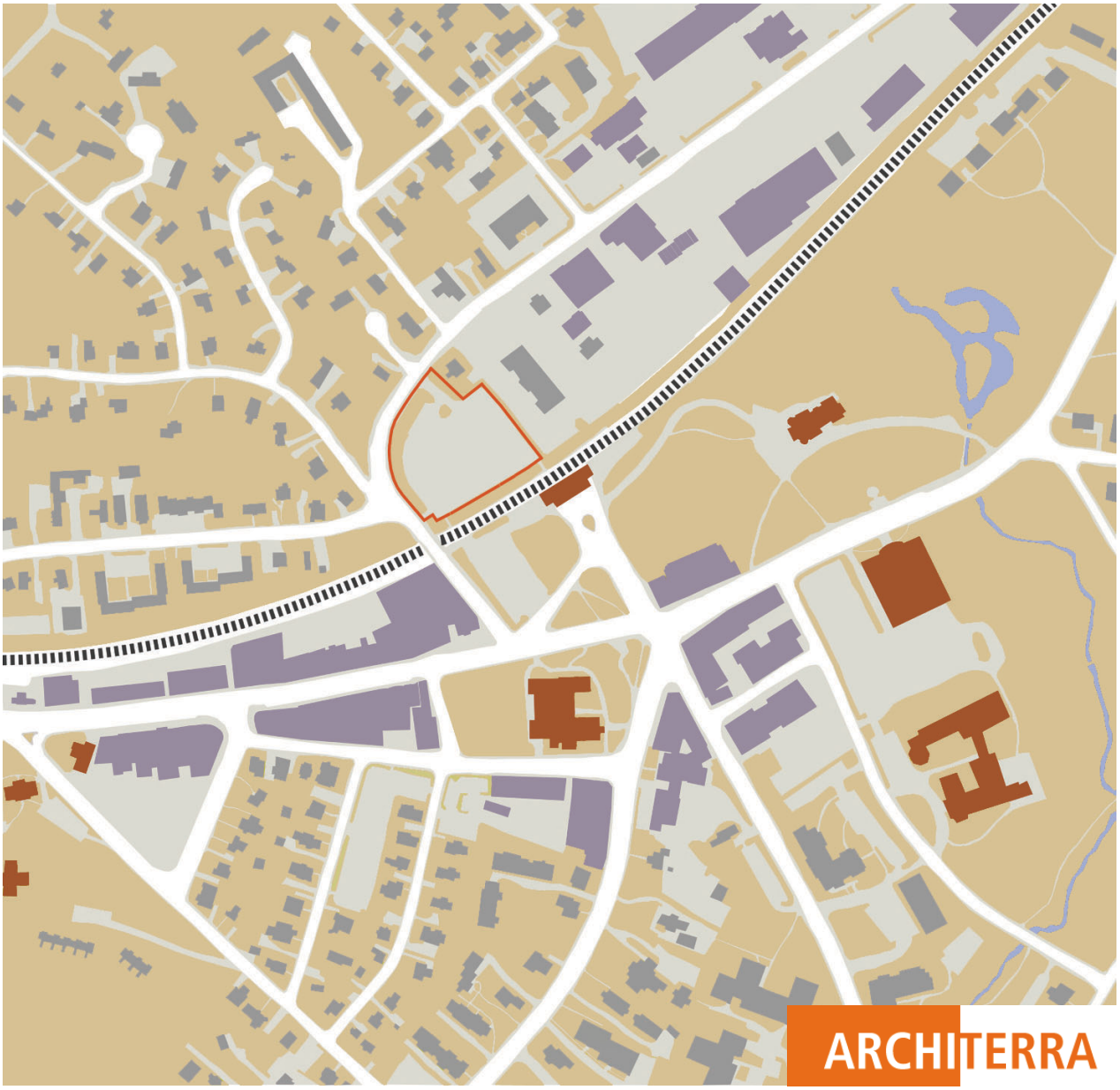

Tailby Lot Feasibility Study

March 2005

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Tailby Lot Committee

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Kit Bowry, Vice Chair
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View from Crest Road, looking south across Tailby Lot toward Village Church

View from Wellesley Square railroad station, looking west toward Crest Road bridge

The Tailby Lot, a strategically located two-acre parcel in the heart of Wellesley Square, has been owned by the Town of Wellesley for over 40 years. Throughout this time, it has been used as a commuter parking lot for the Wellesley Square railroad station. For almost as long, Town residents have discussed what better use than parking might be found for this large, strategically located property, which, since 1972, has been zoned for multi-family and senior housing.

In December 2004, the Town's Tailby Lot Committee, funded by the Community Preservation Committee, engaged a multi-disciplinary team led by Architerra Inc. to determine the financial and physical feasibility of developing the Tailby Lot in accordance with certain goals: development of housing units as allowed by zoning (senior and affordable), expanded parking (for employees and shoppers), attractive open space, and increased revenues to the Town. The study team has reached the following conclusions:

1. The Tailby Lot is currently under utilized, particularly given its strategic location and zoning for housing.

2. The sunken configuration and separation by the railroad tracks results in an erroneous perception of the Tailby Lot as remote for users other than commuters.

3. Market rate condominiums in Wellesley are in such high demand and limited supply that a certain number of units can pay for the construction of additional parking and publicly accessible open space of approximately one acre.

4. There is a significant need for senior housing in Wellesley, designed for 55+ year old residents who want to remain in the community.

5. There is a serious demand (and a State legal requirement) for affordable housing, such that 20% of the housing units developed on the Tailby Lot should be affordable at 80% of the Boston area median income.

6. There is a pressing need for additional Wellesley Square parking for shoppers, commercial employees, and Town employees. Parking fees need to be adjusted and parking regulations enforced to make Tailby parking more desirable.

7. Parking fees alone cannot pay for the cost of constructing structured parking on the Tailby Lot (or any other site in Wellesley Square).

8. Financial analysis has shown that a housing, parking and open space development on the Tailby Lot can result in a host of benefits including a net financial gain to the Town, with no direct investment and returns with an estimated net present value of $5.9 million over 25 years or $9.1 million over 50 years.

9. The next step should be a subsequent follow-up study. Please see "Recommendations for Phase II Study" on page 7.

Figure A - Site plan of existing Tailby Lot next to commuter rail

The two-acre Tailby Lot is located immediately adjacent to the westbound Wellesley Square commuter rail stop (Figure A), and within a 3- to 5-minute walk of virtually every destination in Wellesley Square (Figure B).

This large, strategically located Town property, controlled by the Board of Selectman, currently serves as a surface parking lot. Its 226 spaces produce limited annual Town revenues. Few would contend that this property is currently at its highest best use, as property near town centers and transit is recognized as especially valuable for mixed uses that create more value and vibrancy than surface parking lots. The Tailby Lot is currently zoned as Limited Residential (see page 49 for zoning details).

Because of its ample size, strategic location, Town ownership, and depressed elevation (10 to 16 feet lower than the Crest Road bridge), the Tailby Lot poses a unique development opportunity — the chance to bury unsightly parking, nearly doubling the number of spaces while making them invisible, while simultaneously creating attractive housing and open space at the Town center.

Such a development promises to enhance Wellesley's character and appeal and provide significant benefits to diverse constituents (Figure C). In particular, the Town would gain revenues, the key to flexible, long-term parking management, and perhaps most importantly, expanded senior and affordable housing (condominiums or rental) . Neighbors would benefit from increased property values and improved views of housing and open space. Commuters, shoppers and employees would benefit from the comfort and ease of covered parking and elevator service from the commuter rail platform to Crest Road.

If done right, the development of the Tailby Lot will exemplify "smart growth" – meeting diverse housing and parking needs close to transit, respecting existing zoning, and creating quality open space that belies any increase in density.

This study advances the preliminary conclusion that the development of the Tailby Lot is not only promising, but also feasible. Illustrating the range of possible development approaches and assessing their relative financial and physical merits, this study shows that there is likely only one feasible development strategy – the so-called "over-under" approach – and concludes that a Phase II study is necessary and desirable to examine this approach more closely.

Figure B - Tailby is within a 5 minute walk of most destinations in Wellesley Square

Figure C - Development on the Tailby Lot may have benefits for many Wellesley citizens

The Town's Request for Proposal for the Tailby Lot Feasibility Study established these goals:

- Produce positive net revenue to the Town (i.e.. pay for itself over time);
- Relieve parking and other problems;
- Be an improvement visually (i.e.. create new open space);
- Minimize density (i.e.. respect that current zoning of the Tailby Lot allows no more than 34 housing units);
- Create affordable housing (i.e.. a target of 20% of any market-rate development);
- Orient the new housing to seniors now living in Wellesley.

The "over-under" development approach satisfies all these goals, namely:

- Produces positive net revenue to the Town in the form of three anticipated income streams:

  1) A payment of $700,000 to the Town by the developer (which could be structured in a variety of ways including an upfront developer's fee or a priority share of the future gross housing sales, with the Town retaining fee simple interest in the property); plus
  2) An estimated $115,000 in net new annual parking revenues; plus
  3) An estimated $205,000 in net new annual real estate taxes.

  These three payments together have an estimated net present value to the Town of approximately $5,900,000 over 25 years or $9,100,000 over 50 years. This study contends that this positive financial result is achievable with no municipal bonding, no direct financial investment, and no development risk to the Town.

- Relieves parking and other problems by expanding the number of parking spaces and designing a garage that generally accommodate commuters on the lower level, and residents, employees, and shoppers on the upper level, provides a street-level elevator and enclosed stairs, and uniformly covers and illuminates all the parking spaces.

- Is an improvement visually by largely concealing all the parking, creating attractive neighborhood housing and a new, publicly-accessible open space of approximately one acre, and retaining and enhancing the landscape buffer along Crest Road (conforming to current zoning set-backs).

- Minimizes density by limiting housing to the 34 units allowed by current zoning – 27 market-rate units plus 7 affordable units in a total of 62,000 gross square feet.

  Feasible development is possible in less square footage as long as net sales proceeds exceed development costs. This can be accomplished through a higher sales price per square foot for the market-rate units. Alternatively lower density can be accomplished through a reduction in the number of affordable units and/or an adjustment in the level of affordability. (This study assumes affordability as defined by the State for the Boston Standard Metropolitan Statistical Area. Affordability could be redefined according to Wellesley averages, resulting in higher though still relatively affordable sales prices.)

- Creates 7 affordable units ranging from 1,400 to 1,800 square feet each, totaling 20% of the total number of units.

- Orients new housing to seniors now living in Wellesley by providing condominium units ranging from 1,400 to 2,200 square feet each, with separate entrances and covered attached parking, selling at an average of $425 per square foot near the heart of Wellesley Square.

A Phase II study should refine the concept plan for an "over-under" development, testing unit types and mixes as well as open space and garage configurations.

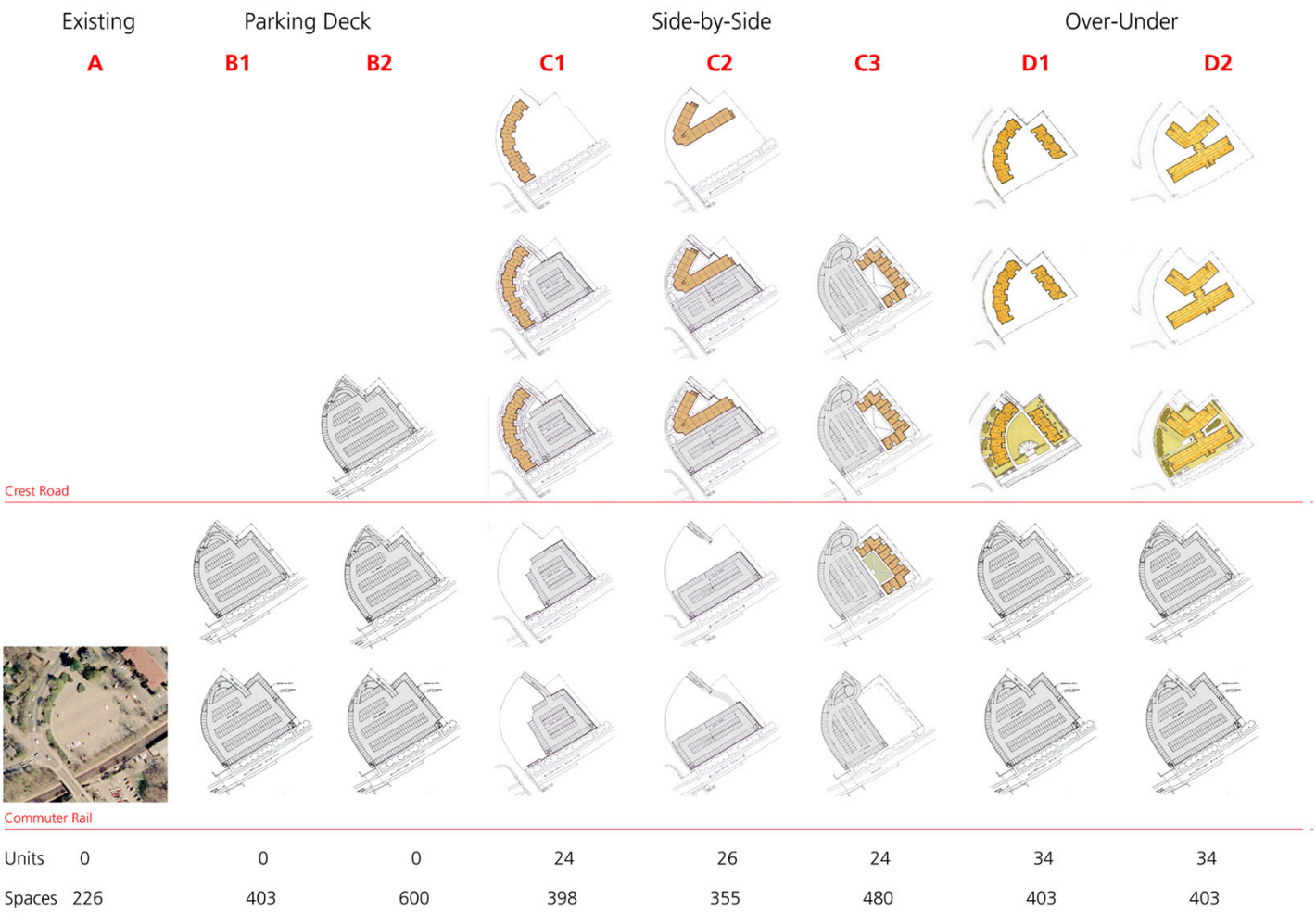
The scope of the Phase II Study should be expanded to include the Post Office Square Lot because consideration of both parcels together will lead to integrated solutions for the commuter rail station, Wellesley Square parking, additional housing, and enhancement of retail frontage along Central Street. Studying Tailby and Post Office Square together is likely to produce creative solutions for unifying Wellesley Square and rectifying existing parking and planning deficiencies.

The Tailby Lot comprises one of two neighboring potential development parcels - the other being the Post Office Square Lot. Together these lots, both under Town control, form a related pair providing commuter rail service and parking on both sides of the tracks.

The Phase II Study should perhaps also include:

- More detailed market analysis including focus groups, questionnaires, and benchmarking of appropriate similar projects;
- Templates for developer's contract, land lease structure, alternatives for conveyances, and ownership structure for both the housing and the garage;
- Further development of the financial analysis including benefits and risks for the developer, condominium owners, and the Town;
- Conceptual cost estimating;
- Investigation into sub-surface conditions including soils, utilities, and the presence of ledge;
- Development of the open space - ownership, maintenance costs and responsibilities;
- Detailed traffic analysis with specific suggestions for traffic mitigation and pedestrian safety with cost analysis and identification of funding sources;
- A broader parking study with analysis of the inter-relationships of the Town parking policies, and the costs of displacement and loss of revenue during construction.

A subsequent Phase III Study should prescribe a deal structure for the Town and draft a request for proposal to solicit bids from developer/architect teams.



	A	B1	B2	C1	C2	C3	D1	D2
Units	0	0	0	24	26	24	34	34
Spaces	226	403	600	398	355	480	403	403

To test the feasibility of development on the Tailby Lot, Architerra sketched and analyzed eight separate development alternatives ranging from leaving the Tailby Lot as it currently exists (Alternative A), through the construction of additional decks of parking only (Alternatives B1 and B2), and proposals which placed new housing and increased parking side by side on the lot (Alternatives C1 through C3), to extensive development that places two decks of parking below a landscaped public open space surrounded by low rise housing at the level of Crest Road and Linden Street (Alternatives D1 and D2).

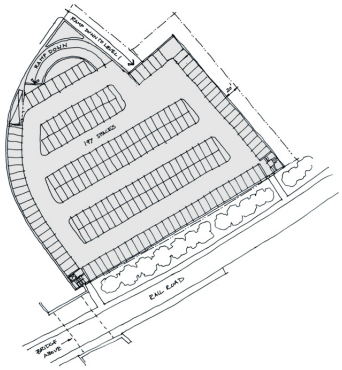
For purposes of the study, the following target development program was assumed:

- 34 housing units (allowed by current zoning) @ an average of 1,825 square feet per unit
- 20% affordable units @ an average cost of 80% of the Boston area median income
- 400 parking spaces

A. Surface Parking

The surface parking approach simply leaves the current paved lot as is. There would be no cost outlay but also only limited opportunities for the Town to increase its revenues utilizing the existing 226 spaces. Moreover, the appearance of the Tailby Lot will continue to be that of a parking lot. Tree screening will never overcome the unfortunate view and illumination of exterior light poles, while the mere presence of the parking lot will continue to be an unpleasant gap in the fabric of attractive buildings and open spaces that define the Town center. The difficult access down one steep stair would remain.

Parking Spaces: 226 Residential Units: 0



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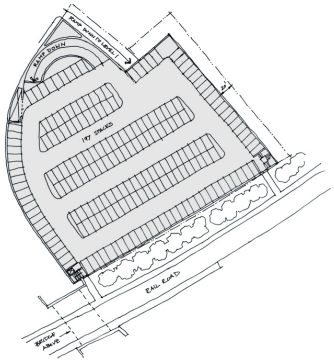


Level 1- Tracks

B. Parking Deck

The parking deck approach places a garage of one or two additional levels above the existing surface parking lot. This would bring parked cars and the base of exterior light poles level with Crest Road, or even higher, making the parking facility even less attractive than the existing, sunken, surface lot. Lighting for security and the mass of parked cars themselves would become much more visually obtrusive.

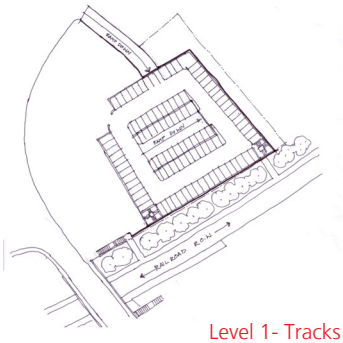
The parking deck, by itself, is not financially feasible. Current parking revenues would have to increase significantly (through a combination of higher rates and higher occupancy) to support the addition of even one level.

Residential Units: 0 Parking Spaces: 403

Level 5

Level 4

Level 3 - Crest Road



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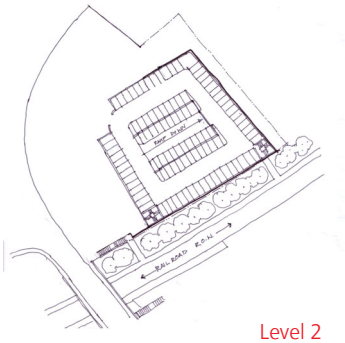


Level 2

C1. Side-by-Side (3 Parking Levels)

The side-by-side approach places housing and parking on separate, contiguous parcels within the boundaries of the Tailby Lot. This approach might seem to be appealing for its promise of conventional simplicity of ownership and cost effective construction. However, it turns out not to be feasible for a number of reasons.

First, this approach produces fewer housing units than the number that can be built as-of-right under current zoning, diminishing the potential profits to subsidize the cost of the garage. Second, all the housing units are close to, and look into a parking garage, and so must be priced at the low-end of the market, again diminishing the potential profits that can be used as a garage subsidy. Third, the garage costs more per space because the smaller footprint and greater number of levels adds more square footage for drive aisles and ramping.

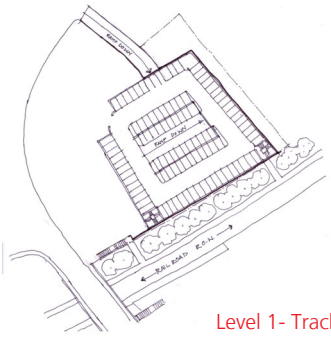
This alternative, with just three levels of parking, creates 100 fewer parking spaces than the 400 spaces assumed in the development program.

Residential Units: 24 Parking Spaces: 300

Level 5

Level 4

Level 3 - Crest Road



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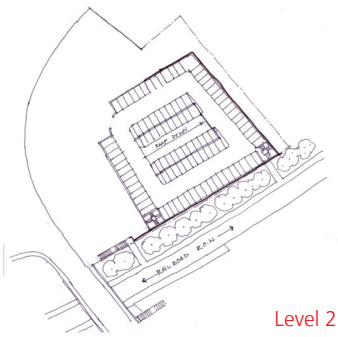

Level 2

C1. Side-by-Side (4 Parking Levels)

This alternative is identical to the previous plan but for the addition of another deck of structured parking to bring the total spaces up to 398. This shows the added problem with the side-by-side approach – the deleterious effect of an above-grade parking structure on the housing and Town Center. Regardless of the garage design, parking will be much more visible, blocking sightlines southward across the tracks to the Village Church, and substantially reducing the value of the new residences.

Residential Units: 24 Parking Spaces: 398

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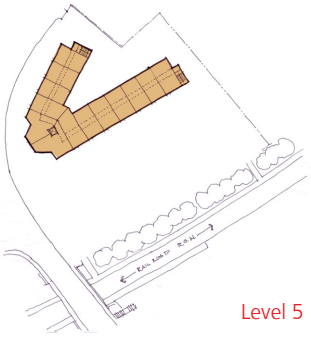

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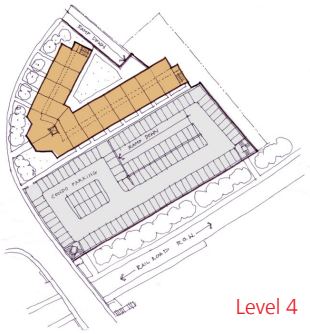

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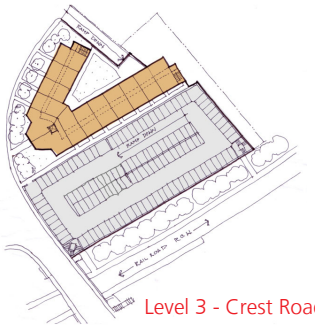
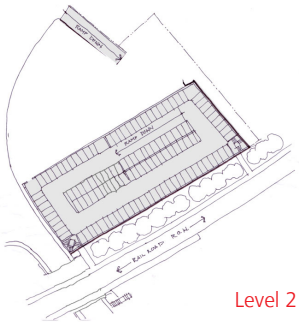


Level 3 - Crest Road



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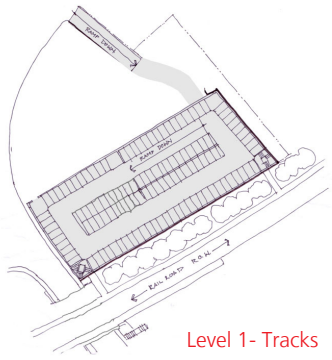


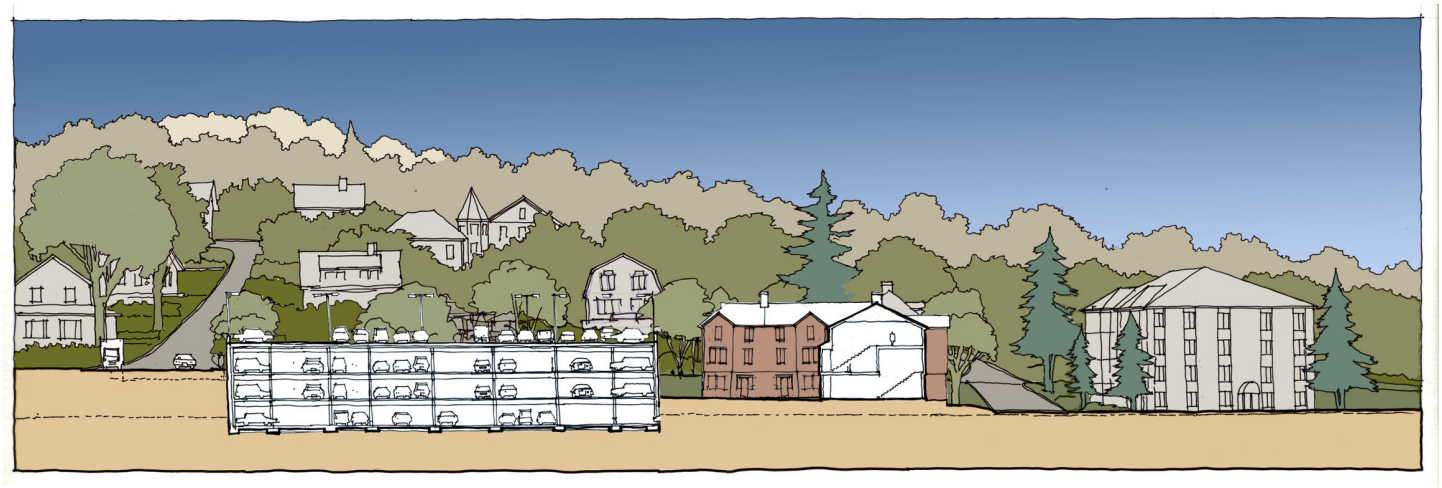
Level 1- Tracks

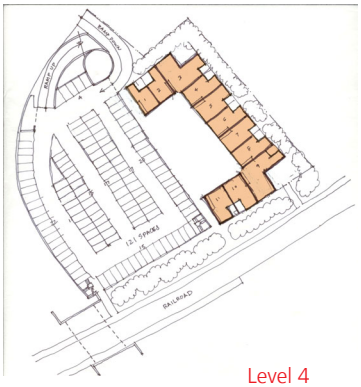
C2. Side-by-Side

In this approach the parking is assembled into a four story parking deck of simple rectangular shape parallel to the commuter rail tracks. Housing is configured as an apartment building with a central lobby and interior corridors,

The parking structure would rise a level above the Crest Road bridge, entirely blocking the views from and to the new housing units.

Residential Units: 26 Parking Spaces: 355

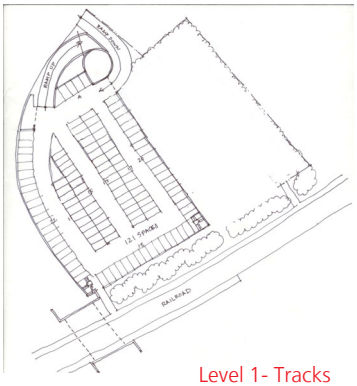




Level 4

Level 3 - Crest Road

Level 2



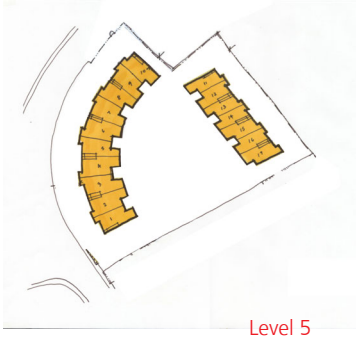
Level 1- Tracks

C3. Side-by-Side

This sketch places all the parking along Crest road in a four level structure that rises one story above street level. The housing is placed on grade, one level below Linden Street and fronting on One Hollis Street.

Though this creates a better view from the single office building on Hollis, the new residences are sunk to the level of the commuter rail tracks making the presence of the trains much more intrusive. The unit's front doors would face the parking structure. Units in this configuration could not command the selling prices that the Wellesley market currently commands, greatly reducing the feasibility of the entire development.

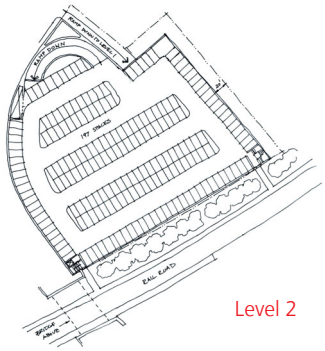
Residential Units: 24 Parking Spaces: 480



Level 5

Level 4

Level 3 - Crest Road



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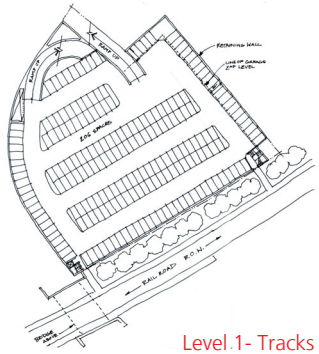

Level 1- Tracks

D1. Over-Under Approach

The over-under approach places housing and open space on a structured platform above an expanded parking deck, concealing the parking from Crest Road and the housing. This creates highly desirable housing units with associated open space and covered parking, in scale with the existing neighborhood and in character with the Town center. The housing is buffered from the railroad tracks by its higher elevation, starting approximately 18 feet above the tracks. Residents, by and large, will not see the train.

The great advantage of the over-under approach is that unsightly parking will largely disappear from view, while the parking count of the existing lot is nearly doubled. Expanded parking in this location will enable it to meet many flexible parking demands over time, including fluctuating, but generally increasing, demand from commuters, employees and shoppers. Added advantages are that all spaces are covered, served by an elevator, and evenly illuminated – promising greater convenience, comfort and safety.

The financial feasibility of the over-under approach depends on achieving housing profits, increased tax revenues, and increased parking revenues, sufficient to cover the projected $22M capital costs of the housing, parking and open space. (This figure includes developer's profit.) Revenues of these types and proportions can be generated, as demonstrated by the pro-formas included in Section 8, Finance.

Residential Units: 34 Parking Spaces: 403

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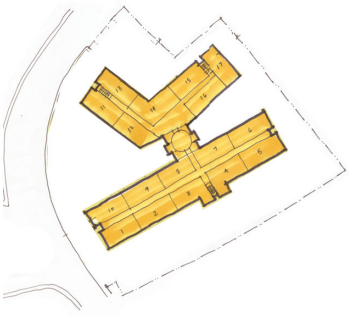

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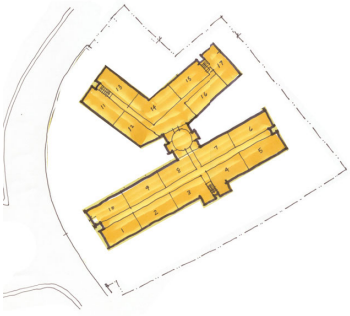

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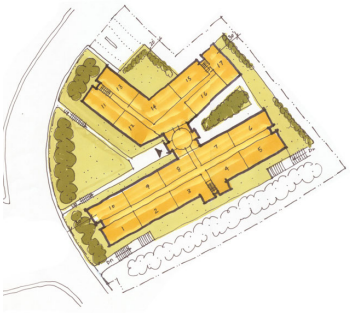
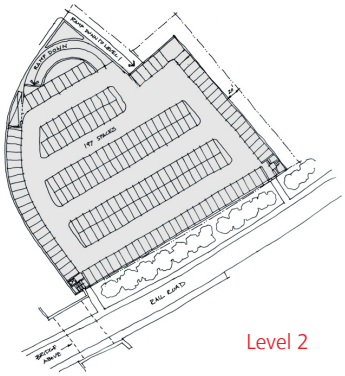


Level 3 - Crest Road



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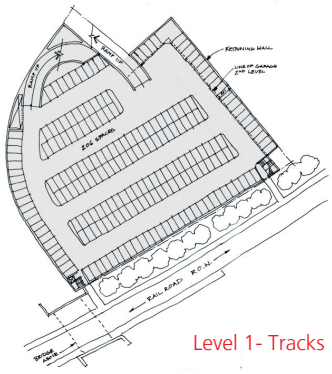


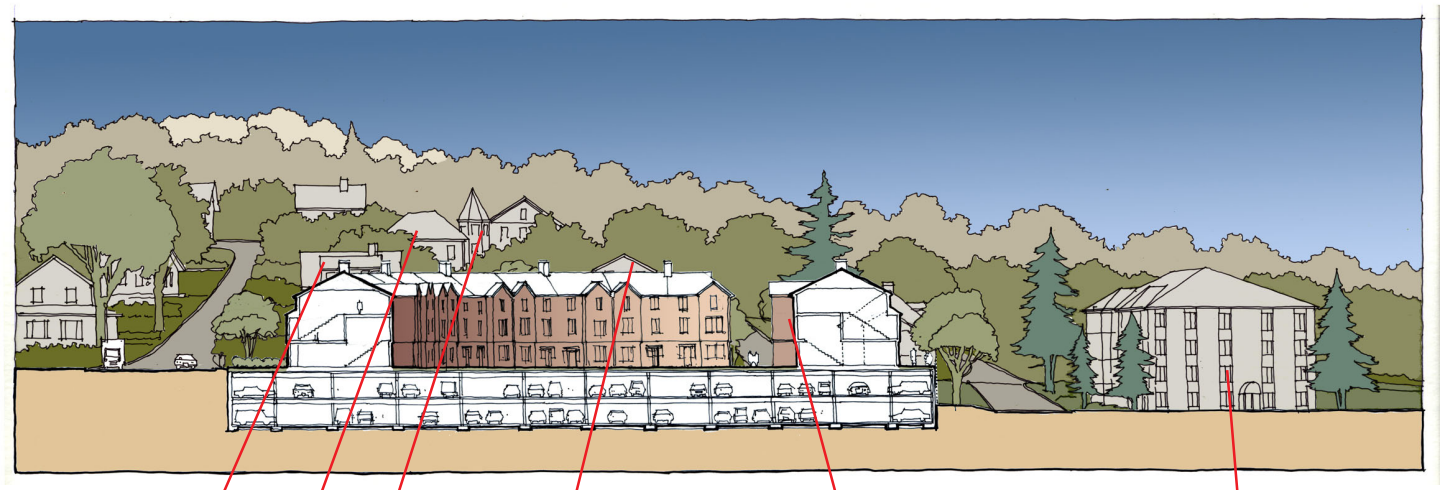
Level 1- Tracks

D2. Over-Under Approach

In this version of the Over-Under approach the housing is configured in an apartment building arrangement with a central lobby and corridors (as opposed to the individual townhouse units in D1). The open space is more directly oriented towards Crest Road.

Market research suggests that the Wellesley senior market would prefer to tenter their units, not through a central lobby and corridors, but through separate at-grade doors to each individual unit, similar to a single-family home.

Residential Units: 34 Parking Spaces: 403



Scale and Neighborhood Context

It is vital that any development on the Tailby Lot be compatible both in scale and architecture with the surrounding residential neighborhood and retail district. The drawing and photographs above show the over-under so-called "Crescent Condominium" development approach in the context of several surrounding structures. This visualization demonstrates that a residential-scale development, with housing and open space built on a parking platform, would be compatible with existing properties along Linden Street and Crest Road. Not shown but equally compelling is the potential for improved views toward Post Office Square and the Village Church from the properties on the hill above the Tailby Lot.

Zoning

Zoning and other development parameters are listed in the appendix to this study. The development approaches were devised to conform to as-of-right zoning as much as possible. They do this with respect to allowable use, density (number of units), building height, parking requirements, minimum lot size, and front and side yard setbacks.

Some zoning relief will be required regardless of the development approach taken. Parking is not an allowable use under current zoning for the Tailby Lot. Lot coverage is expected to be somewhat greater than the current zoning limit of 20% (see discussion below). The rear setback along the railroad track is likely to be less than the required 30 feet from a public way.

Lot Coverage

Sketch plans in the study were prepared at small scale suitable for master planning, and reflect a total housing development of approximately 51,000 to 62,000 gross square feet, corresponding to the range of development approaches considered during the course of this study. All plans assume three-story residential structures.

The Over-Under alternatives have footprints of approximately 17,000 to 20,700 square feet, resulting in a lot coverage of 20% to 24%, and open space of approximately one acre.

The Side-by-Side alternatives have footprints of approximately 50,000 to 55,000 square feet including garages of nearly one acre, resulting in lot coverage of 59% to 65%.

Two public workshops, conducted as part of this study, identified these commonly asked questions about the Tailby Lot:

Why don't we wait until Eastern Development is done with Linden Square?

Nothing about Linden Square will either diminish or promote the development potential of the Tailby Lot. Transit-oriented housing, targeted for the senior and affordable markets, will transform the Tailby Lot and sell well, with or without expanded service retail along Linden Street. The projected incremental traffic from the Tailby Lot development is modest (adding approximately one car per minute during the peak hour) and manageable without significantly affecting levels of service by adjusting the existing lights at Linden/Crest Road and Linden/Everett Road.

Why do we need more parking?

Until 2004, the Tailby Lot was regularly full to capacity. A 2002 study by the Beta Group reports 92% occupancy at weekday peaks. In 2004, by a vote Town Meeting, the Selectman increased the parking rates (Figure D Section 5 - Parking). Subsequently, occupancy decreased to 57% in June 2004, increasing to 63% in December 2004 (Figure E Section 5 - Parking), as reported in an updated study by the Beta Group.

This data suggests that the demand for parking is rebounding, despite 20% lower MBTA ridership and increased Tailby parking rates, and also that Tailby parkers are shifting toward more Wellesley residents (Figure F Section 5 - Parking). The Beta Group study also footnotes that there is a waiting list of 85 customers for annual passes, the fulfillment of which would restore occupancy to over 100%.

Most would agree that transit-related parking is essential for a well-planned Town, and that over time, the Town can reasonably expect continued growth in the numbers of commuters, employees and students who rely on mass transit as the most financially attractive and environmentally responsible solution, or who simply have no other means of transportation.

Most would also agree that parking in Wellesley Square is generally convenient but frequently oversubscribed, particularly at metered spaces in front of popular retail establishments. The Town currently has nearly 1,200 spaces (Figure G Section 5 - Parking), 25% of which are in private lots and 75% of which are in public lots or on-street parking. The Tailby Lot comprises 20% of these spaces, suggesting its critical role in parking demand management.

Many have suggested that the Town would benefit from overall parking management plan, including adjusted parking rates and a effective enforcement policy. This plan should confirm the demand for expanded parking at Tailby, and recommend the ideal mix of parking uses (commuter, employee, shopper) as may be flexibly adjusted over time in response to changing demand.

What's wrong with the Tailby Lot just the way it is?

The Tailby Lot is a utilitarian parking lot buffered by evergreen planting. It is perceived as close the railroad tracks, which are in view, but distant from the Town Center, with which it is linked. There are many factors that contribute to this impression, the most important of which is its depressed grade. With respect to Crest Road, the Tailby Lot is in a ditch.

As a parking facility, the Tailby Lot is not particularly well marketed, signed or designed. Furthermore, the steep stairs and lack of an elevator and ramps discourage pedestrian use.

The major problem with Tailby Lot has less to do with grading and features, but rather the deleterious effect of visible parking lots. Like other surface parking lots in Town, the Tailby Lot is a gap or a hole in the fabric of buildings and open spaces that make Wellesley an attractive, harmonious, and high-quality place. It is therefore very important to realize any feasible way to make the parking invisible.

Why don't we deck the Post Office Lot or Cameron Lot?

Some perceive these lots to be more convenient for employees and shoppers. However, the Cameron Lot is actually more distant from Central Street than the Tailby Lot. The Post Office Lot is approximately half an acre, only a quarter the size of the Tailby Lot, and would therefore produce a less efficient garage with a higher cost per space. The Cameron Street Lot is somewhat bigger but still only half the size of the Tailby Lot, so less feasible from a garage cost perspective. Most importantly, though, there is no way to hide a garage at either the Post Office Lot or Cameron Lot. Above-grade garages at these locations would be ruinous to the Town fabric. Below-grade garages by themselves are prohibitively expensive.

Why not study the Tailby Lot and Post Office Lot together?

The Wellesley Square railroad stop is comprised of westbound platform adjacent to the Tailby Lot and the eastbound platform adjacent to the Post Office Lot. It makes sense to study both lots together, particularly to explore strategies to increase the perceived centrality of the Tailby Lot and produce more revenue for the Town.

Why isn't the side-by-side approach suggested in the Town's Comprehensive Master Plan feasible?

The sketch alternatives in the Town's Comprehensive Master Plan are premised on a number of assumptions that are uncertain or unlikely. These include reducing the required setbacks along Crest Road, taking possession of the two-family house at the entrance to the Tailby Lot, using a private way for garage access (the extension of Hollis Street in front of the One Hollis Street office building), and developing retail as well as housing and parking in this location.

More importantly, though, any side-by-side alternative reduces the potential for optimal housing sale prices. Units that look into a garage, particularly one spaced less than 50 feet away, will sell at a deep discount compared to units that have concealed parking beneath, as offered by the over-under approach.

How does the Town's projected financial benefit compare with what it could expect to receive for selling the land outright?

The present value of the stream of income exceeds the amount that the Town would receive today if it sold the land for its highest-and-best use. A housing developer would pay approximately $125,000 per unit or a total of $4,250,000 to acquire the land to built 34 units. If it were to sell the land outright, the Town would lose 226 existing parking spaces (expandable to approximately 400) and have little control over what would be built.

Overview

There is a significant demand for condominium housing in Wellesley with a very limited supply. Sale prices for Wellesley condominiums in 2004 grew approximately 45% over the previous year as the result of this pressure. In particular, demand stems from the baby boomer "empty nesters" who wish to downsize from their single-family homes and simplify their lifestyles. The Tailby site, currently zoned for senior housing, is well suited for this use due to its proximity to town services, shopping and transportation.

The market analysis on which the pro formas in this study are based consisted of talking to realtors, studying comparable developments, and drawing on the experience of the study team. In-depth market analysis which might include demographic studies, prospective buyer focus groups and survey questionnaires was expressly beyond the scope of this study but should be considered as part of a Phase II study.

Condominium Market

The most desirable features in a 55+ condominium include covered parking available for two cars, a minimum of 1,400 square feet for a two-bedroom unit, and the master bedroom and bath on the main living floor. While one-floor living is most desirable, interior stairs leading to a second bedroom or study are acceptable, as they provide privacy for guests or quiet work space. In addition, quality construction addressing energy and acoustic issues is essential, and fireplaces are a preferred amenity. Premiums are placed on views of open space, as well as access to public transportation.

In terms of access, owners prefer to enter their condominium unit as they would a single-family home, with a separate exterior entry as opposed to an interior hallway through common lobbies. In fact, common area amenities and social programming are not important features for this market in Wellesley.

This study assumes exterior entries to units ranging from 1,400 to 2,200 square feet (averaging 1,825 square feet), with a master bedroom and bath on the main floor.

Sales Data

In 2004, 27 condominiums were sold in Wellesley ranging in price from $425,000 to $1,225,000, averaging $653,000 per unit. The highest sales were at Garden Close and 619 Washington Street, confirming a premium for high ceilings and more interesting space layouts. Wellesley Green units averaged in the mid to high $700,000's and the Overbrook duplexes sold in the $540,000 - $575,000 range. The ratio of sales price to listing price was 97 percent, and the average number of days on the market was 68.

There were no sales transactions recorded for the Kingsbury School condominiums in 2004, but sales in 2005 and 2006 will be a valuable source for future comparable data or studies.

This feasibility study assumes an average sales price of $765,000 in today's dollars.

Wellesley Condominium Sales 2004 - Sampling

Location	Sales Price	Date
Linden Street	$ 425,000	09/04
Walnut Street	$ 479,900	11/04
Grove Street	$ 487,500	07/04
Pleasant Street	$ 515,000	12/04
Walnut Street	$ 530,000	05/04
Edgemoor Circle	$ 550,000	11/04
Edgemoor Circle	$ 550,000	02/04
Forest Street	$ 730,000	10/04
Grove Street	$ 750,000	04/04
Grove Street	$ 770,000	05/04
Washington Street	$1,035,000	06/04
Garden Road	$1,225,000	06/04

Most of these units are in buildings 20-30 years old or in units that are smaller and with a significantly lower grade of finishes than are envisioned for Tailby.

Brokers Comments

Several leading residential brokers offered comments supporting the significant demand for senior housing and condominiums in Wellesley. They all agreed that while older buyers are "downsizing," they are accustomed to living in single family homes and do not want to squeeze into very small units. One broker described 1,400 square feet as "very small." This broker suggested that larger units up to 2,200 square feet would be very desirable, having recently sold one such unit herself for $1.2 million. Her "comps" for this sale included Wellesley and Newton condominium sales prices well in excess of $500 per square foot, with a project in Chestnut Hill selling for up to $580 per square foot. Brokers agree that the Wellesley senior market wants well appointed units, "nothing stripped down," separate front doors, first-floor bedrooms and attached garages.

Senior Housing Development Program

Study team members were recently involved in planning a senior housing development planned for Amherst, MA, the market for which is Boston and New York area residents. The development program called for units ranging from 1,200 to 2,200 square feet. The program was prepared through extensive market surveys (including Wellesley residents) and market analysis by Susan Brecht, author of Senior Living, the definitive Urban Land Institute publication on this subject.

Affordable Housing

In order to comply with the State's 40B affordable housing law, any affordable units must meet the affordability guidelines as determined and adjusted annually by the U.S. Department of Housing. The qualifying maximum income for a family of two is currently $53,000 per year as

stated in the Boston SMSA (Standard Metropolitan Statistical Area). These housing regulations state that no more than 30% of this income may be used for housing costs including mortgage principal, interest, taxes and condo fees.

For the purposes of this feasibility analysis, the average sales price for an affordable unit is assumed to be $189,000.

Overview

The proposed project is a mixed-use development of housing and parking. The existing Tailby Lot is currently marketed, structured, and used as a commuter parking lot which services the MBTA Wellesley Square Commuter Rail. The lot primarily services commuters from the surrounding communities who park for the work day to commute into the Boston area.. The lot is currently configured for efficient parking and is electronically metered with a central pay and display system which minimizes labor and optimizes revenue.

The goal of this study is to maintain the existing parking capacity, provide adequate parking for the proposed development, and expand the parking capacity to improve parking and service the commercial district.

The physical characteristics of the site make it ideal for adding a parking structure and a housing development above the existing parking lot. A one story parking deck with one additional level, which would serve as the platform for additional development, would satisfy the needs of the community. The rise in Linden/Crest road can potentially conceal two levels of parking. This concept has proven to be economical as well as attractive in other projects. A recent example from a local college was used as the basis for conceptual cost estimating for the parking structure and housing platform.

Cost Estimate for Parking Structure

Pricing for the structure was procured in November of 2004 and included only design costs with exclusion for environmental hazards. The site was the existing parking lot built into a hill with a parking deck and services added.

Garage only	
Parking deck, foundations and utilities	$3,920,000
Add upgrade to concrete on grade	$ 170,000
Add architectural screening	$380,000
Subtotal	**$4,470,000**
Upgrades for Housing Platform and Open Space	
Added deck of structure and utilities	$2,570,000
Add sprinklers due to housing	$330,000
Add 4 elevators to serve housing (3 stops each)	$360,000
Add waterproofing and landscaping	$1,300,000
Subtotal	**$4,560,000**
Total	**$9,030,000**

Total existing spaces: 440 (approximately)
Net new spaces: 200 (approximately)
Approximate cost per new space: $50,000 ($28,750 per added space)
Approximate cost per space: $10,000 (based on the total number of spaces)

The estimate assumes current costs associated with materials. Design costs and contingencies are included in the estimates. The pricing is based on a previous turn-key project that was located on a site with similar characteristics. The upgrades are estimates with some variability depending on the material selections made by the designer.

Site Evaluation

The relatively large footprint is ideal for creating an economical and easy to use parking facility. It is very common for parking to be sited on small, inefficient parcels which tend to drive the costs up considerably. The large footprint allows for many of the fixed costs to be apportioned over more spaces thus decreasing the cost per space. Additionally, the large footprint and the natural slope of the grade allows for level floors and an open floor plate. This benefit cannot be underestimated in terms of user comfort and ease of use. The large open floor plate improves visibility and passive safety which is a necessary amenity for a structure in a suburban market.

Given the orientation of the property, the lighting from the parking deck is shielded from the residential abutters. Also, the site is essentially pre-excavated because of the natural slope of the surrounding topography. This allows for ready ramping and the ability to have natural ventilation and light. The natural slope also allows for better "nesting" or segregation of the users; typically the monthly tenants desire separation from the daily retail parkers. Only in the most urban and residential markets can one realize the full benefits of the mixed use.

Review of Parking Studies and Demand Factors

The parking studies from 1998, 2002, and 2004 were made available for our review and use. The existing lot essentially serves only local commuters. The Tailby Lot is not marketed to the town as a general parking lot and is virtually invisible from the street. The lot, according to the previous studies, is not used by the local retailers or their employees from Wellesley Square or the Linden Street corridor. The existing MBTA commuter rail tracks to the south and the existing staircase create a "barrier" for service to the Wellesley Square area.

The Town of Wellesley needs to develop a comprehensive parking plan to address the needs of commuters, residents, and commercial interests. The studies appear to be done to create better utilization of existing parking, not to increase revenue or provide service to certain retail market sectors. Interests need to be prioritized with a strategic emphasis to direct better utilization of the various lots and on-street parking. The on-street parking and other lots are strained, yet the Tailby lot has additional capacity. We believe that through better enforcement and the implementation of tried revenue models, parking behavior can be modified in the town to improve lot utilization and improve flow through the Wellesley Square area. We also believe that the town revenue from parking could increase as a result.

Through a comprehensive parking management plan and additional marketing, we believe this lot can be made an amenity to serve Wellesley Square as well as the Linden Street corridor. It is uniquely situated to provide a reservoir of parking and improve the pedestrian experience in these two vibrant retail areas. Without a plan to move forward with a structured parking option, the lot may remain a commuter facility with the opportunity for an air-rights development.

Parking Revenues

To forecast parking revenues, this study conservatively assumes the following:

Parking Rates (current Tailby Lot rates, as increased in 2004)
Annual permit fee - $480 resident / $960 non-resident
Daily rates - $3.00 with card / $4.50 cash or non-resident

Occupancy
70% parking occupancy (non-residential spaces)

Parking Split
50% parkers with annual parking permit (50% resident / 50% non-resident)
50% parkers paying daily (50% with card / 50% cash or non-resident)

Parking Mix

Commuters	200 spaces (100 Wellesley residents, 100 non-residents)
Employees	100 spaces (50 Town employees, 50 merchant employees)
Shoppers	32 spaces
SUBTOTAL	332 spaces (producing Town parking revenues)
Condominium	68 spaces
TOTAL	400 spaces (rounded from 403 in sketch plans and 406 in the Preliminary Traffic Impact Assesment)

The parking mix will change over time, particularly as the Town's parking policies, marketing strategy, and garage accommodations evolve to promote employee and shopper parking.

Garage Operating Expenses

The $80,000 carried in the pro forma for annual garage operating expenses is based on the advice of an experienced garage developer/operator and reflects comparable facilities. Included are all utilities, snow removal, and maintenance, but no staff.

Employee Parking

The Town can encourage employee parking at the Tailby Lot today, without future development, and should consider a trial program to alleviate current Wellesley Square parking problems. This program should offer merchant and Town employees reduced annual parking permits for the Tailby Lot. The Town should seriously consider increasing the public parking meter rates in Wellesley Square, together with enforcement of the current two-hour limit for on-street parking.

Conclusions & Recommendations

The existing site is well configured and located such that it would be easily converted to structured parking. A one story parking deck with one additional level can be done economically and efficiently.

There are cost premiums associated with the design of a platform which will need to be addressed in the project Proforma.

Currently, the parking lot is not marketed to the general public nor professionally managed. We believe that through successful town wide parking management and marketing, the use of the Tailby Lot can be increased and Wellesley Square traffic and parking issues mitigated. We believe that given Tailby's location, it could become destination parking for people visiting the square.

With the added utilization there may also be increased revenue to the Town as well as improved parking for the community. It requires a town-wide management plan to direct the users to the appropriate locations.

Meter rates in Wellesley Square are currently $0.25 per hour, enabling all-day parking for eight hours for just $2.00. The Tailby Lot day rate is $3.00. Employees currently "feed the meters" along Central Street, resulting in lost productivity and blocking parking for retail customers. The Town should seriously consider increasing the public parking meter rates and enforcing the current two-hour limit for on-street parking to promote employee use of the Tailby Lot.

Figure D - Parking Fee Increases

Across the board increases in parking fees, impacting out of town commuters more than Wellesley commuters, have resulted in a precipitous drop in use of the Tailby Lot and an increase in illegal parking on neighborhood streets.

Despite the large increase in parking fees and the resultant observed drop in daily utilization of the Tailby Lot, there is a reported waiting list of 85 people who wish to buy parking passes.*

	2003	2004
Long-term parking rates	$2.00/day	$3.00/day w/card $4.50/day cash or non-resident
Annual permit fee	$240, Resident $480, Non-resident	$480, Resident * $960, Non-resident

Figure D - Parking Fee Increases *85 person waiting list

Figure E - Drop Off in Tailby Lot Utilization 2002- 004

This graph from the BETA Group December 2004 study, documents the drop-off in Tailby Lot occupancy between 2002 and 2004 in response to the rate increase. Before the rate increase, the lot was 92% full on a daily basis. After the rate increase, weekday peak occupancy fell to just 57%. It should be noted however, the between June and September, 2004, occupancy increased from 57% to 63%. It appears that after the initial impact of the fee increases, utilization of the lot steadily increased. This study assumes 70% garage occupancy, which is close to current levels.

According to the BETA Group study, some drop off in commuter use of the lot can be attributed to a 20% overall decrease in MBTA ridership due to deteriorating service on the commuter rail line. Lower commuter parking demand may also be attributable to more available downtown parking and lower employment rates due to the softened economy.

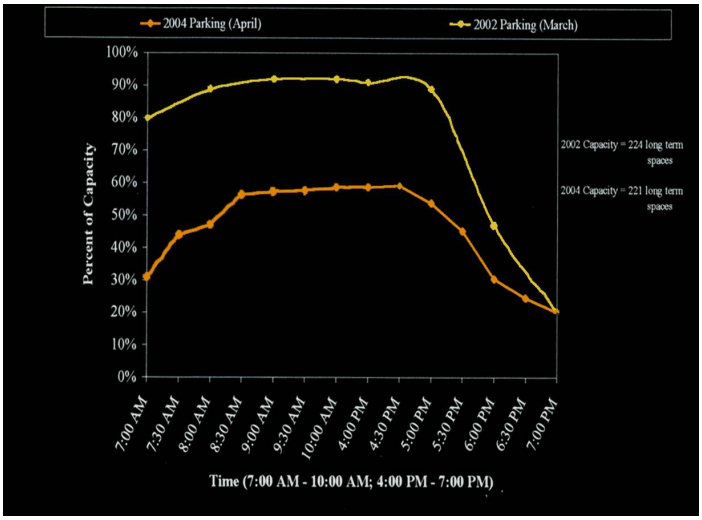


Figure E - Drop off in lot utilization 2002 - 2004

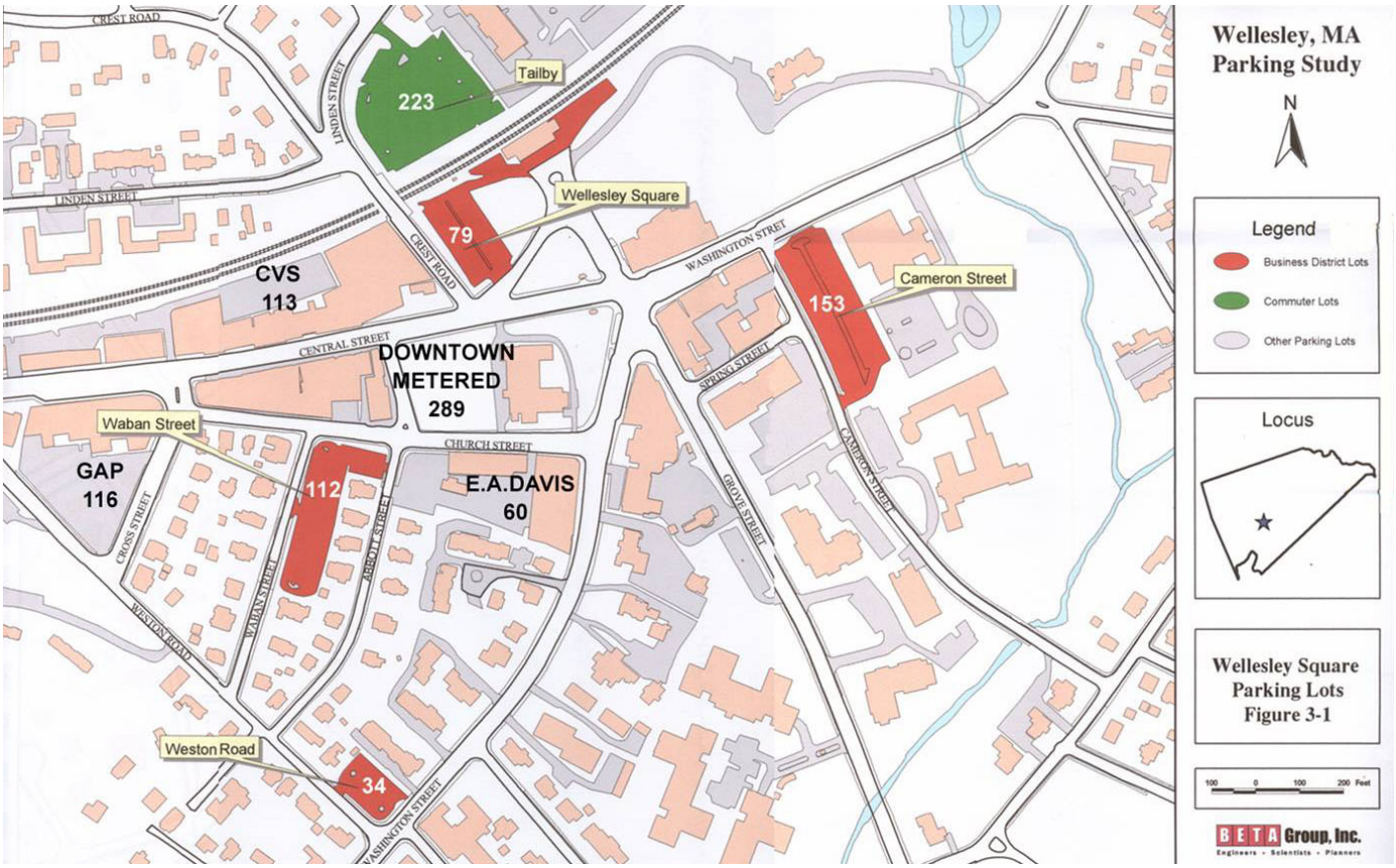
Figure F - "In Town" vs. "Out of Town" Commuters

There is a pervasive misconception that the Tailby lot is largely filled by "out of town" commuters from surrounding communities. The recent implementation of a differential rate structure for Wellesley residents has substantially increased the commuter use of the lot by Wellesley citizens.

	2002	2004
Wellesley	**32%**	**45%**
Natick	26%	19%
Sherborn	7%	6%
Framingham	5%	2%
Other	30%	27%

Figure F - "In town" vs. "out of town" commuters

Figure G - Map of existing parking in Wellesley



Of the 1,179 parking spaces shown on this 2004 study compiled by the BETA Group, 25% of the spaces are under private ownership while 75% are under Town control. The Tailby Lot is approximately 20% of the total parking supply in Wellesley Square.

Private Lots

Gap	116 spaces
CVS	113 spaces
E.A. Davis	60 spaces

Town Lots

Waban Street	112 spaces
Weston Road	34 spaces
Cameron Street	153 spaces
Downtown Meters	289 spaces
Wellesley Square	79 spaces
Tailby	223 spaces

Preliminary Traffic Impact Analysis

New traffic generated from the assumed 406-car garage will come from 180 net new parking spaces including 112 net new public spaces, plus the 68 residential spaces (2 spaces per unit for 34 units).

The following assumptions were used:

- Trips are distributed using 2003 traffic counts for the Sprague School Follow-up Study, provided by BETA Group (the Town's traffic consultant) via the Planning Department.

- The trip generation characteristics of the net additional parking spaces will mimic a "typical" transit station lot. This does not specifically factor in new trips for shopping, employee parking, etc. that may be generated by a larger parking facility. This analysis assumes that 70% of the net additional spaces will be occupied.

- This analysis also assumes that 25% of trips generated by the housing units will be pedestrian trips, which are excluded from the traffic stream.

The residential units and the new parking are expected to generate a total of 91 trips in the AM peak hour and 107 trips in the PM peak hour. This is less of an impact on Linden Street traffic than the traffic expected to be generated by the Eastern Development project. (This project - Linden Square - is assumed to be built for the purposes of this study.)

Applying the same trip distribution assumptions used above, and assuming that the Linden Street shopping area has 300,000 sf of new gross leasable area, 150 new AM peak hour trips and 649 new PM peak hour trips are estimated on Linden Street in the vicinity of the Tailby site due to the Eastern Development project.

The levels of service (LOS A being the best condition; LOS F the worst) at both signalized intersections are currently acceptable (LOS A at Linden/Everett, and LOS C at Linden/Crest for both morning and evening peak hours).

The five-year No-Build scenario (which assumes that the Eastern Development project is built, but that Tailby Lot remaines unchanged) shows decreases in the LOS (LOS B/C at Linden/Everett and LOS C/F at Linden/Crest for the morning and evening peak hours respectively). This increase is largely due to the increased traffic expected to be generated by the Eastern Development project. (Some increase is due to background growth in Wellesley.)

The five-year Build scenario (which assumes that the Eastern Development project is built, and that Tailby Lot is developed as described in this study) shows little change over the No-Build scenario in the LOS (LOS B/B at Linden/Everett and LOS C/F at Linden/Crest for the morning and evening peak hours respectively), with some slight improvements in delay time due to signal timing changes.

The expected impacts on Linden Street due to development of Tailby Lot traffic are minimal when compared to impact of the Eastern Development project at Linden Square, and these minimal impacts can be adequately mitigated.

For more detail, see Appendix for fuller "Preliminary Traffic Impact Analysis."

Garage Entrance/Exit

The best location for the drive entrance/exit is at the existing driveway location. The traffic impacts at the existing driveway would be limited only to increased delay for left turns into and out of the garage. The visibility issues due to the road curvature can be addressed by maintaining sight lines in the design of the development.

Locating the entrance/exit at the signal at Crest Road would introduce additional delay at the intersection and would require adding additional signal equipment and upgrading the operation of the signal. Even if a new curb cut is made as an entrance-only drive, additional delay is likely to result and adding turn lanes at this location may be problematic.

Garage Exit Queuing

To ease the backup of cars exiting the garage, dedicated left and right turn lanes would better distribute vehicle queues. A right turn only movement out of the garage is not recommended, because there are no ideal alternatives (such as U-turn locations or alternative routes) for cars heading to Wellesley Square and points south and west of the site. Modifying signal timing at both the Crest Road and Everett Road intersections with Linden Street should also help. This can be reviewed later in the design process for the site, and again after construction, if the Town so chooses.

Another factor that affects vehicle queuing is the mechanism used to collect fees and control access for the garage (i.e., will access be gated; how will fares be collected - card readers, attendant booths, Fast Lane-like transponders, etc.). Depending on the access control and fee collection methods used, typical exit rates can range from 100-500 vehicles/hour.

Pedestrian Safety

The current Tailby Lot does not particularly ensure pedestrian safety nor provide a high quality pedestrian experience. Its entrance/exit is not signalized and drivers' views are partially blocked by buffer planting and the sloped grades. In addition, transient parkers do not provide the same kind of watchful care or "eyes on the street" as neighborhood residents.

The development of the Tailby Lot represents an opportunity to improve pedestrian safety through the creation of neighborhood housing and a garage designed for safe pedestrian/vehicle flows. Front porches, enhanced sidewalks, tree plantings, and controlled site lighting will produce a first-rate walking experience for middle school students, neighborhood residents, and garage patrons.

Pedestrian safety near the garage entrance/exit can be ensured with warning signals as cars are exiting, as well as signage for both exiting vehicles and pedestrians. Sidewalks should be at least 6' wide, especially at the driveway apron. Crosswalks near the garage entrance/exit are NOT recommended. There are existing crossings east of the site and at the Crest Road/Linden Street intersection.

The development of the two-acre Tailby Lot has the potential to create a significant open space of approximately one acre. Open to the South and elevated 20 feet above the tracks, this parkland would enjoy ideal sun and views, looking toward Post Office Square and the Village Church. This green space could be enjoyed by neighborhood residents and the visiting public alike.

The housing platform can be structured to accommodate a 12-inch soil depth suitable for planting grass and flowers. Greater soil depth of up to 5 feet can be accommodated in discrete planters structured to support trees.

The open space may be enlivened by benches, community gardens, play structures, and other amenities that support the comfort and enjoyment of the users. It may also incorporate projecting skylights and light wells that admit sunlight into the garage below.

This site plan illustrates the potential for a one-acre landscaped open space, built over a two-level parking garage, offering sunny southern exposure and views of the Village Church.

Feasibility Findings

The "over-under" development approach has total development costs of approximately $22,000,000 and is financially feasible — requiring no direct investment or municipal bonding by the Town, while providing the developer with a $2,000,000 profit. The Town stands to gain a $700,000 payment from the developer, future annual net parking revenues of $115,000, and annual real estate tax revenues of $205,000. Together, these funds total more than $11,000,000 over 25 years, with a net present value of approximately $5,900,000 — or more than $31,000,000 over 50 years, with a net present value of approximately $9,100,000.

By contrast, the "side-by-side" development approach has total development costs of approximately $15,000,000 and is not financially feasible. This stems from a gap of nearly $700,000 between net sales proceeds and total development costs. As modeled, the Town would not receive any payment from the developer and would likely be required to fund the gap. The Town would benefit from future annual net parking revenues of $115,000, the same as in the "over-under" approach. However, the Town would receive future annual real estate tax revenues of just $130,000, $75,000 less per year than in the "over-under" approach.

Pro Formas

The feasibility findings are based on pro formas prepared for this study and included on the following pages. These pro formas enumerate and footnote all assumptions, and are organized into five worksheets titled in the upper right-hand corner:

- Development Income to Town
- Development Costs
- Development Assumptions - Housing
- Development Assumptions - Parking
- Net Present Value to Town

Potential development income to the Town derives from three revenue streams (as shown on the first pro forma worksheet):

- Net sales proceeds less development costs (including developers profit)
- Annual net parking revenues
- Annual net real estate tax revenues

Over-Under Approach

Analysis shows that "over-under" development of the Tailby Lot is financially feasible, generating approximately:

- $2,000,000 in developers profit
- $ 700,000 in payment to the Town
- $ 115,000 in annual net parking revenues to the Town
- $ 205,000 in annual net real estate tax revenues to the Town

Competitive bidding among developer/architect teams might result in a better deal for the Town with developers willing to accept less than $2 million profit or to share excess net sales proceeds with the Town.

As modeled by the pro forma, the developer would invest $4.7 million (a $700,000 payment to the Town plus 20% of the development cost or $4 million in equity). The developer would earn an investment return of $2 million over a period of 21 months.

In addition to these financial gains, development of the Tailby Lot creates significant value to the community by making possible:

- 27 senior housing units
- 7 affordable housing units
- 180 additional parking spaces (including 68 attached residential parking spaces)
- All 406 parking spaces covered and elevatored
- Relief for Wellesley Square parking problems
- Approximately one acre of quality open space
- Enhanced buffer along Crest Road
- Increased property values in neighborhood

Side-by Side-Approach

The second pro forma shows that the "side-by-side" approach is significantly less feasible, generating:

- $2,000,000 in developers profit (same as "over-under")
- ($ 680,000) in cost to the Town ($1.3 million less)
- $ 115,000 in annual parking revenues (same as "over-under)
- $ 130,000 in annual real estate tax revenues ($75,000 less)

This differential arises because there are only 26 instead of 34 residential units, which sell at a 20% discount ($325 instead of $425 per square foot) because they look directly into the side of an above grade parking garage.

Parking Deck Approach

This approach is not financially feasible, with total development costs exceeding $4,500,000, and no potential for developer's profit. The Town would not receive any payment from the developer and would have to finance the garage using a municipal bond secured against the future annual net parking revenues of $115,000. No pro forma was prepared for this alternative.

Non-Town Sources of Funding

This study conservatively assumes conventional development financing -- 20% equity by the developer plus 80% debt at commercial market rates -- and no direct investment by the Town or other public agencies.

There are both State and Federal affordable housing and smart growth programs that might be utilized to help fund the project, providing below-market interest rates on the portion of the loan for the construction of the affordable housing and its allocable share of the housing platform and other costs, or possibly other forms of subsidy for the mass transit-related project costs.

For purposes of assessing feasibility, none of these non-Town sources of funding have been assumed. The scope of a Phase II study should ascertain whether such funding is available, and if so, whether it would prevent the Town from giving preference to buyers with Wellesley connections.

Developer's Profit

As modeled by the pro forma, the developer's profit is $2,000,000 or approximately 10% of the total development cost of $22,000,000. A higher developer's profit can be attained through a higher sales price per square foot for the market-rate units. For example, a developer's profit of $4,000,000 or 20% will be produced if the sell-out is at $465 instead of $425 per square foot, a 10% higher sales target which many knowledgable real estate professionals agree is achievable.

DEVELOPMENT INCOME TO TOWN		OVER-UNDER DEVELOPMENT APPROACH 34 units (27 market + 7 affordable) selling at $425/sf 400-car garage + platform 1-acre open space	
A	**Gross Sales Proceeds**		**$24,188,000**
B	**Brokers Commission**	5%	**($1,143,250)**
	Market Units	$1,109,250	
	Residential Parking	$34,000	
C	**Closing Costs**	1%	**($241,880)**
D	**Net Sales Proceeds**		**$22,802,870**
E	**Development Costs**		**($22,101,973)**
F	**Development Income to Town**		**$700,897**
	Annual Net Parking Revenues to Town		**$116,959**
G	Annual Gross Parking Revenues	$196,959	
H	Garage Operating Expenses	$80,000	
	Annual Real Estate Tax Revenues to Town		**$205,598**
I	Assessed value	$24,188,000	
J	Mil Rate	0.0085	

Notes

A Total sellout of housing units and parking spaces; see Development Assumptions - Housing
B Commission on all housing and residential parking sales except affordable units, commission would be lower if co-broke with developer
C Closing costs on all housing and residential parking sales
D Sales proceeds less brokers commission and closing costs
E Includes developers profit; payment to Town can be structured as developers fee, land cost, ground rent, or kicker on sales proceeds
F Net sales proceeds less development costs
G See Development Assumptions - Parking
H Based on comparable garage operating expenses; includes utilities, maintenance, no staff
I Based on 100% of gross sales prices, including affordable units

All figures in 2005 dollars

	DEVELOPMENT COSTS		OVER-UNDER DEVELOPMENT APPROACH
	Construction Costs		
A	Parking		9,030,000
	Parking Deck Alone	4,470,000	
	Upgrades for Housing Platform & Open Space	4,560,000	
B	Housing		7,750,000
C	Hard Cost Contingency		387,500
	SUBTOTAL Construction Costs		**17,167,500**
	Soft Costs		
D	Legal		250,000
E	Architectural/Engineering Fees		1,000,000
F	Insurance		100,000
G	Marketing		200,000
H	Permits & Fees		150,000
I	Soft Cost Contingency		85,000
	SUBTOTAL Soft Costs		**1,785,000**
	Financing Cost		
	Loan		
	Total Construction and Soft Costs (from above)	18,952,500	
J	Less Developers Equity	4,000,000	
	Loan Amount	14,952,500	
	Term (in years)	1.75	
	Interest Rate	6.5%	
	Average Debt Outstanding	50%	
K	Interest	850,423	
L	Financing Closing Costs	299,050	
	SUBTOTAL Financing Costs		**1,149,473**
	SUBTOTAL Developer Profit		**2,000,000**
	TOTAL Development Costs (Construction + Soft + Financing + Profit)		**22,101,973**

Notes

A	Based on 2004 construction bid for comparable project; includes hard cost contingency & architectural/engineering fees for parking only
B	Based on gross square feet times cost per square foot (see Development Assumptions - Housing)
C	5% on residental only
D	Approx 1.5% of construction costs
E	Approx 13% of housing construction cost, reflecting custom residential design
F	Approx 0.5% of construction costs
G	Approx 1% of construction costs
H	Approx 0.75% of construction costs
I	5%
J	Assuming upfront outlay is double anticipated profit
K	Assuming conventional loan; lower interest rate may be attainable for affordable housing
L	Based on 2% of loan amount
	All figures in 2005 dollars

DEVELOPMENT ASSUMPTIONS - HOUSING **OVER-UNDER DEVELOPMENT APPROACH**

Unit Mix

# Units	Unit Type	SF/ Unit	Efficiency	Total SF
10	2 bedroom	1,400	100%	14,000
12	2 bdrm + den	1,800	100%	21,600
12	3 bdrm + den	2,200	100%	26,400
Total		Average		Total
34		**1,824**		**62,000**

Affordable Mix

Market	Affordable
3	7
12	-
12	-
Total Market	Total Affordable
27	**7**
79%	21%

Housing Construction Costs

Cost / SF	$125
Total Cost	**$7,750,000**

Sellout

Market Rate Housing

# Units	SF/ Unit	Sales $/SF	Sales $/Unit	Sellout
3	1,400	$425	**$595,000**	$1,785,000
12	1,800	$425	**$765,000**	$9,180,000
12	2,200	$425	**$935,000**	$11,220,000
				Total
				$22,185,000

Affordable Housing

# Units	SF/ Unit	Sales $/SF	Sales $/Unit	Sellout
7	1,400	$135	**$189,000**	$1,323,000
-	1,800	$135	**$243,000**	$0
-	2,200	$135	**$297,000**	$0
				Total
				$1,323,000

SUBTOTAL Housing Sellout		**$23,508,000**
Residential Parking (attached)		
Spaces/Unit		2
Total Residential Spaces	100%	68
% Included in Unit Sales Price	60%	41
% Sold at Additional Cost per Space	40%	27
% Annual Parking Fee	0%	0
Sales Price/Space		$25,000
SUBTOTAL Residential Parking Sellout		**$680,000**
TOTAL Sellout - Housing + Parking		**$24,188,000**

All figures in current 2005 dollars

DEVELOPMENT ASSUMPTIONS - PARKING		OVER-UNDER DEVELOPMENT APPROACH
PARKING CAPACITY		
Existing Spaces		226
Net New Spaces		174
TOTAL Spaces (Existing and Net New)		**400**
PARKING MIX		
Residential Spaces		
Spaces/Unit		2
# Units		34
SUBTOTAL Residential Spaces		**68**
Public Spaces		
Commuters		200
Resident	100	
Non-Res	100	
Employees		100
Town	50	
Merchant	50	
Shoppers		32
SUBTOTAL Public Spaces		**332**
TOTAL Spaces (Residential and Public)		**400**
ANNUAL PARKING REVENUES - Public Spaces Only		
Vacancy Rate		30%
TOTAL Occupied Public Spaces		**232**
Parking Rates (current)		
Annual Permit Fee		
Resident		$480
Non-Resident		$960
Daily Rates		
With Card		$3.00
Cash or Non-Resident		$4.50
Parking Split		
Annual		50%
Daily		50%
Resident		50%
Non-Resident		50%
Occupied Days/Year (for daily revenues)		260
Annual Parking Revenues (occupied spaces and days only)		
Public - Annual Resident		$27,888
Public - Annual Non-Resident		$55,776
Public - Daily Resident		$45,318
Public - Daily Non-Resident		$67,977
TOTAL Annual Parking Revenues		**$196,959**

NET PRESENT VALUE TO TOWN **OVER-UNDER DEVELOPMENT APPROACH**

	Payment	Current $	Start Year
A	Development Income to Town	$ 700,897	1
B	Annual Net Parking Revenues to Town	$ 116,959	3
C	Annual Real Estate Tax Revenues to Town	$ 205,598	3
D	**Annual Escalation**	2.5%	
E	**Discount Rate**	5.0%	

Year		Year	
1	$ 700,897	26	$ 598,003
2	$ -	27	$ 612,953
3	$ 338,886	28	$ 628,277
4	$ 347,359	29	$ 643,983
5	$ 356,043	30	$ 660,083
6	$ 364,944	31	$ 676,585
7	$ 374,067	32	$ 693,500
8	$ 383,419	33	$ 710,837
9	$ 393,004	34	$ 728,608
10	$ 402,829	35	$ 746,823
11	$ 412,900	36	$ 765,494
12	$ 423,223	37	$ 784,631
13	$ 433,803	38	$ 804,247
14	$ 444,648	39	$ 824,353
15	$ 455,765	40	$ 844,962
16	$ 467,159	41	$ 866,086
17	$ 478,838	42	$ 887,738
18	$ 490,809	43	$ 909,932
19	$ 503,079	44	$ 932,680
20	$ 515,656	45	$ 955,997
21	$ 528,547	46	$ 979,897
22	$ 541,761	47	$ 1,004,394
23	$ 555,305	48	$ 1,029,504
24	$ 569,188	49	$ 1,055,242
25	$ 583,417	50	$ 1,081,623

Total Funds Rec'd Over 25 Years	**$ 11,065,545**	**Total Funds Rec'd Over 50 Years**	**$ 31,491,978**
Net Present Value 5%	**$ 5,899,047**	**Net Present Value 5%**	**$ 9,095,537**

Notes

A	See "Development Income to Town", Line F
B	See "Development Income to Town", Line G
C	See "Development Income to Town", Lines I & J
D	Escalation limited by law, greater tax revenues will result with continuing overrides per BOS projections
E	Reflects Town's borrowing rate, currently and over time

DEVELOPMENT INCOME TO TOWN		SIDE-BY-SIDE DEVELOPMENT APPROACH 26 units (20 market + 6 affordable) selling @ $350/sf 400-car garage 1/2-acre open space	
A	**Gross Sales Proceeds**		**$15,234,000**
B	**Brokers Commission**	5%	**($705,000)**
	Market Units	$679,000	
	Residential Parking	$26,000	
C	**Closing Costs**	1%	**($152,340)**
D	**Net Sales Proceeds**		**$14,376,660**
E	**Development Costs**		**($15,056,488)**
F	**Development Income to Town**		**($679,828)**
	Annual Net Parking Revenues to Town		**$116,959**
G	Annual Gross Parking Revenues	$196,959	
H	Garage Operating Expenses	$80,000	
	Annual Real Estate Tax Revenues to Town		**$129,489**
I	Assessed value	$15,234,000	
J	Mil Rate	0.0085	

Notes

A Total sellout of housing units and parking spaces; see Development Assumptions - Housing
B Commission on all housing and residential parking sales except affordable units, commission would be lower if co-broke with developer
C Closing costs on all housing and residential parking sales
D Sales proceeds less brokers commission and closing costs
E Includes developers profit; payment to Town can be structured as developers fee, land cost, ground rent, or kicker on sales proceeds
F Net sales proceeds less development costs
G See Development Assumptions - Parking
H Based on comparable garage operating expenses; includes utilities, maintenance, no staff
I Based on 100% of gross sales prices, including affordable units

All figures in 2005 dollars

	DEVELOPMENT COSTS		SIDE-BY-SIDE DEVELOPMENT APPROACH
	Construction Costs		
A	Parking		4,970,000
	Parking Deck Alone	4,470,000	
	Upgrades for Housing Platform & Open Space	500,000	
B	Housing		$5,900,000
C	Hard Cost Contingency		295,000
	SUBTOTAL Construction Costs		**11,165,000**
	Soft Costs		
D	Legal		167,475
E	Architectural/Engineering Fees		767,000
F	Insurance		55,825
G	Marketing		111,650
H	Permits & Fees		83,738
I	Soft Cost Contingency		59,284
	SUBTOTAL Soft Costs		**1,244,972**
	Financing Cost		
	Loan		
	Total Construction and Soft Costs (from above)	12,409,972	
J	Less Developers Equity	4,000,000	
	Loan Amount	8,409,972	
	Term (in years)	1.75	
	Interest Rate	6.5%	
	Average Debt Outstanding	50%	
K	Interest	478,317	
L	Financing Closing Costs	168,199	
	SUBTOTAL Financing Costs		**646,517**
	SUBTOTAL Developer Profit		**2,000,000**
	TOTAL Development Costs (Construction + Soft + Financing + Profit)		**15,056,488**

Notes

A	Based on 2004 construction bid for comparable project; includes hard cost contingency & architectural/engineering fees for parking only
B	Based on gross square feet times cost per square foot (see Development Assumptions - Housing)
C	5% on residental only
D	Approx 1.5% of construction cost
E	Approx 13% of housing construction cost, reflecting custom residential design
F	Approx 0.5% of construction costs
G	Aprox 1% of construction costs
H	Approx 0.75% of construction costs
I	5%
J	Assuming upfront outlay is double anticipated profit
K	Assuming conventional loan; lower interest rate may be attainable for affordable housing
L	Based on 2% of loan amount
	All figures in 2005 dollars

DEVELOPMENT ASSUMPTIONS - HOUSING **SIDE-BY-SIDE DEVELOPMENT APPROACH**

Unit Mix

# Units	Unit Type	SF/ Unit	Efficiency	Total SF
8	2 bedroom	1,400	100%	11,200
9	2 bdrm + den	1,800	100%	16,200
9	3 bdrm + den	2,200	100%	19,800
Total		Average		Total
26		**1,815**		**47,200**

Affordable Mix

Market	Affordable
2	6
9	-
9	-
Total Market	Total Affordable
20	**6**
77%	23%

Housing Construction Costs

Cost / SF	$125
Total Cost	**$5,900,000**

Sellout

Market Rate Housing

# Units	SF/ Unit	Sales $/SF	Sales $/Unit	Sellout
2	1,400	$350	**$490,000**	$980,000
9	1,800	$350	**$630,000**	$5,670,000
9	2,200	$350	**$770,000**	$6,930,000
				Total
				$13,580,000

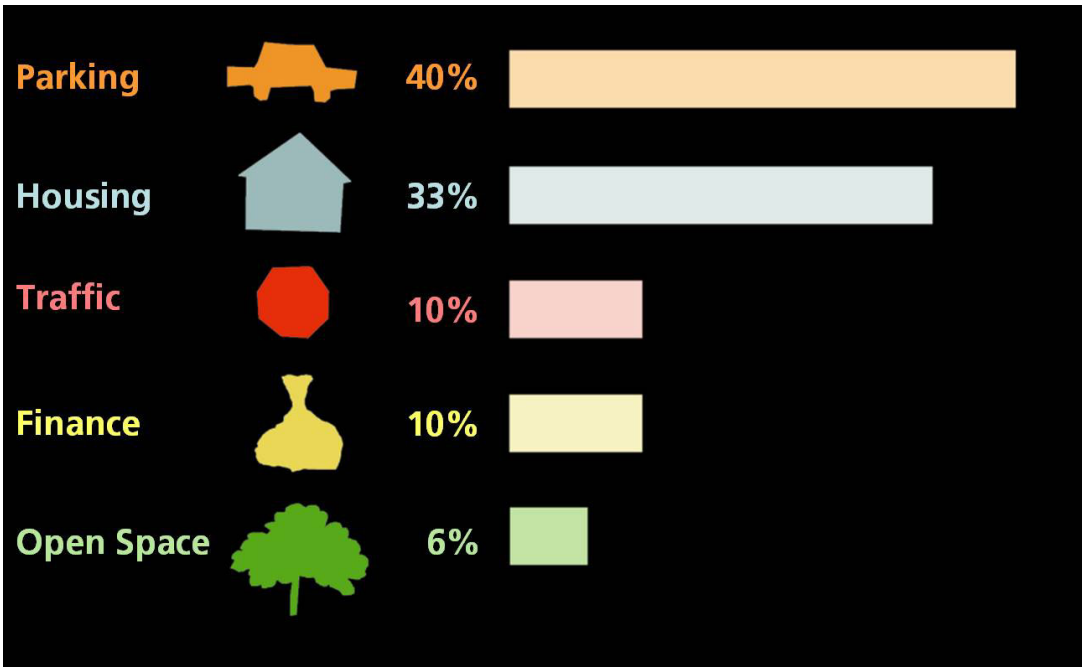
Affordable Housing

# Units	SF/ Unit	Sales $/SF	Sales $/Unit	Sellout
6	1,400	$135	**$189,000**	$1,134,000
-	1,800	$135	**$243,000**	$0
-	2,200	$135	**$297,000**	$0
				Total
				$1,134,000

SUBTOTAL Housing Sellout		**$14,714,000**
Residential Parking (attached)		
Spaces/Unit		**2**
Total Residential Spaces	100%	52
% Included in Unit Sales Price	60%	31
% Sold at Additional Cost per Space	40%	21
% Annual Parking Fee	0%	0
Sales Price/Space		$25,000
SUBTOTAL Residential Parking Sellout		**$520,000**
TOTAL Sellout - Housing + Parking		**$15,234,000**

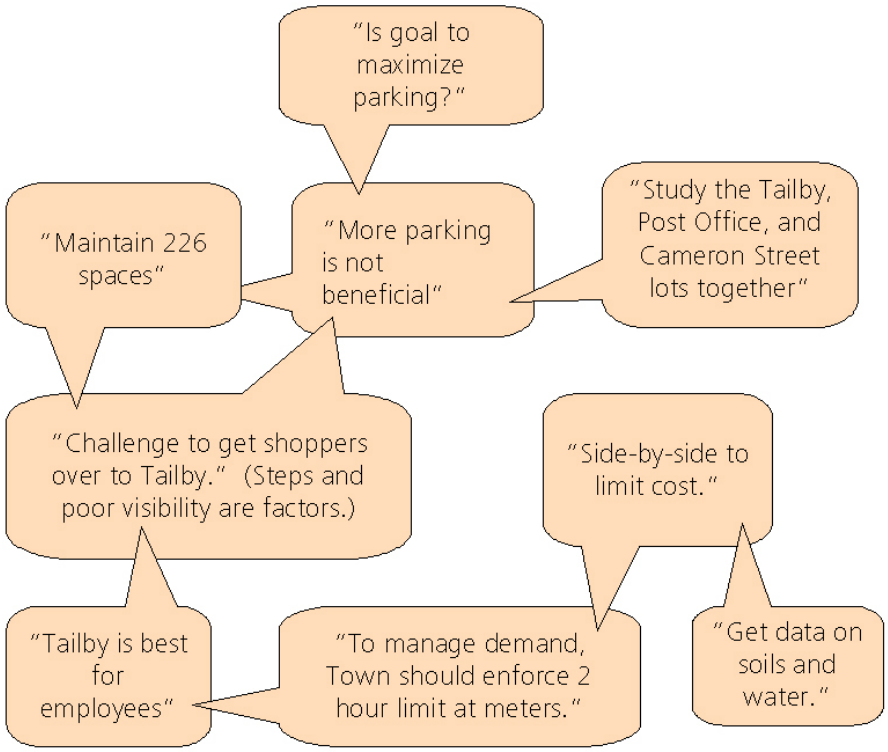
All figures in current 2005 dollars

DEVELOPMENT ASSUMPTIONS - PARKING		SIDE-BY-SIDE DEVELOPMENT APPROACH
PARKING CAPACITY		
Existing Spaces		226
Net New Spaces		174
TOTAL Spaces (Existing and Net New)		**400**
PARKING MIX		
Residential Spaces		
Spaces/Unit		2
# Units		26
SUBTOTAL Residential Spaces		**52**
Public Spaces		
Commuters		200
Resident	100	
Non-Res	100	
Employees		100
Town	50	
Merchant	50	
Shoppers		32
SUBTOTAL Public Spaces		**332**
TOTAL Spaces (Residential and Public)		**384**
ANNUAL PARKING REVENUES - Public Spaces Only		
Vacancy Rate		30%
TOTAL Occupied Public Spaces		**232**
Parking Rates (current)		
Annual Permit Fee		
Resident		$480
Non-Resident		$960
Daily Rates		
With Card		$3.00
Cash or Non-Resident		$4.50
Parking Split		
Annual		50%
Daily		50%
Resident		50%
Non-Resident		50%
Occupied Days/Year (for daily revenues)		260
Annual Parking Revenues (occupied spaces and days only)		
Public - Annual Resident		$27,888
Public - Annual Non-Resident		$55,776
Public - Daily Resident		$45,318
Public - Daily Non-Resident		$67,977
TOTAL Annual Parking Revenues		**$196,959**

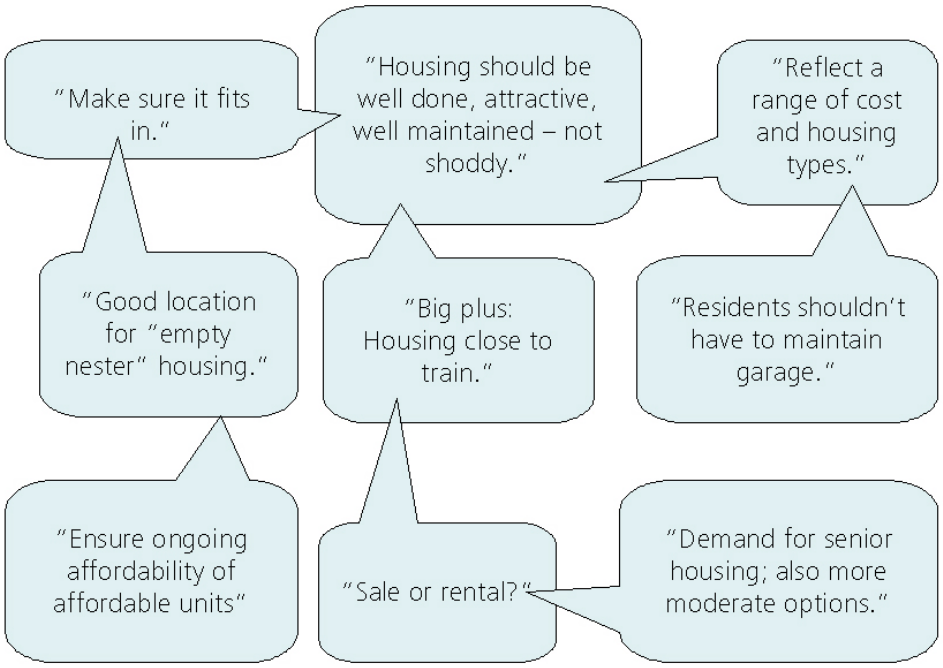


This graph documents the distribution of comments as expressed in the two public workshops.

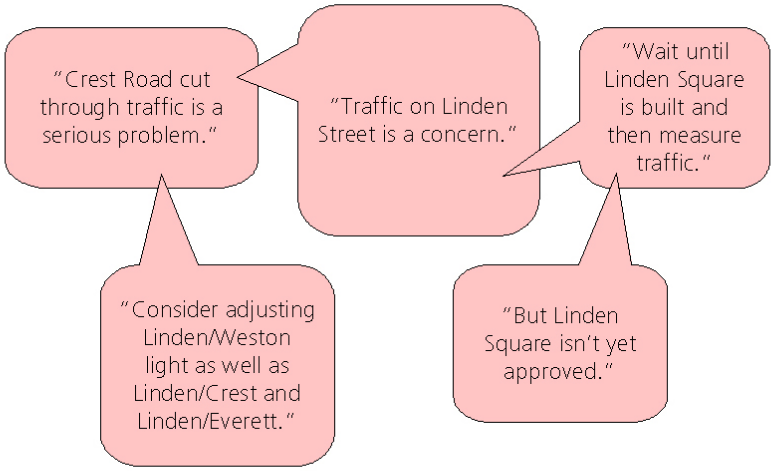
Examples of public comments on parking



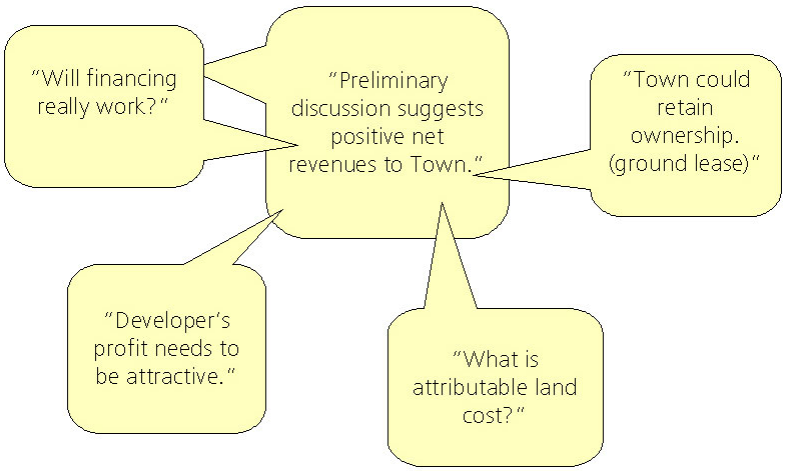
Examples of public comments on housing



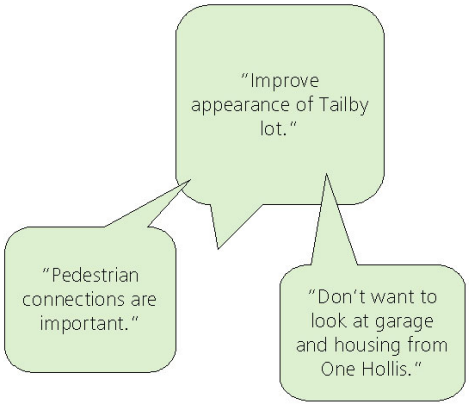
Examples of public comments on traffic



Examples of public comments on finance



Examples of public comments on open space



Appendix 11

TAILBY LOT **DEVELOPMENT PARAMETERS**

Current Zoning

Zoning District	Limited Residential (designated in 1972)
Uses	single family homes, public housing for the elderly, and certain multi-family elderly (62+ years of age) housing developed by private, non-profit
Minimum Lot Size	40,000 square feet
Lot Coverage	20 percent
Density	max 1 dwelling unit /2,500 square feet lot area
Height	max 2-1/2 stories of 30 feet in height
Setbacks - Front	30 feet from public way, 20 feet from private way
Setbacks - Rear	30 feet from public way, 20 feet from private way
Setbacks - Side	30 feet from public way, 20 feet from private way
Parking Spaces /Unit	min 1 space / dwelling unit
Parking / Commercial SF	min 1 space / 150 ground floor sf, not less that 3.2 spaces / 1,000 sf (not currently an allowable use)
Trees / Parking Space	min 1 tree / every 10 spaces on any side of the perimeter that abuts the sideline of a private or public way, landscaped area not less than 10% of the parking area, at least half of which shall be located in the interior of the parking area

Existing Conditions

Lot Size	85,115 sf (approx 2 acres)
Existing Use	parking lot (non-conforming use)
Existing Parking Count	226
Boundary - North	Linden Street
Boundary - West	Crest Road
Boundary - South	MBTA Commuter Rail
Boundary - East	Hollis Street
Nearest Abutters	One Hollis (office building)

As-of-Right Calculations

Residential	34 units
Lot Coverage	17,023 square feet
Lot Coverage / Unit	501 square feet/unit (average)
Possible Unit Types	townhouses (1-1/2 stories each with separate entrances) apartment-style units in building with lobby and corridor (1-1/2 stories each with entrances on grade or level 2)

Introduction

In this section of the study, a preliminary traffic impact analysis will be presented to provide the Town with a sense of how a proposed development of Tailby Lot might impact traffic.

Existing Conditions

Study Area

The following intersections were studied:

- Linden Street/Tailby Lot Entrance (unsignalized);
- Linden Street/Crest Road (signalized); and
- Linden Street/Everett Street (signalized)

A description of these intersections can be found below.

Linden Street/Tailby Lot Entrance

Linden Street and the Tailby Lot Entrance intersect to form a T-type, unsignalized intersection. The Tailby Lot entrance approaches at an upgrade from the south with a single lane. Linden Street has one-lane approaches in both the eastbound and westbound directions. The eastbound approach to the lot entrance is on a curve to the right, while Linden Street is at a slight upgrade heading east through the intersection.

Linden Street/Crest Road

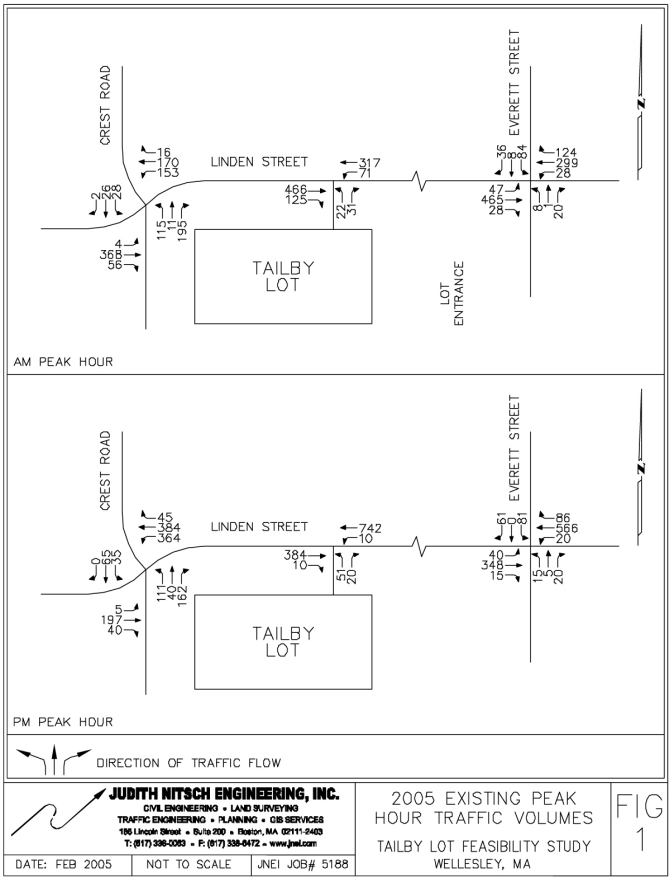
Linden Street and Crest Road intersect to form a four-way, signalized intersection west of the Tailby Lot Entrance. The Linden Street westbound approach is skewed towards the southern leg of Crest Road, creating a curve in the road along the Tailby Lot. The westbound approach has a left-turn lane and a shared through/right-turn lane. The other approaches have a single, general-purpose lane. The Linden Street approaches each have their own green phase, with the Crest Road approaches getting green time concurrently. There is also an exclusive pedestrian phase at this intersection and crosswalks at all approaches of the intersection.

Linden Street/Everett Street

Linden Street and Everett Street intersect to form a four-way signalized intersection, east of the Tailby Lot Entrance. All approaches have a single general-purpose lane. The signal operates in a typical two-phase configuration (i.e., both Linden Street approaches get concurrent green time, then both Everett Street approaches get concurrent green time). There is also an exclusive pedestrian phase at this intersection and crosswalks at all approaches of the intersection.

Traffic Counts

Traffic volumes for the Tailby Lot feasibility study were originally used in two previous studies. The morning volumes were counted in June 2003 for a follow-up study commissioned by the Town to measure the traffic impacts of a nearby elementary school[1]. The afternoon peak hour volumes were counted in 2004 for a traffic study for the proposed Linden Square mixed-use development[2]. It should be noted that no pedestrian or bicycle activity is included in these volumes. These volumes were then increased by a 1% annual growth factor (reflecting conservative traffic growth in the area) to year 2005 levels.



Because volumes at the Tailby Lot itself were not counted for the Sprague School study, morning volumes were estimated using trip generation data from the Institute of Transportation Engineers (ITE).[3] ITE Land Use Code (LUC) 093 (Light-Rail Transit Station with Parking) was used for this purpose. LUC 093 is the ITE Land Use Code that most closely matches the existing primary use of Tailby as a commuter lot; there is no ITE Land Use Code for a commuter rail parking lot. The Tailby Lot volumes were then added to the adjusted volumes and balanced to develop the 2005 AM and PM peak hour traffic networks, which can be seen in Figure 1.

Traffic Analysis

A level of service (LOS) analysis was conducted using techniques[4] commonly used by transportation engineers. Each intersection is given a letter grade representing the quality of traffic operations, with LOS A being the best condition and LOS F being the worst condition. (Acceptable levels of service are generally considered LOS D or better.) These results are summarized in Table 1. It can be seen that all intersections are operating at acceptable levels of service for the peak hours.

Table 1 – 2005 Existing Level of Service Results

Intersection	Movement	Weekday AM Peak		Weekday PM Peak	
		LOS	Delay*	LOS	Delay*
Linden Street/Tailby Lot Entrance (Unsignalized)	Westbound Left Turn	A	2.8	A	0.3
	Northbound Through	C	17.5	D	33.6
Linden Street/Crest Road (Signalized)	Eastbound Through	C	24.4	C	23.8
	Westbound Left Turn	B	19.3	C	22.7
	Westbound Through	C	20.8	C	27.7
	Northbound Through	C	23.6	C	27.3
	Southbound Through	B	17.0	B	18.2
	Overall	C	22.3	C	24.9
Linden Street/Everett Road (Signalized)	Eastbound Through	A	9.5	A	5.9
	Westbound Through	A	6.2	A	9.4
	Northbound Through	A	9.9	B	10.4
	Southbound Through	B	11.3	B	11.6
	Overall	A	8.5	A	8.6

*Delay measured in seconds/vehicle

Intersection Accident Analysis

A safety analysis of the area includes a review of traffic accident data at study area intersections and roadway segments. Accident data in the study area for the years 2001-2003 was obtained from the Massachusetts Highway Department (MassHighway). This information (which is not broken down by year) is summarized in Table 2.

Table 2 - Accident Data Summary – 2001-2003*

Location	Total	Angle	Rear End	Head-On	Other	Dry Surface	Daylight	Fatality	Crash Rate**
Linden Street/Crest Road (Signalized)	1	0	0	0	1	0	1	0	0.07
Linden Street/Everett Street (Signalized)	5	1	1	0	2	3	4	0	0.36
Linden Street/Lot Entrance (Unsignalized)	2	1	1	0	0	2	2	0	0.15

* Source: Massachusetts Highway Department

** Average statewide accident rate = 0.87 accidents per million entering vehicles for signalized intersections and 0.66 accidents per million entering vehicles for unsignalized intersections. District 4 rates are 0.87 and 0.63 accidents per million entering vehicles, respectively

The crash rate (the indication of the frequency of accidents occurring at a location) shows that the intersections are well below the statewide and MassHighway District 4 rates for accident occurrence.

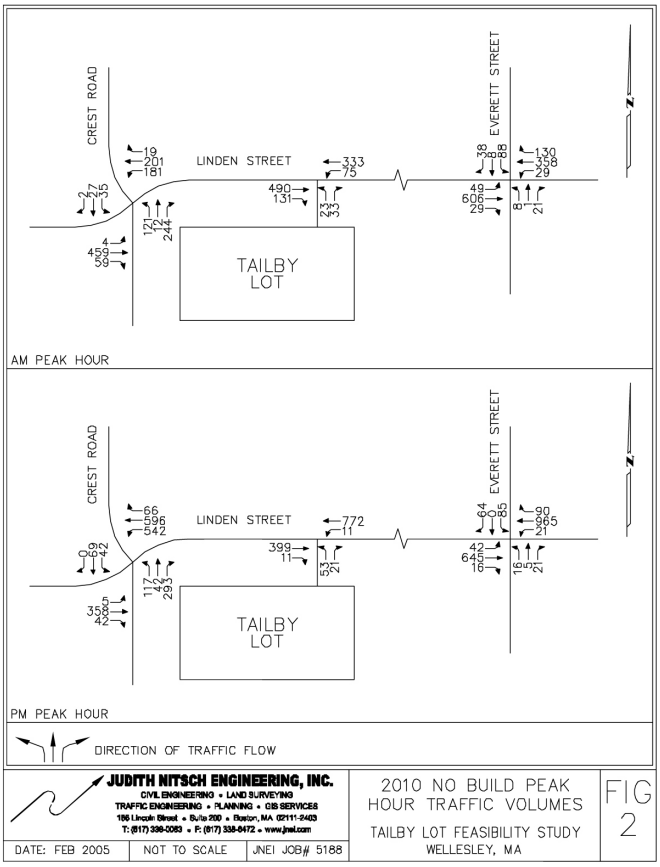
Future Conditions

Normal Background Growth

To assess the potential impacts of development at Tailby, a future condition was established that will satisfy Executive Office of Environmental Affairs (EOEA)/Executive Office of Transportation and Construction (EOTC) guidelines for traffic impact assessments, should such an assessment be required. This future condition is the 2010 condition. The Sprague School study compared traffic volumes in this neighborhood in 1998 and 2003, and found that traffic volumes declined during the period studied. In order to present a conservative amount of growth (i.e., "worst-case"), a 1% annual factor was used to project existing to future traffic volumes.

Background Developments

There is one anticipated development that would have a significant impact on traffic in the vicinity of Tailby Lot within the five-year time horizon. The proposed Linden Square development – located east of Tailby on Linden Street – is currently undergoing the Town approval process. This 300,000 s.f. development would include a mix of retail, office, and residential uses. Our team has estimated the projected trip generation for this project, on the assumption that most of this development will contain retail uses.



Thus, the background growth volumes (incorporating the annual growth factor) and the projected traffic generated by the Linden Square project have been added to create the 2010 No-Build condition traffic network. The 2010 No-Build AM and PM peak hour traffic network can be seen in Figure 2.

Future Year Intersection Analysis

Traffic analyses of the study area intersections were conducted for the 2010 No-Build conditions and can be seen in Table 3.

The results generally show a degradation of operations at all three intersections when compared to existing conditions. The overall level-of-service at the Linden Street/Crest Road intersection drops from a LOS C to a LOS F in the PM peak hour; all movements on Linden Street and the northbound movement on Crest Road all experience heavy delays in the PM peak hour. The northbound movement exiting Tailby Lot experiences increased delay, with LOS F in the PM peak hour. All other movements in both peak hours retain acceptable levels-of-service, but experience slight to moderate degradation of vehicle delays.

The drop in LOS at these intersections is due to the increased traffic generated by the Linden Square development plus estimated background growth.

2010 Build Conditions

Vehicle Trip Generation

ITE trip generation data[5] was used to develop vehicle trip estimates for new site activity. Any viable development of Tailby Lot will likely include a mix of housing and parking. The following ITE Land Use Codes (LUC) were researched: Light-Rail Transit Station with Parking (LUC 093), and Senior Housing – Attached (LUC 252). As stated earlier, LUC 093 is the ITE Land Use Code that most closely matches the existing primary use of Tailby as a commuter lot; there is no ITE Land Use Code for a commuter rail parking lot.

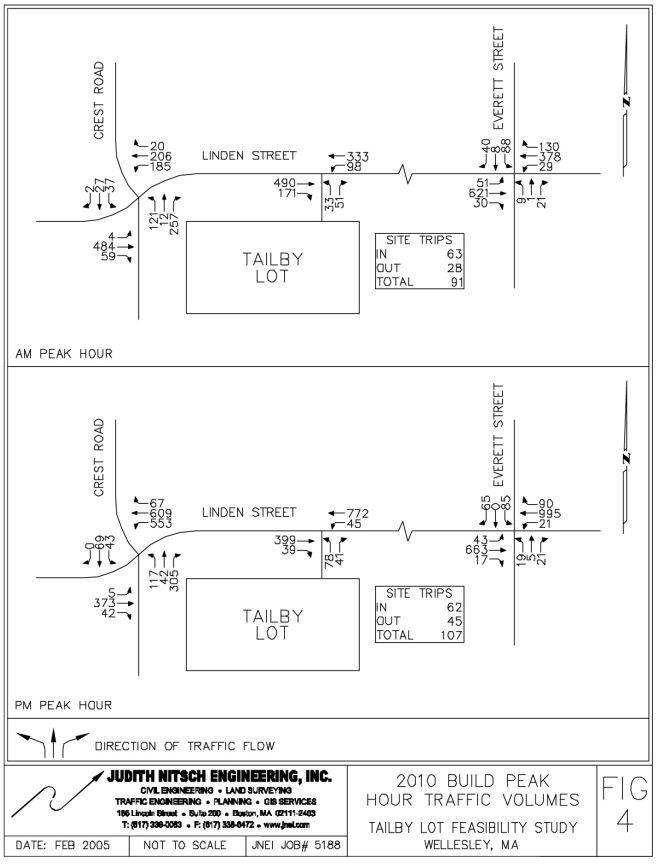
In order to provide a reasonable estimate of the traffic increases due to such development, several assumptions were used for trip generation purposes. The maximum number of housing units allowed at Tailby under current zoning is 34; therefore, 34 units are assumed for trip generation forecasts. A mode split of 25% walking trips vs. 75% vehicle trips was also assumed, based on local experience. Additionally, the current maximum number of spaces being considered for the parking structure is 406 spaces. Removing the existing supply of spaces at Tailby (226), as well as two spaces for each unit

Table 3 – 2010 No-Build Level of Service Results

Intersection	Movement	Weekday AM Peak		Weekday PM Peak	
		LOS	Delay*	LOS	Delay*
Linden Street/Tailby Lot Entrance (Unsignalized)	Westbound Left Turn	A	3.1	A	0.3
	Northbound Through	C	18.7	F	353.2
Linden Street/Crest Road (Signalized)	Eastbound Through	C	33.8	F	93.8
	Westbound Left Turn	C	23.5	E	71.0
	Westbound Through	C	26.6	F	134.6
	Northbound Through	C	32.9	F	81.2
	Southbound Through	B	19.8	C	22.8
	Overall	C	29.9	F	93.5
Linden Street/Everett Road (Signalized)	Eastbound Through	B	12.3	B	10.6
	Westbound Through	A	6.1	D	45.0
	Northbound Through	B	12.5	B	14.0
	Southbound Through	B	14.4	B	15.8
	Overall	B	10.3	C	29.1

*Delay measured in seconds/vehicle

Table 4 – New Vehicle Trip Generation Summary*				
Time Period		LUC 093 - Light-Rail Transit Station w/ Parking	LUC 252 -Senior Housing Attached	Total
AM Peak Hour	In	62	1	63
	Out	27	1	28
	Total	89	2	91
PM Peak Hour	In	60	2	62
	Out	44	1	45
	Total	104	3	107
Daily**	Total	305	89	394
* Based on ITE *Trip Generation (7th Edition),* 34 units, and 78 net new occupied parking spaces ** Total daily trips are distributed evenly (50% In, 50% Out)				



built (68), results in 112 net new spaces. 70% occupancy of this new parking supply is assumed, closely matching the current occupancy rate at Tailby. This results in a total of 78 net new occupied spaces, which is the number used for trip generation purposes.

Table 4 shows the results of the net new ITE trip generation calculations. The combination of these two land use codes will be used to present reasonable traffic analysis for the Build condition.

In summary, proposed development at the Tailby site is expected to produce 91 AM peak hour trips, 107 PM peak hour trips, and 394 daily trips.

Vehicle Trip Distribution

It is expected that the new vehicle trips generated as a result of full build-out of the site will depart in the same manner as the existing traffic on Linden Street; therefore, existing traffic patterns on Linden Street were reviewed and a vehicle trip distribution was determined. These patterns show 63% of traffic travels east and 37% travels west in the AM peak hour; the patterns in the PM peak period show 45% of traffic travels east and 55% travels west. The peak hour trips were assigned to the roadway network, based on the above splits. The site-generated trips can be seen in Figure 3. The site trips were added to the 2010 No-Build traffic network to create the 2010 Build traffic network, which can be seen in Figure 4.

Future Condition Traffic Analysis

Using the previous analysis procedures, a level of service assessment was conducted on the 2010 Build network and can be seen in Table 5.

Levels-of-service in the 2010 Build condition are generally similar to the 2010 No-Build condition. Splitting exiting traffic out of Tailby into two lanes results in better operations for right-turning vehicles, which are not trapped behind left-turning vehicles in a single lane, as is the case today. While delays are high for left-turning vehicles leaving Tailby (particularly in the PM peak hour), they are not unexpected given the anticipated increase in volumes during the peak hours. Additionally, operations on Linden Street are not significantly impacted, as levels-of-service and delays at the two signalized intersections during the 2010 Build condition remain consistent with the 2010 No-Build condition.

As stated in the Future Year Intersection Analysis above, the drop in LOS at these intersections is due to the increased traffic

Table 5 – 2010 Build Level of Service Results					
Intersection	Movement	Weekday AM Peak		Weekday PM Peak	
		LOS	Delay*	LOS	Delay*
Linden Street/Tailby Lot Entrance (Unsignalized)	Westbound Left Turn	A	4.1	A	1.3
	Northbound Left Turn	D	27.1	F	186.4
	Northbound Right Turn	B	14.7	B	11.6
Linden Street/Crest Road (Signalized**)	Eastbound Through	C	33.2	F	122.0
	Westbound Left Turn	C	28.4	D	42.7
	Westbound Through	C	33.4	F	81.1
	Northbound Through	D	36.4	F	137.6
	Southbound Through	C	21.5	C	32.9
	Overall	C	32.7	F	89.0
Linden Street/Everett Road (Signalized**)	Eastbound Through	B	12.6	A	7.7
	Westbound Through	A	6.3	B	19.0
	Northbound Through	B	13.7	C	23.3
	Southbound Through	B	15.8	C	29.3
	Overall	B	10.6	B	15.8
*Delay measured in seconds/vehicle ** Signalized intersections incorporate optimized signal timing					

Table 6 – Sight Distance Summary						
Roadway/ Direction	Required SSD[1] (ft)	JNEI SSD[2] (ft)	Required ISD[1] (ft)		JNEI ISD[2] (ft)	
			Left[3]	Right[3]	Left[3]	Right[3]
Linden St. EB	200	200	335	290	200-250	325
Linden St. WB	200	325	335	290	200-250	325
[1] AASHTO minimum requirements (for 30 mph prima facie speed) [2] JNEI-measured sight distance [3] ISD for vehicles turning left or right from the minor approach						

generated by the Linden Square development plus estimated background growth. The added effect of the proposed development on the Tailby Lot is negligible in comparison.

Safety Analysis

A preliminary assessment of stopping sight distance (SSD) and intersection sight distance (ISD) was conducted at the Tailby Lot entrance to assess driver visibility at its location relative to Linden Street. This assessment was conducted according to procedures outlined in the AASHTO "Green Book[6]." Using the prima facie speed of 30 mph, Table 6 shows the results of the stopping sight distance assessment.

Based on these criteria, the lot entrance as located meets all State criteria for safety considerations. SSD criteria are required to be met, while ISD criteria are recommended to be met, but not required. The curve on the Linden Street eastbound approach to the lot entrance does impair visibility to a degree; however, the stopping sight distance requirement is still met for this approach. Trees at the back of the sidewalk impair westbound visibility for drivers leaving the site; however, visibility can be significantly improved with thoughtful placement of landscaping and proper building setback in any future development at Tailby.

Possible Traffic Mitigation

Any discussion in this study of traffic mitigation as a result of development at Tailby Lot should be considered preliminary. This is so given the more critical need for profitability to the Town for Tailby development, as well as the status of the Linden Square development, which generates significantly more traffic to Linden Street than the development proposed for Tailby in this study. Additionally, any mitigation developed near Tailby as a result of Linden Square will provide benefits for Tailby-related traffic as well.

The preliminary traffic analysis suggests that any mitigation should be focused on the lot entrance and the Linden Street/ Crest Road intersection. This signal was recently installed several years ago, and the accident analysis suggests that vehicular and pedestrian traffic moves safely through this intersection. Potential items of traffic mitigation that might be considered here include the following:

- Changes in timing to the traffic signals at the Linden Street/ Crest Road and Linden Street/Everett Street intersections;

- Advance signage for the lot entrance, particularly on the Linden Street eastbound approach to the lot entrance;
- Warning systems at the lot entrance, such as audible beeps to alert pedestrians of exiting vehicles; and
- Wider sidewalks and, for decked parking, elevator access between parking decks and street level, to improve handicapped access around the site.

(Footnotes)

[1] *Sprague School Post Construction Traffic Monitoring*, BETA Group, Inc., letter dated April 30, 2004.

[2] Counts conducted by Vanasse Hangen Brustlin, Inc.

[3] *Trip Generation*, 7th Edition, Institute of Transportation Engineers, 2003.

[4] *Highway Capacity Manual;* Transportation Research Board; 2000.

[5] *Trip Generation*, 7th Edition, Institute of Transportation Engineers, 2003.

[6] *A Policy on Geometric Design of Highway and Streets (5th Edition)*; American Association of State Highway and Transportation Officials; 2004.

Chamber of Commerce - Merchants' Survey

To: Town of Wellesley - Tailby Lot Study Committee

From: Maura M. O'Brien, President, Wellesley Chamber of Commerce

Date: March 16, 2005

RE: Architerra's Request for Parking Survey of Chamber Members

The Chamber of Commerce has responded to a request from the Tailby Lot Study Committee to participate in its study of the feasibility of adding decked parking to the Town's Tailby Parking Lot. Specifically, the Chamber was asked to survey the opinions of its members conducting business in the Central Street/Wellesley Square shopping area about parking availability and their employees' parking practices. Fourteen Chamber members participated in the survey. We understand that the opinions of the members of the Wellesley Square Merchants Association are consistent with those reported here.

The Chamber thanks the committee for this opportunity to participate, but wishes to emphasize that neither the Chamber nor the members surveyed have studied the overall feasibility of any project at Tailby or take any position with respect to the overall feasibility of adding parking decks to the Tailby lot.

The committee's consultants posed five questions:

1. Do you agree that there are Wellesley Square parking problems that need to be solved? Please describe what these are, and if and how you think Tailby Lot could be part of the solution.

   Businesses agreed unanimously that there is a serious parking problem in Wellesley Square that needs solving. Customers are understandably frustrated at the lack of convenient parking, especially at busy times of the year. It is not uncommon for customers to complain of needing to drive around the Central Street block repeatedly hoping a spot will open up. Employees are unable to find parking unless they come early. The problem has been around for a long time, but has been getting much worse in the last year or so. The businesses encourage the town to try to solve this problem.

2. Would you support raising the rates at the parking meters from $0.25 for an hour to $0.25 for half an hour, in order to discourage employee parking in front of retail establishments?

   Businesses (more than 2:1) oppose raising the parking rates on Central or Washington Street. They feel their customers and their businesses would be adversely impacted by the increased cost, increased inconvenience and resulting less shopper-friendly atmosphere that would result.

3. Would you support a program promoting employee parking at the Tailby Lot at the current rate of $3.00/day? (This is less than what it would cost if the rates at the parking meters were raised to $0.25 for half an hour, which would result in a cost of $4.00/day.)

   Businesses overwhelmingly oppose raising metered parking rates or business placard rates (see #2). So they would not support a Tailby program that required a parking rate increase.

But if a rate increase where not part of the package, the majority would support such a program, but with one or more conditions:

a) Better access (the stairs to the lot are a problem) and better lighting on Central and Crest Road should be provided. Most stores close at 6 pm or later.

b). Tailby spaces would be guaranteed for those employers committing to participate in the program;

c). Tailby spaces be paid for by permits or debit cards, so employees would not have to leave work to feed meters;

d). Tailby rates would be the same for employees as residents.

A minority have locations and/or particular needs that would make use of Tailby impractical for their employees. That minority feels, in general, that decking the lot might be a good idea for the Town, if not for their particular businesses.

4. Would you be willing to pay 50% of the daily cost incurred by your employees to park at the Tailby Lot, in order to encourage them to do so? (This would translate into $1.50 per day or $30.00 per month for a full-time employees who works 5 days per week.)

The majority of businesses surveyed would not be willing to pay this cost. A small minority would be, but, if they committed to use the lot, then spaces would have to be guaranteed for their employees' use. Another small minority either were not sure or had no need for this additional parking.

5. Would you be willing to pay 100% of the annual cost incurred by your employees to park at the Tailby Lot, in order to encourage them to do so for a modest cost? (This would translate into $3.00 per day or $60.00 per month for a full-time employee who works 5 days per week.)

The answers were the same for this question as #4.

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