

Memorandum

From: John Hasse, Ph.D., Department of Geography and Anthropology

To: The Campus Master Planning Committee

Re: Land Use and Environmental Concerns regarding the Proposed Student Townhouses.

Date: April 30, 2003 Revised June 17th, 2003

Rowan University is in dire need of new residential facilities. The current plan to meet this need is a proposal for construction of over 100 townhouse units in the woods between Hawthorn and the Conrail train tracks and Route 322. While a substantial amount of effort has been expended to develop this plan over the past year, there are a number of fundamental concerns and flaws regarding the building siting, land use planning and environmental impacts associated to the plan as proposed. Considering that other options for housing location may be possible at least from an urban planning perspective, the weight of these concerns warrants their discussion in the planning process. The main points of concern include:

- (1) *Inconsistency with the Rowan University Master Plan,*
- (2) *irrevocable loss of old growth forest,*
- (3) *safety implications,*
- (4) *lost opportunity to coordinate with Glassboro downtown redevelopment, and*
- (5) *loss of premier land parcel.*

(1) Inconsistency with the Rowan University Master Plan: The Rowan Vision Plan of 2000 (Figure 1) was a conceptual plan put forth by hired consultants depicting 10 years of growth for the university. From an urban planning and smart growth perspective, this plan was well-conceived. According to the plan, the Glassboro campus would be “densified” to better utilize the land and new sports facilities would move to the West Campus. New academic and residential buildings were sketched in areas on the map that would demonstrably enhance the quality of the campus environment fostering a “critical mass” of students and in turn enhancing residential safety. New student residences on the plan were located in excellent proximity to the student center as well as Glassboro redevelopment district following the principles of “Smart Growth”.

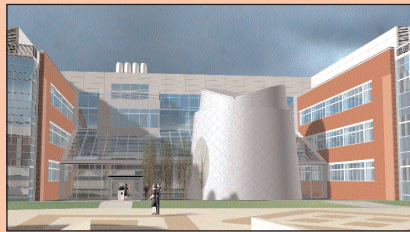
TRANSFORMING ROWAN UNIVERSITY

In Fall 2000, Rowan University embarked on an aggressive 10-year landscape and construction plan. This drawing represents our vision for the future of the University.



Rowan's original mission to train teachers will expand and grow stronger with a new College of Education facility.

ROWAN ARCHIVES



The new science building atrium will host University and community science fairs just beyond the planetarium.

CRAIG TERRY



Historic Tobill Auditorium now holds student theater and dance productions, but the 2002 addition to Wilson Hall will provide for all Fine and Performing Arts performances under one roof.

ROWAN ARCHIVES

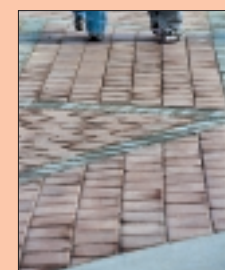
MAP BY H2L2



- EXISTING BUILDINGS
- NEW BUILDINGS

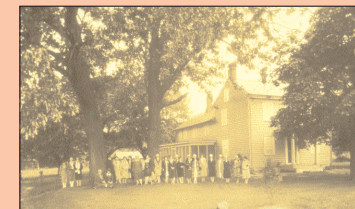


Day Care



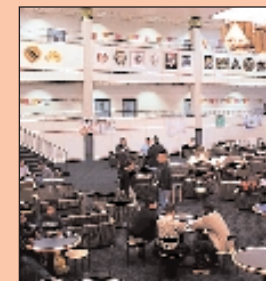
Improving campus from the ground up, new brick walkways will link buildings and greens.

CRAIG TERRY



Boarding houses were home to enrollees in 1923. New residence halls will host at least 400 students.

ROWAN ARCHIVES



Renovating and refurbishing the Pit last summer began a series of changes in the Student Center which will include a new computer lab, commuter lounge, meeting and dining areas.

CRAIG TERRY

The original master plan was well-conceived from a planners perspective. In opinion of the author, the newly proposed townhouses (Figure 2) are a step backwards from the original new dorm locations of the Vision Plan of 2000 (Figure 1). These townhouses are removed from the main residential sector with significant implications for traffic flow problems, residential safety and accessibility to location where much student activity is likely to occur.

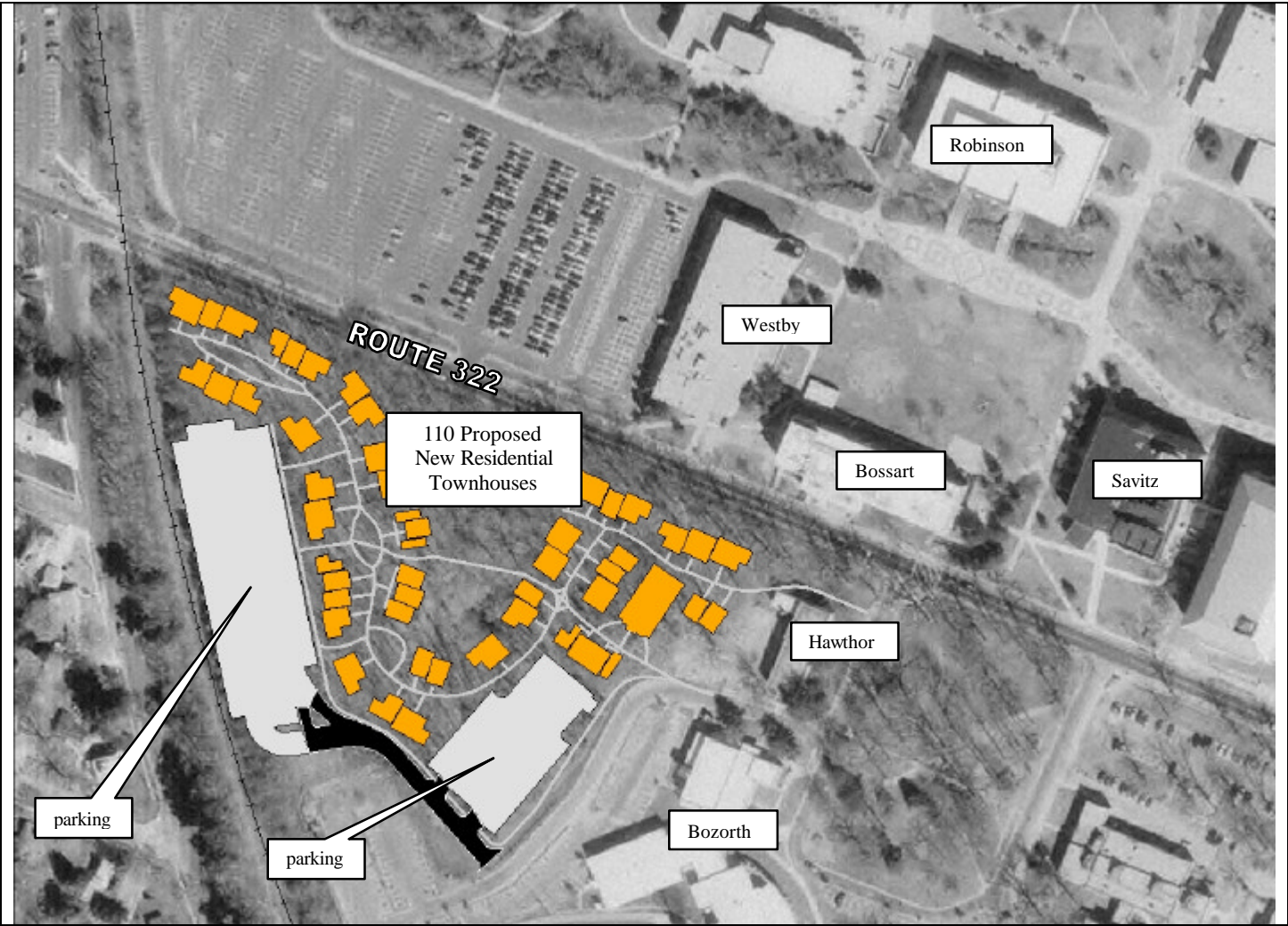
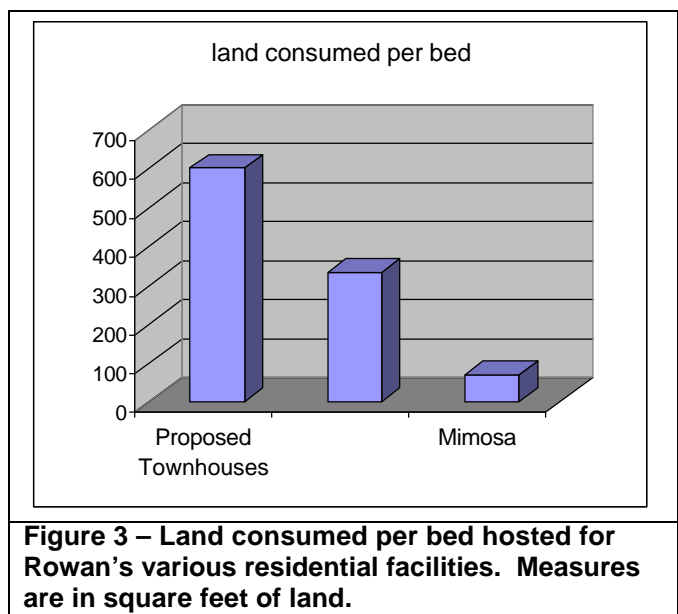


Figure 2 – proposed townhouse location in the forest Behind Hawthorn.

The proposed town houses are problematic in that they impart a relatively low-density use of land for a college campus. The number of students housed per acre is less efficient compared with other residential quarters on this campus (Figure 3) as well as other campuses. For example, the parcel occupies and estimated 278,891 square feet of campus land and is proposed to accommodate 463 beds for a land use density of 602.4 square feet of land utilized per bed accommodated. The residential land area that contains Chestnut, Willow and Magnolia

Hall (750 beds) combined with Edgewood Park Apartments (384 beds) occupies approximately 378,373 square feet of land for a density of 333.7 square feet of land utilized per bed accommodated. The proposed plan houses 44% fewer students per acre developed than the existing residences mentioned above. Another comparison is with Mimosa Hall, which houses 305 beds. Mimosa has an estimated ground footprint (building outline) of 21,000 square feet for a per bed land footprint of land of 68.9 square feet of land occupied by the building per student housed. The gross building area of the proposed town houses is 152,040 square feet to house 463 beds which results in a per bed land footprint of 328.4 square feet per student. With New Jersey's struggle against sprawl, we might be creating our own version of campus sprawl through relatively low-density townhouse development. The appropriate density for residential quarters on a suburban campus should be gauged against other campuses of which we might wish to emulate.



(2) Irrevocable Loss of Remnant Climax Forest: In the face of sprawling suburbanization, New Jersey is rapidly losing many important land resources. The state is struggling to mitigate the conversion of thousands of acres of forest and farmland lost to development every year (Hasse and Lathrop 2001). The wooded parcel at Rowan slated for the townhouses is one of the last remnant climax forest tracts remaining in Glassboro and the surrounding region. Although it is only 7 acres in size, it is an ecological jewel that Rowan has the unique opportunity to preserve (Figure 4 a-f). Patches of intact forest such as the Rowan parcel provide important

function as wildlife habitat, ground water aquifer recharge, flood mitigation, air quality enhancement, scientific and biological education, and potential aesthetic benefits such as a nature trail. While trees can be replanted, the loss of a functioning ecosystem is irreversible. Rowan Woods would make an excellent ecological preserve as they have at Rutgers New Brunswick where students and community members would have ability to experience one of the last stands of climax forest in the region for years to come. Maintained paths and plant signage would make the forest preserve an attractive natural retreat.

The following is an excerpt of a report produced by the Rowan Biology department. It documents the valuable biological diversity found in this stand of forest.

Forest of the Campus

The original forest on the site of the campus before it was settled was probably an oak-hickory community, though very little of the original habitat remains. Some evidence of this original forest remains in the small tract of forest adjacent to Hwy. 322, at the west edge of campus. This fragmented habitat is dominated by black oak, chestnut oak, white oak, mocker nut hickory, black cherry and sassafras. Other less abundant species in this stand include basswood, black walnut, dogwood, eastern red cedar, hackberry, holly, pignut hickory, pitch pine, post oak, red maple, sour gum, southern red oak and willow oak. Some nonnative species have also become naturalized (established) in this forest, especially norway maple and tree-of-heaven (others are catalpa, black locust, honey locust and white pine). It is possible that the original forest also would have included blackjack oak, beech, chestnut, persimmon, scarlet oak, sweet gum and tulip tree, but no evidence of them remains in this small remnant habitat. The oldest trees are oaks, with some of them over 200 years old (the oldest tree is probably close to 300 years), and a great % of 100-150 years old trees. The oak population is healthy, and replenishes itself with a good replacement ratio. The black and honey locust, as well as the red maple form clumps in certain areas of the forest. Black cherry, on the other hand, seems to be more evenly distributed. (provided by Pat Mosto, chair of biological sciences)

The loss of this remnant ecosystem is the most problematic aspect of the proposed student residential townhouses.



(a) Rowan Woods is a mature climax forest.



(b) There is a nesting pair of Red-tailed Hawks [Raptor [Buteo jamaicensis]]



(c) The diversity of plant life and wild life is significant - dame's rocket – [Hesperis matronalis]



(d) *Terrapene carolina carolina* [common name - Eastern Box Turtle]



(e) Many trees are substantial in size. Some trees are over 200 years old. white oak – [Quercus alba]



(f) gill-over-the-ground - *Glechoma hederacea*

Figure 4. The ecological diversity of Rowan Forest warrants creation of an ecological preserve.

(3) Safety Implications: Another important concern is safety. One of the potential problems with a relatively low-density land use such as the proposed townhouses is a more dispersed level of pedestrian activity. An important factor related to the occurrence of crime is visibility to other people. The principles are well spelled out the Crime Prevention Through Environmental Design (CPTED) standards. The townhouse plan is flawed in this respect because it effectively spreads out residences in the woods in a design that provides more opportunities for hiding and makes pedestrians more isolated en-route to residences. This may be more inviting to illicit activity than other higher-density residential designs that would create a critical threshold of people in a more visible environment. Meanwhile, Rowan's existing residential facilities are located somewhat haphazardly from one another. The empty spaces in between existing dorms are a significant safety concern in themselves as is evident by the number of crimes that occur to students en route to Triad. The infill of new housing in closer proximity to existing residences would result in a more secure design with less opportunity for crime. A thorough safety evaluation should be conducted and contrasted with alternate options.

(4) Lost opportunity to coordinate with Glassboro downtown redevelopment: A fourth concern of the proposed plan relates to the creation of a Green Acres park along Route 322 in the area where there are existing fraternity houses slated for demolition (Figure 5). While the creation of a park here may seem attractive, it will likely diminish the success of Glassboro downtown redevelopment. For Rowan Boulevard to be successful, it will need a critical mass of people to be within close proximity. Most of those potential customers will be Rowan students. The more students that are within walking distance to the redevelopment, the more social and economic activity will occur. If the existing frat houses become a park, it is a loss of opportunity for housing residences in what has the potential to be a very dynamic redevelopment. Conversely, a park located between the existing residence halls and Rowan Boulevard will create a more dangerous atmosphere at night, which may discourage students from walking in that direction.

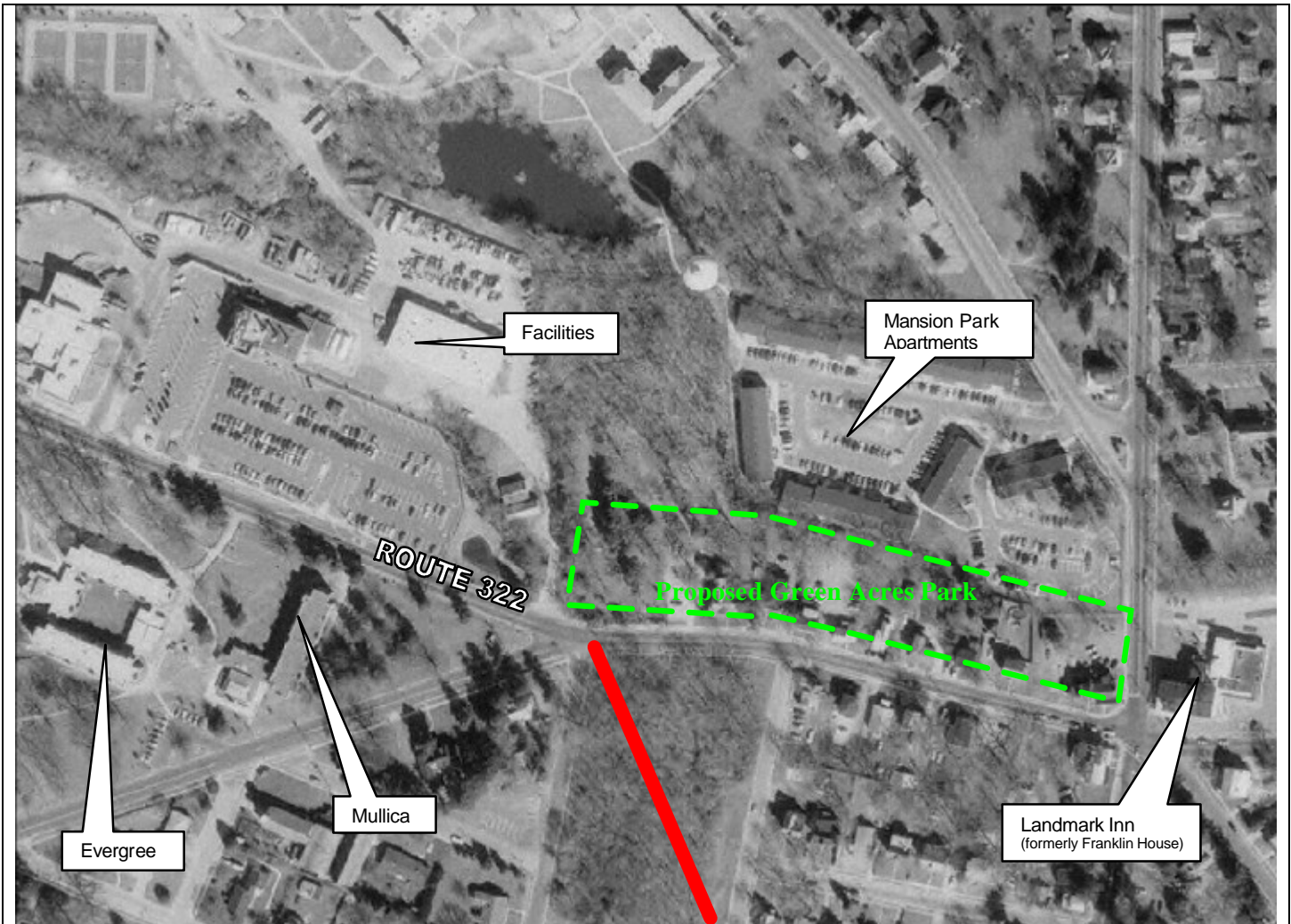


Figure 5 – Rowan campus interface with Glassboro redevelopment area. Proposed Green Acres park may diminish the potential success of Rowan Boulevard by missing the opportunity to house more people near “the action” and by creating a park which may be perceived as dangerous at night to students who might be discourage from walking past it to go downtown.

The proposed Green Acre park would arguably be better suited to relocating some of the proposed townhouse (Figure 6). Conversely, the Green Acres funding that would have been spent on a park along 322 would be far better spent on protecting Rowan Woods where the ecological value warrants land preservation.

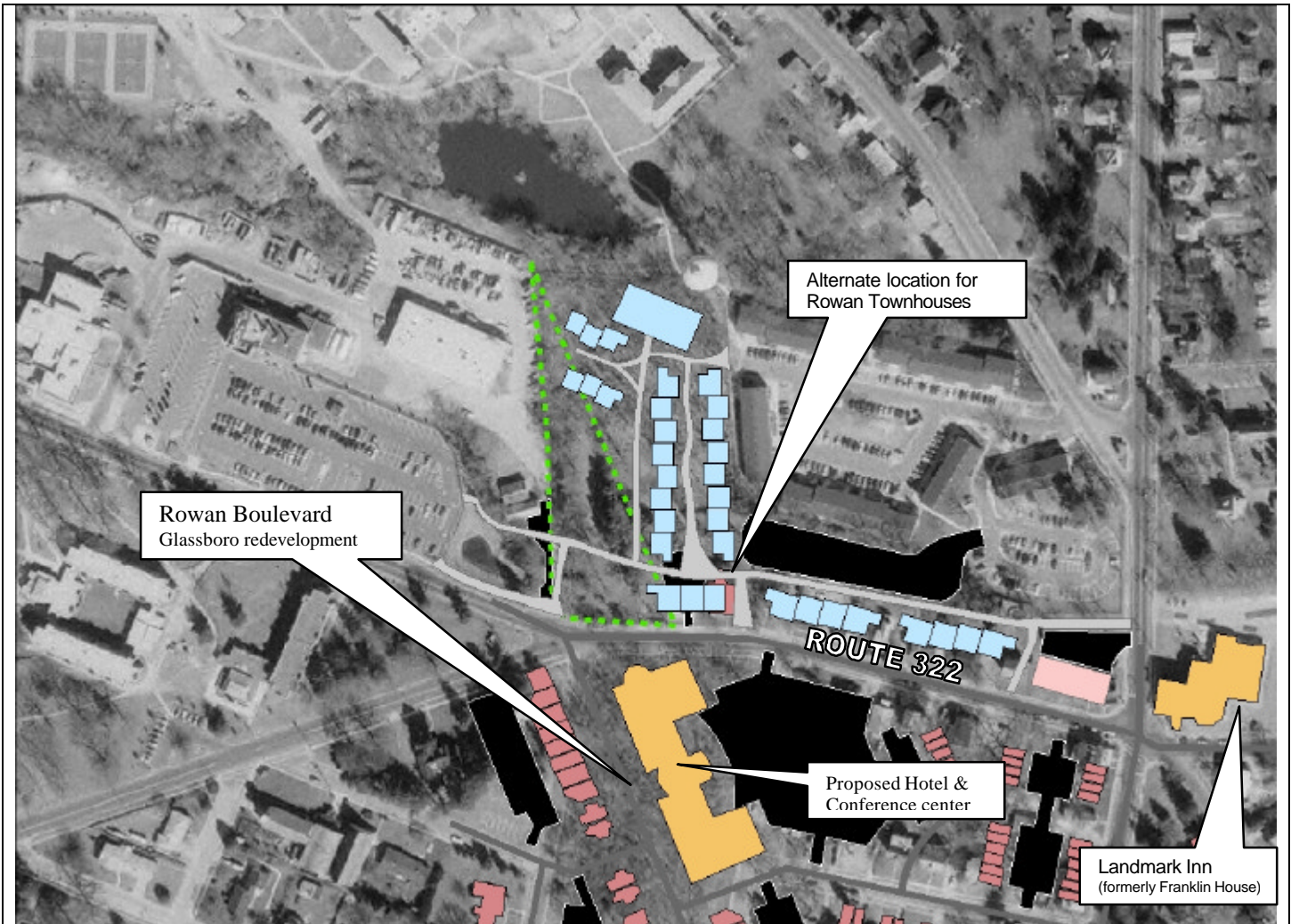


Figure 6 – The corridor along Route 322 holds potential for hosting some of the Rowan’s needed townhouse units. Townhouses located in this area would benefit from and enhance Glassboro’s redevelopment along Rowan Boulevard.

(6) Loss of Premier Land Parcel for a Low-Density Land Use: While loss of the forest is an important environmental concern, it may be inevitable that this parcel will need to be developed in order to save other open space from development in other parts of the region. If the Rowan’s wooded parcel is to ever be developed, it should be done so with a number of important considerations. One of the most valuable attributes of this parcel is its proximity to the Conrail train line. There is strong potential that this corridor will be available for a commuter rail connection to other Gloucester County towns, Camden, Philadelphia, Trenton, and NYC. Rowan should consider what land uses would be most ideally located next to a future commuter rail stop. As Rowan becomes the academic and research hub of South Jersey, it may consider a prominent research center

or conference center or other high-profile land use as a more beneficial use of a parcel adjacent to a commuter rail line than relatively low-density residential land use. A single prominent building could be designed to preserve more of the existing forest than is possible with the dozens of town house units that are necessary. If developed, the parcel should be used for a prominent building that is a "destination" which low-density housing will not be. The environmental, social and parking considerations of designing the campus to coordinate with a commuter rail line are very important long-term considerations.

The second important characteristic of this parcel is its visibility as a gateway to the Glassboro campus. Entering the campus from the west on Route 322 (or by future commuter rail), the first impression of the campus will be the expansive asphalt of parking lot A on the left and the rear side of modular townhouses behind some trees on the right. This may not be the best image that Rowan can present. Imagine the alternative of entering the Rowan Campus from the west a being greeted with a prominent, environmentally state-of-the-art building nestled in the woods on your right that becomes the premier research and conference center of South Jersey. Utilizing this parcel for a stop-gap measure to provide urgently needed housing is not only environmentally irresponsible but also misses the long-term potential of this parcel should it be necessary to develop.

Concluding Remarks

There is an immediate need for construction of new student residences at Rowan. This fact cannot be glossed over by idealized planning principles. However, the urgency for these residences is colliding with the urgency for protecting New Jersey's last remnants of climax forests in the face of tremendous statewide development pressures. While there will never be a perfect solution to contentious land use issues such as this, there are other options available here that can be seriously considered for a win-win solution. For example, construction of the townhouse units in the area of the existing frat houses could accommodate 1/3 of the proposed units in a similar time frame as the current construction schedule. Meanwhile, other adjacent parcels that are not yet owned by Rowan could then be acquired and developed within the following year.