

ATTACHMENT 1



March 5, 2004

MEMORANDUM

TO: Pam Johnson, Planner
Community-Based Planning Division

VIA: Daniel K. Hardy, Supervisor *DKH*
Transportation Planning

FROM: Ed Axler, Planner/Coordinator *EA*
Transportation Planning

SUBJECT: Mandatory Referral No. 04301-MCPS-1
South Lake Elementary School
Montgomery Village/Airpark Policy Area

This memorandum is Transportation Planning staff's adequate public facilities (APF) review of the subject mandatory referral case to modify the existing elementary school to build additional permanent classrooms and other facilities that would result in an increase of six to twelve teaching stations, for Phases 1 and 2, respectively.

FINDINGS

Transportation Planning staff makes the following transportation-related comments for this mandatory referral case:

1. A sidewalk should be provided to connect the existing sidewalks along Contour Road to the sidewalk next to the school building on the outside of the bus loop in the northwest corner of the site.
2. Provide a traffic study to identify any needed transportation improvements if the enrollment exceeds 650 students.

DISCUSSION

Site Location

The existing public school is located on the northeastern side of Contour Road (i.e., connecting Lost Knife Road and Odendhal Road).

Vehicular Accesses, Circulation, and Parking

1. Site Vehicular Accesses: The South Lake Elementary School has two existing access points from Contour Road – one on the northwest side for the bus loop and the driveway to the rear parking area and another on the southeast side for the bus loop.
2. Existing Bus Loop Operation: At any one time, up to eight buses drop off and pick up students in front of the school.
3. Existing Capacity of Rear Parking Area: The capacity of the existing rear parking area is inadequate to accommodate the current vehicles arriving around noontime. The manager of the Safeway Store on the opposite side of Contour Road has agreed to permit overflow parking at the rear of the Safeway Store. As an interim measure while the rear parking area is under construction, MCPS and the Off-Price Shopping Center are negotiating for use of 75 off-site parking spaces.
4. Circulation for the Rear Parking Area: The site access point from Contour Road in the northwest corner of the site connects to a driveway that leads to the rear parking area. According to the school's administrative staff, trucks sometimes have difficulty maneuvering to the rear loading area when the parking area is full and cars are parked in unmarked areas along the internal drive aisles.
5. Proposed Parking Accommodations: The number of parking spaces in the rear parking area will increase by eleven spaces. The overflow parking spaces in the rear of the Safeway Store will still be required. As temporary parking spaces for construction workers, seven spaces are proposed along the driveway connecting between the rear parking area and Contour Road.
6. Proposed Student Drop-Off and Pick-Up Area: The two-way access point to this proposed area is from Contour Road southeast of the bus loop. The student drop-off and pick-up area is separated from the existing bus loop to avoid conflicting movements. The drop-off and pick-up area can hold approximately 15 vehicles and would replace the existing situation where vehicles wait along both curbs of Contour Road. The waiting vehicles on the northeastern curb were observed by MCPS staff to be backing up to the intersection with Odendhal Road.

Pedestrians Facilities and Access to Public Transportation

The proposed mandatory referral use will improve the existing pedestrian access with a sidewalk connecting the outside of the bus loop to the proposed student drop-off and pick-up area along Contour Road. Sidewalks exist:

1. Along Contour Road
2. On the south and east sides of the bus loop
3. Along the northwest side of the building between the bus loop and rear parking area
4. Between the athletic fields on the northeast side of the school and Contour Road

In addition, two sets of steps connect directly to the northwest driveway (between Contour Road and the rear parking area) and the adjacent apartment complex.

The only needed but missing pedestrian connection is between the existing sidewalks along Contour Road and the sidewalk next to the school building on the outside of the bus loop in the northwest corner of the site. This connection is recommended in Comment No. 1.

Master Plan Roadways and Bikeways

According to the *Gaithersburg Vicinity Master Plan*, the nearby roadways and bikeways are classified as follows:

1. Lost Knife Road is classified as a north-south, four-lane arterial, A-18, with an 80-foot right-of-way, no bikeway, and existing sidewalks on both sides.
2. Odendhal Avenue is classified a four-to-six-lane east-west major highway, M-21, with a 120-foot right-of-way.
3. Goshen Road is classified as a four-to-six-lane east-west major highway, M-25, with a 120-foot right-of-way.
4. Midcounty Highway is classified as a four-to-six-lane, north-south controlled major highway, M-83, with a 150-foot right-of-way and a bikeway, S-82.
5. Contour Road is a secondary residential street with a 60-foot right-of-way, no bikeway, and existing sidewalks on both sides.

Accident History Along Contour Road

The school staff expressed concern regarding potential hazardous maneuvers by motorists dropping-off and picking-up students along Contour Road, and vehicle speeds at the vertical and horizontal curve along Contour Road near Horizon Run Road. In response to their concern, the Montgomery County Department of Public Works and Transportation (DPWT) provided a list of reported accidents along Contour Road between Lost Knife Road and Odendhal Avenue for the years 2000 to 2002. Only two of the twelve reported accidents occurred near the school site and during the school's arrival and dismissal times.

Year 2000:

Three accidents occurred near the intersection with Horizon Run Road (adjacent to the northwest property line). Two near Horizon Run Road did occur during school hours, at 9:00 a.m. (between single vehicle and bicyclist) and at 3:00 p.m. (between a moving vehicle and parked van). The fourth occurred near the intersection with Tunstall Drive (towards Odendhal Avenue), but occurred at 5:00 p.m., two hours after the school's dismissal time.

Year 2001:

One accident occurred near the intersection with Horizon Run Road at 6:00 p.m., three hours after the school's dismissal time. Three other accidents occurred near the intersection with Lost Knife Road.

Year 2002:

Three accidents occurred between the intersections of Horizon Run Road and Capps Hill Drive (first intersection northwest of Odendhal Avenue). These accidents occurred either at 6:00 p.m. (three hours after the school's dismissal time) or at 11:00 p.m. The fourth accident occurred near the intersection with Lost Knife Road.

Local Area Transportation Review

The existing school and proposed modifications generates 50 or more peak-hour vehicular trips during the weekday morning peak period (6:30 to 9:30 a.m.). Therefore, a traffic study was prepared and submitted to satisfy Local Area Transportation Review. The site-generated traffic was based on the results of observations by the traffic consultant on Thursday, December 11, 2003, with 517 students in attendance on that day. The total number of existing vehicular trips either in and out of the school's access points and dropping off/picking up students along Contour Road during the weekday morning and evening peak hours (i.e., the peak hour within the peak period) was observed as follows:

Morning Peak Hour (8:15 to 9:15 a.m.): 293 total vehicles arriving and departing the existing school site

Evening Peak Hour (2:45 to 3:45 p.m.): 160 total vehicles arriving and departing the existing school site

From the total site-generated traffic, the number of existing vehicular trips (including buses) in and out of the school site during the weekday morning and evening peak periods was observed as follows:

Morning Peak Hour (8:30 to 9:30 a.m.): 85 vehicles in and out of the school site

Evening Peak Hour (2:45 to 3:45 p.m.): 67 vehicles in and out of the school site

Student were observed arriving and departing the existing school site by the following transportation modes:

Travel Mode	Morning Arrivals		Evening Departures		Percent Compared with School Records
	Number	Percent	Number	Percent	
Walking	194	37.5%	219	42.4%	50.5%
Drop-Off/Pick-Up	168	32.5%	83	16.1%	13.3%
School Buses	155	30.0%	215	41.6%	36.2%
Total	517	100%	517	100%	100%

From the total vehicular trips, the number of school bus trips was observed during the peak hours as follows:

Morning Peak Hour (8:00 to 9:00 a.m.): 11 buses arrive and 11 buses depart
Evening Peak Hour (2:30 to 3:30 p.m.): 9 buses arrive and 9 buses depart

Along Contour Road, the number of on-street drop-offs and pick-ups were observed as follows:

Morning Peak Hour (8:15 to 9:15 a.m.): 109 vehicles arrived and 105 vehicles departed
Evening Peak Hour (2:45 to 3:45 p.m.): 47 vehicles arrived and 46 vehicles departed

Based on the results of the traffic study, the congestion levels at the nearby intersections were calculated during the school's morning peak hour within the weekday morning peak period (6:30 to 9:30 a.m.) and the school's evening dismissal peak hour (starting at 3:05 p.m.). The evening dismissal peak hour of the school occurs before the weekday evening peak period that starts at 4:00 p.m. The Critical Lane Volume (CLV) values were analyzed for the current 517 students in attendance on December 11, 2003, and the projected 650 students (or 133 more students). The CLV values shown below do not represent the congestion levels during the weekday morning and evening peak hours at these adjacent intersections. The CLV values associated with the school's morning and evening peak hours with the current and projected enrollment are as follows:

Intersection	School's Morning Peak Hour		School's Evening Dismissal Peak Hour	
	Current	Projected	Current	Projected
Lost Knife Road & Contour Road	355	394	796	818
Contour Road & Northwest School Driveway	211	242	230	251
Odendhal Avenue & Contour Road	464	491	476	490
Goshen Road & Odendhal Avenue*	795	795	552	552

*The morning peak hour of this intersection occurs before the school opens.

The CLV at all intersections analyzed in the traffic study is less than the congestion standard of 1,500 for the Montgomery Village/Airpark Policy Area. The intersection of Montgomery Village Avenue (MD 124) and Lost Knife Road/Christopher Avenue was not analyzed because Montgomery Village Avenue forms the school's western boundary.

Policy Area Transportation Review/Staging Ceiling Condition

The South Lake Elementary School is an existing land use already accounted in the staging ceiling numbers. Currently, the Montgomery Village/Airpark Policy Area has is positive 37 jobs remaining in the staging ceiling as of February 29, 2004, under the *FY 2004 Annual Growth Policy*.

EA:gw