

June 14, 2005

Jenkintown-Wyncote Station Parking Garage Feasibility Study

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TABLE OF CONTENTS

Introduction	1
Purpose of Study	1
Steering Committee	1
Consultant Team	2
Project Schedule	2
Existing Conditions Review	3
Background	3
Site Description	4
Parking Assessment	5
Traffic and Pedestrian Circulation Assessment	6
Environmental Assessment	7
Planning Considerations	8
DVRPC Report: Parking Demand Study: Glenside and Jenkintown SEPTA Stations	8
PennDOT Project: Greenwood Avenue Bridge Replacement	9
SEPTA Project: High-Level Platform Construction	9
Project Visioning	10
Public Process	10
Public Workshop #1 (6/17/2004)	10
Public Workshop #2 (9/30/2004)	12
Recommended Concept	18
Plan Description	18
Environmental Issues	23
Project Cost Estimate	24
Next Steps	25

LIST OF FIGURES

<i>Jenkintown-Wyncote Train Station</i>	4
<i>Train Entering Station</i>	4
<i>Ralph Morgan Park</i>	4
<i>North Parking Lot</i>	5
<i>Station Parking Lot</i>	5
<i>South Parking Lot</i>	5
<i>Railroad Avenue Intersection</i>	6
<i>Station Exit Across Wooden Bridge</i>	6
<i>On-Site Road Under Greenwood Avenue Bridge</i>	7
<i>Tookany Creek</i>	7
<i>Existing Greenwood Avenue Bridge</i>	8
<i>Existing Station Platforms</i>	8
<i>Alternative 1</i>	14
<i>Alternative 2</i>	15
<i>Alternative 3</i>	16
<i>Recommended Concept: Site Context</i>	18
<i>Recommended Concept: Site Plan</i>	19
<i>Recommended Concept: Parking Garage Levels</i>	20
<i>Recommended Concept: Garage Sections</i>	21
<i>Recommended Concept: Site Plan - Access</i>	22
<i>Conceptual Cost Estimate</i>	24

INTRODUCTION

Purpose of Study

In 2000, the Delaware Valley Regional Planning Commission (DVRPC) conducted a study, *Parking Demand Study: Glenside and Jenkintown SEPTA Stations*, which projected the future parking needs at the Glenside and Jenkintown-Wyncote stations for the year 2025. The purpose of this study, the *Jenkintown-Wyncote Parking Garage Feasibility Study*, is to:

- Determine a program and configuration for a parking garage that meets the future parking demand.
- Recommend traffic improvements to facilitate access to the site.
- Ascertain community preferences regarding station facility improvements.

The study takes in to consideration the Parson Brinckerhoff Greenwood Avenue Bridge Replacement Plan and the SEPTA High-level Platform Location Plan, both of which affect the site. The overall goal of the study is to improve the overall transit experience through the increase of available commuter parking and modernization of the station facilities.

Steering Committee

Delaware Valley Regional Planning Commission: Barry Seymour, Patti Elkis

Southeastern Pennsylvania Transportation Authority: Andrew Furman, Michael Shapiro

Montgomery County Planning Commission: Leo Bagley, Kathy Ember

Cheltenham Township: Board of Commissioners, Township Staff, Citizens' Committees (BHAR, EDTF)

Jenkintown Borough: Borough Council, Borough Staff

Consultant Team

Design & Visioning – Hillier Architecture: Anish Kumar, AIA, AICP, David Chen, Emily Young

Engineering – Desman Associates, Inc.: Timothy Tracy, P.E.

Traffic & Circulation – Orth-Rodgers & Associates: Frank Tavani, P.E.

Project Schedule

Existing Conditions Analysis & Program Alternatives (Spring 2004)

- Steering Committee Meetings (3/11/2004, 4/22/2004, 2/25/2004)
- Public Workshop (6/17/2004)

Alternative Design Concepts (Summer 2004)

- Steering Committee Meeting (9/13/2004)
- Public Workshop (9/30/2004)

Plan Recommendations (Winter 2004/Spring 2005)

- Steering Committee Meeting (10/26/2004, 4/6/2005)

Implementation Strategy (Summer 2005)

- Steering Committee Meeting (5/10/2005)
- Public Plan Presentation (6/2/2005)

EXISTING CONDITIONS REVIEW

Background

Community Description

The Jenkintown-Wyncote Station is located in both Jenkintown Borough and Cheltenham Township. A portion of the site located in Cheltenham Township is within the Township's Wyncote Historic District. Together, Cheltenham Township and Jenkintown Borough comprise approximately 5,835 acres (Cheltenham – 5,587 acres, Jenkintown – 248 acres) surrounded by the nearby communities of Abington, Springfield, and the City of Philadelphia. Both municipalities are home to beautiful older residences, many specialty shops and a downtown office and commercial area. Nearby amenities include academic and cultural destinations, hospitals, and parks.

Ridership Area

Results from a recent survey (Jenkintown Train Station Rider Survey) indicate that the SEPTA trains serving the Jenkintown-Wyncote Station provide an important connection between the local area and the nearby city of Philadelphia - 71% of the riders surveyed lived in either Abington, Cheltenham, or Jenkintown and 76% of the riders' final destinations were either Market East Station or Suburban Station, both located in Center City Philadelphia.



Jenkintown-Wyncote Train Station



Train Entering Station



Ralph Morgan Park

Site Description

The Jenkintown-Wyncote Station encompasses approximately 8 acres of land. The portion of the site west of the train tracks contains multiple surface parking lots and is buffered from the surrounding residential community by Tookany Creek, a strip of wooded land, and Ralph Morgan Park, which consists of a passive recreation area, half court basketball, open space, and a natural area. The northwestern portion of the site is located in the Wyncote Historic District. The eastern edge of the site is bounded by train tracks, where SEPTA's R1, R2, R3, and R5 train lines serve the Station and provide regular daily service to and from Center City Philadelphia and the surrounding area. An underground pedestrian tunnel provides access from the inbound (west) side of the site to the outbound (east) site. Above ground, the site is spanned (east-west) by the Greenwood Avenue Bridge, currently scheduled for replacement by PennDOT.

The Historic Train Station comprises two buildings on the site. The main station building is located on the inbound side and currently houses the Station Grill Restaurant and SEPTA ticket office. The other component is a small structure on the outbound side that has a waiting area and retail space, which is currently vacant. Both structures were built around 1930 and are part of the Wyncote Historic District. There are two other structures on the site - a small, brick building next to the Greenwood Avenue Bridge which is used for maintenance and service and a small, two-story structure adjacent to the northern parking area that serves as a switching station.

Parking Assessment



North Parking Lot



Station Parking Lot



South Parking Lot

For the purposes of this Study, the site's three primary parking areas have been called the North Lot, the Station Lot, and the South Lot. The North Lot is located on a long, narrow portion of the site between the railroad tracks and Tookany Creek. The Station Lot, located adjacent to the historic train station building, is small and serves primarily as a passenger drop-off and pick-up area. The South Lot is the large parking area located on the other side of the Greenwood Avenue Bridge from the Station. Since the South Lot is located on the widest portion of the site, it contains the bulk of the surface parking spaces. There are additional parking spaces located next to the brick maintenance building and along Station Avenue, the road entering the Station Lot. The existing parking spaces are distributed as follows: 364 spaces in the South Lot, 208 spaces in the North Lot, and 35 spaces in the Station Lot. Additionally, there are 5 parallel parking spaces and 8 SEPTA spaces next to the Greenwood Avenue Bridge. Of these spaces 523 are dedicated for commuter parking and 65 to customer parking for the Station Grill Restaurant.

Hillier Architecture conducted observations on June 3rd and June 8th, 2004 at the Jenkintown-Wyncote Station during the peak morning and evening hours (7:30 – 8:30am and 5:00 – 6:00pm). During those hours, twenty-six SEPTA trains were scheduled to arrive at the Station, seven outbound and six inbound during both the morning and evening peak hours. Other than the passenger bursts that occurred around train arrivals and departures, there was little activity observed at the Station. The vast majority (74%) of those using the Jenkintown-Wyncote Station were observed driving to the Station and parking their cars. Another 17% walked and 6% were dropped off. 2% arrived by train, while only 0.5% arrived by bus and 0.5% arrived by bicycle. Approximately 76% of the existing parking spaces were filled by 8:45am with most of the unoccupied spaces occurring in the permit lot (North Lot). This distribution is typical in that permit spaces tend to fill later in the day than daily fee spaces since permit holders do not have to compete for parking spaces.

Currently, the existing surface parking at the Station is at full capacity and cannot be expanded further due to the physical constraints of the site. Without increasing the number of parking spaces, the Station will not be able to satisfy the increased demand for parking as projected by the DVRPC study, *Parking Demand Study: Glenside and Jenkintown SEPTA Stations*. Barring significant property acquisition dedicated to surface parking within walking distance of the Jenkintown-Wyncote Station, a structured parking garage will be required on the site to meet the future demand.

Traffic and Pedestrian Circulation Assessment



Railroad Avenue Intersection

Orth-Rodgers Associates, Inc. (ORA) conducted traffic counts in May 2004 at the following intersections:

- Glenside Avenue and the eastern driveway of the South Lot
- Cliff Terrace and Glenside Avenue
- Railroad Avenue, Greenwood Avenue and Glenside Avenue
- Greenwood Avenue and Railroad Avenue
- Township Line Road and Summit Avenue
- Internal connection under the Greenwood Avenue Bridge between the South and Station Lots

At that time, both signalized intersections (Railroad Avenue, Greenwood Avenue and Glenside Avenue; Township Line Road and Summit Avenue) and the non-signalized intersection at Greenwood Avenue and Railroad Avenue were found to be performing below acceptable levels of service (below LOS C) during the weekday morning and evening peak service hours. The remaining non-signalized intersections were found to be performing at acceptable levels of service (LOS C or better).



Station Exit Across Wooden Bridge

Currently, there are two access points where cars may enter or exit Jenkintown-Wyncote Station – the Greenwood Avenue driveway to the South Parking Lot or the Railroad Avenue driveway to the Station Lot / vehicular drop-off area. An additional exit utilizing a small wooden bridge is located at the Glenside Avenue driveway to the South Parking Lot.

All of the driveways serving the Station are non-signalized and present traffic safety issues. Drivers exiting the South Lot to travel west on Greenwood Avenue make unprotected left turns that lead directly through the failing intersection of Railroad Avenue, Greenwood Avenue, and Glenside Avenue (previously mentioned). Drivers traveling west on Greenwood Avenue to enter the Station or North Lots must make a right turn onto Railroad Avenue; this turn has a very difficult turning radius.

Internal vehicular movements within the Jenkintown-Wyncote Station are limited to movement between the three parking lots and the vehicular drop-off area on the inbound side. Although no conflicts between internal vehicular movements and pedestrian traffic were observed, it must be noted that pedestrians tend to walk on the roadways instead of on the sidewalks. Drivers must be especially aware of people walking on the roadway under the Greenwood Avenue Bridge, where there is limited space for both cars and pedestrians.



On-Site Road Under Greenwood Avenue Bridge



Tookany Creek

Pedestrians may access the Station at numerous points, including four entrances on the inbound side (two of which are near the foot bridges in Ralph Morgan Park) and two on the outbound side, although the Station is not accessible to those with disabilities. Internally, pedestrians may move from one side of the Station to the other through the underground pedestrian tunnel. Hillier Architecture observed that commuters use the outbound platform ingress/egress via a central access point while inbound commuters ingress/egress via multiple access points. During the evening peak hour, commuters disperse to the main surface lot using the vehicular drop-off area and the vehicular lane that passes under the Greenwood Avenue Bridge; few utilize the platform walk under the Bridge. Most of the passengers who disembarked from the outbound train crossed to the inbound side through the pedestrian tunnel. Less than 20 people were observed leaving the station from the outbound side by foot or car.

From the beginning stages of planning, it was recognized that effective transportation initiatives will play an important role in the modernization of the Jenkintown-Wyncote Station. The aim of these initiatives is to improve on-site circulation of both cars and pedestrians (including ADA access) and address traffic problems at nearby intersections. Specific traffic and circulation projects will enable the necessary station upgrades – including increased parking – to occur without distressing already congested local roadways and intersections.

Environmental Assessment

The adjacency of the Tookany Creek to the site raises concerns regarding wetlands and adequate riparian buffers. Based on visual observations, there are no wet lands present on the site. Most of the site is currently used for parking and covered with asphalt. Due to the extensive coverage of impervious surfaces on the site, development within the existing parking areas should not negatively impact the surrounding environment.

PLANNING CONSIDERATIONS

DVRPC Report: *Parking Demand Study: Glenside and Jenkintown SEPTA Stations*



Existing Greenwood Avenue Bridge



Existing Station Platforms

In 2000, the Delaware Valley Regional Planning Commission (DVRPC) conducted a study, *Parking Demand Study: Glenside and Jenkintown SEPTA Stations*, which evaluated the parking needs surrounding SEPTA's Glenside and Jenkintown stations. During the course of the study, passengers were surveyed at six study area train stations to determine and quantify customer preferences for alternate parking expansion scenarios — at the Glenside Station or the Jenkintown Station, or both stations. Estimates of total station parking demand were formulated for each scenario and the findings of the study indicated that the Jenkintown-Wyncote Station would need a total of 898 parking spaces to satisfy parking demand in the year 2025.

In support of the parking demand estimates, DVRPC prepared, conducted (with SEPTA staff) and tabulated on-platform passenger surveys at the Jenkintown Station on May 16, 2000. 809 surveys were distributed between 6:00am and 10:00am; 526 (65%) were returned. The responses provided by these riders showed that many of them believe that more parking is needed. Of the top five comments/suggestions provided by riders, four dealt with parking-related concerns. Seventy-two riders believed that more parking spaces were needed, while twenty-five riders had concerns about the parking policy, eighteen riders believed that more monthly permit sales were necessary, and sixteen riders felt that the maintenance of the Station and its parking lots should be improved.

Given that the vast majority of the passengers surveyed arrived at the Station by car, it is not surprising that parking issues were most frequently mentioned. The following table shows the top modes of arrival at Jenkintown-Wyncote Station. (Note: While no riders arrived by bicycle, 16% (82) said that they would bike to the Station if bicycle parking were available.)

<u>Mode of Arrival</u>	<u>Percent</u>
Drove, parked in SEPTA lot	65.4%
Walked	16.9%
Drove, parked on street	7.2%
Dropped off	6.5%
Train	2.3%

Subsequent to the initial release of the DVRPC study, a reduced Center City Philadelphia employment forecast for 2030 prompted a second look at parking demand numbers. In September 2004, DVRPC released revised demand estimates for the year 2030 indicating that the Jenkintown-Wyncote Station would actually need to provide a total of 811 commuter parking spaces to meet demand – 288 more than the Station has today.

PennDOT Project: Greenwood Avenue Bridge Replacement

The Greenwood Avenue Bridge, which crosses over the site, is scheduled to be replaced by PennDOT. Construction is anticipated to begin in the spring of 2006 and take approximately 18-24 months to complete. Parsons Brinckerhoff, consultants for PennDOT, have prepared a plan that will replace the bridge primarily “as is,” with the removal of a bridge column located on the Station site adjacent to the existing inbound platform. It may be possible to provide pedestrian connections from the new bridge directly to the new Station platforms through ramps and stairs.

SEPTA Project: High-Level Platform Construction

SEPTA plans to install high level platforms at the Jenkintown-Wyncote Station to speed boarding time and provide universal access. While still in the preliminary stages, it has been assumed that the installation of the high level platforms will be completed before construction of the proposed parking garage.

PROJECT VISIONING

Public Process

During a series of meetings held on 3/11/2004, 4/22/2004, and 5/25/2004, the Steering Committee discussed the conditions and planning issues existing at the Jenkintown-Wyncote Station. In particular, discussion focused on expanding parking and the possibilities of placing structured parking on the site, options for improving vehicular and pedestrian access to and circulation throughout the site, integrating the Greenwood Avenue bridge replacement with the Station upgrades, preserving the site's historic resources, and mitigating the effects of any proposed changes on nearby residential neighborhoods.

Based on direction provided by the Steering Committee, the consultant team developed options for parking expansion (different garage configurations and a tentative garage program) and traffic modifications (intersection realignments and signalization changes) in preparation for presentation to the public for their input and ideas.

Public Workshop #1 (6/17/2004)

The goal of the first public workshop was to ascertain the needs of the community and their expectations regarding an upgrade of the Jenkintown-Wyncote Station. Approximately forty business owners, commuters, and residents attended the open house, which was followed by a formal presentation and question/answer exchange.

A tentative garage program was discussed and featured the following:

- Approximately 900 spaces
- 3 supported levels + grade
- 34' or 3 stories
- Approximately 240 cars / level
- SEPTA ticketing, information, and waiting area within proposed garage
- First floor of garage same elevation as high level platform with direct access
- Open space

In addition to discussing ideas and technical requirements for construction of a parking garage, the meeting highlighted relevant planning and design issues such as the Greenwood Avenue Bridge Replacement Project and the new high-level platforms proposed by SEPTA. Significant time was spent explaining existing traffic conditions and alternatives that would mitigate overall congestion. The consultant team also highlighted current station accessibility and observed commuter patterns.

Attendees were asked to verbally make comments or suggestions and to voice their concerns after the formal presentation. "Ideas" forms were also distributed for participants to complete. Of the nearly 35 responses received via comment, hand-written, or email, it was clear that most participants agreed that construction of a parking structure is a viable way to meet future parking demand. Only four people dismissed the idea outright.

Following this workshop, residents of Cliff Terrace, a residential street located across Glenside Avenue from the Station, submitted a letter objecting to the construction of a parking garage on the site. They highlighted several important issues including traffic congestion and noise pollution, as well as environmental impact on Tookany Creek. On September 28, 2004, Cliff Terrace residents submitted another letter elaborating their objections to the construction of a parking garage. Again, their objections focused primarily on concerns about traffic and environmental impact.

Based on the existing conditions and constraints of the site, input from the public, and guidance from the Steering Committee, the consultant team developed a set of criteria to represent the community's vision for the Jenkintown-Wyncote Train Station. Those criteria, listed below, guided the consultant team's development of alternative concepts.

Transportation

Provide comfortable and efficient pedestrian and vehicular circulation by:

- Improving the overall quality of the transit experience
- Increasing parking availability
- Enhancing connectivity between the Station, the proposed parking garage, and the nearby access roads

Preservation

Enhance the area's historic and natural resources by:

- Maintaining or enhancing the importance of the historic Train Station Building
- Creating the best setting in which to view the historic train station
- Eliminating some surface parking in favor of more open space

Community Fit

Improve the overall transit experience at the Jenkintown-Wyncote Train Station without negatively impacting nearby residential neighborhoods by:

- Considering views from adjacent homes and the Greenwood Avenue Bridge
- Respecting prevailing heights within the area
- Upgrading adjacent intersections in conjunction with Station improvements

Public Workshop #2 (9/30/2004)

On 9/13/2004 prior to the second public workshop, the Steering Committee met to discuss the ideas and preferences garnered from public input and to address concerns raised by the workshop participants and the residents of Cliff Terrace. Discussion centered on modification of the garage program to reflect the community's preferences, development of design alternatives for the construction of a parking garage, possibilities for traffic improvements, and options for upgrading the remaining Station area and open space.

At the second public workshop, three site concept alternatives were presented. The alternatives proposed a modified garage concept from the first public workshop and different traffic improvements. Community members were asked to rank the alternatives in the order of their preference and given the opportunity to comment on their choice. Additionally, they were asked to provide input on façade treatments for the proposed garage, the use of open spaces within the Station area, and pedestrian circulation within the site.

Concept Alternatives

The alternative site plans generated by the consultant team shared certain characteristics due to constraints of the site and/or the parameters of the project. First, in each scenario the garage is located on the South Lot because it is the only portion of the site with the dimensions required to allow construction of a parking structure. Second, each scenario reduces the overall amount of impervious surface on the site by reducing the amount of surface parking in favor of a parking structure. Each possible site configuration shown in the alternatives has a garage access road running parallel to Glenside Avenue between the garage and the Tookany Creek and a small green plaza replacing the Station Lot. Finally, the garages featured in all three site plans have the same program, which was developed based on input from the Steering Committee, the public, and the projected need for parking in the year 2030. The program for the proposed garage entailed the following:

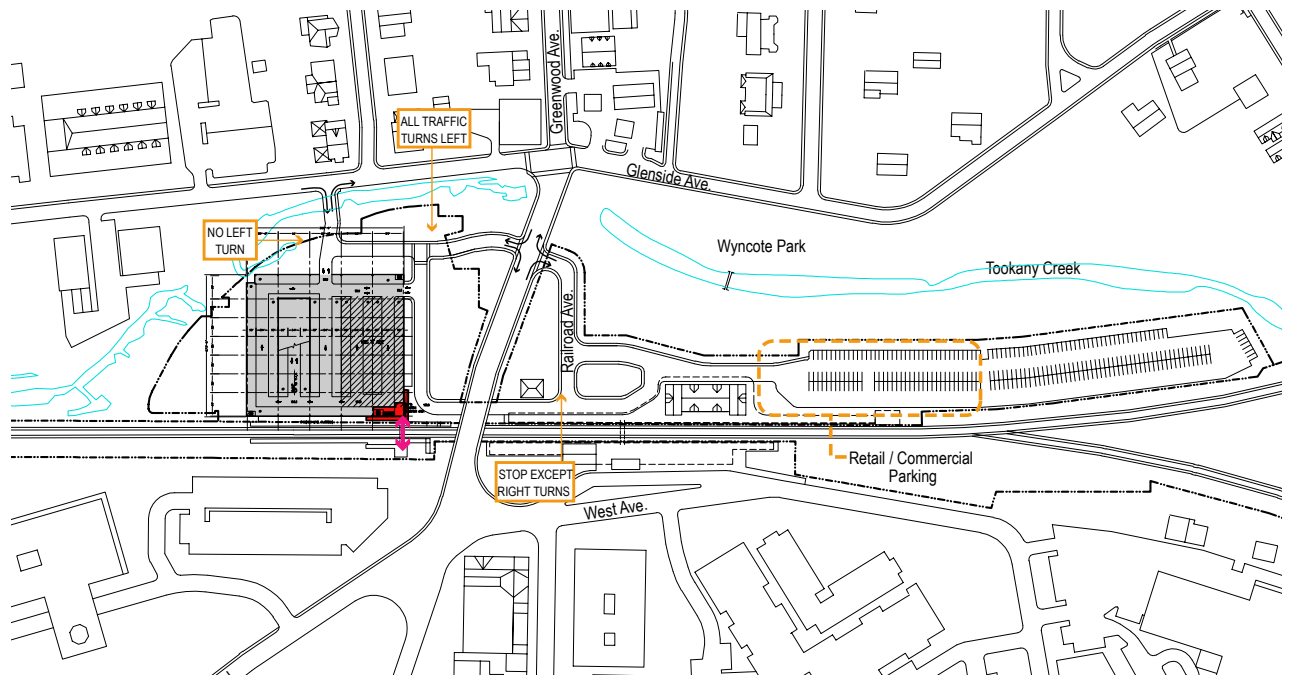
- Approximately 700 spaces
- 2 supported levels + grade
- 24' or 2 stories
- Approximately 260 cars / typical level
- SEPTA ticketing, information, and waiting area within proposed garage
- First floor of garage same elevation as high level platform with direct access
- Open Space

In addition, all proposed alternatives complement the other projects planned for the area (Greenwood Avenue Bridge Replacement, SEPTA High-Level Platforms). The main differences between the alternative site plans are access / traffic improvements to the site.

Alternative 1

In this alternative, the main access into the site is Greenwood Avenue. Railroad Avenue has been realigned to a new access point on the north side of Greenwood Avenue across from the existing access point to the South Lot and no longer extends to the Greenwood-Glenside intersection. To improve traffic operations, only right-in and right-out turns are permitted from these two access points. Movement between the two sides of Greenwood Avenue occurs internally through the underpass connection. Access to the site is also provided from Glenside Avenue at the existing access point but has been restricted to right-in and right-out turns only. The garage has two entrances/exits, both located along the new internal access road.

This site plan was the preferred alternative of only three public workshop participants. While people did believe that right-in/right-out turns only are essential to minimize disruption of neighborhood traffic flow and that this option provides the cleanest intersections and does limit traffic onto Glenside Avenue, they did not feel that continued use of the wooden bridge to access the site was acceptable. The public viewed this alternative as one that mitigates, but does not eliminate, the issues related to station traffic.

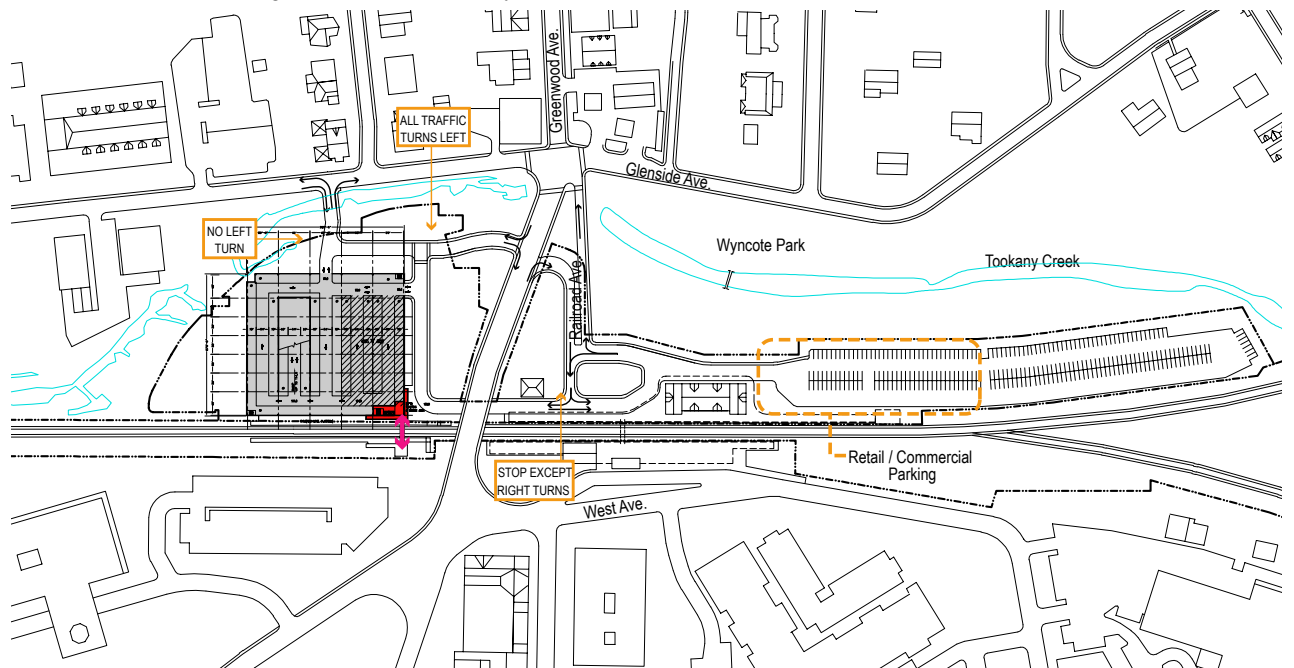


Alternative 1

Alternative 2

In this alternative, the existing access point on the eastbound side of Greenwood Avenue is retained but only allows right-in and right-out turns. On the westbound side, entry and egress on Railroad Avenue are separated so that vehicles enter the site from a right-in only access point just beyond the Greenwood Avenue Bridge but exit at the signalized intersection of Greenwood and Glenside Avenues. This bifurcation eliminates the need for vehicles exiting the station on Railroad Avenue to rely on courtesy gaps to make a left turn onto Glenside Avenue. Movement between the two sides of Greenwood Avenue occurs internally through the underpass connection. The existing access point on Glenside Avenue via the wooden bridge is widened to allow for both right and left turns out of the site but only permits right turns into the site. As in Alternative 1, the garage has two entrances/exits, both located along the new garage access road.

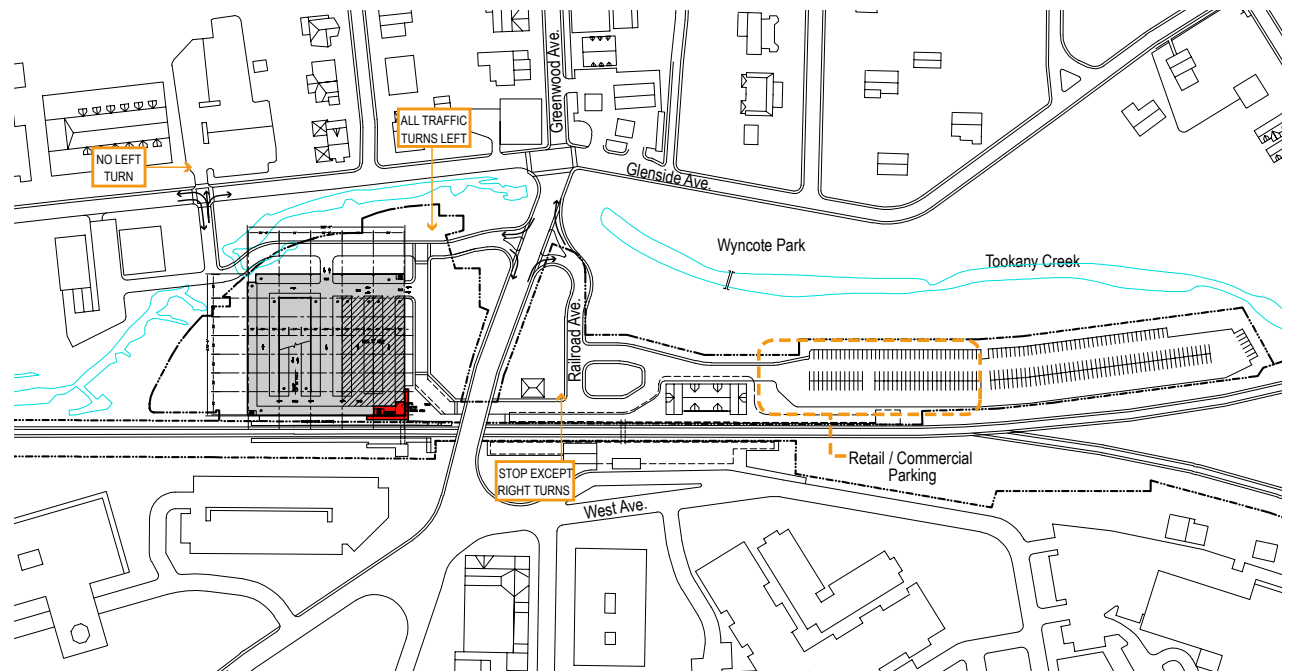
Most workshop participants viewed this option as the one that did the least to alleviate the problem intersections and the congestion on Glenside Avenue. The left hand turn onto Glenside Avenue was viewed as dangerous. Three public workshop participants, however, selected this site plan as their first choice and pointed out that it eliminates the need for drivers on Railroad Avenue to rely on courtesy gaps to exit the station. Overall, Alternative 2 was judged to be inadequate at addressing traffic flow and safety issues.



Alternative 2

Alternative 3

Similar to the first alternative, the main access into the site is from Greenwood Avenue. Railroad Avenue has been realigned to a new access point on the north side of Greenwood Avenue across from the existing access point to South Lot and no longer extends to the Greenwood-Glenside intersection. To improve traffic operations, the access points only permit right-in and right-out turns and have larger turn radii than in Alternative 1 to facilitate traffic flow into and out of the site. Movement between the two sides of the site occurs internally through the underpass connection. In this alternative the access point on Glenside Avenue via the wooden bridge is abandoned and a new access point on Glenside Avenue established across from the entrance to the existing the parking lot for Lincoln Financial Services. The relocation of the access point allows the consolidation of access points along the road and provides queuing space from the intersection with Greenwood Avenue. The new intersection is envisioned to have an on-demand signal that would allow for protected turning movements and reduce pressure on the Greenwood-Glenside intersection. The creation of this access point, however, would require the acquisition of a private lot currently used as parking and new bridge over the Tookany Creek. As in the other alternatives, the garage has two entrances/exits, both located along the new internal access road.



Alternative 3

Numerous participants in the public workshop believed that this alternative best controls traffic flow and minimizes the impact of potentially increased traffic volume on residents of Cliff Terrace and viewed Glenside Avenue as the best place to locate a new access point to the site. It was noted, however, that this new access must be constructed with respect to the environmental constraints associated with the Tookany Creek.

While people still felt that congestion on Glenside Avenue may still be a problem under this scenario, they believed that having two traditional four-way intersections is preferred. In addition, they felt that another positive aspect of this alternative is the elimination of the multi-lane crossing at Greenwood and Glenside Avenues and the left turn problems at all of the parking lot entrances/exits.

Although fourteen public workshop participants selected Alternative 3 as their preferred site plan, most agreed that this alternative could use minor adjustments. It was recommended that the amount of open space between the garage and Glenside Avenue be increased, that the new garage access road be contained within the garage, and that the overall length of the garage be reduced.

Community Preference

Forty-three people attended the workshop and offered feedback to the consultant team. Alternative 3 was overwhelmingly favored by those in attendance; they felt that Alternative 3 best controlled traffic and minimized impact on the residents of Cliff Terrace. The following table summarizes their preferences.

	<u>Alternative 1</u>	<u>Alternative 2</u>	<u>Alternative 3</u>
1st	3	3	14
2nd	5	3	1
3rd	4	4	2

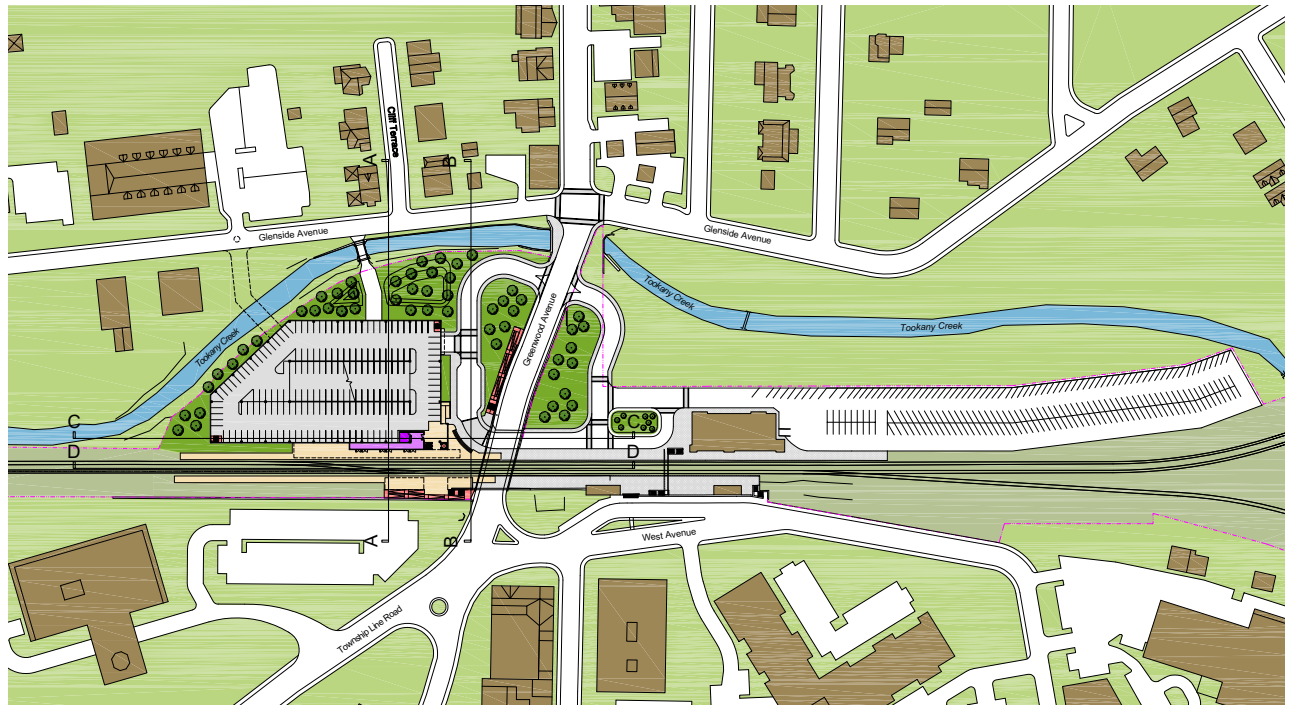
Community members also voiced their continued concerns about the effects of expanding parking on local traffic congestion and environmental resources, as well as concerns about maintenance of both proposed and existing facilities by SEPTA.

In the Steering Committee meetings following the second public meeting, the consultant team presented the feedback provided by the public and discussed modifications that could be made to Alternative 3 (the preferred public alternative) that considered the public input. The Steering Committee, however, decided to await the completion of a site survey that was currently underway by SEPTA before proceeding with the development of a recommended concept.

RECOMMENDED CONCEPT

Plan Description

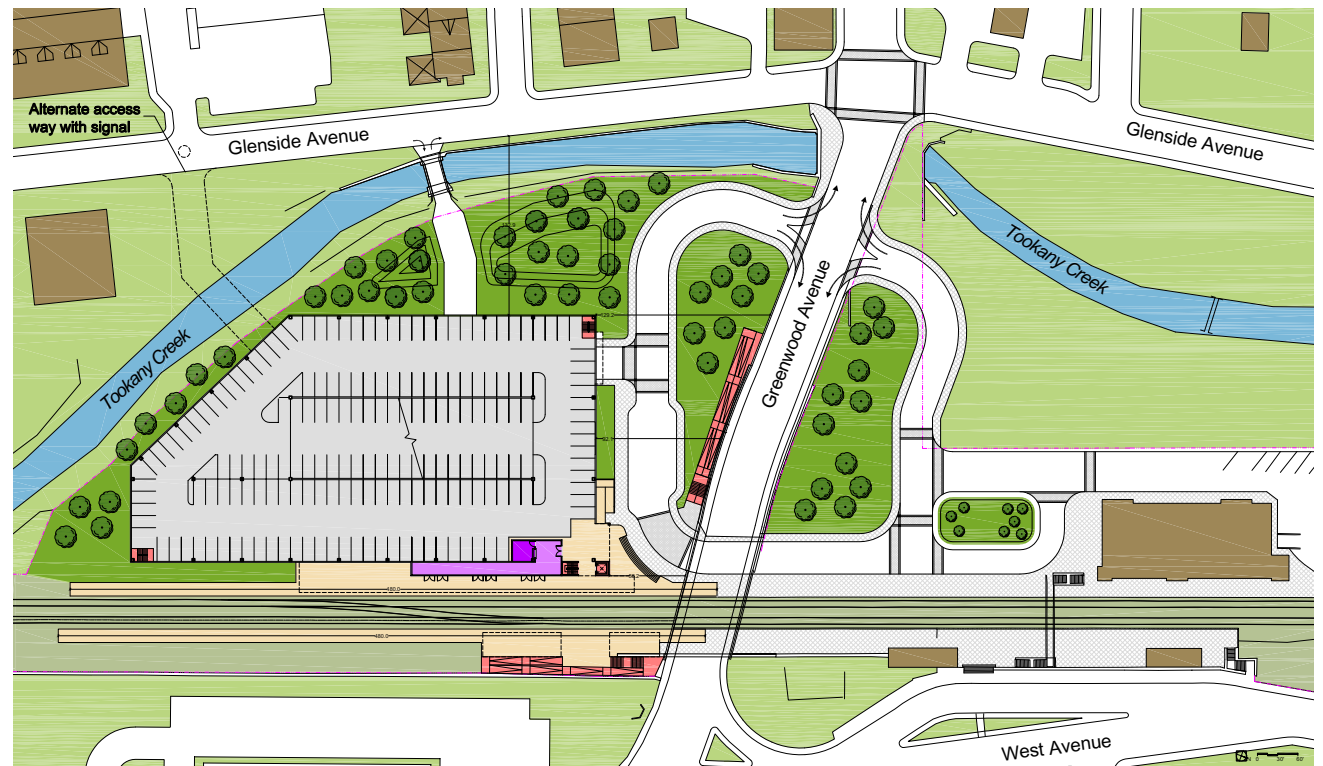
Based on input from the public, direction from the Steering Committee and the site survey from SEPTA, the consultant team developed a final concept for improvements at the Jenkintown-Wyncote Station. The Recommended Concept aims to create an up-to-date, attractive facility that meets the future parking demand while respecting the overall character of the surrounding community. The final concept incorporates the construction of a structured parking garage with high-level SEPTA platforms and upgraded station facilities, replacement of the existing Greenwood Avenue Bridge, and modifications to nearby intersections.



Recommended Concept: Site Context

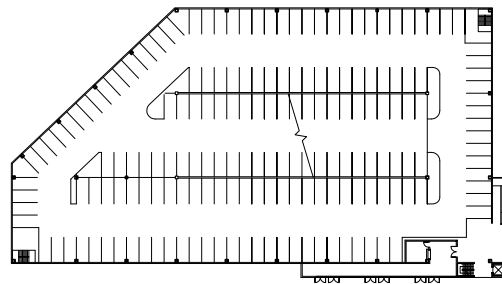
The recommended parking garage is built on the South Lot within the area that is currently paved. It is set back approximately 130 feet from Glenside Avenue and 50 feet from the Greenwood Avenue Bridge at the closest point. The parking garage contains commuter parking, a passenger waiting area and the SEPTA ticketing office. The garage has four levels (3 supported plus grade), with the first level located partially below grade. Vertical circulation between the levels occurs through 3 internal stair towers and an elevator in the northeast corner. The passenger waiting area and SEPTA ticketing office are located on the second level of the garage which is at the same elevation as the high-level platform.

The garage is served by entrances/exits on two internal access roads. The first is the loop road off the Greenwood Avenue Bridge, and the other is the link to Glenside Avenue over the wooden bridge. Connection between these two roads is through the garage. Drop-off and pick-up would occur in front of the Station entrance along the internal loop road where pull-in areas for vehicles have been provided. Pedestrian connection over the tracks is by way of Greenwood Avenue from stairs and ramps that would be built as part of the high-level platform upgrade project. The existing pedestrian tunnel would also be maintained as a connection to serve the existing vehicular drop-off on the out-bound side.

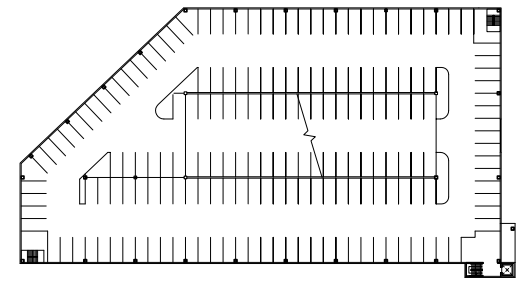


Recommended Concept: Site Plan

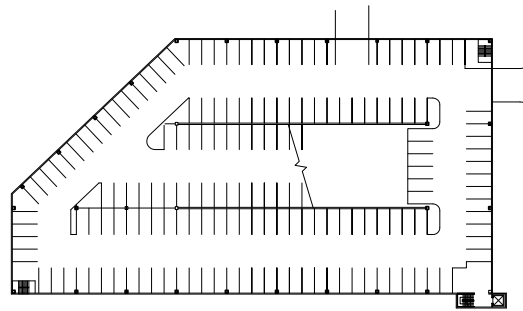
The proposed garage contains a total of 690 parking spaces for commuters. Parking is distributed over the 4 levels with 164, 179, 184, and 163 spaces per level, respectively. Combined with the remaining 143 parking spaces in the North Lot the site will offer a total of 833 parking spaces, 22 spaces over the demand projected by DVRPC. With the construction of the proposed parking garage, the Jenkintown-Wyncote Station will have sufficient parking resources to serve transit users through the year 2030.



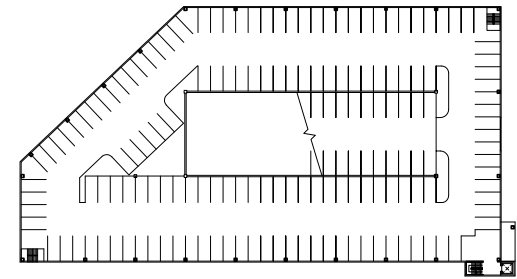
2nd Level - Station (179 spaces)



3rd Level - Typical (184 spaces)



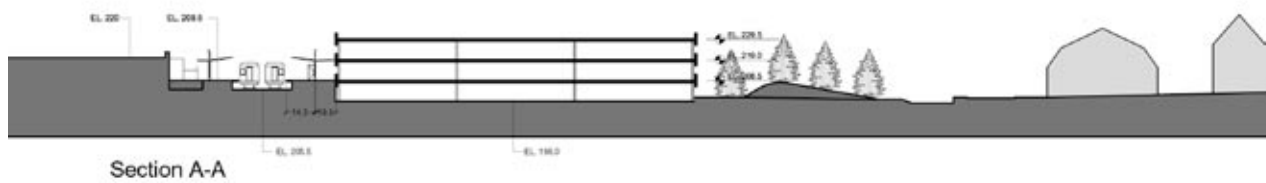
1st Level - Grade (164spaces)



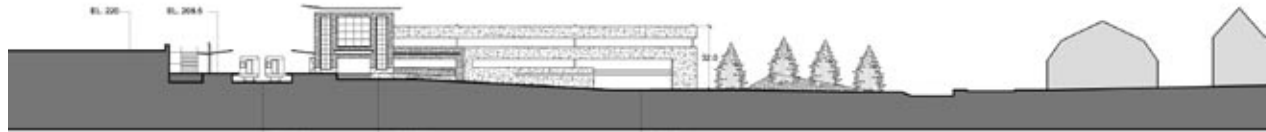
4th Level - Roof (163 spaces)

Total : 690 spaces

Recommended Concept: Parking Garage Levels



Section A-A



Section B-B



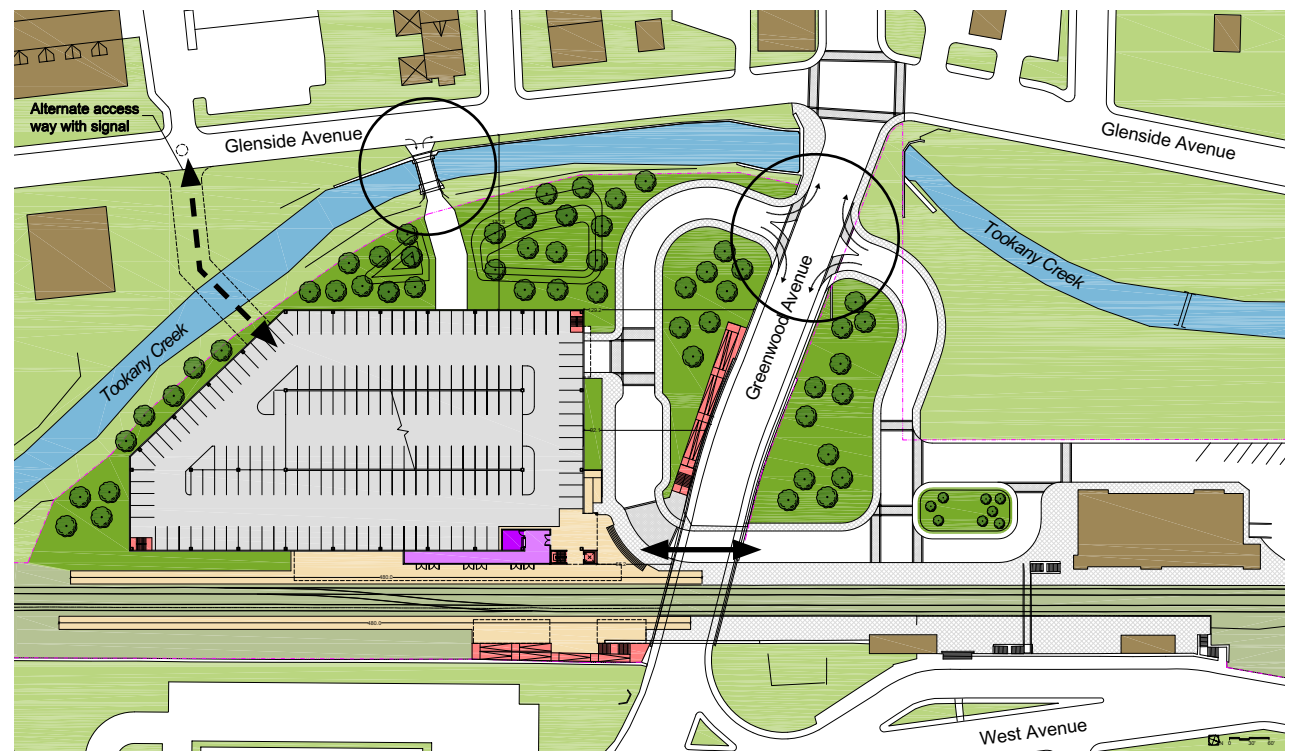
Section C-C



Section D-D

The height of the garage ranges between 26 and 32 feet (approximately 2-3 stories) depending on the grade change. The first level of the garage is partially recessed into the grade of the site which slopes down from the tracks to the creek by approximately 5 feet. By partially recessing the garage into the slope, the height of the garage is reduced to approximately the same height as a garage with 2 supported levels built entirely above grade. The plan recommends that the sides of the garage visible from Greenwood Avenue and Glenside Avenue feature architecturally enhanced façades which employ a material similar in appearance to the historic station building as a way to help the structure blend with the surrounding context. To further reduce the visual impact of the garage, the plan recommends that the residual area between the garage and the creek be burned and landscaped with coniferous trees and plantings to help screen the garage from Glenside Avenue year-round.

Access into and throughout the site is improved through a number of traffic modifications. Similar to Alternative 3, the main access into the site is from Greenwood Avenue. Railroad Avenue has been realigned to a new access point on the north side of Greenwood Avenue across from the existing access point to the South Lot and no longer extends to the Greenwood-Glenside intersection, which would become a traditional, four-way intersection. To improve traffic operations, the access points only permit right-in and right-out turns and have large turn radii to facilitate traffic flow into and out of the site. The large turning radius on the north side may cause the access road to encroach slightly into the park. Further study for the design of the access point is needed. Movement between the two sides of the site occurs internally through the underpass connection. The plan maintains the access point on Glenside Avenue via the wooden bridge but only permits right-in and right-out turns. Even with the increased traffic volume associated with increased ridership and parking utilization at the Station, the recommended traffic modifications should improve the levels of service offered at all times (including peak hours) for drivers, pedestrians, and members of the surrounding community.



Recommended Concept: Site Plan - Access

The plan also presents for consideration the idea of relocating the access point along Glenside Avenue. The existing access point would be closed and a new one established across from the entrance to the existing parking lot for Lincoln Financial Services, which would require the acquisition of a private lot currently used as parking. This alignment would allow for the consolidation of access points along the road while providing queuing space from the intersection with Greenwood Avenue. An on-demand traffic signal at this location would allow for protected turning movements and help reduce pressure on the Greenwood-Glenside intersection. A new access road from this point would bridge over the creek and connect to the garage at an upper level due to the change in grade. Further study is needed to assess the feasibility, environmental impacts, additional cost and timing of this concept.

In conjunction with the upgraded traffic modifications, the plan also recommends that improvements be made to enhance the pedestrian experience as well as the overall appearance of the station area. Sidewalks, crosswalks, and linkages to existing and/or planned trail systems would be added or replaced to facilitate pedestrian movements around the site, and areas no longer required for parking will be attractively landscaped. Furthermore, wayfinding signs program would help direct pedestrians, as well as motorists, throughout the site. The signs could also be used to identify notable features around the site, such as the Wyncote Historic District, the Historic Train Station, Ralph Morgan Park, and regional/local trail systems.

Environmental Issues

With the Tookany Creek running along one edge of the site and the possible presence of wetlands, there are environmental issues that require further study prior to any construction on the site, particularly if access to the site from Glenside Avenue is relocated and a new bridge over the creek is required. Proximity to Tookany Creek raises storm water management issues¹ that need further study to ascertain the potential effect on the proposed garage and to determine remediation or design changes. Study of these issues is beyond the scope of this study, the purpose of which was to recommend a conceptual configuration for a parking garage at the station based on analysis of available site information and expressed community preferences.

An environmental study should be conducted as part of subsequent design and engineering phases of the project, during which wetlands and flood plain boundaries should be accurately delineated. Final design of the garage should take into account the result of the environmental study and incorporate appropriate changes in the configuration of the garage and required remediation measures to mitigate adverse environmental impact.

(1) SEPTA has under contract the preparation of a Hydraulic & Hydrology Study for 4 SEPTA structures over the Tookany Creek between Glenside and Jenkintown Stations. The report is anticipated to be completed in the summer of 2005 and may provide additional information about the storm water management issues at the site.

Conceptual Cost Estimate

Description	Units	Quantity	Unit Cost	Est. Cost
Garage				
Parking	SP	690	\$15,000	\$ 10,350,000
Waiting Area	SF	7,000	\$100	\$ 700,000
Elevator	EA	1	\$50,000	\$ 50,000
Façade Enhancement	SF	10,000	\$45	\$ 450,000
Subtotal				\$ 11,550,000
Soft Cost & Contingency			28%	\$ 3,234,000
Component Total				\$ 14,784,000
Site Improvements				
New Road	LF	1,100	\$400	\$ 440,000
New Curb	LF	2,000	\$50	\$ 100,000
Sidewalks	SF	11,500	\$6	\$ 69,000
Crosswalks	SF	5,000	\$12	\$ 60,000
Seeding	SF	50,000	\$0.5	\$ 25,000
Trees	EA	40	\$500	\$ 20,000
Landscaping	SF	3,000	\$10	\$ 30,000
Way-finding	LS	1	\$50,000	\$ 50,000
Miscellaneous	LS	1	\$50,000	\$ 50,000
Subtotal				\$ 844,000
Soft Cost & Contingency			28%	\$ 236,320
Component Total				\$ 1,080,320
Project Cost Estimate				\$ 15,864,320

Project Cost Estimate

Based on the recommended plan, a conceptual cost estimate has been prepared for the above-ground, on-site improvements that total \$15.9 million, which assumes 28% for soft costs and contingency. Of the total, approximately \$14.8 million is for the construction of the parking garage and station facilities which assumes 690 parking spaces, enhanced façade treatments on two sides, passenger waiting areas and ticketing office. Site improvements associated with the proposed garage total approximately \$1.1 million which includes costs for the internal access road, pedestrian enhancements (sidewalks and crosswalks) and landscaping. The estimate does not include costs for off-site improvement or the relocation of the access point on Glenside Avenue. The estimate also does not include costs for improvements in the rail right-of-way such as the high-level platforms, canopy and track adjustments as well as the pedestrian connections (stair and ramps) to the Greenwood Avenue Bridge. These improvements are considered part of the high level platform upgrade project that is assumed to be completed before the construction of the parking garage.

The conceptual cost estimate is for planning purposes only and subject to change. No consultation with any construction management firm occurred for this assessment. Estimate is based on gross quantities and planning level unit costs. Gross quantities were approximated from the conceptual site plan. Planning level unit costs were derived from costs used in comparable projects. The total conceptual cost estimate is on an order of magnitude of plus or minus 30% and does not include all costs. Some items not included are site preparation, testing, permits, impact fees, hazardous materials abatement, environmental, structural modifications, utilities, or underground conditions. Inclusion of these costs may significantly increase the estimated amount. The completion of the preliminary architectural and engineering phase will most likely result in changes to these amounts.

NEXT STEPS

It is anticipated that the Township Board of Commissioners, after review of this report, will accept the recommendations by resolution and forward the resolution to the Montgomery County Board of Commissioners and SEPTA for implementation.

Based on steering committee and community input, we recommend that the township collaborate with DVRPC and PENNDOT to prepare a joint CMAC application for traffic improvements at the Greenwood/Glenside intersection and the access road to the station for the next funding cycle. Evaluation of environmental impacts and design of potential mitigation measures may be conducted at the time funding for the improvements recommended in this plan has been secured by SEPTA.

It is recommended that design of roadway improvements and high level platforms be advanced in accordance with the recommendations set forth in this plan and implemented prior to construction of the commuter garage by SEPTA.