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Ms. Ana Chesterfield, Engineering Services Manager
City of Mount Vernon
Community and Economic Development Department
P.O. Box 809
Mount Vernon, WA 98273

SUBJECT: SKAGIT VALLEY FAMILY YMCA, HOAG ROAD TRANSPORTATION CONCURRENCY REVIEW (PL16-074)

Dear Ms. Chesterfield:

The following review comments are provided based on the traffic concurrency analysis for the Skagit Valley Family YMCA facility at 1901 Hoag Road in Mount Vernon, WA.

Project Description

The proposed project, consisting of parcel P116052, is located at 1901 Hoag Road. The currently undeveloped site is described as 5.29 acres and is zone P, Public.

The property is bordered by Hoag Road to the south. Salem Lutheran Church borders the site to the east. To the north, the project abuts Salem Village, a senior adult housing complex consisting of 41 townhomes. To the west of the site is undeveloped property zoned R-A, Residential Agricultural. A vicinity map is shown in Figure 1.

The development will function as a YMCA, replacing the existing YMCA which is located at the corner of E Fulton Street and N 6th Street (215 E Fulton Street). On-site structures will include a 45,000 square-foot YMCA and a 4,700 SF child care center with capacity for 60 children. A preliminary site plan is shown in Figure 2.

Access to this development will be provided via two new driveway cuts on Hoag Road and two internal connections to the Salem Lutheran Church site to the east of the project.

The street network in the project vicinity includes Hoag Road, an east-west two-lane minor arterial. In the project vicinity, Hoag Road is a two-lane section with a posted speed of 25 mph. It includes curb, gutter, sidewalk, and on-street parking on both sides at the project frontage.

To the east of the project site, the street network includes North Laventure Road, a north-south arterial which is classified a principal arterial south of Hoag Road and an urban collector to the north of Hoag Road. North Laventure Road is a three-lane section with curb, gutter, and sidewalk. Posted speed limit is 25 mph.

Figure 1. Vicinity Map



Trip Generation and Trip Distribution

Project trip generation rates were developed using trip generation data collected by the applicant at the existing YMCA facility and day care center to supplement trip generation rates identified in the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (9th Edition). The nature of the proposed land uses are consistent with the *Trip Generation Manual* land use types “recreational community center” (code #495) and day care center (code #565). Project trip rates were expressed in terms of proposed employment as identified by the applicant.

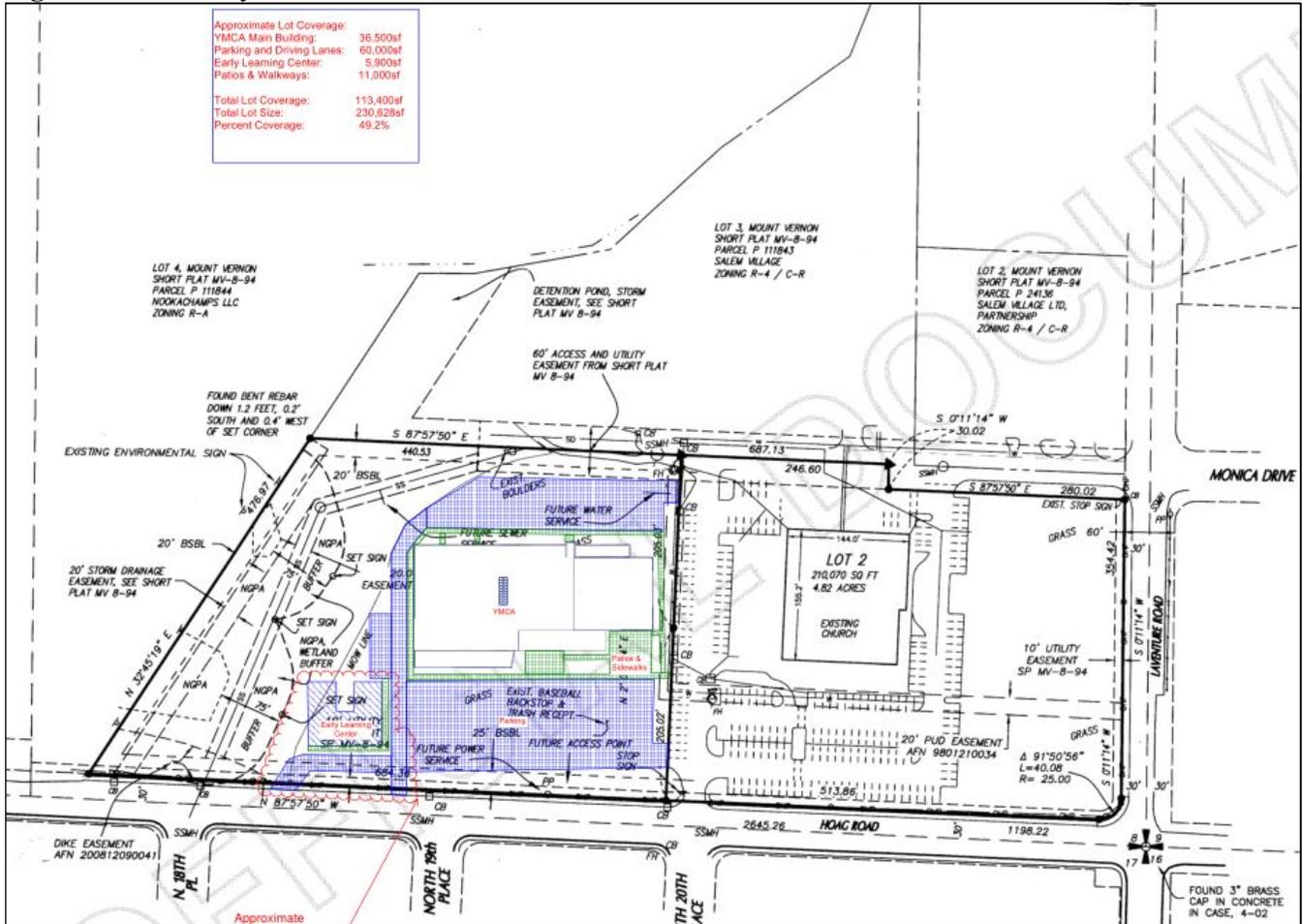
A pass-by rate of 25 percent was applied to the community center and day care center uses. This rate is based on pass-by rates for similar land uses developed by the City of Olympia, Washington.

Table 1 summarizes the results of the project trip generation calculations, which indicate that the Skagit Valley Family YMCA will generate a net total of 63 new vehicle trips during the PM peak hour.

Table 1. Skagit Valley Family YMCA PM Peak Hour Trip Generation

| Description | ITE LUC | Quantity | Trip Rate | Gross Trips | Pass-By % | % In | % Out | Primary Trips | | |
|---------------------------------------------|---------|----------|------------------|-------------|-----------|------|-------|---------------|-----------|-----------|
| | | | | | | | | In | Out | Total |
| Recreational Community Center | 495 | 17 empl | 2.44 trips/ empl | 41 | 25 | 27 | 73 | 8 | 23 | 31 |
| Day Care Center | 565 | 9 empl | 4.73 trips/ empl | 43 | 25 | 47 | 53 | 15 | 17 | 32 |
| Project-Generated PM Peak Hour Trips | | | | | | | | 23 | 40 | 63 |

Figure 2. Preliminary Site Plan



The development location, site accesses, and forecasted trip generation were used to update the Mount Vernon citywide transportation planning model. The site will include two connections to the Salem Lutheran Church site to the east, however, Project-generated trips were conservatively assumed to use only the site accesses onto Hoag Road for the purposes of concurrency analysis.

The concurrency model was used to generate the trip distribution and assignment shown in Figure 3. The majority of the project-generated trips will travel to and from the site via Hoag Road to the west of the site. Seventeen trips will access the site via Hoag Road by way of North Laventure Road to the east of the site. No other street segment will experience more than ten project-generated PM peak hour trips.

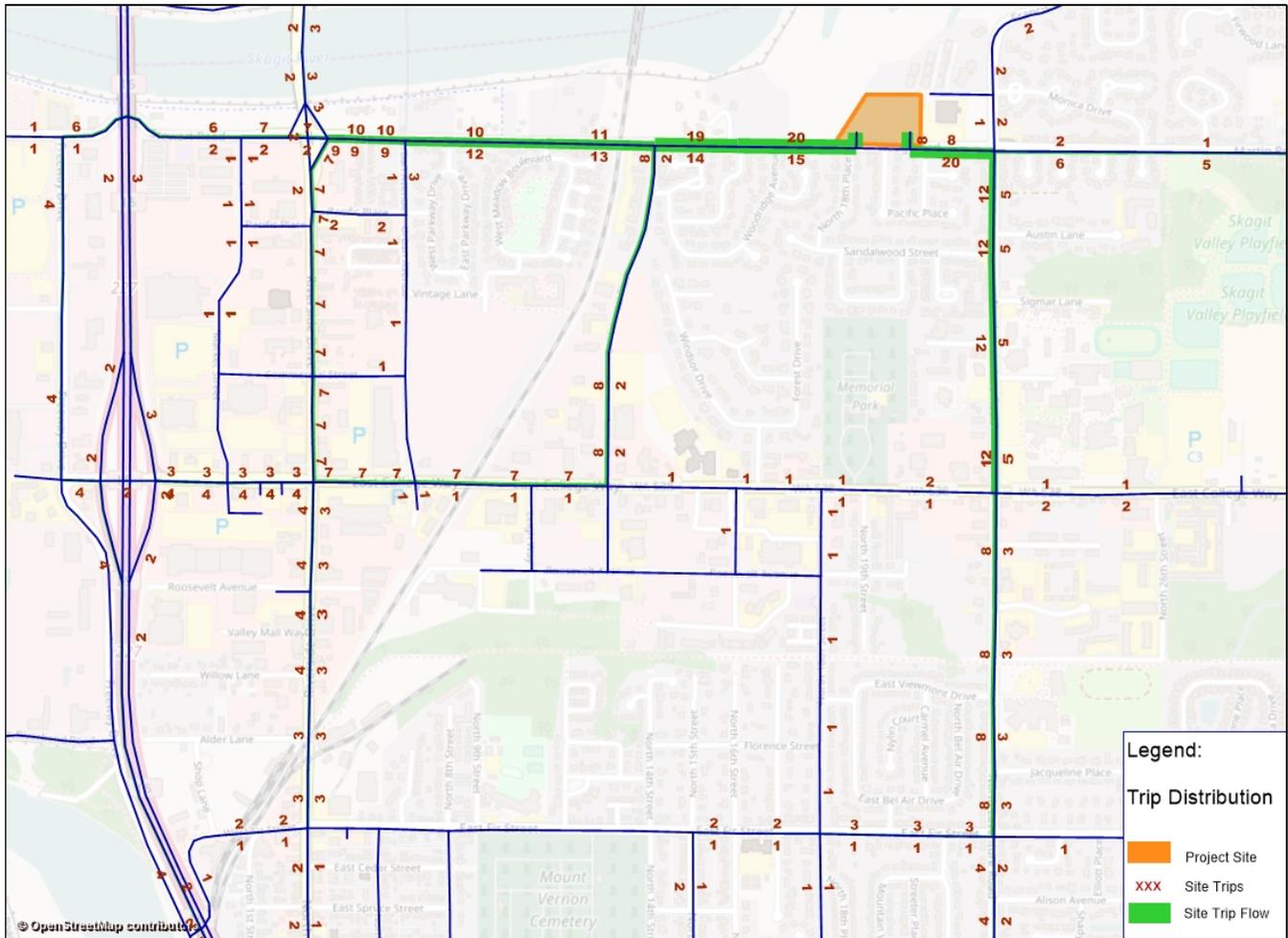
Concurrency Requirements Review

The review is based on the following Level of Service (LOS) standards and concurrency requirements, per Mount Vernon Municipal Code (MVMC):

- Level of service standards stated in MVMC 14.10.080
- Modified level of service standards per MVMC 14.10.060
- Concurrency requirements of “Category C: Thirty to 75 Peak Hour Trips” stated in MVMC 14.10.090

Compliance with LOS standards will be based on the following criteria in the categories indicated.

Figure 3. Skagit Valley Family YMCA PM Peak Hour Vehicle Trip Distribution



A. Pedestrian Safety LOS: Sidewalks are already in place on the north side of Hoag Road at the project frontage. New driveway cuts and curb ramps at the site accesses must comply with current Americans with Disabilities Act (ADA) standards for pedestrian facilities in public rights-of-way.

B. Traffic Capacity LOS: Intersections and segments affected by project-generated trips have been evaluated for traffic capacity LOS.

A total of 63 net new project-generated trips are added to the network. As shown in Figure 3, most project-generated trips access the site via Hoag Road to the west and North Laventure Road to the east of the site.

Project-generated trips will impact one street segment with an existing LOS deficiency. Division Street at the Skagit River crossing will operate with LOS E with 2 project-generated trips. However, this segment is exempt from citywide LOS standards per MVMC 14.10.060. (See Table 2.)

Table 2. Project-Affected Segments with LOS Deficiencies

| ID | Segment | Functional Classification | Site Trips | V/C | LOS | Proposed Mitigation |
|------|--------------------------------------|---------------------------|------------|------|-----|-------------------------------|
| 2001 | Division Street (Freeway to Ball St) | Principal Arterial | 2 | 0.99 | E | LOS exempt per MVMC 14.10.060 |

Intersection LOS analysis indicates that the nearby stop-controlled intersection of Hoag Road and North Laventure Road will operate with satisfactory level of service (LOS C) with the addition of 28 project-generated trips. The intersection will, however, fall below minimum LOS by 2036. The Mount Vernon 2016-2021 Transportation Improvement Program (#T-06-05) identifies a capacity improvement (signal or roundabout) project at this intersection which will mitigate the forecasted LOS deficiency. Transportation impact fees can be used for this project.

Two project-generated trips will affect the intersection of S 1st Street/Freeway Drive and W Division Street which currently operates with substandard LOS F. The Mount Vernon 2016-2021 Transportation Improvement Program (TIP) includes a capacity improvement project at this intersection. The estimated cost of this improvement project is included in the City’s impact fee rate calculation.

The nearby intersection of Hoag Road and North Laventure Road will operate adequately at LOS C with an average 19.9 seconds of control delay.

The east and west site accesses to Hoag Road are forecasted to operate at LOS C and B, respectively, at project opening. This forecast conservatively assumes that all motorized trips to and from the site will use the driveway access located at the project site and that none will use adjacent Salem Lutheran Church site to access the YMCA site.

Table 3. Project-Affected Intersections with LOS Deficiencies

| Intersection | Control Type | Delay (s/veh) | LOS | Site Trips | TIP No. | Proposed Mitigation |
|--------------------------|--------------|---------------|-----|------------|---------|-----------------------------------------------------|
| Division St / Freeway Dr | Signal | 204 | F | 2 | T-09-01 | Re-alignment & LT treatment (Comp Plan Project #16) |

C. Street Design Standard LOS: Three-quarter street improvements are already in place on Hoag Road at the project frontage. The final site plan must maintain minimum stopping sight distance of 400 feet per MVMC 16.16.070 and minimum intersection sight distance requirement of 335 feet per American Association of State Highway and Transportation Officials minimum requirements (or as determined by an engineering analysis) at the site accesses to Hoag Road.

D. On-Site LOS: Access to the development will be provided via two new driveways on Hoag Road and internal connections to Salem Lutheran Church to the east. All on-site transportation facilities must satisfy City design standards and current ADA standards. The applicant will provide safe and adequate parking and loading facilities per MVMC 17.84.

E. Transit LOS: Skagit Transit Route 207 includes a stop at the project frontage. This route travels eastbound from the project site and stops at the Skagit Valley College transfer point to the southeast. Route 207 operates weekdays on 45-minute headway from 6:40 AM to 8:10 PM. Weekend service is provided from 8:10 AM to 5:10 PM on 45-minute headway.

F. Nonmotorized Transportation LOS: A planned intersection improvement project at Hoag Road & North Laventure Road to the east of the project site will improve nonmotorized access to Skagit Valley College and the Kulshan Trail to the south of the site. Transportation impact fees can be used for this project.

Hoag Road is a designated planned bicycle route in the 2016 Comprehensive Plan. Mount Vernon arterial street design standards do not require striped bike lane or separated bike path for 2-lane minor arterial streets, therefore nonmotorized transportation LOS is satisfied.

G. Pavement Condition LOS: The existing pavement on E College Way is in fair condition. The pavement condition should be maintained during project construction.

Findings and Recommendations

The project will generate an estimated 63 net new PM peak hour trips, which will not result in any new street segment or intersection LOS deficiencies.

Project-generated trips will affect the intersection Division Street / Freeway Drive which currently operates below minimum LOS standards. The Mount Vernon 2016-2021 TIP and impact fee rate calculation includes capacity improvements at this intersection. The applicant's impact fee may be used to fund the project. Site access intersections will operate well with LOS C or better at year of opening.

Site accesses and on-site improvements must be constructed to satisfy local street and ADA standards.

The development must maintain City arterial street standards (including minimum stopping sight distance of 400 feet at the site access) per MVMC 16.16.070 and include safe and adequate parking facilities per MVMC 17.84.

Impact fees are generally adjusted by the City each year to account for inflation. The impact fee for commercial and industrial land uses is equal to \$1,974 per PM peak hour vehicle trip per the City's latest adopted impact fee (effective February 4, 2014). Impact fees for the proposed project are calculated as follows:

$$(\$1,974 \text{ per trip}) \times (63 \text{ trips}) = \$124,362 \text{ impact fee}$$

Recommended conditions of approval for this project are:

- Skagit Valley Family YMCA transportation impact fee is \$124,362.
- Site accesses and on-site transportation facilities must satisfy local street and ADA standards.
- Site accesses will maintain minimum stopping sight distance of 400 feet per MVMC 16.16.070 and minimum intersection sight distance of 335 feet per American Association of State Highway and Transportation Officials requirements, or as determined by an engineering analysis.
- Safe and adequate parking facilities will be provided per MVMC 17.84.

Sincerely,

Transportation Solutions, Inc.



Andrew L. Bratlien, PE
Senior Transportation Engineer