areas vulnerable to crime.
RESPONSE: Wall mounted sconces and gooseneck style lights will provide lighting consistent with the other buildings in the district.
5. Light fixtures shall be provided in areas having heavy pedestrian or vehicular traffic and in potentially dangerous areas such as parking lots, stairs, ramps, and abrupt grade changes.
RESPONSE: Wall mounted sconces and gooseneck style lights will provide lighting consistent with the other buildings in the district.
6. Fixtures shall be placed at a height so that light patterns overlap at a height of seven feet which is sufficient to illuminate a person. All commercial, industrial, residential, and public facility projects undergoing design review shall use low or high pressure sodium bulbs and be able to demonstrate effective shielding so that the light is directed downwards rather than omni-directional. Omni-directional lights of an ornamental nature may be used in general commercial districts only.
RESPONSE: Wall mounted sconces and gooseneck style lights will provide lighting consistent with the other buildings in the district.
7. Lines of sight shall be reasonably established so that the development site is visible to police and residents.
RESPONSE: The entire project is located at the property lines. Public sidewalks, Knapps Alley, and the service area between the 1949 and 1969 buildings allow for adequate lines of sight.
8. Security fences for utilities (e.g., power transformers, pump stations, pipeline control equipment, etc.) or wireless communication facilities may be up to eight feet tall in order to protect public safety. No variances are required regardless of location.
RESPONSE: No fences are planned for the project.
K. Provisions for persons with disabilities.
9. The needs of a person with a disability shall be provided for. Accessible routes shall be provided between all buildings and accessible site facilities. The accessible route shall be the most practical direct route between accessible building entries, accessible site facilities, and the accessible entry to the site. An accessible route shall connect to the public right-of-way and to at least one on-site or adjacent transit stop (if the area is served by transit). All facilities shall conform to, or exceed, the Americans with Disabilities Act (ADA) standards, including those included in the Uniform Building Code.

RESPONSE: Accessible parking spaces are provided in the garage and connect to accessible building entries which lead to a fully accessible interior. Additionally, the central entry at the lobby exits onto a public sidewalk that connects to public transit stops. All facilities will comply with ADA requirements.
L. Signs.

1. Based on considerations of crime prevention and the needs of emergency vehicles, a system of signs for identifying the location of each residential unit, store, or industry shall be established.
RESPONSE: Building identification signage will be provided to meet the requirements of local emergency service providers.
2. The signs, graphics, and letter styles shall be designed to be compatible with surrounding development, to contribute to a sense of project identity, or, when appropriate, to reflect a sense of the history of the area and the architectural style.
RESPONSE: Signs are shown for reference only. All signs shall be submitted by the tenant under a separate sign permit prior to installation. Sign styles will comply with the Willamette Falls Drive Commercial Design District.
3. The sign graphics and letter styles shall announce, inform, and designate particular areas or uses as simply and clearly as possible.
RESPONSE: Signs are shown for reference only. All signs shall be submitted by the tenant under a separate sign permit prior to installation. Sign styles will comply with the Willamette Falls Drive Commercial Design District.
4. The signs shall not obscure vehicle driver's sight distance.

RESPONSE: Signs are shown for reference only. All signs shall be submitted by the tenant under a separate sign permit prior to installation. Sign styles will comply with the Willamette Falls Drive Commercial Design District.
5. Signs indicating future use shall be installed on land dedicated for public facilities (e.g., parks, water reservoir, fire halls, etc.).
RESPONSE: Signs are shown for reference only. All signs shall be submitted by the tenant under a separate sign permit prior to installation. Sign styles will comply with the Willamette Falls Drive Commercial Design District.
6. Signs and appropriate traffic control devices and markings shall be installed or painted in the driveway and parking lot areas to identify bicycle and pedestrian routes.
RESPONSE: Signs are shown for reference only. All signs shall be submitted by the tenant under a separate sign permit prior to installation. Sign styles will comply with the Willamette Falls Drive Commercial Design District.
M. Utilities. The developer shall make necessary arrangements with utility companies or other persons or corporations affected for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting, and cable television, shall be placed underground, as practical. The design standards of Tables 1 and 2 above, and of subsection 5.487 of the West Linn Municipal Code relative to existing high ambient noise levels shall apply to this section.

RESPONSE: All utilities to the site are existing and will remain. The secondary feeds from the main lines to the building will be the only new work.
N. Wireless communication facilities (WCFs). (This section only applicable to WCFs.) WCFs as defined in Chapter 57 CDC may be required to go through Class I or Class II design review. The approval criteria for Class I design review is that the visual impact of the WCF shall be minimal to the extent allowed by Chapter 57 CDC. Stealth designs shall be sufficiently camouflaged so that they are not easily seen by passersby in the public right-of-way or from any adjoining residential unit. WCFs that are classified as Class II design review must respond to all of the approval criteria of this chapter.

RESPONSE: Not applicable - none proposed.
O. Refuse and recycling standards.

1. All commercial, industrial and multi-family developments over five units requiring Class II design review shall comply with the standards set forth in these provisions. Modifications to these provisions may be permitted if the Planning Commission determines that the
changes are consistent with the purpose of these provisions and the City receives written evidence from the local franchised solid waste and recycling firm that they are in agreement with the proposed modifications.
RESPONSE: No modifications proposed for this development.
2. Compactors, containers, and drop boxes shall be located on a level Portland cement concrete pad, a minimum of four inches thick, at ground elevation or other location compatible with the local franchise collection firm's equipment at the time of construction. The pad shall be designed to discharge surface water runoff to avoid ponding.
RESPONSE: A concrete slab will be constructed in the enclosed trash enclosure area in which the containers will be placed.
3. Recycling and solid waste service areas.
a. Recycling receptacles shall be designed and located to serve the collection requirements for the specific type of material.
b. The recycling area shall be located in close proximity to the garbage container areas and be accessible to the local franchised collection firm's equipment.
c. Recycling receptacles or shelters located outside a structure shall have lids and be covered by a roof constructed of water and insect-resistive material. The maintenance of enclosures, receptacles and shelters is the responsibility of the property owner.
d. The location of the recycling area and method of storage shall be approved by the local fire marshal.
e. Recycling and solid waste service areas shall be at ground level and/or otherwise accessible to the franchised solid waste and recycling collection firm.
f. Recycling and solid waste service areas shall be used only for purposes of storing solid waste and recyclable materials and shall not be a general storage area to store personal belongings of tenants, lessees, property management or owners of the development or premises.
g. Recyclable material service areas shall be maintained in a clean and safe condition.

RESPONSE: Solid waste containers for the storage of trash and recycling containers provided by the local waste management company. These containers will be provided in an enclosure inside the building. Size of containers and frequency of pick-ups will be determined by the Building Owner and the waste management company.
4. Special wastes or recyclable materials.
a. Environmentally hazardous wastes defined in ORS 466.005 shall be located, prepared, stored, maintained, collected, transported, and disposed in a manner acceptable to the Oregon Department of Environmental Quality.
RESPONSE: Hazardous wastes will be handled and disposed of per state law. Cooking grease, if any, will be stored in approved containers within the restaurant.
b. Containers used to store cooking oils, grease or animal renderings for recycling or disposal shall not be located in the principal recyclable materials or solid waste storage areas. These materials shall be stored in a separate storage area designed for such purpose.
RESPONSE: Hazardous wastes will be handled and disposed of per state law. Cooking grease, if any, will be stored in approved containers within the restaurant.
5. Screening and buffering.
a. Enclosures shall include a curbed landscape area at least three feet in width on the sides and rear. Landscaping shall include, at a minimum, a continuous hedge maintained at a height of 36 inches.
RESPONSE: The enclosure is fully contained within the building structure. Other screening requirements of this section do not apply.
b. Placement of enclosures adjacent to residentially zoned property and along street frontages is strongly discouraged. They shall be located so as to conceal them from public view to the maximum extent possible.
RESPONSE: The enclosure is fully contained within the building structure. Other screening requirements of this section do not apply.
C. All dumpsters and other trash containers shall be completely screened on all four sides with an enclosure that is comprised of a durable material such as masonry with a finish that is architecturally compatible with the project. Chain link fencing, with or without slats, will not be allowed.
RESPONSE: The enclosure is fully contained within the building structure. Other screening requirements of this section do not apply.
6. Litter receptacles.
a. Location. Litter receptacles may not encroach upon the minimum required walkway widths.
RESPONSE: Site furnishings, such as litter receptacles, have not been selected at the time of this application. Future selections will be submitted for approval.
b. Litter receptacles may not be located within public rights-of-way except as permitted through an agreement with the City in a manner acceptable to the City Attorney or his/her designee.
RESPONSE: Site furnishings, such as litter receptacles, have not been selected at the time of this application. Future selections will be submitted for approval.
c. Number. The number and location of proposed litter receptacles shall be based on the type and size of the proposed uses. However, at a minimum, for non-residential uses, at least one external litter receptacle shall be provided for every 25 parking spaces for first 100 spaces, plus one receptacle for every additional 100 spaces. (Ord. 1547, 2007; Ord. 1604 § 52, 2011 ; Ord. 1613 § 12, 2013; amended during July 2014 supplement; Ord. $1623 \S 6,2014$; Ord. $1635 \S 26,2014$; Ord. $1636 \S 37,2014$ )
RESPONSE: Site furnishings, such as litter receptacles, have not been selected at the time of this application. Future selections will be submitted for approval.

### 55.110 SITE ANALYSIS

The site analysis shall include:
A. A vicinity map showing the location of the property in relation to adjacent properties, roads, pedestrian and bike ways, transit stops and utility access.

RESPONSE: See Civil drawings for this information.
B. A site analysis on a drawing at a suitable scale (in order of preference, one inch equals 10 feet to one inch equals 30 feet) which shows:

1. The property boundaries, dimensions, and gross area.

RESPONSE: See Civil drawings for this information.
2. Contour lines at the following minimum intervals:
a. Two-foot intervals for slopes from zero to 25 percent; and
b. Five- or 10 -foot intervals for slopes in excess of 25 percent.

RESPONSE: See Civil drawings for this information.
3. A slope analysis which identifies portions of the site according to the slope ranges as follows:
a. Type I (under 15 percent);
b. Type II (between 15 to 25 percent);
c. Type III (between 25 to 35 percent);
d. Type IV (over 35 percent).

RESPONSE: See Civil drawings for this information.
4. The location and width of adjoining streets.

RESPONSE: See Civil drawings for this information and Existing Conditions plan (Survey).
5. The drainage patterns and drainage courses on the site and on adjacent lands.

RESPONSE: See Civil drawings for this information.
6. Potential natural hazard areas including:
a. Floodplain areas pursuant to the site's applicable FEMA Flood Map panel;
b. Water resource areas as defined by Chapter 32 CDC;
c. Landslide areas designated by the Natural Hazard Mitigation Plan, Map 16; and
d. Landslide vulnerable analysis areas, designated by the Natural Hazard Mitigation Plan, Map 17.
RESPONSE: See Civil drawings for this information.
7. Resource areas including:
a. Wetlands;
b. Riparian corridors;
c. Streams, including intermittent and ephemeral streams;
d. Habitat conservation areas; and
e. Large rock outcroppings.

RESPONSE: See Civil drawings for this information.
8. Potential historic landmarks and registered archaeological sites. The existence of such sites on the property shall be verified from records maintained by the Community Development Department and other recognized sources.
RESPONSE: None exist on the site. Further documentation will be provided to the City if requested.
9. Identification information including the name and address of the owner, developer, project designer, lineal scale and north arrow.
RESPONSE: See Civil \& Architectural drawings for this information.
10. Identify Type I and II lands in map form. Provide a table which identifies square footage of Type I and II lands also as percentage of total site square footage. (Ord. 1408, 1998; Ord. 1425, 1998; Ord. 1442, 1999; Ord. 1463, 2000; Ord. 1526, 2005; Ord. 1544, 2007; Ord. 1565, 2008; Ord. 1590 § 1, 2009; Ord. 1613 § 13, 2013; Ord. 1621 § 25, 2014; Ord. 1635 § 27, 2014; Ord. 1636 § 38, 2014)

### 55.120 SITE PLAN

The site plan shall be at the same scale as the site analysis (CDC 55.110) and shall show:
A. The applicant's entire property and the surrounding property to a distance sufficient to determine the relationship between the applicant's property and proposed development and adjacent property and development.

RESPONSE: See provided site plan.
B. Boundary lines and dimensions for the perimeter of the property and the dimensions for all proposed lot or parcel lines.

RESPONSE: See provided site plan.
C. Streams and stream corridors.

RESPONSE: See provided site plan.
D. Identification information, including the name and address of the owner, developer, project designer, lineal scale and north arrow.

RESPONSE: See provided site plan.
E. The location, dimensions, and names of all existing and proposed streets, public pathways, easements on adjacent properties and on the site, and all associated rights-of-way.

RESPONSE: See provided site plan.
F. The location, dimensions and setback distances of all:

1. Existing and proposed structures, improvements, and utility facilities on site; and
2. Existing structures and driveways on adjoining properties.

RESPONSE: See provided site plan.
G. The location and dimensions of:

1. The entrances and exits to the site;
2. The parking and circulation areas;
3. Areas for waste disposal, recycling, loading, and delivery;
4. Pedestrian and bicycle routes, including designated routes, through parking lots and to adjacent rights-of-way;
5. On-site outdoor recreation spaces and common areas;
6. All utilities, including stormwater detention and treatment; and
7. Sign locations.

RESPONSE: See provided site plan.
H. The location of areas to be landscaped. (Ord. 1442, 1999; Ord. 1613 § 14, 2013; Ord. 1622 § 28, 2014; Ord. 1636 § 39, 2014)

RESPONSE: See provided site plan.

### 55.125 TRANSPORTATION ANALYSIS

Certain development proposals required that a Traffic Impact Analysis (TIA) be provided which may result in modifications to the site plan or conditions of approval to address or minimize any adverse impacts created by the proposal. The purpose, applicability and standards of this analysis are found in CDC 85.170(B) (2). (Ord. 1584, 2008)

RESPONSE: Access to the building is provided via existing public streets that were designed to accommodate the allowable uses in the zone, and parking is not required in the District (although structured parking is provided), so a traffic Impact analysis is not needed.

### 55.130 GRADING PLAN

The grading and drainage plan shall be at a scale sufficient to evaluate all aspects of the proposal and shall include the following:
A. The location and extent to which grading will take place indicating general contour lines, slope ratios, slope stabilization proposals, and location and height of retaining walls, if proposed.

RESPONSE: The civil site drawings show the existing contours. The proposed building will match the existing grades along the frontages and on the property line to the west. Finish grades are shown on the civil and architectural plans to demonstrate how the building fits with the existing grades
B. A registered civil engineer shall prepare a plan and statement that shall be supported by factual data that clearly shows that there will be no adverse impacts from increased intensity of runoff off site, or the plan and statement shall identify all off-site impacts and measures to mitigate those impacts. The plan and statement shall, at a minimum, determine the off-site impacts from a 10 -year storm.

RESPONSE: A preliminary storm report has been prepared to demonstrate how the impervious roof area will be collected into a detention tank with orifices that release storm water at the pre-development rates for the 2 through 25 year events. The storm water from this site will be connected to the public system with an 8 -inch line at a point where the public system has a larger 18 -inch line representing approximately only $1.6 \%$ of the capacity of the public line for the $\mathbf{2 5}$-year flow from the development.
C. Storm detention and treatment plans may be required.

RESPONSE: A storm detention tank is proposed as shown within the storm report which will detain the developed flows and discharge at the pre-developed rates for storm events of 2-though 25 years. Because the building covers almost this entire site no infiltration or water quality swales or rain gardens are possible. A storm water pollution control manhole will provide treatment. Roof water generally does not contain harmful pollutants and in most cases is exempt from DEQ regulations for water quality.
D. Identification, information, including the name and address of the owner, developer, project designer, and the project engineer. (Ord. 1463, 2000; Ord. 1613 § 15, 2013; Ord. 1622 § 28, 2014)

RESPONSE: The civil plans provide a listing of the owner/developer, architect, engineer and surveyor with names and contact information.

### 55.140 ARCHITECTURAL DRAWINGS

This section does not apply to single-family residential subdivisions or partitions, or up to two duplexes or single-family attached dwellings.

Architectural drawings shall be submitted showing:
A. Building elevations and sections tied to curb elevation; RESPONSE: See provided plans.
B. Building materials: color and type; and RESPONSE: See provided plans.
C. The name of the architect or designer. (Ord. 1408, 1998; Ord. 1613 § 16, 2013)

RESPONSE: See provided plans.

### 55.150 LANDSCAPE PLAN

This section does not apply to detached single-family residential subdivisions or partitions, or up to two duplexes or single-family attached dwellings.
A. The landscape plan shall be prepared and shall show the following:

1. Preliminary underground irrigation system, if proposed;
2. The location and height of fences and other buffering of screening materials, if proposed;
3. The location of terraces, decks, patios, shelters, and play areas, if proposed;
4. The location, size, and species of the existing and proposed plant materials, if proposed; and
5. Building and pavement outlines.

RESPONSE: Due to the allowable site coverage of $100 \%$ the proposed development will not have site landscaping.
B. The landscape plan shall be accompanied by:

1. The erosion controls that will be used, if necessary;
2. Planting list; and
3. Supplemental information as required by the Planning Director or City Arborist. (Ord. 1408, 1998; Ord. 1613 § 17, 2013)
RESPONSE: No erosion control measures are required for this development. The site is entirely covered by building structure and will not be landscaped.

### 55.170 EXCEPTIONS TO UNDERLYING ZONE, YARD, PARKING, SIGN PROVISIONS, AND LANDSCAPING PROVISIONS

A. The Planning Director may grant an exception to the dimensional building setback or yard requirements in the applicable zone based on findings that the approval will satisfy the following criteria:

1. A minor exception that is not greater than 20 percent of the required setback.
2. A more efficient use of the site.
3. The preservation of natural features that have been incorporated into the overall design of the project.
4. No adverse affect to adjoining properties in terms of light, air circulation, noise levels, privacy, and fire hazard.
5. Safe vehicular and pedestrian access to the site and safe on-site vehicular and pedestrian circulation.
RESPONSE: No exceptions are being requested as part of this application.
B. The Planning Director may grant an exception to the off-street parking dimensional and minimum number of space requirements in the applicable zone so long as the following criteria are met:
6. The minor exception is not greater than 10 percent of the required parking;
7. The application is for a use designed for a specific purpose which is intended to be permanent in nature (for example, a nursing home) and which has a low demand for offstreet parking; or
8. There is an opportunity for sharing parking and there is written evidence that the property owners are willing to enter into a legal agreement; or
9. Public transportation is available to the site reducing the standards and will not adversely affect adjoining uses, and there is a community interest in the preservation of particular natural feature(s) of the site which make it in the public interest to grant an exception to parking standards.
RESPONSE: No exceptions are being requested as part of this application.
C. The Planning Director may grant an exception to the sign dimensional requirements in the applicable zone when the following criteria are met:
10. The minor exception is not greater than 10 percent of the required applicable dimensional standard for signs;
11. The exception is necessary for adequate identification of the use on the property; and
12. The sign will be compatible with the overall site plan, the structural improvements, and with the structures and uses on adjoining properties.
RESPONSE: No exceptions are being requested as part of this application.
D. The Planning Director may grant an exception to the landscaping requirements in the applicable zone based on findings that the following criteria will be met:
13. A minor exception that is not greater than 10 percent of the required landscaped area.
14. A more efficient use of the site.
15. The preservation of natural features that have been incorporated into the overall design of the project.
16. No adverse effect to adjoining property. RESPONSE: No exceptions are being requested as part of this application.

### 55.180 MAINTENANCE

All on-site improvements shall be the ongoing responsibility of the property owner or occupant. RESPONSE: The applicant acknowledges this responsibility.

### 55.190 SHARED OPEN SPACE

Where the open space is designated on the plan as common open space, the following shall apply:
A. The open space area shall be shown on the final plan and recorded with the Planning Director.

RESPONSE: There is no shared open space planned as part of this application.
B. The open space shall be conveyed in accordance with one of the following methods:

1. By dedication to the City as publicly owned and maintained as open space. Open space proposed for dedication to the City must be acceptable to it with regard to the size, shape, location, improvement, and budgetary and maintenance limitations.
RESPONSE: There is no shared open space planned as part of this application.
2. By leasing or conveying title (including beneficial ownership) to a corporation, home association, or other legal entity with the City retaining the development rights to the property. The terms of such lease or other instrument of conveyance must include provisions suitable to the City Attorney for guaranteeing the following:
a. The continued use of such land for intended purposes.
b. Continuity of property maintenance.
c. When appropriate, the availability of funds required for such maintenance.
d. Adequate insurance protection.
e. Recovery for loss sustained by casualty and condemnation, or otherwise.

RESPONSE: There is no shared open space planned as part of this application.
3. By any method that achieves the objectives set forth in subsection (B) (2) of this section.

RESPONSE: There is no shared open space planned as part of this application.

### 55.195 ANNEXATION AND STREET LIGHTS

As a condition of approval for design review for any project that is being annexed to the City, the developer and/or homeowners association shall pay for all expenses related to street light energy and maintenance costs until annexed into the City. The approval for any property annexed must state: "This approval is contingent on voter approval of annexation of the subject property." This means that no permit, final plat, or certificate of occupancy may be issued or approved until annexation is complete. (Ord. 1442, 1999; Ord. 1604 § 53, 2011).

RESPONSE: The subject property is located within the city limits. The requirements of this section do not apply.

END OF CHAPTER RESPONSES

# 1949 Willamette Falls Drive Proposed Commercial Mixed Use Building <br> West Linn, Oregon <br> Design Review Class II Submittal - Chapter 58 <br> December 2022 

## A. Introduction

The following Narrative, Plans and Supplemental materials will demonstrate that the proposed project is in compliance with the applicable site plan and design review standards set forth in the West Linn Community Development Code.

## B. Narrative

Icon Development is proposing a new two-story development located at 1949 Willamette Falls Drive- east of $12^{\text {th }}$ Street. The site has one existing structure that will be demolished and is bordered primarily by commercial development with some residential development to the south.

The proposed mixed-use development is two-story office/retail with an underground parking facility. The total building area is approximately 29,080 s.f. of above grade building area and 33 on-site parking spaces have been provided behind and under the building. Summer/Fall 2023 construction start is anticipated.
C. Conformance

I
58.010 PURPOSE

RESPONSE: No Response Required
58.020 IMPLEMENTATION

RESPONSE: No Response Required

### 58.030 APPLICABILITY

RESPONSE: The project is within the Willamette Falls Drive Commercial Design District boundaries.

### 58.040 EXEMPTIONS

RESPONSE: No Response Required

### 58.050 PERMITTED USES

RESPONSE: The project's anticipated uses are permitted in the zone.

### 58.060 REVIEW BODY

Repealed by Ord. 1597

### 58.065 APPEALS OF HISTORIC REVIEW BOARD

Repealed by Ord. 1597. (Ord. 1474, 2001)

### 58.070 APPLICATION AND SUBMITTAL REQUIREMENTS

RESPONSE: No Response Required

### 58.080 STANDARDS

A. Standards are needed to provide a clear and objective list of design elements that are needed to bring new construction and remodels into conformance with 1880-1915 architecture. Buildings of the period saw relatively few deviations in design.
Consequently, the Historic Review Board will require conformance with the standards. Deviations or deletions from the standards are addressed in the design exception procedure of this chapter.
B. The use of "neo-designs" or simply contextual designs which only attempt to capture the basic or generalized elements such as building line, massing and form, etc. is not acceptable.
C. The following standards shall apply to new construction and remodels.

1. Dimensional standards:
a. Front: zero-foot setback. Building may not be set back from the property line unless it is consistent with predominant building line.
RESPONSE: The proposed building frontage (north elevation) is located on the property line.
b. Side and Side Street: zero-foot setback. Building may not be set back from the side property line except for side passageway, accessway, or stairway unless fire codes dictate otherwise. The setback shall not exceed sixfeet. The setback should be consistent with the rhythm of adjacent structures, or at least not deleterious to it. (ORD. 1391)
RESPONSE: East (side) building elevation is located on the property line.
c. Rear: 20 -foot setback. Setbacks between 0-20 feet are permitted only ifthe applicant can demonstrate that he can successfully mitigate any impacts associated with the building in current and future uses as they would relate to abutting residential and otherproperties.
RESPONSE: The eastern $80 \%$ of the South (rear) elevation is set back 5' from the property line, with the remainder set on the property line, all fronting on Knapps Alley. The setback was done on the 1969 building also in an agreement with the residential neighbors across the alley. While the neighbor situation is not the same for the 1949 building, this setback maintains a consistent line along the Alley. The alley provides the separation from adjacent properties to mitigate the impact of this project. Access to employee parking and the trash enclosure will occur from Knapp's Alley as well.
d. Lot coverage: Up to 100 percent of lot may be developed depending upon ability to mitigate impacts upon abutting residential and other uses.
RESPONSE: The proposed lot coverage based on the street level ground floor occupied area is $\mathbf{8 2 \%}$. Based upon the entire built area (building, parking, and service area) the proposed lot coverage is $100 \%$.
Site area $=.0344$ acres $=15,000$ s.f.
2. Minimum landscaping required: Structures in this area are exempt from landscaping requirements as identified in Section 55.1 OO(A)(II)(b), Design Review. The provision of CDC Section $55.1 \mathrm{OO}(\mathrm{A})(\mathrm{II})(\mathrm{c})(1-8)$ shall still apply where parking lots are proposed.
RESPONSE: There is no landscaping required for this project.
3. Building height limitations: Maximum building height shall be 35 feet (as measured by this Code), and two stories. False fronts shall be considered as the peak of the building if it exceeds the gable roof ridgeline.
RESPONSE: All proposed building heights are at or below the maximum allowable by code (35'0"). The building consists of a below grade garage, two floors above grade, and a small mezzanine above the second floor at the west end of the building. This is consistent with the underlying GC zone allowing 2-1/2 stories (see 19.070), as well as with IBC Section 505.2, which considers a mezzanine to be a part of the floor below and not a separate story:
"505.2 Mezzanines.
A Mezzanine or mezzanines in compliance with Section 505.2 shall be considered a portion of the story below. Such mezzanines shall not contribute to either the building area or number of stories as regulated by Section 503.1."
4. External ground level or first story minimum height: lofeet to allow transoms.
RESPONSE: The ground level first story height is 13 '0" A.F.F to allow for window transoms.
5. Roof form: Flat orpitched roofs. Pitched roof ridgeline shall run from the front of the building to the back.
RESPONSE: All proposed flat sloped roofs run from front to back of the building.
6. Building form, scale and depth: Building shall emphasize the vertical through narrow, tall windows (especially on second floor), vertical awning supports, engaged columns, and exaggerated facades creating a height-to-width ratio of I.5:I. Building depth shall be flat, only relieved by awning and cornice projections and the indented doorway. RESPONSE: The proposed exterior elevations emphasize many vertical elements using tall windows, cornices, and awnings. The second floor has been provided with many windows that align with the main floor below that enhance the "verticality" of each building elevation. Building reliefs have been incorporated throughout the overall design by off- setting the building footprint and providing awnings and cornice projections.
7. Visual Building Breaks: Strong vertical breaks or lines should be regularly spaced every 25 to 50 feet.
RESPONSE: Appropriate spacing and vertical breaks in the building vernacular, have been incorporated into all the building elevations. No vertical spacing exceeds 50'-0" in length (see elevation sheet).
8. Facades: No gables, hipped, orpitched roofs shall be exposed to the street at the front. The "Western false front" shall be the preferred style although variations shall be allowed through a design exemption.
RESPONSE: All roofs are 'flat' for the entire building and are concealed by "Western False Front" facades (see elevations sheet).
9. Cornice: Cornices shall be broad and may include regularly spaced supporting brackets. A cornice is not required, but preferred.
RESPONSE: The cornices along the north elevation are enhanced with supporting brackets. All other cornices are enhanced with framed panel decoration (see elevations \& wall section sheets.)
10. Building materials and orientation: Horizontal wood siding in I" $X 8$ " dimensions shall be used for siding. Brick and other materials are permitted only by a design exception under Section 58.090.
RESPONSE: The primary materials list will be:
Primary walls: $1 \times 8$ horizontal fiber cement siding (Hardiplank) - painted
Other walls: Brick masonry
Base/Wainscot: Brick masonry
Cornices/trim: Fiber cement trim (Hardieboard) - painted
11. All buildings shall have awnings extending out from building/ace. Awnings are preferred for micro-climate benefits. Ideally, the building will have both transom and awnings, although transoms are not required.

Awnings shall be either canvas or vinyl, or similar approved material, supported by an internal metal framework or metal or wood supported by a curved metal support attached to the building.

Awnings shall extend a minimum of five feet from the facade and along 80 percent of a street facing facade to provide appropriate pedestrian coverage and shall meet ADA requirements. The pitch of the awning shall be $0-40$ degrees. No "bubble-type" awnings are permitted. No backlit awnings are permitted. Canvas or matte finish vinyl, or similar approved material awnings may be one color or striped and shall have afree-hangi.ng plain or crenelated valance. Canvas or matte finish vinyl, or similar approved material awnings should not be shared between two structures. Each structure should have its own awning.
RESPONSE: Building awnings will be a combination of self-supporting fabric awnings on the eastern portion of the building, and a self-supporting steel canopy at the central main entry. These awnings and canopy extend approximately 4 feet from the face of the building. A deeper, canopy with metal roofing and decorative columns wraps the western corner and extends south along $12^{\text {th }}$ Street. This canopy will extend out from the building approximately $8-1 / 2$ feet to allow for outdoor seating/dining. All canopies and awnings will be at least 7 feet above the sidewalk.
12. Extruded roofs: As a substitute for an awning, extruded roofs have a 10-40 degree pitch and extend l-2feetfrom the building face just above the transom windows where the first and second stories meet. The roof runs along the entire building frontage. Standard roofing materials are used. Transoms are required with extruded roofs.
RESPONSE: No "extruded roofs" are being proposed. Transom windows will be provided beneath both the fabric awnings and metal canopies.
13. Doors and entryways: The entryway shall be centered in the middle of the building at grade. The buildings on street corners may position their door on the corner at an angle as depicted in the illustration. The doors may be single or double doors. The doors shall be recessed 3-5feet back from the building line. Doors shall have glazing in the upper twothirds to half of the door. Panels should decorate the lower portions. The entryway shall have windows all the way around at the same level as the other display windows. Wood doors are preferable although alternatives with a dark matte finish may be acceptable. RESPONSE: Recessed double entrance doors have been provided at the center of the building along with additional recessed entry doors at each end of the building (see elevation and floor plan). The door styles will be full glass light style and will meet the intent of the code.
14. Glazing: Clear glass only. No mirrored or tinted glass. No films applied to glass. Lettering on glass is permitted (see item $25(\mathrm{~b})$ of this section).
RESPONSE: Clear glass is proposed for all windows.
15. Display or pedestrian level windows: Shall extend across at least 80 percent of building front. The windows shall start 1-112-2-1/2feet above grade to a height of 7-8 feet, and shall be level with the top of the height of the adjacent entryway area, excluding transom. A single sheet of glass is not permitted. The window shall be broken up into numerous sections, also known as lights. From 1880 onwards, the number of lights was generally no more than six in a pedestrian level window. The frames may be wood or vinyl clad wood, or other materials so long as a matte finish impossible.
RESPONSE: The proposed street level windows and storefronts extend across the entire front elevation (see elevation sheet). On the east end of the building, where the level of the floor is above the sidewalk, the windows are placed close enough to the floor level to allow pedestrians to view into the buildng, thereby meeting the intent of the Code to the extent possible.
16. Second floor and other windows: Double and single hung windows proportionately spaced and centered should be used. Smaller square shaped windows may be permitted ( $1-1 / 2$ feet -2 feet per side). A typical window should have a $3: 1$ height to width ratio for the glass area. There should be a minimum of two lights: "one over one" of equal size. "Two over one" or "four over one" is appropriate.
RESPONSE: The proposed upper level windows have a double-hung appearance, and are provided individually and in groups in sizes to meet the 3:1 standard.
17. Wainscoting: Wainscoting shall be consistent with primary material of the building, typically wood.
RESPONSE: The applicant would like to propose an alternate brick masonry wainscoting instead of the primary Hardie material proposed for the building. This alternative provides for a more durable building base, and is consistent with other buildings along Willamette Falls Drive.
18. Shutters: Shutters are not allowed.

RESPONSE: No shutters are proposed.
19. Balconies: No balconies are permitted except on rear of building.

RESPONSE: No balconies are proposed.
20. Exterior stairs: Simple stairs are permitted on the rear or side of the building only.

RESPONSE: All exit stairs are fully enclosed within the building envelope design (see elevation sheet).
21. Roof mounted mechanical equipment: Equipment shall be screened from view on all sides by normal and consistent architectural features of the building. Section 55.100(A)(4), "Privacy and Noise, "shall apply.

RESPONSE: The mechanical rooftop units (RTUs) will be located in a structurally designed"mechanical zone" that is located at the middle of the building. This location will allow the parapets to provide adequate screening from below to hide the units (see roof plan sheet). Noise from these units will be consistent with typical commercial buildings along Willamette Falls Drive.
22. Air conditioning: No window type on avenue or street side are permitted. Window mounted air conditioners are not allowed at rear where abutting residential.

RESPONSE: All air conditioning/units will be mounted on the roof (see Item 21).
23. Exterior lighting fixtures: Any lighting fixtures that can be traced to 1880-1915 period is permitted. Simple modern fixtures that are screened and/or do not attract attention are acceptable. Overlay ornate fixtures of the Victorian era are to be discouraged.
RESPONSE: All exterior light fixtures will meet the intent of the code "period fixtures 1880-1915". A cutsheet of the light fixture will be provided to the city for review.
24. Transoms: Transom windows are required with extruded roofs and optional with awnings. Transom windows shall cover the front of the building above, but not beyond, the main display windows and the entryway area. Transoms should be broken up into sections every six inches to three feet in a consistent and equal pattern. Height should not exceed three feet. Transoms may or may not open. False ceilings are allowed behind the transoms.
RESPONSE: The storefront windows proposed will have a metal canopies or fabric awnings above their entire width. No upper separate transom windows are proposed, however the window style will have transom influence by the use of grids and mullions. All window sizes will meet the intent of the code (see elevations).
25. Paint colors: Body color typically included white, cream, or a light, warm color of low intensity. Accents, trims, windows, etc., should be dark-colored. A palette or color wheel, submitted by the applicant, of acceptable 1880-1915 period colors shall be the basis for color selection. Colors shall be similar to or consistent with existing buildings within the Willamette Commercial District to establish streetscape continuity. (Ord. 1391, 1996; Ord. 1401, 1997; Ord. 1604 § 59, 2011; Ord. 1613 § 18, 2013; Ord. 1621 § 25, 2014; Ord. 1675 § 47, 2018; Ord. 1735 § 4 (Exh. C), 2022. Formerly 58.090).
RESPONSE: A material and color board is included with this application. Selected colors will be submitted for review prior to installation.

### 58.090 DESIGN EXCEPTION PROCEDURES

In those circumstances where a design proposal cannot meet the standards, or proposes an alternative to the standard, the Historic Review Board may grant a variance in those cases where one of the following criteria is met:
A. The applicant can demonstrate by review of historical records or photographs that the alternative is correct and appropriate to architecture in the region, and especially West Linn, in 1880-1915.
B. The applicant is incorporating exceptional 1880-1915 architecture into the building which overcompensates for an omission. The emphasis is upon superior design, detail, or workmanship.
RESPONSE: Design Exceptions are requested for the following:

1. Item: James Hardie (or equal) fiber cement products to substitute for wood siding and trim.
Criteria A: The proposed materials are designed to accurately represent the appearance of the wood they are replacing. Available in wood grained or smooth textures, when painted they provide high quality wood look.
Criteria B: The proposed fiber cement products are a significant upgrade in quality from natural wood, which makes it a superior design choice. Wood checks, twists, splits, and otherwise fails, necessitating near continuous maintenance. This can cause the building to almost always have portions that have unsightly blemishes
and defects. Wood will typically require replacement after approximately 10 years. The requested substitute is straight and true, without defects, requires no maintenance beyond regularly scheduled painting, and has a lifespan of more than 25 years.
2. Item: Brick masonry for the eastern segment of the building, vertical pilasters, the lower portion of the western segment, and portions of the building base/wainscot. Criteria A: Brick was a fairly common material in the 1880-1915 time period, and is well represented in the District, appearing on the fire station, the 2008 building across the street from the project, the Community of Faith Church at the corner of $1^{\text {th }}$ Street and Willamette Falls Drive, and the 1969 Willamette Falls Drive building adjacent to the project.
Criteria B: Brick is a superior material to wood in terms of durability, longevity, and appearance. Its use on this project helps to emphasise the vertical distinctions in a way that adds interest and human scale while elevating the level of detailing of the façade. In addition, at the base of the building it also provides a more durable surface where the building meets the sidewalk and is at greatest risk of damage from passersby, bicycles, delivery carts, and the like.
3. Item: Columns at the canopy at the west corner of the building.

Criteria A: Canopies with column supports were a fairly common design motif in the 1880-1915 time period, and again appear in the District at the Community of Faith Church and the Little Cooperstown Grill.
Criteria B: In the case of this project, the columns are needed to allow for the deeper covering (8-1/2 feet) which will make outdoor seating/dining possible. In the underlying zone, Chapter 55.100.6.i states that "Sidewalk cafes, kiosks, vendors, and street furniture are encouraged." In addition, the wider cover offers superior protection for pedestrians. This design exception would make the building design far better aesthetically and functionally compared to the typical awning standards.

# Willamette Falls Mixed Use 

West Linn, Oregon<br>Design Review Class II-Supplemental Chapter Responses<br>February 2023

## Chapter 19 General Commercial, GC

## SECTION 19.030 PERMITTED USES

The following uses are permitted outright in this zone:
RESPONSE: The proposed project is a shell building with a single below-grade parking level. The Applicant/Owner reserves the right to secure tenants of any and all uses permitted in the zone by this section. The Applicant/Owner further reserves the right to secure tenants of any and all uses as permitted in the zone by Section 19.040 Accessory Uses, 19.050 Permitted Under Prescribed Conditions, and 19.060 Conditional Uses.

At this time, the actual tenants are not yet known and may not be known until after the shell building is completed. Prospective tenants will be obligated to meet the requirements of this chapter and the rest of the Community Development Code in order to obtain their own individual tenant improvement permits.

In the near term tenants are anticipated to be from (but not limited to) the following outright permitted uses under Section 19.030:
19.030.10. Eating and drinking establishments.
19.030.13. Financial, insurance and real estate services.
19.030.15. General retail services.
19.030.19. Medical and dental services.
19.030.23. Professional and administrative services.

## SECTION 19.070 DIMENSIONAL REQUIREMENTS, [for] USES PERMITTED OUTRIGHT AND USES PERMITTED

 UNDER PRESCRIBED CONDITIONSA. Except as may be otherwise provided by the provisions of this code, the following are the requirements for uses within this zone:

1. The minimum front lot line length or the minimum lot width at the front lot line shall be 35 feet.
RESPONSE: The existing front lot line (Willamette Falls Drive) measures 150'
2. The average minimum lot width shall be 50 feet.

RESPONSE: The existing front lot line (Willamette Falls Drive) averages not less than 150'
3. The average minimum lot depth shall not be less than 90 feet.

RESPONSE: The existing lot depth averages not less than 50'
4. Where the use abuts a residential district, except as provided in CDC 58.090(C)(1), the setback distance of the residential zone shall apply.
RESPONSE: The requirements of CDC 58.090(C)(1) apply to the proposed project. Please refer to our Chapter 58 responses included with this application.


SETBACK OF ABUTTING HOUSE DICTATES COMMERCIAL SETBACK
5. The maximum lot coverage shall be 50 percent, except as provided in CDC 58.090(C)(1)(d).
RESPONSE: The requirements of CDC 58.090(C)(1)(d) apply to the proposed project. Please refer to our Chapter 58 responses included with this application.
6. The maximum building height shall be two and one-half stories or 35 feet for any structure located within 50 feet of a low or medium density residential zone, and three and one-half stories or 45 feet for any structure located 50 feet or more from a low or medium density residential zone.
RESPONSE: The proposed maximum building height is 2 -stories $/ 35^{\prime}$. Please refer to the included Willamette Falls Drive elevation drawing No. 1/ELO5.
7. For lot lines that abut an arterial, there shall be no minimum yard dimensions or minimum building setback area, and the maximum building setback shall be 20 feet. The front setback area between the street and the building line shall consist of landscaping or a combination of non-vehicular hardscape areas (covered with impervious surfaces) and landscaped areas. If there are not street trees within the public right-of-way, the front setback area shall include such trees per the requirements of the City Arborist.
RESPONSE: Willamette Falls Drive is classified as a Minor Arterial per the City of West Linn Road Map. Per the criteria, the allowable setback along this street ranges from 0 ' to 20'. The proposed building sits at a 0 ' setback.
B. The requirements of subsections (A)(1) through (5) of this section may be modified for developments under the planned unit development provisions of Chapter $\underline{24}$ CDC. (Ord. 1401, 1997; Ord. 1425, 1998; Ord. 1614 § 5, 2013; Ord. 1622 § 24, 2014)

RESPONSE: The proposed project is not part of a planned unit development, the requirements of this paragraph do not apply.

## Chapter 41 BUILDING HEIGHT, STRUCTURES ON STEEP LOTS, EXCEPTIONS

## SECTION 41.005 DETERMINING HEIGHT OF BUILDING

A. For all zoning districts, building height shall be the vertical distance above a reference datum measured to the highest point of a flat roof or to the deck line of a mansard roof or to the highest gable, ridgeline or peak of a pitched or hipped roof, not including projections above roofs such as cupolas, towers, etc. The reference datum shall be selected by either of the following, whichever yields a greater height of building.

1. For relatively flat sites where there is less than a 10-foot difference in grade between the front and rear of the building, the height of the building shall be measured from grade five feet out from the exterior wall at the front of the building; or

RESPONSE: The grades at the rear of the building ranges from 192' at the SE corner to 195' at the SW corner, and the grades at the front difference in grade between the front and rear of the building range from 189' at the NE corner to 195' at the NW corner. Thus the difference in grades from front to rear of the building range from 0 ' to 3 ' - less than 10'. Please refer to the Architectural Ground Floor Plan on ELO5 and the Civil Grading Plan 4/4.

Per the Standard, the North (Willamette Falls Drive) Elevation (1/ELO5) is the elevation to be used in calculating the maximum building height.
2. For steeper lots where there is more than a 10 -foot difference in grade between the front and rear of the building, the height of the building is measured from grade at a point five feet out from the exterior wall on the lowest side (front or rear) of the building. One then measures vertically to the peak or ridgeline of the roof to determine the height.

RESPONSE: This criterion does not apply as described in the response above.
3. Buildings on cross slopes or side slopes are measured at either the front or rear of the building using methods described in subsections (A)(1) and (2) of this definition only.

Even if the cross slope creates a tall elevation on the side, the method of determining height is not modified.

RESPONSE: This criterion does not apply as described in the response above.
Also see CDC 41.020, Height Exceptions.
Figure 1.


Height of building on relatively flat lot is measured from grade at front of house to peak of roof.


Height of building on steep lots where there is more than a 10 -foot difference in elevation between the front and rear of the building is measured from grade at a point five feet out from the front or rear exterior wall on the lowest side of the house to the peak of the building.

(Ord. 1604 § 42, 2011 )

### 41.020 HEIGHT EXCEPTIONS

A. If the highest grade of a building site which fronts on the downslope side of the street is greater than 10 feet above the lowest grade as measured along the planes of the proposed structure, the total building height may not exceed 45 feet as measured from the lowest grade at a point five feet downhill from the rear of the building, provided the building height does not project more than 24 feet above the average grade of the street. In the R-15, R-20, and R-40 zones the 45 -foot height may be increased to 50 feet.
B. If the highest grade of a building site which fronts on the upslope side of the street is greater than 10 feet above the lowest grade, as measured along the planes of the proposed structure, the total building height shall not exceed 45 feet. In the R-15, R-20, and R-40 zones the 45-foot height may be increased to 50 feet.
Height of buildings on uphill slopes where there is more than a 10-foot difference between the rear and front elevation is measured from a point five feet downhill from the front of the building to the peak or dominant ridgeline and shall not exceed 45 feet ( 50 feet in the R-15, R-20 and R-40 zones).

Figure 2. Height exceptions


Height of buildings on downhill slopes where there is more than a 10 -foot difference between the rear and front elevation is measured from a point five feet downhill from the rear of the building to the peak or dominant ridgeline and shall not exceed 45 feet ( 50 feet in the R-15, R-20 and R - 40 zones). Front house height cannot be more than 24 feet above average street grade. (Ord. 1276, 1990; Ord. 1308, 1991; Ord. 1538, 2006; Ord. 1604 § 43, 2011)

RESPONSE: The site does not qualify for height exceptions.

### 41.030 PROJECTIONS NOT USED FOR HUMAN HABITATION

Projections such as chimneys, spires, domes, elevator shaft housings, towers, aerials, flag poles, and other similar objects not used for human occupancy are not subject to the building height limitations of this code. (Ord. 1604 § 44, 2011)

RESPONSE: There are projections in the form of western false fronts and cornices as prescribed in CDC 58.080. As shown on the Willamette Falls Drive Elevation (1/ELO5), all portions of the elevation meet the maximum $35^{\prime}$ height standard.

## Chapter 46 OFF-STREET PARKING, LOADING AND RESERVOIR AREAS

### 46.150 DESIGN AND STANDARDS

The following standards apply to the design and improvement of areas used for vehicle parking, storage, loading, and circulation:
A. Design standards.

1. "One standard parking space" means a minimum for a parking stall of eight feet in width and 16 feet in length. These stalls shall be identified as "compact." To accommodate larger cars, 50 percent of the required parking spaces shall have a minimum dimension of nine feet in width and 18 feet in length (nine feet by 18 feet). When multifamily parking stalls back onto a main driveway, the stalls shall be nine feet by 20 feet. Parking for development in water resource areas may have 100 percent compact spaces.
RESPONSE: There are a total of 37 spaces proposed: 33 below grade in the Garage, and 4 parallel spaces located along the south property line. 24 of the 37 ( $65 \%$ ) are full size spaces ( $9^{\prime} \times 18^{\prime}$ minimum), with the remaining $13(35 \%)$ being compact ( 8 ' $\times 16^{\prime}$ minimum). Please refer to the Garage and Ground Floor Plans.
2. Disabled parking and maneuvering spaces shall be consistent with current federal dimensional standards and subsection B of this section and placed nearest to accessible building entryways and ramps.
RESPONSE: ADA compliant spaces are located immediately adjacent to the elevator, which serves as the most convenient accessible route into the building.
3. Repealed by Ord. 1622.

RESPONSE: No Response Required.
4. Service drives shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress, and maximum safety of pedestrians and vehicular traffic on the site.
RESPONSE: There are no service drives provided as part of the project per CDC 46.140.
5. Each parking and/or loading space shall have clear access, whereby the relocation of other vehicles to utilize the parking space is not required.
RESPONSE: All spaces provided have clear access. Please refer to the Garage Floor Plan (G/ELO5).
6. Except for single-family attached and detached residences, any area intended to be used to meet the off-street parking requirements as contained in this chapter shall have all parking spaces clearly marked using a permanent paint. All interior drives and access aisles shall be clearly marked and signed to show direction of flow and maintain vehicular and pedestrian safety. Permeable parking surface spaces may have an alternative delineation for parking spaces.
RESPONSE: All spaces, drive aisles, and pedestrian accessways will be marked with permanent paint as shown on G/ELO5 and the Ground Floor Plan on ELO5.
7. Except for residential parking, and parking for public parks and trailheads, at least 50 percent of all areas used for the parking and/or storage and/or maneuvering of any vehicle, boat and/or trailer shall be improved with asphalt or concrete surfaces according to the same standards required for the construction and acceptance of City streets. The remainder of the areas used for parking may use a permeable paving surface designed to reduce surface runoff. Parking for public parks or trailheads may use a permeable paving surface designed to reduce surface runoff for all parking areas. Where a parking lot contains both paved and unpaved areas, the paved areas shall be located closest to the use which they serve.
RESPONSE: The entire proposed below grade parking area will be paved with concrete to match the adjacent existing attached 1969 parking lot. The parallel spaces along Knapps Alley are also paved in concrete. Please refer to G/ELO5 and the Ground Floor Plan on ELO5. 8. Off-street parking spaces for single-family attached and detached residences shall be improved with an asphalt or concrete surface, or a permeable parking surface designed to reduce surface runoff, to specifications as approved by the Building Official. Other parking facilities for single-family homes that are to accommodate additional vehicles, boats, recreational vehicles, and trailers, etc., need not be paved. All parking for multifamily residential development shall be paved with concrete or asphalt. Driveways shall measure at least 20 feet from the back of sidewalk to garage or the end of the parking pad to accommodate cars and sport utility vehicles without the vehicles blocking the public sidewalk.
RESPONSE: This Standard is for residential projects and does not apply to this proposal.
9. Access drives from the street to off-street parking or loading areas shall be designed and constructed to facilitate the flow of traffic and provide maximum safety for pedestrian and vehicular traffic on the site. The number of access drives shall be limited to the minimum that will allow the property to accommodate and service the anticipated traffic. Access drives shall be clearly and permanently marked and defined through use of rails, fences, walls, or other barriers or markers on frontage not occupied by service drives.

RESPONSE: Only the below grade parking is served by an access drive. The proposed design utilizes the existing access drive on $11^{\text {th }}$ Street that was provided with the adjacent 1969 Willamette Falls Drive building to also serve the 1949 project.
10. Access drives shall have a minimum vision clearance as provided in Chapter 42 CDC, Clear Vision Areas.
RESPONSE: The existing access drive meets the Standards, and no changes are proposed.
11. Parking spaces along the boundaries of a parking lot or adjacent to interior landscaped areas or sidewalks shall be provided with a wheel stop at least four inches high located two feet back from the front of the parking stall. Such parking spaces may be provided without wheel stops if the sidewalks or landscaped areas adjacent the parking stalls are two feet wider than the minimum width.
RESPONSE: There are no spaces proposed that meet this criterion.
12. Off-street parking and loading areas shall be drained in accordance with plans and specifications approved by the City Engineer. Storm drainage at commercial sites may also have to be collected to treat oils and other residue.
RESPONSE: All parking areas within the property line will be drained to the detention facility located below the garage floor slab as shown on the Site and Utility Plan, 3/4.
13. Artificial lighting on all off-street parking facilities shall be designed to deflect all light downward away from surrounding residences and so as not to create a hazard to the public use of any road or street.
RESPONSE: Lighting for the ground floor level parallel spaces will be provided by downlight fixtures in the soffit above the spaces and will meet requirements to avoid impacting adjacent properties.
14. Directional arrows and traffic control devices which are placed on parking lots shall be identified.
RESPONSE: Directional arrows are shown on the Garage Floor Plan, G/ELO5.
15. The maximum driveway grade for single-family housing shall be 15 percent. The 15 percent shall be measured along the centerline of the driveway only. Grades elsewhere along the driveway shall not apply. Variations require approval of a Class II variance by the Planning Commission pursuant to Chapter 75 CDC. Regardless, the last 18 feet in front of the garage must maintain a maximum grade of 12 percent as measured along the centerline of the driveway only. Grades elsewhere along the driveway shall not apply.
RESPONSE: This Standard is for residential projects and does not apply to this proposal.

16. Visitor or guest parking must be identified by painted "GUEST" or "VISITOR."

RESPONSE: This Standard is for residential projects and does not apply to this proposal.
17. The parking area shall have less than a five percent grade. No drainage across adjacent sidewalks or walkways is allowed.
RESPONSE: With the exception of the connecting ramp between the existing and proposed below grade parking areas, all below grade spaces, drive aisles, and pedestrian areas will be sloped at between $1 \%$ and $2 \%$. The ground level parallel spaces and pedestrian areas slope from approximately $192.5^{\prime}$ to $194.5^{\prime}$ across approximately $90^{\prime}$, or $3.33 \%$ as shown on the Ground Floor Plan on ElO5.
18. Commercial, office, industrial, and public parking lots may not occupy more than 50 percent of the main lot frontage of a development site. The remaining frontage shall comprise buildings or landscaping. If over 50 percent of the lineal frontage comprises parking lot, the landscape strip between the right-of-way and parking lot shall be increased to 15 feet wide and shall include terrain variations (e.g., one-foot-high berm) plus landscaping. The defensible space of the parking lot should not be compromised.
RESPONSE: There are no spaces provided in this proposal that occupy the property frontage.
19. Areas of the parking lot improved with asphalt or concrete surfaces shall be designed into areas of 12 or less spaces through the use of defined landscaped area. Groups of 12 or less spaces are defined as:
a. Twelve spaces in a row, provided there are no abutting parking spaces, as in the case when the spaces are abutting the perimeter of the lot; or


## 12 SPACES IN A ROW

b. Twelve spaces in a group with six spaces abutting together; or

c. Two groups of 12 spaces abutting each other, but separated by a 15 -foot-wide landscape area including a six-foot-wide walkway.


## 12 SPACES X2 WITH LANDSCAPING

RESPONSE: There are no surface spaces proposed in groupings of 12 or more. This Standard does not apply.
d. Parking areas improved with a permeable parking surface may be designed using the configurations shown in subsections (A)(19)(a), (b) and (c) of this section except that groups of up to 18 spaces are allowed.
RESPONSE: Permeable paving is not included in this proposal. This Standard does not apply.
e. The requirements of this chapter relating to total parking lot landscaping, landscaping buffers, perimeter landscaping, and landscaping the parking lot islands and interior may be waived or reduced pursuant to CDC 32.110(F) in a WRA application without a variance being required.
RESPONSE: There are no surface spaces proposed in groupings of 12 or more, and landscaping is not possible in the below grade spaces, so this Standard cannot apply.
20. Pedestrian walkways shall be provided in parking areas having 20 or more spaces. Walkways or sidewalks shall be constructed between major buildings/activity areas (an example in multi-family housing: between recreation center, swimming pool, manager's office, park or open space areas, parking lots, etc.) within a development, between adjacent developments and the new development, as feasible, and between major buildings/activity areas within the development and adjacent streets and all adjacent transit stops. Internal parking lot circulation and design should maintain ease of access for pedestrians from streets and transit stops. Walkways shall be constructed using a material that visually contrasts with the parking lot and driveway surface. Walkways shall be further identifiable to pedestrians and motorists by grade separation, walls, curbs, surface texture (surface texture shall not interfere with safe use of wheelchairs, baby carriages, shopping carts, etc.), and/or landscaping. Walkways shall be six feet wide. The arrangement and layout of the paths shall depend on functional requirements.

RESPONSE: The above described connections do not exist as part of this proposal. This Standard does not apply.


## RAISED SIDEWALK/TEXTURED SURFACE AUTOMOBILE BECOMES SUBSERVIENT TO THE PEDESTRIAN

21. The parking and circulation patterns are easily comprehended and defined. The patterns shall be clear to minimize traffic hazards and congestion and to facilitate emergency vehicles.

RESPONSE: The proposed ground level and garage level parking areas are clearly deliniated for ease of use and to minimize hazards as indicated on G/ELO5 and the Ground Floor Plan.
22. The parking spaces shall be close to the related use.

RESPONSE: Ground level parking is located immediately adjacent to building entries along the west side of the building. The Garage level spaces are arranged conveniently surrounding the elevator providing access to the building lobbies.
23. Permeable parking spaces shall be designed and built to City standards.

RESPONSE: Permeable paving is not included in this proposal. This Standard does not apply.
B. Accessible parking standards for persons with disabilities. If any parking is provided for the public or visitors, or both, the needs of the people with disabilities shall be based upon the following standards or current applicable federal standards, whichever are more stringent:

1. Minimum number of accessible parking space requirements (see following table):

RESPONSE: There are a total of 30 proposed spaces, two of which are ADA accessible. The proposed parking complies with the Standard.

| MINIMUM <br> REQUIRED <br> NUMBER OF <br> TOTAL <br> PARKING <br> SPACES | NUMBER OF <br> VAN- <br> TOTAL NUMBER OF ACCESSIBLE <br> SPACES | ACCESSIBLE <br> SPACES | SPACES SIGNED <br> "WHEELCHAIR USE ONLY" |
| :---: | :---: | :---: | :---: |
| $1-25$ | 1 | RQUIRED, OF <br> TOTAL |  |
| $26-50$ | 2 | 1 | - |
| $51-75$ | 3 | 1 | - |
| $76-100$ | 4 | 1 | - |
| $101-150$ | 5 | 1 | - |
| $151-200$ | 6 | - | 1 |


| MINIMUM <br> REQUIRED | NUMBER OF <br> VUMBER OF <br> TOTAL <br> PARKING <br> SPACES | TOTAL NUMBER OF ACCESSIBLE <br> SPACES | ACCESSIBLE <br> SPACES |
| :---: | :---: | :---: | :---: |
| $201-300$ | 7 | REQUIRED, OF <br> TOTAL | "WHEELCHAIR USE ONLY" |
| $301-400$ | 8 | - | 2 |
| $401-500$ | 9 | - | 2 |
| $501-999$ | 2 percent of total spaces | - | 2 |
| Over 1,000 | 20 spaces plus 1 for every 100 <br> spaces, or fraction thereof, over <br> 1,000 | - | 1 in every 6 accessible <br> spaces or portion thereof |

2. Location of parking spaces. Parking spaces for the individual with a disability that serve a particular building shall be located on the shortest possible accessible circulation route to an accessible entrance to a building. In separate parking structures or lots that do not serve a particular building, parking spaces for the persons with disabilities shall be located on the shortest possible circulation route to an accessible pedestrian entrance of the parking facility.
RESPONSE: Both ADA compliant spaces are located immediately adjacent to the elevator, which serves as the most convenient accessible route into the building.
3. Accessible parking space and aisle shall meet ADA vertical and horizontal slope standards.

RESPONSE: As noted above, all slopes in the garage level parking area will be between $1 \%$ and $2 \%$, which complies with ADA parking space requirements.
4. Where any differences exist between this section and current federal standards, those standards shall prevail over this code section.

RESPONSE: The proposed ADA spaces meet both the Standards and Federal requirements.
5. One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 inches wide.

RESPONSE: The ADA space to the north of the elevator has a 96 " access aisle.
6. Van-accessible parking spaces shall have an additional sign marked "Van Accessible" mounted below the accessible parking sign. A van-accessible parking space reserved for wheelchair users shall have a sign that includes the words "Wheelchair Use Only." Vanaccessible parking shall have an adjacent eight-foot-wide aisle. All other accessible stalls shall have a six-foot-wide aisle. Two vehicles may share the same aisle if it is between them. The vertical clearance of the van space shall be 96 inches.

RESPONSE: The ADA space to the north of the elevator will serve as the van space. All ADA spaces will have signage as required by the jurisdiction(s).
C. Landscaping in parking areas. Reference Chapter $\underline{54}$ CDC, Landscaping.

RESPONSE: There is no landscaping proposed for the parking areas, this Standard does not apply.
D. Bicycle facilities and parking.

1. Provisions shall be made for pedestrian and bicycle ways if such facilities are shown on an adopted plan.
RESPONSE: Bicycle spaces are proposed.
2. Bicycle parking facilities shall either be lockable enclosures in which the bicycle is stored, or secure stationary racks which accommodate bicyclist's locks securing the frame and both wheels. The bicycle parking shall be no more than 50 feet from the entrance to the building, well-lit, observable, and properly signed.
RESPONSE: Bicycle spaces are proposed with industry standard ' $U$ ' frames suitable for locking wheels and frames. All spaces are within 50 ' of entrances to the building.
3. Bicycle parking must be provided in the following amounts:

RESPONSE: While the final distribution of tenant uses are not known at this time, bicycle parking spaces are provided based upon the space uses shown:
Retail - 7250 SF @ . $33 / 1000$ SF $=2.39$ spaces required
Restaurant -6710 SF @ $1 / 1000$ SF $=6.71$ spaces required
Service - 8220 SF @ $.5 / 1000 \mathrm{SF}=4.11$ spaces required
Total bicycle spaces required $=13.21$
Total bicycle spaces provided $=14$

| LAND USE CATEGORY | MINIMUM REQUIRED BICYCLE PARKING SPACES | MINIMUM COVERED AMOUNT |
| :---: | :---: | :---: |
| Residential |  |  |
| Multi-family Residential | 1 space per unit | 50\% |
| Institutional |  |  |
| Schools - Elementary | 2 spaces per classroom | 50\% |
| Schools - Jr. High or Middle Schools | 4 spaces per classroom | 50\% |
| Schools - Sr. High | 2 spaces per classroom | 50\% |
| College | 1 space per 4 students | 50\% |
| Transit Centers/Park \& Ride Lots | $5 \%$ of auto spaces, or $100 \%$ of demand, depending on location/accessibility to bicyclists | 100\% |
| Religious Institutions | 1 space per 40-seat capacity | 25\% |
| Hospitals | 1 space per 5 beds | 50\% |
| Doctor, Dentist Offices | 2, or 0.5 spaces per 1,000 gross sq. ft., whichever is greater | 25\% |
| Libraries, Museums, Government Offices, etc. | 2, or 1.5 spaces per 1,000 gross sq. ft., whichever is greater | 25\% |
| Commercial |  |  |
| Retail Sales | 0.33 spaces per 1,000 gross sq. ft. | 50\% |
| Auto-oriented Services (including 7-11s) | 2 , or 0.33 spaces per 1,000 gross sq. ft., whichever is greater | 10\% |
| Groceries/Supermarkets | 0.33 spaces per 1,000 gross sq. ft./bldg. | 10\% |
| Office | 2, or 0.5 spaces per 1,000 gross sq. ft ., whichever is greater | 10\% |
| Quality Restaurant | 1 space per 1,000 gross sq. ft. | 25\% |


| LAND USE CATEGORY | MINIMUM REQUIRED BICYCLE PARKING SPACES | MINIMUM <br> COVERED <br> AMOUNT |
| :--- | :--- | :--- |
| Drive-in Restaurant | 2 spaces per 1,000 gross sq. ft. | $25 \%$ |
| Shopping Center (by size) | 0.33 spaces per 1,000 gross sq. ft./bldg. | $50 \%$ |
| Financial Institutions | 2, or 0.33 spaces per 1,000 gross sq. ft. | $25 \%$ |
| Theaters, Auditoriums, etc. | 1 space per 30 seats | $25 \%$ |
| Industrial |  |  |
| Industrial Park | 2, or 0.5 spaces per 1,000 gross sq. ft. | $50 \%$ |
| Warehouse | 2, or 0.1 spaces per 1,000 gross sq. ft. | $50 \%$ |
| Manufacturing, etc. | 2, or 0.15 spaces per 1,000 gross sq. ft. | $50 \%$ |

E. Office or industrial developments shall be allowed a 10 percent reduction in the number of required parking spaces when the property owner agrees to a demand management program that includes three or more of the following measures:

1. Designate a transportation coordinator responsible for promoting public transit and ridesharing among employees.
2. Participate in region-wide ride matching program at the site.
3. Provide free transit passes to employees.
4. Provide showers and lockers for employees who commute by bicycle.
5. Charge employees for monthly parking and provide a transportation allowance to employees equal to the parking charge.
6. Install office technology, floorplans, and tenant regulations which are permanent, which effectively arrange for at least 10 percent of the employees to telecommute, thereby reducing employee automobile traffic by 10 percent.
The required demand management measures shall be included as conditions of approval for the proposed project. The property owner or manager shall file an annual affidavit with the City of West Linn stating that ongoing demand management measures required as conditions of approval have not been discontinued.

RESPONSE: The proposal does not intend to avail itself of the $10 \%$ reduction.
F. (See Figures 1 and 2 below.)

RESPONSE: All parking in the garage level is $90^{\circ}$ with $23^{\prime}$ drive aisles.
Figure 1. MINIMUM STANDARDS FOR PARKING LOT LAYOUT


Figure 2. MINIMUM DISTANCE FOR PARKING STALLS


| ANGLE OF <br> PARKING | DIRECTION OF <br> PARKING | AISLE WIDTH |  | DIMENSION 'A' |  | DIMENSION 'B' |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | STALL WIDTH |  | STALL WIDTH |  | STALL WIDTH |  |
| $30^{\circ}$ | DRIVE-IN | $12.5^{\prime}$ | $12.5^{\prime}$ | $16.8^{\prime}$ | $13.8^{\prime}$ | $18.0^{\prime}$ | $16.0^{\prime}$ |
| $45^{\circ}$ | DRIVE-IN | $12.5^{\prime}$ | $12.5^{\prime}$ | $19.1^{\prime}$ | $17.0^{\prime}$ | $12.7^{\prime}$ | $11.3^{\prime}$ |
| $60^{\circ}$ | DRIVE-IN | $19.0^{\prime}$ | $18.0^{\prime}$ | $20.1^{\prime}$ | $17.8^{\prime}$ | $10.4^{\prime}$ | $9.2^{\prime}$ |
| $60^{\circ}$ | BACK-IN | $17.0^{\prime}$ | $17.0^{\prime}$ | $20.1^{\prime}$ | $17.8^{\prime}$ | $10.4^{\prime}$ | $9.2^{\prime}$ |
| $90^{\circ}$ | DRIVE-IN | $23.0^{\prime}$ | $23.0^{\prime}$ | $18.0^{\prime}$ | $16.0^{\prime}$ | $9.0^{\prime}$ | $8.0^{\prime}$ |
| $90^{\circ}$ | BACK-IN | $22.0^{\prime}$ | $22.0^{\prime}$ | $18.0^{\prime}$ | $16.0^{\prime}$ | $9.0^{\prime}$ | $8.0^{\prime}$ |

(Ord. 1425, 1998; Ord. 1463, 2000; Ord. 1513, 2005; Ord. 1547, 2007; Ord. 1590 § 1, 2009;
Ord. 1604 § 46, 2011 ; Ord. 1622 § 25, 2014; Ord. 1623 § 4, 2014; Ord. 1635 § 24, 2014; Ord. 1736 § 1 (Exh. A), 2022)

# CITY OF WEST LINN PRE-APPLICATION CONFERENCE MEETING SUMMARY NOTES 

May 5, 2022

| SUBJECT: | Class II Historic Design Review for a new commercial building at 1919/1949 Willamette Falls Dr. |  |
| :--- | :--- | :--- |
| FILE: | PA-22-09 |  |
| ATTENDEES: | Applicant: | Icon Construction \& Development; SG Architecture LLC |
|  | Staff: | John Floyd (Planning), Lynn Schroder (Planning), Maryna Asuncsion |
|  | (Engineering) |  |
|  | Public: | Kathie Halicki (Willamette NA) |

The following is a summary of the meeting discussion provided to you from staff meeting notes. Additional information may be provided to address any "follow-up" items identified during the meeting. These comments are PRELIMINARY in nature. Please contact the Planning Department with any questions regarding approval criteria, submittal requirements, or any other planningrelated items. Please note disclaimer statement below.

## Site Information

Site Address:
Tax Lot No.:
Site Area:
Neighborhood:
Comp. Plan:
Zoning:
Zoning Overlays:
Applicable CDC Chapters:

1719 \& 1749 Willamette Falls Drive
31E02BA04300 \& 4400
15,000 Square Feet +/-
Willamette Neighborhood Association
Commercial
General Commercial (GC)
Willamette Falls Drive Commercial Design District
Chapter 19: General Commercial (GC)
Chapter 41: Building Height
Chapter 46: Off-Street Parking, Loading, and Reservoir Areas
Chapter 55: Design Review
Chapter 58: Willamette Falls Drive Commercial Design District
Chapter 99: Procedures for Decision Making: Quasi-Judicial

## Project Details

Demolish two existing structures to be replaced with a three-story commercial building with underground parking. The underground parking will utilize the existing entrance from the adjoining building, as approved in DR-16-01.

## Pertinent Factors:

The proposed work will require a Class II Design Review. The Planning Commission is the deciding authority on such applications, following a recommendation by the Historic Review Board.

The existing building located at 1919 Willamette Falls Drive is documented as being a potentially eligible contributing historic resource, but is not part of the City's historic resource inventory and is not subject to CDC 25 (Historic District).

Staff has reviewed the concept drawings and has the following preliminary comments:

- The proposed building height was not specified. Please include measurements on the proposed site elevations, consistent with CDC Chapter 41 (Building Height).
- Per CDC 46.140, no off-street parking is required, but any spaces voluntarily provided shall be designed and installed consistent with CDC 46 (Off-Street Parking)
- Internal property lines shall removed prior to construction of the building, per the building official. You may wish to include a property line adjustment with your application.
- A cross-access agreement for the underground garage may be required. However, as the site is not subject to minimum parking agreements, this may only be advised and not required.
- A preliminary review of the project revealed the following design exceptions. Note that this is not an exhaustive list and explanatory findings might justify the absence of an exception:
o Use of non-wood siding
o Use of metal canopies
Note that the City Council is nearing finalization of text amendments to CDC Chapter 58 (Willamette Falls Drive Commercial Design District).

Building: For building code and ADA questions, please contact Adam Bernert at abernert@westlinnoregon.gov or 503-742-6054, or Alisha Bloomfield at 503-742-6053 or abloomfield@westlinnoregon.gov.

Engineering: For work in the right of way and utility questions, see attached notes and/or contact Maryna Asuncion at masuncion@westlinnoregon.gov or 503-722-3436.

Tualatin Valley Fire \& Rescue: Please contact Jason Arn at jason.arn@tvfr.com or 503-259-1510 with any questions. Note that a Service Provider Permit will need to be presented with the application in order for it to be deemed complete. https://www.tvfr.com/399/Service-Provider-Permit

Process: For the proposal, address the submittal requirements and standards for decision making in the Community Development Code (CDC) chapters:

- Chapter 19: General Commercial (GC)
- Chapter 41: Building Height
- Chapter 46: Off-Street Parking, Loading, and Reservoir Areas
- Chapter 55: Design Review
- Chapter 58: Willamette Falls Drive Commercial Design District (note that updates to this chapter are being adopted under CDC-22-01). https://westlinnoregon.gov/planning/community-development-code-chapters-2-25-58-and-99-historic-code-amendments
- Chapter 99: Procedures for Decision Making: Quasi-Judicial

N/A is not an acceptable response to the approval criteria. The submittal requirements may be waived, but the applicant must first identify the specific submittal requirement and request, in letter form, that it be waived by the Planning Manager and must identify the specific grounds for that waiver.

The fee for a Class II Design Review is a deposit of $\$ 4,000$ plus $4 \%$ of construction value ( $\$ 20,000$ maximum). Preliminary approval of a property line adjustment is $\$ 800$.

Once the application and deposit/fee are submitted, the City has 30 days to determine if the application is complete or not. If the application is not complete, the applicant has 180 days to make it complete or provide written notice to staff that no other information will be provided. Once complete, the City has 120 days from the date of completeness to make a final decision on the application.

Typical land use applications can take 6-10 months from beginning to end.
DISCLAIMER: This summary discussion covers issues identified to date. It does not imply that these are the only issues. The burden of proof is on the applicant to demonstrate that all approval criteria have been met. These notes do not constitute an endorsement of the proposed application or provide any assurance of potential outcomes. Staff responses are based on limited material presented at this pre-application meeting. New issues, requirements, etc. could emerge as the application is developed. Preapplication notes are void after 18 months. After 18 months with no application approved or in process, a new pre-application conference is required. Any changes to the CDC standards may require a different design or submittal.

Tualatin Valley
Fire \& Rescue

North Operating Center 11945 SW $70^{\text {th }}$ Avenue Tigard, OR 97223
Phone: 503-649-8577

## South Operating Center

8445 SW Elligsen Rd
Wilsonville, OR 97070
Phone: 503-649-8577

## Project Information

Applicant Name: $\qquad$ SG Architecture ,LLC (Scot Sutton)
Address: 10940 SW Barnes Road \#364
Phone: 503-347-4685
Email: ssutton@sg-arch.net
Site Address: 1919 \& 1949 Willamette Falls Drive
City: West Linn, OR
Map \& Tax Lot \#: 31E02BA04300 \& 4400
Business Name: Commercial Mixed Use Building Land Use/Building Jurisdiction: (GC) General Comm. Land Use/ Building Permit \# Pending
Choose from: Beaverton, Tigard, Newberg, Tualatin, North
Plains, West Linn, Wilsonville, Sherwood, Rivergrove, Durham, King City, Washington County, Clackamas County, Multnomah County, Yamhill County

## Project Description

Demolish two existing structures to be replaced with a $+/-15,000$ sf three-story commercial mixed-use building with underground parking. The underground parking will utilize the existing entrance from the adjoining building and connected to the existing underground parking.

Permit/Review Type (check one):
Land Use / Building Review - Service Provider Permit
-Emergency Radio Responder Coverage Install/Test
口LPG Tank (Greater than 2,000 gallons)
-Flammable or Combustible Liquid Tank Installation (Greater than 1,000 gallons)

* Exception: Underground Storage Tanks (UST) are deferred to DEQ for regulation.
$\square$ Explosives Blasting (Blasting plan is required)
-Exterior Toxic, Pyrophoric or Corrosive Gas Installation (in excess of 810 cu.ft.)
-Tents or Temporary Membrane Structures (in excess of 10,000 square feet)
-Temporary Haunted House or similar
-OLCC Cannabis Extraction License Review
-Ceremonial Fire or Bonfire
(For gathering, ceremony or other assembly)
For Fire Marshal's Office Use Only
TVFR Permit \# $\qquad$ Permit Type: $5 P P-$ West Linn
Submittal Date: $1-21-23$
Assigned To: $\qquad$
Due Date: $\qquad$
Fees Due:


Fees Paid:

Approval/Inspection Conditions
(For Fire Marshal's Office Use Only)


This section used when site inspection is required Inspection Comments:








# Willamette Falls Drive Commercial Building Traffic Impact Study 



## Prepared For:

Icon Construction and Development, LLC

## Prepared By:

Michael Ard, PE
Ard Engineering
Date:
April 24, 2023

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## ExECUTIVE Summary

1. A property located on the south side of Willamette Falls Drive immediately east of 12 st Street in West Linn, Oregon is proposed for development with a mixed-use commercial building with a gross floor area of 28,872 square feet. The site will utilize underground parking connecting to the existing underground lot serving the property immediately to the east and will also use on-street parking at surface level.
2. Upon completion of the proposed development the subject property is projected to generate up to 76 new site trips during the morning peak hour, 91 trips during the evening peak hour, and 1,094 new daily site trips.
3. Based on the operational analysis, the signalized study intersections and the intersection of Willamette Falls Drive at $11^{\text {th }}$ Street currently operate acceptably and are projected to continue to operate acceptably under year 2025 traffic conditions either with or without the addition of site trips from the proposed development. Additionally, construction of a new planned roundabout at the intersection of Willamette Falls Drive at $10^{\text {th }}$ Street is projected to ensure that the intersection will operate acceptably under year 2025 traffic conditions either with or without the addition of sit trips from the proposed development. No mitigations are necessary or recommended for these intersections in conjunction with the proposed development.
4. The intersection of Willamette Falls Drive at $12^{\text {th }}$ Street is projected to operate within capacity but at level of service " $E$ " during the morning and evening peak hours under year 2025 traffic conditions either with or without the addition of site trips from the proposed development. Although a traffic signal cannot be installed at the intersection at this time, it is recommended that a traffic signal be installed once signal warrants are met. It is recommended that the developer pay a proportionate share contribution of $\$ 2,488$ toward the future signalization cost based on the projected impacts at this location.
5. As described in the City's Transportation System Plan, the intersection of $10^{\text {th }}$ Street at $8^{\text {th }}$ Avenue $/ 8^{\text {th }}$ Court is projected to operate at level of service F, but below capacity under future traffic conditions. Since the intersection is projected to operate better under year 2025 conditions with the addition of site trips from the proposed development than under existing conditions and since further improvements will require acquisition of a crossover easement connecting to Willamette Falls Drive across property not under the control of the current development, no further mitigation beyond installation of the planned turning-movement restrictions is recommended for this intersection at this time.
6. Based on the crash data, the study intersections are currently operating acceptably with respect to safety. No specific safety improvements are recommended based on crash history.
7. Based on the warrant analysis, traffic signal warrants are currently met for the intersection of Willamette Falls Drive and $10^{\text {th }}$ Street. However, this intersection is planned for installation of a roundabout, which is projected to adequately accommodate anticipated traffic volumes and patterns. No other traffic signals or turn lanes are recommended in conjunction with the proposed development.

## Project Description \& Location

## INTRODUCTION

A property located on the north side of Willamette Falls Drive west of $12^{\text {th }}$ Street in West Linn is proposed for development with a 29,000 square foot commercial building. The proposed building will contain a mix of retail and office uses on two primary floors, with a smaller $3^{\text {rd }}$-floor lounge and underground parking. The parking lot will be accessed via a connection to the existing underground parking lot serving the building immediately west of the project site.

This report addresses the impacts of the proposed development on the surrounding street system. Based on discussions with the City of West Linn staff, an operational and safety analysis was conducted for the intersections of:

- Willamette Falls Drive at $12^{\text {th }}$ Street;
- Willamette Falls Drive at $11^{\text {th }}$ Street;
- Willamette Falls Drive at $10^{\text {th }}$ Street;
- $10^{\text {th }}$ Street at $8^{\text {th }}$ Avenue $/ 8^{\text {th }}$ Court;
- $10^{\text {th }}$ Street at the I- 205 Southbound Ramps;
- $10^{\text {th }}$ Street at the I-205 Northbound Ramps; and
- $10^{\text {th }}$ Street at Blankenship Road/Salamo Road.

The purpose of this analysis is to determine whether the surrounding transportation system is capable of safely and efficiently supporting the proposed use and to identify any necessary improvements and mitigations.

## Site Location and Study area Description

The project site is in the southeast corner of the intersection of Willamette Falls Drive at $12^{\text {th }}$ Street. The subject property is currently occupied by the Hasson Company Realtors office at 1949 Willamette Falls Drive and the Cole | Tait PC law offices at 1919 Willamette Falls Drive. Existing uses in the site vicinity include a variety of commercial uses along Willamette Falls Drive and $10^{\text {th }}$ Street, and a mix of commercial and residential uses in the surrounding areas.

Willamette Falls Drive is classified by the City of West Linn as a Minor Arterial. In the site vicinity it has a three-lane cross-section, with one through lane in each travel direction and a center left-turn lane. Angled on-street parking, protected bike lanes and sidewalks are provided on both sides of the roadway. It has a posted speed limit of 20 mph within the central business district. The roadway width is reduced to two lanes without on-street parking or sidewalks east of $10^{\text {th }}$ Street, where the speed limit increases to 45 mph . Similarly, the roadway width is reduced to two lanes without on-street parking or sidewalks west of $16^{\text {th }}$ Street, where the speed limit is increased to 30 mph .
$12^{\text {th }}$ Street is classified by the City of West Linn as a Local Street north of Willamette Falls Drive and as a Collector south of Willamette Falls Drive. It has a two-lane cross-section with one through travel lane in each direction and a $25-\mathrm{mph}$ speed limit. On-street parking and sidewalks are in place on both sides of the roadway. A 20-mph school speed zone applies between 7:00 AM and 5:00 PM on school

days near the Willamette Primary School campus, which is located on the east side of $12^{\text {th }}$ Street between $4^{\text {th }}$ Avenue and $6^{\text {th }}$ Avenue.
$11^{\text {th }}$ Street is classified by the City of West Linn as a Local Street. It has a two-lane cross-section with one through travel lane in each direction and is subject to a statutory residential speed limit of 25 mph . On -street parking and sidewalks are in place on both sides of the roadway in the site vicinity. Again, a $20-\mathrm{mph}$ school speed zone is in place near the Willamette Primary School campus.
$10^{\text {th }}$ Street is classified by the City of West Linn as a Minor Arterial. The cross-section varies between three and four lanes for two-way traffic. Continuous sidewalks and partial bike lanes are in place along the west side of the roadway, and partial sidewalks and bike lanes are in place along the east side of the roadway. No on-street parking is provided.
$8^{\text {th }}$ Avenue $/ 8^{\text {th }}$ Court is classified by the City of West Linn as a Local Street. It generally has a twolane cross-section with a single travel lane in each direction; however, turn lanes are added at $10^{\text {th }}$ Street. Continuous sidewalks are available on $8^{\text {th }}$ Court, and partial sidewalks are in place on both sides of $8^{\text {th }}$ Avenue. Some on-street parking is available where the roadway width can accommodate it.

Interstate 205 and the associated freeway ramps serving $10^{\text {th }}$ Street operate under the jurisdiction of the Oregon Department of Transportation. I-205 has a posted speed limit of 65 mph along the main line west of $10^{\text {th }}$ Street, which reduces to 55 mph east of $10^{\text {th }}$ Street. The freeway offramps have 45 mph advisory exit speeds posted, and the on-ramps have ramp metering systems in place.

Blankenship Road is classified by the City of West Linn as a Collector. Near $10^{\text {th }}$ Street it generally has a three-lane cross-section with one through lane in each direction and a center two-way left-turn lane, with a posted speed limit of 25 mph . Existing bike lanes are in place on both sides of the roadway, and continuous sidewalks are provided along the south side of the road. On the north side, partial sidewalks are provided where the adjacent land has been developed; however, no sidewalks are provided along the undeveloped frontages on both sides of Tannler Drive.

Salamo Road intersects $10^{\text {th }}$ Street opposite Blankenship Road and extends to the east up the hill. It is classified by the City of West Linn as a Minor Arterial. It has a two-lane cross-section with one through travel lane in each direction and a posted speed limit of 40 mph . Bike lanes and sidewalks are not provided along the roadway in the vicinity of $10^{\text {th }}$ Street.

## Existing Conditions

The intersection of Willamette Falls Drive at $12^{\text {th }}$ Street is a four-way intersection operating under allway stop control. The eastbound and westbound approaches each have a left-turn lane and a shared through/right lane. The northbound and southbound approaches each have a single, shared lane for all turning movements. Marked crosswalks and cross-bikes (designated bicycle crossings adjacent and parallel to the pedestrian crosswalks) are in place on each intersection approach.

The intersection of Willamette Falls Drive at $11^{\text {th }}$ Street is a T-intersection controlled by a stop sign on the northbound $11^{\text {th }}$ Street approach. Marked crosswalks and cross-bikes are in place across the east and south sides of the intersection. The crossing on the west side of the intersection is closed. Each intersection approach has a single, shared lane for all turning movements.

The intersection of Willamette Falls Drive at $10^{\text {th }}$ Street is a T-intersection operating under all-way stop control. Marked crosswalks are in place crossing the north and west sides of the intersection. The southbound approach has a left-turn lane and a right-turn lane. The westbound approach has a single, shared through/right lane. The eastbound approach has a left-turn lane and a dedicated through lane.

The intersection of $10^{\text {th }}$ Street at $8^{\text {th }}$ Avenue $/ 8^{\text {th }}$ Court is a four-way intersection operating under stop control for the eastbound and westbound approaches. Through traffic traveling along $10^{\text {th }}$ Street does not stop. The northbound approach has a single, shared lane for all turning movements. The southbound and eastbound approaches each have a left-turn lane and a shared through/right lane. The westbound approach has a shared left/through lane and a dedicated right-turn lane. Crosswalks are in place on the west, south and east legs of the intersection. The north side pedestrian crossing is closed.

The intersection of $10^{\text {th }}$ Street at the I-205 Northbound Ramps is a four-way intersection controlled by a traffic signal. The I-205 ramp legs operate as one-way road segments accommodating eastbound traffic only. The northbound approach has a through lane and a right-turn lane. The southbound approach has a left-turn lane and a dedicated through lane. The eastbound approach has a shared left/through lane and a dedicated right-turn lane. Marked crosswalks are in place on the west, south and east legs of the intersection. The north side pedestrian crossing is closed.

The intersection of $10^{\text {th }}$ Street at the I-205 Southbound Ramps is again a four-way intersection controlled by a traffic signal. The I-205 ramp legs operate as one-way road segments accommodating westbound traffic only. The northbound approach has a left-turn lane and a dedicated through lane. The southbound approach has a dedicated through lane and a shared through/right lane. The westbound approach has a shared left/through lane and a dedicated right-turn lane. Marked crosswalks are in place on the west, south and east legs of the intersection. The north side pedestrian crossing is closed.

The intersection of $10^{\text {th }}$ Street at Blankenship Road/Salamo Road is a signalized T-intersection. The northbound approach has a left-turn lane and a right-turn lane. The eastbound approach has a dedicated through lane and a channelized right-turn lane. The westbound approach has a left-turn lane and a through lane. Marked crosswalks are in place on the east and south sides of the intersection. The west side crosswalk is closed.

A vicinity map displaying the project site, vicinity streets, and the study intersections including lane configurations is provided in Figure 1 on page 7.


## Public Transit

Tri-Met bus route 154 - Willamette/Clackamas Heights provides transit service along Willamette Falls Drive, $10^{\text {th }}$ Street, and Blankenship Road. The transit stop nearest the proposed development is located on the south side of Willamette Falls Drive immediately west of $12^{\text {th }}$ Street. The route provides a connection between West Linn and the Oregon City Transit Center for access to the greater Tri-Met transit network. Service is available on weekdays from 6:00 AM to 7:00 PM, with service approximately once per hour. Weekend service is not available.

## Traffic Count Data

Traffic counts were conducted at the study intersections on Wednesday April $12^{\text {th }}, 2023$, from 7:00 to 9:00 AM and from 4:00 to 6:00 PM. The count data was examined to determine the systemwide peak hour for both the morning and evening peak hour periods. The morning peak hour occurred from 7:35 to $8: 35 \mathrm{AM}$, while the evening peak hour occurred from 4:20 to 5:20 PM. Data was used from the highest-volume hour for each of the two analysis periods.

Figure 2 on page 9 shows the existing year 2023 traffic volumes during the morning peak hour for the study intersections. Figure 3 on page 10 shows the existing year 2023 traffic volumes during the evening peak hour.



## OPERATIONAL ANALYSIS

An operational analysis was conducted for the study intersections using Synchro 10 software, with outputs calculated based on the HIGHWAY CAPACITY MANUAL, $6^{\text {th }}$ Edition. The analysis was conducted for the weekday morning and evening peak hours.

The purpose of the existing conditions analysis is to establish how the study area intersections operate currently and allow for calibration of the operational analysis if required.

The results of the operational analysis are reported based on delay, Level of Service (LOS), and volume-to-capacity ratio (v/c). Delays are reported in seconds. Level of service is reported as a letter grade and can range from $A$ to $F$, with level of service A representing nearly free-flow conditions and level of service $F$ representing high delays and severe congestion. A report of level of service D generally indicates moderately high but tolerable delays, and typically occurs prior to reaching intersection capacity. For unsignalized intersections, the $\mathrm{v} / \mathrm{c}$ represents the portion of the available intersection capacity that is being utilized on the worst intersection approach. For signalized intersections, it indicates the portion of the overall intersection's capacity that is being used. A v/c ratio of 1.0 would indicate that the intersection is operating at capacity.

Due to close intersection spacing and the need to maintain coordinated timing, the intersection of $10^{\text {th }}$ Street at Blankenship Road/Salamo Road operates using the same traffic signal controller that controls the intersection of $10^{\text {th }}$ Street at the I-205 Southbound ramps. The signal timing plan for these intersections was obtained from the Oregon Department of Transportation to accurately reflect the timing and interaction of these intersections. Operational standards for these two intersections as well as the intersection of $10^{\text {th }}$ Street at the I-205 Northbound ramps are established under the Oregon Highway Plan. These intersections are required to operate with a v/c ratio of 0.85 or less during the peak hours.

The remaining study intersections operate under the jurisdiction of the City of West Linn and are required to operate at level of service $D$ or better.

A summary of the existing conditions operational analysis is provided in Table 1 on the following page. For the unsignalized intersections the reported delays and levels-of-service represent the approach lane which experiences the highest delays. For the signalized intersections, the reported delays, levels-of-service, and $\mathrm{v} / \mathrm{c}$ ratios represent the operation of the overall intersection.

Detailed capacity analysis worksheets are provided in the technical appendix.

Based on the analysis, the signalized study intersections are currently operating acceptably per the respective ODOT and City of West Linn standards. The intersection of Willamette Falls Drive at $11^{\text {th }}$ Street is also operating acceptably. However, the intersections of Willamette Falls Drive at $12^{\text {th }}$ Street, Willamette Falls Drive at $10^{\text {th }}$ Street, and $10^{\text {th }}$ Street at $8^{\text {th }}$ Avenue $/ 8^{\text {th }}$ Court do not currently meet the City of West Linn's minimum level of service D standard under existing conditions. Accordingly, some form of improvements will be required for these intersections either with or without construction of the proposed development.

Table 1-Operational Analysis Summary: Year 2023 Existing Conditions

| Intersection | AM Peak Hour |  |  | PM Peak Hour |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Delay | LOS | v/c | Delay | LOS | v/c |
| Willamette Falls Drive at 12th Street | 33.9 | D | 0.86 | 36.1 | E | 0.85 |
| Willamette Falls Drive at 11th Street | 16.1 | C | 0.17 | 16.1 | C | 0.12 |
| Willamette Falls Drive at 10th Street | 38.4 | E | 0.85 | 31.8 | D | 0.80 |
| 10th St. at 8th Ave./8th Ct. | 97.6 | F | 0.45 | 121.5 | F | 0.87 |
| 10th St. at I-205 Northbound Ramps | 10.1 | B | 0.46 | 8.8 | A | 0.49 |
| 10th St. at I-205 Southbound Ramps | 31.9 | C | 0.58 | 27.1 | C | 0.62 |
| 10th St. at Blankenship Rd./Salamo Rd. | 23.5 | C | 0.61 | 31.4 | C | 0.64 |

## Site Trips

The proposed commercial building will have a gross floor area of 28,872 square feet. Specific users have not yet been identified for the building, which will be designed to accommodate a mix of office, retail and restaurant uses. As such, while we cannot determine a precise trip generation estimate for the unknown future mix of uses, we can provide a low and high estimate of trip generation to determine the likely range within which future site traffic volumes will fall.

Prior to calculating the expected increase in site trips associated with the future building, a trip estimate was prepared for the existing uses on the site. Under existing conditions, two office buildings are operating within the subject property, including a real estate office and a law office. The two buildings have a combined floor area of approximately 3,250 square feet. To estimate the number of trips generated by the current site uses, trip data from the TRIP GENERATION MANUAL, $11^{\text {th }}$ Edition, published by the Institute of Transportation Engineers was used. The trip data was for land use code 710, General Office, and was calculated for the gross floor area of 3,250 square feet. Based on the analysis, the existing site uses generate 5 trips during the morning peak hour, 5 trips during the evening peak hour, and 36 daily site trips. These existing trips were subtracted from the projected future site trips in order to represent the anticipated increase in traffic resulting from the proposed development.

The high trip generation estimate was prepared assuming that the building areas which are labelled as potential restaurant space and the lounge area designated in the site plan will all be occupied by a highturnover sit-down restaurant. Under this development scenario, the building areas would consist of 10,599 square feet of restaurant space, 9,608 square feet of retail space, and 8,665 square feet of office space. The trip estimate for this development scenario was prepared using trip data for land use codes 932, High-Turnover Sit-Down Restaurant, 821, Shopping Plaza, and 710, General Office Building. The trip generation calculations are provided in Table 2 below, with detailed trip generation worksheets for each land use category provided in the attached technical appendix.

Based on the detailed calculations, the high estimate of trips for the proposed use would consist of 76 added trips during the morning peak hour and 91 added trips during the evening peak hour.

Table 2 - High Estimate Trip Generation Summary

|  | AM Peak Hour |  |  | PM Peak Hour |  |  | Daily |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| 10,599 sf Restaurant | In | Out | Total | In | Out | Total | Tot |
| - Pass-By Trips (43\%) | 56 | 45 | 101 | 59 | 37 | 96 | 1136 |
| 9,608 sf Shopping Plaza | -22 | -22 | -44 | -21 | -21 | -42 | -488 |
| - Pass-By Trips (40\%) | 11 | 6 | 17 | 25 | 25 | 50 | 648 |
| 8,665 sf General Office Building | -3 | -3 | -6 | -10 | -10 | -20 | -260 |
| - Existing Office Site Trips | 11 | 2 | 13 | 2 | 10 | 12 | 94 |
| Net Site Trips | -4 | -1 | -5 | -1 | -4 | -5 | -36 |

For the low estimate of trip generation, it was assumed that the site would develop without a restaurant. Under this development scenario the proposed building was assumed to develop with 15,403 square feet of retail uses and 13,469 square feet of office space. The trip estimate for this development
scenario was prepared using trip data for land use codes 821 , Shopping Plaza, and 710, General Office Building. The trip generation calculations are provided in Table 3 below, again with detailed trip generation worksheets for each land use category provided in the attached technical appendix.

Based on the detailed calculations, the low estimate of trips for the proposed use would consist of 32 added trips during the morning peak hour and 62 added trips during the evening peak hour.

Table 3 - Low Estimate Trip Generation Summary

|  | AM Peak Hour |  |  | PM Peak Hour |  |  | Daily <br> Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | In | Out | Total | In | Out | Total |  |
| 15,403 sf Shopping Plaza | 17 | 10 | 27 | 39 | 41 | 80 | 1040 |
| - Pass-By Trips (40\%) | -5 | -5 | -10 | -16 | -16 | -32 | -416 |
| 13,469 sf General Office Building | 17 | 3 | 20 | 3 | 16 | 19 | 146 |
| - Existing Office Site Trips | -4 | -1 | -5 | -1 | -4 | -5 | -36 |
| Total Site Trips | 25 | 7 | 32 | 25 | 37 | 62 | 734 |

## TRIP DISTRIBUTION

In order to maintain a conservative analysis, it was assumed that the site may develop with traffic volumes matching those projected under the "High Estimate of Trip Generation" scenario.

It is projected that the majority of the site trips generated by the proposed development will travel to and from Interstate 205 when visiting the project site. Based on the existing travel trends in the site vicinity it is projected that 45 percent of site trips will travel to and from the east on I-205, while 25 percent will travel to and from the west on I-205. Approximately 10 percent of site trips are projected to travel to and from the northeast via Salamo Road. Five percent of site trips are projected to travel to and from the northwest on Blankenship Road, five percent are projected to travel to and from the south on $12^{\text {th }}$ Street/Tualatin Avenue, and five percent are projected to travel in each direction on Willamette Falls Drive.

The trip distribution percentages and trip assignment for the primary trips resulting from the proposed development are shown in Figures 4 and 5 on pages 15 and 16.



## Future Conditions Analysis

## BACKGROUND VOLUMES

In order to determine the expected impact of site trips on the study area intersections, it is necessary to compare traffic conditions both with and without the addition of the projected traffic from the proposed development. This comparison is made for future traffic conditions at the time of project completion. It is anticipated that the proposed use will be completed and occupied within two years. Accordingly, the analysis was conducted for year 2025 traffic conditions.

Prior to adding the projected site trips to the study intersections, the existing traffic volumes were adjusted to account for background traffic growth over time. Based on data from ODOT's Future Volume Tables, the growth rate for traffic volumes on Interstate 205 in the site vicinity was calculated to be 1.89 percent per year (linear). This growth rate was applied to the I- 205 ramp volumes. All other turning movements had a growth factor of 2 percent per year (exponential) applied.

No in-process developments which will add to the traffic volumes at the study area intersections were identified. Accordingly, the background growth projections represent the overall increases in traffic anticipated under background traffic conditions.

In addition to background growth, some fully funded improvements are scheduled for construction which will be completed prior to occupancy of the proposed development. These improvements include the installation of a single-lane roundabout at the intersection of Willamette Falls Drive and $10^{\text {th }}$ Street, as well as installation of diverter islands which will restrict turning movements at the intersection of $10^{\text {th }}$ Street and $8^{\text {th }}$ Avenue $/ 8^{\text {th }}$ Court. A diagram showing the planned roadway improvements at these intersections as well as diagrams showing the impact of resulting trip diversions are provided in the attached technical appendix.

Figures 6 and 7 on pages 18 and 19 show the projected year 2025 background traffic volumes at the study intersections during the morning and evening peak hours, respectively.

## BaCkground Volumes plus Site Trips

Peak hour trips calculated to be generated by the proposed development were added to the projected year 2025 background traffic volumes to obtain the year 2025 total traffic volumes following completion of the proposed residential development.

Figures 8 and 9 on pages 20 and 21 show the projected year 2025 peak hour volumes including background growth and site trips from the proposed development for the morning and evening peak hours, respectively.





## OPERATIONAL ANALYSIS

The operational analysis for future traffic conditions was again conducted using Synchro analysis software, with outputs based on the analysis methodologies contained in the HIGHWAY CAPACITY $M A N U A L$. The analysis was prepared for the intersections' morning and evening peak hours.

The results of the operational analysis are summarized in Table 4 below. Detailed analysis worksheets are also included in the technical appendix.

Table 4 - Operational Analysis Summary: Year 2025 Future Conditions

| Intersection | AM Peak Hour |  |  | PM Peak Hour |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Delay | LOS | v/c | Delay | LOS | v/c |
| Willamette Falls Dr. at 12th St. |  |  |  |  |  |  |
| 2025 Background Conditions | 40.6 | E | 0.90 | 41.7 | E | 0.89 |
| 2025 Background plus Site | 42.4 | E | 0.91 | 43.3 | E | 0.89 |
| Willamette Falls Dr. at 11th St. |  |  |  |  |  |  |
| 2025 Background Conditions | 16.5 | C | 0.18 | 16.5 | C | 0.13 |
| 2025 Background plus Site | 17.4 | C | 0.20 | 17.4 | C | 0.16 |
| Willamette Falls Dr. at 10th St. |  |  |  |  |  |  |
| 2025 Background Conditions | 11.5 | B | 0.55 | 22.5 | C | 0.83 |
| 2025 Background plus Site | 12.2 | B | 0.56 | 25.7 | D | 0.87 |
| 10th St. at 8th Ave./8th Ct. |  |  |  |  |  |  |
| 2025 Background Conditions | 74.7 | F | 0.54 | 66.3 | F | 0.40 |
| 2025 Background plus Site | 94.6 | F | 0.62 | 80.9 | F | 0.46 |
| 10th St. at I-205 NB Ramps |  |  |  |  |  |  |
| 2025 Background Conditions | 10.2 | B | 0.48 | 9.0 | A | 0.51 |
| 2025 Background plus Site | 10.4 | B | 0.49 | 9.3 | A | 0.51 |
| 10th St. at I-205 SB Ramps |  |  |  |  |  |  |
| 2025 Background Conditions | 33.1 | C | 0.60 | 27.8 | C | 0.64 |
| 2025 Background plus Site | 36.5 | D | 0.63 | 29.5 | C | 0.66 |
| 10th St. at Blankenship Rd./Salamo Rd. |  |  |  |  |  |  |
| 2025 Background Conditions | 24.5 | C | 0.64 | 34.7 | C | 0.67 |
| 2025 Background plus Site | 24.9 | C | 0.65 | 36.7 | D | 0.68 |

Based on the results of the operational analysis, the signalized study intersections, the roundabout at the intersection of Willamette Falls Drive and $10^{\text {th }}$ Street, and the intersection of Willamette Falls Drive at $11^{\text {th }}$ Street are projected to continue to operate acceptably through 2025 either with or without the addition of site trips from the proposed development. The intersections of Willamette Falls Drive at $12^{\text {th }}$ Street and $10^{\text {th }}$ Street at $8^{\text {th }}$ Avenue $/ 8^{\text {th }}$ Court which failed to meet the City of West Linn's performance standard of level of service D or better under year 2023 existing conditions are again projected to operate with levels of service exceeding acceptable under year 2025 traffic conditions either with or without the addition of site trips from the proposed development. Accordingly, some form of mitigation is appropriate for these intersections.

## Mitigation Descriptions and Proportionate Share Contribution analysis

For the two intersections which are projected to exceed the City of West Linn's operational standards, mitigations were previously identified in the City's 2016 Transportation System Plan. These planned mitigations were examined to determine whether they will be sufficient to restore acceptable operation. Additionally, projected costs from the City's Transportation System Plan were used to calculate appropriate proportionate share contributions for each intersection improvement.

## $\underline{\text { Willamette Falls Drive at 12 }{ }^{\text {th }} \text { Street }}$

The intersection of Willamette Falls Drive at $12^{\text {th }}$ Street is currently operating at level of service D during the morning peak hour and level of service E during the evening peak hour. Under year 2025 traffic conditions, the intersection is projected to operate at level of service E during the morning and evening peak hours either with or without the addition of site trips from the proposed development. The 2016 Transportation System Plan indicates that a new traffic signal should be installed at this intersection once it is warranted (TSP Project M3). The projected cost of the traffic signal was $\$ 300,000$.

Based on the high estimate of trip generation, the proposed development is projected to add 10 trips through the intersection during the evening peak hour. This represents $0.83 \%$ of the 1,206 trips projected to travel through the intersection under year 2025 background plus site trips conditions. If the developer contributes a proportionate share of the cost, the contribution would be $\$ 2,488$ for this intersection.

## $\mathbf{1 0}^{\text {th }}$ Street at $8^{\text {th }}$ Avenue $/ \mathbf{8}^{\text {th }}$ Court

The intersection of $10^{\text {th }}$ Street at $8^{\text {th }}$ Avenue $/ 8^{\text {th }}$ Court is currently operating at level of service F during the morning and evening peak hours. It is projected to continue to operate at level of service F under year 2025 traffic conditions either with or without the addition of site trips from the proposed development. However, with construction of the planned pork-chop island on the west side of the intersection converting the west leg to right-in, right-out only, the intersection is projected to operate better under the "background plus site trips" scenario than under existing conditions. The westbound approach from $8^{\text {th }}$ Court is projected to continue to operate with high delays, but well within intersection capacity.

The 2016 Transportation System Plan acknowledges that, "The westbound approach to the $10^{\text {th }}$ Street $/ 8^{\text {th }}$ Avenue-Court intersection is expected to operate at LOS F, but below capacity during the weekday p.m. peak hour under future traffic conditions with the planned improvements. Providing a crossover easement from $8^{\text {th }}$ Court to Willamette Falls Drive for public ingress and egress will be necessary to provide relief to this intersection by providing an alternative access and secondary emergency access." The crossover easement is depicted in the Transportation System Plan as extending from the current roadway end to intersect Willamette Falls Drive west of the $9^{\text {th }}$ Street alignment and is designated as TSP Project M19. Notably, this project has no projected cost to the city, since it is anticipated that the connection will be made in association with future development within the properties where the easement will be placed. Accordingly, the calculated proportionate share contribution based on the site trips added to the intersection would be zero for the proposed development.

## Mitigation Summary

The intersection of $10^{\text {th }}$ Street at Willamette Falls Drive is projected to operate acceptably with the planned and funded roundabout in place.

The intersection of $10^{\text {th }}$ Street at $8^{\text {th }}$ Avenue $/ 8^{\text {th }}$ Court is projected to operate better with completion of the planned roadway improvements and the addition of site trips from the proposed development than under existing conditions, and further mitigation will be provided in conjunction with future redevelopment within the properties where a future easement for connection to Willamette Falls Drive will be placed.

The intersection of Willamette Falls Drive at $12^{\text {th }}$ Street is projected to operate at Level of Service E; however, the planned traffic signal for this intersection cannot be installed until traffic signal warrants are met. Accordingly, it is appropriate that the developer provide a proportionate share contribution toward the future signalization cost.

Based on the detailed analysis, payment of Transportation System Development Charges is projected to be sufficient to offset the impacts of the proposed mixed-use commercial development. No other operational mitigations are necessary or recommended in conjunction with the proposed development.

## Safety Analysis

## CRASH DATA ANAL YSIS

Using data obtained from the Oregon Department of Transportation, a review of the five most recent years of available crash history (from January 2016 through December 2020) was performed for the study intersections. The crash data was evaluated based on the number, type, and severity of collisions, as well as the intersection crash rate. Crash rates allow comparison of relative safety risks at intersections with different lane configurations, volumes, and traffic control devices by accounting for both the number of crashes that occur during the study period and the number of vehicles that traveled through the intersection during that period. Crash rates are calculated using the standard assumption that evening peak hour volumes are approximately 10 percent of the average daily traffic volume at an intersection. The crash rates were compared to statewide crash rates for similar intersection types in order to identify any locations with crash rates in excess of the $90^{\text {th }}$ percentile.

The intersection of Willamette Falls Drive at $12^{\text {th }}$ Street had three reported collisions during the fiveyear analysis period. These included one turning-movement collision, one angle collision, and one pedestrian collision. The pedestrian collision occurred when an eastbound driver failed to see and yield to a crossing pedestrian in the dark. The crash resulted in a "possible injury/complaint of pain" from the pedestrian. Overall the intersection crashes resulted in no serious injuries or fatalities, and two reports of a "possible injury/complaint of pain". The crash rate for the intersection was calculated to be 0.143 crashes per million entering vehicles. This is well below the $90^{\text {th }}$ percentile crash rate of 0.408 crashes per million entering vehicles for unsignalized, four-way urban intersections in Oregon.

The intersection of Willamette Falls Drive at $11^{\text {th }}$ Street had one reported collision during the five-year analysis period. It was a bicycle collision that occurred when a westbound driver failed attempting to parallel park failed to yield to a westbound cyclist. The crash resulted in a non-incapacitating injury to the cyclist. Subsequent to this crash in 2018, the roadway was redesigned to provide protected bike lanes behind angled parking, so the conflict type that occurred is unlikely to occur in the future. The crash rate for the intersection was calculated to be 0.048 crashes per million entering vehicles. This is well below the $90^{\text {th }}$ percentile crash rate of 0.293 crashes per million entering vehicles for unsignalized, three-way urban intersections in Oregon.

The intersection of Willamette Falls Drive at $10^{\text {th }}$ Street had four reported collisions during the fiveyear analysis period. These included one turning-movement collision, one angle collision, one rearend collision, and one pedestrian collision. The pedestrian collision occurred when an eastbound driver turning left onto $10^{\text {th }}$ Street failed to yield to a crossing pedestrian in the crosswalk. The crash resulted in a "possible injury/complaint of pain" from the pedestrian. Overall, the intersection crashes resulted in no serious injuries or fatalities, and two reports of a "possible injury/complaint of pain". The crash rate for the intersection was calculated to be 0.157 crashes per million entering vehicles. This is well below the $90^{\text {th }}$ percentile crash rate of 0.293 crashes per million entering vehicles for unsignalized, three-way urban intersections in Oregon.

The intersection of $10^{\text {th }}$ Street at $8^{\text {th }}$ Avenue $/ 8^{\text {th }}$ Court had 6 reported crashes during the five-year analysis period. These included three angle collisions, two rear-end collisions, and one turningmovement collision. The crashes resulted in no serious injuries or fatalities, and two reports of a

"possible injury/complaint of pain". The crash rate for the intersection was calculated to be 0.251 crashes per million entering vehicles. This is well below the $90^{\text {th }}$ percentile crash rate of 0.408 crashes per million entering vehicles for urban unsignalized four-way intersections in the state of Oregon.

The intersection of $10^{\text {th }}$ Street at the I-205 Northbound Ramps had four reported crashes during the five-year analysis period. These included three rear-end collisions and one turning-movement collision. The crashes resulted in no serious injuries or fatalities, and two reports of a "possible injury/complaint of pain". The crash rate for the intersection was calculated to be 0.143 crashes per million entering vehicles. This is well below the $90^{\text {th }}$ percentile crash rate of 0.860 crashes per million entering vehicles for urban signalized four-way intersections in the state of Oregon.

The intersection of $10^{\text {th }}$ Street at the I-205 Southbound Ramps had three reported crashes during the five-year analysis period. All three were rear-end collisions. The crashes resulted in no serious injuries or fatalities, and two reports of a "possible injury/complaint of pain". The crash rate for the intersection was calculated to be 0.098 crashes per million entering vehicles. This is well below the $90^{\text {th }}$ percentile crash rate of 0.860 crashes per million entering vehicles for urban signalized four-way intersections in the state of Oregon.

The intersection of $10^{\text {th }}$ Street at Blankenship Road/Salamo Road had six reported crashes during the five-year analysis period. These included two turning-movement collisions, two rear-end collisions, one fixed-object (run off road) collision and one head-on collision. The head-on collision occurred when an eastbound driver failed to maintain their lane, drifting left and striking a westbound vehicle that was stopped while waiting to turn left onto $10^{\text {th }} \mathrm{Street}$. The crash resulted in a non-incapacitating injury to the northbound driver. No other injuries were reported at this intersection. The crash rate for the intersection was calculated to be 0.203 crashes per million entering vehicles. This is well below the $90^{\text {th }}$ percentile crash rate of 0.509 crashes per million entering vehicles for urban signalized fourway intersections in the state of Oregon.

Based on the crash data, the study intersections are currently operating acceptably with respect to safety. No specific safety improvements are recommended based on the crash data.

## Traffic Signal Warrant analysis

Traffic signal warrants were examined for the unsignalized study intersections. Detailed analysis worksheets for each intersection are included in the attached technical appendix.

The intersections of Willamette Falls Drive at $12^{\text {th }}$ Street, Willamette Falls Drive at $11^{\text {th }}$ Street, and $10^{\text {th }}$ Street at $8^{\text {th }}$ Avenue $/ 8^{\text {th }}$ Court are not projected to meet traffic signal warrants under year 2025 traffic conditions either with or without the addition of site trips from the proposed development. Accordingly, installation of traffic signals is not recommended for these intersections.

The intersection of Willamette Falls Drive at $10^{\text {th }}$ Street was identified as meeting traffic signal warrants in the 2016 Transportation System Plan, which showed that even under year 2015 traffic conditions installation of a traffic signal could be considered. The installation of a new traffic signal would also be warranted under year 2025 traffic conditions with completion of the proposed development. However, the intersection is planned for conversion to a roundabout in the near future

under a project which has already been designed and funded. Installation of a roundabout serves as a substitute for signalization. With conversion of the intersection to a roundabout, the intersection is projected to operate acceptably under year 2025 conditions either with or without the addition of site trips from the proposed development. Accordingly, a traffic signal is not projected to be needed at this location.

## Left Turn Lane Warrant Analysis

Left turn lane warrants were also examined for the major-street approaches to the unsignalized study intersections. Left-turn lane warrants are intended to evaluate whether a meaningful safety benefit may be expected if the turning vehicles are provided with turn lane within the street, allowing left-turning drivers to move out of the through travel lane so that following vehicles may pass without conflicts.

The intersections of Willamette Falls Drive at $12^{\text {th }}$ Street and Willamette Falls Drive at $10^{\text {th }}$ Street already have dedicated left-turn lanes in place for all major-street left-turn movements. Accordingly, no analysis was needed for these intersections.

For the intersection of Willamette Falls Drive at $11^{\text {th }}$ Street, the space that could be allocated for a westbound left-turn lane is utilized by the eastbound left-turn lane which serves Willamette Falls Drive at $10^{\text {th }}$ Street. The $10^{\text {th }}$ Street intersection's left-turn volumes are significantly higher than the westbound left-turn volumes at $11^{\text {th }}$ Street. Additionally, drivers have the option to turn at other intersections when traveling westbound, whereas no reasonable alternative routes are available for eastbound drivers turning left onto $10^{\text {th }}$ Street. Finally, interruptions to the flow of through traffic along the $20-\mathrm{mph}$ Willamette Falls Drive corridor are common and acceptable, since the corridor accommodates angled parking which frequently requires through vehicles to stop. Based on these factors, installation of a westbound left-turn lane on Willamette Falls Boulevard at $11^{\text {th }}$ Street is not recommended.

For the intersection of $10^{\text {th }}$ Street at $8^{\text {th }}$ Avenue $/ 8^{\text {th }}$ Court, the planned improvements currently being implemented include the installation of a pork-chop diverter island on the west side of the intersection which will restrict turning movements to right-in, right-out only. Since northbound left-turns will no longer be permitted at this intersection, installation of a northbound left-turn lane is not recommended.

Based on the analysis, no new left-turn lanes are recommended in conjunction with the proposed development.

## Conclusions

Based on the operational analysis, the signalized study intersections and the intersection of Willamette Falls Drive at $11^{\text {th }}$ Street currently operate acceptably and are projected to continue to operate acceptably under year 2025 traffic conditions either with or without the addition of site trips from the proposed development. Additionally, construction of a new planned roundabout at the intersection of Willamette Falls Drive at $10^{\text {th }}$ Street is projected to ensure that the intersection will operate acceptably under year 2025 traffic conditions either with or without the addition of sit trips from the proposed development. No mitigations are necessary or recommended for these intersections in conjunction with the proposed development.

The intersection of Willamette Falls Drive at $12^{\text {th }}$ Street is projected to operate within capacity but at level of service "E" during the morning and evening peak hours under year 2025 traffic conditions either with or without the addition of site trips from the proposed development. Although a traffic signal cannot be installed at the intersection at this time, it is recommended that a traffic signal be installed once signal warrants are met. It is recommended that the developer pay a proportionate share contribution of $\$ 2,488$ toward the future signalization cost based on the projected impacts at this location.

As described in the City's Transportation System Plan, the intersection of $10^{\text {th }}$ Street at $8^{\text {th }}$ Avenue $/ 8^{\text {th }}$ Court is projected to operate at level of service F , but below capacity under future traffic conditions. Since the intersection is projected to operate better under year 2025 conditions with the addition of site trips from the proposed development than under existing conditions and since further improvements will require acquisition of a crossover easement connecting to Willamette Falls Drive across property not under the control of the current development, no further mitigation beyond installation of the planned turning-movement restrictions is recommended for this intersection at this time.

Based on the crash data, the study intersections are currently operating acceptably with respect to safety. No specific safety improvements are recommended based on crash history.

Based on the warrant analysis, traffic signal warrants are currently met for the intersection of Willamette Falls Drive and $10^{\text {th }}$ Street. However, this intersection is planned for installation of a roundabout, which is projected to adequately accommodate anticipated traffic volumes and patterns. No other traffic signals or turn lanes are recommended in conjunction with the proposed development.

APPENDIX





Note: Total study counts contained in parentheses.

|  | HV\% | PHF |
| :--- | :---: | :---: |
| EB | $4.6 \%$ | 0.75 |
| WB | $6.1 \%$ | 0.81 |
| NB | $1.2 \%$ | 0.58 |
| SB | $5.0 \%$ | 0.71 |
| All | $4.5 \%$ | 0.81 |

Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLAMETTE FALLS DR Eastbound |  |  |  | WILLAMETTE FALLS DR Westbound |  |  |  | 12TH ST <br> Northbound |  |  |  | 12TH ST <br> Southbound |  |  |  | Total | Rolling Hour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  |
| 7:00 AM | 0 | 0 | 7 | 0 | 0 | 6 | 10 | 1 | 0 | 1 | 0 | 6 | 0 | 2 | 0 | 0 | 33 | 749 |
| 7:05 AM | 0 | 0 | 14 | 2 | 0 | 4 | 11 | 0 | 0 | 0 | 0 | 6 | 0 | 1 | 0 | 0 | 38 | 806 |
| 7:10 AM | 0 | 0 | 9 | 0 | 0 | 3 | 14 | 1 | 0 | 2 | 1 | 5 | 0 | 1 | 0 | 0 | 36 | 856 |
| 7:15 AM | 0 | 0 | 19 | 1 | 0 | 5 | 7 | 1 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 41 | 901 |
| 7:20 AM | 0 | 0 | 16 | 1 | 0 | 7 | 17 | 1 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 48 | 933 |
| 7:25 AM | 0 | 0 | 19 | 2 | 0 | 10 | 9 | 3 | 0 | 0 | 1 | 7 | 0 | 0 | 0 | 0 | 51 | 939 |
| 7:30 AM | 0 | 0 | 20 | 0 | 0 | 8 | 18 | 2 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 54 | 947 |
| 7:35 AM | 0 | 0 | 23 | 1 | 0 | 13 | 18 | 0 | 0 | 0 | 1 | 9 | 0 | 2 | 1 | 0 | 68 | 955 |
| 7:40 AM | 0 | 1 | 28 | 5 | 0 | 15 | 18 | 0 | 0 | 4 | 0 | 12 | 0 | 0 | 0 | 2 | 85 | 938 |
| 7:45 AM | 0 | 1 | 39 | 2 | 0 | 9 | 25 | 0 | 0 | 4 | 0 | 14 | 0 | 1 | 0 | 0 | 95 | 923 |
| 7:50 AM | 0 | 2 | 39 | 1 | 0 | 8 | 26 | 1 | 0 | 4 | 0 | 24 | 0 | 1 | 0 | 1 | 107 | 870 |
| 7:55 AM | 0 | 1 | 36 | 0 | 0 | 11 | 17 | 0 | 0 | 5 | 0 | 23 | 0 | 0 | 0 | 0 | 93 | 816 |
| 8:00 AM | 0 | 0 | 41 | 0 | 0 | 7 | 20 | 1 | 0 | 0 | 0 | 18 | 0 | 1 | 2 | 0 | 90 | 788 |
| 8:05 AM | 0 | 1 | 46 | 0 | 0 | 7 | 21 | 1 | 0 | 1 | 1 | 8 | 0 | 2 | 0 | 0 | 88 |  |
| 8:10 AM | 0 | 1 | 52 | 0 | 0 | 10 | 8 | 1 | 0 | 0 | 0 | 8 | 0 | 1 | 0 | 0 | 81 |  |
| 8:15 AM | 0 | 1 | 44 | 0 | 0 | 3 | 10 | 3 | 0 | 0 | 0 | 11 | 0 | 1 | 0 | 0 | 73 |  |
| 8:20 AM | 0 | 1 | 21 | 1 | 0 | 5 | 14 | 2 | 0 | 0 | 1 | 7 | 0 | 0 | 1 | 1 | 54 |  |
| 8:25 AM | 0 | 1 | 22 | 1 | 0 | 9 | 20 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 1 | 0 | 59 |  |
| 8:30 AM | 0 | 1 | 22 | 2 | 0 | 2 | 22 | 1 | 0 | 0 | 2 | 8 | 0 | 1 | 0 | 1 | 62 |  |
| 8:35 AM | 0 | 0 | 13 | 3 | 0 | 5 | 17 | 0 | 0 | 1 | 0 | 10 | 0 | 0 | 1 | 1 | 51 |  |
| 8:40 AM | 0 | 0 | 24 | 1 | 0 | 12 | 20 | 2 | 0 | 1 | 0 | 7 | 0 | 3 | 0 | 0 | 70 |  |
| 8:45 AM | 0 | 0 | 8 | 0 | 0 | 9 | 14 | 0 | 0 | 1 | 1 | 8 | 0 | 1 | 0 | 0 | 42 |  |
| 8:50 AM | 0 | 0 | 12 | 1 | 0 | 9 | 20 | 1 | 0 | 2 | 0 | 8 | 0 | 0 | 0 | 0 | 53 |  |
| 8:55 AM | 0 | 0 | 27 | 3 | 0 | 5 | 19 | 1 | 0 | 1 | 0 | 8 | 0 | 1 | 0 | 0 | 65 |  |
| Count Total | 0 | 11 | 601 | 27 | 0 | 182 | 395 | 23 | 0 | 28 | 10 | 229 | 0 | 19 | 6 | 6 | 1,537 |  |
| Peak Hour | 0 | 11 | 413 | 13 | 0 | 99 | 219 | 10 | 0 | 19 | 5 | 146 | 0 | 10 | 5 | 5 | 955 |  |

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval | Heavy Vehicles |  |  |  |  | Interval Start Time | Bicycles on Roadway |  |  |  |  | Interval Start Time | Pedestrians/Bicycles on Crosswalk |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |
| 7:00 AM | 0 | 1 | 2 | 0 | 3 | 7:00 AM | 0 | 0 | 0 | 0 | 0 | 7:00 AM | 0 | 2 | 0 | 0 | 2 |
| 7:05 AM | 0 | 0 | 2 | 0 | 2 | 7:05 AM | 0 | 0 | 0 | 0 | 0 | 7:05 AM | 0 | 0 | 0 | 2 | 2 |
| 7:10 AM | 0 | 0 | 2 | 0 | 2 | 7:10 AM | 0 | 0 | 0 | 0 | 0 | 7:10 AM | 0 | 2 | 0 | 3 | 5 |
| 7:15 AM | 3 | 1 | 0 | 0 | 4 | 7:15 AM | 0 | 0 | 0 | 0 | 0 | 7:15 AM | 0 | 2 | 0 | 1 | 3 |
| 7:20 AM | 0 | 0 | 1 | 0 | 1 | 7:20 AM | 0 | 0 | 0 | 0 | 0 | 7:20 AM | 0 | 0 | 0 | 2 | 2 |
| 7:25 AM | 1 | 0 | 0 | 0 | 1 | 7:25 AM | 0 | 0 | 0 | 0 | 0 | 7:25 AM | 2 | 0 | 0 | 1 | 3 |
| 7:30 AM | 0 | 0 | 1 | 0 | 1 | 7:30 AM | 0 | 0 | 0 | 0 | 0 | 7:30 AM | 0 | 1 | 0 | 1 | 2 |
| 7:35 AM | 1 | 0 | 3 | 0 | 4 | 7:35 AM | 0 | 0 | 0 | 0 | 0 | 7:35 AM | 2 | 1 | 0 | 0 | 3 |
| 7:40 AM | 2 | 0 | 0 | 0 | 2 | 7:40 AM | 0 | 0 | 0 | 0 | 0 | 7:40 AM | 2 | 0 | 0 | 1 | 3 |
| 7:45 AM | 0 | 0 | 2 | 0 | 2 | 7:45 AM | 0 | 0 | 0 | 0 | 0 | 7:45 AM | 3 | 1 | 0 | 0 | 4 |
| 7:50 AM | 1 | 0 | 2 | 0 | 3 | 7:50 AM | 0 | 0 | 0 | 0 | 0 | 7:50 AM | 1 | 4 | 0 | 1 | 6 |
| 7:55 AM | 3 | 1 | 1 | 0 | 5 | 7:55 AM | 0 | 0 | 0 | 0 | 0 | 7:55 AM | 0 | 0 | 2 | 2 | 4 |
| 8:00 AM | 4 | 0 | 4 | 0 | 8 | 8:00 AM | 0 | 0 | 0 | 0 | 0 | 8:00 AM | 0 | 0 | 1 | 2 | 3 |
| 8:05 AM | 1 | 0 | 2 | 0 | 3 | 8:05 AM | 0 | 0 | 0 | 0 | 0 | 8:05 AM | 0 | 0 | 2 | 0 | 2 |
| 8:10 AM | 3 | 0 | 0 | 0 | 3 | 8:10 AM | 0 | 0 | 0 | 0 | 0 | 8:10 AM | 0 | 1 | 0 | 0 | 1 |
| 8:15 AM | 2 | 0 | 0 | 0 | 2 | 8:15 AM | 0 | 0 | 0 | 0 | 0 | 8:15 AM | 1 | 0 | 0 | 0 | 1 |
| 8:20 AM | 1 | 0 | 1 | 0 | 2 | 8:20 AM | 0 | 0 | 0 | 0 | 0 | 8:20 AM | 0 | 0 | 1 | 2 | 3 |
| 8:25 AM | 1 | 0 | 3 | 0 | 4 | 8:25 AM | 0 | 0 | 0 | 0 | 0 | 8:25 AM | 0 | 0 | 2 | 1 | 3 |
| 8:30 AM | 1 | 1 | 2 | 1 | 5 | 8:30 AM | 0 | 0 | 0 | 0 | 0 | 8:30 AM | 0 | 0 | 0 | 2 | 2 |
| 8:35 AM | 1 | 1 | 1 | 1 | 4 | 8:35 AM | 0 | 0 | 0 | 0 | 0 | 8:35 AM | 0 | 1 | 0 | 1 | 2 |
| 8:40 AM | 1 | 0 | 0 | 0 | 1 | 8:40 AM | 0 | 0 | 0 | 0 | 0 | 8:40 AM | 0 | 0 | 0 | 1 | 1 |
| 8:45 AM | 0 | 0 | 3 | 0 | 3 | 8:45 AM | 0 | 0 | 0 | 0 | 0 | 8:45 AM | 0 | 0 | 0 | 2 | 2 |
| 8:50 AM | 0 | 0 | 2 | 0 | 2 | 8:50 AM | 0 | 0 | 0 | 0 | 0 | 8:50 AM | 0 | 1 | 1 | 0 | 2 |
| 8:55 AM | 2 | 0 | 2 | 0 | 4 | 8:55 AM | 0 | 0 | 0 | 0 | 0 | 8:55 AM | 0 | 0 | 0 | 0 | 0 |
| Count Total | 28 | 5 | 36 | 2 | 71 | Count Total | 0 | 0 | 0 | 0 | 0 | Count Total | 11 | 16 | 9 | 25 | 61 |
| Peak Hour | 20 | 2 | 20 | 1 | 43 | Peak Hour | 0 | 0 | 0 | 0 | 0 | Peak Hour | 9 | 7 | 8 | 11 | 35 |



Note: Total study counts contained in parentheses.

|  | HV\% | PHF |
| :--- | :---: | :---: |
| EB | $3.6 \%$ | 0.78 |
| WB | $4.9 \%$ | 0.72 |
| NB | $11.8 \%$ | 0.60 |
| SB | $0.0 \%$ | 0.25 |
| All | $4.6 \%$ | 0.80 |

Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLAMETTE FALLS DR Eastbound |  |  |  | WILLAMETTE FALLS DR Westbound |  |  |  | 11TH ST <br> Northbound |  |  |  | 11TH ST Southbound |  |  |  | Total | Rolling Hour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  |
| 7:00 AM | 0 | 0 | 15 | 0 | 0 | 2 | 20 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 786 |
| 7:05 AM | 0 | 0 | 21 | 0 | 0 | 1 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 850 |
| 7:10 AM | 0 | 0 | 16 | 0 | 0 | 1 | 19 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 38 | 898 |
| 7:15 AM | 0 | 0 | 26 | 0 | 0 | 1 | 12 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 42 | 952 |
| 7:20 AM | 0 | 0 | 20 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 52 | 983 |
| 7:25 AM | 0 | 0 | 25 | 0 | 0 | 1 | 19 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 47 | 985 |
| 7:30 AM | 0 | 0 | 23 | 1 | 0 | 3 | 28 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 56 | 1,001 |
| 7:35 AM | 0 | 0 | 23 | 6 | 0 | 8 | 30 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 69 | 1,007 |
| 7:40 AM | 0 | 0 | 36 | 5 | 0 | 20 | 31 | 1 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 1 | 100 | 989 |
| 7:45 AM | 0 | 0 | 41 | 8 | 0 | 11 | 35 | 0 | 0 | 1 | 0 | 10 | 0 | 0 | 0 | 0 | 106 | 951 |
| 7:50 AM | 0 | 0 | 61 | 0 | 0 | 9 | 34 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 110 | 888 |
| 7:55 AM | 0 | 1 | 58 | 0 | 0 | 3 | 26 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 93 | 837 |
| 8:00 AM | 0 | 0 | 56 | 0 | 0 | 5 | 33 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 102 | 809 |
| 8:05 AM | 0 | 0 | 49 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 83 |  |
| 8:10 AM | 0 | 0 | 66 | 0 | 0 | 2 | 23 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 92 |  |
| 8:15 AM | 0 | 0 | 54 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 73 |  |
| 8:20 AM | 0 | 0 | 26 | 1 | 0 | 1 | 23 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 54 |  |
| 8:25 AM | 0 | 0 | 26 | 0 | 0 | 3 | 31 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 63 |  |
| 8:30 AM | 0 | 0 | 31 | 0 | 0 | 4 | 24 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 62 |  |
| 8:35 AM | 0 | 0 | 19 | 0 | 0 | 6 | 24 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 51 |  |
| 8:40 AM | 0 | 0 | 28 | 1 | 0 | 2 | 28 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 62 |  |
| 8:45 AM | 0 | 0 | 17 | 0 | 0 | 2 | 22 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 43 |  |
| 8:50 AM | 0 | 0 | 21 | 1 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 |  |
| 8:55 AM | 0 | 0 | 33 | 1 | 0 | 4 | 26 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 |  |
| Count Total | 0 | 1 | 791 | 24 | 0 | 89 | 610 | 10 | 0 | 2 | 0 | 67 | 0 | 0 | 0 | 1 | 1,595 |  |
| Peak Hour | 0 | 1 | 527 | 20 | 0 | 66 | 334 | 7 | 0 | 2 | 0 | 49 | 0 | 0 | 0 | 1 | 1,007 |  |

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval | Heavy Vehicles |  |  |  |  | Interval Start Time | Bicycles on Roadway |  |  |  |  | Interval Start Time | Pedestrians/Bicycles on Crosswalk |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |
| 7:00 AM | 1 | 0 | 2 | 0 | 3 | 7:00 AM | 0 | 0 | 0 | 0 | 0 | 7:00 AM | 0 | 0 | 0 | 0 | 0 |
| 7:05 AM | 0 | 0 | 1 | 0 | 1 | 7:05 AM | 0 | 0 | 0 | 0 | 0 | 7:05 AM | 0 | 0 | 0 | 3 | 3 |
| 7:10 AM | 0 | 0 | 2 | 0 | 2 | 7:10 AM | 0 | 0 | 0 | 0 | 0 | 7:10 AM | 0 | 0 | 1 | 1 | 2 |
| 7:15 AM | 4 | 0 | 0 | 0 | 4 | 7:15 AM | 0 | 0 | 0 | 0 | 0 | 7:15 AM | 0 | 2 | 1 | 1 | 4 |
| 7:20 AM | 0 | 0 | 1 | 0 | 1 | 7:20 AM | 0 | 0 | 0 | 0 | 0 | 7:20 AM | 0 | 0 | 1 | 1 | 2 |
| 7:25 AM | 1 | 0 | 0 | 0 | 1 | 7:25 AM | 0 | 0 | 0 | 0 | 0 | 7:25 AM | 0 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 1 | 0 | 1 | 7:30 AM | 0 | 0 | 0 | 0 | 0 | 7:30 AM | 0 | 3 | 0 | 1 | 4 |
| 7:35 AM | 1 | 1 | 3 | 0 | 5 | 7:35 AM | 0 | 0 | 0 | 0 | 0 | 7:35 AM | 0 | 0 | 0 | 0 | 0 |
| 7:40 AM | 0 | 2 | 0 | 0 | 2 | 7:40 AM | 0 | 0 | 0 | 0 | 0 | 7:40 AM | 0 | 0 | 4 | 1 | 5 |
| 7:45 AM | 0 | 1 | 2 | 0 | 3 | 7:45 AM | 0 | 0 | 0 | 0 | 0 | 7:45 AM | 0 | 0 | 0 | 0 | 0 |
| 7:50 AM | 1 | 1 | 2 | 0 | 4 | 7:50 AM | 0 | 0 | 0 | 0 | 0 | 7:50 AM | 0 | 2 | 2 | 2 | 6 |
| 7:55 AM | 3 | 1 | 1 | 0 | 5 | 7:55 AM | 0 | 0 | 0 | 0 | 0 | 7:55 AM | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | 4 | 0 | 4 | 0 | 8 | 8:00 AM | 0 | 0 | 0 | 0 | 0 | 8:00 AM | 0 | 0 | 0 | 1 | 1 |
| 8:05 AM | 1 | 0 | 2 | 0 | 3 | 8:05 AM | 0 | 0 | 0 | 0 | 0 | 8:05 AM | 0 | 1 | 0 | 2 | 3 |
| 8:10 AM | 3 | 0 | 0 | 0 | 3 | 8:10 AM | 0 | 0 | 0 | 0 | 0 | 8:10 AM | 0 | 1 | 2 | 0 | 3 |
| 8:15 AM | 2 | 0 | 0 | 0 | 2 | 8:15 AM | 0 | 0 | 0 | 0 | 0 | 8:15 AM | 0 | 0 | 0 | 0 | 0 |
| 8:20 AM | 1 | 0 | 2 | 0 | 3 | 8:20 AM | 0 | 0 | 0 | 0 | 0 | 8:20 AM | 0 | 0 | 0 | 0 | 0 |
| 8:25 AM | 1 | 0 | 2 | 0 | 3 | 8:25 AM | 0 | 0 | 0 | 0 | 0 | 8:25 AM | 0 | 0 | 0 | 0 | 0 |
| 8:30 AM | 3 | 0 | 2 | 0 | 5 | 8:30 AM | 0 | 0 | 0 | 0 | 0 | 8:30 AM | 0 | 0 | 0 | 0 | 0 |
| 8:35 AM | 1 | 1 | 1 | 0 | 3 | 8:35 AM | 0 | 0 | 0 | 0 | 0 | 8:35 AM | 0 | 0 | 0 | 2 | 2 |
| 8:40 AM | 1 | 0 | 0 | 0 | 1 | 8:40 AM | 0 | 0 | 0 | 0 | 0 | 8:40 AM | 0 | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 3 | 0 | 3 | 8:45 AM | 0 | 0 | 0 | 0 | 0 | 8:45 AM | 0 | 0 | 0 | 0 | 0 |
| 8:50 AM | 0 | 0 | 2 | 0 | 2 | 8:50 AM | 0 | 0 | 0 | 0 | 0 | 8:50 AM | 0 | 0 | 1 | 1 | 2 |
| 8:55 AM | 2 | 0 | 2 | 0 | 4 | 8:55 AM | 0 | 0 | 0 | 0 | 0 | 8:55 AM | 0 | 0 | 0 | 0 | 0 |
| Count Total | 30 | 7 | 35 | 0 | 72 | Count Total | 0 | 0 | 0 | 0 | 0 | Count Total | 0 | 9 | 12 | 16 | 37 |
| Peak Hour | 20 | 6 | 20 | 0 | 46 | Peak Hour | 0 | 0 | 0 | 0 | 0 | Peak Hour | 0 | 4 | 8 | 6 | 18 |



Note: Total study counts contained in parentheses.

|  | HV\% | PHF |
| :---: | :---: | :---: |
| EB | $2.9 \%$ | 0.68 |
| WB | $3.1 \%$ | 0.92 |
| NB | $6.5 \%$ | 0.62 |
| SB |  |  |
| All | $3.3 \%$ | 0.87 |

Traffic Counts - Motorized Vehicles

| Interval | WILLAMETTE FALLS DR Eastbound |  |  |  | WILLAMETTE FALLS DR Westbound |  |  |  | 10TH ST <br> Northbound |  |  |  | Southbound |  |  |  | Total | Rolling Hour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  |
| 7:00 AM | 0 | 0 | 5 | 0 | 0 | 0 | 10 | 0 | 0 | 3 | 0 | 0 |  |  |  |  | 18 | 541 |
| 7:05 AM | 0 | 0 | 12 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 1 |  |  |  |  | 30 | 587 |
| 7:10 AM | 0 | 0 | 9 | 2 | 0 | 1 | 20 | 0 | 0 | 5 | 0 | 1 |  |  |  |  | 38 | 614 |
| 7:15 AM | 0 | 0 | 20 | 1 | 0 | 0 | 21 | 0 | 0 | 3 | 0 | 0 |  |  |  |  | 45 | 646 |
| 7:20 AM | 0 | 0 | 16 | 2 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 |  |  |  |  | 45 | 678 |
| 7:25 AM | 0 | 0 | 13 | 2 | 0 | 0 | 15 | 0 | 0 | 2 | 0 | 1 |  |  |  |  | 33 | 693 |
| 7:30 AM | 0 | 0 | 15 | 0 | 0 | 1 | 21 | 0 | 0 | 2 | 0 | 1 |  |  |  |  | 40 | 708 |
| 7:35 AM | 0 | 0 | 11 | 0 | 0 | 1 | 24 | 0 | 0 | 7 | 0 | 2 |  |  |  |  | 45 | 724 |
| 7:40 AM | 0 | 0 | 15 | 3 | 0 | 0 | 30 | 0 | 0 | 7 | 0 | 0 |  |  |  |  | 55 | 718 |
| 7:45 AM | 0 | 0 | 22 | 4 | 0 | 0 | 28 | 0 | 0 | 8 | 0 | 2 |  |  |  |  | 64 | 709 |
| 7:50 AM | 1 | 0 | 27 | 2 | 0 | 0 | 34 | 0 | 0 | 4 | 0 | 1 |  |  |  |  | 69 | 680 |
| 7:55 AM | 0 | 0 | 23 | 2 | 0 | 0 | 29 | 0 | 0 | 4 | 0 | 1 |  |  |  |  | 59 | 651 |
| 8:00 AM | 0 | 0 | 24 | 2 | 0 | 1 | 33 | 0 | 0 | 4 | 0 | 0 |  |  |  |  | 64 | 626 |
| 8:05 AM | 0 | 0 | 31 | 0 | 0 | 1 | 21 | 0 | 0 | 2 | 0 | 2 |  |  |  |  | 57 |  |
| 8:10 AM | 0 | 0 | 40 | 2 | 0 | 0 | 23 | 0 | 0 | 3 | 0 | 2 |  |  |  |  | 70 |  |
| 8:15 AM | 0 | 0 | 41 | 0 | 0 | 1 | 29 | 0 | 0 | 3 | 0 | 3 |  |  |  |  | 77 |  |
| 8:20 AM | 0 | 0 | 25 | 2 | 0 | 0 | 30 | 0 | 0 | 3 | 0 | 0 |  |  |  |  | 60 |  |
| 8:25 AM | 0 | 0 | 15 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 |  |  |  |  | 48 |  |
| 8:30 AM | 0 | 0 | 19 | 0 | 0 | 0 | 33 | 0 | 0 | 3 | 0 | 1 |  |  |  |  | 56 |  |
| 8:35 AM | 0 | 0 | 8 | 0 | 0 | 0 | 30 | 0 | 0 | 1 | 0 | 0 |  |  |  |  | 39 |  |
| 8:40 AM | 0 | 0 | 19 | 1 | 0 | 0 | 25 | 0 | 0 | 1 | 0 | 0 |  |  |  |  | 46 |  |
| 8:45 AM | 0 | 0 | 10 | 1 | 0 | 0 | 22 | 0 | 0 | 2 | 0 | 0 |  |  |  |  | 35 |  |
| 8:50 AM | 0 | 0 | 11 | 1 | 0 | 0 | 25 | 0 | 0 | 3 | 0 | 0 |  |  |  |  | 40 |  |
| 8:55 AM | 0 | 0 | 12 | 2 | 0 | 1 | 18 | 0 | 0 | 1 | 0 | 0 |  |  |  |  | 34 |  |
| Count Total | 1 | 0 | 443 | 29 | 0 | 7 | 598 | 0 | 0 | 71 | 0 | 18 |  |  |  |  | 1,167 |  |
| Peak Hour | 1 | 0 | 293 | 17 | 0 | 4 | 347 | 0 | 0 | 48 | 0 | 14 |  |  |  |  | 724 |  |

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval | Heavy Vehicles |  |  |  |  | Interval Start Time | Bicycles on Roadway |  |  |  |  |  | Interval Start Time | Pedestrians/Bicycles on Crosswalk |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | EB | NB | WB | SB | Total |  | EB |  | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |
| 7:00 AM | 1 | 0 | 0 |  | 1 | 7:00 AM |  | 0 | 0 | 0 |  | 0 | 7:00 AM | 0 | 0 | 0 |  | 0 |
| 7:05 AM | 1 | 0 | 0 |  | 1 | 7:05 AM |  | 0 | 0 | 0 |  | 0 | 7:05 AM | 0 | 0 | 0 |  | 0 |
| 7:10 AM | 0 | 0 | 1 |  | 1 | 7:10 AM |  | 0 | 0 | 0 |  | 0 | 7:10 AM | 0 | 0 | 0 |  | 0 |
| 7:15 AM | 2 | 0 | 0 |  | 2 | 7:15 AM |  | 0 | 0 | 0 |  | 0 | 7:15 AM | 0 | 0 | 0 |  | 0 |
| 7:20 AM | 0 | 0 | 0 |  | 0 | 7:20 AM |  | 0 | 0 | 0 |  | 0 | 7:20 AM | 0 | 0 | 0 |  | 0 |
| 7:25 AM | 1 | 0 | 0 |  | 1 | 7:25 AM |  | 0 | 0 | 0 |  | 0 | 7:25 AM | 0 | 0 | 0 |  | 0 |
| 7:30 AM | 0 | 0 | 0 |  | 0 | 7:30 AM |  | 0 | 0 | 0 |  | 0 | 7:30 AM | 0 | 0 | 0 |  | 0 |
| 7:35 AM | 0 | 0 | 0 |  | 0 | 7:35 AM |  | 0 | 0 | 0 |  | 0 | 7:35 AM | 0 | 0 | 0 |  | 0 |
| 7:40 AM | 0 | 1 | 0 |  | 1 | 7:40 AM |  | 0 | 0 | 0 |  | 0 | 7:40 AM | 0 | 3 | 0 |  | 3 |
| 7:45 AM | 0 | 0 | 1 |  | 1 | 7:45 AM |  | 0 | 0 | 0 |  | 0 | 7:45 AM | 0 | 0 | 0 |  | 0 |
| 7:50 AM | 0 | 0 | 1 |  | 1 | 7:50 AM |  | 0 | 0 | 0 |  | 0 | 7:50 AM | 0 | 1 | 0 |  | 1 |
| 7:55 AM | 0 | 0 | 0 |  | 0 | 7:55 AM |  | 0 | 0 | 0 |  | 0 | 7:55 AM | 0 | 0 | 0 |  | 0 |
| 8:00 AM | 0 | 0 | 1 |  | 1 | 8:00 AM |  | 0 | 0 | 0 |  | 0 | 8:00 AM | 0 | 1 | 0 |  | 1 |
| 8:05 AM | 2 | 2 | 2 |  | 6 | 8:05 AM |  | 0 | 0 | 0 |  | 0 | 8:05 AM | 0 | 1 | 0 |  | 1 |
| 8:10 AM | 2 | 0 | 1 |  | 3 | 8:10 AM |  | 0 | 0 | 0 |  | 0 | 8:10 AM | 0 | 0 | 0 |  | 0 |
| 8:15 AM | 3 | 1 | 1 |  | 5 | 8:15 AM |  | 0 | 0 | 0 |  | 0 | 8:15 AM | 0 | 2 | 0 |  | 2 |
| 8:20 AM | 0 | 0 | 1 |  | 1 | 8:20 AM |  | 0 | 0 | 0 |  | 0 | 8:20 AM | 0 | 0 | 0 |  | 0 |
| 8:25 AM | 0 | 0 | 3 |  | 3 | 8:25 AM |  | 0 | 0 | 0 |  | 0 | 8:25 AM | 0 | 1 | 0 |  | 1 |
| 8:30 AM | 2 | 0 | 0 |  | 2 | 8:30 AM |  | 0 | 0 | 0 |  | 0 | 8:30 AM | 0 | 0 | 0 |  | 0 |
| 8:35 AM | 0 | 0 | 3 |  | 3 | 8:35 AM |  | 0 | 0 | 0 |  | 0 | 8:35 AM | 0 | 0 | 0 |  | 0 |
| 8:40 AM | 1 | 0 | 1 |  | 2 | 8:40 AM |  | 0 | 0 | 0 |  | 0 | 8:40 AM | 0 | 1 | 0 |  | 1 |
| 8:45 AM | 0 | 0 | 0 |  | 0 | 8:45 AM |  | 0 | 0 | 0 |  | 0 | 8:45 AM | 0 | 0 | 0 |  | 0 |
| 8:50 AM | 0 | 0 | 0 |  | 0 | 8:50 AM |  | 0 | 0 | 0 |  | 0 | 8:50 AM | 0 | 0 | 0 |  | 0 |
| 8:55 AM | 1 | 0 | 0 |  | 1 | 8:55 AM |  | 0 | 0 | 0 |  | 0 | 8:55 AM | 0 | 0 | 0 |  | 0 |
| Count Total | 16 | 4 | 16 |  | 36 | Count Total |  | 0 | 0 | 0 |  | 0 | Count Total | 0 | 10 | 0 |  | 10 |
| Peak Hour | 9 | 4 | 11 |  | 24 | Peak Hour |  | 0 | 0 | 0 |  | 0 | Peak Hour | 0 | 9 | 0 |  | 9 |



Note: Total study counts contained in parentheses.

|  | HV\% | PHF |
| :--- | :---: | :---: |
| EB | $5.3 \%$ | 0.68 |
| WB | $0.5 \%$ | 0.93 |
| NB | $4.5 \%$ | 0.80 |
| SB | $3.6 \%$ | 0.72 |
| All | $3.6 \%$ | 0.85 |

Traffic Counts - Motorized Vehicles

| Interval | 8TH AVE <br> Eastbound |  |  |  | 8TH AVE <br> Westbound |  |  |  | 10TH ST <br> Northbound |  |  |  | 10TH ST <br> Southbound |  |  |  | Total | Rolling Hour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  |
| 7:00 AM | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 9 | 0 | 0 | 9 | 9 | 0 | 11 | 18 | 0 | 60 | 1,061 |
| 7:05 AM | 0 | 2 | 1 | 0 | 0 | 2 | 0 | 10 | 0 | 1 | 17 | 6 | 0 | 9 | 10 | 4 | 62 | 1,110 |
| 7:10 AM | 0 | 2 | 0 | 0 | 0 | 4 | 1 | 11 | 0 | 1 | 21 | 4 | 0 | 10 | 11 | 4 | 69 | 1,150 |
| 7:15 AM | 0 | 3 | 1 | 0 | 0 | 5 | 1 | 14 | 0 | 0 | 22 | 9 | 0 | 15 | 10 | 4 | 84 | 1,180 |
| 7:20 AM | 0 | 3 | 0 | 0 | 0 | 3 | 1 | 10 | 0 | 0 | 20 | 5 | 0 | 11 | 18 | 0 | 71 | 1,180 |
| 7:25 AM | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 15 | 0 | 0 | 18 | 4 | 0 | 12 | 11 | 4 | 68 | 1,193 |
| 7:30 AM | 0 | 3 | 0 | 0 | 0 | 5 | 1 | 11 | 0 | 0 | 18 | 9 | 0 | 10 | 15 | 3 | 75 | 1,222 |
| 7:35 AM | 0 | 2 | 0 | 0 | 0 | 2 | 1 | 13 | 0 | 0 | 27 | 4 | 0 | 17 | 33 | 6 | 105 | 1,229 |
| 7:40 AM | 0 | 1 | 0 | 1 | 0 | 6 | 0 | 13 | 0 | 0 | 39 | 7 | 0 | 11 | 33 | 4 | 115 | 1,203 |
| 7:45 AM | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 14 | 0 | 4 | 48 | 3 | 0 | 10 | 34 | 6 | 124 | 1,185 |
| 7:50 AM | 0 | 4 | 1 | 1 | 0 | 3 | 1 | 10 | 0 | 0 | 53 | 5 | 0 | 12 | 22 | 9 | 121 | 1,146 |
| 7:55 AM | 0 | 5 | 1 | 1 | 0 | 1 | 1 | 16 | 0 | 0 | 50 | 7 | 0 | 9 | 11 | 5 | 107 | 1,092 |
| 8:00 AM | 0 | 3 | 1 | 0 | 0 | 3 | 0 | 9 | 0 | 1 | 51 | 7 | 0 | 9 | 19 | 6 | 109 | 1,081 |
| 8:05 AM | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 14 | 0 | 1 | 39 | 11 | 0 | 9 | 22 | 2 | 102 |  |
| 8:10 AM | 0 | 3 | 1 | 1 | 0 | 1 | 1 | 11 | 0 | 1 | 44 | 4 | 0 | 9 | 19 | 4 | 99 |  |
| 8:15 AM | 0 | 2 | 0 | 3 | 0 | 2 | 1 | 6 | 0 | 2 | 34 | 8 | 0 | 10 | 12 | 4 | 84 |  |
| 8:20 AM | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 13 | 0 | 0 | 21 | 12 | 0 | 13 | 16 | 5 | 84 |  |
| 8:25 AM | 0 | 2 | 0 | 0 | 0 | 7 | 1 | 16 | 0 | 2 | 26 | 6 | 0 | 13 | 20 | 4 | 97 |  |
| 8:30 AM | 0 | 2 | 0 | 0 | 0 | 5 | 1 | 10 | 0 | 1 | 31 | 7 | 0 | 9 | 12 | 4 | 82 |  |
| 8:35 AM | 0 | 6 | 0 | 1 | 0 | 2 | 1 | 10 | 0 | 2 | 14 | 6 | 0 | 17 | 15 | 5 | 79 |  |
| 8:40 AM | 0 | 3 | 0 | 2 | 0 | 2 | 3 | 19 | 0 | 2 | 31 | 4 | 0 | 11 | 16 | 4 | 97 |  |
| 8:45 AM | 0 | 1 | 0 | 0 | 0 | 7 | 1 | 11 | 0 | 2 | 22 | 5 | 0 | 10 | 21 | 5 | 85 |  |
| 8:50 AM | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 11 | 0 | 0 | 18 | 4 | 0 | 6 | 18 | 4 | 67 |  |
| 8:55 AM | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 8 | 0 | 2 | 28 | 9 | 0 | 13 | 26 | 7 | 96 |  |
| Count Total | 0 | 54 | 8 | 12 | 0 | 75 | 20 | 284 | 0 | 22 | 701 | 155 | 0 | 266 | 442 | 103 | 2,142 |  |
| Peak Hour | 0 | 25 | 5 | 8 | 0 | 37 | 10 | 145 | 0 | 12 | 463 | 81 | 0 | 131 | 253 | 59 | 1,229 |  |

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval | Heavy Vehicles |  |  |  |  | Interval Start Time | Bicycles on Roadway |  |  |  |  | Interval Start Time | Pedestrians/Bicycles on Crosswalk |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |
| 7:00 AM | 0 | 1 | 0 | 2 | 3 | 7:00 AM | 0 | 0 | 0 | 0 | 0 | 7:00 AM | 0 | 0 | 0 | 0 | 0 |
| 7:05 AM | 0 | 0 | 0 | 2 | 2 | 7:05 AM | 0 | 0 | 0 | 0 | 0 | 7:05 AM | 0 | 0 | 0 | 0 | 0 |
| 7:10 AM | 1 | 1 | 0 | 2 | 4 | 7:10 AM | 0 | 0 | 0 | 0 | 0 | 7:10 AM | 0 | 1 | 0 | 0 | 1 |
| 7:15 AM | 1 | 3 | 0 | 0 | 4 | 7:15 AM | 0 | 0 | 0 | 0 | 0 | 7:15 AM | 0 | 0 | 0 | 0 | 0 |
| 7:20 AM | 0 | 0 | 0 | 1 | 1 | 7:20 AM | 0 | 0 | 0 | 0 | 0 | 7:20 AM | 0 | 0 | 0 | 0 | 0 |
| 7:25 AM | 0 | 0 | 0 | 1 | 1 | 7:25 AM | 0 | 0 | 0 | 0 | 0 | 7:25 AM | 0 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 7:30 AM | 0 | 0 | 0 | 0 | 0 | 7:30 AM | 0 | 2 | 2 | 0 | 4 |
| 7:35 AM | 0 | 1 | 1 | 3 | 5 | 7:35 AM | 0 | 0 | 0 | 0 | 0 | 7:35 AM | 1 | 0 | 0 | 0 | 1 |
| 7:40 AM | 0 | 4 | 0 | 0 | 4 | 7:40 AM | 0 | 0 | 0 | 0 | 0 | 7:40 AM | 0 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 3 | 0 | 2 | 5 | 7:45 AM | 0 | 0 | 0 | 0 | 0 | 7:45 AM | 0 | 0 | 0 | 0 | 0 |
| 7:50 AM | 0 | 1 | 0 | 1 | 2 | 7:50 AM | 0 | 0 | 0 | 0 | 0 | 7:50 AM | 0 | 0 | 0 | 0 | 0 |
| 7:55 AM | 0 | 5 | 0 | 0 | 5 | 7:55 AM | 0 | 0 | 0 | 0 | 0 | 7:55 AM | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | 2 | 4 | 0 | 3 | 9 | 8:00 AM | 0 | 0 | 0 | 0 | 0 | 8:00 AM | 0 | 0 | 0 | 0 | 0 |
| 8:05 AM | 0 | 1 | 0 | 2 | 3 | 8:05 AM | 0 | 0 | 0 | 0 | 0 | 8:05 AM | 0 | 0 | 0 | 0 | 0 |
| 8:10 AM | 0 | 1 | 0 | 0 | 1 | 8:10 AM | 0 | 0 | 0 | 0 | 0 | 8:10 AM | 0 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 2 | 0 | 1 | 3 | 8:15 AM | 0 | 0 | 0 | 0 | 0 | 8:15 AM | 1 | 0 | 0 | 0 | 1 |
| 8:20 AM | 0 | 1 | 0 | 1 | 2 | 8:20 AM | 0 | 0 | 0 | 0 | 0 | 8:20 AM | 0 | 0 | 0 | 0 | 0 |
| 8:25 AM | 0 | 1 | 0 | 2 | 3 | 8:25 AM | 0 | 0 | 0 | 0 | 0 | 8:25 AM | 0 | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 1 | 0 | 1 | 2 | 8:30 AM | 0 | 0 | 0 | 0 | 0 | 8:30 AM | 1 | 0 | 0 | 0 | 1 |
| 8:35 AM | 0 | 3 | 0 | 0 | 3 | 8:35 AM | 0 | 0 | 0 | 0 | 0 | 8:35 AM | 0 | 0 | 0 | 0 | 0 |
| 8:40 AM | 1 | 2 | 0 | 0 | 3 | 8:40 AM | 0 | 0 | 0 | 0 | 0 | 8:40 AM | 0 | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 4 | 4 | 8:45 AM | 0 | 0 | 0 | 0 | 0 | 8:45 AM | 0 | 0 | 0 | 0 | 0 |
| 8:50 AM | 0 | 0 | 0 | 2 | 2 | 8:50 AM | 0 | 0 | 0 | 0 | 0 | 8:50 AM | 0 | 0 | 0 | 1 | 1 |
| 8:55 AM | 0 | 1 | 0 | 3 | 4 | 8:55 AM | 0 | 0 | 0 | 0 | 0 | 8:55 AM | 0 | 1 | 0 | 0 | 1 |
| Count Total | 5 | 36 | 1 | 33 | 75 | Count Total | 0 | 0 | 0 | 0 | 0 | Count Total | 3 | 4 | 2 | 1 | 10 |
| Peak Hour | 2 | 25 | 1 | 16 | 44 | Peak Hour | 0 | 0 | 0 | 0 | 0 | Peak Hour | 3 | 0 | 0 | 0 | 3 |



Note: Total study counts contained in parentheses.

|  | HV\% | PHF |
| :--- | :---: | :---: |
| EB | $4.6 \%$ | 0.78 |
| WB | $0.0 \%$ | 0.00 |
| NB | $4.6 \%$ | 0.80 |
| SB | $2.5 \%$ | 0.82 |
| All | $3.7 \%$ | 0.92 |

Traffic Counts - Motorized Vehicles

| Interval Start Time | 1205 NB RAMPS <br> Eastbound |  |  |  | I205 NB RAMPS <br> Westbound |  |  |  | 10TH ST <br> Northbound |  |  |  | 10TH ST <br> Southbound |  |  |  | Total | Rolling Hour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  |
| 7:00 AM | 0 | 10 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 9 | 0 | 17 | 23 | 0 | 77 | 1,196 |
| 7:05 AM | 0 | 4 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 12 | 0 | 15 | 18 | 0 | 71 | 1,255 |
| 7:10 AM | 0 | 6 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 6 | 0 | 10 | 18 | 0 | 71 | 1,309 |
| 7:15 AM | 0 | 10 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 14 | 0 | 18 | 15 | 0 | 97 | 1,366 |
| 7:20 AM | 0 | 5 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 21 | 0 | 17 | 24 | 0 | 85 | 1,381 |
| 7:25 AM | 0 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 10 | 0 | 19 | 24 | 0 | 82 | 1,395 |
| 7:30 AM | 0 | 4 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 9 | 0 | 19 | 26 | 0 | 83 | 1,414 |
| 7:35 AM | 0 | 7 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 17 | 0 | 18 | 49 | 0 | 120 | 1,435 |
| 7:40 AM | 0 | 2 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 23 | 0 | 15 | 42 | 0 | 118 | 1,406 |
| 7:45 AM | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 28 | 0 | 21 | 44 | 0 | 137 | 1,394 |
| 7:50 AM | 0 | 6 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 29 | 0 | 16 | 35 | 0 | 131 | 1,363 |
| 7:55 AM | 0 | 9 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 36 | 0 | 19 | 19 | 0 | 124 | 1,320 |
| 8:00 AM | 0 | 11 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 37 | 0 | 32 | 26 | 0 | 136 | 1,317 |
| 8:05 AM | 0 | 9 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 36 | 0 | 23 | 27 | 0 | 125 |  |
| 8:10 AM | 0 | 10 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 39 | 0 | 29 | 23 | 0 | 128 |  |
| 8:15 AM | 0 | 10 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 24 | 0 | 31 | 21 | 0 | 112 |  |
| 8:20 AM | 0 | 12 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 14 | 0 | 20 | 23 | 0 | 99 |  |
| 8:25 AM | 0 | 11 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 13 | 0 | 17 | 27 | 0 | 101 |  |
| 8:30 AM | 0 | 12 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 22 | 0 | 14 | 18 | 0 | 104 |  |
| 8:35 AM | 0 | 10 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 10 | 0 | 15 | 26 | 0 | 91 |  |
| 8:40 AM | 0 | 14 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 20 | 0 | 11 | 19 | 0 | 106 |  |
| 8:45 AM | 0 | 10 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 14 | 0 | 24 | 23 | 0 | 106 |  |
| 8:50 AM | 0 | 16 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 13 | 0 | 14 | 17 | 0 | 88 |  |
| 8:55 AM | 0 | 19 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 18 | 0 | 19 | 33 | 0 | 121 |  |
| Count Total | 0 | 216 | 0 | 192 | 0 | 0 | 0 | 0 | 0 | 0 | 558 | 474 | 0 | 453 | 620 | 0 | 2,513 |  |
| Peak Hour | 0 | 105 | 0 | 89 | 0 | 0 | 0 | 0 | 0 | 0 | 314 | 318 | 0 | 255 | 354 | 0 | 1,435 |  |

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval | Heavy Vehicles |  |  |  |  | Interval Start Time | Bicycles on Roadway |  |  |  |  | Interval Start Time | Pedestrians/Bicycles on Crosswalk |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |
| 7:00 AM | 2 | 1 | 0 | 1 | 4 | 7:00 AM | 0 | 0 | 0 | 0 | 0 | 7:00 AM | 1 | 0 | 0 | 0 | 1 |
| 7:05 AM | 3 | 0 | 0 | 1 | 4 | 7:05 AM | 0 | 0 | 0 | 0 | 0 | 7:05 AM | 0 | 0 | 0 | 0 | 0 |
| 7:10 AM | 1 | 2 | 0 | 2 | 5 | 7:10 AM | 0 | 0 | 0 | 0 | 0 | 7:10 AM | 0 | 0 | 0 | 0 | 0 |
| 7:15 AM | 2 | 3 | 0 | 0 | 5 | 7:15 AM | 0 | 0 | 0 | 0 | 0 | 7:15 AM | 0 | 0 | 0 | 0 | 0 |
| 7:20 AM | 1 | 1 | 0 | 1 | 3 | 7:20 AM | 0 | 0 | 0 | 0 | 0 | 7:20 AM | 0 | 0 | 0 | 0 | 0 |
| 7:25 AM | 0 | 0 | 0 | 1 | 1 | 7:25 AM | 0 | 0 | 0 | 0 | 0 | 7:25 AM | 0 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 7:30 AM | 0 | 0 | 0 | 0 | 0 | 7:30 AM | 0 | 0 | 0 | 0 | 0 |
| 7:35 AM | 1 | 2 | 0 | 3 | 6 | 7:35 AM | 0 | 0 | 0 | 0 | 0 | 7:35 AM | 1 | 0 | 0 | 0 | 1 |
| 7:40 AM | 1 | 4 | 0 | 0 | 5 | 7:40 AM | 0 | 0 | 0 | 0 | 0 | 7:40 AM | 0 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 3 | 0 | 2 | 5 | 7:45 AM | 0 | 0 | 0 | 0 | 0 | 7:45 AM | 0 | 0 | 0 | 0 | 0 |
| 7:50 AM | 0 | 1 | 0 | 1 | 2 | 7:50 AM | 0 | 0 | 0 | 0 | 0 | 7:50 AM | 0 | 0 | 0 | 0 | 0 |
| 7:55 AM | 1 | 5 | 0 | 1 | 7 | 7:55 AM | 0 | 0 | 0 | 0 | 0 | 7:55 AM | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | 1 | 6 | 0 | 2 | 9 | 8:00 AM | 0 | 0 | 0 | 0 | 0 | 8:00 AM | 0 | 0 | 0 | 0 | 0 |
| 8:05 AM | 0 | 1 | 0 | 2 | 3 | 8:05 AM | 0 | 0 | 0 | 0 | 0 | 8:05 AM | 0 | 0 | 0 | 0 | 0 |
| 8:10 AM | 0 | 1 | 0 | 1 | 2 | 8:10 AM | 0 | 0 | 0 | 0 | 0 | 8:10 AM | 0 | 0 | 0 | 0 | 0 |
| 8:15 AM | 1 | 2 | 0 | 2 | 5 | 8:15 AM | 0 | 0 | 0 | 0 | 0 | 8:15 AM | 0 | 0 | 0 | 0 | 0 |
| 8:20 AM | 1 | 1 | 0 | 1 | 3 | 8:20 AM | 0 | 0 | 0 | 0 | 0 | 8:20 AM | 1 | 0 | 0 | 0 | 1 |
| 8:25 AM | 2 | 1 | 0 | 0 | 3 | 8:25 AM | 0 | 0 | 0 | 0 | 0 | 8:25 AM | 0 | 0 | 0 | 0 | 0 |
| 8:30 AM | 1 | 2 | 0 | 0 | 3 | 8:30 AM | 0 | 0 | 0 | 0 | 0 | 8:30 AM | 1 | 0 | 0 | 0 | 1 |
| 8:35 AM | 1 | 3 | 0 | 0 | 4 | 8:35 AM | 0 | 0 | 0 | 0 | 0 | 8:35 AM | 0 | 0 | 0 | 0 | 0 |
| 8:40 AM | 1 | 1 | 0 | 0 | 2 | 8:40 AM | 0 | 0 | 0 | 0 | 0 | 8:40 AM | 0 | 0 | 0 | 0 | 0 |
| 8:45 AM | 3 | 0 | 0 | 0 | 3 | 8:45 AM | 0 | 0 | 0 | 0 | 0 | 8:45 AM | 0 | 0 | 0 | 0 | 0 |
| 8:50 AM | 3 | 0 | 0 | 2 | 5 | 8:50 AM | 0 | 0 | 0 | 0 | 0 | 8:50 AM | 0 | 0 | 0 | 0 | 0 |
| 8:55 AM | 1 | 1 | 0 | 2 | 4 | 8:55 AM | 0 | 0 | 0 | 0 | 0 | 8:55 AM | 0 | 0 | 0 | 0 | 0 |
| Count Total | 27 | 41 | 0 | 25 | 93 | Count Total | 0 | 0 | 0 | 0 | 0 | Count Total | 4 | 0 | 0 | 0 | 4 |
| Peak Hour | 9 | 29 | 0 | 15 | 53 | Peak Hour | 0 | 0 | 0 | 0 | 0 | Peak Hour | 3 | 0 | 0 | 0 | 3 |



Note: Total study counts contained in parentheses.

|  | HV\% | PHF |
| :--- | :---: | :---: |
| EB | $0.0 \%$ | 0.00 |
| WB | $4.3 \%$ | 0.86 |
| NB | $4.5 \%$ | 0.88 |
| SB | $1.8 \%$ | 0.85 |
| All | $3.1 \%$ | 0.89 |

Traffic Counts - Motorized Vehicles

| Interval | I205 SB RAMPS <br> Eastbound |  |  |  | I205 SB RAMPS <br> Westbound |  |  |  | 10TH ST <br> Northbound |  |  |  | 10TH ST <br> Southbound |  |  |  | Total | Rolling Hour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 14 | 0 | 4 | 17 | 0 | 0 | 0 | 26 | 29 | 105 | 1,362 |
| 7:05 AM | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 6 | 0 | 9 | 11 | 0 | 0 | 0 | 23 | 35 | 92 | 1,380 |
| 7:10 AM | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 13 | 0 | 12 | 14 | 0 | 0 | 0 | 20 | 26 | 94 | 1,423 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 9 | 0 | 11 | 22 | 0 | 0 | 0 | 31 | 20 | 99 | 1,440 |
| 7:20 AM | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 7 | 0 | 19 | 7 | 0 | 0 | 0 | 27 | 35 | 105 | 1,467 |
| 7:25 AM | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 12 | 11 | 0 | 0 | 0 | 35 | 28 | 100 | 1,470 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 14 | 0 | 8 | 15 | 0 | 0 | 0 | 45 | 17 | 107 | 1,501 |
| 7:35 AM | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 7 | 0 | 13 | 22 | 0 | 0 | 0 | 56 | 27 | 136 | 1,507 |
| 7:40 AM | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 18 | 0 | 12 | 14 | 0 | 0 | 0 | 40 | 34 | 134 | 1,482 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 14 | 0 | 17 | 27 | 0 | 0 | 0 | 47 | 36 | 153 | 1,466 |
| 7:50 AM | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 11 | 0 | 16 | 29 | 0 | 0 | 0 | 38 | 22 | 129 | 1,434 |
| 7:55 AM | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 14 | 0 | 9 | 25 | 0 | 0 | 0 | 34 | 18 | 108 | 1,420 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 13 | 0 | 7 | 29 | 0 | 0 | 0 | 50 | 20 | 123 | 1,441 |
| 8:05 AM | 0 | 0 | 0 | 0 | 0 | 6 | 1 | 15 | 0 | 18 | 21 | 0 | 0 | 0 | 49 | 25 | 135 |  |
| 8:10 AM | 0 | 0 | 0 | 0 | 0 | 6 | 2 | 10 | 0 | 7 | 18 | 0 | 0 | 0 | 44 | 24 | 111 |  |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 9 | 1 | 17 | 0 | 7 | 25 | 0 | 0 | 0 | 43 | 24 | 126 |  |
| 8:20 AM | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 13 | 0 | 10 | 20 | 0 | 0 | 0 | 29 | 24 | 108 |  |
| 8:25 AM | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 24 | 0 | 14 | 23 | 0 | 0 | 0 | 30 | 27 | 131 |  |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 21 | 0 | 6 | 29 | 0 | 0 | 0 | 24 | 25 | 113 |  |
| 8:35 AM | 0 | 0 | 0 | 0 | 0 | 9 | 1 | 13 | 0 | 14 | 20 | 0 | 0 | 0 | 37 | 17 | 111 |  |
| 8:40 AM | 0 | 0 | 0 | 0 | 0 | 10 | 1 | 15 | 0 | 14 | 29 | 0 | 0 | 0 | 19 | 30 | 118 |  |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 18 | 0 | 7 | 21 | 0 | 0 | 0 | 35 | 30 | 121 |  |
| 8:50 AM | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 25 | 0 | 12 | 19 | 0 | 0 | 0 | 30 | 23 | 115 |  |
| 8:55 AM | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 16 | 0 | 6 | 36 | 0 | 0 | 0 | 31 | 26 | 129 |  |
| Count Total | 0 | 0 | 0 | 0 | 0 | 230 | 6 | 334 | 0 | 264 | 504 | 0 | 0 | 0 | 843 | 622 | 2,803 |  |
| Peak Hour | 0 | 0 | 0 | 0 | 0 | 118 | 4 | 177 | 0 | 136 | 282 | 0 | 0 | 0 | 484 | 306 | 1,507 |  |

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval | Heavy Vehicles |  |  |  |  | Interval Start Time | Bicycles on Roadway |  |  |  |  | Interval Start Time | Pedestrians/Bicycles on Crosswalk |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |
| 7:00 AM | 0 | 1 | 1 | 0 | 2 | 7:00 AM | 0 | 0 | 0 | 0 | 0 | 7:00 AM | 0 | 0 | 0 | 0 | 0 |
| 7:05 AM | 0 | 2 | 2 | 0 | 4 | 7:05 AM | 0 | 0 | 0 | 0 | 0 | 7:05 AM | 0 | 0 | 0 | 0 | 0 |
| 7:10 AM | 0 | 1 | 2 | 0 | 3 | 7:10 AM | 0 | 0 | 0 | 0 | 0 | 7:10 AM | 0 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 5 | 0 | 1 | 6 | 7:15 AM | 0 | 0 | 0 | 0 | 0 | 7:15 AM | 0 | 0 | 0 | 0 | 0 |
| 7:20 AM | 0 | 1 | 2 | 0 | 3 | 7:20 AM | 0 | 0 | 0 | 0 | 0 | 7:20 AM | 0 | 0 | 0 | 0 | 0 |
| 7:25 AM | 0 | 0 | 0 | 2 | 2 | 7:25 AM | 0 | 0 | 0 | 0 | 0 | 7:25 AM | 0 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 7:30 AM | 0 | 0 | 0 | 0 | 0 | 7:30 AM | 0 | 0 | 0 | 0 | 0 |
| 7:35 AM | 0 | 2 | 0 | 3 | 5 | 7:35 AM | 0 | 0 | 0 | 0 | 0 | 7:35 AM | 1 | 0 | 0 | 0 | 1 |
| 7:40 AM | 0 | 3 | 2 | 0 | 5 | 7:40 AM | 0 | 0 | 0 | 0 | 0 | 7:40 AM | 0 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 2 | 1 | 0 | 3 | 7:45 AM | 0 | 0 | 0 | 0 | 0 | 7:45 AM | 0 | 0 | 0 | 0 | 0 |
| 7:50 AM | 0 | 1 | 2 | 3 | 6 | 7:50 AM | 0 | 0 | 0 | 0 | 0 | 7:50 AM | 0 | 0 | 0 | 0 | 0 |
| 7:55 AM | 0 | 2 | 0 | 1 | 3 | 7:55 AM | 0 | 0 | 0 | 0 | 0 | 7:55 AM | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 2 | 1 | 3 | 8:00 AM | 0 | 0 | 0 | 0 | 0 | 8:00 AM | 0 | 0 | 0 | 0 | 0 |
| 8:05 AM | 0 | 2 | 1 | 3 | 6 | 8:05 AM | 0 | 0 | 0 | 0 | 0 | 8:05 AM | 0 | 0 | 0 | 0 | 0 |
| 8:10 AM | 0 | 2 | 0 | 1 | 3 | 8:10 AM | 0 | 0 | 0 | 0 | 0 | 8:10 AM | 0 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 3 | 2 | 2 | 7 | 8:15 AM | 0 | 0 | 0 | 0 | 0 | 8:15 AM | 0 | 0 | 0 | 0 | 0 |
| 8:20 AM | 0 | 1 | 1 | 0 | 2 | 8:20 AM | 0 | 0 | 0 | 0 | 0 | 8:20 AM | 1 | 0 | 0 | 0 | 1 |
| 8:25 AM | 0 | 0 | 2 | 0 | 2 | 8:25 AM | 0 | 0 | 0 | 0 | 0 | 8:25 AM | 0 | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 1 | 0 | 0 | 1 | 8:30 AM | 0 | 0 | 0 | 0 | 0 | 8:30 AM | 1 | 0 | 0 | 0 | 1 |
| 8:35 AM | 0 | 4 | 1 | 0 | 5 | 8:35 AM | 0 | 0 | 0 | 0 | 0 | 8:35 AM | 0 | 0 | 0 | 0 | 0 |
| 8:40 AM | 0 | 0 | 1 | 0 | 1 | 8:40 AM | 0 | 0 | 0 | 0 | 0 | 8:40 AM | 0 | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 2 | 2 | 4 | 8:45 AM | 0 | 0 | 0 | 0 | 0 | 8:45 AM | 0 | 0 | 0 | 0 | 0 |
| 8:50 AM | 0 | 1 | 1 | 1 | 3 | 8:50 AM | 0 | 0 | 0 | 0 | 0 | 8:50 AM | 0 | 0 | 0 | 0 | 0 |
| 8:55 AM | 0 | 0 | 2 | 2 | 4 | 8:55 AM | 0 | 0 | 0 | 0 | 0 | 8:55 AM | 0 | 0 | 0 | 0 | 0 |
| Count Total | 0 | 34 | 27 | 22 | 83 | Count Total | 0 | 0 | 0 | 0 | 0 | Count Total | 3 | 0 | 0 | 0 | 3 |
| Peak Hour | 0 | 19 | 13 | 14 | 46 | Peak Hour | 0 | 0 | 0 | 0 | 0 | Peak Hour | 3 | 0 | 0 | 0 | 3 |



Note: Total study counts contained in parentheses.

|  | HV\% | PHF |
| :--- | :---: | :---: |
| EB | $2.1 \%$ | 0.86 |
| WB | $1.0 \%$ | 0.79 |
| NB | $5.0 \%$ | 0.91 |
| SB |  |  |
| All | $2.7 \%$ | 0.90 |

Traffic Counts - Motorized Vehicles

| Interval Start Time | BLANKENSHIP RD Eastbound |  |  |  | BLANKENSHIP RD Westbound |  |  |  | 10TH ST <br> Northbound |  |  |  | Southbound |  |  |  | Total | Rolling Hour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  |
| 7:00 AM | 0 | 0 | 1 | 33 | 0 | 20 | 0 | 0 | 0 | 18 | 0 | 15 |  |  |  |  | 87 | 1,188 |
| 7:05 AM | 0 | 0 | 1 | 30 | 0 | 26 | 2 | 0 | 0 | 14 | 0 | 3 |  |  |  |  | 76 | 1,220 |
| 7:10 AM | 0 | 0 | 1 | 26 | 0 | 24 | 3 | 0 | 0 | 14 | 0 | 11 |  |  |  |  | 79 | 1,266 |
| 7:15 AM | 0 | 0 | 1 | 34 | 0 | 15 | 3 | 0 | 0 | 20 | 0 | 15 |  |  |  |  | 88 | 1,293 |
| 7:20 AM | 0 | 0 | 1 | 31 | 0 | 35 | 6 | 0 | 0 | 6 | 0 | 7 |  |  |  |  | 86 | 1,329 |
| 7:25 AM | 0 | 0 | 2 | 30 | 0 | 30 | 3 | 0 | 0 | 16 | 0 | 4 |  |  |  |  | 85 | 1,343 |
| 7:30 AM | 0 | 0 | 2 | 34 | 0 | 39 | 5 | 0 | 0 | 16 | 0 | 12 |  |  |  |  | 108 | 1,366 |
| 7:35 AM | 0 | 0 | 9 | 44 | 0 | 39 | 2 | 0 | 0 | 16 | 0 | 13 |  |  |  |  | 123 | 1,357 |
| 7:40 AM | 0 | 0 | 3 | 41 | 0 | 35 | 1 | 0 | 0 | 23 | 0 | 9 |  |  |  |  | 112 | 1,330 |
| 7:45 AM | 0 | 0 | 1 | 49 | 0 | 42 | 12 | 0 | 0 | 22 | 0 | 19 |  |  |  |  | 145 | 1,328 |
| 7:50 AM | 0 | 0 | 4 | 38 | 0 | 19 | 2 | 0 | 0 | 23 | 0 | 16 |  |  |  |  | 102 | 1,294 |
| 7:55 AM | 0 | 0 | 4 | 27 | 0 | 20 | 5 | 0 | 0 | 23 | 0 | 18 |  |  |  |  | 97 | 1,298 |
| 8:00 AM | 0 | 0 | 8 | 41 | 0 | 28 | 4 | 0 | 0 | 23 | 0 | 15 |  |  |  |  | 119 | 1,319 |
| 8:05 AM | 0 | 0 | 2 | 48 | 0 | 25 | 8 | 0 | 0 | 26 | 0 | 13 |  |  |  |  | 122 |  |
| 8:10 AM | 0 | 0 | 7 | 43 | 0 | 27 | 2 | 0 | 0 | 18 | 0 | 9 |  |  |  |  | 106 |  |
| 8:15 AM | 0 | 0 | 7 | 44 | 0 | 22 | 5 | 0 | 0 | 23 | 0 | 23 |  |  |  |  | 124 |  |
| 8:20 AM | 0 | 0 | 3 | 25 | 0 | 31 | 7 | 0 | 1 | 18 | 0 | 15 |  |  |  |  | 100 |  |
| 8:25 AM | 0 | 0 | 2 | 31 | 0 | 27 | 2 | 0 | 0 | 34 | 0 | 12 |  |  |  |  | 108 |  |
| 8:30 AM | 0 | 0 | 4 | 25 | 0 | 20 | 2 | 0 | 0 | 28 | 0 | 20 |  |  |  |  | 99 |  |
| 8:35 AM | 0 | 0 | 2 | 28 | 0 | 25 | 6 | 0 | 0 | 18 | 0 | 17 |  |  |  |  | 96 |  |
| 8:40 AM | 0 | 0 | 3 | 26 | 0 | 27 | 8 | 0 | 0 | 27 | 0 | 19 |  |  |  |  | 110 |  |
| 8:45 AM | 0 | 0 | 4 | 33 | 0 | 32 | 3 | 0 | 0 | 18 | 0 | 21 |  |  |  |  | 111 |  |
| 8:50 AM | 0 | 0 | 5 | 25 | 0 | 26 | 5 | 0 | 0 | 20 | 0 | 25 |  |  |  |  | 106 |  |
| 8:55 AM | 0 | 0 | 4 | 29 | 0 | 27 | 7 | 0 | 0 | 29 | 0 | 22 |  |  |  |  | 118 |  |
| Count Total | 0 | 0 | 81 | 815 | 0 | 661 | 103 | 0 | 1 | 493 | 0 | 353 |  |  |  |  | 2,507 |  |
| Peak Hour | 0 | 0 | 52 | 465 | 0 | 354 | 55 | 0 | 1 | 265 | 0 | 174 |  |  |  |  | 1,366 |  |

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval | Heavy Vehicles |  |  |  |  | Interval Start Time | Bicycles on Roadway |  |  |  |  |  | Interval Start Time | Pedestrians/Bicycles on Crosswalk |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | EB | NB | WB | SB | Total |  | EB |  | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |
| 7:00 AM | 0 | 1 | 0 |  | 1 | 7:00 AM |  | 0 | 0 | 0 |  | 0 | 7:00 AM | 0 | 0 | 0 |  | 0 |
| 7:05 AM | 0 | 2 | 0 |  | 2 | 7:05 AM |  | 0 | 0 | 0 |  | 0 | 7:05 AM | 0 | 0 | 0 |  | 0 |
| 7:10 AM | 0 | 2 | 0 |  | 2 | 7:10 AM |  | 0 | 0 | 0 |  | 0 | 7:10 AM | 0 | 0 | 0 |  | 0 |
| 7:15 AM | 0 | 5 | 1 |  | 6 | 7:15 AM |  | 0 | 0 | 0 |  | 0 | 7:15 AM | 0 | 0 | 0 |  | 0 |
| 7:20 AM | 0 | 2 | 0 |  | 2 | 7:20 AM |  | 0 | 0 | 0 |  | 0 | 7:20 AM | 0 | 0 | 0 |  | 0 |
| 7:25 AM | 3 | 0 | 0 |  | 3 | 7:25 AM |  | 0 | 0 | 0 |  | 0 | 7:25 AM | 0 | 0 | 0 |  | 0 |
| 7:30 AM | 0 | 1 | 0 |  | 1 | 7:30 AM |  | 0 | 0 | 0 |  | 0 | 7:30 AM | 0 | 0 | 0 |  | 0 |
| 7:35 AM | 2 | 1 | 1 |  | 4 | 7:35 AM |  | 0 | 0 | 0 |  | 0 | 7:35 AM | 0 | 0 | 0 |  | 0 |
| 7:40 AM | 0 | 4 | 0 |  | 4 | 7:40 AM |  | 0 | 0 | 0 |  | 0 | 7:40 AM | 0 | 0 | 0 |  | 0 |
| 7:45 AM | 1 | 2 | 0 |  | 3 | 7:45 AM |  | 0 | 0 | 0 |  | 0 | 7:45 AM | 0 | 0 | 0 |  | 0 |
| 7:50 AM | 2 | 2 | 1 |  | 5 | 7:50 AM |  | 0 | 0 | 0 |  | 0 | 7:50 AM | 0 | 0 | 0 |  | 0 |
| 7:55 AM | 0 | 2 | 1 |  | 3 | 7:55 AM |  | 0 | 0 | 0 |  | 0 | 7:55 AM | 0 | 0 | 0 |  | 0 |
| 8:00 AM | 1 | 0 | 0 |  | 1 | 8:00 AM |  | 0 | 0 | 0 |  | 0 | 8:00 AM | 0 | 0 | 0 |  | 0 |
| 8:05 AM | 1 | 1 | 1 |  | 3 | 8:05 AM |  | 0 | 0 | 0 |  | 0 | 8:05 AM | 0 | 0 | 0 |  | 0 |
| 8:10 AM | 2 | 2 | 0 |  | 4 | 8:10 AM |  | 0 | 0 | 0 |  | 0 | 8:10 AM | 0 | 0 | 0 |  | 0 |
| 8:15 AM | 2 | 4 | 0 |  | 6 | 8:15 AM |  | 0 | 0 | 0 |  | 0 | 8:15 AM | 0 | 0 | 0 |  | 0 |
| 8:20 AM | 0 | 1 | 0 |  | 1 | 8:20 AM |  | 0 | 0 | 0 |  | 0 | 8:20 AM | 0 | 0 | 0 |  | 0 |
| 8:25 AM | 0 | 2 | 0 |  | 2 | 8:25 AM |  | 0 | 0 | 0 |  | 0 | 8:25 AM | 0 | 0 | 0 |  | 0 |
| 8:30 AM | 0 | 0 | 0 |  | 0 | 8:30 AM |  | 0 | 0 | 0 |  | 0 | 8:30 AM | 0 | 0 | 0 |  | 0 |
| 8:35 AM | 0 | 3 | 0 |  | 3 | 8:35 AM |  | 0 | 0 | 0 |  | 0 | 8:35 AM | 0 | 0 | 0 |  | 0 |
| 8:40 AM | 0 | 1 | 0 |  | 1 | 8:40 AM |  | 0 | 0 | 0 |  | 0 | 8:40 AM | 0 | 0 | 0 |  | 0 |
| 8:45 AM | 1 | 1 | 1 |  | 3 | 8:45 AM |  | 0 | 0 | 0 |  | 0 | 8:45 AM | 0 | 0 | 0 |  | 0 |
| 8:50 AM | 2 | 2 | 0 |  | 4 | 8:50 AM |  | 0 | 0 | 0 |  | 0 | 8:50 AM | 0 | 0 | 0 |  | 0 |
| 8:55 AM | 1 | 0 | 1 |  | 2 | 8:55 AM |  | 0 | 0 | 0 |  | 0 | 8:55 AM | 0 | 0 | 0 |  | 0 |
| Count Total | 18 | 41 | 7 |  | 66 | Count Total |  | 0 | 0 | 0 |  | 0 | Count Total | 0 | 0 | 0 |  | 0 |
| Peak Hour | 11 | 22 | 4 |  | 37 | Peak Hour |  | 0 | 0 | 0 |  | 0 | Peak Hour | 0 | 0 | 0 |  | 0 |



Note: Total study counts contained in parentheses.

|  | HV\% | PHF |
| :--- | :---: | :---: |
| EB | $2.0 \%$ | 0.92 |
| WB | $0.6 \%$ | 0.86 |
| NB | $1.0 \%$ | 0.84 |
| SB | $2.2 \%$ | 0.81 |
| All | $1.3 \%$ | 0.93 |

Traffic Counts - Motorized Vehicles

| Interval | WILLAMETTE FALLS DR <br> Eastbound |  |  |  | WILLAMETTE FALLS DR Westbound |  |  |  | 12TH ST <br> Northbound |  |  |  | 12TH ST <br> Southbound |  |  |  | Total | Rolling Hour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  |
| 4:00 PM | 0 | 1 | 27 | 1 | 0 | 11 | 18 | 3 | 0 | 1 | 0 | 20 | 0 | 4 | 0 | 2 | 88 | 1,082 |
| 4:05 PM | 0 | 2 | 22 | 0 | 0 | 9 | 13 | 4 | 0 | 0 | 0 | 15 | 0 | 2 | 0 | 1 | 68 | 1,079 |
| 4:10 PM | 0 | 3 | 34 | 1 | 0 | 5 | 11 | 1 | 0 | 1 | 1 | 11 | 0 | 6 | 0 | 2 | 76 | 1,107 |
| 4:15 PM | 0 | 2 | 36 | 0 | 0 | 4 | 14 | 1 | 0 | 1 | 0 | 10 | 0 | 2 | 0 | 0 | 70 | 1,124 |
| 4:20 PM | 0 | 2 | 41 | 0 | 0 | 11 | 12 | 1 | 0 | 2 | 0 | 23 | 0 | 4 | 0 | 0 | 96 | 1,149 |
| 4:25 PM | 0 | 3 | 35 | 1 | 0 | 15 | 16 | 2 | 0 | 1 | 0 | 16 | 0 | 4 | 1 | 0 | 94 | 1,125 |
| 4:30 PM | 0 | 1 | 37 | 2 | 0 | 13 | 20 | 1 | 0 | 1 | 0 | 22 | 0 | 1 | 1 | 1 | 100 | 1,116 |
| 4:35 PM | 0 | 0 | 37 | 1 | 0 | 10 | 21 | 3 | 0 | 0 | 1 | 33 | 0 | 1 | 2 | 2 | 111 | 1,097 |
| 4:40 PM | 0 | 0 | 45 | 1 | 0 | 3 | 17 | 3 | 0 | 1 | 2 | 21 | 0 | 4 | 0 | 0 | 97 | 1,062 |
| 4:45 PM | 0 | 0 | 31 | 2 | 0 | 10 | 16 | 3 | 0 | 2 | 1 | 29 | 0 | 2 | 0 | 2 | 98 | 1,024 |
| 4:50 PM | 0 | 1 | 35 | 0 | 0 | 10 | 21 | 2 | 0 | 2 | 0 | 18 | 0 | 3 | 1 | 4 | 97 | 1,015 |
| 4:55 PM | 0 | 0 | 31 | 0 | 0 | 8 | 15 | 2 | 0 | 4 | 1 | 23 | 0 | 1 | 1 | 1 | 87 | 1,000 |
| 5:00 PM | 0 | 1 | 31 | 2 | 0 | 7 | 16 | 2 | 0 | 1 | 0 | 21 | 0 | 2 | 0 | 2 | 85 | 991 |
| 5:05 PM | 0 | 0 | 34 | 2 | 0 | 10 | 22 | 0 | 0 | 2 | 0 | 22 | 0 | 2 | 0 | 2 | 96 |  |
| 5:10 PM | 0 | 0 | 40 | 1 | 0 | 9 | 13 | 3 | 0 | 1 | 0 | 25 | 0 | 0 | 0 | 1 | 93 |  |
| 5:15 PM | 0 | 0 | 38 | 1 | 0 | 11 | 18 | 0 | 0 | 3 | 1 | 23 | 0 | 0 | 0 | 0 | 95 |  |
| 5:20 PM | 0 | 2 | 31 | 2 | 0 | 6 | 9 | 1 | 0 | 0 | 1 | 16 | 0 | 2 | 1 | 1 | 72 |  |
| 5:25 PM | 0 | 4 | 27 | 2 | 0 | 10 | 20 | 3 | 0 | 0 | 2 | 17 | 0 | 0 | 0 | 0 | 85 |  |
| 5:30 PM | 0 | 2 | 29 | 1 | 0 | 5 | 25 | 1 | 0 | 0 | 0 | 15 | 0 | 1 | 1 | 1 | 81 |  |
| 5:35 PM | 0 | 0 | 21 | 2 | 0 | 14 | 19 | 0 | 0 | 4 | 0 | 13 | 0 | 3 | 0 | 0 | 76 |  |
| 5:40 PM | 0 | 0 | 18 | 2 | 0 | 7 | 23 | 1 | 0 | 1 | 0 | 7 | 0 | 0 | 0 | 0 | 59 |  |
| 5:45 PM | 0 | 0 | 36 | 1 | 0 | 13 | 19 | 0 | 0 | 0 | 1 | 17 | 0 | 1 | 0 | 1 | 89 |  |
| 5:50 PM | 0 | 2 | 32 | 0 | 0 | 10 | 20 | 4 | 0 | 0 | 0 | 8 | 0 | 3 | 1 | 2 | 82 |  |
| 5:55 PM | 0 | 0 | 41 | 1 | 0 | 11 | 14 | 0 | 0 | 2 | 0 | 8 | 0 | 1 | 0 | 0 | 78 |  |
| Count Total | 0 | 26 | 789 | 26 | 0 | 222 | 412 | 41 | 0 | 30 | 11 | 433 | 0 | 49 | 9 | 25 | 2,073 |  |
| Peak Hour | 0 | 8 | 435 | 13 | 0 | 117 | 207 | 22 | 0 | 20 | 6 | 276 | 0 | 24 | 6 | 15 | 1,149 |  |

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval | Heavy Vehicles |  |  |  |  | Interval Start Time | Bicycles on Roadway |  |  |  |  | Interval Start Time | Pedestrians/Bicycles on Crosswalk |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 4:00 PM | 0 | 0 | 0 | 0 | 0 | 4:00 PM | 1 | 0 | 0 | 2 | 3 |
| 4:05 PM | 1 | 1 | 0 | 0 | 2 | 4:05 PM | 0 | 0 | 0 | 0 | 0 | 4:05 PM | 1 | 0 | 0 | 4 | 5 |
| 4:10 PM | 1 | 0 | 0 | 0 | 1 | 4:10 PM | 0 | 1 | 0 | 0 | 1 | 4:10 PM | 0 | 1 | 0 | 1 | 2 |
| 4:15 PM | 1 | 0 | 0 | 0 | 1 | 4:15 PM | 0 | 0 | 0 | 0 | 0 | 4:15 PM | 0 | 0 | 0 | 1 | 1 |
| 4:20 PM | 1 | 0 | 1 | 0 | 2 | 4:20 PM | 0 | 0 | 1 | 0 | 1 | 4:20 PM | 1 | 0 | 0 | 0 | 1 |
| 4:25 PM | 2 | 0 | 0 | 1 | 3 | 4:25 PM | 0 | 0 | 0 | 0 | 0 | 4:25 PM | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | 1 | 1 | 0 | 0 | 2 | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 4:30 PM | 1 | 0 | 0 | 0 | 1 |
| 4:35 PM | 2 | 0 | 0 | 0 | 2 | 4:35 PM | 0 | 0 | 0 | 0 | 0 | 4:35 PM | 0 | 0 | 0 | 0 | 0 |
| 4:40 PM | 0 | 0 | 0 | 0 | 0 | 4:40 PM | 0 | 0 | 0 | 0 | 0 | 4:40 PM | 0 | 0 | 1 | 4 | 5 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 4:45 PM | 0 | 0 | 0 | 0 | 0 | 4:45 PM | 2 | 0 | 0 | 1 | 3 |
| 4:50 PM | 1 | 0 | 1 | 0 | 2 | 4:50 PM | 0 | 0 | 0 | 0 | 0 | 4:50 PM | 0 | 0 | 0 | 1 | 1 |
| 4:55 PM | 0 | 1 | 0 | 0 | 1 | 4:55 PM | 0 | 0 | 0 | 0 | 0 | 4:55 PM | 0 | 0 | 0 | 2 | 2 |
| 5:00 PM | 1 | 0 | 0 | 0 | 1 | 5:00 PM | 0 | 0 | 0 | 0 | 0 | 5:00 PM | 0 | 1 | 2 | 3 | 6 |
| 5:05 PM | 0 | 0 | 0 | 0 | 0 | 5:05 PM | 0 | 0 | 0 | 1 | 1 | 5:05 PM | 0 | 0 | 0 | 0 | 0 |
| 5:10 PM | 1 | 0 | 0 | 0 | 1 | 5:10 PM | 0 | 0 | 0 | 0 | 0 | 5:10 PM | 3 | 0 | 0 | 4 | 7 |
| 5:15 PM | 0 | 1 | 0 | 0 | 1 | 5:15 PM | 0 | 0 | 0 | 0 | 0 | 5:15 PM | 2 | 0 | 0 | 0 | 2 |
| 5:20 PM | 0 | 0 | 0 | 0 | 0 | 5:20 PM | 0 | 0 | 0 | 0 | 0 | 5:20 PM | 2 | 0 | 0 | 4 | 6 |
| 5:25 PM | 0 | 0 | 0 | 0 | 0 | 5:25 PM | 0 | 0 | 0 | 0 | 0 | 5:25 PM | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 1 | 0 | 0 | 0 | 1 | 5:30 PM | 0 | 0 | 0 | 0 | 0 | 5:30 PM | 0 | 0 | 0 | 5 | 5 |
| 5:35 PM | 0 | 1 | 0 | 0 | 1 | 5:35 PM | 0 | 0 | 0 | 0 | 0 | 5:35 PM | 2 | 1 | 1 | 2 | 6 |
| 5:40 PM | 0 | 0 | 2 | 0 | 2 | 5:40 PM | 0 | 0 | 0 | 0 | 0 | 5:40 PM | 0 | 1 | 0 | 0 | 1 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 5:45 PM | 0 | 0 | 0 | 0 | 0 | 5:45 PM | 0 | 0 | 2 | 1 | 3 |
| 5:50 PM | 2 | 0 | 0 | 0 | 2 | 5:50 PM | 0 | 0 | 0 | 0 | 0 | 5:50 PM | 0 | 3 | 2 | 1 | 6 |
| 5:55 PM | 0 | 0 | 0 | 0 | 0 | 5:55 PM | 0 | 0 | 0 | 0 | 0 | 5:55 PM | 3 | 0 | 1 | 4 | 8 |
| Count Total | 15 | 5 | 4 | 1 | 25 | Count Total | 0 | 1 | 1 | 1 | 3 | Count Total | 18 | 7 | 9 | 40 | 74 |
| Peak Hour | 9 | 3 | 2 | 1 | 15 | Peak Hour | 0 | 0 | 1 | 1 | 2 | Peak Hour | 9 | 1 | 3 | 15 | 28 |



Note: Total study counts contained in parentheses.

|  | HV\% | PHF |
| :--- | :---: | :---: |
| EB | $1.2 \%$ | 0.90 |
| WB | $0.6 \%$ | 0.90 |
| NB | $0.0 \%$ | 0.79 |
| SB | $0.0 \%$ | 0.25 |
| All | $1.0 \%$ | 0.91 |

Traffic Counts - Motorized Vehicles

| Interval | WILLAMETTE FALLS DR Eastbound |  |  |  | WILLAMETTE FALLS DR <br> Westbound |  |  |  | 11TH ST <br> Northbound |  |  |  | 11TH ST <br> Southbound |  |  |  | Total | Rolling Hour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  |
| 4:00 PM | 0 | 0 | 51 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 83 | 1,069 |
| 4:05 PM | 0 | 0 | 38 | 0 | 0 | 1 | 27 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 69 | 1,071 |
| 4:10 PM | 0 | 0 | 53 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 73 | 1,098 |
| 4:15 PM | 0 | 0 | 49 | 1 | 0 | 3 | 20 | 1 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 79 | 1,117 |
| 4:20 PM | 0 | 0 | 63 | 2 | 0 | 4 | 25 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 99 | 1,131 |
| 4:25 PM | 0 | 0 | 55 | 0 | 0 | 1 | 30 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 90 | 1,110 |
| 4:30 PM | 0 | 0 | 57 | 1 | 0 | 4 | 34 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 97 | 1,097 |
| 4:35 PM | 0 | 0 | 72 | 0 | 0 | 3 | 32 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 111 | 1,087 |
| 4:40 PM | 0 | 0 | 69 | 0 | 0 | 1 | 25 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 102 | 1,051 |
| 4:45 PM | 0 | 0 | 62 | 0 | 0 | 0 | 23 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 88 | 1,003 |
| 4:50 PM | 0 | 0 | 56 | 0 | 0 | 2 | 37 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 97 | 1,013 |
| 4:55 PM | 0 | 0 | 54 | 1 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 81 | 999 |
| 5:00 PM | 0 | 0 | 54 | 1 | 0 | 3 | 24 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 85 | 996 |
| 5:05 PM | 0 | 0 | 58 | 0 | 0 | 0 | 32 | 1 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 96 |  |
| 5:10 PM | 0 | 0 | 62 | 1 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 92 |  |
| 5:15 PM | 0 | 0 | 63 | 0 | 0 | 2 | 26 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 93 |  |
| 5:20 PM | 0 | 0 | 52 | 0 | 0 | 1 | 23 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 78 |  |
| 5:25 PM | 0 | 0 | 45 | 0 | 0 | 2 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 77 |  |
| 5:30 PM | 0 | 0 | 45 | 0 | 0 | 5 | 33 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 87 |  |
| 5:35 PM | 0 | 0 | 35 | 0 | 0 | 1 | 33 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 75 |  |
| 5:40 PM | 0 | 0 | 24 | 0 | 0 | 3 | 23 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 54 |  |
| 5:45 PM | 0 | 0 | 54 | 0 | 0 | 2 | 38 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 98 |  |
| 5:50 PM | 0 | 0 | 41 | 0 | 0 | 2 | 35 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 83 |  |
| 5:55 PM | 0 | 0 | 50 | 1 | 0 | 1 | 24 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 78 |  |
| Count Total | 0 | 0 | 1,262 | 8 | 0 | 41 | 670 | 4 | 0 | 2 | 0 | 77 | 0 | 0 | 0 | 1 | 2,065 |  |
| Peak Hour | 0 | 0 | 725 | 6 | 0 | 20 | 338 | 3 | 0 | 1 | 0 | 38 | 0 | 0 | 0 | 0 | 1,131 |  |

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval | Heavy Vehicles |  |  |  |  | Interval Start Time | Bicycles on Roadway |  |  |  |  | Interval Start Time | Pedestrians/Bicycles on Crosswalk |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 4:00 PM | 0 | 0 | 0 | 0 | 0 | 4:00 PM | 0 | 0 | 0 | 1 | 1 |
| 4:05 PM | 2 | 0 | 0 | 0 | 2 | 4:05 PM | 0 | 0 | 0 | 0 | 0 | 4:05 PM | 0 | 0 | 0 | 2 | 2 |
| 4:10 PM | 1 | 0 | 0 | 0 | 1 | 4:10 PM | 0 | 0 | 0 | 0 | 0 | 4:10 PM | 0 | 0 | 0 | 1 | 1 |
| 4:15 PM | 1 | 0 | 1 | 0 | 2 | 4:15 PM | 0 | 0 | 1 | 0 | 1 | 4:15 PM | 1 | 0 | 0 | 0 | 1 |
| 4:20 PM | 1 | 0 | 1 | 0 | 2 | 4:20 PM | 0 | 0 | 0 | 0 | 0 | 4:20 PM | 0 | 0 | 0 | 0 | 0 |
| 4:25 PM | 2 | 0 | 0 | 0 | 2 | 4:25 PM | 0 | 0 | 0 | 0 | 0 | 4:25 PM | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | 2 | 0 | 0 | 0 | 2 | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 4:30 PM | 0 | 0 | 0 | 0 | 0 |
| 4:35 PM | 1 | 0 | 0 | 0 | 1 | 4:35 PM | 0 | 0 | 0 | 0 | 0 | 4:35 PM | 0 | 0 | 0 | 0 | 0 |
| 4:40 PM | 0 | 0 | 0 | 0 | 0 | 4:40 PM | 0 | 0 | 0 | 0 | 0 | 4:40 PM | 1 | 0 | 0 | 4 | 5 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 4:45 PM | 0 | 0 | 0 | 0 | 0 | 4:45 PM | 0 | 0 | 0 | 1 | 1 |
| 4:50 PM | 1 | 0 | 1 | 0 | 2 | 4:50 PM | 0 | 0 | 0 | 0 | 0 | 4:50 PM | 0 | 0 | 0 | 1 | 1 |
| 4:55 PM | 0 | 0 | 0 | 0 | 0 | 4:55 PM | 0 | 0 | 0 | 0 | 0 | 4:55 PM | 0 | 0 | 0 | 2 | 2 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 5:00 PM | 0 | 0 | 0 | 0 | 0 | 5:00 PM | 0 | 1 | 1 | 1 | 3 |
| 5:05 PM | 0 | 0 | 0 | 0 | 0 | 5:05 PM | 0 | 0 | 0 | 0 | 0 | 5:05 PM | 0 | 0 | 0 | 1 | 1 |
| 5:10 PM | 1 | 0 | 0 | 0 | 1 | 5:10 PM | 0 | 0 | 0 | 0 | 0 | 5:10 PM | 0 | 0 | 3 | 4 | 7 |
| 5:15 PM | 1 | 0 | 0 | 0 | 1 | 5:15 PM | 0 | 0 | 0 | 0 | 0 | 5:15 PM | 0 | 0 | 0 | 0 | 0 |
| 5:20 PM | 0 | 0 | 0 | 0 | 0 | 5:20 PM | 0 | 0 | 0 | 0 | 0 | 5:20 PM | 0 | 0 | 0 | 3 | 3 |
| 5:25 PM | 0 | 0 | 0 | 0 | 0 | 5:25 PM | 0 | 0 | 0 | 0 | 0 | 5:25 PM | 0 | 2 | 2 | 3 | 7 |
| 5:30 PM | 1 | 1 | 0 | 0 | 2 | 5:30 PM | 0 | 0 | 0 | 0 | 0 | 5:30 PM | 0 | 1 | 0 | 0 | 1 |
| 5:35 PM | 0 | 0 | 0 | 0 | 0 | 5:35 PM | 0 | 0 | 0 | 0 | 0 | 5:35 PM | 0 | 0 | 0 | 4 | 4 |
| 5:40 PM | 0 | 0 | 2 | 0 | 2 | 5:40 PM | 0 | 0 | 0 | 0 | 0 | 5:40 PM | 0 | 2 | 2 | 0 | 4 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 5:45 PM | 0 | 0 | 0 | 0 | 0 | 5:45 PM | 0 | 3 | 0 | 2 | 5 |
| 5:50 PM | 2 | 0 | 0 | 0 | 2 | 5:50 PM | 0 | 0 | 0 | 0 | 0 | 5:50 PM | 0 | 0 | 0 | 0 | 0 |
| 5:55 PM | 0 | 0 | 0 | 0 | 0 | 5:55 PM | 0 | 0 | 0 | 0 | 0 | 5:55 PM | 0 | 2 | 2 | 3 | 7 |
| Count Total | 16 | 1 | 5 | 0 | 22 | Count Total | 0 | 0 | 1 | 0 | 1 | Count Total | 2 | 11 | 10 | 33 | 56 |
| Peak Hour | 9 | 0 | 2 | 0 | 11 | Peak Hour | 0 | 0 | 0 | 0 | 0 | Peak Hour | 1 | 1 | 4 | 14 | 20 |



Note: Total study counts contained in parentheses.

|  | HV\% | PHF |
| :--- | :---: | :---: |
| EB | $1.4 \%$ | 0.91 |
| WB | $3.0 \%$ | 0.80 |
| NB | $0.0 \%$ | 0.58 |
| SB |  |  |
| All | $1.8 \%$ | 0.88 |

Traffic Counts - Motorized Vehicles

| Interval Start Time | WILLAMETTE FALLS DR Eastbound |  |  |  | WILLAMETTE FALLS DR Westbound |  |  |  | 10TH ST <br> Northbound |  |  |  | Southbound |  |  |  | Total | Rolling Hour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  |
| 4:00 PM | 1 | 0 | 39 | 1 | 0 | 0 | 24 | 0 | 0 | 1 | 0 | 1 |  |  |  |  | 67 | 791 |
| 4:05 PM | 0 | 0 | 34 | 3 | 0 | 1 | 15 | 0 | 0 | 2 | 0 | 0 |  |  |  |  | 55 | 770 |
| 4:10 PM | 0 | 0 | 39 | 2 | 0 | 1 | 11 | 0 | 0 | 1 | 0 | 0 |  |  |  |  | 54 | 770 |
| 4:15 PM | 0 | 0 | 36 | 3 | 0 | 0 | 14 | 0 | 0 | 3 | 0 | 0 |  |  |  |  | 56 | 784 |
| 4:20 PM | 0 | 0 | 41 | 3 | 0 | 0 | 20 | 0 | 0 | 5 | 0 | 4 |  |  |  |  | 73 | 788 |
| 4:25 PM | 0 | 0 | 52 | 1 | 0 | 1 | 16 | 0 | 0 | 2 | 0 | 4 |  |  |  |  | 76 | 778 |
| 4:30 PM | 0 | 0 | 40 | 3 | 0 | 1 | 28 | 0 | 0 | 2 | 0 | 1 |  |  |  |  | 75 | 755 |
| 4:35 PM | 0 | 0 | 42 | 3 | 0 | 1 | 26 | 0 | 0 | 2 | 0 | 1 |  |  |  |  | 75 | 749 |
| 4:40 PM | 0 | 0 | 40 | 5 | 0 | 0 | 21 | 0 | 0 | 3 | 0 | 0 |  |  |  |  | 69 | 714 |
| 4:45 PM | 0 | 0 | 35 | 4 | 0 | 0 | 21 | 0 | 0 | 5 | 0 | 2 |  |  |  |  | 67 | 681 |
| 4:50 PM | 0 | 0 | 48 | 1 | 0 | 1 | 25 | 0 | 0 | 0 | 0 | 1 |  |  |  |  | 76 | 678 |
| 4:55 PM | 0 | 0 | 34 | 3 | 0 | 0 | 10 | 0 | 0 | 1 | 0 | 0 |  |  |  |  | 48 | 657 |
| 5:00 PM | 0 | 0 | 25 | 2 | 0 | 0 | 17 | 0 | 0 | 2 | 0 | 0 |  |  |  |  | 46 | 666 |
| 5:05 PM | 0 | 0 | 29 | 4 | 0 | 0 | 19 | 0 | 0 | 2 | 0 | 1 |  |  |  |  | 55 |  |
| 5:10 PM | 0 | 0 | 40 | 5 | 0 | 0 | 22 | 0 | 0 | 1 | 0 | 0 |  |  |  |  | 68 |  |
| 5:15 PM | 0 | 0 | 39 | 3 | 0 | 0 | 16 | 0 | 0 | 2 | 0 | 0 |  |  |  |  | 60 |  |
| 5:20 PM | 0 | 0 | 41 | 2 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 1 |  |  |  |  | 63 |  |
| 5:25 PM | 0 | 0 | 33 | 2 | 0 | 0 | 16 | 0 | 0 | 2 | 0 | 0 |  |  |  |  | 53 |  |
| 5:30 PM | 0 | 0 | 37 | 2 | 0 | 0 | 27 | 0 | 0 | 2 | 0 | 1 |  |  |  |  | 69 |  |
| 5:35 PM | 0 | 0 | 24 | 1 | 0 | 1 | 13 | 0 | 0 | 1 | 0 | 0 |  |  |  |  | 40 |  |
| 5:40 PM | 0 | 0 | 16 | 3 | 0 | 0 | 16 | 0 | 0 | 1 | 0 | 0 |  |  |  |  | 36 |  |
| 5:45 PM | 0 | 0 | 40 | 1 | 0 | 1 | 19 | 0 | 0 | 2 | 0 | 1 |  |  |  |  | 64 |  |
| 5:50 PM | 0 | 0 | 32 | 3 | 0 | 0 | 18 | 0 | 0 | 2 | 0 | 0 |  |  |  |  | 55 |  |
| 5:55 PM | 0 | 0 | 38 | 3 | 0 | 1 | 13 | 0 | 0 | 2 | 0 | 0 |  |  |  |  | 57 |  |
| Count Total | 1 | 0 | 874 | 63 | 0 | 9 | 446 | 0 | 0 | 46 | 0 | 18 |  |  |  |  | 1,457 |  |
| Peak Hour | 1 | 0 | 480 | 32 | 0 | 6 | 231 | 0 | 0 | 27 | 0 | 14 |  |  |  |  | 791 |  |

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval | Heavy Vehicles |  |  |  |  |  | Interval Start Time | Bicycles on Roadway |  |  |  |  |  |  | Interval <br> Start Time | Pedestrians/Bicycles on Crosswalk |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | EB | NB |  | WB | SB | Total |  | EB |  | NB |  | WB | SB | Total |  | EB |  | NB | WB | SB | Total |
| 4:00 PM | 1 |  | 0 | 0 |  | 1 | 4:00 PM |  | 0 |  | 0 | 0 |  | 0 | 4:00 PM |  | 0 | 0 | 0 |  | 0 |
| 4:05 PM | 0 |  | 0 | 0 |  | 0 | 4:05 PM |  | 0 |  | 0 | 0 |  | 0 | 4:05 PM |  | 0 | 0 | 0 |  | 0 |
| 4:10 PM | 1 |  | 0 | 0 |  | 1 | 4:10 PM |  | 0 |  | 0 | 0 |  | 0 | 4:10 PM |  | 0 | 1 | 0 |  | 1 |
| 4:15 PM | 0 |  | 0 | 1 |  | 1 | 4:15 PM |  | 0 |  | 0 | 0 |  | 0 | 4:15 PM |  | 0 | 0 | 0 |  | 0 |
| 4:20 PM | 0 |  | 0 | 2 |  | 2 | 4:20 PM |  | 0 |  | 0 | 0 |  | 0 | 4:20 PM |  | 0 | 0 | 0 |  | 0 |
| 4:25 PM | 2 |  | 0 | 2 |  | 4 | 4:25 PM |  | 0 |  | 0 | 0 |  | 0 | 4:25 PM |  | 2 | 2 | 0 |  | 4 |
| 4:30 PM | 1 |  | 0 | 0 |  | 1 | 4:30 PM |  | 0 |  | 0 | 0 |  | 0 | 4:30 PM |  | 0 | 0 | 0 |  | 0 |
| 4:35 PM | 0 |  | 0 | 0 |  | 0 | 4:35 PM |  | 0 |  | 0 | 0 |  | 0 | 4:35 PM |  | 0 | 0 | 0 |  | 0 |
| 4:40 PM | 0 |  | 0 | 1 |  | 1 | 4:40 PM |  | 0 |  | 0 | 0 |  | 0 | 4:40 PM |  | 0 | 0 | 0 |  | 0 |
| 4:45 PM | 0 |  | 0 | 0 |  | 0 | 4:45 PM |  | 0 |  | 0 | 0 |  | 0 | 4:45 PM |  | 0 | 1 | 0 |  | 1 |
| 4:50 PM | 2 |  | 0 | 1 |  | 3 | 4:50 PM |  | 0 |  | 0 | 0 |  | 0 | $4: 50$ PM |  | 0 | 0 | 0 |  | 0 |
| 4:55 PM | 0 |  | 0 | 0 |  | 0 | 4:55 PM |  | 0 |  | 0 | 0 |  | 0 | 4:55 PM |  | 0 | 0 | 0 |  | 0 |
| 5:00 PM | 0 |  | 0 | 0 |  | 0 | 5:00 PM |  | 0 |  | 0 | 0 |  | 0 | 5:00 PM |  | 0 | 0 | 0 |  | 0 |
| 5:05 PM | 0 |  | 0 | 0 |  | 0 | 5:05 PM |  | 0 |  | 0 | 0 |  | 0 | 5:05 PM |  | 0 | 0 | 0 |  | 0 |
| 5:10 PM | 0 |  | 0 | 0 |  | 0 | 5:10 PM |  | 0 |  | 0 | 0 |  | 0 | 5:10 PM |  | 0 | 0 | 0 |  | 0 |
| 5:15 PM | 0 |  | 0 | 1 |  | 1 | 5:15 PM |  | 0 |  | 0 | 0 |  | 0 | 5:15 PM |  | 0 | 1 | 0 |  | 1 |
| 5:20 PM | 0 |  | 0 | 1 |  | 1 | 5:20 PM |  | 0 |  | 0 | 0 |  | 0 | 5:20 PM |  | 0 | 0 | 0 |  | 0 |
| 5:25 PM | 0 |  | 0 | 0 |  | 0 | 5:25 PM |  | 0 |  | 0 | 0 |  | 0 | 5:25 PM |  | 0 | 2 | 0 |  | 2 |
| 5:30 PM | 1 |  | 0 | 0 |  | 1 | 5:30 PM |  | 0 |  | 0 | 0 |  | 0 | 5:30 PM |  | 0 | 0 | 0 |  | 0 |
| 5:35 PM | 0 |  | 0 | 0 |  | 0 | 5:35 PM |  | 0 |  | 0 | 0 |  | 0 | 5:35 PM |  | 0 | 0 | 0 |  | 0 |
| 5:40 PM | 0 |  | 0 | 0 |  | 0 | 5:40 PM |  | 0 |  | 0 | 0 |  | 0 | 5:40 PM |  | 0 | 0 | 0 |  | 0 |
| 5:45 PM | 0 |  | 0 | 0 |  | 0 | 5:45 PM |  | 0 |  | 0 | 0 |  | 0 | 5:45 PM |  | 0 | 3 | 0 |  | 3 |
| 5:50 PM | 1 |  | 0 | 1 |  | 2 | 5:50 PM |  | 0 |  | 0 | 0 |  | 0 | 5:50 PM |  | 0 | 0 | 0 |  | 0 |
| 5:55 PM | 0 |  | 0 | 0 |  | 0 | 5:55 PM |  | 0 |  | 0 | 0 |  | 0 | 5:55 PM |  | 0 | 0 | 0 |  | 0 |
| Count Total | 9 |  | 0 | 10 |  | 19 | Count Total |  | 0 |  | 0 | 0 |  | 0 | Count Total |  | 2 | 10 | 0 |  | 12 |
| Peak Hour | 7 |  | 0 | 7 |  | 14 | Peak Hour |  | 0 |  | 0 | 0 |  | 0 | Peak Hour |  | 2 | 4 | 0 |  | 6 |



Note: Total study counts contained in parentheses.

|  | HV\% | PHF |
| :--- | :---: | :---: |
| EB | $0.0 \%$ | 0.80 |
| WB | $1.2 \%$ | 0.79 |
| NB | $2.4 \%$ | 0.85 |
| SB | $0.4 \%$ | 0.86 |
| All | $1.3 \%$ | 0.97 |

Traffic Counts - Motorized Vehicles

| Interval | 8TH AVE <br> Eastbound |  |  |  | 8TH AVE <br> Westbound |  |  |  | 10TH ST <br> Northbound |  |  |  | 10TH ST <br> Southbound |  |  |  | Total | Rolling Hour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  |
| 4:00 PM | 0 | 15 | 0 | 2 | 0 | 2 | 0 | 10 | 0 | 2 | 32 | 6 | 0 | 7 | 24 | 10 | 110 | 1,290 |
| 4:05 PM | 0 | 12 | 1 | 5 | 0 | 2 | 1 | 8 | 0 | 2 | 22 | 5 | 0 | 9 | 26 | 22 | 115 | 1,304 |
| 4:10 PM | 0 | 15 | 0 | 3 | 0 | 8 | 1 | 16 | 0 | 2 | 29 | 3 | 0 | 9 | 13 | 13 | 112 | 1,303 |
| 4:15 PM | 0 | 5 | 0 | 4 | 0 | 1 | 0 | 15 | 0 | 0 | 31 | 4 | 0 | 5 | 19 | 10 | 94 | 1,291 |
| 4:20 PM | 0 | 3 | 0 | 2 | 0 | 2 | 0 | 14 | 0 | 1 | 45 | 8 | 0 | 8 | 35 | 7 | 125 | 1,312 |
| 4:25 PM | 0 | 11 | 1 | 8 | 0 | 0 | 1 | 12 | 0 | 0 | 24 | 1 | 0 | 7 | 33 | 5 | 103 | 1,285 |
| 4:30 PM | 0 | 5 | 3 | 2 | 0 | 6 | 1 | 6 | 0 | 3 | 42 | 3 | 0 | 8 | 18 | 6 | 103 | 1,278 |
| 4:35 PM | 0 | 9 | 2 | 1 | 0 | 5 | 0 | 8 | 0 | 0 | 41 | 7 | 0 | 9 | 26 | 9 | 117 | 1,294 |
| 4:40 PM | 0 | 7 | 1 | 2 | 0 | 2 | 1 | 13 | 0 | 1 | 47 | 5 | 0 | 6 | 21 | 3 | 109 | 1,277 |
| 4:45 PM | 0 | 5 | 0 | 4 | 0 | 0 | 1 | 9 | 0 | 1 | 52 | 5 | 0 | 10 | 18 | 7 | 112 | 1,257 |
| 4:50 PM | 0 | 7 | 2 | 5 | 0 | 3 | 1 | 11 | 0 | 1 | 27 | 5 | 0 | 5 | 34 | 3 | 104 | 1,256 |
| 4:55 PM | 0 | 9 | 0 | 1 | 0 | 4 | 1 | 7 | 0 | 3 | 29 | 3 | 0 | 6 | 17 | 6 | 86 | 1,251 |
| 5:00 PM | 0 | 10 | 0 | 4 | 0 | 2 | 0 | 13 | 0 | 2 | 52 | 2 | 0 | 6 | 21 | 12 | 124 | 1,242 |
| 5:05 PM | 0 | 17 | 1 | 3 | 0 | 2 | 0 | 15 | 0 | 3 | 33 | 8 | 0 | 2 | 23 | 7 | 114 |  |
| 5:10 PM | 0 | 9 | 2 | 4 | 0 | 1 | 0 | 9 | 0 | 1 | 38 | 3 | 0 | 6 | 21 | 6 | 100 |  |
| 5:15 PM | 0 | 5 | 1 | 4 | 0 | 2 | 1 | 8 | 0 | 2 | 35 | 8 | 0 | 11 | 26 | 12 | 115 |  |
| 5:20 PM | 0 | 9 | 2 | 3 | 0 | 1 | 2 | 9 | 0 | 0 | 33 | 2 | 0 | 8 | 22 | 7 | 98 |  |
| 5:25 PM | 0 | 11 | 1 | 5 | 0 | 3 | 0 | 11 | 0 | 1 | 25 | 3 | 0 | 6 | 25 | 5 | 96 |  |
| 5:30 PM | 0 | 4 | 0 | 3 | 0 | 2 | 1 | 15 | 0 | 3 | 31 | 5 | 0 | 6 | 38 | 11 | 119 |  |
| 5:35 PM | 0 | 5 | 1 | 2 | 0 | 1 | 0 | 11 | 0 | 0 | 27 | 7 | 0 | 10 | 26 | 10 | 100 |  |
| 5:40 PM | 0 | 4 | 1 | 3 | 0 | 1 | 0 | 8 | 0 | 0 | 24 | 3 | 0 | 13 | 24 | 8 | 89 |  |
| 5:45 PM | 0 | 2 | 0 | 3 | 0 | 4 | 0 | 15 | 0 | 2 | 31 | 1 | 0 | 10 | 34 | 9 | 111 |  |
| 5:50 PM | 0 | 6 | 0 | 0 | 0 | 5 | 1 | 9 | 0 | 0 | 30 | 3 | 0 | 8 | 28 | 9 | 99 |  |
| 5:55 PM | 0 | 3 | 0 | 5 | 0 | 3 | 0 | 5 | 0 | 2 | 27 | 0 | 0 | 2 | 24 | 6 | 77 |  |
| Count Total | 0 | 188 | 19 | 78 | 0 | 62 | 13 | 257 | 0 | 32 | 807 | 100 | 0 | 177 | 596 | 203 | 2,532 |  |
| Peak Hour | 0 | 97 | 13 | 40 | 0 | 29 | 7 | 125 | 0 | 18 | 465 | 58 | 0 | 84 | 293 | 83 | 1,312 |  |

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval | Heavy Vehicles |  |  |  |  | Interval Start Time | Bicycles on Roadway |  |  |  |  | Interval Start Time | Pedestrians/Bicycles on Crosswalk |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |
| 4:00 PM | 1 | 0 | 0 | 1 | 2 | 4:00 PM | 0 | 0 | 0 | 0 | 0 | 4:00 PM | 0 | 0 | 0 | 0 | 0 |
| 4:05 PM | 0 | 1 | 0 | 0 | 1 | 4:05 PM | 0 | 0 | 0 | 0 | 0 | 4:05 PM | 1 | 0 | 0 | 0 | 1 |
| 4:10 PM | 0 | 1 | 0 | 0 | 1 | 4:10 PM | 0 | 1 | 1 | 0 | 2 | 4:10 PM | 0 | 1 | 0 | 0 | 1 |
| 4:15 PM | 0 | 1 | 0 | 1 | 2 | 4:15 PM | 0 | 0 | 0 | 0 | 0 | 4:15 PM | 0 | 1 | 0 | 0 | 1 |
| 4:20 PM | 0 | 2 | 0 | 0 | 2 | 4:20 PM | 0 | 0 | 0 | 0 | 0 | 4:20 PM | 0 | 1 | 0 | 1 | 2 |
| 4:25 PM | 0 | 2 | 0 | 0 | 2 | 4:25 PM | 0 | 0 | 0 | 0 | 0 | 4:25 PM | 0 | 1 | 2 | 0 | 3 |
| 4:30 PM | 0 | 2 | 1 | 1 | 4 | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 4:30 PM | 0 | 0 | 0 | 0 | 0 |
| 4:35 PM | 0 | 2 | 1 | 1 | 4 | 4:35 PM | 0 | 0 | 0 | 0 | 0 | 4:35 PM | 0 | 0 | 0 | 0 | 0 |
| 4:40 PM | 0 | 1 | 0 | 0 | 1 | 4:40 PM | 0 | 0 | 0 | 0 | 0 | 4:40 PM | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 4:45 PM | 0 | 0 | 0 | 0 | 0 | 4:45 PM | 1 | 6 | 0 | 0 | 7 |
| 4:50 PM | 0 | 1 | 0 | 0 | 1 | 4:50 PM | 0 | 0 | 0 | 0 | 0 | 4:50 PM | 0 | 0 | 0 | 0 | 0 |
| 4:55 PM | 0 | 0 | 0 | 0 | 0 | 4:55 PM | 0 | 0 | 0 | 0 | 0 | 4:55 PM | 1 | 0 | 0 | 0 | 1 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 5:00 PM | 0 | 0 | 0 | 0 | 0 | 5:00 PM | 0 | 0 | 0 | 0 | 0 |
| 5:05 PM | 0 | 0 | 0 | 0 | 0 | 5:05 PM | 0 | 0 | 0 | 0 | 0 | 5:05 PM | 1 | 0 | 0 | 0 | 1 |
| 5:10 PM | 0 | 0 | 0 | 0 | 0 | 5:10 PM | 0 | 0 | 0 | 0 | 0 | 5:10 PM | 0 | 1 | 0 | 0 | 1 |
| 5:15 PM | 0 | 3 | 0 | 0 | 3 | 5:15 PM | 0 | 0 | 0 | 0 | 0 | 5:15 PM | 4 | 0 | 0 | 0 | 4 |
| 5:20 PM | 0 | 1 | 1 | 0 | 2 | 5:20 PM | 0 | 0 | 0 | 0 | 0 | 5:20 PM | 0 | 0 | 0 | 0 | 0 |
| 5:25 PM | 1 | 0 | 0 | 0 | 1 | 5:25 PM | 0 | 0 | 0 | 0 | 0 | 5:25 PM | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 1 | 1 | 0 | 2 | 5:30 PM | 0 | 0 | 0 | 0 | 0 | 5:30 PM | 0 | 2 | 0 | 0 | 2 |
| 5:35 PM | 0 | 0 | 0 | 1 | 1 | 5:35 PM | 0 | 0 | 0 | 0 | 0 | 5:35 PM | 0 | 0 | 0 | 0 | 0 |
| 5:40 PM | 0 | 0 | 0 | 3 | 3 | 5:40 PM | 0 | 0 | 0 | 0 | 0 | 5:40 PM | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 1 | 0 | 1 | 5:45 PM | 0 | 0 | 0 | 0 | 0 | 5:45 PM | 0 | 0 | 0 | 0 | 0 |
| 5:50 PM | 0 | 2 | 0 | 0 | 2 | 5:50 PM | 0 | 0 | 0 | 0 | 0 | 5:50 PM | 0 | 0 | 0 | 0 | 0 |
| 5:55 PM | 0 | 0 | 0 | 0 | 0 | 5:55 PM | 0 | 0 | 0 | 0 | 0 | 5:55 PM | 0 | 0 | 0 | 0 | 0 |
| Count Total | 2 | 20 | 5 | 8 | 35 | Count Total | 0 | 1 | 1 | 0 | 2 | Count Total | 8 | 13 | 2 | 1 | 24 |
| Peak Hour | 0 | 13 | 2 | 2 | 17 | Peak Hour | 0 | 0 | 0 | 0 | 0 | Peak Hour | 7 | 9 | 2 | 1 | 19 |



Note: Total study counts contained in parentheses.

|  | HV\% | PHF |
| :--- | :---: | :---: |
| EB | $1.1 \%$ | 0.65 |
| WB | $0.0 \%$ | 0.00 |
| NB | $1.5 \%$ | 0.88 |
| SB | $0.9 \%$ | 0.93 |
| All | $1.2 \%$ | 0.94 |

Traffic Counts - Motorized Vehicles

| Interval | I205 NB RAMPS <br> Eastbound |  |  |  | I205 NB RAMPS Westbound |  |  |  | 10TH ST <br> Northbound |  |  |  | 10TH ST <br> Southbound |  |  |  | Total | Rolling Hour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  |
| 4:00 PM | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 20 | 0 | 18 | 36 | 0 | 125 | 1,501 |
| 4:05 PM | 0 | 7 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 16 | 0 | 31 | 42 | 0 | 133 | 1,512 |
| 4:10 PM | 0 | 2 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 27 | 0 | 32 | 28 | 0 | 130 | 1,517 |
| 4:15 PM | 0 | 4 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 32 | 0 | 29 | 30 | 0 | 125 | 1,517 |
| 4:20 PM | 0 | 6 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 23 | 0 | 32 | 42 | 0 | 143 | 1,532 |
| 4:25 PM | 0 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 25 | 0 | 30 | 42 | 0 | 132 | 1,501 |
| 4:30 PM | 0 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 18 | 0 | 30 | 30 | 0 | 112 | 1,492 |
| 4:35 PM | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 33 | 0 | 25 | 40 | 0 | 130 | 1,524 |
| 4:40 PM | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 33 | 0 | 30 | 24 | 0 | 124 | 1,511 |
| 4:45 PM | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 38 | 0 | 23 | 36 | 0 | 134 | 1,499 |
| 4:50 PM | 0 | 1 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 18 | 0 | 22 | 34 | 0 | 113 | 1,496 |
| 4:55 PM | 0 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 21 | 0 | 27 | 27 | 0 | 100 | 1,496 |
| 5:00 PM | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 35 | 0 | 36 | 33 | 0 | 136 | 1,496 |
| 5:05 PM | 0 | 6 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 30 | 0 | 31 | 33 | 0 | 138 |  |
| 5:10 PM | 0 | 6 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 27 | 0 | 30 | 28 | 0 | 130 |  |
| 5:15 PM | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 22 | 0 | 37 | 47 | 0 | 140 |  |
| 5:20 PM | 0 | 3 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 24 | 0 | 28 | 27 | 0 | 112 |  |
| 5:25 PM | 0 | 4 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 23 | 0 | 28 | 32 | 0 | 123 |  |
| 5:30 PM | 0 | 11 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 28 | 0 | 31 | 46 | 0 | 144 |  |
| 5:35 PM | 0 | 3 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 16 | 0 | 25 | 42 | 0 | 117 |  |
| 5:40 PM | 0 | 9 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 18 | 0 | 18 | 35 | 0 | 112 |  |
| 5:45 PM | 0 | 11 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 20 | 0 | 26 | 46 | 0 | 131 |  |
| 5:50 PM | 0 | 10 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 23 | 0 | 11 | 30 | 0 | 113 |  |
| 5:55 PM | 0 | 11 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 11 | 0 | 16 | 24 | 0 | 100 |  |
| Count Total | 0 | 123 | 4 | 147 | 0 | 0 | 0 | 0 | 0 | 0 | 662 | 581 | 0 | 646 | 834 | 0 | 2,997 |  |
| Peak Hour | 0 | 40 | 3 | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 353 | 323 | 0 | 353 | 416 | 0 | 1,532 |  |

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval | Heavy Vehicles |  |  |  |  | Interval Start Time | Bicycles on Roadway |  |  |  |  | Interval <br> Start Time | Pedestrians/Bicycles on Crosswalk |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |
| 4:00 PM | 0 | 0 | 0 | 2 | 2 | 4:00 PM | 0 | 0 | 0 | 0 | 0 | 4:00 PM | 1 | 0 | 0 | 0 | 1 |
| 4:05 PM | 1 | 1 | 0 | 0 | 2 | 4:05 PM | 0 | 0 | 0 | 0 | 0 | 4:05 PM | 0 | 0 | 0 | 0 | 0 |
| 4:10 PM | 0 | 1 | 0 | 0 | 1 | 4:10 PM | 0 | 0 | 0 | 0 | 0 | 4:10 PM | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 1 | 0 | 1 | 2 | 4:15 PM | 0 | 0 | 0 | 0 | 0 | 4:15 PM | 1 | 0 | 0 | 0 | 1 |
| 4:20 PM | 0 | 1 | 0 | 0 | 1 | 4:20 PM | 0 | 0 | 0 | 0 | 0 | 4:20 PM | 0 | 0 | 0 | 0 | 0 |
| 4:25 PM | 0 | 3 | 0 | 0 | 3 | 4:25 PM | 0 | 0 | 0 | 0 | 0 | 4:25 PM | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 1 | 0 | 1 | 2 | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 4:30 PM | 0 | 0 | 0 | 0 | 0 |
| 4:35 PM | 0 | 1 | 0 | 1 | 2 | 4:35 PM | 0 | 0 | 0 | 0 | 0 | 4:35 PM | 0 | 0 | 0 | 0 | 0 |
| 4:40 PM | 0 | 2 | 0 | 0 | 2 | 4:40 PM | 0 | 0 | 0 | 0 | 0 | 4:40 PM | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 1 | 1 | 4:45 PM | 0 | 0 | 0 | 0 | 0 | 4:45 PM | 1 | 0 | 0 | 0 | 1 |
| 4:50 PM | 0 | 1 | 0 | 0 | 1 | 4:50 PM | 0 | 0 | 0 | 0 | 0 | 4:50 PM | 1 | 0 | 0 | 0 | 1 |
| 4:55 PM | 0 | 0 | 0 | 1 | 1 | 4:55 PM | 0 | 0 | 0 | 0 | 0 | 4:55 PM | 1 | 0 | 0 | 0 | 1 |
| 5:00 PM | 1 | 0 | 0 | 0 | 1 | 5:00 PM | 0 | 0 | 0 | 0 | 0 | 5:00 PM | 0 | 0 | 0 | 0 | 0 |
| 5:05 PM | 0 | 0 | 0 | 1 | 1 | 5:05 PM | 0 | 0 | 0 | 0 | 0 | 5:05 PM | 1 | 0 | 0 | 0 | 1 |
| 5:10 PM | 0 | 0 | 0 | 1 | 1 | 5:10 PM | 0 | 0 | 0 | 0 | 0 | 5:10 PM | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 1 | 0 | 1 | 2 | 5:15 PM | 0 | 0 | 0 | 0 | 0 | 5:15 PM | 6 | 0 | 0 | 0 | 6 |
| 5:20 PM | 0 | 2 | 0 | 0 | 2 | 5:20 PM | 0 | 0 | 0 | 0 | 0 | 5:20 PM | 0 | 0 | 0 | 0 | 0 |
| 5:25 PM | 0 | 1 | 0 | 0 | 1 | 5:25 PM | 0 | 0 | 0 | 0 | 0 | 5:25 PM | 1 | 0 | 0 | 0 | 1 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 5:30 PM | 0 | 0 | 0 | 0 | 0 | 5:30 PM | 0 | 0 | 0 | 0 | 0 |
| 5:35 PM | 0 | 1 | 0 | 2 | 3 | 5:35 PM | 0 | 0 | 0 | 0 | 0 | 5:35 PM | 0 | 0 | 0 | 0 | 0 |
| 5:40 PM | 0 | 0 | 0 | 3 | 3 | 5:40 PM | 0 | 0 | 0 | 0 | 0 | 5:40 PM | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 1 | 0 | 0 | 1 | 5:45 PM | 0 | 0 | 0 | 0 | 0 | 5:45 PM | 0 | 0 | 0 | 0 | 0 |
| 5:50 PM | 1 | 2 | 0 | 0 | 3 | 5:50 PM | 0 | 0 | 0 | 0 | 0 | 5:50 PM | 0 | 0 | 0 | 0 | 0 |
| 5:55 PM | 0 | 0 | 0 | 1 | 1 | 5:55 PM | 0 | 0 | 0 | 0 | 0 | 5:55 PM | 0 | 0 | 0 | 0 | 0 |
| Count Total | 3 | 20 | 0 | 16 | 39 | Count Total | 0 | 0 | 0 | 0 | 0 | Count Total | 13 | 0 | 0 | 0 | 13 |
| Peak Hour | 1 | 10 | 0 | 7 | 18 | Peak Hour | 0 | 0 | 0 | 0 | 0 | Peak Hour | 10 | 0 | 0 | 0 | 10 |



Note: Total study counts contained in parentheses.

|  | HV\% | PHF |
| :--- | :---: | :---: |
| EB | $0.0 \%$ | 0.00 |
| WB | $1.3 \%$ | 0.94 |
| NB | $1.8 \%$ | 0.85 |
| SB | $2.5 \%$ | 0.97 |
| All | $2.0 \%$ | 0.94 |

Traffic Counts - Motorized Vehicles

| Interval | I205 SB RAMPS <br> Eastbound |  |  |  | I205 SB RAMPS <br> Westbound |  |  |  | 10TH ST <br> Northbound |  |  |  | 10TH ST <br> Southbound |  |  |  | Total | Rolling Hour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 21 | 0 | 8 | 22 | 0 | 0 | 0 | 39 | 23 | 130 | 1,640 |
| 4:05 PM | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 20 | 0 | 12 | 32 | 0 | 0 | 0 | 57 | 17 | 151 | 1,647 |
| 4:10 PM | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 19 | 0 | 11 | 20 | 0 | 0 | 0 | 48 | 21 | 133 | 1,659 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 15 | 0 | 9 | 22 | 0 | 0 | 0 | 55 | 22 | 133 | 1,662 |
| 4:20 PM | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 25 | 0 | 9 | 22 | 0 | 0 | 0 | 59 | 20 | 147 | 1,675 |
| 4:25 PM | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 15 | 0 | 17 | 28 | 0 | 0 | 0 | 59 | 15 | 145 | 1,654 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 19 | 0 | 5 | 22 | 0 | 0 | 0 | 41 | 25 | 127 | 1,638 |
| 4:35 PM | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 16 | 0 | 7 | 21 | 0 | 0 | 0 | 59 | 25 | 136 | 1,666 |
| 4:40 PM | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 23 | 0 | 8 | 25 | 0 | 0 | 0 | 48 | 18 | 136 | 1,647 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 20 | 0 | 7 | 33 | 0 | 0 | 0 | 37 | 37 | 146 | 1,637 |
| 4:50 PM | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 11 | 0 | 8 | 15 | 0 | 0 | 0 | 46 | 32 | 125 | 1,629 |
| 4:55 PM | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 29 | 0 | 7 | 22 | 0 | 0 | 0 | 41 | 21 | 131 | 1,620 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 16 | 0 | 9 | 14 | 0 | 0 | 0 | 63 | 20 | 137 | 1,610 |
| 5:05 PM | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 24 | 0 | 20 | 30 | 0 | 0 | 0 | 52 | 24 | 163 |  |
| 5:10 PM | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 24 | 0 | 8 | 24 | 0 | 0 | 0 | 46 | 18 | 136 |  |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 26 | 0 | 10 | 25 | 0 | 0 | 0 | 57 | 16 | 146 |  |
| 5:20 PM | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 22 | 0 | 6 | 22 | 0 | 0 | 0 | 50 | 15 | 126 |  |
| 5:25 PM | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 26 | 0 | 8 | 17 | 0 | 0 | 0 | 45 | 17 | 129 |  |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 19 | 0 | 9 | 30 | 0 | 0 | 0 | 57 | 20 | 155 |  |
| 5:35 PM | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 16 | 0 | 9 | 19 | 0 | 0 | 0 | 43 | 11 | 117 |  |
| 5:40 PM | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 23 | 0 | 6 | 19 | 0 | 0 | 0 | 32 | 24 | 126 |  |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 26 | 0 | 5 | 23 | 0 | 0 | 0 | 54 | 16 | 138 |  |
| 5:50 PM | 0 | 0 | 0 | 0 | 0 | 12 | 1 | 18 | 0 | 9 | 35 | 0 | 0 | 0 | 29 | 12 | 116 |  |
| 5:55 PM | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 24 | 0 | 7 | 35 | 0 | 0 | 0 | 25 | 17 | 121 |  |
| Count Total | 0 | 0 | 0 | 0 | 0 | 333 | 1 | 497 | 0 | 214 | 577 | 0 | 0 | 0 | 1,142 | 486 | 3,250 |  |
| Peak Hour | 0 | 0 | 0 | 0 | 0 | 152 | 0 | 248 | 0 | 115 | 281 | 0 | 0 | 0 | 608 | 271 | 1,675 |  |

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval | Heavy Vehicles |  |  |  |  | Interval Start Time | Bicycles on Roadway |  |  |  |  | Interval <br> Start Time | Pedestrians/Bicycles on Crosswalk |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |
| 4:00 PM | 0 | 1 | 1 | 1 | 3 | 4:00 PM | 0 | 0 | 0 | 0 | 0 | 4:00 PM | 1 | 0 | 0 | 0 | 1 |
| 4:05 PM | 0 | 1 | 1 | 1 | 3 | 4:05 PM | 0 | 0 | 0 | 0 | 0 | 4:05 PM | 0 | 0 | 0 | 0 | 0 |
| 4:10 PM | 0 | 0 | 0 | 3 | 3 | 4:10 PM | 0 | 0 | 0 | 0 | 0 | 4:10 PM | 1 | 0 | 0 | 0 | 1 |
| 4:15 PM | 0 | 2 | 1 | 2 | 5 | 4:15 PM | 0 | 0 | 0 | 0 | 0 | 4:15 PM | 0 | 0 | 0 | 0 | 0 |
| 4:20 PM | 0 | 0 | 0 | 2 | 2 | 4:20 PM | 0 | 0 | 0 | 0 | 0 | 4:20 PM | 0 | 0 | 0 | 0 | 0 |
| 4:25 PM | 0 | 4 | 2 | 0 | 6 | 4:25 PM | 0 | 0 | 0 | 0 | 0 | 4:25 PM | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 1 | 1 | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 4:30 PM | 0 | 0 | 0 | 0 | 0 |
| 4:35 PM | 0 | 2 | 0 | 4 | 6 | 4:35 PM | 0 | 0 | 0 | 0 | 0 | 4:35 PM | 0 | 0 | 0 | 0 | 0 |
| 4:40 PM | 0 | 0 | 0 | 1 | 1 | 4:40 PM | 0 | 0 | 0 | 0 | 0 | 4:40 PM | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 1 | 3 | 4 | 4:45 PM | 0 | 0 | 0 | 0 | 0 | 4:45 PM | 1 | 0 | 0 | 0 | 1 |
| 4:50 PM | 0 | 0 | 0 | 3 | 3 | 4:50 PM | 0 | 0 | 0 | 0 | 0 | 4:50 PM | 1 | 0 | 0 | 0 | 1 |
| 4:55 PM | 0 | 0 | 1 | 2 | 3 | 4:55 PM | 0 | 0 | 0 | 0 | 0 | 4:55 PM | 1 | 0 | 0 | 0 | 1 |
| 5:00 PM | 0 | 0 | 0 | 1 | 1 | 5:00 PM | 0 | 0 | 0 | 0 | 0 | 5:00 PM | 0 | 0 | 0 | 0 | 0 |
| 5:05 PM | 0 | 1 | 0 | 3 | 4 | 5:05 PM | 0 | 0 | 0 | 0 | 0 | 5:05 PM | 0 | 0 | 0 | 0 | 0 |
| 5:10 PM | 0 | 0 | 1 | 1 | 2 | 5:10 PM | 0 | 0 | 0 | 0 | 0 | 5:10 PM | 5 | 0 | 0 | 0 | 5 |
| 5:15 PM | 0 | 0 | 0 | 1 | 1 | 5:15 PM | 0 | 0 | 0 | 0 | 0 | 5:15 PM | 2 | 0 | 0 | 0 | 2 |
| 5:20 PM | 0 | 2 | 0 | 1 | 3 | 5:20 PM | 0 | 0 | 0 | 0 | 0 | 5:20 PM | 0 | 0 | 0 | 0 | 0 |
| 5:25 PM | 0 | 0 | 0 | 1 | 1 | 5:25 PM | 0 | 0 | 0 | 0 | 0 | 5:25 PM | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 5:30 PM | 0 | 0 | 0 | 0 | 0 | 5:30 PM | 1 | 0 | 0 | 0 | 1 |
| 5:35 PM | 0 | 1 | 1 | 1 | 3 | 5:35 PM | 0 | 0 | 0 | 0 | 0 | 5:35 PM | 0 | 0 | 0 | 0 | 0 |
| 5:40 PM | 0 | 0 | 1 | 1 | 2 | 5:40 PM | 0 | 0 | 0 | 0 | 0 | 5:40 PM | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 5:45 PM | 0 | 0 | 0 | 0 | 0 | 5:45 PM | 0 | 0 | 0 | 0 | 0 |
| 5:50 PM | 0 | 3 | 0 | 0 | 3 | 5:50 PM | 0 | 0 | 0 | 0 | 0 | 5:50 PM | 0 | 0 | 0 | 0 | 0 |
| 5:55 PM | 0 | 0 | 0 | 0 | 0 | 5:55 PM | 0 | 0 | 0 | 0 | 0 | 5:55 PM | 0 | 0 | 0 | 0 | 0 |
| Count Total | 0 | 17 | 10 | 33 | 60 | Count Total | 0 | 0 | 0 | 0 | 0 | Count Total | 13 | 0 | 0 | 0 | 13 |
| Peak Hour | 0 | 7 | 5 | 22 | 34 | Peak Hour | 0 | 0 | 0 | 0 | 0 | Peak Hour | 10 | 0 | 0 | 0 | 10 |



Note: Total study counts contained in parentheses.

|  | HV\% | PHF |
| :--- | :---: | :---: |
| EB | $1.9 \%$ | 0.93 |
| WB | $2.2 \%$ | 0.91 |
| NB | $1.1 \%$ | 0.87 |
| SB |  |  |
| All | $1.7 \%$ | 0.97 |

Traffic Counts - Motorized Vehicles

| Interval | BLANKENSHIP RD Eastbound |  |  |  | BLANKENSHIP RD Westbound |  |  |  | 10TH ST <br> Northbound |  |  |  | Southbound |  |  |  | Total | Rolling Hour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right | U-Turn | Left | Thru | Right |  |  |
| 4:00 PM | 0 | 0 | 8 | 26 | 0 | 38 | 11 | 0 | 0 | 14 | 0 | 27 |  |  |  |  | 124 | 1,597 |
| 4:05 PM | 0 | 0 | 18 | 41 | 0 | 29 | 5 | 0 | 0 | 24 | 0 | 26 |  |  |  |  | 143 | 1,604 |
| 4:10 PM | 0 | 0 | 6 | 41 | 0 | 33 | 9 | 0 | 0 | 22 | 0 | 20 |  |  |  |  | 131 | 1,598 |
| 4:15 PM | 0 | 0 | 5 | 60 | 0 | 16 | 8 | 0 | 0 | 19 | 0 | 19 |  |  |  |  | 127 | 1,603 |
| 4:20 PM | 0 | 0 | 12 | 43 | 0 | 37 | 8 | 0 | 0 | 14 | 0 | 27 |  |  |  |  | 141 | 1,622 |
| 4:25 PM | 0 | 0 | 8 | 46 | 0 | 28 | 7 | 0 | 0 | 27 | 0 | 22 |  |  |  |  | 138 | 1,608 |
| 4:30 PM | 0 | 0 | 8 | 34 | 0 | 33 | 5 | 0 | 0 | 22 | 0 | 16 |  |  |  |  | 118 | 1,595 |
| 4:35 PM | 0 | 0 | 14 | 48 | 0 | 38 | 12 | 0 | 0 | 14 | 0 | 22 |  |  |  |  | 148 | 1,613 |
| 4:40 PM | 0 | 0 | 1 | 35 | 0 | 28 | 13 | 0 | 0 | 26 | 0 | 19 |  |  |  |  | 122 | 1,576 |
| 4:45 PM | 0 | 0 | 11 | 51 | 0 | 22 | 5 | 0 | 0 | 28 | 0 | 32 |  |  |  |  | 149 | 1,566 |
| 4:50 PM | 0 | 0 | 10 | 45 | 0 | 40 | 7 | 0 | 0 | 9 | 0 | 15 |  |  |  |  | 126 | 1,543 |
| 4:55 PM | 0 | 0 | 7 | 35 | 0 | 28 | 9 | 0 | 0 | 30 | 0 | 21 |  |  |  |  | 130 | 1,524 |
| 5:00 PM | 0 | 0 | 14 | 46 | 0 | 33 | 7 | 0 | 0 | 19 | 0 | 12 |  |  |  |  | 131 | 1,503 |
| 5:05 PM | 0 | 0 | 5 | 49 | 0 | 27 | 4 | 0 | 0 | 21 | 0 | 31 |  |  |  |  | 137 |  |
| 5:10 PM | 0 | 0 | 14 | 38 | 0 | 31 | 5 | 0 | 0 | 21 | 0 | 27 |  |  |  |  | 136 |  |
| 5:15 PM | 0 | 0 | 13 | 46 | 0 | 24 | 10 | 0 | 0 | 22 | 0 | 31 |  |  |  |  | 146 |  |
| 5:20 PM | 0 | 0 | 15 | 46 | 0 | 18 | 5 | 0 | 0 | 18 | 0 | 25 |  |  |  |  | 127 |  |
| 5:25 PM | 0 | 0 | 13 | 33 | 0 | 33 | 6 | 0 | 0 | 23 | 0 | 17 |  |  |  |  | 125 |  |
| 5:30 PM | 0 | 0 | 6 | 48 | 0 | 27 | 2 | 0 | 0 | 30 | 0 | 23 |  |  |  |  | 136 |  |
| 5:35 PM | 0 | 0 | 16 | 37 | 0 | 19 | 9 | 0 | 0 | 12 | 0 | 18 |  |  |  |  | 111 |  |
| 5:40 PM | 0 | 0 | 6 | 32 | 0 | 25 | 3 | 0 | 0 | 25 | 0 | 21 |  |  |  |  | 112 |  |
| 5:45 PM | 0 | 0 | 13 | 34 | 0 | 31 | 3 | 0 | 0 | 19 | 0 | 26 |  |  |  |  | 126 |  |
| 5:50 PM | 0 | 0 | 4 | 22 | 0 | 22 | 4 | 0 | 0 | 27 | 0 | 28 |  |  |  |  | 107 |  |
| 5:55 PM | 0 | 0 | 6 | 23 | 0 | 17 | 4 | 0 | 0 | 28 | 0 | 31 |  |  |  |  | 109 |  |
| Count Total | 0 | 0 | 233 | 959 | 0 | 677 | 161 | 0 | 0 | 514 | 0 | 556 |  |  |  |  | 3,100 |  |
| Peak Hour | 0 | 0 | 117 | 516 | 0 | 369 | 92 | 0 | 0 | 253 | 0 | 275 |  |  |  |  | 1,622 |  |

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

| Interval | Heavy Vehicles |  |  |  |  | Interval Start Time | Bicycles on Roadway |  |  |  |  | Interval <br> Start Time | Pedestrians/Bicycles on Crosswalk |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |  | EB | NB | WB | SB | Total |
| 4:00 PM | 0 | 0 | 1 |  | 1 | 4:00 PM | 0 | 0 | 0 |  | 0 | 4:00 PM | 0 | 0 | 0 |  | 0 |
| 4:05 PM | 0 | 1 | 1 |  | 2 | 4:05 PM | 0 | 0 | 0 |  | 0 | 4:05 PM | 0 | 0 | 0 |  | 0 |
| 4:10 PM | 1 | 1 | 2 |  | 4 | 4:10 PM | 0 | 0 | 0 |  | 0 | 4:10 PM | 0 | 0 | 0 |  | 0 |
| 4:15 PM | 0 | 1 | 2 |  | 3 | 4:15 PM | 0 | 0 | 0 |  | 0 | 4:15 PM | 0 | 0 | 0 |  | 0 |
| 4:20 PM | 0 | 0 | 2 |  | 2 | 4:20 PM | 0 | 0 | 0 |  | 0 | 4:20 PM | 0 | 0 | 0 |  | 0 |
| 4:25 PM | 0 | 3 | 0 |  | 3 | 4:25 PM | 0 | 0 | 0 |  | 0 | 4:25 PM | 0 | 0 | 0 |  | 0 |
| 4:30 PM | 1 | 0 | 1 |  | 2 | 4:30 PM | 0 | 0 | 0 |  | 0 | 4:30 PM | 0 | 0 | 0 |  | 0 |
| 4:35 PM | 3 | 1 | 1 |  | 5 | 4:35 PM | 0 | 0 | 0 |  | 0 | 4:35 PM | 0 | 0 | 0 |  | 0 |
| 4:40 PM | 1 | 0 | 0 |  | 1 | 4:40 PM | 0 | 0 | 0 |  | 0 | 4:40 PM | 0 | 0 | 0 |  | 0 |
| 4:45 PM | 1 | 0 | 2 |  | 3 | 4:45 PM | 0 | 0 | 0 |  | 0 | 4:45 PM | 0 | 0 | 0 |  | 0 |
| 4:50 PM | 0 | 0 | 2 |  | 2 | 4:50 PM | 0 | 0 | 0 |  | 0 | 4:50 PM | 0 | 0 | 0 |  | 0 |
| 4:55 PM | 2 | 1 | 0 |  | 3 | 4:55 PM | 0 | 0 | 0 |  | 0 | 4:55 PM | 0 | 0 | 0 |  | 0 |
| 5:00 PM | 1 | 0 | 0 |  | 1 | 5:00 PM | 0 | 0 | 0 |  | 0 | 5:00 PM | 0 | 0 | 0 |  | 0 |
| 5:05 PM | 1 | 0 | 2 |  | 3 | 5:05 PM | 0 | 0 | 0 |  | 0 | 5:05 PM | 0 | 0 | 0 |  | 0 |
| 5:10 PM | 1 | 1 | 0 |  | 2 | 5:10 PM | 0 | 0 | 0 |  | 0 | 5:10 PM | 0 | 0 | 0 |  | 0 |
| 5:15 PM | 1 | 0 | 0 |  | 1 | 5:15 PM | 0 | 0 | 0 |  | 0 | 5:15 PM | 0 | 0 | 0 |  | 0 |
| 5:20 PM | 0 | 2 | 1 |  | 3 | 5:20 PM | 0 | 0 | 0 |  | 0 | 5:20 PM | 0 | 0 | 0 |  | 0 |
| 5:25 PM | 0 | 0 | 2 |  | 2 | 5:25 PM | 0 | 0 | 0 |  | 0 | 5:25 PM | 0 | 0 | 0 |  | 0 |
| 5:30 PM | 0 | 0 | 0 |  | 0 | 5:30 PM | 0 | 0 | 0 |  | 0 | 5:30 PM | 0 | 0 | 0 |  | 0 |
| 5:35 PM | 0 | 0 | 1 |  | 1 | 5:35 PM | 0 | 0 | 0 |  | 0 | 5:35 PM | 0 | 0 | 0 |  | 0 |
| 5:40 PM | 1 | 0 | 0 |  | 1 | 5:40 PM | 0 | 0 | 0 |  | 0 | 5:40 PM | 0 | 0 | 0 |  | 0 |
| 5:45 PM | 0 | 0 | 0 |  | 0 | 5:45 PM | 0 | 0 | 0 |  | 0 | 5:45 PM | 0 | 0 | 0 |  | 0 |
| 5:50 PM | 0 | 1 | 0 |  | 1 | 5:50 PM | 0 | 0 | 0 |  | 0 | 5:50 PM | 0 | 0 | 0 |  | 0 |
| 5:55 PM | 1 | 0 | 0 |  | 1 | 5:55 PM | 0 | 0 | 0 |  | 0 | 5:55 PM | 0 | 0 | 0 |  | 0 |
| Count Total | 15 | 12 | 20 |  | 47 | Count Total | 0 | 0 | 0 |  | 0 | Count Total | 0 | 0 | 0 |  | 0 |
| Peak Hour | 12 | 6 | 10 |  | 28 | Peak Hour | 0 | 0 | 0 |  | 0 | Peak Hour | 0 | 0 | 0 |  | 0 |


| Intersection |  |
| :--- | ---: |
| Intersection Delay, s/veh 22.1 |  |
| Intersection LOS | C |


| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | \% | $\uparrow$ |  | ${ }^{7}$ | F |  |  | $\uparrow$ |  |  | $\uparrow$ |  |
| Traffic Vol, veh/h | 11 | 413 | 13 | 99 | 219 | 10 | 19 | 5 | 146 | 10 | 5 | 5 |
| Future Vol, veh/h | 11 | 413 | 13 | 99 | 219 | 10 | 19 | 5 | 146 | 10 | 5 | 5 |
| Peak Hour Factor | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 |
| Heavy Vehicles, \% | 5 | 5 | 5 | 6 | 6 | 6 | 2 | 2 | 2 | 5 | 5 | 5 |
| Mumt Flow | 14 | 510 | 16 | 122 | 270 | 12 | 23 | 6 | 180 | 12 | 6 | 6 |
| Number of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Approach | EB |  |  | WB |  |  | NB |  |  | SB |  |  |
| Opposing Approach | WB |  |  | EB |  |  | SB |  |  | NB |  |  |
| Opposing Lanes | 2 |  |  | 2 |  |  | 1 |  |  | 1 |  |  |
| Conflicting Approach Left | SB |  |  | NB |  |  | EB |  |  | WB |  |  |
| Conflicting Lanes Left | 1 |  |  | 1 |  |  | 2 |  |  | 2 |  |  |
| Conflicting Approach Right | NB |  |  | SB |  |  | WB |  |  | EB |  |  |
| Conflicting Lanes Right | 1 |  |  | 1 |  |  | 2 |  |  | 2 |  |  |
| HCM Control Delay | 33.3 |  |  | 13.2 |  |  | 12.1 |  |  | 10.4 |  |  |
| HCM LOS | D |  |  | B |  |  | B |  |  | B |  |  |


| Lane | NBLn1 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | SBLn1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Vol Left, \% | $11 \%$ | $100 \%$ | $0 \%$ | $100 \%$ | $0 \%$ | $50 \%$ |
| Vol Thru, \% | $3 \%$ | $0 \%$ | $97 \%$ | $0 \%$ | $96 \%$ | $25 \%$ |
| Vol Right, \% | $86 \%$ | $0 \%$ | $3 \%$ | $0 \%$ | $4 \%$ | $25 \%$ |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 170 | 11 | 426 | 99 | 229 | 20 |
| LT Vol | 19 | 11 | 0 | 99 | 0 | 10 |
| Through Vol | 5 | 0 | 413 | 0 | 219 | 5 |
| RT Vol | 146 | 0 | 13 | 0 | 10 | 5 |
| Lane Flow Rate | 210 | 14 | 526 | 122 | 283 | 25 |
| Geometry Grp | 2 | 7 | 7 | 7 | 7 | 2 |
| Degree of Util (X) | 0.345 | 0.024 | 0.856 | 0.222 | 0.472 | 0.048 |
| Departure Headway (Hd) | 5.921 | 6.388 | 5.86 | 6.553 | 6.014 | 6.985 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 604 | 560 | 615 | 546 | 597 | 509 |
| Service Time | 3.986 | 4.133 | 3.604 | 4.305 | 3.766 | 5.079 |
| HCM Lane V/C Ratio | 0.348 | 0.025 | 0.855 | 0.223 | 0.474 | 0.049 |
| HCM Control Delay | 12.1 | 9.3 | 33.9 | 11.2 | 14.1 | 10.4 |
| HCM Lane LOS | B | A | D | B | B | B |
| HCM 95th-tile Q | 1.5 | 0.1 | 9.5 | 0.8 | 2.5 | 0.2 |


| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 1.4 |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | $\uparrow$ |  |  | - | r |  |
| Traffic Vol, veh/h | 528 | 20 | 66 | 341 | 2 | 49 |
| Future Vol, veh/h | 528 | 20 | 66 | 341 | 2 | 49 |
| Conflicting Peds, \#/hr | 0 | 4 | 12 | 0 | 4 | 12 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, \# | 0 | - | - | 0 | 0 | - |
| Grade, \% | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, \% | 4 | 4 | 5 | 5 | 12 | 12 |
| Mvmt Flow | 600 | 25 | 83 | 426 | 3 | 61 |


| Major/Minor | Major1 |  | Major2 |  | Minor1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | 0 | 0 | 697 | 0 | 1281 | 697 |
| Stage 1 | - | - | - | - | 685 | - |
| Stage 2 | - | - | - | - | 596 | - |
| Critical Hdwy | - | - | 4.15 | - | 6.52 | 6.32 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.52 | - |
| Follow-up Hdwy | - | - | 2.245 | - | 3.608 | 3.408 |
| Pot Cap-1 Maneuver | - | - | 885 | - | 174 | 424 |
| Stage 1 | - | - | - | - | 482 | - |
| Stage 2 | - | - | - | - | 531 | - |
| Platoon blocked, \% | - | - |  | - |  |  |
| Mov Cap-1 Maneuver | - | - | 875 | - | 150 | 414 |
| Mov Cap-2 Maneuver | - | - | - | - | 150 | - |
| Stage 1 | - | - | - | - | 477 | - |
| Stage 2 | - | - | - | - | 464 | - |
|  |  |  |  |  |  |  |
| Approach | EB |  | WB |  | NB |  |
| HCM Control Delay, s | 0 |  | 1.5 |  | 16.1 |  |
| HCM LOS |  |  |  |  | C |  |
|  |  |  |  |  |  |  |
| Minor Lane/Major Mvmt |  | NBLn1 | EBT | EBR | WBL WBT |  |
| Capacity (veh/h) |  | 387 | - | - | 875 | - |
| HCM Lane V/C Ratio |  | 0.165 | - | - | 0.094 | - |
| HCM Control Delay (s) |  | 16.1 | - | - | 9.5 | 0 |
| HCM Lane LOS |  | C | - | - | A | A |
| HCM 95th \%tile Q(veh) |  | 0.6 | - | - | 0.3 | - |


| Intersection |  |
| :--- | ---: | :--- |
| Intersection Delay, s/veh | 26.3 |
| Intersection LOS | D |


| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | ${ }^{1}$ | 4 | $\uparrow$ |  | ${ }^{1}$ | 「 |
| Traffic Vol, veh/h | 371 | 207 | 211 | 185 | 103 | 196 |
| Future Vol, veh/h | 371 | 207 | 211 | 185 | 103 | 196 |
| Peak Hour Factor | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Heavy Vehicles, \% | 6 | 6 | 5 | 5 | 7 | 7 |
| Mvmt Flow | 436 | 244 | 248 | 218 | 121 | 231 |
| Number of Lanes | 1 | 1 | 1 | 0 | 1 | 1 |
| Approach | EB |  | WB |  | SB |  |
| Opposing Approach | WB |  | EB |  |  |  |
| Opposing Lanes | 1 |  | 2 |  | 0 |  |
| Conflicting Approach Left | SB |  |  |  | WB |  |
| Conflicting Lanes Left | 2 |  | 0 |  | 1 |  |
| Conflicting Approach Right |  |  | SB |  | EB |  |
| Conflicting Lanes Right | 0 |  | 2 |  | 2 |  |
| HCM Control Delay | 29.8 |  | 30 |  | 14.5 |  |
| HCM LOS | D |  | D |  | B |  |


| Lane | EBLn1 | EBLn2 | WBLn1 | SBLn1 | SBLn2 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Vol Left, \% | $100 \%$ | $0 \%$ | $0 \%$ | $100 \%$ | $0 \%$ |
| Vol Thru, \% | $0 \%$ | $100 \%$ | $53 \%$ | $0 \%$ | $0 \%$ |
| Vol Right, \% | $0 \%$ | $0 \%$ | $47 \%$ | $0 \%$ | $100 \%$ |
| Sign Control | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 371 | 207 | 396 | 103 | 196 |
| LT Vol | 371 | 0 | 0 | 103 | 0 |
| Through Vol | 0 | 207 | 211 | 0 | 0 |
| RT Vol | 0 | 0 | 185 | 0 | 196 |
| Lane Flow Rate | 436 | 244 | 466 | 121 | 231 |
| Geometry Grp | 7 | 7 | 4 | 7 | 7 |
| Degree of Util (X) | 0.852 | 0.441 | 0.803 | 0.271 | 0.437 |
| Departure Headway (Hd) | 7.024 | 6.514 | 6.204 | 8.047 | 6.817 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes |
| Cap | 515 | 550 | 582 | 445 | 526 |
| Service Time | 4.797 | 4.287 | 4.268 | 5.822 | 4.591 |
| HCM Lane V/C Ratio | 0.847 | 0.444 | 0.801 | 0.272 | 0.439 |
| HCM Control Delay | 38.4 | 14.4 | 30 | 13.8 | 14.8 |
| HCM Lane LOS | E | B | D | B | B |
| HCM 95th-tile Q | 8.9 | 2.2 | 7.9 | 1.1 | 2.2 |





|  | $\rangle$ |  |  |  |  |  | 4 | 4 | $p$ |  | $\dagger$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | $\uparrow$ | $\stackrel{7}{ }$ |  |  |  |  | $\uparrow$ | \% | ${ }^{7}$ | 4 |  |
| Traffic Volume (veh/h) | 105 | 0 | 89 | 0 | 0 | 0 | 0 | 314 | 318 | 255 | 354 | 0 |
| Future Volume (veh/h) | 105 | 0 | 89 | 0 | 0 | 0 | 0 | 314 | 318 | 255 | 354 | 0 |
| Initial $Q(Q b)$, veh | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 |  | 0.99 |  |  |  | 1.00 |  | 1.00 | 1.00 |  | 1.00 |
| Parking Bus, Adj | 0.99 | 1.00 | 1.00 |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach |  | No |  |  |  |  |  | No |  |  | No |  |
| Adj Sat Flow, veh/h/n | 1826 | 1826 | 1826 |  |  |  | 0 | 1826 | 1826 | 1856 | 1856 | 0 |
| Adj Flow Rate, veh/h | 114 | 0 | 97 |  |  |  | 0 | 341 | 346 | 277 | 385 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 |  |  |  | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, \% | 5 | 5 | 5 |  |  |  | 0 | 5 | 5 | 3 | 3 | 0 |
| Cap, veh/h | 210 | 0 | 188 |  |  |  | 0 | 773 | 655 | 598 | 1223 | 0 |
| Arrive On Green | 0.12 | 0.00 | 0.12 |  |  |  | 0.00 | 0.42 | 0.42 | 0.13 | 0.66 | 0.00 |
| Sat Flow, veh/h | 1718 | 0 | 1536 |  |  |  | 0 | 1826 | 1547 | 1767 | 1856 | 0 |
| Grp Volume(v), veh/h | 114 | 0 | 97 |  |  |  | 0 | 341 | 346 | 277 | 385 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1718 | 0 | 1536 |  |  |  | 0 | 1826 | 1547 | 1767 | 1856 | 0 |
| $Q$ Serve(g_s), s | 2.9 | 0.0 | 2.7 |  |  |  | 0.0 | 6.1 | 7.6 | 3.5 | 4.1 | 0.0 |
| Cycle Q Clear(g_c), s | 2.9 | 0.0 | 2.7 |  |  |  | 0.0 | 6.1 | 7.6 | 3.5 | 4.1 | 0.0 |
| Prop In Lane | 1.00 |  | 1.00 |  |  |  | 0.00 |  | 1.00 | 1.00 |  | 0.00 |
| Lane Grp Cap(c), veh/h | 210 | 0 | 188 |  |  |  | 0 | 773 | 655 | 598 | 1223 | 0 |
| V/C Ratio(X) | 0.54 | 0.00 | 0.52 |  |  |  | 0.00 | 0.44 | 0.53 | 0.46 | 0.31 | 0.00 |
| Avail Cap(c_a), veh/h | 752 | 0 | 672 |  |  |  | 0 | 1198 | 1016 | 1342 | 1223 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 |  |  |  | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 18.9 | 0.0 | 18.8 |  |  |  | 0.0 | 9.3 | 9.8 | 5.6 | 3.4 | 0.0 |
| Incr Delay (d2), s/veh | 1.3 | 0.0 | 1.3 |  |  |  | 0.0 | 1.8 | 3.0 | 0.3 | 0.7 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| \%ile BackOfQ( $50 \%$ ),veh/ln | 1.0 | 0.0 | 0.9 |  |  |  | 0.0 | 2.2 | 2.5 | 0.8 | 0.9 | 0.0 |
| Unsig. Movement Delay, s/veh |  |  |  |  |  |  |  |  |  |  |  |  |
| LnGrp Delay(d),s/veh | 20.2 | 0.0 | 20.1 |  |  |  | 0.0 | 11.2 | 12.8 | 5.9 | 4.0 | 0.0 |
| LnGrp LOS | C | A | C |  |  |  | A | B | B | A | A | A |
| Approach Vol, veh/h |  | 211 |  |  |  |  |  | 687 |  |  | 662 |  |
| Approach Delay, s/veh |  | 20.2 |  |  |  |  |  | 12.0 |  |  | 4.8 |  |
| Approach LOS |  | C |  |  |  |  |  | B |  |  | A |  |
| Timer - Assigned Phs |  | 2 |  |  | 5 | 6 |  | 8 |  |  |  |  |
| Phs Duration ( $\mathrm{G}+\mathrm{Y}+\mathrm{Rc}$ ), $s$ |  | 35.1 |  |  | 10.8 | 24.4 |  | 10.6 |  |  |  |  |
| Change Period ( $Y+R \mathrm{Cc}$ ), $s$ |  | 5.0 |  |  | 5.0 | 5.0 |  | 5.0 |  |  |  |  |
| Max Green Setting (Gmax), s |  | 30.0 |  |  | 25.0 | 30.0 |  | 20.0 |  |  |  |  |
| Max Q Clear Time (g_c+1), s |  | 6.1 |  |  | 5.5 | 9.6 |  | 4.9 |  |  |  |  |
| Green Ext Time (p_c), s |  | 6.8 |  |  | 0.5 | 9.8 |  | 0.5 |  |  |  |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM 6th Ctrl Delay |  |  | 10.1 |  |  |  |  |  |  |  |  |  |
| HCM 6th LOS |  |  | B |  |  |  |  |  |  |  |  |  |


|  | 4 |  | 7 | \% |  | 4 | $4$ | $\dagger$ | \% |  | $\downarrow$ | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  | $\uparrow$ | 「 | ${ }^{7}$ | 4 |  |  | 虫 |  |
| Traffic Volume (vph) | 0 | 0 | 0 | 118 | 4 | 177 | 136 | 282 | 0 | 0 | 484 | 306 |
| Future Volume (vph) | 0 | 0 | 0 | 118 | 4 | 177 | 136 | 282 | 0 | 0 | 484 | 306 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) |  |  |  |  | 5.5 | 5.5 | 5.5 | 5.5 |  |  | 5.5 |  |
| Lane Util. Factor |  |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 |  |  | 0.95 |  |
| Frpb, ped/bikes |  |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 |  |  | 0.99 |  |
| Flpb, ped/bikes |  |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 |  |  | 1.00 |  |
| Frt |  |  |  |  | 1.00 | 0.85 | 1.00 | 1.00 |  |  | 0.94 |  |
| Fit Protected |  |  |  |  | 0.95 | 1.00 | 0.95 | 1.00 |  |  | 1.00 |  |
| Satd. Flow (prot) |  |  |  |  | 1742 | 1553 | 1719 | 1810 |  |  | 3298 |  |
| Flt Permitted |  |  |  |  | 0.95 | 1.00 | 0.95 | 1.00 |  |  | 1.00 |  |
| Satd. Flow (perm) |  |  |  |  | 1742 | 1553 | 1719 | 1810 |  |  | 3298 |  |
| Peak-hour factor, PHF | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph) | 0 | 0 | 0 | 133 | 4 | 199 | 153 | 317 | 0 | 0 | 544 | 344 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 177 | 0 | 0 | 0 | 0 | 79 | 0 |
| Lane Group Flow (vph) | 0 | 0 | 0 | 0 | 137 | 22 | 153 | 317 | 0 | 0 | 809 | 0 |
| Confl. Peds. (\#/hr) |  |  |  |  |  |  | 2 |  |  |  |  | 2 |
| Heavy Vehicles (\%) | 0\% | 0\% | 0\% | 4\% | 4\% | 4\% | 5\% | 5\% | 5\% | 2\% | 2\% | 2\% |
| Turn Type |  |  |  | Split | NA | Prot | Prot | NA |  |  | NA |  |
| Protected Phases |  |  |  | 7 | 7 | 7 | 1 | 5 |  |  | 234 |  |
| Permitted Phases |  |  |  |  |  |  |  |  |  |  |  |  |
| Actuated Green, G (s) |  |  |  |  | 13.8 | 13.8 | 12.7 | 30.5 |  |  | 82.8 |  |
| Effective Green, g (s) |  |  |  |  | 13.8 | 13.8 | 12.7 | 30.5 |  |  | 82.8 |  |
| Actuated g/C Ratio |  |  |  |  | 0.11 | 0.11 | 0.10 | 0.24 |  |  | 0.66 |  |
| Clearance Time (s) |  |  |  |  | 5.5 | 5.5 | 5.5 | 5.5 |  |  |  |  |
| Vehicle Extension (s) |  |  |  |  | 2.3 | 2.3 | 2.3 | 5.2 |  |  |  |  |
| Lane Grp Cap (vph) |  |  |  |  | 191 | 170 | 173 | 438 |  |  | 2170 |  |
| v/s Ratio Prot |  |  |  |  | c0.08 | 0.01 | 0.09 | c0.18 |  |  | c0.25 |  |
| v/s Ratio Perm |  |  |  |  |  |  |  |  |  |  |  |  |
| v/c Ratio |  |  |  |  | 0.72 | 0.13 | 0.88 | 0.72 |  |  | 0.37 |  |
| Uniform Delay, d1 |  |  |  |  | 54.1 | 50.6 | 55.8 | 43.8 |  |  | 9.7 |  |
| Progression Factor |  |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 |  |  | 0.53 |  |
| Incremental Delay, d2 |  |  |  |  | 10.9 | 0.2 | 37.0 | 7.3 |  |  | 0.0 |  |
| Delay (s) |  |  |  |  | 65.0 | 50.8 | 92.8 | 51.1 |  |  | 5.2 |  |
| Level of Service |  |  |  |  | E | D | F | D |  |  | A |  |
| Approach Delay (s) 0.0 |  |  |  |  | 56.6 |  |  | 64.7 |  |  | 5.2 |  |
| Approach LOS |  | A |  |  | E |  |  | E |  |  | A |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM 2000 Control Delay |  |  | 31.9 |  | HCM 2000 | evel of | ervice |  | C |  |  |  |
| HCM 2000 Volume to Capacity ratio |  |  | 0.58 |  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length (s) |  |  | 125.8 |  | Sum of los | time (s) |  |  | 27.5 |  |  |  |
| Intersection Capacity Utilization |  |  | 51.3\% |  | CU Level | Service |  |  | A |  |  |  |
| Analysis Period (min) |  |  | 15 |  |  |  |  |  |  |  |  |  |
| c Critical Lane Group |  |  |  |  |  |  |  |  |  |  |  |  |

HCM 6th Edition methodology does not support clustered intersections.


[^0]| Intersection |  |
| :--- | ---: |
| Intersection Delay, s/veh $\quad 22.9$ |  |
| Intersection LOS | C |


| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | ${ }^{1 /}$ | $\uparrow$ |  | ${ }^{1}$ | $\uparrow$ |  |  | \& |  |  | ¢ |  |
| Traffic Vol, veh/h | 8 | 435 | 13 | 117 | 207 | 22 | 20 | 6 | 276 | 24 | 6 | 15 |
| Future Vol, veh/h | 8 | 435 | 13 | 117 | 207 | 22 | 20 | 6 | 276 | 24 | 6 | 15 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 9 | 468 | 14 | 126 | 223 | 24 | 22 | 6 | 297 | 26 | 6 | 16 |
| Number of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Approach | EB |  |  | WB |  |  | NB |  |  | SB |  |  |
| Opposing Approach | WB |  |  | EB |  |  | SB |  |  | NB |  |  |
| Opposing Lanes | 2 |  |  | 2 |  |  | 1 |  |  | 1 |  |  |
| Conflicting Approach Left | SB |  |  | NB |  |  | EB |  |  | WB |  |  |
| Conflicting Lanes Left | 1 |  |  | 1 |  |  | 2 |  |  | 2 |  |  |
| Conflicting Approach Right | NB |  |  | SB |  |  | WB |  |  | EB |  |  |
| Conflicting Lanes Right | 1 |  |  | 1 |  |  | 2 |  |  | 2 |  |  |
| HCM Control Delay | 35.6 |  |  | 13.7 |  |  | 15.9 |  |  | 11.2 |  |  |
| HCM LOS | E |  |  | B |  |  | C |  |  | B |  |  |


| Lane | NBLn1 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | SBLn1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Vol Left, \% | $7 \%$ | $100 \%$ | $0 \%$ | $100 \%$ | $0 \%$ | $53 \%$ |
| Vol Thru, \% | $2 \%$ | $0 \%$ | $97 \%$ | $0 \%$ | $90 \%$ | $13 \%$ |
| Vol Right, \% | $91 \%$ | $0 \%$ | $3 \%$ | $0 \%$ | $10 \%$ | $33 \%$ |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 302 | 8 | 448 | 117 | 229 | 45 |
| LT Vol | 20 | 8 | 0 | 117 | 0 | 24 |
| Through Vol | 6 | 0 | 435 | 0 | 207 | 6 |
| RT Vol | 276 | 0 | 13 | 0 | 22 | 15 |
| Lane Flow Rate | 325 | 9 | 482 | 126 | 246 | 48 |
| Geometry Grp | 2 | 7 | 7 | 7 | 7 | 2 |
| Degree of Util (X) | 0.541 | 0.017 | 0.857 | 0.249 | 0.447 | 0.098 |
| Departure Headway (Hd) | 5.993 | 6.938 | 6.407 | 7.113 | 6.533 | 7.292 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 601 | 519 | 568 | 504 | 552 | 490 |
| Service Time | 4.035 | 4.638 | 4.107 | 4.86 | 4.28 | 5.36 |
| HCM Lane V/C Ratio | 0.541 | 0.017 | 0.849 | 0.25 | 0.446 | 0.098 |
| HCM Control Delay | 15.9 | 9.8 | 36.1 | 12.2 | 14.5 | 11.2 |
| HCM Lane LOS | C | A | E | B | B | B |
| HCM 95th-tile Q | 3.2 | 0.1 | 9.3 | 1 | 2.3 | 0.3 |


| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.7 |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | $\uparrow$ |  |  | - | rin |  |
| Traffic Vol, veh/h | 725 | 6 | 20 | 341 | 1 | 38 |
| Future Vol, veh/h | 725 | 6 | 20 | 341 | 1 | 38 |
| Conflicting Peds, \#/hr | 0 | 2 | 5 | 0 | 2 | 5 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, \# | 0 | - | - | 0 | 0 | - |
| Grade, \% | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 91 | 91 | 91 | 91 | 91 | 91 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 797 | 7 | 22 | 375 | 1 | 42 |


| Major/Minor M | Major1 |  | Major2 |  | Minor1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | 0 | 0 | 809 | 0 | 1227 | 811 |
| Stage 1 | - | - | - | - | 806 | - |
| Stage 2 | - | - | - | - | 421 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 817 | - | 197 | 379 |
| Stage 1 | - | - | - | - | 439 | - |
| Stage 2 | - | - | - | - | 662 | - |
| Platoon blocked, \% | - | - |  | - |  |  |
| Mov Cap-1 Maneuver | - | - | 813 | - | 189 | 375 |
| Mov Cap-2 Maneuver | - | - | - | - | 189 | - |
| Stage 1 | - | - | - | - | 437 | - |
| Stage 2 | - | - | - | - | 638 | - |
|  |  |  |  |  |  |  |
| Approach | EB |  | WB |  | NB |  |
| HCM Control Delay, s | 0 |  | 0.5 |  | 16.1 |  |
| HCM LOS |  |  |  |  | C |  |
|  |  |  |  |  |  |  |
| Minor Lane/Major Mvmt |  | NBLn1 | EBT | EBR | WBL | WBT |
| Capacity (veh/h) |  | 366 | - | - | 813 | - |
| HCM Lane V/C Ratio |  | 0.117 | - | - | 0.027 | - |
| HCM Control Delay (s) |  | 16.1 | - | - | 9.6 | 0 |
| HCM Lane LOS |  | C | - | - | A | A |
| HCM 95th \%tile Q(veh) |  | 0.4 | - | - | 0.1 | - |


| Intersection |  |
| :--- | ---: |
| Intersection Delay, s/veh $\quad 21.3$ |  |
| Intersection LOS | C |


| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | ${ }^{1}$ | 4 | 个 |  | ${ }^{7}$ | 「 |
| Traffic Vol, veh/h | 401 | 365 | 136 | 135 | 137 | 225 |
| Future Vol, veh/h | 401 | 365 | 136 | 135 | 137 | 225 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, \% | 3 | 3 | 2 | 2 | 3 | 3 |
| Mvmt Flow | 427 | 388 | 145 | 144 | 146 | 239 |
| Number of Lanes | 1 | 1 | 1 | 0 | 1 | 1 |
| Approach | EB |  | WB |  | SB |  |
| Opposing Approach | WB |  | EB |  |  |  |
| Opposing Lanes | 1 |  | 2 |  | 0 |  |
| Conflicting Approach Left | SB |  |  |  | WB |  |
| Conflicting Lanes Left | 2 |  | 0 |  | 1 |  |
| Conflicting Approach Right |  |  | SB |  | EB |  |
| Conflicting Lanes Right | 0 |  | 2 |  | 2 |  |
| HCM Control Delay | 26.7 |  | 15.3 |  | 14.2 |  |
| HCM LOS | D |  | C |  | B |  |


| Lane | EBLn1 | EBLn2 | WBLn1 | SBLn1 | SBLn2 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Vol Left, \% | $100 \%$ | $0 \%$ | $0 \%$ | $100 \%$ | $0 \%$ |
| Vol Thru, \% | $0 \%$ | $100 \%$ | $50 \%$ | $0 \%$ | $0 \%$ |
| Vol Right, \% | $0 \%$ | $0 \%$ | $50 \%$ | $0 \%$ | $100 \%$ |
| Sign Control | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 401 | 365 | 271 | 137 | 225 |
| LT Vol | 401 | 0 | 0 | 137 | 0 |
| Through Vol | 0 | 365 | 136 | 0 | 0 |
| RT Vol | 0 | 0 | 135 | 0 | 225 |
| Lane Flow Rate | 427 | 388 | 288 | 146 | 239 |
| Geometry Grp | 7 | 7 | 4 | 7 | 7 |
| Degree of Util (X) | 0.803 | 0.676 | 0.498 | 0.314 | 0.435 |
| Departure Headway (Hd) | 6.774 | 6.266 | 6.223 | 7.76 | 6.536 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes |
| Cap | 533 | 575 | 579 | 462 | 551 |
| Service Time | 4.526 | 4.017 | 4.272 | 5.517 | 4.292 |
| HCM Lane V/C Ratio | 0.801 | 0.675 | 0.497 | 0.316 | 0.434 |
| HCM Control Delay | 31.8 | 21.2 | 15.3 | 14.1 | 14.3 |
| HCM Lane LOS | D | C | C | B | B |
| HCM 95th-tile Q | 7.7 | 5.1 | 2.8 | 1.3 | 2.2 |





|  | $\rangle$ |  |  |  |  |  | 4 | 4 | $p$ |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | $\uparrow$ | $\stackrel{7}{ }$ |  |  |  |  | 个 | \% | ${ }^{*}$ | 4 |  |
| Traffic Volume (veh/h) | 40 | 3 | 44 | 0 | 0 | 0 | 0 | 353 | 323 | 353 | 416 | 0 |
| Future Volume (veh/h) | 40 | 3 | 44 | 0 | 0 | 0 | 0 | 353 | 323 | 353 | 416 | 0 |
| Initial $\mathrm{Q}(\mathrm{Qb})$, veh | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 |  | 0.96 |  |  |  | 1.00 |  | 1.00 | 1.00 |  | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach |  | No |  |  |  |  |  | No |  |  | No |  |
| Adj Sat Flow, veh/h/n | 1870 | 1870 | 1870 |  |  |  | 0 | 1870 | 1870 | 1870 | 1870 | 0 |
| Adj Flow Rate, veh/h | 43 | 3 | 47 |  |  |  | 0 | 376 | 344 | 376 | 443 | 0 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 |  |  |  | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, \% | 2 | 2 | 2 |  |  |  | 0 | 2 | 2 | 2 | 2 | 0 |
| Cap, veh/h | 151 | 11 | 138 |  |  |  | 0 | 799 | 677 | 643 | 1295 | 0 |
| Arrive On Green | 0.09 | 0.09 | 0.09 |  |  |  | 0.00 | 0.43 | 0.43 | 0.16 | 0.69 | 0.00 |
| Sat Flow, veh/h | 1670 | 117 | 1524 |  |  |  | 0 | 1870 | 1585 | 1781 | 1870 | 0 |
| Grp Volume(v), veh/h | 46 | 0 | 47 |  |  |  | 0 | 376 | 344 | 376 | 443 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1787 | 0 | 1524 |  |  |  | 0 | 1870 | 1585 | 1781 | 1870 | 0 |
| $Q$ Serve(g_s), s | 1.1 | 0.0 | 1.3 |  |  |  | 0.0 | 6.6 | 7.3 | 4.6 | 4.4 | 0.0 |
| Cycle Q Clear(g_c), s | 1.1 | 0.0 | 1.3 |  |  |  | 0.0 | 6.6 | 7.3 | 4.6 | 4.4 | 0.0 |
| Prop In Lane | 0.93 |  | 1.00 |  |  |  | 0.00 |  | 1.00 | 1.00 |  | 0.00 |
| Lane Grp Cap(c), veh/h | 162 | 0 | 138 |  |  |  | 0 | 799 | 677 | 643 | 1295 | 0 |
| V/C Ratio(X) | 0.28 | 0.00 | 0.34 |  |  |  | 0.00 | 0.47 | 0.51 | 0.59 | 0.34 | 0.00 |
| Avail Cap(c_a), veh/h | 776 | 0 | 662 |  |  |  | 0 | 1218 | 1032 | 1330 | 1295 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 |  |  |  | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 19.6 | 0.0 | 19.7 |  |  |  | 0.0 | 9.5 | 9.7 | 5.7 | 2.9 | 0.0 |
| Incr Delay (d2), s/veh | 0.6 | 0.0 | 0.9 |  |  |  | 0.0 | 2.0 | 2.7 | 0.5 | 0.7 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| \%ile BackOfQ(50\%),veh/In | 0.4 | 0.0 | 0.4 |  |  |  | 0.0 | 2.5 | 2.5 | 1.0 | 0.9 | 0.0 |
| Unsig. Movement Delay, s/veh |  |  |  |  |  |  |  |  |  |  |  |  |
| LnGrp Delay(d),s/veh | 20.1 | 0.0 | 20.5 |  |  |  | 0.0 | 11.4 | 12.4 | 6.2 | 3.6 | 0.0 |
| LnGrp LOS | C | A | C |  |  |  | A | B | B | A | A | A |
| Approach Vol, veh/h |  | 93 |  |  |  |  |  | 720 |  |  | 819 |  |
| Approach Delay, s/veh |  | 20.3 |  |  |  |  |  | 11.9 |  |  | 4.8 |  |
| Approach LOS |  | C |  |  |  |  |  | B |  |  | A |  |
| Timer - Assigned Phs |  | 2 |  |  | 5 | 6 |  | 8 |  |  |  |  |
| Phs Duration ( $\mathrm{G}+\mathrm{Y}+\mathrm{Rc}$ ), $s$ |  | 36.9 |  |  | 12.2 | 24.7 |  | 9.2 |  |  |  |  |
| Change Period ( $Y+R \mathrm{Cc}$ ), $s$ |  | 5.0 |  |  | 5.0 | 5.0 |  | 5.0 |  |  |  |  |
| Max Green Setting (Gmax), s |  | 30.0 |  |  | 25.0 | 30.0 |  | 20.0 |  |  |  |  |
| Max Q Clear Time (g_c+11), s |  | 6.4 |  |  | 6.6 | 9.3 |  | 3.3 |  |  |  |  |
| Green Ext Time (p_c), s |  | 7.9 |  |  | 0.7 | 10.4 |  | 0.2 |  |  |  |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM 6th Ctrl Delay |  |  | 8.8 |  |  |  |  |  |  |  |  |  |
| HCM 6th LOS |  |  | A |  |  |  |  |  |  |  |  |  |


|  | 4 |  | 7 | \% |  | 4 | $4$ | $\dagger$ | \% |  | $\downarrow$ | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  | $\uparrow$ | 「' | ${ }^{7}$ | 4 |  |  | 禹 |  |
| Traffic Volume (vph) | 0 | 0 | 0 | 152 | 0 | 248 | 115 | 281 | 0 | 0 | 608 | 271 |
| Future Volume (vph) | 0 | 0 | 0 | 152 | 0 | 248 | 115 | 281 | 0 | 0 | 608 | 271 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) |  |  |  |  | 5.5 | 5.5 | 5.5 | 5.5 |  |  | 5.5 |  |
| Lane Util. Factor |  |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 |  |  | 0.95 |  |
| Frpb, ped/bikes |  |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 |  |  | 0.98 |  |
| Flpb, ped/bikes |  |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 |  |  | 1.00 |  |
| Frt |  |  |  |  | 1.00 | 0.85 | 1.00 | 1.00 |  |  | 0.95 |  |
| Fit Protected |  |  |  |  | 0.95 | 1.00 | 0.95 | 1.00 |  |  | 1.00 |  |
| Satd. Flow (prot) |  |  |  |  | 1787 | 1599 | 1770 | 1863 |  |  | 3285 |  |
| Flt Permitted |  |  |  |  | 0.95 | 1.00 | 0.95 | 1.00 |  |  | 1.00 |  |
| Satd. Flow (perm) |  |  |  |  | 1787 | 1599 | 1770 | 1863 |  |  | 3285 |  |
| Peak-hour factor, PHF | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 0 | 0 | 0 | 162 | 0 | 264 | 122 | 299 | 0 | 0 | 647 | 288 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 228 | 0 | 0 | 0 | 0 | 36 | 0 |
| Lane Group Flow (vph) | 0 | 0 | 0 | 0 | 162 | 36 | 122 | 299 | 0 | 0 | 899 | 0 |
| Confl. Peds. (\#/hr) |  |  |  |  |  |  | 10 |  |  |  |  | 10 |
| Heavy Vehicles (\%) | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% | 2\% | 2\% | 2\% | 3\% | 3\% | 3\% |
| Turn Type |  |  |  | Split | NA | Prot | Prot | NA |  |  | NA |  |
| Protected Phases |  |  |  | 7 | 7 | 7 | 1 | 5 |  |  | 234 |  |
| Permitted Phases |  |  |  |  |  |  |  |  |  |  |  |  |
| Actuated Green, G (s) |  |  |  |  | 16.3 | 16.3 | 12.2 | 28.7 |  |  | 73.9 |  |
| Effective Green, g (s) |  |  |  |  | 16.3 | 16.3 | 12.2 | 28.7 |  |  | 73.9 |  |
| Actuated g/C Ratio |  |  |  |  | 0.14 | 0.14 | 0.10 | 0.24 |  |  | 0.62 |  |
| Clearance Time (s) |  |  |  |  | 5.5 | 5.5 | 5.5 | 5.5 |  |  |  |  |
| Vehicle Extension (s) |  |  |  |  | 2.3 | 2.3 | 2.3 | 5.2 |  |  |  |  |
| Lane Grp Cap (vph) |  |  |  |  | 244 | 219 | 181 | 449 |  |  | 2041 |  |
| v/s Ratio Prot |  |  |  |  | c0.09 | 0.02 | 0.07 | c0.16 |  |  | c0.27 |  |
| v/s Ratio Perm |  |  |  |  |  |  |  |  |  |  |  |  |
| v/c Ratio |  |  |  |  | 0.66 | 0.17 | 0.67 | 0.67 |  |  | 0.44 |  |
| Uniform Delay, d1 |  |  |  |  | 48.7 | 45.3 | 51.4 | 40.8 |  |  | 11.7 |  |
| Progression Factor |  |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 |  |  | 0.59 |  |
| Incremental Delay, d2 |  |  |  |  | 5.7 | 0.2 | 8.2 | 5.1 |  |  | 0.1 |  |
| Delay (s) |  |  |  |  | 54.4 | 45.5 | 59.7 | 45.8 |  |  | 6.9 |  |
| Level of Service |  |  |  |  | D | D | E | D |  |  | A |  |
| Approach Delay (s) 0.0 |  |  |  |  | 48.9 |  |  | 49.8 |  |  | 6.9 |  |
| Approach LOS |  | A |  |  | D |  |  | D |  |  | A |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM 2000 Control Delay |  |  | 27.1 |  | HCM 2000 | evel of | ervice |  | C |  |  |  |
| HCM 2000 Volume to Capacity ratio |  |  | 0.62 |  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length (s) |  |  | 118.9 |  | Sum of los | ime (s) |  |  | 27.5 |  |  |  |
| Intersection Capacity Utilization |  |  | 54.3\% |  | CU Level | Service |  |  | A |  |  |  |
| Analysis Period (min) |  |  | 15 |  |  |  |  |  |  |  |  |  |
| c Critical Lane Group |  |  |  |  |  |  |  |  |  |  |  |  |

HCM 6th Edition methodology does not support clustered intersections.


HCM 6th Edition methodology does not support clustered intersections.

## Trip Generation Calculation Worksheet



Land Use Description: High-Turnover (Sit-Down) Restaurant ITE Land Use Code: 932
Independent Variable: Gross Floor Area
Quantity: 10.6 Thousand Square Feet

## Summary of ITE Trip Generation Data

AM Peak Hour of Adjacent Street Traffic
Trip Rate: $\quad 9.57$ trips per ksf
Directional Distribution: 55\% Entering 45\% Exiting

PM Peak Hour of Adjacent Street Traffic
Trip Rate: $\quad 9.05$ trips per ksf
Directional Distribution: 61\% Entering 39\% Exiting

Total Weekday Traffic
Trip Rate: $\quad 107.20$ trips per ksf
Directional Distribution: 50\% Entering 50\% Exiting

## Site Trip Generation Calculations

10.6 ksf High-Turnover Restaurant

|  | Entering | Exiting | Total |
| :--- | :---: | :---: | :---: |
| AM Peak Hour | 56 | 45 | 101 |
| PM Peak Hour | 59 | 37 | 96 |
| Weekday | 568 | 568 | 1136 |

## Trip Generation Calculation Worksheet



Land Use Description: Shopping Plaza (40-150k) Supermarket No ITE Land Use Code: 821
Independent Variable: Gross Floor Area
Quantity: 9.6 Thousand Square Feet

## Summary of ITE Trip Generation Data

AM Peak Hour of Adjacent Street Traffic
Trip Rate: $\quad 1.73$ trips per ksf
Directional Distribution: 62\% Entering 38\% Exiting

PM Peak Hour of Adjacent Street Traffic
Trip Rate: $\quad 5.19$ trips per ksf
Directional Distribution: 49\% Entering 51\% Exiting

## Total Weekday Traffic

Trip Rate: $\quad 67.52$ trips per ksf
Directional Distribution: 50\% Entering 50\% Exiting

## Site Trip Generation Calculations

9.6 ksf Shopping Plaza (40-150k)

|  | Entering | Exiting | Total |
| :--- | :---: | :---: | :---: |
| AM Peak Hour | 11 | 6 | 17 |
| PM Peak Hour | 25 | 25 | 50 |
| Weekday | 324 | 324 | 648 |

## Trip Generation Calculation Worksheet

Land Use Description: General Office Building
ITE Land Use Code: 710
Independent Variable: Gross Floor Area
Quantity: 8.665 Thousand Square Feet

## Summary of ITE Trip Generation Data

AM Peak Hour of Adjacent Street Traffic
Trip Rate: $\quad 1.52$ trips per ksf
Directional Distribution: 86\% Entering 14\% Exiting

PM Peak Hour of Adjacent Street Traffic
Trip Rate: $\quad 1.44$ trips per ksf
Directional Distribution: 16\% Entering 84\% Exiting

## Total Weekday Traffic

Trip Rate: $\quad 10.84$ trips per ksf
Directional Distribution: 50\% Entering 50\% Exiting

## Site Trip Generation Calculations

8.665 ksf General Office Building

|  | Entering | Exiting | Total |
| :--- | :---: | :---: | :---: |
| AM Peak Hour | 11 | 2 | 13 |
| PM Peak Hour | 2 | 10 | 12 |
| Weekday | 47 | 47 | 94 |

## Trip Generation Calculation Worksheet



Land Use Description: Shopping Plaza (40-150k) Supermarket No ITE Land Use Code: 821
Independent Variable: Gross Floor Area
Quantity: 15.4 Thousand Square Feet

## Summary of ITE Trip Generation Data

AM Peak Hour of Adjacent Street Traffic
Trip Rate: $\quad 1.73$ trips per ksf
Directional Distribution: 62\% Entering 38\% Exiting

PM Peak Hour of Adjacent Street Traffic
Trip Rate: $\quad 5.19$ trips per ksf
Directional Distribution: 49\% Entering 51\% Exiting

## Total Weekday Traffic

Trip Rate: $\quad 67.52$ trips per ksf
Directional Distribution: 50\% Entering 50\% Exiting

## Site Trip Generation Calculations

| 15.4 ksf Shopping Plaza (40-150k) |  |  |  |
| :--- | :---: | :---: | :---: |
|  Entering Exiting <br> Total   <br> AM Peak Hour 17 10 <br> 27   <br> PM Peak Hour 39 41 <br> Weekday 520 520 |  |  |  |

## Trip Generation Calculation Worksheet

Land Use Description: General Office Building
ITE Land Use Code: 710
Independent Variable: Gross Floor Area
Quantity: 13.469 Thousand Square Feet

## Summary of ITE Trip Generation Data

AM Peak Hour of Adjacent Street Traffic
Trip Rate: $\quad 1.52$ trips per ksf
Directional Distribution: 86\% Entering 14\% Exiting

PM Peak Hour of Adjacent Street Traffic
Trip Rate: $\quad 1.44$ trips per ksf
Directional Distribution: 16\% Entering 84\% Exiting

## Total Weekday Traffic

Trip Rate: $\quad 10.84$ trips per ksf
Directional Distribution: 50\% Entering 50\% Exiting

## Site Trip Generation Calculations

13.469 ksf General Office Building

|  | Entering | Exiting | Total |
| :--- | :---: | :---: | :---: |
| AM Peak Hour | 17 | 3 | 20 |
| PM Peak Hour | 3 | 16 | 19 |
| Weekday | 73 | 73 | 146 |


| Site id | HWY | MP | DIR | HS | Description | 2017 | 2019 | 2021 | $2041{ }^{*}$ | RSQ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3016 | 064 | 0.76 | 1 |  | East of Pacific Highway No. 1 (I-5) [1.04 miles] \{Stafford ATR, Sta. 03-016\} |  |  | 81600 | 107700 | MODEL |
| 2770 | 064 | 3.66 | 1 |  | East of Wankers Corner Interchange (Stafford Road) [0.50 mile] |  |  | 80500 | 110000 | MODEL |
| 2771 | 064 | 7.00 | 1 |  | East of 10th Street, (South West Linn Interchange Connector No. 3) [ 0.60 mile] |  |  | 83600 | 115200 | MODEL |
| 2772 | 064 | 9.12 | 1 |  | East of Oswego Highway (OR43) West Linn Interchange [0.30 mile] |  |  | 96000 | 127700 | MODEL |
| 2773 | 064 | 9.69 | 1 |  | East of Pacific Highway East (OR99E), Oregon City Interchange [0.40 mile] |  |  | 107000 | 138900 | MODEL |
| 2774 | 064 | 10.75 | 1 |  | South of SE 82nd Drive (OR213 South Jct.) Gladstone Interchange [ 0.30 mile] |  |  | 136700 | 170100 | MODEL |
| 2775 | 064 | 12.27 | 1 |  | South of Clackamas Highway (OR224), South Clackamas Interchange [ 0.40 mile] |  |  | 121500 | 145600 | MODEL |
| 2776 | 064 | 12.97 | 1 |  | North of Clackamas Highway (OR224), South Clackamas Interchange [0.30 mile] |  |  | 126300 | 147500 | MODEL |
| 2777 | 064 | 13.38 | 1 |  | North of SE 82nd Drive/OR213 (North Jct.), Lake Road Interchange [ 0.20 mile] |  |  | 123200 | 146400 | MODEL |
| 2778 | 064 | 13.88 | 1 |  | South of Sunnyside Road Interchange [0.70 mile] |  |  | 102200 | 121000 | MODEL |
| 2779 | 064 | 15.84 | 1 |  | South of Johnson Creek Boulevard Interchange [ 0.40 mile ] |  |  | 132500 | 153700 | MODEL |
| 2780 | 064 | 17.45 | 1 |  | South of Foster Road Interchange [0.40 mile] |  |  | 138800 | 154100 | MODEL |
| 26022 | 064 | 18.25 | 1 |  | South of Mt. Hood Highway No. 26 (US26) [0.87 mile] \{Lents ATR, Sta. 26- $022\}$ |  |  | 146100 | 166300 | MODEL |
| 2782 | 064 | 20.11 | 1 |  | North of Division Street Interchange [0.50 mile] |  |  | 163100 | 186900 | MODEL |
| 26018 | 064 | 20.51 | 1 |  | South of SE Washington Street Undercrossing [0.09 mile] \{Yamhill ATR, Sta. 26-018\} |  |  | 144900 | 168100 | MODEL |
| 2784 | 064 | 20.87 | 1 |  | At Burnside Street Undercrossing |  |  | 127000 | 147800 | MODEL |


| Intersection |  |
| :--- | ---: |
| Intersection Delay, s/veh 25.3 |  |
| Intersection LOS | D |


| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | \% | 1 |  | \% | F |  |  | $\uparrow$ |  |  | $\uparrow$ |  |
| Traffic Vol, veh/h | 17 | 427 | 14 | 103 | 228 | 24 | 20 | 7 | 150 | 10 | 5 | 5 |
| Future Vol, veh/h | 17 | 427 | 14 | 103 | 228 | 24 | 20 | 7 | 150 | 10 | 5 | 5 |
| Peak Hour Factor | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 |
| Heavy Vehicles, \% | 5 | 5 | 5 | 6 | 6 | 6 | 2 | 2 | 2 | 5 | 5 | 5 |
| Mumt Flow | 21 | 527 | 17 | 127 | 281 | 30 | 25 | 9 | 185 | 12 | 6 | 6 |
| Number of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Approach | EB |  |  | WB |  |  | NB |  |  | SB |  |  |
| Opposing Approach | WB |  |  | EB |  |  | SB |  |  | NB |  |  |
| Opposing Lanes | 2 |  |  | 2 |  |  | 1 |  |  | 1 |  |  |
| Conflicting Approach Left | SB |  |  | NB |  |  | EB |  |  | WB |  |  |
| Conflicting Lanes Left | 1 |  |  | 1 |  |  | 2 |  |  | 2 |  |  |
| Conflicting Approach Right | NB |  |  | SB |  |  | WB |  |  | EB |  |  |
| Conflicting Lanes Right | 1 |  |  | 1 |  |  | 2 |  |  | 2 |  |  |
| HCM Control Delay | 39.4 |  |  | 14.3 |  |  | 12.7 |  |  | 10.7 |  |  |
| HCM LOS | E |  |  | B |  |  | B |  |  | B |  |  |


| Lane | NBLn1 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | SBLn1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Vol Left, \% | $11 \%$ | $100 \%$ | $0 \%$ | $100 \%$ | $0 \%$ | $50 \%$ |
| Vol Thru, \% | $4 \%$ | $0 \%$ | $97 \%$ | $0 \%$ | $90 \%$ | $25 \%$ |
| Vol Right, \% | $85 \%$ | $0 \%$ | $3 \%$ | $0 \%$ | $10 \%$ | $25 \%$ |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 177 | 17 | 441 | 103 | 252 | 20 |
| LT Vol | 20 | 17 | 0 | 103 | 0 | 10 |
| Through Vol | 7 | 0 | 427 | 0 | 228 | 5 |
| RT Vol | 150 | 0 | 14 | 0 | 24 | 5 |
| Lane Flow Rate | 219 | 21 | 544 | 127 | 311 | 25 |
| Geometry Grp | 2 | 7 | 7 | 7 | 7 | 2 |
| Degree of Util (X) | 0.368 | 0.038 | 0.901 | 0.235 | 0.525 | 0.05 |
| Departure Headway (Hd) | 6.06 | 6.489 | 5.959 | 6.655 | 6.079 | 7.299 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 590 | 550 | 604 | 538 | 591 | 494 |
| Service Time | 4.137 | 4.246 | 3.716 | 4.419 | 3.843 | 5.299 |
| HCM Lane V/C Ratio | 0.371 | 0.038 | 0.901 | 0.236 | 0.526 | 0.051 |
| HCM Control Delay | 12.7 | 9.5 | 40.6 | 11.5 | 15.4 | 10.7 |
| HCM Lane LOS | B | A | E | B | C | B |
| HCM 95th-tile Q | 1.7 | 0.1 | 11 | 0.9 | 3 | 0.2 |


| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 1.5 |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | $\uparrow$ |  |  | - | r |  |
| Traffic Vol, veh/h | 541 | 21 | 69 | 369 | 2 | 51 |
| Future Vol, veh/h | 541 | 21 | 69 | 369 | 2 | 51 |
| Conflicting Peds, \#/hr | 0 | 4 | 12 | 0 | 4 | 12 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, \# | 0 | - | - | 0 | 0 | - |
| Grade, \% | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, \% | 4 | 4 | 5 | 5 | 12 | 12 |
| Mvmt Flow | 676 | 26 | 86 | 461 | 3 | 64 |


| Major/Minor | Major1 |  | Major2 |  | Minor1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | 0 | 0 | 714 | 0 | 1338 | 713 |
| Stage 1 | - | - | - | - | 701 | - |
| Stage 2 | - | - | - | - | 637 | - |
| Critical Hdwy | - | - | 4.15 | - | 6.52 | 6.32 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.52 | - |
| Follow-up Hdwy | - | - | 2.245 | - | 3.608 | 3.408 |
| Pot Cap-1 Maneuver | - | - | 872 | - | 161 | 415 |
| Stage 1 | - | - | - | - | 474 | - |
| Stage 2 | - | - | - | - | 508 | - |
| Platoon blocked, \% | - | - |  | - |  |  |
| Mov Cap-1 Maneuver | - | - | 862 | - | 137 | 406 |
| Mov Cap-2 Maneuver | - | - | - | - | 137 | - |
| Stage 1 | - | - | - | - | 469 | - |
| Stage 2 | - | - | - | - | 438 | - |
|  |  |  |  |  |  |  |
| Approach | EB |  | WB |  | NB |  |
| HCM Control Delay, s | 0 |  | 1.5 |  | 16.5 |  |
| HCM LOS |  |  |  |  | C |  |
|  |  |  |  |  |  |  |
| Minor Lane/Major Mvmt |  | NBLn1 | EBT | EBR | WBL WBT |  |
| Capacity (veh/h) |  | 378 | - | - | 862 | - |
| HCM Lane V/C Ratio |  | 0.175 | - | - | 0.1 | - |
| HCM Control Delay (s) |  | 16.5 | - | - | 9.6 | 0 |
| HCM Lane LOS |  | C | - | - | A | A |
| HCM 95th \%tile Q(veh) |  | 0.6 | - | - | 0.3 | - |






|  | 4 | $\rightarrow$ |  |  |  |  |  | $\dagger$ | $p$ | , | $\downarrow$ | $\checkmark$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | $\uparrow$ | 「 |  |  |  |  | $\uparrow$ | F | ${ }^{*}$ | $\uparrow$ |  |
| Traffic Volume (veh/h) | 109 | 0 | 92 | 0 | 0 | 0 | 0 | 327 | 330 | 264 | 368 | 0 |
| Future Volume (veh/h) | 109 | 0 | 92 | 0 | 0 | 0 | 0 | 327 | 330 | 264 | 368 | 0 |
| Initial $Q(Q b)$, veh | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 |  | 0.99 |  |  |  | 1.00 |  | 1.00 | 1.00 |  | 1.00 |
| Parking Bus, Adj | 0.99 | 1.00 | 1.00 |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach |  | No |  |  |  |  |  | No |  |  | No |  |
| Adj Sat Flow, veh/h/ln | 1826 | 1826 | 1826 |  |  |  | 0 | 1826 | 1826 | 1856 | 1856 | 0 |
| Adj Flow Rate, veh/h | 118 | 0 | 100 |  |  |  | 0 | 355 | 359 | 287 | 400 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 |  |  |  | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, \% | 5 | 5 | 5 |  |  |  | 0 | 5 | 5 | 3 | 3 | 0 |
| Cap, veh/h | 208 | O | 186 |  |  |  | 0 | 785 | 665 | 594 | 1233 | 0 |
| Arrive On Green | 0.12 | 0.00 | 0.12 |  |  |  | 0.00 | 0.43 | 0.43 | 0.13 | 0.66 | 0.00 |
| Sat Flow, veh/h | 1718 | 0 | 1535 |  |  |  | 0 | 1826 | 1547 | 1767 | 1856 | 0 |
| Grp Volume(v), veh/h | 118 | 0 | 100 |  |  |  | 0 | 355 | 359 | 287 | 400 | 0 |
| Grp Sat Flow(s),veh/h/n | 1718 | 0 | 1535 |  |  |  | 0 | 1826 | 1547 | 1767 | 1856 | 0 |
| Q Serve(g_s), s | 3.0 | 0.0 | 2.9 |  |  |  | 0.0 | 6.4 | 8.0 | 3.6 | 4.3 | 0.0 |
| Cycle Q Clear(g_c), s | 3.0 | 0.0 | 2.9 |  |  |  | 0.0 | 6.4 | 8.0 | 3.6 | 4.3 | 0.0 |
| Prop In Lane | 1.00 |  | 1.00 |  |  |  | 0.00 |  | 1.00 | 1.00 |  | 0.00 |
| Lane Grp Cap(c), veh/h | 208 | 0 | 186 |  |  |  | 0 | 785 | 665 | 594 | 1233 | 0 |
| V/C Ratio(X) | 0.57 | 0.00 | 0.54 |  |  |  | 0.00 | 0.45 | 0.54 | 0.48 | 0.32 | 0.00 |
| Avail Cap(c_a), veh/h | 736 | 0 | 658 |  |  |  | 0 | 1174 | 995 | 1314 | 1233 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(l) | 1.00 | 0.00 | 1.00 |  |  |  | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 19.4 | 0.0 | 19.3 |  |  |  | 0.0 | 9.4 | 9.9 | 5.7 | 3.3 | 0.0 |
| Incr Delay (d2), s/veh | 1.5 | 0.0 | 1.5 |  |  |  | 0.0 | 1.9 | 3.1 | 0.4 | 0.7 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| \%ile BackOfQ(50\%),veh/ln | 1.1 | 0.0 | 0.9 |  |  |  | 0.0 | 2.4 | 2.7 | 0.8 | 1.0 | 0.0 |
| Unsig. Movement Delay, s/veh |  |  |  |  |  |  |  |  |  |  |  |  |
| LnGrp Delay(d),s/veh | 20.8 | 0.0 | 20.8 |  |  |  | 0.0 | 11.3 | 13.0 | 6.1 | 4.0 | 0.0 |
| LnGrp LOS | C | A | C |  |  |  | A | B | B | A | A | A |
| Approach Vol, veh/h |  | 218 |  |  |  |  |  | 714 |  |  | 687 |  |
| Approach Delay, s/veh |  | 20.8 |  |  |  |  |  | 12.2 |  |  | 4.9 |  |
| Approach LOS |  | C |  |  |  |  |  | B |  |  | A |  |
| Timer - Assigned Phs |  | 2 |  |  | 5 | 6 |  | 8 |  |  |  |  |
| Phs Duration ( $\mathrm{G}+\mathrm{Y}+\mathrm{Rc}$ ), s |  | 36.0 |  |  | 11.0 | 25.0 |  | 10.6 |  |  |  |  |
| Change Period ( $Y+\mathrm{Rc}$ ), s |  | 5.0 |  |  | 5.0 | 5.0 |  | 5.0 |  |  |  |  |
| Max Green Setting (Gmax), s |  | 30.0 |  |  | 25.0 | 30.0 |  | 20.0 |  |  |  |  |
| Max Q Clear Time (g_c+1), s |  | 6.3 |  |  | 5.6 | 10.0 |  | 5.0 |  |  |  |  |
| Green Ext Time (p_c), s |  | 7.1 |  |  | 0.5 | 10.0 |  | 0.5 |  |  |  |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM 6th Ctrl DelayHCM 6th LOS |  |  | 10.2 |  |  |  |  |  |  |  |  |  |
|  |  |  | B |  |  |  |  |  |  |  |  |  |



HCM 6th Edition methodology does not support clustered intersections.


| Intersection Summary |  |  | C |
| :--- | ---: | :--- | ---: |
| HCM 2000 Control Delay | 24.5 | HCM 2000 Level of Service |  |
| HCM 2000 Volume to Capacity ratio | 0.64 |  | 27.5 |
| Actuated Cycle Length (s) | 126.2 | Sum of lost time (s) | B |
| Intersection Capacity Utilization | $57.9 \%$ | ICU Level of Service |  |
| Analysis Period (min) | 15 |  |  |
| C Critical Lane Group |  |  |  |

[^1]| Intersection |  |
| :--- | ---: |
| Intersection Delay, s/veh $\quad 25.4$ |  |
| Intersection LOS | D |


| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | ${ }^{*}$ | $\uparrow$ |  | ${ }^{*}$ | 个 |  |  | \& |  |  | $\uparrow$ |  |
| Traffic Vol, veh/h | 17 | 444 | 14 | 122 | 215 | 34 | 21 | 12 | 281 | 25 | 6 | 16 |
| Future Vol, veh/h | 17 | 444 | 14 | 122 | 215 | 34 | 21 | 12 | 281 | 25 | 6 | 16 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 18 | 477 | 15 | 131 | 231 | 37 | 23 | 13 | 302 | 27 | 6 | 17 |
| Number of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Approach | EB |  |  | WB |  |  | NB |  |  | SB |  |  |
| Opposing Approach | WB |  |  | EB |  |  | SB |  |  | NB |  |  |
| Opposing Lanes | 2 |  |  | 2 |  |  | 1 |  |  | 1 |  |  |
| Conflicting Approach Left | SB |  |  | NB |  |  | EB |  |  | WB |  |  |
| Conflicting Lanes Left | 1 |  |  | 1 |  |  | 2 |  |  | 2 |  |  |
| Conflicting Approach Right | NB |  |  | SB |  |  | WB |  |  | EB |  |  |
| Conflicting Lanes Right | 1 |  |  | 1 |  |  | 2 |  |  | 2 |  |  |
| HCM Control Delay | 40.6 |  |  | 14.7 |  |  | 17.3 |  |  | 11.5 |  |  |
| HCM LOS | E |  |  | B |  |  | C |  |  | B |  |  |


| Lane | NBLn1 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | SBLn1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Vol Left, \% | $7 \%$ | $100 \%$ | $0 \%$ | $100 \%$ | $0 \%$ | $53 \%$ |
| Vol Thru, \% | $4 \%$ | $0 \%$ | $97 \%$ | $0 \%$ | $86 \%$ | $13 \%$ |
| Vol Right, \% | $89 \%$ | $0 \%$ | $3 \%$ | $0 \%$ | $14 \%$ | $34 \%$ |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 314 | 17 | 458 | 122 | 249 | 47 |
| LT Vol | 21 | 17 | 0 | 122 | 0 | 25 |
| Through Vol | 12 | 0 | 444 | 0 | 215 | 6 |
| RT Vol | 281 | 0 | 14 | 0 | 34 | 16 |
| Lane Flow Rate | 338 | 18 | 492 | 131 | 268 | 51 |
| Geometry Grp | 2 | 7 | 7 | 7 | 7 | 2 |
| Degree of Util (X) | 0.576 | 0.036 | 0.892 | 0.265 | 0.495 | 0.106 |
| Departure Headway (Hd) | 6.146 | 7.05 | 6.518 | 7.27 | 6.659 | 7.527 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 587 | 508 | 556 | 495 | 541 | 475 |
| Service Time | 4.188 | 4.791 | 4.259 | 5.018 | 4.407 | 5.596 |
| HCM Lane V/C Ratio | 0.576 | 0.035 | 0.885 | 0.265 | 0.495 | 0.107 |
| HCM Control Delay | 17.3 | 10.1 | 41.7 | 12.6 | 15.8 | 11.5 |
| HCM Lane LOS | C | B | E | B | C | B |
| HCM 95th-tile Q | 3.6 | 0.1 | 10.3 | 1.1 | 2.7 | 0.4 |


| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.7 |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | $\uparrow$ |  |  | - | r |  |
| Traffic Vol, veh/h | 739 | 6 | 21 | 366 | 1 | 40 |
| Future Vol, veh/h | 739 | 6 | 21 | 366 | 1 | 40 |
| Conflicting Peds, \#/hr | 0 | 2 | 5 | 0 | 2 | 5 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, \# | 0 | - | - | 0 | 0 | - |
| Grade, \% | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 91 | 91 | 91 | 91 | 91 | 91 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 812 | 7 | 23 | 402 | 1 | 44 |


| Major/Minor | Major1 |  | Major2 |  | Minor1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | 0 | 0 | 824 | 0 | 1271 | 826 |
| Stage 1 | - | - | - | - | 821 | - |
| Stage 2 | - | - | - | - | 450 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 806 | - | 185 | 372 |
| Stage 1 | - | - | - | - | 432 | - |
| Stage 2 | - | - | - | - | 642 | - |
| Platoon blocked, \% | - | - |  | - |  |  |
| Mov Cap-1 Maneuver | - | - | 802 | - | 177 | 368 |
| Mov Cap-2 Maneuver | - | - | - | - | 177 | - |
| Stage 1 | - | - | - | - | 430 | - |
| Stage 2 | - | - | - | - | 617 | - |
|  |  |  |  |  |  |  |
| Approach | EB |  | WB |  | NB |  |
| HCM Control Delay, s | 0 |  | 0.5 |  | 16.5 |  |
| HCM LOS |  |  |  |  | C |  |
|  |  |  |  |  |  |  |
| Minor Lane/Major Mvmt |  | NBLn1 | EBT | EBR | R WBL | WBT |
| Capacity (veh/h) |  | 359 | - | - | 802 | - |
| HCM Lane V/C Ratio |  | 0.126 | - | - | 0.029 | - |
| HCM Control Delay (s) |  | 16.5 | - | - | 9.6 | 0 |
| HCM Lane LOS |  | C | - | - | A | A |
| HCM 95th \%tile Q(veh) |  | 0.4 | - | - | 0.1 | - |






|  | $\rangle$ |  |  |  |  |  | 4 | 4 | $p$ |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | $\uparrow$ | $\stackrel{7}{ }$ |  |  |  |  | $\uparrow$ | \# | ${ }^{7}$ | 4 |  |
| Traffic Volume (veh/h) | 41 | 3 | 46 | 0 | 0 | 0 | 0 | 367 | 335 | 366 | 433 | 0 |
| Future Volume (veh/h) | 41 | 3 | 46 | 0 | 0 | 0 | 0 | 367 | 335 | 366 | 433 | 0 |
| Initial $\mathrm{Q}(\mathrm{Qb})$, veh | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 |  | 0.96 |  |  |  | 1.00 |  | 1.00 | 1.00 |  | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach |  | No |  |  |  |  |  | No |  |  | No |  |
| Adj Sat Flow, veh/h/n | 1870 | 1870 | 1870 |  |  |  | 0 | 1870 | 1870 | 1870 | 1870 | 0 |
| Adj Flow Rate, veh/h | 44 | 3 | 49 |  |  |  | 0 | 390 | 356 | 389 | 461 | 0 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 |  |  |  | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, \% | 2 | 2 | 2 |  |  |  | 0 | 2 | 2 | 2 | 2 | 0 |
| Cap, veh/h | 152 | 10 | 139 |  |  |  | 0 | 807 | 684 | 638 | 1303 | 0 |
| Arrive On Green | 0.09 | 0.09 | 0.09 |  |  |  | 0.00 | 0.43 | 0.43 | 0.16 | 0.70 | 0.00 |
| Sat Flow, veh/h | 1673 | 114 | 1523 |  |  |  | 0 | 1870 | 1585 | 1781 | 1870 | 0 |
| Grp Volume(v), veh/h | 47 | 0 | 49 |  |  |  | 0 | 390 | 356 | 389 | 461 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1787 | 0 | 1523 |  |  |  | 0 | 1870 | 1585 | 1781 | 1870 | 0 |
| $Q$ Serve(g_s), s | 1.2 | 0.0 | 1.4 |  |  |  | 0.0 | 7.1 | 7.8 | 4.8 | 4.7 | 0.0 |
| Cycle Q Clear(g_c), s | 1.2 | 0.0 | 1.4 |  |  |  | 0.0 | 7.1 | 7.8 | 4.8 | 4.7 | 0.0 |
| Prop In Lane | 0.94 |  | 1.00 |  |  |  | 0.00 |  | 1.00 | 1.00 |  | 0.00 |
| Lane Grp Cap(c), veh/h | 163 | 0 | 139 |  |  |  | 0 | 807 | 684 | 638 | 1303 | 0 |
| V/C Ratio(X) | 0.29 | 0.00 | 0.35 |  |  |  | 0.00 | 0.48 | 0.52 | 0.61 | 0.35 | 0.00 |
| Avail Cap(c_a), veh/h | 758 | 0 | 646 |  |  |  | 0 | 1191 | 1009 | 1299 | 1303 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 |  |  |  | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 20.0 | 0.0 | 20.1 |  |  |  | 0.0 | 9.6 | 9.8 | 6.0 | 2.9 | 0.0 |
| Incr Delay (d2), s/veh | 0.6 | 0.0 | 0.9 |  |  |  | 0.0 | 2.1 | 2.8 | 0.6 | 0.8 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| \%ile BackOfQ(50\%),veh/In | 0.4 | 0.0 | 0.5 |  |  |  | 0.0 | 2.7 | 2.6 | 1.0 | 0.9 | 0.0 |
| Unsig. Movement Delay, s/veh |  |  |  |  |  |  |  |  |  |  |  |  |
| LnGrp Delay(d),s/veh | 20.6 | 0.0 | 21.0 |  |  |  | 0.0 | 11.7 | 12.6 | 6.5 | 3.6 | 0.0 |
| LnGrp LOS | C | A | C |  |  |  | A | B | B | A | A | A |
| Approach Vol, veh/h |  | 96 |  |  |  |  |  | 746 |  |  | 850 |  |
| Approach Delay, s/veh |  | 20.8 |  |  |  |  |  | 12.1 |  |  | 5.0 |  |
| Approach LOS |  | C |  |  |  |  |  | B |  |  | A |  |
| Timer - Assigned Phs |  | 2 |  |  | 5 | 6 |  | 8 |  |  |  |  |
| Phs Duration ( $\mathrm{G}+\mathrm{Y}+\mathrm{Rc}$ ), $s$ |  | 37.8 |  |  | 12.5 | 25.3 |  | 9.3 |  |  |  |  |
| Change Period ( $Y+R \mathrm{Cc}$ ), $s$ |  | 5.0 |  |  | 5.0 | 5.0 |  | 5.0 |  |  |  |  |
| Max Green Setting (Gmax), s |  | 30.0 |  |  | 25.0 | 30.0 |  | 20.0 |  |  |  |  |
| Max Q Clear Time (g_c+11), s |  | 6.7 |  |  | 6.8 | 9.8 |  | 3.4 |  |  |  |  |
| Green Ext Time (p_c), s |  | 8.3 |  |  | 0.7 | 10.6 |  | 0.2 |  |  |  |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM 6th Ctrl Delay |  |  | 9.0 |  |  |  |  |  |  |  |  |  |
| HCM 6th LOS |  |  | A |  |  |  |  |  |  |  |  |  |



HCM 6th Edition methodology does not support clustered intersections.

|  | $\rightarrow$ | $\checkmark$ | 1 |  | 4 | $p$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | 4 | 7 | ${ }^{1}$ | 4 | ${ }^{7}$ | F' |
| Traffic Volume (vph) | 122 | 537 | 384 | 96 | 263 | 286 |
| Future Volume (vph) | 122 | 537 | 384 | 96 | 263 | 286 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 5.5 | 5.5 | 5.5 | 6.0 | 5.5 | 5.5 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.85 | 1.00 | 1.00 | 1.00 | 0.85 |
| Flt Protected | 1.00 | 1.00 | 0.95 | 1.00 | 0.95 | 1.00 |
| Satd. Flow (prot) | 1863 | 1583 | 1770 | 1863 | 1787 | 1599 |
| Flt Permitted | 1.00 | 1.00 | 0.95 | 1.00 | 0.95 | 1.00 |
| Satd. Flow (perm) | 1863 | 1583 | 1770 | 1863 | 1787 | 1599 |
| Peak-hour factor, PHF | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph) | 126 | 554 | 396 | 99 | 271 | 295 |
| RTOR Reduction (vph) | 0 | 116 | 0 | 0 | 0 | 27 |
| Lane Group Flow (vph) | 126 | 438 | 396 | 99 | 271 | 268 |
| Heavy Vehicles (\%) | 2\% | 2\% | 2\% | 2\% | 1\% | 1\% |
| Turn Type | NA | custom | Prot | NA | Prot | custom |
| Protected Phases | 4 | 457 | 3 | 8 | 567 | 3567 |
| Permitted Phases |  | 4 |  |  |  | 567 |
| Actuated Green, G (s) | 16.1 | 72.4 | 25.6 | 46.7 | 61.2 | 92.3 |
| Effective Green, g (s) | 16.1 | 72.4 | 25.6 | 46.7 | 61.2 | 92.3 |
| Actuated g/C Ratio | 0.13 | 0.61 | 0.21 | 0.39 | 0.51 | 0.77 |
| Clearance Time (s) | 5.5 |  | 5.5 | 6.0 |  |  |
| Vehicle Extension (s) | 2.3 |  | 2.3 | 2.3 |  |  |
| Lane Grp Cap (vph) | 251 | 959 | 379 | 728 | 915 | 1236 |
| v/s Ratio Prot | 0.07 | c0.28 | c0. 22 | 0.05 | 0.15 | c0.17 |
| v/s Ratio Perm |  |  |  |  |  |  |
| v/c Ratio | 0.50 | 0.46 | 1.04 | 0.14 | 0.30 | 0.22 |
| Uniform Delay, d1 | 47.9 | 12.8 | 46.9 | 23.4 | 16.7 | 3.7 |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 0.37 | 0.06 |
| Incremental Delay, d2 | 7.0 | 0.8 | 58.4 | 0.4 | 0.3 | 0.2 |
| Delay (s) | 54.9 | 13.6 | 105.3 | 23.8 | 6.5 | 0.4 |
| Level of Service | D | B | F | C | A | A |
| Approach Delay (s) | 21.2 |  |  | 89.0 | 3.3 |  |
| Approach LOS | C |  |  | F | A |  |


| Intersection Summary |  |  |  |
| :--- | ---: | :--- | ---: |
| HCM 2000 Control Delay | 34.7 | HCM 2000 Level of Service | C |
| HCM 2000 Volume to Capacity ratio | 0.67 |  | 27.5 |
| Actuated Cycle Length (s) | 119.4 | Sum of lost time (s) | B |
| Intersection Capacity Utilization | $63.7 \%$ | ICU Level of Service |  |
| Analysis Period (min) | 15 |  |  |
| C Critical Lane Group |  |  |  |

[^2]| Intersection |  |
| :--- | ---: |
| Intersection Delay, s/veh $\quad 26.1$ |  |
| Intersection LOS | D |


| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | \% | ${ }^{1}$ |  | \% | 1 |  |  | \$ |  |  | \$ |  |
| Traffic Vol, veh/h | 17 | 430 | 14 | 104 | 229 | 24 | 20 | 7 | 152 | 10 | 5 | 5 |
| Future Vol, veh/h | 17 | 430 | 14 | 104 | 229 | 24 | 20 | 7 | 152 | 10 | 5 | 5 |
| Peak Hour Factor | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 |
| Heavy Vehicles, \% | 5 | 5 | 5 | 6 | 6 | 6 | 2 | 2 | 2 | 5 | 5 | 5 |
| Mvmt Flow | 21 | 531 | 17 | 128 | 283 | 30 | 25 | 9 | 188 | 12 | 6 | 6 |
| Number of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Approach | EB |  |  | WB |  |  | NB |  |  | SB |  |  |
| Opposing Approach | WB |  |  | EB |  |  | SB |  |  | NB |  |  |
| Opposing Lanes | 2 |  |  | 2 |  |  | 1 |  |  | 1 |  |  |
| Conflicting Approach Left | SB |  |  | NB |  |  | EB |  |  | WB |  |  |
| Conflicting Lanes Left | 1 |  |  | 1 |  |  | 2 |  |  | 2 |  |  |
| Conflicting Approach Right | NB |  |  | SB |  |  | WB |  |  | EB |  |  |
| Conflicting Lanes Right | 1 |  |  | 1 |  |  | 2 |  |  | 2 |  |  |
| HCM Control Delay | 41 |  |  | 14.4 |  |  | 12.8 |  |  | 10.7 |  |  |
| HCM LOS | E |  |  | B |  |  | B |  |  | B |  |  |


| Lane | NBLn1 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | SBLn1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Vol Left, \% | $11 \%$ | $100 \%$ | $0 \%$ | $100 \%$ | $0 \%$ | $50 \%$ |
| Vol Thru, \% | $4 \%$ | $0 \%$ | $97 \%$ | $0 \%$ | $91 \%$ | $25 \%$ |
| Vol Right, \% | $85 \%$ | $0 \%$ | $3 \%$ | $0 \%$ | $9 \%$ | $25 \%$ |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 179 | 17 | 444 | 104 | 253 | 20 |
| LT Vol | 20 | 17 | 0 | 104 | 0 | 10 |
| Through Vol | 7 | 0 | 430 | 0 | 229 | 5 |
| RT Vol | 152 | 0 | 14 | 0 | 24 | 5 |
| Lane Flow Rate | 221 | 21 | 548 | 128 | 312 | 25 |
| Geometry Grp | 2 | 7 | 7 | 7 | 7 | 2 |
| Degree of Util (X) | 0.373 | 0.038 | 0.91 | 0.238 | 0.529 | 0.05 |
| Departure Headway (Hd) | 6.077 | 6.506 | 5.976 | 6.675 | 6.099 | 7.334 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 588 | 559 | 603 | 537 | 587 | 491 |
| Service Time | 4.155 | 4.263 | 3.733 | 4.44 | 3.864 | 5.334 |
| HCM Lane V/C Ratio | 0.376 | 0.038 | 0.909 | 0.238 | 0.532 | 0.051 |
| HCM Control Delay | 12.8 | 9.5 | 42.2 | 11.5 | 15.6 | 10.7 |
| HCM Lane LOS | B | A | E | B | C | B |
| HCM 95th-tile Q | 1.7 | 0.1 | 11.3 | 0.9 | 3.1 | 0.2 |


| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 1.6 |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | $\uparrow$ |  |  | - | r |  |
| Traffic Vol, veh/h | 560 | 21 | 80 | 402 | 2 | 57 |
| Future Vol, veh/h | 560 | 21 | 80 | 402 | 2 | 57 |
| Conflicting Peds, \#/hr | 0 | 4 | 12 | 0 | 4 | 12 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, \# | 0 | - | - | 0 | 0 | - |
| Grade, \% | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, \% | 4 | 4 | 5 | 5 | 12 | 12 |
| Mvmt Flow | 700 | 26 | 100 | 503 | 3 | 71 |







|  | $\rangle$ |  |  |  |  |  | 4 | $\dagger$ | $p$ |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | $\uparrow$ | $\stackrel{7}{ }$ |  |  |  |  | $\uparrow$ | \% | ${ }^{7}$ | $\uparrow$ |  |
| Traffic Volume (veh/h) | 109 | 0 | 104 | 0 | 0 | 0 | 0 | 338 | 342 | 264 | 398 | 0 |
| Future Volume (veh/h) | 109 | 0 | 104 | 0 | 0 | 0 | 0 | 338 | 342 | 264 | 398 | 0 |
| Initial $\mathrm{Q}(\mathrm{Qb})$, veh | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 |  | 0.99 |  |  |  | 1.00 |  | 1.00 | 1.00 |  | 1.00 |
| Parking Bus, Adj | 0.99 | 1.00 | 1.00 |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach |  | No |  |  |  |  |  | No |  |  | No |  |
| Adj Sat Flow, veh/h/n | 1826 | 1826 | 1826 |  |  |  | 0 | 1826 | 1826 | 1856 | 1856 | 0 |
| Adj Flow Rate, veh/h | 118 | 0 | 113 |  |  |  | 0 | 367 | 372 | 287 | 433 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 |  |  |  | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, \% | 5 | 5 | 5 |  |  |  | 0 | 5 | 5 | 3 | 3 | 0 |
| Cap, veh/h | 207 | 0 | 185 |  |  |  | 0 | 796 | 675 | 586 | 1240 | 0 |
| Arrive On Green | 0.12 | 0.00 | 0.12 |  |  |  | 0.00 | 0.44 | 0.44 | 0.13 | 0.67 | 0.00 |
| Sat Flow, veh/h | 1718 | 0 | 1535 |  |  |  | 0 | 1826 | 1547 | 1767 | 1856 | 0 |
| Grp Volume(v), veh/h | 118 | 0 | 113 |  |  |  | 0 | 367 | 372 | 287 | 433 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1718 | 0 | 1535 |  |  |  | 0 | 1826 | 1547 | 1767 | 1856 | 0 |
| $Q$ Serve(g_s), s | 3.1 | 0.0 | 3.3 |  |  |  | 0.0 | 6.7 | 8.5 | 3.6 | 4.8 | 0.0 |
| Cycle Q Clear(g_c), s | 3.1 | 0.0 | 3.3 |  |  |  | 0.0 | 6.7 | 8.5 | 3.6 | 4.8 | 0.0 |
| Prop In Lane | 1.00 |  | 1.00 |  |  |  | 0.00 |  | 1.00 | 1.00 |  | 0.00 |
| Lane Grp Cap(c), veh/h | 207 | 0 | 185 |  |  |  | 0 | 796 | 675 | 586 | 1240 | 0 |
| V/C Ratio(X) | 0.57 | 0.00 | 0.61 |  |  |  | 0.00 | 0.46 | 0.55 | 0.49 | 0.35 | 0.00 |
| Avail Cap(c_a), veh/h | 726 | 0 | 648 |  |  |  | 0 | 1157 | 980 | 1295 | 1240 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 |  |  |  | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 19.7 | 0.0 | 19.8 |  |  |  | 0.0 | 9.4 | 9.9 | 5.8 | 3.4 | 0.0 |
| Incr Delay (d2), s/veh | 1.5 | 0.0 | 2.0 |  |  |  | 0.0 | 1.9 | 3.2 | 0.4 | 0.8 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| \%ile BackOfQ(50\%),veh/In | 1.1 | 0.0 | 1.1 |  |  |  | 0.0 | 2.5 | 2.8 | 0.8 | 1.1 | 0.0 |
| Unsig. Movement Delay, s/veh |  |  |  |  |  |  |  |  |  |  |  |  |
| LnGrp Delay(d),s/veh | 21.2 | 0.0 | 21.8 |  |  |  | 0.0 | 11.3 | 13.1 | 6.1 | 4.2 | 0.0 |
| LnGrp LOS | C | A | C |  |  |  | A | B | B | A | A | A |
| Approach Vol, veh/h |  | 231 |  |  |  |  |  | 739 |  |  | 720 |  |
| Approach Delay, s/veh |  | 21.5 |  |  |  |  |  | 12.2 |  |  | 5.0 |  |
| Approach LOS |  | C |  |  |  |  |  | B |  |  | A |  |
| Timer - Assigned Phs |  | 2 |  |  | 5 | 6 |  | 8 |  |  |  |  |
| Phs Duration ( $\mathrm{G}+\mathrm{Y}+\mathrm{Rc}$ ), $s$ |  | 36.6 |  |  | 11.0 | 25.7 |  | 10.7 |  |  |  |  |
| Change Period ( $Y+R \mathrm{Cc}$ ), $s$ |  | 5.0 |  |  | 5.0 | 5.0 |  | 5.0 |  |  |  |  |
| Max Green Setting (Gmax), s |  | 30.0 |  |  | 25.0 | 30.0 |  | 20.0 |  |  |  |  |
| Max Q Clear Time (g_c+11), s |  | 6.8 |  |  | 5.6 | 10.5 |  | 5.3 |  |  |  |  |
| Green Ext Time (p_c), s |  | 7.7 |  |  | 0.5 | 10.2 |  | 0.5 |  |  |  |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM 6th Ctrl Delay |  |  | 10.4 |  |  |  |  |  |  |  |  |  |
| HCM 6th LOS |  |  | B |  |  |  |  |  |  |  |  |  |


|  | 4 |  | 7 | 4 |  | 4 | $4$ | $\dagger$ | \% |  | $\downarrow$ | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  | $\uparrow$ | 「' | ${ }^{1 /}$ | 4 |  |  | 禹 |  |
| Traffic Volume (vph) | 0 | 0 | 0 | 144 | 4 | 184 | 148 | 297 | 0 | 0 | 512 | 317 |
| Future Volume (vph) | 0 | 0 | 0 | 144 | 4 | 184 | 148 | 297 | 0 | 0 | 512 | 317 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) |  |  |  |  | 5.5 | 5.5 | 5.5 | 5.5 |  |  | 5.5 |  |
| Lane Util. Factor |  |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 |  |  | 0.95 |  |
| Frpb, ped/bikes |  |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 |  |  | 0.99 |  |
| Flpb, ped/bikes |  |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 |  |  | 1.00 |  |
| Frt |  |  |  |  | 1.00 | 0.85 | 1.00 | 1.00 |  |  | 0.94 |  |
| Fit Protected |  |  |  |  | 0.95 | 1.00 | 0.95 | 1.00 |  |  | 1.00 |  |
| Satd. Flow (prot) |  |  |  |  | 1742 | 1553 | 1719 | 1810 |  |  | 3301 |  |
| Flt Permitted |  |  |  |  | 0.95 | 1.00 | 0.95 | 1.00 |  |  | 1.00 |  |
| Satd. Flow (perm) |  |  |  |  | 1742 | 1553 | 1719 | 1810 |  |  | 3301 |  |
| Peak-hour factor, PHF | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph) | 0 | 0 | 0 | 162 | 4 | 207 | 166 | 334 | 0 | 0 | 575 | 356 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 184 | 0 | 0 | 0 | 0 | 75 | 0 |
| Lane Group Flow (vph) | 0 | 0 | 0 | 0 | 166 | 23 | 166 | 334 | 0 | 0 | 856 | 0 |
| Confl. Peds. (\#/hr) |  |  |  |  |  |  | 2 |  |  |  |  | 2 |
| Heavy Vehicles (\%) | 0\% | 0\% | 0\% | 4\% | 4\% | 4\% | 5\% | 5\% | 5\% | 2\% | 2\% | 2\% |
| Turn Type |  |  |  | Split | NA | Prot | Prot | NA |  |  | NA |  |
| Protected Phases |  |  |  | 7 | 7 | 7 | 1 | 5 |  |  | 234 |  |
| Permitted Phases |  |  |  |  |  |  |  |  |  |  |  |  |
| Actuated Green, G (s) |  |  |  |  | 13.9 | 13.9 | 13.0 | 30.7 |  |  | 82.8 |  |
| Effective Green, g (s) |  |  |  |  | 13.9 | 13.9 | 13.0 | 30.7 |  |  | 82.8 |  |
| Actuated g/C Ratio |  |  |  |  | 0.11 | 0.11 | 0.10 | 0.24 |  |  | 0.66 |  |
| Clearance Time (s) |  |  |  |  | 5.5 | 5.5 | 5.5 | 5.5 |  |  |  |  |
| Vehicle Extension (s) |  |  |  |  | 2.3 | 2.3 | 2.3 | 5.2 |  |  |  |  |
| Lane Grp Cap (vph) |  |  |  |  | 191 | 171 | 177 | 440 |  |  | 2165 |  |
| v/s Ratio Prot |  |  |  |  | c0.10 | 0.01 | c0.10 | c0.18 |  |  | c0.26 |  |
| v/s Ratio Perm |  |  |  |  |  |  |  |  |  |  |  |  |
| v/c Ratio |  |  |  |  | 0.87 | 0.13 | 0.94 | 0.76 |  |  | 0.40 |  |
| Uniform Delay, d1 |  |  |  |  | 55.3 | 50.7 | 56.2 | 44.3 |  |  | 10.1 |  |
| Progression Factor |  |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 |  |  | 0.60 |  |
| Incremental Delay, d2 |  |  |  |  | 31.1 | 0.2 | 49.1 | 8.9 |  |  | 0.1 |  |
| Delay (s) |  |  |  |  | 86.4 | 50.9 | 105.3 | 53.2 |  |  | 6.1 |  |
| Level of Service |  |  |  |  | F | D | F | D |  |  | A |  |
| Approach Delay (s) 0.0 |  |  |  |  | 66.7 |  |  | 70.5 |  |  | 6.1 |  |
| Approach LOS |  | A |  |  | E |  |  | E |  |  | A |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM 2000 Control Delay |  |  | 36.5 |  | HCM 2000 | evel of | ervice |  | D |  |  |  |
| HCM 2000 Volume to Capacity ratio |  |  | 0.63 |  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length (s) |  |  | 126.2 |  | Sum of los | ime (s) |  |  | 27.5 |  |  |  |
| Intersection Capacity Utilization |  |  | 54.5\% |  | CU Level | Service |  |  | A |  |  |  |
| Analysis Period (min) |  |  | 15 |  |  |  |  |  |  |  |  |  |
| c Critical Lane Group |  |  |  |  |  |  |  |  |  |  |  |  |

HCM 6th Edition methodology does not support clustered intersections.


[^3]| Intersection |  |
| :--- | ---: |
| Intersection Delay, s/veh $\quad 26.2$ |  |
| Intersection LOS | D |


| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | ${ }^{*}$ | $\uparrow$ |  | ${ }^{7}$ | $\uparrow$ |  |  | \& |  |  | \& |  |
| Traffic Vol, veh/h | 17 | 447 | 14 | 124 | 217 | 34 | 21 | 12 | 284 | 25 | 6 | 16 |
| Future Vol, veh/h | 17 | 447 | 14 | 124 | 217 | 34 | 21 | 12 | 284 | 25 | 6 | 16 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 18 | 481 | 15 | 133 | 233 | 37 | 23 | 13 | 305 | 27 | 6 | 17 |
| Number of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Approach | EB |  |  | WB |  |  | NB |  |  | SB |  |  |
| Opposing Approach | WB |  |  | EB |  |  | SB |  |  | NB |  |  |
| Opposing Lanes | 2 |  |  | 2 |  |  | 1 |  |  | 1 |  |  |
| Conflicting Approach Left | SB |  |  | NB |  |  | EB |  |  | WB |  |  |
| Conflicting Lanes Left | 1 |  |  | 1 |  |  | 2 |  |  | 2 |  |  |
| Conflicting Approach Right | NB |  |  | SB |  |  | WB |  |  | EB |  |  |
| Conflicting Lanes Right | 1 |  |  | 1 |  |  | 2 |  |  | 2 |  |  |
| HCM Control Delay | 42.1 |  |  | 14.9 |  |  | 17.6 |  |  | 11.6 |  |  |
| HCM LOS | E |  |  | B |  |  | C |  |  | B |  |  |


| Lane | NBLn1 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | SBLn1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Vol Left, \% | $7 \%$ | $100 \%$ | $0 \%$ | $100 \%$ | $0 \%$ | $53 \%$ |
| Vol Thru, \% | $4 \%$ | $0 \%$ | $97 \%$ | $0 \%$ | $86 \%$ | $13 \%$ |
| Vol Right, \% | $90 \%$ | $0 \%$ | $3 \%$ | $0 \%$ | $14 \%$ | $34 \%$ |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 317 | 17 | 461 | 124 | 251 | 47 |
| LT Vol | 21 | 17 | 0 | 124 | 0 | 25 |
| Through Vol | 12 | 0 | 447 | 0 | 217 | 6 |
| RT Vol | 284 | 0 | 14 | 0 | 34 | 16 |
| Lane Flow Rate | 341 | 18 | 496 | 133 | 270 | 51 |
| Geometry Grp | 2 | 7 | 7 | 7 | 7 | 2 |
| Degree of Util (X) | 0.584 | 0.036 | 0.901 | 0.27 | 0.502 | 0.106 |
| Departure Headway (Hd) | 6.173 | 7.079 | 6.546 | 7.299 | 6.69 | 7.575 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 583 | 506 | 555 | 492 | 537 | 472 |
| Service Time | 4.213 | 4.82 | 4.288 | 5.048 | 4.438 | 5.647 |
| HCM Lane V/C Ratio | 0.585 | 0.036 | 0.894 | 0.27 | 0.503 | 0.108 |
| HCM Control Delay | 17.6 | 10.1 | 43.3 | 12.7 | 16 | 11.6 |
| HCM Lane LOS | C | B | E | B | C | B |
| HCM 95th-tile Q | 3.7 | 0.1 | 10.6 | 1.1 | 2.8 | 0.4 |


| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.9 |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | $\uparrow$ |  |  | - | r |  |
| Traffic Vol, veh/h | 764 | 6 | 33 | 402 | 1 | 48 |
| Future Vol, veh/h | 764 | 6 | 33 | 402 | 1 | 48 |
| Conflicting Peds, \#/hr | 0 | 2 | 5 | 0 | 2 | 5 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, \# | 0 | - | - | 0 | 0 | - |
| Grade, \% | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 91 | 91 | 91 | 91 | 91 | 91 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 840 | 7 | 36 | 442 | 1 | 53 |







|  | $\prime$ |  |  |  |  |  | 4 | $\dagger$ | $p$ |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | $\uparrow$ | F |  |  |  |  | 个 | F | ${ }^{7}$ | 4 |  |
| Traffic Volume (veh/h) | 41 | 3 | 59 | 0 | 0 | 0 | 0 | 382 | 351 | 366 | 497 | 0 |
| Future Volume (veh/h) | 41 | 3 | 59 | 0 | 0 | 0 | 0 | 382 | 351 | 366 | 497 | 0 |
| Initial $Q(Q b)$, veh | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 |  | 0.96 |  |  |  | 1.00 |  | 1.00 | 1.00 |  | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach |  | No |  |  |  |  |  | No |  |  | No |  |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 |  |  |  | 0 | 1870 | 1870 | 1870 | 1870 | 0 |
| Adj Flow Rate, veh/h | 44 | 3 | 63 |  |  |  | 0 | 406 | 373 | 389 | 529 | 0 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 |  |  |  | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, \% | 2 | , | 2 |  |  |  | 0 | 2 | 2 | 2 | 2 | 0 |
| Cap, veh/h | 160 | 11 | 146 |  |  |  | 0 | 818 | 693 | 623 | 1305 | 0 |
| Arrive On Green | 0.10 | 0.10 | 0.10 |  |  |  | 0.00 | 0.44 | 0.44 | 0.16 | 0.70 | 0.00 |
| Sat Flow, veh/h | 1673 | 114 | 1521 |  |  |  | 0 | 1870 | 1585 | 1781 | 1870 | 0 |
| Grp Volume(v), veh/h | 47 | 0 | 63 |  |  |  | 0 | 406 | 373 | 389 | 529 | 0 |
| Grp Sat Flow(s),veh/h/n | 1787 | 0 | 1521 |  |  |  | 0 | 1870 | 1585 | 1781 | 1870 | 0 |
| Q Serve(g_s), s | 1.2 | 0.0 | 1.9 |  |  |  | 0.0 | 7.5 | 8.4 | 4.9 | 5.8 | 0.0 |
| Cycle Q Clear(g_c), s | 1.2 | 0.0 | 1.9 |  |  |  | 0.0 | 7.5 | 8.4 | 4.9 | 5.8 | 0.0 |
| Prop In Lane | 0.94 |  | 1.00 |  |  |  | 0.00 |  | 1.00 | 1.00 |  | 0.00 |
| Lane Grp Cap (c), veh/h | 171 | 0 | 146 |  |  |  | 0 | 818 | 693 | 623 | 1305 | 0 |
| V/C Ratio(X) | 0.27 | 0.00 | 0.43 |  |  |  | 0.00 | 0.50 | 0.54 | 0.62 | 0.41 | 0.00 |
| Avail Cap(c_a), veh/h | 738 | 0 | 628 |  |  |  | 0 | 1159 | 982 | 1264 | 1305 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 |  |  |  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(l) | 1.00 | 0.00 | 1.00 |  |  |  | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 20.3 | 0.0 | 20.6 |  |  |  | 0.0 | 9.8 | 10.0 | 6.3 | 3.1 | 0.0 |
| Incr Delay (d2), s/veh | 0.5 | 0.0 | 1.2 |  |  |  | 0.0 | 2.1 | 3.0 | 0.6 | 0.9 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| \%ile BackOfQ(50\%),veh/ln | 0.4 | 0.0 | 0.6 |  |  |  | 0.0 | 2.9 | 2.9 | 1.1 | 1.2 | 0.0 |
| Unsig. Movement Delay, s/veh |  |  |  |  |  |  |  |  |  |  |  |  |
| LnGrp Delay (d),s/veh | 20.9 | 0.0 | 21.9 |  |  |  | 0.0 | 11.9 | 13.0 | 6.9 | 4.0 | 0.0 |
| LnGrp LOS | C | A | C |  |  |  | A | B | B | A | A | A |
| Approach Vol, veh/h |  | 110 |  |  |  |  |  | 779 |  |  | 918 |  |
| Approach Delay, s/veh |  | 21.4 |  |  |  |  |  | 12.4 |  |  | 5.2 |  |
| Approach LOS |  | C |  |  |  |  |  | B |  |  | A |  |
| Timer - Assigned Phs |  | 2 |  |  | 5 | 6 |  | 8 |  |  |  |  |
| Phs Duration ( $G+Y+R \mathrm{c}$ ), $s$ |  | 38.8 |  |  | 12.6 | 26.2 |  | 9.6 |  |  |  |  |
| Change Period ( $Y+\mathrm{Rc}$ ), s |  | 5.0 |  |  | 5.0 | 5.0 |  | 5.0 |  |  |  |  |
| Max Green Setting (Gmax), s |  | 30.0 |  |  | 25.0 | 30.0 |  | 20.0 |  |  |  |  |
| Max Q Clear Time (g_c+11), s |  | 7.8 |  |  | 6.9 | 10.4 |  | 3.9 |  |  |  |  |
| Green Ext Time (p_c), s |  | 9.4 |  |  | 0.7 | 10.8 |  | 0.2 |  |  |  |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM 6th Ctrr Delay |  |  | 9.3 |  |  |  |  |  |  |  |  |  |
| HCM 6th LOS |  |  | A |  |  |  |  |  |  |  |  |  |


c Critical Lane Group

HCM 6th Edition methodology does not support clustered intersections.


[^4]






## Preliminary Traffic Signal Warrant Analysis

Project Name: Willamette Falls Mixed-Use Building
Intersection: Willamette Falls Drive at 12th Street
Scenario: 2025 Background plus Site Trips Conditions
Number of Major Street Lanes: $\quad 1$
Number of Minor Street Lanes $\qquad$ 1 PM Peak Hour Volume $\qquad$ 710 (sum of both approaches) PM Peak Hour Volume 245 (highest-volume approach) ${ }^{\text {a }}$
Posted or 85th percentile speed $>40 \mathrm{mph}$ : No
Isolated Population Less than 10,000: $\qquad$

## Warrant 1, Eight-Hour Vehicular Volume

Condition A - Minimum Vehicular Volume

| Number of lanes for moving <br> traffic on each approach | Vehicles per hour on major street <br> (total of both approaches) |  |  | Vehicles per hour on minor street <br> (total of both approaches) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major Street | Minor Street | $100 \%$ | $80 \%$ | $70 \%$ | $56 \%$ | $100 \%$ | $80 \%$ | $70 \%$ | $56 \%$ |
| 1 | 1 | 500 | 400 | 350 | 280 | 150 | 120 | 105 | 84 |
| 2 or more | 1 | 600 | 480 | 420 | 336 | 150 | 120 | 105 | 84 |
| 2 or more | 2 or more | 600 | 480 | 420 | 336 | 200 | 160 | 140 | 112 |
| 1 | 2 or more | 500 | 400 | 350 | 280 | 200 | 160 | 140 | 112 |

Condition B - Interruption of Continuous Traffic

| Number of lanes for moving traffic on each approach |  | Vehicles per hour on major street (total of both approaches) |  |  |  | Vehicles per hour on minor street (total of both approaches) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major Street | Minor Street | 100\% | 80\% | 70\% | 56\% | 100\% | 80\% | 70\% | 56\% |
| 1 | 1 | 750 | 600 | 525 | 420 | 75 | 60 | 53 | 42 |
| 2 or more | 1 | 900 | 720 | 630 | 504 | 75 | 60 | 53 | 42 |
| 2 or more | 2 or more | 900 | 720 | 630 | 504 | 100 | 80 | 70 | 56 |
| 1 | 2 or more | 750 | 600 | 525 | 420 | 100 | 80 | 70 | 56 |
| Warrant Anaylsis Calculations |  |  |  | 8th Highest Hour ${ }^{\text {b }}$ |  | Minimum Volume |  | Warrant Satisfied? |  |
| Condition A - Minimum Vehicular Volume |  |  |  |  |  |  |  |  |  |
| Major Street Volume |  |  |  |  |  |  |  |  |  |
| Minor Street Volume |  |  |  |  |  |  |  |  |  |
| Condition B - Interruption of Continuous Traffic |  |  |  |  |  |  |  |  |  |
| Major Street Volume |  |  |  |  |  |  |  |  |  |
| Minor Street Volume |  |  |  |  |  |  |  |  |  |
| Combination Warrant ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |
| Major Street Volume |  |  |  |  |  |  |  |  |  |
| Minor Street Volume |  |  |  |  |  |  |  |  |  |
| ${ }^{\text {a }}$ Minor-Street right turn volumes are reduced to account for the impact of right-turns on red. |  |  |  |  |  |  |  |  |  |
| ${ }^{\text {b }}$ Eighth-highest hour volumes are calculated as 5.65 percent of the expected daily traffic volume. |  |  |  |  |  |  |  |  |  |
| ${ }^{\text {c }}$ This warrant should be used only after adequate trial of other alternatives has failed to solve traffic problems. |  |  |  |  |  |  |  |  |  |

## Preliminary Traffic Signal Warrant Analysis

Project Name: Willamette Falls Mixed-Use Building
Intersection: Willamette Falls Drive at 11th Street
Scenario: 2025 Background plus Site Trips Conditions

Number of Major Street Lanes: $\qquad$ 1
Number of Minor Street Lanes 1 $\qquad$ 1209 (sum of both approaches) (highest-volume approach) ${ }^{\text {a }}$

Posted or 85th percentile speed > 40 mph : No
Isolated Population Less than 10,000: $\qquad$

## Warrant 1, Eight-Hour Vehicular Volume

Condition A - Minimum Vehicular Volume

| Number of lanes for moving <br> traffic on each approach | Vehicles per hour on major street <br> (total of both approaches) |  |  | Vehicles per hour on minor street <br> (total of both approaches) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major Street | Minor Street | $100 \%$ | $80 \%$ | $70 \%$ | $56 \%$ | $100 \%$ | $80 \%$ | $70 \%$ | $56 \%$ |
| 1 | 1 | 500 | 400 | 350 | 280 | 150 | 120 | 105 | 84 |
| 2 or more | 1 | 600 | 480 | 420 | 336 | 150 | 120 | 105 | 84 |
| 2 or more | 2 or more | 600 | 480 | 420 | 336 | 200 | 160 | 140 | 112 |
| 1 | 2 or more | 500 | 400 | 350 | 280 | 200 | 160 | 140 | 112 |

Condition B - Interruption of Continuous Traffic

| Number of lanes for moving traffic on each approach |  | Vehicles per hour on major street (total of both approaches) |  |  |  | Vehicles per hour on minor street (total of both approaches) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major Street | Minor Street | 100\% | 80\% | 70\% | 56\% | 100\% | 80\% | 70\% | 56\% |
| 1 | 1 | 750 | 600 | 525 | 420 | 75 | 60 | 53 | 42 |
| 2 or more | 1 | 900 | 720 | 630 | 504 | 75 | 60 | 53 | 42 |
| 2 or more | 2 or more | 900 | 720 | 630 | 504 | 100 | 80 | 70 | 56 |
| 1 | 2 or more | 750 | 600 | 525 | 420 | 100 | 80 | 70 | 56 |
| Warrant Anaylsis Calculations |  |  |  | 8th Highest Hour ${ }^{\text {b }}$ |  | Minimum Volume |  | Warrant Satisfied? |  |
| Condition A - Minimum Vehicular Volume |  |  |  |  |  |  |  |  |  |
| Major Street Volume |  |  |  | 683 |  | 500 |  |  |  |
| Minor Street Volume |  |  |  | 21 |  | 150 |  | No |  |
| Condition B - Interruption of Continuous Traffic |  |  |  |  |  |  |  |  |  |
| Major Street Volume |  |  |  | 683 |  | 750 |  |  |  |
| Minor Street Volume |  |  |  | 21 |  | 75 |  | No |  |
| Combination Warrant ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |
| Major Street Volume |  |  |  | 683 |  | 600 |  |  |  |
| Minor Street Volume |  |  |  | 21 |  | 120 |  | No |  |
| ${ }^{\text {a }}$ Minor-Street right turn volumes are reduced to account for the impact of right-turns on red. |  |  |  |  |  |  |  |  |  |
| ${ }^{\mathrm{b}}$ Eighth-highest hour volumes are calculated as 5.65 percent of the expected daily traffic volume. |  |  |  |  |  |  |  |  |  |
| ${ }^{\text {c }}$ This warrant should be used only after adequate trial of other alternatives has failed to solve traffic problems. |  |  |  |  |  |  |  |  |  |

## Preliminary Traffic Signal Warrant Analysis

Project Name: Willamette Falls Mixed-Use Building
Intersection: Willamette Falls Drive at 10th Street
Scenario: 2025 Background plus Site Trips Conditions
Number of Major Street Lanes: 2
Number of Minor Street Lanes $\qquad$ PM Peak Hour Volume $\qquad$ 1114 (sum of both approaches) PM Peak Hour Volume 422 (highest-volume approach) ${ }^{\text {a }}$ Posted or 85th percentile speed > 40 mph : No

Isolated Population Less than 10,000: $\qquad$

## Warrant 1, Eight-Hour Vehicular Volume

Condition A - Minimum Vehicular Volume

| Number of lanes for moving <br> traffic on each approach | Vehicles per hour on major street <br> (total of both approaches) |  |  | Vehicles per hour on minor street <br> (total of both approaches) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major Street | Minor Street | $100 \%$ | $80 \%$ | $70 \%$ | $56 \%$ | $100 \%$ | $80 \%$ | $70 \%$ | $56 \%$ |
| 1 | 1 | 500 | 400 | 350 | 280 | 150 | 120 | 105 | 84 |
| 2 or more | 1 | 600 | 480 | 420 | 336 | 150 | 120 | 105 | 84 |
| 2 or more | 2 or more | 600 | 480 | 420 | 336 | 200 | 160 | 140 | 112 |
| 1 | 2 or more | 500 | 400 | 350 | 280 | 200 | 160 | 140 | 112 |

Condition B - Interruption of Continuous Traffic

| Number of lanes for moving traffic on each approach |  | Vehicles per hour on major street (total of both approaches) |  |  |  | Vehicles per hour on minor street (total of both approaches) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major Street | Minor Street | 100\% | 80\% | 70\% | 56\% | 100\% | 80\% | 70\% | 56\% |
| 1 | 1 | 750 | 600 | 525 | 420 | 75 | 60 | 53 | 42 |
| 2 or more | 1 | 900 | 720 | 630 | 504 | 75 | 60 | 53 | 42 |
| 2 or more | 2 or more | 900 | 720 | 630 | 504 | 100 | 80 | 70 | 56 |
| 1 | 2 or more | 750 | 600 | 525 | 420 | 100 | 80 | 70 | 56 |
| Warrant Anaylsis Calculations |  |  |  | 8th Highest Hour ${ }^{\text {b }}$ |  | Minimum Volume |  | Warrant Satisfied? |  |
| Condition A - Minimum Vehicular Volume |  |  |  |  |  |  |  |  |  |
| Major Street Volume |  |  |  | 629 |  | 600 |  |  |  |
| Minor Street Volume |  |  |  | 238 |  | 200 |  | Yes |  |
| Condition B - Interruption of Continuous Traffic |  |  |  |  |  |  |  |  |  |
| Major Street Volume |  |  |  | 629 |  | 900 |  |  |  |
| Minor Street Volume |  |  |  | 238 |  | 100 |  | No |  |
| Combination Warrant ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |
| Major Street Volume |  |  |  | 629 |  | 720 |  |  |  |
| Minor Street Volume |  |  |  | 238 |  | 160 |  | No |  |
| ${ }^{\text {a }}$ Minor-Street right turn volumes are reduced to account for the impact of right-turns on red. |  |  |  |  |  |  |  |  |  |
| ${ }^{\mathrm{b}}$ Eighth-highest hour volumes are calculated as 5.65 percent of the expected daily traffic volume. |  |  |  |  |  |  |  |  |  |
| ${ }^{\text {c }}$ This warrant should be used only after adequate trial of other alternatives has failed to solve traffic problems. |  |  |  |  |  |  |  |  |  |

## Preliminary Traffic Signal Warrant Analysis

Project Name: Willamette Falls Mixed-Use Building
Intersection: 10th Street at 8th Avenue/8th Court
Scenario: 2025 Background plus Site Trips Conditions

Number of Major Street Lanes: $\qquad$ 1
Number of Minor Street Lanes 1 PM Peak Hour Volume $\qquad$ 1030 (sum of both approaches) 147 (highest-volume approach) ${ }^{\text {a }}$ PM Peak Hour Volume
$\qquad$

Posted or 85 th percentile speed $>40 \mathrm{mph}$ : No
Isolated Population Less than 10,000: $\qquad$

## Warrant 1, Eight-Hour Vehicular Volume

Condition A - Minimum Vehicular Volume

| Number of lanes for moving <br> traffic on each approach | Vehicles per hour on major street <br> (total of both approaches) |  |  | Vehicles per hour on minor street <br> (total of both approaches) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major Street | Minor Street | $100 \%$ | $80 \%$ | $70 \%$ | $56 \%$ | $100 \%$ | $80 \%$ | $70 \%$ | $56 \%$ |
| 1 | 1 | 500 | 400 | 350 | 280 | 150 | 120 | 105 | 84 |
| 2 or more | 1 | 600 | 480 | 420 | 336 | 150 | 120 | 105 | 84 |
| 2 or more | 2 or more | 600 | 480 | 420 | 336 | 200 | 160 | 140 | 112 |
| 1 | 2 or more | 500 | 400 | 350 | 280 | 200 | 160 | 140 | 112 |

Condition B - Interruption of Continuous Traffic

| Number of lanes for moving traffic on each approach |  | Vehicles per hour on major street (total of both approaches) |  |  |  | Vehicles per hour on minor street (total of both approaches) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major Street | Minor Street | 100\% | 80\% | 70\% | 56\% | 100\% | 80\% | 70\% | 56\% |
| 1 | 1 | 750 | 600 | 525 | 420 | 75 | 60 | 53 | 42 |
| 2 or more | 1 | 900 | 720 | 630 | 504 | 75 | 60 | 53 | 42 |
| 2 or more | 2 or more | 900 | 720 | 630 | 504 | 100 | 80 | 70 | 56 |
| 1 | 2 or more | 750 | 600 | 525 | 420 | 100 | 80 | 70 | 56 |
| Warrant Anaylsis Calculations |  |  |  | 8th Highest Hour ${ }^{\text {b }}$ |  | Minimum Volume |  | Warrant Satisfied? |  |
| Condition A - Minimum Vehicular Volume |  |  |  |  |  |  |  |  |  |
| Major Street Volume |  |  |  | 582 |  | 500 |  |  |  |
| Minor Street Volume |  |  |  | 83 |  | 150 |  | No |  |
| Condition B - Interruption of Continuous Traffic |  |  |  |  |  |  |  |  |  |
| Major Street Volume |  |  |  | 582 |  | 750 |  |  |  |
| Minor Street Volume |  |  |  | 83 |  | 75 |  | No |  |
| Combination Warrant ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |
| Major Street Volume |  |  |  | 582 |  | 600 |  |  |  |
| Minor Street Volume |  |  |  | 83 |  | 120 |  | No |  |
| ${ }^{\text {a }}$ Minor-Street right turn volumes are reduced to account for the impact of right-turns on red. |  |  |  |  |  |  |  |  |  |
| ${ }^{\mathrm{b}}$ Eighth-highest hour volumes are calculated as 5.65 percent of the expected daily traffic volume. |  |  |  |  |  |  |  |  |  |
| ${ }^{\text {c }}$ This warrant should be used only after adequate trial of other alternatives has failed to solve traffic problems. |  |  |  |  |  |  |  |  |  |




1 GROUND FLOOR PLAN + WILLAMETTE FALLS DRIVE ELEVATION
WILLAMETHE FALIS DRIVE ELEVATION


2 SECOND FLOOR PLAN + EAST \& $12 \dagger$ h STREET ELEVATIONS



4 view from intersection of 12 th + willametie falls drive
VIEW FROM 12th + WFD

CONCEPTUALPLANS + ELEVATIONS

SGA





## resource areas:


NO STREAS OR NTEFEMTTENT WATER WAYS
NO HABIAT CONSERVAVION
No habrat conservation
No Rock outchopplias

NATURAL HAZARD AREAS
not in Flood palan
A NOT T NLOODPDLIN
Not IN LANDLLDE AREA
NOTIN LANDSLIDE UULNERABLL ANALYSIS AREA
GROSS AREA $=15,000$ SQ.FT
SLOPE ANALYSIS







| Luminaire Schedule |  |  |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :---: | :---: |
| Tag | Symbol | Qty | Description | Lum. Lumens |  |  |
| SD | - | 14 | LITON - DL340-FINISH-B45UE-DUN-T30 | 1108 |  |  |
| W1 | - | 13 | LITON - WD2360-FINISH-L2O-BDIV-BUO2UE-DUN-T30 | 2266 |  |  |
| W2 | - | 7 | HI-LITE - H-151-12-FINISH-1500 | 1407 |  |  |
| W3 | - | 2 | Hi-Lite - H-151-12-Finish-3000 | 2948 |  |  |
| W4 | + | 7 | CAMMAN - OW318-28-LN-30K | 1489 |  |  |

Cafe Seating
Illuminance (Fc)
Average $=8.76$
Maximum $=11.2$
Minimum $=6.0=1.87$

## 1949 Willamette Falls Drive

## Proposed Commercial Mixed Use Building

Willamette Falls Drive \& 12 th Street, West Linn, Oregon


NAME:
L. ADAMS DEPARTMENT STORE

## LOCATION:

OREGON CITY
dATE OF CONSTRUCTION:
1912
USE:
DEPARTMENT STORE

PRIMARY MATERIALS IN SUPPORT OF EXCEPTION:
BRICK MASONRY


## NAME:

WEINHARD BUILDING
LOCATION:
802 MAIN STREET, OREGON CITY

## DATE OF CONSTRUCTION:

1895

USE:
DEPARTMENT STORE
PRIMARY MATERIALS IN SUPPORT OF EXCEPTION: BRICK MASONRY

NAME:
TVFR STATION No. 59
LOCATION:
1860 WILLAMETTE FALLS DRIVE
DATE OF CONSTRUCTION:
2010

USE:
FIRE STATION
PRIMARY MATERIALS IN SUPPORT OF EXCEPTION:
BRICK MASONRY

## NAME:

WILLAMETTE CENTER IV

## LOCATION:

1969 WILLAMETTE FALLS DRIVE, WEST LINN
DATE OF CONSTRUCTION:
2019
USE:
MIXED USE COMMERCIAL

PRIMARY MATERIALS IN SUPPORT OF EXCEPTION:
BRICK MASONRY

## 1949 Willamette Falls Drive

## Proposed Commercial Mixed Use Building

Willamette Falls Drive \& 12th Street, West Linn, Oregon


NAME:
MEIER \& FRANK ORIGINAL STORE

## LOCATION:

SW FRONT \& SW AMHILL STREETS, PORTLAND
DATE OF CONSTRUCTION:
1857
USE:
DEPARTMENT STORE

PRIMARY MATERIALS IN SUPPORT OF EXCEPTION:
DECORATIVE CANOPY COLUMNS


## NAME:

ORO FINO SALOON
LOCATION:
OAK \& STARK STREETS, PORTLAND
DATE OF CONSTRUCTION:
1876
USE:
SALOON
PRIMARY MATERIALS IN SUPPORT OF EXCEPTION:
DECORATIVE CANOPY COLUMNS

## NAME:

COMMUNITY OF FAITH CURCH

## LOCATION:

1889 WILLAMETTE FALLS DR, WEST LINN
DATE OF CONSTRUCTION:
UNKNOWN

USE:
CHURCH
PRIMARY MATERIALS IN SUPPORT OF EXCEPTION:
DECORATIVE CANOPY COLUMNS

## NAME:

LIL' COOPERSTOWN GRILL

## LOCATION:

1817 WILLAMETTE FALLS DRIVE, WEST LINN

## DATE OF CONSTRUCTION:

UNKNOWN
USE:
RESTAURANT

PRIMARY MATERIALS IN SUPPORT OF EXCEPTION: DECORATIVE CANOPY COLUMNS

1949 Willamette Falls Drive DR-23-01
Color and Materials Board
(Physical Samples Delivered to Planning Office)


## 1949 Willamette Falls Drive

## Proposed Commercial Mixed Use Building

Willamette Falls Drive \& 12th Street, West Linn, Oregon

[^5]

## 1949 Willamette Falls Drive

## Proposed Commercial Mixed Use Building

Willamette Falls Drive \&12th Street, West Linn, Oregon

NOTE: THE BRICK BLENDS \& AWNING FABRICS SHOWN BELOW ARE REPRESENTATIVE ONLY. THEY ARE DRAWN FROM MUTUAL MATERIALS' HISTORICAL BLEND SELECTIONS, AND FROM THE SUNBRELLA FABRIC CATALOG. BRICK BLENDS FOR THE BUILDING WILL BE SELECTED FROM THE FULL RANGE OF HISTORICAL BLENDS AVAILABLE FROM MUTUAL MATERIALS. AWNING FABRIC COLORS WILL BE SELECTED FROM THE FULL RANGE OF SUNBRELLA SELECTIONS.

BRICK BLENDS:


BRICK BLEND:
CEDAR SPRINGS


BRICK BLEND:
CLASSIC USED


BRICK BLEND:
HOMESTEAD USED


BRICK BLEND:
MADRONA SPRINGS


BRICK BLEND:
MUTUAL USED


BRICK BLEND:
OLD UNIVERSITY


BRICK BLEND:
PACIFIC HANDMOLD


BRICK BLEND:
VANCOUVER USED

AWNING FABRICS:


AWNING FABRIC:
SLATE


AWNING FABRIC:
FERN


AWNING FABRIC:
MAHOGANY


AWNING FABRIC:
MANHATTAN DUNE


The Lighting Project
315 Columbia St.
Vancouver WA 98660
360.314 .4100
www.tlpnw.com

## 1949 Willamette Luminaire Spec Sheets

# Lition <br> <br> DL340 ：4＂ROUND CEILING DOWNLIGHT（IP65） <br> <br> DL340 ：4＂ROUND CEILING DOWNLIGHT（IP65） 1000LM／1500LM（15W／22W） 

 1000LM／1500LM（15W／22W）}


## SPECIFICATION

Application：This DL Series covered ceiling mount down light can be used for surface ceiling or pendant mount in both interior and outdoor settings．Typical locations are in commercial and retail spaces that require lighting from above．Dark Sky compliant．

Housing：Constructed from a round one piece high grade aluminum extrusion with a rectangular extrusion arm，end cap，faceplate and a mounting plate with a powder coat finish．Includes an adjustable led array with optics（rotates $25^{\circ}$ ），COB LED，reflector and LED driver．Mounting plate is secured to arm with four（4）flat head phillips stainless steel screws．Mounting plate installs onto an electrical junction box．Consult factory for junction box mounting sizes．

Mounting：Fixture includes a mounting bracket for installation directly to a 3－1／2＂or 4＂ octagonal electrical junction－box．Can also be mounted as a 12＂－48＂pendant（LPCMDL4）．

Faceplate：Round one piece aluminum with powder coat finish，clear tempered glass lens， and silicone o－ring．Faceplate is secured to the housing by threads．
Reflector Construction：Minimum 50，000 hours L70 life based on ANSI TM－21 calculations from LM80 standardized test results．See ordering guide for delivered lumens．

Lumen Maintenance：Minimum 50，000 hours L70 life based on ANSI TM－21 calculations from LM80 standardized test results．See ordering guide for delivered lumens．

Dimming：UE－DUN）UniDim ${ }^{\text {TM }}$ dimming option is a universal dimming system that works with most $120 \mathrm{~V}, 3$－wireELV， 2 －wireincandescentand $120 \mathrm{~V} / 277 \mathrm{~V}, 5$－wire $0-10 \mathrm{~V}$
fluorescentdimmers．（UE－D10）0－10V dimming works with most 5 －wire，0－10V dimmers． Factory qualified for use with Leviton IP710－DLZ．（－DIN）dimming option smoothly dims down to $5 \%$ of initial light output with flicker－free performance．Works with standard 120V incandescent dimmers．

Electrical：AC 50／60Hz Electronic Direct Current Class 2 driver integrally mounted．Power Factor $>0.90$ ．For cold weather applications $\left(-22^{\circ} \mathrm{C}\right.$ and above）use－DUN driver option．

Emergency Options：Emergency LED Battery Back－up available，remotely mounted adjacent to housing by installer．When AC power fails，the device immediately switches to the emergency mode，operating the LEDs for a minimum of 90 minutes．Remote test switch and plate cover included．（－EMAC）is not wet location rated，and must be mounted in a dry area．

Warranty：Covered by a 5 Year Warranty to be free of defects in materials and craftsmanship．Fixture should not be installed in applications with ambient temperature above 60 degrees $C$ ． Doing so will result in reduced lamp life and voided warranty．

Note：Dark sky compliant．
Listing：ETL／cETL Listed．Suitable for wet location．Assembled in USA．（IP65）IK08 rating for impact resistance

Finish：A 7－stage electrostatic，polymer process provides a finish that delivers outstanding durability，superior anti－aging，resistance to corrosion and UV－degradation．Standard finishes are White， Silver，Basic Bronze，Black．Special order finishes are Light Silver， Dark Grey，Metallic Gold，and Metallic Black²．

Beam Spread：Available in Wide Flood， $2^{\circ}$ Pencil Beam， Narrow Spot，Spot，Flood，and Wall Wash Optic．

LED：Energy efficient Chip－On－Board（COB）Singular LED Light Source provides for smooth uniform light output，eliminating the multiple shadow effect seen by multiple LED Source products． Binned with 4 －step MacAdam ellipses as recommended by ANSI Standard．Available in 4000K， $1700 \mathrm{~K}^{2}, 2700 \mathrm{~K}, 2700 \mathrm{~K} 97 \mathrm{CRI}{ }^{2}$ ， 3000K，3000K 97CRI²，3500K，and 5000K．

## Benefits：

－Energy efficient，low glare LED Chip－On－Board light engine
－Beam spreads include NS，SP，FL，WFL and $2^{\circ}$ Pencil Beam
－Emergency back up available
－Singular COB Light Source
－ 5 year limited warranty

Caution：LITON recommends use of surge protectors on the power entering LED Housings． Surge damage is not covered by warranty．

| FEATURE： |  | $?^{*}$ |  | 000 |  | （FIV） | 44＊＊＊＊ |  | ORDERING EXAMPLE ：DL340B－B45－EMAC |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DL340 |  | FINISH | LUMEN ${ }^{1}$ |  | BEAM SPREAD |  | DIMMING |  |  | LED |  | OPTIONS |  |
| DL340 | w | ：White | Blank | ：10001m（15W） | Blank | ：Wide Flood | Blank | Non－Dimming（120V） | Blank | ：4000K |  | －Blank | ：None |
|  | S | ：Silver | －L15 | ：15001m（22W） | －802 | $2^{\circ}$ Pencil Beam | UE－DUN | ：UniDim ${ }^{\text {™ }}(120 \mathrm{~V} / 277 \mathrm{~V})^{3}$ | －T17 | ：1700K ${ }^{\text {² }}$ |  | －EMAC | ：Emergency Back Up |
|  | BZ | ：Basic Bronze |  |  | －B10 | ：Narrow Spot | UE－D10 | ：0－10 Dimming | －T27 | ：2700K |  | －FR | ：Frosted Lens |
|  | B | ：Black |  |  | －820 | ：Spot |  | （120V／277V） | －T27－C | C97：2700K | K，97CRI ${ }^{2}$ | －JB | ：Integral Junction Box ${ }^{3,5}$ |
|  | LS | ：Light Silver ${ }^{2}$ |  |  | －B45 | ：Flood | －DIN | ：2－Wire 10\％Triac | －T30：3 | 3000K |  | －LVR | ：Hex－Cell Louver ${ }^{2}$ |
|  |  | ：Dark Grey ${ }^{2}$ |  |  | BWW | ：WallWash Optic |  | Dimming（120V） | －T30－C | c97：3000K | K，97CR12 ${ }^{2}$ | －EMA | ：Emergency BackPack＊ |
|  |  | ：Metallic Gold |  |  |  |  |  |  | －T35 | ：3500K |  |  |  |
|  |  | ：Metallic Black |  |  |  |  |  |  | －T50 | 5000K |  |  |  |

${ }^{1}$（Blank） $1000 \mathrm{~lm}(15 \mathrm{~W}$ ）color temperature is 80 CRI minimum，and is not available in 90 plus CRI．（－L15） 1500 lm （22W）is 90 CRI minimum with optional 97 CRI ．
${ }^{2}$ Special Order．Minimum order，extended lead time may apply．Consult factory．（Finish options 50 piece minimum．10－12 week lead time）
${ }^{3}$ DUN Options comes with externally mounted driver．Not for use with Integral Junction Boxes，Flat Junction Boxes or Pendant Systems．
${ }^{5}$ Not available for－JB option
＊Only available for（Blank，－L15）with or LPCMDL4 options．

# WD2360-6" ROUND 2-DIRECTION WALL MOUNT (IP65) - 2 X 1000LM/1500LM/2200LM/2600LM <br> SURFACE 2-DIRECTION WALL MOUNT 



## SPECIFICATION

Application: This WD2 Series Double directional wall luminaire can be used in both interior and outdoor settings. Typical locations are in commercial and retail spaces that contain walls and/or columns that require directional lighting. Dual reflector design allows for direct and indirect lighting for a single fixture.
Energy efficient Chip-On-Board (COB) Singular LED Light Source provides for smooth uniform light output, eliminating the multiple shadow effect seen by multiple LED Source products. Binned with 4-step MacAdam ellipses as recommended by ANSI Standard.

Housing: Constructed from a round one piece high grade aluminum extrusion with a rectangular extrusion arm, two (2) faceplates and a mounting plate with a powder coat finish. Includes COB LED, reflector and LED driver. Mounting plate is secured to arm with four (4) flat head phillips stainless steel screws. Mounting plate installs onto an electrical junction box. Consult factory for junction box mounting sizes.
Mounting: Fixture includes a mounting bracket for installation directly to a $4^{\prime \prime}$ octagonal electrical junction-box.

Faceplate: Round one piece extruded aluminum with powder coat finish, clear tempered glass lens, and silicone o-ring. Faceplate is secured to the housing by threads.

Reflector Construction: One piece, heavy-gauge aluminum reflector prevents ugly dents during shipping and installation. Deeply mounted singular LED provides 50 degree visual cutoff for a glare-free appearance.

Lumen Maintenance: Minimum 50,000 hours L70 life based on ANSI TM-21 calculations from LM80 standardized test results. See ordering guide for delivered lumens.
Dimming: (-DIN) dimming option smoothly dims down to $5 \%$ of initial light output with flickerfree performance. Works with standard 120 V incandescent dimmers. (UE-D10) 0-10V dimming works with most 5 -wire, $0-10 \mathrm{~V}$ dimmers. Factory qualified for use with Leviton IP710-DLZ. (UE-DUN) option is a universal dimming system that works with most 3-Wire ELV, 2-Wire Incandescent and 120V/277V 5-Wire 0-10V fluorescent dimmers.
Electrical: AC 50/60Hz Electronic Direct Current Class 2 driver integrally mounted. Power Factor $>0.90$. For cold weather applications $\left(-22^{\circ} \mathrm{C}\right.$ and above) use -DUN driver option.

Emergency Options: Emergency LED Battery Back-up available, remotely mounted adjacent to housing by installer. When AC power fails,the device immediately switches to the emergency mode, operating the LEDs for a minimum of 90 minutes. Remote test switch and plate cover included. (-EMAC) is not wet location rated, and must be mounted in a dry area.

Junction Box: The integral surface mounted junction box provides a clean finished look in situations where a recessed junction box is not an option. This feature includes (1) or (2) conduit holes on the side or top for 1/2" weatherproof fitting (by others).
Caution: LITON recommends use of surge protectors on the power entering LED Housings. Surge damage is not covered by warranty.

Warranty: Covered by a 5 Year Warranty to be free of defects in materials and craftsmanship. Fixture should not be installed in applications with ambient temperature above 60 degrees $C$. Doing so will result in reduced lamp life and voided warranty.
Listing: ETL / cETL Listed. Suitable for wet location. Assembled in USA. (IP65). IK08 rating for impact resistance.
Finish: A 7-stage electrostatic, polymer process provides a finish that delivers outstanding durability, superior anti-aging, resistance to corrosion and UV-degradation Standard finishes are White, Silver, Basic Bronze, Black. Special order finishes are Light Silver, Dark Grey, Metallic Gold and Metallic Black.
Beam (Down): Available in Wide Flood, Narrow Spot, Spot, Flood, Wall Wash, and Type IV (Forward Throw) Optics.
Beam (Up): Available in Wide Flood, $2^{\circ}$ Pencil Beam, Narrow Spot, Spot, Flood, Wall Wash, and Type IV (Forward Throw) Optics.

Benefit:

- Daylight Sensor available
- Uniform, low glare illumination
- Durable, corrosion resistant finish
- Emergency back up available
- Singular COB Light Source
- 5 year limited warranty
- Available with Type IV/Forward Throw Option
- UniDim ${ }^{\text {TM }}$ option dimming with 2-Wire Incandescent, 3-Wire, ELV or 0-10V Controls


ORDERING EXAMPLE : WD2360B-T27-EMAC

| WD2360 | FINISH |  |  | LUMEN ${ }^{1}$ | BEAM (DOWN) | BEAM (UP) | DIMMING |  | LED |  | OPTIONS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WD2360 | W | :White | Blank : | :2x1000lm (30W) | Blank :Wide Flood | Blank :Wide Flood | Blank | :Non-Dimming (120V) | Blank | :4000K | Blank | :None |
|  | S | :Silver | -L15 : | $: 2 \times 15001 \mathrm{~m}(30 \mathrm{~W})$ | -BD02: $2^{\circ}$ Pencil Beam | -BU02:2 ${ }^{\circ}$ Pencil Beam | -DIN | :ELV and Triac Dimming (120V) | -T17 | :1700K* | -JB | :Integral Junction Box 1-Outlet |
|  | BZ | :Basic Bronze | -L20 : 2 | :2x22001m (45W) | -BD10:Narrow Spot | -BU10:Narrow Spot | UE-D10 | :0-10V Dimming (120/277V) | -T27 | :2700K | -JB2 | :Integral Junction Box 2-Outlet |
|  | B | :Black | -L26 : | :2x26001m (64W) | -BD20: Spot | -BU20:Spot | UE-DUN | :UniDim ${ }^{\text {"'I }}(120 \mathrm{~V} / 277 \mathrm{~V}$ ) | -T27-C97 | :2700K, 97CRI* | -JBT | :Junction Box, Conduit |
|  | LS | :Light Silver* |  |  | -BD45:Flood | -BU45:Flood | -2CCT | :2-Circuit | -T30 | :3000K |  | :Top Entry |
|  | DG | :Dark Grey* |  |  | -BDWW:Wall Wash | -BUWW:Wall Wash | -2CCT | :2-Circuir | -T30-C97 | :3000K, 97CRI* | -SDL | :Integral Daylight Sensor**** |
|  | MG | :Metallic Gold* |  |  | -BDIV :Type IV | -BUIV :Type IV |  |  | -T35 | :3500K | -EMAC | :Emergency Backup** |
|  | MB | :Metallic Black* |  |  | (Forward Throw) | (Forward Thr |  |  | -T50 | :5000K |  |  |
|  |  |  |  |  |  |  |  |  | -TAM | :590nm AMBER |  |  |

[^6]HI-LITE MFG.

## CO., INC

13450 Monte Vista Avenue Chino, California 91710
Telephone: (909) 465-1999
Toll Free: (800) 465-0211
Fax: (909) 465-0907
web: www.hilitemfg.com
e-mail: sales@hilitemfg.com


FINISH -Offered in exceptional finishes, comprised of: polyester/polished powder coat, baking enamal liquid, raw metal, or galvanized finishes.

Standard Finishes are: 91(Black), 93(White), 95(Dark Green), 96(Galvanized), BR47(Powder Coat Rust), BK01(Black Texture), GN20(Powder Coat Patina).
Upgraded Finishes are: 29, 66, 82, 90, 92, 94, 97, 99, 100, 103, 104, 105, 110, 112, 113, 114, 115, 117, 118, 119, 120, 127, 128, 129, 133, 134, 135, 136, 138, 139, 140, 11, 98, 101, 102, 137, 121, 122, 123, 124, 125, 126, 01, 22, 25, 33, 77, 89, 24, 44, 48, 49, 15, 16, 55.
For interior finish of fixture refer to color chart on pages 344-348.

MOUNTING - Cord, Stem, Arm, and Flush mounting available.

ACCESSORIES - CGU(Cast Guard and Glass), LCGU(Large Cast Guard and Glass), WGU(Wire Guard and Glass), LWGU(Large Wire Guard and Glass), ARN(Acorn Globe), LARN(Large Acorn Globe), WGR(Wire Guard), SK(Swivel Knuckle) and FX(Flexible tubing for cord mounted fixture only) available.

REFLECTOR - Heavy duty, spun shade, aluminum 6061-0 and/or 1100-0, galvanized 22 gauge, steel 20/22 gauge, copper 032/040 and brass 032/040 construction. Dependant on finish.

SOCKETS/LAMPS - Available in: Incandescent

- rated 200 watt max/120 volt, medium base.

Compact Fluorescent(CFL)

- rated 13/18/26/32/42/57 watt max/120/277 volt, GX24Q base.
Metal Halide(MH)
- rated 35/50/70/100/150/175 watt max/120/208/240/277 volt, medium base, 4KV socket.
High Pressure Sodium(HPS)
- rated 50/70/100/150 watt max/120/277 volt, medium base.
Light-Emitted Diode(LED)
-See LED specification sheet.

| Fixture Number |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Project Title | 1949 Willamette Falls Dr. | Type | W3 | Qty |  |
| Comments |  |  |  |  |  |

- White Acrylic Diffuser with Bottom Lens
- Downlight Version with Bottom Louver
- Decorative Metal Panels (See Options)
- Wet Location


## Dimensions and Lamping:

OW318-28
$11^{\prime \prime} \mathrm{A} \times 28^{\prime \prime} \mathrm{B} \times 13.938^{\prime \prime} \mathrm{D} \times 6.625^{\prime \prime} \mathrm{MC} \times 16^{\prime \prime} \mathrm{MC} 2$
LN $\quad$ LED: Nominal $35 \mathrm{~W}, 1450$ Delivered Lumens
LD $\quad$ LED: Nominal $70 \mathrm{~W}, 5200$ Delivered Lumens

Weight: 35 lbs.

LED Color Temperature:
$35 \mathrm{~K} \quad 3500 \mathrm{~K} \quad 30 \mathrm{~K} \quad 3000 \mathrm{~K} \quad 40 \mathrm{~K} \quad 4000 \mathrm{~K}$

Downlight Optics:

| BN | Narrow Beam $\left(\sim 20^{\circ}\right)$ | BW | Wide Beam $\left(\sim 50^{\circ}\right)$ |
| :--- | :--- | :--- | :--- |
| BM | Medium Beam $\left(\sim 30^{\circ}\right)$ | BX | Extra Wide Beam $\left(\sim 90^{\circ}\right)$ |

Control:
CLV: Integral Power Supply, 0-10V Dimming to $1 \%$
Voltage:

| 1 | 20 V | 277 V | Mv | Multi-Volt |
| :--- | :--- | :--- | :--- | :--- |
| Diffusers: |  |  |  |  |


| WA | Gloss White Acrylic |
| :--- | :--- |
| WM | Matte White Acrylic |

## Standard Finishes:

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| PAL | Aluminum | PAB | Antique Brass | PYL | Traffic Yellow (RAL 1023) |
| PNL | Nickel | PHB | Hammered Bronze | PGR | Emerald Green (RAL 6001) |
| PBR | Bronze | PHC | Hammered Copper | PBL | Signal Blue (RAL 5005) |
| PLB | Light Bronze | PHS | Hammered Silver | STBD | To Be Determined |
| PMB | Medium Bronze | PSG | Satin Gold |  |  |
| PDB | Dark Bronze | PPA | Patina |  |  |
| PSB | Satin Black | PRD | Traffic Red (RAL 3020) |  |  |
| PBB | Brushed Brass | POR | Pure Orange (RAL 2004) |  |  |

## Premium Finishes:

| BA | Brushed Aluminum | PB | Polished Brass |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| SN | Satin Nickel | AB | Antique Brass |  |  |  |
| PC | Polished Chrome | PTBD | To Be Determined |  |  |  |
| BB | Brushed Brass |  |  |  |  |  |
| Panel Options: |  |  |  |  |  |  |
| P1 | P1 Panel | P3 | P3 Panel | P5 | P5 Panel |  |
| P2 | P2 Panel | P4 | P4 Panel | P6 Panel |  |  |
| Other Options: |  |  |  |  |  |  |

[^7]
## OW318 | Seneca




## Notes:

- Custom sizes and finishes available upon request.
- Camman reserves the right to make design changes without prior notice.
- Mounting is to a 4 inch octagonal junction box.
- Photometric information is available at cammanlighting.com


## Additional Information

| Color Temperature Adjustment |  |
| :--- | :---: |
| Color Temperature | Multiplier |
| 2700 K | .967 |
| 3000 K | .984 |
| 3500 K | 1.000 |
| 4000 K | 1.032 |


| LED Performance |  |
| :--- | :--- |
| Color Rendering Index | $80 C$ RI Standard (90CRI Available) |
| L70 (Projected): | $>72,000$ hours |


| Warranty | $\mathbf{5}$ years <br> (electrical components retain the <br> component manufacturer warranty). |
| :---: | :---: |

## Camman Plus Customizations

Camman Standard Plus products provide an extra degree of freedom to customize most standard products, including dimensions, finish, performance, and adding or removing details. Visit www.cammanlighting.com/plus to learn more about the Plus program, and visit this fixture to see what specific options might be available.

## Standard Finishes

## MODERN



PAL Aluminum


PNL Nickel


NEUTRAL


PAB Antique Brass


PMB Medium Bronze


PBB Brushed Brass


PBR Bronze
PSG Satin Gold


PDB Dark Bronze


COLORS


## TEXTURES



## Premium Finishes



- Colors are for reference only and may vary per monitor.
- See cammanlighting.com/resources for more information, or contact your local rep for finish samples.


# Willamette Falls Commercial <br> 1949 Willamette Falls Drive <br> West Linn, Oregon 

## PRELIMINARY DRAINAGE REPORT

DECEMBER 2022

Prepared By:
Bruce D. Goldson, PE
Theta, Ilc
PO Box 1345, Lake Oswego, Oregon 97035

\# 2014-129Z
pg. 1

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## NARRATIVE ASSUMPTIONS

## Existing Conditions:

The subject property of two tax lots ( 3 S 1E 02BA TL 4300 \& 4400) with two existing buildings bordered on three sides with public roads and containing 0.34 Acres. The property slopes to the northwesterly direction at approximately $5 \%$. There is sanitary, storm and water service to the property.

## Developed Conditions:

A proposed multi-story commercial building is proposed to virtually cover the entire property. With nearly complete lot coverage with impervious area on-site infiltration is not possible. Onsite detention and water quality facilities are proposed. The storm discharge will be to the existing public storm system in Willamette Falls Drive

## Summary of storm water flow

|  | $2-Y E A R$ | $5-Y E A R$ | $10-$ YEAR | $25-$ YEAR |
| :--- | :--- | :--- | :--- | :--- |
| PRE-DEVELOP | 0.14 CFS | 0.18 CFS | 0.22 CFS | 0.26 CFS |
| POST-DEVELOP | 0.22 CFS | 0.26 CFS | 0.30 CFS | 0.35 CFS |

## REGULATORY DESIGN CRITERIA

The storm water quantity management requirements of the City of West Linn.

## References

1. King County Department of Public Works, Surface Water Management Division, Hydrographic Programs

## Water Quality Facility

## Design Parameters

The design storm is a 24 hour standard SCS Type 1A

- 2 -year 2.5 inches
- 5-year 3.0 inches
- 10-year . 3.4 inches
- 25-year 3.9 inches
- 100-year 4.5 inches


## SOIL TYPES

Willamette Silt Loam - type C soil

## Time of Concentration

$$
\mathrm{T}=(0.42)\left[(\mathrm{nL})^{8} /\left(\mathrm{p}_{2}\right)^{5}\left(\mathrm{~s}_{0}\right)^{4}\right.
$$

Pre-development: $T=(0.42)[(0.15)(80)]^{.8} /(2.5)^{5}(.03)^{4}=6.4 \mathrm{~min}$ (pre)
Assume 5-minutes developed
HYDROGRAPH RESULTS
KING COUNTY DEPARTMENT OF PUBLIC WORKS
Surface Water Management Division HYDROGRAPH PROGRAMS

Version 4.21B
1 - INFO ON THIS PROGRAM
2 - SBUHYD
3 - MODIFIELD SBUHYD
4 -ROUTE
5 -ROUTE2
6 - ADDHYD
7-BASEFLOW
8 - PLOTHYD
9 - DTATA
10 - REFAC
11 - RETURN TO DOS
ENTER OPTION:
2
SBUN/SCS METHOD FOR COMPUTING RUNOFF HYDROGRAPH
STORM OPTIONS:
1-S.C.S. TYPE-1A
2-7-DAY DESIGN STORM
3 - STORM DATA FILE
SPECIFY STORM OPTION:
1
S.C.S. TYPE - 1A RAINFALL DISTRIBUTION

ENTER; FREQ(YEAR), DURATION(HOUR), PRECIP(INCHES)
$2,24,2.6$
Xxxxxxxxxxxxxxxxxxxxxxxx S.C.S.TYPE-1A DISTRIBUTION xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx] XXXXXXXXXXXX 2-YEAR 24-HOUR STORM $x x x x$ 2.50 "TOTAL PRECIP Xxxxxxxxxxxxxxxxxxxxxxxxxxxyxxxxxx/

ENTER: A(PERV),CN(PERV),A(IMPERV),CN(IMPERV),TC FOR BASIN NO. 1
0.21,86,0.13,98,6.4

DATA PRINT OUT:

| AREA(ACRES) | PERVIOUS | IMPERVIOUS | TC(MINUTES) |
| :---: | :---: | :---: | :---: |
|  | A CN | A CN |  |
| . 3 | . 286 | . 198 | 6.4 |
| PEAK-Q(CFS) | T-PEAK(HRS) | VOL(CU-FT) |  |
| . 14 | 7.83 | 2019 |  |
| ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH: |  |  |  |
| C:WF2pre |  |  |  |
| SPECIFY: C-CONTINUE, N - NEWSTORM, P-PRINT, S - STOP |  |  |  |
| C |  |  |  |

C
ENTER: A(PERV),CN(PERV),A(IMPERV),CN(IMPERV),TC FOR BASIN NO. 1
0.005,86,335,98,5

DATA PRINT OUT:

| AREA(ACRES) | PERVIOUS |  | IMPERVIOUS |  | TC(MINUTES) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | CN | A | CN |  |
| . 3 | . 0 | 86 | . 3 | 98 | 5.0 |
| PEAK-Q(CFS) |  | HRS) |  | FT) |  |
| . 22 |  |  |  |  |  |
| ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH: |  |  |  |  |  |
| C:WF2post |  |  |  |  |  |
| SPECIFY: C-CONTINUE, N-NEWSTORM, P-PRINT, S - STOP |  |  |  |  |  |
| n |  |  |  |  |  |
| STORM OPTIONS: |  |  |  |  |  |
| 1-S.C.S. TYPE-1A |  |  |  |  |  |
| 2-7-DAY DESIGN STORM |  |  |  |  |  |
| 3 - STORM DATA FILE |  |  |  |  |  |
| SPECIFY STORM OPTION: |  |  |  |  |  |
| 1 |  |  |  |  |  |
| ENTER; FREQ(YEAR), DURATION(HOUR), PRECIP(INCHES) |  |  |  |  |  |


XXXXXXXXXXXX 5-YEAR 24-HOUR STORM xxxx $3.00^{\prime \prime}$ TOTAL PRECIP Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
ENTER: A(PERV),CN(PERV),A(IMPERV),CN(IMPERV),TC FOR BASIN NO. 1
0.21,86,0.13,98,6.4

DATA PRINT OUT:

| AREA(ACRES) | PERVIOUS |  | IMPERVIOUS |  | TC(MINUTES) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | CN | A | CN |  |
| .3 | .2 | 86 | .1 | 98 | 6.4 |

```
PEAK-Q(CFS)
        T-PEAK(HRS)
    7.83
        VOL(CU-FT)
    2573
ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:
C:WF5pre
SPECIFY: C - CONTINUE, N - NEWSTORM, P - PRINT, S - STOP
C
0.005,86,0.335,98,5
DATA PRINT OUT:
AREA(ACRES) PERVIOUS IMPERVIOUS TC(MINUTES)
    .0 86 .3 98 5.0
PEAK-Q(CFS) T-PEAK(HRS) VOL(CU-FT)
    . }2
    7.67
    3396
ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:
C:WF5post
SPECIFY: C - CONTINUE, N - NEWSTORM, P - PRINT, S - STOP
n
STORM OPTIONS:
1-S.C.S. TYPE-1A
2-7-DAY DESIGN STORM
3-STORM DATA FILE
SPECIFY STORM OPTION:
1
ENTER; FREQ(YEAR), DURATION(HOUR), PRECIP(INCHES)
10,24,3.4
Xxxxxxxxxxxxxxxxxxxxxxxx S.C.S.TYPE-1A DISTRIBUTION xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxyxxxxxxxxxxxxxxxxxxxxxxxxxxx
XXXXXXXXXXXXX 10-YEAR 24-HOUR STORM xxxx 3.40" TOTAL PRECIP Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
ENTER: A(PERV),CN(PERV),A(IMPERV),CN(IMPERV),TC FOR BASIN NO. 1
0.21,86,0.13,98,6.4
DATA PRINT OUT:
AREA(ACRES) PERVIOUS IMPERVIOUS TC(MINUTES)
    .3 .2 86 1 1 98 6.4
PEAK-Q(CFS) T-PEAK(HRS) VOL(CU-FT)
    22 7.83 3026
ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:
C:WF1Opre
SPECIFY: C - CONTINUE, N - NEWSTORM, P - DATA PRINT OUT:
C
ENTER: A(PERV),CN(PERV),A(IMPERV),CN(IMPERV),TC FOR BASIN NO. }
0.005,86,0.335,98,5
AREA(ACRES)
```

PERVIOUS
A CN
. 3
PEAK-Q(CFS)
.30
ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:
086
T-PEAK(HRS) VOL(CU-FT)
7.67

3887

TC(MINUTES)
5.0

TC(MINUTES)
6.4

VOL(CU-FT) 3026

```
ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:
C:WF10pre
SPECIFY: C - CONTINUE, N - NEWSTORM, P - DATA PRINT OUT:
C
ENTER: A(PERV),CN(PERV),A(IMPERV),CN(IMPERV),TC FOR BASIN NO. 1
0.005,86,0.335,98,5
```

pg. 5

```
C:WF1Opost
SPECIFY: C - CONTINUE, N - NEWSTORM, P - PRINT, S - STOP
n
STORM OPTIONS:
1-S.C.S. TYPE-1A
2-7-DAY DESIGN STORM
3-STORM DATA FILE
SPECIFY STORM OPTION:
1
ENTER; FREQ(YEAR), DURATION(HOUR), PRECIP(INCHES)
25,24,3.9
```



```
XXXXXXXXXXXX 25-YEAR 24-HOUR STORM xxxx 3.90" TOTAL PRECIP Xxxxxxxxxxxxxxxxxxxxxxxxxxyxxxxxxxxxx
ENTER: A(PERV),CN(PERV),A(IMPERV),CN(IMPERV),TC FOR BASIN NO. 1
0.21,86,0.13,98,6.4
DATA PRINT OUT:
AREA(ACRES) PERVIOUS IMPERVIOUS TC(MINUTES)
    .3 .2 86 1 % 98 6.4
PEAK-Q(CFS)
    . }2
    7 . 6 7
VOL(CU-FT)
    3601
ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:
C:WF25pre
SPECIFY: C - CONTINUE, N - NEWSTORM, P - DATA PRINT OUT:
C
ENTER: A(PERV),CN(PERV),A(IMPERV),CN(IMPERV),TC FOR BASIN NO. 1
0.005,86,0.335,98,5
AREA(ACRES) PERVIOUS IMPERVIOUS TC(MINUTES)
\begin{tabular}{clll} 
& A & CN & A \\
.3 & .0 & 86 & .3 \\
PEN & 98 & 5.0 \\
PEAK-Q(CFS) & T-PEAK(HRS) & VOL(CU-FT) & \\
.35 & 7.67 & 4501 &
\end{tabular}
ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:
C:WF25post
DETENTION SIZING
ENTER OPTION
10
R/D FACILITY DESIGN ROUTINE
SPEFICY TYPE OF R/D FACILTY
\begin{tabular}{ll}
1 - POND & 4 - INFILTRATION POND \\
2 - TANK & 5 - INFILTRATION TANK \\
3 -VAULT & \(6-\) GRAVEL TRENCH/BED \\
2
\end{tabular}
```

```
4,4
ENTER: [d:][[atj]filename[.ext] OF PRIMARY DESIGN INFLOW HYDROGRAPH:
C:WF25POST
PRELIMINARY DESIGN INFLOW PEAK = . 35 CFS
ENTER PRIMARY DESIGN RELEASE RATE(cfs)
0.26
ENTER NUMBER OF INFLOW HYDROGRAPHS TO BE TESTED FOR PERFORMANCE (5 MAXIMUM)
3
ENTER [d:][path]filename[.ext] OF HYDROGRAPH 1:
C:WF10POST
ENTER TARGET RELEASE RATE (cfs)
0.22
ENTER [d:][path]filename[.ext] OF HYDROGRAPH 2:
C:WF5POST
ENTER TARGET RELEASE RATE (cfs)
0.18
0. ENTER [d:][path]filename[.ext] OF HYDROGRAPH 3:
C:WF2POST
ENTER TARGET RELEASE RATE (cfs)
0.14
ENTER: NUMBER OF ORIFICES, RISER-HEAD (ft), RISER-DIAMETER(in)
2.4.10
RISER OVERFLOW DEPTH FOR PRIMARY PEAK INFLOW=0.12 FT
SPECIFY ITERATION DISPLAY: Y -YES, N - NO
N
SPECIFY: R - REVIEW/REVISE INPUT, C - CONTINUE
C
INITIAL STORAGE VALUE FOR ITERATION PURPOSES: 1770 CU-FT
BOTTOM ORIFICE: ENTER Q-MAX(cfs)
0.18
DIA. = 1.82INCHES
TOP ORIFICE: ENTER HEIGHT(ft)
3.45
DIA. = 1.72 INCHES
\begin{tabular}{lcccccc} 
PERFORMANCE: & INFLOW & TARGET-OUTFLOW & ACTUAL-OUTFLOW & PK-STAGE STORAGE \\
DESIGN HYD: & .35 & .26 & .26 & 3.99 & 281 \\
TEST HYD 1: & .30 & .22 & .21 & 3.32 & 240 \\
TEST HYD 2: & .26 & .18 & .21 & 3.32 & 240 \\
TEST HYD 3: & .22 & .14 & .14 & 2.25 & 160
\end{tabular}
SPECIFY: D - DOCUMENT, R-REVISE, A - ADJUST ORIF, E -ENLARGE, S -STOP
```


## DESIGN SUMMARY:

A 48" diameter tank coupled with the pollution manhole is proposed for detention, with two orifices will meet the outflow of the 2,510 , and 25 year pre-developed flow rates per the city code. The pollution control manhole is provided ahead of the detention system to trap sediments and floatable from the roof water. Access is provided to the pollution manhole and the detention system via manholes in the garage area and control manhole in the area between the two buildings.

Appendix



SCALE: $1^{\prime \prime}=4^{\prime}$

EXHIBIT PC-2.A: HISTORIC REVIEW BOARD RECOMMENDATION

# WEST LINN HISTORIC REVIEW BOARD CHAPTER 58 RECOMMENDATION 

DR-23-01

## IN THE MATTER OF A PROPOSAL FOR A CLASS II DESIGN REVIEW AT 1919 \& 1949 WILLAMETTE FALLS DRIVE.

The Historic Review Board (HRB) held a public hearing on June 13, 2023. The purpose of the public hearing was to make a recommendation to the West Linn Planning Commission on DR-23-01 compliance with Chapter 58 of the Community Development Code (CDC).

The hearing began with City Attorney addressing legal standards, appeal rights, substantive rights, and procedural issues. Historic Review Board member Watton stated he was also a member of the Planning Commission, and was going to recuse himself from considering the application as a member of the Historic Review Board.

Associate Planner John Floyd presented the application for the demolition of two existing structures, to be replaced with a speculative commercial building to be occupied by a variety of restaurant and office or retail uses. The above ground structure would be multi-story with approximately 29,080 square feet of commercial space, with underground parking to be accessed from the adjoining underground parking garage to the east. Requested design exceptions included the use of fiber-cement and brick masonry in lieu of cedar siding and trim, and the use of columns to support an extended sidewalk canopy.

As part of the presentation, Association Planner Floyd stated CDC Chapter 58 limits structures within the Willamette Falls Design District to no more than 35 feet and two stories. The proposed design falis outside the standards because the mezzanine is above the second story. Floyd noted that the HRB needed to decide about the mezzanine by either an interpretation or a design exception. Given the rooftop lounge area, aka mezzanine, only covers a relatively small area of the footprint, is limited to the western façade area, and employs shorter and horizontally oriented windows to reduce their profile, the HRB could have interpreted the design as effectively being limited to two-stories with a rooftop access area. Alternatively, the HRB could permit the rooftop lounge as part of a design exception and request the applicant provide supplemental findings supporting a design exception.

Association Planner Floyd concluded with a summary of additional written testimony received after publication of the staff report. This included testimony from Shannen Knight in support of the application, and concern and opposition from Laura and Albert Secchi, Ian and Audra Brown, James Estes, and Kristin Woofter.

Kevin Godwin and Scott Sutton of SGR Architecture presented on behalf of the applicant. Godwin discussed the new commercial and proposed design exceptions. He noted that the existing homes were not designated as historic properties. The applicant would facilitate moving the buildings instead of demolishing them if someone wanted them. The design of the new commercial building was intended to mimic the structure at the eastern end of the same biock in size and scale to create a
cohesive streetscape. He noted his client was seeking two design exceptions for brick masonry and canopies to match the other building. Additionally, the proposed columns complement the design and are historically appropriate. The proposed design sought to maintain the integrity of the architectural vernacular of the Willamette Falls Drive Commercial Design District.

Deliberations discussed a range of design topics and included the following:

- Definition of mezzanine in the IBC and CDC versus that used by the applicant, and whether the rooftop space is a mezzanine or a third story, and whether it should be approved through an interpretation of the code or as a design exception, or otherwise denied;
- Whether the windows facing the alley were subject to the vertical height-to-width ratio of 1.5:1 as set forth in CDC 58.060.C.6, and how the standards had been applied on other structures in the district; and
- The appropriateness of a design exception to allow support columns for an extended awning at the corner of Willamette Falls Drive and $12^{\text {th }}$ Street, the limitations the columns impose on use of the sidewalk over time, and the appropriateness of deferring their approval to the City Engineer.

Verbal testimony was received at the hearing from the following parties:

- James Estes objected to the proposed new construction, stating the proposal needed to meet the two-story Code criteria.
- Ian Brown stated concern about the large windows in the back of the proposed buildings that would shine light on residential neighbors. He said the proposed building was inconsistent with the other buildings on the block on the backside. He stated that the design elevations do not show the entire third story. He objected to calculating the building height on a diagonal. He noted the diagonal line would cross over the long corridor in the third story. He objected to the interpretation that the mezzanine is not a third story. He stated that the mezzanine/third floor would be a design exception to the code, but they did not request one for this aspect of the proposal. He objected to the columns because they impede the sidewalk and the ability to use it.
- Jody Carson, Historic Willamette Mainstreet, testified in support of the proposal. She stated that the design would complement the historic main street. The underground parking would benefit the commercial area. She wanted the mezzanine to be considered a third floor under the design exception process. She wanted to ensure a clear pedestrian walkway if the columns were allowed. She supported the efforts to relocate the bungalow on the property and requested that the property owner allow neighbors to remove the existing mature plants from the property.

In rebuttal, Sutton sated the design elevations show the building height on the diagonal because the code requires it to be shown that way. He noted that the property owner would support efforts to relocate the existing bungalow and vegetation if someone demonstrates interest. As currently designed, the location of the columns provides a wider than-required ADA walkway, but the applicant was willing to work with the City on placement. He did not think the applicant needed a design exception for the mezzanine because they believed it met the building code outright. He said the back windows could be redesigned to meet a 1.5/1 ratio.

The HRB considered a continuance, but decided they had enough information to make a recommendation.

After conducting the public hearing, the HRB deliberated and Member fuller moved to recommend approval of DR-23-01, as presented, with a recommendation of further analysis of the "mezzanine area" by the Planning Commission and directed staff to prepare a recommendation. The motion was approved by a vote of three (Manning, Fuller, Salttee) to two (Schreiber, Soldberg), with the following Conditions of Approval as recommended in the staff report:

1. Approved Plans. All alterations and improvements shall substantially conform to all submitted tentative plan sheets and supporting materials contained in Exhibit HRB-01.
2. Engineering Standards. All public improvements and facilities associated with the approved site design, including but not limited to street improvements, driveway approaches, curb cuts, utilities, grading, onsite and offsite stormwater, street lighting, easements, easement locations, and connections for future extension of utilities are subject to conformance with the City Municipal Code and Community Development Code. These must be designed, constructed, and completed prior to final building certificate of occupancy. The City may partner with the applicant to fund additional improvements as part of the project.
3. Vertical Breaks. Prior to issuance of building permits, the applicant shall submit building permit plans with revised western and southern elevations that demonstrate compliance with CDC 58.080.C. 7 that requires strong vertical breaks or lines regularly spaced every 25 to 50 feet.
4. Entry Doors \& Pedestrian Level Windows. Prior to issuance of building permits, the applicant shall submit building permit plans with revised elevations and door details that demonstrate compliance the glazing and panel ratios for entry doors in CDC 58.080.C.13, and minimum pedestrian level window sill heights within CDC 58.080.C.15.
5. Awning. Prior to issuance of building permits, the applicant shall submit building permit plans that demonstrate compliance with the 5 -foot minimum awning depth as required in CDC 58.080.C.11.

On behalf of the HRB, I would like to express our appreciation for being provided the opportunity to review the proposal and make this recommendation.


Date

## EXHIBIT PC-2.B: HISTORIC REVIEW BOARD RECOMMENDATION

HISTORIC REVIEW BOARD
Meeting Notes of November 14, 2023

| Members present: | James Manning, Tom Watton, Danny Schreiber, Dan Saltee, and Kirsten Solberg. John Steele arrived late. |
| :---: | :---: |
| Members absent: | Michael Fuller |
| Applicant Present: | Scott Sutton, SGR Architecture |
| Public Present: | Ian Brown, Audra Brown, Kathi Halicki, Willamette Neighborhood Association, Yarrow Currie, Al Secchi, James Estes, Dee Deatherage |
| Staff present: | John Floyd, Associate Planner, City Attorney Bill Monahan, Community Development Management Analyst Lynn Schroder |

## Staff Liaison: John Floyd - jfloyd@westlinnoregon.gov

1. Call To Order and Roll Call

Chair Manning called the meeting to order at 6:05 pm. Community Development Management Analyst Lynn Schroder called the roll.
2. Public Comment Related To Items Not On The Agenda

None.
3. Approval of Draft Meeting Notes for August 15, 2023

Member Saltee moved to approve the meeting notes for August 15, 2023. Member Solberg seconded.
Ayes: Watton, Schreiber, Saltee, Solberg, and Manning. Nays: None. Abstain: None. The motion passed 5-0-0.

## 4. Agenda Modification

Chair Manning moved to amend the agenda by moving Item 5 - Public Hearing: HDR-23-03-4865 Willamette Falls Drive - Class II Historic Design Review for Replacement of 16 Windows before Item 4 Public Hearing: Remand from Planning Commission - DR-23-01-1919/1949 Willamette Falls Drive - Class II Design Review for a New Commercial Building. Member Schreiber seconded. Ayes: Watton, Schreiber, Saltee, Solberg, and Manning. Nays: None. Abstain: None. The motion passed 5-0-0.
5. Public Hearing: HDR-23-03-4865 Willamette Falls Drive - Class II Historic Design Review for Replacement of 16 Windows
Chair Manning introduced application HDR-23-03, Class II Historic Design Review for Replacement of 16 Windows at 4865 Willamette Falls Drive. Manning explained the hearing procedures provided in CDC Chapter 99.170 and opened the public hearing.

City Attorney Monahan addressed legal standards and appeal rights. The substantive criteria that apply to the application are contained in Community Development Code (CDC) Chapter 25: Overlay Zones - Historic District and Chapter 99: Procedures for Decision Making: Quasi-Judicial.

City Attorney Monahan addressed Historic Review Board conflicts of interest, ex-parte contacts, jurisdiction, and bias challenges. Member Watton recused himself based on potential bias. Chair Manning declared a site visit. No other declarations of ex-parte contacts, conflicts of interest, or bias were made. Monahan asked if any audience member wished to challenge the Historic Review Board's jurisdiction,
impartiality, or ex-parte disclosures of any members. There were none.
Associate Planner John Floyd presented the staff report. The applicant has requested approval to alter sixteen (16) existing windows on four facades of the historic Lewthwaite House, a Craftsmen style bungalow built circa 1914-1915. The house is a local historic landmark listed on the National Register of Historic Places. Because of the poor condition of the existing windows, the applicant requests to replace all windows with Marvin Infinity Ultrex Fiberglass replacement windows. No change to the existing framing or trim is proposed.

The historic Lewthwaite House is one of seven homes along a ridgeline that sits above the mill parking lot and Historic City Hall. Four of these homes are listed as historic landmarks. As the area is zoned for commercial land uses, these homes now have residential and non-residential land uses. The project site is minimally visible from Willamette Falls Drive as it sits at the center of a private frontage road, at a lower grade than the adjoining street and behind tree cover.

Chapter 25 allows material substation if the substitute material conveys the form, design, scale, detailing, and overall appearance of the historic material and the application of the substitute material does not damage, destroy, or obscure the historic features.

Floyd recommended approval of the application to replace sixteen existing windows, subject to the following conditions:

1. Site Plan, Elevations, and Narrative. Alterations to the building shall conform to the plans, elevations, and narrative submitted in the application.
2. Window Lights. Replacement windows shall utilize "simulated divided lights" on the exterior of the window panes.

Applicant Rigel Bruening discussed the need for window replacement and answered questions about the window design.

Chair Manning asked for public testimony. No public testimony was received.
There were no requests for continuances.
Chair Manning closed the public hearing and opened deliberations. Members discussed the design of the proposed windows.

Member Saltee moved to recommend approval of HDR-23-03, as presented. Member Solberg seconded. Ayes: Schreiber, Saltee, Solberg, Steele, and Manning. Nays: None. Abstain: Watton. The motion passed 5-0-1.
6. Public Hearing: Remand from Planning Commission - DR-23-01-1919/1949 Willamette Falls Drive - Class 2 Design Review for a New Commercial Building
Chair Manning introduced application DR-23-01, a Class 2 Design Review at 1919 \& 1949 Willamette Falls Drive. The HRB was tasked with considering a recommendation to the Planning Commission regarding a proposed Design Exception to exceed the maximum height limit of two stories, as part of a Class 2 Design Review. Manning explained the hearing procedures provided in CDC Chapter 99.170 and opened the public hearing.
the application are contained in Community Development Code (CDC) Chapters 58 (the Willamette Falls Drive Commercial Design District) and 99 (Quasi-Judicial Decision-Making Procedures).

City Attorney Monahan addressed Historic Review Board conflicts of interest, ex-parte contacts, jurisdiction, and bias challenges. Member Watton recused himself based on potential bias. Chair Manning declared a site visit. Member Schreiber noted that he lives within a block of the subject property. No other declarations of ex-parte contacts, conflicts of interest, or bias were made. Monahan asked if any audience member wished to challenge the Historic Review Board's jurisdiction, impartiality, or ex-parte disclosures of any members. There were none.

Associate Planner John Floyd presented the staff report. The HRB is asked to consider a new Design Exception as part of the Class II Design Review for a new commercial building within the Willamette Falls Drive Commercial Design District (WFDCDD).

While the HRB provided a recommendation to the Planning Commission on June 13, 2023, the Planning Commission remanded the application back to the Historic Review Board to decide a new Design Exception requested by the applicant. After receiving a recommendation from the HRB on June 13th, the applicant amended the proposal to remove a design exception for canopy support columns in the sidewalk and replaced it with a new design exception to exceed the two-story height limit. As CDC 58.090 assigns the Historic Review Board the sole authority to grant a Design Exception, the City Attorney and Planning Commission determined that a remand to the HRB was necessary to decide the new design exception.

On October 23, 2023, the applicant provided a revised plan and elevation drawings to aid the Historic Review Board (HRB) in reviewing the new design exception. Per CDC 58.090 and 99.060.D.2(c), the HRB must consider the proposed Design Exception to permit a third story and recommend to the Planning Commission whether the project complies with CDC Chapter 58, Willamette Falls Drive Commercial Design District. Once an HRB recommendation is made, the Planning Commission will decide on the Class 2 Design Review request.

The site is zoned General Commercial and is within the boundaries of the Willamette Falls Drive Commercial Design District Overlay (WFDCDD). The project backs up to R-7 zoning. Two structures occupying the site are proposed to be demolished. Three design exceptions are requested as part of the application:

- Use of James Hardie fiber cement instead of wood siding and trim - approved by HRB on 6/13/23;
- Use of brick masonry instead of wood siding along selected portions of the façade - approved by HRB on $6 / 13 / 23$; and
- Permit a third story to exceed the 2-story maximum height limit for the district for mechanical equipment, roof access, and storage - new request to be decided by HRB on 11/14/23.

Floyd recommended the Historic Review Board consider the third design exception.
Members asked clarifying questions about the design exception, number of allowed stories, total maximum height, and procedures. Member Schreiber asked about similar design exceptions in the District.

Scott Sutton of SGR Architecture presented the design exception for rooftop storage on behalf of the applicant. He stated that the enclosed area on top of the building would be unoccupied, accessory storage intended to store the rooftop furniture in the winter. A second enclosed area would screen the mechanical equipment.

He testified that all proposed building heights are at or below the maximum allowable by code ( $35^{\prime} 0$ "). The building would have a below-grade garage, two floors above grade, and a roof-top deck. The proposed rooftop spaces would not be visible to the public. He stated that the rooftop deck is, by definition, not a third floor because it does not have a roof. He emphasized that the design exception request is for accessible, enclosed accessory space for storage. He stated that the city has previously approved covered rooftop spaces for roof access and storage for five other buildings in the District, making their proposal align with existing building

Members asked clarifying questions about the windows and architectural features of the building.
Chair Manning asked for public testimony.
lan Brown submitted written testimony. He objected to the height of the building and third-story windows and proposed a third story.

Audra Brown objected to the applicant's request to allow 2,400 square feet of storage space on top of a two-story building.

Kathi Halicki of the Willamette Neighborhood Association objected to the applicant's proposal based on building height, noise, and lighting.

Yarrow Currie, Al Secchi, and James Estes testified in opposition to the proposed design exception.
Sutton rebutted that the proposed rooftop storage area is only 1,200 square feet. Additionally, he commented on the light and noise concerns. Finally, he noted that the building is within the District's 35foot height limit and reiterated his perspective that the rooftop storage is not a third floor.

The HRB discussed the potential need for a continuance. There were no requests for continuances.
Floyd clarified issues for consideration.
Chair Manning closed the public hearing and opened deliberations. Members discussed:

- Concerns about the height of the building,
- Third floor precedent,
- Historic character and design detail of the proposed design exception; and
- Proposed windows above the second floor.

Member Schreiber moved to deny the proposed design exception to exceed the 2-story maximum height limit for DR-23-01, and directed staff to prepare a Recommendation and Order adopting findings that specifically addressed:

- The proposed design exception did not incorporate exceptional 1880-1915 architecture demonstrating superior design, detail, or workmanship and
- The proposed design exception did meet historical precedence for the District.

Member Solberg seconded. Ayes: Schreiber, Saltee, Solberg, Steele, and Manning. Nays: None. Abstain: Watton. The motion passed 5-0-1.
7. Discussion Item: HRB Input on 2023 Annual Report to Council

Associate Planner Floyd requested input for the 2023 Annual Report to City Council.
8. Items Of Interest - Board Members

None.
9. Items Of Interest - Staff

Floyd discussed upcoming projects and HRB vacancies. Members also discussed the Beckman Stone historic marker and the use of the McLean House.
10. Adjourn

Chair Manning adjourned the meeting at 9:15pm.

EXHIBIT PC-3: PUBLIC COMMENTS

| From: | A Sight for Sport Eyes |
| :--- | :--- |
| To: | Floyd, John |
| Subject: | DR-23-01 |
| Date: | Wednesday, May 24, 2023 2:36:45 PM |

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I just wanted to submit testimony in support of this project. I took a look at the plans and the building looks consistent with the required design standards. I was at first concerned about the $12^{\text {th }}$ St side showing what looked like 3 stories because of the windows. But them I was very pleased to learn this is not a story but a rooftop patio. Very excited about that. I appreciate Icon adding in underground parking. The building looks beautiful and gives us needed office and retail space for the district. I will probably be impacted by the construction as the digging of the last building across the street from me did shake my office and knock down some of my displays. But overall, this is a beautiful design and I'm fully supportive of this project.

Thanks
Shannen Knight
A Sight for Sport Eyes
1553 11 ${ }^{\text {th }}$ St.
West Linn, OR 97068
503-699-4160
888-223-2669
Fax: 888-240-6551
www.sporteyes.com

To: West Linn Historical Review Board
Date: June 13, 2023
From: Audra Brown, 1968 6th Ave Ian Brown, 1968 6th Ave James Estes, 1992 6th Ave Kristen Woofter 1992 6th Ave
Re: DR-23-01
1919/1949 Willamette Falls Drive Class II Design Review
Thank you for the opportunity to comment on the proposed commercial building at 1919 and 1949 Willamette Falls Drive, DR-23-23-01. While the proposal has potential, we oppose the project as submitted. Without waiving objections based on other sections of the CDC, this comment focuses on CDC 58, which is within the Historic Review Board's authority. Our objections are based on issues that have already been noted in the Staff Report, but we add the following additional comments.

## I THE THIRD STORY IS IMPERMISSIBLE

In the Willamette Falls Drive Commercial Design District, "Maximum building height shall be 35 feet (as measured by this code), and two stories." CDC 58.080.C.3. While most of the building is two stories, page 10 of the applicant's submittal (both the second and third submittal) show a third-story commercial space of over $2,000 \mathrm{sq} \mathrm{ft}$, as well as an outdoor seating area of close to $1,000 \mathrm{sq} \mathrm{ft}$.

The Willamette Falls Drive and Knapps Alley elevation plans show the 20 feet or so of the third story that extend to the front and back of the building, but they do not show the 75 or 80 feet of the third story that extends down the middle of the building. That structure might not be visible from the ground, but it would be visible from an upper floor of a neighboring building.

At the September 14, 2022, Willamette Neighborhood Association (WNA) meeting, the applicant characterized this as a two-and-a-half story building in compliance with what the applicant asserted to be a zoning limitation of two and a half stories. The applicant has built in this area before and is aware that CDC chapter 58 limits building height to two stories.

In its submission, the applicant describes the third story area as a "mezzanine" and cites to IBC section 505.2 for the proposition that a mezzanine does not count as a separate floor. The Staff Report, at pages 11 and 12 , explains clearly why the third-story area is not a mezzanine. Moreover, even if the third story were a mezzanine, IBC section 505.2 would not be applicable authority. IBC section 505.2 specifically applies to the calculation of number of stories for purposes set forth in IBC chapter 5, which pertains to things like fire safety requirements. The applicable definition of a "story" is "That portion of a building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling or roof above. ***." CDC 2.030.

The Staff Report nevertheless suggests two rationales to approve the third-story area, characterizing it as a rooftop access area or permitting a design exception. Neither rationale should be adopted.

The third-story area is clearly commercial space. It is labeled as a lounge, although other uses are possible. It is not a rooftop access area.

A design exception should not be granted. A design exception must satisfy CDC 58.090, which applies if a design proposal "cannot meet the standards" or "proposes an alternative to the standard." The design proposal can easily meet the two-story standard by eliminating the third story. And no "alternative to the standard" has been articulated; to the contrary, the applicant has consistently represented that the design is in compliance with the applicable standards. At the WNA meeting, the
applicant specified that no exceptions were sought. Even if the applicant were to propose an alternative to the standard, neither the applicant nor the Staff Report has suggested how the applicable criteria for granting an exception has been met.

While it is undeniable that three-story buildings were built in 1880-1915, an exception under paragraph (A) requires documentation specific to the region, and especially West Linn, to establish that the architecture is correct and appropriate. The applicant has not provided such documentation. Even if such documentation were provided, the mere existence of three-story buildings in the reference era would not be an appropriate basis to disregard a specific height limitation.

Paragraph (B) applies to an omission, deviation, or non-period materials that can be overcompensated for by exceptional 1880-1915 architecture. A third story is not a deviation that can be overcompensated for by architecture, and the applicant has not identified such architecture in its application.

Paragraph (C) does not apply to new construction.

Even if there were grounds to conclude that the criteria for an exception had been met, granting an exception would be discretionary, and no exception should be granted. Every other building applicant has been faced with the two-story limitation, so fairness dictates that the requirement continue to be applied evenly. And, while the building fronts to a commercial street, it backs to a residential neighborhood, and the additional impact of the third story should be viewed in light of its impact on the residential neighbors. And the proposed third story implicates real impacts of sunlight and noise.

Every additional story is an additional obstruction of light to neighboring homes, and the standard limits that obstruction to two stories. In a different context, the applicant has suggested that the houses on the south side of Knapp's Alley do not get sunlight from north of Knapp's Alley.

Of course, even when sunlight is not direct, significant light comes from the sky to the north (which is why buildings have windows to the north). And, as the picture below shows, the houses on the south side of Knapp's Alley do receive significant direct sunlight from across the alley.


View of proposed building site from 1968 6th Ave.

Additionally, the proposed outdoor lounge would routinely generate noise during operational hours. While the sounds of nighttime revelry can be joyful, the management of such sounds in a residential neighborhood (where a neighbor can informally ask that a celebration be modified) is different from a commercial area (where noise-generating events are scheduled in advance and cannot be easily canceled at a neighbor's request). At the interface of commercial and residential areas, harmony between differing uses requires care in the management of noise impacts.

In this location, lounge noise should be contained within a building. No design exception should be granted that that would exacerbate the noise impact.

## II COLUMNS SHOULD NOT BE IN SIDEWALKS

The applicant proposes that the awnings be supported by columns set on the sidewalk. The applicant acknowledges that the awning support columns require a design exception because CDC 58.080.C. 11 requires awnings be "supported by an internal metal framework or metal or wood supported by a curved metal support attached to the building." The applicant asserts that 58.090.A is satisfied by photographs of two examples in Willamette with unknown dates of construction and two examples in Portland with older dates of construction. The applicant also asserts that 58.090.B is satisfied because deeper coverings will make outdoor seating and dining possible, better protect pedestrians, and make the building design better aesthetically and functionally.

Even if a criteria for granting an exception were met, the exception is discretionary and should not be granted. The columns would obstruct the public right-of-way. The two Willamette examples are illustrative. The columns outside the Community of Faith Church do not really interfere with foot traffic because the furniture on the sidewalk is limited to a few benches and the awnings extend less than six feet. By contrast, outside Lil' Cooperstown, a bustling restaurant with outdoor seating, pedestrian access along the sidewalk is funneled to a narrow, crowded path.

If furniture turns out to be too disruptive to pedestrians, the furniture can be rearranged. But if support columns turn out to be too disruptive to pedestrians, the options to remedy the problem become much more limited. For example, the obstacles to pedestrians outside Lil' Cooperstown are greater than the obstacles outside other restaurants in Willamette, and that difference results from the placement of the columns. Even if Lil' Cooperstown were to use smaller tables under the awnings, doing so would not open the sidewalk space at all.

In any event, paragraph (A) is not satisfied because none of the examples are documented to be from the appropriate period. And paragraph ( $B$ ) is not satisfied because the applicant has not identified "exceptional 1880-1915 architecture" with an emphasis on "superior design, detail, or workmanship" that compensates for the sidewalk obstruction.

## III BRICK EMPHASIZES HORIZONTAL BREAKS

One theme of CDC chapter 58 is the emphasis on vertical, rather than horizontal, lines. CDC 58.080.C. 6 requires a building to "emphasize the vertical." CDC 58.080.C. 7 requires regular placement of "[s]trong vertical breaks or lines."

Brick is not an allowed material, but exceptions have been allowed for brick in the past, and the applicant requests an exception for brick in this case. In support of its request, the applicant reasons that brick will "help to emphasize the vertical distinctions."

However, the front elevation shows brick used to emphasize horizontal lines. The building is divided into roughly three sections, including one large section in the middle (which is not further divided) and a section on each side that is further divided by appearance. On the left section of the building, there are two separate brick subsections partially separated by a subsection with lap siding. However, brick is also used to join the two brick sections by creating a horizontal line under the "lap siding" subsection and interrupting the vertical breaks between the three subsections. On the right section of the building, the second story has a regular vertical rhythm, but the first story is all brick, which creates a solid horizontal section and interrupts the vertical rhythm. Insofar as an exception for brick is requested to enable the applicant to meet the design motif of the District, it is counterproductive. (And, while brick may have been a common building material in the 1880-1915 era, the Willamette examples cited by the applicant are of much more recent vintage.)

Rather than creating strong vertical breaks or lines, the applicant proposes a patchwork design that does not satisfy CDC 58.050.C and does not support a design exception under CDC 58.090.

## IV CONCLUSION

The proposal has a lot to offer the community. This proposal includes parking, which would be much appreciated by neighbors. However, it does not meet the requirements for the Willamette Falls Drive Commercial Design District. We ask that this particular proposal be disapproved.

Ian Brown

Audra Brown
brownwestlinn@gmail.com
503-656-4460
1968 6th Ave
West Linn OR 97068

## JOINED IN EACH PART AND THE CONCLUSION BY

James Estes
Kristen Woofter
jimmyestes@outlook.com
(503)568-1680

1992 6th Ave
West Linn OR 97068

Our home is on the same block as the proposed development just across Knapp's Alley.

| From: | Audra and Ian Brown |
| :--- | :--- |
| To: | Floyd, John |
| Subject: | DR-23-01 comment (1919/1949 Willamette Falls Drive) |
| Date: | Tuesday, June 13, 2023 10:03:25 AM |
| Attachments: | HRB submission.pdf |
|  | HRB submission.pdf |

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Good morning. Attached should be a comment for the Historic Review Board meeting tonight regarding the proposed development at 1919 and 1949 Willamette Falls Drive, e-mailed at 10:02 am.
Please let me know if you have any questions or problems opening the document.
Thank you,
Ian Brown

| From: | Al Secchi |
| :--- | :--- |
| To: | Floyd, John |
| Cc: | Laura Secchi; Secchi, Albert (alsecchi@comcast.net) |
| Subject: | Concerns and Objections to Proposed Construction Project at Willamette Falls Drive and 12th Street |
| Date: | Tuesday, June 13, 2023 10:49:50 AM |
| Importance: | High |

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## Dear John Floyd,

I hope this letter finds you well. I am writing to express my deep concern and objection regarding the proposed construction project of a three-story building (2 story with Mezzanine), including any possibility of a rooftop restaurant and bar, adjacent to my residential home. As a resident living in close proximity to this project, I strongly believe that the proposed development will have a significant negative impact on both the quality of life for my family and the overall neighborhood.

First and foremost, my primary concern revolves around the potential disturbance and noise pollution that will be caused by the operation of a restaurant and bar. The location of our children's bedroom windows is such that they would be directly exposed to the noise generated by any high traffic establishment. We are deeply concerned about this potential breach of our family's personal space. It is essential that we maintain a sense of privacy and security within our own home, and this project would compromise that fundamental right.

In addition to the noise and privacy concerns, the proposed building will obstruct the current view from all windows facing the three-story structure. This view has been an integral part of our home, providing us with a sense of openness and connection to the surrounding environment. The loss of this view would not only be detrimental to our property value but also adversely affect our overall living experience.

Another major concern is the anticipated increase in residential traffic and street parking that would accompany the completion of this project. Our neighborhood already faces challenges when it comes to traffic and finding parking spaces for residents and their visitors. The construction of a restaurant and bar, which would attract more people to the area, would exacerbate these issues and further strain the available parking resources. This could result in undue inconvenience for residents and potentially compromise the safety and accessibility of our neighborhood.

Considering the points mentioned above, I strongly urge you to reconsider and reassess the proposed construction project. I implore you to take into account the concerns and objections raised by the affected residents who will have to bear the brunt of the negative consequences. It is vital that community well-being, including the needs of families and the overall quality of life, are prioritized when making decisions that impact our neighborhood.

I kindly request that you keep me informed about any developments or decisions regarding this matter. I am open to engaging in a constructive dialogue to explore alternative solutions that would be more compatible with the residential nature of our community.

Thank you for your attention to this important matter. I trust that you will carefully consider the valid concerns presented in this letter and take the necessary steps to address them.

Sincerely,
Albert and Laura Secchi
503.519.3957

| From: | sugarfairypdx |
| :--- | :--- |
| To: | Floyd, John |
| Subject: | 1919/1949 Willamette Falls Drive |
| Date: | Tuesday, October 3, 2023 10:29:20 PM |

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To whom it may concern, I have some issues with the design review for the new commercial build on 1919/1949 Willamette Falls Drive. My main point of concern is that this is a 3 story space. Portions of the building exceed 35 feet and include a rooftop deck. These details violate the Community Code. This is a shared commercial and residential area but the noise and light from the rooftop deck greatly impact the residential character. I myself would not suddenly want a visual intrusion to my home and view. I can't imagine having a residential home replaced by a commercial property where patrons can look down upon or into my home from the rooftop deck.

I have only recently moved to West Linn but and deeply concerned about new developments and the harm they can do. We left Happy Valley because it became a free for all for builders without any regard for the community. West Linn is a beautiful community and I would hope this would not happen here. I know this is just one building, but it is a slippery slope. One small allowance sets a precident. The beauty of historic downtown West Linn is something we want to preserve not destroy. I have no issue with new buildings. I do firmly believe they should fit the community they are in and not just be thrown in the maximize profit for the space they occupy.
Thank you,
Rachel Goebert

To West Linn Planning Commission
From Ian Brown (1968 6th Ave)
Audra Brown (1968 6th Ave)
Re DR 23-01 (1919/1949 Willamette Falls Drive), 10/4/23 meeting

Thank you for providing the opportunity for public comment regarding the proposed development of 1919 and 1949 Willamette Falls Drive. The development site is part of the Willamette Falls Commercial Design District. Our home is immediately to the south of the development site, in an area zoned R-5. Although the proposal has many good qualities, we object to specific third-story features. The proposal exceeds the 35 -foot height limitation, exceeds the 2 -story height limitation, does not qualify for an exception to the height limitations, and does not include required noise and sound buffering. These details are out of step with the character of the neighborhood and violate specific requirements of CDC Chapters 55 and 58.

The applicant went before the Historic Review Board on June 13, 2023, to address the CDC Chapter 58 criteria. We objected to several features, but our main concern was the third-story features. The Historic Review Board discussed the concerns regarding the third story and passed a motion to recommend approval except for the third story (described by the applicant as a "mezzanine"). The Historic Review Board recommended that the Planning Commission further consider the third story issues.

The removal of these particular third-story features would allow the project to go forward in better harmony with the overall character of the neighborhood as well as in compliance with both the letter and the spirit of the Community Development Code.

## I Height objection

In the Willamette Falls Drive Commercial Design District, "Maximum building height shall be 35 feet (as measured by this code), and two stories." CDC 58.080.C.3. The application contains a partial third story consisting of two sections, one located approximately in the center of the building and the other on the west end of the building. (Page 58). ${ }^{1}$ The center section of the third story is not shown in any of the elevation renderings, so it is impossible to evaluate. The west section of the third story is the most visually prominent as seen from the north, west, or south. (Pages 52, 53, 54). It runs approximately $25^{\prime}$ along the north side of the building facing Willamette Falls Drive, 100' along the west side of the building (the entire length) facing 12th Street, and 25 ' along the south side of the building facing Knapp's Alley. ${ }^{2}$

[^8]While the applicant is now pursuing an exception, it earlier contended that the proposal complies with the applicable height limitation. The third story violates the applicable height limit, and the criteria for granting an exception are not satisfied.

A The third story exceeds the 35-foot, two-story limitation

At the September 14, 2022 Willamette Neighborhood Association meeting, the applicant represented that the zoning allowed a two-and-a-half story building. While CDC Chapter 19 allows two-and-a-half stories for General Commercial zoning, the site is also subject to CDC Chapter 58, which limits buildings to two stories to preserve the integrity of the neighboring Willamette Historic District as well as the Willamette Falls Commercial Design District.

In its submission to the Historic Review Board, the applicant asserted that the third story was actually a "mezzanine" considered part of the second story and not constituting a separate story. The applicant's assertion was based on a citation to IBC Section 505.2. First, this provision of IBC Section 505.2 specifically limits its applicability to the calculation of stories under IBC chapter 5 , which is a building code chapter pertaining to things like fire safety requirements, not zoning limitations. Second, the third story area does not meet the definition of a "mezzanine," either under a dictionary definition or as defined by IBC chapter 5. Third, and most importantly, "story" is specifically defined by CDC Chapter 2 in terms of floors and ceilings. ${ }^{3}$ The first story is the space between the floor that exists at approximately ground level and the floor immediately above. The second story is the space between the floor above the first story and the next floor above. The third story is the space between the floor above the second story and the ceiling/roof above. By the CDC definition, the space above the second story is a third story. Although the applicant has revised its proposal to reduce the size of the third story, it continues to include a third story in two sections.

Although the west section is well-depicted in the elevation drawings, and clearly fits the CDC definition of a third story, the center section is not shown on the elevation drawings at all. If it is a fully enclosed area matching the west section in height, it would exceed the 35 -foot elevation line (page 52) in addition to constituting a third story.

[^9]The revised submission indicates that this section will house those portions of rooftop HVAC equipment that are normally placed outdoors, suggesting that the section is not fully enclosed and may not need to be the same height as the west section. CDC 55.100.C requires buffering between differing uses, such as residential and commercial, and CDC 55.100.C.3 specifically requires that rooftop HVAC and other mechanical equipment be visually screened. If this section houses HVAC and other rooftop mechanical equipment and does not exceed the 35 -foot height limitation, we would have no objection to it. However, the application does not provide sufficient information to evaluate this question.

Given the impossibility in evaluating whether the central section exceeds the 35-foot elevation line or even whether this section is fully enclosed, the application is incomplete and should be rejected, at least insofar as it pertains to the central section.

Finally, small portions of the north parapet exceed the 35 -foot elevation line (page 52). The west parapet includes a peak that appears even taller (page 53). The applicant asserts that the height is measured as the midpoint between the eave and the parapet and that the flat second-story roof is the eave. However, the CDC contains no text supporting the applicant's interpretation. CDC 58.080.C. 3 specifically provides, "Maximum building height shall be 35 feet (as measured by this code), and two stories. A false front shall be considered as the peak of the building if it exceeds the gable roof ridgeline." ${ }^{4}$

## B The criteria for granting an exception are not satisfied

As seen on the elevation drawings, the west section of the third story is extremely prominent. (Pages 52, 53, 54). The third-story wall on the north side of the building, facing Willamette Falls Drive, runs approximately $25^{\prime}$. It has three large sets of windows running the entire length. On the west side of the building, facing 12th Street, the third-story wall runs 100', the entire length of the building. This side has a segment that matches the north side, with three large sets of windows, a longer segment sided with fiber cement panels, and a shorter segment composed of brick. The brick segment shows a window between the second and third story. On the south side of the building, facing Knapp's Alley, 100' along the west side of the building, the third story wall is featureless brick.

As noted, the center section of the third story is not depicted in the applicant's elevation drawings and cannot be readily evaluated. The applicant's request for an exception The third-story section that would require an exception (assuming that the section in the middle of the roof is mere screening for the HVAC equipment) is the block that is approximately $25^{\prime}$ by $100^{\prime}$

[^10]on the west end of the building. ${ }^{5}$ From the north (page 52), the third story appears small, but it is lined by windows its entire length. From the east (page 53), the third story extends the entire length of the building, with windows on the left side and with a window from the staircase that clearly is between floors. While a portion of the wall lacks windows, it is clearly the height of a third story, and it is framed by windows on either side. From the south (page 54), it is simply an undifferentiated brick rectangle topped with a plain wall.

CDC 58.090 provides criteria for the Historic Review Board to grant an exception where a design proposal cannot meet the standards, or proposes an alternative to the standard. ${ }^{6}$ The Historic Review Board did not grant an exception. The Historic Review Board did not have the opportunity to consider an exception because the applicant did not request one. Several members expressed concern that the third story exceeded the height limitation, but the Historic Review Board was unable to determine the correctness of the applicant's position regarding whether the third story was "mezzanine." Rather than deciding that question, the Historic Review Board passed the buck to the Planning Commission to evaluate whether the proposed building was, in fact, two or three stories. But the CDC requires the exception to be granted by the Historic Review Board, which is charged with evaluating compliance with CDC Chapter 58 standards. Because the applicant did not request an exception at the Historic Review Board level, the CDC does not allow an exception to be granted at this point.

Even if the procedural posture allowed an exception to be granted, the criteria for doing so are not satisfied. The applicant relies on criterion A, which requires that a review of historical
${ }^{5}$ Dimensional descriptions are approximate based on the applicant's illustrations.
${ }^{6}$ CDC 58.090 states:
"In those circumstances where a design proposal cannot meet the standards, or proposes an alternative to the standard, the Historic Review Board may grant a design exception in those cases where one of the following criteria is met:
"A. The applicant can demonstrate by review of historical records or photographs that the alternative is correct and appropriate to architecture in the region, and especially West Linn, in 1880-1915.
"B. The applicant is incorporating exceptional 1880-1915 architecture into the building which overcompensates for an omission, deviation, or use of non-period materials. The emphasis is upon superior design, detail, or workmanship.
"C. The application is for the restoration or alteration of an existing, out-of-period structure where it can be demonstrated that applicant cannot reasonably comply with the standard due to existing building setbacks, orientation, roof forms, materials, architectural style, functional design, or other existing conditions; and where the exception would further the purpose of this chapter as set forth in CDC 58.010. This exception does not apply when the structure is demolished."
records or photographs demonstrates that the alternative is correct and appropriate to the architecture in the region, and especially West Linn, in the 1880 to 1915 era. The applicant cites five buildings in the Willamette Falls Commercial Design District: 1672, 1849, 1880, 1914, and 1980 Willamette Falls Drive (page 59). Four of these five buildings were approved in the 1994 to 2007 era, rather than the relevant 1880 to 1915 era, and none of them include third-story spaces that are even readily observable from the street. The applicant's proposal, which includes an extremely prominent third story, is not similar to any of the cited examples.

1849 Willamette Falls Drive is a modest example of an older local building with third-story space hidden behind a western false front. ${ }^{7}$ The third-story space is in a conventional "half-story" configuration, making use of the space under a gable roof. The false front has the appearance of a tall parapet rising from the second story. It has the same lap siding material, painted in the same color scheme, as the first and second story. It has no windows. It runs only along the side of the building that faces Willamette Falls Drive and joins no right angles. It steps down as the distance from the gable ridge line increases and plainly could not be the wall of a full third story. Because the false front faces only only the street side of the building, a person viewing it at an angle off of center can easily see empty space behind it, creating the impression that there is no third story structure at all. The overall effect is to render the third story structure very difficult to identify from Willamette Falls Drive, 12th Street, or 13th Street.

[^11]

The applicant's third-story structure is completely different. Rather than a street-facing false front that steps down with distance from a ridgeline, it has four straight walls joined by at right angles, creating the visually unambiguous appearance of a $25^{\prime}$ by $100^{\prime}$ box. Rather than using a half-story configuration with a sloping roof to minimize visibility, it has a flat roof to maximize space. Rather than being set back from the streets on the sides to minimize visibility, it is set at the edge of the second story on all three sides that are visible to the public. Rather than eliminating windows altogether from the street-facing side, it displays large sets of windows on the most prominent corner of the building, windows that clearly correspond to the second-story windows below. Unlike the third-story structure of 1849 Willamette Falls Drive, which does not appear to be a third story at all from three sides, the applicant's third-story structure is impossible to miss from the north, west, or south.

The comparison with 1849 Willamette Falls Drive does not support the application of criterion A. Rather, it shows that the applicant's alternative is not correct for the period architecture in the area.

The next-oldest building cited by the applicant, 1672 Willamette Falls Drive, is far out of the relevant time period. As the relevant Historic Review Board decision (DR-94-07) shows, the building is a 1990s structure that began the application process before the codification of the Willamette Falls Drive overlay zone. However, a comparison with 1672 Willamette Falls Drive shows that the present application is inconsistent with the design criteria.


The Historic Review Board recognized that the proposal for a third-story structure required a variance. In granting the variance, the Historic Review Board reasoned that the "extra half story" would be permissible because it would "not be seen" from Willamette Falls Drive. As the photograph shows, the third story structure is mostly hidden from Willamette Falls Drive behind a western false front with no windows. The third story is a gable roof, to minimize its visual impact, and it is set far from 14th Street and Dollar Street. While the structure can be seen from some angles, as the applicant's photographs show, the design was largely successful in hiding the structure from casual observation (as was the intent of the approval).

The building at 1672 Willamette Falls Drive was built approximately 80 years outside of the relevant time period, so it is not really an appropriate example to review to support criterion A. It is an interesting example of how the Historic Review Board might consider allowing third-story space. As such an example, however, it illustrates why the applicant's request for an exception should be denied.

In the present application, the west section of the third story, with its box-shaped configuration with vertical walls on all sides, set on the edges of the building, and a grand set of windows anchoring the most prominent corner, is not comparable to the configuration of 1672 Willamette Falls Drive, with a false front with no windows hiding a gabled half-story set far from the side streets. The applicant's proposal, which makes the third-story structure a defining visual characteristic from all street-facing angles, is inconsistent with the criteria for a variance granted in 1672 Willamette Falls Drive, which was based on the third story structure being
difficult to see. Based on this example, even if one assumes assume that the Historic Review Board would grant the same exception if given the chance, it is difficult to imagine the Historic Review Board approving an exception for the present application.

The next three examples share certain design characteristics. They are very new, with application numbers in the 2000s era. They were built far outside of the reference era and, therefore, the applicant's reference to these buildings is not responsive to the exception criteria. In addition, the three buildings (none of which include third-story space or any design elements suggesting third-story space) are very different from the applicant's proposal.

The Historic Review Board approval of 1880 Willamette Falls Drive (DR-00-28), a recent building, did not approve an exception for a third story or indicate any awareness of any third-story space. ${ }^{8}$ It did require that any HVAC on the roof be screened and mitigated.


The 1880 Willamette Falls Drive building itself has a small rooftop structure, as seen in the overhead photograph in the applicant's submittal. ${ }^{9}$ (Page 59). The rooftop structure is entirely tucked behind the false front at the middle of the building, as far away from the sides of

[^12]the building as possible. There is no structure behind the other false fronts, and there is no window in the middle false front suggesting the presence of any structure above the second story.

The applicant's proposal would be considerably taller than the 1880 Willamette Falls Drive building, which sits diagonally across the same intersection. The new building's windows would proclaim its design as a three-story building, whereas 1880 Willamette Falls is built without a hint of the appearance of a third story. These two structures are not comparable.

The design of 1914 Willamette Falls Drive, another recent building located at the same intersection as 1880 Willamette Falls Drive and the applicant's proposal, shows attempts at a similar effect. The rooftop structures are small, with gable roofs, and they have the appearance of mechanical screening. This building differs from 1880 Willamette Falls Drive in that the structures are not as well hidden, but there is no appearance of usable third-story space. The design review process (DR-06-46) shows that even the appearance of a third story was to be avoided. The pre-application conference resulted in the elimination of "third floor" windows, and the Historic Review Board (DR-06-46) then required the elimination of "the circles/cutouts at the top of the false gable end."


Again, the applicant's proposal, with a prominent third story, would stand in stark contrast to 1914 Willamette Falls Drive, which was built to avoid any features suggestive of a third story.

1980 Willamette Falls Drive, another relatively recent building on the same block as 1914 Willamette Falls Drive, also has the appearance of a two-story building with some structure
to house rooftop mechanical equipment. The Historic Review Board (DR-01-43) required any HVAC on the roof to be visually screened on all sides. It also required two of the three vents, which were cut into the western false fronts, to be eliminated. As a comparison of the overhead and front views shows, the remaining vent is on the false front that is in the middle of the building, not attached to a rooftop structure. There was no exception granted for a third story. As with the other very new buildings, it has rooftop structures that have gable roofs, are screened from the street by western false fronts, and have no windows to suggest the presence of a third story.


Again, the applicant's proposal would be an obvious three-story building sitting across the street from 1980 Willamette Falls Drive, a two-story building designed to eliminate the hint of a third story.

Taken as a group, these three most recent examples (1880, 1914, and 1980 Willamette Falls Drive) show a pattern of allowing structures above the second story only to house mechanical equipment, and only when designed to eliminate that those rooftop structures avoid even the appearance of a third story. The applicant's proposal, by contrast, involves an obvious third story along the entire west end of the building.

Most of the buildings cited by the applicant are far outside the reference era and are not responsive to the exception criteria. Most of the buildings do not include third-story space. What they all show, however, is that the western false front design is used to conceal structures over the second story. It does not have a window to suggest interior space, it does not join another wall at a right angle to suggest an enclosed structure. It does not run the entire length of
a building (as the 100'-long wall overlooking 12th St would), but instead steps down to reveal the absence of a large third story. The criteria for an exception are not satisfied.

Finally, the height of buildings matters because of its impact on neighbors. Height limitations are how we balance neighbors' access to views and sunlight, and the applicant chose to build in a zone with a two-story height limitation. The applicant has, in the past, suggested that buildings on the north side of Knapp's Alley have no impact on the light received by homes on the south side of Knapp's Alley. As this picture from our back yard shows, we get a lot of sun from the direction of the proposed building.


The applicant is not asking to build as allowed by the zoning. The applicant is asking for an exception to exceed the limitations imposed by the zoning, limitations that have generally applied to all development in the area for decades and which apply to all other development in the area. When an application asks for such unique and favorable treatment, it is appropriate to consider what that treatment means to the people around the project.
C. The design of the third story west wall is not approvable

Siding materials other than wood require a design exception to be granted by the Historic Review Board. CDC 58.080.C.10. In its revised submission, the applicant has removed many of the windows from the west wall and replaced them with large squares of fiber cement panels.
(Page 53). It is a major departure from the siding approved by the Historic Review Board and requires a new exception. It also does not satisfy the criteria for an exception.

Of course, if the siding were changed back to the approved fiber cement lap siding (for which an exception was granted), the result would be a plain wall extending from the second-story windows to the parapet above the third story and from the window bay near Willamette Falls Drive to the brick stairwell section near Knapp's Alley. This would be a plain rectangle, perhaps $15^{\prime}$ high by $60^{\prime}$ long. This design would not be consistent with CDC Chapter 58 and would also not satisfy the criteria for an exception.

## II Noise objection

To reiterate, the proposed building sits adjacent to a residential area, and the roof will overlook neighboring houses.


The proposal includes a 1,300 square foot rooftop deck (page 58). CDC 55.100.C.1 requires that buffering be provided between different types of land uses. Buffering is appropriate to decrease noise levels and to provide a visual barrier. CDC 55.100.C.1.a. Structures or on-site activity areas that generate noise, lights, or glare must be buffered from adjoining residential uses. CDC 55.100.D.2. A rooftop deck would be expected to generate noise and light at the least. The applicant's proposal includes no buffering whatsoever between the deck and the residences to the south of Knapp's Alley.

Discussing the noise concern, the applicant has noted that no use has been determined. It is the applicant's burden to establish compliance with the standards. If the applicant's position is that determination of the use is necessary to evaluate compliance with noise buffering requirements, the applicant should identify the use of the deck and explain what the noise impacts will be and how the applicant has buffered the noise.

Staff Finding 23 (page 27) reasons that the rooftop deck is not expected to "generate noise in excess of street level activities that are permitted along the Willamette Falls Drive commercial corridor." However, there are no 1,300 -square-foot decks on the sidewalks of Willamette Falls Drive. The seating layout (page 58) is speculative, but it shows 56 seats comfortably arranged. A larger crowd could easily be accommodated. Any restaurant with street-level outdoor seating along Willamette Falls Drive accommodates a fraction of that size crowd.

And any street level activities on Willamette Falls Drive are inherently buffered from the residences in ways that this rooftop deck is not. Activity on the sidewalk Willamette Falls Drive is twice as far from the closest residence as this rooftop deck, which is in the middle of the building. And the commercial buildings that lie between Willamette Falls Drive and the residential area provide sound buffering. In contrast to street-level activity on Willamette Falls Drive, the rooftop deck directly overlooks the residences with no light or sound barrier.

Given the nature of crowd noise, it is doubtful that any rooftop deck this close to residences could be sufficiently buffered from noise. There are other commercial areas further from residential areas that are better candidates for that type of use. Here, though, there is no need to think about whether buffering is sufficient, because this proposal has no buffering at all.

The CDC recognizes the need to balance the rights of commercial property owners and users against the rights of neighboring residents, and every commercial developer knows they have limits to their uses. CDC 55.100.C. 1 and D. 2 specifically protect neighboring residents in this circumstance.

## III Conclusion

We fell in love with the Willamette neighborhood because of the vibrancy we saw as a result of its historical character and its mix of residential and commercial uses. It's a great neighborhood, and its character is the result of dedicated individuals and a dedicated community.

There are a few things we don't like about this proposal: the third story space, the portions of the structure that exceed 35 feet, and the rooftop deck. These details violate the

CDC. There are a lot of good things about this proposal, and we look forward to it being built without these code violations.

The meeting was called to order at 7:05 by President, Kathie Halicki.
The Treasury remains at \$3.245.52.
The Minutes of the July 13, 2022, meeting were read and approved.
23 persons attending on Zoom.

## ICON Construction

A proposed building design for the corner of 12th and Willamette Falls was presented by Scott Sutton and Kevin Godwin of SGA Architects. Images of a street elevation and a floor plan were shared-screened with design elements explained. The height limitation is 35 ' and $21 / 2$ stories. There will be underground parking for 35 cars that connects with the adjacent ICON building.
The facade design will be compatible with the adjacent ICON building.
Office space and restaurant areas are included. A second story restaurant space is included with a mezzanine/roof area which will be enclosed.

Q: Noise from restaurant music?
A: All will be contained within walls on alley side. Should be no more than ambient noise from WF Drive.
Q: Delivery trucks in the alley?
A: Deliveries will be made from 12th street side in marked area

## Main Street

Rebecca announced tonight as the last day of the Summer Market.
Next Wednesday, Sept 21, will be a Wine Walk with tickets available as a Main Street fund raiser.
October 1 will be the Arch Bridge Centennial Celebration. West Linn, Oregon City and the Grande Ronde Tribe will each produce art events which will merge at the bridge center.
October 31 will have Halloween events and treats for children. Last year 1300 kids appeared. Volunteers will be welcomed. A donation of $\$ 200$ will be asked of the WNA at the October meeting.
November 1 will be 'Small Business Saturday' and the lighting of street trees.
Also the Historic Review Board is developing an on line walking tour of the Historic District. Calendar and events are described on the Historic Willamette Website.

## Update

Kathie reported two land use applications. Both involve property divisions.
The police station will allow use to use their community room but not their technical equipment.
poll: A vote among those present chose to continue with Zoom and perhaps meet in person twice a year.

The bird scooters are now gone from Willamette.
A Community Attitude Survey is underway: polco.us/westlinn22op
Traffic on Hwy 43 will be reduced to one lane during road improvements thru
December.

## October meeting

A candidate forum is planned. Four candidates have responded and will be given 5 minutes to present and 5 minutes for questions.

The new City Manager, John Williams, will describe TIF, Tax Increment Financing
Lean Liu requested support from the WNA for a community pool citing popularity and reasons for the need. Kathie explained that generating petitions was not the purpose of the WNA and perhaps social media would be a better source for support. We were reminded that bond measures for a community pool had been turned down three times because of costs of construction and maintenance
She will bring a presentation to the WNA in the future.
Athey Creek School issues:
The Brandon Place extension needs a solution for adjacent residents.
The expanding width of WF Drive will cause large and extensive retaining walls in both the West and East entrances to Fields Bridge Park. Is this necessary? Is widening the road beyond a required bike lane necessary?
Attendance at a Transportation Advisory Board to voice concerns is urged.
The meeting adjourned at 8:53
Elizabeth Rocchia
secretary

# HISTORIC REVIEW BOARD <br> Meeting Notes of June 13, 2023 

| Members present: | James Manning, Tom Watton, Dan Saltee, Michael Fuller, Kirsten Solberg, <br> and Danny Schreiber |
| :--- | :--- |
| Members absent: | John Steele |
| City Council present: | Scott Erwin <br> Public: |
| Pam Krecklow and Mark Hamilton, West Linn Historic Society, Kevin Godwin, |  |
| Scott Sutton, James Estes, Jody Carson, Ian Brown, |  |

## Staff Liaison: John Floyd - jfloyd@westlinnoregon.gov

## 1. Call To Order and Roll Call

Chair Manning called the meeting to order at 6:09 pm.
2. Public Comment Related To Items Not On The Agenda

Pam Krecklow and Mark Hamilton commented on the Beckman Stone, a historical marker in West Linn adjacent to the Tualatin River at the end of Dollar Street. The Beckman Stone was moved from the Fields Family cemetery in the location circa 1916. The stone marks Klaus Beckman's death in 1875 in a boat explosion on the Tualatin River. The WLHS seeks to preserve and protect the stone as a local historic landmark.
3. Approval Of Draft Meeting Notes for 4/18/23

Member Watton moved to approve the meeting notes for 4/18/23. Member Schreiber seconded. Ayes: Watton, Schreiber, Fuller, Saltee, Solberg, and Manning. Nays: None. Abstain: None. The motion passed 6-0-0.
4. Public Hearing: DR-23-01-1919/1949 Willamette Falls Drive - Class II Design Review for a New Commercial Building
Chair Manning introduced application DR-23-01, a Class II Design Review to construct a new commercial building at 1919 \& 1949 Willamette Falls Drive. Manning explained the hearing procedures provided in CDC Chapter 99.170 and opened the public hearing.

City Attorney Monahan addressed legal standards and appeal rights. The substantive criteria that apply to the application are contained in Community Development Code (CDC) Chapters 58 (the Willamette Falls Drive Commercial Design District) and 99 (Quasi-Judicial Decision-Making Procedures).

City Attorney Monahan addressed Historic Review Board conflicts of interest, ex-parte contacts, jurisdiction, and bias challenges. Member Watton stated that he is also a member of the Planning Commission. He recused himself from considering the application as a member of the Historic Review Board and stated his intent to consider the application as a Planning Commissioner when it is presented there. Member Schreiber declared that he lives near the property. Members Solberg and Manning declared site visits. Both members confirmed their ability to decide the application based on
the testimony presented at the hearing. No other declarations of ex-parte contacts, conflicts of interest, or bias existed. Monahan asked if any audience member wished to challenge the Historic Review Board's jurisdiction, impartiality, or ex-parte disclosures of any members of the Historic Review Board. There were none.

Associate Planner John Floyd presented the staff report. The applicant requested to demolish the two existing structures and replace them with a two-story commercial building with a rooftop lounge, outdoor patio, and underground parking. The above-ground structure would contain approximately 29,080 square feet of speculative commercial space for retail, service, and restaurant tenants

Floyd explained that per CDC 99.060.D.2(c), the Historic Review Board recommends the Planning Commission regarding the project's compliance with CDC Chapter 58, which contains the standards and criteria for new development within the Willamette Falls Drive Commercial Design District. Once a recommendation is made, a Planning Commission would decide on the application.

The site is zoned General Commercial. Two structures occupy the site. Both were constructed as single-family homes but have been converted to commercial uses. Neither is listed as a local historic resource in the Willamette Historic District or listed on the National Register. Therefore, no historic protections apply per CDC $25.020(\mathrm{~A})$, and the City did not notify SHPO about the proposed demolition.

Three design exceptions are requested as part of the application:

- Use James Hardie fiber cement instead of wood siding and trim.
- Use of brick masonry instead of wood siding along selected portions of the façade
- The use of columns to support an 8.5-foot canopy that wraps the northwestern corner of the building at Willamette Falls Drive and 12th Street.

Most of the building would stand in a two-story configuration with a rooftop lounge and outdoor seating area ("mezzanine") at the corner of Willamette Falls Drive and 12th Street. The outdoor mezzanine is centered on the roof, with a hallway between it and the residential area to the south.

Current standards typically limit structures to no more than 35 feet and two stories. The proposed design falls outside the standards because the mezzanine is above the second story. Floyd noted that the HRB needed to decide about the mezzanine by either an interpretation or a design exception. Given the rooftop lounge area, aka mezzanine, only covers a relatively small area of the footprint, is limited to the western façade area, and employs shorter and horizontally oriented windows to reduce their profile, the HRB could have interpreted the design as effectively being limited to two-stories with a rooftop access area. Alternatively, the HRB could permit the rooftop lounge as part of a design exception and request the applicant provide supplemental findings supporting a design exception.

Kevin Godwin and Scott Sutton of SGR Architecture presented on behalf of the applicant. Godwin discussed the new commercial and proposed design exceptions. He noted that the existing homes were not designated as historic properties. The applicant would facilitate moving the buildings instead of demolishing them if someone wanted. The design of the new commercial building was intended to mimic the structure at the eastern end of the same block in size and scale to create a cohesive design for the entire block. The applicant is seeking two design exceptions for brick masonry and canopies to match the other building. Additionally, the proposed columns complement the design and are historically appropriate. The proposed design seeks to maintain the integrity of the architectural vernacular of the Willamette Falls Drive Commercial Design District.

Sutton addressed the proposed rooftop bar/mezzanine. He stated that the International Building Code defines a mezzanine as a space open to the floor below and taking up no more than $1 / 4$ of the area below. A mezzanine is considered to be part of the floor beneath it. The entire structure is within the 35 -foot height restriction for the District. He addressed the public's concern about noise from the rooftop bar by noting that the space is to be enclosed. The outdoor space is oriented toward Willamette Falls Drive and is buffered by the stairwell. Thirty-five off-street parking spots are provided onsite under the building. The Traffic Impact Analysis demonstrated that the traffic impacts are within the Code requirements.

Member Saltee expressed his concern about noise from the rooftop mezzanine and the extent of the awning into the right of way. He asked about the building entryways.

Member Schreiber noted that although one of the existing buildings was not designated a historic landmark, the bungalow house on the property was built in 1919, according to Sanborn maps. He asked for more information about the offer to move the house rather than demolish it. He asked questions about the rooftop and classifying the mezzanine as a third floor

Member Solberg was concerned about using Hardiboard siding material because it was not appropriate for the historic fabric of the District.

Chair Manning asked for public testimony. James Estes objected to the proposed new construction. He stated that the proposal does not meet the two-story Code criteria.

Chair Manning asked for public testimony.
James Estes objected to the proposed new construction. He stated that the proposal needed to meet the two-story Code criteria.

Ian Brown stated his concern about the large windows in the back of the proposed buildings that would shine light on residential neighbors. He said the proposed building was inconsistent with the other buildings on the block on the backside. He stated that the design elevations do not show the entire third story. He objected to calculating the building height on a diagonal. He noted the diagonal line would cross over the long corridor in the third story. He objected to the interpretation that the mezzanine is not a third story. He stated that the mezzanine/third floor would be a design exception to the code, but they did not request one for this aspect of the proposal. He objected to the columns because they impede the sidewalk and the ability to use it.

Jody Carson, Historic Willamette Mainstreet, testified in support of the proposal. She stated that the design would complement the historic main street. The underground parking would benefit the commercial area. She wanted the mezzanine to be considered a third floor under the design exception process. She wanted to ensure a clear pedestrian walkway if the columns were allowed. She supported the efforts to relocate the bungalow on the property and requested that the property owner allow neighbors to remove the existing mature plants from the property.

Sutton rebutted that design elevations show the building height on the diagonal because the code requires it to be shown that way. He noted that the property owner would support efforts to relocate the existing bungalow and vegetation if someone demonstrates interest. As currently designed, the location of the columns provides a wider than-required ADA walkway, but the applicant was willing to work with the City on placement. He did not think the applicant needed a design exception for the
mezzanine because they believed it met the building code outright. He said the back windows could be redesigned to meet a 1.5/1 ratio.

There were no requests for continuances.

Chair Manning closed the public hearing and opened deliberations. Members discussed:

- Definition of a mezzanine in the IBC and CDC versus that used by the applicant, and whether the rooftop space is a mezzanine or a third story, and whether it should be approved through an interpretation of the code or as a design exception;
- Whether the windows facing the alley were subject to the vertical height-to-width ratio of 1.5:1 as set forth in CDC 58.060.C.6, and how the standards had been applied to other structures in the district; and
- The appropriateness of a design exception to allow support columns for an extended awning at the corner of Willamette Falls Drive and 12th Street, the limitations the columns impose on use of the sidewalk over time, and the appropriateness of deferring their approval to the City Engineer.

The HRB considered a continuance, but decided they had enough information to make a recommendation.

Member Fuller moved to recommend approval of DR-23-01, as presented, except for the mezzanine based on Chapter 58 to be further discussed by the Planning Commission, and directed staff to prepare a recommendation to the Planning Commission based on the findings in the June 13, 2023 hearing and staff report. Member Saltee seconded. Ayes: Manning, Fuller, and Saltee. Nays: Schreiber and Solberg. Abstain: None. The motion passed 3-2-0.
5. Updates on Outreach Efforts to Historic District Homeowners

Administrative Assistant Schroder noted that the Historic Home Ownership Guide brochure was mailed to historic homeowners with the Willamette Historic District in May. Willamette Historic District Walking Tour Storymap postcards would be sent to Willamette District residents in June.
6. Items Of Interest From The Board

Member Watton commented on new paint colors in the buildings in the Willamette District. He noted that the buildings were painted the same color. Members agreed that a Chapter 58 Code review should be prioritized on the docket. Floyd will put a discussion of a Chapter 58 code update on an upcoming HRB agenda.
7. Items Of Interest From Staff

Floyd updated the Board on the upcoming development applications.

## 8. Adjourn

Chair Manning adjourned the meeting at 9:14 pm.

## 1672 WFP

## WEST LINN/CLACKAMAS COUNTY

# HISTORIC REVIEW BOARD NOTICE OF FINAL DECISION 

FILLE NO. DR-94-07

At a special hearing on April 13, 1994, the Clackamas County/West Linn Historic Review Board approved the application by Randy Sebastian to construct a new office/commercial building at 1684 Willamette Falls Drive in the Willamette Historic District. The public hearing was conducted pursuant to the provisions contained in Chapter 99 of the Community Development Code. The decision to approve the application was based upon findings contained in the Staff Report which specifically addressed the approval criteria of Chapter 58 of the Community Development Code. Additionally, Board member, Charles Awalt, made the following findings:

1. The applicant, Randy Sebastian, made an application to construct the first phase prior to the codification of the Willamette Falls Drive commercial overlay zone. Although his design agrees with the majority of the approval criteria of Chapter 58, there are some deviations, particularly in the form of a second story overhang, lack of indented doorway, and lack of awnings above the pedestrian windows. At the time of the original submittal, Mr. Sebastian supplied plans for the second and third sections of the addition, which was reviewed in this application. At the time of the approval of the first section, Mr. Sebastian was given the understanding that not only was his first phase approved, but also the subsequent phases or sections were appropriate to the expected approval criteria of Chapter 58. Because Mr. Sebastian set the architectural tone for the project prior to the enactment of the Code, it was the finding of Board member Awalt that the second and third sections should be consistent with the first section, and that the Code provisions which would relate to the new additions (e.g., requirement for awning, indented door, no overhang, etc.) were not appropriate.
2. Board member Awalt found that the Code allows a height of two stories and 35 feet for structures in this overlay zone, but that there is a provision for a variance if the applicant can demonstrate that their alternative design is historically accurate. Mr. Awalt found that the review of period architecture submitted at the meeting by Associate Planner, Peter Spir, revealed that 2-1/2-story structures were found in the area. For that reason, Board member Awalt found that if the applicant wishes to go with an extra half story, it is consistent with the Code provisions for the variance and the architecture of the period. Board member Awalt found that the half story will not be seen from Willamette Falls Drive as it will be positioned at the rear or north end of the structure. In the event that an elevator is required to the third floor, and elevator housing is likely to project above the parapet, it was the finding by Board members Awalt and Ron Lee, that the elevator should not be shielded, screened, or embellished in any way.
3. Because of the fact that the design concept was approved prior to the enactment of Chapter 58, the four-foot overhang that exists in section 1 of the structure, should be allowed to continue through sections 2 and 3 . Also, the canopy requirement is waived since, from a functional standpoint, the overhang serves some of the same purposes, and that an awning for the second and third sections would look out of character since the first section would be without.
4. Board member Awalt made finding that the indented doorway on section 3 should not be required since it would be out of character with the door on section 1, and because of the fact that it was grandfathered in with the earlier application.

The Board felt that it was important to reiterate the fact that this application was substantially approved in design and concept prior to the enactment of Chapter 58 of the Community Development Code. Consequently, three or four of the provisions that would currently be enforced, were not considered to be applicable. This should be noted by any new applicants who may consider this application as a guideline for their own submittals. All submittals that are made for the Historic Review Board after the date of enactment of this Code in 1992, will be required to meet the Code in its fullest.

Testimony was heard from the applicant, Randy Sebastian and his architect. There were no other participants in the process.

The Clackamas County/Historic Review Board made a motion to approve the application based upon the aforementioned findings and those contained in the Staff Report with the following conditions of approval.

1. Half-story on the top floor is acceptable so long as it is not seen from Willamette Falls Drive.
2. The indented door on section 3 is not required.
3. The awnings are not required for sections 2 and 3 .
4. The elevator to the top half-story should be kept out of site from Willamette Falls Drive. However, if it is visible, there should be no shielding or screening, or decorative design. At such time that the applicant has plans for the location of the elevator and housing, the Planning Department shall review those plans and make a determination as to the appropriateness of its location and its exterior. Staff may choose to consult with members of the. Historic Review Board.

This decision shall become final 14 days from the date of mailing which is identified below. Appeals by persons with standing (e.g., those who have mailed in letters which are accepted into the record, those who testified at the hearing or signed in on the attendance sheet at the rear of the room during the hearing) must be submitted to the Planning Department by 5 p.m. of the deadline date and accompanied with a check for $\$ 350$ and the specific grounds for appeal. The review body for this case is the West Linn City Council. Chapter 99 of the Community Development Code details the specifics of appeals.

## 

HERB BEALS, ACTING CHAIR

$$
\text { April 15, } 1994
$$

DATE

This final decision mailed the $19^{\pi+}$ day of APR /L, 1999.4
Appeal deadline: 5 p.m. on May 3,1994 .
c : \historic .dec


## WEST LINN/CLACKAMAS COUNTY

## HIISTORIC REVIEW BOARD NOTICE OF FINAL DECISION

FILE NO. DR-94-37 REMODEL OF COMMERCIAL STRUCTURE AND CONSTRUCTION OF A NEW STRUCTURE IN THE HISTORIC DISTRICT COMMERCIAL OVERLAY ZONE

At a special meeting of November 16, 1994, the Clackamas County/West Linn Historic Review Board convened a public hearing to consider the request of Wayne Fitzpatrick and Ernest Cassella to construct a new structure in the Historic District at 1869 Willamette Falls Drive, and to remodel a structure at 1849 Willamette Falls Drive, also known as Fitz's Restaurant. These parcels are further defined as Tax Lots 3400 and 3500 of Assessor's Map 3 1E 2BA. The meeting was conducted pursuant to the provisions of Chapter 99 of the Community Development Code. The approval criteria that was applied to the application was drawn from Chapter 58 of the Community Development. Based upon the findings contained in the Staff Report and the findings made by the members of the Historic Review Board, the application was approved with the following conditions of approval:

1. The two vertical projections at each end of Fitz's proposed parapet shall be eliminated. These are the two crenelation-like protrusions on either end of the front elevation. The peaked or pointed false front feature will remain.
2. Crenelation of the new building adjacent to Fitz's Restaurant will be eliminated to provide a single plane of the roof line. In other words, the parapet will be flat.
3. All awnings on both buildings shall be extended from one side of the elevation to the other. Wood awnings are an acceptable alternative but must be approved by the Planning Director.
4. The pedestrian level windows must be broken into lights of "two over two" or configurations acceptable to the Planning Director in consultation with the Historic Review Board.
5. The vertical corner boards shall be widened. Fitz's Restaurant sign and shamrock insignia may be installed as separate design elements or combined into one element with Planning Director approval.
6. The doorway for Fitz's shall be recessed to a depth of approximately 4 feet.
7. The applicant has not submitted paint samples. At such time that the structure is ready to be painted, the applicant will submit paint samples to staff for approval. The code states, "body color typically included white, cream or light warm colors with low intensity. Accent trim windows, etc., should be dark colored." Under provisions of the code, the applicant may present photographic evidence to support alternate color combinations.
8. The door on Fitz's design shall be designed and constructed pursuant to code with at least one-half to two-thirds glazed.

This decision shall become final 14 days from the date of mailing which is identified below. Appeals by persons with standing (e.g., those who have mailed in letters which are accepted into the record, those who testified at the hearing or signed in on the attendance sheet at the rear of the room during the hearing) must be submitted to the Planning Department by 5 p.m. of the deadline date and accompanied with a check for $\$ 350$ and the specific grounds for appeal. The review body for this case is the West Linn City Council. Chapter 99 of the Community Development Code details the specifics of appeals.


This final decision mailed the $\qquad$ day of $\qquad$ , 1994. Appeal deadline: 5 p.m. on

ns
c : historic. dec


FINAL DECISION NOTICE
FILE NO. DR-99-28

At a special meeting of the West Linn/Clackamas County Historic Review Board on January 12, 2000, a public hearing was convened to consider the request of Ed and Mark Handris to construct a two-story office building at 1824 Willamette Falls Drive (Assessor's Map 3 1E 2BA, Tax Lots 2100 and 2200). This property is in the Willamette Falls Drive Commercial Overlay Zone. The standards of Chapter 58 of the West Linn Community Development Code apply.

After the hearing was convened and the proposal was discussed, Board member Harlan Levy moved to approve the application with conditions. The motion was seconded and approved by a a unanimous vote with the following conditions of approval:

1. The applicant shall provide 80 percent transparency on the front elevation and 30 percent transparency on the $12^{\text {th }}$ Street elevation. The transparencies shall include the main pedestrian level windows and the transom windows above them. The redesign of the windows shall be presented to the Planning Director for review and approval prior to submittal of any building permit application.
2. The applicant shall provide awnings that extend across the length of the Willamette Falls Drive elevation so that the gaps between the awnings of the different tenant spaces are no more than 6-12 inches at any given spot. The applicant shall similarly connect the awning on the $12^{\text {th }}$ Street elevation so that there is no gap greater than 6-12 inches.
3. The applicant shall provide windows on the west elevation per sheet A-4.
4. The applicant shall provide half-street improvements on $12^{\text {th }}$ Street, at a minimum, including from centerline, one 12 -foot travel lane and a diagonal parking area. Beyond that will be the curb and an 8 -foot wide sidewalk. Feathering beyond the centerline may be required.
5. The applicant shall provide an 8 -foot wide sidewalk on Willamette Falls Drive with street trees in grated cutouts every 30 feet.
6. The applicant shall provide a two-foot wide landscape strip around the perimeter of the parking lot at the rear with tree plantings (arborvitae) three feet on center.
7. The applicant shall select a darker trim for the parapet, cornice, and dentil area that clearly contrasts with the body color.. All colors must be approved by the Planning Director. Variations of beige are not permitted for the trim The trim for the first and second floor windows and doors may be lighter.
8. Any HVAC on the roof shall be screened and mitigated to the degree necessary to comply with noise standards of CDC Ch. 55.
9. Except as modified by these conditions, the applicant shall construct the building as proposed in this application.
10. All doorways shall be recessed per Code.
11. Construct six-foot high solid wood fence along rear of the lot.
12. No off-site glare from lights is permitted.

This decision shall become effective at 5 p.m., 14 days from the date of mailing. Appeals, by parties with standing, must be filed before that deadline.


Mailed this 12 day of Vormuny , 2000.

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A-4

"PRELIMINARY"
FRONT ELEVATION
$3 / 16^{\circ}=\uparrow-0^{*}$





# FINAL DECISION NOTICE 

FILE NO. DR-06-46

## IN THE MATTER OF A HISTORIC DISTRICT DESIGN REVIEW TO CONSTRUCT A TWO-STORY 19,425 SQUARE FOOT OFFICE AND RETAIL BUILDING IN THE WILLAMETTE FALLS DRIVE OVERLAY ZONE AT 1914 WILLAMETTE FALLS DRIVE


#### Abstract

At their meeting of April 18, 2007, the Clackamas County Historic Review Board (HRB) held a public hearing to consider the request by Icon Construction/Mark Handris to construct a twostory 19,425 square foot office/retail building in the Willamette Falls Historic District Overlay Zone. The decision was based upon the approval criteria of Chapter 25 of the West Linn Community Development Code (CDC). The hearing was conducted pursuant to the provisions of CDC Chapter 99.


Staff made a brief presentation. The applicant provided comments. The public hearing was opened. There was no public testimony. The public hearing was closed.

In discussion, all HRB members stated concern about the circles/cutouts at the top of the false gable end. The HRB found that awnings should be seven feet deep. Staff expressed concern about the lack of verticality in some of the elements. The applicant proposed landscaping at the corner entrance and concrete wainscoting for enhanced product life.

A motion was made, seconded and unanimously approved to approve the application as submitted with the following conditions:

1 The applicant shall mitigate noise and glare through construction of a six-foot high solid wood fence along the rear property line.
2. The applicant shall mitigate for tree removal along the rear lot line on a one-inch to one-inch basis. Mitigation may be off site with City Arborist approval.
3. All HVACs shall be visually screened and acoustically muffled per the Altermatt Associate study.
4. No off-site glare is permitted. Security lighting shall not direct glare off-site. Property frontage lighting shall be provided per city standards.
5. Sidewalk width will need to be increased on $11^{\text {th }}$ to eight feet per CDC 85.200 (page 85-23).

- No half-street improvements required on Willamette Falls Drive frontage.
- Half street and travel lane improvements required on $11^{\text {th }} \mathrm{St}$ frontage. Improvements likely to include curb, gutter, sidewalk, street trees and storm drainage improvements.

6. For more than $5,000 \mathrm{SF}$ new impervious area, treatment and detention required. This may be an underground system. Connection to stormwater system Willamette Falls Drive along frontage
7. Undergrounding of overhead utilities required along both Willamette Falls Drive and $11^{\text {th }} \mathrm{St}$. frontages.
8. The applicant shall achieve lineal transparency of $80 \%$ per code for the south elevation.
9. Individual sign permits for tenants shall require sign design and mounting per code with no sign hanging down or suspended over the sidewalk. A consistent pattern of signage is recommended.
10. Applicant shall meet all City Engineering and Planning standards.
11. Landscaping at the corner/beveled entrance is permitted. The landscape plan shall show plant material for those planter areas with approval required by the Planning Director.
12. Awnings shall extend outwards at least seven feet from the building elevation.
13. The design shall eliminate the circle at the top of the gable end.
14. The applicant shall submit a color scheme that creates greater verticality and a greater break up of the building into smaller sub-elements.
15. Concrete wainscoting shall be allowed.
16. A consistent sign plan shall be submitted identifying where the signs will go.

This decision will become effective 14 days from the date of mailing of this final decision as identified below. Those parties with standing (i.e., those individuals who submitted letters into the record, or provided oral or written testimony during the course of the hearing, or signed in on the attendance sheet at the hearing, or who have contacted City Planning staff and made their identities known to staff) may appeal this decision to the West Linn City Council within 14 days of the mailing of this decision pursuant to the provisions of Chapter 99 of the Community Development Code. Such appeals would require payment of fee and a completed appeal application form together with the specific grounds for appeal to the Planning Director prior to the appeal-filing deadline.


PETER SPIR, AS\&OCIATE PLANNER
CITY OF WEST LINN

Mailed this 25 day of Apie , 2007.
Therefore, this decision becomes final at 5 p.m., May 9 , 2007.
$2 \nrightarrow-\forall$


(4) East Elevation

(3) $\frac{\mathrm{North} \text { Elevation }}{\mathrm{Nan} \text { IL }}$

(2) West Elevation



[^13]


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

WILLAMETTE III BUILDING
WILLAMETTE FALLS DRIVE
WEST LINN, OREGON
South Elevation
SCALE $1 / 6 \cdot 1 / 2$

# HISTORIC REVIEW BOARD 

## NOTICE OF FINAL DECISION

## IN THE MATTER OF A 16,432 SQUARE FOOT OFFICE AND RETAIL BUILDING AT 1974 AND 1980 WILLAMETTE FALLS DRIVE, FILE NO. DR-01-43.

On July 23, 2002, the West Linn/Clackamas County Historic Review Board (HRB) held a public hearing to consider the request of Mark and Ed Handris to construct a two-story office and retail building, comprising 16,432 square feet on the north side of Willamette Falls Drive halfway between $10^{\text {th }}$ and $12^{\text {th }}$ Street. The site is also described as Assessors Map 31E 2BA, Tax Lots 800 and 700. The approval criteria of CDC Chapter 58.090 applied.

The staff presentation began with a statement of concern that Mr. Handris' previous projects, all two stories high, are of similar scale and design to this one. Making the problem worse is that the proposed white and beige colors will match other similar sized buildings on the north side. The result would be the creation of bland monotype architecture on the north side in contrast to the diversity and interest created by the storefronts on the south side. Also, characteristic of the south side is the fact that the pattern or rhythm of the buildings creates strong vertical breaks every 40-50 feet which agrees with the development code. In contrast, despite the building indentations of the proposed structure, there are no strong vertical breaks by engaged columns and the like to break up the large building into discrete and attractive units as required by CDC Section $58.090(\mathrm{C})(6-7)$. Staff recommended five different colors on the five building elements to break up the visual sameness.

On a positive note, staff supported the awning extending across the front elevation but it must be at a point 8-12 feet above grade with no awnings on the second floor or higher. After the staff report was given, the applicant explained their rationale for consistent design and color proposal as shown in the record.

During the discussion phase, HRB members stated that the building was too symmetrical, too bland, too "strip-mallish," and too white. The use of the same engaged columns and window designs were cited as examples of the problem. HRB members noted that there is a dramatic contrast between buildings on the north side, such as the one proposed, and buildings on the south side. HRB consensus was that the two western-most building elements need to be made distinct by having a flat parapet across the top of the western one and a peaked gable roof on the smaller building element next to it. HRB member McGriff stated concern with the three vents on the building. She said one or two should be replaced with building medallions that only have the date of the building's construction. She also spoke against snap-in grids that try to create multi- light windows. Instead she recommended "one over one" windows on the first floor.

Mr. Handris asked if it was all right to have a sign projecting out from the building. Staff said it would be permitted with a light projected onto the sign. HRB member McLoughlin made a motion to approve the application DR-01-43, with conditions, based upon findings in the staff
report and the hearing record. It was seconded by HRB member McGriff. The motion passed unanimously with the following conditions of approval:

1. The applicant shall provide an awning or series of awnings that extend across the length of the Willamette Falls Drive elevation and that extend out to the curb edge. The awnings shall have breaks in them every 16-35 feet about 1-1.5 feet wide to match the pattern of the five building elements. The awning shall be at first floor elevation only.
2. The applicant shall provide an eight-foot wide sidewalk on Willamette Falls Drive.
3. The applicant shall provide a six-foot high solid wood fence (no gaps) at the rear of the parking lot along the entire northern edge.
4. The applicant shall select five different colors for the five building elements of the front elevation. The applicant shall not use white/off-white/beige, or similar colors for the body color. The applicant shall select darker trim colors for each of the five building elements. The Planning Director must approve the colors.
5. Any HVAC on the roof shall be visually screened on all sides and mitigated to the degree necessary to comply with noise standards of CDC Chapter 55.
6. Except as modified by these conditions, the applicant shall construct the building as proposed in this application.
7. All doorways shall be recessed per Code.
8. The two western-most building elements shall be re-designed. The extreme west one shall have a flat parapet with a two-foot deep cornice across the top with brackets. The building element next to it shall have a peaked/gable roofline.
9. No off-site glare from lights is permitted.
10. The applicant shall provide all storm, sewer, and water facilities as necessary to comply with the Engineering Department's Construction Code. The applicant shall negotiate all necessary utility easements and joint maintenance agreements for storm drainage from this site across intervening private properties. These necessary agreements and easements must be recorded prior to occupancy of this building.
11. The wainscoting shall be replaced by rough faced concrete, cement, or stucco.
12. An eight-foot wide sidewalk shall be constructed along Willamette Falls Drive. Supports for the awning/overhang may be in the eight-foot sidewalk area. This sidewalk shall transition to connect with sidewalks on abutting lots.
13. Two of the three top floor vents shall be eliminated and replaced with decorative wooden medallions. The medallions may have the year of construction on one and the builder's name (e.g.:"Handris") on the other, but shall not have the street address.
14. Each of the five building elements shall have different engaged columns to make each of the elements distinct from the one next to it. The applicant may use Doric, square, tapered, or elephantine columns. No double columns are allowed.
15. The applicant may use "one over one" windows on the first floor with transoms and grids above. The first floor windows shall not all be the same so that the sought-after architectural diversity is accomplished. The same approach would apply to second floor windows.

This decision shall become effective 14 days from the date of mailing below. Parties with standing may appeal this decision within that 14 -day appeal period. The appeal fee is $\$ 400$ and must be accompanied by a signed application form and the specific grounds for appeal. The Planning Commission hears appeals by the HRB.


ASSOCIATE PLANNER FOR THE HISTORIC REVIEW BOARD

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# City of West Linn <br> PREAPPLICATION CONFER I SUMMARY NOT <br> September 20, 200 


#### Abstract

The following is a summary of the meeting discussion, provided to you from staff meeting notes. Additional information may be provided to address any "follow-up" items identified during the meeting. These comments are PRELIMINARY in nature. Please contact the Planning Department with any questions regarding approval criteria, submittal requirements or any other planning-related items. Please note disclaimer statement below.


## Project Details

To construct two retail/office buildings on Willamette Falls Drive in the Willamette Overlay Zone. The buildings would be two stories high. The buildings are designed to meet the zones architectural standards. Building one, west of the existing Handris Building, would comprise 13,816 sq. ft. while building two, at the northeast corner of $12^{\text {th }} \mathrm{St}$. and Willamette Falls Drive, would comprise 18,916 sq. ft.

Site analysis shows a 28 inch poplar, a cedar clump (6@14inches), and a row of cedar along the rear and east edge of tax lot 600. Mike Perkins visited the site briefly and found that these trees, to the exclusion of others, were significant. He also noted that the 30 -inch Douglas fir on the lot to the north needs to have its roots protected. Mr. Handris stated that saving the poplar could mean that building two would be scrapped or at least require a major redesign. There were no significant trees on the east parcel. Mike Perkins stated that he may take a more comprehensive look at the poplar and other trees.

On the subject of engineering, Gordon Munro provided a list of issues that are attached as exhibit A. A traffic study is needed along with a traffic flow and distribution analysis.

Tom Larsen, representing the building department, questioned the overhang being in the public right of way. He would check with the building codes on that issue. Staff will send that response at a later date.

Peter Sir, representing the planning department, stated that he had reviewed the plans with Charles Awalt the day before. Overall, the response to the design was very positive. Unlike most of the other buildings in the district, particularly on the north side of the street, the buildings were broken up horizontally into discrete elements. The awnings will provide cover for pedestrians and shield office workers from sun in the summer. Rather than have some of the awnings near the top of the building (just below the cornice), they need to be sized and located to protect only the windows on the second floor. Awnings must also extend along the first floor
were the transom windows would typically be. Extending the awnings to the edge of the sidewalk is an excellent idea and meets planning code. All three abreast double hung windows need to be replaced by two abreast double hung windows. The exception would be the one set of windows above the entrance to building 3 which can remain three abreast. The parapet/cornice detail needs to be strengthened. It is too weak looking. The parapet trim should be 2.5-3 feet high. The cornice cap should extend outwards at least 1-1.75 feet and be at least 4-6 inches thick. The "third floor" windows must be eliminated. All material and color boards are needed. A different color than off-white would be appreciated.

## Process

Hold neighborhood meeting per CDC Section 99.038. The site is in the Willamette Neighborhood. Contact person is Julia Simpson, 655-9819. They meet at 7 pm on the third Wednesday. Allow one month to take care of this requirement. Follow the procedures exactly.

Prepare the application and submit to the Planning Department with fees. The City has 30 days to determine if the application is complete or not (most applications are incomplete). The applicant has 180 days to make it complete, although usually it is complete within three months of the original submittal. Once complete, the City has 120 days to exhaust all local review and appeals.
-Staff prepares public notice and schedules the hearing. The first hearing is usually four weeks from the date the application is deemed complete. The decision making body is the Historic Review Board (HRB). The HRB holds hearing and renders a final decision. The decision may be appealed to the City Council.

If appealed, the City Council hearing is $6-8$ weeks from HRB hearing date. Subsequent appeals go to LUBA.

Once approved, the applicant has three years to occupy use and satisfy conditions of approval before approval lapses and is void.

Typical land use applications can take 6-10 months from beginning to end.

DISCLAIMER: This summary discussion covers issues identified to date. It does not imply that these are the only issues. The burden of proof is on the applicant to demonstrate that all approval criteria have been met. These notes do not constitute an endorsement of the proposed application. Staff responses are based on limited material presented at this pre-application meeting. New issues, requirements, etc. could emerge as the application is developed.
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# PREAPPLICATION <br> September 20, 2001, 10:00 am <br> Mark Handris (503 657 1094) <br> 1914 Willamette Falls Drive Commercial Lot Development 

## Streets

- $12^{\text {th }}$ Street has been developed from curb to curb, so no pavement improvements are require.
- An 8 -foot sidewalk is required on the $12^{\text {th }}$ Street frontage to match the rest of the street. There is no existing sidewalk on the east side of $12^{\text {th }}$ Street.
- The telephone junction box is in the way of the sidewalk.
- Willamette Falls Drive street improvements are completed except for sidewalks.
- An 8 -foot sidewalk is required on the Willamette Falls Drive frontage. This is shown in the proposed plan; however, about 5 -feet of the sidewalk is shown outside the right-of-way. This needs to be addressed. There are several options, the main two options are: move the sidewalk into the right-of-way, dedication of land.
- The sidewalk as proposed on Willamette Falls Drive will not match up with the developments to the east (Handris Building \#1).
- It has been proposed that the diagonal parking remain. However, developments on either side have converted the parking to parallel to make room for the sidewalk. Matching the existing sidewalk alignment and parking scheme may be required.
- It appears that the access to parking behind the buildings (all three Handris buildings) will be shared, almost creating an alley. There will need to be access agreements.
- What is the expected increase of traffic on $12^{\text {th }}$ Street due to all three buildings? Depending upon the impact, improvements may be needed at the intersection of $12^{\text {th }}$ Street and Willamette Falls drive.
- Is the traffic expected to go down $8^{\text {th }}$ Street when exiting the back parking?
- Traffic analysis should be done with respect to all three buildings.


## Water

- The water line is already constructed on $12^{\text {th }}$ Street and Willamette Falls Drive. This is in the Willamette pressure zone.
- What is the projected water usage? Depending upon the demand, a larger water meter may be required.
- A separate fire flow line will likely be needed.
- The buildings may need to have sprinklers.
- The Fire Chief will need to be consulted to determine if additional fire hydrants are required.


## Storm Drainage

- The stormwater collection system in the streets is already in place.
- Where is the storm drainage from the building and the parking lot proposed to go?
- Stormwater quality facilities will be required.
- If the impervious area is increased by more than $5,000 \mathrm{sf}$, then detention will be required.


## Sanitary Sewer

- The sanitary sewer collection system is already installed.
- Need to check the size of the existing service to determine if it is sized adequately for the new use.


BGILDING $2_{\text {(PhASE 1) }}$


| From: | Lason Hall |
| :--- | :--- |
| To: | $\frac{\text { Floyd, لohn }}{\text { 1919/1949 Class II Design Review }}$ |
| Subject: | Wednesday, October 4, 2023 10:05:12 AM |
| Date: |  |

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Dear Planning Commission,

I have lived in the Willamette neighborhood for years. We have gone through many changes, some of them positive and some that I view as negative to the overall aesthetic and livability of the neighborhood. My concerns with the project listed above relate to the exceptions requested. Mainly around a rooftop deck, $3^{\text {rd }}$ story, or overall height of the building which are in violation of the existing code. I believe if these exceptions are granted this will negatively affect those living in the neighborhood.

For Aesthetic purposes this would look poorly on the street. The street is currently full of uniform looking structures which add to the overall appeal and draw to the neighborhood. Similar to the historic district directly adjacent these codes are in place to preserve the look and feel of the neighborhood. We all comply with these rules even if there are less expensive or different options we would want to use on our houses. The benefit of violating these codes vs. keeping them in place seems disproportionate value to the owner of the property vs the owners of all the adjacent properties. If this were a neighborhood that had a drastic need for a new business that required a third story, or a rooftop deck the discussion would be different. However, on a per capita, or per square mile basis we have several other properties that can provide similar services with outside space that does not violate the privacy, or general noise issues that come with a roof top deck and third story. Almost every restaurant on our street has outdoor seating available to them where the lights and noise associated with these places have reasonable buffers of a building between the commercial enterprise and the residents.

Before you approve such a building ask yourself how you would feel living next to a development that is requesting a 3 story rooftop deck. Your privacy being invaded. Your views from your property being obstructed. The additional light pollution affecting the neighboring houses. And above all the noise pollution that a structure of this type contains. No matter what the applicant says the property will be used for once constructed it can easy be transitioned to be something all adjacent neighbors would hate. This will diminish property values of anyone that lives next to it a structure of this type, and most likely cause long standing residents in the community to leave.

I humbly request that no matter how powerful the contractor or influential the contractor/owner is applying for this variance/exception be denied and all structures stay withing the current code.

Sincerely your concerned neighbor,

## Jason Hall, CPA, CCIFP

Hoffman, Stewart \& Schmidt, P.C.

Phone: 503-220-5900
Fax: 503-220-8836
jason@hss-cpas.com

3 CenterPointe, Suite 300
Lake Oswego, Oregon 97035-8663
www.hsscpas.com

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| From: | LustMeDee |
| :--- | :--- |
| To: | $\frac{\text { Floyd, John }}{\text { development proposal 1919 and 1949 }}$ |
| Subject: | Wednesday, October 4, 2023 6:06:53 AM |
| Date: |  |

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## To Whom It May Concern

This is our neighborhood, our homes. Don't we all feel at the end of a hard day we can go to our home, our sanctuary and feel rejuvenated to get up the next day and do it all over again. If the project moves forward with exemptions granted, it will negatively impact nearby residences, including my own.

Thank you.

| From: | Karie Oakes |
| :--- | :--- |
| To: | Floyd, John |
| Cc: | Planning Commission (Public) |
| Subject: | DR-23-01, Class II Commercial Building 1919/1949 Willamette Falls DR |
| Date: | Thursday, October 5, 2023 9:24:27 PM |

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Dear Mr. Floyd,
I believe there was a procedural error at the PC hearing on October 4, 2023, for the above mentioned proposed commercial building.

The applicant was asked if he would extend the 120-day clock during the Planning Commission deliberation. The City Attorney advised staff that he was to speak just on the question. Instead of answering directly, the applicant went on to discuss the application for about four minutes. The City Attorney did not intervene to inform the applicant that the public testimony portion of the meeting was closed and that he must answer only the substance of the question. The Planning Commission considered the applicant's testimony and then voted.

My understanding of quasi-judicial procedure is that public testimony must be re-opened to allow equal opportunity for other people to testify. I would appreciate it if you or the City Attorney would clarify the procedure. I did not hear how extensions would be handled in the procedural preamble to the hearing. Since this situation comes up from time to time, perhaps it would benefit everyone if it were included in the preamble.

Thank you.

Sincerely,
Karie Oakes

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From: A Sight for Sport Eyes
To: Floyd,John
Subject: DR-23-01 Testimony
Date: Saturday, September 23, 2023 3:02:20 PM
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Dear Planning Commission:

Please accept my testimony for DR-23-01. I am writing on behalf of myself, not any affiliated group or organization.

As a business owner, we are in desperate need of more commercial space. I am extremely excited about having a potential roof top patio in our area. I think this would be an attraction that not very many local cities have, and that will draw customers from outside the city to our district especially during summer months.

However, as you may know, I am a stickler for code. I understand this is where it can get a bit tricky. Here are a few ways I think the code could be interpreted.

While I understand that it looks like 3 stories from the front, many of the buildings on the street do look like 3 stories because of the Western False fronts. The applicant also referenced this in their submittal with pictures. They are higher pitched, typically in the center, and that can make it look like 3 stories. If I look at the buildings from the side, I can see that some of these buildings have a pitched roof behind this false front. I don't know if there is attic space in there, but presumably, that space could be used as an attic.

I also believe that the building where Rubia salon is may actually be 3 stories if you consider some of the attic offices they have as a "story". I remember walking around that building getting lost when I was handing out flyers for the streetscape design. I kept finding more and more floors to go up into and they appeared when I got inside to be attic type spaces. It has been several years since I've been in that building, but I do recall that it felt like I kept climbing up more than 2 floors.

But what I don't know is if an "attic" is technically a "story" as attic is not defined in the code. Websters defines it as:
" a low story or wall above the main order of the façade in the classical styles" Or "a room or space immediately below the roof of the building".
Thus, it would seem that an attic is a story from this definition. If so, I believe many of the
buildings are that have attics are then 3 stories and in violation therefore of the 2 story limit. Not to say that just because other buildings have it make it alright, but there is that "precedence" where code must have been interpreted to be that an attic (or storage space above the $2^{\text {nd }}$ floor) is not a story for those buildings to be built.

If we look at the code's definition of a "story", it states:
"Story. That portion of a building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling or roof above. If the finished floor level directly above a basement or unused under floor space is more than six feet above grade as defined herein for more than 50 percent of the total perimeter, or is more than 12 feet above grade as defined herein at any point, such basement or unused under floor space shall be considered as a story." (side note for future code updates, you may want to figure in attic space per the above mentioned definition into what a story is)

The key here is the "ceiling or roof". The topmost story ends at the roof. Again, we have no "roof" definition so we go to Websters:
"Roof: The cover of a building"

Presumably there will be an entire roof that covers that topmost floor, and the patio is on top of that "roof". If so, the then it is not a story per code definition of a "story". There is no ceiling or roof closing off the entire patioed area to make it a "story". The part of the proposed plan that becomes a gray area is the storage areas as those have what looks to be "roofs". If there were no proposed storage areas, then it would be pretty cut and dry to me that this is not a story. However, once you start adding structures with a "roof", then it becomes more confusing.

The definition of a roof is the "cover of a building" but what is a "building". Per the code definition, a building is:
"Building: Any structure used or intended for supporting or sheltering any use or occupancy"
"any use" being the key words here. These "structures" on top of the roof have a use. Does this make them then part of the building underneath? Or are they more like an accessory structure or "shed" on top of the patio. If they were not "built in" and were just portable sheds on top of the roof, again it would be clear that they are not part of the building. But does the pure fact that these are permanent structures with "roofs" on top of the building then make them a story? Or is it simply a two story building with an accessory structure on top of the building?

If we look at the definition of an "accessory structure", there is some discretion here. The code says
"Accessory Structure: a subordinate structure with a maximum area of 1500 square feet... where the use is clearly incidental and associated with the principal use. Examples of accessory structures includes but is not limited to".....
4. Sheds
10. Appurtenances such as mailboxes and heat pumps; and
11. Similar structures as determined by the Planning Director."

These storage areas are clearly "incidental and associated with a principal use". Thus, they should be considered "accessory structures". I don't know the square footage of these storage units. It was unclear from the drawings. If over 1500 square feet each, then maybe a condition needs to be made so that they are under the 1500 square feet. However, under definition and I think these storage areas would qualify either as \#4 Shed, or \#11 definition of "similar structures as determined by the planning director". There is also nothing that says that an accessory structure can't be located on top of a building. \#10 references a heat pump, and heat pumps are sometimes located on the roof of a buildings. Thus, I think it is fair to assume that these storge areas (sheds) are accessory structures on top of the building and not a "story" under the code definition of a "story".

To look at it another way, what would be the difference if someone came in with an application to convert the roof of an existing WFD building to patio space by adding a railing or façade to the building, and building in some storage areas? Would you approve that under this code? If so, then I feel like this application is no different and does meet the two story requirements.

I will also say that the other testimony received (at least in the HRB hearing) were from neighbors upset that any structure was going to ruin their view and/or natural light, and potential noise and traffic. These are not approval criteria in the code. Regardless of whether it is 2 or 3 stories, 2 stories is enough to block their view and sunlight. The extra few feet of façade enclosing the patio area is not going to change that. As to noise and traffic, one of the downsides to living adjacent to a commercial district is that you trade off walkability for potential noise and traffic. The tenants of the already existing building could change at any time to a restaurant with outdoor seating causing similar noise and traffic concerns. Having a new building doesn't guarantee that this will be a problem. Parking issues are addressed with applicant building underground parking spaces. They are doing this presumably to reduce parking demands on the neighborhood. I appreciate that the applicants are doing this when is not required and adds costs to construction.

Again having an option for outdoor space whether restaurant, hotel, or just a rooftop garden
would be great attraction for the area, bringing more business to the Willamette area. I understand that this is something new that the commission has never encountered for the historic overlay district. However, I think between there being other buildings on the street that could be considered to be more than two stories, and that the code definition of a "story" ends at the roofline, I think it is justifiable to approve this application. It is reasonable to conclude that this is indeed a roof top patio with accessory structures, and not "story" per code definition, thus meeting the code.

One last comment, and this is more for the applicant. I would be one of the people interested in saving some of the landscaping. I can go and dig out plants to transplant elsewhere if given the opportunity.

Thanks as always for your service.

Shannen Knight
West Linn resident and Business Owner

A Sight for Sport Eyes
1553 11 ${ }^{\text {th }}$ St.
West Linn, OR 97068
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From: A Sight for Sport Eyes
To: Floyd, John
Subject: DR-23-01 Testimony for HRB
Date: Thursday, October 26, 2023 11:03:11 AM
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Dear HRB:

Please accept my testimony for DR-23-01. I am writing on behalf of myself, not any affiliated group or organization.

Since you last met on this topic, I have done a bit more research into the code.

If we look at the code's definition of a "story", it states:
"Story. That portion of a building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling or roof above..."

The key here is the "ceiling or roof". The topmost story ends at the roof. Again, we have no "roof" definition so we go to Websters:
"Roof: The cover of a building"

Presumably there will be an entire roof that covers that topmost floor, and the patio is on top of that "roof". If so, then it is not a story per code definition of a "story". There is no "ceiling" or "roof" closing off the entire patioed area to make it a "story".

The part of the proposed plan that becomes a gray area is the storage areas as those have what looks to be "roofs". If there were no proposed storage areas, then it would be pretty cut and dry to me that this is not a story. But does the simple fact that there are storage areas on top of the roof make it a story? I don't think so. I believe they should be considered an "accessory structure" (or shed). If they were just portable sheds on top of the roof, again it would be clear that they are not part of the building and not a story. But does the pure fact that these are semi-permanent structures with "roofs" on top of the building then make them a story? Or is it simply a two story building with an accessory structure on top of the building?

If we look at the definition of an "accessory structure", there is some discretion here. The
"Accessory Structure: a subordinate structure with a maximum area of 1500 square feet... where the use is clearly incidental and associated with the principal use. Examples of accessory structures includes but is not limited to".....
4. Sheds
10. Appurtenances such as mailboxes and heat pumps; and
11. Similar structures as determined by the Planning Director."

These storage areas are clearly "incidental and associated with a principal use". I don't know the square footage of these storage units. It was unclear from the drawings. If over 1500 square feet each, then maybe a condition needs to be made so that they are under the 1500 square feet. However, under definition and I think these storage areas would qualify either as \#4 Shed, or \#11 definition of "similar structures as determined by the planning director". There is also nothing that says that an accessory structure can't be located on top of a building. \#10 references a heat pump, and heat pumps are sometimes located on the roof of a buildings. Thus, I think it is fair to assume that these storge areas (sheds) are accessory structures on top of the building and not a "story" under the code definition of a "story".

To look at it another way, what if the applicant was proposing a rooftop garden instead of a patio? If it was a garden with "greenhouses" which are also accessory structures with roofs, would that be allowed? I'm sure if it was a rooftop garden, there would be less pushback from the neighbors. But does the simple fact that it will have patio furniture instead of plants make it a story?

Another way to also look at it is how integral are these storage areas to the structure itself? Let's say lighting struck the roof of the storage shed. If it was a "story" (or roof of the building) the building department would require the roof to be properly replaced before the whole entire structure could be inhabitable as you can't have people going into a building with no roof. That would be a safety hazard. But since these storage areas are incidental and independent of the "roof" of the building, the building could still be inhabited underneath without any risk of injury to those inside the building. This tells me that it is not a story as the "roof" of the building underneath the patio is what is protecting the building itself. If the roof of the building is indeed under the patio, then it is not a story.

Also, what would be the difference if someone came in with an application to convert the roof of an existing WFD building to patio space by adding a railing or façade to the building, and building in some storage areas? Would you approve that under this code? If so, then I feel like this application is no different and does meet the two story requirements.

Lastly, many of the buildings on the street do look like 3 stories because of the Western False fronts. The applicant also referenced this in their submittal with pictures. They are higher
pitched, typically in the center, and that can make it look like 3 stories. I also believe that the building where Rubia salon is may actually be 3 stories if you consider some of the attic offices they have as a "story".

If attic spaces are considered a "story" (which it seems like they would be since they are under the "roof") then I believe many of the buildings are that have attics are then 3 stories and in violation therefore of the 2 story limit. Not to say that just because other buildings have it make it alright, but there is that "precedence" where code must have been interpreted to be that an attic (or storage space above the $2^{\text {nd }}$ floor) is not a story for those buildings to be built (or for those attic spaces to be converted into living space).

As mentioned in my previous testimony, we are in need of more commercial spaces, and this has the potential bring new customers. I think between there being other buildings on the street that could be considered to be more than two stories, and that the code definition of a "story" ends at the roofline, it is reasonable to conclude that this is indeed a roof top patio with accessory structures, and not "story" per code definition, thus meeting the code.

Thanks as always for your service.

Shannen Knight
West Linn resident and Business Owner

| From: | Brenda Bless Russell |
| :--- | :--- |
| To: | Floyd, John |
| Subject: | Building 3 stories high?? |
| Date: | Thursday, November 9, 2023 3:14:43 PM |

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Hello,
I was just informed that there has been a developer here in Willamette asking for an exception on a new construction of having 3 stories, when the limit is 2 .
I object to this as it will open a door for other builders to do the same.
Willamettes' growth is out of hand. We need to remember this is a historical town, not to be abused by new urban growth. Please consider enforcing the Community Development Code so resident needs are met. Taller buildings are not welcome.
Sincerely,
Brenda Bless

| From: | Robert Beegle |
| :--- | :--- |
| To: | Floyd, John |
| Subject: | Historic Review Board Exception |
| Date: | Sunday, November 12, 2023 12:50:49 PM |

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John -
We believe the Historic Review Board should enforce the existing Community Development Code and not grant any exceptions on building height. We lived in Coupeville, Whidbey Island, Washington for over thirty years. Their historic district review board was strict, but they maintained the look and feel of that old town and it proved to be an asset for both the community and existing merchants.

1. I do not believe that a new three-story building with a rooftop deck would be a good fit for the existing character of this "Old Town". Also, if the building sneaks under the existing code it will weaken future regulations and open a wide door to further exceptions granted under the old - "hey you already approved one exception, so why can't we do something similar" rule.
2. Traffic and parking on Willamette Falls Drive, 11th Street, 12th Street, Knapps Alley, Sixth Avenue and Fifth Avenue will be adversely affected by the new two story building, even without the third story being added, but it is obviously something we can live with. Why though make traffic and parking even worse that it already is, which is what would happen if a third story and rooftop patio is added. Parking is already scarce for residents of 5th and 6th Avenues. On Fridays and Saturdays we have to sometimes have to park a block or two away from our house - and we often find ourselves timing our returns based on best guess on finding a spot.

Many transient, non-resident cars now use residential side streets, especially Fifth and Sixth Avenues, to bypass congestion on Willamette Falls Drive. Earlier this week it took us a half hour to drive from SW Bosky Dell Lane \& Borland Road to our house on Sixth Avenue. We had to follow a "train" of other cars who were obviously just passing through. Many of these drivers do not pay attention to statutory residential speed limits and rolling stops at stop signs are common. This is still a family neighborhood and there are always walkers, kids, dogs on the streets.

Three days ago one Willamette Falls driver did stop at the 14th Street crosswalk, but apparently never looked around as my wife and I crossed. He started moving again when we were only three feet from the side of his car and close enough to hear me shout even with his window shut and radio on. More traffic, more people, more congestion - this problem will obviously continue to grow. These cars passing through will continue regardless of whether a third story is added or not, but does it make sense to add even more?

We enjoy living in West Linn and hope that the Historic Review Board and planning department takes note of our opinion.

Bob and Lorraine Beegle
1850 6th Avenue
West Linn

| From: | Karin O"Brien |
| :--- | :--- |
| To: | Floyd, John |
| Subject: | 3 story business |
| Date: | Monday, November 13, 2023 10:47:30 PM |

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Hi ,
I live on 11th St. across from the new "Willamette" Bldg. To say I oppose the 3 story building that is being proposed, would be an understatement!! The owner of the Willamette building already lights the building up so extensively, one can probably see it from space! I've had to put blinds up in my bedroom window just to make it dark enough to sleep. God forbid they build a 3rd story on the next one; because, that would light up a two block radius! Thank you for taking time to read my opinion.

Karin Pappin-O’Brien
1547 11th St.
West Linn
503.422.9373
"Once man has mastered the winds, the waves, and gravity, he shall harness for God the energy of love; and then, for the second time in the history of the world....Man will have discovered fire."
----Teihard de Chardin

To West Linn Historic Review Board
From Ian Brown (1968 6th Ave)
Audra Brown (1968 6th Ave)
Re DR 23-01 (1919/1949 Willamette Falls Drive), 11/14/23 meeting

Thank you for providing the opportunity for public comment regarding the proposed development of 1919 and 1949 Willamette Falls Drive. The development site is part of the Willamette Falls Commercial Design District. Our home is immediately to the south of the development site, in an area zoned R-5. The proposal has many good qualities, and we would not be objecting if the application matched the neighboring building at 1969 Willamette Falls Drive. However, we have specific concerns and, at this stage, we object to the request for a design exception to exceed the two-story height limitation.

Throughout the history of this application, the applicant has inaccurately described its proposal, the applicable criteria, or the prior proceedings.

- At the September 14, 2022, Willamette Neighborhood Association meeting, the applicant represented that the zoning allowed a two-and-a-half story building, and the project met the zoning criteria because the proposed third story was less than half the area of the second story. The zoning allows only two stories.
- At the June 13, 2023, Historic Review Board meeting, the applicant asserted that the second story included the story above the second story. The story above the second story is the third story.
- At the October 4, 2023, Planning Commission meeting, the applicant cited five buildings as examples to support its request for a design exception under CDC 58.090.A. None of those buildings are similar to the requested design exception.
- In its submission for this November 14, 2023, Historic Review Board meeting, the applicant asserts that the Planning Commission had determined that the proposed rooftop deck is "allowed." The Planning Commission did not address objections to the deck, but instead simply remanded to the Historic Review Board for the sole purpose of evaluating the requested exception to the two-story limitation of CDC 58.080.C.3.

The applicant requests an exception under CDC 58.090.A, which allows that an exception "may" be granted if a design proposal proposes an alternative to the standard and "The applicant can demonstrate by review of historical records or photographs that the alternative is correct and appropriate to architecture in the region, and especially West Linn, in 1880 - 1915." The phrasing establishes that an exception is not allowed if the applicant does not meet the criteria, but the Historic Review Board has discretion to either grant or not grant the exception if the applicant meets the criteria.

After the Historic Review Board first considered the application, the applicant modified its proposal for a third story. The proposed third story is now split into a center section and a west section, with an outdoor deck in between. As seen on the elevation drawings, the west section of the third story is extremely prominent. (Pages 35-37). ${ }^{1}$ The third-story-level wall on the north side of the building, facing Willamette Falls Drive, runs approximately $25{ }^{\prime} .^{2}$ It has three large sets of windows running the entire length. On the west side of the building, facing 12th Street, the third-story wall runs $100^{\prime}$, the entire length of the building. This side has a segment that matches the north side, with three large sets of windows, a longer segment sided with fiber cement panels, and a shorter segment composed of brick. The brick segment shows a window between the second and third story. On the south side of the building, facing Knapp's Alley, the third story wall is approximately $25^{\prime}$ of featureless brick topped with a plain wall. Thus, the design creates the unmistakable appearance of a rectangular third-story that is approximately $25^{\prime}$ by $100^{\prime}$.

The applicant requests the exception to allow for storage, access to a rooftop deck, and exiting from the outdoor patio. These are all things that the applicant could achieve with a two-story building, if the applicant were so inclined. They would simply require trade-offs that the applicant has not been willing to make.

The applicant's assertion that the planning commission deemed the proposed rooftop deck to be "allowed," and so third story access and exits for the deck are "required," is not accurate. The applicant's position is that the rooftop deck is allowed because the outdoor rooftop area is not, by itself, a third story. Our position is that the third story is not allowed. If that prohibition, which is an objective standard that all builders in the Willamette Falls Commercial Design District must abide by, prevents the access and exits for a rooftop deck above the second story, it simply prevents a rooftop deck above the second story. If a rooftop deck requires a structural story at its level, then a rooftop deck above the first story would be permissible, assuming that all other CDC requirements were met. ${ }^{3}$ Including such a rooftop deck would, however, involve a choice to forgo enclosed commercial space. Such trade-offs are inherent in any development that is subject to dimensional restrictions such as a height limitation. The applicant has chosen to enclose the entire second story, which is an entirely reasonable commercial choice. But the implication that the applicant's choice to enclose a second story

[^14]entitles it to a partial third story, simply because it would like to also have an open deck above the second story, is at odds with the CDC's requirement that an applicant make the trade-offs necessary to keep the building within two stories.

Likewise, the applicant's statements regarding on-site storage does not lead to the conclusion that a third story should be allowed. The applicant contends that on-site storage is a green alternative. The applicant could incorporate storage space within an allowed two-story building, but it has chosen not to do so. We do not dispute the value of storage, and we encourage the applicant to include all necessary storage within a CDC-complaint design. Increasing the amount of on-site storage, however, requires trade-offs. By excluding storage from the allowed two stories, the applicant has made a choice. If the storage is required, as the applicant asserts, it can be moved to the allowed second story. If it is not required, the applicant may choose to omit it. Again, it is a choice for the applicant to make based on the requirements and goals that the applicant sees.

As the applicant notes, it built the 1969 Willamette Falls Drive structure, and the current application has been presented as a complement to that structure. The applicant has presented that structure, which is a two-story building, as a success. We agree. The applicant was able to make whatever trade-offs were necessary to allow 1969 Willamette Falls Drive to meet the height limitations of the CDC. We would drop our objections if the applicant's proposal matched that existing structure.

In any event, the application is not consistent with an exception. CDC 58.090 first requires that an alternative standard be proposed. The applicant's "proposed design exception" does not articulate a standard that is consistent with the application. Moreover, CDC 58.090.A requires that a review of historical records or photographs demonstrates that the alternative is correct and appropriate to the architecture in the region, and especially West Linn, in the 1880 to 1915 era. ${ }^{4}$ The applicant cites five buildings in the Willamette Falls Commercial Design District: 1672, 1849, 1880, 1914, and 1980 Willamette Falls Drive (Pages 25, 33). Four of these five buildings were approved in the 1994 to 2007 era, rather than the relevant 1880 to 1915 era, and none of them even include third-story spaces that are readily observable from the street. The applicant's proposal, which includes an extremely prominent third story, is not similar to any of the cited examples.

[^15]1849 Willamette Falls Drive is a modest example of an older local building with third-story space hidden behind a western false front. ${ }^{5}$ The third-story space is in a conventional "half-story" configuration, making use of the space under a gable roof. The false front has the appearance of a tall parapet rising from the second story. It has the same lap siding material, painted in the same color scheme, as the first and second story. It has no windows. It runs only along the side of the building that faces Willamette Falls Drive and joins no right angles. It steps down as the distance from the gable ridge line increases and plainly could not be the wall of a full third story. Because the false front faces only only the street side of the building, a person viewing it at an angle off of center can easily see empty space behind it, creating the impression that there is no third story structure at all. The overall effect is to render the third story structure very difficult to identify from Willamette Falls Drive, 12th Street, or 13th Street.


[^16]The applicant's third-story structure is completely different. Rather than a street-facing false front that steps down with distance from a ridgeline, it has four straight walls joined by at right angles, creating the visually unambiguous appearance of a $25^{\prime}$ by $100^{\prime}$ box. Rather than using a half-story configuration with a sloping roof to minimize visibility, it has a flat roof to maximize space. Rather than being set back from the streets on the sides to minimize visibility, it is set at the edge of the second story on all three sides that are visible to the public. Rather than eliminating windows altogether from the street-facing side, it displays large sets of windows on the most prominent corner of the building, windows that clearly correspond to the second-story windows below. Unlike the third-story structure of 1849 Willamette Falls Drive, which is well-hidden from three sides, the applicant's third-story structure is impossible to miss from the north, west, or south.

The comparison with 1849 Willamette Falls Drive does not support the application of criterion A. Rather, it shows that the applicant's proposal is not correct for the period architecture in the area.

The next-oldest building cited by the applicant, 1672 Willamette Falls Drive, is far out of the relevant time period. As the relevant Historic Review Board decision (DR-94-07) shows, the building is a 1990s structure that began the application process before the codification of the Willamette Falls Drive overlay zone. However, a comparison with 1672 Willamette Falls Drive shows that the present application is inconsistent with the design criteria.


The Historic Review Board recognized that the proposal for a third-story structure required a variance. In granting the variance, the Historic Review Board reasoned that the "extra half story" would be permissible because it would "not be seen" from Willamette Falls Drive. As the photograph shows, the third story structure is mostly hidden from Willamette Falls Drive behind a western false front with no windows. The third story is a gable roof, to minimize its visual impact, and it is set far from 14th Street and Dollar Street. While the structure can be seen from some angles, as the applicant's photographs show, the design was largely successful in hiding the structure from casual observation (as was the intent of the approval).

The building at 1672 Willamette Falls Drive was built approximately 80 years outside of the relevant time period, so it is not a sufficient example to review to support criterion A. It is an interesting example of how the Historic Review Board might evaluate a proposal for third-story space. As an example, however, it illustrates why the applicant's request for an exception should be denied.

As the applicant's 12th Street elevation depictions show, the third story defines the scale of the west side of the building. (Page 36). The applicant has outlined the portion of the west wall of the building that is the wall of the storage room (it's not "concealed by the parapet," it's a third-story wall). The entire 100 ' length of the wall emphasizes the three-story scale of the building. As the "section looking south" image (Page 38) shows, a person to the west of the structure would have to avert their gaze from the building altogether and look to the sky to miss the third story. As the "section looking east" (Page 38) shows, a person to the south of the structure and a person to the north of the structure would, likewise, have to gaze skyward, away from the building, to miss the third story. Additionally, while not depicted in the applicant's submission a person standing to the northeast of the structure on Willamette Falls Drive would see the northeast corner and the north and east walls of the third story, and a person standing to the southeast of the structure on Knapp's Alley would see the southeast corner and the south and east walls of the third story. None of these angles hint at a false front with vacant space behind. All of these views reveal a large, solid structure.

Additionally, the "section looking east" image overstates the extent to which the viewing angles would obscure any third-story features that are set back from the south side of the building. The image reduces the scale of the houses to the south. The following are pictures of 1969 Willamette Falls Drive, a building almost identical in scale to the first and second stories of the applicant's proposal, taken from our second story. The pictures show that the residences to the south would have a much better view of whatever is above the second story than the applicant's submission depicts.


The applicant's proposal has a box-shaped configuration set on three edges of the building. It has prominent vertical walls on all sides and a grand set of windows anchoring the most prominent corner. It is not comparable to the configuration of 1672 Willamette Falls Drive, which has a false front with no windows hiding a gabled half-story set far from the side streets.

It is incompatible with the rationale for the exception granted for 1672 Willamette Falls Drive, which was based on the third-story structure being difficult to see. Based on this example, even assuming that the Historic Review Board would grant the same exception if given the chance, it is difficult to imagine the same Historic Review Board approving an exception for the present application.

The next three examples share certain design characteristics. They are very new, with application numbers in the 2000s era. They were built far outside of the reference era and, therefore, the applicant's reference to these buildings is not responsive to the exception criteria. In addition, the three buildings (none of which include third-story space beyond HVAC housing, nor any design elements suggesting third-story space) ${ }^{6}$ are very different from the applicant's proposal.

The Historic Review Board approval of 1880 Willamette Falls Drive (DR-00-28), a recent building, did not approve an exception for a third story or indicate any awareness of any third-story space. ${ }^{7}$ It did require that any HVAC on the roof be screened and mitigated.

[^17]

The 1880 Willamette Falls Drive building has a small rooftop structure, as seen in the overhead photograph in the applicant's submittal. ${ }^{8}$ (Page 33). The rooftop structure is entirely tucked behind the false front at the middle of the building, as far away from the sides of the building as possible. There is no structure behind the other false fronts, and there is no window in the middle false front suggesting the presence of any structure above the second story.

The applicant's proposal would be considerably taller than the 1880 Willamette Falls Drive building, which sits diagonally across the same intersection. The new building's windows would proclaim its design as a three-story building, whereas 1880 Willamette Falls is built without a hint of the appearance of a third story. These two structures are not comparable.

The design of 1914 Willamette Falls Drive, another recent building located at the same intersection as 1880 Willamette Falls Drive and the applicant's proposal, shows attempts at a similar effect. The rooftop structures are small, with gable roofs, and they have the appearance of mechanical screening. There is no appearance of usable third-story space. The design review process (DR-06-46) shows that even the appearance of a third story was to be avoided. The pre-application conference resulted in the elimination of "third floor" windows, and the Historic Review Board then required the elimination of "the circles/cutouts at the top of the false gable end."

[^18]

Again, the applicant's proposal, with a prominent third story, would stand in stark contrast to 1914 Willamette Falls Drive, which was built to avoid any features suggestive of a third story.

1980 Willamette Falls Drive, another relatively recent building on the same block as 1914 Willamette Falls Drive, also has the appearance of a two-story building with some structure to house rooftop mechanical equipment. The Historic Review Board (DR-01-43) required any HVAC on the roof to be visually screened on all sides. It also required two of the three vents, which were cut into the western false fronts, to be eliminated. As a comparison of the overhead and front views shows, the remaining vent is on the false front that is in the middle of the building, not attached to a rooftop structure. There was no exception granted for a third story. As with the other very new buildings, it has rooftop structures that have gable roofs, are screened from the street by western false fronts, and have no windows to suggest the presence of a third story.


Again, the applicant's proposal would be an obvious three-story building sitting across the street from 1980 Willamette Falls Drive, a two-story building designed to eliminate the hint of a third story.

Taken as a group, these three most recent examples (1880, 1914, and 1980 Willamette Falls Drive) show a pattern of allowing structures above the second story only to house mechanical equipment, and only when designed to eliminate even the appearance of a third story. The applicant's proposal, by contrast, involves an obvious third story along the entire west end of the building.

Most of the buildings cited by the applicant are far outside the reference era and are not responsive to the exception criteria. Most of the buildings do not include any space above the second story beyond mechanical screening. What they all show, however, is that the western false front design is used to conceal structures over the second story. It does not have a window to suggest interior space. It does not join another wall at a right angle to suggest an enclosed structure. It does not run the entire length of a building (as the 100'-long wall overlooking 12th St would), but instead steps down to indicate the absence of a third story. The criteria for an exception are not satisfied.

Moreover, the height of buildings matters because of its impact on neighbors. Height limitations are how we balance neighbors' access to views and sunlight, and the applicant chose to build in a zone with a two-story height limitation. The applicant has, in the past, suggested that buildings on the north side of Knapp's Alley have no impact on the light received by homes
on the south side of Knapp's Alley. As this picture from our back yard shows, we get a lot of sun from the direction of the proposed building.


The applicant is not asking to build as allowed by the zoning. The applicant is asking for an exception to exceed the limitations imposed by the zoning, limitations that have generally applied to all development in the area for decades and which continue to apply to all other development in the area. When an application asks for such unique and favorable treatment, it is appropriate to consider what that treatment means to the people around the project.

Finally, the applicant's citation of such non-responsive examples as support for its proposal suggests that Chapter 58's height limitation would ultimately become meaningless if its exception request were granted. If the Historic Review Board adopts the reasoning that two-story, 21st-century buildings show the appropriateness of a partial third story in this case, there really would be no rationale to prevent the addition of even larger third stories to other buildings in the Willamette Falls Commercial Design District.

We recognize that this site will be developed. The current proposal has a lot of positive attributes. But it exceeds the maximum height limitation. The height limit has applied to every other building in the Willamette Falls Commercial Design District that began the application
process after the implementation of the standards. This application proposes a radical deviation from the existing character of the District. No exception should be given.

| From: | Nikki Hydes |
| :--- | :--- |
| To: | Floyd, John |
| Subject: | Request to Deny Exception of DR-23-01 |
| Date: | Tuesday, November 14, 2023 11:25:01 AM |
| Attachments: | DR-23-01 Request to deny exception (11.14.23).pdf |

You don't often get email from nikkihydes@gmail.com. Learn why this is important

CAUTION: This email originated from an External source. Do not click links, open attachments, or follow instructions from this sender unless you recognize the sender and know the content is safe. If you are unsure, please contact the Help Desk immediately for further assistance.

Tuesday, November 14, 2023

Dear Mr. Floyd,

I am writing to you about the new building proposed at 1919/1949 Willamette Falls Drive. I live at 1847 6th Ave, West Linn, OR 97068 and would be directly impacted by this project. I am in strong opposition to the Historic Review Board making an exception to allow this proposed building to be three stories tall. The added noise and light pollution diminish the quality of life of the neighboring homes, and further reduces privacy and parking for residences. Our little community simply cannot handle the added tenants and visitors it would bring to our already overcrowded streets. While 33 underground parking spaces sounds like it would assist with the overcrowding, the access to parking on $11^{\text {th }}$ Street is inadequate. First, the lack of signage to direct traffic to the parking garage is minimal, if non-existent. Most visitors, and many residents, have no idea of existence, forcing visitors to park in front of the homes on $6^{\text {th }}$ Ave which displaces residents. Secondly, the condition of our sidewalks on $6^{\text {th }}$ Ave between $12^{\text {th }}$ and $16^{\text {th }}$ is so poor, combined with the narrowness of our street, most visitors park on top of it, forcing pedestrians and the children walking to Willamette Primary, to walk down the middle of the street. Thirdly, there is a gate at the entrance of that parking garage, which is typically closed, prohibiting all access.

The Community Development Code exists for a reason and should be protected and observed. Furthermore, it is the Historic Review Board's responsibility to do so. As a resident of $6^{\text {th }}$ Avenue, I respectfully request that you deny the request for a third story, require a second access point to the 33 underground parking spaces which must remain open during business hours, and add parking signage to inform visitors and tenants of its availability.

Sincerely,

Nicolette Hydes
$18476^{\text {th }}$ Ave
West Linn, OR 97068
503-502-1691
NikkiHydes@gmail.com

## EXHIBIT PC-4: COMPLETENESS LETTER



May 15, 2023

Scot Sutton
SG Architecture, LLC
10940 SW Barnes Road \#364
Portland, OR 97225

SUBJECT: DR-23-01 Application to construct a new commercial structure at 1919 \& 1949 Willamette Falls Drive

Dear Mr. Sutton,

Your revised application received on April 23 and supplemented with additional materials on May 2, 2023 has been deemed complete as of May 2, 2023. The city has 120 days to exhaust all local review; that period ends August 30, 2023.

Please be aware that determination of a complete application does not guarantee a recommendation of approval from staff for your proposal as submitted - it signals that staff believes you have provided the necessary information for the Planning Director to render a decision on your proposal.

A 20-day public notice will be prepared and mailed for public hearings before the West Linn Historic Review Board and Planning Commission.

Please contact me at 503-742-6058, or by email at jfloyd@westlinnoregon.gov if you have any questions or comments.


## EXHIBIT PC-5: VICINITY MAPS



Notes
This map was automatically generated using Geocortex Essentials.


EXHIBIT PC-6: AFFIDAVIT AND NOTICE PACKET

## CITY OF WEST LINN PLANNING COMMISSION <br> PUBLIC HEARING NOTICE <br> FILE NO. DR-23-01

The West Linn Planning Commission will hold a hybrid public hearing on Wednesday, February 21, 2024 at 6:30 pm in the Council Chambers of City Hall, 22500 Salamo Road, West Linn, to consider a request for a Class II Design Review at 1919 \& 1949 Willamette Falls Drive.

The applicant is requesting approval for the demolition of two existing structures, to be replaced with a twostory commercial building with underground parking and a rooftop deck. The underground parking will utilize the existing $11^{\text {th }}$ Street entrance from the adjoining building (1969/1993 Willamette Falls Drive). Included with the application is a request for design exceptions to permit the use of brick masonry and fiber cement instead of wood siding. The application was reviewed by the Historic Review Board (HRB) on June 13 and November 14, 2023, whose recommendation will be considered by the Planning Commission.

You have been notified of this proposal because County records indicate that you own property within 500 feet of the property (Clackamas County Assessor's Map 31E02BA04300/4400), or as otherwise required by CDC Chapter 99.080.

The Planning Commission will make its decision based on applicable criteria found in Chapters 19, 41, 46, 55, 58 , and 99 of the Community Development Code (CDC). The CDC approval criteria are available for review on the City website http://www.westlinnoregon.gov/cdcor at City Hall and the City Library.

The application is posted on the City's website, https://westlinnoregon.gov/planning/19191949-willamette-falls-drive-class-ii-design-review-new-commercial-building. The application, all documents or evidence relied upon by the applicant, and applicable criteria are available for inspection at City Hall at no cost. Copies may be obtained at a reasonable cost. The staff report will be posted on the website and available for inspection at no cost, or copies may be obtained at a reasonable cost, at least ten days before the hearing.

The hearing will be conducted according to CDC Section 99.170 in a hybrid format with some members, staff, presenters, and public attending remotely via Webex and others attending in-person at City Hall. The public can watch the meeting online at https://westlinnoregon.gov/meetings.

Anyone wishing to present written testimony for consideration should submit all materials before 12:00 pm (noon) on the meeting day to jfloyd@westlinnoregon.gov or mail them to City Hall. Those who wish to participate remotely should complete the speaker form at https://westlinnoregon.gov/citycouncil/meeting-request-speak-signup before 4:00 pm on the meeting day to receive an invitation to join the meeting. Virtual participants can log in through a computer, mobile device, or call-in.

It is important to submit all testimony in response to this notice. All comments submitted for consideration of this application should relate specifically to the applicable criteria. Failure to raise an issue in a hearing, in person, or by letter, or failure to provide sufficient specificity to afford the decision-maker an opportunity to respond to the issue, precludes appeal to the Oregon Land Use Board of Appeals (LUBA) based on that issue (CDC Section 99.090).

The final decision will be posted on the website and available at City Hall. Persons with party status may appeal the decision by submitting an appeal application to the Planning Department within 14 days of mailing the final decision notice pursuant to CDC 99.240.

For additional information, please contact John Floyd Associate Planner, City Hall, 22500 Salamo Rd., West Linn, OR 97068, 503-742-6058, jfloyd@westlinnoregon.gov.

Scan this QR Code to go to Project Web Page.


# NOTICE OF UPCOMING <br> HISTORIC REVIEW BOARD RECOMMENDATION AND PLANNING COMMISSION DECISION 

PROJECT \# DR-23-01
MAIL: 05/18/23 \& 9/14/23 \& 10/25/23 \& 2/1/24
TIDINGS: 05/31/23 \& 9/20/23 \& 11/1/23 \& 2/7/24

## CITIZEN CONTACT INFORMATION

To lessen the bulk of agenda packets and land use application notice, and to address the concerns of some City residents about testimony contact information and online application packets containing their names and addresses as a reflection of the mailing notice area, this sheet substitutes for the photocopy of the testimony forms and/or mailing labels. A copy is available upon request.

## AFFIDAVIT OF NOTICE

DR-23-01 CLASS 2 DECISION REVIEW DECISION

We, the undersigned, certify that, in the interest of the party initiating a proposed land use, the following took place on the dates indicated below:

## PROJECT

File No.: DR-23-01
Address: 1919/1949 Willamette Falls Drive
Applicant's Name: ICON
Scheduled Hearing Dates: Historic Review Board Hearing - 6/13/23
Planning Commission Hearing - 10/04/23
Historic Review Board Remand Hearing - 11/14/23

### 06.13.23 HRB HEARING

MAILED NOTICE
Notice of Upcoming of Historic Review Board Hearing was mailed at least 20 days before the hearing date, per Section 99.080 of the Community Development Code to:

| ICON, applicant | $5 / 18 / 23$ | Lynn Schroder |
| :--- | :--- | :--- |
| SG Architecture, applicant representative | $5 / 18 / 23$ | Lynn Schroder |
| WLWV SD | $5 / 18 / 23$ | Lynn Schroder |
| ODOT | $5 / 18 / 23$ | Lynn Schroder |
| Property owners within 500ft of the site perimeter | $5 / 18 / 23$ | Lynn Schroder |
| Willamette Neighborhood Association | $5 / 18 / 23$ | Lynn Schroder |

EMAILED NOTICE
Notice of Upcoming of Historic Review Board hearing was emailed at least 20 days before the hearing date to:

| PC Agenda Notice List | $5 / 18 / 23$ | Lynn Schroder |
| :--- | :--- | :--- |
| Willamette Neighborhood Association | $5 / 18 / 23$ | Lynn Schroder |
| ICON, applicant | $5 / 18 / 23$ | Lynn Schroder |

## WEBSITE

Notice was posted on the City's website 20 days before the hearing date.

```
5/18/23 Lynn Schroder
```

TIDINGS
Notice was posted in the West Linn Tidings at least 10 days before the hearing, per Section 99.080 of the CDC.

```
5/31/23 Lynn Schroder
```


## SIGN

A sign was posted on the property at least 10 days before the hearing, per Section 99.080 of the CDC.

```
6/1/23 John Floyd
```


### 10.04.23 PC HEARING

## MAILED NOTICE

Notice of Upcoming of Planning Commission Hearing was mailed at least 20 days before the hearing date, per Section 99.080 of the Community Development Code to:

| ICON, applicant | $9 / 14 / 23$ | Lynn Schroder |
| :--- | :--- | :--- |
| SG Architecture, applicant representative | $9 / 14 / 23$ | Lynn Schroder |
| WLWV SD | $9 / 14 / 23$ | Lynn Schroder |
| ODOT | $9 / 14 / 23$ | Lynn Schroder |
| Property owners within 500ft of the site perimeter | $9 / 14 / 23$ | Lynn Schroder |
| Willamette Neighborhood Association | $9 / 14 / 23$ | Lynn Schroder |

## EMAILED NOTICE

Notice of Upcoming of Planning Commission hearing was emailed at least 20 days before the hearing date to:

| PC Agenda Notice List | $9 / 14 / 23$ | Lynn Schroder |
| :--- | :--- | :--- |
| Willamette Neighborhood Association | $9 / 14 / 23$ | Lynn Schroder |
| ICON, applicant | $9 / 14 / 23$ | Lynn Schroder |

## WEBSITE

Notice was posted on the City's website 20 days before the hearing date.

```
9/14/23 
```


## TIDINGS

Notice was posted in the West Linn Tidings at least 10 days before the hearing, per Section 99.080 of the CDC.

| 9/20/23 | Lynn Schroder |
| :--- | :--- |

## SIGN

A sign was posted on the property at least 10 days before the hearing, per Section 99.080 of the CDC.

```
9/21/23 John Floyd
```


### 11.14.23 HRB REMANDED HEARING

## MAILED NOTICE

Notice of Upcoming of Historic Review Board Remanded Hearing was mailed at least 20 days before the hearing date, per Section 99.080 of the Community Development Code to:

| ICON, applicant | $10 / 25 / 23$ | Lynn Schroder |
| :--- | :--- | :--- |
| SG Architecture, applicant representative | $10 / 25 / 23$ | Lynn Schroder |
| WLWV SD | $10 / 25 / 23$ | Lynn Schroder |
| ODOT | $10 / 25 / 23$ | Lynn Schroder |
| Property owners within 500ft of the site perimeter | $10 / 25 / 23$ | Lynn Schroder |
| Parties of Record | $10 / 25 / 23$ | Lynn Schroder |
| Willamette Neighborhood Association | $10 / 25 / 23$ | Lynn Schroder |

EMAILED NOTICE
Notice of Upcoming of Historic Review Board remanded hearing was emailed at least 20 days before the hearing date to:

| PC Agenda Notice List | $10 / 25 / 23$ | Lynn Schroder |
| :--- | :--- | :--- |
| Willamette Neighborhood Association | $10 / 25 / 23$ | Lynn Schroder |
| ICON, applicant | $10 / 25 / 23$ | Lynn Schroder |

## WEBSITE

Notice was posted on the City's website 20 days before the hearing date.

```
10/25/23 Lynn Schroder
```


## TIDINGS

Notice was posted in the West Linn Tidings at least 10 days before the hearing, per Section 99.080 of the CDC.

## 11/1/23 Lynn Schroder

SIGN
A sign was posted on the property at least 10 days before the hearing, per Section 99.080 of the CDC.
11/2/23 $\quad$ John Floyd

## 02/21/24 PC HEARING

## MAILED NOTICE

Notice of Upcoming of Planning Commission hearing was mailed at least 20 days before the hearing date, per Section 99.080 of the Community Development Code to:

| ICON, applicant | $2 / 1 / 24$ | Lynn Schroder |
| :--- | :--- | :--- |
| SG Architecture, applicant representative | $2 / 1 / 24$ | Lynn Schroder |
| ODOT | $2 / 1 / 24$ | Lynn Schroder |
| WLWV SD | $2 / 1 / 24$ | Lynn Schroder |
| Property owners within 500ft of the site perimeter | $2 / 1 / 24$ | Lynn Schroder |
| Willamette Neighborhood Association | $2 / 1 / 24$ | Lynn Schroder |
| Parties of Record | $2 / 1 / 24$ | Lynn Schroder |

## EMAILED NOTICE

Notice of Upcoming of Planning Commission hearing was emailed at least 20 days before the hearing date to:

| PC Agenda Notice List | $2 / 1 / 24$ | Lynn Schroder |
| :--- | :--- | :--- |
| Willamette Neighborhood Association | $2 / 1 / 24$ | Lynn Schroder |
| ICON, applicant | $2 / 1 / 24$ | Lynn Schroder |
| SG Architecture, applicant representative | $2 / 1 / 24$ | Lynn Schroder |
| Historic Review Board | $2 / 1 / 24$ | Lynn Schroder |
| Rachel Goebert | $2 / 1 / 24$ | Lynn Schroder |
| Brenda Russell | $2 / 1 / 24$ | Lynn Schroder |

## WEBSITE

Notice was posted on the City's website 20 days before the hearing date.

```
2/1/24
Lynn Schroder
```

TIDINGS
Notice was posted in the West Linn Tidings at least 10 days before the hearing, per Section 99.080 of the CDC.
2/7/24
SIGN
A sign was posted on the property at least 10 days before the hearing, per Section 99.080 of the CDC.

```
2/8/24 John Floyd
```

FINAL DECISION
Notice of Final Decision was mailed to the applicant, all parties with standing, and posted on the City's website, per Section 99.040 of the Community Development Code.

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


[^0]:    HCM 6th Edition methodology does not support clustered intersections.

[^1]:    HCM 6th Edition methodology does not support clustered intersections.

[^2]:    HCM 6th Edition methodology does not support clustered intersections.

[^3]:    HCM 6th Edition methodology does not support clustered intersections.

[^4]:    HCM 6th Edition methodology does not support clustered intersections.

[^5]:    NOTE: THE COLOR PALETTES SHOWN BELOW ARE REPRESENTATIVE ONLY, SELECTED FROM THE 'AMERICA'S HERITAGE HISTORICAL COLORS
    COLLECTION BY SHERWIN WILLIAMS. ACTUAL BUILDING COLORS WILL BE SELECTED FROM THE FULL LINE OF THIS COLLECTION.

[^6]:    (Blank) $2 \times 1000 \mathrm{~lm}$ (30W) color temperature is 80CRI minimum, and is not available in 90 plus CRI.
    (-L15) $2 \times 1500 \mathrm{~lm}(30 \mathrm{~W}),(-L 20) 2 \times 2200 \mathrm{~lm}(45 \mathrm{~W})$, and (-L26) $2 \times 2600 \mathrm{~lm}$ ( 64 W ) are 90 CRI minimum with optional 97 CRI .
    *Special Order. Minimum order, extended lead time may apply. Consult factory. (Finish options 50 piece minimum. 10-12 week lead time)
    ${ }^{* *}(-E M A C)$ Emergency back up is only available for (Blank) $\mathbf{2 x 1 0 0 0 1 m}$ (30W), and (-L15) 2x1500lm (30W).
    ${ }^{* * *}$ (-SDL) Daylight Sensor is for 120 V input only.

[^7]:    REM
    Remote Emergency Power Supply

[^8]:    ${ }^{1}$ Page citations refer to the Planning Commission hearing packet prepared for the October 4, 2023.
    ${ }^{2}$ Dimensions are estimated based on the applicant's submission.

[^9]:    ${ }^{3}$ A "story" is defined as: "That portion of a building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling or roof above. If the finished floor level directly above a basement or unused under floor space is more than six feet above grade as defined herein for more than 50 percent of the total perimeter, or is more than 12 feet above grade as defined herein at any point, such basement or unused under floor space shall be considered as a story."

[^10]:    ${ }^{4}$ The applicant's interpretation appears to be based on an accompanying illustration in CDC Chapter 58. While this illustration is less than clear, the text is unambiguous.

[^11]:    ${ }^{7}$ The "western false front" is the preferred style in the Willamette Falls Commercial Design District. CDC $58.080 . C .8$. CDC Chapter 2 provides the following definition:
    "Western false front. An architectural style that was intended to create visual continuity and a prosperous urban atmosphere during the early settlement period of American western towns. Defining characteristics include:
    "1. The street facing facade(s) rises to form a parapet (upper wall) which hides most or nearly all of the roof;
    "2. The roof is almost always a front gable, though gambrel and bowed roofs are occasionally found;
    "3. The street facing facade(s) may exhibit greater ornamentation than other sides of the building."

[^12]:    ${ }^{8}$ The Historic Review Board decision referred to 1824 Willamette Falls Drive. However, the decision describes the building on the corner of 12th Street and Willamette Falls Drive, which is currently the 1880 Willamette Falls Drive building.
    ${ }^{9}$ The photograph that the applicant identifies as the front of 1880 Willamette Falls Drive is actually a picture of a different building, which is a nearby two-story building with no third-story space. 1880 Willamette Falls Drive is the building pictured above with the Bellagios Pizza sign.

[^13]:    

[^14]:    ${ }^{1}$ Page citations are to the staff report prepared for the November 14, 2023, Historic Review Board meeting.
    ${ }^{2}$ Many dimensions are not specified, so dimension descriptions are approximate based on the applicant's illustrations.
    ${ }^{3}$ We preserve our other objections to this particular rooftop deck proposal based on other provisions of the CDC. We also note that there are other areas in West Linn where taller commercial buildings are allowed, and the applicant's vision would better fit the zoning in those areas.

[^15]:    ${ }^{4}$ The applicant's submission also refers to CDC 58.090.B, which requires the incorporation of overcompensating exceptional $1880-1915$ architecture. Whereas the applicant has included examples of buildings in an attempt to satisfy criterion A, the application identifies no characteristics that are suggested to relate to criterion B. However, the reference to criterion B illustrates that the applicant has not identified a proposed alternative to the standard.

[^16]:    ${ }^{5}$ The "western false front" is the preferred style in the Willamette Falls Commercial Design District. CDC $58.080 . C .8$. CDC Chapter 2 provides the following definition:
    "Western false front. An architectural style that was intended to create visual continuity and a prosperous urban atmosphere during the early settlement period of American western towns. Defining characteristics include:
    "1. The street facing facade(s) rises to form a parapet (upper wall) which hides most or nearly all of the roof;
    "2. The roof is almost always a front gable, though gambrel and bowed roofs are occasionally found;
    "3. The street facing facade(s) may exhibit greater ornamentation than other sides of the building."

[^17]:    ${ }^{6} \mathrm{CDC} 55.100$.C requires buffering between differing uses, such as residential and commercial, and CDC 55.100.C. 3 specifically requires that rooftop HVAC and other mechanical equipment be visually screened. Thus, HVAC housing differs, analytically, from other third-story space such as extra storage, elevator lobbies, or stair landings.
    ${ }^{7}$ The Historic Review Board decision referred to 1824 Willamette Falls Drive. However, the decision describes the building on the corner of 12th Street and Willamette Falls Drive, which is currently the 1880 Willamette Falls Drive building.

[^18]:    ${ }^{8}$ The photograph that the applicant identifies as the front of 1880 Willamette Falls Drive is actually a picture of a different building, which is a nearby two-story building with no third-story space. 1880 Willamette Falls Drive is the building pictured above with the Bellagios Pizza sign.

