



# MEMORANDUM

DATE: June 5, 2020

TO: Josh Wells | Westech Engineering, Inc.

FROM: Lacy Brown, Ph.D., P.E. | DKS Associates  
Jenna Bogert, EI | DKS Associates



SUBJECT: 1575 Burns Street Trip Generation and TIA Determination

This memorandum provides a site plan review and trip generation analysis to determine the need for a traffic impact analysis. The following sections describe the average daily, AM peak hour and PM peak hour trip generation for the proposed office development in West Linn, Oregon. The proposed development is located at 1575 Burns Street and will consist of a 7,000-square-foot office building.

## TRIP GENERATION

The expected trip generation of the proposed office building was estimated using the ITE Trip Generation Manual, 10th Edition.<sup>1</sup> The trip generation estimates are summarized in Table 1.

Table 1: Trip Generation

Land Use [ITE Code]	Trip Generation Rate <sup>a</sup>		Units <sup>b</sup>	AM Peak Hour			PM Peak Hour			Daily Trips
	AM Peak	PM Peak		In	Out	Total	In	Out	Total	
Medical-Dental Office [720]	3 trips/KSF	3.71 trips/KSF	7.0 KSF	16	5	21	7	19	26	180

<sup>a</sup>Trip Generation Rate calculated using fitted curve equation.  
<sup>b</sup>KSF = 1,000 Square Feet

As shown, the development is expected to generate 180 daily trips, 21 AM peak hour trips, and 26 PM peak hour trips. Based on section 5.0014 of the City of West Linn Community Development Code, the proposed development will not require a full transportation impact analysis since it generates less than 250 vehicle trips per weekday.

<sup>1</sup> Trip Generation, 10th Edition, Institute of Transportation Engineers, 2017.

## SITE PLAN REVIEW

The most recent site plan was provided by Westech Engineering, Inc. and is attached in the appendix. Based on the site plan, the proposed development will have two parking lots, one with vehicle access to Hood Street and the other with vehicle access to Burns Street via full access driveways.

Sight distance and site access spacing requirements were evaluated for the two driveways and are discussed below. Both Hood Street and Burns Street are classified as local streets in the City TSP and have a posted speed limit of 25 miles per hour fronting the project site near the proposed driveway locations.

### Sight Distance

A preliminary sight distance evaluation was conducted at the proposed accesses on Hood Street and Burns Street. Based on AASHTO standards for 25 miles per hour speeds, 280 feet of intersection sight distance would be required in both directions.<sup>2</sup> A preliminary sight distance review indicated that the available sight distance is adequate for vehicles traveling 25 miles per hour or less. Prior to occupancy, sight distance will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon.

### Access Spacing

Based on the City of West Linn access spacing standards, driveways on local streets should be spaced at least 35 feet from intersecting streets.<sup>3</sup> The proposed development plans to provide access onto Hood Street with a driveway placed approximately 65 feet north of Burns Street. The site driveway on Burns Street is located approximately 35 feet from the nearest intersection (Burns Street/Cascade Street), meeting the City's access spacing requirements.

### Parking

Based on the City of West Linn parking requirements, medical-dental office buildings are required to provide one parking space per 250 square feet of building area.<sup>4</sup> For a 7,000 square foot building, the minimum number of parking spaces required is 28, with a minimum of two ADA accessible spaces. The City code also states that development sites within one-quarter mile of a transit corridor may reduce parking by up to 10%. If Willamette Drive is considered a transit corridor, the parking requirement would be 25 spaces.

The proposed site plan shows 26 off-street parking spaces including two ADA accessible spaces, which meets City parking requirements (assuming a reduction for transit corridor proximity). Additionally, on-street parking is available along Hood Street and Burns Street (west of Hood Street) which may provide the opportunity for overflow parking supply.

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<sup>2</sup> *A Policy on Geometric Design of Highways and Streets, 6th Edition*, Table 9-6, AASHTO, 2011.

<sup>3</sup> *City of West Linn Public Works Design Standards*, Section 5 – Street Requirements.

<sup>4</sup> *City of West Linn Community Development Code*, Section 46.090.C and 46.150.B.

## SUMMARY

Key findings for the proposed office development in West Linn, Oregon are as follows:

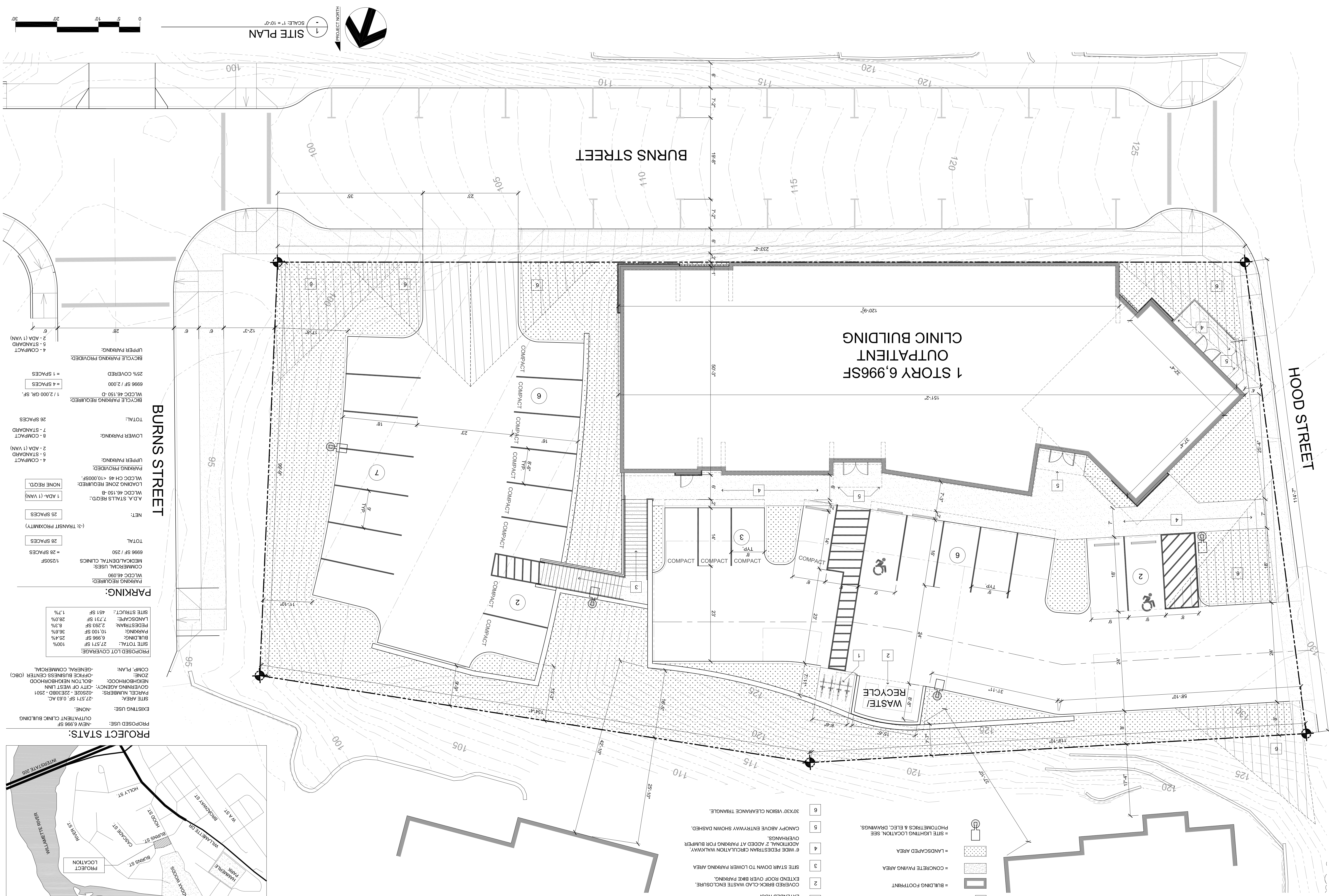
- The 7,000 square feet of office space would generate 180 daily trips, 21 AM peak hour trips, and 26 PM peak hour trips. Based on the City of West Linn Community Development Code, the proposed development will not require a full transportation impact study since it generates less than 250 vehicle trips per weekday.
- The preliminary site plan meets the City's requirements for access spacing.
- The preliminary site plan meets the City's requirements for a 7,000 square foot office building in close proximity to a transit corridor.

Please let us know if you have any questions.

**APPENDIX A – SITE PLAN**



HOOD STREET



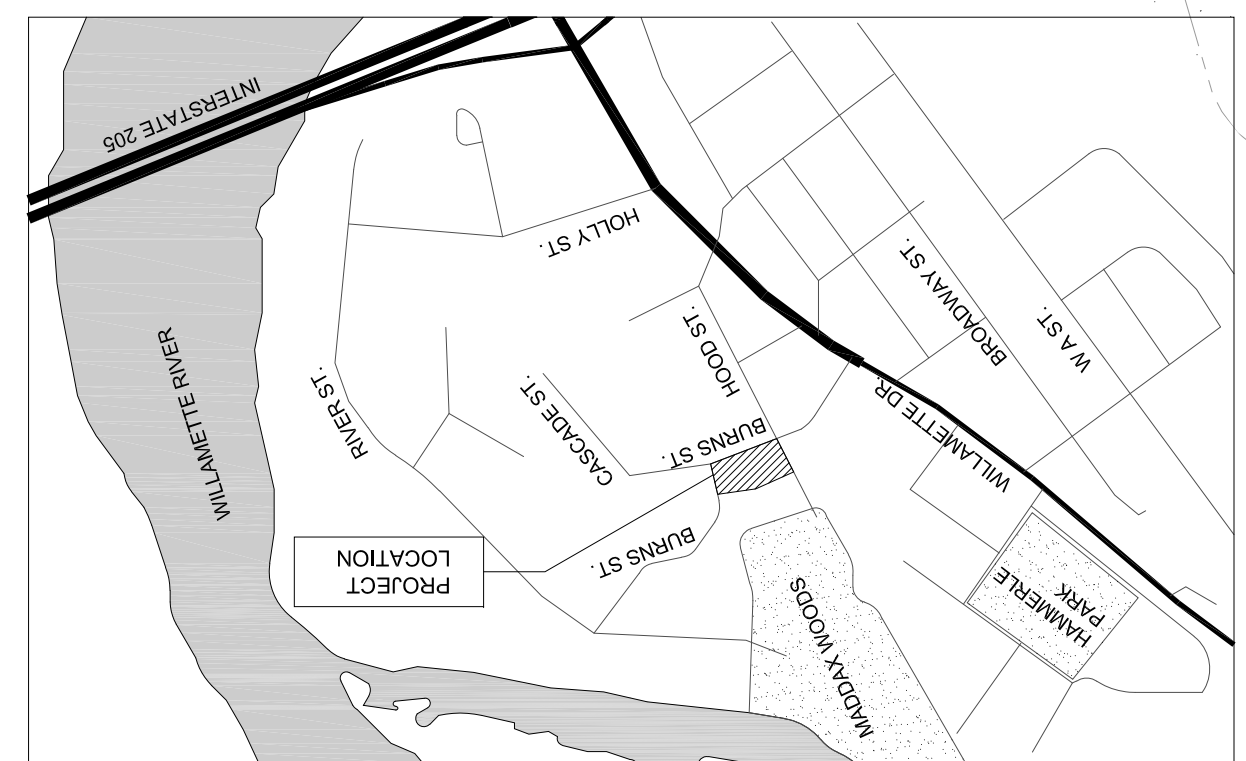
**SITE PLAN LEGEND**

- # = KEYNOTE TAG
- [Building Footprint] = BUILDING FOOTPRINT
- [Concrete Paving Area] = CONCRETE PAVING AREA
- [Landscape Area] = LANDSCAPED AREA
- [Lighting Symbol] = SITE LIGHTING LOCATION. SEE PHOTOMETRICS & ELEC. DRAWINGS.
- [Canopy Symbol] = CANOPY ABOVE ENTRYWAY SHOWN DASHED.
- [30'x30' Vision Triangle] = 30'x30' VISION CLEARANCE TRIANGLE.

**SITE PLAN KEYNOTES**

- 1 NEW BIKE RACK FOR 4 BIKES, 2 SPACES UNDER EXTENDED ROOF
- 2 COVERED BRICK-CLAD WASTE BIKING.
- 3 SITE STAIR DOWN TO LOWER PARKING AREA
- 4 6' WIDE PEDESTRIAN CIRCULATION WALKWAY. ADDITIONAL Z ADDED AT PARKING FOR BUMPER OVERHANGS.
- 5 SITE LIGHTING LOCATION. SEE PHOTOMETRICS & ELEC. DRAWINGS.
- 6 30'x30' VISION CLEARANCE TRIANGLE.

**VICINITY MAP N.T.S.**



**PROJECT STATS:**

PROPOSED USE: OUTPATIENT CLINIC BUILDING  
 NEW 6,996 SF  
 EXISTING USE: NONE  
 SITE AREA: -27,571 SF, 0.63 AC.  
 PARCEL NUMBER: 42002C - 222380D - 2501  
 COVERING AGENCY: CITY OF WEST LINN  
 NEIGHBORHOOD: BOLTON NEIGHBORHOOD  
 ZONE: OFFICE BUSINESS CENTER (OBC)  
 COMP. PLAN: GENERAL COMMERCIAL

**PROPOSED LOT COVERAGE:**

SITE TOTAL:	27,571 SF	100%
BUILDING:	6,996 SF	25.4%
PARKING:	10,100 SF	36.6%
PEDESTRIAN:	2,293 SF	8.3%
LANDSCAPE:	7,731 SF	28.0%
SITE STRUCT.:	451 SF	1.7%

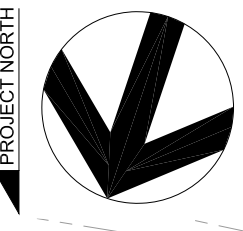
**PARKING:**

COMMERICAL USES:  
 WLCDC 46,090  
 MEDICAL/DENTAL CLINICS  
 1/250SF  
 TOTAL  
 28 SPACES  
 (-3: TRANSIT PROXIMITY)  
 25 SPACES  
 NET:  
 WLCDC 46,150 -B  
 LOADING ZONE REQUIRED:  
 WLCDC CH 46 <10,000SF.  
 PARKING PROVIDED:  
 4- COMPACT  
 2- ADA (1 VAN)  
 5- STANDARD  
 7- STANDARD  
 9- COMPACT  
 LOWER PARKING:  
 TOTAL:  
 WLCDC 46,150 -D  
 1 / 2,000 GR. SF.  
 BICYCLE PARKING REQUIRED:  
 4 SPACES  
 25% COVERED  
 = 1 SPACES  
 BICYCLE PARKING PROVIDED:  
 4- COMPACT  
 2- ADA (1 VAN)  
 5- STANDARD

**BURNS STREET**

UPPER PARKING:  
 4- COMPACT  
 2- ADA (1 VAN)  
 5- STANDARD  
 LOWER PARKING:  
 9- COMPACT  
 7- STANDARD  
 2- ADA (1 VAN)  
 5- STANDARD  
 4- COMPACT  
 TOTAL:  
 28 SPACES

**SITE PLAN**  
 SCALE: 1" = 10'-0"



**SHEET**  
 A1.1

DATE: 2/14/2020  
 REVISED DATE:

**SITE PLAN**

**NEW BUILDING FOR ADVANCE DENTAL ARTS CENTER**  
 1575 BURNS ST. WEST LINN, OR 97068

**EMMETT PHAIR ARCHITECTURE, INC.**  
 6305 SW ROSEWOOD ST. SUITE E,  
 LAKE OSWEGO, OR 97035  
 phone: 503-572-8606

**Ienity architecture, inc.**  
 3150 KENNA COURT SE, SUITE 500  
 WASHINGTON, OR 97146  
 phone: 503-399-1990

**PRELIMINARY NOT FOR CONSTRUCTION**