CITY OF MILWAUKIE

AGENDA

June 23, 2020

PLANNING COMMISSION

www.milwaukieoregon.gov

Hybrid Meeting Format
Due to State of Oregon guidelines on physical distancing, the Planning Commission will hold this meeting in a hybrid format featuring opportunities for public participation both in person and through Zoom video. The public is also invited to watch the meeting online through the City of Milwaukie YouTube page (https://www.youtube.com/channel/UCRFbfqe3OnDWLQKSB_m9cAw) or on Comcast Channel 30 within city limits.

If you wish to provide comments, the city encourages written comments via email at planning@milwaukieoregon.gov. Written comments should be submitted before the Planning Commission meeting begins to ensure that they can be provided to the Planning Commissioners ahead of time.

To speak during the meeting, visit the meeting webpage (https://www.milwaukieoregon.gov/bc-pc/planning-commission-52) and follow the Zoom webinar login instructions.

Pre-registration for in-person attendance is required. To register, email planning@milwaukieoregon.gov by **3 p.m.** on **Monday, June 22**. Limited public seating will be available at City Hall. If you plan to attend in person, it is strongly recommended that you bring a pair of headphones and a mobile device through which you can view the meeting in Zoom while you are in the building.

1.0 Call to Order - Procedural Matters — 6:30 PM

2.0 Information Items

3.0 Audience Participation — This is an opportunity for the public to comment via Zoom or by email on any item not on the agenda

4.0 Public Hearings — Public hearings will follow the procedure listed on the reverse side

4.1
Summary: 32nd Ave Mixed-Use Building
Applicant: Valerie Hunter
Address: 9391 SE 32nd Ave
File: VR-2019-013
Staff: Vera Kolias, Senior Planner

5.0 Planning Department Other Business/Updates

6.0 Planning Commission Committee Updates and Discussion Items — This is an opportunity for comment or discussion for items not on the agenda.

7.0 Forecast for Future Meetings

July 14, 2020	1. Hearing Item: VR-2019-013, 32nd Ave Mixed-Use Building Continuation
July 28, 2020	No agenda items are currently scheduled for this meeting.
August 11, 2020	No agenda items are currently scheduled for this meeting.

Milwaukie Planning Commission Statement

The Planning Commission serves as an advisory body to, and a resource for, the City Council in land use matters. In this capacity, the mission of the Planning Commission is to articulate the Community's values and commitment to socially and environmentally responsible uses of its resources as reflected in the Comprehensive Plan

1. **PROCEDURAL MATTERS.** If you wish to register to provide spoken comment at this meeting or for background information on agenda items please send an email to planning@milwaukieoregon.gov.
2. **PLANNING COMMISSION and CITY COUNCIL MINUTES.** City Council and Planning Commission minutes can be found on the City website at www.milwaukieoregon.gov/meetings.
3. **FORECAST FOR FUTURE MEETINGS.** These items are tentatively scheduled but may be rescheduled prior to the meeting date. Please contact staff with any questions you may have.
4. **TIME LIMIT POLICY.** The Commission intends to end each meeting by 10:00pm. The Planning Commission will pause discussion of agenda items at 9:45pm to discuss whether to continue the agenda item to a future date or finish the agenda item.

Public Hearing Procedure

Those who wish to testify should come to the front podium, state his or her name and address for the record, and remain at the podium until the Chairperson has asked if there are any questions from the Commissioners.

1. **STAFF REPORT.** Each hearing starts with a brief review of the staff report by staff. The report lists the criteria for the land use action being considered, as well as a recommended decision with reasons for that recommendation.
2. **CORRESPONDENCE.** Staff will report any verbal or written correspondence that has been received since the Commission was presented with its meeting packet.
3. **APPLICANT'S PRESENTATION.**
4. **PUBLIC TESTIMONY IN SUPPORT.** Testimony from those in favor of the application.
5. **NEUTRAL PUBLIC TESTIMONY.** Comments or questions from interested persons who are neither in favor of nor opposed to the application.
6. **PUBLIC TESTIMONY IN OPPOSITION.** Testimony from those in opposition to the application.
7. **QUESTIONS FROM COMMISSIONERS.** The commission will have the opportunity to ask for clarification from staff, the applicant, or those who have already testified.
8. **REBUTTAL TESTIMONY FROM APPLICANT.** After all public testimony, the commission will take rebuttal testimony from the applicant.
9. **CLOSING OF PUBLIC HEARING.** The Chairperson will close the public portion of the hearing. The Commission will then enter into deliberation. From this point in the hearing the Commission will not receive any additional testimony from the audience but may ask questions of anyone who has testified.
10. **COMMISSION DISCUSSION AND ACTION.** It is the Commission's intention to make a decision this evening on each issue on the agenda. Planning Commission decisions may be appealed to the City Council. If you wish to appeal a decision, please contact the Planning Department for information on the procedures and fees involved.
11. **MEETING CONTINUANCE.** Prior to the close of the first public hearing, *any person* may request an opportunity to present additional information at another time. If there is such a request, the Planning Commission will either continue the public hearing to a date certain or leave the record open for at least seven days for additional written evidence, argument, or testimony. The Planning Commission may ask the applicant to consider granting an extension of the 120-day time period for making a decision if a delay in making a decision could impact the ability of the City to take final action on the application, including resolution of all local appeals.

The City of Milwaukie will make reasonable accommodation for people with disabilities. Please notify us no fewer than five (5) business days prior to the meeting.

Milwaukie Planning Commission:

Robert Massey, Chair
Lauren Loosveldt, Vice Chair
Joseph Edge
Greg Hemer
John Henry Burns

Planning Department Staff:

Denny Egner, Planning Director
Vera Kolias, Senior Planner
Brett Kelver, Associate Planner
Mary Heberling, Assistant Planner
Dan Harris, Administrative Specialist II
Alicia Martin, Administrative Specialist II

CITY OF MILWAUKIE

To: Planning Commission

Through: Dennis Egner, Planning Director

From: Vera Kolias, Senior Planner and Dalton Vodden, Associate Engineer

Date: June 16, 2020, for June 23, 2020, Public Hearing

Subject: **File:** VR-2019-013
Applicant: Valerie Hunter
Address: 9391 SE 32nd Ave
Legal Description (Map & Tax Lot): 11E25BD07700
NDA: Ardenwald

ACTION REQUESTED

Review application VR-2019-013, take public testimony, and consider making a tentative decision and continue the hearing to July 14 for a final decision. Please provide staff with direction to provide findings for approval or denial at the next hearing based on discussion and deliberation.

BACKGROUND INFORMATION

The subject property was the site of the former Stein Oil Company and the Luther Davis Auto Repair shop. The businesses were housed in a structure which occupied the site from about 1950 until it was recently demolished in preparation for redevelopment. Valerie Hunter, the applicant and current owner of the property, is proposing a four-story mixed use building, comprised of three ground-floor commercial tenant spaces facing 32nd Ave, 21 dwelling units (20 one-bedroom units and one five-bedroom unit) in the upper three floors, and 17 covered parking spaces to be accessed from Olsen St.

The property is located in the Neighborhood Mixed Use Zone (NMU), which was adopted in 2015 as part of the Moving Forward Milwaukie initiative. As stated in Milwaukie Municipal Code (MMC) section 19.303.1.B, the NMU zone "allows for a mix of small-scale retail and services, along with residential uses, that meet the needs of nearby residents and contribute to a vibrant, local economy. It is also intended to provide a safe and pleasant pedestrian environment while maintaining a neighborhood-scale identity."

A. Site and Vicinity

The site is located at 9391 SE 32nd Ave at the corner of 32nd Ave and Olsen St. The site contains 0.25 acres and is currently vacant.

The surrounding area consists of single-family homes, as well as commercial properties directly east and south of the subject property, including a convenience store, café and restaurant, and a dog grooming business. A commercial/industrial property is located approximately 250 ft north at the corner of 32nd Ave and Malcolm St.

Figure 1. Site and surrounding area

B. Zoning Designation

Neighborhood Mixed Use – NMU

C. Comprehensive Plan Designation

Commercial – C

D. Land Use History

- **January 22, 1986:** NCU-86-02 - The Planning Commission approved an application requesting an alternation, extension, and change of a non-conforming use to conduct an auto engine repair and auto body repair and painting business in a structure which had been used for auto repair and gasoline sales. The approval eliminated gasoline sales from the site.

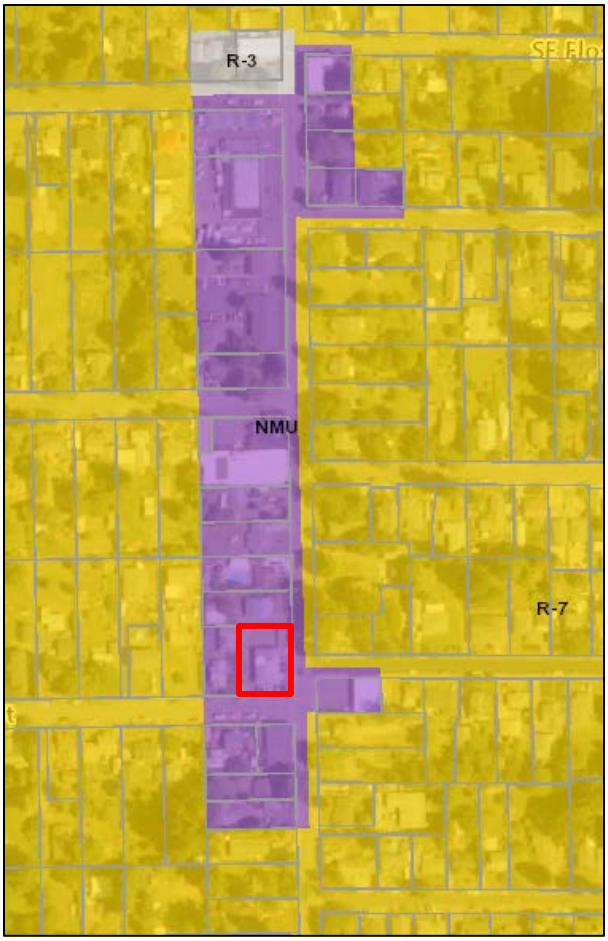


Figure 2. Zoning

E. Proposal

The applicant is seeking land use approvals for a four-story mixed-use building. The proposal includes the following:

1. VR-2019-013: A variance is requested to allow a building with four stories and a maximum height of 48 ft rather than the maximum three stories and 45 ft; a variance is requested to allow a vehicular accessway less than 24 ft in width.
2. P-2019-001: A parking modification is requested to reduce the number of off-street parking spaces to 17 rather than the minimum 21 required (with by-right reductions).
3. DEV-2019-013: The proposal requires development review to confirm compliance with all base zone standards as well as the design standards for non-residential development identified in MMC 19.505.7.
4. TFR-2020-001: Transportation Facilities Review is the mechanism by which the required Transportation Impact Study is reviewed and evaluated.

5. A modification has been requested to allow a driveway to be located less than 100 ft from the nearest intersection. This modification is reviewed with the Development Review land use application.

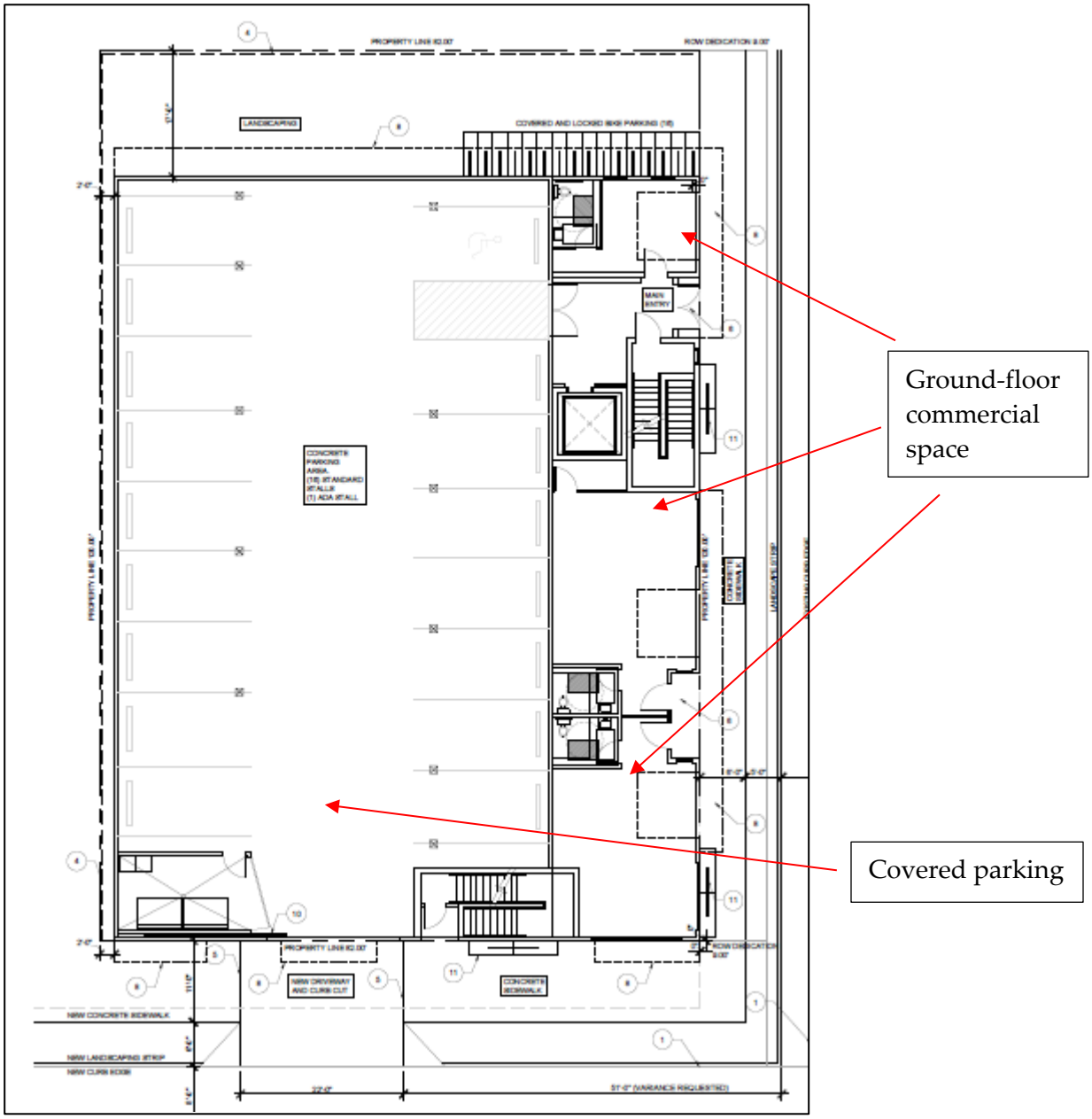


Figure 3. Proposed site plan

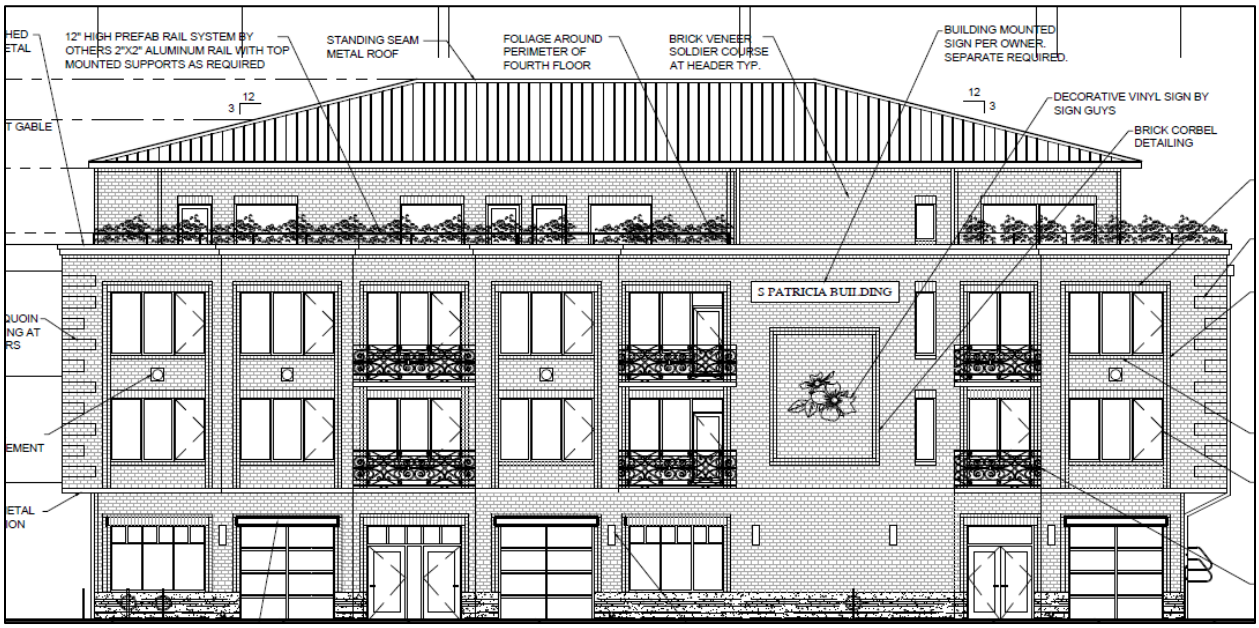


Figure 4. Proposed elevation - facing 32nd Ave

Figure 5. Proposed elevation - facing Olsen St

KEY ISSUES

The key issues identified by staff stem from the approval criteria for parking modifications and variances. Generally, the criteria involve identification of impacts to surrounding properties and proposed mitigation. For requested parking modifications, the code requires that an approval must find that the reduction in off-street parking will not adversely affect available on-street parking and that there is available transit or other special characteristics of the site that will reduce expected vehicle use for users of the site.

Type III variances (MMC 19.911) require a determination that the variance is both reasonable and appropriate and that an alternatives analysis has provided an analysis of the impacts and benefits of the variance proposal as compared to the baseline code requirements.

Summary

Staff has identified the following key issues for the Planning Commission's deliberation.

A. Would approval of the variances result in any negative impacts? Have they been mitigated?

B. Is the requested reduction in required off-street parking reasonable? Would it result in significant neighborhood impacts?

C. Does the Transportation Impact Study (TIS) adequately address potential traffic impacts resulting from the project? Have the impacts been mitigated?

Analysis

A. Would approval of the variances result in any negative impacts?

Each of the variances is addressed below.

1. Maximum Building Height – The maximum building height in the NMU zone is 45 ft or 3 stories, whichever is less. The variance request is to allow a four-story building that would be 48 ft tall as measured per the zoning code; the actual building height would be approximately 51 ft. The proposed building meets the maximum height standard at the top of the third floor; the additional height allows the building to have a fourth story, which will have one large dwelling unit.

   Type III Variances require the Planning Commission to find that the proposal meets the criteria set forth in MMC 19.911.4.B. The applicant has chosen to address the discretionary relief criteria which means an alternatives analysis must be prepared and the variance must be found to be reasonable and appropriate. The application materials focus on the benefits of a mixed-use building in the NMU zone and state that the project would add amenities to the neighborhood. The application does examine the benefits of the additional story, which is for the construction of a large single apartment.

But for the height variance, the proposed building meets the design and development standards for a mixed-use building in the NMU zone. Based on the purpose statement for the NMU zone, the proposal meets the intent as a mixed-use building. However, the Ardenwald NDA, and others, submitted comments regarding the size of the commercial spaces, stating that they would be too small to provide for useful "neighborhood hub" type businesses. Many comments noted appreciation for reusing a vacant site and the desire for neighborhood amenities. However, all commenters oppose the proposal as designed with four stories.

As described in the application materials, the proposal minimizes any visual impacts of the additional height to adjacent residential properties, and reduces the massing of the building at the property lines, by designing the fourth floor to set the dwelling unit back from parapet walls at the top of the third floor. In addition, the design includes a large wrap-around deck, decorative rail, parapet, and landscape planters (see Figures 6 and 7). These last few details will also act as screening, providing privacy for adjacent neighbors. As stated in the application materials, the height of the screening was determined by a line-of-sight study which was not included with the application materials.

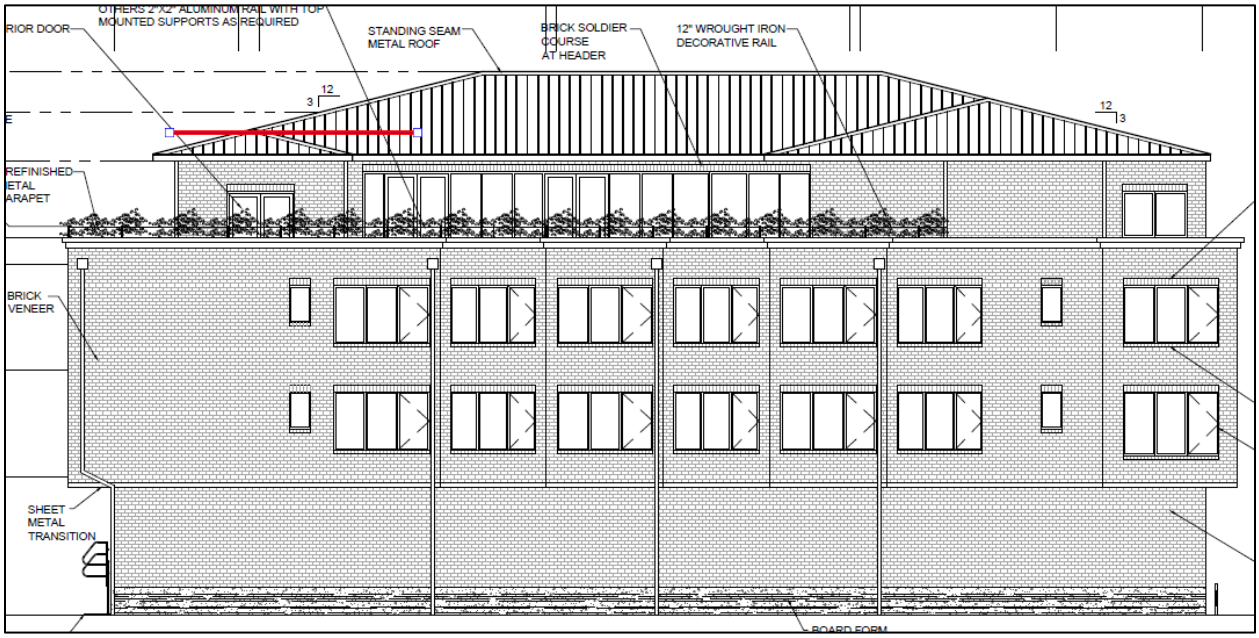


Figure 6. West facing elevation (red line indicates the 45-ft max. height allowed)

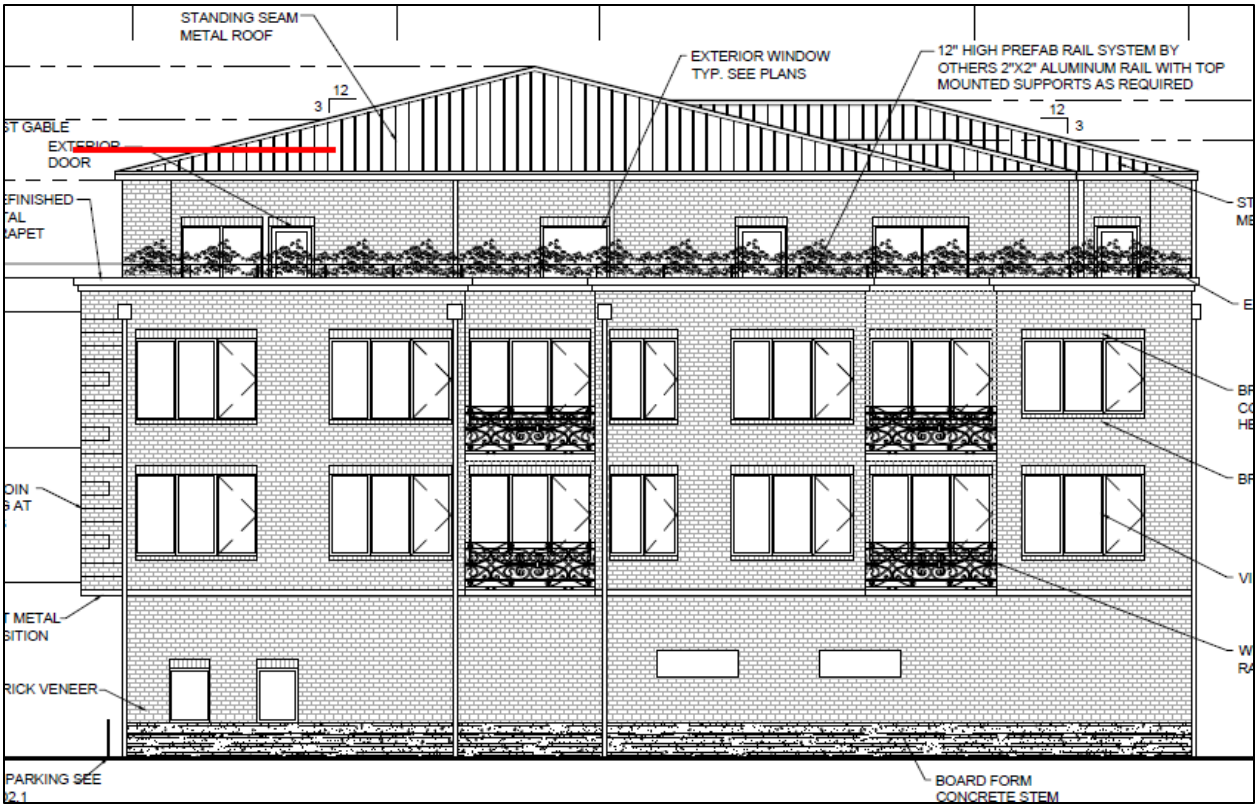


Figure 7. North facing elevation (red line indicates the 45-ft max. height allowed)

The application also states that the proposal mitigates the effect on surrounding properties as the area of increased height – the fourth floor – is set back away from neighboring properties. The predominant mass of the fourth floor will be located on the street-facing facades and away from the residential neighbors. The building has a 16-ft setback from the northern property line allowing for minimum intrusions to the northern neighbors. On the western property line, the fourth floor will be set back through the use of a patio area from the exterior wall of the floors below. The patio on the western property line varies in width between 9 and 17 ft.

Of additional concern is how the additional height affects solar access to surrounding properties. Comments received note the issue of shade and shadow on neighboring properties.

Many comments were submitted expressing concern about the scale of the proposed building particularly in relation to adjacent one-and two-story residences, especially since there are no minimum setbacks. Staff notes that, unlike the General Mixed Use zone (GMU), a height bonus is not available in the NMU. This decision was made during the NMU code amendment process and reflects the neighborhood-scale development that was intended for this area. The question, then, is what does the proposal provide that responds to these concerns? While the

fourth floor is designed for only one large dwelling unit, can the Commission find that the variance is reasonable and appropriate given impacts on neighboring properties and the limited public benefits provided, as identified in the variance approval criteria?

2. Accessway – There are two separate issues regarding the proposed accessway for the off-street parking area – accessway width and the distance from the 32nd Ave intersection.

    a. Accessway width: Milwaukie Municipal Code identifies a minimum driveway apron width of 24 ft and a maximum of 30 ft for off-street parking areas with sixteen or more spaces. The applicant is proposing 17 spaces, but has proposed a driveway apron width of 22 ft; a variance is required to reduce the width. The reduced width would be compliant for a parking area with 15 spaces. Reducing the width of an accessway may slow vehicles entering the parking and increase street queues, but staff does not object to a narrower accessway as proposed.

    Accessway spacing: The accessway spacing for multi-family residential uses has a required minimum distance of 100 ft from nearest edge of driveway apron to nearest intersecting street face of curb. Reducing this distance is possible by considering additional mitigation measures through a study by a professional engineer as described in MMC 12.16040.B.2. Recommendations found in the TIS include a sight distance analysis at final site plan approval for the accessway.

B. Is the requested reduction in required off-street parking reasonable? Would it result in significant neighborhood impacts?

The minimum number of off-street parking spaces required for the project would be 21 spaces (21 spaces for the residential use and 5 spaces for the commercial use with a 20% reduction for multi-family developments in close proximity to mass transit).

The applicant is proposing a reduction in the minimum required off-street parking spaces for the commercial spaces to a total of 17 off-street spaces with five additional on-street parking to be developed as part of the project. The proposed 1,346 sq ft of commercial space would require five off-street parking spaces. The proposed frontage improvements include a nine-ft dedication to create additional right-of-way for five on-street parking spaces on 32nd Ave; a 10-ft dedication is required. These spaces accommodate the minimum required spaces and help to alleviate the pressure on the surrounding neighborhood.

The residents of the proposed development will be able to use public transit or bicycles as alternatives to personal vehicles. The #75 TriMet bus route which runs on a 15-min headway on 32nd Ave connects downtown Milwaukie to St. John's using Caesar Chavez Blvd as a key route through Portland. This bus route connects to multiple other bus routes

and two MAX stations in northeast Portland, so it is conceivable that residents of the apartments would not need to own vehicles to access shopping, work, and other destinations. However, many comments were submitted expressing concern about the reduction in parking on the site, even with the on-street spaces. The surrounding neighborhood streets currently provide parking for the adjacent commercial site to the south, which does not have its own off-street parking.

The applicant did not submit any information about mitigation for the reduction in spaces, such as carshare or e-bike share opportunities to reduce the need for residents to own a vehicle. These have become typical amenities in multifamily buildings with very little off-street parking. The applicant did not respond to the approval criterion regarding impacts to existing on-street parking. Many of the public comments received state that available on-street parking is minimal in this area and that on-street spaces in the neighborhood are few. However, a parking utilization study was not provided to confirm these statements or to analyze the key times of day when on-street parking is difficult to obtain. One possibility would be that if the commercial parking spaces are unused at night, residents could use those spaces in off-hours.

C. Does the Transportation Impact Study adequately address potential traffic impacts resulting from the project? Have the impacts been mitigated?

The Transportation Impact Study (TIS) was reviewed by DKS Associates on behalf of the City. Due to the Covid-19 situation, it would be impossible to conduct accurate trip counts for the TIS. Staff provided the applicant's traffic consultant with the 2018 preliminary traffic study prepared by Lancaster Engineering for the Hillside Master Plan in order to establish background trips for the proposed project. Those counts were to be modified by the standard 2% increase per year to factor the counts to 2020 existing conditions. Trip estimates for 2022 operations analysis were obtained through applying a 2% growth rate to existing conditions.

In a document dated June 2, 2020 three issues where listed, involving: daily new trip generation, parking supply analysis, and roadway width for frontage improvements (See Attachment 2). The recommendations from the DKS Associates document included: meeting AASHTO sight distance requirements at final site plan approval, approval by the City Engineer of the final site plan prior to construction, and seeking a parking supply standard variation. These issues and recommendations have been satisfied by the applicant in the application materials and through staff review. An estimated daily new trip analysis will be provided in the findings.

A final site plan must be submitted to the City for review prior to permit issuance. The City Engineer will ensure all accessway standards are met prior to certificate of occupancy. The application materials included a parking supply analysis, a plan for incorporating street parking in frontage improvements, and a request for a modification to minimum required off-street parking. All recommendations and issues in the TIS have been addressed. The TIS did not incorporate 261 additional square feet of commercial space that is found in the applicant's final application materials. It is unclear why the applicant produced a TIS with

this discrepancy. However, staff does not believe this oversight would have altered the issues and recommendations found by DKS Associates through review of the TIS.

CONCLUSIONS

Staff recommendation to the Planning Commission is as follows:

1. Provide direction to staff regarding findings and potential conditions of approval for a decision.
2. Continue the hearing to July 14, 2020.

CODE AUTHORITY AND DECISION-MAKING PROCESS

The proposal is subject to the following provisions of the Milwaukie Municipal Code (MMC).

- MMC 12.16 - Access Management
- MMC 19.303 - Commercial Mixed Use Zones
- MMC 19.505.7 - Nonresidential Development
- MMC 19.600 - Off-street Parking and Loading
- MMC 19.700 - Public Facility Improvements
- MMC 19.911 – Variances

This application is subject to Type III review, which requires the Planning Commission to consider whether the applicant has demonstrated compliance with the code sections shown above. In Type III reviews, the Commission assesses the application against review criteria and development standards and evaluates testimony and evidence received at the public hearing.

The Commission has 3 decision-making options as follows:

A. Approve the application subject to Findings and Conditions of Approval.

B. Deny the application upon finding that it does not meet approval criteria.

C. Continue the hearing.

The final decision on these applications, which includes any appeals to the City Council, must be made by September 8, 2020, in accordance with the Oregon Revised Statutes and the Milwaukie Zoning Ordinance. The applicant can waive the time period in which the application must be decided.

COMMENTS

Notice of the proposed changes was given to the following agencies and persons on May 19, 2020: City of Milwaukie Engineering, Building, and Public Works departments, Clackamas County, City of Portland, TriMet, Metro, North Clackamas School District, and NW Natural, and the Ardenwald Neighborhood District Association (NDA). The following is a summary of the comments received by the City. See Attachment 3 for further details.

- **Amanda Owings, P.E., Traffic Engineer, Portland Bureau of Transportation:** Given the uses listed in the application, the intersection of 32nd Ave and Johnson Creek Blvd should operate adequately since it was recently signalized.
- **Ardenwald/Johnson Creek NDA Board:** The NDA submitted lengthy comments stating that the application does not meet the applicable code sections and that they oppose the application. They also stated that they wish the applicant had attended an NDA meeting to present and discuss the project in advance of submitting the application. Specific issues raised include:
    - Disputes the findings of the TIS as it lacked sufficient background data to establish growth
    - The access spacing variance will create a hazard for pedestrians and bicyclists
    - The proposed retail space is too small to meet the needs of the neighborhood. The comments suggest removing the commercial space to create more parking or diversify the dwelling units. Although the neighborhood very much wants a neighborhood hub with local shopping options, the proposed space is not realistically large enough to provide these amenities.
    - The proposed height does not maintain a neighborhood scale identity in the NMU. The comments also question if the 5-bedroom unit is the intent of the NMU, particularly with the need for affordable housing in the city.
    - The codes submitted as part of the parking modification are not reasonable, as they came from Seattle and Portland.
    - Reducing the amount of parking on the site decreases the livability for the intended residents, especially because the #75 bus does not have late night service. Further, the surrounding neighborhood already has issues with a lack of parking, which will be exacerbated by this project.

Numerous individuals submitted comments in opposition to the project, for reasons related to the requested reduction of parking and the lack of available parking in the neighborhood, the height of building and its incompatibility with surrounding development, and the increase in traffic that will result. Many of these comments expressed support for the redevelopment of the site to enhance the neighborhood, but believe that the proposal should not be approved as submitted. These individuals are as follows (see Attachment 3 for the full text of their comments):

- Pat Carlman, 3038 SE Boyd St
- Carol Moyer, Milwaukie
- Rebekah Dresselhaus, 3236 Harvey St
- Abigail Brittain, Olsen St
- Michele Lukowski
- Nikolay Demchenko
- Michael and Susan Stone
- Ramona King, 9529 SE 32nd Ave
- Sarah Newson, Ardenwald
- Lindsay Rodriguez
- Kara Cecil, 9709 SE 40th Ave
- Chris Holle-Bailey
- Travis Tomlinson, 3509 SE Wake St
- Coralee Popp
- Ronelle Coburn, 29th Ave
- Aine Seitz McCarthy
- Chris Ortolano
- Elvis Clark, Ardenwald
- John Van Buskirk
- Steve Gutendorf, SE Floss St
- Keira MacMillan
- Pamela Boyd, 9272 SE 32nd Ave
- Sterling Leiv
- Connie Leiv
- Glennda and Jerry Cox, Olsen St

ATTACHMENTS

Attachments are provided as indicated by the checked boxes. All material is available for viewing upon request.

	Early PC Mailing	PC Packet	Public Copies	Packet
1. Applicant's Narrative and Supporting Documentation received on March 5, 2020, with revisions received on May 27, 2020.				
a. Narrative	☒	☐	☐	☐
b. Site Plan	☒	☐	☐	☐
c. Architectural drawings	☒	☐	☐	☐
d. Transportation Impact Study	☒	☐	☐	☐
e. Preliminary Stormwater Report	☒	☐	☐	☐
2. DKS Associates review of TIS (June 2, 2020)	☐	☒	☒	☒
3. Comments Received	☐	☒	☒	☒

Key:
Early PC Mailing = paper materials provided to Planning Commission at the time of public notice 20 days prior to the hearing.
PC Packet = paper materials provided to Planning Commission 7 days prior to the hearing.
Public Copies = paper copies of the packet available for review at City facilities and at the Planning Commission meeting.
Packet = packet materials available online at https://www.milwaukieoregon.gov/bc-pc/planning-commission-52.

PLANNING DEPARTMENT
6101 SE Johnson Creek Blvd
Milwaukie OR 97206
503-786-7630
planning@milwaukieoregon.gov

Application for Land Use Action

Master File #: VR-2019-013

Review type*: ☐ I ☐ II ☒ III ☐ IV ☐ V

CHOOSE APPLICATION TYPE(S):

Transportation Facility Review

Development Review

Parking: Quantity Modification

Variance: Building Height

...

Use separate application forms for:
- Annexation and/or Boundary Change
- Compensation for Reduction in Property Value (Measure 37)
- Daily Display Sign
- Appeal

RESPONSIBLE PARTIES:

APPLICANT (owner or other eligible applicant—see reverse): Valerie Hunter

Mailing address: 15350 SE Monner Rd. Zip: 97086

Phone(s): 541-419-7253 Email: vshproperty@gmail.com

APPLICANT'S REPRESENTATIVE (if different than above): Auryn White -- BAMA Architecture

Mailing address: 7350 SE Milwaukie Ave. Zip: 97202

Phone(s): 503-253-4283 Email: auryn@bamadesign.com

SITE INFORMATION:

Address: 9391 SE 32nd Avenue Map & Tax Lot(s): 11E25BD07700

Comprehensive Plan Designation: C Zoning: NMU Size of property: 10.80 Sq Ft

PROPOSAL (describe briefly):

Type I Development Review, Type II Transportation Facility Review, Type II Parking Quantity Modification, Type III Variance for non-conforming height in new 4 story mixed-use structure.

SIGNATURE:

ATTEST: I am the property owner or I am eligible to initiate this application per Milwaukie Municipal Code (MMC) Subsection 19.1001.6.A. If required, I have attached written authorization to submit this application. To the best of my knowledge, the information provided within this application package is complete and accurate.

Submitted by: Date: January 3, 2020

IMPORTANT INFORMATION ON REVERSE SIDE

*For multiple applications, this is based on the highest required review type. See MMC Subsection 19.1001.6.B.1.

WHO IS ELIGIBLE TO SUBMIT A LAND USE APPLICATION (excerpted from MMC Subsection 19.1001.6.A):

Type I, II, III, and IV applications may be initiated by the property owner or contract purchaser of the subject property, any person authorized in writing to represent the property owner or contract purchaser, and any agency that has statutory rights of eminent domain for projects they have the authority to construct.

Type V applications may be initiated by any individual.

PREAPPLICATION CONFERENCE:

A preapplication conference may be required or desirable prior to submitting this application. Please discuss with Planning staff.

REVIEW TYPES:

This application will be processed per the assigned review type, as described in the following sections of the Milwaukie Municipal Code:

- Type I: Section 19.1004
- Type II: Section 19.1005
- Type III: Section 19.1006
- Type IV: Section 19.1007
- Type V: Section 19.1008

THIS SECTION FOR OFFICE USE ONLY:

FILE TYPE	FILE NUMBER	FEE AMOUNT*	PERCENT DISCOUNT	DISCOUNT TYPE	DEPOSIT AMOUNT	DATE STAMP
Master file		$			$	
Concurrent application files		$			$	
		$			$	
		$			$	
		$			$	
SUBTOTALS		**$**			**$**	
TOTAL AMOUNT RECEIVED: $			**RECEIPT #:**			**RCD BY:**

Associated application file #s (appeals, modifications, previous approvals, etc.)**:**

Neighborhood District Association(s):

Notes:

*After discount (if any)

BAMA Architecture and Design LLC

3/02/2020

Revised Project Narrative

Applicant: Auryn White
BAMA Architecture and Design
7350 SE Milwaukie Avenue
Portland, OR 97202

RECEIVED
MAR 05 2020
CITY OF MILWAUKIE
PLANNING DEPARTMENT

Below is a narrative for a Type III Variance, Type II Parking Quantity Modification, and Type I Development Review for a proposed Four-Story Mixed-Use Building at 9391 SE 32nd Avenue Milwaukie, OR 97222.

This proposal requests a Type III Variance to exceed the base zone height maximum of 45', the proposed maximum height is 48' per MMC 19.911.

This proposal requests a Type II Parking Quantity Modification to reduce the required number of off-street parking stalls from 21.336 to 17 per MMC 19.605.2.

This proposal includes Type I Development Review application per MMC 19.906.

Description of Proposal:

This is a new construction of a 32,548 square-foot, four-story, mixed-use building with 3 commercial tenant spaces and 21 residential dwelling units. Development to include first floor covered parking, public right of way upgrades, site landscaping installation, and demolition of existing auto repair establishment.

This proposal will create a vibrant, attractive mixed-use structure consistent with the standards and purposes of the MMC. This proposal will allow the continued development of the NMU zone located on 32nd Avenue and allow for a pedestrian centered building with a multitude of benefits to the residents, neighbors, and city at large.

Existing Site Conditions:

The site in question is located along the west side of SE 32nd Avenue at the intersection of 32nd Avenue and SE Olsen Street. The site is approx. 0.24 acres in size (10,800 square-feet), with the street facing eastern and southern facades. The property is relatively flat with an overall grade change of approximately 1 foot and currently populated with an automobile repair establishment. The current structure on site is proposed to be demolished. The site has no existing trees or landscaping that require protection.

Type III Variance – Discretionary Relief Criteria:

Section 19.911.4.B.1.a-c

1. Discretionary Relief Criteria

a. The applicant's alternatives analysis provides, at a minimum, an analysis of the impacts and benefits of the variance proposal as compared to the baseline code requirements.

b. The proposed variance is determined by the Planning Commission to be both reasonable and appropriate, and it meets one or more of the following criteria:

(1) The proposed variance avoids or minimizes impacts to surrounding properties.

(2) The proposed variance has desirable public benefits.

(3) The proposed variance responds to the existing built or natural environment in a creative and sensitive manner.

c. Impacts from the proposed variance will be mitigated to the extent practicable.

Response:

The proposed Variance is to exceed the code requirement for maximum building height in the NMU Zone. The maximum height in the NMU Zone is 45'-0". This proposal would request the maximum height to be 48'-0". The main bulk of the building (floors 1-3) will meet the maximum height requirement. This proposal asks that a variance be approved that would allow the fourth-floor dwelling unit to be constructed above the height limit. The fourth floor will house a single dwelling and be setback to the extent practical from the exterior walls of the floors below to reduce the overall bulk and visibility of the additional height. The fourth floor would allow an opportunity for a more aesthetically pleasing top floor which would include a large wrap-around deck with decorative parapet rails as well as visible landscaping to be provided around the perimeter of the occupiable roof.

It is difficult to assess the affect of the proposed structure to the relationships of other structures as there has been a lack of new mixed-use structures in the NMU Zone and in the surrounding areas of 32nd Ave. This proposal intends to allow for a precedent of the type of buildings that are beneficial to the area and allow for the maximum effectiveness to meet the growing demands of the area in question. This proposal will allow the area designated as NMU Zone on 32nd Ave. to have an attractive beginning of what can be an economically diverse center for community growth and support.

At the fourth floor, the tall parapet, decorative rail, and planter will act as screening, and will provide greater privacy by restricting the view from the single-family unit, as well as provide greater privacy for the neighbors to the north and west. The

height of the screening was determined by an analysis of a line-of-sight study, with particular consideration given to the residential properties adjacent to the site.

In an effort to create an inviting building, rather than one that feels dominating and unattractive, the building is designed in a way that provides variations and enhanced interest in the exterior wall. There is maximum glazing at all levels, decorative artistic tile details, and exterior lighting at the pedestrian level, and the use of masonry provides a very tactile experience for pedestrians.

The stated purpose of the NMU Zone is to "*recognize 32nd and 42nd Avenues as neighborhood commercial centers. This zone allows for a mix of small-scale retail and services, along with residential uses, that meet the needs of nearby residents and contribute to a vibrant, local economy. It is also intended to provide a safe and pleasant pedestrian environment while maintaining a neighborhood-scale identity.*" Per MMC 19.303.1.

This development will create a neighborhood commercial center that incorporates small scale retail and services with diverse residential uses all within a safe pedestrian environment. It improves the quality and safety of the public right of way while utilizing a corner lot to create an opportunity for a pedestrian centered urban environment that appropriately utilizes vehicle and bicycle parking, and attractive outside areas. By utilizing the first floor with small scale storefront commercial units and incorporating balconies and ground level exterior area to the north. This proposal will create a neighborhood scale identity while creating much needed higher density housing options for the neighborhood.

This proposal mitigates the effect on surrounding properties as the area of increased height is located as far away from neighboring properties as possible. The mass of the fourth floor will be located on the street facing facades predominately. The building has a large setback from the northern property line allowing for minimum intrusions and concerns to the northern neighbors. On the other façade facing adjacent residential property (western property line) the fourth floor will be setback from the exterior wall of the floors below. An attractive parapet rail and landscaping will be installed to create a visibly attractive roof top while minimizing the visibility, and privacy concerns to the neighboring properties.

By allowing a fourth story single family dwelling, this development will be able to increase the diversity of the housing types in the area and increase the economic viability. It will create an opening for other mixed-use buildings that can meet the economic needs of many individuals. The top floor will be a single dwelling unit, which creates a housing type similar to a single-family residence while still having much needed smaller scale and intentional residential and commercial units below.

By limiting the bulk of the height and requesting a minor change to the height limit this proposal can better meet the purpose of the NMU Zone. The cohesiveness of

the fourth floor can be achieved by utilizing aesthetic architectural elements, landscaping, and shallow roof pitches.

Type II Parking – Quantity Modification:

Section 19.605.2.C.1-3

1. All modifications and determinations must demonstrate that the proposed parking quantities are reasonable based on existing parking demand for similar use in other locations; parking quantity requirements for the use in other jurisdictions; and professional literature about the parking demands of the proposed use.

2. In addition to the criteria in Subsection 19.605.2.C.1, requests for modifications to decrease the amount of minimum required parking shall meet the following criteria:

a. The use of transit, parking demand management programs, and/or special characteristics of the site users will reduce expected vehicle use and parking space demand for the proposed use or development, as compared with the standards in Table 19.605.1.

b. The reduction of off-street parking will not adversely affect available on-street parking.

c. The requested reduction is the smallest reduction needed based on the specific circumstances of the use and/or site.

3. In addition to the criteria in Subsection 19.605.2.C.1, requests for modifications to increase the amount of maximum allowed parking shall meet the following criteria:

a. The proposed development has unique or unusual characteristics that create a higher-than-typical parking demand.

b. The parking demand cannot be accommodated by shared or joint parking arrangements or by increasing the supply of spaces that are exempt from the maximum amount of parking allowed under Subsection 19.605.3.A.

c. The requested increase is the smallest increase needed based on the specific circumstances of the use and/or site.

Response:

This proposal includes the construction and installation of 16 standard parking stalls and 1 ADA parking stall. In totality this proposal will provide 17 total automobile parking stalls.

Per MMC Table 19.605.1 this proposal is required to provide 26.67 parking stalls.

20 Residential Units under 800 SF = 20 stalls minimum

1 Residential Unit over 800 SF = 1.25 stalls minimum

1,356 SF of Commercial Area = 5.42 stalls minimum

The parking count minimum can be reduced per MMC 19.605.3.B.1-7.

By utilizing Reduction 2 – Proximity to mass transit in multi-family buildings the minimum parking can be lowered 20% (20% of 26.67 stalls = 5.334 stalls).

This exception lowers the minimum parking to 21.336 stalls.

This proposal asks that the minimum parking stalls be lowered from 21.336 stalls to 17 total stalls. This reduction is requested due to the small site size and the desire to provide a retail frontage along 32nd Avenue. If additional parking is required, then the pedestrian environment will be compromised as retail spaces will be replaced with parking spaces.

This proposal is consistent with parking requirements in other jurisdictions. Please see attached exhibits from the City of Portland Zoning Code as well as the City of Seattle Municipal code for examples of parking quantities on other jurisdictions.

Due to the fact that this proposal includes almost entirely one-bedroom units, as well as its proximity to mass transit and the amount of proposed bicycle parking, we do not believe an increase in parking would be conducive to this development. Characteristics of one-bedroom tenants is of a lower parking need than larger units. One-bedroom tenants are more likely to be a part of a smaller household, own one or less vehicles, and typically a younger and more mass transit oriented nature.

Based on the experience of BAMA Architecture and our history of designing mixed-use and multi-family structures, we believe this proposal meets the intent of the code by providing adequate parking that does not decrease the livability or the amount of housing that can be provided. Parking has been proposed on this site to the best extent practical. Due to site and building constraints, adding additional parking would be impractical and would reduce the quality of the proposal in a way that is not consistent with other sections of the Municipal Code.

Type I Development Review:

Section 19.906.4.A-F

An application for Type I or Type II development review shall be approved when all of the following criteria have been met:

A. The proposal complies with all applicable base zone standards in Chapter 19.300.

B. The proposal complies with all applicable overlay zone and special area standards in Chapter 19.400.

C. The proposal complies with all applicable supplementary development regulations in Chapter 19.500.

D. The proposal complies with all applicable off-street parking and loading standards and requirements in Chapter 19.600.

E. The proposal complies with all applicable public facility standards and requirements, including any required street improvements, in Chapter 19.700.

F. The proposal complies with all applicable conditions of any land use approvals for the proposal issued prior to or concurrent with the development review application. (Ord. 2161 § 2, 2018; Ord. 2036 § 3, 2011; Ord. 2025 § 2, 2011)

Response:

This proposal will comply with all criteria listed above. Please see individual section responses below for chapter specific criteria and standards.

Development Standards:

Base Zone Standards:

Section 19.303 Commercial Mixed-Use Zones

This proposal is for uses permitted outright in the NMU zone.

The use for this development is *Mixed-Use*. The uses within the mixed-use structure are commercial tenant spaces and parking on the first floor along with mostly one-bedroom residential dwelling units on the second and third floor, and a larger single dwelling on the fourth floor.

The lot utilized as part of this development currently meets development standards per *MMC Table 19.303.3*.

The total building area proposed is 32,548 square-feet. This is above the minimum floor area ratio of 0.5:1 (lot area is 10,800 square-feet, with a minimum floor area of 5,400 square-feet).

The proposed setbacks in this development are 0'-0" on both the East and South facades (street facing), 1'-0" on the West façade, and 17'-0" on the North façade. The only required building setback in the NMU zone is a maximum street setback of 10'-0", this development will meet that standard.

Maximum lot coverage for this proposal is 85% (9,180 square-feet). This proposal is requesting a lot coverage of 8,137 square-feet. This is within the development standard.

Minimum vegetation for this proposal is 15% of the site area (1,620 square-feet). This proposal includes 1,620 square-feet of qualifying landscaping, therefore meeting the development standards.

All other standards of the base zone will be met as part of this proposal.

Overlay Zone and Special Area Standards:

Section 19.400

This proposal is not located in an overlay zone, and is not defined as a special area, therefore this section is not applicable to this proposal.

Supplementary Development Regulations:

Section 19.500

There are limited applicable supplementary development regulations applicable for this proposal.

This proposal asks to utilize *MMC 19.501.2.B* to allow for architectural features to extend 24" over the street setback requirements on the South and East façade.

There are no accessory structures or accessory uses proposed as part of this development.

This proposal shall meet all clear vision requirements of *MMC 12.24.* for the intersection of 32nd Avenue & Olsen Street.

Neighboring properties are of the same zone designation; therefore, no additional setback is triggered.

The landscape areas will be less than 20% mulch or bark dust.

Compliant walkways are located to allow for easy pedestrian connections to all building entrances.

MMC 19.505.7 Nonresidential Development:

Guidelines and standards:

Building Design Standards:

1. Corners

   The building is not located on a key corner, therefore this standard does not apply.

2. Weather Protection

   All first floor entries proposed are recessed at least three feet, provided with a canopy, or both.

   Proposed weather protection will meet all applicable building codes and will not fetter pedestrian signage.

3. Exterior Building Materials

   The street facing facades will be comprised of brick materials, and window glazing totaling more than 80 percent of the building facade.

   Decorative metal panels will be utilized as a minor accent on the facades totaling less than 5 percent of the building façade.

   No prohibited materials are proposed as part of this proposal.

4. Windows and Doors

   This proposal has two street facing facades, on the east and south property line. The street facing facades have openings located throughout totally more than 30 percent of the wall area. Most of the openings are located on the east facing façade and is maximized to the extent practical. The south façade area has more than 30 percent openings in the non-parking area of the façade.

Ground floor windows will be constructed with a visible transmittance of 0.6 or higher.

All commercial entries will remain unlocked during business hours and residential entries will be secured with key fob entry available to residents only.

All first floor glazing will be clear glazed to allow for light to project into the building.

First floor windows will be located 32" above finished floor to allow for view into the spaces from pedestrians.

Signs will not be installed on more than 50 percent of the window area.

Windows will be slightly recessed into the façade and decorative brick detailing will provide relief to the façade allowing shading to occur.

Building windows will not be constructed with reflective, tinted, or opaque glazing. No simulated divisions are proposed for window systems. Any metal frames proposed will be unexposed or painted.

5. Roofs

   The proposed structural will utilize multiple roof forms. Flat and hip roofs will be constructed on the fourth floor. All hip roofs will have a pitch of 4/12 minimum and will have eaves that project 18" minimum.

6. Rooftop Equipment and Screening

   All rooftop equipment will not extend over 10' in height and will be setback a minimum of 5' from the roof edge. All equipment will not be visible from public view

7. Ground-Level Screening

   No mechanical or communication equipment, outdoor storage, or outdoor garbage and recycling areas are located on the outside of the building.

8. Rooftop Structures

   No rooftop structures will be constructed over 10' in height.

Off-Street Parking and Loading Standards and Requirements:

Section 19.600

This proposal includes the construction and installation of 16 standard parking stalls and 1 ADA parking stall. In totality this proposal will provide 17 total automobile parking stalls.

Per MMC Table 19.605.1 this proposal is required to provide 26.67 parking stalls.

20 Residential Units under 800 SF = 20 stalls minimum

1 Residential Unit over 800 SF = 1.25 stalls minimum

1,356 SF of Commercial Area = 5.42 stalls minimum

The parking count minimum can be reduced per MMC 19.605.3.B.1-7.

> By utilizing Reduction 2 – Proximity to mass transit in multi-family buildings the minimum parking can be lowered 20% (20% of 26.67 stalls = 5.334 stalls).
>
> This exception lowers the minimum parking to 21.336 stalls.

This proposal asks for a variance to reduce the overall required parking stalls.

Parking stalls will be utilized appropriately and will not be used for storage or other prohibited activities.

Parking spaces will be designed to the appropriate width, length, and aisle requirements.

All parking areas will be installed inside the building, therefore removing the requirement for parking lot landscaping.

The parking area will be constructed with concrete, striped, and wheel stops will be installed at all parking stalls.

The parking area will be well lit and pedestrian areas will be identified through changes in color and texture from parking areas.

Loading spaces are not required as part of this proposal.

Bicycle Parking Requirements MMC 19.609

Quantities:

21 Residential Units = 21 bicycle parking spaces

1,356 SF of Commercial Area = 5.42 stalls X (0.1) = .542 bicycle parking spaces

Total spaces required = 22

Total units provided = 22

Bicycle parking will be provided a minimum of 2' x 6' for the stall as well as a 5' clear minimum access aisle.

Public Facility Standards and Requirements:

Section 19.700

Response: This proposal will comply with all standards set forth in MMC 19.700 and the public works standards.

The applicant will submit full engineering plans at building permit submittal for use of determining required updates to public facilities and required street improvements.

Compliance with Applicable Land Use Approvals:

Response: This proposal will meet all the requirements or conditions of any land use approval on this site.

Type III Variance – Driveway Exception -- Economic Hardship Criteria:

B. Type III Variances

An application for a Type III variance shall be approved when all of the criteria in either Subsection 19.911.4.B.1 or 2 have been met. An applicant may choose which set of criteria to meet based upon the nature of the variance request, the nature of the development proposal, and the existing site conditions.

1. Discretionary Relief Criteria

a. The applicant's alternatives analysis provides, at a minimum, an analysis of the impacts and benefits of the variance proposal as compared to the baseline code requirements.

b. The proposed variance is determined by the Planning Commission to be both reasonable and appropriate, and it meets one or more of the following criteria:

(1) The proposed variance avoids or minimizes impacts to surrounding properties.

(2) The proposed variance has desirable public benefits.

(3) The proposed variance responds to the existing built or natural environment in a creative and sensitive manner.

c. Impacts from the proposed variance will be mitigated to the extent practicable.

2. Economic Hardship Criteria

a. Due to unusual site characteristics and/or other physical conditions on or near the site, the variance is necessary to allow reasonable economic use of the property comparable with other properties in the same area and zoning district.

b. The proposed variance is the minimum variance necessary to allow for reasonable economic use of the property.

c. Impacts from the proposed variance will be mitigated to the extent practicable.

Response: The applicant is pursuing a Type III Variance driveway distance exception, under the economic hardship criteria of unusual site dimensions and orientation. This proposal requests to construct a driveway less than 100' from the nearest intersection. The proposed driveway location on SE Olsen Street is a less impactful location and is of a lower classification than 32nd Avenue. By utilizing this location, the effect on pedestrian and vehicle movement is minimized. The proposed driveway location allows for a more attractive and inviting pedestrian centered front entry with less vehicle traffic and accentuates bicycle parking options. Both frontages will be improved per City of Milwaukie requirements. Without this variance no on-site parking would be permitted, creating an economic burden to the applicant, further, it would increase the strain on the

transportation system. We believe the driveway location proposed would be the least negatively impactful option and would mitigate adverse effects to the extent practical.

Prepared by: Auryn White – BAMA Architecture

Table B for 23.54.015 Required Parking for residential uses		
Use		Minimum parking required
I. General residential uses		
A.	Adult family homes	1 space for each dwelling unit
B.	Artist's studio/dwellings	1 space for each dwelling unit
C.	Assisted living facilities	1 space for each 4 assisted living units; plus 1 space for each 2 staff members on-site at peak staffing time; plus 1 barrier-free passenger loading and unloading space
D.	Caretaker's quarters	1 space for each dwelling unit
E.	Congregate residences	1 space for each 4 sleeping rooms
F.	Cottage housing developments	1 space for each dwelling unit
G.	Floating homes	1 space for each dwelling unit
H.	Mobile home parks	1 space for each mobile home lot as defined in Chapter 22.904
I.	Multifamily residential uses, except as otherwise provided in this Table B for 23.54.015 [1]	1 space per dwelling unit, or 1 space for each 2 small efficiency dwelling units

Table B for 23.54.015 Required Parking for residential uses		
Use		Minimum parking required
J.	Nursing homes [2]	1 space for each 2 staff doctors; plus 1 additional space for each 3 employees; plus 1 space for each 6 beds
K.	Single-family dwelling units	1 space for each dwelling unit
II. Residential use requirements for specific areas		
L.	All residential uses within urban centers or within the Station Area Overlay District [1]	No minimum requirement
M.	All residential uses in commercial, RSL and multifamily zones within urban villages that are not within urban center or the Station Area Overlay District, if the residential use is located within a frequent transit service area [1, 4]	No minimum requirement
N.	Multifamily residential uses within the University of Washington parking impact area shown on Map A for 23.54.015 [1]	1 space per dwelling unit for dwelling units with fewer than 2 bedrooms; plus 1.5 spaces per dwelling units with 2 or more bedrooms; plus 0.25 spaces per bedroom for dwelling units with 3 or more bedrooms
O.	Multifamily dwelling units, within the Alki area shown on Map B for 23.54.015 [1]	1.5 spaces for each dwelling unit
III. Multifamily residential use requirements with rent and income criteria		

Table B for 23.54.015
Required Parking for residential uses

Use		Minimum parking required
P.	For each dwelling unit rent and income-restricted at or below 80 percent of the median income [1, 5]	No minimum requirement

Footnotes to Table B for 23.54.015

[1] The minimum amount of parking prescribed by Part I of Table B for 23.54.015 does not apply if a use, structure, or development qualifies for a greater or a lesser amount of minimum parking, including no parking, under any other provision of this Section 23.54.015. If more than one such provision may apply, the provision requiring the least amount of minimum parking applies, except that if item O in Part II of Table B for 23.54.015 applies, it shall supersede any other applicable requirement in Part I or Part II of this Table B for 23.54.015. The minimum amount of parking prescribed by Part III of Table B for 23.54.015 applies to individual units within a use, structure, or development instead of any requirements in Parts I or II of Table B for 23.54.015.

[2] For development within single-family zones the Director may waive some or all of the minimum parking requirements according to Section 23.44.015 as a special or reasonable accommodation. In other zones, if the applicant can demonstrate that less parking is needed to provide a special or reasonable accommodation, the Director may reduce the requirement. The Director shall specify the minimum parking required and link the parking reduction to the features of the program that allow such reduction. The parking reductions are effective only as long as the conditions that justify the waiver are present. When the conditions are no longer present, the development shall provide the amount of minimum parking that otherwise is required.

[3] No parking is required for single-family residential uses on lots in any residential zone that are less than 3,000 square feet in size or less than 30 feet in width where access to parking is permitted through a required yard or setback abutting a street according to the standards of subsections 23.44.016.B.2, 23.45.536.C.2, or 23.45.536.C.3.

[4] Except as provided in Part III of Table B for 23.54.015, the minimum amounts of parking prescribed by Part 1 of Table B for 23.54.015 apply within 1,320 feet of the Fauntleroy Ferry

Table B for 23.54.015 Required Parking for residential uses	
Use	Minimum parking required
Terminal.	
[5] Dwelling units qualifying for parking reductions according to Part III of Table B for 23.54.015 shall be subject to a recorded restrictive housing covenant or recorded regulatory agreement that includes rent and income restrictions at or below 80 percent of median income, without a minimum household income requirement. The housing covenant or regulatory agreement including rent and income restrictions qualifying the development for parking reductions according to Part III of Table B for 23.54.015 shall be for a term of at least 15 years from the date of issuance of the certificate of occupancy and shall be recorded with the King County Recorder, signed and acknowledged by the owner(s), in a form prescribed by the Director of Housing. If these provisions are applied to a development for housing for persons 55 or more years of age, such housing shall have qualified for exemptions from prohibitions against discrimination against families with children and against age discrimination under all applicable fair housing laws and ordinances.	

f. City of Portland bike-sharing stations may substitute for required parking if all of the following are met:

(1) A City of Portland bike-sharing station providing 15 docks and 10 shared bicycles reduces the motor vehicle parking requirement by 3 spaces. The provision of each addition of 4 docks and 2 shared bicycles reduces the motor vehicle parking requirement by an additional space, up to a maximum of 25 percent of the required parking spaces;

(2) The bike-sharing station must be adjacent to, and visible from the street, and must be publicly accessible;

(3) The bike-sharing station must be shown on the building plans; and

(4) A copy of the signed agreement between the property owner and the Portland Bureau of Transportation must be submitted before the building permit is approved.

Table 266-1
Minimum Required and Maximum Allowed Parking Spaces By Zone [1], [2]

Zone	Requirement
OS, RF – RH, RMP, EG, I, IR	Minimum is Standard A in Table 266-2. Maximum is Standard B in Table 266-2.
CR, CM1, CM2, CM3, CE, CI	Minimum for sites that are 7,500 square feet or less in size: No minimum except for Household Living, which has the following minimums: 0 for 1 to 30 units; 0.20 per unit for 31-40 units; 0.25 per unit for 41-50 units; and 0.33 per unit for 51+ units. Minimum for all other sites is Standard A in Table 266-2 Maximum is Standard B in Table 266-2.
EX	No minimum except for Household Living, which has the following minimums: 0 for 1 to 3 units; 1 per 2 units for four+ units; and SROs are exempt. Maximum is Standard A in Table 266-2, except: 1) Retail, personal service, repair-oriented - Maximum is 1 per 200 sq. ft. of net building area. 2) Restaurants and bars - Maximum is 1 per 75 sq. ft. of net building area. 3) General office – Maximum is 1 per 400 sq. ft. of net building area. 4) Medical/Dental office – Maximum is 1 per 330 sq. ft. of net building area.

CITY OF MILWAUKIE

July 1, 2019

Auryn White
BAMA Architecture
7350 SE Milwaukie Ave
Portland, OR 97202

Re: Preapplication Report

Dear Auryn:

Enclosed is the Preapplication Report Summary from your meeting with the City on June 6, 2019, concerning your proposal for action on property located at 9391 SE 32nd Avenue.

A preapplication conference is required prior to submittal of certain types of land use applications in the City of Milwaukie. Where a preapplication conference is required, please be advised of the following:

- Preapplication conferences are valid for a period of 2 years from the date of the conference. If a land use application or development permit has not been submitted within 2 years of the conference date, the Planning Director may require a new preapplication conference.

- If a development proposal is significantly modified after a preapplication conference occurs, the Planning Director may require a new preapplication conference.

If you have any questions concerning the content of this report, please contact the appropriate City staff.

Sincerely,

Dan Harris
Administrative Specialist II

Enclosure

cc: Mildred White, BAMA Architecture
Valerie Hunter, VH Development
Izak Hamilton, Clackamas Fire District #1
Preapplication File

CITY OF MILWAUKIE
PRE-APPLICATION CONFERENCE REPORT

PreApp Project ID #: 19-008PA

This report is provided as a follow-up to a meeting that was held on 6/6/2019 at 10AM

Applicant Name:	**Auryn White**
Company:	**BAMA Architecture**
Applicant 'Role':	Owner
Address Line 1:	7350 SE Milwaukie Ave
Address Line 2:	
City, State Zip:	Portland OR 97202
Project Name:	**4-story mixed use building**
Description:	**Construct 4-story wood-framed mixed use building with 1st floor retail + covered parking. 2nd-4th floor 28 total res. Units**
ProjectAddress:	**9391 SE 32ND AVE**
Zone:	NMU (Neighborhood Mixed Use)
Occupancy Group:	
ConstructionType:	
Use:	Neighborhood Mixed Use
Occupant Load:	
AppsPresent:	Auryn White, Mildred White, Valerie Hunter
Staff Attendance:	Denny Egner, Mary Heberling, Steve Adams, Izak Hamilton

BUILDING ISSUES

ADA:	
Structural:	
Mechanical:	
Plumbing:	
Plumb Site Utilities:	
Electrical:	
Notes:	This structure shall comply with all the code provisions of the Oregon Structural Specialty Code (OSSC).

Fire sprinklers and alarms will be required as per Oregon Structural Specialty Code (OSSC).

Please note all drawings must be individually rolled. If the drawings are small enough to fold they must be individually folded.

FIRE MARSHAL ISSUES

Fire Sprinklers:

Fire Alarms:

Fire Hydrants:

Turn Arounds:

Addressing:

Fire Protection:

Fire Access:

Hazardous Mat.:

Fire Marshal Notes: See notes attached.

PUBLIC WORKS ISSUES

Water: A City of Milwaukie 6-inch water main on SE 32nd Avenue is available to provide service to the proposed development. A new water service and meter assembly will be required. The development will require separate water meters for the commercial and residential portions of the building. The Water System Development Charge (WSDC) is based on the size of water meter serving the property. A WSDC credit will be provided based on the size of existing water meter(s) being replaced. SDC charges and credits will be assessed at building permit issue.

Please refer to CFD #1 memorandum for fire hydrant and additional requirements

Sewer: An 8-inch concrete wastewater main on SE 32nd Avenue will provide service to the proposed development. The existing service lateral size is unknown, and lateral must be sized to accommodate the proposed development. Currently, the wastewater SDC is comprised of two components: the first component is the City's SDC charge calculated based on plumbing fixture units in accordance with the Uniform Plumbing Code and the second component is the County's SDC for treatment calculated per equivalent dwelling unit that the City collects and forwards to the County. The wastewater SDC will be assessed and collected at the time the building permits are issued.

Storm: Submission of a stormwater management plan by a qualified professional engineer is required as part of the proposed development. The plan shall conform to Section 2 - Stormwater Design Standards of Milwaukie Pubic Works Standards.
The stormwater management plan shall demonstrate that the post-development runoff does not exceed the predevelopment, including any existing stormwater management facilities serving the development property. Also, the plan shall demonstrate compliance with water quality standards. The City of Milwaukie has adopted the City of Portland 2016 Stormwater Management Manual for design of water quality facilities.

All new impervious surfaces, including replacement of impervious surface with new impervious surfaces, are subject to the water quality standards. See Milwaukie Public Works Standards for design and construction standards and detailed drawings.
If the runoff cannot be disposed of with onsite infiltration facilities, connection to the storm system in SE 32nd Avenue will be permitted.
The stormwater SDC is based on the amount of new impervious surface constructed at the site. The stormwater SDC will be assessed and collected at the time the building permits are issued.

Street:

The proposed development fronts the west side of SE 32nd Avenue, which is classified as a Collector Street. The portion of SE 32nd Avenue fronting the proposed development has a right-of-way width of 40 feet, a paved width of 28 feet, and curb tight sidewalks on both sides of the road.
The proposed development fronts the north side of SE Olsen Street, which is classified as a Local Street. The portion of SE Olsen Street fronting the proposed development has a right-of-way width of 50 feet and a paved width of approximately 16 feet with both sides of the road unimproved.
The Transportation SDC will be based on the increase in trips generated by the new use per the Trip Generation Handbook from the Institute of Transportation Engineers. The SDC for transportation is per p.m. peak trip generated. Credits will be given for any demolished structures, which shall be based upon the existing use of the structures.

Frontage:

Chapter 19.700 of the Milwaukie Municipal Code (MMC), applies to partitions, subdivisions, new construction, and modification and/or expansions of existing structures or uses that produce a projected increase in vehicle trips.
Transportation Facility Requirements, MMC Section 19.708, states that all rights-of-way, streets, sidewalks, necessary public improvements, and other public transportation facilities located in the public right-of-way and abutting the development site shall be adequate at the time of development or shall be made adequate in a timely manner.
SE Olsen Street
According to Code Table 19.708.2 the local street cross section includes the following:
- 8-foot travel lanes
- 6-foot parking strips with curb & gutter
- 5-foot landscape strips with sized stormwater planters
- 5-foot setback sidewalks

SE 32nd Avenue
According to Code Table 19.708.2 the collector street cross section includes the following:
- 10-foot travel lanes
- 8-foot parking strips with curb & gutter
- 5-foot landscape strips with sized stormwater planters
- 6-foot setback sidewalks

Right of Way:

The existing 50-foot right-of-way on SE Olsen Street fronting the proposed development is of adequate width to accommodate the planned cross-section.
The existing 40-foot right-of-way on SE 32nd Avenue fronting the proposed development is not of adequate width to accommodate the planned cross-section. A dedication of 10 feet may be necessary.

Driveways:

MMC 12.16.040.B addresses spacing requirements from intersections. The minimum spacing from an intersection for multifamily driveways on a local street is 100 feet. The intersection of 32nd Avenue and Olsen Street is at a sufficient distance as proposed.
MMC 12.16.040.A states that access to private property shall be permitted with the use of driveway curb cuts and driveways shall meet all applicable guidelines of the Americans with Disabilities Act (ADA). Driveway approaches shall be improved to meet the requirements of Milwaukie's Public Works Standards, Section 5.0085, at the time of development. The plan depicts an opening of 18 feet, which also includes the walkway width. This width appears to be inadequate. Depending on the number of dwelling units, the access width will need to be a minimum of 20 or 24 feet wide, exclusive

of the walkway width.

Erosion Control:

Per MMC Section 16.28.020.C, an erosion control permit is required prior to placement of fill, site clearing, or land disturbances, including but not limited to grubbing, clearing or removal of ground vegetation, grading, excavation, or other activities, any of which results in the disturbance or exposure of soils exceeding 500 square feet. The proposed development exceeds the threshold therefore, an erosion control permit is required.
MMC 16.28.020.E states that an erosion control permit is required prior to issuance of building permits or approval of construction plans. Also, MMC 16.28.020.B states that an erosion control plan that meets the requirements of Section 16.28.030 is required prior to any approval of an erosion control permit.

Traffic Impact Study:

MMC 19.704 states the Engineering Director will determine whether a proposed development has impacts on the transportation system by using existing transportation data. If the Engineering Director cannot properly evaluate a proposed development's impacts without a more detailed study, a transportation impact study (TIS) will be required to evaluate the adequacy of the transportation system to serve the proposed development and determine proportionate mitigation of impacts. The Engineering Director has determined that a project specific TIS is required to determine impacts of the development. The applicant will engage the city to determine scope prior to beginning work on the TIS.

PW Notes:

APPLICABILITY OF PRE-APPLICATION REVIEW
The comments provided are preliminary and intended to address the original application materials submitted unless otherwise specifically called out in the notes. The information contained within these notes may change over time due to changes or additional information presented for the development.
This pre-application review is for the following:
The construction of a 3-4 story mixed-use building.
SYSTEM DEVELOPMENT CHARGES (SDC'S)
There was insufficient information to estimate SDCs with the pre-application submitted. All SDCs are calculated, assessed, and collected at the time of building permit issue. Any changes in the proposed use may result in a change in the SDCs that are assessed. An estimate of SDCs can be provided if more detail is provided to staff.
The Parks & Recreation System Development Charge (PRSDC) is triggered when an application on a new dwelling or a change in commercial use is received. The PRSDC is calculate base on dwelling units and employees. Credit can be applied for demolished structures based upon existing use. The parks and recreation SDC will be assessed and collected at the time of building permit issue.
OVERHEAD UTILITIES
The existing building is served by overhead utility lines crossing above SE 32nd Avenue. Service to the new building will need to be placed underground.
REQUIREMENTS PRIOR TO OCCUPANCY
- Engineered plans for public improvements (street, sidewalk, and utility) are to be submitted and approved prior to start of construction. Full-engineered design is required along the frontage of the proposed development. Plans shall be prepared by a Professional Engineer licensed in the State of Oregon.
- The applicant shall pay an inspection fee of 5.5% of the cost of public improvements prior to start of construction.
- The applicant shall provide a payment and performance bond for 100% of the cost of the public improvements prior to the start of construction.
- The applicant shall provide a final approved set of Mylar "As Constructed" drawings to the City of Milwaukie prior to the final inspection.
- The applicant shall provide a maintenance bond for 100% of the cost of the public improvements prior to the final inspection
ADDITIONAL REQUIREMENTS
- All fees mentioned are subject to change in accordance with the City of Milwaukie Master Fee

Schedule.

PLANNING ISSUES

Setbacks:

NMU Setback Requirements:
Minimum street setback: none
Maximum street setback: 10 ft
Side and rear setback: none

Additional Setback requirements:
On 32nd Ave: Distance from the centerline: 30 ft, plus any NMU setback requirements
On Olsen St: Distance from centerline: 25 ft, plus any NMU setback requirements. Olsen street is wide enough to meet this setback requirement.

The setback may include usable open space such as plazas, courtyards, terraces, and small parks.

Building Height:
The maximum building height in the NMU is 3 stories or 45 ft, whichever is less. No building height bonuses are available in the NMU zone, but a variance to the height standard is possible. See more details on the variance process under the Application Procedures section.

Lot Coverage:
Maximum lot coverage is 85%. This includes the parking area as it will be covered. Lot coverage means the amount of area covered by building(s) on a lot expressed as a percentage of the total lot area. Lot coverage includes open structures, such as pole barns; building features such as a patio covers, roofed porches, and decks; or similar features with a surface height of more than 18 inches above average grade. Lot coverage does not include eaves.

Nonresidential Development:
New mixed-use buildings within commercial mixed-use zones must meet the standards in 19.505.7 Nonresidential Development. See the standards at link:
http://www.qcode.us/codes/milwaukie/view.php?topic=19-19_500&frames=on

Landscape:

Minimum vegetation: 15%
No more than 20% of the required vegetation area shall be covered in mulch or bark dust. Mulch or bark dust under the canopy of trees or shrubs is excluded from this limit.

Usable open space may be counted toward the minimum vegetation requirement.

Parking:

Quantity Parking Requirements
Multifamily dwelling units with 800 sq ft of floor area or less:
Minimum: 1 space per dwelling
Maximum: 2 spaces per dwelling

General Retail:
Minimum: 2 spaces per 1,000 sq ft of floor area
Maximum: 5 spaces per 1,000 sq ft of floor area

Eating and Drinking Establishments:
Minimum: 4 spaces per 1,000 sq ft of floor area

Maximum: 15 spaces per 1,000 sq ft of floor area

Exemptions and By-Right Reductions to Quantity Requirements
Applicants are allowed to utilize multiple reductions provided that the total reduction in required parking does not exceed 25% of the minimum quantity requirement.

Proximity to Public Transit:
- Parking for commercial and industrial uses may be reduced by up to 10% if the development is within 500 ft walking distance of a transit stop with a peak hour service frequency of 30 mins or less.
- Parking for multifamily uses may be reduced up to 20% if the development is within 500 ft walking distance of a transit stop with a peak hour service frequency of 30 mins or less.

Multitenant Commercial Sites:
Where multiple commercial uses occur on the same site, minimum parking requirements shall be calculated as described below. The Planning Director shall have the authority to determine when multiple uses exist on a site:
- Use with highest parking requirement. The use that has the largest total number of minimum parking spaces required shall be required to provide 100% of the minimum number of parking spaces.
- All other uses. All other uses on the site shall be required to provide 80% of the minimum number of parking spaces.

Carpool/Vanpool:
Commercial and industrial developments that provide at least 2 carpool/vanpool parking spaces may be reduce the required number of parking spaces by up to 10%.

Bicycle Parking:
The minimum amount of required bicycle parking for all non-single-family residential uses may be reduced by up to 10% for the provision of covered and secured bicycle parking in addition to what is required by Section 19.609. A reduction of 1 vehicle parking space is allowed for every 6 additional bicycle parking spaces installed. The bicycle spaces shall meet all other standards of Section 19.609. If a reduction of 5 or more stalls is granted, then on-site changing facilities for bicyclists, including showers and lockers, are required. The area of an existing parking space in an off-street parking area may be converted into bicycle parking to utilize this reduction.

Car Sharing:
Required parking may be reduced by up to 5% if at least 1 off-street parking space is reserved for a vehicle that is part of a car sharing program. The car sharing program shall be sufficiently large enough, as determined by the Planning Director, to be accessible to persons throughout Milwaukie and its vicinity. The applicant must provide documentation from the car sharing program that the program will utilize the space provided.

Quantity Modifications and Required Parking Determinations
Subsection 19.605.2 allows for the modification of minimum and maximum parking ratios from Table 19.605. The application for a determination and the approval criteria can be found in Subsection 19.605.2. Parking Modification Determination is a separate Type II land use application.

Link to the code section for vehicle parking quantities requirements is here:
http://www.qcode.us/codes/milwaukie/view.php?topic=19-19_600&frames=on

Transportation Review: The proposal will trigger the requirements of MMC Chapter 19.700 Public Facility Improvements. Please see the Public Works notes for more information about the requirements of MMC 19.700 and the necessary right-of-way dedication and/or street frontage improvements.

Application Procedures: The applicant is interested in demolishing the existing structure on the property and building a 3-4 story mixed-use building. Depending on a how tall the structure will be and other development standards, there may be a few options for the types of application for the proposal.

1. 3-Story Mixed-Use Building that meets all development standards:
If there are no need for any variances to all development standards (including parking standards, the nonresidential development standards, or other standards related to this development) the process will be a Type I or Type II Development Review application.

The application will be reviewed through a Type I or Type II review per the process and approval criteria for development review found in MMC 19.906 and the application fee for a Type I review is $200 and for a Type II review is $1,000. The submitted narrative and site plans for the application should address the following sections of the MMC: 19.303 Commercial Mixed-Use Zones, 19.501 General Exceptions, 19.504.7 Minimum Vegetation, 19.504.9 On-Site Walkways and Circulation, 19.505.7 Nonresidential Development, 19.600 Off-Street Parking and Loading, 19.700 Public Facility Improvements, and 19.906 Development Review.

For the City's initial review, the applicant should submit 5 complete copies of the application, including all required forms and checklists. A determination of the application's completeness will be issued within 30 days. If deemed incomplete, additional information will be requested. If deemed complete, additional copies of the application will be required for referral to other departments, the Neighborhood District Association (NDA), and other relevant parties and agencies. City staff will inform the applicant of the total number of copies needed.

Land use application submission materials are listed below for your convenience. Please refer to the handouts online at the City's website at https://www.milwaukieoregon.gov/forms?keys=&term_node_tid_depth=311&field_microsite_tid_1=All.

1. All applicable land use applications forms with signatures of property owners.
2. All applicable land use application fees.
3. Completed and signed "Submittal Requirements" form.
4. 5 copies of an existing conditions and a proposed conditions site plan, both to scale. These two site plans can be combined onto one site plan. Once the application is deemed complete, additional copies will be requested for distribution to City departments, applicable governmental agencies, and the neighborhood district association for review.
5. Detailed narrative describing compliance with all applicable code sections.

Type I applications are decided by the Planning Director and are administrative in nature. Once the Planning Director renders a decision, there is a fifteen calendar-day appeal period. A decision is generally issued within 14 days of the application being deemed complete. Building permits will be accepted for review only after the appeal period for all land use decisions has expired.

Type II applications are decided by the Planning Director. A public notice is sent to all residents within 300 ft of the site and has a 14-day comment period. A decision is generally issued within 57 days of the application being deemed complete. Once the Planning Director renders a decision, there is a fifteen calendar-day appeal period. Building permits will be accepted for review only after the appeal period for all land use decisions has expired.

2. 4-Story Mixed-Use Building
A 4-story mixed use building does not meet the height requirements for the NMU zone. It will need to go through a Type III Variance process.

In addition to the same requirements needed for a Type I Development Review (see above), a variance application will need to be submitted for any standard that does not meet the requirements of the Milwaukie Municipal Code (MMC), including height. For a Type III Variance application, it will need to explain how it meets the approval criteria for a Type III Variance. See MMC 19.911 Variances on the approval criteria that needs to be addressed. The application will need to specifically address the Discretionary Relief Criteria, which include an alternative analysis, as well as, showing how the proposed variance avoids or minimizes impacts to surrounding properties, has desired public benefits, and responds to the existing built or natural environment in a creative and sensitive manner. The Planning Director and staff will need to see how a 4th story can meet that approval criteria. Creative ways to meet the criteria could be a step-back for the 4th floor, a green roof or other green building materials/amenities, and many more. A mixed-use building with just a 4th story will be hard for the Planning staff to recommend approval on due to it not providing anything that shows it meets the approval criteria.

The variance application will be reviewed through a Type III review per MMC 19.1006 and the application fee is $2,000. The submittal narrative for the application should address the approval criteria for Type III Variances in MMC 19.911.

If there are multiple variances, one variance application can accommodate up to 3 variance requests.

The submittal requirements and materials are the same as listed above in the Type I process.

For Type III review, once the application is deemed complete, a public hearing with the Planning Commission will be scheduled. Staff will determine the earliest available date that allows time for preparation of a staff report (including a recommendation regarding approval) as well as provision of the required public notice to property owners and residents within 300 ft of the subject property, at least 20 days prior to the public hearing. A sign giving notice of the application must be posted on the subject property at least 14 days prior to the hearing.

Multiple applications are addressed concurrently. A Type II application would be reviewed with Type III applications at the Planning Commission, but are subject to the Type II approval criteria; not the Type III approval criteria.

Natural Resource Review: There are no natural resource overlay zones on this lot.

Lot Geography: The subject property is a rectangular lot that is 10,787.21 sq ft.

Planning Notes: 1. The preapplication conference is valid for purposes of submitting future land use applications as described in MMC 19.1002.4. A preapplication conference is valid for 2 years.

2. The Milwaukie Municipal Code is available online at http://www.qcode.us/codes/milwaukie/view.php?topic=19&frames=off.

3. The site is in the Ardenwald-Johnson Creek Neighborhood District Association (NDA) boundary. Staff encourages the applicant to present the proposal to the NDA and/or its Land Use Committee, as well as to the immediate property owners. The NDA's webpage is on-line at https://www.milwaukieoregon.gov/citymanager/ardenwald-johnson-creek-nda.Their meetings are held at 6:30 pm on the fourth Monday of the month at Milwaukie Café and Bottle Shop (9401 SE 32nd Ave.) The NDA Chairperson is Matt Rinker (mattrinker@hotmail.com). Please contact the Chair to coordinate a meeting to discuss the proposal.

4. This site is a brownfield and has been recognized by the Department of Environmental Quality

(DEQ) as having had/or has contaminants on site. Please contact DEQ to assess any remediation that may be needed for this proposal. The City will also refer any submitted applications to DEQ to provide any comments on the proposal, if needed.

ADDITIONAL NOTES AND ISSUES

County Health Notes:

Other Notes:

This is only preliminary preapplication conference information based on the applicant's proposal and does not cover all possible development scenarios. Other requirements may be added after an applicant submits land use applications or building permits. City policies and code requirements are subject to change. If you have any questions, please contact the City staff that attended the conference (listed on Page 1). Contact numbers for these staff are City staff listed at the end of the report.

Sincerely,

City of Milwaukie Development Review Team

BUILDING DEPARTMENT

Samantha Vandagriff - Building Official - 503-786-7611

Harmony Drake - Permit Specialist - 503-786-7623
Stephanie Marcinkiewicz 503-786-7636

ENGINEERING DEPARTMENT

Steve Admans - City Engineer - 503-786-7605

Dalton Vodden - Associate Engineer - 503-786-7617

Alex Roller - Engineering Tech II - 503-786-7695

COMMUNITY DEVELOPMENT DEPARTMENT

Leila Aman - Comm. Dev. Director - 503-786-7616

Alicia Martin - Admin Specialist - 503-786-7600

Tempest Blanchard -Admin Specialist - 503-786-7600

Dan Harris -Admin Specialist - 503-786-7600

PLANNING DEPARTMENT

Dennis Egner - Planning Director - 503-786-7654

David Levitan - Senior Planner - 503-786-7627

Brett Kelver - Associate Planner - 503-786-7657

Vera Kolias - Associate Planner - 503-786-7653
Mary Heberling - Assistant Planner - 503-786-7658

CLACKAMAS FIRE DISTRICT

Mike Boumann - Lieutenant Deputy Fire Marshal - 503-742-2673
Izak Hamilton - Fire Inspector - 503-742-2660

Clackamas County Fire District #1
Fire Prevention Office

E-mail Memorandum

To: City of Milwaukie Planning Department

From: Izak Hamilton, Fire Inspector, Clackamas Fire District #1

Date: 6/6/2019

Re: 19-008PA, 9391 SE 32nd Ave., Milwaukie, OR

This review is based upon the current version of the Oregon Fire Code (OFC), as adopted by the Oregon State Fire Marshal's Office. The scope of review is typically limited to fire apparatus access and water supply, although the applicant must comply with all applicable OFC requirements. When buildings are completely protected with an approved automatic fire sprinkler system, the requirements for fire apparatus access and water supply may be modified as approved by the fire code official. The following items should be addressed by the applicant:

> **A Fire Access and Water Supply plan is required for subdivisions and commercial buildings over 1000 square feet in size or when required by Clackamas Fire District #1. The plan shall show fire apparatus access, fire lanes, fire hydrants, fire lines, available fire flow, FDC location (if applicable), building square footage, and type of construction. The applicant shall provide fire flow tests per NFPA 291, and shall be no older than 12 months. Work to be completed by experienced and responsible persons and coordinated with the local water authority.**

Fire Safety Program: In accordance with NFPA 241 Chapter 7 a fire safety program shall include provisions for: Housekeeping, on-site security, fire protection systems, pre fire coordination with the fire district, fire district notification, protection of existing structures and equipment from exposure fires.

(Please see accompanying document)

Access:

1. Provide address numbering that is clearly visible from the street.
2. No part of the building may be more than 150 from an approved fire department access road.

3. Buildings exceeding 30 feet in height shall require extra width and proximity provisions for aerial apparatus.

Water Supply

1. Fire Hydrants Commercial Buildings: Where a portion of the building is more than 400 feet from a hydrant on a fire apparatus access road, as measured in an approved route around the exterior of the building, on-site fire hydrants and mains shall be provided.

Note: This distance may be increased to 600 feet for buildings equipped throughout with an approved automatic sprinkler system.

2. All new buildings shall have a firefighting water supply that meets the fire flow requirements of the Fire Code. Maximum spacing between hydrants on street frontage shall not exceed 500 feet. Additional private on-site fire hydrants may be required for larger buildings. Fire sprinklers may reduce the water supply requirements.
3. Prior to the start of combustible construction required fire hydrants shall be operational and accessible.
4. The fire department connection (FDC) for any fire sprinkler system shall be placed as near as possible to the street, and within 100 feet of a fire hydrant.

Notes:

1. Comments may not be all inclusive based on information provided.
2. Please visit our website for access to our Fire flow Worksheet, and Fire Code Application Guide.

   http://www.clackamasfire.com/fire-prevention/new-construction-resources/

Fire Safety During Construction

The purpose of this document is to outline the minimum requirements in Clackamas Fire District #1 for subdivisions and commercial buildings during construction, alteration, and demolition. The following items, along with the requirements on OFC Chapter 33, and NFPA 241 will be inspected and enforced by the fire district during activities regulated by the referenced standards.

Fire Safety Program: In accordance with NFPA 241 Chapter 7 a fire safety program shall include provisions for: Housekeeping, on-site security, fire protection systems, pre fire coordination with the fire district, fire district notification, protection of existing structures and equipment from exposure fires.

Temporary Offices and Sheds: Separation of the structures shall be in accordance with table 4.2.1 in NFPA 241.

Table 4.2.1 Separation Distances

Temporary Structure Exposing Wall Length		Minimum Separation Distance	
m	ft	m	ft
6	20	9	30
9	30	11	35
12	40	12	40
15	50	14	45
18	60	15	50
>18	>60	18	60

Hot Work: Shall be conducted in accordance with OFC Chapter 35. Permits are not required, but records of the operations should be maintained on site for 48 hours after the hot work has been completed. The fire district shall be notified prior to any hot work operation that will required fire protection or detection systems to be taken out of service. A fire watch is required in areas with combustible materials, and shall continue for no less than 30 minutes after operations are completed, or two hours after roofing operations. The fire watch

shall have a fire extinguisher with a rating of not less than 2-A:20-B:C within 30 feet of the operation. A pre hot work check shall be completed prior to work.

Access: Approved access for fire fighting shall be provided within 100 feet of all fire fighting equipment. (Stand Pipes, FDC's, Hydrants)

Water Supply: Hydrants shall be in service, and available for use prior to the arrival of combustible material on site.

Standpipes: In buildings required to have stand pipes, not less than one shall be provided for use during construction. Hose connections shall be in place adjacent to stairs, and be extended to within one floor of the highest point of construction.

Means of Egress: In buildings greater than 50 feet, or 4 stories in height, shall have at least one temporary **Lighted** stairway. This stairway shall remain clear of obstructions and be readily available for use.

Portable Fire Extinguishers: Structures under construction, alteration, and demolition shall be provided with not less than one 2-A:10-B:C portable fire extinguisher within 75 feet of all portions of the building. Additional fire extinguishers shall be placed at each stairway where combustible materials are present, in every storage shed. Additional fire extinguishers shall be available for other hazardous operations.

Waste Disposal: Accumulations of combustible waste shall be removed for the structure at the end of every work shift.

Storage of Flammable and Combustible Liquids and Gasses: No more than 60 gallons of Class I and II liquids shall be stored in or within 50 feet of the structure. Storage areas shall be marked with "No Smoking" signs. Appropriate NFPA 704 placards shall be in place.

For Additional Information Please Refer to the Following:

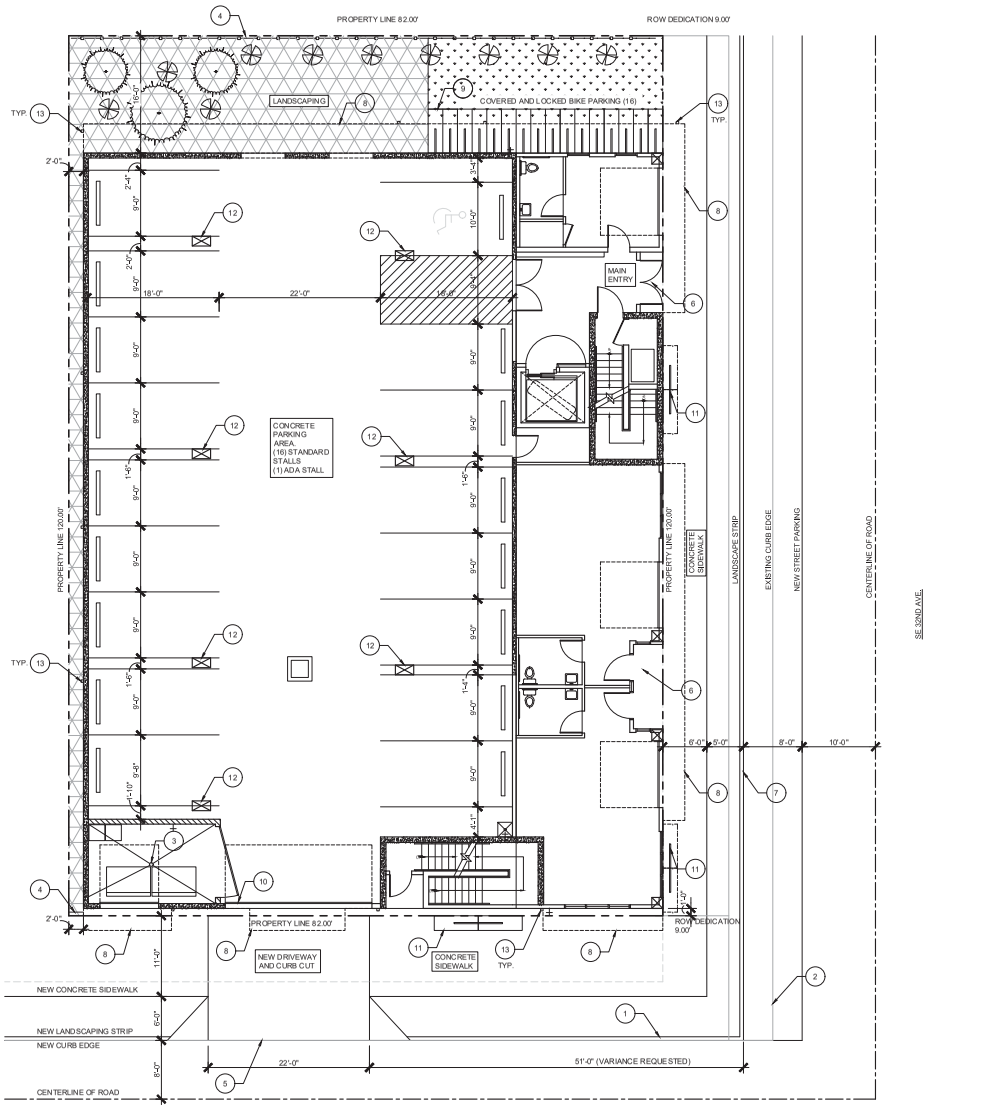
Temp Heating equipment OFC Section 3303, NFPA 241 Section 5.2

Smoking Restrictions OFC 3304, NFPA 241 Section 5.3

Explosive Materials OFC 3307, NFPA 241 Section 5.6

Roofing Operations OFC 3317, NFPA 241 Chapter 9

ATTACHMENT 1 Exhibit B



NOTE: NO EXISTING TREES OR EXISTING NATURAL FEATURES ON SITE. NO TREE PROTECTION OR TREE REMOVAL REQUIRED.

TRUE NORTH

1 SD1.1 SITE PLAN
SCALE: 1/8" = 1'-0"

SITE PLAN LEGEND

PROPERTY LINE

NEW FENCE. SEE DETAIL 1/SD2.1

PROPERTY INFORMATION

ADDRESS: 9391 SE 32ND AVE, MILWAUKIE, OR 97222

PROJECT: RETAIL AND PARKING ON FIRST FLOOR, WITH 20 APARTMENT UNITS LESS THAN 800 SF, 1 APARTMENT OVER 800 SF.

LEGAL DESCRIPTION

LEGAL DESCRIPTIONS: ARDENWALD, BLOCK 5, LOT 21 AND 22

TAX LOT ID: 11E25BD07700

PARCEL NUMBER: 00008547

ZONING CODE INFORMATION

BASE ZONE: NMU (NEIGHBORHOOD MIXED USE)

SITE AREA: 0.24 ACRES (10,800 SF)

PROPOSED SITE INFORMATION:

PLOT: 9,720 SF

BUILDING FOOTPRINT: 8,140 SF (84%)

EXTERIOR CONCRETE PAVING: 80 SF (0.5%)

PROPOSED LANDSCAPING: 1,500 SF (15.5%)

MINIMUM FAR ALLOWED: 0.5:1

BUILDING HEIGHT:

MAXIMUM ALLOWABLE HEIGHT (TABLE 19.303.3):	45'-0"
ACTUAL HEIGHT: (VARIANCE REQUESTED)	51'-1"

MAX SETBACKS ALLOWED:

MAXIMUM STREET SETBACK: 10'-0"
ACTUAL STREET SETBACK: 1'-0"

AUTOMOBILE PARKING REQUIREMENTS (TABLE 19.605.1):

PROVIDED STANDARD PARKING SPACES:	17
REQUIRED STANDARD PARKING SPACES: (QUANTITY MODIFICATION REQUESTED)	24.25

BICYCLE PARKING REQUIREMENTS (TABLE 266-6):

BIKE PARKING MIN. OF 22 REQUIRED, 22 TO BE PROVIDED.

STANDARD BIKE PARKING (MIN OF 1 SPACE REQUIRED).

ENCLOSED BIKE PARKING (1 PER UNIT, 50% MINIMUM OF REQUIRED)

SEE SECTION: 19.609.2

FLOOR AND BUILDING COVERAGE AREA:

FIRST FLOOR COVERED PARKING AREA/RETAIL:	8,056 SF
SECOND FLOOR BUILDING AREA:	8,682 SF
THIRD FLOOR BUILDING AREA:	8,682 SF
FOURTH FLOOR PENTHOUSE BUILDING AREA:	8,332 SF
TOTAL AREA (INCLUDING COVERED PARKING):	33,762 SF

SITE PLAN GENERAL NOTES

EXISTING INFORMATION IS BASED ON DRAWINGS PROVIDED BY AKS.

DIMENSIONS ARE TO FACE OF CURB, FACE OF BUILDING, PROPERTY LINE, OR CENTER OF PAINT STRIPING UNLESS NOTED OTHERWISE.

WHERE ACCESS TO OR WITHIN A STRUCTURE OR AN AREA IS RESTRICTED BECAUSE OF SECURED OPENINGS OR WHERE IMMEDIATE ACCESS IS NECCESARY FOR LIFE-SAVING OR FIRE FIGHTING PURPOSES A "KNOXBOX" KEY BOX SHALL BE INSTALLED IN AN APPROVED LOCATION.

PLANT KEY

SYMBOL	LANDSCAPING TYPE	SIZE	COUNT
TREES			
	MEDIUM SIZED DECIDUOUS TREE PER OWNER AND MARKET AVAILABILITY *NOTE: MUST PROVIDE 3'X3' MIN PLANTING AREA	2" CAL 4' ABOVE GRADE	3
SHRUBS			
	LANDSCAPE SHRUBS PER OWNER AND MARKET AVAILABILITY	1 GAL. 3' O.C.	10
GROUND COVER			
	MULCH PER OWNER	24" O.C. 1 GAL.	
	GRASS PER OWNER		

SITE PLAN KEYNOTES

1. EXISTING CONCRETE CURB TO REMAIN.
2. EXISTING CURB TO BE REMOVED.
3. TRASH AND RECYCLING ROOM. PROVIDE DRAIN THAT CONNECTS TO A SANITARY SEWER WASTE LINE. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
4. NEW 6' HIGH CHAIN LINK FENCE WITH PRIVACY SLATS. PAINTED BLACK PER OWNER.
5. NEW CONCRETE OR ASPHALT DRIVEWAY WITH NEW CURB EDGE. SEE CIVIL DRAWINGS.
6. NEW CONCRETE PAVING. SEE STRUCTURAL DRAWINGS
7. NEW DEDICATION AND FRONTAGE IMPROVEMENTS. SEE CIVIL DRAWINGS.
8. FACE OF BUILDING ABOVE
9. LONG TERM BICYCLE STORAGE 2'X6' EACH; 16 TOTAL. SEE DETAIL 10/SD2.1
10. 20' WIDE CONTROLLED ACCESS ENTRY GATE. SEE ELECTRICAL. PROVIDE KEYBOX FOR EMERGENCY ACCESS.
11. SHORT TERM BICYCLE PARKING AREA 2'x6' EACH, FOUR TOTAL. SEE DETAIL 10/SD2.1.
12. CONCRETE POST. SEE STRUCTURAL.
13. DOWNSPOUT, SEE ROOF PLANS A1.5 & A1.6.

B A M A
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.253.4283

REGISTERED ARCHITECT
MILDRED WHITE
PORTLAND, OREGON
STATE OF OREGON
EXPIRES 12/31/2021

9391 SE 32nd Ave. Mixed-Use

4.1 Page 49

9391 SE 32ND AVE,
MILWAUKIE, OR 97222

Proj # 201931

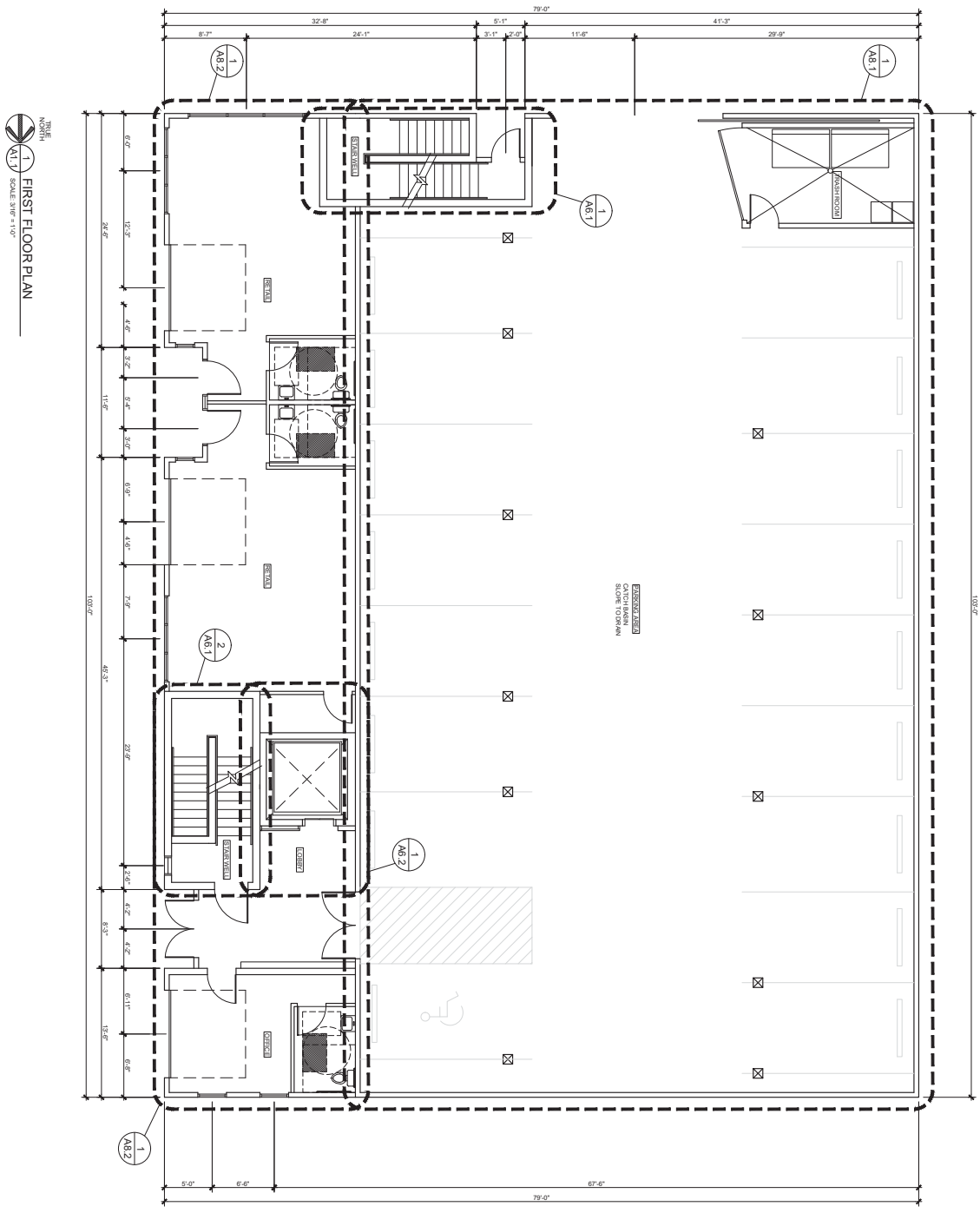
REVISIONS:
1 OWNER REVISION 04/28/20
2 OWNER REVISION 05/25/20

RECEIVED
By KOLIASV at 8:31 am, May 27, 2020

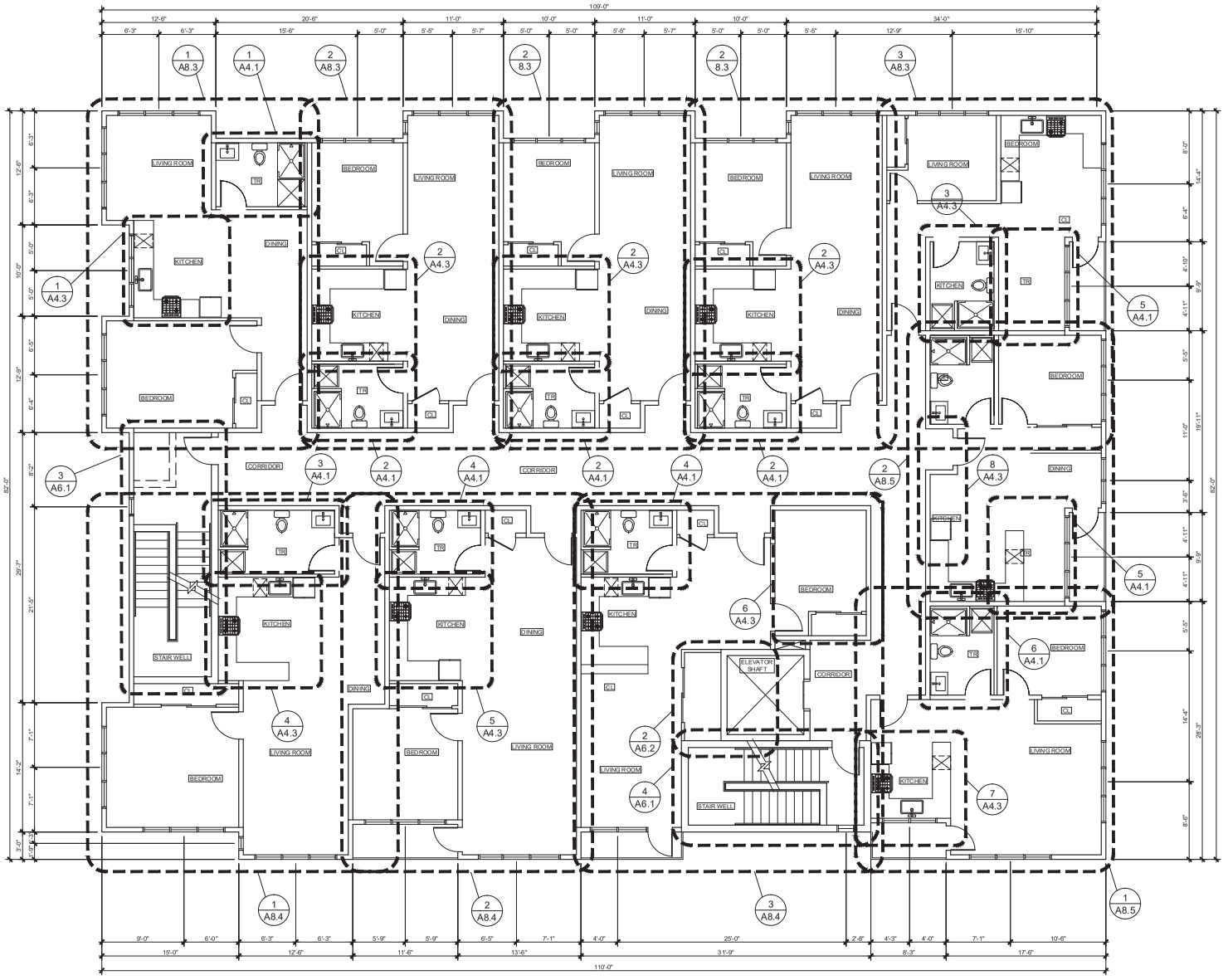
REVISED

BUILDING PERMIT:
DATE: 4-16-20
SHEET NO.
SD1.1
SITE PLAN

THIS PAGE WAS LEFT BLANK INTENTIONALLY



BUILDING PERMIT: SHEET NO A1.1 FIRST FLOOR PLAN		Proj #: 201931	9391 SE 32ND AVE MILWAUKIE, OR 97222	32ND AVE MIXED USE	These drawings are the property of BAMA Architecture and Design, and are not to be reproduced or distributed in any manner without the written consent of BAMA Architecture and Design	REGISTERED ARCHITECT STATE OF OREGON PORTLAND, OREGON MILDRED WHITE EXPIRES: 12/31/2019	B A M A Architecture and Design 7350 SE Milwaukie Ave. Portland, Oregon 97202 Ph: 503.253.4283



TRUE NORTH

1 A1.2 SECOND FLOOR PLAN

SCALE: 3/16" = 1'-0"

B A M A
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.253.4283

REGISTERED ARCHITECT
MILDRED WHITE
PORTLAND, OREGON
STATE OF OREGON
EXPIRES 12/31/2019

32ND AVE MIXED USE

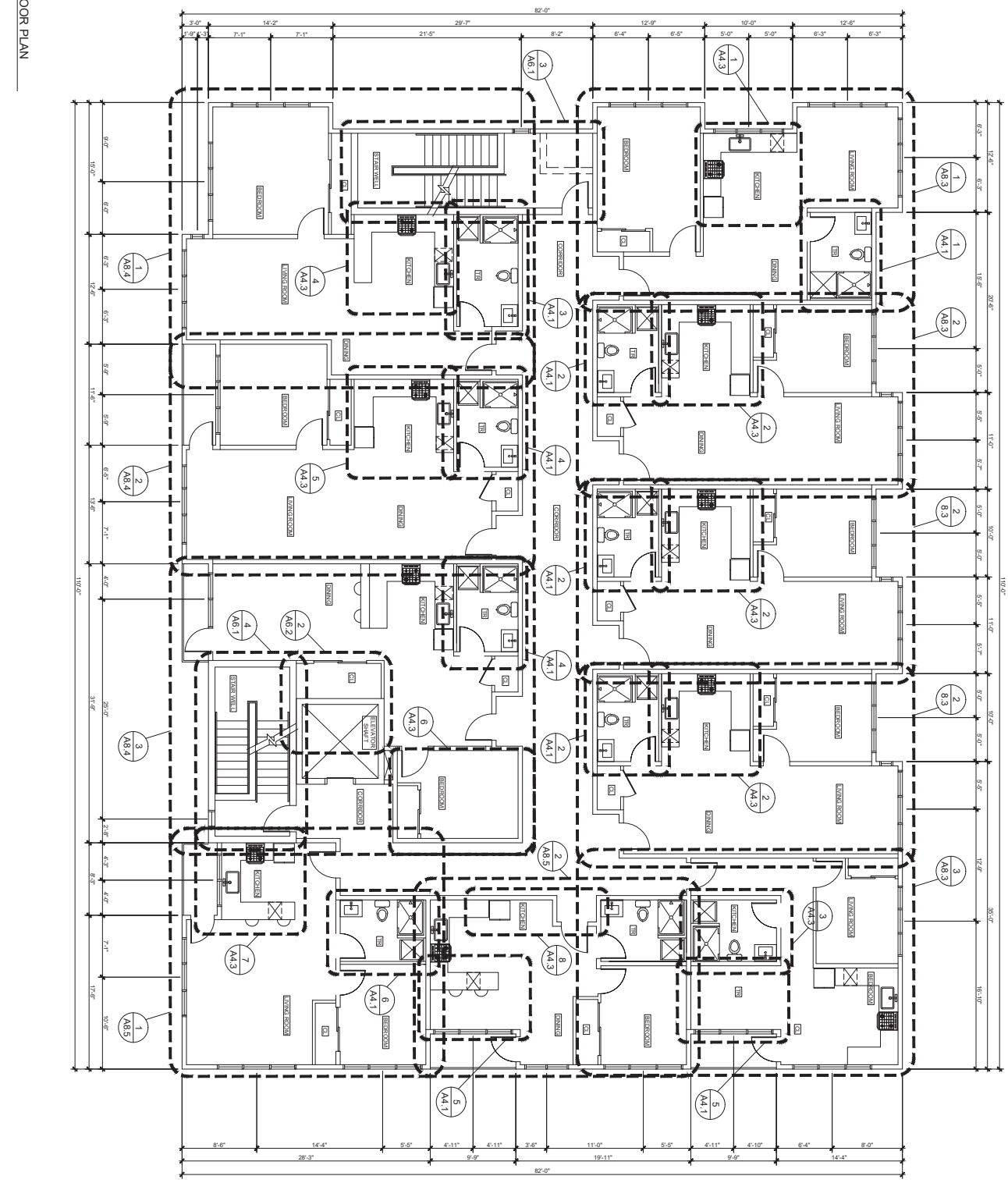
4.1 Page 52

9391 SE 32ND AVE,
MILWAUKIE, OR 97222

Proj # 201931

BUILDING PERMIT:

SHEET NO.
A1.2
SECOND FLOOR PLAN



BUILDING PERMIT:

SHEET NO.
A1.3
THIRD FLOOR PLAN

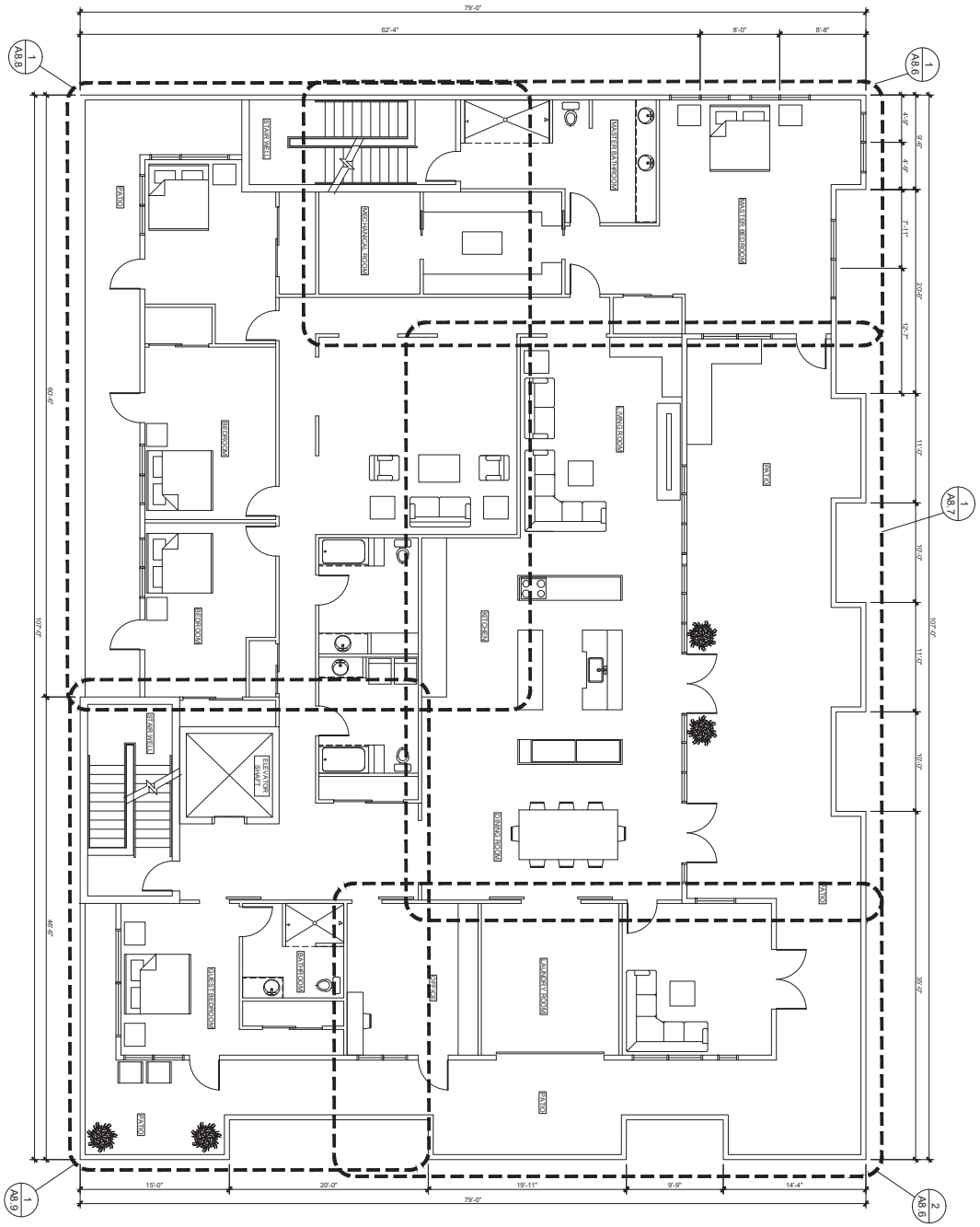
9391 SE 32ND AVE.
MILWAUKIE, OR 97222

Proj # 20131

32ND AVE MIXED USE

B A M A
Architecture and Design

7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.253.4283



TRUE NORTH

1 A1.4 FOURTH FLOOR PLAN - PENTHOUSE

SCALE: 3/16" = 1'-0"

BUILDING PERMIT

SHEET NO.
A1.4
FOURTH FLOOR PLAN - PENTHOUSE

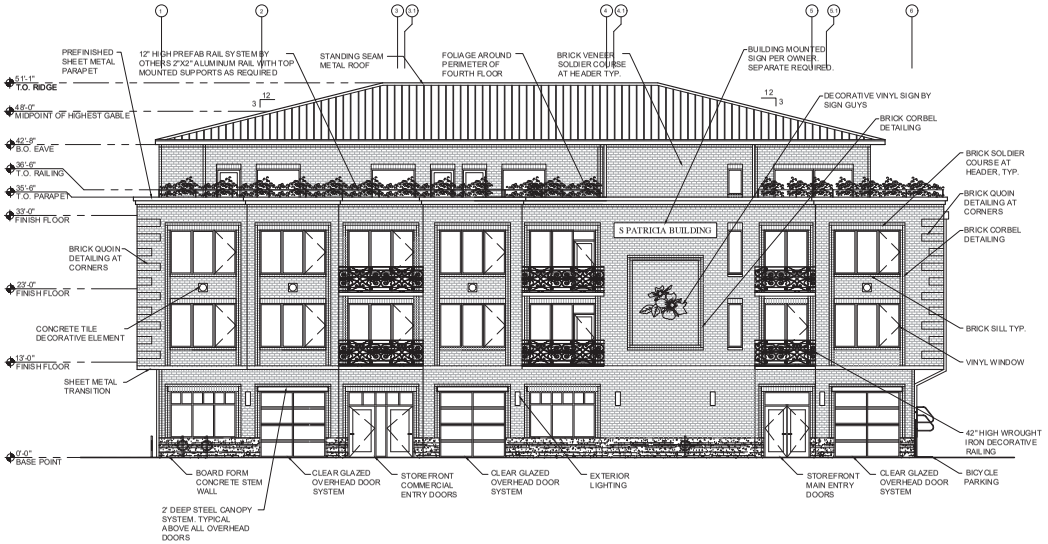
9393 SE 32ND AVE.
MILWAUKIE OR 97222

Proj # 201931

32ND AVE MIXED USE

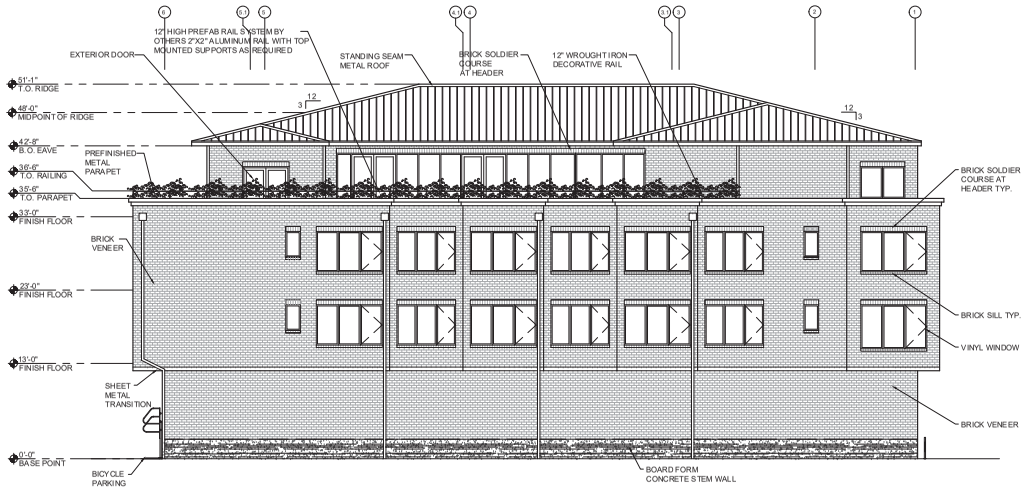
REGISTERED ARCHITECT
STATE OF OREGON
PORTLAND, OREGON
MICHAEL WHITE
EXPIRES: 12/31/2019

BAMA
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.253.4283



1 A2.1 EAST EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0"



2 A2.1 WEST EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0"

B A M A
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.253.4283

REGISTERED ARCHITECT
MILDRED WHITE
PORTLAND, OREGON
STATE OF OREGON
EXPIRES 12/31/2021

9391 SE 32nd Ave. Mixed-Use 4.1 Page 55

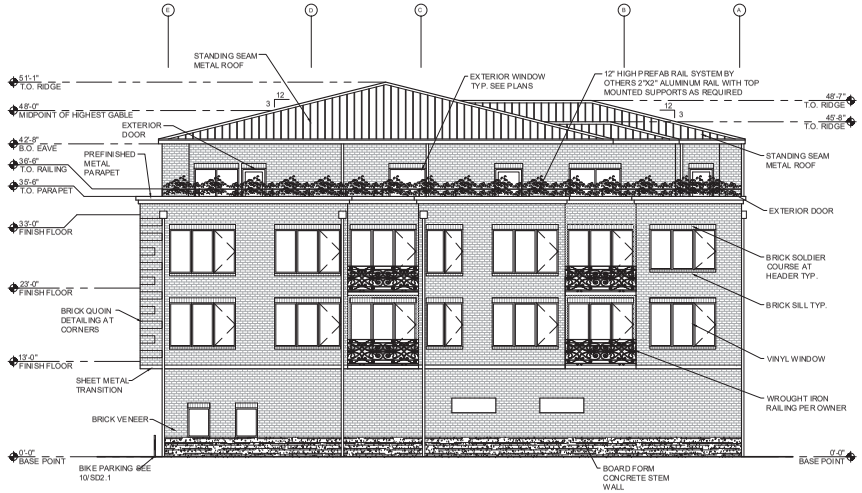
9391 SE 32ND AVE,
MILWAUKIE, OR 97222

Proj # 201931

REVISIONS:
1 OWNER REVISION 04/28/20
2 OWNER REVISION 05/25/20

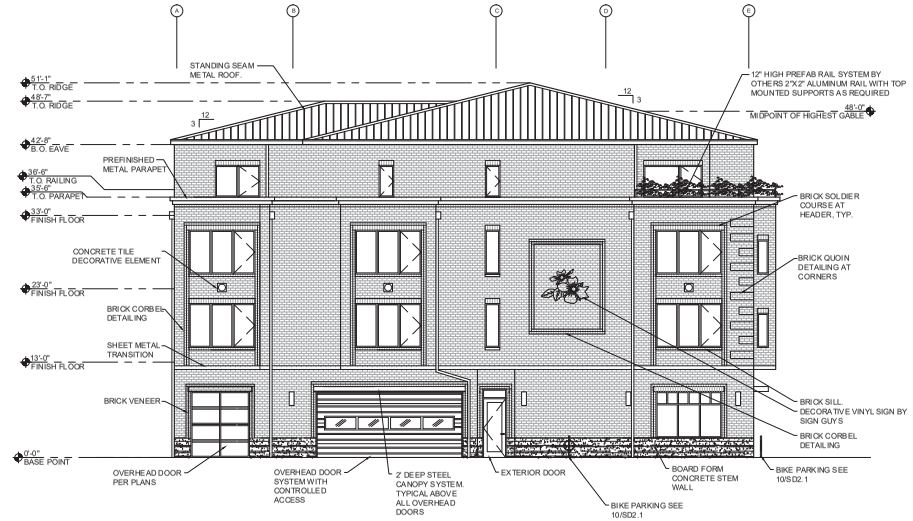
RECEIVED
By KOLIASV at 8:31 am, May 27, 2020

BUILDING PERMIT:
DATE: 4-16-20
SHEET NO.
A2.1
EAST & WEST ELEVATIONS



1 A2.2 NORTH EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0"



2 A2.2 SOUTH EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0"

B A M A
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.253.4283

REGISTERED ARCHITECT
MILDRED WHITE
PORTLAND, OREGON
STATE OF OREGON
EXPIRES 12/31/2021

9391 SE 32nd Ave. Mixed-Use 4.1 Page 56

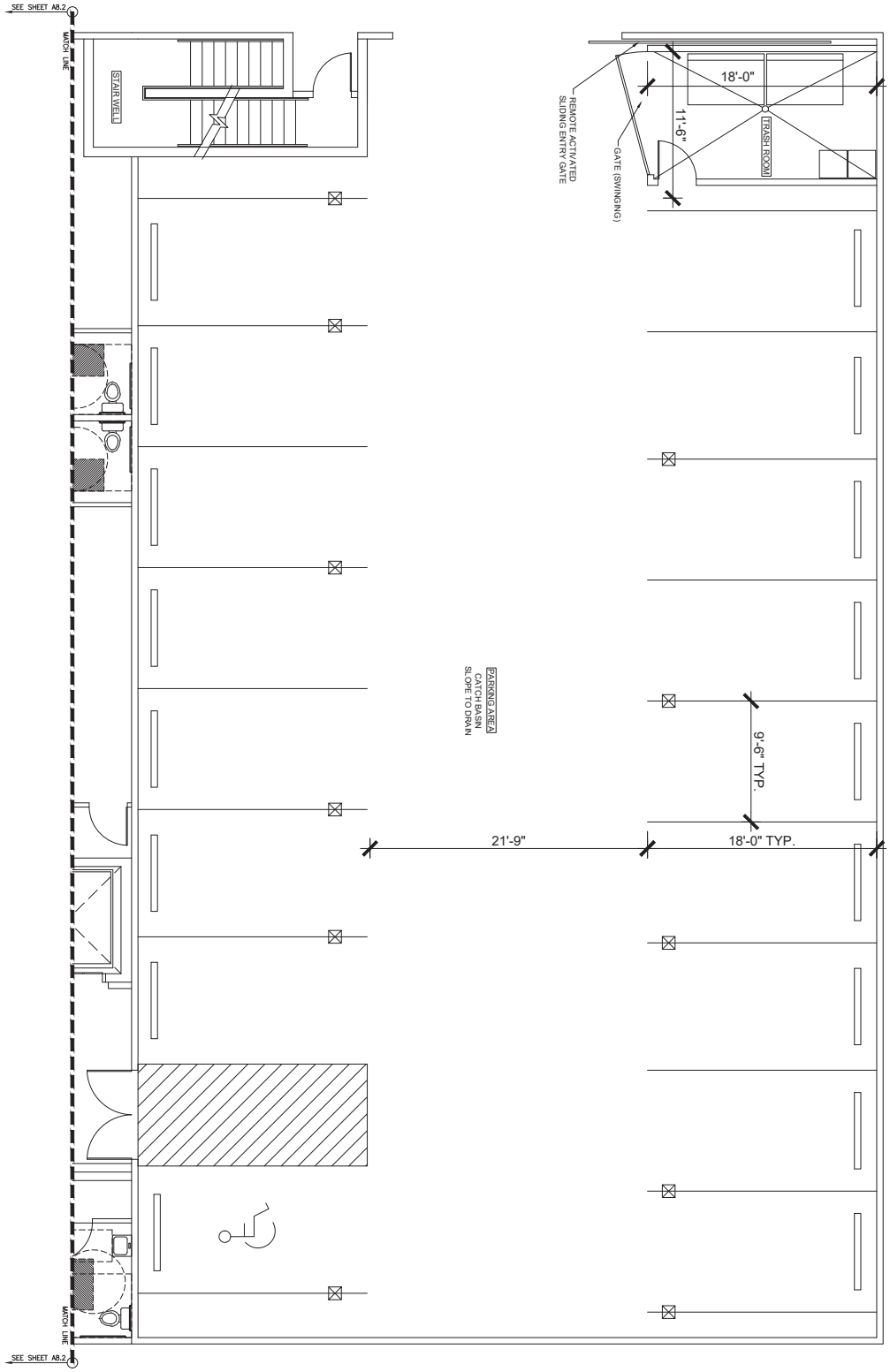
9391 SE 32ND AVE,
MILWAUKIE, OR 97222

Proj # 201931

REVISIONS:
1 OWNER REVISION 04/28/20
2 OWNER REVISION 05/25/20

RECEIVED
By KOLIASV at 8:32 am, May 27, 2020

BUILDING PERMIT:
DATE: 4-16-20
SHEET NO.
A2.2
ELEVATIONS



NORTH

1 / A8.1 ENLARGED FLOOR PLAN- FIRST FLOOR PARKING

SCALE: 1/8" = 1'-0" SEE A1.1 FOR EXTERIOR DIMENSIONS

BUILDING PERMIT

SHEET NO.
A8.1
ENLARGED FIRST FLOOR PLANS

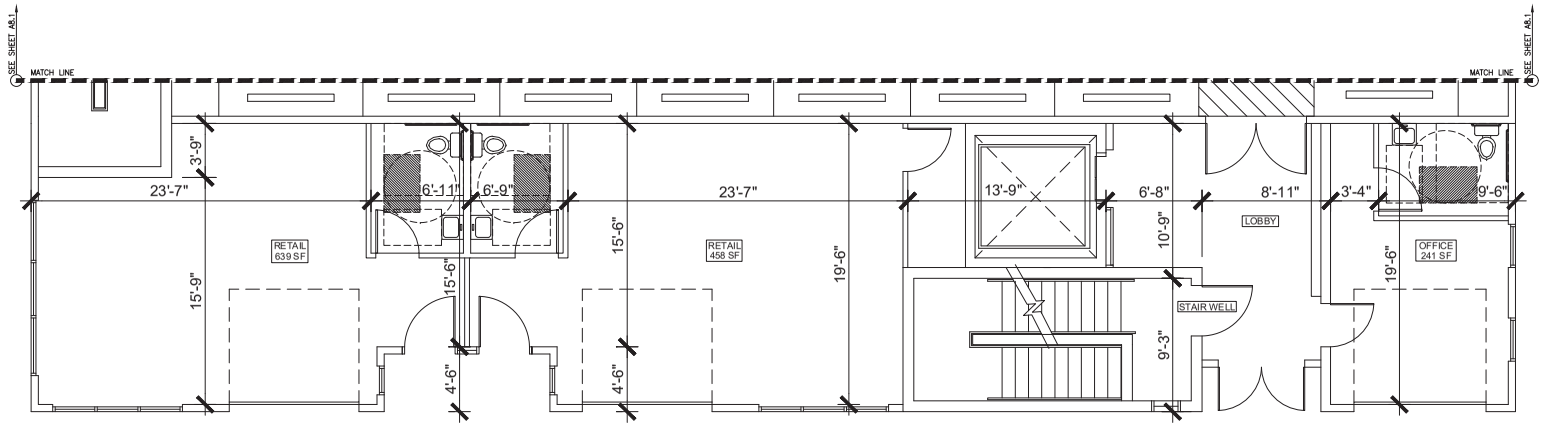
9393 SE 32ND AVE.
MILWAUKIE, OR 97222

Proj # 201931

32ND AVE MIXED USE

REGISTERED ARCHITECT
STATE OF OREGON
PORTLAND, OREGON
MILDRED WHITE
EXPIRES: 12/31/2019

BAMA
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.253.4283



NORTH

1 / A8.2 ENLARGED FLOOR PLAN

SCALE: 1/4" = 1'-0" SEE A1.1 FOR EXTERIOR DIMENSIONS

B A M A
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.233.4283

REGISTERED ARCHITECT
MILDRED WHITE
PORTLAND, OREGON
STATE OF OREGON
EXPIRES 12/31/2019

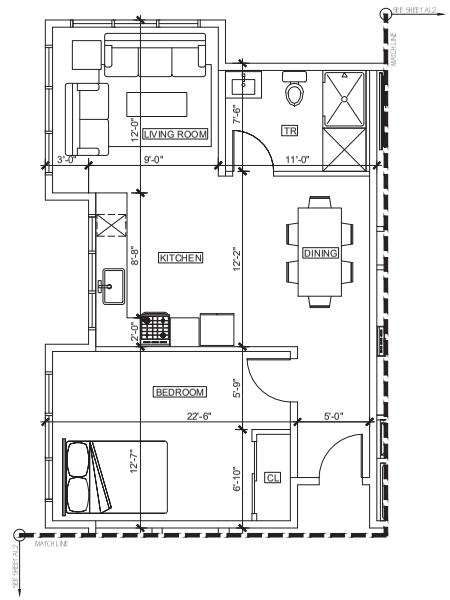
32ND AVE MIXED USE

9391 SE 32ND AVE,
MILWAUKIE, OR 97222

Proj # 201931

BUILDING PERMIT:

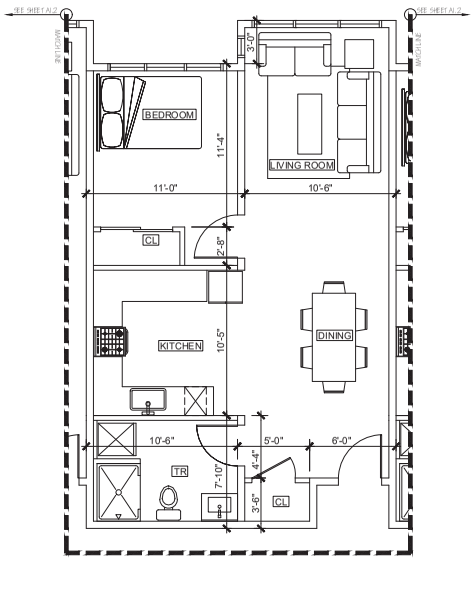
SHEET NO.
A8.2
ENLARGED FIRST FLOOR PLANS



TRUE NORTH

1 A8.3 ENLARGED SECOND/THIRD FLOOR PLAN

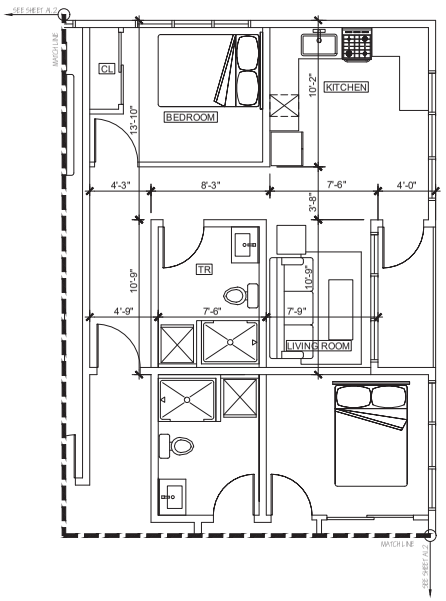
SCALE: 1/4" = 1'-0"



TRUE NORTH

2 A8.3 ENLARGED SECOND/THIRD FLOOR PLAN

SCALE: 1/4" = 1'-0"



TRUE NORTH

3 A8.3 ENLARGED SECOND/THIRD FLOOR PLAN

SCALE: 1/4" = 1'-0"

B A M A
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.233.4283

REGISTERED ARCHITECT
MILDRED WHITE
PORTLAND, OREGON
STATE OF OREGON
EXPIRES 12/31/2019

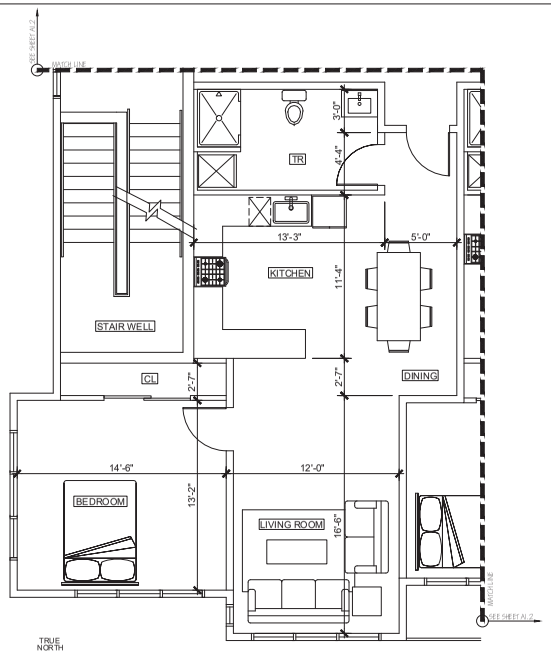
32ND AVE MIXED USE

9391 SE 32ND AVE,
MILWAUKIE, OR 97222

Proj # 201931

BUILDING PERMIT:

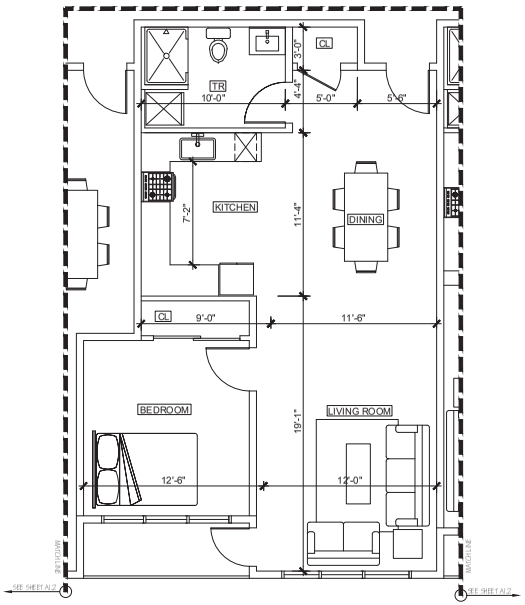
SHEET NO.
A8.3
ENLARGED SECOND/THIRD FLOOR PLANS



TRUE NORTH

1 A8.4 ENLARGED SECOND/THIRD FLOOR PLAN

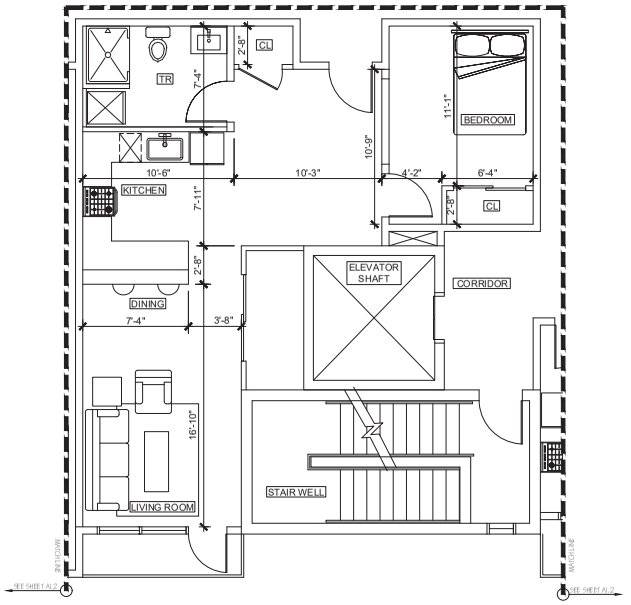
SCALE: 1/4" = 1'-0"



TRUE NORTH

2 A8.4 ENLARGED SECOND/THIRD FLOOR PLAN

SCALE: 1/4" = 1'-0"



TRUE NORTH

3 A8.4 ENLARGED SECOND/THIRD FLOOR PLAN

SCALE: 1/4" = 1'-0"

B A M A
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
PH: 503.233.4283

REGISTERED ARCHITECT
MILDRED WHITE
PORTLAND, OREGON
STATE OF OREGON
EXPIRES 12/31/2019

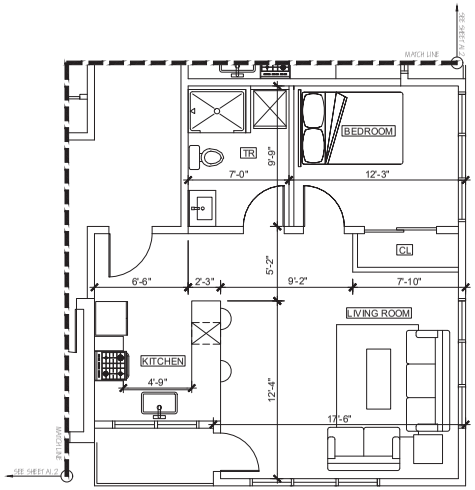
32ND AVE MIXED USE

9391 SE 32ND AVE,
MILWAUKIE, OR 97222

Proj # 201931

BUILDING PERMIT:

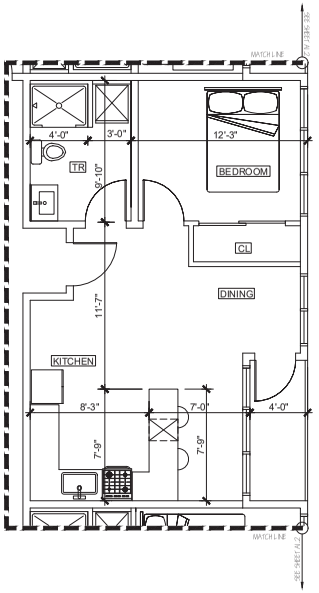
SHEET NO.
A8.4
ENLARGED SECOND/THIRD FLOOR PLANS



TRUE NORTH

1 A8.5 ENLARGED SECOND/THIRD FLOOR PLAN

SCALE: 1/4" = 1'-0"



TRUE NORTH

2 A8.5 ENLARGED SECOND/THIRD FLOOR PLAN

SCALE: 1/4" = 1'-0"

B A M A
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.233.4283

REGISTERED ARCHITECT
MILDRED WHITE
PORTLAND, OREGON
STATE OF OREGON
EXPIRES 12/31/2019

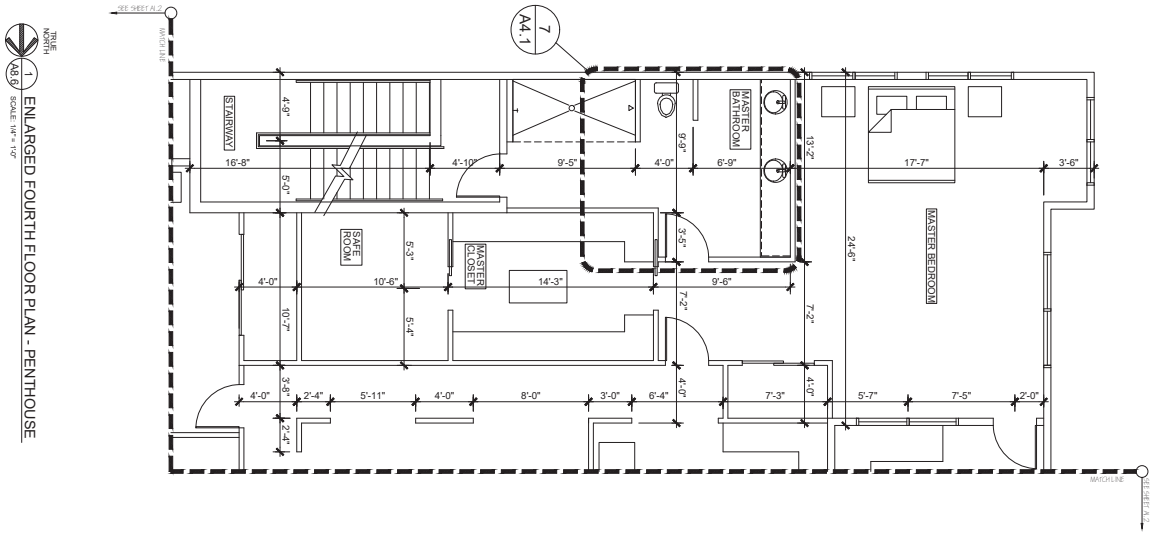
32ND AVE MIXED USE

9391 SE 32ND AVE,
MILWAUKIE, OR 97222

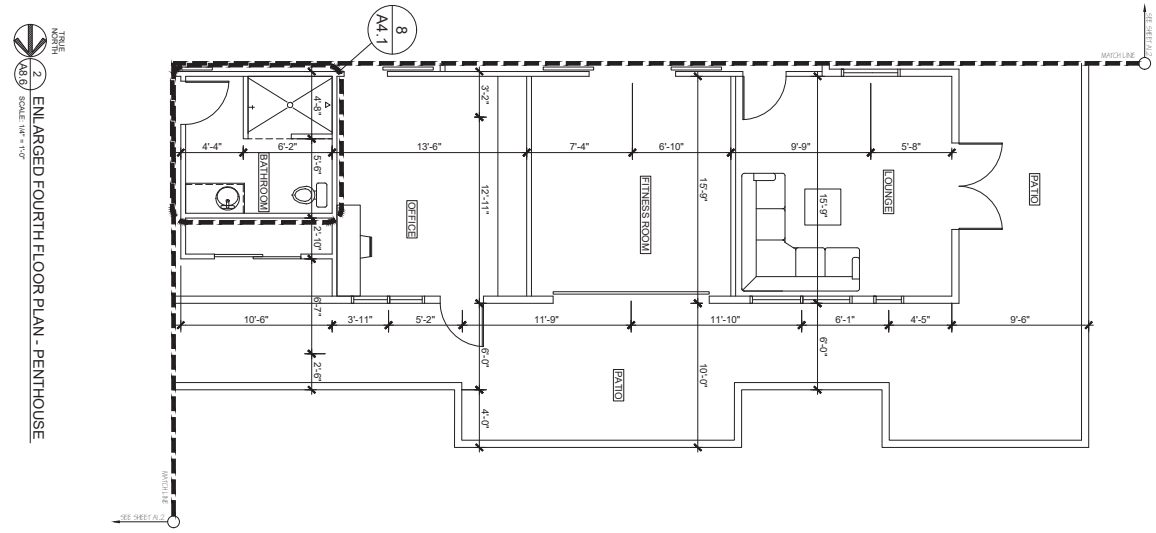
Proj # 201931

BUILDING PERMIT:

SHEET NO.
A8.5
ENLARGED SECOND/THIRD FLOOR PLANS



ENLARGED FOURTH FLOOR PLAN - PENTHOUSE



ENLARGED FOURTH FLOOR PLAN - PENTHOUSE

BUILDING PERMIT

SHEET NO.
A8.6

ENLARGED PENTHOUSE - FOURTH FLOOR PLANS

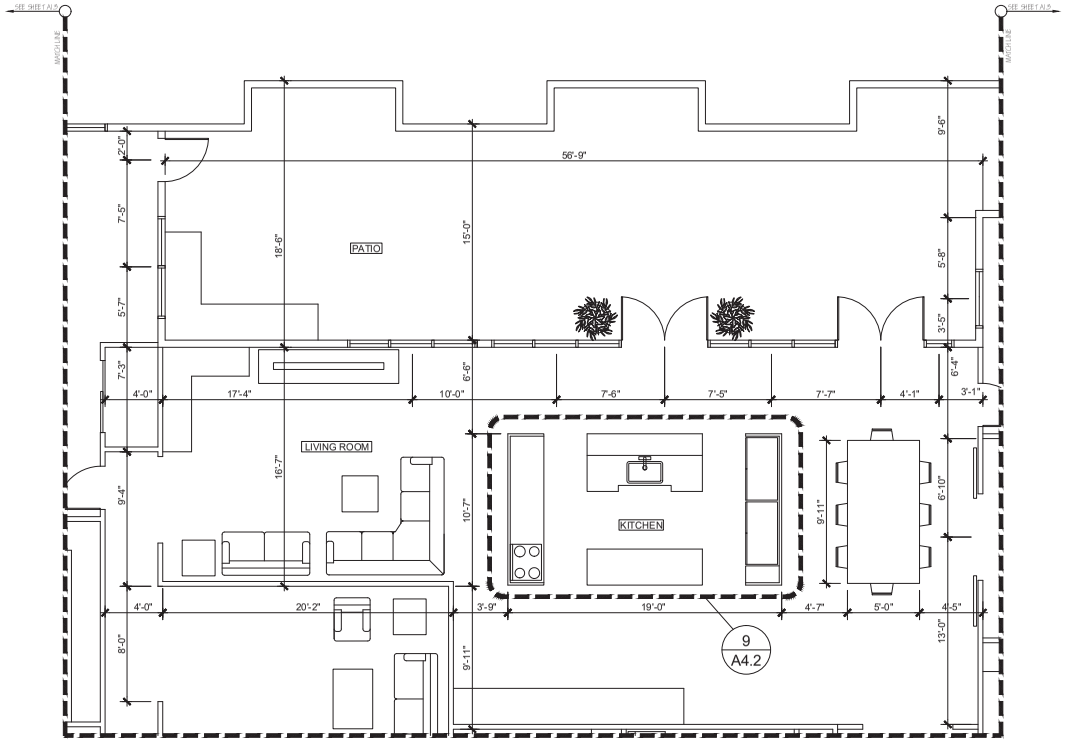
9393 SE 32ND AVE.
MILWAUKIE OR 97222

Proj # 201931

32ND AVE
MIXED USE

REGISTERED ARCHITECT
STATE OF OREGON
PORTLAND, OREGON
MICHAEL WHITE
EXPIRES: 12/31/2019

BAMA
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.253.4283



TRUE NORTH

1 A8.7 ENLARGED FOURTH FLOOR PLAN - PENTHOUSE

SCALE: 1/4" = 1'-0"

B A M A
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.233.4283

REGISTERED ARCHITECT
MILDRED WHITE
PORTLAND, OREGON
STATE OF OREGON
EXPIRES 12/31/2019

32ND AVE
MIXED USE

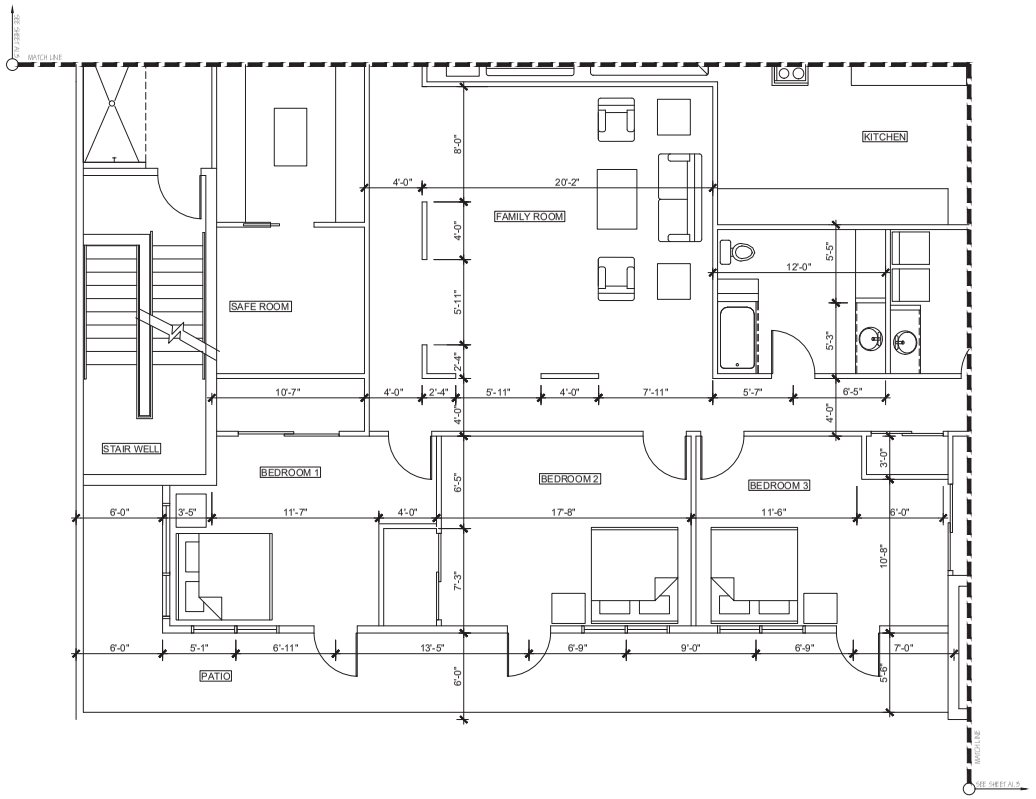
9391 SE 32ND AVE,
MILWAUKIE, OR 97222

Proj # 201931

BUILDING PERMIT:

SHEET NO.
A8.7

ENLARGED PENTHOUSE - FOURTH FLOOR PLANS



TRUE NORTH

1 A8.8 ENLARGED FOURTH FLOOR PLAN - PENTHOUSE

SCALE: 1/4" = 1'-0"

B A M A
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.233.4283

REGISTERED ARCHITECT
MILDRED WHITE
PORTLAND, OREGON
STATE OF OREGON
EXPIRES 12/31/2019

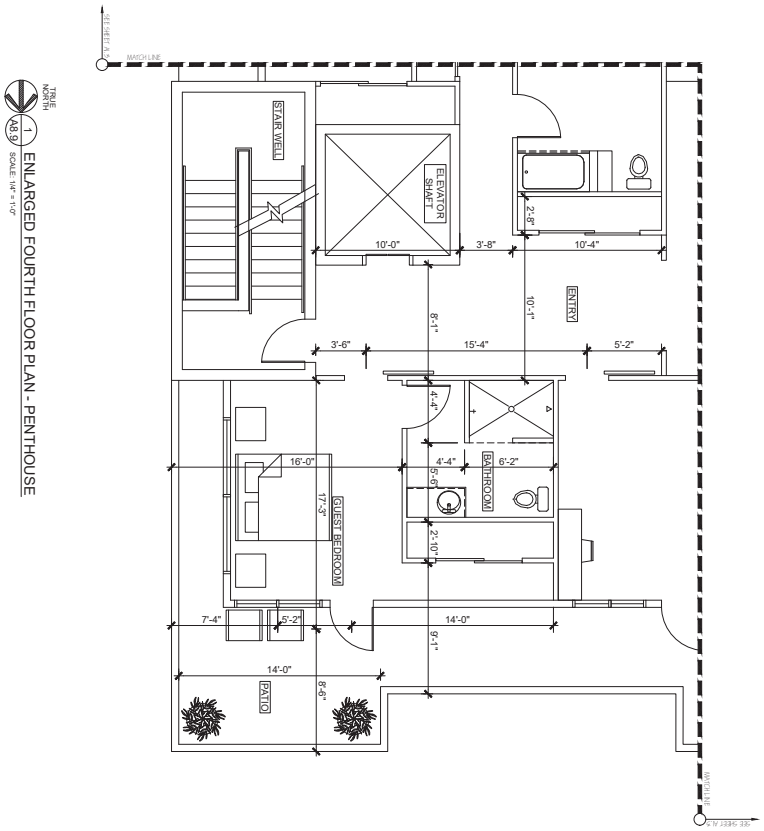
32ND AVE MIXED USE

9391 SE 32ND AVE,
MILWAUKIE, OR 97222

Proj # 201931

BUILDING PERMIT:

SHEET NO.
A8.8
ENLARGED PENTHOUSE - FOURTH FLOOR PLANS



TRUE NORTH

1 / A8.9

SCALE: 1/4" = 1'-0"

ENLARGED FOURTH FLOOR PLAN - PENTHOUSE

BUILDING PERMIT

SHEET NO.
A8.9

ENLARGED PENTHOUSE - FOURTH FLOOR PLANS

9393 SE 32ND AVE.
MILWAUKIE OR 97222

Proj # 20931

32ND AVE
MIXED USE

REGISTERED ARCHITECT
STATE OF OREGON
PORTLAND, OREGON
MICHAEL WHITE
EXPIRES: 12/31/2019

BAMA
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.253.4283

THIS PAGE WAS LEFT BLANK INTENTIONALLY

clemow
associates LLC

TRANSPORTATION IMPACT STUDY

To
City of Milwaukie

For
Milwaukie Mixed-Used
9391 SE 32nd Avenue

Prepared
May 11, 2020

C&A Project Number
20200201.00

1582 Fetters Loop, Eugene, Oregon 97405 | (541) 579-8315 | cclemow@clemow-associates.com

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

I. INTRODUCTION

Property Description and Proposed Land Use Actions

The subject property located at 9391 SE 32nd Avenue is in the northwest corner of SE 32nd Avenue/SE Olsen Street intersection and is specifically described as tax lot 7700 on Clackamas County Assessors Map 11E25BD. The proposed mixed-use development includes 1,085 square feet of ground-floor retail and three floors of residential uses consisting of 21 apartments. The existing auto repair establishment will be demolished. The existing site access to SE 32nd Avenue will be closed and the accesses to SE Olsen Street will be consolidated to a single entry/exit, providing access to the ground-level parking area. The proposed development is illustrated in the attached site plan and Figure 1 in Appendix A.

Transportation Analysis Description

The proposed development is consistent with the existing Neighborhood Mixed-Use (NMU) zoning. Based on materials contained in the January 23, 2020 City of Milwaukie *Transportation Impact Study Checklist* prepared by Amanda Deering of DKS Associates and email correspondence with City staff, a detailed Transportation Impact Study (TIS) is required to address City requirements. The checklist and email correspondence are included in Appendix B.

Analysis Intersections

Per City TIS requirements, specific intersection operations analysis is required. Based on development trip generation and distribution described later in this analysis, the following table presents the relative impacts to the study intersections:

TABLE 1 – STUDY INTERSECTION IMPACTS

Intersection	AM Peak Hour		PM Peak Hour	
	Development Trips	Trip Volume Increase	Development Trips	Trip Volume Increase
SE 32nd Avenue / SE Olsen Street	4	0.7%	2	0.2%
SE 32nd Avenue / SE Harrison Street	5	0.8%	2	0.2%

As identified in the previous table, the proposed development is trip generation is low, resulting in the development causing a <1% intersection traffic volume increase. Because daily traffic fluctuations at these same intersections are typically greater than 5%, the subject development has *de minimus* transportation system impacts that cannot be quantified/measured. Regardless, at City request, intersection operations analysis is performed.

Analysis Scenarios

The proposed development will be constructed in one phase and is anticipated to be occupied by 2022. As such, the following analysis scenarios include:

- 2020 Current (Existing) Conditions
- 2022 Pre-Development Conditions
- 2022 Post-Development Conditions

II. EXISTING CONDITIONS

Existing Site Conditions

The subject property is located in the northwest corner of SE 32nd Avenue/SE Olsen Street intersection and is specifically described as tax lot 7700 on Clackamas County Assessors Map 11E25BD.

The property is currently developed with an existing auto repair establishment that will be demolished. The existing site access to 32nd will be closed and the accesses to Olsen will be consolidated to a single entry/exit, providing access to the ground-level parking area.

Roadway Facilities

The following table summarizes existing roadway classifications and characteristics within the study area.

TABLE 2 – EXISTING ROADWAY CHARACTERISTICS

Roadway	Functional Classification	Lanes	Speed Limit (MPH)	Sidewalks	Bicycle Lanes	On-Street Parking
SE 32nd Avenue	Collector	2	25	Yes	No	No
SE Harrison Street	Arterial	2-3	25	Yes	No	Yes
SE Olsen Street	Neighborhood Route (east of 32nd)	2	25	South Side Only	No	No
SE Olsen Street	Local (west of 32nd)	2	25	No	No	Yes

Safety Analysis

When evaluating intersection safety, consideration is given to the total number and types of crashes occurring and the number of vehicles entering the intersection. This leads to the concept known as "crash rate," typically expressed in terms of the number of crashes occurring per one million vehicles entering the intersection (crashes/mev). A critical crash rate analysis is then performed by comparing the subject intersection to the published statewide 90th percentile intersection crash rates at comparable/reference intersections. Crash rates close to or exceeding 1 crash/mev, or the 90th percentile rates require further analysis.

Crash data for the study area intersections were obtained from the Oregon Department of Transportation (ODOT) for five years from January 1, 2013 through December 31, 2017. The following table presents the study intersection crash rates and critical crash analysis. Crash data and crash rate calculations are provided in Appendix C.

TABLE 3 – INTERSECTION CRASH RATES										
Intersection	2013	2014	2015	2016	2017	Total	Crash Rate (crashes/mev)	Reference Population	90th%ile Crash Rate	Over or under Crash Rate?
SE 32nd Avenue / SE Olsen Street	0	0	1	0	0	1	0.091	Urban 4ST	0.408	Under
SE 32nd Avenue / SE Harrison Street	1	0	2	4	3	10	0.399	Urban 4ST	0.408	Under

All study area intersection crash rates are less than 1.0 crashes/mev, and less than the 90th percentile crash rates of the reference intersections; therefore, the intersections are considered relatively safe and no further evaluation of safety deficiencies is necessary.

Transit Facilities

Tri-Met currently operates one bus route in the immediate project area and is described as follows:

- **Route 75** – Cesar Chavez/Lombard – connects Milwaukie, SE Portland, Hollywood, N/NE Portland, and St. Johns, via Harrison, 32nd, Johnson Creek, 45th, Cesar E Chavez Blvd, 42nd, Columbia, Dekum, and Lombard. The route operates with frequent service, i.e., headways of 15 minutes or less most of the day, every day.

Intersection Traffic Volumes

Because it is not currently possible to obtain typical/average intersection traffic count data, the City of Milwaukie provided 2018 count data for the SE 32nd Avenue/SE Harrison Street and SE 32nd Avenue/SE Johnson Creek Boulevard intersections with instruction to apply an annual background growth rate to estimate current year traffic volumes. A copy of this data is included in Appendix D.

Background Growth

Consistent with City recommendations, and assumptions contained within the intersection traffic volume data provided by the City, a 2% annual background traffic growth rate was applied to the 2018 volumes to obtain 2020 (Existing) and 2022 (Development year) volumes which are illustrated in Figures 2 and 3 in Appendix A for the AM and PM peak hours.

III. SITE DEVELOPMENT

Development Trip Generation

Trip generation for the proposed mixed-use development and existing auto repair facility was estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition, and practices from the ITE *Trip Generation Handbook*, 3rd Edition and is presented in the following table.

TABLE 4 – DEVELOPMENT TRIP GENERATION

Land Use	ITE Code	Size	AM Peak Hour			PM Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total
Proposed Development								
Multifamily Housing (Mid-Rise)	221	21 DU	2	6	8	5	4	9
Shopping Center	820	1,085 SF	1	0	1	2	2	4
Total Proposed Development Trip Generation			**3**	**6**	**9**	**7**	**6**	**13**
Existing Development								
Automobile Care Center	942	2,550 SF	*(4)*	*(2)*	*(6)*	*(4)*	*(4)*	*(8)*
New Trip Generation (Proposed Uses – Existing Uses)			**(1)**	**4**	**3**	**3**	**2**	**5**

As identified in the table above, the proposed development generates an additional 3 AM and 5 PM peak hour trips over the existing development.

Trip Distribution and Traffic Assignment

Development trip distribution is based on existing traffic patterns, surrounding land uses, and engineering judgment.

The resulting trip distribution and traffic assignment are illustrated in the attached Figures 2 and 3 in Appendix A for the AM and PM peak hours.

IV. INTERSECTION ANALYSIS

Analysis Scope

Based on City TIS requirements, operations analysis is performed at the following intersections:

- SE 32nd Avenue/SE Olsen Street
- SE 32nd Avenue/SE Harrison Street

The existing site access to 32nd will be closed and the accesses to Olsen will be consolidated to a single entry/exit.

Analysis Description

Intersection peak hour factors (PHFs) were not included in the summarized traffic count data provided by the City. As such a 0.90 PHF is assumed for all intersections in all scenarios.

Intersection operation characteristics are generally defined by two mobility standards: volume-to-capacity (v/c) ratio and level-of-service (LOS). At signalized intersections, the v/c ratio is a measurement of an intersection's ability to accommodate the critical movements, while LOS is based on the average control delay per vehicle for the entire intersection. At unsignalized intersections, the v/c ratio and LOS are calculated for intersection approach movements yielding right-of-way.

Referring to the City of Milwaukie TSP materials, the Milwaukie Municipal Code (MMC), Section 19.1407.4(A) identifies a minimum operating standard of LOS D during peak operating conditions for all intersections. A review of the current MMC does not find this code section; however, MMC Section 19.704.1 contains a reference to *"intersection level of service (LOS)"* but no operating standards are identified. Notwithstanding there does not appear to be a currently identified operating standard, LOS D is assumed.

Operations Analysis

Intersection operations analyses were performed per the Transportation Research Board's *Highway Capacity Manual 6th Edition* methodologies using Trafficware's *Synchro* software (Version 11).

The proposed mixed-use development is an allowed use in the current zone designation. The development will be constructed in one phase and is anticipated to be occupied by 2022. As such, the following analysis scenarios include:

- 2020 Current (Existing) Conditions
- 2022 Pre-Development Conditions
- 2022 Post-Development Conditions

The following table summarizes weekday peak hour operation analysis results. Data output sheets from all operations calculations are in Appendix E.

TABLE 5 – INTERSECTION OPERATIONS ANALYSIS

Intersection	Critical Movement Lane Group	Mobility Target	Operations					
			2020 30HV Existing		2022 30HV Pre-Development		2022 30HV Post-Development	
			AM	PM	AM	PM	AM	PM
SE 32nd Avenue / SE Olsen Street	NB L/T/R	LOS D	A	A	A	A	A	A
	SB L/T/R	LOS D	A	A	A	A	A	A
	EB L/T/R	LOS D	B	B	B	B	B	B
	WB L/T/R	LOS D	B	B	B	B	B	B
SE 32nd Avenue / SE Harrison Street	Intersection	LOS D	B	B	C	B	C	B

As identified in the table above, all intersections are anticipated to operate within agency mobility standards in all analysis scenarios. As previously noted, the proposed development is trip generation is low, resulting in the development causing a <1% intersection traffic volume increase. Because daily traffic fluctuations at these same intersections are typically greater than 5%, the subject development has *de minimus* transportation system impacts that cannot be quantified/measured.

V. TRANSPORTATION ANALYSIS

The following addresses specific items from the January 23, 2020 City of Milwaukie *Transportation Impact Study Checklist* in italics followed by the applicant's response in plain text.

Checklist Item: *Demonstrate compliance with applicable access spacing standards for any proposed driveways. If access spacing standards cannot be met, access restrictions should be recommended.*

Applicant Response: The existing site access to 32nd will be closed and the accesses to Olsen will be consolidated to a single entry/exit, providing access to the ground-level parking area. The proposed Olsen access is located as far away from 32nd as practical, as illustrated on the attached site plan in Appendix A. Noting the access is 51 feet from 32nd (measured edge to edge), the applicant is requesting a variance.

Checklist Item: *Analysis of sight distance at the site access point(s).*

Applicant Response: The proposed access to Olsen is located in an area where there is no horizontal or roadway curvature. As such there are no sight distance obstructions. Further, the proposed site design provides the necessary clear vision areas.

Checklist Item: *Evaluate safe-routes-to-school for the site (generally ½ to 1-mile walking radius) and identify any necessary pedestrian facility improvements. Identify any nearby school bus stops (Contact the school district).*

Applicant Response: Ardenwald Elementary School, located at 8950 SE 36th Avenue, is within a 1-mile walking distance of the subject site. Except for 32nd, all roadways between the school and the subject site are functionally classified as a *Neighborhood Route* or a *Local* roadway. All roadways have sidewalks, and striped crosswalks are provided along the route-to-school.

It is further noted the Milwaukie TSP Pedestrian Element identifies Project "R" as a low priority project to fill in the sidewalk gaps on the north side of Olsen from 32nd to 42nd. This project is not funded. Refer to the Milwaukie TSP Pedestrian Master Plan map in Appendix F.

Checklist Item: *Analysis of public facility adequacy for pedestrians, bicycles, and public transportation access to the site and identification of the nearest transit stop (if within 1/2 mile of the project site).*

Applicant Response: The Milwaukie TSP Pedestrian Element identifies numerous locations adjacent 32nd, Harrison, and Olsen as having sidewalks less than 5 feet wide. The TSP also identifies Project "R" as a low priority project to fill in the sidewalk gaps on the north side of Olsen from 32nd to 42nd. This project is not funded.

The Milwaukie TSP Bicycle Element identifies Project "L" as a low priority project to fill in bike lane gaps on Harrison from Hwy 224 to 42nd. This project is not funded. The TSP also identifies Project "AU" to provide a bicycle crossing at Harrison/31st. No project priority is identified, and it is unfunded.

The Milwaukie TSP Public Transit Element identifies Tri-Met Route 75 as operating on 32nd. The route operates with frequent service, i.e., headways of 15 minutes or less most of the day, every day. There are transit stops on both sides of 32nd at Olsen.

Refer to the Milwaukie TSP Pedestrian, Bicycle, and Public Transit Master Plan maps in Appendix F.

Checklist Item: *Identify accessibility to public transit.*

Applicant Response: Tri-Met Route 75 operates on 32nd with frequent service, i.e., headways of 15 minutes or less most of the day, every day. There are transit stops on both sides of 32nd at Olsen.

Checklist Item: *Identify any access deficiencies (including transit/pedestrian/bicycle connections).*

Applicant Response: There are no access deficiencies immediately adjacent to the project site. Within the larger study area, there are pedestrian and bicycle system deficiencies as identified above.

Checklist Item: *Identify any TDM measures.*

Applicant Response: Due to the residential, and small commercial nature of the project, the applicant is not proposing any TDM measures.

Checklist Item: *Parking Supply Analysis.*

Applicant Response: The applicant is proposing to construct 17 on-site parking spaces. On-street parking is available in the project area on both sides of Olsen.

VI. CONCLUSION

The following summary and recommendations are based on the materials contained in this analysis.

1. The subject property located at 9391 SE 32nd Avenue is in the northwest corner of SE 32nd Avenue/SE Olsen Street intersection and is specifically described as tax lot 7700 on Clackamas County Assessors Map 11E25BD.

2. The proposed mixed-use development includes 1,085 square feet of ground-floor retail and three floors of residential uses consisting of 21 apartments. The existing auto repair establishment will be demolished. The existing site access to SE 32nd Avenue will be closed and the accesses to SE Olsen Street will be consolidated to a single entry/exit, providing access to the ground-level parking area.

3. The proposed development is trip generation is low, resulting in the development causing a <1% intersection traffic volume increase. Because daily traffic fluctuations at these same intersections are typically greater than 5%, the subject development has *de minimus* transportation system impacts that cannot be quantified/measured.

4. All study area intersection crash rates are less than 1.0 crashes/mev, and less than the 90th percentile crash rates of the reference intersections; therefore, the intersections are considered relatively safe and no further evaluation of safety deficiencies is necessary.

5. The proposed development generates an additional 3 AM and 5 PM peak hour trips over the existing development.

6. All intersections are anticipated to operate within agency mobility standards in all analysis scenarios. The subject development has *de minimus* transportation system impacts that cannot be quantified/measured.

7. The proposed development access to SE Olsen Street is located as far away from SE 32nd Avenue as practical. Noting it is 51 feet from 32nd (measured edge to edge), the applicant is requesting a variance.

8. There are no transportation system deficiencies immediately adjacent to the project site. Within the larger study area, there are pedestrian and bicycle system deficiencies and the City of Milwaukie TSP identifies mitigating projects.

VII. APPENDICES

A. Figures

B. Agency Correspondence

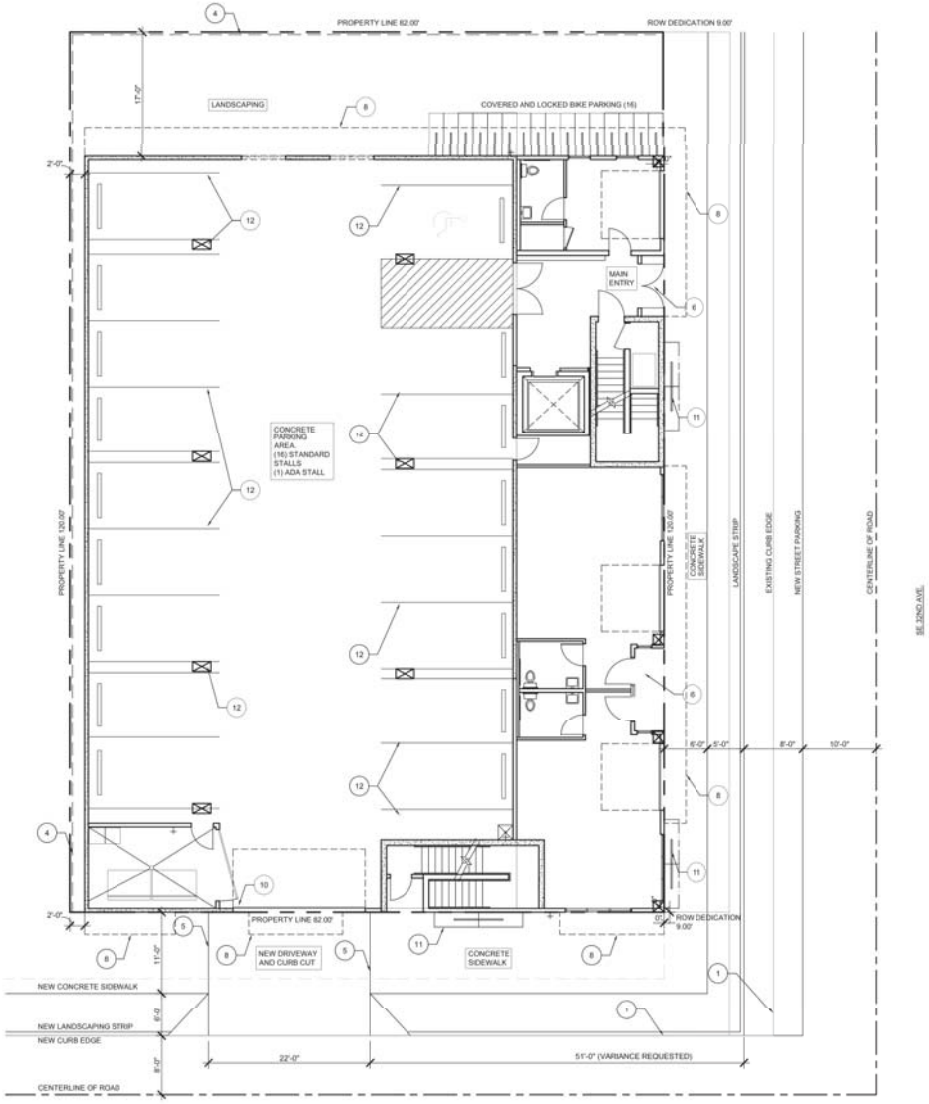
C. Crash Data

D. Traffic Count Summaries

E. Operation Analyses

F. TSP System Maps

Appendix A



TRUE NORTH

1 SD1.1 SITE PLAN

SCALE: 1/8" = 1'-0"

PROPERTY INFORMATION

ADDRESS: 9391 SE 32ND AVE. MILWAUKIE, OR 97222

PROJECT: RETAIL AND PARKING ON FIRST FLOOR, WITH 28 APARTMENT UNITS 800 SF OR LESS ABOVE.

LEGAL DESCRIPTION

LEGAL DESCRIPTIONS: ARDENWALD, BLOCK 5, LOT 21 AND 22

TAX LOT ID: 11E25BD07700

PARCEL NUMBER: 00008547

ZONING CODE INFORMATION

BASE ZONE: NMU (NEIGHBORHOOD MIXED USE)

SITE AREA: 0.24 ACRES (10,800 SF)

PROPOSED SITE INFORMATION:

BUILDING FOOTPRINT: 9,775 SF (90%)

EXTERIOR CONCRETE PAVING: 60 SF (0.5%)

MINIMUM FAR ALLOWED: 0.5:1

BUILDING HEIGHT:

MAXIMUM ALLOWABLE HEIGHT (TABLE 19.303.3):	45'-0"
ACTUAL HEIGHT: (VARIANCE REQUESTED)	51'-1"

MAX SETBACKS ALLOWED:

MAXIMUM STREET SETBACK: 10'-0"

AUTOMOBILE PARKING REQUIREMENTS (TABLE 19.605.1):

PROVIDED STANDARD PARKING SPACES:	17
REQUIRED STANDARD PARKING SPACES: (QUANTITY MODIFICATION REQUESTED)	24.25

BICYCLE PARKING REQUIREMENTS (TABLE 260-6):

BIKE PARKING MIN. OF 22 REQUIRED, 22 TO BE PROVIDED.

STANDARD BIKE PARKING (MIN OF 1 SPACE REQUIRED).

ENCLOSED BIKE PARKING (1 PER UNIT, 50% MINIMUM OF REQUIRED)

SEE SECTION: 19.609.2

FLOOR AND BUILDING COVERAGE AREA:

FIRST FLOOR COVERED PARKING AREA/RETAIL:	8,066 SF
SECOND FLOOR BUILDING AREA:	8,682 SF
THIRD FLOOR BUILDING AREA:	8,682 SF
FOURTH FLOOR PENTHOUSE BUILDING AREA:	8,332 SF
TOTAL AREA (INCLUDING COVERED PARKING):	33,762 SF

SITE PLAN GENERAL NOTES

EXISTING INFORMATION IS BASED ON DRAWINGS PROVIDED BY AKS.

DIMENSIONS ARE TO FACE OF CURB, FACE OF BUILDING, PROPERTY LINE, OR CENTER OF PAINT STRIPING UNLESS NOTED OTHERWISE.

WHERE ACCESS TO OR WITHIN A STRUCTURE OR AN AREA IS RESTRICTED BECAUSE OF SECURED OPENINGS OR WHERE IMMEDIATE ACCESS IS NECESSARY FOR LIFE-SAVING OR/FIRE FIGHTING PURPOSES A "KNOXBOX" KEY BOX SHALL BE INSTALLED IN AN APPROVED LOCATION.

SITE PLAN LEGEND

PROPERTY LINE

SITE PLAN KEYNOTES

1. EXISTING CONCRETE CURB
2. INFILL EXISTING DRIVEWAY. SEE CIVIL DRAWINGS
3. TRASH AND RECYCLING ROOM. PROVIDE DRAIN THAT CONNECTS TO A SANITARY SEWER WASTE LINE.
4. NEW 6' FULLY SIGHT-OBSCURING WOOD FENCE. SEE DETAIL 1/SD2.1
5. NEW DRIVEWAY. SEE CIVIL DRAWINGS
6. NEW CONCRETE PAVING. SEE STRUCTURAL DRAWINGS
7. STORMWATER FACILITY. SEE CIVIL DRAWINGS
8. FACE OF BUILDING ABOVE
9. NOT USED
10. 20' WIDE CONTROLLED ACCESS ENTRY GATE. SEE ELECTRICAL. PROVIDE KEYBOX FOR EMERGENCY ACCESS.
11. SHORT TERM BICYCLE PARKING AREA 2'x6' EACH, 4/HR TOTAL. SEE DETAIL 11/SD2.1.
12. ONE HOUR FIRE-RATED STRUCTURAL POST. SEE STRUCTURAL DRAWINGS AND DETAIL 6/A4.4
13. 3'-0" HIGH ELECTRICAL TRANSFORMER AND VAULT SEE CIVIL AND ELECTRICAL DRAWINGS
14. INSTALL ONE 6" CONCRETE BOLLARD
15. SWITCH GEAR. MUST BE 7' MIN. FROM END OF VAULT. SEE ELECTRICAL DRAWINGS. PROVIDE CONCRETE SLAB BELOW

B A M A
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.233.4283

REGISTERED ARCHITECT
MILDRED WHITE
PORTLAND, OREGON
STATE OF OREGON
EXPIRES: 12/31/2019

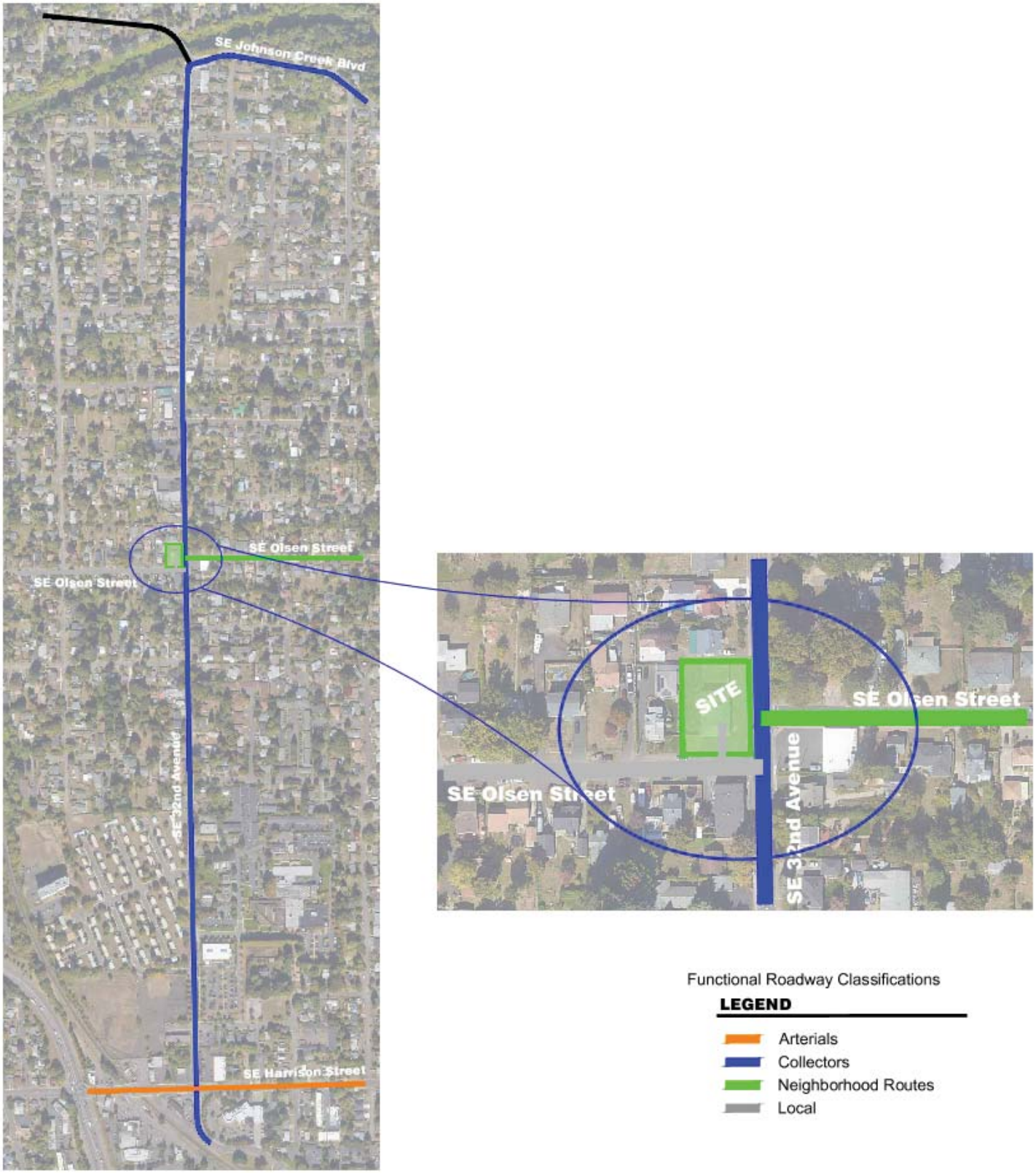
9391 SE 32nd Ave. Mixed-Use

9391 SE 32ND AVE,
MILWAUKIE, OR 97222

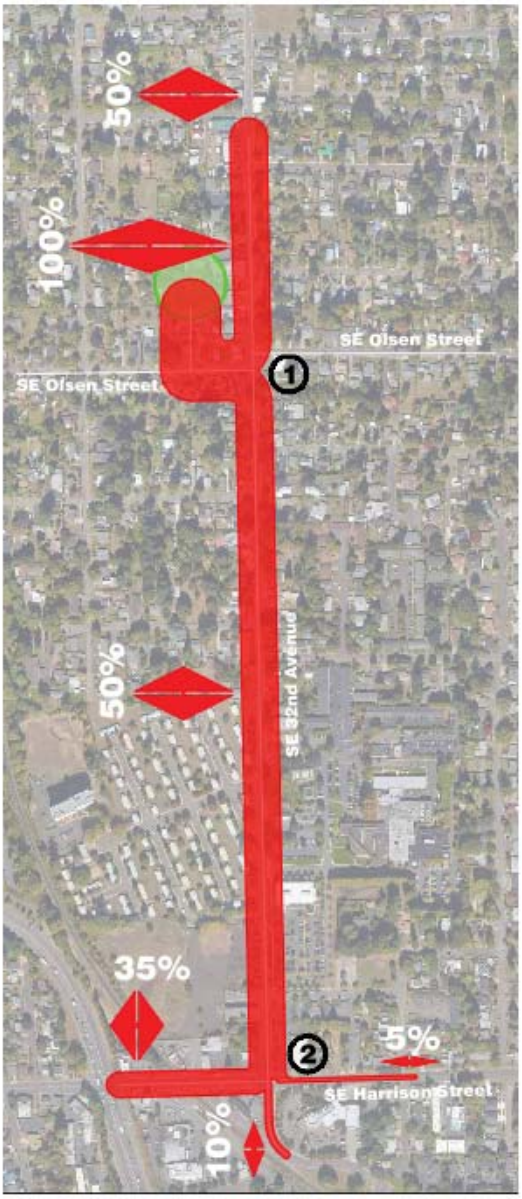
Proj # 201931

BUILDING PERMIT:

SHEET NO.
SD1.1
SITE PLAN

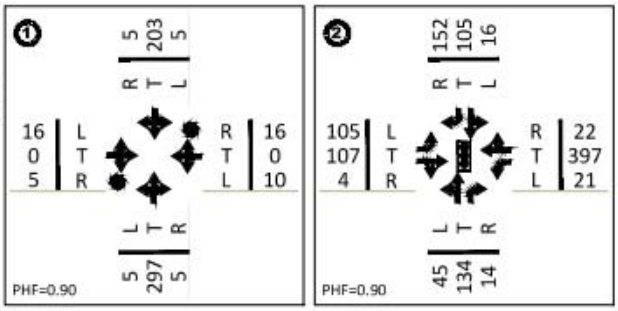


clemow associates LLC 1582 Fetters Loop Eugene, Oregon 97402 541-579-8315 cclemow@clemow-associates.com	SITE AREA Milwaukie Mixed-Use Development - Milwaukie, Oregon C&A Project No. 20200201.00	FIGURE 1

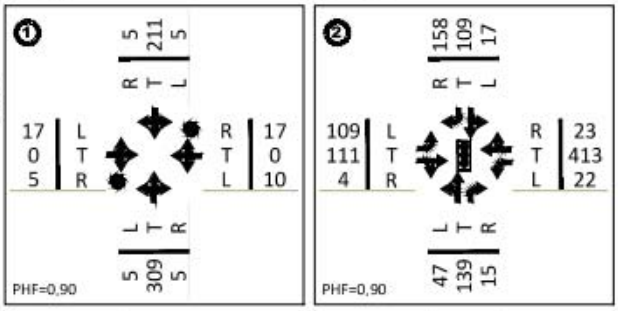


AM Peak Hour

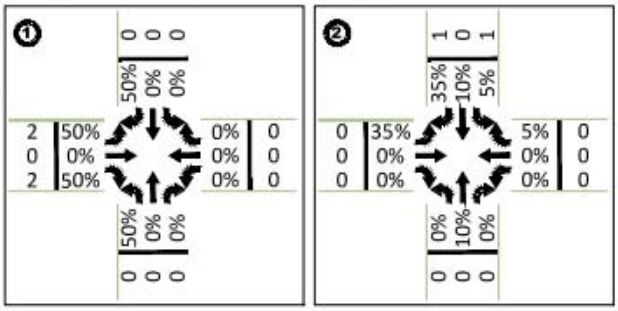
2020 Existing Traffic



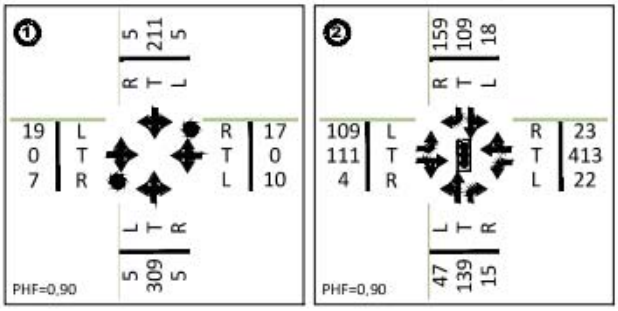
2022 Pre-Development Traffic



Development Trips

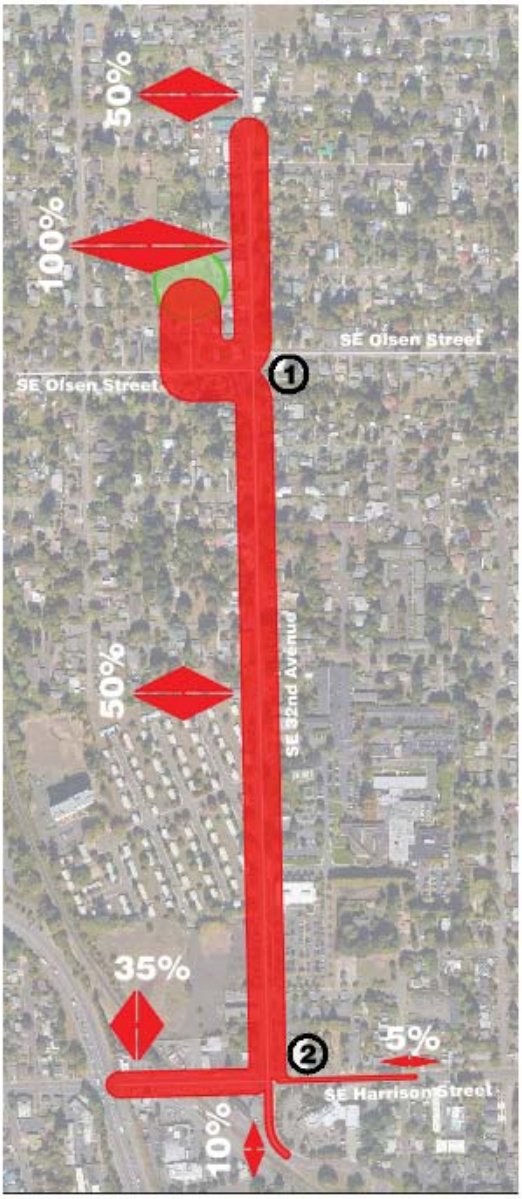


2022 Post-Development Traffic



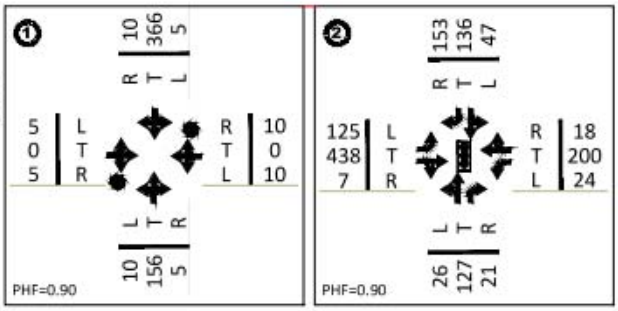
clemow associates LLC
1582 Fetters Loop
Eugene, Oregon 97402
541-579-8315
cclemow@clemow-associates.com

AM PEAK HOUR TRAFFIC VOLUMES	FIGURE
Milwaukie Mixed-Use Development - Milwaukie, Oregon	2
C&A Project No. 20200201.00	

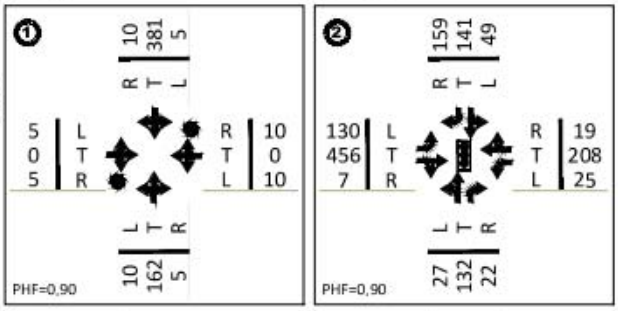


PM Peak Hour

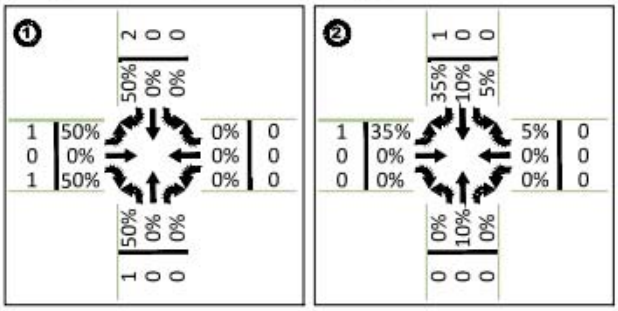
2020 Existing Traffic



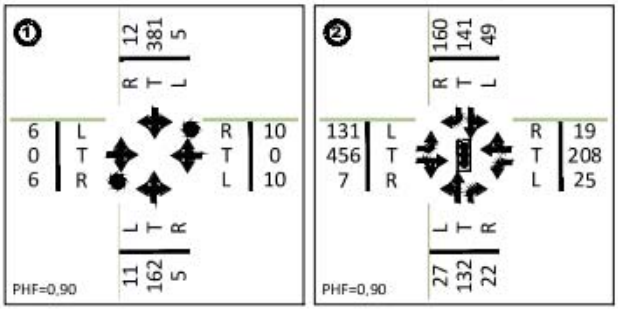
2022 Pre-Development Traffic



Development Trips



2022 Post-Development Traffic



clemow associates LLC	1582 Fetters Loop Eugene, Oregon 97402 541-579-8315 cclemow@clemow-associates.com	PM PEAK HOUR TRAFFIC VOLUMES	FIGURE
		Milwaukie Mixed-Use Development - Milwaukie, Oregon	3
		C&A Project No. 20200201.00	

Appendix B

Table 4: TRANSPORTATION IMPACT STUDY CHECKLIST

Project Name: 32nd Avenue Mixed Use_____
City Reference Code: _____

Score

THRESHOLD SCORING

Transportation Impact Study Required with score of 99 or greater

☒ Yes ❒ No Study Required Comment: _____ Date: _____

BACKGROUND INFORMATION ☒

☒ Yes ❒ No Oregon PE Stamp and Signature ❒

☒ Yes ❒ No **INTRODUCTION AND SUMMARY ☒**

EXISTING CONDITIONS ☒

☒ Yes ❒ No Roadway Network - summary of roadway classifications and description of study area
☒ Yes ❒ No Analysis Periods Correct (☒AM, ❒ Mid-day, ☒ PM, ❒ Afternoon (when classes let out), ❒ Saturday_____,❒ Sunday Church Peak , ❒ Weekday evening peak (for evening services)
☒ Yes ❒ No Existing Traffic Operations (☒ Existing Level of Service, ☒ traffic volumes, ❒speeds, ☒ accident data)

IMPACTS ☒

☒ Yes ❒ No ☒ Trip Generation - Daily, peak hour trips generated by site development: ITE Trip Generation Manual ❒Survey
☒ Yes ❒ No Level of Service Analysis - projected LOS with site build out, existing traffic, and background traffic growth
❒ Yes ☒ No Future year 20 year analysis *(Note: Assumes proposed used conforms with adopted zoning.)*
☒ Yes ❒ No Signal Warrant Analysis (peak hour warrants, if needed for capacity mitigation)
☒ Yes ❒ No Turn Lane Warrant Analysis (where applicable)
☒ Yes ❒ No Access Spacing Standards
☒ Yes ❒ No Analysis of sight distance at frontage road access point(s)
❒ Yes ☒ No Neighborhood Traffic Analysis
☒ Yes ❒ No Identify safe route to school or school bus stop (Contact with school district)
☒ Yes ❒ No Analysis of safe pedestrian/bicycle access to nearest transit stop (if within 1/2 mile of project site)
☒ Yes ❒ No Identify accessibility to public transit
☒ Yes ❒ No Parking Supply Analysis

MITIGATION ☒

☒ Yes ❒ No Identify need for right/left turn lanes, storage capacity and length
☒ Yes ❒ No Identify possible corrections of any LOS deficiencies
☒ Yes ❒ No Identify any access deficiencies (including transit/pedestrian/bicycle connections)
☒ Yes ❒ No Identify any TDM measures

FIGURES ☒

☒ Yes ❒ No Vicinity Map
☒ Yes ❒ No Site Plan
☒ Yes ❒ No Existing peak hour turn movement volumes (counts conducted within previous 12 months)
☒ Yes ❒ No Trip Distribution (%) including Added Project Peak Hour Traffic Volumes (see sample)
☒ Yes ❒ No Approved Projects Peak Hour Traffic Volumes (land use to be provided by the City)
❒ Yes ☒ No TSP Future Year turn movement volumes comparison
☒ Yes ❒ No Programmed transportation improvements and transportation mitigation outlined in study

TABLES ☒

☒ Yes ❒ No Intersection Performance Existing Conditions
☒ Yes ❒ No Project Trip Generation
☒ Yes ❒ No Intersection Level of Service

OTHER ☒

☒ Yes ❒ No Technical appendix - sufficient material to convey complete understanding of traffic issues (e.g. HCM analyses, trip generation calculations, signal warrant analyses, turn lane warrant analyses, etc.) ❒Include site survey information for trip generation and parking observations
☒ Yes ❒ No Additional Comments Attached☒

Completed By: Amanda Deering (DKS Associates)
Date: January 23, 2020

Additional TIS Comments

Project Name: 32nd Avenue Mixed Use _____
City Reference Code: _____

- The proposed project would construct a four-story building with 21 residential apartment units with 3 commercial tenant spaces (approx. 2,500 sq. ft. commercial) on the northwest corner of SE 32nd Avenue and SE Olsen Street. The existing auto repair establishment would be demolished.
- The proposed project would include first floor covered parking.
- The existing site driveway on SE 32nd Avenue will be closed and the driveway on SE Olsen Street will be consolidated to a single entry, providing access to the ground level parking.
- The proposed development is consistent with existing zoning.
- Study intersection turn movement counts shall be conducted during typical weekday conditions while school is in full operation.
- Study intersections should include at a minimum:
    - SE 32nd Avenue/SE Olsen Street (both legs)
    - SE 32nd Avenue/SE Johnson Creek Boulevard
    - SE 32nd Avenue/SE Harrison Street
    - Site access/SE Olsen Street
- ITE trip generation rates should be used as the basis for estimation of vehicle trip generation potential of the site.
- Trip distribution/assignment should consider the existing travel patterns at the site.
- Background growth should include any approved developments in the study area (approved land uses to be provided by the City), as well as a background growth rate on study area roadways. Growth rates may be determined by comparing existing volumes at study area intersections with the historical traffic count data documented in the City's Transportation System Plan (TSP), representative future traffic growth rates documented in the TSP, or growth based on the Metro regional travel demand forecast model.
- Adequate public facilities for pedestrians, bicycles, and public transportation access for the site should be analyzed.
- The study should evaluate safe-routes-to-school for the site (generally ½ mile to 1 mile walking radius) and identify any necessary pedestrian facility improvements.
- The study must address compliance with applicable access spacing standards for any proposed driveways. If access spacing standards cannot be met, access restrictions should be recommended.
- The study must address if existing and proposed (if any) roadways are consistent with applicable roadway standard cross-sections.
- Documentation of sight distance measurements should be included for all access points (existing and proposed) and compared to sight distance standards where applicable.
- TIA scope development must be coordinated with appropriate Clackamas County and ODOT staff.

Gmail by Google

Chris Clemow <cclemow@clemow-associates.com>

RE: Milwaukie Mixed-Use Development - Transportation Analysis

1 message

Steve Adams <AdamsS@milwaukieoregon.gov> Thu, May 7, 2020 a
To: Chris Clemow <cclemow@clemow-associates.com>
Cc: Vera Kolias <KoliasV@milwaukieoregon.gov>, Valerie Hunter <vhproperty@gmail.com>, Mildred White <mildred@bamadesign.com>, Auryn White <auryn@bamadesign.com>, Dennis Egner <EgnerD@milwaukieoregon.gov>, Dalton Vodden <VoddenD@milwaukieoregon.gov>, "Reah Flisakowski (rlf@dksassociates.com)" <rlf@dksassociates.com>

Good morning,

Sorry, yes, ITE Code 820 with no pass-by/diverted-link reductions.

Yes, interpolating the known traffic data at 32nd/Harrison and 32nd/Johnson Creek intersections, and adding a background growth factor to it is acceptable.

Thanks, Steve

Steve R. Adams, PE

City Engineer

he • him • his

City of Milwaukie

o 503-786-7605, ce 971-978-7435

6101 SE Johnson Creek Blvd • Milwaukie, OR 97206

From: Chris Clemow <cclemow@clemow-associates.com>
Sent: Tuesday, May 5, 2020 1:25 PM
To: Steve Adams <AdamsS@milwaukieoregon.gov>
Cc: Vera Kolias <KoliasV@milwaukieoregon.gov>; Valerie Hunter <vhproperty@gmail.com>; Mildred White <mildred@bamadesign.com>; Auryn White <auryn@bamadesign.com>; Dennis Egner <EgnerD@milwaukieoregon.gov>; Dalton Vodden <VoddenD@milwaukieoregon.gov>; Reah Flisakowski (rlf@dksassociates.com) <rlf@dksassociates.com>
Subject: Re: Milwaukie Mixed-Use Development - Transportation Analysis

This Message originated outside your organization.

Steve,

Several additional questions/comments as we proceed with analysis preparation:

You indicate "*ITE Code 221 and ITE Code 822 best apply to the proposed development*". There does not appear to be an ITE Code 822. Did you mean ITE Code 820 with no pass-by/diverted-link reductions'

You indicate analysis will be required at the "*SE 32nd Ave/SE Olsen and SE 32nd Ave/SE Harrison St intersections using the base traffic counts provided by the City for the Harrison [intersection], and includi background traffic growth rate.*" It is noted the City provided data for the 32nd/Harrison and 32nd/Johnson Creek intersections. Because it is not currently possible to obtain typical/average intersection traffic data at the 32/Olsen intersection, we propose to estimate these turning movement volumes using the data you provided at the other intersections. Is this acceptable?

Thank you,

Chris

Christopher M. Clemow PE, PTOE

Transportation Engineer

cclemow@clemow-associates.com

541-579-8315

PORTLAND | EUGENE | BEND

On Tue, Apr 28, 2020 at 4:04 PM Steve Adams <AdamsS@milwaukieoregon.gov> wrote:

> Good day,
>
> My thoughts on this development and traffic study:
>
> - With understanding the recent changes in the ITE 10th Edition, I feel that ITE Code 221 and ITE Code 822 best apply to the proposed development.
> - Without knowing the tenants in the commercial area of the project, I feel that Pass-By/Diverted Trips cannot be applied to the project.

- While I feel trips for defunct businesses should have a time limit for expiration, City code is silent on both allowing trip credits and expiring trip credits. For this instance we will allow the 8 trip credit f previous use as an automobile care center.
- Net New AM Peak Hour trips remain at 3; Net New PM Peak Hour trips are adjusted to 5.
- A traffic memo is required as we stated previously. The TIS will evaluate the SE 32nd Ave/SE Olsen and SE 32nd Ave/SE Harrison St intersections using the base traffic counts provided by the City Harrison, and including a background traffic growth rate.

Please let me know should you have any questions.

Thanks, Steve

Steve R. Adams, PE

City Engineer

he • him • his

City of Milwaukie

o 503-786-7605, ce 971-978-7435

6101 SE Johnson Creek Blvd • Milwaukie, OR 97206

From: Chris Clemow <cclemow@clemow-associates.com>
Sent: Tuesday, April 7, 2020 3:32 PM
To: Vera Kolias <KoliasV@milwaukieoregon.gov>
Cc: Valerie Hunter <vhproperty@gmail.com>; Mildred White <mildred@bamadesign.com>; Auryn White <auryn@bamadesign.com>; Steve Adams <AdamsS@milwaukieoregon.gov>; Alex Roller <RollerA@milwaukieoregon.gov>; Dennis Egner <EgnerD@milwaukieoregon.gov>; Dalton Vodden <VoddenD@milwaukieoregon.gov>; undefined <rlf@dksassociates.com>
Subject: Re: Milwaukie Mixed-Use Development - Transportation Analysis

Vera, et al,

I see I presented some incorrect retail square footage numbers in my previous email; however, the trip generation numbers are correct for the actual retail square footage - 1,085 SF.

The following is the corrected material....

- The TIS will evaluate the SE 32nd Ave/SE Olsen and SE 32nd Ave/SE Harrison St intersections using the base traffic counts you provided and include a background traffic growth rate.

- It is our understanding City staff will provide further clarification of potential trip credits. The TIS will incorporate these materials when received.

- You have indicated a *Shopping Center* (ITE Land Use 820) is not acceptable for the proposed commercial use and have requested we assume more appropriate designations better reflecting the propose uses. We have recently faced this same issue on several other projects in the Portland metro area having a multi-story building with residential over commercial. The following is our response:

Based on the applicant's site plan, there are three (3) commercial spaces totaling 1,085 square feet, resulting in rather small individual spaces. Based on applicant-provided information, the space in the nc building corner will be used by the owner for property management purposes. The remaining two spaces are of similar size - and their tenancy is unknown.

Previously, these retail spaces were commonly characterized as *Specialty Retail Center* uses in the ITE Trip Generation Manual (TGM) 9th edition - ITE Land Use 826, and 8th Edition - ITE Land Use 814. However, the current ITE TGM 10th Edition eliminated the *Specialty Retail Center* land use code and includes the statement, "*In an effort to continually provide data that accurately reflects the composition each land use, some data were reassigned to other land uses, corrected from previous editions, or removed from the database. Several land uses were also renumbered to facilitate a more logical groupin related land uses. The following list summarizes these changes: ...Specialty Retail Center (826) was removed. Data from the land use was reclassified to existing land uses.*"

A review of available TGM 10th Edition land use codes finds a small number of potential uses which are summarized in the table below and in the attached PDF.

Table xx – Potential Land Uses

Land Use	ITE Code	Range of Sizes	Number of Studies	Development Size	AM Peak Hour Trip Generation	PM Peak Hour Trip Generation	ITE Land Use Description
Shopping Center	820	7.42-207.98 KSF	147	1.085 KSF	1	4	A shopping center is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. A shopping center's composition is related to its market area in terms of size, location, and type of store. A shopping center also provides on-site parking facilities sufficient to serve its own parking demands. Factory outlet center (Land Use 823) is a related use. Additional Data Shopping centers, including neighborhood centers, community centers, regional centers, and super regional centers, were surveyed for this land use. Some of these centers contained non-merchandising facilities, such as office buildings, movie theaters, restaurants, post offices, banks, health clubs, and recreational facilities (for example, ice skating rinks or indoor miniature golf courses). Many shopping centers, in addition to the integrated unit of shops in one building or enclosed around a mall, include outparcels (peripheral buildings or pads located on the perimeter of the center adjacent to the streets and major access points). These buildings are typically drive-in banks, retail stores, restaurants, or small offices. Although the data herein do not indicate which of the centers studied included peripheral buildings, it can be assumed that some of the data show their effect.
Apparel Store	876	66.4 KSF	1	1.085 KSF	1	4	An apparel store is an individual store specializing in the sale of clothing. Department store (Land Use 875) is a related use

Arts and Crafts Store	879	56.55 KSF	1	1.085 KSF	—	7	An arts and crafts store is a free-standing facility that sells art, framing, wall décor, and seasonal merchandise. These stores may provide in-store arts and crafts classes. Arts and crafts stores are sometimes found as separate parcels within a retail complex, with or without their own dedicated offstreet parking.
Mid-Rise Residential with 1st-Floor Commercial	231	422 DU	1	21 DU	6 [1]	8 [1]	Mid-rise residential with 1st-floor commercial are mixed-use multifamily housing buildings that have between three and 10 levels (floors) and include retail space on the first level. These facilities are typically found in dense multi-use urban and center city core settings. Multifamily housing (midrise) (Land Use 221) and high-rise residential with 1st-floor commercial (Land Use 232) are related land uses.

[1] Trip generation includes both Retail and Residential Land Uses

Discussions with ITE staff regarding this issue resulted in the following recommendations:

- The retail portion of the [applicant's] proposed development is small compared to the ITE data sets, and data for Land Uses 876 and 879 is limited to 1 observation. As such, if retail trip generation is estimated separately, the Shopping Center Land Use is the most similar, and appropriate, land use to use for estimating purposes.
- Consideration should be given to using Land Use 231. While this is a new land use (as of the ITE TGM 10th edition) and there is only 1 observation, it is based on Oregon data and this is a 'newer' development type, similar to the [applicant's] proposed development. It is further noted the retail trip generation portion of this land use is less than a stand-alone retail trip generation rate.
- Trip generation data can be obtained via data collection at similar developments based on ITE recommended practice, with the additional ITE staff recommendation the data be collected/characteriz ITE Land Use 231. ITE staff further noted that because the [applicant's] proposed development is small, additional data collection is unlikely to yield significantly different results than to simply use L Use 231, or Land Uses 221 and 820.

Based on the above information, we recommend assuming Land Use 231. Alternatively, we can continue to use the trip generation methodology/estimates proposed in our scoping letter assuming Land Us and 820. Please let us know how you wish for us to proceed.

Thank you,

Chris

Christopher M. Clemow PE, PTOE

Transportation Engineer

cclemow@clemow-associates.com

541-579-8315

PORTLAND | EUGENE | BEND

On Tue, Apr 7, 2020 at 1:47 PM Chris Clemow <cclemow@clemow-associates.com> wrote:

> Vera,
>
> The following are our comments and additional questions regarding your response:
>
> - The TIS will evaluate the SE 32nd Ave/SE Olsen and SE 32nd Ave/SE Harrison St intersections using the base traffic counts you provided and include a background traffic growth rate.
>
> - It is our understanding City staff will provide further clarification of potential trip credits. The TIS will incorporate these materials when received.
>
> - You have indicated a *Shopping Center* (ITE Land Use 820) is not acceptable for the proposed commercial use and have requested we assume more appropriate designations better reflecting the prop uses. We have recently faced this same issue on several other projects in the Portland metro area having a multi-story building with residential over commercial. The following is our response:
>
> Based on the applicant's site plan, there are three (3) commercial spaces totaling 1,085 square feet, resulting in rather small individual spaces. Based on applicant-provided information, the space in the northeast building corner will be used by the owner for property management purposes. The remaining two spaces total approximately 1,150 SF and are of similar size - approximately 575 SF each and tenancy is unknown.
>
> Previously, these retail spaces were commonly characterized as *Specialty Retail Center* uses in the ITE Trip Generation Manual (TGM) 9th edition - ITE Land Use 826, and 8th Edition - ITE Land Use 8 However, the current ITE TGM 10th Edition eliminated the *Specialty Retail Center* land use code and includes the statement, "*In an effort to continually provide data that accurately reflects the composi each land use, some data were reassigned to other land uses, corrected from previous editions, or removed from the database. Several land uses were also renumbered to facilitate a more logical grou related land uses. The following list summarizes these changes: ...Specialty Retail Center (826) was removed. Data from the land use was reclassified to existing land uses.*"
>
> A review of available TGM 10th Edition land use codes finds a small number of potential uses which are summarized in the table below and in the attached PDF.

Table xx – Potential Land Uses

Land Use	ITE Code	Range of Sizes	Number of Studies	Development Size	AM Peak Hour Trip Generation	PM Peak Hour Trip Generation	ITE Land Use Description
Shopping Center	820	7.42-207.98 KSF	147	1.325 KSF	1	4	A shopping center is an integrated group of commercial establishments that is planned, developed, owned, and ma as a unit. A shopping center's composition is related to its market area in terms of size, location, and type of store. A shopping center also provides on-site parking facilities sufficient to serve its own parking demands. Factory outlet c (Land Use 823) is a related use. Additional Data Shopping centers, including neighborhood centers, community cen regional centers, and super regional centers, were surveyed for this land use. Some of these centers contained non merchandising facilities, such as office buildings, movie theaters, restaurants, post offices, banks, health clubs, and recreational facilities (for example, ice skating rinks or indoor miniature golf courses). Many shopping centers, in ad the integrated unit of shops in one building or enclosed around a mall, include outparcels (peripheral buildings or pa located on the perimeter of the center adjacent to the streets and major access points). These buildings are typicall

							in banks, retail stores, restaurants, or small offices. Although the data herein do not indicate which of the centers stu included peripheral buildings, it can be assumed that some of the data show their effect.
Apparel Store	876	66.4 KSF	1	1.325 KSF	1	4	An apparel store is an individual store specializing in the sale of clothing. Department store (Land Use 875) is a rela
Arts and Crafts Store	879	56.55 KSF	1	1.325 KSF	—	7	An arts and crafts store is a free-standing facility that sells art, framing, wall décor, and seasonal merchandise. Thes stores may provide in-store arts and crafts classes. Arts and crafts stores are sometimes found as separate parcels retail complex, with or without their own dedicated offstreet parking.
Mid-Rise Residential with 1st-Floor Commercial	231	422 DU	1	21 DU	6[1]	8[1]	Mid-rise residential with 1st-floor commercial are mixed-use multifamily housing buildings that have between three a levels (floors) and include retail space on the first level. These facilities are typically found in dense multi-use urban center city core settings. Multifamily housing (midrise) (Land Use 221) and high-rise residential with 1st-floor comme (Land Use 232) are related land uses.

[1] Trip generation includes both Retail and Residential Land Uses

Discussions with ITE staff regarding this issue resulted in the following recommendations:

- The retail portion of the [applicant's] proposed development is small compared to the ITE data sets, and data for Land Uses 876 and 879 is limited to 1 observation. As such, if retail trip generatio estimated separately, the Shopping Center Land Use is the most similar, and appropriate, land use to use for estimating purposes.
- Consideration should be given to using Land Use 231. While this is a new land use (as of the ITE TGM 10th edition) and there is only 1 observation, it is based on Oregon data and this is a 'newe development type, similar to the [applicant's] proposed development. It is further noted the retail trip generation portion of this land use is less than a stand-alone retail trip generation rate.
- Trip generation data can be obtained via data collection at similar developments based on ITE recommended practice, with the additional ITE staff recommendation the data be collected/characte as ITE Land Use 231. ITE staff further noted that because the [applicant's] proposed development is small, additional data collection is unlikely to yield significantly different results than to simply Land Use 231, or Land Uses 221 and 820.

Based on the above information, we recommend assuming Land Use 231. Alternatively, we can continue to use the trip generation methodology/estimates proposed in our scoping letter assuming Land 221 and 820. Please let us know how you wish for us to proceed.

Thank you,

Chris

Christopher M. Clemow PE, PTOE

Transportation Engineer

cclemow@clemow-associates.com

541-579-8315

PORTLAND | EUGENE | BEND

On Mon, Apr 6, 2020 at 8:36 AM Vera Kolias <KoliasV@milwaukieoregon.gov> wrote:

> Good morning Valerie,
>
> One of the engineers will respond to your question so you have a specific answer from the Engineering Department.
>
> Thank you,
>
> Vera
>
> **VERA KOLIAS, AICP**
>
> Associate Planner
>
> she • her • hers
>
> 503.786.7653
>
> City of Milwaukie
>
> 6101 SE Johnson Creek Blvd • Milwaukie, OR 97206
>
> ---
>
> **From:** Valerie Hunter <vhproperty@gmail.com>
> **Sent:** Monday, April 6, 2020 8:14
> **To:** Vera Kolias <KoliasV@milwaukieoregon.gov>
> **Cc:** Mildred White <mildred@BAMAdesign.com>; Chris Clemow <cclemow@clemow-associates.com>; Auryn White <auryn@bamadesign.com>; Steve Adams <AdamsS@milwaukieoregon.gov>; Al Roller <RollerA@milwaukieoregon.gov>; Dennis Egner <EgnerD@milwaukieoregon.gov>; Dalton Vodden <VoddenD@milwaukieoregon.gov>; undefined <rlf@dksassociates.com>
> **Subject:** Re: Milwaukie Mixed-Use Development - Transportation Analysis
>
> **This Message originated outside your organization.**
>
> ---
>
> Good Morning Vera,
>
> Thank you for your response my team is working on all the items.. but I do have one question about the credits… Can you send me where in your code that it explains them please.. I really find it not a viable option not to give credits for a business that was so long standing and never replaced with another business. I hope to have everything turned into you today from Chris & Mildred.

Valerie S Hunter
Certified REO Specialist-CREO, AREO
ABR, CRS, GRI, E-PRO
H&H Preferred Real Estate

Cell: 541-419-7253
email: vhproperty@gmail.com

https://www.oregon.gov/rea/licensing/Documents/Initial-Agency-Disclosure-Pamphlet.pdf

On Apr 3, 2020, at 2:51 PM, Vera Kolias <KoliasV@milwaukieoregon.gov> wrote:

Hello Mildred and Chris,

We have discussed the March 4 scoping letter that was submitted, which provided an argument for a limited TIS scope for the proposed project. The following summarizes our discussion:

The required TIS must address the full scope that was provided by the city. However:

- Study intersections to include only: SE 32nd Ave/SE Olsen and SE 32nd Ave/SE Harrison St
- Attached please find a preliminary traffic study completed in October 2018. Please use this document as a source for trip counts, but they should be modified by the standard 2-3% increase per year to bring them up to date.
- You propose to claim trip credits for the prior use on the site. However, it has been closed for more than 2 years, so those credits are not available.
- You propose to use ITE code 820 (shopping center) for the commercial uses on the site. This is not an acceptable land use code for the proposed development. Please use a more appropriate designation that better reflects the proposed uses in the development.

Please let me know if you have any questions.

Stay healthy and safe,

Vera

Vera Kolias, AICP

Associate Planner

she/her/hers

503.786.7653

City of Milwaukie

6101 SE Johnson Creek Blvd., Milwaukie, OR 97206

From: Mildred White <mildred@BAMAdesign.com>
Sent: Tuesday, March 24, 2020 8:09 PM
To: Vera Kolias <KoliasV@milwaukieoregon.gov>; 'Chris Clemow' <cclemow@clemow-associates.com>; Alex Roller <RollerA@milwaukieoregon.gov>; Steve Adams <AdamsS@milwaukieoregon.gov>
Cc: 'Auryn White' <auryn@bamadesign.com>; 'Valerie Hunter' <vhproperty@gmail.com>
Subject: RE: Milwaukie Mixed-Use Development - Transportation Analysis

This Message originated outside your organization.

Good evening Vera,

I hope you are doing well and staying healthy. Just wanted to reach out to you and see if there's been an update on this project from the engineering department over the last week.

Thanks for your assistance,

Mildred

Mildred White, AIA, NCARB

Principal
BAMA Architecture and Design, LLC

7350 SE Milwaukie Avenue

Portland, Oregon 97202
office: 503-253-4283

Cell: 503-380-2852
Mildred@BAMAdesign.com

WBE and ESB Certified

*Licensed in Oregon, Washington, Hawaii, Alaska and Colorado

PLEASE NOTE, ALTHOUGH BAMA ARCHITECTURE IS CONTINUING TO WORK AS NORMAL, OUR PHYSICAL OFFICE IS CURRENTLY CLOSED FOR HEALTH PRECAUTIONS. PLEASE EMAIL OR CALL MY CELL PHONE. THANK YOU FOR YOUR UNDERSTANDING.

From: Vera Kolias
Sent: Tuesday, March 17, 2020 1:41 PM
To: Chris Clemow <cclemow@clemow-associates.com>; Alex Roller <RollerA@milwaukieoregon.gov>; Steve Adams <AdamsS@milwaukieoregon.gov>
Cc: Auryn White <auryn@bamadesign.com>; Mildred White <mildred@bamadesign.com>; Valerie Hunter <vhproperty@gmail.com>
Subject: Re: Milwaukie Mixed-Use Development - Transportation Analysis

Hello Chris,

Given the Coronavirus situation I just wanted to check in with you and let you know that the Engineering Department is reviewing the scoping letter and we will respond soon.

-Vera

Vera Kolias, AICP

Associate Planner

she/her/hers

503.786.7653

City of Milwaukie

6101 SE Johnson Creek Blvd., Milwaukie, OR 97206

From: Chris Clemow <cclemow@clemow-associates.com>
Sent: Thursday, March 5, 2020 10:22 AM
To: Vera Kolias <KoliasV@milwaukieoregon.gov>; Alex Roller <RollerA@milwaukieoregon.gov>
Cc: Auryn White <auryn@bamadesign.com>; Mildred White <mildred@bamadesign.com>; Valerie Hunter <vhproperty@gmail.com>
Subject: Milwaukie Mixed-Use Development - Transportation Analysis

Vera and Alex,

Attached is a copy of our Transportation Impact Study (TIS) scoping letter supporting the proposed Milwaukie Mixed-Use development that addresses the January 23, 2020 City of Milwaukie Transportation Impact Study Checklist prepared by Amanda Deering of DKS Associates.

Please note, the development size has decreased from that contemplated by the City checklist, resulting in decreased transportation system impacts and a decreased scope of work.

Please review the attached materials and provide necessary comments so that we can prepare the TIS.

Thank you,

Chris

Christopher M. Clemow PE, PTOE

Transportation Engineer

cclemow@clemow-associates.com

541-579-8315

PORTLAND | EUGENE | BEND

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and may have been automatically archived by **Mimecast Ltd**.

<Hillside Master Plan Draft 10-8.pdf>

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notifie any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and may have been automatically archived by **Mimecast Ltd**.

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and may have been automatically archived by **Mimecast Ltd**.

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that an disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and may have been automatically archived by **Mimecast Ltd**.

Appendix C

January 1, 2013 through December 31, 2017

INTERSECTION CRASH RATES

Intersection	Crashes						PM Entering Volume	ADT (10xPM)	AADT (365xADT)	Annual Crashes	Crash Rate (crashes/MEV)	Reference Population	90th%ile Crash Rate	Over or Under Crash
	2013	2014	2015	2016	2017	Total								
SE 32nd Avenue / SE Olsen Street	0	0	1	0	0	1	603	6,030	2,200,950	0.20	0.091	Urban 4SG	0.860	Under
SE 32nd Avenue / SE Harrison Street	1	0	2	4	3	10	1,375	13,750	5,018,750	2.00	0.399	Urban 4ST	0.408	Under

SE 32nd Ave & SE Olsen St
January 1, 2013 through December 31, 2017

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2015														
FIXED / OTHER OBJECT	0	0	1	1	0	0	0	1	0	1	0	1	0	1
2015 TOTAL	0	0	1	1	0	0	0	1	0	1	0	1	0	1
FINAL TOTAL	0	0	1	1	0	0	0	1	0	1	0	1	0	1

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

SE 32nd Ave & SE Harrison St
January 1, 2013 through December 31, 2017

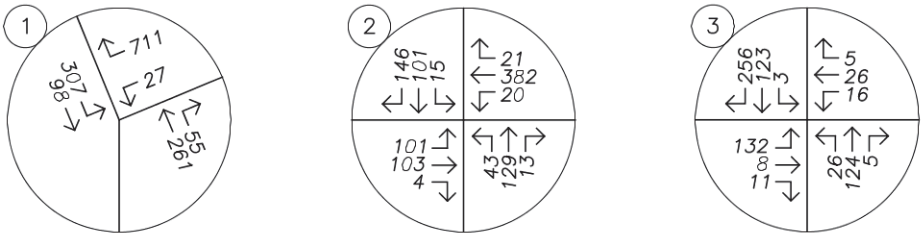
COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2017														
FIXED / OTHER OBJECT	0	0	1	1	0	0	0	0	1	1	0	1	0	1
PEDESTRIAN	0	1	0	1	0	1	0	1	0	1	0	1	0	0
2017 TOTAL	0	1	1	2	0	1	0	1	1	2	0	2	0	1
YEAR: 2016														
ANGLE	0	2	0	2	0	5	0	1	1	1	1	2	0	0
TURNING MOVEMENTS	0	2	0	2	0	2	0	1	1	2	0	2	0	0
2016 TOTAL	0	4	0	4	0	7	0	2	2	3	1	4	0	0
YEAR: 2015														
TURNING MOVEMENTS	0	0	2	2	0	0	0	2	0	1	1	2	0	0
2015 TOTAL	0	0	2	2	0	0	0	2	0	1	1	2	0	0
YEAR: 2014														
REAR-END	0	1	0	1	0	1	0	1	0	1	0	1	0	0
TURNING MOVEMENTS	0	1	0	1	0	1	0	0	1	0	1	1	0	0
2014 TOTAL	0	2	0	2	0	2	0	1	1	1	1	2	0	0
YEAR: 2013														
FIXED / OTHER OBJECT	0	0	1	1	0	0	0	1	0	1	0	1	0	1
TURNING MOVEMENTS	0	1	1	2	0	3	0	2	0	2	0	2	0	0
2013 TOTAL	0	1	2	3	0	3	0	3	0	3	0	3	0	1
FINAL TOTAL	0	8	5	13	0	13	0	9	4	10	3	13	0	2

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

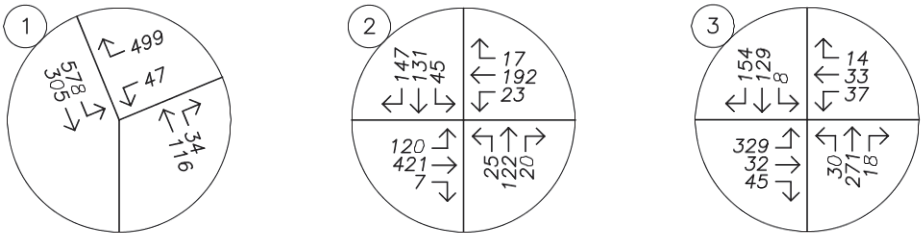
A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

Appendix D

AM PEAK HOUR



PM PEAK HOUR



TRAFFIC VOLUMES
Existing Conditions
AM & PM Peak Hours

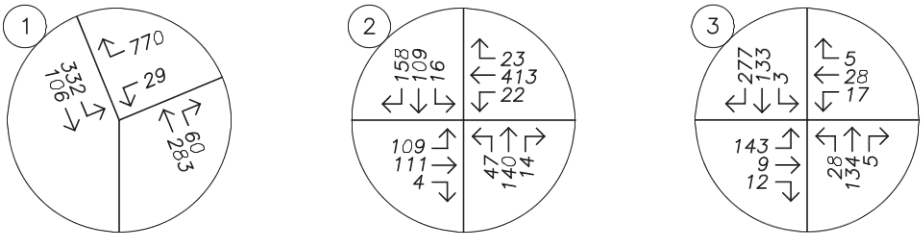
no scale

FIGURE 5

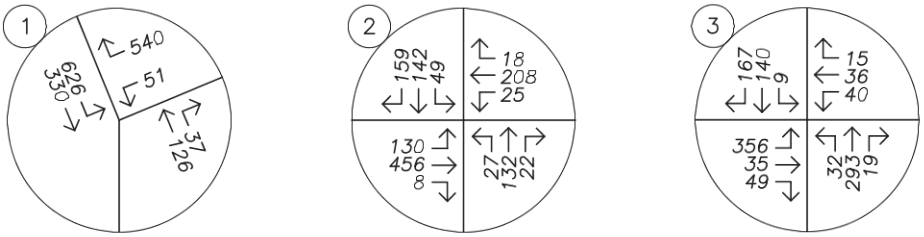
PAGE 12

GROWTH RATE: 2.0 PERCENT PER YEAR COMPOUNDED

AM PEAK HOUR



PM PEAK HOUR



TRAFFIC VOLUMES
2022 Background Conditions
AM & PM Peak Hours

no scale

FIGURE 6

PAGE 13

Appendix E

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	16	0	5	10	0	16	5	297	5	5	203	5
Future Vol, veh/h	16	0	5	10	0	16	5	297	5	5	203	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	0	6	11	0	18	6	330	6	6	226	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	595	589	229	589	589	333	232	0	0	336	0	0
Stage 1	241	241	-	345	345	-	-	-	-	-	-	-
Stage 2	354	348	-	244	244	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	416	421	810	420	421	709	1336	-	-	1223	-	-
Stage 1	762	706	-	671	636	-	-	-	-	-	-	-
Stage 2	663	634	-	760	704	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	402	416	810	413	416	709	1336	-	-	1223	-	-
Mov Cap-2 Maneuver	402	416	-	413	416	-	-	-	-	-	-	-
Stage 1	757	702	-	667	632	-	-	-	-	-	-	-
Stage 2	642	630	-	750	700	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.3	11.8	0.1	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1336	-	-	457	556	1223	-	-
HCM Lane V/C Ratio	0.004	-	-	0.051	0.052	0.005	-	-
HCM Control Delay (s)	7.7	0	-	13.3	11.8	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	107	4	21	397	22	45	134	14	16	105	152
Future Volume (veh/h)	105	107	4	21	397	22	45	134	14	16	105	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	119	4	23	441	24	50	149	16	18	117	169
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	646	22	48	529	29	196	530	608	123	648	608
Arrive On Green	0.08	0.36	0.36	0.03	0.30	0.30	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1781	1799	60	1781	1757	96	286	1380	1585	118	1690	1585
Grp Volume(v), veh/h	117	0	123	23	0	465	199	0	16	135	0	169
Grp Sat Flow(s),veh/h/ln	1781	0	1859	1781	0	1853	1667	0	1585	1808	0	1585
Q Serve(g_s), s	3.4	0.0	2.4	0.7	0.0	12.2	0.0	0.0	0.3	0.0	0.0	3.8
Cycle Q Clear(g_c), s	3.4	0.0	2.4	0.7	0.0	12.2	3.8	0.0	0.3	2.5	0.0	3.8
Prop In Lane	1.00		0.03	1.00		0.05	0.25		1.00	0.13		1.00
Lane Grp Cap(c), veh/h	151	0	667	48	0	558	726	0	608	772	0	608
V/C Ratio(X)	0.77	0.00	0.18	0.48	0.00	0.83	0.27	0.00	0.03	0.17	0.00	0.28
Avail Cap(c_a), veh/h	273	0	803	188	0	711	726	0	608	772	0	608
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.4	0.0	11.5	25.0	0.0	17.0	11.1	0.0	10.0	10.7	0.0	11.1
Incr Delay (d2), s/veh	8.2	0.0	0.1	7.1	0.0	6.7	0.9	0.0	0.1	0.5	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.9	0.4	0.0	5.7	1.6	0.0	0.1	1.0	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.5	0.0	11.6	32.1	0.0	23.7	12.0	0.0	10.1	11.2	0.0	12.2
LnGrp LOS	C	A	B	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h		240			488			215			304	
Approach Delay, s/veh		21.3			24.1			11.9			11.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		24.0	5.4	22.7		24.0	8.4	19.7				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		20.0	5.5	22.5		20.0	8.0	20.0				
Max Q Clear Time (g_c+I1), s		5.8	2.7	4.4		5.8	5.4	14.2				
Green Ext Time (p_c), s		1.0	0.0	0.6		1.1	0.1	1.5				

Intersection Summary	
HCM 6th Ctrl Delay	18.5
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	17	0	5	10	0	17	5	309	5	5	211	5
Future Vol, veh/h	17	0	5	10	0	17	5	309	5	5	211	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	0	6	11	0	19	6	343	6	6	234	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	617	610	237	610	610	346	240	0	0	349	0	0
Stage 1	249	249	-	358	358	-	-	-	-	-	-	-
Stage 2	368	361	-	252	252	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	402	409	802	407	409	697	1327	-	-	1210	-	-
Stage 1	755	701	-	660	628	-	-	-	-	-	-	-
Stage 2	652	626	-	752	698	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	388	404	802	400	404	697	1327	-	-	1210	-	-
Mov Cap-2 Maneuver	388	404	-	400	404	-	-	-	-	-	-	-
Stage 1	750	697	-	656	624	-	-	-	-	-	-	-
Stage 2	631	622	-	742	694	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.7	12	0.1	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1327	-	-	440	547	1210	-	-
HCM Lane V/C Ratio	0.004	-	-	0.056	0.055	0.005	-	-
HCM Control Delay (s)	7.7	0	-	13.7	12	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	111	4	22	413	23	47	139	15	17	109	158
Future Volume (veh/h)	109	111	4	22	413	23	47	139	15	17	109	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	121	123	4	24	459	26	52	154	17	19	121	176
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	660	21	50	538	30	195	527	611	123	647	611
Arrive On Green	0.09	0.37	0.37	0.03	0.31	0.31	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1781	1801	59	1781	1753	99	292	1366	1585	124	1679	1585
Grp Volume(v), veh/h	121	0	127	24	0	485	206	0	17	140	0	176
Grp Sat Flow(s),veh/h/ln	1781	0	1860	1781	0	1852	1658	0	1585	1803	0	1585
Q Serve(g_s), s	3.6	0.0	2.5	0.7	0.0	13.4	0.0	0.0	0.4	0.0	0.0	4.2
Cycle Q Clear(g_c), s	3.6	0.0	2.5	0.7	0.0	13.4	4.1	0.0	0.4	2.7	0.0	4.2
Prop In Lane	1.00		0.03	1.00		0.05	0.25		1.00	0.14		1.00
Lane Grp Cap(c), veh/h	155	0	681	50	0	568	722	0	611	770	0	611
V/C Ratio(X)	0.78	0.00	0.19	0.48	0.00	0.85	0.29	0.00	0.03	0.18	0.00	0.29
Avail Cap(c_a), veh/h	229	0	734	180	0	680	722	0	611	770	0	611
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.3	0.0	11.7	26.1	0.0	17.7	11.6	0.0	10.4	11.1	0.0	11.6
Incr Delay (d2), s/veh	9.7	0.0	0.1	7.1	0.0	8.9	1.0	0.0	0.1	0.5	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	1.0	0.4	0.0	6.6	1.7	0.0	0.1	1.1	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.0	0.0	11.9	33.1	0.0	26.6	12.5	0.0	10.5	11.6	0.0	12.8
LnGrp LOS	C	A	B	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h		248			509			223			316	
Approach Delay, s/veh		22.7			26.9			12.4			12.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		25.0	5.5	23.9		25.0	8.8	20.7				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		21.0	5.5	21.5		21.0	7.0	20.0				
Max Q Clear Time (g_c+I1), s		6.1	2.7	4.5		6.2	5.6	15.4				
Green Ext Time (p_c), s		1.1	0.0	0.6		1.2	0.0	1.3				

Intersection Summary												
HCM 6th Ctrl Delay			20.0									
HCM 6th LOS			C									

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	0	7	10	0	17	5	309	5	5	211	5
Future Vol, veh/h	19	0	7	10	0	17	5	309	5	5	211	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	0	8	11	0	19	6	343	6	6	234	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	617	610	237	611	610	346	240	0	0	349	0	0
Stage 1	249	249	-	358	358	-	-	-	-	-	-	-
Stage 2	368	361	-	253	252	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	402	409	802	406	409	697	1327	-	-	1210	-	-
Stage 1	755	701	-	660	628	-	-	-	-	-	-	-
Stage 2	652	626	-	751	698	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	388	404	802	398	404	697	1327	-	-	1210	-	-
Mov Cap-2 Maneuver	388	404	-	398	404	-	-	-	-	-	-	-
Stage 1	750	697	-	656	624	-	-	-	-	-	-	-
Stage 2	631	622	-	739	694	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.5	12	0.1	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1327	-	-	451	545	1210	-	-
HCM Lane V/C Ratio	0.004	-	-	0.064	0.055	0.005	-	-
HCM Control Delay (s)	7.7	0	-	13.5	12	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	111	4	22	413	23	47	139	15	18	109	159
Future Volume (veh/h)	109	111	4	22	413	23	47	139	15	18	109	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	121	123	4	24	459	26	52	154	17	20	121	177
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	660	21	50	538	30	195	527	611	127	642	611
Arrive On Green	0.09	0.37	0.37	0.03	0.31	0.31	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1781	1801	59	1781	1753	99	292	1366	1585	133	1666	1585
Grp Volume(v), veh/h	121	0	127	24	0	485	206	0	17	141	0	177
Grp Sat Flow(s),veh/h/ln	1781	0	1860	1781	0	1852	1658	0	1585	1799	0	1585
Q Serve(g_s), s	3.6	0.0	2.5	0.7	0.0	13.4	0.0	0.0	0.4	0.0	0.0	4.2
Cycle Q Clear(g_c), s	3.6	0.0	2.5	0.7	0.0	13.4	4.1	0.0	0.4	2.7	0.0	4.2
Prop In Lane	1.00		0.03	1.00		0.05	0.25		1.00	0.14		1.00
Lane Grp Cap(c), veh/h	155	0	681	50	0	568	722	0	611	769	0	611
V/C Ratio(X)	0.78	0.00	0.19	0.48	0.00	0.85	0.29	0.00	0.03	0.18	0.00	0.29
Avail Cap(c_a), veh/h	229	0	734	180	0	680	722	0	611	769	0	611
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.3	0.0	11.7	26.1	0.0	17.7	11.6	0.0	10.4	11.1	0.0	11.6
Incr Delay (d2), s/veh	9.7	0.0	0.1	7.1	0.0	8.9	1.0	0.0	0.1	0.5	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	1.0	0.4	0.0	6.6	1.7	0.0	0.1	1.1	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.0	0.0	11.9	33.1	0.0	26.6	12.5	0.0	10.5	11.6	0.0	12.8
LnGrp LOS	C	A	B	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h		248			509			223			318	
Approach Delay, s/veh		22.7			26.9			12.4			12.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		25.0	5.5	23.9		25.0	8.8	20.7				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		21.0	5.5	21.5		21.0	7.0	20.0				
Max Q Clear Time (g_c+I1), s		6.1	2.7	4.5		6.2	5.6	15.4				
Green Ext Time (p_c), s		1.1	0.0	0.6		1.2	0.0	1.3				

Intersection Summary												
HCM 6th Ctrl Delay			20.0									
HCM 6th LOS			C									

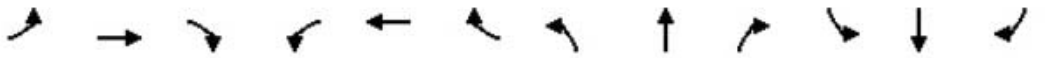
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	0	5	10	0	10	10	156	5	5	366	10
Future Vol, veh/h	5	0	5	10	0	10	10	156	5	5	366	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	0	6	11	0	11	11	173	6	6	407	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	629	626	413	626	628	176	418	0	0	179	0	0
Stage 1	425	425	-	198	198	-	-	-	-	-	-	-
Stage 2	204	201	-	428	430	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	395	401	639	397	400	867	1141	-	-	1397	-	-
Stage 1	607	586	-	804	737	-	-	-	-	-	-	-
Stage 2	798	735	-	605	583	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	385	394	639	388	393	867	1141	-	-	1397	-	-
Mov Cap-2 Maneuver	385	394	-	388	393	-	-	-	-	-	-	-
Stage 1	600	582	-	795	729	-	-	-	-	-	-	-
Stage 2	779	727	-	596	580	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.7	12	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1141	-	-	480	536	1397	-	-
HCM Lane V/C Ratio	0.01	-	-	0.023	0.041	0.004	-	-
HCM Control Delay (s)	8.2	0	-	12.7	12	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	438	7	24	200	18	26	127	21	47	136	153
Future Volume (veh/h)	125	438	7	24	200	18	26	127	21	47	136	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	139	487	8	27	222	20	29	141	23	52	151	170
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	602	10	56	437	39	151	626	628	212	557	628
Arrive On Green	0.10	0.33	0.33	0.03	0.26	0.26	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1781	1835	30	1781	1691	152	164	1580	1585	303	1406	1585
Grp Volume(v), veh/h	139	0	495	27	0	242	170	0	23	203	0	170
Grp Sat Flow(s),veh/h/ln	1781	0	1865	1781	0	1843	1745	0	1585	1709	0	1585
Q Serve(g_s), s	3.7	0.0	11.9	0.7	0.0	5.5	0.0	0.0	0.4	0.0	0.0	3.6
Cycle Q Clear(g_c), s	3.7	0.0	11.9	0.7	0.0	5.5	3.0	0.0	0.4	3.6	0.0	3.6
Prop In Lane	1.00		0.02	1.00		0.08	0.17		1.00	0.26		1.00
Lane Grp Cap(c), veh/h	180	0	612	56	0	477	777	0	628	769	0	628
V/C Ratio(X)	0.77	0.00	0.81	0.48	0.00	0.51	0.22	0.00	0.04	0.26	0.00	0.27
Avail Cap(c_a), veh/h	326	0	872	199	0	730	777	0	628	769	0	628
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.6	0.0	15.1	23.4	0.0	15.6	9.9	0.0	9.1	10.1	0.0	10.0
Incr Delay (d2), s/veh	6.9	0.0	3.8	6.3	0.0	0.8	0.6	0.0	0.1	0.8	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	5.0	0.4	0.0	2.2	1.2	0.0	0.1	1.4	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	0.0	18.9	29.8	0.0	16.4	10.5	0.0	9.2	10.9	0.0	11.1
LnGrp LOS	C	A	B	C	A	B	B	A	A	B	A	B
Approach Vol, veh/h		634			269			193			373	
Approach Delay, s/veh		21.0			17.7			10.4			11.0	
Approach LOS		C			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	5.5	20.2		23.5	9.0	16.7				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		19.5	5.5	23.0		19.5	9.0	19.5				
Max Q Clear Time (g_c+I1), s		5.0	2.7	13.9		5.6	5.7	7.5				
Green Ext Time (p_c), s		0.9	0.0	2.2		1.5	0.1	1.1				

Intersection Summary												
HCM 6th Ctrl Delay			16.5									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	0	5	10	0	10	10	162	5	5	381	10
Future Vol, veh/h	5	0	5	10	0	10	10	162	5	5	381	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	0	6	11	0	11	11	180	6	6	423	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	652	649	429	649	651	183	434	0	0	186	0	0
Stage 1	441	441	-	205	205	-	-	-	-	-	-	-
Stage 2	211	208	-	444	446	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	381	389	626	383	388	859	1126	-	-	1388	-	-
Stage 1	595	577	-	797	732	-	-	-	-	-	-	-
Stage 2	791	730	-	593	574	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	371	382	626	375	381	859	1126	-	-	1388	-	-
Mov Cap-2 Maneuver	371	382	-	375	381	-	-	-	-	-	-	-
Stage 1	588	574	-	788	724	-	-	-	-	-	-	-
Stage 2	772	722	-	584	571	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.9	12.2	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1126	-	-	466	522	1388	-	-
HCM Lane V/C Ratio	0.01	-	-	0.024	0.043	0.004	-	-
HCM Control Delay (s)	8.2	0	-	12.9	12.2	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	456	7	25	208	19	27	132	22	49	141	159
Future Volume (veh/h)	130	456	7	25	208	19	27	132	22	49	141	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	144	507	8	28	231	21	30	147	24	54	157	177
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	619	10	57	447	41	148	617	619	208	548	619
Arrive On Green	0.10	0.34	0.34	0.03	0.26	0.26	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1781	1836	29	1781	1689	154	162	1581	1585	302	1405	1585
Grp Volume(v), veh/h	144	0	515	28	0	252	177	0	24	211	0	177
Grp Sat Flow(s),veh/h/ln	1781	0	1865	1781	0	1843	1743	0	1585	1707	0	1585
Q Serve(g_s), s	3.9	0.0	12.6	0.8	0.0	5.8	0.0	0.0	0.5	0.0	0.0	3.8
Cycle Q Clear(g_c), s	3.9	0.0	12.6	0.8	0.0	5.8	3.2	0.0	0.5	3.9	0.0	3.8
Prop In Lane	1.00		0.02	1.00		0.08	0.17		1.00	0.26		1.00
Lane Grp Cap(c), veh/h	186	0	629	57	0	488	765	0	619	757	0	619
V/C Ratio(X)	0.77	0.00	0.82	0.49	0.00	0.52	0.23	0.00	0.04	0.28	0.00	0.29
Avail Cap(c_a), veh/h	321	0	859	196	0	719	765	0	619	757	0	619
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.8	0.0	15.2	23.8	0.0	15.6	10.3	0.0	9.4	10.5	0.0	10.4
Incr Delay (d2), s/veh	6.7	0.0	4.6	6.3	0.0	0.8	0.7	0.0	0.1	0.9	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	5.5	0.4	0.0	2.3	1.3	0.0	0.2	1.6	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.5	0.0	19.7	30.0	0.0	16.5	11.0	0.0	9.5	11.4	0.0	11.6
LnGrp LOS	C	A	B	C	A	B	B	A	A	B	A	B
Approach Vol, veh/h		659			280			201			388	
Approach Delay, s/veh		21.6			17.8			10.8			11.5	
Approach LOS		C			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	5.6	20.8		23.5	9.2	17.2				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		19.5	5.5	23.0		19.5	9.0	19.5				
Max Q Clear Time (g_c+I1), s		5.2	2.8	14.6		5.9	5.9	7.8				
Green Ext Time (p_c), s		0.9	0.0	2.2		1.6	0.1	1.1				

Intersection Summary	
HCM 6th Ctrl Delay	16.9
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	0	6	10	0	10	11	162	5	5	381	12
Future Vol, veh/h	6	0	6	10	0	10	11	162	5	5	381	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	0	7	11	0	11	12	180	6	6	423	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	655	652	430	652	655	183	436	0	0	186	0	0
Stage 1	442	442	-	207	207	-	-	-	-	-	-	-
Stage 2	213	210	-	445	448	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	379	387	625	381	386	859	1124	-	-	1388	-	-
Stage 1	594	576	-	795	731	-	-	-	-	-	-	-
Stage 2	789	728	-	592	573	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	369	380	625	372	379	859	1124	-	-	1388	-	-
Mov Cap-2 Maneuver	369	380	-	372	379	-	-	-	-	-	-	-
Stage 1	587	573	-	785	722	-	-	-	-	-	-	-
Stage 2	769	719	-	582	570	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13	12.2	0.5	0.1
HCM LOS	B	B		

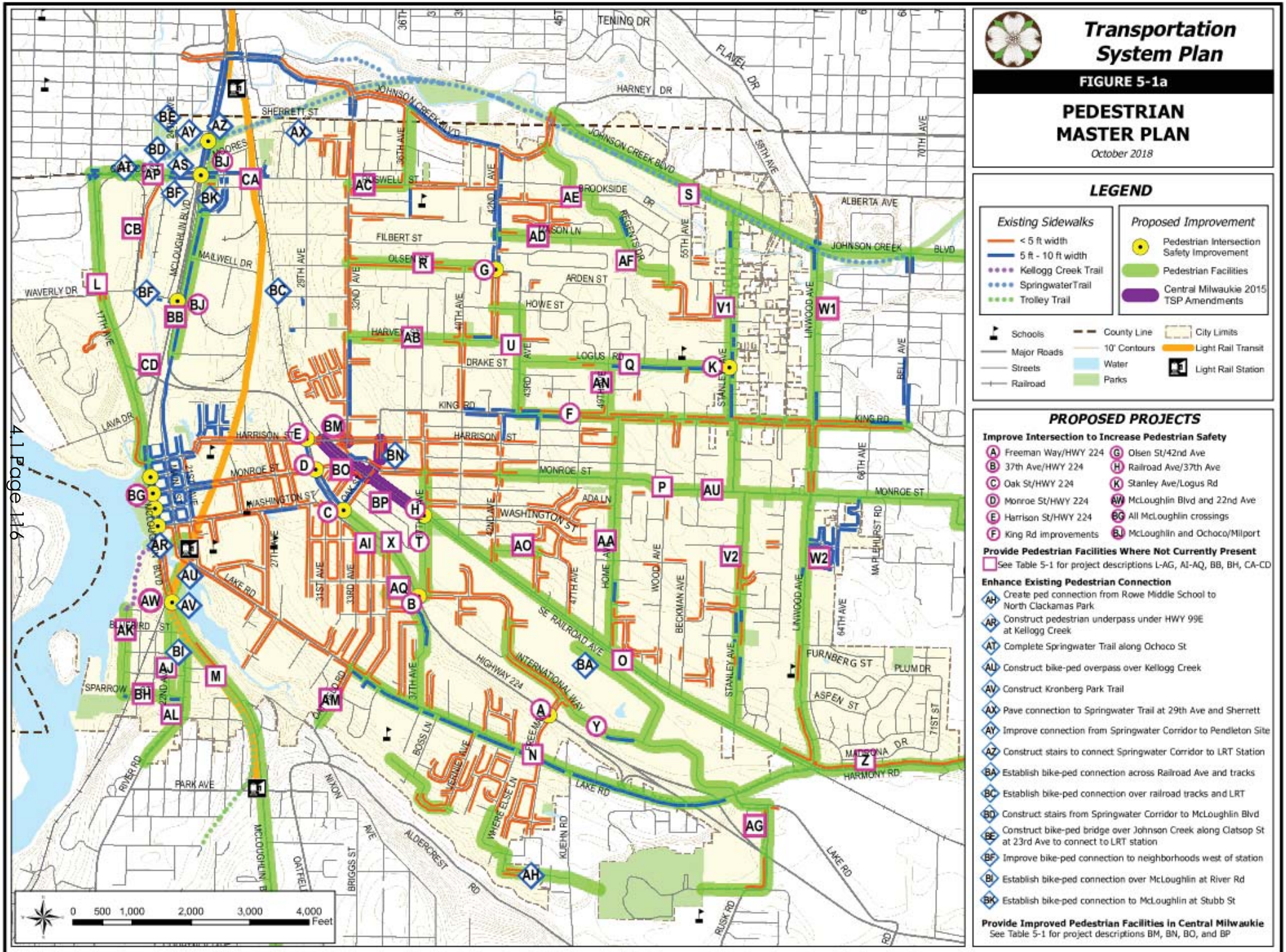
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1124	-	-	464	519	1388	-	-
HCM Lane V/C Ratio	0.011	-	-	0.029	0.043	0.004	-	-
HCM Control Delay (s)	8.2	0	-	13	12.2	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

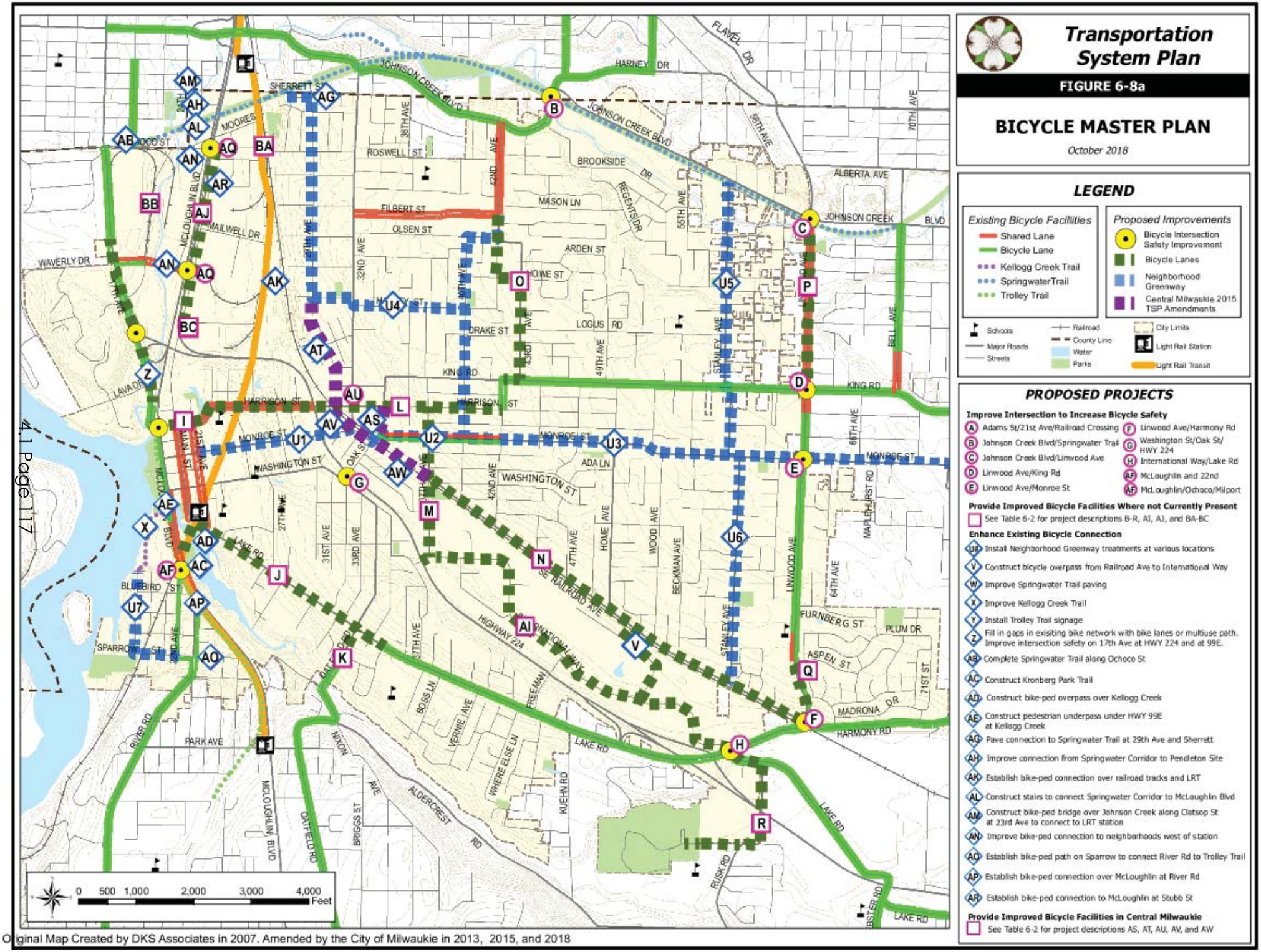
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	456	7	25	208	19	27	132	22	49	141	160
Future Volume (veh/h)	131	456	7	25	208	19	27	132	22	49	141	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	146	507	8	28	231	21	30	147	24	54	157	178
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	619	10	57	445	40	148	617	619	208	548	619
Arrive On Green	0.11	0.34	0.34	0.03	0.26	0.26	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1781	1836	29	1781	1689	154	162	1580	1585	302	1405	1585
Grp Volume(v), veh/h	146	0	515	28	0	252	177	0	24	211	0	178
Grp Sat Flow(s),veh/h/ln	1781	0	1865	1781	0	1843	1742	0	1585	1707	0	1585
Q Serve(g_s), s	4.0	0.0	12.6	0.8	0.0	5.8	0.0	0.0	0.5	0.0	0.0	3.9
Cycle Q Clear(g_c), s	4.0	0.0	12.6	0.8	0.0	5.8	3.2	0.0	0.5	3.9	0.0	3.9
Prop In Lane	1.00		0.02	1.00		0.08	0.17		1.00	0.26		1.00
Lane Grp Cap(c), veh/h	188	0	629	57	0	486	765	0	619	757	0	619
V/C Ratio(X)	0.77	0.00	0.82	0.49	0.00	0.52	0.23	0.00	0.04	0.28	0.00	0.29
Avail Cap(c_a), veh/h	321	0	859	196	0	719	765	0	619	757	0	619
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.8	0.0	15.2	23.8	0.0	15.7	10.3	0.0	9.4	10.5	0.0	10.5
Incr Delay (d2), s/veh	6.7	0.0	4.6	6.3	0.0	0.9	0.7	0.0	0.1	0.9	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	5.5	0.4	0.0	2.3	1.3	0.0	0.2	1.6	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	0.0	19.7	30.0	0.0	16.6	11.0	0.0	9.5	11.4	0.0	11.6
LnGrp LOS	C	A	B	C	A	B	B	A	A	B	A	B
Approach Vol, veh/h		661			280			201			389	
Approach Delay, s/veh		21.6			17.9			10.8			11.5	
Approach LOS		C			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	5.6	20.8		23.5	9.3	17.2				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		19.5	5.5	23.0		19.5	9.0	19.5				
Max Q Clear Time (g_c+I1), s		5.2	2.8	14.6		5.9	6.0	7.8				
Green Ext Time (p_c), s		0.9	0.0	2.2		1.6	0.1	1.1				

Intersection Summary	
HCM 6th Ctrl Delay	17.0
HCM 6th LOS	B

Appendix F


Transportation System Plan
FIGURE 5-1a
PEDESTRIAN MASTER PLAN
October 2018
LEGEND
Existing Sidewalks
< 5 ft width
5 ft - 10 ft width
Kellogg Creek Trail
SpringwaterTrail
Trolley Trail
Proposed Improvement
Pedestrian Intersection Safety Improvement
Pedestrian Facilities
Central Milwaukie 2015 TSP Amendments
Schools
Major Roads
Streets
Railroad
County Line
10' Contours
Water
Parks
City Limits
Light Rail Transit
Light Rail Station
PROPOSED PROJECTS
Improve Intersection to Increase Pedestrian Safety
A Freeman Way/HWY 224
B 37th Ave/HWY 224
C Oak St/HWY 224
D Monroe St/HWY 224
E Harrison St/HWY 224
F King Rd improvements
G Olsen St/42nd Ave
H Railroad Ave/37th Ave
K Stanley Ave/Logus Rd
AW McLoughlin Blvd and 22nd Ave
BG All McLoughlin crossings
BJ McLoughlin and Ochoco/Milport
Provide Pedestrian Facilities Where Not Currently Present
See Table 5-1 for project descriptions L-AG, AI-AQ, BB, BH, CA-CD
Enhance Existing Pedestrian Connection
AH Create ped connection from Rowe Middle School to North Clackamas Park
AR Construct pedestrian underpass under HWY 99E at Kellogg Creek
AT Complete Springwater Trail along Ochoco St
AU Construct bike-ped overpass over Kellogg Creek
AV Construct Kronberg Park Trail
AX Pave connection to Springwater Trail at 29th Ave and Sherrett
AY Improve connection from Springwater Corridor to Pendleton Site
AZ Construct stairs to connect Springwater Corridor to LRT Station
BA Establish bike-ped connection across Railroad Ave and tracks
BC Establish bike-ped connection over railroad tracks and LRT
BD Construct stairs from Springwater Corridor to McLoughlin Blvd
BE Construct bike-ped bridge over Johnson Creek along Clatsop St at 23rd Ave to connect to LRT station
BF Improve bike-ped connection to neighborhoods west of station
BI Establish bike-ped connection over McLoughlin at River Rd
BK Establish bike-ped connection to McLoughlin at Stubb St
Provide Improved Pedestrian Facilities in Central Milwaukie
See Table 5-1 for project descriptions BM, BN, BO, and BP
0 500 1,000 2,000 3,000 4,000 Feet
Original Map Created by DKS Associates in 2007, Amended by the City of Milwaukie in 2013, 2015, 2018


Transportation System Plan
FIGURE 6-8a
BICYCLE MASTER PLAN
October 2018
LEGEND
Existing Bicycle Facilities
Shared Lane
Bicycle Lane
Kellogg Creek Trail
SpringwaterTrail
Trolley Trail
Proposed Improvements
Bicycle Intersection Safety Improvement
Bicycle Lanes
Neighborhood Greenway
Central Milwaukie 2015 TSP Amendments
Schools
Major Roads
Streets
Railroad
County Line
Water
Parks
City Limits
Light Rail Station
Light Rail Transit
PROPOSED PROJECTS
Improve Intersection to Increase Bicycle Safety
A Adams St/21st Ave/Railroad Crossing
B Johnson Creek Blvd/Springwater Trail
C Johnson Creek Blvd/Linwood Ave
D Linwood Ave/King Rd
E Linwood Ave/Monroe St
F Linwood Ave/Harmony Rd
G Washington St/Oak St/ HWY 224
H International Way/Lake Rd
AF McLoughlin and 22nd
AF McLoughlin/Ochoco/Milport
Provide Improved Bicycle Facilities Where not Currently Present
See Table 6-2 for project descriptions B-R, AI, AJ, and BA-BC
Enhance Existing Bicycle Connection
U Install Neighborhood Greenway treatments at various locations
V Construct bicycle overpass from Railroad Ave to International Way
W Improve Springwater Trail paving
X Improve Kellogg Creek Trail
Y Install Trolley Trail signage
Z Fill in gaps in exisiting bike network with bike lanes or multiuse path. Improve intersection safety on 17th Ave at HWY 224 and at 99E.
AB Complete Springwater Trail along Ochoco St
AC Construct Kronberg Park Trail
AD Construct bike-ped overpass over Kellogg Creek
AE Construct pedestrian underpass under HWY 99E at Kellogg Creek
AG Pave connection to Springwater Trail at 29th Ave and Sherrett
AH Improve connection from Springwater Corridor to Pendleton Site
AK Establish bike-ped connection over railroad tracks and LRT
AL Construct stairs to connect Springwater Corridor to McLoughlin Blvd
AM Construct bike-ped bridge over Johnson Creek along Clatsop St at 23rd Ave to connect to LRT station
AN Improve bike-ped connection to neighborhoods west of station
AQ Establish bike-ped path on Sparrow to connect River Rd to Trolley Trail
AP Establish bike-ped connection over McLoughlin at River Rd
AR Establish bike-ped connection to McLoughlin at Stubb St
Provide Improved Bicycle Facilities in Central Milwaukie
See Table 6-2 for project descriptions AS, AT, AU, AV, and AW
0 500 1,000 2,000 3,000 4,000 Feet
JOHNSON CREEK BLVD
HARNEY DR
FLAVEL DR
SHERRETT ST
MOORES ST
ROSWELL ST
BROOKSIDE DR
ALBERTA AVE
FILBERT ST
MASON LN
OLSEN ST
ARDEN ST
JOWE ST
LOGUS RD
DRAKE ST
KING RD
HARRISON ST
MONROE ST
WASHINGTON ST
ADA LN
MAILWELL DR
WAVERLY DR
LAVA DR
MCLOUGHLIN BLVD
OCHOCO ST
BLUEBIRD ST
SPARROW ST
RIVER RD
PARK AVE
ALDERCREST RD
OATFIELD RD
BRIGGS ST
NIXON AVE
BOSS LN
LVERNIE AVE
WHERE ELSE LN
KUEHN RD
FREEMAN
OAK ST
SE RAILROAD AVE
HIGHWAY 224
INTERNATIONAL WAY
FURNBERG ST
PLUM DR
ASPEN ST
MADRONA DR
HARMONY RD
LAKE RD
RUSK RD
BOSTER RD
MAPLEHURST RD
LINWOOD AVE
STANLEY AVE
HOME AVE
WOOD AVE
BECKMAN AVE
BELL AVE
REGENTS DR
Original Map Created by DKS Associates in 2007. Amended by the City of Milwaukie in 2013, 2015, and 2018

Transportation System Plan

FIGURE 7-3

PUBLIC TRANSIT MASTER PLAN

November 2013

LEGEND

Existing Facilities

- Bus Route Number
- Bus Stop
- Bus Route
- Light Rail Station
- Light Rail Transit
- Park-and-Ride

Proposed Improvements

- Park-and-Ride
- New or Rerouted Bus Route
- Bus Rapid Transit Route

Other Map Features

- Schools
- Major Roads
- Streets
- Railroad
- Kellogg Creek Trail
- SpringwaterTrail
- Trolley Trail
- County Line
- Water
- Parks
- City Limits

AAI afghan associates, inc.
ENGINEERING

32nd Avenue Mixed Use

PRELIMINARY STORMWATER REPORT & CALCULATIONS

9391 SE 32nd Ave,
Milwaukie, Oregon 97222

January 13, 2020
PROJECT NUMBER: A20011.10

AAI Engineering
John Megrditchian
4875 S.W. Griffith Drive
Suite 300
Beaverton, Oregon
PH 503.620.3030
FX 503.620.5539
EMAIL: johnm@aaieng.com

32nd Avenue Mixed Use

Table of Contents

Appendices

32nd Avenue Mixed Use

I. Project Summary

This preliminary report has been prepared to outline the existing and proposed on-site stormwater conditions for the 32nd Avenue Mixed Use project. The final report will be based off field observation, existing survey, geotechnical report, and will include completed appendices. The current preliminary report demonstrates feasibility for a stormwater system at a worst case scenario.

The project is located in the city of Milwaukie at the corner of SE Olsen St. and SE 32nd Ave. The existing site consists of a grocery store and asphalt parking which is mostly impervious. The site slightly slopes to the west. No stormwater facilities currently exist on site.

See Appendix A – Existing Conditions

The proposed improvements consist of a multistory mixed used building. The project proposes 8,452 sf (0.19 acres) of building and bike parking area (impervious) and 2,348 sf (0.05 acres) will be landscape or lawn pervious.

See Appendix B – Site Plan and Appendix C – Storm Plan and Details.

All proposed runoff from new impervious and existing impervious will be collect and detained onsite. No adjacent properties are anticipated to be captured by the proposed facilities.

II. Stormwater Design

The stormwater design for the 32nd Avenue Mixed project consists roof drains, conveyance piping, and detention piping. Since none of the onsite impervious area is pollution generating no water quality treatment is required.

A Geotech report has not been completed but will be in the coming weeks. Until completion of the Geotechnical report, the project has been designed for the worst-case scenario assuming no infiltration is available. The detention system is sized to detain the run off from the 2, 5, 10, and 25 yr storm events of the post developed site to predeveloped (Lewis and Clark era) conditions. The flow control will be accomplished with the use of a flow control tee with no orifice smaller than 1 inch in diameter.

See Appendix D – Stormwater Calculations for additional information on the proposed stormwater system sizing and See Appendix E – Geotechnical Report for additional information on the onsite soil properties.

III. Conveyance Calculations

See Appendix D – Stormwater Calculations for conveyance calculations.

IV. Operations and Maintenance

See Appendix F – Operations and Maintenance Form for O&M requirements.

V. Engineering Conclusion

Based on the requirements of the Stormwater Design Standard of Milwaukie Public Works standards and the City of Portland 2016 Stormwater Management Manual, the proposed site facilities will be adequately designed to manage the proposed development conditions and should be approved as designed.

Appendix A

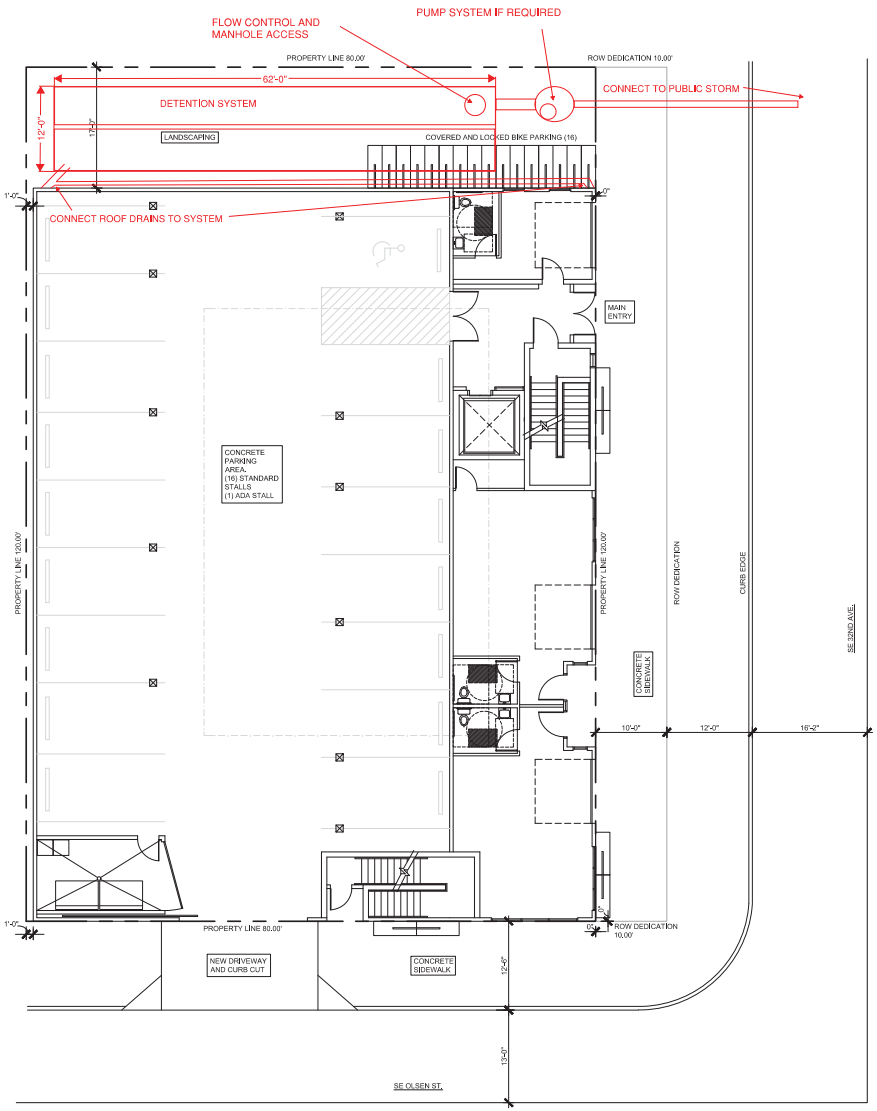
Existing Conditions - To be provided in future submittals

Appendix B

Site Plan - To be provided in future submittals

Appendix C

Preliminary Storm Plan



TRUE NORTH

1 SD1.1 SITE PLAN

SCALE: 1/8" = 1'-0"

PROPERTY INFORMATION

ADDRESS: 9391 SE 32ND AVE, MILWAUKIE, OR 97222

PROJECT: RETAIL AND PARKING ON FIRST FLOOR, WITH 28 APARTMENT UNITS 800 SF OR LESS ABOVE.

LEGAL DESCRIPTION

LEGAL DESCRIPTIONS: ARDENWALD, BLOCK 5, LOT 21 AND 22

TAX LOT ID: 11E25BD07700

PARCEL NUMBER: 00008547

ZONING CODE INFORMATION

BASE ZONE: NMU (NEIGHBORHOOD MIXED USE)

SITE AREA: 0.24 ACRES (10,800 SF)

PROPOSED SITE INFORMATION:
BUILDING FOOTPRINT: 9,775 SF (90%)

EXTERIOR CONCRETE PAVING: 60 SF (0.5%)

MINIMUM FAR ALLOWED: 0.5:1

BUILDING HEIGHT:
MAXIMUM ALLOWABLE HEIGHT (TABLE 19.303.3): 45'-0"
ACTUAL HEIGHT: 51'-1"
(VARIANCE REQUESTED)

MAX SETBACKS ALLOWED:
MAXIMUM STREET SETBACK: 10'-0"

AUTOMOBILE PARKING REQUIREMENTS (TABLE 19.605.1):
PROVIDED STANDARD PARKING SPACES: 17
(QUANTITY MODIFICATION REQUESTED)

BICYCLE PARKING REQUIREMENTS (TABLE 266-6):

BIKE PARKING MIN. OF 22 REQUIRED, 22 TO BE PROVIDED.

STANDARD BIKE PARKING (MIN OF 1 SPACE REQUIRED).

ENCLOSED BIKE PARKING (1 PER UNIT, 50% MINIMUM OF REQUIRED)

SEE SECTION: 19.609.2

FLOOR AND BUILDING COVERAGE AREA:

FIRST FLOOR COVERED PARKING AREA/RETAIL:	8,137 SF
SECOND FLOOR BUILDING AREA:	8,137 SF
THIRD FLOOR BUILDING AREA:	8,137 SF
FOURTH FLOOR PENTHOUSE BUILDING AREA:	8,137 SF
TOTAL AREA (INCLUDING COVERED PARKING):	32,548 SF

SITE PLAN GENERAL NOTES

EXISTING INFORMATION IS BASED ON DRAWINGS PROVIDED BY AKS.

DIMENSIONS ARE TO FACE OF CURB, FACE OF BUILDING, PROPERTY LINE, OR CENTER OF PAINT STRIPING UNLESS NOTED OTHERWISE.

WHERE ACCESS TO OR WITHIN A STRUCTURE OR AN AREA IS RESTRICTED BECAUSE OF SECURED OPENINGS OR WHERE IMMEDIATE ACCESS IS NECCESARY FOR LIFE-SAVING OR FIRE FIGHTING PURPOSES A "KNOXBOX" KEY BOX SHALL BE INSTALLED IN AN APPROVED LOCATION.

SITE PLAN LEGEND

PROPERTY LINE

B A M A
Architecture and Design
7350 SE Milwaukie Ave.
Portland, Oregon 97202
Ph: 503.253.4283

REGISTERED ARCHITECTS
MILDRED WHITE
PORTLAND, OREGON
STATE OF OREGON
EXPIRES 12/31/2019

32ND AVE MIXED USE

9391 SE 32ND AVE,
MILWAUKIE, OR 97222

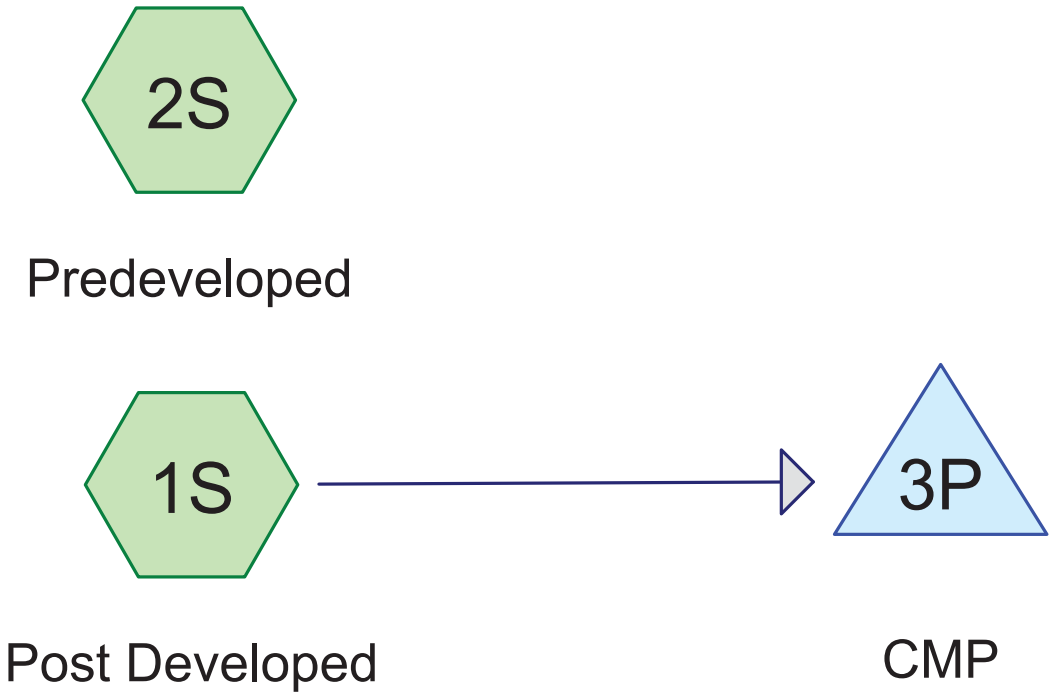
Proj # 201931

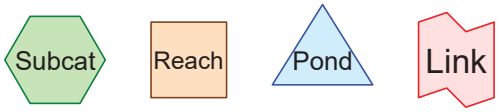
BUILDING PERMIT

SHEET NO.
SD1.1
SITE PLAN

Appendix D

Stormwater Calculation





Routing Diagram for 32nd Mixed Use
Prepared by {enter your company name here}, Printed 1/13/2020
HydroCAD® 10.00-24 s/n 01638 © 2018 HydroCAD Software Solutions LLC

Project Notes

Rainfall events imported from "A18203.HydroCad.hcp"
Rainfall events imported from "A18205.hcp"

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.187	98	(1S)
0.031	98	Water Surface, HSG A (1S)
0.218	60	Woods/grass comb., Fair, HSG B (2S)
0.436	**79**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.031	HSG A	1S
0.218	HSG B	2S
0.000	HSG C	
0.000	HSG D	
0.187	Other	1S
0.436		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	0.187	0.187		1S
0.031	0.000	0.000	0.000	0.000	0.031	Water Surface	1S
0.000	0.218	0.000	0.000	0.000	0.218	Woods/grass comb., Fair	2S
0.031	**0.218**	**0.000**	**0.000**	**0.187**	**0.436**	**TOTAL AREA**	

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Post Developed Runoff Area=9,497 sf 100.00% Impervious Runoff Depth>1.80"
Tc=0.0 min AMC Adjusted CN=99 Runoff=0.13 cfs 0.033 af

Subcatchment2S: Predeveloped Runoff Area=9,497 sf 0.00% Impervious Runoff Depth>0.60"
Tc=0.0 min AMC Adjusted CN=78 Runoff=0.03 cfs 0.011 af

Pond 3P: CMP Peak Elev=1.55' Storage=0.007 af Inflow=0.13 cfs 0.033 af
Outflow=0.03 cfs 0.033 af

Total Runoff Area = 0.436 ac Runoff Volume = 0.044 af Average Runoff Depth = 1.20"
50.00% Pervious = 0.218 ac 50.00% Impervious = 0.218 ac

Summary for Subcatchment 1S: Post Developed

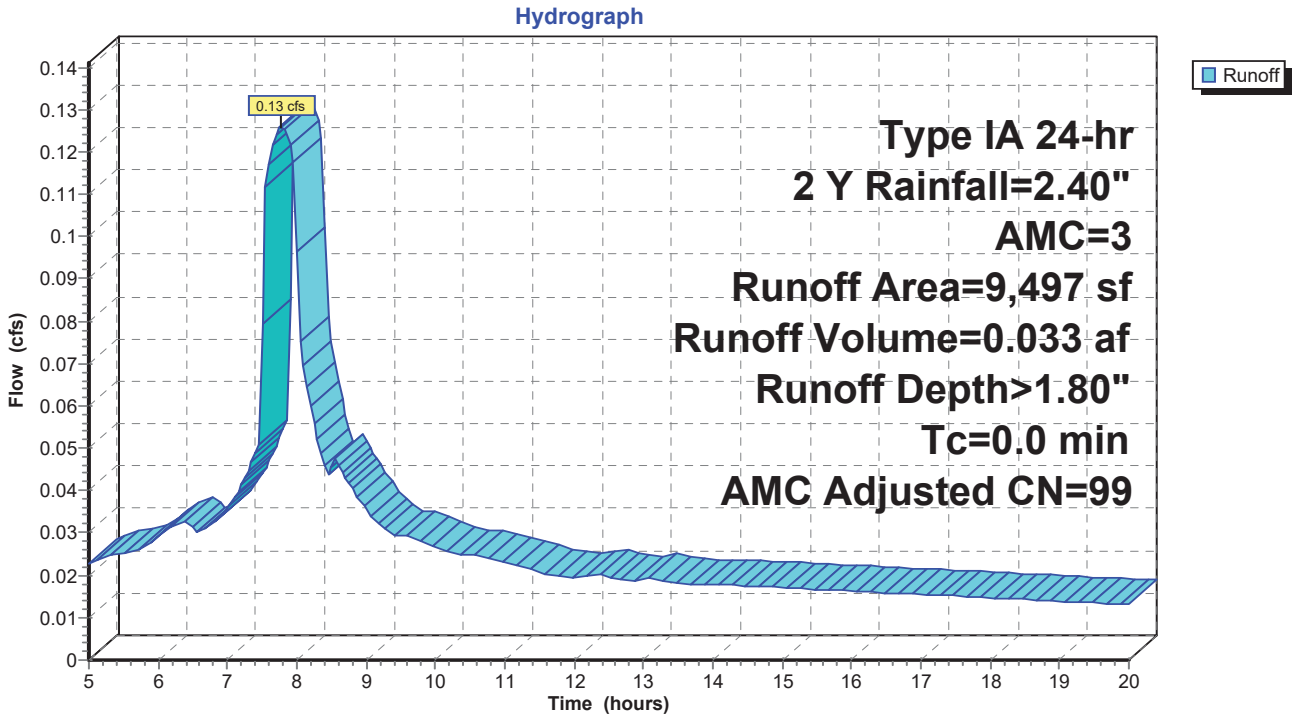
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.13 cfs @ 7.78 hrs, Volume= 0.033 af, Depth> 1.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type IA 24-hr 2 Y Rainfall=2.40", AMC=3

	Area (sf)	CN	Adj	Description
*	8,137	98		
	1,360	98		Water Surface, HSG A
	9,497	98	99	Weighted Average, AMC Adjusted
	9,497			100.00% Impervious Area

Subcatchment 1S: Post Developed



Summary for Subcatchment 2S: Predeveloped

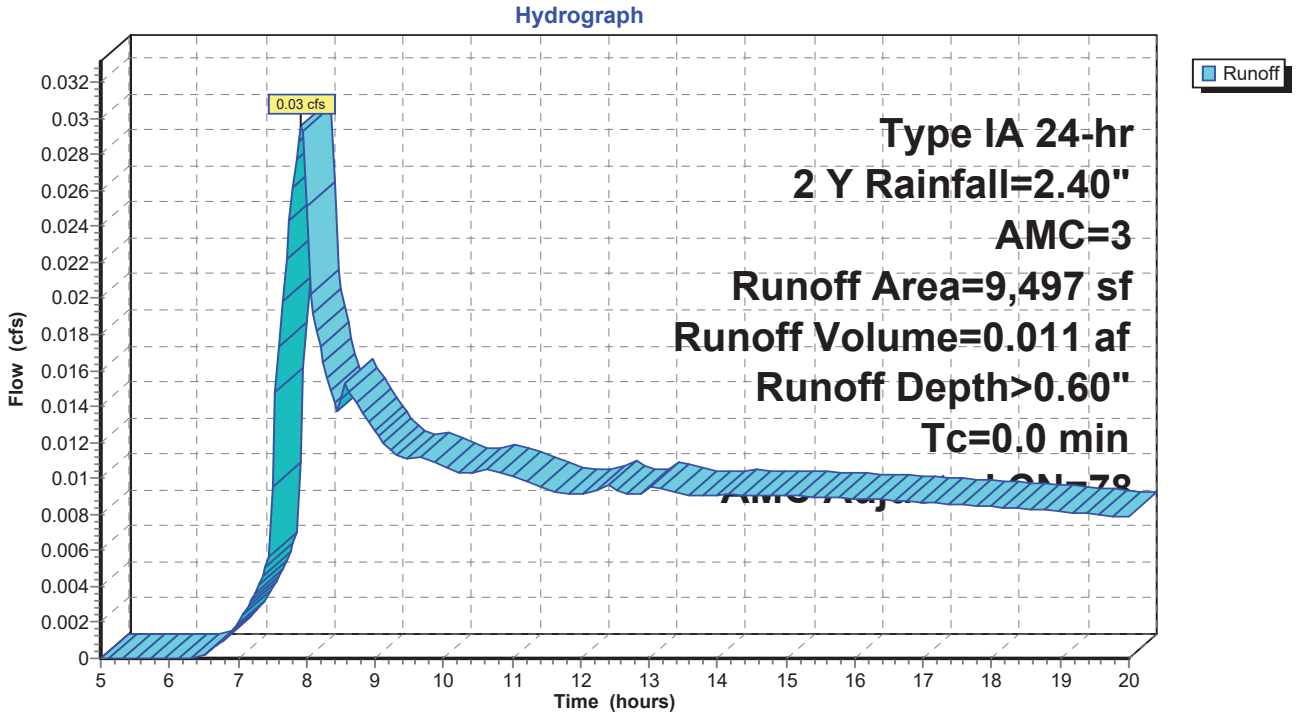
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.03 cfs @ 7.93 hrs, Volume= 0.011 af, Depth> 0.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type IA 24-hr 2 Y Rainfall=2.40", AMC=3

	Area (sf)	CN	Adj	Description
*	9,497	60		Woods/grass comb., Fair, HSG B
	9,497	60	78	Weighted Average, AMC Adjusted
	9,497			100.00% Pervious Area

Subcatchment 2S: Predeveloped



Summary for Pond 3P: CMP

[82] Warning: Early inflow requires earlier time span

Inflow Area = 0.218 ac,100.00% Impervious, Inflow Depth > 1.80" for 2 Y event
Inflow = 0.13 cfs @ 7.78 hrs, Volume= 0.033 af
Outflow = 0.03 cfs @ 9.15 hrs, Volume= 0.033 af, Atten= 74%, Lag= 82.3 min
Primary = 0.03 cfs @ 9.15 hrs, Volume= 0.033 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1.55' @ 9.15 hrs Surf.Area= 0.017 ac Storage= 0.007 af

Plug-Flow detention time= 90.5 min calculated for 0.033 af (100% of inflow)
Center-of-Mass det. time= 90.0 min (732.4 - 642.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	0.000 af	**12.00'W x 62.00'L x 5.00'H Field A** 0.085 af Overall - 0.035 af Embedded = 0.051 af x 0.0% Voids
#2A	0.50'	0.035 af	**CMP Round 48** x 6 Inside #1 Effective Size= 48.0"W x 48.0"H => 12.57 sf x 20.00'L = 251.3 cf Overall Size= 48.0"W x 48.0"H x 20.00'L 6 Chambers in 2 Rows
		0.035 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**1.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	2.78'	**0.7" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.03 cfs @ 9.15 hrs HW=1.55' (Free Discharge)
└**1=Orifice/Grate** (Orifice Controls 0.03 cfs @ 6.00 fps)
└**2=Orifice/Grate** (Controls 0.00 cfs)

Pond 3P: CMP - Chamber Wizard Field A

Chamber Model = CMP Round 48 (Round Corrugated Metal Pipe)
Effective Size= 48.0"W x 48.0"H => 12.57 sf x 20.00'L = 251.3 cf
Overall Size= 48.0"W x 48.0"H x 20.00'L

48.0" Wide + 24.0" Spacing = 72.0" C-C Row Spacing

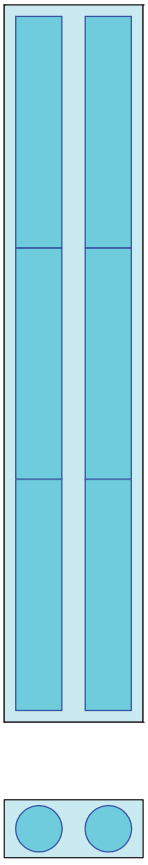
3 Chambers/Row x 20.00' Long = 60.00' Row Length +12.0" End Stone x 2 = 62.00' Base Length
2 Rows x 48.0" Wide + 24.0" Spacing x 1 + 12.0" Side Stone x 2 = 12.00' Base Width
6.0" Base + 48.0" Chamber Height + 6.0" Cover = 5.00' Field Height

6 Chambers x 251.3 cf = 1,508.0 cf Chamber Storage

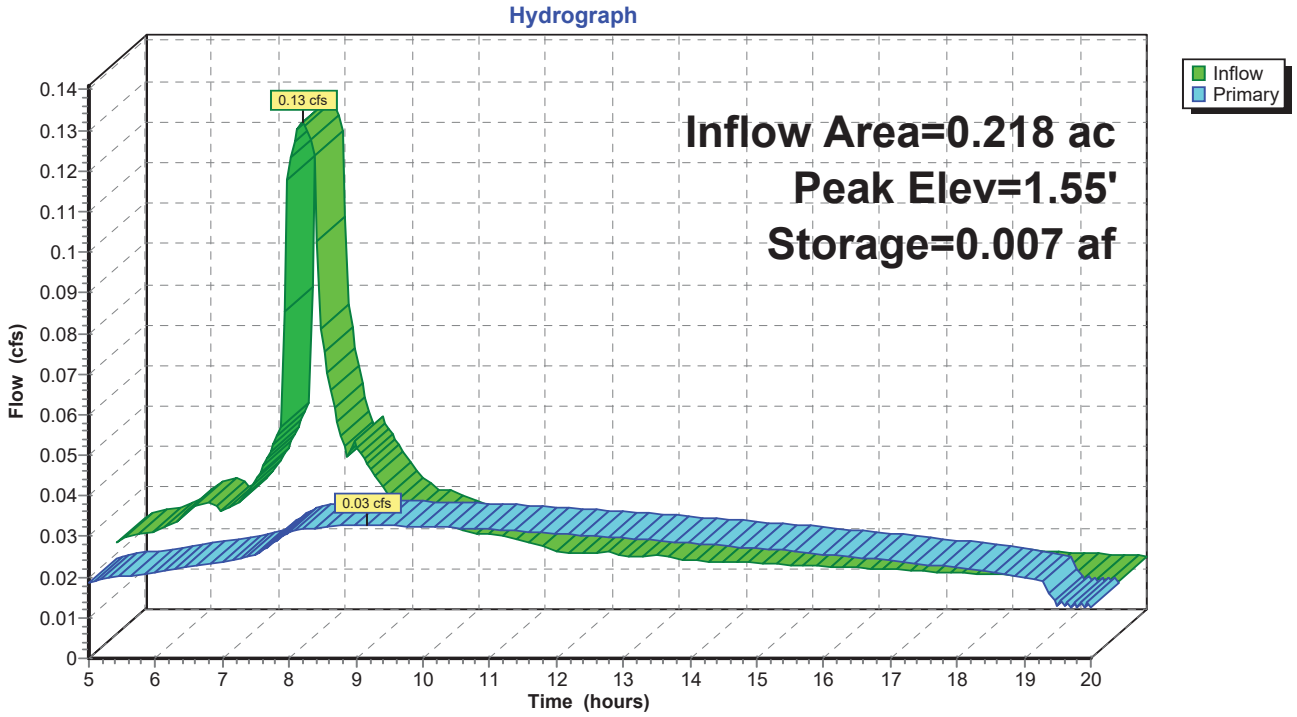
3,720.0 cf Field - 1,508.0 cf Chambers = 2,212.0 cf Stone x 0.0% Voids = 0.0 cf Stone Storage

Chamber Storage = 1,508.0 cf = 0.035 af
Overall Storage Efficiency = 40.5%
Overall System Size = 62.00' x 12.00' x 5.00'

6 Chambers
137.8 cy Field
81.9 cy Stone



Pond 3P: CMP


Hydrograph
Inflow
Primary
Inflow Area=0.218 ac
Peak Elev=1.55'
Storage=0.007 af
0.13 cfs
0.03 cfs
Flow (cfs)
Time (hours)
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.1
0.11
0.12
0.13
0.14
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Post Developed Runoff Area=9,497 sf 100.00% Impervious Runoff Depth>2.18"
Tc=0.0 min AMC Adjusted CN=99 Runoff=0.15 cfs 0.040 af

Subcatchment2S: Predeveloped Runoff Area=9,497 sf 0.00% Impervious Runoff Depth>0.89"
Tc=0.0 min AMC Adjusted CN=78 Runoff=0.05 cfs 0.016 af

Pond 3P: CMP Peak Elev=1.84' Storage=0.010 af Inflow=0.15 cfs 0.040 af
Outflow=0.04 cfs 0.038 af

Total Runoff Area = 0.436 ac Runoff Volume = 0.056 af Average Runoff Depth = 1.53"
50.00% Pervious = 0.218 ac 50.00% Impervious = 0.218 ac

Summary for Subcatchment 1S: Post Developed

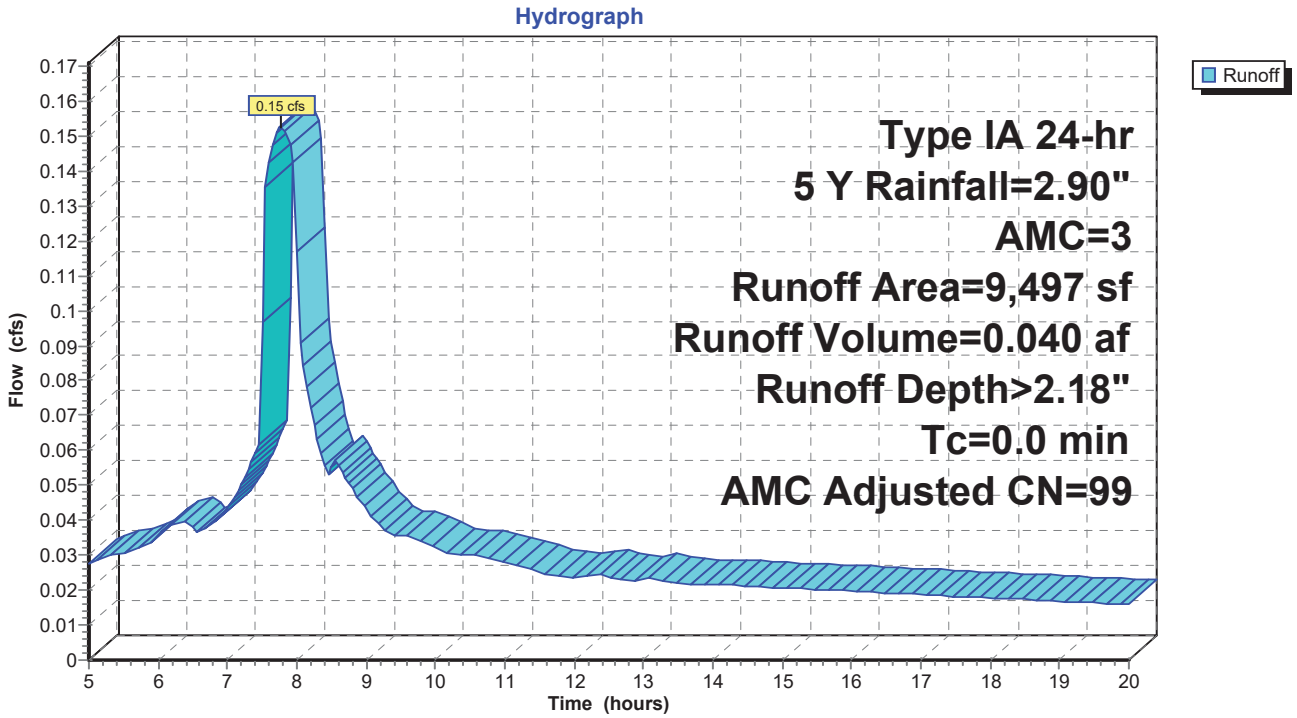
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.15 cfs @ 7.78 hrs, Volume= 0.040 af, Depth> 2.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type IA 24-hr 5 Y Rainfall=2.90", AMC=3

	Area (sf)	CN	Adj	Description
*	8,137	98		
	1,360	98		Water Surface, HSG A
	9,497	98	99	Weighted Average, AMC Adjusted
	9,497			100.00% Impervious Area

Subcatchment 1S: Post Developed



Summary for Subcatchment 2S: Predeveloped

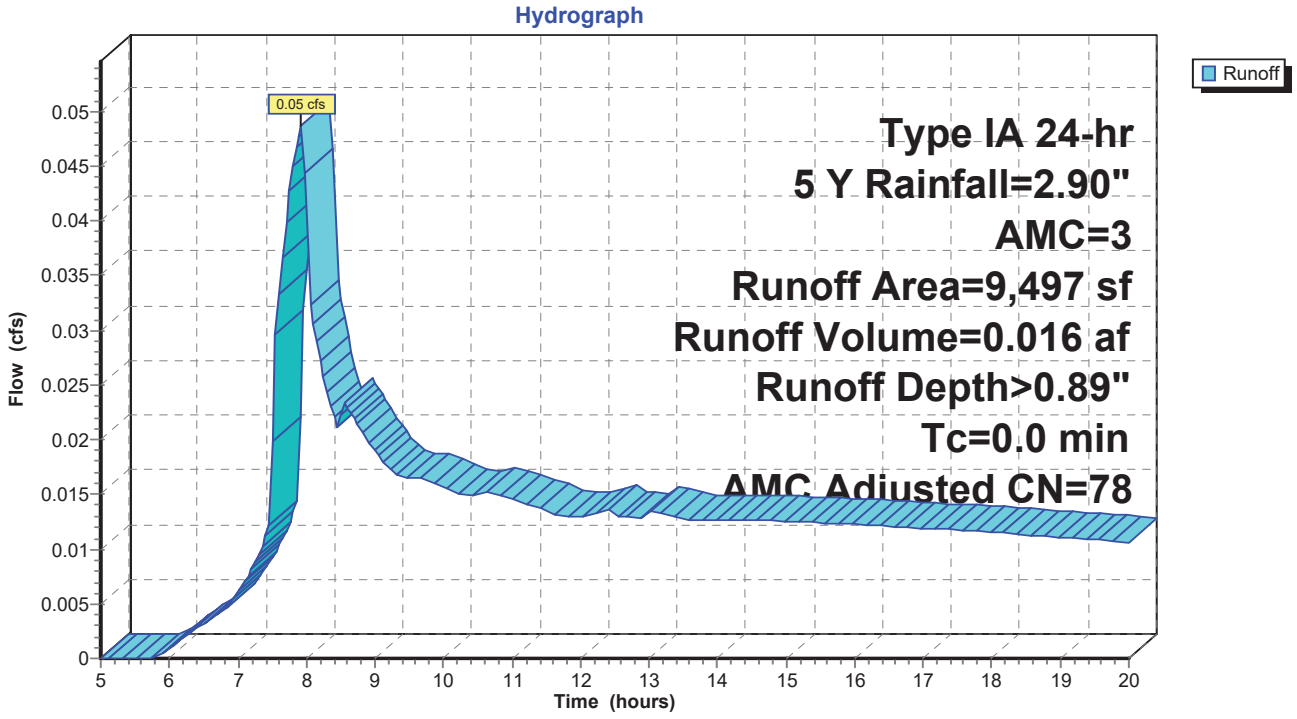
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.05 cfs @ 7.93 hrs, Volume= 0.016 af, Depth> 0.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type IA 24-hr 5 Y Rainfall=2.90", AMC=3

	Area (sf)	CN	Adj	Description
*	9,497	60		Woods/grass comb., Fair, HSG B
	9,497	60	78	Weighted Average, AMC Adjusted
	9,497			100.00% Pervious Area

Subcatchment 2S: Predeveloped



Summary for Pond 3P: CMP

[82] Warning: Early inflow requires earlier time span

Inflow Area = 0.218 ac,100.00% Impervious, Inflow Depth > 2.18" for 5 Y event
Inflow = 0.15 cfs @ 7.78 hrs, Volume= 0.040 af
Outflow = 0.04 cfs @ 9.41 hrs, Volume= 0.038 af, Atten= 77%, Lag= 98.0 min
Primary = 0.04 cfs @ 9.41 hrs, Volume= 0.038 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1.84' @ 9.41 hrs Surf.Area= 0.017 ac Storage= 0.010 af

Plug-Flow detention time= 137.0 min calculated for 0.038 af (95% of inflow)
Center-of-Mass det. time= 110.0 min (752.0 - 642.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	0.000 af	**12.00'W x 62.00'L x 5.00'H Field A** 0.085 af Overall - 0.035 af Embedded = 0.051 af x 0.0% Voids
#2A	0.50'	0.035 af	**CMP Round 48** x 6 Inside #1 Effective Size= 48.0"W x 48.0"H => 12.57 sf x 20.00'L = 251.3 cf Overall Size= 48.0"W x 48.0"H x 20.00'L 6 Chambers in 2 Rows
		0.035 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**1.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	2.78'	**0.7" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.04 cfs @ 9.41 hrs HW=1.84' (Free Discharge)
└**1=Orifice/Grate** (Orifice Controls 0.04 cfs @ 6.52 fps)
└**2=Orifice/Grate** (Controls 0.00 cfs)

Pond 3P: CMP - Chamber Wizard Field A

Chamber Model = CMP Round 48 (Round Corrugated Metal Pipe)
Effective Size= 48.0"W x 48.0"H => 12.57 sf x 20.00'L = 251.3 cf
Overall Size= 48.0"W x 48.0"H x 20.00'L

48.0" Wide + 24.0" Spacing = 72.0" C-C Row Spacing

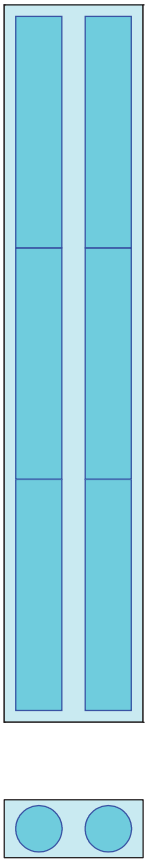
3 Chambers/Row x 20.00' Long = 60.00' Row Length +12.0" End Stone x 2 = 62.00' Base Length
2 Rows x 48.0" Wide + 24.0" Spacing x 1 + 12.0" Side Stone x 2 = 12.00' Base Width
6.0" Base + 48.0" Chamber Height + 6.0" Cover = 5.00' Field Height

6 Chambers x 251.3 cf = 1,508.0 cf Chamber Storage

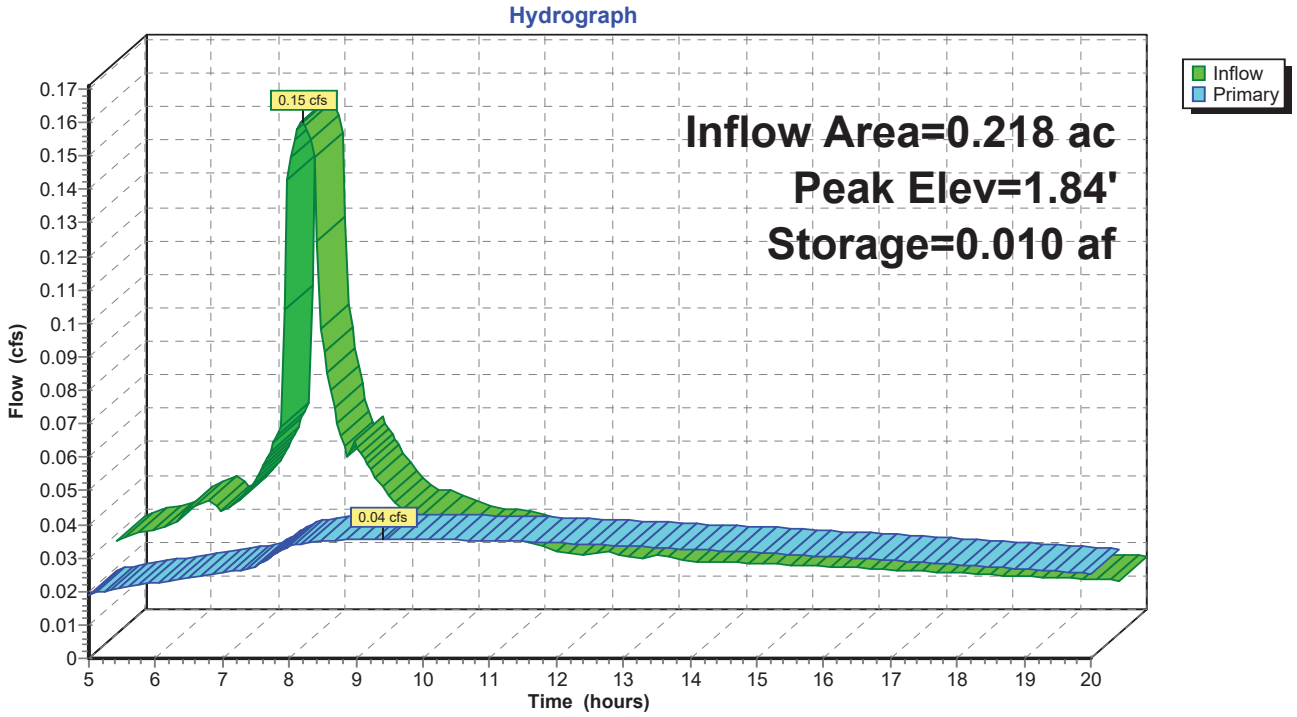
3,720.0 cf Field - 1,508.0 cf Chambers = 2,212.0 cf Stone x 0.0% Voids = 0.0 cf Stone Storage

Chamber Storage = 1,508.0 cf = 0.035 af
Overall Storage Efficiency = 40.5%
Overall System Size = 62.00' x 12.00' x 5.00'

6 Chambers
137.8 cy Field
81.9 cy Stone



Pond 3P: CMP


Hydrograph
Inflow
Primary
Inflow Area=0.218 ac
Peak Elev=1.84'
Storage=0.010 af
0.15 cfs
0.04 cfs
Flow (cfs)
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
Time (hours)

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Post Developed Runoff Area=9,497 sf 100.00% Impervious Runoff Depth>2.56"
Tc=0.0 min AMC Adjusted CN=99 Runoff=0.18 cfs 0.047 af

Subcatchment2S: Predeveloped Runoff Area=9,497 sf 0.00% Impervious Runoff Depth>1.20"
Tc=0.0 min AMC Adjusted CN=78 Runoff=0.07 cfs 0.022 af

Pond 3P: CMP Peak Elev=2.12' Storage=0.013 af Inflow=0.18 cfs 0.047 af
Outflow=0.04 cfs 0.042 af

Total Runoff Area = 0.436 ac Runoff Volume = 0.068 af Average Runoff Depth = 1.88"
50.00% Pervious = 0.218 ac 50.00% Impervious = 0.218 ac

Summary for Subcatchment 1S: Post Developed

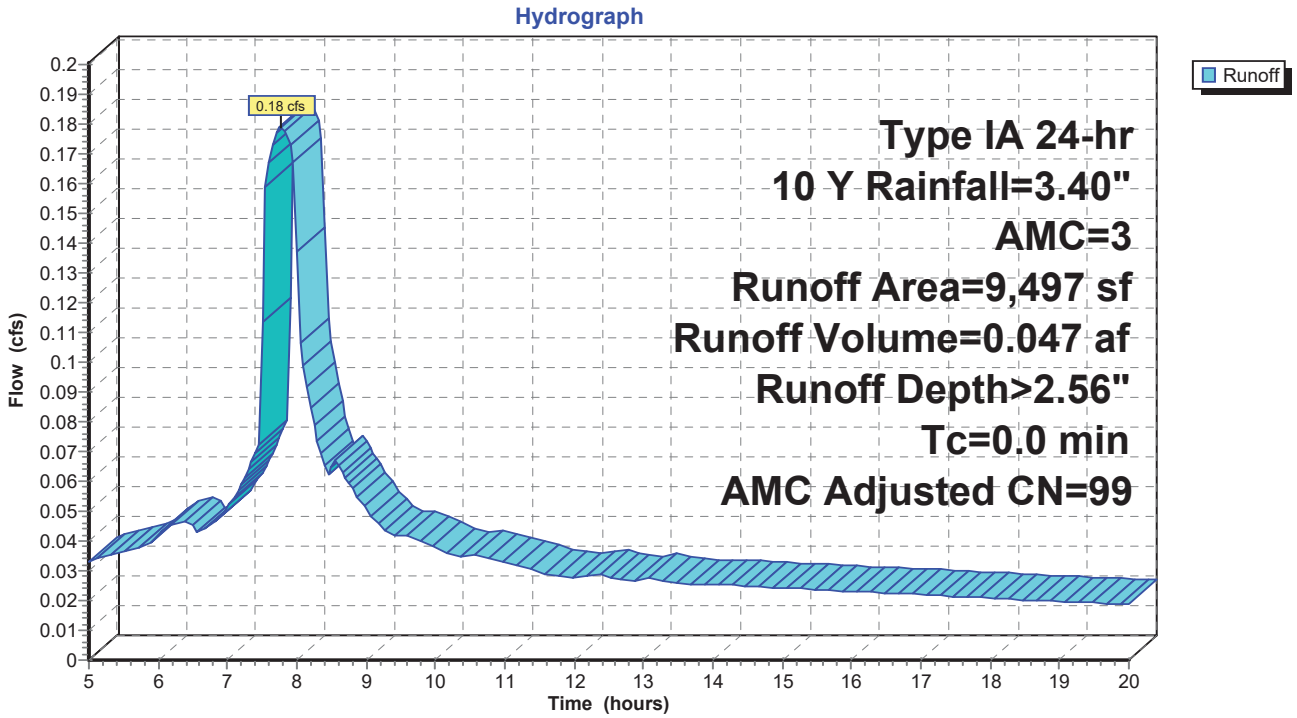
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.18 cfs @ 7.78 hrs, Volume= 0.047 af, Depth> 2.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type IA 24-hr 10 Y Rainfall=3.40", AMC=3

	Area (sf)	CN	Adj	Description
*	8,137	98		
	1,360	98		Water Surface, HSG A
	9,497	98	99	Weighted Average, AMC Adjusted
	9,497			100.00% Impervious Area

Subcatchment 1S: Post Developed



Summary for Subcatchment 2S: Predeveloped

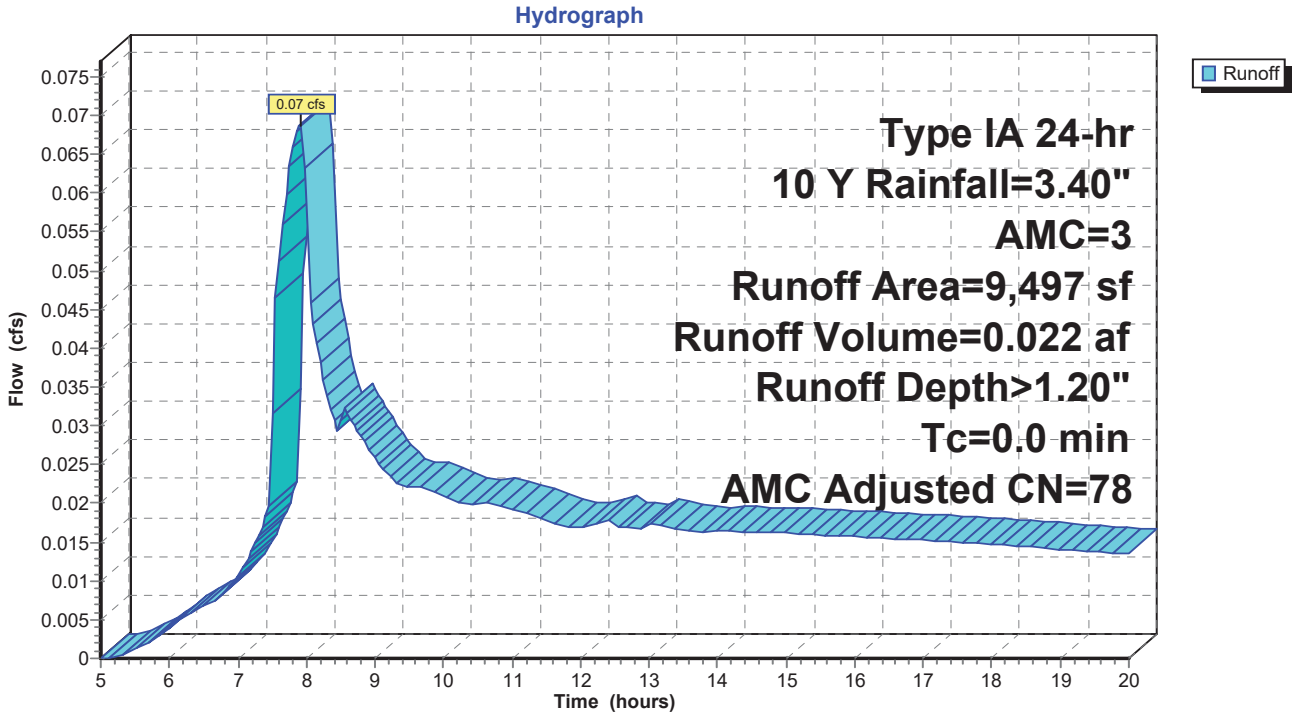
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.07 cfs @ 7.91 hrs, Volume= 0.022 af, Depth> 1.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type IA 24-hr 10 Y Rainfall=3.40", AMC=3

	Area (sf)	CN	Adj	Description
*	9,497	60		Woods/grass comb., Fair, HSG B
	9,497	60	78	Weighted Average, AMC Adjusted
	9,497			100.00% Pervious Area

Subcatchment 2S: Predeveloped



Summary for Pond 3P: CMP

[82] Warning: Early inflow requires earlier time span

Inflow Area = 0.218 ac,100.00% Impervious, Inflow Depth > 2.56" for 10 Y event
Inflow = 0.18 cfs @ 7.78 hrs, Volume= 0.047 af
Outflow = 0.04 cfs @ 9.96 hrs, Volume= 0.042 af, Atten= 79%, Lag= 131.1 min
Primary = 0.04 cfs @ 9.96 hrs, Volume= 0.042 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2.12' @ 9.96 hrs Surf.Area= 0.017 ac Storage= 0.013 af

Plug-Flow detention time= 175.7 min calculated for 0.041 af (89% of inflow)
Center-of-Mass det. time= 118.8 min (760.4 - 641.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	0.000 af	**12.00'W x 62.00'L x 5.00'H Field A** 0.085 af Overall - 0.035 af Embedded = 0.051 af x 0.0% Voids
#2A	0.50'	0.035 af	**CMP Round 48** x 6 Inside #1 Effective Size= 48.0"W x 48.0"H => 12.57 sf x 20.00'L = 251.3 cf Overall Size= 48.0"W x 48.0"H x 20.00'L 6 Chambers in 2 Rows
		0.035 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**1.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	2.78'	**0.7" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.04 cfs @ 9.96 hrs HW=2.12' (Free Discharge)
└**1=Orifice/Grate** (Orifice Controls 0.04 cfs @ 7.02 fps)
└**2=Orifice/Grate** (Controls 0.00 cfs)

Pond 3P: CMP - Chamber Wizard Field A

Chamber Model = CMP Round 48 (Round Corrugated Metal Pipe)
Effective Size= 48.0"W x 48.0"H => 12.57 sf x 20.00'L = 251.3 cf
Overall Size= 48.0"W x 48.0"H x 20.00'L

48.0" Wide + 24.0" Spacing = 72.0" C-C Row Spacing

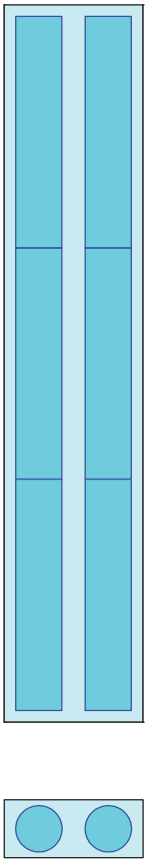
3 Chambers/Row x 20.00' Long = 60.00' Row Length +12.0" End Stone x 2 = 62.00' Base Length
2 Rows x 48.0" Wide + 24.0" Spacing x 1 + 12.0" Side Stone x 2 = 12.00' Base Width
6.0" Base + 48.0" Chamber Height + 6.0" Cover = 5.00' Field Height

6 Chambers x 251.3 cf = 1,508.0 cf Chamber Storage

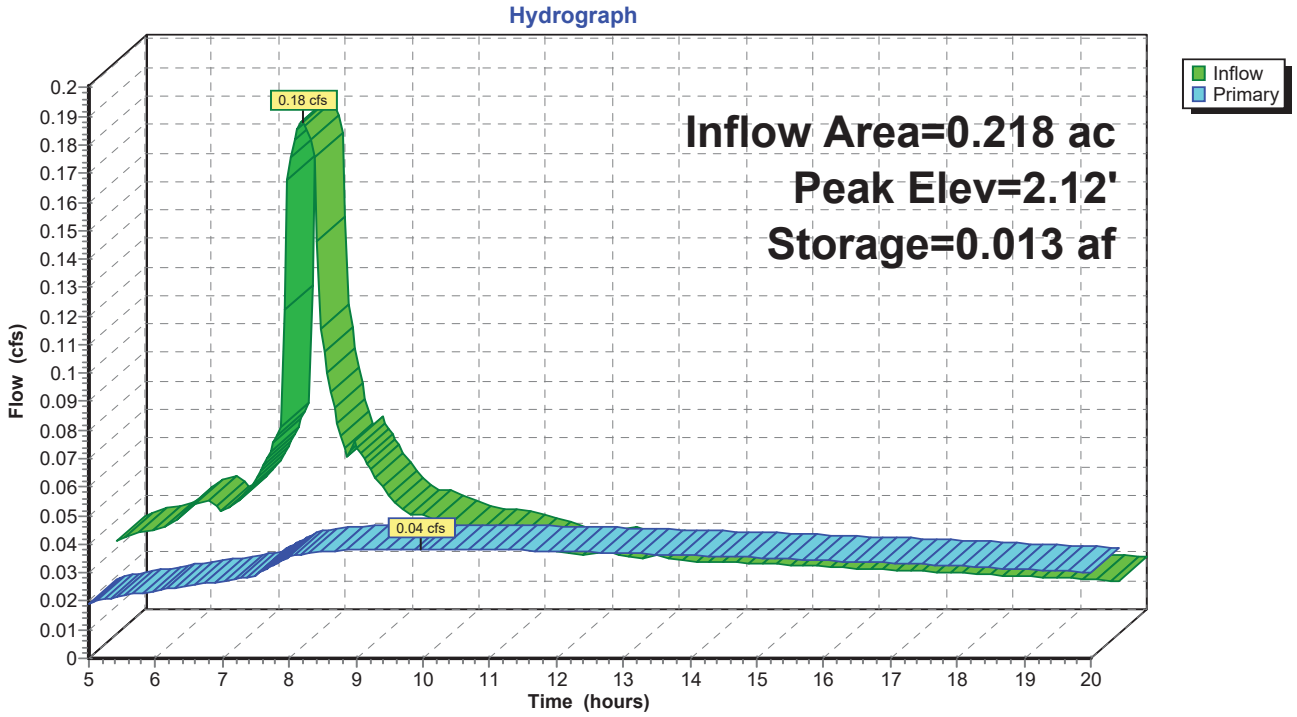
3,720.0 cf Field - 1,508.0 cf Chambers = 2,212.0 cf Stone x 0.0% Voids = 0.0 cf Stone Storage

Chamber Storage = 1,508.0 cf = 0.035 af
Overall Storage Efficiency = 40.5%
Overall System Size = 62.00' x 12.00' x 5.00'

6 Chambers
137.8 cy Field
81.9 cy Stone



Pond 3P: CMP


Hydrograph
Inflow
Primary
0.18 cfs
0.04 cfs
Inflow Area=0.218 ac
Peak Elev=2.12'
Storage=0.013 af
Flow (cfs)
Time (hours)
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.1
0.11
0.12
0.13
0.14
0.15
0.16
0.17
0.18
0.19
0.2
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Post Developed Runoff Area=9,497 sf 100.00% Impervious Runoff Depth>2.95"
Tc=0.0 min AMC Adjusted CN=99 Runoff=0.21 cfs 0.054 af

Subcatchment2S: Predeveloped Runoff Area=9,497 sf 0.00% Impervious Runoff Depth>1.54"
Tc=0.0 min AMC Adjusted CN=78 Runoff=0.09 cfs 0.028 af

Pond 3P: CMP Peak Elev=2.42' Storage=0.016 af Inflow=0.21 cfs 0.054 af
Outflow=0.04 cfs 0.045 af

Total Runoff Area = 0.436 ac Runoff Volume = 0.082 af Average Runoff Depth = 2.24"
50.00% Pervious = 0.218 ac 50.00% Impervious = 0.218 ac

Summary for Subcatchment 1S: Post Developed

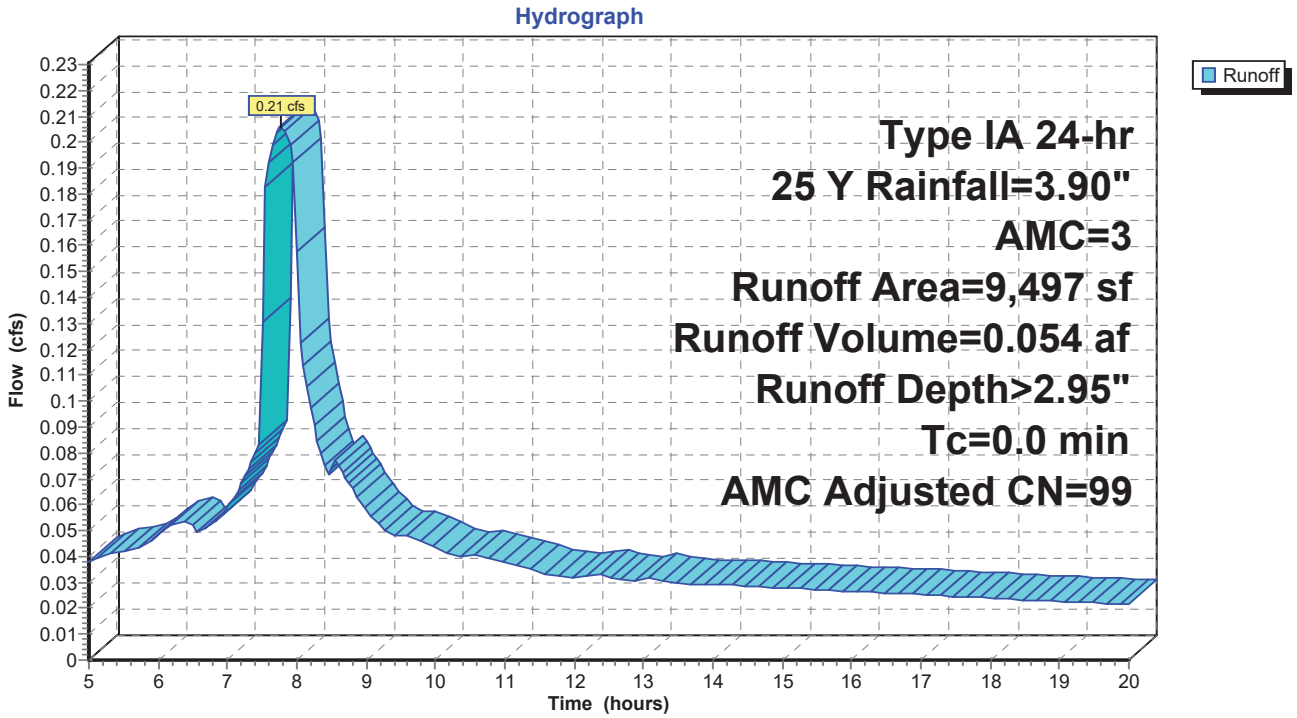
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.21 cfs @ 7.78 hrs, Volume= 0.054 af, Depth> 2.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25 Y Rainfall=3.90", AMC=3

	Area (sf)	CN	Adj	Description
*	8,137	98		
	1,360	98		Water Surface, HSG A
	9,497	98	99	Weighted Average, AMC Adjusted
	9,497			100.00% Impervious Area

Subcatchment 1S: Post Developed



Summary for Subcatchment 2S: Predeveloped

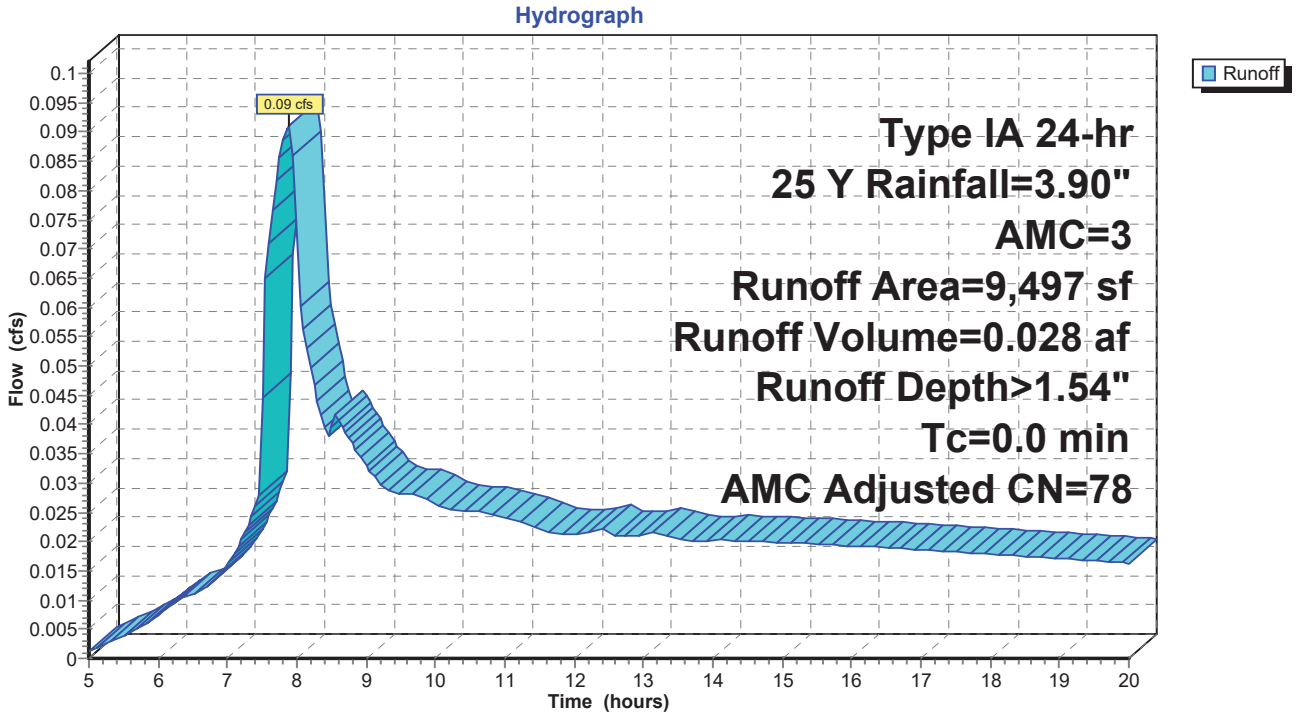
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.09 cfs @ 7.90 hrs, Volume= 0.028 af, Depth> 1.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25 Y Rainfall=3.90", AMC=3

	Area (sf)	CN	Adj	Description
*	9,497	60		Woods/grass comb., Fair, HSG B
	9,497	60	78	Weighted Average, AMC Adjusted
	9,497			100.00% Pervious Area

Subcatchment 2S: Predeveloped



Summary for Pond 3P: CMP

[82] Warning: Early inflow requires earlier time span

Inflow Area = 0.218 ac,100.00% Impervious, Inflow Depth > 2.95" for 25 Y event
Inflow = 0.21 cfs @ 7.78 hrs, Volume= 0.054 af
Outflow = 0.04 cfs @ 10.27 hrs, Volume= 0.045 af, Atten= 80%, Lag= 149.4 min
Primary = 0.04 cfs @ 10.27 hrs, Volume= 0.045 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2.42' @ 10.27 hrs Surf.Area= 0.017 ac Storage= 0.016 af

Plug-Flow detention time= 206.4 min calculated for 0.045 af (84% of inflow)
Center-of-Mass det. time= 124.7 min (766.1 - 641.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	0.000 af	**12.00'W x 62.00'L x 5.00'H Field A** 0.085 af Overall - 0.035 af Embedded = 0.051 af x 0.0% Voids
#2A	0.50'	0.035 af	**CMP Round 48** x 6 Inside #1 Effective Size= 48.0"W x 48.0"H => 12.57 sf x 20.00'L = 251.3 cf Overall Size= 48.0"W x 48.0"H x 20.00'L 6 Chambers in 2 Rows
		0.035 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**1.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	2.78'	**0.7" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.04 cfs @ 10.27 hrs HW=2.42' (Free Discharge)
└**1=Orifice/Grate** (Orifice Controls 0.04 cfs @ 7.49 fps)
└**2=Orifice/Grate** (Controls 0.00 cfs)

Pond 3P: CMP - Chamber Wizard Field A

Chamber Model = CMP Round 48 (Round Corrugated Metal Pipe)
Effective Size= 48.0"W x 48.0"H => 12.57 sf x 20.00'L = 251.3 cf
Overall Size= 48.0"W x 48.0"H x 20.00'L

48.0" Wide + 24.0" Spacing = 72.0" C-C Row Spacing

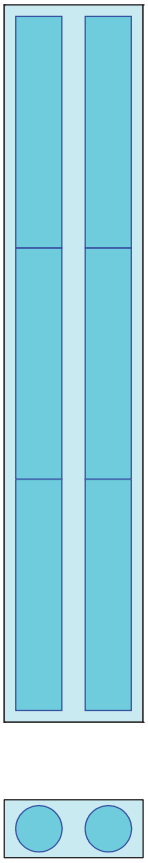
3 Chambers/Row x 20.00' Long = 60.00' Row Length +12.0" End Stone x 2 = 62.00' Base Length
2 Rows x 48.0" Wide + 24.0" Spacing x 1 + 12.0" Side Stone x 2 = 12.00' Base Width
6.0" Base + 48.0" Chamber Height + 6.0" Cover = 5.00' Field Height

6 Chambers x 251.3 cf = 1,508.0 cf Chamber Storage

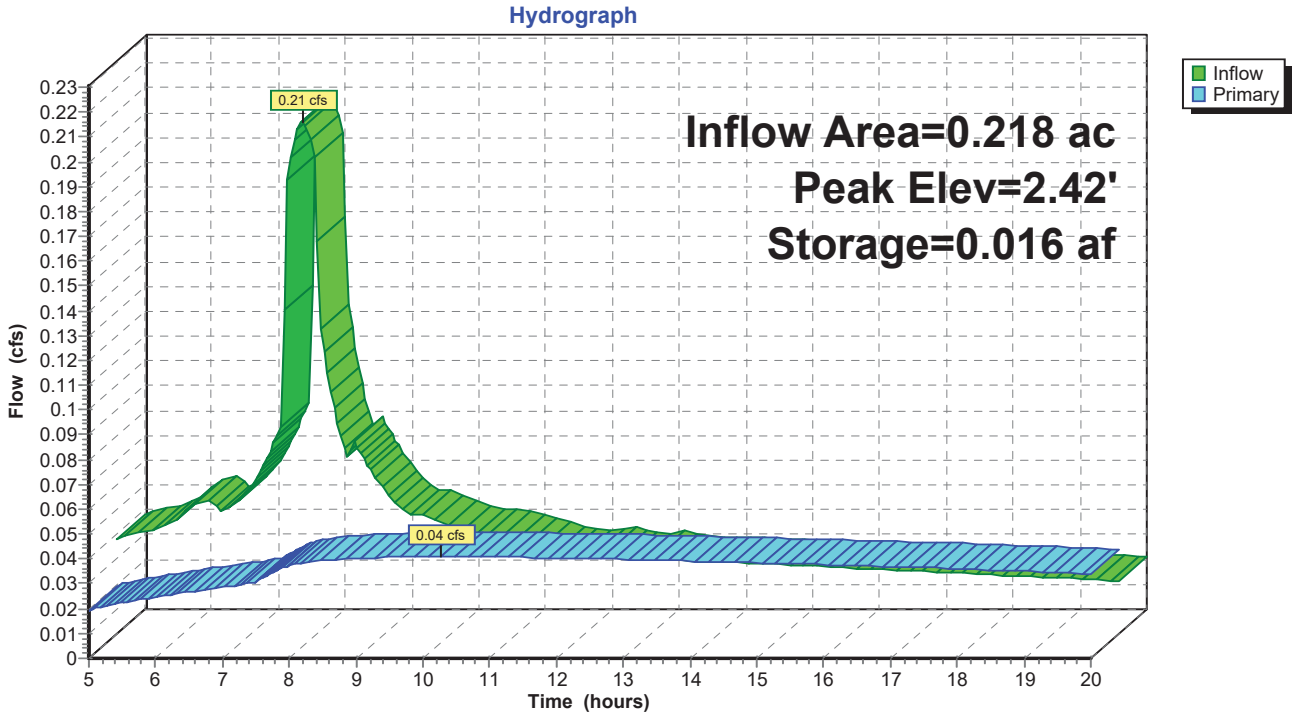
3,720.0 cf Field - 1,508.0 cf Chambers = 2,212.0 cf Stone x 0.0% Voids = 0.0 cf Stone Storage

Chamber Storage = 1,508.0 cf = 0.035 af
Overall Storage Efficiency = 40.5%
Overall System Size = 62.00' x 12.00' x 5.00'

6 Chambers
137.8 cy Field
81.9 cy Stone



Pond 3P: CMP


Hydrograph
Inflow
Primary
Inflow Area=0.218 ac
Peak Elev=2.42'
Storage=0.016 af
0.21 cfs
0.04 cfs
Flow (cfs)
Time (hours)
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.1
0.11
0.12
0.13
0.14
0.15
0.16
0.17
0.18
0.19
0.2
0.21
0.22
0.23
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Post Developed Runoff Area=9,497 sf 100.00% Impervious Runoff Depth>3.33"
Tc=0.0 min AMC Adjusted CN=99 Runoff=0.23 cfs 0.060 af

Subcatchment2S: Predeveloped Runoff Area=9,497 sf 0.00% Impervious Runoff Depth>1.90"
Tc=0.0 min AMC Adjusted CN=78 Runoff=0.11 cfs 0.034 af

Pond 3P: CMP Peak Elev=2.73' Storage=0.020 af Inflow=0.23 cfs 0.060 af
Outflow=0.04 cfs 0.048 af

Total Runoff Area = 0.436 ac Runoff Volume = 0.095 af Average Runoff Depth = 2.61"
50.00% Pervious = 0.218 ac 50.00% Impervious = 0.218 ac

Summary for Subcatchment 1S: Post Developed

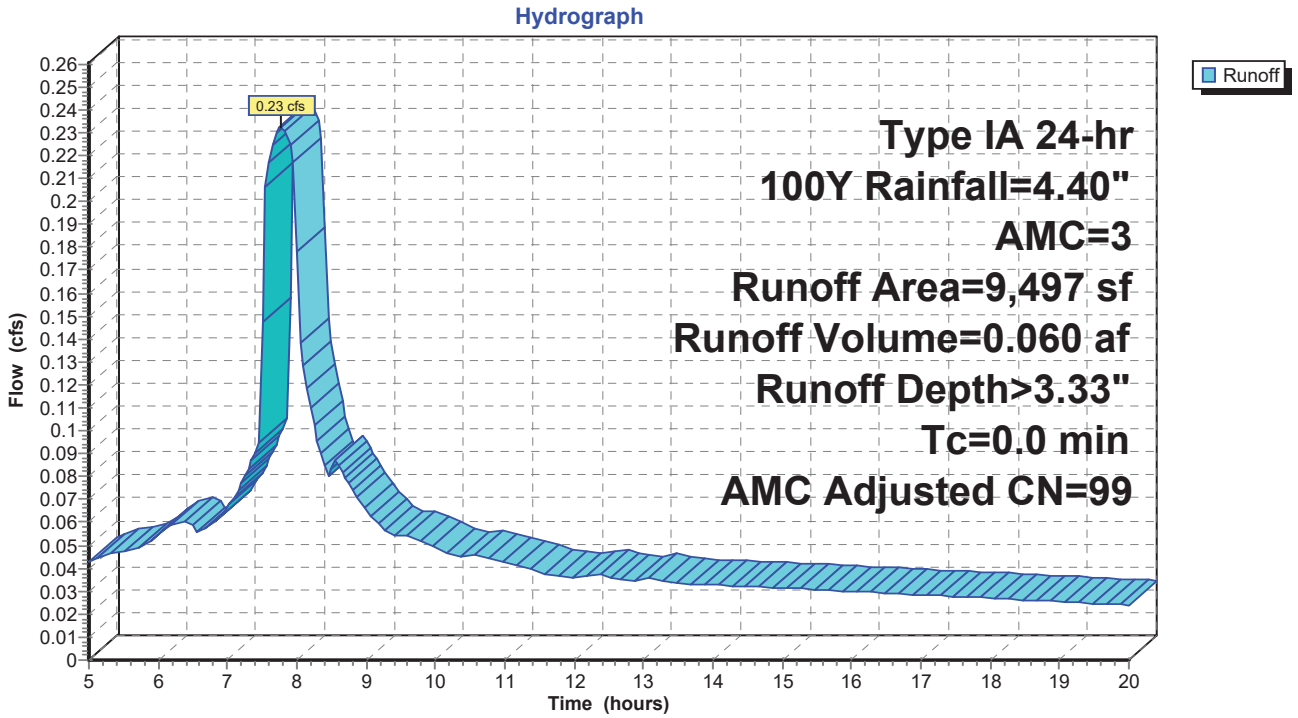
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.23 cfs @ 7.78 hrs, Volume= 0.060 af, Depth> 3.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type IA 24-hr 100Y Rainfall=4.40", AMC=3

	Area (sf)	CN	Adj	Description
*	8,137	98		
	1,360	98		Water Surface, HSG A
	9,497	98	99	Weighted Average, AMC Adjusted
	9,497			100.00% Impervious Area

Subcatchment 1S: Post Developed



Summary for Subcatchment 2S: Predeveloped

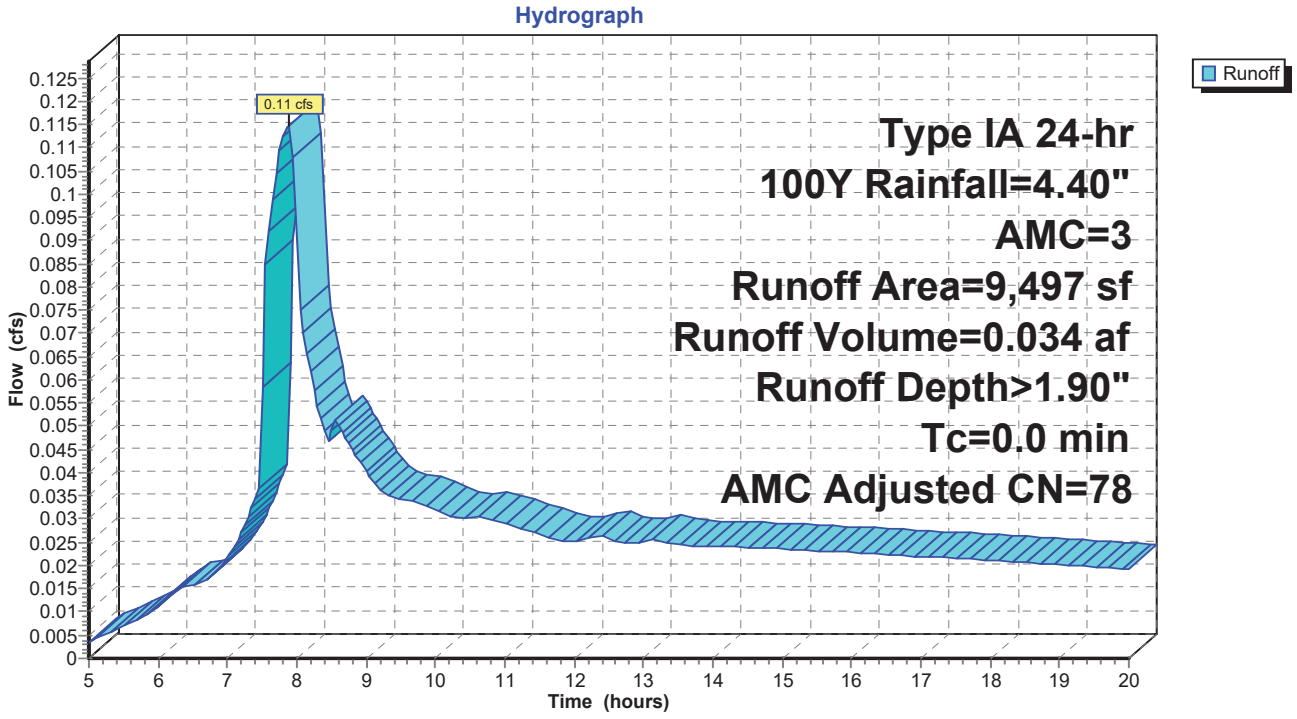
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.11 cfs @ 7.88 hrs, Volume= 0.034 af, Depth> 1.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type IA 24-hr 100Y Rainfall=4.40", AMC=3

	Area (sf)	CN	Adj	Description
*	9,497	60		Woods/grass comb., Fair, HSG B
	9,497	60	78	Weighted Average, AMC Adjusted
	9,497			100.00% Pervious Area

Subcatchment 2S: Predeveloped



Summary for Pond 3P: CMP

[82] Warning: Early inflow requires earlier time span

Inflow Area = 0.218 ac,100.00% Impervious, Inflow Depth > 3.33" for 100Y event
Inflow = 0.23 cfs @ 7.78 hrs, Volume= 0.060 af
Outflow = 0.04 cfs @ 10.89 hrs, Volume= 0.048 af, Atten= 81%, Lag= 186.8 min
Primary = 0.04 cfs @ 10.89 hrs, Volume= 0.048 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2.73' @ 10.89 hrs Surf.Area= 0.017 ac Storage= 0.020 af

Plug-Flow detention time= 230.3 min calculated for 0.048 af (79% of inflow)
Center-of-Mass det. time= 129.1 min (770.4 - 641.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	0.000 af	**12.00'W x 62.00'L x 5.00'H Field A** 0.085 af Overall - 0.035 af Embedded = 0.051 af x 0.0% Voids
#2A	0.50'	0.035 af	**CMP Round 48** x 6 Inside #1 Effective Size= 48.0"W x 48.0"H => 12.57 sf x 20.00'L = 251.3 cf Overall Size= 48.0"W x 48.0"H x 20.00'L 6 Chambers in 2 Rows
		0.035 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**1.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	2.78'	**0.7" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.04 cfs @ 10.89 hrs HW=2.73' (Free Discharge)
└**1=Orifice/Grate** (Orifice Controls 0.04 cfs @ 7.95 fps)
└**2=Orifice/Grate** (Controls 0.00 cfs)

Pond 3P: CMP - Chamber Wizard Field A

Chamber Model = CMP Round 48 (Round Corrugated Metal Pipe)
Effective Size= 48.0"W x 48.0"H => 12.57 sf x 20.00'L = 251.3 cf
Overall Size= 48.0"W x 48.0"H x 20.00'L

48.0" Wide + 24.0" Spacing = 72.0" C-C Row Spacing

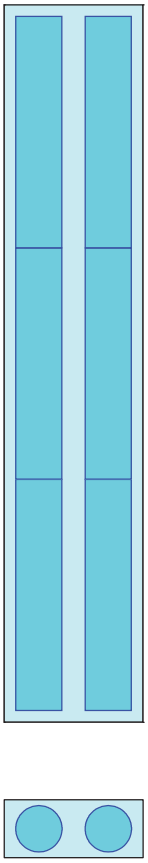
3 Chambers/Row x 20.00' Long = 60.00' Row Length +12.0" End Stone x 2 = 62.00' Base Length
2 Rows x 48.0" Wide + 24.0" Spacing x 1 + 12.0" Side Stone x 2 = 12.00' Base Width
6.0" Base + 48.0" Chamber Height + 6.0" Cover = 5.00' Field Height

6 Chambers x 251.3 cf = 1,508.0 cf Chamber Storage

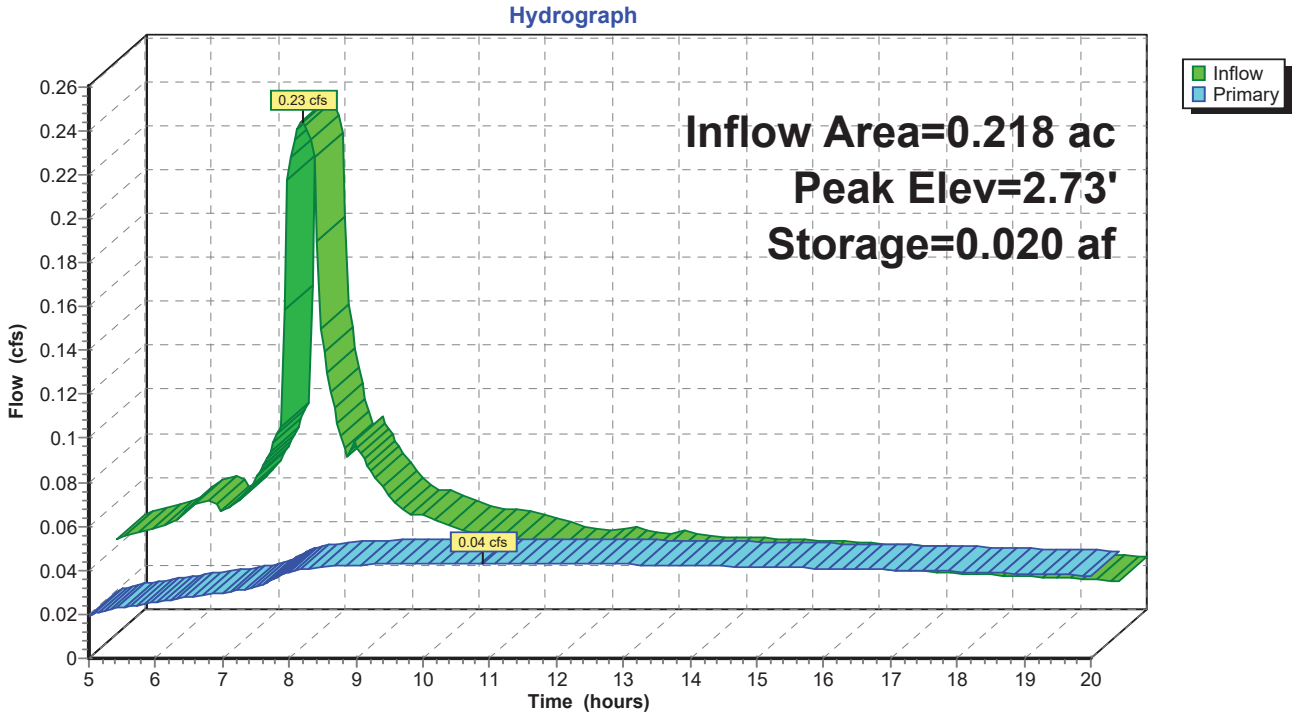
3,720.0 cf Field - 1,508.0 cf Chambers = 2,212.0 cf Stone x 0.0% Voids = 0.0 cf Stone Storage

Chamber Storage = 1,508.0 cf = 0.035 af
Overall Storage Efficiency = 40.5%
Overall System Size = 62.00' x 12.00' x 5.00'

6 Chambers
137.8 cy Field
81.9 cy Stone



Pond 3P: CMP


Hydrograph
Inflow
Primary
Inflow Area=0.218 ac
Peak Elev=2.73'
Storage=0.020 af
0.23 cfs
0.04 cfs
Flow (cfs)
Time (hours)
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
0.2
0.22
0.24
0.26
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

Appendix E

Geotechnical Report- To be provided in future submittals

Appendix F

Operations and Maintenance Form- To be provided in future submittals

720 SW Washington St.
Suite 500
Portland, OR 97205
503.243.3500
www.dksassociates.com

Date: June 2, 2020

Request: Milwaukie 32nd Avenue Mixed Use Transportation Impact Study Review

Reviewer: Reah Flisakowski and Amanda Deering, DKS Associates P14167-022

DKS Associates has reviewed the transportation impact analysis (TIA) for the Milwaukie-Mixed Use development[1]. The proposed development is located at 9391 SE 32nd Avenue in the northwest corner of SE 32nd Avenue and SE Olsen Street in Milwaukie, Oregon. The project would construct a four-story building to include 1,085 square feet of ground floor retail and three residential floors with 21 apartments. There is an existing auto repair establishment in this location which would be demolished. The general comments and recommendations are based on review of the transportation impact analysis (TIA) materials.

TRANSPORTATION IMPACT ANALYSIS SUMMARY

Key findings from the transportation impact analysis include:

- The proposed project would result in the following estimated net increase in motor vehicle trip generation: 3 (-1 in/4 out) weekday AM peak hour vehicle trips, 5 (3 in/2 out) weekday PM peak hour trips. Daily trip estimate for the project not provided. The estimates are based on applying ITE trips rates (Land Use Codes 221, 820, and 942) for the proposed retail and residential uses on the site and a trip credit from the removal of the prior auto repair shop.
- Traffic operations were analyzed for existing conditions (year 2020) and forecasted conditions (year 2022), when construction of the proposed development is anticipated to be complete. Operations analysis was performed for the AM and PM peak hours at two study intersections.
- Since current traffic counts could not be collected, historic 2018 counts were used with a 2% per year growth rate to factor the counts to 2020 existing conditions year.
- A growth rate of 2% per year was applied to existing year traffic volumes to estimate background volumes for year 2022 operations analysis. No additional in-process developments were included in background volume growth.
- The trip distribution estimate showed 50% of site trips traveling to or from the north via 32nd Avenue and 50% of site trips traveling to or from the south via 32nd Avenue. Of the 50% traveling to/from the south, 35% head towards OR 224, 10% continue south and 5% head east along Harrison Street. The locations of likely trip destinations, locations of major transportation

[1] Milwaukie Mixed Use Transportation Impact Study, Clemow Associates LLC, May 11, 2020.

facilities in the site vicinity and existing travel patterns at the study intersections were offered as rationale for the trip distribution estimate. The trip distribution is reasonable when compared to the Metro 2015 travel demand model.

- All study intersections were found to operate at an acceptable level of service through the 2022 AM and PM peak hours with full buildout of the proposed development.
- Proposed site access driveway would not meet the City's spacing standard of 100 feet for local streets due to the property location on a corner. The driveway is located as far from the 32nd Avenue/Olsen Street intersection as is feasible (approximately 51 feet).
- A total of 17 on-site parking spaces are provided. There is no parking supply analysis in the TIA; however, the site plan notes that 24.25 parking spaces would be required. There is street parking available, but it is not stated how many would be available for the development site.
- The study identified the pedestrian and bicyclist facilities along routes to the nearby Ardenwald Elementary school. No improvements were recommended beyond what is identified in the TSP.
- Transit service in the area includes access to one TriMet bus line (the 75) within walking or biking distance of the site. Two bus stops are located adjacent to the site.
- No significant safety issues were found from the review of the last five years of available collision data at study intersections. However, crash data was misreported for 32nd Avenue/Harrison Street.

ISSUES TO BE ADDRESSED

- Daily new trips generated by the site development were not provided. Per the checklist, they should be included.
- The parking supply analysis should be provided. The site plan in the appendix shows 17 spaces will be provided but 24.25 spaces are required. Parking supply was not included in the traffic study.
- The site plan identifies new street parking along the entire 32nd Avenue frontage. The existing roadway width will not accommodate on-street parking. The traffic study does not address how frontage improvements will be provided.

RECOMMENDATIONS

The following recommendations should be considered in developing conditions of approval for the proposed development:

- Minimum AASHTO sight distance requirements should be met at the proposed driveway access. These should be approved by the City Engineer prior to final site plan approval.
- The final site plan should be approved by the City Engineer prior to construction.
- A parking supply standard variation may be triggered.

X:\Projects\2014\P14167-022 (Milwaukie 32nd Ave Mixed Use Review)\DKS TIA Full Review for 32nd Ave Mixed Use.docx

5/23/2020

Vera Kolias
Milwaukie Planning Dept.
6101 SE Johnson Creek Blvd
Milwaukie OR 97206

Re: VR-2019-013; P-2019-001; DEV-2019-013; TRF-2020-001

Application concerning 9391 SE 32nd Ave Neighborhood Mixed Use (NMU) Development:

Type III height variance request per MMC 19.911
Type III driveway exception variance per MMC 19.911
Type II parking minimum variance per MMC 19.605.2

Applicable code sections for response:
MMC 12.16 – Access Management
MMC 19.303 – Commercial Mixes Use/Zone
MMC 505.7 – Nonresidential Development
MMC 19.600 – Off-street Parking and Loading
MMC 19.700 – Public Facility Improvements
MMC 19.911 - Variances

The Ardenwald/Johnson Creek Neighborhood Association (AJCNDA) appreciates the amount of work that the applicants, Valerie Hunter, Auryn White, and the City of Milwaukie, has put into creating this application for development in the AJCNDA. The neighborhood also greatly appreciates the information that this application has provided about the City of Milwaukie's NMU code and feels that this has been a very educational application about precedent setting within this new zone. We do, however, wish that the applicant had agreed to attend a neighborhood meeting to present this proposal and discuss neighborhood concerns about such an important project not only for the applicant, but for the neighborhood as well.

Regretfully, the AJCNDA does not agree that the applicable code sections required by the City of Milwaukie's NMU have been met by this Type III variance application and do oppose it. The neighborhood looks at land use applications through the lens of: 1) safety concerns for citizens; 2) does the application fulfill what the code says; 3) how will this application affect the neighborhood and the concerns that neighbors have about the application.

12.16.040.C Accessway Location
4. Distance from Intersection
To protect the safety and capacity of street intersections, the following minimum distance from the nearest intersecting street face of curb to the nearest edge of driveway apron shall be maintained. Where intersecting streets do not have curbs, the distance shall be measured from the nearest intersecting street edge of pavement. Distance from intersection may be modified with a modification as described in MMC Section 12.16.040.B.2.

b. At least one hundred (100) feet for multifamily residential properties and all other uses accessing local and neighborhood streets.

We understand that this property could not possibly meet this safety code of more than 100' from a local and a collector intersection and must request a variance. This application site is right on the corner and puts the proposed accessway <50' from the intersection. It is a very small parcel, .24 acres, on the corner of the street(s) which made it a great place for a prior gasoline station, then automotive repair shop, (a DEQ registered site with conditions). The neighborhood views that this accessway variance will affect more than just the intersection request concerning

access/traffic and requires more discussion/consideration for safety. The prior use of this site was entered from 32nd which has a sidewalk. Olsen street does not have sidewalks, and even if one is built near the new building, pedestrians and bicyclists will still be entering the area from the middle of the street. The neighborhood wonders if possibly not having parking at this site is an option that was considered for this project. Even though it would cause more hardship and increase hazards for the neighborhood, it might be safer??

12.16.040.E

2C Cause hazardous conditions that would constitute a clear and present danger to the public health, safety, and general welfare.

This community area has no sidewalks on streets on the west side of 32nd, nor are there plans to make any, which means limited safety for pedestrians and bicyclists, especially if several cars are parked on the new street/curb on 32nd and on the street on Olsen. Many of those pedestrians are children since this is near Ardenwald Elementary School. Also, across the street there is a school bus pickup location for middle, high school, and special needs students. It is the view of this neighborhood that this variance in access will create a hardship and create hazards for local neighbors, local businesses, and a real safety hazard for pedestrians and bicyclists.

12.040.B Access Spacing

2. Modification of Access Spacing
Access spacing may be modified with submission of an access study prepared and certified by a registered professional traffic engineer in the State of Oregon. The access study shall assess transportation impacts adjacent to the project frontage within a distance equal to the access spacing requirement established in Subsection 12.16.040.B.1. For example, for a site with arterial access, the access study would include evaluation of site access and capacity along the project frontage plus capacity and access issues within six hundred (600) feet of the adjacent property. The access study shall include the following:

b. Evaluation of traffic impacts adjacent to the site within a distance equal to the access spacing distance from the project site

As density increases in the AJC neighborhood, remember how much busier this intersection will be and how many more people may be impacted. We did not see any future analysis, specific neighborhood traffic analysis, or background growth analyses of any already approved developments such as the Monroe Street Apartments (234 units near Harrison and 32nd) or the Hillside Park Redevelopment (500 units on 32nd and Hillside Court and Meek Street) included/ provided, but currently on 32nd in peak mornings from the JCB and Harrison intersection counts in the TIS Figure 5 page 12 ~974 cars travel 32nd not including background traffic volumes which is as much or more. In the pm ~1,050 cars will be on 32nd not including background traffic volumes, which is as much or more. This is again only the information that was given from the City of Milwaukie for the TIS report. The neighborhood notes that the intersection of Johnson Creek Blvd was not included as an intersection in the TIS report as far as operations analyses, but it is part of our neighborhood and is very much part of the consideration of the safety of this variance request. The neighborhood requests that for a better heartbeat on the safety of 32nd and Olsen, that at least the JCB intersection data and background growth analyses of already approved developments be included in these analyses.

19.303.1 Purpose

B. The Neighborhood Mixed Use Zone is intended to recognize 32nd and 42nd Avenues as neighborhood commercial centers. This zone allows for a mix of small-scale retail and services, along with residential uses, that meet the needs of nearby residents and contribute to a vibrant, local economy.

It is also intended to provide a safe and pleasant pedestrian environment while maintaining a neighborhood-scale identity.

The neighborhood disagrees that this code section has been met and after reviewing this purpose/intent of the NMU and thinking about how this new code was presented to the neighborhoods is troubling, and unfortunately raises several concerns/discussion points about this application.

The retail space provided by this development is sited in various parts of the application as 1,085 sq. ft. (TIS introduction) The neighborhood could not find this specifically stated on the property information site plan, but after careful measuring with a magnifying hand lens and calculations determined it could be no more than ~1350 sq. ft including bathrooms and such for all 3 spaces. In emails in the TIS it is noted that the smaller NE retail space is already reserved for the property management office of the owner leaving < 800-1000sq ft of actual retail broken into 2 spaces to "meet the needs of nearby residents and contribute to a vibrant, local economy". For the size of the building 33,762sq ft (as referenced in the TIS site plan including the garage) or 32,548sq ft (as referenced in the application site plan), this NMU application "intends to allow for a precedent of the type of buildings that are beneficial to the area" (applicant quote under type 3 variance-discretionary relief criteria).

The neighborhood argues that this type of building is not beneficial to the area as, allowing only this small amount of space for retail purposes does not "meet the needs of nearby residents and contribute to a vibrant, local economy." It does not allow enough retail for a project of this size, and setting a precedent with this paradigm will mean the neighborhood will never have a local shopping hub that offers the neighborhood any retail amenities, while allowing many variances. (A coffee shop might be able to fit in one of those spaces or a food cart size business but would never provide a real neighborhood hub space. Milwaukie Café, across the street from the proposed site, has ~1700sq ft for people to enjoy and is considered the hub of this neighborhood. The neighborhood wonders/asks if anyone from the City or the applicant have reached out to the owner to discuss any project concerns the owner may have (Parking/Traffic/Construction, etc.).

From reviewing this application, and in the concerns of safety for citizens it would probably be better to not have the retail stores on the bottom and make extra space for parking which would make it a stand-alone residential building, but maybe take the on-street parking out of the equation making the environment more safe for pedestrians and bicyclists. Or, the number of units in the building could be diversified to 1, 2, and 3 bedrooms. In retrospect, retail on the bottom floor is what the neighborhood wanted to make our community a more walkable, local shopping hub. During neighborhood hub walks and open houses the neighborhood wanted a Green Zebra or small grocer, or a local wine bar for tastings and gatherings, but there isn't realistically enough space leftover for a real gathering or shopping place for neighbors in this application.

Also, the intent of this NMU application should be to "provide a safe and pleasant pedestrian environment while maintaining a neighborhood-scale identity". The neighborhood has already raised its concerns about a safe pedestrian and bicyclist environment earlier under 12.16.040.E2C The code 19.303.4B2C states "Maximum building height in NMU Zone is 3 stories or 45', whichever is less". The applicant is requesting a type 3 variance to allow a height of 48' for this building. The site plan for this application and the TIS site plan both state under property information that the actual height of this building is 51'1", so higher than 48' is required. Also, under 19.303.3B5 the maximum lot coverage allowed in the NMU zone is listed at 85%, and on both the TIS and the main application site plans it is listed at 90%(really 91%) or 9775sq ft of the 10,800sq ft total plus exterior concrete paving of 60' for an additional .5% coverage. (There were various numbers listed throughout all the paperwork stating what the maximum lot coverage was, but since the 2 site maps listed the 9775sq ft consistently, that is the number the neighborhood determined was the correct one.) The neighborhood opposes this height variance request arguing that it does not maintain a neighborhood-scale identity in the NMU zone and does not

meet the NMU lot coverage standard. Also, the elephant in the room is that the height variance request for the entire extra story is for 1 5-bedroom, 4-bathroom unit. There isn't anything in the code stating that 1 story of a building couldn't be 1 unit, but with the need of affordable housing in the area brought up continually for the past 5 years and part of the reason the city stated that the NMU hub areas were needed seems highly contradictory. The neighborhood asks if granting this height variance request for the purpose of adding a 1 story unit is what was intended for the NMU zone. If it is, this will lead to gentrification and displacement of low and middle-income families in the AJC neighborhood, and change the area from a family oriented one to a much more affluent one.

This application contains several discrepancies which make it hard to discern what numbers are correct, but it is the NMU code that is problematic. The neighborhood clearly stated, when the NMU code was being discussed and written, that since the southern part of AJC would have taller buildings (Monroe Street Apts. = 5 stories part of Central Milwaukie, Hillside Park = 4 stories part of Central Milwaukie) that the center of the AJC neighborhood (not part of Central Milwaukie) would have a maximum height of 3 stories, period. This was discussed and determined by citizens to fit more cohesively with the 1 and 2 story houses, duplexes, and existing apartment buildings during numerous open houses. Even a stepped back building at 51'1" is still almost 5 stories tall, and far beyond the neighborhood-scale identity that was envisioned for AJC by its citizens in the NMU zone. The AJC neighborhood opposes the requested variances.

19.505.7 Nonresidential Development

A. Purpose

The design standards contained in this section are intended to encourage building design and construction with durable, high-quality materials. The design standards support development of an attractive, cohesive, and pedestrian-friendly commercial area. The design standards do not prescribe a particular building or architectural style.

The neighborhood does cede that the design of the building is pleasant overall, and the materials appear to be used for best effect. Others may argue that the use of brick increases the appearance of mass or density or squareness of the building, but out of all the comments the neighborhood has about this project, it has the least.

19.605.2 Quantity Modifications and Required Parking Determinations

C. Approval Criteria

The Planning Director shall consider the following criteria in deciding whether to approve the determination or modification. The Planning Director, based on the applicant's materials and other data the Planning Director deems relevant, shall set the minimum parking requirement and maximum parking allowed. Conditions of approval may be placed on the decision to ensure compliance with the parking determination.

1. All modifications and determinations must demonstrate that the proposed parking quantities are reasonable based on existing parking demand for similar use in other locations; parking quantity requirements for the use in other jurisdictions; and professional literature about the parking demands of the proposed use.

After reviewing the submissions of the Seattle, WA Municipal code for Parking and a table from the City of Portland Parking/Zoning code, the AJC neighborhood argues that both of these entities are hardly fair comparisons and proposed parking quantities are not reasonable to the City of Milwaukie, and that the existing parking demand for similar use in other locations is not equivalent. City of Seattle population: 744,955 (2018); City of Portland population: 653,115 (2018); City of Milwaukie population: 21,014 (2018). Examples that are a closer fit in scale and demand would more clearly outline the parking scope of a small town and not a large city.

2. In addition to the criteria in Subsection 19.605.2.C.1, requests for modifications to decrease the amount of minimum required parking shall meet the following criteria:

a. The use of transit, parking demand management programs, and/or special characteristics of the site users will reduce expected vehicle use and parking space demand for the proposed use or development, as compared with the standards in Table 19.605.1.

The neighborhood would also state that by not providing adequate or minimal parking on site, it will decrease the livability of the residents of the proposed building. This building per MMC Table 19.605.1 is minimally required to provide 26.67 (27) parking stalls. It has reduced this amount by utilizing Reduction 2 – being close to mass transit in a multi-family building – lower by 20% (5 stalls) to ~22 stalls. The applicant has argued that because of the size of the units provided that the tenants are more likely to be younger and more transit oriented and therefore 17 spaces will be adequate. This means that residents, being younger, will be out later, and as is implied, not have a family, but many friends/visitors. Because there is a limited transit schedule on 32nd street for bus #75 (buses run every 15min or longer during peak hours, but have no late evening service, weekend service is stopped to Milwaukie/Ardenwald after 7pm, and there is over a mile walk to either max station). Parking will be needed for each of the housing units, retail parking for employees and customers, guests/visitors of residents, and in reality only 15 spaces of the 17 will be available for most tenants as 1 space is reserved for the penthouse unit and 1 space is ADA. As noted before this development focusses more on a higher number of smaller residential units with little retail, so making it a stand-alone residential building appears to be the higher interest of the applicant.

b. The reduction of off-street parking will not adversely affect available on-street parking.

It is hard to predict whether the reduction of off-street parking will adversely affect available on-street parking, but it will impact it. On street parking on this corner is already busy so there could be issues. Currently, when Milwaukie Café is open, parking already occurs on both the north and south sides of Olsen Street and on 32nd in front of their building. The neighborhood does foresee that parking on Olsen Street is already adversely affecting Olsen Street neighbors as some have placed "leave driveways unblocked signs" in front of their homes.

c. The requested reduction is the smallest reduction needed based on the specific circumstances of the use and/or site.

The requested reduction is 5 spaces (with 5 already reduced so 10 spaces total). Again, as there is little retail, more parking spaces could be provided on site in lieu of retail.

19.911.4B Approval Criteria

Type III Variances

2. Economic Hardship Criteria
a. Due to unusual site characteristics and/or other physical conditions on or near the site, the variance is necessary to allow reasonable economic use of the property comparable with other properties in the same area and zoning district.

We understand that this property could not possibly meet this access safety code of more than 100' from a local and a collector intersection and must request a variance. This application site is right on the corner and puts the proposed accessway <50' from the intersection. It is a very small parcel, .24 acres, on the corner of the street(s) which made it a great place for a prior gasoline station, then automotive repair shop, (a DEQ registered site with conditions). The neighborhood views that this accessway variance will affect more than just the intersection request concerning access/traffic and requires more discussion/consideration for safety. The prior use of this site was entered from 32nd which has a sidewalk. Olsen street does not have sidewalks, and even if one is built near the new building, pedestrians and bicyclists will still be coming up the middle of the street further down the road and may not use the sidewalks anyway. The neighborhood wonders if possibly not having parking at this site is an option that was considered for this

project. Even though it would cause more hardship and increase some hazards for the neighborhood, it might be safer?

b. The proposed variance is the minimum variance necessary to allow for reasonable economic use of the property.

Again, what other possibilities are there besides parking, 1) car sharing, 2) parking elsewhere, that could allow for reasonable economic use.

c. Impacts from the proposed variance will be mitigated to the extent practicable.

This is problematic as the impacts of this variance are the safety of pedestrians, bicyclists, and school kids. This variance warrants further discussion concerning safety and the neighborhood argues that there should be input from other boards such as the Public Safety Advisory Committee. This variance in access will create a hardship and create hazards for local neighbors, local businesses, and a real safety hazard for pedestrians and bicyclists.

19.911.4 B. Approval Criteria

Type III Variances

1. Discretionary Relief Criteria

a. The applicant's alternatives analysis provides, at a minimum, an analysis of the impacts and benefits of the variance proposal as compared to the baseline code requirements.

The site plan for this application and the TIS site plan both state under property information that the actual height of this building is 51'1", so higher than the 48' variance that is requested.

A typical 3 story building (36'-40') next to a 1 story (15'-20') or 2 story (20'-30') house makes sense and is vastly different then having a 1 story (15'-20') next to an almost 5 story at 51'1" building. No matter how this is described, by allowing this height variance to add a 5-bedroom, 4-bathroom, 1 story unit, this will set a precedent for all NMUs in the city. As the applicant states, "This proposal will create a neighborhood-scale identity". The neighborhood opposes this height variance request arguing that it does not maintain a neighborhood-scale identity in the NMU zone. Again, the neighborhood clearly stated, when the NMU code was being discussed and written, that since the southern part of AJC would have taller buildings (Monroe Street Apts. = 5 stories part of Central Milwaukie, Hillside Park = 4 stories part of Central Milwaukie) that the center of the AJC neighborhood (not part of Central Milwaukie) would have a maximum height of 3 stories, period. This was discussed and determined by citizens to fit more cohesively with the 1 and 2 story houses, duplexes, and existing apartment buildings during numerous open houses. Even a stepped back building at 51'1" is still almost 5 stories tall, and far beyond the neighborhood-scale identity that was envisioned for AJC by its citizens in the NMU zone. The AJC neighborhood opposes the requested variance.

No surrounding buildings have reached or exceeded the maximum building height code, and this building, at this height, could take away the beauty of our community. It would certainly change our home values and could become a hardship on families in our community if this precedent became the standard.

b. The proposed variance is determined by the Planning Commission to be both reasonable and appropriate, and it meets one or more of the following criteria:

(1) The proposed variance avoids or minimizes impacts to surrounding properties.

The neighborhood argues that this increased height variance does not avoid or minimize impacts to surrounding properties. Properties to the north and east will have reduced solar access and properties to the west will have a 51'1" building 1'-2' (depending on which maps you look at) from their property line. Several homes on Olsen, Kelvin, Malcom, and 32nd will lose their privacy, and all community members will not be able to avoid seeing this building as it towers over the heart of our neighborhood. Having a setback on various sides of the building will still make it over 4 stories on the other side facing other neighbors, and planters, screens, etc., will do more for the homeowner than the neighborhood.

(2) The proposed variance has desirable public benefits.

The neighborhood argues that this height variance does not have desirable public benefits. The only benefit is to the owner who will have a 5-bedroom, 4-bathroom 1 story unit with a fabulous view.

(3) The proposed variance responds to the existing built or natural environment in a creative and sensitive manner.

The neighborhood argues that the height variance does not respond to the existing built or natural environment in a creative and sensitive manner. If this height variance is given, this building will be a looming wall over 32nd Ave. At 51'1" it will be far taller than the current road is wide.

c. Impacts from the proposed variance will be mitigated to the extent practicable.

The impacts from the proposed height variance cannot be mitigated to the extent practicable to the community.

By allowing this height variance to set precedent, every NMU development application in our neighborhood and the city will request a height variance, a parking variance, and most likely an access variance. This is problematic because looking at 19.303.4 F3 – Exemptions – "Maximum residential densities for mixed use building are controlled by height limits", and the number of units determines the amount of parking required. Therefore, every application will request a height variance, a parking variance, and an access variance. Each building will have as many units as possible crammed into it with less parking, and the neighborhood will become unsafe for families to live in. In trying to achieve more diversity by creating the NMU zone, the outcome will be the opposite, and this "urbanization" will be just be another "D" street where people go for dinner and then leave because…who would want to live there?

Ardenwald/Johnson Creek NDA Board

From: Owings, Amanda
To: Vera Kolias
Cc: Montalvo, Teresa
Subject: RE: Land use application referral - 9391 SE 32nd Ave
Date: Friday, May 22, 2020 21:51:47

Hi Vera,

I reviewed the project description. Given the uses listed, the intersection of SE 32nd/Johnson Creek should operate adequately since it was recently signalized. I cannot find that PBOT has any future projects in the area.
Thanks for the opportunity to comment,
Amanda

Amanda Owings, P.E.
Traffic Engineer | PBOT Development Review
503-823-3100

From: Vera Kolias <KoliasV@milwaukieoregon.gov>
Sent: Thursday, May 21, 2020 8:30 AM
To: Montalvo, Teresa <Teresa.Montalvo@portlandoregon.gov>
Cc: Owings, Amanda <Amanda.Owings@portlandoregon.gov>; Public Works Permitting <publicworkspermitting@portlandoregon.gov>
Subject: Re: Land use application referral - 9391 SE 32nd Ave

Good morning Teresa,

Thanks very much.

Stay safe out there!

Vera

Vera Kolias, AICP
Associate Planner
she/her/hers
503.786.7653
City of Milwaukie
6101 SE Johnson Creek Blvd., Milwaukie, OR 97206

From: Montalvo, Teresa <Teresa.Montalvo@portlandoregon.gov>
Sent: Thursday, May 21, 2020 8:27 AM
To: Vera Kolias <KoliasV@milwaukieoregon.gov>
Cc: Owings, Amanda <Amanda.Owings@portlandoregon.gov>; Public Works Permitting <publicworkspermitting@portlandoregon.gov>
Subject: RE: Land use application referral - 9391 SE 32nd Ave

Good Morning Vera,

I have forwarded your information to the Bureau's Development Review Traffic Engineer. Thank you for reaching out to us!

Teresa M Montalvo
Land Use Review Supervisor
Prounouns:She/Her
Portland Bureau of Transportation
1900 SW 4th Avenue, Suite 5000
Portland, OR 97201
Teresa.montalvo@portlandoregon.gov

Mayor Ted Wheeler has declared a State of Emergency for the City of Portland. While city offices are closed to the public to maintain social distancing guidelines from Oregon and federal health authorities, PBOT staff who are able to are currently working remotely to help keep the business of PBOT moving. Our maintenance crews are also taking extra precautions to protect our crews and the public as they respond to road hazards or other road emergencies.
Please allow extra time as we work to help get the service you need during our national emergency. If you have an emergency road hazard to report, you may contact our 24/7 maintenance dispatch at 503-823-1700 or email pdxroads@portlandoregon.gov.

From: Owings, Amanda <Amanda.Owings@portlandoregon.gov>
Sent: Wednesday, May 20, 2020 7:15 PM
To: Montalvo, Teresa <Teresa.Montalvo@portlandoregon.gov>; Public Works Permitting <publicworkspermitting@portlandoregon.gov>
Subject: RE: Land use application referral - 9391 SE 32nd Ave

I could not find any other projects in this area that are in planning or design.
I will take a look at the materials from Milwaukie.
Thanks for sending this!

Amanda Owings, P.E.
Traffic Engineer | PBOT Development Review
503-823-3100

From: Montalvo, Teresa <Teresa.Montalvo@portlandoregon.gov>
Sent: Wednesday, May 20, 2020 4:27 PM
To: Public Works Permitting <publicworkspermitting@portlandoregon.gov>; Owings, Amanda <Amanda.Owings@portlandoregon.gov>
Subject: RE: Land use application referral - 9391 SE 32nd Ave

Sent: Monday, May 18, 2020 2:24 PM
To: BDS Web mailbox <bds@portlandoregon.gov>; BPS Mailbox <BPSMBX@portlandoregon.gov>
Subject: Land use application referral - 9391 SE 32nd Ave

Good afternoon,

I am sending a courtesy referral to you for a proposed mixed-use development on the property located at 9391 SE 32nd Ave. We are sending this as one of the affected intersections addressed in the TIS is the Johnson Creek Blvd/32nd Ave intersection.

Please note that I do not know to whom at PBOT I should be sending this referral - I left them a voicemail message. If you could please forward this to staff at PBOT, I would appreciate it.

Application referral
notice: https://www.milwaukieoregon.gov/sites/default/files/fileattachments/planning/page/114471/vr-2019-013_referral.pdf

thank you very much,
Vera

Vera Kolias, AICP
Associate Planner
she/her/hers
503.786.7653
City of Milwaukie
6101 SE Johnson Creek Blvd., Milwaukie, OR 97206

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and may have been automatically archived by **Mimecast Ltd**.

From: Becky Dresselhaus
To: Milwaukie Planning
Subject: Variance request at 9391 SE 32nd Ave
Date: Wednesday, May 27, 2020 18:40:16

This Message originated outside your organization.

I live on Harvey Street. 32nd Avenue is my most traveled route. I am surprised that the proposed variance for the property at the corner of 32nd Avenue and Olsen requests less parking spaces. Obviously, the proposed plan does not take into account the lack of parking in this area. Milwaukie Cafe, a very popular neighborhood restaurant, does not even have designated parking, so cars park on Olsen. Cars are often parked at the stop sign on Olsen, making it difficult for cars heading west on Olsen to turn left onto 32nd. Olsen is already the same as a "one lane" street as cars park on both sides of the street. I cannot imagine what this intersection will turn into with this proposed plan - 17 spots instead of 21 for 21 units! Many apartment units like ours (Willammette Townhouses) have two cars and there is a constant scramble for the few visitor parking spots.

This is a very residential and heavily traveled area by both cars and tri met buses. It is the last place we need a four story, multi use building.

Please visit the site and think very carefully about the impact on the homes and other businesses on 32nd.

Sincerely,
Rebekah Dresselhaus
3236 SE Harvey Street

From: Abigail Brittain
To: Vera Kolias
Subject: 32nd & Olsen Proposal
Date: Thursday, May 28, 2020 8:11:45

This Message originated outside your organization.

Good morning,

I would like to express my opinion regarding the variance request at 32nd and Olsen. As a neighbor living on Olsen Street I do not support the height variance. I would not want a 4 story house built 2 feet from my property line and the application distinctly notes this property would set a precedence for the neighborhood. I am in support of developing the property for retail and residential use. If it was built to a smaller scale it could perhaps meet the necessary parking requirements which it appears to be well under. I do not support reducing the parking requirements as its logical that any available street parking would be used by residents of the building leaving no parking for the proposed retail spaces. This intersection is currently the core of our neighborhood and should be thoughtfully planned to accommodate pedestrian, bicycle and vehicle traffic.

Thank you,
Abby

Abigail Brittain MPAS, PA-C
Physician Assistant
Pronouns: she/her (Why is this in my email signature?)

From:	Chris Bailey
To:	Vera Kolias
Subject:	comments on Application concerning 9391 SE 32nd Ave Neighborhood Mixed Use (NMU) Development:
Date:	Wednesday, May 27, 2020 16:43:04

This Message originated outside your organization.

Vera Kolias

Milwaukie Planning Dept.
6101 SE Johnson Creek Blvd
Milwaukie OR 97206

Application concerning 9391 SE 32nd Ave Neighborhood Mixed Use (NMU) Development:

I am resident of the Ardenwald neighborhood and a member of the Ardenwald Johnson Creek NDA board. I am writing to share my opposition to proposed variances to code for the development at 9291 SE 32nd Avenue, Milwaukie 97222.

I want to be clear that I am not opposed to the development of this site. I believe that intelligently increased density is a must if our region is to create enough housing. I welcome multifamily housing and retail to this site.
However, **existing code already allows reasonable limits for development in this residential neighborhood** and the proposed variances create serious livability and safety challenges to the immediate neighborhood that are unacceptable.

In general I wish to add my support to the incredibly thoughtful and well articulated letter written by Lisa Gunion-Rinker.

Some specific thoughts I wish to add:

In reading the application materials I found two particularly concerning statements. First, “The proposed variance has desirable public benefits.” The opposite is true. The proposed variances have clear undesirable public harms, while benefiting only the owner and developer. For example, we know from the experience in Portland that creating apartments without enough parking for each resident does not mean residents do not own cars. Rather, they park their cars on public streets. There must be enough parking for each unit to have a space.
Crowded street parking on the surrounding streets, which already lack sidewalks or curbs, will be a significant challenge to local residents. In addition, a reduction in a available public parking in the area will detrimentally impact the Milwauie Cafe and Bottle shop next door, an existing business which is an incredibly important neighborhood gathering center.

My second big concern is that the developer specifically states that ‘This proposal intends to allow for a precedent of the type of buildings.” Please do NOT allow this to become a precedent. The 45 feet tall is already a significant change to the character of the neighborhood.
There is lots of talk in the proposal about how they will make the 4th floor more attractive and less intrusive. This is impossible. Towering 2 stories higher than any of the surrounding buildings (and any buildings anywhere in the neighborhood) the 4th story variance will be intrinsically intrusive, as will any other 4 story buildings then allowed in the future under this ‘precedence’. From many conversations with other neighborhood residents over the past three years I believe that this 4th story variance will be widely opposed and will generate ill-will and resentment towards the development and the city for allowing it. This has the unfortunately potential to inhibit future multifamily developments.

These variances are NOT creating a public benefit and should be denied. A residential building with adequate parking can be created on the site with only 3 stories.

Thank you for your time and consideration in this reading.
Chris Holle-Bailey

From: Coralee Popp
To: Vera Kolias
Subject: 32nd and Olsen construction
Date: Wednesday, May 27, 2020 15:50:25

This Message originated outside your organization.

I have a home on Olsen, and am absolutely not in favor of this 4 story building being constructed. The Cannabis dispensary that wanted to build there was bad enough, but this would change the entire character of the neighborhood. Traffic and parking are two issues that spring to mind. I can think of no-one that benefits beyond the developer.

Sincerely,
Coralee Popp

From: Kara E. Cecil
To: Vera Kolias
Subject: Variance at 32nd & Olsen
Date: Wednesday, May 27, 2020 17:27:16

This Message originated outside your organization.

Hello! I am a neighborhood resident and am pleased to hear that there will be a mixed use development in this space. However, I am very concerned about the variances being considered for this property. There should be at least the same number of parking spaces as there are units - definitely no less. This is especially important because there are two retail spaces there that will be sharing parking space with a business that is very valuable to our neighborhood, the Milwaukie Cafe. The cafe already has very limited parking, and with two other retail spaces as well as apartment people competing for street parking space this will be a very unfortunate situation that will impact these businesses significantly. Please require this developer to have at least as many parking spaces as there are units in the building. It is very likely that even with only one space per apartment there will still be quite a few apartment people who will also be parking on the street. Even if only a few units have two cars this will quickly overwhelm any spaces for the businesses which are essential to developing our neighborhood's goal of having that be a nice little mixed use central area. It only takes a small issue like no parking to deter people from stopping there during the rainy season (which is almost always) and it would be terrible to lose the momentum that we have there with Milwaukie Cafe.

Thank you for considering my input. I hope we have the same vision of a healthy neighborhood social hub at the corner of 32nd & Olsen, which is likely of less importance to the developer than the cost of adding parking spaces.

All the best,

Kara Cecil
9709 SE 40th Ave

From: Lindsay Rodriguez
To: Vera Kolias
Subject: Comments for VR-2019-013
Date: Wednesday, May 27, 2020 18:22:47

This Message originated outside your organization.

Hi Vera,

I read about this proposal VR-2019-013 here in Ardenwald, of which I am a resident. Personally, I am really excited by this proposition and believe new retail space could give Ardenwald the neighborhood feel it lacks, like places such as Woodstock and Sellwood do. I am really happy to see there are parking spots included in the proposal as well. I hope the commercial tenants will be places that foster community and a gathering place for all of us to enjoy.

Thank you for your work on this. I am excited to see what will happen.

Lindsay Rodriguez

From:	Michael Stone
To:	Vera Kolias
Subject:	32nd Ave Zone Variance
Date:	Wednesday, May 27, 2020 21:01:13

This Message originated outside your organization.

4 stories is just too much and out of character for the Ardenwald neighborhood. 2 to 3 stories should be more than enough to make the project economically viable. Note that there are no other multi-unit apartments on 32nd that exceed 2 stories.

What is the plan for parking to service this site? Every apartment will likely have at least two persons who will each own a vehicle. To assume that all or even a sizable portion of the new residents will use mass transit is pathetically naive.
32nd Ave already carries a lot of traffic, still more does nothing to enhance livability in the neighborhood but I suspect it will do wonders for the bottom line of the developers who most certainty do not make their home in Ardenwald.

Mike & Susan Stone
Milwaukie, OR

From: michele@michelelukowski.com
To: Vera Kolias
Subject: Re: Development at 32nd and Olsen
Date: Thursday, May 28, 2020 8:38:57

This Message originated outside your organization.

Hi Vera,

Just so it's not misunderstood, I do hope that the old auto mechanic site gets a nice development. However what is proposed there is too much for the site. I am saying this as someone who has lived here for 9 years and seen the positive changes and looks forward to some of the growth that is happening.

My suggestions as to what is reasonable for the property at 32nd and Olson are: 1. Fewer residential units, no exception on parking requirement as there is not adequate street parking. 2. Observe at least a 5' setback from property line since it is up against a single family home on the west side. 3. Locate the driveway for the building on 32nd, because the proposed driveway is not set back far enough from the intersection and is directly across from the driveway for the commercial building across Olsen.

On May 28, 2020 8:15 AM, michele@michelelukowski.com wrote:

> I see reading through the traffic study that the engineers did not do a traffic count at 32nd and Olsen, and are using count numbers from 32nd and Harrison and 32nd and Johnson creek. This makes the study pretty inaccurate. They say less than 1% increase in traffic but their own modeled numbers say from 16 to 19 in peak AM hour, which is an 18% increase. Also it suggests that there is on-street parking on both sides of Olsen, which is not exactly true. Did they miss that there is an existing driveway directly across from the main proposed entrance for the development site?
>
> I also see that you are allowing a 2' setback to the property line for the new building? Why?
>
> Why is it that we received mailed notifications for someone two blocks away who wants to build a house addition and requires no exceptions to code, but we've received no details on this for months?
>
> On May 27, 2020 4:33 PM, michele@michelelukowski.com wrote:
>
> > Hi Vera,
> >
> > I emailed you earlier on this, then looked at the plans. I stand by my statement about needing parking, and think 17 spaces for 21 units plus commercial space is not adequate. This needs at least 21 spaces or fewer units. Also there is already a hazard at that corner for traffic due to proximity to the bus stop and difficulty seeing around parked cars on the corner. Has a traffic study been done?
> >
> > Thanks,
> >
> > Michele

From: Nikolay Demchenko
To: Vera Kolias
Subject: 4 story residential unit at 32nd and Olsen.
Date: Thursday, May 28, 2020 0:22:43

This Message originated outside your organization.

Hi,
I just wanted to comment that the variance for less parking spaces should not be approved. All the visitors of the residents will already park on the side streets and if the parking spaces are reduced there will be even more cars lined along the street. Currently if there are cars parked on both sides of the street, only one car can drive in one direction. There is not enough room for two cars to maneuver side by side. I would recommend that the variance is reversed in the other direction and additional parking spaces for visitors are added in the building. Thank you.

From:	Ramona King
To:	Vera Kolias
Subject:	Proposed new development at 32nd and Olsen
Date:	Wednesday, May 27, 2020 18:56:14

This Message originated outside your organization.

To whom it may concern:

As a born and raised Oregonian, I have seen this type of development many times. I appreciate progress and growth but not at the sacrifice of local communities. Areas that come to mind are Division St., Alberta, Albina, Mississippi, Williams, and soon to be SE Woodstock. Change is inevitable and welcome. However, granting these variances will open the door to and set a precedence for rampant disregard for the neighborhood impacted. Increased traffic, parking violations, and a general degradation of our neighborhood values.
By all means, allow growth to occur. However, please have the developers adapt to us, not the other way around.

Respectfully,
Ramona King
9529 SE 32nd Ave, Milwaukie, OR 97222

From: Sarah Newson
To: Vera Kolias
Subject: 32nd and Olsen
Date: Wednesday, May 27, 2020 18:29:20

This Message originated outside your organization.

I am opposed to the four-story building that they are proposing at this point. There is already very limited parking in that area of the neighborhood and it would certainly take the little parking that the Milwaukie café has.
The other concern is when did the contaminated dirt become OK all of a sudden?
Sarah Newson
Ardenwald
Sent from my iPhone

From:	Travis Tomlinson
To:	Vera Kolias
Subject:	Proposed development on 9391 SE 32nd Ave.
Date:	Wednesday, May 27, 2020 17:03:01

This Message originated outside your organization.

Hi Vera, I'm writing to express my concerns about the proposed development on 9391 SE 32nd Ave.

Any new development along 32nd should first and foremost meet the vision of the NMU zone and any variances granted should be granted specifically to ensure the intent of the NMU is met. The only reason to allow for a height variance is if the variance is needed to provide a substantial community benefit. An ~8k sqft penthouse does no such thing and is the only motivation for the proposed height variance.

If the building provided substantial community benefit in other ways, perhaps the variance could be allowed. However, a paltry 1,085 of the proposed 32,548 sq ft (3%) is marked for commercial use, beyond the property management office that is needed for the building itself. That 1085 sq feet is divided between two commercial units, making each unit barely bigger than the living room I'm typing this email from. Very few businesses that we don't already have in Ardenwald- Johnson Creek could fit into that space and as a result, they provide little value to our community.

It's clear from the language of the proposal that the fourth floor (and reason for the variance) isn't in line with the spirit of the NMU. They claim, almost laughably, that "The fourth floor would allow an opportunity for a more aesthetically pleasing top floor" by including "a large wrap-around deck with decorative parapet rails" and planters which are intended to "act as screening and provide greater privacy for the neighbors to the north and west." As though a palatial penthouse with a wraparound deck was a burden to develop and would never do it but for the needs of the neighbors, especially given that the height of the building, there are no nearby neighbors who could view into or be seen out of the penthouse. Rather, it seems the owner/developer is interested in building herself a luxury apartment with views of the city and surrounding area, and the only way to do so in a financially feasible manner, is to build two floors of apartments and some token commercial space.

The building's structure and design does not align with the overall aesthetic and community feel of the area. It would almost certainly stand out as a behemoth in the neighborhood and destroy the culture, community, and walk-able structure Milawaukie, and the NMU are striving to create.

Finally, the proposal itself talks about how unprecedented this development is. "It is difficult to assess the affect of the proposed structure to the relationships of other structures as there has been a lack of new mixed-use structures in the NMU Zone and in the surrounding areas of 32nd Ave. This proposal intends to allow for a precedent of the type of buildings that are beneficial to the area and allow for the maximum effectiveness to meet the growing demands of the area in question."

The growing demands of the area in question are exactly the demands of the NMU zone, to encourage development that contributes to a vibrant local economy and maintains neighborhood identity. This development does neither and is not the precedent we should set.

Thank you for taking the communities concerns into consideration.

Travis Tomlinson
3509 SE Wake st.

From:	Aine Seitz McCarthy
To:	Vera Kolias
Subject:	Development at Olsen & 32nd
Date:	Wednesday, May 27, 2020 15:12:10
Attachments:	We sent you safe versions of your files.msg NMU2020-MFR Updates.docx

Dear Vera,

I'm writing in support of the attached neighborhood assoc (NDA) letter about the development on the corner of Olsen & 32nd. I'm not in the NDA but I'm concerned about this development- especially about how very little retail space is allocated. We in the neighborhood (I live on Olsen st) are very much in support of retail, but the amount in the proposal is WAY too small. Thanks for listening.

Thanks
Aine

--
Aine Seitz McCarthy
ainesmccarthy@gmail.com

From: Steve Gutendorf
To: Vera Kolias
Subject: 4 Story penthouse proposal - 32nd & Olsen
Date: Wednesday, May 27, 2020 15:32:00

This Message originated outside your organization.

I have no issues with this, as it will clean up that corner and will hopefully encourage the other businesses to improve their appearances.

Steve Gutendorf
Resident at SE Floss Street.

5/27/2020

Vera Kolias
Milwaukie Planning Dept.
6101 SE Johnson Creek Blvd
Milwaukie OR 97206

Re: VR-2019-013; P-2019-001; DEV-2019-013; TRF-2020-001

Application concerning 9391 SE 32nd Ave Neighborhood Mixed Use (NMU) Development:

Type III height variance request per MMC 19.911
Type III driveway exception variance per MMC 19.911
Type II parking minimum variance per MMC 19.605.2

Dear Ms. Kolias,

I OPPOSE the approval of these variances by the city and request the city to conduct the much-needed transportation impact analysis for transportation and parking impacts to all of Ardenwald West and the Johnson Creek-Tacoma-SE 32nd intersection—and that also take into account the accumulation of traffic impacts to come due to the upcoming redevelopment and addition of 400 units at Hillside Park, and also the new Monroe Apartments, which will add another 234 new units of housing the area.

As this is the first precedent-setting mixed-use building proposal has been submitted for 9391 SE 32nd @ the corner of SE Olsen (prior Luther Davis Auto site across street to north of Milwaukie Cafe) and VARIANCES have been requested that would result in a much larger building than code permits, is likely to create spill-over parking onto SE Olsen.

Furthermore the Transportation Impact Study did not evaluate the likelihood of cut-through traffic throughout Ardenwald West which would decrease our neighborhood's livability and endanger pedestrians, bicyclists, and children at play if not mitigated.

In 2016 the city formulated a new zoning code for mixed-use residential-commercial buildings along SE 32nd Ave and SE 42nd Ave to create "Neighborhood Hubs" with needed retail shops and amenities for the neighborhood and the new multiplex residential housing.

• The new Neighborhood Mixed Use (NMU) code:

Which allows for:

- Buildings with a height of 45 ft up to 3 floors (no "bonus" floors for any reason)

- No front setbacks or side or rear setbacks (away from neighboring residences)

Whose purpose and intent is to:

- Ensure high-quality urban development that is pedestrian friendly and complementary to the surrounding area

- Provide a safe and pleasant pedestrian environment while maintaining a neighborhood-scale identity.

- Meet the needs of nearby residents and contribute to a vibrant local economy.

- Ensure new development in the new mixed-use zones is appropriate for a mixed-use district in terms of building mass and scale.

Which Requires:

- That the reduction of off-street parking will not adversely affect available on-street parking.

And the proposed land use application building characteristics are now:

- 4th Floor: HEIGHT VARIANCE exception requested to accommodate 5,000 ft2 owner penthouse (code allows only 3 floors with NO bonus floors available)

- 2nd-3rd Floors: 20 X 800 ft2 residential 1- bedroom rental units

- 1st Floor: 2 small ground floor commercial retail units for rent

- PARKING: REDUCTION VARIANCE exception requested to bring required on-site parking down from 26.67 stalls to 17 stalls (including 1 reserved for ADA & 1 for owner). Net: 15 spaces for ALL other resident and penthouse visitors)

And given the values and vision embedded within the City of Milwaukie Vision Statement speak to increasing equity and diversity, and the clearly stated need for affordable housing in Milwaukie as stated in the MHAS, what precedent will be set by allowing developers to seek variances to our building codes to accommodate their personal needs with a variance to accommodate a 4th floor height variance for a proposed lavish penthouse?

Sincerely, Chris Ortolano

March 27, 2020

Very Kolias, Associate Planner
City of Milwaukie | koliasv@milwaukieoregon.gov

RE: Application VR-2019-013 | NMU development at 9391 SE 32nd Avenue & SE Olsen

OPPOSED:

- the requested variance for a building height increase from 45 ft > 48 ft (51' 1" total) to add an explicitly code-prohibited 4th floor in order to accommodate a 5 bedroom, 4 bathroom, 2 bonus room penthouse for the owner.

- the requested variance for an extreme reduction of required on-site parking for building residents and visitors and commercial retail employees and visitors from 26.67 down to 17 (includes 1 stall reserved for ADA use and 1 stall reserved for penthouse) leaving only 15 spaces for 20 rental units, + 3 commercial retail units with employees and visitors. Visitors of residents will use street parking on Olsen as well.

Much thoughtfulness and care has been put into the creation of the new Neighborhood Mixed Use zoning codes to ensure we preserve and enhance the friendly livable human-scale of our Ardenwald Johnson Creek neighborhood.

19.303.1.A-B declares that the new code's purpose is to *"ensure high-quality urban development that is pedestrian-friendly and complementary to the surrounding area"* and is *"intended to provide a safe and pleasant pedestrian environment while maintaining a neighborhood-scale identity."*

This precedent-setting first proposed residential-commercial Neighborhood Mixed Use (NMU) project fails to meet these and other code criteria in important ways that benefit the developer at a high cost to the entire Ardenwald West neighborhood particularly in terms of:

- safe pedestrian, bicycle, and children-at-play street safety (parking and traffic impacts)
- neighborhood architectural aesthetics

The parameters that get approved for this first development will be precedent-setting for all proposed developments to come in our SE 32nd NMU zone. This makes it particularly important that variances are not granted for this first project that clearly seeks to "push out" the limits of the codes, formed by lengthy deliberation and approved by our city and its residents, by developers who are likely to hold their profits and desires above what's best for the people in our neighborhoods and communities.

The developer's proposal promises "a multitude of benefits to the residents, neighbors, and city at large." On the following pages is an analysis of the code variance requests, building features, and our city's stated visions and goals, organized by "Community Benefits" and "Community Detriments." Unfortunately, the latter column vastly outstrips the former. We urge you to reject the requested variances on this proposed project and to ask for a design that better suits the open friendly aesthetics of our existing neighborhood.

Respectfully:

Ronelle M Colburn

SE 29th Ardenwald Greenway

Community Benefits	Community Detriments
2 commercial retail stores	**Permanent loss of solar access** to properties to North & West (4th story exacerbates this)
Improved planted sidewalks & curbsides on SE 32nd & SE Olsen	**Permanent loss of visual privacy:** West facing: 18 windows look down with only 2 ft setback North facing :14 windows (incl 4 balconies) look down with 17 ft setback)
	Out of scale building: Height 19.303.4.2C Detailed Development Standards: states: "The maximum building height in the NMU Zone is 3 stories or 45 ft. whichever is less. No building height bonuses are available in the NMU Zone." NMU = Neighborhood Mixed Use **Variance requested** for 48 ft to allow for code prohibited 4th story 5+ bedroom, 2 bonus room, 4 bath penthouse for owner. **NOTE**: drawings say total height = 51' 1"
	Out of scale building: **Mass** Building is built out to property lines on East, South, West sides and has heavy large block aesthetic. This design does not meet the purpose of the NMU zoning 19.303.1 "to ensure high-quality urban development that is *complimentary to the surrounding area*." Brick façade does not fit with the overall architectural aesthetics (mid-century, bungalow, farmhouse) of the Ardenwald neighborhood.
	Parking impacts on Olsen Insufficient on-site parking, even at maximum coded requirements (26.67 stalls required). Olsen is already adversely impacted by the wonderful success of our beloved Milwaukie Café. Developer requesting variance for reduction from 21 *minimum required* down to 17 stalls (including 1 ADA parking stall and 1 stall reserved for penthouse…leaving just 15 stalls for 20 apartments) stating that one-bedroom tenants are less likely to own vehicles and that younger people take mass transit more. Given these are market-rate units, this economic class of renter will be *less likely* to take transit, particularly bus transit that does not get them directly to work. Current COVID issues only exacerbate this. The 75 bus does not provide direct convenient service to grocery shopping or other necessities (banks, hardware, etc), the Max station, or downtown Portland.

	Parking impacts on Olsen (continued) Also, given market rate rents, there are likely to be two people per apartment in many units & a higher need for parking spaces. Even if only 50% of units (10) have 2 residents we are looking at 30 rental unit residents *and* their visitors, plus how many in 5+ bedroom penthouse *and* their visitors. The *maximum of 26.67 spaces of on-site parking is already insufficient* to meet the needs of the building, especially on evenings and weekends (when most residents are home, visitors are over, and retail likely to be open). This project clearly relies on neighborhood on-street parking for all employees and customers of the three commercial retail stores. There will be some new on-street parking in front of the building, but not enough to accommodate majority of parking needed for these stores. Citing Portland and Seattle codes seems an irrelevant choice of reference as it is well-known that their streets have become "car swamps" with vehicles circling residential neighborhood blocks searching for on-street parking in all their "neighborhood hubs." Milwaukie does not have to model our neighborhoods and their development after cities that are forcing bumper-to-bumper parked-up streets. *The practical reality is that people own cars because they need them…especially in a location like this, where basic necessities are not within walking distance and are not directly served by timely direct transit (groceries, banks, hardware stores) and are unlikely to be at any time in the near future.* A search for other places with reduced parking requirements has not turned up a single example of a neighborhood not flooded with parked cars due to reduced parking requirements. The cities cited have failed spectacularly to create pedestrian and bicycle friendly neighborhood environments and have not deterred car ownership. This proposed project sets us firmly on-course to follow suit. The practical reality is that this location is NOT well served by transit and does not have basic necessities within walking distance (closest groceries are 1.5 miles away and 1.1 miles away…most other necessities are even farther away), and given our rainy winters most are not hard core bicyclists who will ride in the rain to get practical errands done.
	Pedestrian Impacts on Olsen The parking access driveway and garage door are on Olsen which will make the adjacent sidewalk unsafe for pedestrians. There are no alternatives for pedestrians as there are no sidewalks on the South side of Olsen street for pedestrians to use.

	Traffic impacts to Olsen, SE 29th, and other Ardenwald West neighborhood streets Residents will decide to turn WEST onto Olsen in the morning and *cut-through the neighborhood* to avoid traffic, buses, and garbage trucks on SE 32nd. Many of them will be in a hurry and speed down our slow residential streets where pedestrians, children, and bicyclists *already come first* on our roads. There will be neighborhood-wide negative impacts to our already calm pedestrian- and bicycle-centered neighborhood SE 29th Greenway, and on all East-West streets between SE 29th & SE 32nd, as drivers return to SE 32nd to go North or South, especially at rush hours. (reverse at PM rush) Neighborhood-wide plans are needed, for the entire area West of SE 32nd, to prevent cut-through traffic that reduces the livability (noise, speed, air pollution) and reduces the safety of all Ardenwald West streets. (ie. Traffic kept SLOW and DISCOURAGED from cutting-through).
	Parking & Traffic impacts to North end of Ardenwald West due to Tacoma-JC Max Station How will the North end of the neighborhood be protected from train commuters driving to park and walk to the Max station via Springwater Trail? It is a mile to walk from the proposed development and the train station parking lot is already full before 7am. In addition, there are 400 new units to be built at Hillside on south end of Ardenwald West and the new 234-unit Monroe Apartments, not to mention development to come at the Murphy Site just South of Hillside, and future multiplex development on SE 32nd. *Perhaps we need a residential parking permit system throughout Ardenwald West NOW to prevent this.*
	Traffic impacts to SE 32nd @ Johnson Creek Boulevard intersection What will the impacts be to this intersection from this project? (and of course, the compounding of all development projects which will comprise a 40% increase in residents in Central Milwaukie in less than a decade). This intersection was not included in this project's Transportation Impact Study and has already been identified as headed for an "F" rating in less than 15 years due ONLY to yhe Hillside Redevelopment (addition of 400 units over current number) just south of Ardenwald West.

City Vision & Goals	Proposed Development Market-rate large 1-bedrooms units & 5+ bedroom penthouse
Milwaukie Community Vision "In 2040, Milwaukie is a flourishing city that is entirely equitable, delightfully livable, and completely sustainable."	**Vision #1: "entirely equitable"** This project does not meet our community's first goal of being "entirely equitable." Project provides neither affordable middle- or low-income housing, nor does is provide any family housing. Also, in its proposal, developer states its prospective tenants are those who are, "younger and more mass transit oriented." Who are "younger and more mass transit oriented" who can also afford the cost of large market-rate apartments? Based on the developer's stated prospective tenant, this proposed project does not promote an "entirely equitable" community. **Vision #2: "delightfully livable"** This project begs the question of "for whom"? Given the many detriments to the neighborhood vis-à-vis the project's spillover of its parking needs onto SE Olsen and cut-through rush hour traffic throughout Ardenwald West that detracts from street safety and the peace of the entire neighborhood (speed, noise, air pollution), this project, as proposed, does not meet our city and community's second stated goal of an "delightfully livable" city.
Milwaukie Community Goal Statements: PLACE "Milwaukie invests in housing options that provide (1) affordability, high quality development, & (3) good design, promoting (4) quality living environments. It maintains the (5) small neighborhood feel through (6) creative use of space with housing options that (7) embrace community inclusion and promote stability."	**PLACE Goal #1: "housing options that provide affordability"** See above. **PLACE Goal #3: "good design"** The proposed building is a "boxy brick fortress" that is grossly out of scale with the surrounding neighborhood. Brick façade treatment is visually dissonant with surrounding mid-century, bungalow, and farmhouse design aesthetics. Lack of upper story step-backs (floors 2-3) and lack of variations in facades create bulk that is also dissonant and over-dominating of surroundings. **PLACE Goal #4: "quality living environments"** Domination via height and bulk and parking and traffic issues for neighborhood adjacent to West…these clearly do not create "equitable quality living environments" for our neighborhood. **PLACE Goal #5: "maintains small neighborhood feel"** This building does not meet this goal in any way. **PLACE Goals #6: "creative use of space" and #7: "with housing options that (7) embrace community inclusion"**

Milwaukie Community Goal Statements: PLACE (continued)	This building is a conventional large box that shuts its residents off from the rest of the community. There is no use of space that connects building residents to the surrounding neighborhood or vice versa. Against the scale of the AJC neighborhood, it is a massive brick fortified urban fortress dropped in the midst of our open green pedestrian-scale neighborhood.
Milwaukie Housing Affordability Strategy Milwaukie Housing Affordability Strategy findings were that the **highest needed housing category for Milwaukie = rentals @ $900 or less per month, as well as a need for 2-3 bedroom middle income family units.**	This project is comprised of 20 large one-bedroom units, ~ 800 ft each (singles and couples with high incomes). In no way does it meet Milwaukie's expressed *housing emergency* needs for regular middle income earners and/or families. **As this proposed project does not serve our communities' stated highest emergency priority housing needs, it should not receive any special variances.** This project in itself is the type of gentrification that encourages the mass future displacement of current middle and low income residents through increased pressure on land costs for more high-income rental development—both in the NMU zones and in the residential neighborhoods (via HB2001's Residential Infill Program which will allow medium and high-density 3-story multiplex development in formerly zoned single family residential neighborhoods).
Comprehensive Plan 8.2.1C	Requires new developments to be designed so as not to compromise safety and comfort for alternative means of transportation, like walking. Proposed project compromises safety of walking and bicycling for entire area west of SE 32nd.

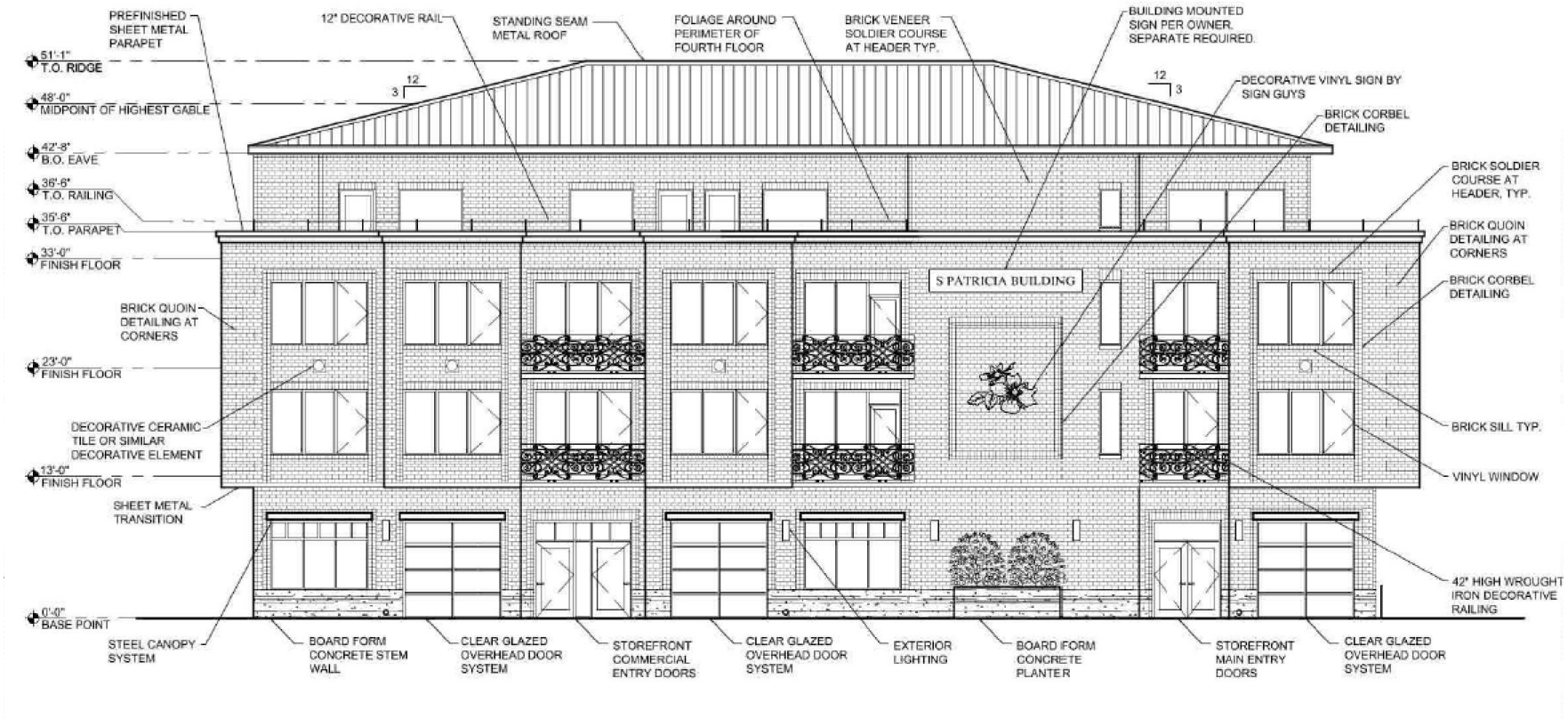
This project is the antithesis of every single painstakingly thought-out and crafted declared community vision and goal: affordability, equitability, preservation of livability, street safety, pedestrian and bicycle safe, small scale neighborhood feel, and existing residents' ability to continue living in Milwaukie for the long haul.

It offers far too little to our neighborhood and city while subtracting far too much from our neighborhood and community.

If approved we will take a clear bold step in the direction of becoming a city and community that caters to Portland's "Silicon Forest" industry workers, and in the continuation of the age-old pattern of gentrification; building housing and amenities to meet the desires of the socioeconomic upper-class with high profits for developers, to the detriment of everyone else. This proposed project threatens to set Milwaukie's feet on an ever more certain course of mass displacement of its historically low- and middle- income working residents, many of whom are already struggling to pay skyrocketing property taxes and rents. This project does not propose to meet the needs of the many, but to gratify the desires of very few while greatly enriching the owner-developer. >>>

Approval of this project, in its current form, would belie and render worthless, all the hours and years of hard work done by the city and our collective community vision that, "In 2040, Milwaukie is a flourishing city that is *entirely equitable, delightfully livable...whose residents enjoy affordable housing."*

It is not a suitable development, in its current form, for our community or neighborhood and its approval would set a legal precedent for all development to come in our new Neighborhood Mixed Use zone on SE 32nd.



Proposed Mixed Use Development: 9391 SE 32nd @ SE Olsen

(Northwest corner where Luther Davis Auto used to be & across street from Milwaukie Cafe)

4th Floor: 5 Bedroom, 2 Bonus Room, 4 Bathroom Penthouse on 4th floor (height variance requested to allow code-prohibited 4th floor)

2nd & 3rd Floors: 20 x One-Bedroom Rental Apartments (approx. 800 ft2 each)

1st Floor: 3 small commercial retail stores (one reserved for building office, other 2 for rent)

Parking: Reduced parking variance requested from 26.67 to 17 (1 reserved for ADA & 1 for owner = 15 units for all residents' & penthouse residents/visitors)

To: Vera Kolias, Associate Planner, City of Milwaukie

Re: Property Development application VR-2019-13, nw corner 32nd and Olsen Street

May 25, 2020

I **Oppose** approving a variance for **Parking Quantity Modification**, instead asking for maintaining the 1 to 1 ratio (off-street parking space to housing unit); which means requiring a minimum of 21 off-street parking spaces rather than the proposed reduced number of 17.

There is a substantial **risk**, more so than otherwise with the off-street parking reduction, that the project will have an **increased impact on surrounding properties and very local Olsen Street pedestrian safety and flow**.

Here are my points on this matter (Also attached are supporting materials and photos of area):

1) **On street parking** on the south side of Olsen street is already **in short supply** because of the increasing success of Milwaukie Café restaurant on the **SW corner of Olsen and 32nd**. In fact, customers of Milwaukie Café park alongside the north side of Olsen using space at the idle 9391 se 32nd property (former Luther's Auto repair shop), as parking is limited alongside the Café on the SW corner.

Milwaukie Café epitomizes the very concept of a neighborhood hub where folks in the area gather for grub and gab.

Lowering the number of off-street parking spaces as proposed increases the risk of added competition for the limited parking in the immediate area of Olsen and 32nd, as tenants in the new building may have above average car ownership numbers just because of variance in small sample sizes like this population of 21 housing units.

2) **Olsen Street west of proposed property driveway has no sidewalks** on either side, and already cars are parked on the shoulders; steering **pedestrians** to **walk in the street** down and up Olsen. If off-street parking spaces are reduced, then there probably is also an increase in the number of cars parked on street west of the proposed development. This **reduces the ability of pedestrians to step aside when cars travel west of the proposed property**. (See attached photo showing the poor pedestrian conditions west of the proposed project.)

3) **Ride Share** such as Uber/Lyft have **no off-street parking to pick up and deliver tenants** of this new project, increasing chances the ride share **traffic continues west on Olsen**.

4) **Trends are shifting away from the use of mass transit buses** such as the #75 bus line servicing 32nd. Overall TriMet bus ridership is down substantially over the last decade even as the Metro population increases significantly (see attached table). What data there is on the #75 bus line shows no real growth in ridership in the past two years despite growth in area population.

And now the Covid-19 pandemic may be causing a permanent shift down in the use of mass transit bus lines (like the #75), in favor of individual means of transport such as the automobile. In places such as China which lifted its lock down three months ago, Reuters is reporting a shift away from use of mass transit bus (see attached Reuters article).

5) The previous use of 9391 se 32nd property is an auto repair shop building with a much smaller footprint relative to lot size; than is proposed in this application. The auto repair customers entered the property easily from driveways connected to 32nd. Parking in this incidence is off-street by and large.

6) **Why does the proposed Penthouse get an off-street parking space, but the other 20 tenant households must share the remaining (16) off-street parking spaces**. Strikes me as being somewhat inequitable. I infer this is the arrangement as the proposal talks at some point about the smaller units below penthouse not needing as many spaces for cars.

7) **Eric's (formerly "Low Beer") Market** across the street at the southeast corner of Olsen and 32nd seemingly may offer a solution in increasing the parking capacity at this intersection. A possible solution might be for the project to lease parking on an on-going basis from the owner/management of Eric's market. Eric's Market has spare parking almost always from what I can observe (photo Eric's Market included in attachments).

<u>Other Non-parking Issues</u>

A) **Previous Traffic Impact Study for the Hillside Park** re-development demonstrates **traffic level of service at the intersection of Johnson Creek and 32nd declines to an <u>F rating</u>** in the next 15 years or so; **even without this proposed project**.

When the Ardenwald-Johnson Creek Neighborhood Association is helping conceptualize neighborhood hub buildings a few years back, reportedly the desire is for development projects of 3 stories or shorter in building height.

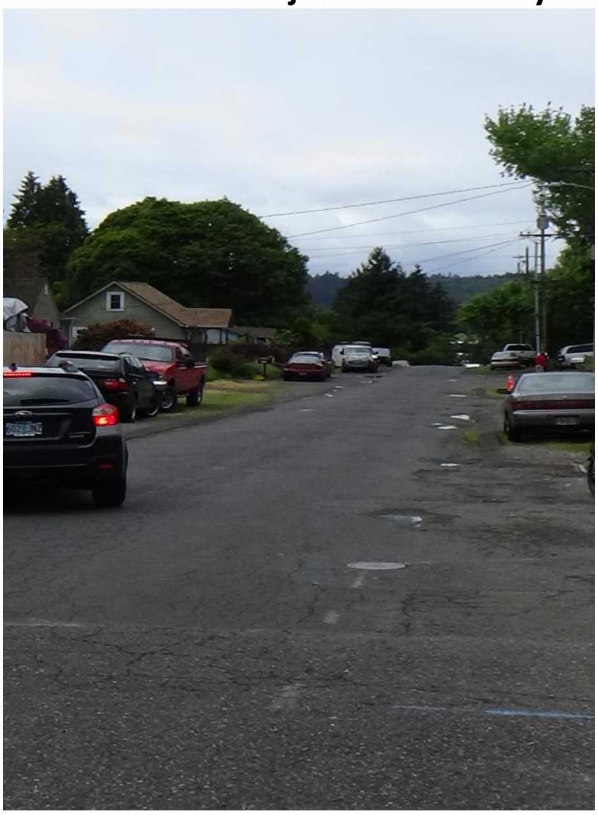
So, the extra size of this proposed project and its corresponding traffic worsens a tad an already congested intersection of Johnson Creek and 32nd, a decade or so out from now.

B) The Traffic Impact Study for this project does not include possible right hand turns coming out of the driveway, so as to place more traffic going west down Olsen – which again there are no sidewalks and the Olsen is a bit rutty.

Sincerely,

Elvis Clark
Ardenwald Neighborhood resident and enthusiast
EclarkMilwOr@yahoo.com

West Down Olsen just immediately after drive way of proposed project



Eric's Market just across the street from project sports spare parking…just a thought.

Pictured here is the previous building on the 9391 property (Luther Davis Auto Repair), and maybe the volume of business (before it is shuttered) is moderate in terms of customer traffic; also fairly easy vehicle entry and exit off of 32nd , fronting the property, during Luther Auto Repair's time in business. Building is now demolished.

From:	Elvis Clark
To:	Vera Kolias
Subject:	Re: My Comments and attachments for Application VR-2019-13; Olsen and 32nd project (9391)
Date:	Tuesday, May 26, 2020 20:53:33

This Message originated outside your organization.

Hello, Vera.

In addition to the comments I provided yesterday. I am also uneasy the proposed project VR-2019-13 (32nd and Olsen) does not provide enough parking spaces for the retail establishment employees and customers. It is very likely these employees and customers end up parking on Olsen Street with some frequency, Probably on Olsen east of 32nd around Eric's Market.

Thanks for adding this additional concern.

Elvis

Sent from Yahoo Mail. Get the app

On Monday, May 25, 2020, 05:18:01 PM PDT, Elvis Clark <eclarkmilwor@yahoo.com> wrote:

Hi, Vera.

Please find my comments/attachments regarding the proposed building project at 32nd and Olsen, formerly the site of Luther's Auto Repair building/business.

I think the Ardenwald Neighborhood Association, which I serve as Transportation Representative, is also sending my comments with there other comments. Their version is missing a photograph of former building (Luther's Auto Repair Shop). I also attach here Trimet data on bus ridership trends, Hillside Master Plan Transportation Impact Study for Johnson Creek and 32nd intersection, and a Reuters article indicating less use of mass transit buses as a lingering effect of Covid-19 virus outbreak.

Thanks for taking my comments and attachments here,

Elvis
Ardenwald neighborhood
(503) 654-8895

Sent from Yahoo Mail. Get the app

TRIMET

Audited*

TRIMET SERVICE AND RIDERSHIP INFORMATION

04/28/2020

Key Indicator	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Originating Rides																				
Bus	45,956,400	47,905,200	48,148,800	47,790,000	48,394,800	48,373,200	47,732,400	47,463,600	48,186,000	49,970,400	45,492,000	43,622,926	44,512,567	45,220,800	45,131,280	47,023,200	45,061,200	44,538,000	43,704,000	43,515,600
MAX	17,652,000	18,579,600	21,218,400	21,801,600	22,890,000	26,641,200	27,214,800	28,406,400	29,396,400	29,370,000	32,037,600	34,373,474	35,203,333	32,638,800	30,254,400	29,870,400	31,766,400	31,668,000	31,035,600	30,963,600
WES (1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	97,180	239,519	289,980	326,910	345,510	393,880	366,830	351,520	287,520	265,668	244,812
Fixed Route:	**63,608,400**	**66,484,800**	**69,367,200**	**69,591,600**	**71,284,800**	**75,014,400**	**74,947,200**	**75,870,000**	**77,582,400**	**79,437,580**	**77,769,119**	**78,286,380**	**80,042,810**	**78,205,110**	**75,779,560**	**77,260,430**	**77,179,120**	**76,493,520**	**75,005,268**	**74,724,012**
LIFT/Cab	735,792	781,956	845,496	918,948	958,248	1,026,156	1,050,144	1,084,056	1,122,036	1,088,446	1,072,704	1,063,942	1,062,874	1,037,700	1,036,824	1,042,272	1,064,568	1,017,648	1,009,080	962,220
Total System:	64,344,192	67,266,756	70,212,696	70,510,548	72,243,048	76,040,556	75,997,344	76,954,056	78,704,436	80,526,026	78,841,823	79,350,322	81,105,684	79,242,810	76,816,384	78,302,702	78,243,688	77,511,168	76,014,348	75,686,232
Boarding Rides																				
Bus	60,072,000	62,667,600	63,208,800	62,743,200	63,640,800	63,906,000	63,129,600	62,882,400	63,880,800	66,153,600	60,640,800	58,431,700	59,626,800	59,768,310	60,034,200	62,488,800	60,002,000	57,820,520	56,737,466	56,492,524
MAX	21,165,600	22,279,200	25,424,400	26,120,400	27,430,800	31,920,000	32,606,400	34,035,600	35,217,600	35,188,800	38,390,400	41,200,160	42,193,180	39,036,500	38,228,800	37,746,000	40,019,560	39,699,760	38,906,694	38,817,600
WES (1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	124,346	305,844	370,800	418,090	442,120	512,270	476,976	457,210	448,530	414,432	377,700
Fixed Route:	**81,237,600**	**84,946,800**	**88,633,200**	**88,863,600**	**91,071,600**	**95,826,000**	**95,736,000**	**96,918,000**	**99,098,400**	**101,466,746**	**99,337,044**	**100,002,660**	**102,238,070**	**99,246,930**	**98,775,270**	**100,711,776**	**100,478,770**	**97,968,810**	**96,058,592**	**95,687,824**
LIFT/Cab	735,792	781,956	845,496	918,948	958,248	1,026,156	1,050,144	1,084,056	1,122,036	1,088,446	1,072,704	1,063,942	1,062,874	1,037,700	1,036,824	1,042,272	1,064,562	1,017,647	1,009,080	962,220
Total System:	81,973,392	85,728,756	89,478,696	89,782,548	92,029,848	96,852,156	96,786,144	98,002,056	100,220,436	102,555,192	100,409,748	101,066,602	103,300,944	100,284,630	99,812,094	101,754,048	101,543,332	98,986,457	97,067,672	96,650,044

1e

Table 4 – Intersection Capacity Analysis Summary

	Morning Peak Hour		Evening Peak Hour	
	LOS	Delay (s)	LOS	Delay (s)
SE 32nd Avenue at SE Johnson Creek Blvd/SE Tacoma St				
2018 Existing Conditions	C	26	C	20
2022 Background Conditions	C	30	C	24
2022 Background Plus Site Conditions (300 Units)	C	32	C	25
2022 Background Plus Site Conditions (500 Units)	C	34	C	27
2038 Background Conditions	F	>120	F	86
2038 Background Plus Site Conditions (300 Units)	F	>120	F	92
2038 Background Plus Site Conditions (500 Units)	F	>120	F	96

Oct 8, 2018
Prelim Master Plan
Lancaster Engr.

U.S.
MAY 20, 2020 / 8:00 AM / 2 DAYS AGO

Empty trains, clogged roads: Americans get behind the wheel to avoid transit

Tina Bellon
5 MIN READ

NEW YORK (Reuters) - As Americans plan for life after pandemic lockdowns, many want to avoid public transport and use a car instead, straining already underfunded transit systems and risking an increase in road congestion and pollution.

Several opinion polls show Americans plan to avoid trains and buses as stay-at-home orders ease, with some city dwellers buying a car for the first time. A potential boon to coronavirus-battered automakers, the shift poses a challenge to city planners end environmental goals.

Similar dynamics have played out in China, where transit ridership in large cities remains down about 35% two months after lockdown restrictions were lifted while car purchases increase.

Ford Motor Co Chief Operating Officer Jim Farley said the company has seen an uptick in Chinese demand for higher-priced utility vehicles fueled by upscale office workers who used to take public transport.

Volkswagen AG VWG_p.DE has also seen its sales in China rise above prior-year levels in the final week of April, driven by the desire to avoid public transport, according to Juergen Stackmann, in charge of VW's passenger car sales and marketing.

Sales of passenger cars jumped 12.3% between April 20 and 25, according to China's Passenger Car Association

Transit ridership has plummeted by as much as 95% in large U.S. cities during the pandemic and America's leading transit agencies forecast massive budget drops and revenue deficits well into 2022.

They call for $33 billion in federal support in addition to the $25 billion they were granted as part of a March U.S. coronavirus stimulus bill.

Transit agencies argue they are essential to a comprehensive economic recovery that avoids gridlock, but surveys show Americans plan to reduce their use of shared transportation.

In an April Ipsos poll among U.S. transit riders, 72% said they would either reduce their use of public transportation or wait until it was safe again. That compared with 68% of U.S. consumers who said they will use their car as much or more than before the pandemic.

From: Carol Moyer
To: Vera Kolias
Subject: Building 32 nd & Olson Milw.
Date: Friday, May 29, 2020 11:33:54

This Message originated outside your organization.

This proposed building would not fit in with the single family dwellings that keep Milwaukie a neighborhood. Portland is creeping into our neighborhoods at an alarming pace bringing crime and traffic where our children walk to school. Please do not allow this to change.

Thank you for listening,

C. M.
Milwaukie resident for 63 yrs.

Sent from my iPhone

From: Pat Carlman
To: Vera Kolias
Subject: VR-2019-013
Date: Friday, May 29, 2020 16:44:13

This Message originated outside your organization.

Just a quick note in opposition to the variance requested. I'm not opposed to the 48' height. I am opposed to the number of units plus commercial space, with fewer parking spots than units, and the entry so close to 32nd. Milwaukie and Portland might want everyone to convert to bikes and buses but that won't happen soon. Parking will overflow to being in front of homes.

Regards,
Pat Carlman
3038 SE Boyd St
Milwaukie

From: Vera Kolias
To: "Keira MacMillan"
Subject: RE: 32nd and Olsen St.
Date: Tuesday, June 2, 2020 12:05:00

Hello Keira,

Thank you for your comment – it will be added to the record.

-Vera

VERA KOLIAS, AICP
Associate Planner
she • her • hers
503.786.7653
City of Milwaukie
6101 SE Johnson Creek Blvd • Milwaukie, OR 97206

From: Keira MacMillan <keiranye@gmail.com>
Sent: Tuesday, June 2, 2020 11:32 AM
To: Milwaukie Comprehensive Plan <plan@milwaukieoregon.gov>
Subject: 32nd and Olsen St.

I am opposed to the proposed 4 story building on 32nd and Olsen.

Thank you, Keira MacMillan

From: Pamela Boyd
To: Milwaukie Planning
Subject: 9391 se 32 Ave.
Date: Sunday, June 7, 2020 12:07:49

This Message originated outside your organization.

Hello Planning commission of Milwaukie. I live at 9272 Se 32 Ave and as person who will be affected by this new building, I would like to take a moment to strongly oppose the addition to the height restriction. The 45ft maximum hight should be enforced! If one developer can easily not have to follow restrictions it will open the doors for even more to follow. Nothing on 32ave Is that hight and I would hate to have a 48ft wall put up blocking all sun, increasing traffic and noise. I love my neighbors and neighborhood. Please help preserve the charm and character of my neighborhood and streets. Thank you for listening, Pamela Boyd

From: motosterling
To: Milwaukie Planning
Subject: 9391 se 32nd Avenue proposal
Date: Monday, June 8, 2020 8:25:30

This Message originated outside your organization.

To whom it may concern,
It's not right that our neighborhood has to put up with extra traffic, less parking, and a huge eyesore to our skyline. Simply because this company is greedy for profit.
Why must we be burdened with these things, when they could just make a smaller building.
Best regards
Sterling Leiv

From: LEIV Connie
To: Milwaukie Planning
Subject: 9391 se 32nd Avenue- land use proposal
Date: Monday, June 8, 2020 8:28:58

This Message originated outside your organization.

Dear Milwaukie Planning commission,
I do not agree with the variance requests for the building proposal for the above address. The businesses located on that same corner and the residents on Olsen street are already using the very limited amount of street parking. Because there is a limited TRIMET transit schedule on 32nd street for bus #75 (buses run every 15min or longer, no late evening service, weekend service is stopped to Milwaukie/Ardenwald after 7pm, there is **over a mile walk** to a max train). Parking will be needed for each of the housing units and retail. In addition - This community area has no sidewalks on the side street (Olsen), which means limited safety for pedestrians especially if several cars are parked on the street/curb (**many of those pedestrians are children since this is in close proximity to a school**). Where are the retail customers going to park? If there are 16 regular spaces and 1 ADA for 3 retail spaces and 21 living spaces, there should be a minimum of 24 spaces!
This variance in parking spaces will create a hardship on local neighbors parking and a safety hazard for pedestrians. ***PLEASE DO NOT APPROVE THE VARIANCE****. They should make a smaller building to accommodate the parking spaces needed.*
Proposed variance to code for maximum building height for the NMU Zone.
No surrounding buildings have reached or exceeded the maximum building height code, this building could take away from the beauty of our small town and community. It would certainly change our home values and could become a hardship on our community if this became the standard. Milwaukie/Ardenwald is a suburb –we are NOT the big city, we like our family, small town and we do not want to have cramped spaces with buildings that are too tall taking over. We would prefer a small gathering hub that doesn't pollute and crowd our community built on this land parcel.

Thank you,
Connie Leiv

From: Glennda Cox
To: Milwaukie Planning
Subject: 4story building on 32nd
Date: Monday, June 8, 2020 18:24:58

This Message originated outside your organization.

We are not pleased with this proposal. It will not fit in this neighborhood. It would be an eye sore. Jerry & Glennda Cox on Olsen st.

Sent from Yahoo Mail on Android