


MEMORANDUM

DATE: March 26, 2014

TO: Kambiz Shahbazi, President
KS Partners
150 East 58th Street, Suite 2000
New York, NY 10155

FROM: Robert J. Michaud, P.E.– Managing Principal 
Courtney E. Jones, E.I.T. – Project Engineer

RE: **Parking Evaluation – 19-33 Needham Street
Newton, Massachusetts**

MDM Transportation Consultants, Inc. (MDM) has evaluated existing parking characteristics of properties located at 19-33 Needham Street in Newton, Massachusetts (“University Business Center”) to determine parking requirements needed to support current and future building tenants. The evaluation includes an inventory of the existing site uses and parking supply, a manual survey of peak parking demands (parking accumulation counts) and calculation of anticipated parking demands assuming full tenancy of the site buildings for a combination of prospective warehouse, retail, medical office and general office use tenants. The evaluation concludes that the proposed 163-space parking supply will accommodate peak demands under the preferred tenant programming which will be augmented by additional available unmarked spaces along Easy Street.

Key findings of the parking evaluation are as follows:

- *Site Parking Supply.* The 1991 approved parking plan¹ for the Site included 154 on-site parking spaces inclusive of spaces provide within an existing MBTA lot lease area. A 2013 parking plan depicts updated Site parking layout that includes an additional 28 spaces when compared to the 1991 plan for a total of 182 on-site parking spaces. Following consultation with the City of Newton planning staff, the Applicant has opted to update the Site parking layout to more closely conform to the 1991 Plan but with modifications that ensure reasonable circulation aisle widths and handicap parking stall

¹ Site Plan, NTW Special Permit, NTW Inc., 21 Needham Street prepared by Morris Architects dated April 10, 1991 as amended through December 11, 1991.

locations. MDM has accordingly created a proposed parking plan which provides a total of 163 parking spaces, inclusive of 24 spaces located within the existing MBTA lot lease area. The MDM pavement marking plan of March 2014 is attached and provides a parking supply that (a) exceeds the approved 1991 Plan supply of 154 spaces, and (b) provides wider circulation aisles and enhanced maneuvering area relative to the approved 1991 Plan.

- *Existing Peak Utilization.* The existing University Business Center consists of 66,300± sf of commercial space with approximately 25,000 sf currently occupied by various commercial uses. Peak weekday parking demand was observed to be 35 or fewer vehicles and occurred between 10:00 AM and 4:00 PM. The existing parking supply of 182 marked parking spaces, as reflected in the 2013 marking plan, readily accommodates this demand, leaving a surplus of approximately 147 parking spaces available for use by new/prospective tenants.
- *Projected Peak Parking Demand.* Re-tenancy of approximately of 27,179 sf of vacant office space as 9,699 sf of warehouse space, 9,117 sf of retail space and 8,363 sf of medical office space with 14,063 sf remaining as general office use, will generate an additional peak parking demand of approximately 122 spaces based on industry parking rates. The combination of existing and proposed uses results in a peak parking demand of 157 spaces, which is accommodated within the proposed 163 space parking supply and as augmented by additional available unmarked spaces along Easy Street.
- *As-of-Right Office Use Parking Demand.* As a point of comparison, re-occupancy of current vacant space (approximately 41,242 sf) for general office use is estimated to generate a peak demand of 143 vehicles over observed levels based on industry standard parking rates, bringing the total site peak parking demand to 178 spaces. This projected peak demand would require use of additional available (unmarked) parking along Easy Street to augment the 163-space parking supply at the Site.

In summary, a review of existing parking activity, standard industry parking data indicates that the re-occupancy of currently vacant space (41,242 sf) for general office use is estimated to generate a total peak parking demand of 178 occupied parking spaces, inclusive of existing parking demands. Based on industry standard parking rates, preferred retail and medical office use programming at the Site as defined under Proposed Site Programming is estimated to generate a total peak parking demand of 157 occupied parking spaces, inclusive of existing parking demands. Therefore, MDM concludes that (a) parking demands for the proposed site programming are less intense than as-of-right office use of the property; (b) the proposed 163-space parking supply exceeds the parking supply of 154 spaces as identified in the approved 1991 Plan for the property; and (c) the proposed parking supply of 163 spaces will adequately meet projected peak parking demands for the proposed alternate retail and medical office program with additional available parking along Easy Street to the extent higher demands occur.

EXISTING SITE PROGRAMMING

The existing University Business Center located at 19-33 Needham Street consists of two commercial buildings – a vacant 4,300± square-foot (sf) building and a partially occupied 62,000± sf building located on an approximate 2.5-acre tract of land. The proximity of the site to area roadways is presented in **Figure 1**. The approved on-site parking supply includes 154 on-site parking spaces as shown in the approved 1991 parking plan. A total parking supply of 182 on-site parking spaces as shown on a 2013 Site Detail Plan² currently supports the buildings representing an effective parking supply ratio of 2.79 spaces per 1,000 sf of building area (approximately 1 space per 350 sf of building area). Marked spaces included in the 182 space supply include 28 spaces on an immediately adjacent MBTA lease lot. Access/egress to the site is currently provided via a curb cut along Needham Street and curb cuts along Easy Street – a privately-maintained, dead-end roadway located along the northeastern property line. Additional unmarked spaces are available along Easy Street that provides capacity for approximately 15 vehicles.

Existing parking areas for the site are shown in **Figure 2**, which serve as the basis for the parking accumulation survey documented in this memorandum. The site has an occupancy rate of 38% with approximately 41,242 sf of vacant office space available for lease. A breakdown of tenants and leased square footage is summarized in **Table 1**.

TABLE 1
TENANT INFORMATION

Building Tenant	Size (sf)
Delta T Group	1,211±
NewTV	7,836±
National Tire & Battery (NTB)	<u>16,000±</u>
Subtotal	25,047
<i>Vacant Office – Suite 201A</i>	450±
<i>Vacant Office – 2nd Floor</i>	2,406±
<i>Vacant Office – 2nd Floor</i>	4,059±
<i>Vacant Office – Suite 206</i>	6,843±
<i>Vacant Office – Suite 102</i>	9,699±
<i>Vacant Office – Suite 103</i>	4,676±
<i>Vacant Office – Suite 104</i>	4,441±
<i>Vacant Office – Suite 105</i>	4,364±
<i>Vacant Office – Building #33</i>	<u>4,304±</u>
Subtotal	41,242
University Business Center Total	66,289

² University Center Condominium Site Detail Plan, prepared by Precision Land Survey, Inc. dated June 5, 2013.



Figure 1

Site Location

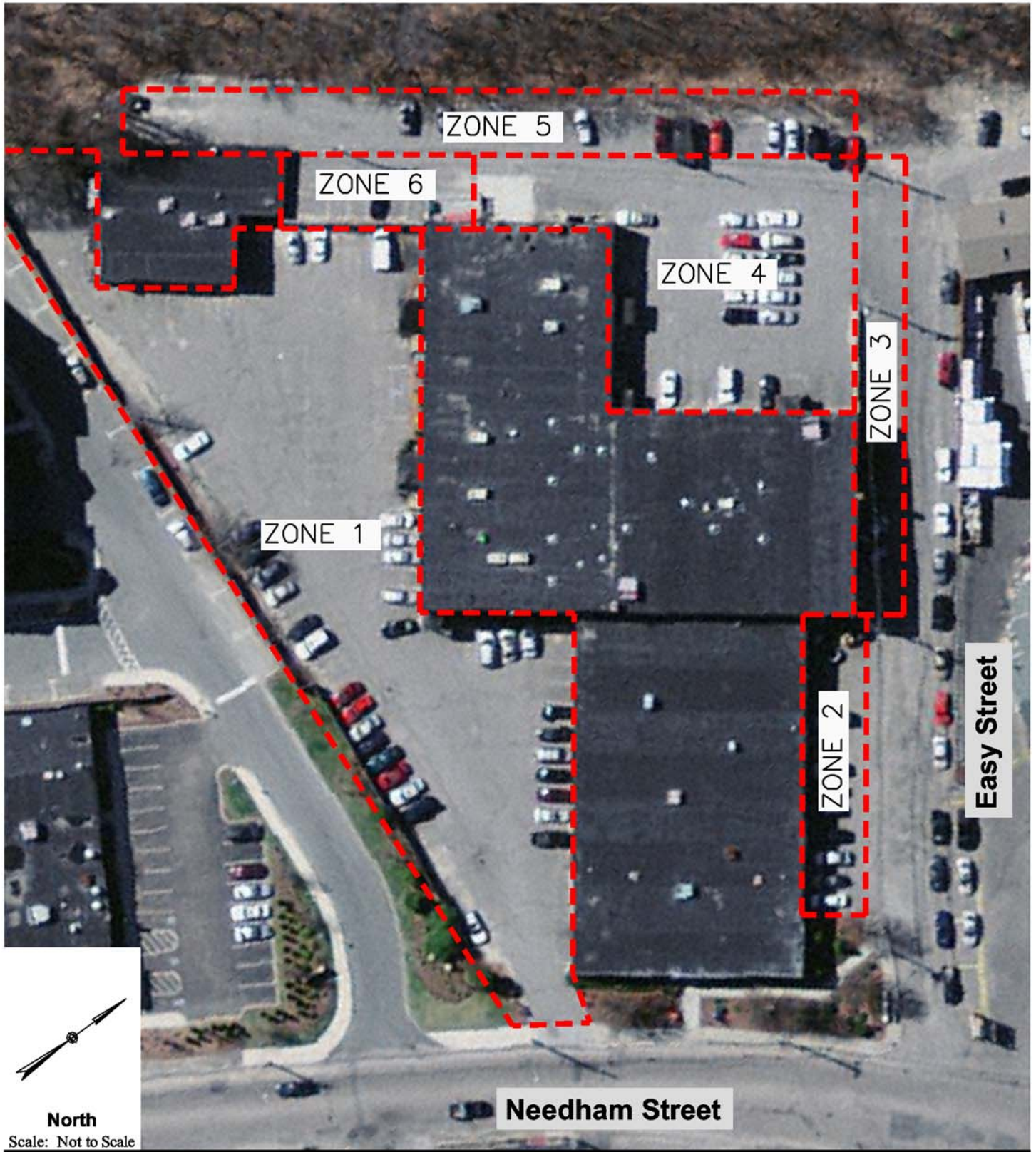


Figure 2

Parking Zones

Parking Accumulation Survey Thursday, July 18, 2013

Parking Accumulation Survey

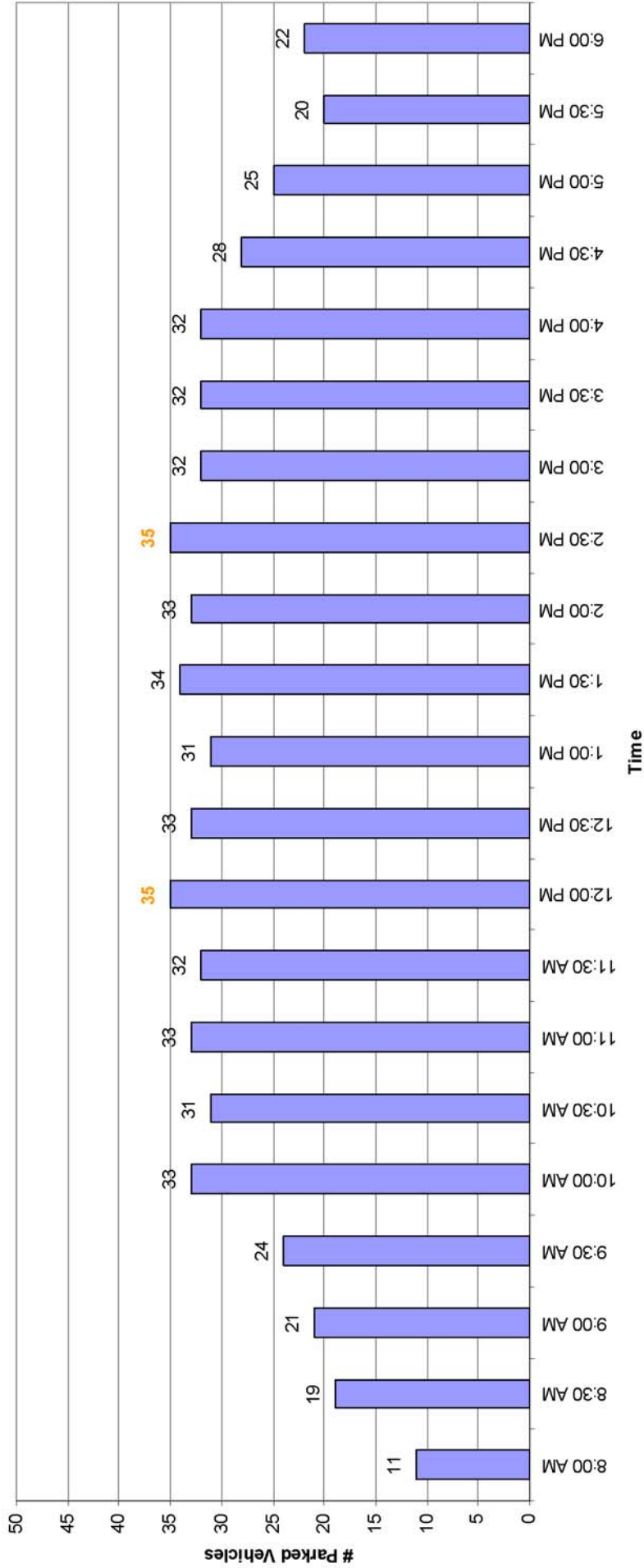


Figure 3

OBSERVED PEAK PARKING DEMAND

A parking accumulation survey was conducted to identify parking trends at University Business Center on Thursday, July 18, 2013 and included observations between 8:00 AM and 6:00 PM. These time periods correspond to the peak demand periods for the University Business Center uses, as well as proposed building uses (warehouse, retail and medical office) as published in the Institute of Transportation Engineers (ITE) *Parking Generation*³. The site parking lot was subdivided into parking zones for inventory purposes and to more precisely identify where peak parking use (or vacancies) occur relative to various suites in the building. Hourly parking activity is presented in **Figure 3**. Parking accumulation data is provided in the **Attachments**.

A summary of on-site peak parking activity is as follows:

- The existing site uses exhibit a consistent parking demand of 31 to 35 parked vehicles between 10:00 AM and 4:00 PM (approximate 19% utilization rate) on weekdays, representing an existing surplus of approximately 147 parking spaces. The equivalent peak parking demand rate for observed conditions is 1.40 spaces per thousand square feet of occupied building space.

PROPOSED SITE PROGRAMMING

Under the proposed conditions, the vacant office suites totaling 41,242 sf will be re-occupied by approximately 9,699 sf of warehouse use, 9,117 sf of retail use, 8,363 sf of medical office use and 14,063 sf of general office use.

Following consultation with the City of Newton planning staff, the Applicant has opted to update the Site parking layout to more closely conform to the 1991 Plan but with modifications that ensure reasonable circulation aisle widths and handicap parking stall locations. MDM has accordingly created a proposed parking plan which provides a total of 163 parking spaces, inclusive of 24 spaces located within the existing MBTA lot lease area. The MDM pavement marking plan of March 2014 is attached and provides a parking supply that (a) exceeds the approved 1991 Plan supply of 154 spaces, and (b) provides wider circulation aisles and enhanced maneuvering area relative to the approved 1991 Plan. The additional unmarked spaces that are available along Easy Street will remain unchanged.

³*Parking Generation*, 4th Edition; Institute of Transportation Engineers; Washington, DC; 2010.

PROJECTED PEAK PARKING DEMAND

Estimated Peak Parking Demand – ITE Based Methodology

The observed parking demand is not representative of parking demand for the entire University Business Center since approximately 41,242 sf of space was unoccupied at the time the survey was conducted. In order to account for parking demands from re-occupancy of the vacant space and determine the adequacy of the proposed 163-space parking supply, parking rates published by the Institute of Transportation Engineers (ITE)⁴ were reviewed for the following scenarios:

- a) Full occupancy of the permitted office and retail (NTB) spaces (By-Right Uses)
- b) Full occupancy under proposed tenant programming (Proposed Uses)

Peak parking demand projections for the infill of vacant space at the site was based on parking rates published by ITE using the land use codes that most closely reflect the planned uses at the site – Land Use Codes (LUC) 150 (Warehousing), 820 (Shopping Center), 710 (Office Building) and LUC 720 (Medical-Dental Office Building). For reference, the ITE parking data is provided in the **Attachments**. In order to present a conservative analysis, peak parking demand rates for each use have been utilized; however, not all uses are expected to exhibit peak parking demand concurrently. **Table 2** summarizes the projected peak parking demand for the above re-occupancy scenarios.

⁴*Parking Generation*, 4th Edition; Institute of Transportation Engineers; Washington, DC; 2010.

TABLE 2
PROJECTED PEAK PARKING DEMAND – ITE BASIS
UNIVERSITY BUSINESS CENTER

Land Use	Size (gsf)	Peak Parking Rate (Vehicles/1,000 sf)	Peak Parking Demand (Vehicles)
<i>Scenario (a) By-Right Uses</i>			
Existing Tenants ¹	25,047	1.40	35
<u>Projected Office Tenants²</u>	<u>41,242</u>	<u>3.45</u>	<u>143</u>
Estimated Total Demand	66,289	2.68	178
<i>Scenario (b) Proposed Uses</i>			
Existing Tenants ¹	25,047	1.40	35
Projected Warehouse Tenants ³	9,699	0.81	8
Projected Retail Tenants ⁴	9,117	3.16	29
Projected Medical Office Tenants ⁵	8,363	4.27	36
<u>Projected Office Tenants⁶</u>	<u>14,063</u>	<u>3.45</u>	<u>49</u>
Estimated Total Demand	66,289	2.37	157

¹25,047± gsf of building space was occupied on the date observed (7/18/2013) with a peak observed parking demand of 35 spaces.

²Based on 41,242 gsf of vacant space applied to ITE LUC 710 (office) 85th percentile parking rates.

³Based on 9,699 gsf of vacant space applied to ITE LUC 150 (warehouse) 85th percentile parking rates.

⁴Based on 9,117 gsf of vacant space applied to ITE LUC 820 (retail) 85th percentile parking rates.

⁵Based on 8,363 gsf of vacant space applied to ITE LUC 720 (medical office) 85th percentile parking rates.

⁶Based on 14,063 gsf of vacant space applied to ITE LUC 710 (office) 85th percentile parking rates.

As summarized in **Table 2**,

- Based on ITE methodology, re-occupancy of the 41,242 sf of vacant space entirely as general office use is estimated to result in a peak site parking demand of approximately 178 spaces which is accommodated within the available parking supply of 163 spaces with reliance upon additional available unmarked spaces along Easy Street.
- In comparison, re-occupancy of vacant space under the preferred tenant programming (9,699 sf of warehouse space, 14,063 sf of general office space, 9,117 sf of retail space and 8,363 sf of medical/dental office space) is estimated to result in a peak site parking demand of approximately 157 spaces which is accommodated within the proposed 163 space parking supply and augmented by additional available unmarked spaces along Easy Street.

SUMMARY AND CONCLUSIONS

Upon review of existing parking activity, standard industry parking data, full occupancy of the University Business Center for general office use is estimated to generate a total peak parking demand of 178 occupied parking spaces. Under the preferred tenanting option which includes a mix of general office, warehouse, retail and medical-office uses peak parking demand is estimated to be less intense at 157 occupied parking spaces, inclusive of existing inventoried parking demands. Therefore, MDM concludes that (a) parking demands for the proposed site programming are less intense than as-of-right office use of the property; (b) the proposed 163-space parking supply exceeds the parking supply of 154 spaces as identified in the approved 1991 Plan for the property; and (c) the proposed parking supply of 163 spaces will adequately meet projected peak parking demands for the proposed alternate retail and medical office program with additional available parking along Easy Street to the extent higher demands occur.