



**TRAFFIC IMPACT AND ACCESS REVIEW FOR SITE PLAN
PROPOSED FOR MCGRATH ELEMENTARY SCHOOL
STAFF REPORT**

PETITION NAME: P&Z Case #21-03 – Traffic Impact and Access Review for Site Plan Proposed for McGrath Elementary School at 2350 St. Clair Avenue

REQUESTED ACTION: Review of Traffic Impact and Access Review for Site Plan Proposed for McGrath Elementary School Project

MEETING DATE: April 14, 2021

PETITIONER: Civil Engineering Design Consultants

LOCATION OF SITE: 2350, 2344 and 2354 St. Clair Avenue

LOCATOR NUMBER(S): 21K440294, 21K440306, 21K440184

SIZE OF TRACT: 5.55 acres

ZONING DISTRICT(S): "B" Single-Family Residential District

PROPERTY OWNER: Brentwood School District, 1201 Hanley Industrial Court, Brentwood, MO 63144

PROPERTY INFORMATION

The subject property is McGrath Elementary School located on the north side of Litzsinger Road between St. Clair Avenue and High School Drive. The subject site is comprised of three (3) parcels, 5.55 acres in size and zoned B-Single-Family Residential District. Access to the site is currently provided via one median divided entrance on St. Clair Avenue. The property includes the school buildings parking areas, play areas and open space.

PROJECT DESCRIPTION

The Brentwood School District will be making improvements to both elementary schools; McGrath Elementary located at 2350 St. Clair Avenue and Mark Twain Elementary located at 8636 Litzsinger Road. At the site of McGrath Elementary, the District is proposing to construct a new school on the east end of the existing school building site and raze the existing school to become the new outdoor play area. As part of the plan, an access road would be extended from the existing access driveway to High School Drive at a new intersection opposite Harrison Avenue. In addition, the District indicated that the Early Childhood Center, Parents as Teachers, Special School District and Administrative Offices would be moved from their current location in Hanley Industrial Court to the McGrath site.

Once the new school is available to occupy, the District intends to relocate the students and staff from Mark Twain Elementary School to the old McGrath building temporarily while major renovations are made at the Mark Twain site. During this interim period, both schools will operate on the same site at McGrath Elementary School. Upon completion of renovations at the Mark Twain Elementary School site, the Mark Twain students and staff will return to their separate site at 8636 Litzsinger Road.

Based upon the school district's plans, City staff requested CBB, the City's on-call traffic engineer, to complete a traffic study related to changes proposed by the school district at the McGrath Elementary School site, specifically to focus on:

- Traffic impacts during construction of the new school building with McGrath Elementary School operating in the existing school building (approximately one-year duration);
- Traffic impacts upon completion of the new school building with both McGrath Elementary School and Mark Twain Elementary School operating on the same site (approximately one-year duration); and
- Traffic impacts of the conditions resulting from McGrath Elementary operating in the new school building and the other site improvements as depicted on the proposed site plan.

The City has limited review and approval authority related to the school site, but the Brentwood School District will need a permit for the proposed new access on High School Drive and may need other permits for work in City right-of-way around the perimeter of the site.

PUBLIC NOTICE

Letters were mailed notifying property owners within 300 feet of the subject property of the request and the dates of the Planning and Zoning Commission review.

SITE DESIGN ISSUES

A. *Ingress / Egress and Internal Circulation*

The roadways along the perimeter of the subject site; St. Clair Avenue, Litzsinger Road, and High School Drive are owned and maintained by the City of Brentwood, as well as Harrison Avenue which is an east/west residential street intersecting High School Drive near the northeast corner of the school site. As noted, CBB's services were requested to provide a Traffic Impact and Access Study of the proposed school building construction. The primary emphasis of this study was the a.m. commuter/school arrival peak hour and the afternoon school dismissal peak hour of a typical school day and the impacts to local streets and neighborhoods.

CBB has recommended potential solution options and/or site plan modifications to improve safety and traffic flow during arrival and dismissal as well as minimize congestion on the adjacent local streets and intersections. Given existing school traffic conditions may not completely be the "norm" due to the ongoing COVID-19 pandemic, this recent CBB study benefitted from previous field observations collected for a 2016 CBB traffic study. In 2015-16, the school district was contemplating modifying the traffic flow and proposing a new curb cut along High School Drive at the site of the McGrath Elementary School. Although a new curb cut on High School Drive was approved by the Board of Aldermen in June 2016, the site improvements were not constructed.

Following the review of the findings of the recent CBB study, the site development plan was revised by the petitioner. The current site development plan dated March 31, 2021 has been distributed to the Planning and Zoning Commission for its review and recommendation to the Board of Aldermen to approve a permit to the Brentwood School District for curb-cuts and right-of-way work along St. Clair Avenue, Litzsinger Road and High School Drive pursuant to Section 505.290 of the Brentwood City Code. CBB provided recommendations regarding access for Phase 1 (during construction of the new school building), Phase 2 (interim occupancy with both McGrath and Mark Twain Elementary Schools operating on the same site) and the ultimate conditions with McGrath Elementary operating in the new school building.

It is staff's opinion that several of the findings to improve safety and encourage good access management have been addressed in the revised site plan submitted with the application to the P&Z Commission.

- The District complied with the recommendation that the proposed driveway operate eastbound only with ingress via St. Clair Avenue and egress only to High School Drive opposite Harrison Avenue.
- It is recommended that only a portion of the access road be marked for two-way traffic (the segment between High School Drive and the service driveway), and the western segment could be used permanently in a one-way configuration with angled parking stalls to emphasize the one-way traffic directional flow. It is unknown at this time if the District intends to allow two-way traffic of the access drive during a portion of the day and is considering this as an option.
- The access road and the service road should be physically sized to accommodate the appropriate emergency response vehicle as determined by the Fire Marshall.
- It is recommended a few designated parking stalls near the ECC entrance should be dedicated/reserved for ECC parents who will typically park and enter the building to drop off and pick up their students and should be shown on the site plan.
- It is recommended that a dedicated drop-off area (separate from the car parking) be considered near the front door to the new school building and should be shown on the site plan.

Related to the District's site development plan and their proposal to install a new curb cut along High School Drive, modify curb cuts along St. Clair Avenue, and perform other ROW work along St. Clair Avenue, Litzsinger Road, and High School Drive, there are several recommendations provided in the traffic study (page 19). These recommendations will be reviewed by the Commission with the Brentwood School District and their design team at the April 14th meeting.

Respectfully submitted,

Lisa Koerkenmeier, AICP
Director of Planning and Development