storhäug
civil engineering | planning
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March 16, 2021

Mike Nilsson, PE
City of Spokane Department of Engineering Services
808 W Spokane Falls Boulevard
Spokane, WA 99201

RE: Trip Generation and Distribution Letter
        Corbin Cottages, B19M0053PDEV
        Storhaug Engineering Project #19-087

Dear Mike,

It is the intent of this narrative to discuss the Corbin Cottages project, B19M0053PDEV, 600 W Cora Ave, Spokane, WA 99205, to summarize the trips generated by the completed project. The project is situated on the north side of W Cora Ave, approximately 2,000 feet west of N Division St. A road will be constructed that will provide access to the proposed residential lots called N Howard Ct, but W Cora Ave will provide primary access to this development. The project site is 1.89-acres in size. There is also an existing church and parking lots, which will not be affected by the proposed project. The current zoning of the site is RSF. ❌ Please see the attached drawings for site plan and vicinity map. The project is anticipated to be built in 1 phase, and construction will start in Summer of 2022.

Note: New address of 1.89 acre preliminary long plat is 516 W. Cora Ave. MDO 06/28/2021

Trip Generation characteristics for the Corbin Cottages project, B19M0053PDEV, 600 W Cora Ave, Spokane, WA 99205, are calculated from trip generation studies compiled by the Institute of Transportation Engineers, "Trip Generation", 10th Edition, 2017. The project proposes 13 single-family homes. Based on the total number of units for the proposed project, Trip Generation characteristics of the project are projected as follows:

The trip generation characteristics of the commercial project conforms to ITE Land Use category 210, Single-Family Housing. The weekday trips were calculated as follows:

LEGEND
T: Number of Trips
X: Number of Dwelling Units

ITE 210 Single-Family Housing Weekday Trip Generation Fitted Curve Equation:
$Ln(T) = 0.92Ln(X) + 2.71$
Calculation: $Ln(T) = 0.92Ln(13) + 2.71$

$Ln(T) = 5.07$

$e^{Ln(T)} = e^{5.07}$

$T = 159.14$ rounded to **160 ADT**

ITE 210 Single-Family Housing A.M. Peak Hour of Adjacent Street Traffic Trip Generation
Equation: $T = 0.71(X) + 4.80$
Calculation: $T = 0.71(13) + 4.80$

$T = 14.03$ rounded to **14 A.M. Peak Hour Trips**
Allocation: 25% entering, 75% exiting: 4 trips enter, 10 trips exit

ITE 210 Single-Family Housing P.M. Peak Hour of Adjacent Street Traffic Trip Generation
Equation: $Ln(T) = 0.96Ln(X) + 0.20$
Calculation: $Ln(T) = 0.96Ln(13) + 0.20$

$Ln(T) = 2.66$

$e^{Ln(T)} = e^{2.66}$

$T = 14.33$ rounded to **15 P.M. Peak Hour Trips**
Allocation: 63% entering, 37% exiting: 9 trips enter, 6 trips exit

Trip Generation summary for overall proposed project:
ADT Total: 160
A.M. Peak Total: 14, 4 enter, 10 exit
P.M. Peak Total: 15, 9 enter, 6 exit

It is anticipated that 70% of the traffic will travel to and from the east, utilizing N Division St, and 25% of the traffic will travel to and from the west, utilizing N Post St. The remaining 5% of the traffic will travel to and from the south, utilizing N Howard St.

Written by: Liam J. Taylor

Reviewed by: Jerry Storhaug, PE