



Milltown Dam

Park Open Space Master Site Plan

Prepared for:
East Goshen Township
Chester County, PA

Draft - March, 2017

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DRAFT MILLTOWN DAM PARK OPEN SPACE MASTER PLAN

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CHAPTER Project Introduction

Master Plan Purpose

Site Description

Milltown Dam Park Open Space is a 19.77 acre passive recreation area owned by East Goshen Township. The site is transversed by the East Branch of Chester Creek that was dammed in the 1920's to create a reservoir. Due to the unsafe conditions of the dam the Township is partially decommissioning the dam and draining the reservoir. The loss of the open water is significant to the surrounding residential community, since many residents purchased their home for the open water views.

Master Plan Goals & Objectives

Generally, the goal for the Milltown Dam Park Open Space Master Plan is to develop a site master plan

MILLTOWN DAM PARK OPEN SPACE MASTER PLAN

GOALS AND OBJECTIVES

- Engage in an open and transparent exchange of ideas where all ideas are considered and where everyone's voice can be heard throughout the design process.
- Foster ecological sustainability through plant and animal diversity and by employing best practices in landscape and park design.
- Protect and preserve the privacy of adjacent and nearby residences through proper setbacks, screening and other techniques.
- Create landscapes that are low maintenance and that will create new cultural landscape values in each surrounding neighborhood.
- Develop realistic completion time frames for project benchmarks
- Maximize open water views.
- Create a world class passive recreation amenity.

WATER SUPPLY DAMS

These dams are used by water supply companies, industry, or agriculture to pump and pipe water out of the impoundment for local or distant uses. Many water supply dams in Pennsylvania serve municipalities and townships in providing a source of drinking water to their communities. These dams are generally larger than mill dams, some rising 50 or 60 feet high, and generally have an outlet or water control structure at the base to regulate levels in the impoundment and flows into the creek below.

-Excerpt from: Small Dam Removal in Pennsylvania: Free-Flowing Watershed Restoration

that provides the surrounding neighborhood with a park and open space amenity to replace the former reservoir.

Dam Partial Decommissioning Explanation

Milltown Dam was identified as a dam hazard by Pennsylvania Department of Environment (PaDEP) and East Goshen Township was tasked with addressing the dam's inadequacies or decommissioning the dam. The dam deficiencies include:

- Inadequate spillway capacity;
- Embankment stability;
- Limited capacity in reservoir;
- Spillway concrete spalling damage;
- Cracking / undermining of spillway slab;
- Limited dam access; and
- Inadequate public safety features.

Selected option

The Township explored multiple options including repairing the dam, partial decommissions and full decommission of the dam.

On June 28, 2016 the East Goshen Township Board of Supervisors voted to partially decommission the



Historic Image of Milltown Dam Spillway from Jan 26, 1923

Milltown Dam.

Regional Context

East Goshen Township is located in southeastern Pennsylvania in Chester County and was incorporated in 1817. Geographically located in the central east portion of Chester County, East Goshen shares its borders with seven other municipalities:

- East Whiteland Township
- West Whiteland Township
- West Goshen Township
- Willistown Township
- Westtown Township

Major roadways within the Township include West Chester Pike (Rt 3), S.R. 202, S.R. 352, Strasburg Road (S.R. 2010), Boot Road (S.R. 2020), and Paoli Pike (S.R. 2014). The Township is located in the vicinity of several important transportation routes including Route 30, and the Pennsylvania Turnpike. Commercial activity is focused on the West Chester pike and Paoli Pike Corridors. Though a majority of the Township has been developed for housing many of the major roads still preserve the historic rural and agrarian landscape characteristic of Chester County.

The project site is located in the southwest portion of East Goshen Township (see Figure 1.1 project location). The access to the 19.77-acre project area via Reservoir Road, 250 feet north of its intersection with West Chester Pike.

Park System

The Township completed an Open Space and Recreation Plan in 2015. The Plan states that the Township's 28.20 acres of parkland and open space per 1,000 residents exceeds the national recommend ratio. The East Goshen recreational offerings are a mix of active and passive parks that meet the needs of its diverse residents. The Township code clearly defines the difference between active and passive

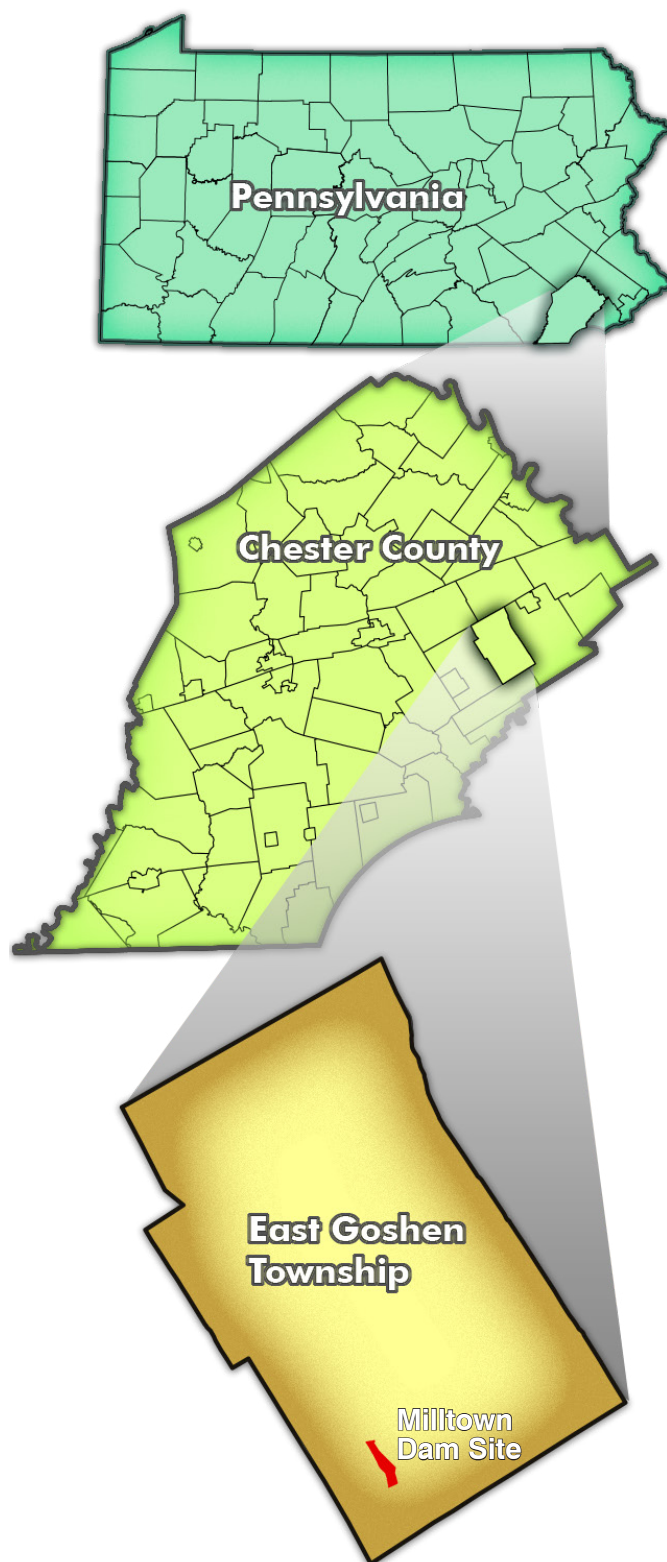


Figure 1.1 Project Location



View across the Milltown Reservoir

park lands.

An active park is intended, designed, equipped and designated by the Park Board for activities by individuals or groups participating in one or more of the following activities: individual athletic activity, organized athletic/sport's activities by groups or teams, whether formal or informal, group picnics, theatrical events, national holiday events and similar formal activities. No hunting or deer management activities are permitted in any active park. (East Goshen Township Code, §163-2). The Township's Active Parks are East Goshen Park (55-acre), Milltown Park (2.06-acre), and Mill Creek Ball Field (18.16-acres)

A passive park is intended to remain as permanent open space which is primarily maintained in a relatively natural and/or landscaped setting and which is designated by the Park Board for pastoral enjoyment and low-intensity recreational activities

such as walking trails, non-motorized biking, running, roller-blading, picnic areas, bird watching and similar activities. A passive park is not intended to be used for organized athletic activities or events by individuals or athletic teams or clubs or for group picnics, theatrical events, national holiday events and similar formal group activities. If approved by the Board of Supervisors by resolution, a passive park may be used for deer management as part of the Township's deer management program strictly in accordance with the regulations in § 163-4 of this chapter and all rules and regulations governing the deer management program. (East Goshen Township Code, §163-2). In all the township maintains 21 sites (433.04 acres) of passive recreation open space. Hershey's Mill Dam Park Open Space is defined as a Passive Park.

Community Demographics

According to census data, the population of East Goshen Township was 16,824 in the year 2000, 18,026 in 2010, and 18,188 in 2015. The population of the Township is forecasted to rise to 19,202 in 2020, and 21,221 in 2030. If these changes take place, this is a projected fourteen percent increase in population between 2015 and 2030.

Community Planning

Central Chester County Bicycle and Pedestrian Circulation Plan

In an effort to connect the seven municipalities within Central Chester County, the Chester County Planning Commission and Chester County Health Department prepared this plan in 2013. The seven municipalities within the study area include:

- East Bradford Township
- East Caln Township
- East Goshen Township
- Downingtown Borough

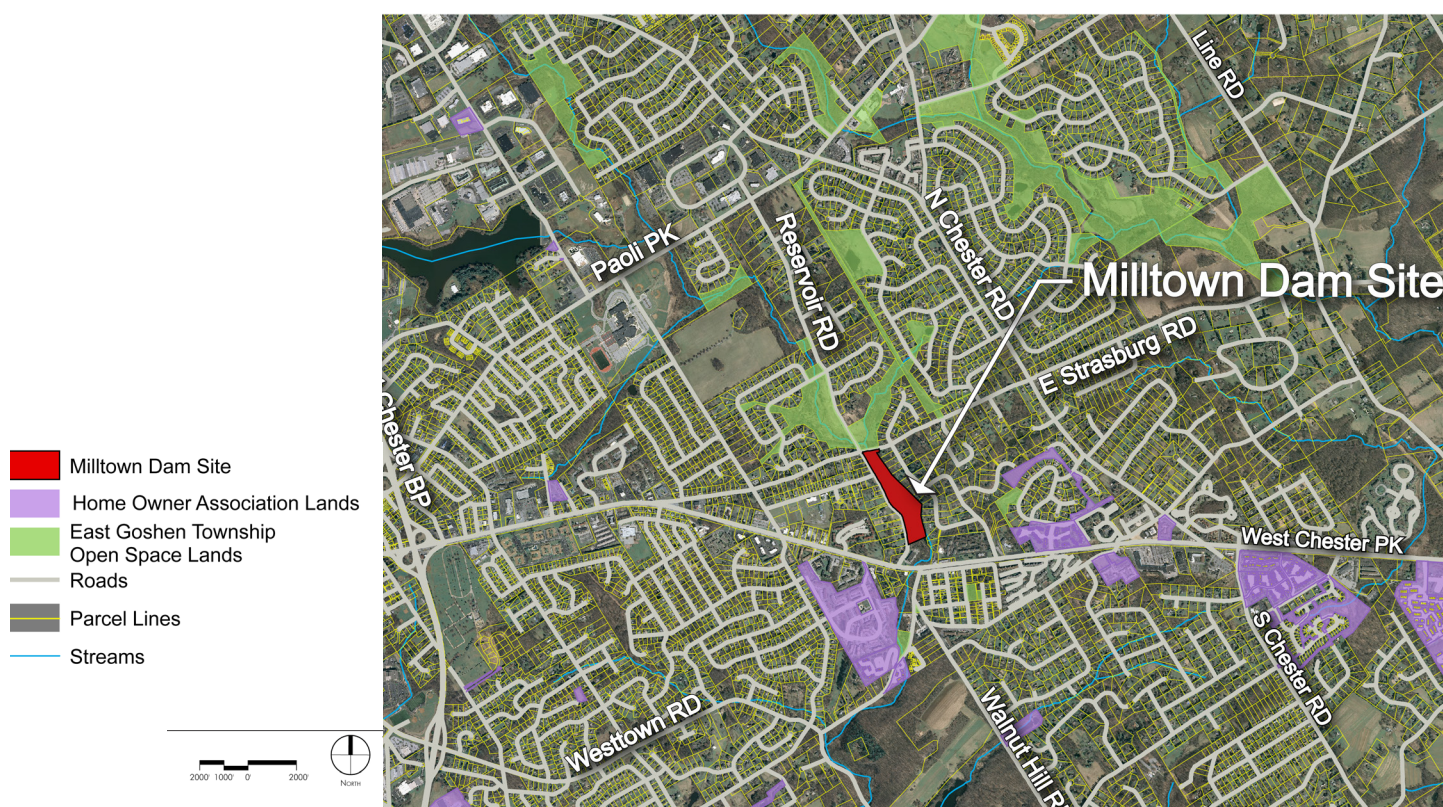


Figure 1.2 Area Site Context Map

- West Goshen Township
- West Whiteland Township
- West Chester Borough

The plan has a central mission of connecting Exton, Downingtown, and West Chester by promoting a vision of communities that encourage and facilitate more walking, biking, and transit use.

The goals and objectives of the plan are:

- Establish a comprehensive network of pedestrian, bicycle, and public transportation facilities, that connect local and regional destinations for all users
- Provide supportive amenities that address the needs of pedestrians, bicyclists, and public transportation users at their destinations
- Improve public health and safety through education, enforcement, and encouragement strategies.
- Integrate concepts that enhance walking,

bicycling, and public transportation within the policies and practices of government, private, and non-profit organizations.

East Goshen Township Comprehensive Plan

The Comprehensive Plan, developed by the East Goshen Township in 2015, is a framework for maintaining the mission of being environmentally sound, socially equitable, and fiscally responsible.

Goal D in the plan is to enhance recreational opportunities:

- By expanding recreation facilities, activities, and programs at East Goshen Park for persons of all ages and abilities
- By enhancing linkages to East Goshen Park through the Paoli Pike Trail
- By expanding the Farmers Market hours and vendors

The township's land use map shows Hershey's Mill site and select adjacent parcels are designated as passive township-owned recreation and open space.

East Goshen Township Parks, Recreation, & Open Space Plan Update

This Plan Update was developed by East Goshen Township in 2015. The purpose of the plan is to serve as a guide for community leaders as they seek to improve and sustain the township's parks and recreation system.

The goals and objectives of the plan include:

- To continue to provide premier parks and recreation facilities and services while protecting the Township's scenic beauty, natural resources, and open space.
- Take care of and improve our parks and recreation system.
- Protect our scenic beauty, open space, and natural resources
- Engage citizens in active healthy living and lifelong enrichment through recreation opportunities.
- Continue to provide operational excellence and financial sustainability for the parks, recreation, and open space system through a mix of public and private support.

Zoning and Land Use

The zoning of the Hershey's Mill site and surrounding area is R-2 Low Density Suburban Residential. Hershey's Mill Village, to the south of the site, is zoned as R-1 Low Density Open Space Suburban Residential.



Current Dam Spillway



Waterview Farms Subdivision borders the Milltown Reservoir and many of the homes enjoy open water views.

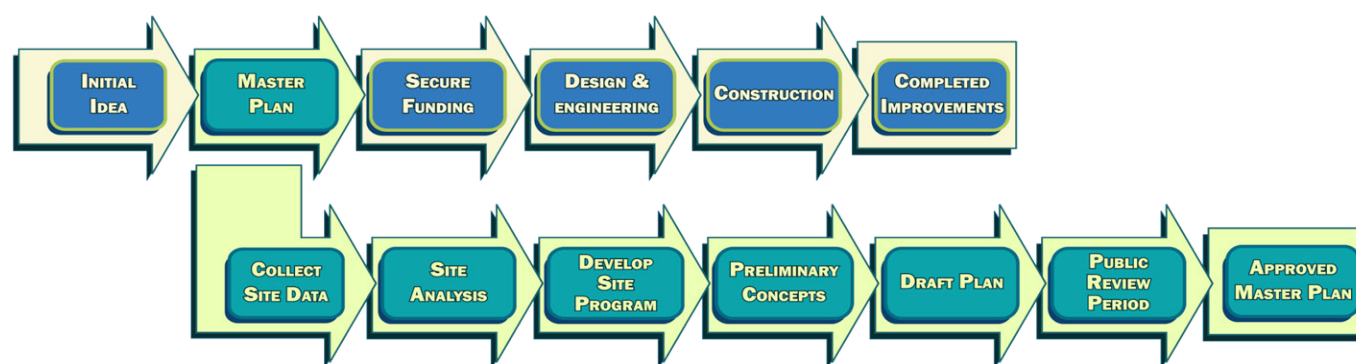


Figure 1.3 Master Plan Process

Master Plan Process

Figure 1.3 shows Master Planning as an early step in the process of improving the existing passive recreational facility. The Milltown Dam Park Open Space Master Plan seeks to create a consensus for improvements and facilities at the Milltown Dam site. A master plan provides estimates of probable costs for improvements and outlines a strategy for construction phasing. Potential funding sources for these improvements are also identified.

A master plan is a living document that provides guidance for site development. The plan must be flexible enough to adapt to the future needs of the Township as well as opportunities for funding.

Following the completion of the Master Plan, the steps toward construction are to identify and acquire funding for the first phase of improvements. Once these funding sources are identified and funding is acquired, detailed design, engineering and construction documents can be completed. The construction documents are then publicly bid and a contract is awarded to a contractor for the construction of the first phase of improvements. This process is repeated for subsequent development phases.

Public Participation Process

In late 2016, East Goshen Township selected Simone Collins Landscape Architecture (SC), and Princeton Hydro (PH) to lead the master planning and public participation process for the Milltown Dam Park Open Space Master Plan. A project steering committee comprised of residents and was assembled to help direct and inform this process.

Simone Collins worked with the Township Staff and the steering committee to tailor the public participation process to the specific project needs. Community input and support is extremely important to a successful master plan; because of this it is critical for the planner, steering committee, and Township to hear citizen's observations, needs, and their vision(s) for the park and to incorporate this information into the final master plan.

The public participation process for the Milltown Dam site included (4) public meetings, (4) steering committee meetings, and (3) on-line public input surveys. All steering committee meetings were open to the public. Table 1.1 shows the project meeting schedule. Meeting notes and attendance sheets for all of the meetings can be found in the appendix of this report.

The first steering committee and public meetings focused on cultivating information and developing

the site's program. Brief presentations by the consultants reviewed the Milltown Dam site features via photographs and analysis mapping. This information familiarized the attendees with the site. These initial presentations were followed by brainstorming sessions where participants were asked for their ideas for the site.

The Public meetings were followed by a steering committee work session where the initial site concepts were reviewed. A second public meeting was held to present the initial concepts and solicit public feedback on the concepts. Another steering committee work session was held to review public

feedback and to decide on the direction of the Draft Master Plan.

The draft master plan was presented at the third steering committee and public meetings. A 60 day long review period was held prior to the final steering committee meeting where comments were reviewed. Revisions made were based on public and steering committee feedback. The final master plan was presented to the public during a board of supervisors meeting.

During the project process the SC team wrote and administered a series of (3) on-line surveys. The first survey was to gain an understanding of the general

MEETING	DATE	PURPOSE
Milltown Committee Meeting #1	Nov 2, 7:00 pm	Project Introduction / Brainstorming
Milltown Public Meeting #1	Dec 14&15, 7:00 pm	Project Introduction / Brainstorming
Milltown Committee Meeting #2	Jan 11, 7:00 pm	Site Concepts
Milltown Public Meeting #2	Jan 25, 7:00 pm	Site Concepts
Milltown Committee Meeting #3	Feb 21, 7:00 pm	Draft Plan Review
Milltown Committee Meeting #3	Feb 21, 7:00 pm	Draft Plan Review
Milltown Public Meeting #3	Mar 22, 7:00 pm	Draft Plan Presentation - 60 day review
Milltown Committee Meeting #4	May 23, 7:00 pm	Final Plan Review
Milltown Public Meeting #4	Jun 20, 7:00 pm	Final Plan Presentation

Figure 1.4 Project Schedule

characteristics of the Milltown Dam area. The second survey was to gather opinions about the three alternative concept plans presented at the January 25th public meeting. The final survey was to gather opinions about the final draft plan presented at the March 23rd public meeting.

Data Collection and Methodology

Information for the Base Map was compiled using the best available information. This information included Geographic Information System (GIS) mapping, a site survey prepared by Gannett Fleming, site wetland and floodplain mapping prepared by Gannett Fleming, and site visits by the SC team. Programming information was derived from multiple sources and methods including reports and documents provided by East Goshen Township, and public input.

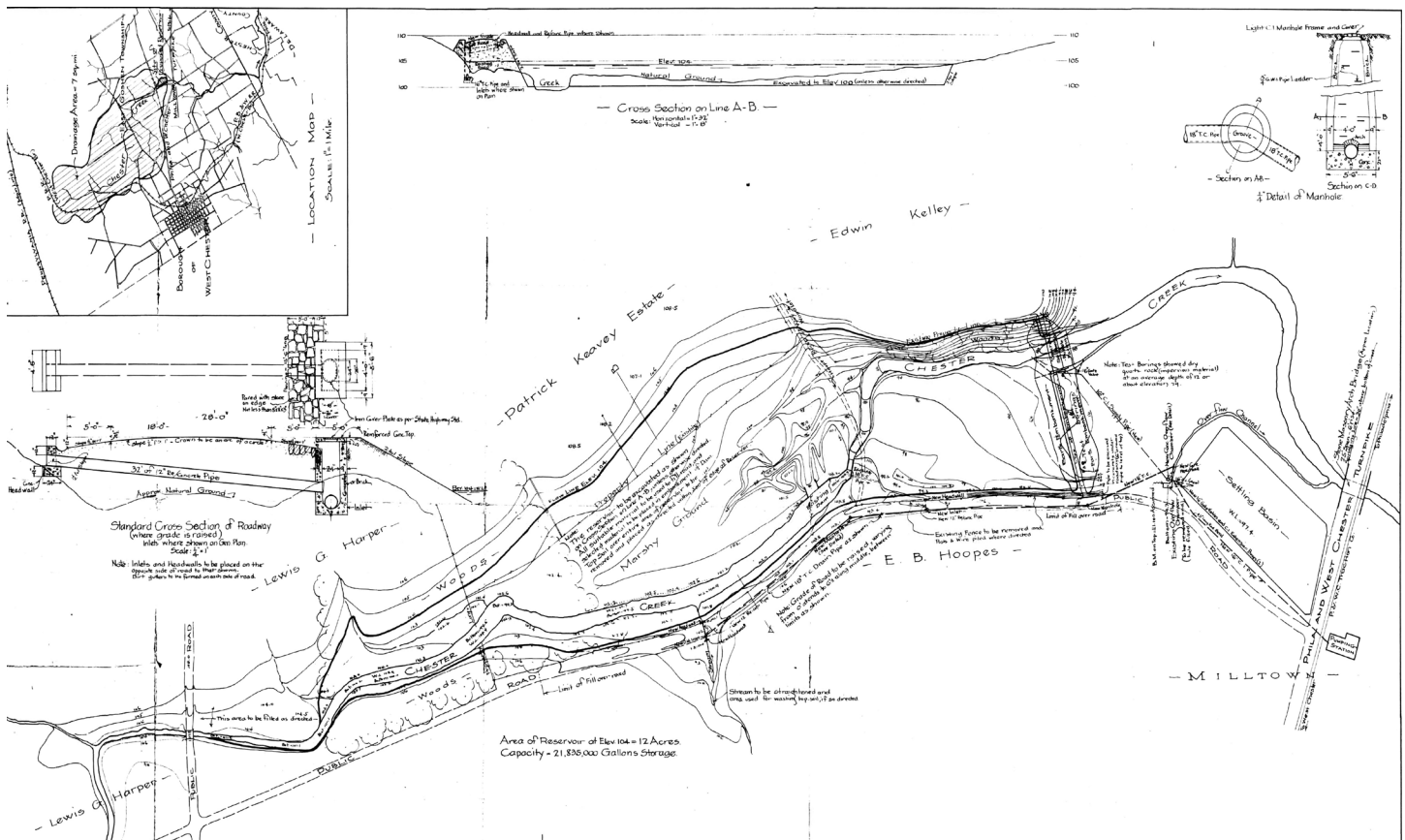


Figure 1.5 1920 construction Plan for Mill town Dam





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CHAPTER Inventory & Analysis

Site Access and Roads

The site is surrounded by private property on the majority of its boundaries. Reservoir Road (T-470) with a Right-of-Way of 50 feet borders the western boundary of the site. East Strasburg Road (S.R. 2010) with a Right-of-Way of 50 feet borders the northern boundary of the site. An existing maintenance access drive is located along Reservoir Road at the dam. Due to both the horizontal and vertical curves in Reservoir Road at this location there are poor sight lines in both directions.

Circulation

There are no sidewalks or pedestrian facilities within the project site or along adjacent roads. Along portions of Reservoir Road there is a area of lawn



Looking west along Strasburg Road at the pedestrian bridge over the Chester Creek.

between the road and lake where people do walk and there are a few benches. Directly north of the site along Strasburg Road a pedestrian bridge crosses the Chester Creek. In addition, the intersection of Reservoir Road and Strasburg Road though lacking pedestrian facilities, has a pedestrian signalized light.

Further to the north, about 250 feet from the intersection of Reservoir Road and Strasburg Road, there is an existing gravel parking area on the west side of Reservoir Road and a system of mown / dirt trails located on the adjacent Township-owned Suplee Open Space. However along Reservoir Road between the Suplee Valley Open Space and the site is a one-lane historic stone arch bridge that constricts the width of the road cartway to approximately 15 feet.

Utilities

The site currently has no utility service. Overhead power lines are located on the western boundary of the site within the Reservoir Road right-of-way. The entire Township is on public sewer and water, however these utilities are not located in the Reservoir Road right-of-way.

Soils

The site is composed of the following soils:

- Ha - Hatboro silt loam
- Ur1B - Urban land-Gladstone complex, 0 to 8 percent slopes
- Ur1D - Urban land-Gladstone complex, 8 to 25 percent slopes
- UugB - Urban land-Udorthents, schist and gneiss complex, 0 to 8 percent slopes
- W - Water (forms reservoir area)

Additional information on site soils can be found in Gannett Fleming's Wetland Identification and Delineation Report.

Water resources



Mown trail in the Suplee Open Space.



Lawn area along the reservoir edge.

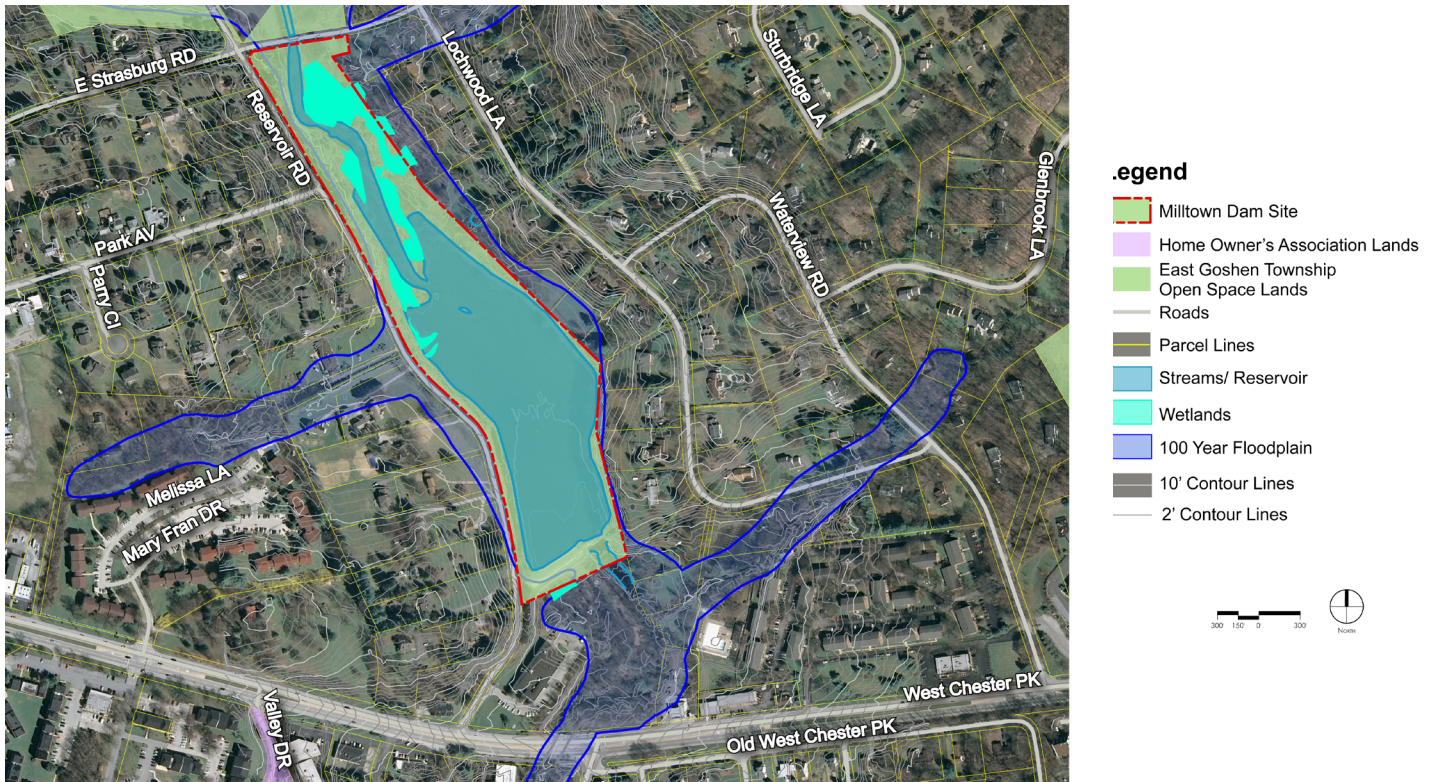


Figure 2.1 Existing Conditions Map

Stream Classification

The east branch of Chester Creek runs through the site. The stream is classified as warm water fisheries with migratory fish (WWF, MF). During field investigations completed by Gannett Fleming (GF), five watercourses were identified within or immediately adjacent to the project site. The watercourses included one ephemeral stream, one intermittent stream, and three perennial streams. The stream widths range from less than one foot to 30 feet, lengths are between 45 and 365 feet, average water depths range from less than one inch to 48 inches. (The wider and deeper classifications represent the reservoir area along the Chester Creek.)

The substrate materials in the streams include cobbles, silt, leaf litter, gravel and boulders.

Reservoir

The reservoir was constructed in 1923 and the water

impoundment area was approximately 9.2-acres in size and varied in depths of 4-5 feet at the northern end to 10-12 feet in depth at the dam. Today the majority of the reservoir is only 1 to 2 feet in depth, with the deepest areas towards the dam limited to 4-5 feet in depth. The large amount of sediment has had a drastic effect water quality, wildlife habitat and recreational value of the reservoir.

Wetlands Classification

During field investigations completed by GF, ten palustrine wetlands were identified within or adjacent to the project site. The wetlands included two palustrine unconsolidated bottom wetlands (PUB), three palustrine emergent wetlands (PEM), four palustrine scrub-shrub wetlands (PSS), and one palustrine forested wetland (PFO).

Floodplains

The existing 100 year floodplain falls outside the site,

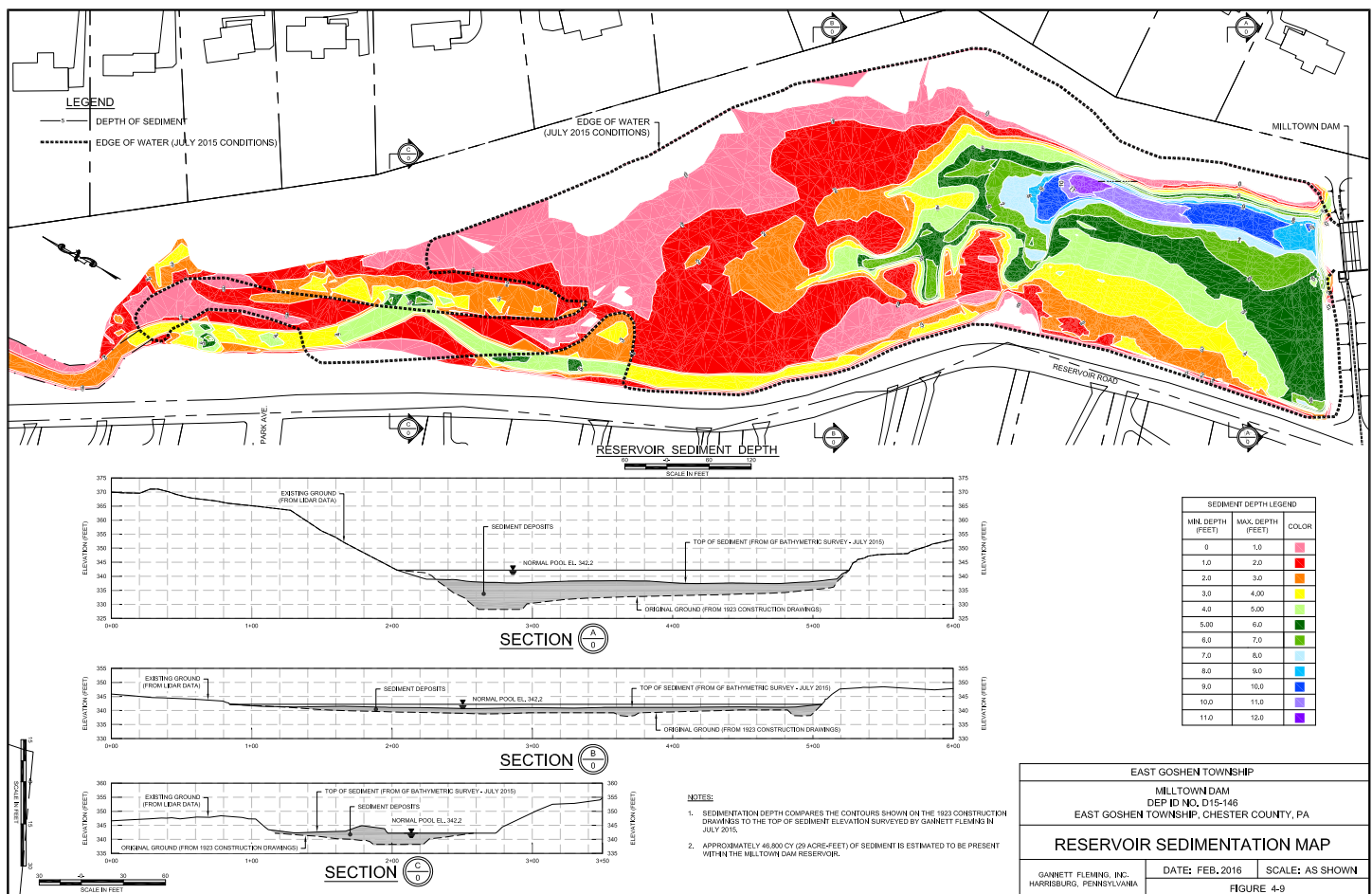


Figure 2.2 Sedimentation Map, Gannett Fleming, Feb 2016.

except for parts of the western edges of the site. After the dam breach, the majority of the 100 year floodplain is projected to be contained within the site. The site also falls within the FEMA floodplain for the region.

Vegetation and Wildlife

The Milltown Site is surrounded by typical suburban landscape of open lawn and partial tree canopy. The edges of the lake is a mix of shrub, trees, and open lawn. A large stand of white pine are located along the steep east bank at and upstream from the dam. The northern part of the site is dominated by 1.74-acre forested wetlands.

The Site's wildlife is typical of the open water and wetland communities of Southeast Pennsylvania. Waterfowl are typically since within the area. There

have been sightings of a Bald Eagle in the area of the reservoir, though no nest have been identified within the proximity of the study area. In recent years Canadian geese droppings have become a greater problem within the site.

A Pennsylvania Natural Diversity Inventory (PNDI) search was conducted for the Milltown Site as part of the wetland survey study. The presence of red-belly turtle was identified as a potential species of concern within the site. As part of the dam project permitting Gannet Flemming is working with United States Fish and Wildlife Service (USFWS) to determine what their concerns and to develop a turtle relocation plan as necessary.

Due to the generally passive nature of Milltown Dam Park Open Space and the prepared plan's impacts to

wildlife are anticipated to be temporary as a project goal is to develop more diverse habitat areas than currently exist.

Site Constraints & Opportunities

Currently the Milltown Reservoir site has very little space for passive recreational activities. Of the total 19.77-acre, 10.125 acres are open water, 1.867 acres are wetlands, and 1 acre comprises the dam area where public access is limited. This leaves a mere 6.77 acres of open land or 33% of the site, though parts of this land include steep slopes, wooded areas, and public roads. The current conditions leave very little space for public access to the site.

The partial decommissioning of the dam presents the opportunity to limit the open water area to a single stream corridor returning a majority of the open space for passive recreation activities.

The complex site hydrology brings with it constraints. Recommendations will need to consider how to best preserve and restore natural hydrology patterns to the site. Site Features such as the palustrine forested wetlands are very valuable and should not be disturbed. As part of the dam decommission Pennsylvania Department of the Environmental Protection (PaDEP) is requiring that the Chester Creek be allowed to reestablish a natural course across the site. Since the final course of the stream is unknown, the master plan will need to be flexible to adjust to the final stream location.

The site hydrology also provides opportunities. The diversity of water regimes creates the potential for the development of varying natural habitats for plants and wildlife. In turn, unique recreational opportunities to observe plants and wildlife can be created.

Site access is currently limited. The opportunity to create safe access for both vehicles and pedestrians



The Chester Creek, north of East Strasburg Road.



Outlet of Chester Creek into the Milltown Reservoir, wetlands borders both banks.

will exist within the areas of the former reservoir.

Opportunities exist to build upon past planning such as the East Goshen Township Parks, Recreation, & Open Space Plan Update and Central Chester County Bicycle and Pedestrian Circulation Plan. Both plans identify potential pedestrian and bicycle facilities along Reservoir Road that would provide safe connections from Paoli Pike and to West Chester Pike.

The dam partial decommission will create a large amount of spoils (earthen material removed from the dam). This material will provide opportunists to create usable vehicular and pedestrian facilities along Reservoir Road.

Additionally the potential exist to create topography within the site by moving the sediment deposits within the reservoir area to other locations on the site. The opportunity to create a smaller water body, constructed wetlands, and islands all exist.

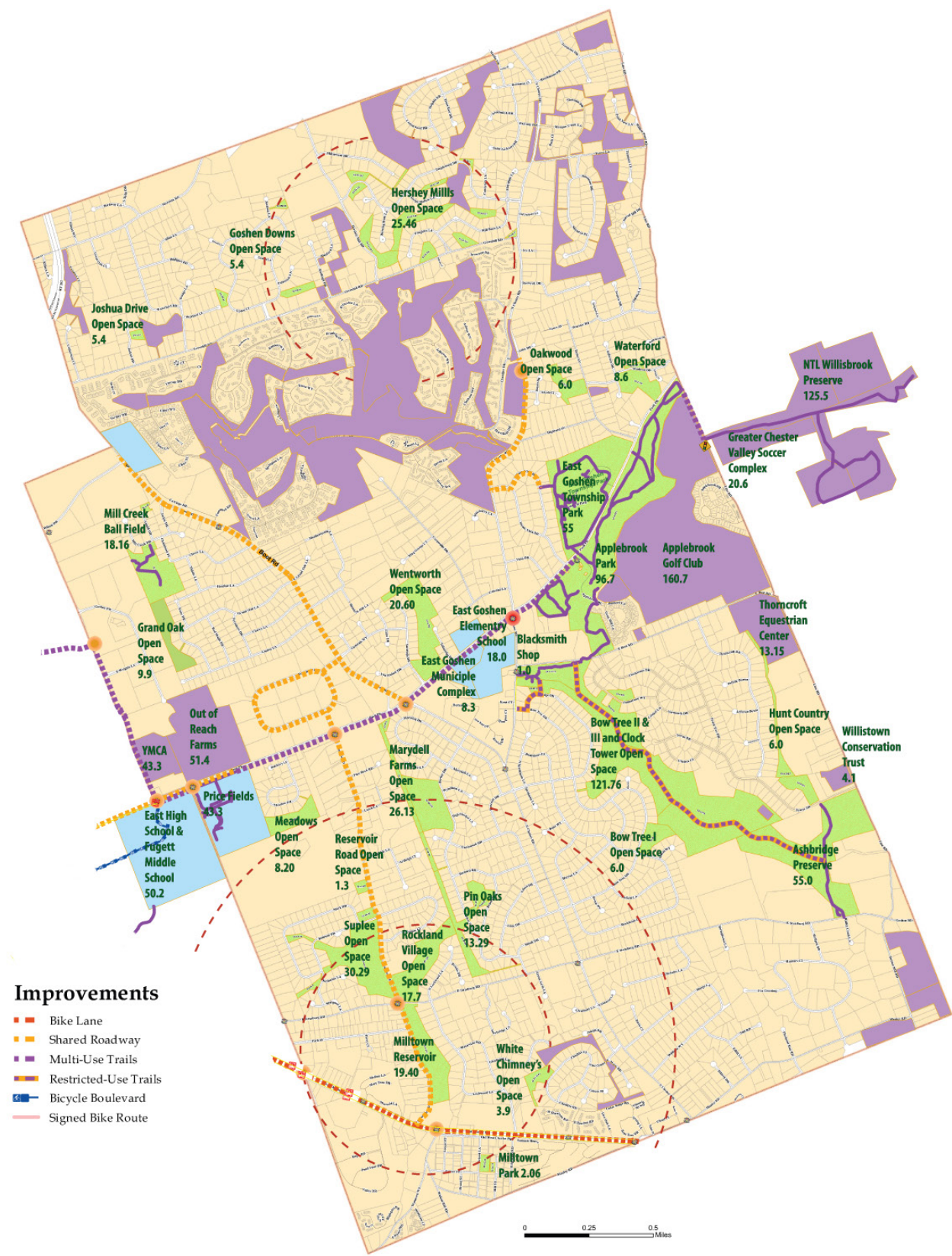


Figure 2.3 Composite Recreational Facilities and Proposed Trails





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CHAPTER Plan Recommendations

Community Needs

The redevelopment of the Milltown Dam Park will benefit the surrounding neighborhood by improving the ecological systems and providing a neighborhood destination for passive recreation.

It was important to the surrounding neighbors that the plan address the ‘private’ character of the area while maximizing the opportunities for open water views.

Neighbors talked of the importance of the current open water views across the reservoir as a main reason for moving to the area and any proposed improvements should include some open water areas.

Design Considerations

Permitting

The Township regulates all construction, including earth grading activities. Certain projects require Grading Permits & Erosion & Sedimentation Control plans. The development of the site must conform to the municipal permits and land development process application process. Necessary permits and approvals for regulated earth disturbance activities from the Chester County Conservation District or appropriate PA DEP regional office must be secured by the Township.

Construction projects that involve the disturbance of more than one acre of earth will require a National Pollutant Discharge Elimination System (NPDES) permit. The permit is a federal requirement that is administered at the state level with the overall goal to improve water quality.

Due to the unique nature of the project, in that it parallels the dam removal project, it is the goal of the Township to cover all work for the dam removal and site restoration under the Dam Removal Permit.

Stormwater Management

Developed by the Pennsylvania Department of Environmental Protection (PADEP), The Pennsylvania Handbook of Best Management Practices for Developing Areas offers numerous solutions for handling on-site stormwater. Best Management Practices (BMP's) that might be implemented at Milltown Dam Park can include: protect and restore riparian/forest buffers; protect / utilize natural stormwater flow runoff direction; habitat restoration; soil amendments; native tree planting; berms that help detain and infiltrate stormwater; bio-swales; and the use of porous surfaces in the parking areas, or paths. These facilities require site-specific soil tests to determine site suitability and the infiltration rates of the existing soils.

Incorporation of these BMPs into site development will have a direct positive impact on preserving and enhancing water quality. The opportunity for education exists through the placement of interpretive signage to educate site visitors about watershed water quality and how BMP's can positively impact all sites.

Municipal Separate Storm Sewer Systems (MS4)

The Township is currently in the process of developing a MS4 plan with the goal of reducing sediment inputs into impaired watersheds by ten percent (10%) through the implementation of strategic BMP's.

The potential exists that the proposed improvements for Milltown Dam Site could address partially or in full the sediment reductions required for the Chester Creek Watershed.

A list of the MS4 BMP can be found in the Appendix of this report.

Native Plant Material & Invasive Plant Removal

The use of native plants supports the goal of enhancing the natural ecosystems at Milltown Dam Park. The planting design for the site should include canopy and understory trees; shrub and herbaceous plant understory; and meadow reestablishment. Habitat restoration in some areas of the site should include native plant buffers and screen plantings. Native plant materials can create an attractive landscape that will help reduce long-term maintenance costs. Native plants are generally resistant to most pests and diseases and once established, require little or no irrigation or fertilizers. In addition to the above benefits, native plants provide food and habitat for indigenous fauna.

Disturbed lands and farm fields often allow invasive plant materials to establish on a site. As outlined in the Township's Comprehensive Plan, a program for controlling invasive plant species within the site

should be undertaken. The Township should seek to replant these areas with native plants. This is a labor intensive task, ideally suited for volunteers, including neighbors and local schools or scout groups.

Sustainable Materials

Choices in site materials have the potential to affect the health of a site's ecosystem as well as the larger environment. Every material has a life cycle: raw materials or natural resources and manufactured products. Close consideration of the sustainability of a material's life cycle can have far reaching benefits. Sustainable material practices include (SITES, 2014):

- Re-use of existing site materials.
- Purchase local and sustainably-produced plants and materials.
- Consider the full life cycle of materials. Consider the end life of a product. Can it be deconstructed and re-used?
- Work towards zero net waste in demolition, construction, and management of the site.

Americans with Disabilities Act (ADA) Design Standards

Public recreation improvements must be designed in accordance with the most recent edition of the ADA Accessibility Guidelines for Buildings and Facilities. The most recent version of the ADA Accessibility Guidelines for Buildings and Facilities can be found at: <http://www.ada.gov>.

Additional guidelines have been developed to provide guidance for outdoor recreation facilities including trails. These guidelines can be found at: <http://www.access-board.gov/guidelines-and-standards/recreation-facilities>

Historic Considerations

A dam was built on the Milltown Dam project site in the late 1800s for use by the local farm and was demolished when the existing dam was constructed

in 1923. The dam was repaired in 1985 to stabilize the embankment and control vegetation growth on the embankment. The dam was determined in 2014 to have an inadequate spillway capacity. Proposals were requested from engineers to evaluate options for increasing conveyance capacity. The East Goshen Township Supervisors voted to partially breach the dam in 2016.

Design Elements

Various design elements are incorporated into each concept. The following elements will be reviewed to understand the unique quality and benefits of each element and identify the objectives for including them in the concept plans.

- Re-establishment of a pond;
- Maintain streams;
- Preserve and protect wetlands;
- Create low mow lawn areas;
- Create beautiful meadows; and
- Establish riparian buffers.

Re-establishment of a Pond

Benefits

- Wildlife Diversity;
- Wildlife water source;
- Increased species movement;
- Sediment trap; and
- Cultural Interest.

Objectives

- Create ponds to allow for open water views from neighboring homes and from adjacent roads;
- Maintain pond depth necessary for healthy aquatic life (3 ft to 5 ft min);
- Maintain water movement through pond;
- Create a pond forebay to trap sediment;
- Provide vegetation along pond edges to promote both terrestrial and aquatic life;



Example Pond with vegetated edges.

Pond Objectives Continued

- Incorporate trees along pond edges while preserving key views into and across the site;
- Locate pond off of main stream channel to allow for flood events (keep sediment out of pond);
- Control mosquitoes through implementation of proper pond hydrology and by providing habitat for natural predators such as fish, bats, birds, and amphibians; and
- Develop a management plan for the pond:
 - Remove Sedimentation from Forebay every 5 years;
 - Partner with surrounding property owners to limit fertilization in surrounding areas;
 - Maintain ecological balance by the removal of excessive vegetation; and
 - Encourage Aeration within pond.



Constructed stream riffle used to enhance fish habitat and control change in stream elevations.

Maintain Stream

Benefits

- Wildlife corridor;
- Fish movement; and
- Ground water recharge.

Objectives

- Step stream to prevent head cutting of the culvert at East Strasburg Road and into the Wetlands through use of riffles or step pools;
- Maintain hydrology as close to existing conditions as possible at wetlands;
- Provide vegetation along stream edges to promote both terrestrial and aquatic life;
- Incorporate trees along stream edges (to cool water) while preserving key views into and across the site; and
- Develop a management plan for stream corridor:
 - Monitor stream banks for erosion and repair as soon as possible; and
 - Plan for removal of invasive plant species.



Open water wetland restoration project with a string grid to prohibit damage by Canadian geese during establishment.

Preserve and Protect Wetlands

Benefits

- Groundwater recharge;
- Groundwater discharge;
- Flood flow alteration;
- Sediment stabilization;
- Sediment/toxicant retention;
- Nutrient removal / transformation;
- Carbon transformation;
- Production export (creates food that moves downstream);
- Wildlife diversity/abundance;
- Wildlife migration; and
- Wildlife wintering.

Objectives

- Preserve and enhance existing wetlands;
- For permitting purposes, replace wetlands if required (and only if required); and
- Develop a management plan for wetlands:
 - Plan for invasive plant monitoring and removal; and
 - Periodic removal of woody vegetation as required (3-5 yrs.).



Low Mow lawn mixes can be used to stabilize steep slopes will creating green uniformed landscapes.

Create Low Mow / No Mow Lawn

Benefits

- Control water-runoff;
- Natural filter;
- Prevent erosion; and
- Reduces maintenance

Objectives

- Provide beautiful green open areas;
- Create planting transition from neighboring lawns into Township site;
- Limit maintenance noise from mowers;
- Limit fertilizer and watering needs;
- Develop a management plan for No Mow / Low Mow
 - Mow monthly during growing season;
 - Identify areas for no mowing except seasonal clean up; and
 - Plan for invasive plant monitoring and removal



Example upland meadow dominated with grass species supplemented with seasonal flowering perennials.

Create Beautiful Meadows

Benefits

- Habitat and food for insects and animals;
- Natural filter of sediments and pollutants;
- Prevents erosion; and
- Reduce maintenance.

Objectives

- Provide open areas to preserve long views;
- Design areas of both lower meadows and taller meadows;
- Limit Pedestrian access to private properties;
- Use in areas of steep slopes;
- Meadows limit maintenance needs (mowing); and
- Develop a management plan for Meadow:
 - Seasonal mowing - early spring to maintain winter habitat and wildlife coverage;
 - Identify areas to be allowed to succeed into shrubland and forest;
 - Invasive plant monitoring and removal; and
 - Removal of woody plant material as required.



Example riparian buffer full of seasonal color in a suburban setting.

Establish Riparian Buffers

Benefits

- Cool water temperatures;
- Filter sediment and nutrients;
- Flood control;
- Habitat; and
- Bank stabilization.

Objectives

- Preserve and enhance existing riparian buffers;
- Create 20' wide riparian buffers along new stream corridor / pond edges;
- Incorporate trees within Riparian Buffer while preserving key views into and across the site;
- Develop a management plan for riparian buffers:
 - Plan for invasive plant monitoring and removal;
 - Seasonal mowing / removal of perennial material; and
 - Periodic removal of woody vegetation as required (3-5 yrs.).

Design Alternatives and Evaluation

Site Access & Circulation

Each concept recommends similar circulation and access improvements. A new driveway and parking area is proposed along the straight section of Reservoir Road near the dam. The parking area of 10-20 spaces would be constructed on fill material from the dam spoils. An ADA boardwalk / or paved trail would provide access down into the site. A smaller second parking area is located opposite Park Ave. Internal site trails would provide access to the Reservoir Road side of the ponds and creek and connect the two parking areas. Access to the areas adjacent to private property would not be provided.

A multi-use trail is proposed along the shoulder of Reservoir Road. In some areas fill from the dam would be used to extend the road shoulder to accommodate the trail. The trail would extend north

along reservoir road across East Strasburg Road, and terminate at the existing Suplee Open Space parking area. A pedestrian bridge would be required over the East Branch of the Chester Creek to allow for the trail to extend along the Reservoir Road shoulder where the existing vehicular bridge is too narrow to accommodate a safe trail separation from vehicular cartway. Sidewalk improvements within the northern edge of the East Strasburg Road right-of-way would provide a pedestrian connection from Reservoir Road to Lockwood Lane, taking advantage of the existing pedestrian bridge across the creek.

Concept 1

Concept 1 explores options should the new creek channel locate toward Reservoir Road side of the site along the historic pre-dam channel. A three (3) acre pond is located to the east the creek. A few small islands located in the pond would provide secluded wildlife habitat areas, fish habitat, and visual interest. Along a landmass between the creek and pond a

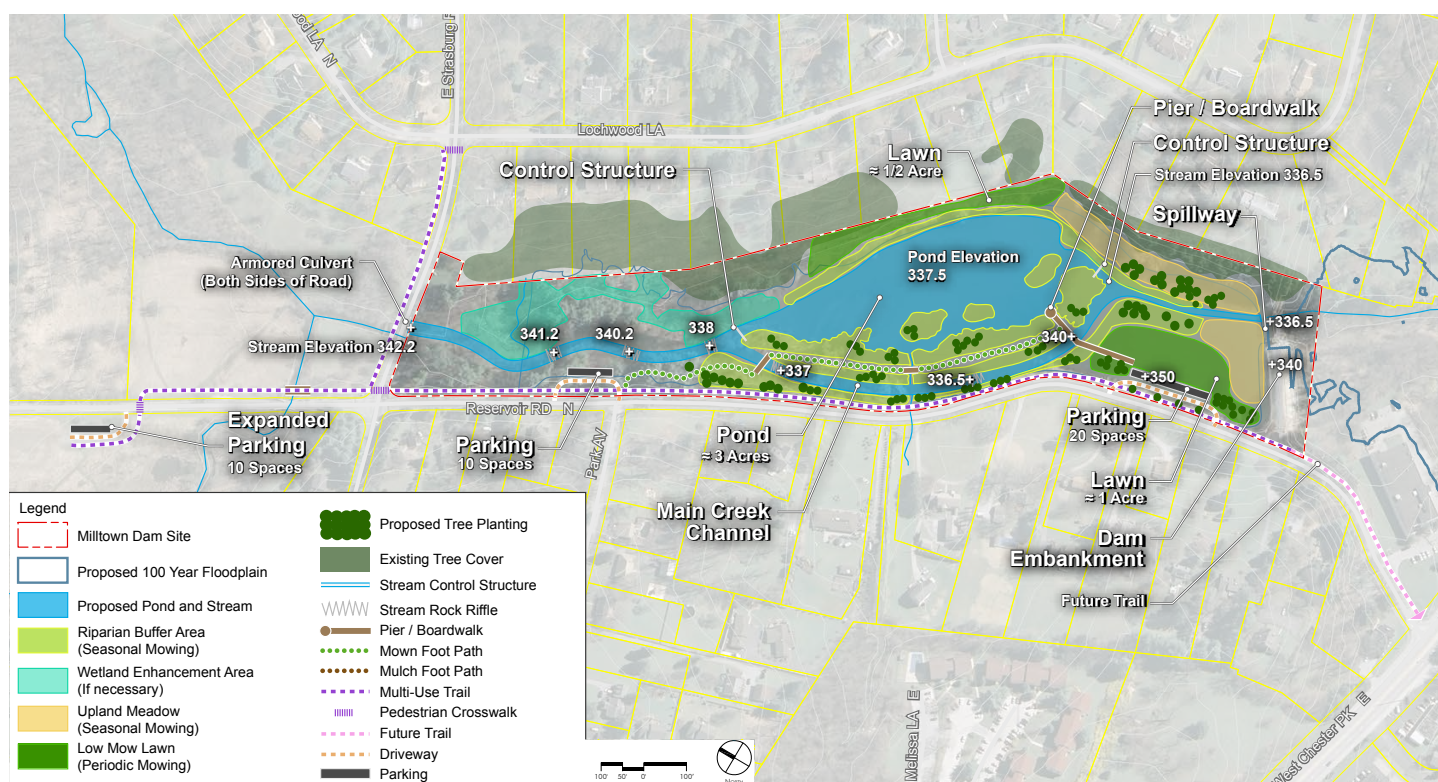


Figure 3.1 Site Concept Plan 1

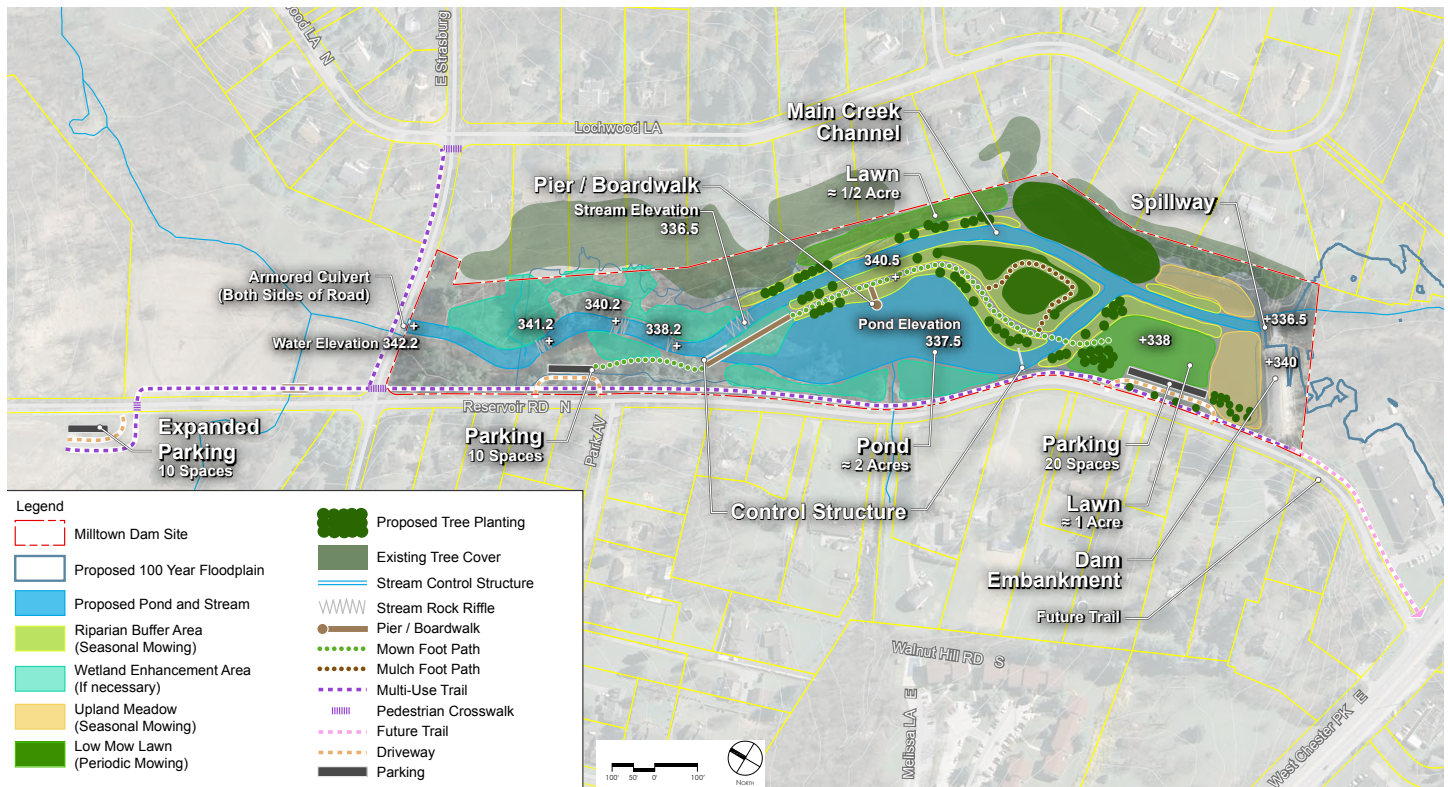


Figure 3.2 Site Concept Plan 2

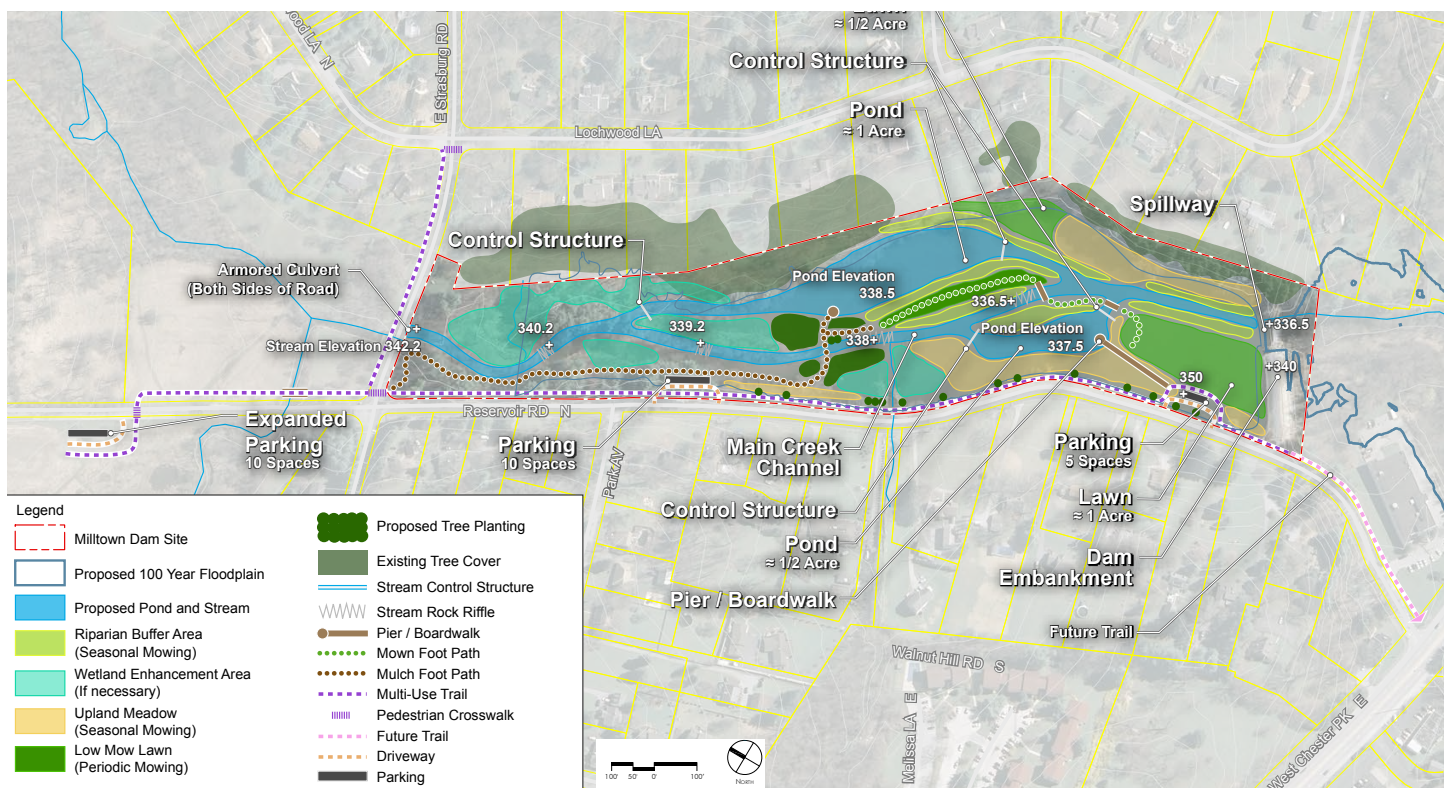


Figure 3.3 Site Concept Plan 3

footpath provide access to a pond and piers. A lawn area is located near the southern parking area and the dam is buffered by a small meadow area.

Concept 2

Concept 2 assumes a new creek channel located on the east edge of the site closer to where creek channels have formed during recent dam draw downs for repairs. A two (2) acre pond is located near Reservoir Road. A larger land mass is proposed between the pond and the creek. Pedestrian access via small bridges and footpaths onto the island is proposed. The walkways may include a boardwalk to span wet areas and provide handicapped accessibility, including access to a fishing area. A lawn area is proposed near the parking area and the dam will be buffered by a small meadow area.

Concept 3

Concept 3 assumes a more central location for the new creek channel and shows a one (1) acre pond and an half (½) acre pond on either side of the creek. Footpaths meander along the creek and ponds and provide a variety of access points and views within the park. The footpaths include small bridges and boardwalks. A one (1) acre lawn area is shown near the dam.

Draft Plan Recommendation

Public Feedback

Concept 1 was the clearly favored plan with the deciding factor being the large size of the pond. Due to concerns on how a different creek course may affect the concept it was determined that the draft plan should look at creating a large pond with the concept 2 stream location.

Circulation improvements and trails were well received. It was determined that a multi-use shoulder trail connection to the Suplee Open Space parking area should be recommended as a future improvement

similar to the future connection improvement to West Chester Pike (Rt. 3). Sidewalk connections to the both Lockwood Lane and along Park Avenue should be considered as future improvements as well.

Vehicular Circulation

A new ADA accessible parking area is located on Reservoir Road, 700 feet north from the intersection of West Chester Pike (Rt. 3). Both entrances have a min 250' sight line in both directions. The asphalt paved driveway and parking area is constructed on fill material created from the partial dam breach and pond excavation work. The ten (10) space lot includes eight (8) regular spaces and two (2) ADA van accessible spaces.

A second smaller parking area is proposed along Reservoir Road 150 feet south of the Park Ave intersection. The asphalt paved driveway and parking area is constructed on fill material created from the partial dam breach and pond work. The parking area would include five (5) parallel parking space.

Pedestrian Circulation

A multi-use trail is proposed along the right-of-way of Reservoir Road. The trail would conform to the minimum trail standards. A five (5) foot wide buffer between the cartway edge and a trail width of eight feet with two foot wide shoulders is proposed. The relatively constant grade the 4/10th of a mile long trail would be ADA accessible. Along the trail, three (3) seating areas with benches and ADA wheel chair 'pads' would provide overlook views of the pond and creek.

At the East Strasburg Intersection crosswalk improvements would provide for safe crossing of the road. On the northern side of the crosswalk a short segment of a minor 5' wide trail would connect to the existing pedestrian bridge. On the east side of the bridge informal connections can be made to the Suplee Open Space parking area via existing mown

paths (some demarcation of private property in this area may be required).

Located at the existing dam access drive a trail terminus would include a bike rack. A minor walkway would connect the trail terminus to the main parking area. Along this walkway a fenced area for 2 portable restrooms (1 ADA accessible) are located. Additionally, a kiosk with park rules and a trail map would be located at the parking lot end of the walkway.

From the main parking area a 5' wide boardwalk / ramp would provide accessible access into the site (not to exceed 8.3% gradient). The boardwalk would connect to a ADA walkway leading to a ADA accessible fishing pier.

Site Features

The plan shows the creek flow following the northeastern edge of the existing reservoir. A 2.5-acre pond is located along the Reservoir Road side of the site. Separating the pond and stream is a linear 'island' landform about 80 feet in width. The island would be constructed out of the material from the pond excavation and would rise up to an elevation approximating that of Reservoir Road. Both ends of the island taper down and bridge structures connect the island to site trail. Along the island a stone dust pathway would provide access to a second fishing pier that offers a spot to stop and observe wildlife. The island trail would meet ADA trail standards. The northern bridge connects to a ADA boardwalk connecting to the Reservoir Road multi-use trail. One lap of the trail system from the main parking area across the island and back along the Reservoir Road multi-use trail is just under 1/2 mile.

Pond Improvements

Control structures will be located in the stream channel to divert water into a new pond and to outlet water back into the stream channel. The inclusion of a wetland forebay near the stream input will trap sediment before it enters the greater pond.

The pond will have a maximum depth of 4-5 feet. Along the pond edge a shallow shelf of 1-2 feet will provide varying habitat opportunities for fish and wildlife. The majority of the pond edge would be planted with shrubs or trees to provide fish habitat and cool water temperature. An open area with boulders for interaction with the waters edge is located along the northwestern edge of the pond.

Stream Improvements

Stream features on the Milltown Dam Park Open Space include stream bank restoration along the existing stream corridors, the incorporation of constructed stream riffles into the stream channel to prevent head cutting, and bank stabilization along the new stream banks. Stone armoring of the creek bank would be placed at the East Strasburg Road to further protect the culvert area against head cutting and erosion.

Enhanced plantings

A variety of trees, mixed shrubs, meadow habitat, and low mow lawn areas contribute to a natural-looking landscape. Native species, acclimated to wet and dry conditions, should be selected for year-round ornamental value and wildlife habitat.

At the northeastern area of the former reservoir a forest restoration area with extensive tree planting is proposed. This area will building upon the existing tree canopy and forested wetlands in this area.

Additional tree planting areas within the site should be strategically places to focus and frame views throughout the site.

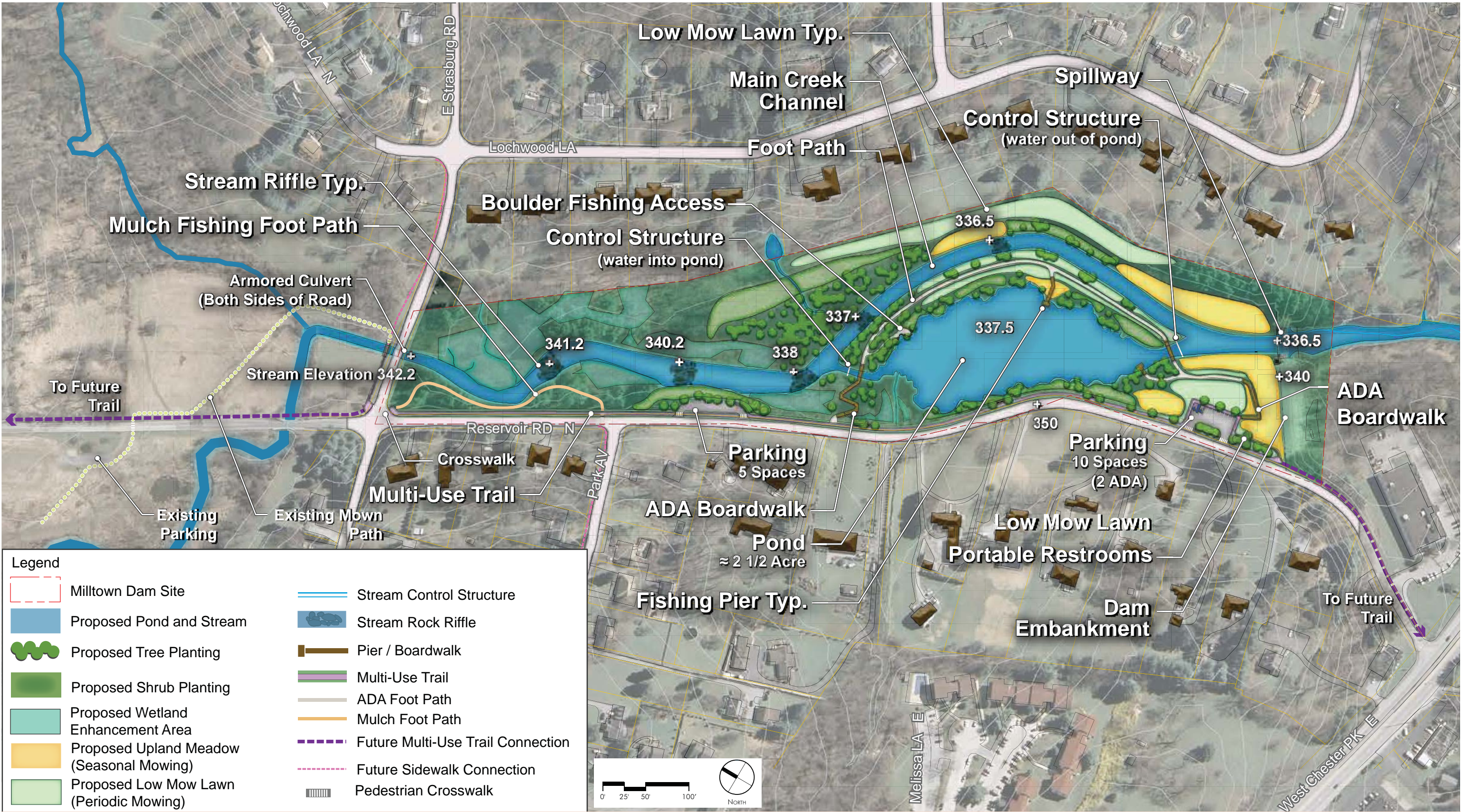


Figure 3.4 *Draft Master Plan*

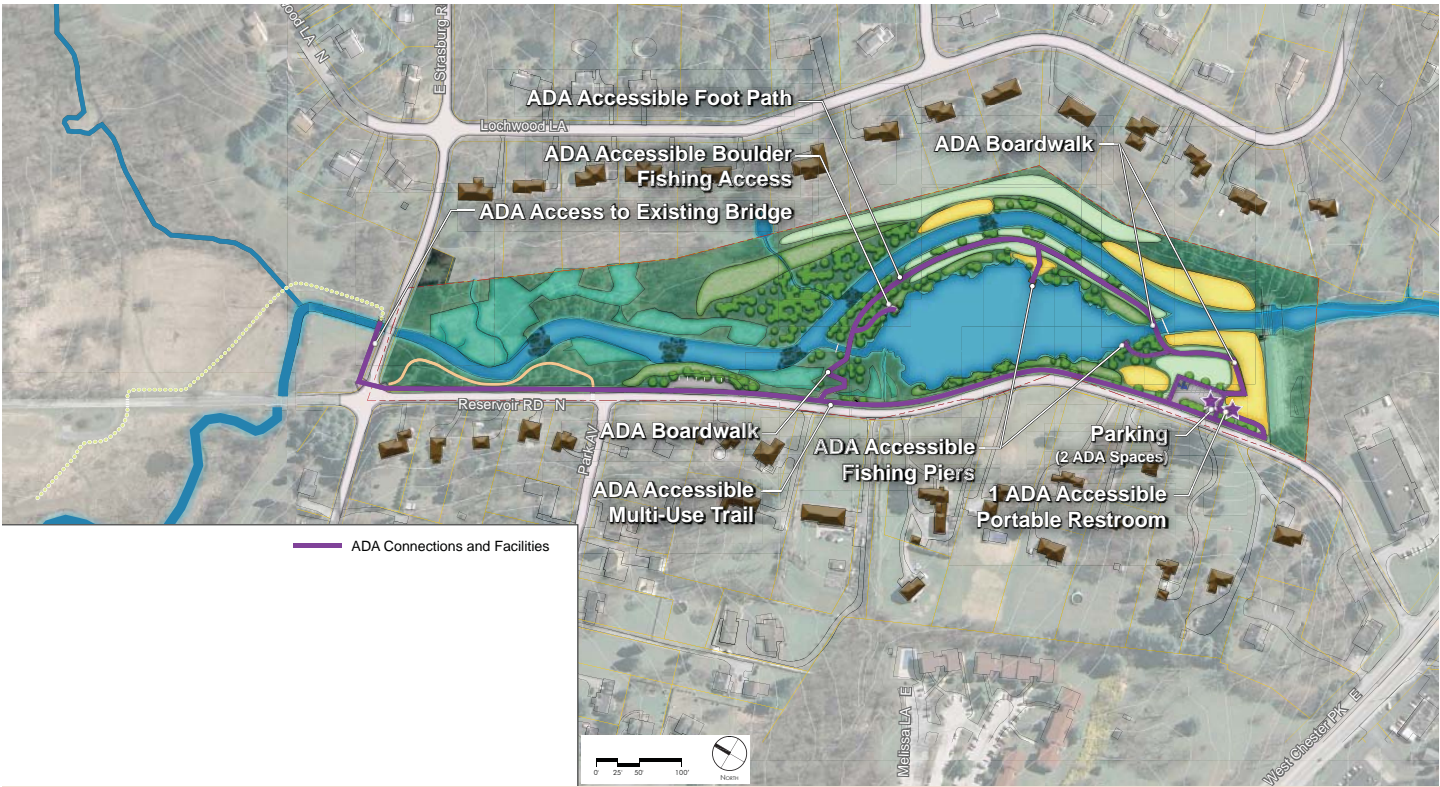


Figure 3.5 ADA Access Site Plan

Future connections

The Plan proposes a series of future connections. The most important is an extension of the multi-use trail to the south to West Chester Pike. This is a complicated connection due to the narrow road shoulder and steep slopes in the area. However if made it directly connects many large multi-family residential areas to the site.

An future extension of the multi-use trail to the north along Reservoir Road will connect the site to the Paoli Pike Trail creating safe bicycle connections to most of the Township.

In addition two sidewalk connections are proposed to connect local neighborhood to the site. The first is located along the northern right-of-way of East Strasburg Road and connects the pedestrian bridge to Lockwood lane. The second is along Park Ave.

Site Maintenance

Management of the site should be based on the needs associated with use areas, re-establishing and enhancing habitat, providing for public access and trails. Habitat management requires maintenance at key times during the year. For example, meadows should be left undisturbed in the fall and throughout the winter to provide cover for birds and small mammals. The area should be regularly monitored in order to manage the habitat quality. As the primary improvement to the site, trail maintenance should not be deferred. The regular review and maintenance of trails will maintain a safe user environment while identifying any necessary repairs.

The following is a monthly outline of basic maintenance tasks that should be completed. The frequency (times per month) of these maintenance tasks is indicated in parentheses. Refer to the appendix for the estimated yearly labor hours for maintenance and upkeep for the Park.

January

- Inspect trails, bridges & culverts / make repairs (1)
- Snow removal for driveway, parking areas (as required).

February

- Inspect trails, bridges & culverts / make repairs (1)
- Signage inspection and repairs (1)
- Inspect and mechanically remove invasive plants
- Snow removal for driveway, parking areas (As required).

March

- Return portable restroom(s)
- Clean portable restroom(s) once weekly (4)
- Inspect site trees for winter damage / perform work (1)
- Inspect trails, bridges & culverts / make repairs (1)
- Mow warm season meadows (1)
- Snow removal for driveway, parking areas (As required).
- Inspect and mechanically remove invasive plants
- Inspect BMP's & remove debris as required (1)

April

- Clean portable restroom(s) once weekly (4)
- Mow lawns, trails and shoulders (1)
- Plant / replant (re-vegetation target areas) (1)
- Inspect trails, bridges & culverts/make repairs (1)

May

- Clean portable restroom(s) once weekly (4)
- Mow lawns, trails and shoulders (1)
- Inspect trails, bridges & culverts / make repairs (1)

June

- Clean portable restroom(s) once weekly (4)
- Mow lawns, trails and shoulders (1)
- Inspect trails, bridges & culverts / make repairs (1)

July

- Clean portable restroom(s) once weekly (4)
- Mow lawns, trails and shoulders (1)
- Inspect trails, bridges & culverts /make repairs (1)
- Inspect meadows for invasive plants – Mow ½ of meadow if required (1)

August

- Clean portable restroom(s) once weekly (4)
- Mow lawns, trails and shoulders (1)
- Inspect trails, bridges & culverts /make repairs (1)

September

- Clean portable restroom(s) once weekly (4)
- Mow lawns, trails and shoulders (1)
- Signage inspection (1)
- Inspect trails, bridges & culverts /make repairs (1)

October

- Clean portable restroom(s) once weekly (4)
- Mow lawns, trails and shoulders (1)
- Inspect trails, bridges & culverts /make repairs (1)
- Inspect BMP's remove debris as required (1)

November

- Inspect trees / prune as required (1)
- Inspect trails, bridges & culverts /make repairs (1)
- Fall clean-up (1)
- Remove portable restroom(s)
- Snow removal for driveway, parking area (As required).

December

- Inspect trails, bridges & culverts /make repairs (1)
- Snow removal for driveway, parking areas (As required).

Safety and Crime Deterrence

Park crime deterrence is a combination good park rules, occasional policing and community participation in the park's stewardship. The basic Township park rule of restricting park use from sunrise to sunset should be followed. The adjacent residences will also serve as immediate eyes and ears of the community to help deter crime. Active observation by neighbors should be encouraged and random police patrols should occur. When initial park trail improvements are built and the park use is beginning, the Township staff and police should maintain an active dialogue with neighbors to prevent any unwanted activities such as littering, vandalism and underage drinking. As park users populate the park open space they will become the eyes and ears of "authority" armed with cell phones. People who engage in negative activities do not wish to be seen and will typically go elsewhere once they are identified for their bad behavior. Additionally, the rapid repair of damage or vandalism helps mitigate bad behavior.

Park users should also be encouraged to help the Township maintain and operate any proposed trails. When there are problems, trail users can notify the Township about the issue. It is important that municipal office phone numbers and email addresses be posted at the parking area and trail connection access points as a part of park signage.





4

CHAPTER Implementation

Estimate of Probable Development Costs

An estimate of probable development costs (Table 4.1) is based on the proposed improvements shown on the Master Site Plan. Unit costs were established based on construction costs for similar projects and reflect prevailing wage rates that are required for public construction projects. A detailed cost estimate is included in the appendix of this report with a summary of the improvement costs, per phase, outlined in this section.

Project Cost	
Phase 1 Project Costs	\$963,771
Phase 2 Project Costs	\$350,546
Phase 3 Project Costs	\$76,964
Total Costs of Development	\$1,391,280

Phase 1 Estimated Costs of Development	
Work Item	Total Cost
Demolition and Site Preparation	\$496,649
Reservoir Road Mixed-Use Trail (South)	\$49,890
Reservoir Road Parking Area, 10 Spaces (South)	\$26,170
ADA Asphalt Walkway	\$2,461
Stone Dust Foot Paths, 4"Depth	\$12,863
Structures- Bridges & Boardwalks	\$131,200
Phase 1 Improvement Cost	\$719,232
General Project Cost (Mobilization, E&S, Construction Surveying)	\$50,346
Construction Contingency (15%)	\$107,885
Design and Engineering (12%)	\$86,308
Phase 1 Total Project Costs	\$963,771

Phase 2 Estimated Costs of Development	
Structures- Fishing Piers	\$78,400
Planting	\$183,201
Phase 2 Improvement Cost	\$261,601
General Project Cost (Mobilization, E&S, Construction Surveying)	\$18,312
Construction Contingency (15%)	\$39,240
Design and Engineering (12%)	\$31,392
Phase 2 Total Project Costs	\$350,546

Phase 3 Estimated Costs of Development	
Reservoir Road Parking Area, 5 Spaces (North)	\$17,472
Reservoir Road Mixed-Use Trail (North)	\$38,436
Wood Chip Foot Paths, 5' Wide	\$1,528
Phase 3 Improvement Cost	\$57,436
General Project Cost (Mobilization, E&S, Construction Surveying)	\$4,020
Construction Contingency (15%)	\$8,615
Design and Engineering (12%)	\$6,892
Phase 3 Total Project Costs	\$76,964

Figure 4.1 Cost Summary

Project Phasing

Improvements to Hershey's Mill Dam Park Open Space will most likely occur in phases, based on available funding. There are multiple options for project funding. The timing and scope of the phases will be determined by the amount of future funding available and the Township's success with grant applications over an estimated five to eight year period or longer. The phasing plan for the parcels is included to suggest potential strategies for implementation of improvements over time (Figure 4.1).

The Milltown Dam Park Open Space Master Plan will be implemented in phases in coordination with the dam partial decommissioning project. Phase one site preparation work will include the dam work; construction of stream riffles and armoring at the East Strasburg Road culvert; site grading to create the pond, island, and embankment for the parking; and construction of the pond. Phase one site improvements will include construction of the main parking area; and the development of the 1/2-mile of trails including the two boardwalks, island footpath, and a portion of the multi-use trail connecting the

southern boardwalk to the main parking lot area. Additional phase one improvements include the three bench areas along the trail and the kiosk signage and development of the portable restroom area at the main parking area. Phase one planting improvements will focus on shade tree planting along the multi-use trail and parking area; bio-engineering plantings on steep embankments and stream banks; and general site stabilization through the seeding of a cover crop.

Phase two would focus on additional planting improvements to include the establishment of site meadows, shrub plantings, and forest restoration. Dependent on the final extent of plantings phase two planting could be implemented over two planting seasons.

Phase three improvements will include the construction of secondary parking lot area; the extension of the multi-use trail to the East Strasburg

Road intersection; the construction of crosswalk improvements at the Reservoir Road and East Strasburg Road intersect; the construction of the 5 foot wide trail to the existing pedestrian bridge; and the development of the fishing access path along the Chester Creek. Phase three planting improvements will focus on shade tree planting along the multi-use trail and parking area; bio-engineering plantings on steep embankments and stream banks

Potential Partners / Funding Sources

The following is a resource of grants, programs, funds and other sources that can assist with the funding of park design and construction. Different sources can be pursued during various phases, based on availability of funds and priorities for each year.

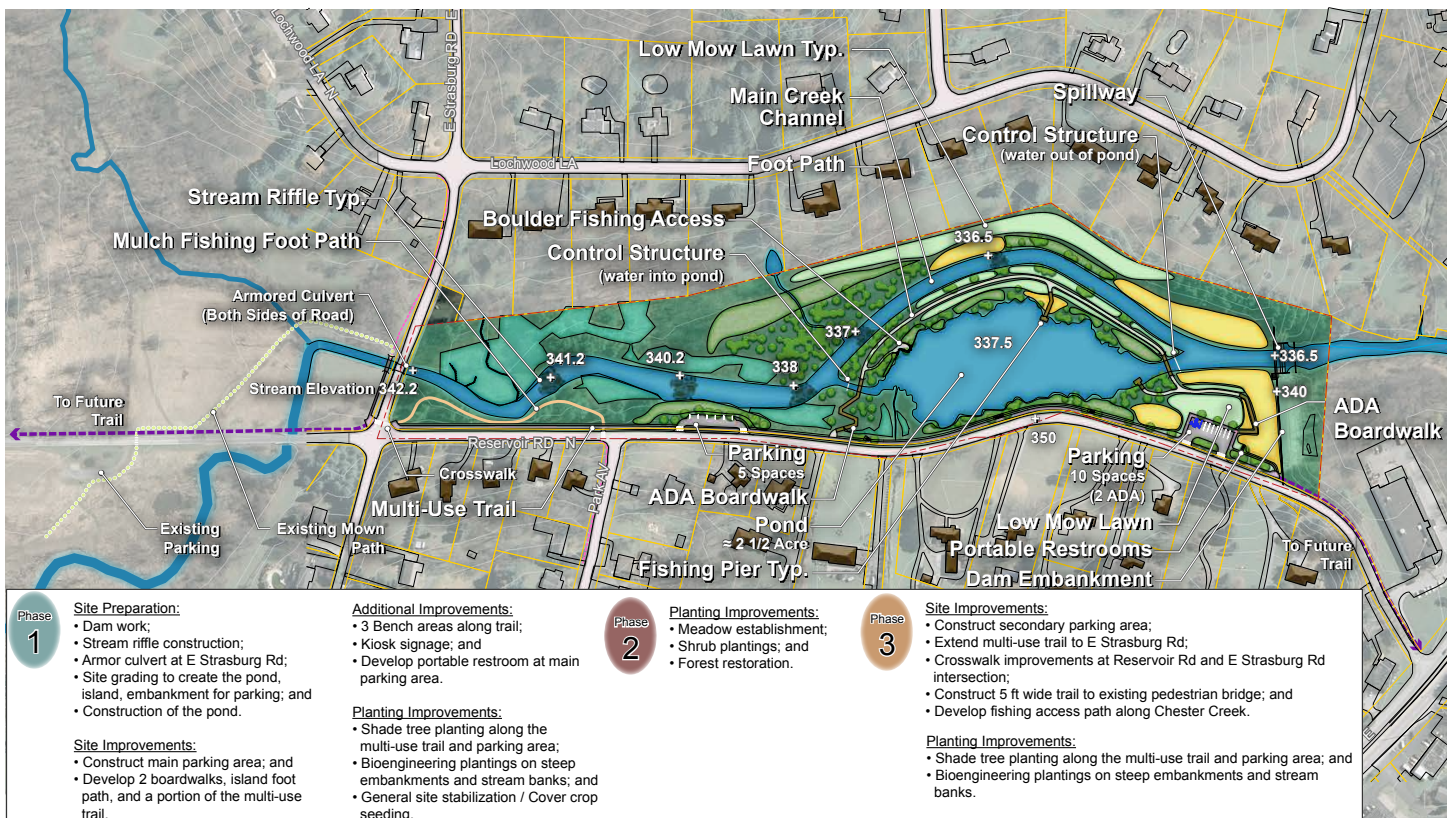


Figure 4.2 Project Phasing Plan

PA DCNR Community Conservation Partnership Program

The PA DCNR Community Conservation Partnership Program (C2P2) provides funding for communities and nonprofit organizations to acquire, plan and implement open space, conservation and recreation resources; including trails and riparian forest buffers. DCNR accepts grant applications annually-with deadlines usually in April. Projects will receive additional consideration for using “green” technology or practices. The next C2P2 application deadline will be April 12, 2017. DCNR funds can be used for most park projects, and as a match to many federal funds for some trails. DCNR requires a 50–50 match (cash or in kind services) to its grant awards. The first step is to contact the DCNR regional advisor.

More information on this program can be found at the DCNR website: www.dcnr.state.pa.us/brc/

Greenways, Trails and Recreation Program (GTRP)

The Department of Community and Economic Development (DCED) Greenways, Trails and Recreation Program (GTRP) is a program that helps fund for planning, acquisition, development, rehabilitation and repair of greenways, recreational trails, open space, parks and beautification projects. Grant applications cannot exceed \$250,000 and require a 15% matching funds. Applications are due in June 30th for consideration in September.

More information on this program can be found at the DCED website: <http://community.newpa.com/programs/greenways-trails-and-recreation-program-gtrp/>

Watershed Restoration and Protection Program (WRPP)

DCED Watershed Restoration and Protection Program is a funding program to restore, and maintain

restored stream reaches impaired by the uncontrolled discharge of non-point source polluted runoff. Funds may be used for construction, improvement, expansion, repair, maintenance or rehabilitation of new or existing watershed protection BMPs; stream bank bio-engineering; and design services. Grant applications cannot exceed \$300,000 and require a 15% matching funds. The next application period is due May 31, 2017 for consideration in September.

More information on this program can be found at the DCED website: <http://community.newpa.com/programs/watershed-restoration-protection-program-wrpp/>

DEP Growing Greener Watershed Protection Program

Funded through the state Growing Greener Environment Stewardship Funds applications should be targeted towards clean up of non-point source pollution. The grant will fund local watershed-based conservation projects with the average award is \$150,000 and requires a 15% match from a non-DEP fund source. The next application period is due Jan, 2018.

More information on this program can be found at the DEP website: <http://www.dep.pa.gov/Citizens/GrantsLoansRebates/Growing-Greener/Pages/default.aspx>

DEP Non-point Source Implementation Programs Grant

Provides funding assistance for projects aimed at implementing Pennsylvania’s Non-point Source Management Program. Targeted projects include control of urban runoff, and natural channel design/stream bank stabilization projects. The grant will fund local projects with the average award is \$200,000. The next application period is in July 2017.

More information on this program can be found at

the DEP website: <http://www.dep.pa.gov/Business/Water/PlanningConservation/NonpointSource/Pages/default.aspx>

PENNVEST

Pennvest oversees the administration and finance of the Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF) for the state of Pennsylvania. The CWSRF program provides funding to projects throughout Pennsylvania for the construction and maintenance of wastewater treatment facilities, stormwater management projects, non-point source pollution controls, and watershed and estuary management. The program offers low interest loans with flexible terms to assist a variety of borrowers that include local governments, municipalities, and privately owned entities and to establish partnerships to leverage other funding sources. Additional information is available at: <http://www.pennvest.pa.gov/Pages/default.aspx#.Vcux3WfbJ9A>

Chester County Municipal Grant Program

The Chester County Commissioners provide grants to local municipalities for the preservation of land and construction of parks. Applications are due to the County's Department of Open Space Preservation by February 28 of each year. Priority consideration is given to applicants that propose preservation of the most land with the least amount of County Funds. Additional information is available at:

<http://www.chesco.org/1505/Municipal-Grants>

PHMC Keystone Construction Grant Program

The Pennsylvania Historical & Museum Commission (PHMC) provides funding to local governments for small construction projects for publicly accessible historic resources through its Keystone Historic Preservation Construction Grants. The goal of

the program is to support projects that preserve, rehabilitate or restore resources listed or eligible for listing in the National Register. The maximum amount awarded is \$100,000 and projects require a 50/50 cash match.

Additional information is available at: <http://www.phmc.pa.gov/Preservation/Grants-Funding/Pages/Construction-Projects.aspx>

Environmental Education

The Pennsylvania Environmental Education Grants Program awards funding to schools, nonprofit groups and county conservation districts to develop new or expanded current environmental education programming. The funds are administered through the Pennsylvania Department of Environmental Protection for projects ranging from creative, hands-on lessons for students and teacher training programs to ecological education for community residents. Educational Resources, including exhibits, educational signage, and demonstration projects, also qualify for funding. Grant applications cannot exceed \$3,000 and no match is required, however it is recommended. Applications are due in Dec and awarded in April.

Legislative Funding

State and federal elected officials can sometimes include items into legislation for worthy projects in their districts. A conversation between county and municipal officials and legislators is the way to begin this process. This type of funding should be targeted toward capital improvement projects.

East Goshen Township

Some grant programs allow official services to count as a local match. It is suggested that the Township keep a record of municipal staff and / or volunteer time spent on Milltown Dam Park Open Space. Occasionally, grantors may allow time spent to date to count as part of the in-kind match for funds. This

record will also demonstrate a continuing commitment by the municipality to the successful implementation of the master plan. The Township may in some cases choose to invest municipal funds in specific aspects of the Parks development to “leverage” funding from other partners.

Grant programs that require matching funds present an opportunity for the Township to engage in targeted fundraising efforts and to partner with other organizations. The opportunity exist for the Township to leverage the cost of the dam breach towards matching funds when pursuing grant programs.

Development impact fees and annual set asides from the Township budget can also contribute to park improvement funding.

Private Foundations

There may be regional corporations and foundations that support public works such as park development. Competition for these funds is usually brisk, but opportunities should be researched. Funding is often to non-profit organizations.

Foundations and institutions represent another potential source of funding for education-related site improvements and programming. Grants are available to support student field trips, provide teacher training in science, and provide other educational opportunities. Education tied to research can increase the pool of potential funds. The science community and research institutions are the logical starting points for solicitation foundation funds.

Schools and Local Organizations

Local schools and scouts organizations may also be of assistance in several ways. These groups might get involved with club, fundraising events, and Park cleanup days. The school faculty might incorporate the Park into various curricula with students helping to develop and possibly maintain the Park as part of a classroom assignment or after school club. While

the amount of funds raised may be relatively small, this process builds constituents and support that is critical to the long-term success of the Park.

Appendix

Appendix Listing

- Meeting Minutes
- Survey #1 – Visioning Survey
- Survey #2 – Concept Survey
- Milltown Dam Park Open Space Probable Costs of Development
- PNDI Receipt

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**EAST GOSHEN TOWNSHIP
MILLTOWN DAM COMMITTEE
1580 PAOLI PIKE
OCTOBER 26, 2016 – 7:00 pm
MINUTES**

Present:

Paul Knox, Mike Lehmicke, Glenn Artman, Vince “Mick” McInnis, Dana Pizarro, Dave Hewett

Also in attendance were Board of Supervisors Chairman Senya D. Isayeff, Vice-Chairman Marty Shane, Jason Lang, Director of Recreation, and Township Manager Rick Smith.

Call to order & Pledge of Allegiance:

Senya called the meeting to order at 7:00 pm and asked Jason to lead the assembly in the Pledge of Allegiance.

Moment of Silence:

Marty called for a moment of silence to honor the members of the military who defend our country.

New Business:

Welcome

Senya welcomed the members of Milltown Dam Committee. He provided background on the history of Milltown Dam Project. He advised the attendees that meetings of the Committee were subject to the Sunshine Law and, as such, that all meeting had to be advertised, the public had the right to attend the meeting, and minutes were required.

Senya asked all of the members to introduce themselves and the Committee members gave a short summary of their background and interests. Paul noted that while his house was under agreement, he wanted to serve on the Committee until the sale was concluded.

Election of Officers

Marty noted that while he would be the Supervisor liaison to the Committee and that Rick would be the staff liaison, the Committee would need to select a Chair and Vice Chair, who would be tasked with running the meetings.

Paul nominated Mike for Chair; the motion was seconded by Dana and approved unanimously.

Paul nominated Mick for Vice Chair; the motion was seconded by Mike and approved unanimously.

The Process

Marty noted the Board had engaged Simone Collins/Princeton Hydro to work with the Committee to develop the plan for the area above the dam. He reviewed the process the Committee would follow to develop the plan. Marty advised that Simone Collins would conduct

two Visioning Sessions, one on December 14 and a second on December 15 in order to provide the residents with two opportunities to provide comment. Both sessions would be identical. He also noted that the preliminary 2017 budget included \$100,000 for improvements and/or plantings and the Township would also seek grants.

Meetings

Rick advised those in attendance that the Committee meeting agendas and supporting information would be posted on the Township web site the Friday before a meeting and that the members would receive an e-mail advising that the info was available. He advised that the Visioning Session meeting agenda and supporting information would be posted on the Township web site, the Township would notify all residents within 1,000 feet of the dam about the meeting via a letter, and that the general public would be able to submit comments electronically.

He reviewed the plot plan for the parcel on which the dam is situated noting that while the main tributary flows south from Strasburg Road, there is a smaller stream coming in from the west.

Meeting Dates

It was the consensus of the members that in preparation for the Visioning Session, they would schedule Committee meetings for November 2, 9, 16, 30, and December 7 at 7:00 pm.

General Discussion

The members discussed the project in general terms, noting that the final location of the streams will impact the project. In response to a question, Jason explained the differences between active and passive parks.

Adjournment:

There being no further business, the meeting was adjourned at 8:17 p.m.

Respectfully submitted,

Louis F. Smith Jr.
Township Manager

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**EAST GOSHEN TOWNSHIP
MILLTOWN DAM COMMITTEE
1580 PAOLI PIKE
NOVEMBER 2, 2016 – 7:00 pm
FINAL MINUTES**

Present:

Chuck Hepler, Mike Lehmiche, Glenn Artman, Vince “Mick” McInnis, Dana Pizarro, Dave Hewett.

Also in attendance were Supervisor Vice-Chairman Marty Shane, Peter Simone of Simone Collins, and Township Manager Rick Smith.

Call to order & Pledge of Allegiance:

Mike called the meeting to order at 7:00 pm and asked Jason to lead the assembly in the Pledge of Allegiance.

Moment of Silence:

Marty called for a moment of silence to honor the members of the military who defend our country.

Glenn moved to approve the minutes for the October 26, 2016, meeting as presented; the motion was seconded by Jim and approved unanimously.

New Business:

Peter Simone provided some background information on his firm, Simone Collins and Princeton Hydro. He stated they would follow DCNR guidelines, which would enable the Township to obtain grant funding for the project. Peter reviewed process noting the 1st Public Meeting was intended to get everyone’s ideas. He intends to present 2 or more concept plans, with estimated costs, at the 2nd Public Meeting. A final plan will be presented for the Committee’s review and approval at the 3rd Public Meeting. The 4th Public Meeting will entail a presentation of the final plan at a Board of Supervisors meeting. A survey will be posted on the Township website to solicit public comment.

Peter noted the need to consider future maintenance of the site and protection of the interests of the neighbors, while making the site a public space.

Marty noted that PA DCNR had grant money available for forested riparian buffers.

Peter further noted that this project may help the Township address its MS4 permit requirements, and the location of the stream will impact how the site is developed. He expected the site would be developed as a passive recreation area, and that fish ponds, viewing stations, and paths would be possible.

Glenn stated access is a key issue.

In response to a question, Rick advised that the Committee would be able to post information on the Township website and the Public Meeting dates would be posted on the LED signs.

Mike noted that some residents have expressed concerns about what happens when the reservoir is drained.

Meeting Dates

The Committee reviewed the following meeting dates as proposed by Simone Collison:

Committee Meeting #1	Nov 2, 7:00 pm
Committee Meeting #2	January 11, 7:00 pm
Committee Meeting #3	February 21, 7:00 pm
Committee Meeting #4	May 23, 7:00 pm (review draft plan comments)
Public Meeting #1	December 14 & 15, 7:00 pm (same presentation both days)
Public Meeting #2	January 25, 7:00 pm
Public Meeting #3	March 22, 7:00pm (draft plan – 60 day review)
Public Meeting #4	June 20, 7:00 pm (final plan presentation)

It was the consensus of the members the proposed meeting dates were acceptable.

Adjournment:

There being no further business, the meeting was adjourned at 8:50 p.m.

Respectfully submitted,

Louis F. Smith Jr.
Township Manager

Attachments – Peter Simone Comments – Committee Meeting #1- November 2, 2016

**EAST GOSHEN TOWNSHIP
MILLTOWN DAM COMMITTEE
1580 PAOLI PIKE
NOVEMBER 9, 2016 – 7:00 pm
FINAL MINUTES**

Present:

Paul Knox, Mike Lehmicke, Glenn Artman, Vince “Mick” McInnis, Dana Pizarro, Dave Hewett and Chuck Hepler

Also in attendance were Board of Supervisors Vice-Chair Marty Shane, Township Manager Rick Smith, and Hershey Mill Dam Committee Chair Wayne Hall.

Call to order & Pledge of Allegiance:

Mike called the meeting to order at 7:00 pm and lead the assembly in the Pledge of Allegiance.

Moment of Silence:

Rick called for a moment of silence to honor the members of the military who defend our country.

Minutes:

Rick distributed a copy of Peter Simone’s comments from the November 2, 2016 meeting and suggested that they be attached to the meeting minutes.

Mick motioned to approve the minutes of the November 2, 2016 meeting; the motion was seconded by Glenn and approved unanimously.

Old Business:

Glenn asked if the Committee would consider including recommendations for something that extended beyond the Milltown Dam property. It was the consensus of the members that they could and would if it was related to the project.

New Business:

The members discussed Peter Simone’s comment that the area should be a “passive recreational facility”. Rick advised that the terms “active” and “passive” concerns how the activity is conducted. He cited by way of example in a “passive” recreation area a family could play a pick-up baseball game. However, an organized little league baseball game would be limited to an “active” recreation area.

The members identified the following opportunities and restrictions that exist for the site.

- Fishing Ponds and/or Multiple Large Ponds
- Controlling sediment
- Trails (paved or unpaved)
- Parking area (the location and number of cars)
- View shed Vista

- Have grass up to the stream for visibility
- Boardwalks
- Plaque with the history of the dam
- Use stone from valve house
- Bird houses
- Compliance with ADA requirements
- Privacy for home that abut the Reservoir
- Providing pedestrian access to the site.
- Connecting the site to other neighborhoods.
- Traffic speed on Strasburg & Reservoir Roads.
- Maintenance of any improvements

During the discussion Wayne noted that the Hershey Mill Dam Committee was also wrestling with the parking and site access issues.

Rick suggested that the members walk the site, especially the north end of the Reservoir.

It was the consensus of the members that they would develop questions for the proposed web page survey.

Paul noted that this would be his final meeting, since he was leaving for Colorado next week.

Adjournment:

There being no further business, Chuck moved to adjourn the meeting at 8:34 pm the motion was seconded by Mike and approved unanimously.

Respectfully submitted,

Louis F. Smith Jr.
Township Manager

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**EAST GOSHEN TOWNSHIP
MILLTOWN DAM COMMITTEE
1580 PAOLI PIKE
NOVEMBER 16, 2016 – 7:00 pm
FINAL MINUTES**

Present:

Vince “Mick” McInnis, Vice Chair, Glenn Artman, Dana Pizarro, Dave Hewett and Chuck Hepler. Also in attendance was Township Manager Rick Smith.

Call to order & Pledge of Allegiance:

Mick called the meeting to order at 7:04 pm and lead the assembly in the Pledge of Allegiance.

Moment of Silence:

Rick called for a moment of silence to honor the members of the military who defend our country.

Minutes:

Dave motioned to approve the minutes of the November 9, 2016 meeting as amended; the motion was seconded by Dana and approved unanimously.

Old Business:

Glenn asked if it had been determined how long it would take after the impoundment had been drained before work could commence in the Reservoir. Rick advised that a timetable has not been established, however, they were exploring ways to reduce it.

Rick advised that Simone and Gannet Fleming would be meeting on Thursday.

New Business:

Mick distributed photos of various ponds he had looked at since the last meeting. The member had the following comments.

- Need to maintain a view of the ponds and/or stream.
- Cannot use invasive plants.
- Do not want to plant trees over the entire site.
- Consider trees in the north end of the site and a more open area in the south end.
- Ability to walk out in to any wetland areas (similar to the Boardwalk at Goshenville)
- Bird houses
- Need additional info about bird blinds.

Rick updated the members about the beavers in the Supplee Valley Open Space.

It was the consensus of the members that they would conduct a site inspection on Sunday November 20, 2016 at 1 pm. The members would start at the Boardwalk in Goshenville than go to the Reservoir.

The member discussed possible questions for the survey.

- What would you like to see at this location?
- What would you not like to see at this location?

It was also suggested providing a list of possible amenities and asking residents to either: 1) rank them in order, 2) agree or disagree, or 3) list their top 3-5.

It was suggested that the survey be finalized at the meeting on December 7th, so it could be posted immediately after the Visioning Sessions on December 14 and 15.

Mick noted that Paul Knox had recently left for Colorado and it was the consensus of the members to acknowledge the efforts of Paul Knox, since he was instrumental in generating public interest about the Milltown Reservoir.

Adjournment:

There being no further business, Dave moved to adjourn the meeting at 8:04 pm the motion was seconded by Mike and approved unanimously.

Respectfully submitted,

Louis F. Smith, Jr.
Township Manager

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**EAST GOSHEN TOWNSHIP
MILLTOWN DAM COMMITTEE
1580 PAOLI PIKE
NOVEMBER 30, 2016 – 7:00 pm
DRAFT MINUTES**

Present:

Mike Lehmiche, Vince “Mick” McInnis, Vice Chair, Glenn Artman, Dana Pizarro, Dave Hewett and Chuck Hepler. Also in attendance were Supervisor Marty Shane and Township Manager Rick Smith.

Call to order & Pledge of Allegiance:

Mike called the meeting to order at 7:04 pm and lead the assembly in the Pledge of Allegiance.

Moment of Silence:

Rick called for a moment of silence to honor the members of the military who defend our country.

Minutes:

Chuck motioned to approve the minutes of the November 16, 2016 meeting as amended; the motion was seconded by Mike and approved unanimously.

New Business:

The members viewed photos of the Boardwalk at Goshenville and the Milltown Reservoir, some of which were taken during the site walk on December 20th. It was noted that the vegetation at Goshenville was mowed once a year and that the Chester Creek was fairly close to Reservoir Road north of Park Avenue.

Rick noted that the limits of the 100 year floodplain would not change significantly once the dam was breached and that while we could maintain a grass trail in the wetlands a paved trail would require a federal permit.

The members reviewed and provided comments on the draft survey prepared by Pete Simone. Rick advised that they would post the agenda for the Visioning Session and the survey on the Township website on Friday December 9th.

The Committee will review revised survey at their meeting on December 7th.

The members discussed the format of the Visioning Sessions. It was the consensus of the members that Pete Simone should as part of his presentation provide:

- A brief background on the Milltown Dam project
- That the Milltown Reservoir is currently classified as a passive recreation area and that is not expected to change.
- The Dam Committee has been asked to provide the Board with a recommendation.
- That while the Milltown Dam site has a lot of opportunities, the site also has a lot of constraints.

1 Rick was asked to prepare the opportunities/constraints list for the next meeting.

2
3 **Adjournment:**

4 There being no further business, Dave moved to adjourn the meeting at 9:00 pm the motion was
5 seconded by Chuck and approved unanimously.

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7 Respectfully submitted,

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11 Louis F. Smith, Jr.
12 Township Manager

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**EAST GOSHEN TOWNSHIP
MILLTOWN DAM COMMITTEE
1580 PAOLI PIKE
DECEMBER 7, 2016 – 7:00 pm
FINAL MINUTES**

Present:

Mike Lehmicke, Vince “Mick” McInnis, Vice Chair, Glenn Artman, Dana Pizarro, Dave Hewett and Chuck Hepler. Also in attendance were Supervisor Marty Shane and Township Manager Rick Smith.

Call to Order & Pledge of Allegiance:

Mike called the meeting to order at 7:07 pm and lead the assembly in the Pledge of Allegiance.

Moment of Silence:

Rick called for a moment of silence to honor the members of the military who defend our country.

Minutes:

Dave motioned to approve the minutes of the November 30, 2016 meeting as presented; the motion was seconded by Glenn and approved unanimously.

Old Business

The Board reviewed the revised survey. It was a consensus of the members to revise the 3rd item under Question 10 to just “Boardwalks” since they may not be only located in the wetlands. Rick was requested to find out when the survey would go live on the website.

The Committee discussed where the wetlands would be located, and if they would impact how the site was developed. Rick advised that Gannett Fleming has delineated the existing wetlands at the site. He noted that as a general rule there can be no net loss of wetlands with dam removal projects. The expectation was that some of the existing wetlands would dry up when the reservoir is drained, but that new wetlands will develop at other locations along the stream.

New Business:

Chuck updated the members on his observations from the Hershey Mill Dam Visioning session that was held on Monday, December 5th. He noted that Pete Simone had done a good job in getting input for the residents in attendance.

The members discussed the format of the Visioning Sessions. Chuck noted that Pete Simone had followed the script this Committee had agreed upon on November 30, 2016 and it had worked well. It was the consensus of the members that Mike would open the meeting and after the Committee members had introduced themselves, he would term the meeting over to Pete Simone.

The Committee discussed mechanics of the project. Rick advised that it was anticipated the spillway would be lowered in stages, and it would take about one growing season to get the

spillway at the design elevation and the site established with vegetation. It was suggested that Pete Simone provide the public with a timeline as part of his presentation so they would know what to expect.

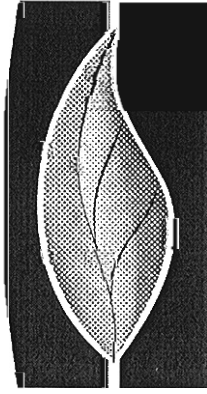
Adjournment:

There being no further business, Chuck moved to adjourn the meeting at 8:20 pm, and the motion was seconded by Dave and approved unanimously.

Respectfully submitted,

Louis F. Smith, Jr.
Township Manager

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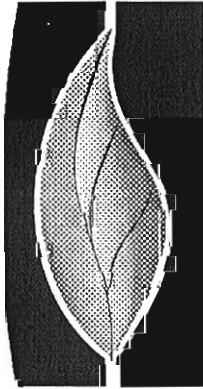


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MEETING SIGN IN SHEET

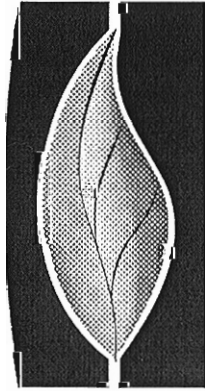
Project: Milltown Dam Park Open Space Master Plan Project: 19060.10
 Location: East Goshen Township Building Date: 12.14.2016
 Topic: Public Meeting #1 - Project Background & Brainstorming Time: 7-8:30 PM

NAME	ADDRESS	EMAIL
1. JASON LANG		jlang@eastgoshen.org
2. Dana Pizano		
3. Michael Lehmick	4 Reservoir Road	lehnickm@gmail.com
4. Chuck Hegler	124 Reservoir Rd	chuckhegler@yahoo.com
5. Michelle Glosson	14 Reservoir Rd	michelleglosson@gmail.com
6. Glenn Artman	50 Lockwood Lane	Rose. Artman@gmail.com
7. Vincent McGinnis	32 Lockwood Lane	nick7119@aol.com
8. Melissa McGinnis	"	"
9. Jim Mc Baize	34 Lockwood Lane	
10. Karen Lehmick	4 Reservoir Road	



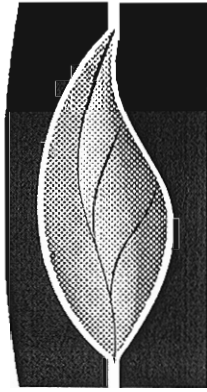
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NAME	ADDRESS	EMAIL
Gerri Connor	36 Lochwood Ln	West Chester Pa RA19380
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NAME	ADDRESS	EMAIL
39. Rich Swenson	20 Reservoir Rd	WANTERUNIO2@AOL.COM
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**EAST GOSHEN TOWNSHIP
MILLTOWN DAM COMMITTEE
1580 PAOLI PIKE
DECEMBER 14, 2016 – 7:00 pm
DRAFT MINUTES**

Present:

Mike Lehmick – Chair, Vince “Mick” McInnis - Vice Chair, Glenn Artman, Dana Pizarro, Dave Hewett, and Chuck Hepler. Also in attendance were Supervisor Marty Shane, Township Manager Rick Smith, and Peter Simone, Sarah Leeper, and Melissa Barley from Simone Collins.

Call to Order & Pledge of Allegiance:

Mike called the meeting to order at 7:00 pm and lead the assembly in the Pledge of Allegiance.

Moment of Silence:

Mike called for a moment of silence to honor the members of the military who defend our country.

New Business:

The members of the Dam Committee introduced themselves. Mike then introduced Peter Simone who introduced the members of his firm.

Peter advised those in attendance that the Milltown Reservoir was classified as a passive recreation area and there were no plans to change the designation. He noted the Committee was tasked with making recommendations on how the area above the dam would be developed after the dam was breached. The project will proceed in phases and the grants will be applied for. He also mentioned that surveys will be posted on the Township website to obtain input from the public.

Peter stated he had developed four goals for this project:

- Engage the public to get the best plan
- The project should be ecologically sustainable
- Protect the privacy of nearby residents
- Have a low maintenance landscape

He asked residents what they are losing and the residents noted the following:

- Wildlife
- Bald eagles
- Viewshed
- Fishing
- Ice skating
- Looking at water
- Ice hockey
- Open water views
- Joy

- Property values
- Sense of security (privacy)
- Loss of long views over water

Peter then provided some history on the dam and noted the following:

- The area will flood after the dam is breached.
- The landscape will be much more dynamic.
- PA DEP wants nature to determine the location of the stream.
- The water level is expected to be lowered in stages. This will let the exposed areas dry out and vegetation to become established. If need be, the Township will mow the area on a regular basis.
- He noted that State grant applications will be due in April 2017 and the Township will be in a position to apply.

Peter then asked what they would like to have and the residents suggested the following:

- Multiple ponds
- Buffer planting for homes in Waterview
- Scenic views from Reservoir Road
- Maximize the amount of water features

In response to a question, Peter advised that approximately 2 acres of wetlands exist at the reservoir today, and that the Township would be required to mitigate their loss. He noted that ponds require regular maintenance and that there is greater diversity of wildlife in a wetland than in a pond.

Peter then showed photos of amenities that had been installed at other stream restoration projects and the following was noted by those in attendance:

- Install a desilting pond upstream
- Spread milkweed seeds for butterflies
- Do something about the geese
- Maximize the water features
- No fences
- No trails
- Need to address trash problem
- Bike path/trail along Reservoir Road with a connection to Lochwood Lane
- Install crosswalk at Strasburg Road and Reservoir Road

Public Comment

None

Adjournment:

There being no further business, Chuck moved to adjourn the meeting at 8:25 pm, and the motion was seconded by Dave and approved unanimously.

1 Respectfully submitted,

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5 Louis F. Smith, Jr.

6 Township Manager

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**EAST GOSHEN TOWNSHIP
MILLTOWN DAM COMMITTEE
1580 PAOLI PIKE
DECEMBER 15, 2016 – 7:00 pm
DRAFT MINUTES**

Present:

Mike Lehmicke - Chair, Vince “Mick” McInnis - Vice Chair, Dana Pizarro, Dave Hewett, and Chuck Hepler. Also in attendance were Supervisor Marty Shane, Township Manager Rick Smith, and Peter Simone, Sarah Leeper, and Melissa Barley from Simone Collins.

Call to Order & Pledge of Allegiance:

Mike called the meeting to order at 7:10 pm and lead the assembly in the Pledge of Allegiance.

Moment of Silence:

Mike called for a moment of silence to honor the members of the military who defend our country.

New Business:

The members of the Dam Committee introduced themselves. Mike then introduced Peter Simone who introduced the members of his firm.

The only resident in attendance was the wife of one of the Committee members, who indicated she did not have any comments on the project.

The members and Peter Simone had a general discussion about the project and the following issues were noted:

- Trash along Reservoir Road
- Speed of vehicles on Reservoir Road
- This is not a regional attraction.
- Fishing is the primary draw of people to the Reservoir.
- Noted that the Reservoir site is part of 100 acres of Township open space in the Chester Creek Watershed

Public Comment

None

Minutes

Dave moved to approve the minutes of December 7, 2016, and the motion was seconded by Dana and approved unanimously.

Adjournment:

There being no further business, Dave moved to adjourn the meeting at 8:15 pm, and the motion was seconded by Chuck and approved unanimously.

1 Respectfully submitted,

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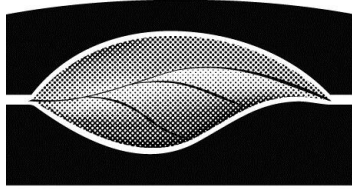
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5 Louis F. Smith, Jr.

6 Township Manager

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MEETING NOTES

Project:	Milltown Dam Park and Open Space Plan	Project No.:	16060.10
Location:	East Goshen Township 1580 Paoli Pike, West Chester, PA	Meeting Date/Time:	01.11.2017 7- 8:30 pm
Topic:	Committee Meeting #2 – Site Concept Review	Issue Date:	3/21/2017

- There was a request to see, at some point, for us to take the survey and make it so we can see only the people who live right on the reservoir.
- Before the meeting started, one committee member asked for printouts of concepts, and the SC team agreed to send out copies by email to be distributed to everyone.
- What are the control structures, where are they? Are they going to be made of concrete? Stone?
- Once we find out where the stream is going, do we have an idea about where the pond might shift? If it changes from the existing concept design, the stream and the pond will just switch locations.
- Can we post the concepts on the website? Maybe we can post them so that people who can't come to the meeting can see the plans on the website so they aren't left out, and can respond with feedback
- Is there a cost yet? No. As a follow up question where would sediment be moved to? Offsite? No, we would move it somewhere on site to not incur any more cost.
- Would we receive Federal or state funds? Mostly state funds.
- What are the differences between the plans in our words? The streams and ponds are in different places in all of them. The ponds are not as big as the reservoir, but they are pretty big. Also the inclusion of the islands in concept one make it different than the others. The stream habitat is going to want to be similar to the area above the site as far as the width and depth of the stream. A pond with creek going through it would be hard to maintain because it would fill with sediment faster than a pond not on the main course of the stream. Concept 2 is a long and linear type of system with the 2 long

ponds. Concept 2 was investigating a design in the case that the stream took a course along the middle of the site.

- Attendees were surprised that we were able to get so much water in the ponds.
- How do we feel about maintaining the 3 foot pond depth? We have to move a lot of material to do it. We should get the plan settled first, and then we'll look at cost. If we find out the cost is too much, we'll look at ways to value engineering: maybe make the pond as long but not as wide.
- Balance the cut and fill: make the islands high enough so that they are sustainable. The damage is not caused by the flooding: it's caused by the velocity of the stream. The value of a low mow lawn: root structure is much stronger, won't be as susceptible to flooding and erosion. Could mow the path every 2 weeks depending on what people want.
- What is the size of the current reservoir? 12 Acres? It would be helpful for SC to superimpose the existing reservoir over the concepts.
- Sediment management: how would the ponds be accessed by the township in order to maintain them? We could install a fore bay in the upper hydraulic end. Worst case scenario: set up a machine along the perimeter and have access to the area.
- Concept 2 looks like it will swamp in quickly. There is more control and engineering with that one.
- Concepts 1 and 3 (each one pond) seem to have the most interest in terms of trails, and fishing piers. 1 and 3 seem to be the best to work with, might have wetland issues, and boardwalk to maintain.
- Do we have copies to hand out? We don't but we can send them out tomorrow.
- We may need to create an island as big as in 3 for the other two concepts. Explain under what circumstances you would need to have a larger island. Explain details, and what would cause you to make decisions one way or another.
- SC team asked how the presentation was. Was there too much or not enough about different explanations of the parts of the site (wetlands, etc.)? There were too many words when you were explaining the site components beforehand (wetlands, Riparian buffer, etc.). We wanted to get to the concepts. When we are going over the bubble diagram we can talk about components. Bullet point the components before we get into the concept explanations. Show the existing reservoir with components. Show each concept briefly.
- Concept two is more expensive (two ponds, more engineering), but which one is next as a guess? Not sure, maybe 1 because pond is bigger.
- Are we going to do constructed wetlands? We are going to try not to do constructed wetlands because they are expensive, and unpredictable.

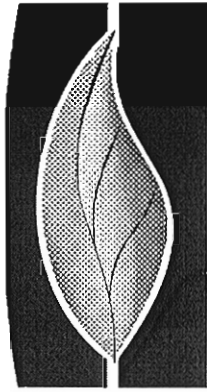
- A committee member said that if we lose wetlands, we should go to the government and make them pay for them. We have to spend money here to cut down sediment, so we will spend on wetlands because they are important. Use this opportunity to help capture sediment, and fulfill MS4 requirements.
- Of concepts 1 and 3 which has the least factor for to have to do meadows? There are lots of different decisions that have to take place there: mowing, plant species, and soil. This committee member prefers a concept that does not have meadows over a concept that does
- Is there a possibility to make the ponds 4 feet deep? Possibly – 3 feet is the minimum. Is it critical to get water flow through the pond? Yes, they get messy if not.
- Will the ponds be an attractive nuisance to kids? No different than the existing reservoir.
- Is there funding to support a trail along here? The township got lots of money for that this year, and they may get more next year too. The pollution reduction plan is due in September. If you get more than 10% capture in this stream, do they give you a credit on another stream? You can't just do it with numbers, you have to build stuff.
- This presentation will settle down the folks against the removal of the dam, it will be beautiful. In the presentation, talk about beautiful plants, stress world class landscape. We understand that the weeds will be there for a while.
- A resident nesting eagle family is near the reservoir. And a threatened turtle. Please provide an area for the wildlife to live and not move them offsite. The turtle can be brought back. It doesn't have to move, eastern red belly turtle. April 1 to October 1 can work in the land around that season because the turtles dig into the mud.
- Local colleges may have interest in setting up a project with site. Conservation district may have interest too.
- Turtles in other projects below the dam were numerous.
- Permitting could take you anywhere on this project.
- Presently surprised on the project results.
- There was a girl who was jogging and lost her leg in an accident near here. The traffic scares people on Strasburg Road. There is no pedestrian light signal. The sign that told people not to walk along Strasburg Rd is gone. Don't know why. People can't take bikes many places around the area because it is unsafe with cars.
- Keep in mind the stream on the property owner's property from his spring house. One other spring in the heavy tree line. 3 definite streams. He wants flow out of his spring stream. Google the original spring house built 1830.

This report represents the Professional's summation of the proceedings and is not a transcript. Unless written notice of any correction or clarification is received by the

Professional within ten days of issue, the report shall be considered factually correct and shall become part of the official project record.

Sincerely,
SIMONE COLLINS, INC.
LANDSCAPE ARCHITECTURE

[Name]

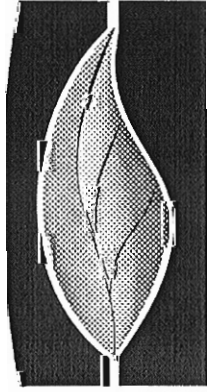


SIMONE COLLINS
LANDSCAPE ARCHITECTURE
 119 EAST LAFAYETTE STREET NORRISTOWN, PA 19401
 PHONE: 610.239.7601 FAX: 610.239.7606
 WWW.SIMONECOLLINS.COM

MEETING SIGN IN SHEET

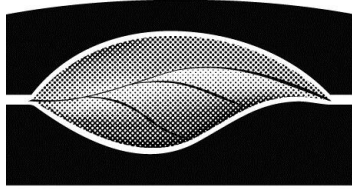
Project: Milltown Dam Park Open Space Master Plan Project: 19060.10
 Location: East Goshen Township Building Date: 01.25.2017
 Topic: Public Meeting #2 - Site Concept Review Time: 7:00 - 9:00 PM

NAME	ADDRESS	EMAIL
1. <i>Dana Pizarro</i>	<i>1002 Ivy Ln</i>	
2. <i>Heidi Kane</i>	<i>46 Lochwood Ln</i>	<i>bivertmon@comcast.net</i>
3. <i>Heidi Kane</i>	<i>42 Lochwood Ln</i>	<i>HKane310@yahoo</i>
4. <i>Melissa McGinnis</i>	<i>32 Lochwood Ln</i>	<i>mick7119@aol.com</i>
5. <i>Vince McGinnis</i>		
6. <i>Staci Miller</i>	<i>1323 W. Chester Pike</i>	<i>smiller@harmetropolitan.com</i>
7. <i>Glenn Arman</i>	<i>50 Lochwood Ln</i>	<i>Rose.Arman@gmail.com</i>
8. <i>Rich Swanson</i>	<i>20 Reservoir Rd</i>	<i>WANTARUN102@AOL.COM</i>
9. <i>Jim Sealey</i>	<i>47 Lochwood Ln</i>	<i>jimsealey@comcast.net</i>
10. <i>Edward Decker</i>	<i>40 Lochwood Ln</i>	<i>edward.a.decker@gmail.com</i>



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NAME	ADDRESS	EMAIL
11. Denise Decker	40 Lochwood Ln	denise.decker1@gmail.com
12. Gail Connor	36 Lochwood	
13. Elizabeth Robinson	37 Waterview Rd.	eprobinson1@verizon.net
14. Spencer Robinson	37 Waterview Rd.	
15.		
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MEETING NOTES

Project:	Milltown Dam Park and Open Space Plan	Project No.:	16060.10
Location:	East Goshen Township 1580 Paoli Pike, West Chester, PA	Meeting Date/Time:	01.25.2017 6 - 7 pm
Topic:	Public Meeting #2 – Site Concept Review		

ATTENDEES

See sign-in sheet

NOTES

1. The survey data is unclear as to what is being shown, specifically for the weighted questions ("pick top three choices"). SC: People who took the survey were asked to pick their top three desired programs for the site. The order of the graphic shows the program that had the most overall votes first. For example, an option like "unobstructed water views" may have had the most number of "1st choice" votes, but it was second in overall votes to "habitat for plants and animals".
2. What does the schedule look like if no grants are secured? The schedule is similar but the township has been successful in getting grants, and this project has features that are attractive to grant awarders, so it will probably secure funding. The project may take longer to do if there is not enough funding this year. Sometimes the second year is successful in securing funding if the first year is not successful with the grant application. This project is attractive to grant approvers because it includes dam removal, native vegetation, etc. There is also an Township MS4 plan to enhance water quality; this site may be able to meet those demands and thus receive funding.
3. In the presentation you presented the pond with minimum depth of 3 feet. What is the ideal pond depth? SC: About 5 feet. When we have a preliminary plan, we will run the numbers to find out the cost. The size of the ponds may decrease to limit cut and fill. We do not want to do decrease the pond size but it may be the best thing, depending on the numbers that occur. The deepest part of the reservoir is near the dam now 5-6 feet. It does support life now.

4. The supervisors had an option 10, which had a figure amount in it for 15 million. Do we know the amount for the Milltown Dam part of the project? The \$15 million amount is for the breaching of Hershey's Mill and Milltown Dams and the master plan for both parks, the and the Paoli Pike Trail. The price may reduce in March depending on how we predict the construction will be spread out over time.
5. The residents select the plan and the township approves it. East Goshen Township is ahead of a lot of others in some of the grant awards. How much grant money for Milltown? Around a million. Is there a final cost estimate from Gannett Fleming yet? No, we won't know the cost for a while, probably 2018. It is important that GF and SC work together so they keep each other aware about the budget. The money probably will not be all provided by grants, the township will probably provide money. Trying to figure out the cost now is wasteful. Don't worry about the cost, think about the design. A large percentage of the cost is in the plantings and the earth moving. SC is going to try to incorporate work from this plan into the Gannett Fleming cost.
6. How many parking spaces are in East Goshen Park? About 500. People probably won't come if there is no parking.
7. Will there be bathroom facilities at this park? If they were there they would be composting toilets. SC probably won't suggest restrooms, but maybe we will need to think about that moving forward. Applewood Park has passive recreation, and there are no restrooms there. Marty said that they may be able to provide decent portable restrooms at Milltown as a test.
8. There is a drop in elevation that is close to 20 feet near the parking area. Is this area handicap accessible? Yes, there would be an ADA compliant ramp from the parking area to the pond edge.
9. For concept 2, the pond elevation is shown at 338. If you are using the pond as a floodplain anyway, why not have the pond lower to have it hold more water during a large storm event? The pond would flood more often if it was a lower elevation, and as a result would fill with sediment faster.
10. The concepts show a proposed pathway and existing bridge on north side of East Strasburg Road, across the street from the park. There are about 25 residents on Lochwood Lane, north of the park. Anyone walking through the park will cross East Strasburg Road twice to make a loop around the park. Instead, there should be a path and bridge along Strasburg Road on the other side of the street, the park side. And instead of the proposed bridge on Reservoir Road to access the existing parking area to the north of the site, put a pathway away from the road that cuts across that property to preserve the quality of the existing one-lane stone bridge on Reservoir Road. Peter Simone: Thank you for your feedback, we will consider it. When we get to that phase of the detail design we will also show different options of nice bridges including stone and concrete varieties.
11. A committee member said that low mow grass would suit him better than no mow grass. It also suits him better to use meadow sparsely around the dam. SC: the meadow will be used to discourage people from going close to the dam. It is important to keep the reservoir more of a residential area.
12. Would you be able to make the ponds larger? The pond cannot be very much larger. Three acres is a pretty large size for a pond. We have constraints with the size of the pond because we want

to protect the creek, and to do this, we need to allow room for riparian buffers, and we need to have a place to put the pond spoils. Three acres is about half the size of the existing pond.

13. Does the township foresee plowing parking lots and walkways in the winter? The township does not maintain walkways now. We suspect to do same thing in this park. The township will plow the parking spaces. A committee member recommends that we limit the parking spaces to five per parking area (15 spaces total including the existing offsite lot) in order to limit cost. PS: The key cost for parking areas is grading, not asphalt or paint. Maybe we would limit the number of parking spaces because we want to limit the people coming to the park to preserve a peaceful experience. You would not want 100 people in the park. The park would get 25 people on a weekend.
14. The 3 acre pond does not include the acreage of the stream.
15. There was an observation that people at the beginning of these meetings a few months ago wanted to see a large pond on the plans. There is a lot of water on these concept plans. It is not what it was originally, but compared to Hershey's mill where the concept pond is an eighth of an acre, there is a large amount of water. There are not a lot of trees to interrupt the view scape. We still have to talk about permitting issues in the future, which may change the outcome of the plan.
16. What will happen to the design if the stream snakes back and forth? SC: We will address that problem if it occurs. The stream draw down will probably happen this summer; we will know at that time where the stream is going to settle. We predict that it will settle along the edge of the site, an assumption based on historical locations of the stream when the reservoir was drained. Construction documents will not be drafted until early 2018. The end result of the park likely will not look like any of these three plans. It will likely be something close to one of the plans. If scheme 3 gets the most votes, doesn't mean we will definitely go in that direction
17. Being able to walk is on pathways around the park is important; it makes the area more world class. How would someone get to the walking trails if they lived to the south or east of the park? Would they have to drive from Lockwood Lane? SC: They would walk around the developments and along West Chester Pike, onto Reservoir Road to the get to the trailhead. There is no direct access from Waterview Apartments to the site. If the site is popular, maybe the apartments will want direct access in the future. Sarah Leeper: One of the design objectives for these plans was to always have water between the pedestrian circulation and the neighbors near the site for privacy.
18. There was an observation that there was more emphasis on trails and privacy with the Hershey's Mill project. There was an effort here by property owners in the beginning to stress the opposition to trails near their properties because of the desire to preserve privacy.
19. One committee member and Lochwood Lane resident likes the idea of as much parking on site as possible. They would be unhappy to see Lockwood Lane used as overflow parking for the park. It would be good to maximize the parking area on the existing open space. SC: A similar site is Squire Cheyney Farm Park. It is a passive park with a trail. You will see around five or six cars in the parking lot at any given time. Milltown Dam Park will be nicer because it has water. Remember that a parking lot with ten spaces will have one handicap space.

20. There is an existing concrete parking lane at the corner of Strasburg Road. SC: Maybe that should be considered as parking area also.

This report represents the Professional's summation of the proceedings and is not a transcript. Unless written notice of any correction or clarification is received by the Professional within ten days of issue, the report shall be considered factually correct and shall become part of the official project record.

Sincerely,
SIMONE COLLINS, INC.
LANDSCAPE ARCHITECTURE

[Name]

**EAST GOSHEN TOWNSHIP
MILLTOWN DAM COMMITTEE
1580 PAOLI PIKE
FEBRUARY 22, 2017 – 7:00 pm
DRAFT MINUTES**

Present:

Chair-Vince “Mick” McInnis, Vice Chair-Dana Pizarro, Dave Hewett, Glenn Artman, Mike Lehmicke and Chuck Hepler. Also in attendance were Supervisors Marty Shane, Carmen Battavio, Mike Lynch, Township Manager Rick Smith, and Peter Simone and Sarah Leeper from Simone Collins.

Call to Order & Pledge of Allegiance:

Mick called the meeting to order at 7:00 pm and lead the assembly in the Pledge of Allegiance.

Moment of Silence:

Mick called for a moment of silence to honor the members of the military who defend our country.

New Business:

Sarah reviewed the results from Survey 2 stating that there were 55 responses. She noted that Concept Plan 1 was the first choice for 20 respondents and the second choice for 5, Concept Plan 2 was the first choice for 7 respondents and second choice for 18. Concept Plan 3 received 4 first place votes and 7 second place votes.

She also noted the survey indicated that while people to not walk on the roads there was support for a trail to the site and within the site. In addition there was interest in the water feature (pond) with fishing access and the normal park amenities.

Peter noted that while the final location of the stream had not been determined, Concept Plans 1 and 2 could be flipped if need be.

Rick noted that people will have a hard time visualizing the flipped plan and suggested both versions should be depicted for the selected Concept Plan.

The Committee reviewed the three Concept Plans and it was the consensus of the Committee to go with Concept Plan 1, since that showed the largest body of water possible.

It was noted that while the original construction plans showed the creek being close to Reservoir Road, the last time the impoundment was dewatered the creek was on the east side. It was the consensus of the Committee that the Draft Plan, which would be referred to as Plan 1A should show the creek on the east side. This plan would be fully developed with all of the applicable elements. A second Draft Plan 1B would be prepared that would show the creek along Reservoir Road. This plan would contain less detail.

1 There was some discussion of how large the pond could be? Peter noted that pond on Concept
2 Plan 1 was +/- 3 acres in size. The cuts and the fills on Concept Plan 1 are balanced, which means
3 that none of the material has to be removed from the site. A larger pond would require material
4 to be removed which would increase the cost. Peter stated the actual pond may be larger or
5 smaller than what is depicted on the Concept Plan as the engineering is finalized.

6
7 Mick noted that 5 homes in Waterview currently have a direct view of the water, and these views
8 should be preserved if possible.

9
10 Marty asked Peter if they had developed any preliminary costs. Peter noted that they were
11 moving about 38,000 cubic yards of sediment, which at \$9 a cubic yard worked out to around
12 \$350,000. Peter noted that DCNR grant applications were due April 12, and DCED grant
13 applications were due May 31st. In addition the Township may be able to get credit against their
14 MS4 Permit obligations and some of the improvements could be done in phases. Peter noted that
15 detailed costs estimate will be presented with the Draft Plan in March.

16
17 The Committee then discussed the trails, site access and parking.

18
19 It was the consensus of the Committee that the Draft Plan should show the trail along Reservoir
20 Road, and a foot path in the impoundment area. The Plan should also depict a future connection
21 along Reservoir Road to West Chester Pike, and future connection along Reservoir Road to the
22 north, both of which are referenced in the Comp Plan, and a future connection to Lochwood
23 Lane. The intention being that these connections would be constructed at a later date. It was
24 suggested that a pedestrian crosswalk be marked at Park Avenue.

25
26 It was a consensus of the Committee that a parking area for +/- 10 cars with adequate sight
27 distance be installed at the south end of the Reservoir. Additional parking spaces and/or areas
28 could be installed in the future if the demand warranted it.

29
30 Rick noted that the parking area and paved trails would necessitate stormwater management
31 which increases the cost.

32
33 The Committee discussed the need for a restroom, and it was the consensus that if one was
34 installed it should be located between the parking area and the dam, since this area contained
35 several trees. Carmen noted that the Township was going to install a porta-potty in the
36 Applebrook Park this summer. The porta-potty would be screened by fencing and used to
37 determine whether there is a need for a permanent facility. It was suggested that this approach be
38 tried with this project.

39
40 **Public Comment:**

41 Carmen stated he was very impressed by the Committee's efforts.

42
43 **Minutes:**

44 Dana moved to approve the minutes of January 11, 2017, and the motion was seconded by Dave
45 and approved unanimously.

1 Dana moved to approve the minutes of January 15, 2017, and the motion was seconded by Mick
2 and approved unanimously.

3
4 **Adjournment:**

5 There being no further business, Mike moved to adjourn the meeting at 8:25 pm, and the motion
6 was seconded by Dave and approved unanimously.

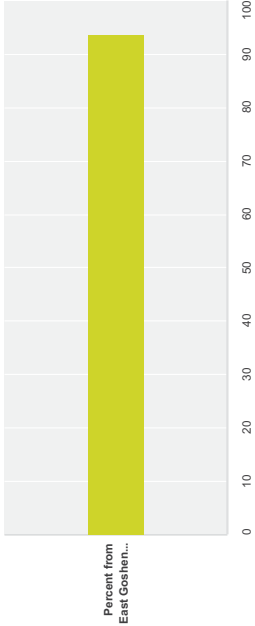
7
8 Respectfully submitted,

9
10
11
12 Louis F. Smith, Jr.
13 Township Manager

14
15 F:\Data\Shared Data\Minutes\Milltown Dam Committee\1-22-17 Draft Minutes.doc

Q1 What is the name of the municipality in which you live?

Answered: 113 Skipped: 0

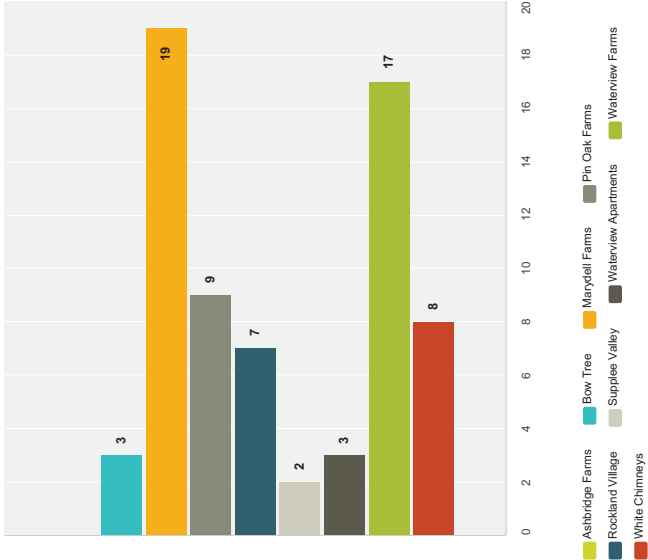


	East Goshen Township	West Goshen Township	Westtown Township	Total	Weighted Average
Percent from East Goshen Township	93.81% 106	2.65% 3	3.54% 4	113	93.81

#	Other (please specify)	Date
	There are no responses.	

Q2 What is the name of the neighborhood / development in which you live?

Answered: 68 Skipped: 45

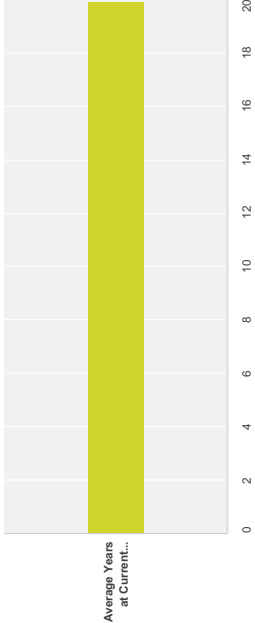


#	Other (please specify neighborhood or street)	Date
1	meadows	1/9/2017 1:53 PM
2	Reservoir Rd	1/7/2017 12:06 AM
3	Vista Farms	1/4/2017 2:20 PM
4	Milltown	1/3/2017 9:01 AM
5	Rossmore	1/2/2017 10:11 PM
6	E Strasburg RD	1/1/2017 2:12 PM
7	On strasburg near park ave and reservoir rd.	1/1/2017 1:24 PM
8	Hershey's Mill	12/30/2016 8:35 PM
9	Hillock Drive	12/28/2016 5:12 PM
10	Parry circle	12/28/2016 3:51 PM

11	Reservoir rd	12/28/2016 3:49 PM
12	Park Avenue	12/28/2016 3:36 PM
13	Parry Circle	12/28/2016 9:56 AM
14	Reservoir Road	12/25/2016 5:19 PM
15	Reservoir Road	12/24/2016 3:46 PM
16	Homestead Acres 1620 Highland Ave	12/22/2016 6:38 PM
17	Vista Farms	12/20/2016 7:56 PM
18	Reservoir Road	12/20/2016 8:31 AM
19	WESTTWN MEWS	12/19/2016 10:39 PM
20	lochwood lane	12/19/2016 8:58 AM
21	Milltown	12/19/2016 8:23 AM
22	Westworth	12/18/2016 1:46 PM
23	Ivy Lane	12/18/2016 12:07 PM
24	6 Reservoir Rd.	12/18/2016 9:39 AM
25	Oakbourne Rd	12/18/2016 8:45 AM
26	Reservoir Roa	12/17/2016 9:25 PM
27	Reservoir Road	12/17/2016 2:32 PM
28	Glen Acres	12/17/2016 1:11 PM
29	Reservoir Rd	12/17/2016 1:08 PM
30	Hearsay's mill	12/17/2016 12:47 PM
31	Reservoir Rd	12/17/2016 1:53 AM
32	Westwynn	12/16/2016 9:37 PM
33	Clocktower Woods	12/16/2016 5:17 PM
34	clocktower woods	12/16/2016 4:38 PM
35	Wylipen Farms	12/16/2016 3:49 PM
36	Greenhill	12/16/2016 2:52 PM
37	Summit House Condo	12/16/2016 12:33 PM
38	Summit House	12/16/2016 12:03 PM
39	Wylipen Farms	12/16/2016 1:14 AM
40	Clocktower Woods	12/16/2016 1:06 AM
41	Hershey's Mill	12/16/2016 1:03 AM
42	Park Ave off of Reservoir Road	12/16/2016 10:57 AM
43	Clocktower woods	12/16/2016 10:27 AM

Q3 How many years have you resided at your current address?

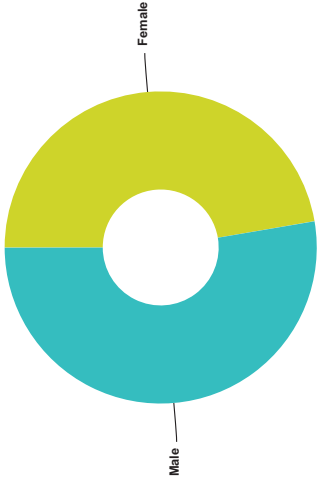
Answered: 113 Skipped: 0



Average Years at Current Address	0-10	10-20	20-30	30-40	40+	Total	Weighted Average
	30.09% 34	29.20% 33	11.50% 13	22.12% 25	7.08% 8	113	19.92

Q4 What is your gender?

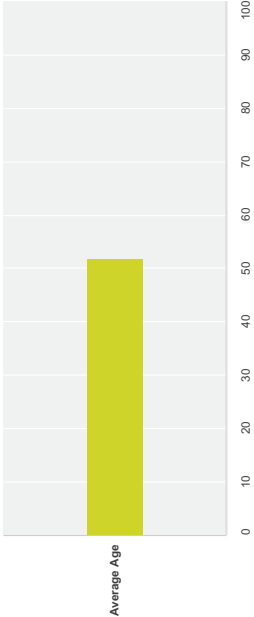
Answered: 112 Skipped: 1



Answer Choices	Responses
Female	47.32% 53
Male	52.68% 59
Total	112

Q5 What is your age?

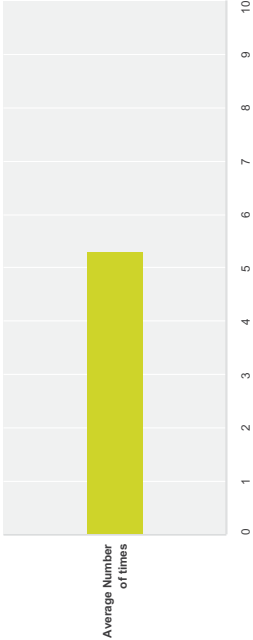
Answered: 111 Skipped: 2



	<18	19-25	26-45	46-65	65+	Total	Weighted Average
Average Age	0.90% 1	0.90% 1	24.32% 27	50.45% 56	23.42% 26	111	51.85

Q6 During a normal week, how many times do you drive along Reservoir Road, past the dam and the reservoir?

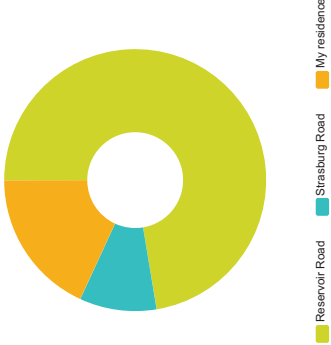
Answered: 112 Skipped: 1



	0	1-5	5-10	10+	Total	Weighted Average
Average Number of times	11	54	19	28	112	5.30

Q7 From where do you see the dam area most often?

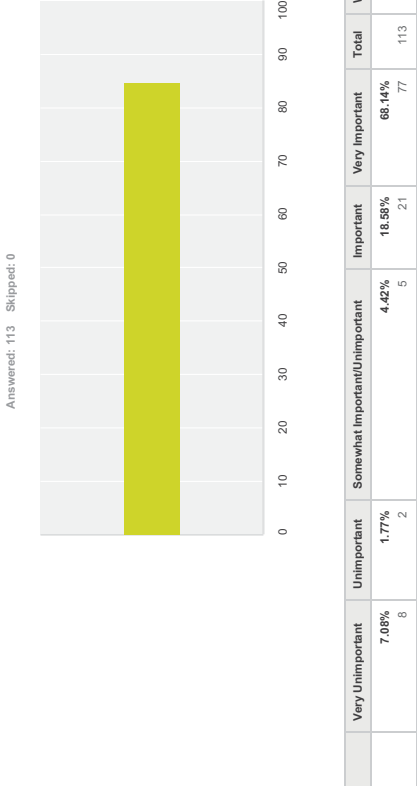
Answered: 105 Skipped: 8



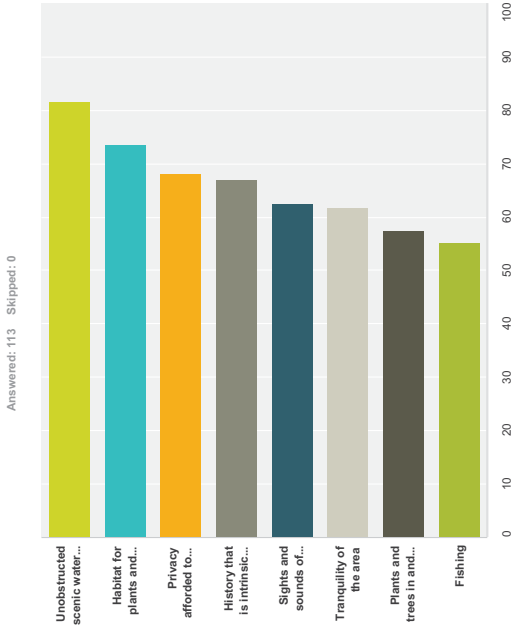
	Reservoir Road	Strasburg Road	My residence	Total	Weighted Average
(no label)	76	10	19	105	1.46

#	Another location (please specify)	Date
1	Route 3	1/4/2017 11:42 AM
2	lochwood road	12/30/2016 7:59 PM
3	Lockwood lane	12/20/2016 1:31 PM
4	Lochwood Lane	12/19/2016 7:02 PM
5	From Lochwood Lane	12/17/2016 5:42 PM
6	Lockwood Rd	12/17/2016 2:55 PM
7	lochwood lane	12/17/2016 12:59 PM
8	Lockwood In	12/17/2016 12:02 PM
9	Few times per year.	12/16/2016 11:46 AM
10	Lochwood Lane	12/16/2016 9:16 AM

Q8 In general, how important do you feel scenic resources are to the quality of life in the community?



Q9 With regards to the existing Milltown Dam site, what are the 3 (three) most important aesthetic or cultural resources (1 being the most important, and 3 being the least important)?

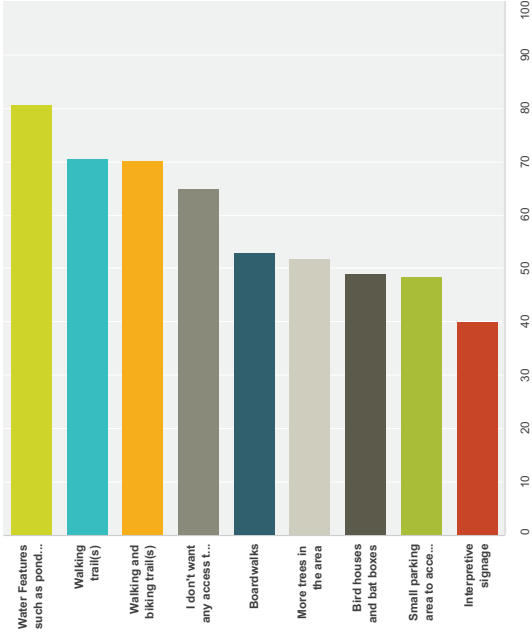


	1	2	3	Total	Weighted Average
Unobstructed scenic water views	58.53% 33	25.79% 15	14.29% 8	56	81.73
Habitat for plants and animals	39.34% 24	40.98% 25	19.67% 12	61	73.49
Privacy afforded to residential properties that back onto the reservoir	48.28% 14	6.90% 2	44.83% 13	29	68.14
History that is intrinsic to the dam structure	31.25% 5	37.50% 6	31.25% 5	16	67.00
Sights and sounds of wildlife in and around the reservoir	25.49% 13	35.29% 18	39.22% 20	51	62.47
Tranquility of the area	22.22% 10	40.00% 18	37.78% 17	45	61.87
Plants and trees in and around the reservoir	15.79% 6	39.47% 15	44.74% 17	38	57.45
Fishing	17.86% 5	28.57% 8	53.57% 15	28	55.21

#	Another characteristic (please specify, and rank 1, 2 or 3) :	Date
1	really all above	1/7/2017 12:06 AM
2	Clean landscaping, access to ice skating and fishing	1/1/2017 2:12 PM
3	Habitat for plants & animals (1)	12/19/2016 8:23 AM
4	1). Preserve natural setting	12/16/2016 6:25 PM
5	Losing the reservoir for ice skating in the winter 1	12/16/2016 3:46 PM
6	Tranquility. 4	12/16/2016 2:18 PM

Q10 After the Milltown Dam has been partially breached, what improvements you would like to see at the Milltown Dam site, please rank the top 5 (five) with 1 being the most important and 5 being the least important.

Answered: 113 Skipped: 0



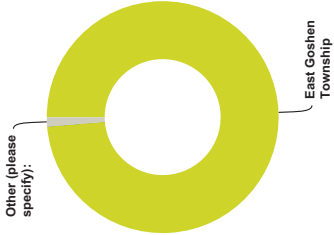
	1	2	3	4	5	Total	Weighted Average
Water Features such as ponds (s) for fishing/ scenic value	56.12% 55	15.31% 15	10.20% 10	12.24% 12	6.12% 6	98	80.61
Walking trail(s)	21.21% 14	34.85% 23	25.76% 17	12.12% 8	6.06% 4	66	70.61
Walking and biking trail(s)	26.23% 16	27.87% 17	26.23% 16	9.84% 6	9.84% 6	61	70.16
I don't want any access to the area	25.00% 4	18.75% 3	25.00% 4	18.75% 3	12.50% 2	16	65.00
Boardwalks	7.50% 3	25.00% 10	22.50% 9	15.00% 6	30.00% 12	40	53.00
More trees in the area	12.99% 10	10.39% 8	23.38% 18	28.57% 22	24.68% 19	77	51.69

Bird houses and bait boxes	3.13%	2	25.00%	16	15.63%	26.56%	29.69%	19	64	49.06
Small parking area to access trails	5.88%	4	14.71%	10	20.59%	33.82%	25.00%	17	68	48.53
Interpretive signage	4.17%	1	12.50%	3	12.50%	20.83%	50.00%	12	24	40.00

#	Another improvement (please specify, and rank 1, 2, 3, 4 or 5) :	Date
1	parking for all township citizens to use not jut a few	1/9/2017 1:53 PM
2	save the dam	1/7/2017 12:06 AM
3	Don't breach	1/4/2017 11:42 AM
4	Unless the silt and sediment is removed, the emptied basin "floor" will be not usable. The silty-sediment should be tested for heavy metals if left in place.	1/3/2017 6:35 PM
5	Return the area to its characteristics that were there prior to the dam.	1/1/2017 10:11 PM
6	Keep the area clean and usable not an overgrown swamp area	1/1/2017 2:12 PM
7	Walking/biking bridge connecting reservoir and waterview. Rank 1	1/1/2017 1:24 PM
8	1. Don't breach the dam. 3. If the dam must be breached, then connect the area to the open space and paths also on Reservoirs Rd, past the one car bridge.	12/28/2016 3:36 PM
9	1- maintain natural water, plant and animal cycles	12/20/2016 11:55 PM
10	Pond for ice skating in the winter 2	12/19/2016 10:57 AM
11	stop teenagers and homeless people from sleeping and camping along the water's edge	12/19/2016 8:58 AM
12	Sealing 3	12/18/2016 11:42 PM
13	Control of invasive vegetation and insects (rank 2)	12/17/2016 2:32 PM
14	1- would like it to remain a natural habitat	12/17/2016 2:00 PM
15	2. Tranquility 3. Support for wildlife (Boardwalks in wetlands. Trails to ponds/ponds.)	12/17/2016 1:08 PM
16	Forest area with as much water left for wildlife #1	12/17/2016 1:53 AM
17	5. Privacy afforded to residential properties 6. Weedless	12/17/2016 10:12 AM
18	3. Skating pond 4. dog park	12/16/2016 3:49 PM
19	Water area for ice skating 1	12/16/2016 3:46 PM
20	Small family oriented fishing stream would be great!	12/16/2016 11:46 AM
21	Area certified as bird sanctuary or wildlife preserve	12/16/2016 9:16 AM

Q1 What is the name of the municipality in which you live?

Answered: 77 Skipped: 1

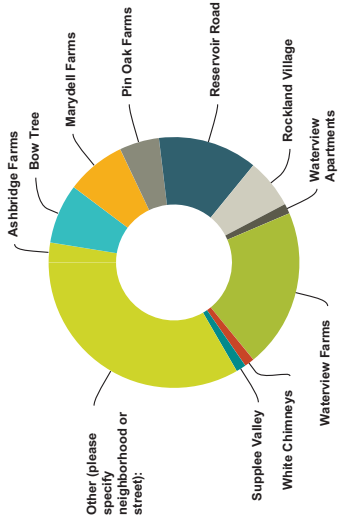


Answer Choices	Responses
East Goshen Township	98.70%
West Goshen Township	0.00%
Westtown Township	0.00%
West Whiteland	0.00%
East Whiteland	0.00%
Other (please specify):	1.30%
Total	77

#	Other (please specify):	Date
1	Live in Hershey Mill Estates	1/27/2017 1:09 PM

Q2 What is the name of the street / neighborhood / development in which you live?

Answered: 78 Skipped: 0

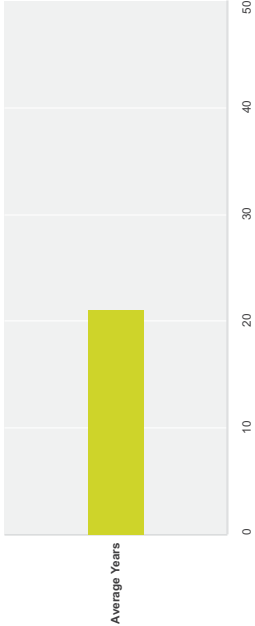


Answer Choices	Responses
Ashbridge Farms	2.56%
Bow Tree	7.69%
Marydell Farms	7.69%
Pin Oak Farms	5.13%
Reservoir Road	12.82%
Rockland Village	6.41%
Waterview Apartments	1.28%
Waterview Farms	20.51%
White Chimneys	1.28%
Supplee Valley	1.28%
Other (please specify neighborhood or street):	33.33%
Total	78

#	Other (please specify neighborhood or street):	Date
1	Lochwood Lane within 1000	3/21/2017 10:01 AM
2	Ivy Lane	3/18/2017 6:41 PM
3	park ave	3/1/2017 5:52 PM
4	park ave	3/1/2017 9:12 AM
5	Milltown	2/23/2017 11:14 AM

Q3 How many years have you resided at your current address?

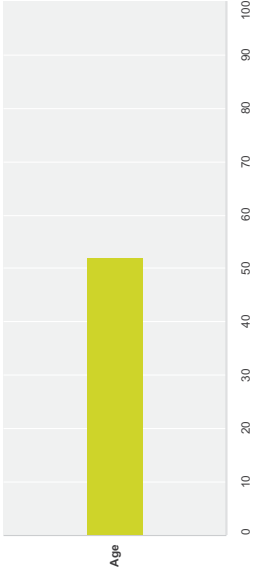
Answered: 78 Skipped: 0



Average Years	0-10	10-20	20-30	30-40	40+	Total	Weighted Average
	19	16	24	10	9	78	21.09

Q4 What is your age?

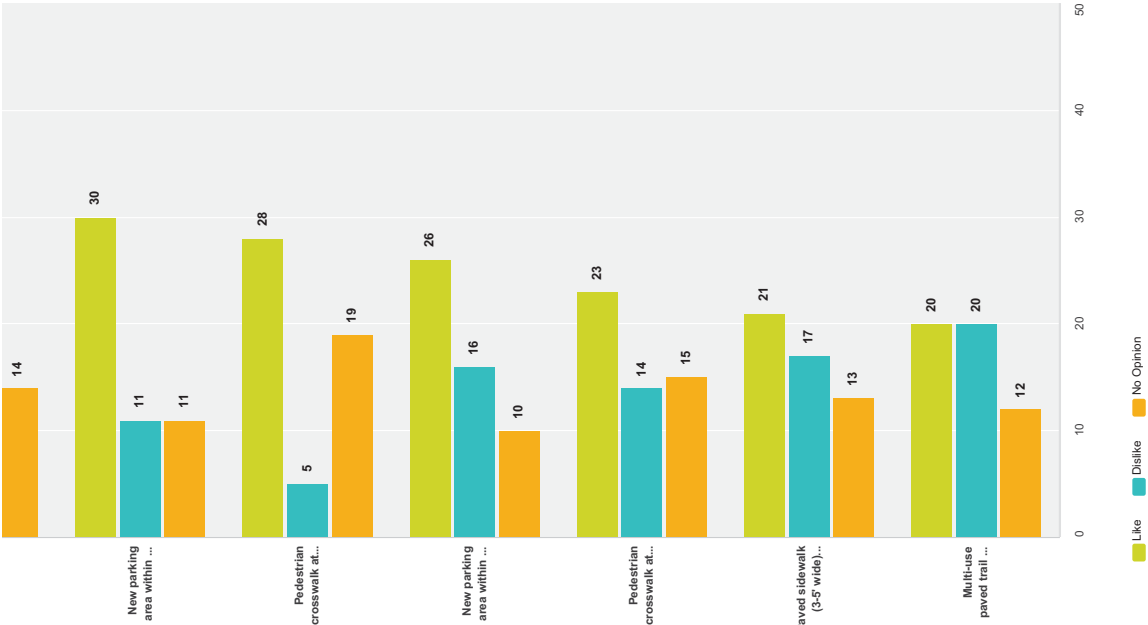
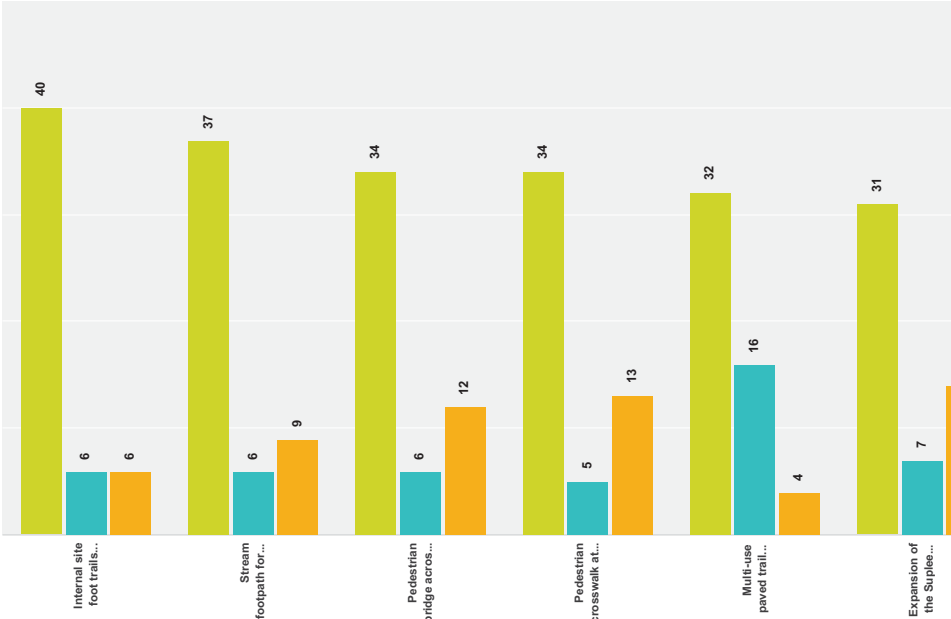
Answered: 78 Skipped: 0



Age	<18	18-25	26-45	46-65	65+	Total	Weighted Average
	0	0	20	41	17	78	52.05

Q5 Each concept shows the same network for pedestrian and vehicular circulation please; please specify which circulation components that you like or dislike form the options below:

Answers: 52 Skipped: 26



Like Dislike No Opinion

#	Like	Dislike	No Opinion	Total	Weighted Average
Internal site foot trails (3-5 ft wide earth, mown grass or mulch)	76.92% 40	11.54% 6	11.54% 6	52	86.96
Stream footpath for fishing access at the north end of the site within the existing forested area	71.15% 37	11.54% 6	17.31% 9	52	86.05
Pedestrian bridge across the Chester Creek north of East Strasburg Road parallel to Reservoir Road near the existing vehicular stone bridge	65.38% 34	11.54% 6	23.08% 12	52	85.00
Pedestrian crosswalk at East Strasburg Road and Reservoir Road	65.38% 34	9.62% 5	25.00% 13	52	87.18
Multi-use paved trail (8-10' wide) within the site parallel to Reservoir Road from the Dam to Suplee Valley parking area	61.54% 32	30.77% 16	7.69% 4	52	66.67
Expansion of the Suplee Valley Open Space parking area along Reservoir Road with a connection footpath	59.62% 31	13.46% 7	26.92% 14	52	81.58
New parking area within the site along Reservoir Road in the vicinity of the dam	57.69% 30	21.15% 11	21.15% 11	52	73.17
Pedestrian crosswalk at Suplee Valley Entrance Drive and Reservoir Road	53.85% 28	9.62% 5	36.54% 19	52	84.85
New parking area within the site along Reservoir Road in the Park Ave vicinity	50.00% 26	30.77% 16	19.23% 10	52	61.90
Pedestrian crosswalk at Lochwood Lane and East Strasburg Road	44.23% 23	26.92% 14	28.85% 15	52	62.16
Paved sidewalk (3-5' wide) within the East Strasburg Road right-of-way from Reservoir Road to Lochwood Lane	41.18% 21	33.33% 17	25.49% 13	51	55.26
Multi-use paved trail or sidewalk within the road right of way from the Dam to West Chester Pike	38.46% 20	38.46% 20	23.08% 12	52	50.00

#	Comments for "Stream footpath for fishing access at the north end of the site within the existing forested area"	Date
1	Create same with adequate drainage to ensure surface of trail is kept adequately dry for foot traffic - all seasons - limit installation to Western side of stream to preserve wetland areas on East side from PED traffic, which will also provide private landowners on East side with a sense of a barrier (limiting access by intruders to their properties)	3/21/2017 11:58 AM
2	encourages trespassing on private property	3/20/2017 11:01 AM
3	allows public access to close to backyards	3/20/2017 10:51 AM
4	it is currently convenient to fish without any deliberate planning necessary. I would personally prefer to let the area naturally develop with as little centralized planning like this as possible.	3/18/2017 7:33 PM
5	YES YES YES	2/16/2017 11:23 AM
6	Leave it natural	2/1/2017 12:19 PM
7	Drained Lake NO Fish	1/28/2017 11:16 AM

#	Comments for "Pedestrian crosswalk at Lochwood Lane and East Strasburg Road"	Date
1	Provide safe pedestrian crossings & roadway signage, especially at top of hill. North side of road - to complement flashing light as speeding drivers disregard posted speed signage currently, (DESIGN WALKWAY ALONG SOUTH SIDE OF STRASBURG)	3/21/2017 11:58 AM
2	encourages parking on Lochwood Lane	3/20/2017 10:51 AM
3	this is a fairly dangerous intersection - better to cross at Reservoir light.	3/18/2017 3:32 PM
4	think it would be safer people to walk down to crossing at Reservoir road	2/14/2017 7:55 AM
5	Hate it. It will be very dangerous for people to walk there - cars come down that road way to fast, and with the curves, that is asking for trouble for people walking in the crosswalk. I didn't move to E. Goshen for crosswalks.	2/10/2017 5:57 PM

6	Only if funds are left	2/8/2017 7:32 PM
7	Funding for this should be secondary to funding features in the former reservoir area.	2/7/2017 10:13 PM
8	Very unsafe crossing. Westbound traffic can't be seen until it is upon you. You would another crossing light.	2/12/2017 12:19 PM
9	For who I have never seen A person doing that	1/28/2017 11:16 AM
10	This seems a gery dangerous plave to put across walk. The elevation and curve of the road makes this a bind spot until just a short driving disbaice away. This will require more than just a cross walk (possably lights), impact traffic, and easily cause accidents. Please drive by this location to assess.	1/26/2017 9:21 PM
#	Comments for "Pedestrian crosswalk at Suplee Valley Entrance Drive and Reservoir Road"	Date
1	As none exists currently, provide safe pedestrian crossing & roadway signage, especially at top of hill. West side of Reservoir Road as intersection is approached from North (on Reservoir Rd) to include Park Entrance, = currently dangerous (speeding traffickers) improve access to Suplee Valley as well as safer access to Dam Area by providing an entrance to same by an PED access path (from the East) crossing the creek from the cul-de-sac just to the West of the creek	3/21/2017 11:58 AM
2	probably not necessary	3/18/2017 3:32 PM
3	Hate it. It will be very dangerous for people to walk there - cars come down that road way to fast, and with the curves, that is asking for trouble for people waking in the crosswak. I didn't move to E. Goshen for crosswalks.	2/10/2017 5:57 PM
4	Only if funds are left	2/8/2017 7:32 PM
5	Funding for this should be secondary to funding improvement in the former reservoir area.	2/7/2017 10:13 PM
6	For Who	1/28/2017 11:16 AM
#	Comments for "Pedestrian crosswalk at East Strasburg Road and Reservoir Road"	Date
1	Provide safer = improved pedestrian crossing & roadway signage, especially at top of hill. South side of Strasburg Road as intersection is approached from West (on Strasburg Rd) to include Park Entrance, = currently dangerous (speeding traffickers) improve signage @ current Strasburg Rd PED crossing	3/21/2017 11:58 AM
2	with push-button at lightpole	3/18/2017 3:32 PM
3	Definetly to safely connect Suplee Valley and Reservoir	2/14/2017 7:55 AM
4	Hate it. It will be very dangerous for people to walk there - cars come down that road way to fast, and with the curves, that is asking for trouble for people walking in the crosswalk. I didn't move to E. Goshen for crosswalks.	2/10/2017 5:57 PM
5	Only if funds are left	2/8/2017 7:32 PM
6	For parking at the Northeast corner of this intersection.	2/7/2017 10:13 PM
7	For Who	1/28/2017 11:16 AM
8	Cannot see where this is...but any pedestrian crosswalks in this area seem dangerous and will have big impact on traffic. Was a traffic study conducted to suggest these?	1/26/2017 9:21 PM
#	Comments for "pedestrian bridge across the Chester Creek north of East Strasburg Road parallel to Reservoir Road near the existing vehicular stone bridge"	Date
1	Preserve Views of existing stone bridge on RES RD by locating bridge yards away	3/21/2017 11:58 AM
2	is this necessary? maybe at a later date	3/18/2017 3:32 PM
3	I guess this is an alternative to pedestrian's using the existing vehicular stone bridge. If this is deemed necessary for safety reasons, then yes. But it doesn't seem like there's all that much vehicular traffic using the bridge so isn't this sufficient?	2/14/2017 7:55 AM
4	Hate it. It will be very dangerous for people to cross E. Strasburg Rd if they want to get to the new pond - cars come down that road way to fast, and with the curves, that is asking for trouble for people walking on that proposed bridge. May not even be needed with adequate parking closer to the reservoir.	2/10/2017 5:57 PM
5	Concerned that funding for this may limit other more important features within the former reservoir area.	2/7/2017 10:13 PM
6	Not necessary	1/28/2017 11:16 AM
7	like, but how maintained? Litter, etc	1/27/2017 7:56 AM
#	Comments for "paved sidewalk (3-5' wide) within the East Strasburg Road right-of-way from Reservoir Road to Lochwood Lane"	Date

Milltown Dam Master Plan – Survey #2 – Concept Survey

SurveyMonkey

1	As existing PED BRIDGE does not meet flooding requirements, construct new unit on South side of E Strasburg so most prevalent (PEDS & bikers) using same don't have to cross Strasburg twice in order to access Dam area	3/21/2017 11:58 AM
2	encourages parking on Lochwood	3/20/2017 11:01 AM
3	encourages parking on Lochwood Lane	3/20/2017 10:51 AM
4	Is a good idea for North Lochwood residents to have a mulch or grass footpath- then they can cross Strasburg at Reservoir Rd-a safer place to cross	3/19/2017 3:32 PM
5	Hate it. It will be very dangerous for people to walk on E. Strasburg Rd if they want to get to the new pond – cars come down that road way to fast, and with the curves, that is asking for trouble for people walking on that proposed bridge. May not even be needed with adequate parking closer to the reservoir.	2/10/2017 5:57 PM
6	As long as it doesn't take funds from Reservoir area	2/8/2017 7:32 PM
7	Any addition of sidewalks in our township is a positive. Safety for pedestrians is lacking and should be considered a priority.	2/8/2017 9:02 AM
8	Funding for this should be secondary to funding the features within the former reservoir area.	2/7/2017 10:13 PM
9	Not necessary	1/28/2017 11:16 AM
10	A paved trail seems more cohesive with the area	1/27/2017 9:51 AM
11	Don't like paved	1/27/2017 7:56 AM
#	Comments for "New parking area within the site along Reservoir Road in the vicinity of the dam"	Date
1	Provide safe pedestrian crossings & roadway signage, on Park Ave as well, keeping protection of Guide Rails	3/21/2017 11:58 AM
2	would prefer all parking to be in Suplee Valley and not in the area of existing reservoir	3/20/2017 10:51 AM
3	ok if it can look natural - no paving needed	3/19/2017 3:32 PM
4	sight lines aren't good	2/14/2017 7:55 AM
5	5 spaces maximum	2/7/2017 10:13 PM
6	Not necessary	1/28/2017 11:16 AM
#	Comments for "New parking area within the site along Reservoir Road in the Park Ave vicinity"	Date
1	Provide safe pedestrian crossings & roadway signage, on Park Ave as well, keeping protection of Guide Rails	3/21/2017 11:58 AM
2	prefer to minimize parking within the site	3/20/2017 11:01 AM
3	would prefer all parking to be in Suplee Valley and not in the area of existing reservoir	3/20/2017 10:51 AM
4	may not be necessary, and paving not necessary - should look natural	3/19/2017 3:32 PM
5	Need additional parking somewhere and this area has better sight lines.	2/14/2017 7:55 AM
6	Don't like at all. Would much prefer to keep the parking down where the dam currently is.	2/10/2017 5:57 PM
7	5 spaces maximum	2/7/2017 10:13 PM
8	Close to houses, safety problem at Park Ave intersection, need a lot of fill???	2/1/2017 12:19 PM
9	Not necessary	1/28/2017 11:16 AM
#	Comments for "Multi-use paved trail or sidewalk within the road right of way from the Dam to West Chester Pike"	Date
1	Provides for a much safer PED/biker access for traveler along Reservoir Road (for near-by private residents, & numerous individuals living in housing establishments in the area = WaterView Apartments, Golf Club Apartments, Metropolitan Apartments, Requebaal Apartments, Rosehill I and II Apartments/Rosehill II Condominiums, Summit House Condominiums, Goshen Valley II Condominiums) visiting Dam area -- also provides safer access for those traversing Reservoir Rd in order to access Bus Stop on West Chester Pike & workplaces (along proposed Paoli Pike trail and corporate centers) as well as for recreational walking) II. Provides direct access to dam area for public transportation users on West Chester Pike III. Two officials can access data records to determine numbers of individuals affected by completion of same. Provide safe pedestrian crossings & roadway signage, on Reservoir Rd as well, keeping protection of Guide Rails	3/21/2017 11:58 AM
2	I believe pavement will detract from the appearance of the area.	3/19/2017 7:33 PM
3	It's pretty dangerous walking on WC Pike in that area	3/19/2017 3:32 PM

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Milltown Dam Master Plan – Survey #2 – Concept Survey

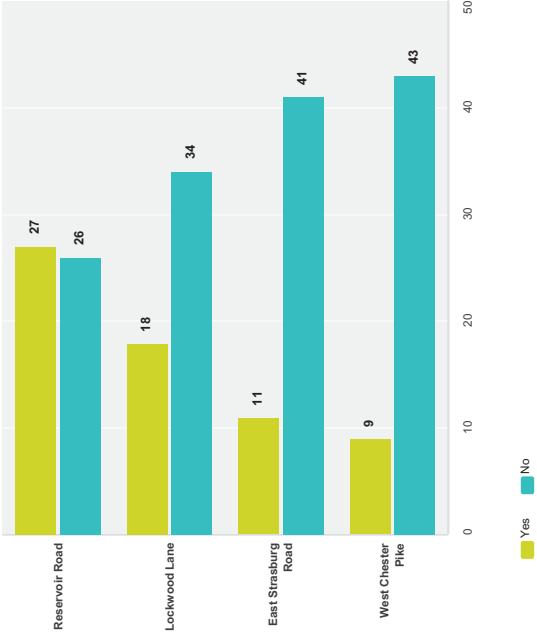
SurveyMonkey

4	Love it.	2/10/2017 5:57 PM
5	Only if funds are left	2/8/2017 7:32 PM
6	Why?	2/1/2017 12:19 PM
7	No Water, No Fish, No People	1/28/2017 11:16 AM
8	Paved how? If natural ok, if eg blacktop no.	1/27/2017 7:56 AM
9	Does not seem practical or like it will get a lot of use. Who would be walking on WC pike?	1/26/2017 9:21 PM
#	Comments for "Multi-use paved trail (8-10' wide) within the site parallel to Reservoir Road from the Dam to Suplee Valley parking area"	Date
1	Provide safe pedestrian crossings & roadway signage, on Park Ave as well, keeping protection of Guide Rails	3/21/2017 11:58 AM
2	prefer natural pathways. 8-10' seems too wide for the size of the site	3/20/2017 11:01 AM
3	would like to limit paved areas, prefer natural pathways. Also 8-10' seems too wide for the size of the park	3/20/2017 10:51 AM
4	pavement would be detrimental to the natural look and doesn't seem necessary	3/19/2017 7:33 PM
5	maybe too wide? how about a boardwalk instead of ugly paving	3/18/2017 3:32 PM
6	It will be very dangerous for people to cross E. Strasburg Rd if they want to get to the new pond. May not even be needed with adequate parking close to the reservoir.	2/10/2017 5:57 PM
7	Gravel path would be great	2/8/2017 7:32 PM
8	Not sure that this needs to be 8-10 feet wide.	2/7/2017 10:13 PM
9	Why paved? Keep it natural	2/1/2017 12:19 PM
10	May not have 8-10' in some parts between Reservoir rd and the creek in some places.	1/31/2017 9:36 AM
11	Not necessary	1/28/2017 11:16 AM
12	Paved how? If natural ok, if eg blacktop no.	1/27/2017 7:56 AM
#	Comments for "Internal site foot trails (3-5 ft wide earth, mown grass or mulch)"	Date
1	Create same with adequate drainage to ensure surface of trail is kept adequately dry for foot traffic - all seasons	3/21/2017 11:58 AM
2	prefer paved paths	2/14/2017 7:55 AM
3	As long as the remaining area is garden landscaped and end result doesn't look like suplee valley area	2/8/2017 9:02 AM
4	If possible, extend this trail through the wetland area as shown in option #3.	2/7/2017 10:13 PM
5	Use the park	1/28/2017 11:16 AM
#	Comments for "Expansion of the Suplee Valley Open Space parking area along Reservoir Road with a connection footpath"	Date
1	Provide safe pedestrian crossings & roadway signage, especially at top of hill, same side of road as parking = hidden drive, currently dangerous, improve signage @ current Strasburg Rd PED crossing	3/21/2017 11:58 AM
2	would prefer all parking to be in Suplee Valley and not in the area of existing reservoir	3/20/2017 10:51 AM
3	As the areas are similar makes sense to connect them. The whole is more than the sum of the two parts.	2/14/2017 7:55 AM
4	It will be very dangerous for people to cross E. Strasburg Rd if they want to get to the new pond. May not even be needed with adequate parking close to the reservoir. Also don't like the proposed trail along Strasburg - cars come down that road way to fast, and with the curves, that is asking for trouble for people walking on that proposed trail.	2/10/2017 5:57 PM
5	I would prefer parking at the Northeast corner of the Reservoir Rd and East Strasburg Rd intersection.	
6	Drain the area	2/7/2017 10:13 PM
7	Extend footpath north along Reservoir to Baldwin	1/28/2017 11:16 AM
8	Does the foot traffic and use warrant funds to expand? I have never seen a single car there.	1/27/2017 9:51 AM
		1/26/2017 9:21 PM

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Q6 Do you currently walk or bike along the following roads?

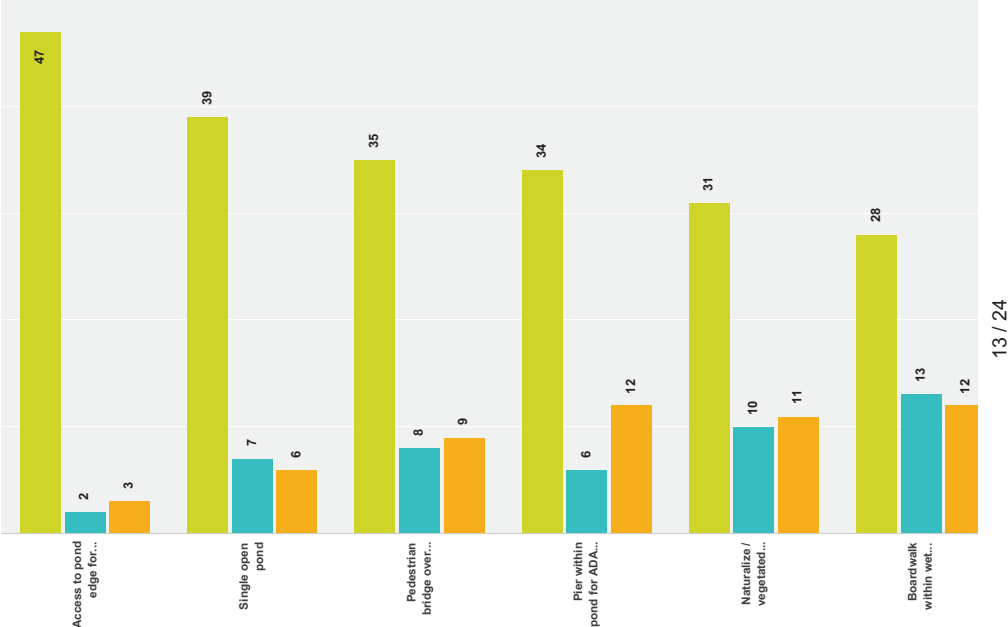
Answered: 53 Skipped: 25

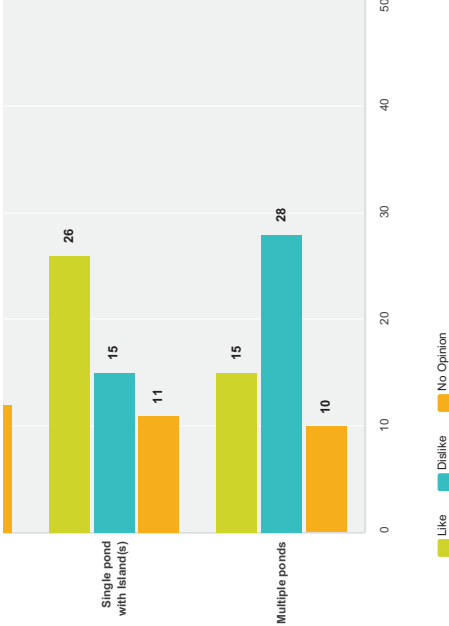


	Yes	No	Total	Weighted Average
Reservoir Road	50.94% 27	49.06% 26	53	1.49
Lockwood Lane	34.62% 18	65.38% 34	52	1.65
East Strasburg Road	21.15% 11	78.85% 41	52	1.79
West Chester Pike	17.31% 9	82.69% 43	52	1.83

Q7 Each concept shows the configurations how water features could be used within the site please specify which features you like or dislike below:

Answered: 53 Skipped: 25





	Like	Dislike	No Opinion	Total	Weighted Average
Access to pond edge for fishing	90.38% 47	3.85% 2	5.77% 3	52	95.92
Single open pond	75.00% 39	13.46% 7	11.54% 6	52	84.78
Pedestrian bridge over creek (within Milltown site)	67.31% 35	15.38% 8	17.31% 9	52	81.40
Pier within pond for ADA access, viewing, and fishing	65.38% 34	11.54% 6	23.08% 12	52	85.00
Naturalize / vegetated stream banks	59.62% 31	19.23% 10	21.15% 11	52	75.61
Boardwalk within wet areas	52.83% 28	24.53% 13	22.64% 12	53	68.29
Single pond with island(s)	50.00% 26	28.85% 15	21.15% 11	52	63.41
Multiple ponds	28.30% 15	52.83% 28	18.87% 10	53	34.88

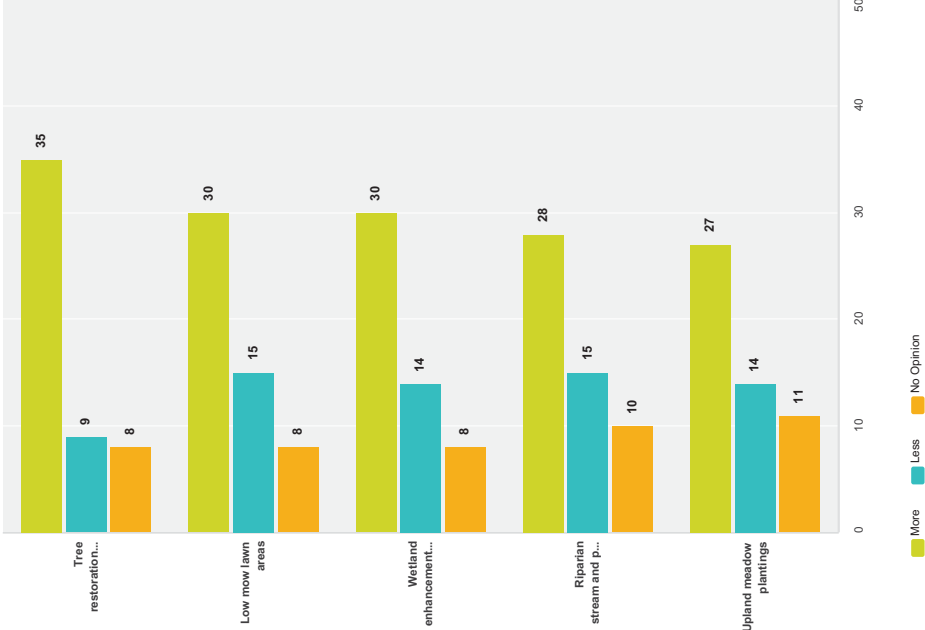
#	Comments for "Single pond with island(s)"	Date
1	Due to how low flow rate and low currents between islands as well as between islands and pond shoreline areas will silt-in quickly creating a swampy area leading to mosquitoes, etc.	3/21/2017 11:58 AM
2	want as much water as possible - the large birds need to find food	3/18/2017 3:32 PM
3	Plan 1 is overall favorite, but would rather have open pond.	3/14/2017 4:22 PM
4	I like this option most because it allows for the largest pond of all the concepts.	2/19/2017 8:54 PM
5	Wildlife is a priority	2/8/2017 7:32 PM
6	Plan #1	2/7/2017 10:13 PM
7	Islands could be a maintenance issue	1/31/2017 9:36 AM

8	Drain	1/28/2017 11:16 AM
#	Comments for "Single open pond"	Date
1	Provides for a closer to present appearance of the dam area - the existing body of water.	3/21/2017 11:58 AM
2	would like to see the ice hockey players have enough space for games	3/18/2017 3:32 PM
3	Would rather have big open pond.	3/14/2017 4:22 PM
4	I like this option second best because I live within walking distance and this provides a better usability of the area.	2/19/2017 8:54 PM
5	Wildlife is a priority	2/8/2017 7:32 PM
6	Maximize water features (is this plan #2?)	2/7/2017 10:13 PM
7	Drain	1/28/2017 11:16 AM
#	Comments for "Pier within pond for ADA access, viewing, and fishing"	Date
1	Provided pier is designated for ADA access only with appropriate signage limiting access to the contrary.	3/21/2017 11:58 AM
2	made of boardwalk material (not paved)	3/18/2017 3:32 PM
3	Only if funds are available. Priority for wildlife	2/8/2017 7:32 PM
4	Cost and upkeep	1/31/2017 9:36 AM
5	Drain No Need	1/28/2017 11:16 AM
#	Comments for "Pedestrian bridge over creek (within Milltown site)"	Date
1	Pedestrian bridge installation must not provide access to East side of pond/stream area in order to protect privacy of adjacent East side land owners.	3/21/2017 11:58 AM
2	might be very nice if not big and bulky	3/18/2017 3:32 PM
3	Drain No Need	1/28/2017 11:16 AM
#	Comments for "Naturalize / vegetated stream banks"	Date
1	Install low mow grass down to pond edge.	3/21/2017 11:58 AM
2	Please prioritize views of the water over vegetation whenever the choice is available. Overgrown swamps are not visibly pleasing.	3/18/2017 7:33 PM
3	water view/access should not be obstructed - low height	3/18/2017 3:32 PM
4	As long as the stream is not obstructed from view.	2/23/2017 11:33 AM
5	Provided vegetation is very low	2/7/2017 10:13 PM
6	As long as they are not a mess as now exists on North-West side of Reservoir. Must be kept neat.	2/1/2017 12:19 PM
#	Comments for "Multiple ponds"	Date
1	Harder to maintain as multiple silting sites in lieu of single pond future dredging.	3/21/2017 11:58 AM
2	I believe the biggest pond possible would offer the most beautiful appearance and should encourage a diverse and healthy ecosystem for the fish and birds currently here that might otherwise be displaced. If the choice comes down to trees/swamp versus a body of water, additional ponds would be preferable.	3/18/2017 7:33 PM
3	again, as much water as possible	3/18/2017 3:32 PM
4	Would rather have big open pond.	3/14/2017 4:22 PM
5	Strongly dislike the look of this plan	2/19/2017 8:54 PM
6	Wildlife is a priority	2/8/2017 7:32 PM
7	Maximize water features (is this plan #3)	2/7/2017 10:13 PM
8	Need to maintain water flow to keep bugs down.	2/1/2017 12:19 PM
9	Drain	1/28/2017 11:16 AM
#	Comments for "Boardwalk within wet areas"	Date
1	Instead of installing boardwalks, create mixed pathways with adequate drainage for all season access.	3/21/2017 11:58 AM
2	may be interesting as nature walk but it shouldn't detract from scenery	3/18/2017 3:32 PM

3	Only if funds are available	2/8/2017 7:32 PM
4	Cost and upkeep	1/31/2017 9:36 AM
5	Drain, No Need	1/28/2017 11:16 AM
#	Comments for "Access to pond edge for fishing"	Date
1	Provide access to West side of pond area only to ensure privacy of East side property owners.	3/21/2017 11:58 AM
2	If far from private property	3/20/2017 11:01 AM
3	as long as it doesn't encourage trespassing on private property	3/20/2017 10:51 AM
4	Only if funds are available. Priority for wildlife	2/8/2017 7:32 PM
5	Very important	2/7/2017 10:13 PM
6	Fish from both sides	2/1/2017 12:19 PM
7	Drain, No Fish	1/28/2017 11:16 AM

Q8 Restoration of desirable plantings within the area to create diverse healthy ecosystems is key to the success of each concept in general would you like to see more or less of each type of planting proposed:

Answered: 53 Skipped: 25



Riparian stream and pond edge plantings		52.83%	28	28.30%	15	18.87%	10	53	65.12
Upland meadow plantings		51.92%	27	26.92%	14	21.15%	11	52	65.85

#	Comments for "Wetland enhancement plantings"	Date
1	Use minimum guidelines for maintaining existing wetlands.	3/21/2017 11:58 AM
2	ok as long as views not obstructed	3/19/2017 3:32 PM
3	Wetland areas only as necessary.	3/14/2017 4:22 PM
4	Inability to enjoy wildlife if plants obstruct view	2/8/2017 7:32 PM
5	Just clean it up	2/1/2017 12:19 PM
6	Weeds	1/28/2017 11:16 AM

#	Comments for "Upland meadow plantings"	Date
1	Limit use of same to dam breast area where pedestrian traffic is discouraged.	3/21/2017 11:58 AM
2	as long as it doesn't obstruct water views	3/19/2017 3:32 PM
3	Concept Plan 1 is the favorite.	3/14/2017 4:22 PM
4	Limited to hilly areas or where water will build-up	2/7/2017 10:13 PM
5	Weeds Like Open Space	1/28/2017 11:16 AM

#	Comments for "Tree restoration plantings"	Date
1	In addition to culling fallen trees in the currently wooded existing area, install trees for coding of stream/ponds/trails along bench areas.	3/21/2017 11:58 AM
2	As long as the trees don't obstruct the view from Reservoir Rd.	3/14/2017 4:22 PM
3	Limited to prevent obstructing water view	2/7/2017 10:13 PM
4	Don't try to fill the current wter area with trees	2/1/2017 12:19 PM
5	Weeds Like Open Dpace	1/28/2017 11:16 AM

#	Comments for "Riparian stream and pond edge plantings"	Date
1	Utilize same to assist in providing privacy along East side of stream and pond to ensure privacy for adjacent East side land owners.	3/21/2017 11:58 AM
2	I would greatly prefer expansive unobstructed views of the water.	3/19/2017 7:33 PM
3	I understand you want to limit erosion, but any plantings should be "low profile" as it is now on Reservoir Rd. side	3/19/2017 3:32 PM
4	Limited to prevent obstructing water views	2/7/2017 10:13 PM
5	None Weeds	1/28/2017 11:16 AM
6	This needs to be defined. Most people do not know what 'riparian' is.	1/28/2017 9:21 PM

#	Comments for "Low mow lawn areas"	Date
1	Frequency of mowing should ensure that an average but not manicured appearance is maintained.	3/21/2017 11:58 AM
2	Lawns = Geese and droppings. Already totally uncontrolled in this area	3/20/2017 4:49 PM
3	do not want to obstruct water views	3/19/2017 3:32 PM
4	Concept Plan 1 is the favorite.	3/14/2017 4:22 PM
5	Weeds Like Open Space	1/28/2017 11:16 AM
6	Low mow is not natural	1/27/2017 7:56 AM

	More	Less	No Opinion	Total	Weighted Average
Tree restoration plantings	67.31% 35	17.31% 9	15.38% 8	52	79.55
Low mow lawn areas	56.60% 30	28.30% 15	15.09% 8	53	66.67
Wetland enhancement plantings	57.69% 30	26.92% 14	15.38% 8	52	68.18

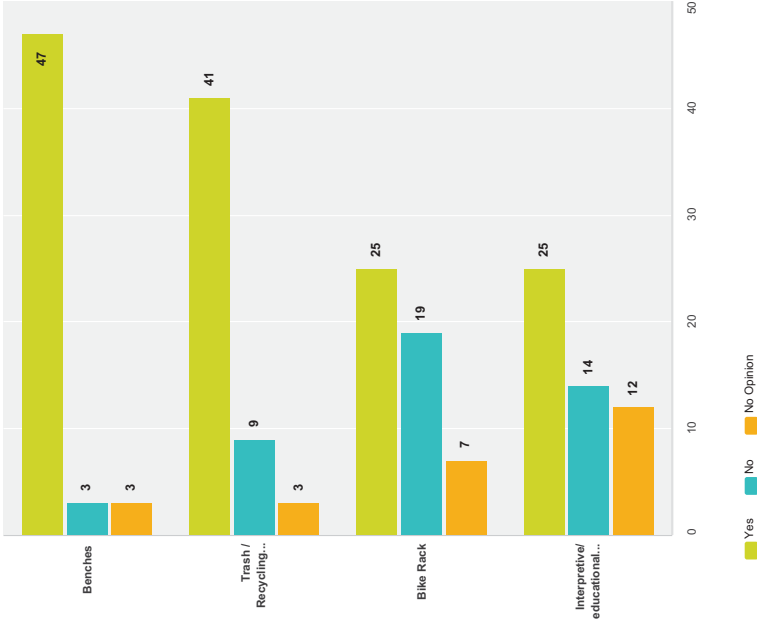
Q9 Is there an improvement you would like to see added to this area that is currently not shown on the plan?

Answered: 8 Skipped: 70

#	Responses	Date
1	If a restroom facility is deemed appropriate, locate same near existing Southeast parking area using shrubbery/trees to minimize public view of same.	3/21/2017 11:58 AM
2	vegetation to combat mosquitos	3/20/2017 11:01 AM
3	plant life to combat mosquitos	3/20/2017 10:51 AM
4	I think it is important to make it as natural as possible and to limit mown areas while increasing wild area especially by planting many trees.	3/18/2017 11:48 PM
5	Enhancements to the Northern wetland area that is overgrown and choked off with fallen trees etc. I would like to see this area cleared for access. I would like to see a boardwalk in this area or other access to show off wetland features.	2/7/2017 10:13 PM
6	Remove the dam	1/26/2017 8:46 PM
7	Yes, more Reed type grasses to clean up the pollution in stream, like an artificial Meadows for treating wastewater at North influential end.	1/26/2017 7:01 PM
8	maybe some benches. add bags/buckets for people to pick up after their dogs.	1/26/2017 5:39 PM

Q10 Would you like to see the incorporation of any traditional park amenities in this area, such as:

Answered: 53 Skipped: 25

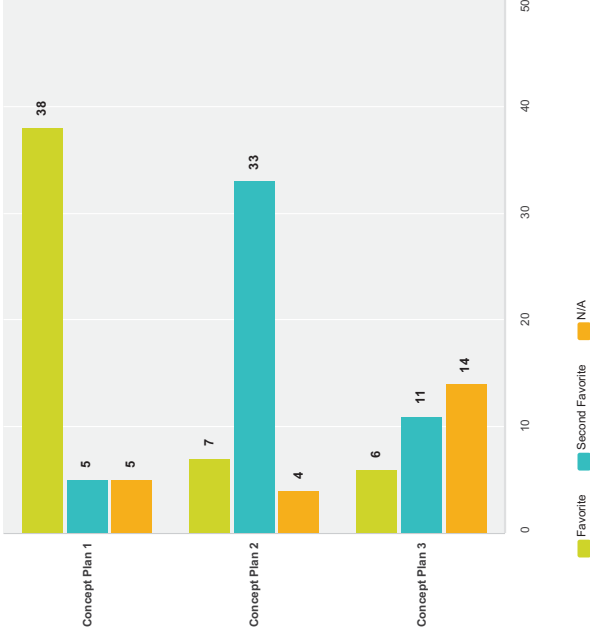


	Yes	No	No Opinion	Total	Weighted Average
Benches	88.68% 47	5.66% 3	5.66% 3	53	94.00
Trash / Recycling Receptacles	77.36% 41	16.98% 9	5.66% 3	53	82.00
Bike Rack	49.02% 25	37.25% 19	13.73% 7	51	56.82

Interpretive/ educational signage		49.02%	27.45%	23.53%	51	64.10
#	Please provide any comments you may have:	Date				
1	Keep interpretive signage to a minimum.	3/21/2017 11:58 AM				
2	trash at parking areas only or carry in/carry out rule	3/20/2017 11:01 AM				
3	maybe trash receptacles at parking areas or carry in/carry out policy	3/20/2017 10:51 AM				
4	I believe trash cans would result in more trash around the area rather than less.	3/18/2017 7:33 PM				
5	Only if funds are available	2/8/2017 7:32 PM				
6	Keep it as close to natural as you can.	2/1/2017 12:19 PM				
7	Signage describing the past history of the site and how it links to Milltown itself. That history in the current location is all but lost to the widening of West Chester Pike of the 1960's	1/31/2017 9:36 AM				
8	Drain	1/28/2017 11:16 AM				
9	portapotty	1/26/2017 8:46 PM				

Q11 Please choose your two favorite concept plans in order of most favorite, then second favorite:

Answered: 53 Skipped: 25



	Favorite	Second Favorite	N/A	Total	Weighted Average
Concept Plan 1	79.17% 38	10.42% 5		48	1.12
Concept Plan 2	15.91% 7	75.00% 33	9.09% 4	44	1.62
Concept Plan 3	19.35% 6	35.48% 11	45.16% 14	31	1.65

#	Please provide any comments you may have:	Date
1	During a committee meeting, it was suggested that the stone facade on the existing pump house building be removed and retained for future use by the township (potentially the Historical Society) for the erection of a Veterans Memorial "Plaza", or for other historical purposes. This project provides for extensive inclusion of prior township residents/committee input - respectively for township wide trails/ pedestrian/biker traffic safety, as well as for meeting many of the other objectives cited in the East Goshen Township Comprehensive Plan of 2015 with adopted revisions thereto. We highly encourage review of these relevant documents for inclusion in the final planning and the implementation of this project.	3/21/2017 11:58 AM

Milltown Dam Master Plan – Survey #2 – Concept Survey

SurveyMonkey

2	the more water the better	3/20/2017 11:01 AM
3	The more water the better.	3/20/2017 10:51 AM
4	My main desire is expansive undistructed views of water. Tall weeds along the edges are would be extremely detrimental to the ponds appearance. Please make the main body of water as large as possible. Beyond that, people already enjoy the area and are able to easily access it for fishing and walking. Please avoid over-engineering the area into something that seems sanitized and unnatural.	3/18/2017 7:33 PM
5	When this is complete, how will the hunters interact with the new space? Will they be permitted to hunt on these twp. grounds? Will the future sewer pump station have an impact on where the connecting trail and pedestrian bridge would be placed?	1/31/2017 9:36 AM
6	Drain and Fill, Creek Only like open space	1/28/2017 11:16 AM
7	No dam, the entire township is forced to pay for this, so few will benefit	1/28/2017 8:46 PM
8	I'm retired and spend a great deal of my time fishing, anything you do to accoutnuate fishing would be great. btw, nice job!!! love all 3 plans.	1/28/2017 5:39 PM
9	If you need to increase or fix the dam, do it. There is zero need to disturb the eco system of cheater creek or the milltown dam reservoir. The down and upstream effects for the inhabitants would be potentially disastrous. The township should focus on improving the ecosystems and maintaining the ponds that are annually covered in algae blooms, and filled with geese by product. Let's spend our money on conserving the great open spaces we have.	1/28/2017 4:40 PM

Phase 1 Estimated Costs of Development	
Work Item	Total Cost
<i>Demolition and Site Preparation</i>	\$ 496,649
<i>Reservoir Road Mixed-Use Trail (South)</i>	\$ 49,890
<i>Reservoir Road Parking Area, 10 Spaces (South)</i>	\$ 26,170
<i>ADA Asphalt Walkway</i>	\$ 2,461
<i>Stone Dust Foot Paths, 4"Depth</i>	\$ 12,863
<i>Structures- Bridges & Boardwalks</i>	\$ 131,200
<i>Phase 1</i>	\$ 719,232
General Project Cost (Mobilization, E&S, Construction Surveying)	\$ 50,346
Construction Contingency (15%)	\$ 107,885
Design and Engineering (12%)	\$ 86,308
Phase 1 Project Costs	\$ 963,771
Phase 2 Estimated Costs of Development	
<i>Structures- Fishing Piers</i>	\$ 78,400
<i>Planting</i>	\$ 183,201
<i>Phase 2</i>	\$ 261,601
General Project Cost (Mobilization, E&S, Construction Surveying)	\$ 18,312
Construction Contingency (15%)	\$ 39,240
Design and Engineering (12%)	\$ 31,392
Phase 2 Project Costs	\$ 350,546
Phase 3 Estimated Costs of Development	
<i>Reservoir Road Parking Area, 5 Spaces (North)</i>	\$ 17,472
<i>Reservoir Road Mixed-Use Trail (North)</i>	\$ 38,436
<i>Wood Chip Foot Paths, 5' Wide</i>	\$ 1,528
<i>Phase 3</i>	\$ 57,436
General Project Cost (Mobilization, E&S, Construction Surveying)	\$ 4,020
Construction Contingency (15%)	\$ 8,615
Design and Engineering (12%)	\$ 6,892
Phase 3 Project Costs	\$ 76,964
Total Costs of Development \$ 1,391,280	

Phase 1 Estimated Costs of Development					
Work Item	Quantity		Unit Cost	Total Item Cost	Total Cost
Demolition and Site Preparation			Sub Total		\$ 496,649
Site Preparation / vegetation clear and grub	9	AC	\$ 2,000.00	\$ 18,000	
Excavate for pond	21,151	CY	\$ 10.00	\$ 211,510	
Dam Spoils (Dam Repair Cost Estimate)	5,500	CY	\$ -	\$ -	
Embankment Construction - from stockpile	26,651	CY	\$ 7.00	\$ 186,557	
Pond Control Structures	2	LS	\$ 5,000.00	\$ 10,000	
Stream Improvements - riffles 1.5 elevation drop	5	LS	\$ 10,000.00	\$ 50,000	
Cover Crop Site Stabilization	915	LB	\$ 12.50	\$ 11,435	
Straw Mulch	26.14	TN	\$ 350.00	\$ 9,148	
Reservoir Road Mixed-Use Trail (South)	10,080	SF	Sub Total		\$ 49,890
Excavation, 10" Depth	373	CY	\$ 9.90	\$ 3,696	
Grade Subgrade	1,120	SY	\$ 2.93	\$ 3,282	
6" PADOT 2A Aggregate Subbase	373	CY	\$ 45.00	\$ 16,800	
Grade and Compact Aggregate Subbase	1,120	SY	\$ 0.93	\$ 1,042	
2" Asphalt Base Course	1,120	SY	\$ 9.55	\$ 10,696	
Tack Coat	1,120	SY	\$ 1.52	\$ 1,702	
1.5" Wearing Course	1,120	SY	\$ 8.10	\$ 9,072	
ADA Cross Walk at driveways: Markings & DWS	4	LS	\$ 900.00	\$ 3,600	
Reservoir Road Parking Area, 10 Spaces (South)	5,355	SF	Sub Total		\$ 26,170
Excavation, 10" Depth	198	CY	\$ 9.90	\$ 1,964	
Grade Subgrade	595	SY	\$ 2.93	\$ 1,743	
6" PADOT 2A Aggregate Subbase	198	CY	\$ 45.00	\$ 8,925	
Grade and Compact Aggregate Subbase	595	SY	\$ 0.93	\$ 553	
2" Asphalt Base Course	595	SY	\$ 9.55	\$ 5,682	
Tack Coat	595	SY	\$ 1.52	\$ 904	
1.5" Wearing Course	595	SY	\$ 8.10	\$ 4,820	
Precast Concrete Parking Bumpers *8" x13" x 6'-0"	10	EA	\$ 70.50	\$ 705	
Handicap Symbol	2	EA	\$ 60.00	\$ 120	
Handicap Parking Sign	2	EA	\$ 285.00	\$ 570	
Handicap Van Zone Striping (4" wide, blue)	129	LF	\$ 1.00	\$ 129	
Standard Striping (4" wide, white)	54	LF	\$ 1.00	\$ 54	

ADA Asphalt Walkway	740	SF	Sub Total		\$ 2,461
Grade Subgrade	82	SY	\$ 2.93	\$ 241	
6" PADOT 2A Aggregate Subbase	27	CY	\$ 45.00	\$ 1,233	
Grade and Compact Aggregate Subbase	82	SY	\$ 0.93	\$ 76	
2" Asphalt Base Course	82	SY	\$ 9.55	\$ 785	
Tack Coat	82	SY	\$ 1.52	\$ 125	
Stone Dust Foot Paths, 4"Depth	980	LF	Sub Total		\$ 12,863
Grading	544	SY	\$ 2.00	\$ 1,089	
4" - 2A Subbase	544	SY	\$ 7.50	\$ 4,083	
4.5" - Trail Surface Aggregate	544	SY	\$ 3.76	\$ 2,047	
Fine Grade Trail Shoulder	97	CY	\$ 55.00	\$ 5,323	
Seeding and Soil Supplements (4' Shoulders)	18	LB	\$ 12.50	\$ 229	
Straw Mulch	0	TN	\$ 350.00	\$ 91	
Structures			Sub Total		\$ 131,200
Bridges	2	LS	\$ 35,000.00	\$ 70,000	
Boardwalk	1,224	SF	\$ 50.00	\$ 61,200	
Phase 1				\$	719,232
Mobilization (3%)				\$	21,577
Construction Surveying (2%)				\$	14,385
Erosion and Sedimentation Control (2%)				\$	14,385
Construction Contingency (15%)				\$	107,885
Design and Engineering (12%)				\$	86,308
Total Estimated Project Costs				\$	963,771

Phase 2 Estimated Costs of Development					
Structures	784	SF	Sub Total		\$ 78,400
Fishing Piers	784	SF	\$ 100.00	\$ 78,400	
Planting					\$ 183,201
Forest Restoration - bare root 2-3' with tube	400	EA	\$ 100.00	\$ 40,000	
Shrub Area Restoration - two gallon	4000	EA	\$ 30.00	\$ 120,000	
Meadow/ Low Mow Lawn	66	LB	\$ 350.00	\$ 23,201	
				Phase 2	\$ 261,601
				Mobilization (3%)	\$ 7,848
				Construction Surveying (2%)	\$ 5,232
				Erosion and Sedimentation Control (2%)	\$ 5,232
				Construction Contingency (15%)	\$ 39,240
				Design and Engineering (12%)	\$ 31,392
				Total Estimated Project Costs	\$ 350,546

Phase 3 Estimated Costs of Development					
Reservoir Road Parking Area, 5 Spaces (North)	3,791	SF	Sub Total		\$ 17,472
Excavation, 10" Depth	140	CY	\$ 9.90	\$ 1,390	
Grade Subgrade	421	SY	\$ 2.93	\$ 1,234	
6" PADOT 2A Aggregate Subbase	140	CY	\$ 45.00	\$ 6,318	
Grade and Compact Aggregate Subbase	421	SY	\$ 0.93	\$ 392	
2" Asphalt Base Course	421	SY	\$ 9.55	\$ 4,023	
Tack Coat	421	SY	\$ 1.52	\$ 640	
1.5" Wearing Course	421	SY	\$ 8.10	\$ 3,412	
Standard Striping (4" wide, white)	63	LF	\$ 1.00	\$ 63	
Reservoir Road Mixed-Use Trail (North)	8,152	SF	Sub Total		\$ 38,436
Excavation, 10" Depth	302	CY	\$ 9.90	\$ 2,989	
Grade Subgrade	906	SY	\$ 2.93	\$ 2,654	
6" PADOT 2A Aggregate Subbase	302	CY	\$ 45.00	\$ 13,587	
Grade and Compact Aggregate Subbase	906	SY	\$ 0.93	\$ 842	
2" Asphalt Base Course	906	SY	\$ 9.55	\$ 8,650	
Tack Coat	906	SY	\$ 1.52	\$ 1,377	
1.5" Wearing Course	906	SY	\$ 8.10	\$ 7,337	
ADA Cross Walk: Markings, DWS, & Signage	1	LS	\$ 1,000.00	\$ 1,000	
Wood Chip Foot Paths, 5' Wide	2,750	SF	Sub Total		\$ 1,528
3" Wood Chip Mulch	306	SY	\$ 5.00	\$ 1,528	
				Phase 3	\$ 57,436
				Mobilization (3%)	\$ 1,723
				Construction Surveying (2%)	\$ 1,149
				Erosion and Sedimentation Control (2%)	\$ 1,149
				Construction Contingency (15%)	\$ 8,615
				Design and Engineering (12%)	\$ 6,892
				Total Estimated Project Costs	\$ 76,964

1. PROJECT INFORMATION

Project Name: **Milltown Dam Hazard Reduction**

Date of Review: **11/13/2016 10:04:59 AM**

Project Category: **In-stream / Riverine Activities and Projects, Dam or Lock, Maintenance or modification**

Project Area: **24.46 acres**

County(s): **Chester**

Township/Municipality(s): **EAST GOSHEN**

ZIP Code: **19380; 19382**

Quadrangle Name(s): **WEST CHESTER**

Watersheds HUC 8: **Lower Delaware**

Watersheds HUC 12: **East Branch Chester Creek**

Decimal Degrees: **39.968863, -75.545309**

Degrees Minutes Seconds: **39° 58' 7.9054" N, 75° 32' 43.1130" W**

2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	Potential Impact	FURTHER REVIEW IS REQUIRED, See Agency Response
U.S. Fish and Wildlife Service	Potential Impact	FURTHER REVIEW IS REQUIRED, See Agency Response

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

Note that regardless of PNDI search results, projects requiring a Chapter 105 DEP individual permit or GP 5, 6, 7, 8, 9 or 11 in certain counties (Adams, Berks, Bucks, Carbon, Chester, Cumberland, Delaware, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Schuylkill and York) must comply with the bog turtle habitat screening requirements of the PASPGP.

Milltown Dam Hazard Reduction

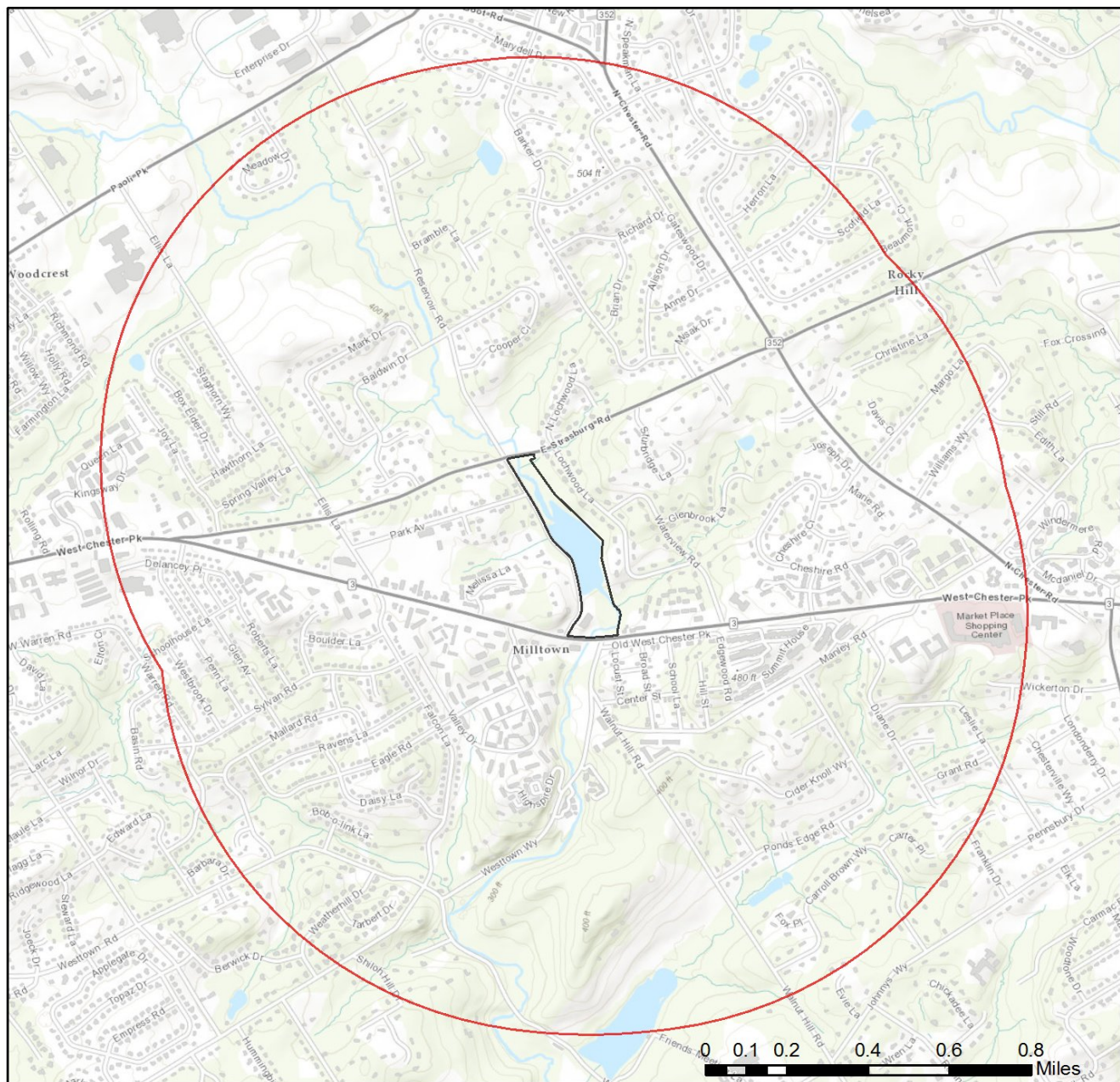


- ☐ Project Boundary
- ☐ Buffered Project Boundary



Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Milltown Dam Hazard Reduction



- Project Boundary
- Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



RESPONSE TO QUESTION(S) ASKED

Q1: Accurately describe what is known about wetland presence in the project area or on the land parcel by selecting ONE of the following. "Project" includes all features of the project (including buildings, roads, utility lines, outfall and intake structures, wells, stormwater retention/detention basins, parking lots, driveways, lawns, etc.), as well as all associated impacts (e.g., temporary staging areas, work areas, temporary road crossings, areas subject to grading or clearing, etc.). Include all areas that will be permanently or temporarily affected -- either directly or indirectly -- by any type of disturbance (e.g., land clearing, grading, tree removal, flooding, etc.). Land parcel = the lot(s) on which some type of project(s) or activity(s) are proposed to occur.

Your answer is: Someone qualified to identify and delineate wetlands has investigated the site, and determined that wetlands ARE located in or within 300 feet of the project area. (A written report from the wetland specialist, and detailed project maps should document this.)

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

PFBC Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

Scientific Name	Common Name	Current Status
Sensitive Species**		Threatened

U.S. Fish and Wildlife Service

RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.

** Sensitive Species - Species identified by the jurisdictional agency as collectible, having economic value, or being susceptible to decline as a result of visitation.

WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload* or email* the following information to the agency(s). Instructions for uploading project materials can be found [here](#). This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies. Alternatively, applicants may email or mail their project materials (see AGENCY CONTACT INFORMATION).

***Note:** U.S.Fish and Wildlife Service requires applicants to mail project materials to the USFWS PA field office (see AGENCY CONTACT INFORMATION). USFWS will not accept project materials submitted electronically (by upload or email).

Check-list of Minimum Materials to be submitted:

____ Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.

____ A map with the project boundary and/or a basic site plan (particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)

In addition to the materials listed above, USFWS REQUIRES the following

____ **SIGNED** copy of a Final Project Environmental Review Receipt

The inclusion of the following information may expedite the review process.

____ Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)

____ Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.

5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov
Fax: (717) 772-0271

PA Fish and Boat Commission

Division of Environmental Services
450 Robinson Lane, Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
NO Faxes Please

PA Game Commission

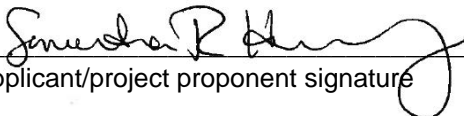
Bureau of Wildlife Habitat Management
Division of Environmental Planning and Habitat Protection
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: Samantha R. Hockenberry
Company/Business Name: Gannett Fleming, Inc.
Address: 207 Senate Avenue
City, State, Zip: Camp Hill, PA 17011
Phone: (717) 763-7211 x2144 Fax: ()
Email: shockenberry@gfnet.com

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.


applicant/project proponent signature

11/13/2016

date