

Chapter Three: Phelps/Szymanski Properties - Feasibility Study and Master Site Plan

Purpose and Goals

The purpose of the Phelps/Szymanski Properties Plan is to:

1. Conduct a feasibility study to determine the ultimate and most appropriate use of the Township-owned properties, including soliciting input from the Open Space Review Board and the public participation process;
2. Perform a site analysis to determine the physical opportunities and constraints of the combined properties;
3. Prepare a Master Site Plan illustrating proposed site improvements and including an estimate of probable development costs;
4. Outline potential funding sources; and,
5. Determine the operational and maintenance requirements for the proposed improvements.

Goals include:

- Identify recreational opportunities;
- Identify service area & potential users;
- Identify potential connections to other Township resources; and,
- Identify project partners for implementation.

Site Analysis / Physical Feasibility

Please refer to the Site Analysis exhibit found at the end of this chapter.

The Phelps property is 32.6 acres in size and is bound by residential land use to the north, east, and south, and the White Clay Creek to the west. Access to the Phelps is provided by a public right-of-way connecting to Laurel Heights Road in the northeastern corner of the property. Penn Green Road separates the wooded hillside to the east and creek valley to the east.

A steep and rocky man-made canyon is a remnant from the former railroad alignment in the southwestern corner of the property, in addition to the railroad bridge abutments found within the properties and vicinity. A chain link fence has been placed atop the canyon on the Phelps side to prevent persons from entering and/or falling into the canyon. Two other man-made remnants can be found within the Phelps property: a former steam dam for use by the railroad; and, an old road grade running northeast/southwest along the top of slope leading to the railroad canyon east of Penn Green Road.

Chapter 3: Phelps/Szymanski Properties Plan

Also, there are some man-made hiking trails that connect the former road grade within Phelps to the adjacent residential community.

The Szymanski property is 10.4 acres in size and is bound by Franklin Township to the west, residential land use to the north and south, and the White Clay Creek to the east. Access to the Szymanski property is via a 20' trail easement acquired through the land development process along the New Garden/Franklin Township line extending from Chandler Drive in 'The Preserve' residential subdivision.

The two properties are separated by and share a boundary line along the White Clay Creek and the former railroad alignment. Both properties are wooded and steeply sloped and contain significant portions of the floodplain in the valley that lies between them. The White Clay Creek is a popular destination at the annual opening of trout season when the creek is heavily populated with fisherman.

Some existing trees, primarily along the wooded slope east of Penn Green Road, are in poor condition and should be inspected by a certified arborist and/or cleared prior to opening the property to the public. This is most important where trails will be located.

Trash and debris can be found throughout the property, mostly along Penn Green Road, with some evidence of littering attributable to drinking activities, illegal or otherwise.

A PNDI search was conducted for the Phelps property. A total of 4 potential impacts were identified, most likely associated with the White Clay Creek as the Pennsylvania Fish and Boat Commission and the US Fish and Wildlife Service are listed as the affected agencies. The full PNDI Environmental Review Receipt can be found in the report appendix.



Access right-of-way from Laurel Heights Road.



Former road grade within Phelps property, looking southwest.



Former railroad cut at southwestern portion of Phelps.



Intersection of Penn Green and Laurel Heights Roads..



Penn Green Road looking north.



Penn Green Road looking south.

Opportunities and Constraints Summary

Opportunities:

- Wooded hillside offers scenic vistas of the White Clay Creek valley;
- Railroad Cut, former Steam Dam, and old road alignment offer historic interpretation possibilities;
- Existing woodland trails could be formalized and expanded into a larger network; and,
- Existing informal trails may be formalized and connected directly into the future White Clay Creek trail system.

Constraints:

- Steep wooded slopes and floodplains throughout both properties limit site development and universal accessibility;
- There is no direct access to the western portion of the Phelps Property across Penn Green Road, or any potential vehicular access to the Szymanski Property; and,
- Older vegetation will need to be removed for safety purposes.

Legal and Usage Feasibility

The fact that the Phelps property contains steep wooded slopes and that it is economically not feasible to develop active recreation sports fields was widely accepted by the Township prior to the study, and confirmed with this report. Proposed improvements are limited to trail development in the form of pedestrian only hiking trails and support facilities, which are feasible within both properties and could provide a link to the White Clay Creek loop trail currently being planned. Mountain biking on either property is not recommended due to the potential for erosion, potential user conflicts with hikers, and the limited opportunity for an independent trail network to support the activity given its limited size.

Primary projected users of the property will be

Chapter 3: Phelps/Szymanski Properties Plan

local residents. These properties will be for the use and enjoyment of the local residents and most likely will not attract any considerable regional draw due to the limited size and scale of the proposed improvements. Its proximity to the White Clay Creek and the trail connection planned for that valley may create additional demand for use on the property as an access point from the outside, or an extra spur trail from the inside.

Proposed Improvements

Please refer to the Master Site Plan exhibit found at the end of this chapter. Please note that the costs for the improvements shown for the multi-use trail connection north of the Phelps property and following the former railroad alignment are included in the Township-wide Greenway Plan chapter of this report and not included in this chapter.

Hiking Trails - Approximately 1.5 miles of hiking trails are proposed within the two properties, as shown on the plan. The location of these trails will need to be confirmed in the field prior to their development. Most of the alignments shown already exist, but are yet to be formalized. The southernmost connection within the Szymanski property that follows the western/southern bank of the creek and connects to Penn Green Road at Laurel Bridge Lane has an extremely steep cross slope, is very rugged, and may be impassable during certain times of the year. Further investigation of this potential route is necessary.

Parking / Access - The only location capable of supporting any vehicular parking is within the existing right-of-way connecting to Laurel Heights Road. There is enough room here to provide parking for up to fifteen (15) vehicles. The Township may want to initially develop only 5 spaces, and then develop the remainder if dictated by demand. The parking is proposed



Former Steam Dam in the western portion of the Phelps property.



Twenty (20) foot easement from The Preserve to the Szymanski property.



Dead tree leaning over proposed trail alignment.

Chapter 3: Phelps/Szymanski Properties Plan

to be composed of gravel and will require some earthwork to provide a level connection to the existing roadway surface.

Penn Green Road Crossing - Connecting the east and west portions of the Phelps property and the White Clay Creek will require some pedestrian and traffic control elements to be installed and to provide for a safe crossing of Penn Green Road. Sight distance at this intersection is pretty good, however the vehicular speeds along this roadway are cause for concern. One suggestion was to install a three way stop sign at the Penn Green / Laurel Heights Road intersection. Other possible improvements include advance warning pedestrian crossing signage, and pavement markings. Once on the western side of Penn Green Road, an easement may be required to provide for a pedestrian way south if there is not enough room within the roadway right-of-way. An opening in the existing guardrail may also be required to allow for the trail connection along the existing drainage course leading to the former steam dam. Costs for these improvements are conceptually estimated to be \$10,000 and are included within the estimate of probable development costs for the Township-wide Greenway plan within this report.

Information Kiosks - Proposed to be located at all access points, including the crossing at Auburn Road outside of the Phelps / Szymanski project area, these informational kiosks will be used to post trail rules, volunteer maintenance schedules, community announcements, etc. and any other activities and/or information related to the properties. These boards should be located in places in open view so that all users of the properties will be able to see them and so that they can be easily monitored against any potential vandalism. Materials of these boards should be relatively inexpensive and easily replaceable as they are, for better or worse, targets for vandalism.

Interpretive Signage - There are at least three opportunities for historic interpretation within the Phelps Property: the former railroad alignment and canyon cut; the former steam dam; and, the former roadway grade. Signage could be installed at these locations to provide educational opportunities for trail users and/or students in an outdoor classroom setting. Sign materials and the information displayed within these panels for these signs should also be easily replaceable to account for vandalism.

Site Amenities - Benches could be located throughout the properties periodically along the proposed trails to provide opportunities for trail users to rest or enjoy the environment. Benches should be primitive and easily replaceable. Trash receptacles may be located at all access points with a posted rule of 'carry in-carry out' or 'leave no trace', however, they are not recommended to be located within the properties' interior due to vandalism concerns and the maintenance they will require. Ten (10) benches are suggested, however the Township may wish to add more or install less at their discretion.

Chapter 3: Phelps/Szymanski Properties Plan

Estimate of Probable Development Costs

Hiking Trails (1.5 miles)	\$24,000
Gravel Parking (15 spaces)	\$20,000
Info/Rules Boards (4)	\$10,000
Interpretive Signage (3)	\$6,000
<u>Benches (10)</u>	<u>\$10,000</u>
Subtotal	\$70,000
Contingency (10%)	\$7,000
TOTAL Improvements	\$77,000
Design & Engineering (20%)	\$15,400
GRAND TOTAL	\$92,400

Financial Feasibility and Funding Options

Please refer to the Potential Funding Sources within the Township-wide Greenways Plan chapter of this report for more detailed information relative to the following recommended programs.

The Phelps/Szymanski improvements would make an excellent application to DCNR or to Chester County for development funding. Township labor could be used as matching funds in the DCNR program, or if the Township could successfully obtain DCED funding, that could be used as a match as well.

It is possible that a volunteer organization could complete the majority of the proposed improvements, outside of the parking area and Penn Green Road crossing, that would result in a significant cost savings. Signage, information kiosks, and benches could be designed, purchased and/or installed as part of a fund-raising effort by the organization.

Operation and Maintenance

Maintenance requirements for the Phelps/Szymanski properties will be limited to the following tasks:

- Clearing felled debris along trails, as necessary;
- Limited mowing and/or weed control at access areas;
- Access area trash removal; and,
- Information kiosk / interpretive signage replacement & repair (as necessary).

It is envisioned that a 'Friends of the Trail' volunteer organization would be able to complete all of these maintenance items with little assistance required from Township staff. However, in the absence of one of these groups, it is estimated that it would require approximately 250-300 man hours per year to complete the tasks listed above.