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Refer to File No. NED-0008

March 20, 2016

Town of Needham Board of Selectmen
Maurice P. Handel, Chairman
Town Hall
1471 Highland Avenue
Needham, MA 02492

**RE: 33 Highland Avenue
Traffic Impact Statement for Registered Marijuana Dispensary**

Dear Chairman Handel and Selectmen:

On behalf of Massachusetts Patient Foundation, Inc., a Massachusetts non-profit corporation (the "Applicant") Hayes Engineering, Inc. (HEI) has prepared a Traffic Impact Statement for the above referenced project. The Project, as proposed, will convert two (2) existing commercial uses to a registered marijuana dispensary (RMD) use.

Trip generation rates indicate a decrease of over 350 vehicle trip ends per day as compared to the previous land use(s) at the property. RMDs are not high impact traffic generators with anticipated vehicle trip ends of ±36 per 1,000 square feet of gross floor area. The following table summarizes trip generation of allowed uses within the zone and their trip generation rates per 1,000 sf. of gross floor area:

Land Use (ITE Code)	Average Daily Vehicle Trip Ends per 1,000 sf of GFA
Medical Office (720)	36.13
Specialty Retail (826)	44.32
Drive-In Bank (912)	148.15

Should you have any questions or concerns please do not hesitate to contact me using the information provided above.

Regards,

Anthony M. Capachietti,
Project Manager

Enclosures

Cc: VGR Law; File



TRAFFIC IMPACT STATEMENT
 33 Highland Ave
 Needham, Massachusetts
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The methodology selected for analysis of traffic issues for the Massachusetts Patient Foundation, Inc. (MPFI) project proposed for 33 Highland Avenue in Needham, MA follows the approach outlined by the Massachusetts Department of Transportation (MassDOT) Highway Division in Section 2. IV. of the MassDOT Transportation Impact Assessment (TIA) Guidelines.



Trip Generation:

Average Daily Vehicle Trips calculated below using information published by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition.

Existing Facility:

The existing facility at 33 Highland Avenue was previously occupied by New England Pack and Ship and YoSoGood Frozen Yogurt; these uses are best represented by the following Land Use Codes:

920:	Copy, Print and Express Ship Store	1,900 sf.
826:	Specialty Retail	1,800 sf.

The selected independent variable used in analysis for both uses is "1,000 Square Feet Gross Floor Area."



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The number of Average Vehicle Trip Ends (Weekday) was not presented by the ITE for Land Use Code 920. The Peak AM and Peak PM generators were presented with the following Trip Generation Rates:

$$\begin{aligned} \text{AM Peak Hour} &= 8.10 \text{ vehicles per } 1,000\text{sf} \times 1,900\text{sf} = 15.39 \text{ Trips} \\ \text{PM Peak Hour} &= 12.27 \text{ vehicles per } 1,000\text{sf} \times 1,900\text{sf} = 24.13 \text{ Trips} \end{aligned}$$

Conservatively, the sum of the total Peak Hour Trips represents approximately ten-percent (10%) of the Average Vehicle Trip Ends (AVTE) for the use. The estimated AVTE for this use is 400 vehicle trips ends per day.

The number of Average Vehicle Trip Ends (Weekday) presented by the ITE for Land Use Code 826 can be calculated as presented below:

Where T represents the number of Average Vehicle Trip Ends and X represents 1,000 sf of GFA. The number of vehicle trip ends for the 1,800 sf. facility is:

$$T = 44.32(X) = \mathbf{79.78 \text{ AVTE}}$$

The facility, as previously occupied, would be expected to generate 480 trip ends daily.

Proposed Facility:

The proposed facility is best represented by the following Land Use code:

720: Medical Office (RMD Dispensary Area) 3,500 sf.

The selected independent variable used in analysis for both uses is "1,000 Square Feet Gross Floor Area." The relationship between weekday AVTE and GFA for medical office use is identified by ITE as follows:

Where T represents the number of Average Vehicle Trip Ends and X represents 1,000 sf of GFA. The number of vehicle trip ends for the 1,800 sf. facility is:

$$T = 36.13(X) = \mathbf{126.46 \text{ AVTE}}$$

The total AVTE generated for the proposed RMD facility is 126 (63 trips), a significant decrease from the existing facility as previously occupied.

Mode Split:

The majority of the traffic to the site is assumed to be via vehicle with a small portion accessing the site via public transportation. The site is located approximately ±650 feet from the Needham Street stop in Newton along the Massachusetts Bay Transit Authority (MBTA) Bus Route 59. No reduction in trips or parking is proposed in this analysis.



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Trip Distribution:

MassDOT conducted two-way traffic counts at the Needham/Newton corporate limits along Highland Avenue/Needham Street on the following dates:

Year	Location ID	Northbound (to Newton)	%	Southbound (to Needham)	%
8/28/2000	235505	15,260	52%	13,939	48%
4/3/1991	219909	14,425	37%	24,324	63%

The most recent traffic count data indicates a fairly even split of traffic heading into the neighboring City of Newton as compared to volumes heading toward I-95 in Needham. The Applicant is projecting that the 126 estimated trip ends will be split with 66 trip ends via Needham Street in Newton and 60 trip ends via Highland Ave in Needham.

Safety:

Sight distances from the parking area on-site exceed 300-feet in both directions and are suitable for design speeds of 40 mph. The site is not located in a Highway Safety Improvement Program (HSIP) eligible area; the closest eligible site is ±575 feet north of the site at the intersections of Cross, Oak and Needham Streets in Newton. The proposed use, having significantly less expected vehicle trips, should not represent a decrease in traffic safety from existing conditions.

Parking:

The subject property provides surface parking for 24 vehicles, eight (8) lined spaces in the front of the building, 3 spaces alongside the building and 13 additional spaces at the rear of the building. The Town of Needham Zoning Ordinance requires 1 space per 200 sf. of medical office space, requiring 18 spaces for the use.