



McMAHON ASSOCIATES
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May 3, 2013

Mr. Gregory Cain
Owner
CrossFit LZ
15 Upland Road
Cambridge, MA 02140

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R. Trent Ebersole, P.E.
Matthew M. Kozsuch, P.E.

RE: McMahan Parking Assessment

Dear Mr. Cain:

As part of your filing with the City of Somerville for your project site located at 44 Park Street, my company produced a Parking Assessment dated April 5, 2013 for your use. The Assessment was primarily completed by Jason T. Adams, P.E., PTOE a Senior Project Manager with McMahon who has been employed here since August 2000. The assessment was reviewed by me prior to its distribution. It is our understanding that questions have been raised as to the accuracy of the report because Mr. Adams was not a registered Professional Engineer in the Commonwealth of Massachusetts at the time the Parking Assessment was completed. This letter is intended to provide additional detail and to alleviate any concerns.

The Parking Assessment was completed following standard engineering methodology within Massachusetts and nationwide. The final product submitted to you was also reviewed by me and I am a registered Professional Engineer (#41045) in Massachusetts and a certified Professional Traffic Operations Engineer (PTOE), #1026. It should also be noted that Mr. Adams has been a registered Professional Engineer in the State of New Hampshire (#11907) since 2006, was deemed a Model Law Engineer by the National Council of Examiners for Engineering and Surveying (NCEES), has since become a Professional Engineer in Massachusetts (#50414, granted April 16, 2013), and is also a certified Professional Traffic Operations Engineer (#3372).

Please find included a revised version of the Parking Assessment which I have co-signed with Mr. Adams. I trust that the additional information I have provided will assist you in defending the work that my company has completed on your behalf. Should you require any additional information, please do not hesitate to contact us.

Sincerely,

Gary R. McNaughton, P.E., PTOE
Vice President & General Manager

Corporate Headquarters: Fort Washington, Pennsylvania

Serving the East Coast from 11 offices throughout the Mid-Atlantic, New England, and Florida



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RE: Parking Assessment
44 Park Street Somerville, MA

Dear Mr. Cain

McMahon Associates has completed a review of the existing 44 Park Street site in Somerville, MA. Your project calls for the existing building on site to house an approximately 5,500 square foot day care center (which currently occupies the building) and a new 4,500 square foot gym. Our review focused on the parking demand of the existing site and the expected parking demand of the proposed project site. This letter documents our findings.

Project Description

The existing project site, located at 44 Park Street, houses an approximately 10,000 square foot building which is occupied by a day care center (hours of operation: 8:00 AM to 6:00 PM). Access to the site is provided via a single, full access, unsignalized driveway on Park Street. The project driveway connects to a circulating roadway on the south side of the existing building which allows for pick-up/drop-off activities and provides 5 parking spaces. The primary parking lot for the site, located to the east of the existing building, is connected to the circulating roadway and provides 14 parking spaces, 1 of which is a handicapped parking space. All told the existing site provides for 19 parking spaces, including the handicapped parking space.

The proposed project calls for the building on site to house the existing day care facility in a space of approximately 5,500 square feet and a new gym in the space of approximately 4,500 square feet. In order to serve the additional gym customers traveling to the site by vehicle, the gravel area extending to the east from the existing parking lot will be configured so as to provide approximately 8 additional parking spaces. One additional handicapped parking space will also be provided on the west (front) side of the building, with access to the handicapped space being provided from the site driveway. The handicapped spot will include a van accessible eight-foot loading area and will have handicapped accessible access to the building.

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In order to best serve the needs of the gym's customers, bike racks will also be provided on the site.

Existing Parking Demand

Parking utilization counts were conducted during the weekday morning (7:00 AM to 9:00 AM), weekday midday (11:30 AM to 1:30 PM) and weekday afternoon (4:00 PM to 6:00 PM) peak periods on Wednesday April 3, 2013. Parking observations were completed in 15-minute intervals and are summarized below in Table 1:

Table 1
Existing Parking Demand

Peak Hour	Average Parking Demand	Peak Parking Demand
Weekday Morning (8:00-9:00AM)	13	16
Weekday Midday (12:30-1:30 PM)	13	14
Weekday Afternoon (5:00-6:00 PM)	11	15

As shown in Table 1, the existing site has an average parking demand of 13 parked vehicles during the weekday morning and weekday midday peak hours and an average parking demand of 11 parked vehicles during the weekday afternoon peak hour. Therefore on average there are 6 parking spaces are available during the weekday morning and weekday midday peak hours, and an average of 8 parking spaces are available during the weekday afternoon peak hour. The peak parking demand was observed to be 16 parked vehicles during the weekday morning peak hour, 14 parked vehicles during the weekday midday peak hour, and 15 parked vehicles during the weekday afternoon peak hour.

During the weekday morning and weekday afternoon peak periods, many of the vehicles entering the site were observed to park for periods of 5 to 20 minutes as they completed pick-up/drop-off activities at the day care center. During the weekday midday peak period from 11:30 AM until 1:30 PM there were always between 12 and 14 cars parked, and only 7 total vehicles were observed to enter and exit the site.

There were no cars in the parking lot until approximately 8:00 AM and at 6:00 PM there were only 3 cars left in the parking lot. These times coincide with the hours of operation of the day care center (8:00 AM to 6:00 PM).

Expected Parking Generation

The parking demand of the day care center is not expected to change as a result of the proposed project. For this reason the peak parking demand shown in Table 1 is expected to remain the same in the future.

In order to forecast the number of parking spaces expected to be needed by the proposed gym use, the Institute of Transportation Engineers' (ITE) publication, *Parking Generation, 4th Edition* was consulted. The expected parking generation for the gym was developed based on data presented in this publication for Land Use Code 492 (Athletic Club). The ITE data indicates that the gym would be expected to generate approximately 6 parked vehicles during its peak time in the weekday morning time period, approximately 11 parked vehicles during its peak time in the weekday midday time period, and approximately 20 parked vehicles during its peak time in the weekday afternoon time period.

The data contained within ITE does not account for the high percentage of gym patrons that are expected to arrive at this site via other modes of transportation such as walking, bicycling and public transit. Based on information supplied by the proponent for similar gym facilities in this area as many as 70-80% of patrons are expected to arrive via other forms of transportation, therefore greatly reducing the need for on-site parking. Conservatively reducing the ITE peak parking estimates by 60% to account for alternative modes of transportation would result in a peak parking demand of approximately 2 vehicles in the weekday morning peak period, approximately 4 vehicles during the weekday midday peak period, and approximately 8 vehicles during the Saturday midday peak period. These peak parking demands should therefore be able to be served by the gravel lot without impacting the parking needs of the day care center.

Furthermore, the peak times of the proposed gym are expected to be from 6:00AM to 8:00 AM and from 6:00 PM to 8:00PM. Both of these peaks are expected to fall outside the hours of the existing day care center use.

Recommendations

Based on a review of the existing parking demand of the day care center, the gravel lot will need to be reconfigured into a parking area in order to serve the needs of the proposed gym during the business hours of the day care center. While the day care center does have a small surplus of available parking, the nature of that business requires that the surplus be maintained for convenient customer use. Therefore, it is recommended that gym customers be prohibited from parking within the main parking lot areas of the site during the hours of operation (8:00 AM to 6:00 PM) of the day care center.

Mr. Gregory Cain

May 3, 2013

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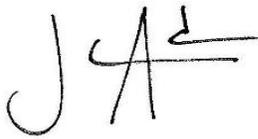
By providing an appropriate amount of bicycle parking and delineating approximately 8 parking spaces in the gravel area to the east of the main parking lot and a handicapped parking space at the front of the building, the parking needs of the proposed gym should be met. The parking demand of the gym is not expected to exceed 8 parked vehicles during the hours of operation of the day care center, and can therefore be served by the gravel lot. During the peak time of the gym (expected to be 6:00 PM to 8:00 PM) the parking needs of the patrons can be served by the combination of the main parking lot areas and the gravel parking area.

Should you require any additional information or have a need for any further explanation, please do not hesitate to contact us.

Sincerely,



Gary R. McNaughton, P.E., PTOE
Vice President & General Manager



Jason T. Adams, P.E., PTOE
Senior Project Manager