Feasibility Study
for
Community Trails Initiative
Multi-municipal Trails & Greenways
Development Partnership
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Prepared For:
Township of O'Hara,
Allegheny County

In Association With:
# Community Trails Initiative
## Feasibility Study - Draft Report

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1.0 ACKNOWLEDGEMENTS

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2.0 PROJECT OVERVIEW

Background

The Three Rivers Heritage Trail is a trail system that begins within the City of Pittsburgh and follows the banks along the Monongahela, Allegheny and Ohio Rivers. The trail
along the Allegheny River now ends in Millvale Borough and at that point municipalities have been working to connect to this trail system. Much work has been done to date:

- In 2001 Millvale Borough completed their portion of the Three Rivers Heritage Trail including the development of several riverfront amenities like a boat access point, picnic shelter and restrooms.
- In 2005, the Township of O’Hara completed a Trail Feasibility and Planning Study. Phase I implementation of this study included the completion of the Squaw Valley Riverfront Trail, which is almost five miles in length.
- In 2006 Sharpsburg Borough began work on a trail and boat ramp as a segment of the Three Rivers Heritage Trail.
- In 2007 Natrona begins planning for riverfront connections and a park.
- November 2006, Chief Executive Dan Onorato signed into law the creation of a county wide greenway system. This legislation supports the creation of trails and greenways along both sides of the rivers within Allegheny County.
- 2010 marked the completion of the City of Pittsburgh and Millvale Borough and Park with the completion of a boardwalk built by PennDOT.

There are currently gaps in trail development between the Three Rivers Heritage Trail and the Armstrong Trail, which begins in Schenley, north of Freeport in Armstrong County. Both the Three Rivers Heritage Trail and the Armstrong Trail are a part of the Erie to Pittsburgh Greenway and the Pennsylvania Mainline Canal Greenway. Regional connections to the Pennsylvania Greenway system provide opportunities for economic and recreational development. In 2009 the Community Trails Feasibility Study was initiated.

**Description**

The Community Trails Initiative is a public/private multi-municipal project to complete a trail feasibility study encompassing 17 municipalities (City of Pittsburgh, Millvale, Shaler, Etna, Sharpsburg, Aspinwall, Township of O’Hara, Blawnox, Harmar, Cheswick, Springdale Borough, Springdale Township, Tarentum, Brackenridge and Harrison Township, Freeport Borough, Allegheny Township) along the North Shore of the Allegheny River for the purpose of connecting the existing Three Rivers Heritage Trail with the Armstrong Trail.

The opportunity to complete regional trail connections is one of the most promising attributes of the Community Trails Initiative. The Southern terminus would link with the completed Millvale Riverfront Park and Three Rivers Heritage Trail which affords the opportunity of access the many segments of trail on both sides of the Allegheny, Ohio and Monongahela Rivers. The Northern trail will connect to Schenley and the Armstrong Trail in Armstrong County where plans are underway to continue development as part of the Erie to Pittsburgh Trail Alignment.

What makes the trail unique is that each section of the trail purposefully links to the municipality allowing for the Community Trails connections.
Purpose

A Preliminary Trail Location Study was conducted to identify engineering and environmental constraints for a pedestrian/bicycle trail through the study corridor and provide recommendations for further studies. A practical and preferred alignment was developed to evaluate property impacts and constructability issues.

The practical alignment is defined as the alignment that may be most feasible in the immediate future. This route may be on road more often and away from the river. The preferred alignment provides close proximality to the riverfront. Both alignments overlap in areas.

The practical alignment is approximately 29 miles long, passing through 17 municipalities and 3 counties (Allegheny, Armstrong, and Westmoreland). The practical alignment traverses thru 4.0 miles of active Railroad property, 7.0 miles thru private property, 15.0 miles thru public rights-of-way and 3 miles on existing trails. Proceeding from south the practical alignment extends 0.8 miles in Millvale, 1.0 miles in Shaler, 0.7 miles in Etna, 1.8 miles in Sharpsburg, 0.6 miles in Aspinwall, 0.7 miles in City of Pittsburgh, 2.5 miles in Township of O’Hara, 0.8 miles in Blawnox, 2.2 miles in Harmar, 0.8 miles in Cheswick, 1.9 miles in Springdale Borough, 1.3 miles in Springdale Township, 2.2 miles in East Deer, 1.5 miles in Tarentum, 0.6 miles in Brackenridge, 4.6 miles in Harrison, 0.5 miles Freeport (Armstrong County) and 2.0 miles in Allegheny Township, Westmoreland County.

The preferred alignment traverses thru 12 miles of active Railroad property, 12.0 miles thru private property, 2.0 miles thru public rights-of-way and 3 miles on existing trails. Proceeding from south the preferred alignment extends 0.8 miles in Millvale, 1.0 miles in Shaler, 0.7 miles in Etna, 1.3 miles in Sharpsburg, 0.4 miles in Aspinwall, 0.7 miles in City of Pittsburgh, 3.6 miles in Township of O’Hara, 1.0 miles in Blawnox, 3.0 miles in Harmar, 0.7 miles in Cheswick, 1.5 miles in Springdale Borough, 1.3 miles in Springdale Township, 3.1 miles in East Deer, 1.5 miles in Tarentum, 0.6 miles in Brackenridge, 5.6 miles in Harrison, 0.5 miles Freeport (Armstrong County) and 2.0 miles in Allegheny Township, Westmoreland County.

The Trail Concept Plans showing the preferred and practical alignments are attached in appendix E.

Regional Trail / Greenways

It is important to understand the role that this project plays in the local, regional and statewide trail and greenway system. The PA Department of Conservation & Natural Resources (DCNR) has identified 34 major or mega greenway corridors in Pennsylvania that are at least 50 miles, pass through two or more counties, and are recognized in an official planning document. Five of these mega greenways have been targeted by DCNR for increased funding and staff assistance. Two of the five pass through Allegheny County: the Great Allegheny Passage and the Pittsburgh to Harrisburg Mainline Canal.
The Erie to Pittsburgh Trail also has a good chance of being included in this group due to its strategic location and the number of residents and communities it can join together.

**Pittsburgh-to-Harrisburg Mainline Canal Greenway™**
The Pittsburgh-to-Harrisburg Mainline Canal Greenway™, is a 320-mile long corridor that follows the path of the historic Pennsylvania Mainline Canal. The section of the greenway in Allegheny County runs from Pittsburgh to Freeport, along the Allegheny River. This greenway has been designated Pennsylvania’s Millennium Legacy Trail – one of 52 state significant trails that link heritage, culture and recreation. The Pittsburgh-to-Harrisburg Mainline Canal Greenway™ will encompass both land and river trails to complete the corridor connections.

[www.alleghenyridge.org](http://www.alleghenyridge.org)

**Erie to Pittsburgh Mega Greenway**
DCNR's second priority for greenways funding in western Pennsylvania is the Erie to Pittsburgh Greenway, a recently designated greenway in the PA Greenways Program. The Erie to Pittsburgh Greenway incorporates trail systems both built and planned along the Allegheny River, and overlaps the Pittsburgh to Harrisburg Mainline Canal Greenway™ within Allegheny County’s borders. Trail organizations from Pittsburgh to Erie are working to connect a number of land trails to it.

The concept for the Erie to Pittsburgh Greenway emerged from local communities and trail organizations. The success of other community and regional trails built in the western part of the Commonwealth over the years provided good models for the Erie to Pittsburgh Greenway. With trails such as the Three Rivers Heritage Trail, Armstrong Trail, Allegheny River Trail, McClintock Trail, Oil Creek Gorge Trail, Ernst Trail, Pymatuning Spillway Trail, and many others, the Erie to Pittsburgh Greenway can unify the Western Pennsylvania Trail Network. This potential mega greenway will enhance the existing trail system, give it a regional identity, make additional connections, raise the visibility of individual trail projects in the region and elevate the value of recreational resources in local communities. Once the Erie to Pittsburgh regional trail system is completed, it can then connect to The Great Allegheny Passage, linking Erie to Washington, DC.

[www.eriepittsburghtrail.org](http://www.eriepittsburghtrail.org)

Please refer to Appendix B for a map and more information about the regional trail system.

**Preferred / Practical Alignment & Community Connections**

For riverfront trail projects the most desirable or preferred location is to be as close to the river as possible. This reduces the amount of road crossings, provides a very scenic and enjoyable trail experience and allows public access to our riverfronts. Riverfront property is also typically at a level grade making the trail accessible to a variety of users.
Due to private property, active railroads or other industrial property it is not always possible to provide a trail directly on the riverfront and frequently riverfront trails need to veer away from the riverfront and utilize either roads or property that may be available for trail development. Thus projects take on a more practical alignment due to specific circumstances.

In this case we must deal with private property, railroads and industry. The active mainline railroad, Norfolk & Southern follows the entire stretch of this alignment and serves several industries along the Allegheny River. This presents a challenge to developing a consistent trail along the riverfront. In some areas along this alignment, due to the railroad tracks and railroad property, there is very little space for a trail let alone available property to develop the trail right along the river.

In order to be successful, this project must address the realities of private property and active railroads along the Allegheny River. We have developed both a practical and preferred alignment for the trail to address these concerns. Following is a description of these alignments as related to this project.

**Preferred Alignment:** The goal of this project is to, where possible; develop the trail along the Allegheny River with strong connections from the river into communities at key trailheads. This is defined as the preferred alignment and we will strive to achieve this goal. A good example is the existing trail in Millvale Borough or the trail along the Riverfront Park in Tarentum. Much of this alignment is right at the top of the slope directly overlooking the river. A typical preferred alignment is shown below:

![Typical preferred alignment](Typical%20preferred%20alignment)

**Practical Alignment:** The practical alignment will take into account private property along the riverfront, industrial property uses and active railroads. To accommodate all of these issues, a practical alignment has been identified. This alignment is more likely to be developed in a shorter timeframe and can be used until other uses along the river change. The practical alignment will typically veer away from the riverfront and into communities sometimes using on street facilities (share the road) or other property that can be acquired for separated trail property. Please refer to the conceptual designs for the corridor for more information about what potential on street facilities (share the road)
could look like in (Section 5.0). A typical practical alignment option of a share the road facility is shown below:

(Photo of typical share the road facility)

**Community Connections:** One of the benefits of trails is the potential for economic development in communities that are along the alignment. Benefits come both from visitors to communities who spent money while they are using the trail and also an increase in property values as a result of the trail development. The Great Allegheny Passage, for example, has an estimated 700,000 trips annually. This equates to an estimated $40 million impact in direct spending and $7.5 million in wages every year (Source: Trail Town Program ® [www.trailtowns.org](http://www.trailtowns.org)).

One of the keys to enhancing the economic development potential of trails is to have strong connections from the trail into communities. This will also make it easier for residents along the trail alignment to use the trail. We have identified several connections from the river into the heart of communities along the trail. These connections are identified on the maps in Appendix E and discussed in the Trail Corridor Descriptions.

### 3.0 PUBLIC INVOLVEMENT

**List of Stakeholders**

Borough, Harmar Township, Cheswick Borough, Springdale Borough, Springdale Township, Frazer Township, Tarentum Borough, Brackenridge Borough, Harrison Township, Freeport Borough, and Allegheny Township.

**Public and Project Stakeholder Meetings**

An extensive public involvement program was maintained throughout the feasibility study process that included stakeholder, municipality, and general public meetings. The involvement extended to meetings and regular correspondence with community leaders. Local municipalities were grouped and steering committee members and the consultant met with municipal representatives to gain local knowledge within the study area. This was a critical step in the feasibility study as it allowed municipal representatives and volunteer organizations to develop the alignment by showing the best placement of the trail route.

In all, twelve (12) informational presentations were made before various municipalities and community leaders as well as (3) advertised public meetings during the study process.

At each meeting the public was given the opportunity to discuss sections of the proposed trail that would pass through their municipalities and indicate an alignment. These alignments were analyzed for right-of-way impacts, physical restraints, flood plain and environmental impacts and accessibility. The results of the analysis were then presented to the municipalities and an agreed upon practical alignment was established that is described in this feasibility study.

The following is a list of the correspondence with community leaders, municipality and public meetings with participants:

**Municipal Meetings & Correspondence with Community Leaders**

- **March 10, 2009**
  - Tarentum
  - Brackenridge
  - East Deer
  - Natrona

- **April 20, 2009**
  - Etna
  - Shaler
  - Millvale

- **May 5, 2009**
  - Aspinwall
  - Fox Chapel
  - Freeport

- **May 12, 2009**
  - Springdale Twp.
• Cheswick
  o May 18, 2009
    • Phone interview Harmar.
  o May 20, 2009
    • Phone interview with Springdale Borough.
  o June 10, 2009
    • Freeport
  o June 23, 2009
    • Allegheny Valley Land Trust
  o June 25, 2009
    • Sharpsburg
  o July 10, 2009
    • City of Pittsburgh - Department of Public Works
  o July 20, 2009
    • Blawnox

Public Meetings

March 2, 2010 Millvale Community Center

March 3, 2010 Alle-Kiski Museum, Tarentum

March 6, 2010 Boyd Community Center, O’Hara Township

The Public and Project Stakeholder Meeting Minutes are attached in appendix B.

Property Owners

In the past, traditional trail development normally consisted of dealing with one property owner: Railroads. Securing and purchasing the rights to abandoned railroad lines would sometimes provide 10, 20 or 50 miles of a trail alignment.

However, within Allegheny County, the riverfronts are alive and well with activity – commercial, industrial, residential, railroads and recreational uses. These uses are located near the riverfront because the area provides easy access to barge transportation and a flat area for construction.

As recreational use of the riverfronts grow, working with private property owners has become more critical. This study area presents some challenges and opportunities with the significant number of private property owners.

Railroad Property

Private property owners and the Norfolk & Southern Railroad Company are important partners to the Allegheny Valley Community Trails Study.
The study area has identified several miles of railroad property that would be necessary to traverse in order to develop a trail near the riverfront. This is a challenging proposition due to safety concerns identified by the railroad. Property owned by the railroad is used by railroad personnel to monitor and repair track activity and is part of the track infrastructure. Safety is of paramount concern to the railroad and a distance of eighty (80) feet from the tracks is necessary for any type of trail development.

Safety is an important part of trail development and this study recommends a continued relationship with Norfolk & Southern to determine if and when trail development may occur.

**Private Property**
Along the Allegheny River there are industrial, commercial and privately owned homes, condominiums or apartment complexes. Each type of ownership presents opportunities to work on identifying trail alignments that owners are comfortable with and provide safe and secure trails for the users.

**Public Property**
Several municipalities own property along the riverfront. These segments of land become important connections for the Allegheny Valley Community Trails Initiative. Developing riverfront parks and trails is a common use of municipal owned property and there are several communities that have trails and parks in place along the study area. We work to connect these segments to complete the entire trail.

### 4.0 DEMAND FOR AND POTENTIAL USE OF TRAIL

**Market Analysis**

As stated, one of the benefits of trails is the potential for economic development in communities that are along the alignment. Benefits come both from visitors to communities who spent money while they are using the trail. An increase in property values as a result of the trail development and creation of new businesses that cater specifically to trail users. Over the past 10 years, the Great Allegheny Passage economic impact has increased as the trail alignment grew and people began to use the trail for day trips and overnight trips. There is now an estimated 700,000 trips annually. This equates to an estimated $40 million impact in direct spending and $7.5 million in wages every year (Source: Trail Town Program ® www.trailtowns.org).

Friends of the Riverfront is currently conducting a Trail usage survey of the existing segment so the Three Rivers Heritage Trail and plans to provide the data to the public, municipal leaders and local planning agencies in October of 2011. The information will also be provided to the Rails to Trails Conservancy which in 2014 plans conduct a comprehensive economic impact report for the entire system including currently build but not yet fully connected segments. Once both studies are complete a clear understanding of usage and economic benefits will be available and utilized for further development of
the Three Rivers Heritage Trail. Potential demand for the proposed trail will be estimated once this information is made available.

**Trail Linkages/Connections to Existing Trails**
A comprehensive description of the proposed practical and preferred alignments for the trail and where they connect to existing trails is shown on the Trail Concept Plan (Appendix E).

**Trail Survey and Results**

A trail user survey form was developed to help determine any possible economic impact that the proposed trail would have on the associated local communities. The target group for the surveys was focused on stakeholders who would use the trail and also adjacent property owners / businesses that provide products and services for trail users.

The trail survey form was given to every individual who attended the public meetings. The survey was made available online at the Friends of the Riverfront webpage for individuals to print, complete and mail the completed survey to the Friends of the Riverfront. The results of the completed surveys were recorded and compiled.

The completed surveys showed that a predominant number of people that took the survey were over 46 years of age, without children. The primary use of the trail would be walking or biking. Users indicated that in the past year they spent money on average of $100 for trail use which includes purchases of accessories, clothing, bikes or footwear. Looking at potential needs identified by the survey; ice cream and beverages ranked the highest in potential purchases of trail users. A total of 146 completed survey forms were collected as a result of the public meetings. The answers to the completed surveys are attached in Appendix D.

**5.0 CONCEPTUAL DESIGN FOR CORRIDOR**

**Trail Corridor Typical Sections**

The majority of the multi-use trail will follow a newly constructed paved cart path with a varied width depending on available space. The paved cart path will consist of a 1.5” asphalt wearing course, 4.5” asphalt base course, 6” Subbase (No. 2A), and geotextile fabric. An alternate crushed limestone cart path of consisting of 2” of AASHTO #10 crushed limestone, 2” of AASHTO #2A Modified, and geotextile fabric can be used where desirable. An easement, right-of-way or agreement must be obtained from all affected property owners for the trail. Fencing or concrete barrier will be considered in the final design along any sections of the trail adjacent to an active rail line and will be determined following discussions with the Norfolk & Southern Railroad Company. In other areas, it may be necessary to “share the road” with motor vehicles by using designated and restricted bike lanes or using signs to mark a “bike route”. The areas where the trail will utilize the “share the road” facilities shall be in accordance with the MUTCD 2009 Edition standards. The proposed trail and amenity development /
construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990. The typical sections for the newly constructed paved and crushed limestone cart paths are shown below:

**Typical Section - Paved Cart Path**

**Typical Section - Limestone Cart Path**

**Trailer Corridor Description**

In the following section, a description of the current land use for the total length of the proposed Three Rivers Heritage Trail Corridor is described. There are many small segments that are necessary to complete the entire alignment from Millvale to Schenley. This section includes specific descriptions of each segment of trail, typically separated by
municipality. Other aspects of the segment that is important for development like property ownership, topography, description, preliminary cost estimates, etc. are included in Appendix G (Physical Inventory and Assessment of the ROW). This information should be used to pursue development opportunities.

The following are brief descriptions of each segment of the Three Rivers Heritage Trail corridor:

**Millvale Segment ≈ 0.8 miles**
The proposed practical and preferred alignment through Millvale exists and it is in use. The alignment will begin at Millvale Riverfront Park and follow the existing bike trail that currently extends from the park to the Shaler Twp. boundary line. The Millvale Riverfront Park currently serves as a trailhead.

**Shaler / Etna Segment ≈ 1.7 miles**
The proposed preferred and practical alignment through Shaler/Etna will follow along an existing railroad service road that parallels the railroad tracks. The service road is along the river side of the railroad tracks and extends to Bridge Street under the 62nd Street Bridge along the Etna / Sharpsburg borough boundary. This alignment intersects with private property and property owned by the Borough of Etna. There are limited opportunities for a trail connection through Shaler that is not along the riverfront due to the existing railroad tracks, SR 28 and a steep grade. Much of Shaler and other public roads are at the top of the steep hill. For much of this section of riverfront there are not other roads that we can take advantage of to make this connection. This presents a major challenge to completing this section of trail. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

**Sharpsburg Segment = varies from 1.3 to 1.8 miles**
The proposed preferred alignment through Sharpsburg will follow the existing railroad service road that parallels the railroad tracks from Bridge Street under 62nd St. Bridge and ends just before the Sharpsburg Riverfront Park. The alignment will connect to the Sharpsburg Riverfront Park and then run along an existing dirt road along the river that extends from the park to the Sharpsburg water plant and Silky’s Crow’s Nest Restaurant. The proposed practical alignment in Sharpsburg will take advantage of Main Street and improving biking connections through the Sharpsburg business district. Access to Main Street is available as soon as under the 62nd Street Bridge if needed. Trail users will be able to cross back to the riverfront at 19th Street to connect to Aspinwall through private property. It is also recommended that Freeport Road be upgraded for share the road opportunities. The Sharpsburg Riverfront Park will serve as a proposed trailhead. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

**Township of O’Hara Section No. 1 Segment = varies from 0.4 miles to “to be determined”**
The proposed preferred alignment through the Township of O’hara section 1 will begin along private property along the riverfront and cross under the Highland Park Bridge to
the Aspinwall Borough boundary. It is recommended that the practical alignment include improvements to Freeport Road for shared road opportunities. The proposed trail and amenity development/construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

**Aspinwall Segment ≈ varies from 0.4 miles to “to be determined”**
The proposed preferred alignment through Aspinwall will begin along private property along the riverfront and connect to the Aspinwall Marina. The alignment will then share the road for the marina entrance to utilize the public railroad crossing to cross the railroad tracks and connect to the existing railroad service road that parallels Freeport Road. The Aspinwall Marina will serve as a proposed trailhead. The practical alignment will use share the road along Freeport Road and utilize neighborhood streets. The Aspinwall Marina will serve as a proposed trailhead. The proposed trail and amenity development/construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

**City of Pittsburgh Segment ≈ 0.7 miles**
The proposed preferred & practical alignment through the City of Pittsburgh will follow the existing railroad service road on Norfolk & Southern property adjacent to Freeport Road and continue to the railroad crossing for the City of Pittsburgh water treatment plant (PWSC) entrance. This crossing is owned by the City of Pittsburgh. The alignment will utilize the existing crossing and maintain along the PWSC employee access road to the Chapel Harbor Development (O’hara Twp. section 2 boundary line). The proposed trail and amenity development/construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

**Township of O’Hara Section No. 2 Segment ≈ 1.4 miles**
The proposed preferred alignment through Township of O’hara section 2 will begin along the PWSC entrance road that parallels the railroad (adjacent to Chapel Harbor) and cross the Chapel Harbor retirement home property to connect to the existing walking trail located along Chapel Harbor Drive. The existing trail along Chapel Harbor Drive consists of an approximately 5 ft wide sidewalk used for pedestrians. The existing sidewalk will be used for pedestrian use and Chapel Harbor Drive will be a shared road facility used for bicycles. The alignment will continue along Chapel Harbor Drive and then along Zaenger Drive to Riverfront Drive. The alignment will then cross Zaenger Drive and Riverfront Drive and run along Papercraft Park Road, which extends to the Blawnox Borough boundary line. The trail adjacent to Papercraft Park Road will consist of an 8 ft wide paved surface. The trail in Township of O’hara Section No. 2 can be directly accessed along Chapel Harbor Road. An existing connection to the Squaw Valley Trail is in-place and will connect to the proposed alignment at the Chapel Harbor entrance. The proposed trail and amenity development/construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

**Blawnox Segment ≈ varies from 0.8 miles to 1.0 miles**
The proposed practical alignment through Blawnox will begin adjacent to 4th Street and continue adjacent to Centre Avenue. The alignment will use the Centre Avenue public railroad crossing to cross the railroad tracks and follow along the existing railroad service
road closest to Freeport Road. The Blawnox Borough Community Park will serve as a proposed trailhead. The alignment will continue along the existing railroad service road that extends to the Township of O’hara section 3 boundary line. The proposed preferred alignment will begin along 4th Street and follow along the municipal boundary to the riverfront. The alignment will follow along the riverfront through private property to the Township of O’hara section 3 boundary line. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

Township of O’Hara Section No. 3 Segment ≈ varies from 1.8 miles to “to be determined”
The proposed preferred alignment through Township of O’hui section 3 will begin along the riverfront through private property and continue to River Road. The alignment will continue along River Road to the public railroad crossing just before Freeport Road. The alignment will then continue along the existing railroad service road that parallels the railroad tracks / Freeport Road and extends to the Harmar Township boundary line. No improvements are anticipated for the public railroad crossings. It is suggested for the practical alignment that improvements to Freeport Road be made for Share the Road opportunities. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

Harmar Segment ≈ varies from 3.0 miles to “to be determined”
The proposed preferred alignment through Harmar will follow the existing railroad service road that parallels the railroad tracks / Freeport Road and extends to the Cheswick boundary line. The public boat launch properties owned by the Commonwealth of Pennsylvania and the PA Fish and Boat Commission will serve as proposed trailheads. This trail alignment presents major challenges because of a steep hillside, Route 28, Freeport Road and the railroad tracks. Options for the alignment are limited. It is recommended that a practical alignment include biking improvements along Freeport Road and utilize neighborhood streets. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

Cheswick Segment ≈ varies from 0.7 miles to 0.8 miles
The proposed preferred alignment through Cheswick will follow along the existing railroad service road that parallels the railroad tracks and extends to the Springdale Township boundary line. The proposed practical alignment through Cheswick will use the public railroad crossing along Blockdale Street to cross the railroad tracks and onto private property. The alignment will then continue through various private properties along the riverfront and extend to the Rachael Carson Park along S. Duquesne Ave. The Rachael Carson Park along S. Duquesne Ave will serve as a proposed trail head for the practical & preferred alignments. There is public parking available at the Rachael Carson Park. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

- 14 -
**Springdale Borough Segment ≈ varies from 1.5 miles to 1.9 miles**
The proposed practical alignment through Springdale Borough will begin at the public railroad crossing along S. Duquesne Ave. and become a share the road facility along S. Duquesne Ave., Freeport Rd., Coalfax St., Railroad St., Keane St., and Butler St to the Springdale Borough boundary line. The Veterans Memorial Ballfields, Springdale Township VFW, and the public boat launch owned by Springdale Borough along Colfax St. will serve as proposed trail heads. An existing connection to the Rachael Carson Trail is in-place at the Springdale Township VFW, which will serve as a proposed trail head. The proposed preferred alignment through Springdale Borough will follow along the existing railroad service road that parallels the railroad tracks / Freeport Road and extends to the Springdale Township boundary line. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

**Springdale Township Segment ≈ 1.3 miles**
The proposed preferred alignment through Springdale Township will follow along the existing railroad service road that parallels the railroad tracks / Freeport Road and extends to the East Deer boundary line. An existing connection to the Rachael Carson Trail is in-place at the Springdale Township VFW, which will serve as a proposed trail head for the proposed trail alignment. It is recommended that the practical alignment include improvements to Freeport Road for share the road opportunities. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

**East Deer Segment ≈ varies from 2.2 miles to 3.1 miles**
The proposed practical alignment through East Deer will begin along Freeport Road via a share the road facility and extend to the public railroad crossing at the East Deer Park. The alignment will run through the East Deer Park and private property (PPG Industries) to Ferry Street. The alignment will then continue along Ferry Street and cut through private property (PPG Industries) adjacent to railroad property to a point where the trail can cross the private property to make its way back along the riverfront The alignment will then follow along the riverfront through private property (1000 Treadway Trust & Holcim Inc.) to the Tarentum Borough boundary line. The proposed preferred alignment through East Deer will begin along the existing railroad service road that parallels the railroad tracks / Freeport Road and extend to the Air Products entrance. The alignment will utilize the entrance to follow along the riverfront through private property and into the East Deer Park. The alignment will run through the East Deer Park and private property (PPG Industries) to Ferry Street. The alignment will then continue along Ferry Street and cut through private property (PPG Industries) adjacent to railroad property to a point where the trail can cross the private property to make its way back along the riverfront The alignment will then follow along the riverfront through private property (1000 Treadway Trust & Holcim Inc.) to the Tarentum Borough boundary line. (1000 Treadway Trust & Holcim Inc.) to the Tarentum Borough boundary line. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.
**Tarentum Segment ≈ 1.5 miles**
The proposed practical alignment through Tarentum will begin along private property along the riverfront and then become a share the road facility along Grantham Street to W. 6th Avenue to 4th Avenue to 1st Avenue to the Tarentum Riverfront Park. The alignment will then run through the Tarentum Riverfront Park to the Brackenridge Memorial Park. The proposed preferred alignment will begin along private property along the riverfront and extend to 4th Avenue and then to 1st Avenue to the Tarentum Riverfront Park. The alignment will then run through the Tarentum Riverfront Park to the Brackenridge Memorial Park. The Tarentum Public Boat Launch & Riverfront Park will serve as proposed trailheads. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

**Brackenridge Segment ≈ 0.6 miles**
The proposed practical and preferred alignment through Brackenridge will begin at the Brackenridge Memorial Park and follow the existing walking trail that extends through the park. The alignment will then continue as a share the road facility along 1st Avenue to Brackenridge Borough line. The Brackenridge Memorial Park will serve as a proposed trailhead. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

**Harrison Township Segment ≈ varies from 4.6 miles to 5.6 miles**
The proposed practical and preferred alignment through Harrison Township will be a share the road facility beginning along River Avenue and continue to Veteran’s Way. The alignment will then follow Veteran’s Way along the river that extends to the U.S. Army Corps (USACE) property for the Allegheny River Lock Station. The alignment may then either continue along U.S. Army Corps (USACE) property back along River Avenue to Federal Street or stop at the U.S. Army Corps (USACE) property and bear left through private property. The practical alignment will then continue along Federal Street to N. Canal Street, where as the preferred alignment will follow the riverfront through private property and connect the existing railroad service road and extend to the proposed onramp to the SR 356 Bridge over the Allegheny River. The practical alignment will then continue along N. Canal Street and onto Karns Road. The practical alignment will follow Karns Road till the road turns into Oak Manor Drive. The practical alignment will then cross private property (Mount Airy Cemetery) and may continue on railroad property along the existing railroad service road to the proposed onramp to the SR 356 Bridge over the Allegheny River. The Harrison Ballpark off of Karns Rd. will serve as a proposed trailhead. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

**Freeport Borough / Allegheny Township Segment ≈ 2.5 miles**
The proposed practical alignment will begin along the proposed onramp to the SR 356 Bridge over the Allegheny River. The alignment will run adjacent to the proposed onramp and across the SR 356 Bridge over the Allegheny River. Bridge reconstruction includes a bike lane The alignment will use this bike lane to cross the SR 356 Bridge over the Allegheny River and onto River Landing Drive (share the road facility), which is
adjacent to the River Forest Golf Club. The alignment will continue along River Landing Drive and connect to the abandoned railroad bed along the Allegheny River. The abandoned railroad bed is private property and has recently been sold. The new owners of the property have publicly discussed working with Allegheny Township to provide a 1.5 mile transfer of the abandoned railroad bed to the Butler/Freeport trail. The proposed practical alignment will provide a connection to the Butler/Freeport Trail via the old abandoned railroad bed under the north side of the SR 356 Bridge over the Allegheny River and the proposed bike lane across the SR 356 Bridge over the Allegheny River. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

**Trail Corridor Definitions**

The following are definitions for the various items that are described in the trail corridor descriptions and cost estimates in Appendix F.

*Description* – Brief description of trail segment and location

*Legal Feasibility* – Brief description regarding the feasibility of trail segment.

*Property Owners* – Identify all segment property owners impacted by the trail alignment.

*Topography* – Is the area flat? Are the any significant obstacles like creeks, dams, etc.

*Land Use* – Identify and address potential impacts on adjacent land uses (agricultural lands, industrial properties, school facilities, businesses, residences, etc.)

*Erosion/Drainage Problems* – noticeable problems with erosion and water

*Significant Natural Features* – the adjacent or intersecting streams; significant natural features (lakes, ponds, rock outcroppings, wetlands, floodplains, etc.); and, existing vegetation and wildlife analysis (identify any species of concern or sensitive habitat areas in the project area and/or the existence of aggressive, weedy species/major invasive plants)

*Structures in Corridor* – Provide a general assessment of existing bridges, canals, culverts, and/or tunnels. Provide a general assessment of existing trail buildings (train stations, etc.). Identify potential and/or obvious trail encroachments.

*Utilities* – Identify and map the location of utilities in relationship to trail and alternative trail locations (water, sanitary sewers, electrical and gas lines, telephone, etc.). Access the capacity of these utilities to serve trail development. Determine instances where the physical location of utilities may be an impediment to trail development.

*Property Owner Required Right-of-Way* – Identify property owners impacted by the trail alignment right-of-way.
Environmental Hazards – Based on preliminary assessments, determine the need for environmental assessment studies relative to toxic waste disposal or other environmental hazards.

Intersections and Access Points – Identify and map existing road crossings, active rail lines, driveways, etc. Inventory access points located within the corridor for possible vehicular and pedestrian assess to and through the corridor.

Trail Linkages/Connections to Existing Trails – Possible connections to neighboring developments for both recreational and commuter use by residents and employees; and, Possible connections with other existing or proposed trails. Possible motorized/non-motorized public access points to the riverfronts.

User Demand & Market Analysis – Estimate initial usage levels, project future usage levels and estimate seasonal demand versus year-round demand based on surveying and information about the location.

ROW Costs – Costs to acquire necessary pieces of property if known.

Preliminary Construction Cost Estimate – Cost estimate of what it would cost to construct this segment of trail based on conceptual designs.

6.0 TRAIL OPERATION, MAINTENANCE, AND SECURITY

Typically Friends of the Riverfront aids in the development of new sections of the Three Rivers Heritage Trail. As part of this process there is a high probability that the municipality will own and maintain the trail and adjacent amenities. If however the municipality is unable or unwilling to do so Friends of the Riverfront is set up as a land trust to hold properties or in some cases Allegheny County may assume the role of ownership. In all instances Friends of the Riverfront will offer aid in maintaining the trail corridor through a license and maintenance agreement.

7.0 FINANCIAL FEASIBILITY

Cost Estimates

Right-of-way or Easement Acquisition
The proposed practical trail alignment occupies 15 miles of existing public right-of-way and 3 miles of existing trails which does not need to be acquired. This anticipates that right-of-way for the remaining 11 miles of proposed trail will need to be acquired. The proposed preferred trail alignment occupies 2 miles of existing public right-of-way and 3 miles of existing trails which does not need to be acquired. This anticipates that right-of-way for the remaining 24 miles of proposed trail will need to be acquired.
The proposed trail template varies due to limited construction opportunities, so a conservative estimate of the required right-of-way width is 20 feet. This defines a linear corridor that covers approximately 70 acres for the entire corridor. In addition, 14 trailheads are proposed that will utilize existing facilities.

Right-of-way for the proposed trail can be acquired through a variety of instruments including fee simple, easement or lease agreement. Purchase of the right-of-way in fee simple is generally preferred, but may not be feasible along much of the alignment because it could interfere with the economic interests of the current owners. Fee simple acquisition of the proposed trail right-of-way across large undivided tracts of land would require subdivision, which can be costly and time consuming. However, not having a fee simple interest in the trail right-of-way will make it difficult to secure public funding, since many government agencies require a fee simple interest, or at least a legal instrument that is guaranteed for the design life of the improvements.

Easement or lease agreements do not necessarily need to be described in the metes and bounds, but can simply identify logical termini and reserve corridor improved to set specifications necessary for the defined use and maintenance of the trail. This provides the property owners with the flexibility to relocate the trail if they have a compelling financial interest to do so. Because it does not completely encumber the owner’s future use of the land, a flexible easement or lease agreement could significantly reduce the cost of the right-of-way acquisition.

Right-of-way acquisition can cost what the market will bear. A uniform fair appraisal valuation will be defined using the county property assessments. The range of values for a 20 foot tract of land is estimated at $20,000 to $100,000 per acre. This results in a total estimate for right-of-way cost that ranges from $540,000 to $2,700,000 for the practical alignment and $1,180,000 to $5,900,000 for the preferred alignment. The right-of-way acquisition cost for each segment of the corridor is listed in Appendix G.

The scope of engineering services varies widely with the legal instrument used for right-of-way acquisition. If the right-of-way is acquired in fee simple, the need to perform deed research, survey, subdivide, and monument miles of primary trail right-of-way will have a significant cost. However, if most of the right-of-way is acquired as a flexible easement or lease agreement, most of the boundary surveying and subdivision cost are eliminated. Conservatively estimating that 20% of the primary trail right-of-way will require deed research, survey and monumentation puts the minimum cost for design services for right-of-way acquisition at $50,000 and $150,000.

**Design and Environment Clearance**

The cost for engineering and environmental services to design and obtain environmental clearance for construction of the proposed trail will vary greatly due to the diverse land types along the riverfront. However, it is conceivable that all design and environmental clearance for the proposed trail could be attained for between $150,000 and $300,000.
**Construction Costs**
The proposed practical alignment occupies a variety of existing conditions ranging from raw undeveloped land to existing state highway. The proposed practical alignment traverses approximately 18.0 miles of existing paved roadway, and 11.0 miles of off-road alignment, of which will require asphalt pavement. The proposed preferred alignment traverses approximately 5.0 miles of existing paved roadway, and 24.0 miles of off-road alignment, of which will require asphalt pavement. Recent experience with similar trail projects has shown that contractor bids are so variable and escalating so quickly, that a detailed breakdown by construction cost items is not likely to yield reliable information. However, experience has shown that the most reliable ball park estimate for average trail construction costs remains at approximately $20,000 to $50,000 per mile for trail along existing roadways and $250,000 to $300,000 for trail requiring new asphalt pavement. The 14 trailhead facilities are not expected to be very expensive since they are existing parking areas, parks, etc. and will only require signage. There are no expected structural items anticipated at this time for construction of the practical alignment.

The total cost for construction of the entire proposed practical alignment is anticipated to be within the range of $2,880,000 to $3,950,000. The total cost for construction of the entire proposed preferred alignment is anticipated to be within the range of $6,330,000 to $7,700,000. The construction cost for each segment of the corridor is listed in Appendix G.

**Maintenance Costs**
An excellent overview of operation and maintenance cost is provided by the Rails to Trails Conservancy Northeast Regional Office in their July 2005 publication Rail-Trail Maintenance & Operation. This publication compares the maintenance and operation costs of 100 rail-trails in the Northeast and Mid-west. The maintenance & operation costs reported ranged from a low of $500 to a high of $800,000 per year; with an average M & O cost of $50,000. The average trail surveyed was 23 miles long, and reported maintenance & operation costs of just under $1,500 per mile, regardless of whether it had a paved or unpaved surface. Much of this cost can be covered by volunteers and trail-tender groups.

**The Importance of Local Support**
When preparing and considering an estimate of costs it is very important to consider how support from within the community can reduce costs enormously. For example, a high level of support from land owners could reduce estimated right-of-way acquisition costs significantly. Similarly, if construction is funded locally, state and Federal requirements and standards can be relaxed and some eliminated altogether. Costs for maintenance of the trail where it occupies utility right-of-way could be shared between the entity responsible for maintenance of the trail and the municipal authority. The more the community takes ownership and is involved in maintenance and operation of the trail, the less there is likely to be vandalism and incidents of illegal activity along the trail corridor.
Phased Implementation Plan

The development of the Three Rivers Heritage Trail is a long-term proposition that will likely be developed in segments. The following sections have the highest potential for being dedicated as a trail with minimal costs and right-of-way conflicts:

**City of Pittsburgh/Township of O’Hara Sec. 2/Blawnox**
The trail will begin at the City of Pittsburgh water treatment plant (PWCSA) entrance and maintain along the employee access road. The trail will then cross the Chapel Harbor retirement home property to connect to the existing walking trail located along Chapel Harbor Drive. The existing trail along Chapel Harbor Drive consists of an approximately 5 ft wide sidewalk used for pedestrians. The existing sidewalk will be used for pedestrian use and Chapel Harbor Drive will be a share the road facility used for bicycles. The alignment will continue along Chapel Harbor Drive and then along Zaenger Drive to Riverfront Drive. The alignment will then cross Zaenger Drive and Riverfront Drive and run along Papercraft Park Road and 4th Street to Centre Avenue. The trail adjacent to Papercraft Park Road and 4th Street will consist of an 8 ft wide paved surface. The trail in can be directly accessed along Chapel Harbor Road. An existing connection to the Squaw Valley Trail is in-place and will connect to the proposed alignment at the Chapel Harbor entrance.
Trail length – 1.8 miles
Estimated Construction Cost - $145,000 to $200,000

**East Deer/Tarentum/Brackenridge**
The trail will begin at the East Deer Park located along Freeport Road. The trail will run through the East Deer Park and private property (PPG Industries) to Ferry Street. The trail will then continue along Ferry Street and cut through private property (PPG Industries) adjacent to railroad property to a point where the trail can cross the private property to make its way back along the riverfront. The trail will then follow along the riverfront through private property (1000 Treadway Trust & Holcim Inc.) to Grantham Street. The trail will then follow along Grantham Street, W. 6th Avenue, 4th Avenue, and 1st Avenue sharing the roadway to the Tarentum Riverfront Park. The trail will then run through the Tarentum Riverfront Park and Brackenridge Memorial Park to East 1st Avenue.
Trail length – 3.4 miles
Estimated Construction Cost - $666,000 to $820,000

**Harrison Township**
The trail will begin as a share the road facility along River Avenue and continue to the intersection with Linden Street. At the intersection, the trail will turn onto and follow Veteran’s Way along the river that extends to the U.S. Army Corps (USACE) property for the Allegheny River Lock Station. The alignment may then either continue along U.S. Army Corps (USACE) property back along River Avenue to Federal Street or stop at the U.S. Army Corps (USACE) property and bear left through private property. The alignment will then continue along Federal Street to N. Canal Street. Then alignment
will then continue along N. Canal Street and onto Kams Road. The alignment will follow Kams Road to where the road turns into Oak Manor Drive.
Trail length – 3.8 miles
Estimated Construction Cost - $76,000 to $190,000

8.0 EXECUTIVE SUMMARY AND RECOMMENDATIONS

This study reviews the various alignment alternatives available, identifies a practical and preferred alignments based on feasibility and user demand, identifies and documents the affected properties and their owners, documents and extensive public involvement process, and projects the costs associated for implementation of the proposed trail project.

This project has the potential to be a great asset for the 17 municipalities involved along this corridor. It will provide recreational as well as educational value to the entire region. It will also connect to major trail systems.

Much work has been done to date:
- In 2001, Millvale Borough completed their portion of the Three Rivers Heritage Trail including the development of several riverfront amenities like a boat access point, picnic shelter and restrooms.
- In 2005, O’Hara Township completed a Trail Feasibility and Planning Study. Phase I implementation of this study included the completion of the Squaw Valley Riverfront Trail, which provided a connection from Squaw Valley Park to Chapel Harbor with spurs north along the river to the Fox Chapel Yacht Club.
- In 2006 Sharpsburg Borough began work on a trail and boat ramp as a segment of the Three Rivers Heritage Trail.
- The connection between the City of Pittsburgh and the Borough of Millvale was completed in the Fall of 2010 creating a safe connection to the Three Rivers Heritage Trail.
- In 2009 the Community Trails Feasibility Study was initiated encompassing 17 municipalities (City of Pittsburgh, Millvale, Shaler, Etna, Sharpsburg, Aspinwall, Fox Chapel, O’Hara Township, Blawnox, Harmar, Cheswick, Springdale, Springdale Township, Frazer, Tarentum, Brackenridge and Harrison).

Successes of the Community Trails Feasibility Study to date:
- 17 municipalities have signed on are supportive including three counties (Allegheny, Westmoreland & Armstrong). We have support letters and have held face-to-face meetings with every municipality.
- In addition to stakeholder meetings we have held one round of public meetings. Over 70 people attended each one of three meetings along the alignment. There is strong public interest in this project.
- Both the Freeport & Hulton Bridges are undergoing renovation or rebuilding. In both cases there will be bike/pedestrian accommodations on the new or renovated structure in part because of the trail efforts in this area.
This trail project is part of two larger mega-greenway projects endorsed and supported by the Department of Conservation and Natural Resources. The Erie to Pittsburgh Trail and the Harrisburg to Pittsburgh Mainline Canal Greenway. Both projects bring interest and momentum to this important segment.

This trail is viewed as part of the quality of life for the local communities, but more importantly it is also seen an economic driver.

Challenges:

- 13 of the 29 miles needed to complete the trail are within Norfolk & Southern Railroad property. This is a high speed line and Norfolk & Southern is looking for expansion opportunities. They are not currently open to negotiations.
- Specific communities have limited opportunity for a practical alignment and community connection (Etna and Township of O'Hara/Harmar are particularly difficult).

Opportunities

- There are several existing riverfront parks that are owned by municipalities that can be connected as part of the larger trail system (Millvale, Sharpsburg, O'Hara-trail through private development, Cheswick, Springdale, East Deer, Tarentum, Brackenridge, and Harrison).
- Key riverfront acquisitions will be important to completing this project. There is currently an opportunity at the Aspinwall Marina and 0.5 acres of riverfront property in Etna Borough adjacent to the 62nd Street Bridge.
- Explore community connections and combination of road and trail connections.
- Allegheny County has developed "ActiveAllegheny" which focuses on connectivity to our existing transportation system using walking, biking and other modes of transportation. It provides an opportunity to plan and prioritize bike routes and walking facilities. The goal is to connect people to communities, work places, schools, transit sites, attractions and residences. ActiveAllegheny looks at the following components: Bike Allegheny, Walk and Roll Allegheny (ADA accessibility), Complete Streets, Active Transportation opportunities and Actions. Each component provides resources, identifies potential opportunities, deficiencies and system improvements and looks at both successful policies and programs. This action plan provides municipalities' opportunities to develop safe walking routes to schools, on road biking opportunities and ideas to develop safe and sustainable active transportation.
  
  http://www.activeallegheny.com/

In order to build on successes and to meet the challenges that are we have identified several pilot projects and next steps. The following are recommendations as a result of the feasibility study:

- Easement agreements with Norfolk & Southern must be negotiated for use of any railroad property to allow for construction of the trail. In some instances, the condition of the service roads along the property right-of-way may provide
enough property to ensure safety. Additionally, minimal costs would be involved to provide a surface for walking or biking.

- Request local municipalities to amend their existing zoning ordinances in order to specify and require a setback from the river edge on all new development. There is a model riverfront development ordinance in the Improving Local Development Regulations handbook that would help municipalities amend their zoning ordinances. Allegheny County has a similar subdivision and land development ordinance (SALDO) to require a minimum setback for watercourses of 50 feet. This ordinance would provide an opportunity for a possible location for the trail along the riverfront within the municipality. The City of Pittsburgh, Pennsylvania Code has another similar ordinance for riverfront overlay district. These examples are attached in Appendix H.

- Conduct a title search for all the impacted and adjacent railroad property to clarify any leasing or easement agreements.

Support from the host municipalities is very important, because it is the local communities that will most likely be responsible for maintenance and operation of the trail once it has been constructed. The local communities will also derive the most economic benefit. The costs associated with right-of-way acquisition, engineering and environmental services, construction, operation and maintenance may appear formidable, but accomplished in carefully planned phases this is a very affordable project. Once the most attractive segments are constructed, revenue realized from heritage and recreational tourism will provide the compelling force that drives this project through to completion.
APPENDIX A
LOCATION MAP
APPENDIX B
REGIONAL TRAIL MAP
APPENDIX C
PUBLIC AND PROJECT STAKEHOLDER MEETING MINUTES
MINUTES OF MEETING

Subject: Allegheny River Trail Kickoff Meeting

Meeting Date: January 6, 2009 – 1:00 P.M.

Place: Friends of the Riverfront Office

Attendees: See Attached Sign-In Sheet

Discussion - Action Items are shown as (A)

• (A) Tom Baxter (FOR) stated that he will supply MKA all studies, reports, and files of any previous or relevant projects around the city.
• Tom stated that MKA should use the DCNR GIS standards to develop the feasibility study, since the funding will come through DCNR.
• Ohara Twp. already has an agreement with the Allegheny County GIS department to supply any necessary GIS information to MKA when requested.
• Darla Carrotta (AC) stated that many of the townships within the project limits already have proposed trail plans and they should be implemented in the feasibility study.
• Tom (ROR) stated that they have developed a Community Trails contact committee for this project, which consists of the public officials for each municipality involved in this project.
• Darla (AC) stated that a public meeting has already been held with the 17 municipalities involved with this project to inform them of the trail intentions and receive any comments or feedback. Darla stated they received positive feedback and support from the municipalities and that the majority of the municipalities within the project limits seem to be in favor of the proposed trail.
• Tom (FOR) stated that ideally he would like the trail to stay along the river, but in reality the alignment will most likely involve being placed along various streets. Trail maintenance will be an important factor to consider when laying the proposed trail alignment. All railroad crossings need to be shown on the final basemap.
• Darla (AC) stated that the priority of this study is to show an ideal trail alignment and the practical trail alignment based on our findings and experience.
• Darla (AC) stated that we can get a railroad GIS layer from SPC online if needed.
• (A) A municipal (workshop) meeting will be scheduled with the committee to present a preliminary base map without a proposed trail alignment to receive any comments or possible trail alignment pinch-points.
• (A) MKA will prepare the preliminary basemap and meet with Tom (ROR) to make sure the map will be sufficient for the municipal meeting.
• (A) MKA will develop a proposed trail alignment based from the committee meeting comments and then adjust the alignment in areas where it will be difficult to construct or obtain ROW based on our experience.
• (A) A second municipal meeting will be scheduled with the committee to present the proposed trail alignment for any additional comments or suggestions.
• Tom (ROR) stated the City has a formula to determine what trails will need to be paved and what trails will need to have crushed limestone.
• The proposed trail alignment should try to connect to any existing parks if possible.
• (A) Tom stated the Allegheny River Towns Enterprise Zone (ARTEZ) also received a grant from DCNR for the trail and will need to be billed.
These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates

cc: All Attendees
MINUTES OF MEETING

Subject: Allegheny River Trail Meeting

Meeting Date: February 10, 2009 – 10:00 A.M.

Place: Friends of the Riverfront Office

Attendees: See Attached Sign-In Sheet

Discussion - Action Items are shown as (A)

- MKA presented the GIS base map file of the project and a color plot of the Tarentum test section for any comments or recommendations. Some of the comments include:
  - Show all road names on the basemap and make the text more legible.
  - Label all the railroads on the basemap with the railroad owners.
  - Label all municipal parks on the basemap.
  - Show a transparent shading of all the properties that are owned by each municipality.
  - Insert the GIS contour file into the basemap for future meetings to reveal areas with steep slopes along the river. This layer will not be turned on, but will only be used to answer questions in future meetings.
  - Insert the GIS 100-year floodplain file into the basemap. This layer will not be turned on, but will only be used to answer questions in future meetings.

- Tom Baxter (FOR) has scheduled a meeting on February 17, 2009 with the Steering Committee to introduce MKA as the designers for the project. At this meeting, MKA will do a quick overview of the project by presenting the GIS base map file on an overhead projector and color plots of the Tarentum test section and test sections of Aspinwall to Blawnox.

- (A) Tom Baxter (FOR) will check with DCNR to determine if funding is available for the project if the proposed alignment is within the 100-year floodplain.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates

cc: All Attendees
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Meeting Date: February 17, 2009 – 6:00 P.M.

Place: Boyd Community Center

Attendees: See Attached Sign-In Sheet

Discussion - Action Items are shown as (A)

- Darla Cravotta (AC) started off the meeting by introducing McTish, Kunkel & Associates as the consultant who will prepare the feasibility study for the Allegheny River Trail.
- Jack Porter (MKA) gave an overview of project and a summary of how MKA will complete the legal feasibility study for the project. Jack stated the first step in preparing the feasibility study is MKA will prepare a preliminary base map without a proposed trail alignment from resources of the Allegheny County GIS Department and meeting with the local municipalities to receive local knowledge about development, existing trails, planned trails, etc. Jack stated that MKA will then develop a preferred and practical trail alignment based from municipality feedback and MKA construction and design experience.
- Steve Baird (MKA) presented a color plot of the Aspinwall to Blawnox test section and the preliminary GIS project base map file on an overhead projector to present how the Allegheny County GIS shape files will be a very effective way to determine the legal feasibility by identifying parcel boundaries, parcel identification numbers and the name and address of the owners of all affected tax parcels along a proposed alignment. This same approach will be used to present the project base map to the local municipalities for possible trail locations.
- (A) The Trail Steering Committee commented that they would like to see the existing schools and libraries on the preliminary base map that will be presented to the local municipalities.
- Jack (MKA) suggested that MKA meet with the local municipalities in groups. The Trail Steering Committee liked the idea and identified the following groups for the local municipal meetings:
  1. Tarentum, East Deer, Harrison, Brackenridge
  2. Shaler, Etna, Millvale, City of Pittsburgh
  3. Fox Chapel, Blawnox, O'hara, Aspinwall, Sharpsburg
- (A) The Trail Steering Committee will identify a chairman for each group as well as participants for each group.
- (A) MKA will prepare a Draft Organizational Chart to be completed by Steering Committee.
- (A) Darla (AC) stated that the Trail Steering Committee will assist in providing any consultant names associated with any ongoing or proposed projects along the river.
- Julie Jakubec (O'hara Township) suggested to the Trail Steering Committee that the municipalities should keep in mind to suggest providing an easement for the proposed trail to any proposed projects in the future.
- (A) Tom Baxter (FOR) will schedule a 2nd Steering Committee meeting after MKA has met with the groups.
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Meeting Date: March 10, 2009 – 10:00 A.M.

Place: Tarentum Borough Building

Attendees: See Attached Sign-In Sheet

Discussion - Action Items are shown as (A)

- Carl Magnetta (Tarentum Borough) started off the meeting by introducing McTish, Kunkel & Associates as the consultant who will prepare the feasibility study for the Allegheny River Trail.

- Terry McCue (MKA) gave an overview of project and a summary of how MKA will complete the legal feasibility study for the project. Terry (MKA) stated that MKA will meet with the 17 municipalities in 4 groups of 4 to 5 municipalities at a time and that this is the first group meeting. Terry (MKA) explained that MKA has prepared a preliminary base map of the project site showing aerial images, property lines, roadways, parks, railroads, and municipal buildings to display during the group meetings to receive local knowledge and possible trail locations from municipal representatives.

- Steve Baird (MKA) presented the base map on an overhead projector and stated MKA is using resources from the Allegheny County GIS Department to identify affected property owners when a preferred and practical trail alignment is developed. Steve (MKA) explained how beneficial using the GIS data is to identifying possible affected property owners is to completing the feasibility study. Steve (MKA) explained that the proposed alignment will not only be a proposed trail for biking, but will promote business within the municipalities by providing access to local business adjacent to the trail.

- Steve and Terry (MKA) layed out a color plot of each municipality (East Deer, Tarentum, Brackenridge, and Harrison) and opened the meeting for a workshop with the municipal representatives to obtain local knowledge and possible trail locations. The preferred and practical trail alignments were drawn in on the color plots and comments are listed below:
  - **East Deer Township**
    - **Preferred Alignment**
      - Starting from the southern border of East Deer, the preferred alignment would be along the river through railroad property which only has (2) active lines.
      - Then cut through Air Products property to get back along the river.
      - Maintain along river through sewer authority property.
      - Maintain through East Deer Park along the river (use existing pedestrian bridge in the park to cross existing drainage swale and along the existing walking trail in the park).
      - Maintain trail along the river to Tarentum Borough
    - **Practical Alignment**
      - Starting from the southern border of East Deer, the practical alignment would run along Freeport Road. Freeport Road currently has a 5' wide sidewalk along the western side of the road. (RR will most likely not allow trail within property)
      - Use Air Products driveway to cross RR tracks.
      - Maintain trail along Air Products property to get along the river.
- Maintain along river through sewer authority property.
- Maintain through East Deer Park along the river (use existing pedestrian bridge in the park to cross existing drainage swale and along the existing walking trail in the park).
- The trail should then cut up along Ford Street and along RR property, then back down along property to get back along river (to bypass property with wall along river)
- Maintain trail along the river to Tarentum Borough

- **Tarentum Borough**
  - Notes
    - The RR property will most likely not be able to be used because ATI will not want people using the RR ROW.
  - Preferred Alignment
    - Starting from the northern border of East Deer, the preferred alignment would be along the river to the existing scrap yard.
    - The trail will cut up along the scrap yard property and along W. 4th Ave.
    - Maintain trail along W. 4th Ave. over bridge (Bull Creek) and then cut down along Bull Creek to river.
    - Maintain trail along the river through Tarentum Park to Brackenridge.
  - Practical Alignment
    - Starting from the northern border of East Deer, the practical alignment would be start along the river and travel up along Graham Street sidewalk to Flornce Street.
    - Maintain trail along Flornce Street, Larusse Blvd., and W. 6th Ave.
    - The trail would then turn right onto Center Street (entrance to scrap yard) and maintain along W. 4th Ave. to Corbet Street. (Most businesses in Tarentum are along W. 4th Ave.)
    - The trail would then follow Corbet Street (ex. Sidewalk) and cross 1st Ave. and travel along river through Tarentum Park. The trail can either run along 1st Ave. or through the park to Brackenridge.

- **Brackenridge**
  - Notes
    - ATI property will not want the trail through their property and they have a lot of control of the RR property as well.
  - Preferred Alignment
    - Starting from the northern border of Tarentum, the preferred alignment would run along 1st Ave. (Ex. Sidewalk) to Harrison Twp.
  - Practical Alignment (1)
    - Starting from the northern border of Tarentum, the practical alignment would run along 1st Ave. (Ex. Sidewalk) to Harrison Twp.
  - Practical Alignment (2)
    - Starting from the northern border of Tarentum, the practical alignment would run along 1st Ave. and up Cherry Street (along sidewalk) to 5th Ave. (along sidewalk).
    - The trail will then run down 5th Ave. to Morgan Street.
    - The trail will then run along Morgan Street to 6th Ave.
    - The trail will then follow 6th Ave. to Argonne Drive to Harrison Twp.
Harrison Township

- Notes
  - ATI will be widening River Ave. with a proposed sidewalk.
  - The other mill up the river from ATI will be closing in the near future.

- Preferred Alignment
  - Starting from the northern border of Brackenridge, the preferred alignment would run along River Ave. / 1st Ave (ATI will be widening this road with a proposed sidewalk, cannot really go along the river because there is an existing steep bank there).
  - The trail would maintain along River Ave. to Federal Street.
  - At Federal Street, the trail would then cut down along the river (along the property for the existing mill that is going to shutdown). There is an existing road along the river here.
  - The trail would then connect to the RR property and maintain along the RR property to the northern border of Harrison Twp.

- Practical Alignment
  - Starting from the northern border of Brackenridge, the practical alignment would run along River Ave. / 1st Ave (ATI will be widening this road with a proposed sidewalk, cannot really go along the river because there is an existing steep bank there).
  - The trail would maintain along River Ave. to Federal Street.
  - The trail would then run adjacent to Federal Street to N. Canal Street.
  - The trail would then run along N. Canal Street and onto Karns Rd. (this road currently is used for walking).
  - The trail then would follow along Karns Road to Oak Manor Road.
  - At Oak Manor Road, the trail will maintain straight over the hill (existing trail now) to along the RR property to the northern border of Harrison Twp.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

Steven Baird

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates

cc: All Attendees
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Meeting Date: March 24, 2010 – 12:00

Place: Friends of the Riverfront Office

Attendees: See Attached Sign-In Sheet

Discussion - Action Items are shown as (A)

- Steve Baird (MKA) started off the meeting by stating the (3) public meetings went very well and as a result of the meetings, there were (3) main changes to the proposed practical alignment for the trail. The changes are listed below:
  - The practical alignment in Sharpsburg was revised. Instead of locating the trail along Main Street, the alignment will be located to run along 19th Street to the township baseball fields, which connects directly to an abandoned railroad line. The alignment will follow the abandoned railroad line under Freeport Road and the Highland Park Bridge, and then connect back to the railroad maintenance road located adjacent to Freeport Road. The alignment change was recommended due to the limited space for the trail and high vehicle traffic along Main Street.
  - The proposed practical alignment will run adjacent to an abandoned railroad line at the Cheswick / Springdale Borough border. The abandoned railroad line may serve as a possible connection to the Rachael Carson Trail in the future.
  - The practical alignment in East Deer by the East Deer Recreational Facility, East Deer Sanitary Authority, and Air Products was revised. The alignment was originally located along the riverfront, but the East Deer Sanitary Authority currently outlets directly into the river here. As a result, there isn’t any room to place the trail in this area, so the alignment was moved to maintain along the railroad maintenance road located adjacent to Freeport Road and utilize the public RR crossing for the East Deer Recreational Facility entrance into the existing park.

- (A) MKA will evaluate which sections of the trail alignment will be the easiest to build.
- (A) MKA will verify if PennDOT has adopted the new version of the MUTCD (Manual on Uniform Traffic Control Devices).
- (A) MKA will include a preliminary construction cost estimate in the draft feasibility study.
- (A) Darla Cravotta (AC) will contact Andy Beachle (Director of Parks) who has a good relationship with John Foley (Norfolk Southern) to discuss when a meeting can be held to discuss the proposed trail alignment and status of the feasibility study.
- DCNR stated that the feasibility study should include documentation that an attempt was made to contact the individual private property owners and make
them aware of the proposed alignment.

- (A) MKA will prepare a list of private property owner contact information by municipality that will be affected.
- (A) A separate meeting with the affected private property owners will be held to inform the owners of the proposed alignment.
- DCNR will review and comment on the draft feasibility study report before it is submitted.
- (A) A final public meeting will be held once the draft feasibility study is submitted to construct the final feasibility study report.
- The game plan for the feasibility study is summarized below:
  - Meet with railroad to discuss project ramifications in regards to railroad property.
  - Meeting with affected private property owners to give notice in regards to the alignment layout.
  - Submit draft feasibility study report
  - Final public meeting
  - Submit final draft feasibility study report

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

[Signature]

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Meeting Date: April 20, 2009 – 7:00 P.M.

Place: Millvale Borough Building

Attendees: See Attached Sign-In Sheet

Discussion - Action Items are shown as (A)

- Terry McCue (MKA) started off the meeting by introducing McTish, Kunkel & Associates as the consultant who will prepare the Feasibility Study for the Community Trails Initiative extending from Millvale to Armstrong County. Terry (MKA) stated that MKA will meet with the 17 municipalities in 4 groups of 4 to 5 municipalities at a time and that this is the second group meeting. Terry (MKA) explained that MKA has prepared a preliminary base map of the project site showing aerial images, property lines, roadways, parks, railroads, and municipal buildings to display during the group meetings to receive local knowledge, possible trail locations and trail head locations from municipal representatives.

- Steve Baird (MKA) presented the base map on an overhead projector and stated MKA is using resources from the Allegheny County GIS Department to identify affected property owners when a preferred and practical trail alignment is developed. Steve (MKA) explained how beneficial using the GIS data is to identifying possible affected property owners is to completing the feasibility study.

- Steve and Terry (MKA) layed out a color plot of each municipality (Millvale, Shaler, and Etna) and opened the meeting for a workshop with the municipal representatives to obtain local knowledge, possible trail locations, access points, and existing railroad crossings. The preferred and practical trail alignments were drawn in on the color plots and comments are listed below:
  
  o Millvale Borough
    - Notes
      - Millvale Borough currently has an existing bike trail that extends from the Millvale Riverview Park to a riverfront property in Shaler Township adjacent to the Millvale / Shaler boundary (which is owned by Millvale Borough) along the riverfront. The existing bike trail is approximately 8 feet wide gravel path. The Millvale Riverview Park currently offers available parking and serves as a trail head location to the existing bike trail.

  o Shaler Township
    - Notes
      - Tim Rogers (Shaler) stated the Shaler Water Plant currently uses the Norfolk Southern Railroad service road along the riverfront to access their wells along the river. The service road currently extends from the riverfront property in Shaler Township that is owned by Millvale Borough to the Borough of Etna. Tim (Shaler) stated that the Shaler Water Plant currently has a right-of-entry permit with the Norfolk Southern to use the service road. Tim (Shaler) explained that Norfolk Southern is very difficult to negotiate with and that they would not like the idea of a bike trail along their service road. It was stated that one possible way to help with negotiations with Norfolk
Southern is to contact local Congressman Altmire (who is in favor of the community access trails). Tim (Shaler) stated that he believes the RR service road runs along the railroad to the Pine Creek crossing bridge. Tim explained that he doesn’t believe the existing railroad service road crosses Pine Creek railroad bridge.

- There are no possible access points through Shaler Township due to the close proximity of SR 28 and the Norfolk Southern Railroad.

- Preferred & Practical Alignment
  - Starting from the existing trail through the riverfront property that is owned by Millvale Borough, the practical alignment would be run along the Norfolk Southern access road to the Pine Creek railroad crossing bridge, which is approximately the Shaler Township and Borough of Etna boundary.

- Borough of Etna
  - Notes
    - Dave Becki (Etna) stated he is in favor of the community bike trail through Etna and would try to help in any which way they can. Dave explained that Etna has existing water wells located along the riverfront just north of the Pine Creek crossing and are run by the Shaler Water Plant. Pete Ramage (Etna) was born and raised in Etna and has a lot of local knowledge of the area and offered to take MKA on a field view of Etna if necessary. Pete stated he would like to see the trail run through their business district, which would involve finding a way to make the trail cross two railroads and SR 28 onto Butler Street exit along SR 28. Butler Street has an existing sidewalk and goes straight through the Etna business district.
    - The Borough of Etna currently owns two pieces of riverfront property between the Shaler and Sharpsburg boundaries.
    - The embankment from the river to the Norfolk Southern RR is very steep along the riverfront property.
    - (A) Steve Baird will email Dave Becki the group discussion points form to complete and return.

- Preferred Alignment
  - Starting from the northern border of Shaler Township, the preferred alignment would involve constructing (3) overhead bridges crossing the two sets of railroad lines along Pine Creek, and SR 28 connecting to the Butler Street exit along SR 28.
  - The trail will then run along Butler Street (Ex. Sidewalk) through a residential area and into the business district of Etna to Bridge Street.
  - The trail will then run down along Bridge Street (Ex. Sidewalk) under the 62nd Street Bridge to a possible connection point to the Sharpsburg trail section. Bridge Street currently crosses the railroad under the 62nd Street Bridge. Dave (Etna) stated there is an existing parking lot under the 62nd Street Bridge that could serve as possible trail head location for Etna.

- Practical Alignment
  - Starting from the northern border of Shaler Township, the practical alignment would follow the Norfolk Southern service road and cross Pine Creek using the existing railroad bridge.
  - The trail would then follow along riverfront to what appears to be a possible service road adjacent to the railroad.
  - The trail would then run through the two properties owned by Etna and connect to the Sharpsburg trail section under the 62nd Street Bridge. There is an existing parking lot under the 62nd Street Bridge
that could serve as a possible trail head location for Etna. An existing railroad crossing is also located under the 62nd Street Bridge.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

[Signature]

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates

cc: All Attendees
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Meeting Date: May 5, 2009 – 6:00 P.M.

Place: Aspinwall Borough Building

Attendees: See Attached Sign-In Sheet

Discussion - Action Items are shown as (A)

- Darla Cravotta (AC) started off the meeting by introducing McTish, Kunkel & Associates as the consultant who will prepare the feasibility study for the Community Trails Initiative extending from Millvale to Armstrong County and gave an overview of the project.

- Jack Porter (MKA) explained that MKA’s approach to completing the legal feasibility study for the project is to first meet with the local municipalities to receive any local knowledge of existing trails, planned trails, proposed development, existing railroad crossings, possible trail access points, etc. Jack (MKA) explained that MKA will then develop a preferred and practical trail alignment based from municipality feedback and MKA construction / design experience.

- Steve Baird (MKA) explained that MKA has prepared a preliminary base map of the project site showing aerial images, property lines, roadways, parks, railroads, and municipal buildings to display during the group meetings to receive local knowledge, possible trail locations and trail head locations from municipal representatives. Steve (MKA) presented the base map on an overhead projector and stated MKA is using resources from the Allegheny County GIS Department to identify affected property owners when a preferred and practical trail alignment is developed. Steve (MKA) explained how beneficial using the GIS data is to identifying possible affected property owners is to completing the feasibility study.

- Steve and Jack (MKA) layed out a color plot of each municipality (Sharpsburg and Aspinwall) and opened the meeting for a workshop with the municipal representatives to obtain local knowledge, possible trail locations, access points, and existing railroad crossings. The preferred and practical trail alignments were drawn in on the color plots and comments are listed below:
  - Sharpsburg Borough
    - No representatives for Sharpsburg Borough attended the meeting. Tom Baxter (FOR) will be meeting with the representative from Sharpsburg to discuss the proposed alignment.
    - Sharpsburg currently has three (3) railroad crossing locations along the river.
      - The first RR crossing is at Bridge Street under the 62nd Street Bridge.
      - The second RR crossing is at 13th Street which provides access to the Sharpsburg Riverfront Park.
      - The third RR crossing is at 19th Street which provides access to Sharpsburg Marina / Silky’s Restaurant.
    - Darla Cravotta (AC) currently has a plan that shows the set of tracks closest to the river from approx. the 62nd Street Bridge to approx. 13th Street has been removed.
- Preferred & Practical Alignment
  - Starting from the preferred and practical alignment bordering Etna, the preferred and practical alignment through Sharpsburg would begin under the 62nd Street Bridge where the railroad tracks apparently has been removed.
  - The alignment will continue along the set of removed tracks and connect to the Sharpsburg Riverfront Park (13th Street RR crossing). Sharpsburg Riverfront Park would be a great location for a trail access point with provided parking and a public boat launch.
  - The alignment will then continue along the riverfront through a property owned by The Deitch Company to the Sharpsburg Marina / Silky’s Restaurant.
  - The alignment will then cross under the railroad tracks along 19th Street and continue along a set of tracks that were removed. Aspinwall Borough believes that the set of tracks closest to Main Street has been removed 10-15 years ago. The alignment would continue along this set of tracks that have been removed through Ohara Twp. and into Aspinwall Borough.

  - Aspinwall Borough
    - Notes
      - Aspinwall Borough currently has one (1) railroad crossing located along River Ave. which provides access to the Aspinwall Marina. Aspinwall Borough owns River Avenue.
      - Aspinwall Borough believes that the set of tracks closest to Freeport Road has been removed approx.10-15 years ago.
    - Preferred & Practical Alignment
      - The preferred and practical alignment through Aspinwall Borough would follow along the set of tracks that were removed (adjacent to Freeport Road). This will provide direct access to the Aspinwall business district.

  - City of Pittsburgh
    - Notes
      - No representatives for the City of Pittsburgh attended the meeting.
      - The City of Pittsburgh currently has one (1) railroad crossing located along Freeport Road, which provides access to the Water Authority.
    - Preferred & Practical Alignment
      - The preferred and practical alignment through The City of Pittsburgh would follow along the set of tracks that were removed (adjacent to Freeport Road). This will provide direct access to the Waterworks Mall.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

[Signature]

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates

cc: All Attendees
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Meeting Date: May 12, 2009 – 10:00 A.M.

Place: Springdale Township Borough Building

Attendees: See Attached Sign-In Sheet

Discussion - Action Items are shown as (A)

- Hannah Hardy (PEC) started off the meeting by introducing McIntosh, Kunkel & Associates as the consultant who will prepare the feasibility study for the Community Trails Initiative extending from Millvale to Armstrong County and gave an overview of the project.
- Jack Porter (MKA) explained that MKA’s approach to completing the legal feasibility study for the project is to first meet with the local municipalities to receive any local knowledge of existing trails, planned trails, proposed development, existing railroad crossings, possible trail access points, etc. Jack (MKA) explained that MKA will then develop a preferred and practical trail alignment based from municipality feedback and MKA construction / design experience.
- Steve Baird (MKA) explained that MKA has prepared a preliminary base map of the project site showing aerial images, property lines, roadways, parks, railroads, and municipal buildings to display during the group meetings to receive local knowledge, possible trail locations and trail head locations from municipal representatives. Steve (MKA) presented the base map on an overhead projector and stated MKA is using resources from the Allegheny County GIS Department to identify affected property owners when a preferred and practical trail alignment is developed. Steve (MKA) demonstrated GIS works and how beneficial using the GIS data is to identifying possible affected property owners is to completing the feasibility study.
- Steve and Jack (MKA) layed out a color plot of each municipality (Sharpsburg and Aspinwall) and opened the meeting for a workshop with the municipal representatives to obtain local knowledge, possible trail locations, access points, and existing railroad crossings. The preferred and practical trail alignments were drawn in on the color plots and comments are listed below:
- George Manning (Springdale Twp.) stated the railroad company originally had two (2) sets of railroad tracks from Harmar to East Deer Township and that one (1) set of tracks has been removed. The set of tracks that have been removed is along Freeport Road, not along the river.
  - Harmar
    - Notes
      - No representatives for Harmar attended the meeting.
      - Harmar currently has five (5) railroad crossing locations along the river.
        - The first RR crossing is for access to the Sewage Treatment Plant, just north of the Hulton Bridge.
        - The second RR crossing is at Wendzel Drive, which provides access to the park owned by the PA Fish and Boat Commission.
        - The third RR crossing is at Warner Camp Road.
        - The fourth RR crossing is Denny Estates.
- The fifth RR crossing is for access to the public boat launch located adjacent to the PA turnpike bridge.

- Harmar has two (2) possible trail head access points.
  - The first possible trail head access point is located at the PA Fish and Boat Commission Park / Boat Launch and has available public parking.
  - The second possible trail head access point is located at the public boat launch adjacent to the PA Turnpike Bridge and has available public parking.

- Preferred & Practical Alignment
  - Starting from the preferred and practical alignment bordering Ohara, the preferred and practical alignment will run through Harmar along the set of railroad tracks that have been removed (Freeport Road Side).

- Cheswick
  - Notes
    - Gayle Godfrey (Cheswick Council) attended the meeting on behalf of Cheswick.
    - Cheswick currently has two (2) railroad crossing locations along the river.
      - The first RR crossing is along Blockdale Street and provides access to Reed's Marina.
      - The second RR crossing is along S. Duquesne Ave. and provides access to the Rachael Carson Park
    - Cheswick has one (1) possible trail head access point.
      - The first possible trail head access point is located at the Rachael Carson Park, which currently has available public parking.

- Preferred Alignment
  - Starting from the preferred and practical alignment bordering Harmar, the preferred alignment will run along the set of railroad tracks that have been removed (Freeport Road Side) to the railroad crossing at Blockdale Street (access road to Reed's Marina).
  - The preferred alignment will then cross the railroad tracks using the existing railroad crossing at Blockdale Street and run along the riverfront property to the Rachael Carson Park.
  - Connecting to the Rachael Carson Park, the trail will cross the railroad tracks using the existing crossing along S. Duquesne Ave.
  - The preferred alignment will then run along the set of railroad tracks that have been removed and continue to Springdale Township.

- Practical Alignment
  - Starting from the preferred and practical alignment bordering Harmar, the practical alignment will run through Cheswick to Springdale Township along the set of railroad tracks that have been removed.

- Springdale Township
  - Notes
    - Springdale Township currently has three (3) railroad crossing locations along the river.
      - The first RR crossing is along Coflax Street and provides access to a public boat launch which is owned by Springdale Township.
      - The second RR crossing is along RI Lampus Ave. and provides access to RI Lampus.
The third RR crossing is along Butler Street and provides access to a number of Industrial businesses along the riverfront.

- Springdale Township has two (2) possible trail head access points.
  - The first possible trail head access point is located at the public boat launch which is owned by Springdale Township. The boat launch offers public parking.
  - The second possible trail head access point is located at the Springdale Township VFW, which offers public parking and is a trail head access point to the Rachael Carson Trail.

- Preferred & Practical Alignment
  - Starting from the preferred and practical alignment bordering Cheswick, the preferred and practical alignment will run through Springdale Township along the set of railroad tracks that have been removed. The preferred alignment will offer a connection point to the Rachael Carson Trail using the existing railroad crossing along Butler Street and running along Lincoln Ave. to connect to the Springdale Township VFW.

- Springdale Borough
  - Notes
    - Springdale Borough currently does not have any railroad crossing locations along the river.
  - Preferred & Practical Alignment
    - Starting from the preferred and practical alignment bordering Springdale Township, the preferred and practical alignment will run through Springdale Borough along the set of railroad tracks that have been removed (along Freeport Side).

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

[Signature]

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates

cc: All Attendees
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Meeting Date: June 10, 2009 – 12:00

Place: Freeport Borough Building

Attendees: Steve Baird (McTish, Kunkel & Associates)
Jack Porter (McTish, Kunkel & Associates)
Tom Baxter (Friends of the Riverfront)
Gayle Furer (Freeport Council)

Discussion - Action Items are shown as (A)

- Gayle Furer (Freeport Council) provided MKA a CD containing various Armstrong County GIS shape files. Gayle stated that the Armstrong Co. GIS director (Mark Bletz) would supply MKA with any necessary GIS files.
- Gayle explained that the Butler/Freeport Trail is currently working with PennDOT to extend the trail along Buffalo Creek and across the SR 356 Bridge across the Allegheny River. Gayle believes the new bridge will have a widened sidewalk and a lane for bikes, according to the plans supplied by PennDOT. The plans will also incorporate a parking area adjacent to the bridge to serve as a trail head access point for Freeport Borough.
- Gayle stated we should be able to get a copy of the Construction Plans for the SR 356 Bridge from PennDOT District 10-0 (Mark Rosik).
- Gayle stated she would like the Allegheny River Trail to connect to the Butler/Freeport Trail under the SR 356 Bridge (adjacent to Buffalo Creek), which would provide access across the Allegheny River and ultimately connect to Freeport Borough.
- Gayle stated that the railroad ROW on the other side of the river has been abandoned and since been sold to Herb Tomer. Gayle explained that Herb Tomer intends on constructing a bike trail along the property to be a selling point on the homes he plans to build in the area. The bike trail would extend from the SR 356 Bridge to the abandoned railroad bridge across the Kiskiminetas River.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

[Signature]

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates

cc: All Attendees
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Meeting Date: June 11, 2009 – 12:00

Place: Silky's Restaurant

Attendees: See Attached Sign-In Sheet

Discussion - Action Items are shown as (A)

- Jack Porter (MKA) started off the meeting by stating MKA has met with municipal representatives to develop a preferred and practical alignment for the trail. As a result of the municipal meetings, Jack stated that the majority of the property owners affected from the preferred and practical alignments will be the railroad. Jack explained that negotiations with the railroad will be a key factor to the overall success of the project.
- MKA has met with municipal representatives for the all the municipalities involved with the project except for Sharpsburg, City of Pittsburgh, O'hara Township, Harmar, and Blawnox.
- Jack (MKA) stated that MKA recently met with Freeport Borough to discuss the construction of the SR 356 Bridge across the Allegheny River. The construction the bridge is scheduled for 2010.
- Steve Baird (MKA) explained that the Butler/Freeport Trail is currently working with PennDOT to provide a widened sidewalk for pedestrians and a bike lane across the SR 356 Bridge.
- Susan Crookston (Fox Chapel) stated she has had discussions with Jim Bonner and he believes scrap yard along the river in Aspinwall is thinking about relocating along the river somewhere.
- John Stephen (ARTEZ) stated he believes that the preferred alignment should designate barriers to the overall alignment.
- John (ARTEZ) stated MKA should identify locations where the trail will provide access to the bridges across the Allegheny River.
- Hanna Hardy (PEC) stated she believes that the overall feasibility study should state that PennDOT is currently working with local municipalities to provide a bike lane on the construction of the new bridges across the Allegheny River.
- Darla Cravotta (AC) suggested calling a meeting to meet with all the municipal representatives to discuss the affected property owners affected as a result of the preferred and practical alignments.
- (A) MKA will provide a list of affected property owners to the municipal representatives so they can converse with the property owners to buy-into the project.
- (A) MKA will first meet with missing municipalities before having the overall municipal representative meeting.
- (A) John (ARTEZ) stated he will help with providing municipal representative contact info for Blawnox and Sharpsburg.
- Chuck Steinert (O'hara) stated that he has had many discussions with Norfolk Southern is that they are very difficult to deal with.
- Jim Segedy (PEC) stated MKA should try to determine what railroad lines are used for through traffic and what lines are used for switching traffic. This may help in determining what lines can or cannot be affected.
- Jim (PEC) stated MKA should try to find out of any recent traffic studies done in the area to determine local traffic across the public railroad crossings. Jim explained that a bargaining tool to negotiate with the railroad is to try to eliminate some public railroad crossing by grouping existing railroad crossing together. John (ARTEZ) stated that the railroad will want to remove local RR crossings and that the municipalities will not be favor of this.
• (A) MKA will develop a list of public RR crossings per municipality for the municipal representative meeting.
• Darla (AC) suggested having a meeting with the trail steering committee after the overall municipal representative meeting to discuss the overall progress of the meetings and the preferred and practical alignments.
• Steve Baird (MKA) presented the project base map on an overhead projector to show the proposed preferred and practical alignments, possible trail head locations, and public railroad crossings as result of the municipal meetings.
• Chuck (Ohara) briefly described how Ohara Township would like the alignment to run through Ohara Township and that parts of Ohara Township already has an existing bike trail.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates

cc: All Attendees
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Meeting Date: June 23, 2009 – 10:00 am

Place: Allegheny Valley Land Trust Office

Attendees: Steve Baird (McTish, Kunkel & Associates)
Jack Porter (McTish, Kunkel & Associates)
Ron Steffey (Allegheny Valley Land Trust Office)

Discussion - Action Items are shown as (A)

- Ron Steffey (AVLT) stated that the Allegheny Valley Land Trust (AVLT) has rail banked various sections of the Armstrong Trail through a Declaration of Rail-Banking. This includes the section from Schenley to roughly 550 ft south of crooked creek, which is the proposed connection point to the Allegheny River Trail. Ron explained that “Rail-Banking” is a federally-authorized method under the National Trail[s] System Act, 16 U.S.C. §§ 1241-51, to preserve a former rail corridor as an interim trail and thereby avoid abandonment and the concomitant reversion of property rights; a rail banked right-of-way remains part of the national rail transportation system and remains subject to the jurisdiction of the ICC (now the Surface Transportation Board).
- Ron explained that the railroad is planning on installing a set of railroad tracks to accommodate a coal mine in the area. The railroad company is intending on using the existing railroad bridge to cross the Kiski River and connect to the Norfolk Southern line. Ron believes the bridge can only be used with permission from the Kiski Junction Railroad and Norfolk Southern.
- Ron stated the condemnation is completed and the railroad does now own the southern section of the Armstrong Trail. Construction hasn’t started, but he believes the railroad does have approved E&S Plans from DEP.
- Ron stated he feels that there will still be places to put the trail, even though the railroad company is planning on installing a single set of railroad tracks within railroad right-of-way, the railroad was at one time a double track with independent tracks for northbound and southbound trains. Ron explained that the trail could be placed adjacent to the railroad or along the local road (Railroad Street). Ron doesn’t feel the trail would be a safety hazard because the trains are not high speed in that area.
- Ron stated the existing bridge crossing the Kiski River does not have space for the trail, so the proposed trail would have to be cantilevered off of the existing bridge. Ron said that users of the Bakers Trail may be using the Kiski River Bridge, but he is not aware of any formal agreement to use the bridge.
- Ron stated he believes the trains will be traveling at approximately 15-20 mph for a maximum speed.
• Ron feels the major goal is to get the Allegheny River Trail to Armstrong County, and show the support to tie the multiple trails in the area together. Once other begin to take notice of the opportunities the numerous trails provide, additional funding sources can be found to complete the connection to the Armstrong Trail and other trails in the immediate area.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

[Signature]

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates

cc: All Attendees
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Meeting Date: June 25, 2009 – 10:00 am

Place: Sharpsburg Borough Building

Attendees: See Attached Sign-In Sheet

Discussion - Action Items are shown as (A)

- Tom Baxter (FOR) kicked off the meeting by giving a brief background of how we have to gotten to this point in the project.
- Hannah Hardy (PEC) explained that numerous trail projects around the state have generated an economic benefit to the associated municipalities and that this trail could have an economic benefit to Sharpsburg Borough due to close proximity of the business district and the Sharpsburg Riverview Park.
- Ron Borczyk (Sharpsburg Borough) asked about the Allegheny County Riverfront Park Plan that was proposed by Councilman Pawcett and Councilman Burn. As part of that Plan, there were conceptual drawings of a connection from the proposed trail to the Sharpsburg Riverfront Park. Hannah (PEC) explained that the Community Trails Initiative is an implementation of the vision to have a riverfront park throughout the County.
- (A) Ron (Sharpsburg) will look for any old plans for the conceptual study to connect the trail to the existing Sharpsburg Riverfront Park area.
- Jan Barbus (Sharpsburg Borough) explained a committee has been organized (Connect Congress) to put all the surrounding 36 municipalities around the City of Pittsburgh together to go after grants. Luke Ravenstahl was voted the chairman.
- Jan (Sharpsburg) stated a “Policy Committee” has been organized and is working with the Port Authority to improve ways of transportation for the 36 surrounding municipalities to the City of Pittsburgh. This could be an important topic when negotiating the railroad owners. Ohara Township is not part of the committee.
- Preferred & Practical Alignment
  - Notes
    - Larry Stecitano (Sharpsburg Borough) stated that there is an existing access road along the railroad tracks (river side) from the 62nd Street Bridge to just about the Sharpsburg Riverview Park.
    - Larry (Sharpsburg) stated there is an existing road along the river from the Sharpsburg Riverview Park to the stream crossing (south of the Sharpsburg Water Plant). Larry explained that Sharpsburg has permission from ASCON to use this road. The road is placed below the 100-year floodplain, and is often flooded. The road narrows down from a road to a somewhat of a walking trail from the stream crossing to the Sharpsburg Water Plant.
    - ALCOSAN uses an existing road along the river next to the Sharpsburg Water Plant to access their sanitary sewer manholes.
    - The existing sidewalk along Main Street can not be widened due to right-of-way issues.
    - The set of tracks from approximately 23rd street north has been removed and would be a good location for the trail.
    - Trains usually travel a low speeds in this area and usually 1-2 times a day.
    - Sharpsburg currently has three (3) railroad crossing locations along the river.
- The first RR crossing is at Bridge Street under the 62nd Street Bridge.
- The second RR crossing is at 13th Street which provides access to the Sharpsburg Riverfront Park.
- The third RR crossing is at 19th Street which provides access to Sharpsburg Marina / Silky's Restaurant.

  o Starting from the preferred and practical alignment bordering Etna, the preferred and practical alignment through Sharpsburg would begin under the 62nd Street Bridge where the railroad tracks apparently has been removed.
  
  o The alignment will continue along the set of removed tracks and connect to the Sharpsburg Riverfront Park (13th Street RR crossing). Sharpsburg Riverfront Park would be a great location for a trail access point with provided parking and a public boat launch.
  
  o The alignment will then continue along the riverfront through a property owned by ASCON along the existing road that extends from the Sharpsburg Riverview Park to the stream crossing just south of the Sharpsburg Water Plant. A bridge will need to be built to cross the stream. This section of the alignment will be placed below the 100-year floodplain, which experiences excessive flooding during the spring.
  
  o The alignment will then cross the stream and along the river to the Sharpsburg Water Plant. Sharpsburg owns this property and leases part of it to Silky's Restaurant.
  
  o The alignment will continue along an access road along the river adjacent to the Water Plant to Silky's Restaurant parking lot. ALCOSAN uses this access road for maintenance to their sanitary sewer line.
  
  o The alignment will cross Silky's Restaurant parking lot cross under the railroad tracks along 19th Street.
  
  o The alignment will then continue along Main Street to the Ohara Township Border and onto the set of tracks that were removed. The alignment would continue along this set of tracks that have been removed through Ohara Twp. and into Aspinwall Borough.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

[Signature]

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates

cc: All Attendees
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Meeting Date: July 10, 2009 – 10:00 am

Place: Department of Public Works, Bureau of Transportation and Engineering

Attendees: See Attached Sign-In Sheet

Discussion - Action Items are shown as (A)

- Tom Baxter (FOR) kicked off the meeting by giving a brief background of how we have to gotten to this point in the project.
- Pat Hassett (City of Pittsburgh) stated that Water Treatment Plant is owned by Pittsburgh Sewer and Water (PWSA) not by the City of Pittsburgh.
- (A) Steve Baird (MKA) will contact PWSA to discuss a possible trail alignment through the Water Treatment Plant property.
- Tom (FOR) stated that there is an abandoned tunnel under the railroad and Freeport Road along the eastern side of the Water Treatment Plant property adjacent to Chapel Harbors that is owned by the City of Pittsburgh. Tom explained that discussions have been held between Friends of the Riverfront, Ohara Township & City of Pittsburgh to possibly re-open the abandoned tunnel. The tunnel would serve as a pedestrian walkway under the railroad and Freeport Road and give access to the Waterworks Shopping Center from the Riverfront Trail. Pat (City of Pittsburgh) gave MKA a copy of all emails and plans pertaining to this matter. (This information has been attached)
- (A) Steve (MKA) will send a plan showing all property owner information to Steve Patchan (City of Pittsburgh) for their records.
- Steve Baird (MKA) verified that the railroad in this area is owned by CSX.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

[Signature]

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates

cc: All Attendees
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Meeting Date: July 20, 2009 – 1:00 pm

Place: Blawnox Borough Building

Attendees: Steve Baird (McTish, Kunkel & Associates) – 412-824-2910 – sbaird@mctish.com
Sherry Kordas (Blawnox Borough) – 412-828-4141 – blawnox@choiceonemail.net
Denny Chuvala (Blawnox Borough) – denny039@comcast.net

Discussion - Action Items are shown as (A)

- Sherry Kordas (Blawnox) and Denny Chuvala (Blawnox) stated ultimately they would like the trail to run along the river as close as possible.
- Sherry stated Beckworth (which is located along the river) may be receptive to allowing the trail cut through their property. Sherry doesn’t believe Beckworth does anything along the river.
- Preferred & Practical Alignment Layout
  - Notes
    - The Blawnox Borough Municipal Park along Center Avenue can serve as a trail head. The park currently has approximately 100 public parking spaces. Blawnox Borough has an easement from Amtech for the parking lot.
    - Center Avenue currently has a sidewalk along the road.
    - Blawnox Borough currently has one (1) public railroad crossing, which is located along Center Avenue.
  - Practical Alignment
    - Starting from the preferred and practical alignment bordering Ohara, the practical alignment through Blawnox would begin along Papercraft Park Rd. and continue along 4th Street.
    - The trail would then cross 4th Street and cut through the property owned by Beckworth and continue along the strip of woods between the river and the railroad to the Ohara/Blawnox border.
    - The trail will then connect to the preferred and practical alignment in Ohara Twp. along River Avenue.
  - Preferred Alignment (1)
    - Starting from the preferred and practical alignment bordering Ohara, the preferred alignment through Blawnox would begin along Papercraft Park Rd. and cross 4th Street at the municipal border with Ohara Twp.
    - The trail would then continue along the Ohara/Blawnox border (which currently is a strip of woods) and then along the river through various private properties to the property owned by Beckworth.
    - The trail would then continue along the strip of woods between the river and the railroad to the Ohara/Blawnox border.
    - The trail will then connect to the preferred and practical alignment in Ohara Twp. along River Avenue.
- Preferred Alignment (2)
  - Starting from the preferred and practical alignment bordering Ohara, the preferred alignment through Blawnox would begin along Papercraft Park Rd. and continue along 4th Street.
  - The trail would then cross the Center Avenue public railroad crossing and continue along the railroad where the set of tracks have been removed.
  - The trail would continue along the railroad to the public railroad crossing in Ohara along River Avenue and then connect to the preferred and practical alignment in Ohara Twp. along River Avenue.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

[Signature]

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates

cc: All Attendees
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Meeting Date: November 12, 2009 – 6:00 P.M.

Place: Harmarville Municipal Building

Attendees: See Attached Sign-In Sheet

Discussion - Action Items are shown as (A)

- Darla Cravotta (AC) started off the meeting by introducing McTish, Kunkel & Associates as the consultant who will prepare the feasibility study for the Allegheny River Trail. Darla explained that the Allegheny River Trail will provide a missing link to the Pittsburgh to Erie Trail.
- Hannah Hardy (PEC) & Tom Baxter (FOR) discussed the project background and gave an overview of how we have gotten to this point in the feasibility study.
- This section of trail is also an important part of the Pittsburgh to Harrisburg Mainline Canal Greenway. Karl King of the Allegheny Ridge Corporation gave an overview.
- Jack Porter (MKA) discussed how McTish, Kunkel & Associates have developed a preferred/practical trail alignment for the feasibility study. Jack stated that MKA has divided the 17 involved municipalities into four groups and met with or spoken to municipal representatives from all of the involved municipalities. Jack explained that MKA has developed a preferred/practical trail alignment based on feedback from municipalities and MKA construction/design experience.
- Jack stated that the estimated trail length is 27 miles with the estimated affected property owner lengths of:
  o Railroad Property ≈ 16 miles
  o Private Property ≈ 2 miles
  o Public Right-of-Way ≈ 6 miles
  o Existing Trails ≈ 3 miles
- Jack explained there is a section in Harrison along Karns Road ≈ 2 miles that would involve constructing the trail along the existing roadway. MKA feels this would be a manageable section to build.
- Steve Baird (MKA) presented the project base map on an overhead projector and walked the group through the preferred/practical trail alignments. Steve pointed out various property owners, public railroad crossings, community connections, public parking areas, municipal limits and estimated right-of-way throughout the trail alignments.
- Jack (MKA) explained that MKA has prepared hard copies of the project plan map and opened the meeting as a workshop allowing for people come up and provide further municipality feedback regarding the trail alignments.
These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Meeting Date: December 3, 2009 – 10:00 am

Place: The Pittsburgh Water and Sewer Authority Treatment Plant

Attendees: Steve Baird – Mctish, Kunkel & Assocaites
Jack Porter – Mctish, Kunkel & Assocaites
Tom Baxter – Friends of the Riverfront
Stanley States – The Pittsburgh Water & Sewer Authority
Ed Warchol – Aspinwall Borough

Discussion - Action Items are shown as (A)

- Tom Baxter (FOR) kicked off the meeting by giving a brief background of how we have to gotten to this point in the project.
- Steve Baird (MKA) displayed the preliminary preferred and practical trail alignments as a result from the municipal meetings in relation to the PWSA property.
- Stanley States (PWSA) stated that the trail alignment could not go through the open field area where PWSA’s underground tanks are because they are afraid the tanks may collapse due to the age and condition of the tanks.
- Stanley explained that the railroad crossing used to access the PWSA property is not a public railroad crossing and that the crossing is not signalized.
- Stanley stated that the trail alignment can go through the property, as long as the trail stays outside the PWSA property fence. Stanley also stated that the access driveway can be used if needed. Stanley explained that placing the trail within the fence limits will be a major security issue. Stanley also explained that he can not see any possible way to place a trail around the treatment ponds by St. Margaret’s, due to the security issues. The trail around the treatment pond would need to be fenced in completely to restrict access to the ponds and anything associated with the ponds.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

[Signature]

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates

cc: All Attendees
MINUTES OF MEETING

Subject: Allegheny River Trail Meeting

Meeting Date: August 18, 2009 – 12:00

Place: Friends of the Riverfront Office

Attendees: Jack Porter – McTish, Kunkel & Associates
Steve Baird – McTish, Kunkel & Associates
Tom Baxter – Friends of the Riverfront
Hanna Hardy – Pennsylvania Environmental Conservation
Darla Cravotta – Allegheny County

Discussion - Action Items are shown as (A)

- Steve Baird (MKA) explained that MKA has met or talked with representatives for every municipality within the project limits and laid out a preferred and practical alignment for the entire project. Steve presented the GIS base map file on the overhead to review the alignments with everyone. Steve handed out a preliminary table of affected property owners due to the preferred and practical alignments and a list of public railroad crossings in each municipality. Steve explained that MKA has used a 20 ft wide easement / right of way take to construct the list of affected property owners. Steve opened the meeting for comments or recommendations that can be made to the GIS base map file and some of the comments included:
  - Make right-of-way/easement lines thicker
  - Make the linetype for the preferred alignments that specifically go through the business districts of the municipalities different than the blue dots and designate it as a community connection.
  - Verify the railroad lines that currently exist and update the GIS railroad file.
  - Include photos of various locations throughout the project limits to give a better understanding of what actually exist due to the clarity of the aerial images.

- Darla Cravotta (AC) suggested that MKA include the affected proposed trail linear footage through each parcel and estimated right-of-way/easement in acres on the table of affected property owners.

- (A) MKA will investigate the railroad property ownership and current leasing to private parties and corporations throughout the project limits.

- (A) MKA will field verify what parts of Ohara Township has an existing trail that is already built.

- (A) Tom Baxter (FOR) will schedule a meeting with Michael McKinney (runs the water plant across from the Waterworks mall with PWSA) to discuss possible trail alignments through the property owned by the City of Pittsburgh (Water Plant).

- (A) Tom will schedule a pre-public meeting with the steering committee to give an overview of the status of the feasibility study. The overall public meetings will held in two segments, at Ohara Twp. and in Tarentum Borough.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

[Signature]

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates

cc: All Attendees
MINUTES OF MEETING

Subject: Community Trails Initiative

Meeting Date: March 26, 2009 – 10:00 A.M.

Place: Friends of the Riverfront Office

Attendees: Jack Porter – McTish, Kunkel & Associates
Steve Baird – McTish, Kunkel & Associates
Tom Baxter – Friends of the Riverfront
Hanna Hardy – Pennsylvania Environmental Conservation

Discussion - Action Items are shown as (A)

- Jack Porter (MKA) stated that the 1st municipal group meeting (East Deer, Tarentum, Brackenridge, & Harrison Twp) was held and that the meeting went very well. Steve Baird (MKA) explained that the representatives for the municipalities were very helpful and were very familiar with the property owners adjacent to the river. Steve also explained that the representatives pretty much had a general idea where they envisioned the trail alignment based on property owners, future development, surrounding parks and schools, and business areas within their municipality.

- Jack (MKA) stated that a preferred and practical alignment was drawn in on color plots while sitting down with the municipal representatives and will serve as the starting point for the proposed trail alignment. These color plots were reviewed. Tom Baxter (FOR) and Hanna Hardy (PEC) were very pleased with the MKA’s performance and approach to the 1st municipal group meeting and hope that future meetings are as successful.

- (A) Tom Baxter (FOR), Darla Cravotta (AC), or Hanna Hardy (PEC) will organize and schedule the three (3) remaining local municipal group meetings.

- Jack (MKA) stated that a municipal group meeting discussion points document was generated to use at the remaining group meetings to answer a list of general questions at the meetings. Tom (FOR) requested that MKA should add a discussion point “What are some locations of libraries and possible access to the proposed trail?” to the document.

- Jack (MKA) stated that feasibility study survey per DCNR’s requirements was generated and will be handed out during the municipal meetings for survey data. Tom (FOR) requested that MKA should add “Events” as a response for question #9 on the survey. Tom also requested that a question should be added to the survey “Do you use any trails nearby and how do you access the trail?”

- (A) Jack Porter (MKA) will complete the DCNR Planning Progress Report and send to DCNR, Friends of the Riverfront, and O’hara Township.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

[Signature]

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates

cc: All Attendees
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Public Meeting Date: March 2, 2010 – 6:00 P.M.

Place: Millvale Community Center

Attendees: See Attached Sign-In Sheet

Discussion - Action Items are shown as (A)

- Darla Cravotta (AC) started off the meeting by thanking all the people for attending and stated the purpose of the meeting was to inform the general public about the purpose and scope of the project and to review project progress. Darla introduced McTish, Kunkel & Associates as the consultant who was selected to prepare the feasibility study for the Allegheny Valley Community Trails Initiative. Darla explained that the Allegheny Valley Community Trail will provide a missing link to the Pittsburgh to Erie Trail, Pittsburgh to Harrisburg, and Mainline Canal Greenway and Three Rivers Heritage Trail.

- Hannah Hardy (PEC) gave a brief overview of the project and provided information on funding and partners.

- Jack Porter (MKA) discussed the process for developing the feasibility study. Jack explained that MKA has met or spoken to municipal representatives from all the 17 involved municipalities to gain local knowledge and develop a trail alignment. Jack explained that MKA has developed a preferred and practical trail alignment based on feedback from the municipalities. The preferred alignment generally follows the riverfront. The practical alignment takes into account challenges and property ownership and follow parallel alignments in some communities.

- Jack stated that the estimated trail length is 27 miles with the estimated affected property owner lengths of:
  - Railroad Property ≈ 16 miles
  - Private Property ≈ 2 miles
  - Public Right-of-Way ≈ 6 miles
  - Existing Trails ≈ 3 miles

- Jack explained that any feedback or suggestions from the public meetings will be taken into account for community connections and trail alignments when finalizing the feasibility study for the Allegheny Valley Community Trails Initiative.

- Steve Baird (MKA) presented the project base map on an overhead projector and walked the group through the preferred and practical trail alignments. Steve pointed out various property owners, public railroad crossings, community connections, public parking areas, municipal limits and estimated right-of-way throughout the trail alignments. There was discussion and questions from the audience.

- Public responses are listed below:
o Various individuals expressed an interest in working with the scrap yard under the Highland Park Bridge in Sharpsburg to see about a trail alignment through the property.

o Various individuals commented on providing more public parking for access to the proposed trail and clearly identifying trailheads.

o An individual stated that the set of tracks in Sharpsburg that goes under the Highland Park Bridge and behind the Sharpsburg business district to the township baseball fields has been removed and would be a great location for the alignment of the trail. Instead of locating the alignment along Main Street, the alignment would run up 19th Street to the township baseball fields and connect to the old railroad bed. The alignment will then follow the old railroad bed under Freeport Road and the Highland Park Bridge and continue onto the existing railroad maintenance road that parallels Freeport Road.

o It was noted that there is a federal tax credit in effect for business owners who have employees who use bicycles for transportation to work.

o There was a discussion about rails with trails and what that means. There was also discussion about what different railroads require in terms of distance from the railroad tracks.

- Jack (MKA) thanked all attendees for their interest in the project and for their participation during the meeting. Jack stated that MKA has prepared hard copies of the project plan map and people can come up and provide further municipality feedback regarding the trail alignments.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

[Signature]

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Public Meeting Date: March 3, 2010 – 6:00 P.M.

Place: Alle-Kiski Museum, Tarentum

Attendees: See Attached Sign-In Sheet

Discussion - Action Items are shown as (A)

- Darla Cravotta (AC) started off the meeting by thanking all the people for attending and stated the purpose of the meeting was to inform the general public about the purpose and scope of the project and to review project progress. Darla introduced McTish, Kunkel & Associates as the consultant who was selected to prepare the feasibility study for the Allegheny Valley Community Trails Initiative. Darla explained that the Allegheny Valley Community Trail will provide a missing link to the Pittsburgh to Erie Trail, Pittsburgh to Harrisburg, and Mainline Canal Greenway and Three Rivers Heritage Trail. Darla gave a brief overview of the project and provided information on funding for the project. Darla also introduced the project partners and several other individual / groups that have provided letters and other support for the project.

- Jack Porter (MKA) discussed the process for developing the feasibility study. Jack explained that MKA has met or spoken to municipal representatives from all the 17 involved municipalities to gain local knowledge and develop a trail alignment. Jack explained that MKA has developed a preferred and practical trail alignment based on feedback from the municipalities. The preferred alignment generally follows the riverfront. The practical alignment takes into account challenges and property ownership and follows parallel alignments in some communities.

- Jack stated that the estimated trail length is 27 miles with the estimated affected property owner lengths of:
  o Railroad Property ≈ 16 miles
  o Private Property ≈ 2 miles
  o Public Right-of-Way ≈ 6 miles
  o Existing Trails ≈ 3 miles

- Jack explained that any feedback or suggestions from the public meetings will be taken into account for community connections and trail alignments when finalizing the feasibility study for the Allegheny Valley Community Trails Initiative.

- Steve Baird (MKA) presented the project base map on an overhead projector and walked the group through the preferred and practical trail alignments. Steve pointed out various property owners, public railroad crossings, community connections, public parking areas, municipal limits and estimated right-of-way throughout the trail alignments. There was discussion and questions from the audience.
Public responses are listed below:

- An individual expressed concerns with the trail located along Karns Road in Harrison Township due to the traffic along Karns Rd. and the limited roadway width.
- PPG Industries Inc. in East Deer was recently sold and now is PGW (Pittsburgh Glass Works). MKA will investigate the opportunity to put the trail through the property.
- Various individual expressed concerns with the proximity of the trail in regards to the active railroad.
- An individual stated that the riverfront property along Allegheny Ludlum in Harrison Twp. would be a great place for the trail because it is already a flat area and is clear. This idea is used for the preferred alignment; the practical alignment bypasses this area. MKA will investigate the opportunity to put the trail along the riverfront in this area.
- An individual stated the trail alignment through Cheswick should go along the riverfront (where the preferred alignment is) because of the scenery and the connection to the Rachael Carson Trail. The individual also stated that the large commercial business there was recently sold and the new owners maybe in favor of placing the trail along their riverfront property. MKA will investigate the opportunity to put the trail along the riverfront in this area.
- An individual questioned whether owners will be allowed to walk their pets along the trail.
- An individual questioned whether restrooms will be provided along the trail.
- An individual stated that in Springdale Borough along the Cheswick border, there is an abandoned railroad line that can be used to provide a direct connection to the Rachael Carson Trail.
- An individual expressed concern that the current alignment in East Deer by the East Deer Recreational Facility is proposed to go through the East Deer Sanitary Authority property along the riverfront. The individual stated that in this area, the sanitary authority outlets directly into the river and there is no room and security issues will prevent the trail to be placed in this area.

Jack (MKA) thanked all attendees for their interest in the project and for their participation during the meeting. Jack stated that MKA has prepared hard copies of the project plan map and people can come up and provide further municipality feedback regarding the trail alignments.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

[Signature]

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates
MINUTES OF MEETING

Subject: Community Trails Initiative Meeting

Public Meeting Date: March 6, 2010 – 1:00 P.M.

Place: Boyd Community Center

Attendees: See Attached Sign-In Sheet

Discussion - Action Items are shown as (A)

- Darla Cravotta (AC) started off the meeting by thanking all the people for attending and stated the purpose of the meeting was to inform the general public about the purpose and scope of the project and to review project progress. Darla introduced McTish, Kunkel & Associates as the consultant who was selected to prepare the feasibility study for the Allegheny Valley Community Trails Initiative. Darla explained that the Allegheny Valley Community Trail will provide a missing link to the Pittsburgh to Erie Trail, Pittsburgh to Harrisburg, and Mainline Canal Greenway and Three Rivers Heritage Trail. Darla also introduced the project partners and several other individual / groups that have provided letters and other support for the project.

- Hannah Hardy (PEC) gave a brief overview of the project and provided information on funding and partners.

- Jack Porter (MKA) discussed the process for developing the feasibility study. Jack explained that MKA has met or spoken to municipal representatives from all the 17 involved municipalities to gain local knowledge and develop a trail alignment. Jack explained that MKA has developed a preferred and practical trail alignment based on feedback from the municipalities. The preferred alignment generally follows the riverfront. The practical alignment takes into account challenges and property ownership and follows parallel alignments in some communities.

- Jack stated that the estimated trail length is 27 miles with the estimated affected property owner lengths of:
  - Railroad Property ≈ 16 miles
  - Private Property ≈ 2 miles
  - Public Right-of-Way ≈ 6 miles
  - Existing Trails ≈ 3 miles

- Jack explained that any feedback or suggestions from the public meetings will be taken into account for community connections and trail alignments when finalizing the feasibility study for the Allegheny Valley Community Trails Initiative.

- Steve Baird (MKA) presented the project base map on an overhead projector and walked the group through the preferred and practical trail alignments. Steve pointed out various property owners, public railroad crossings, community connections, public parking areas, municipal limits and estimated right-of-way throughout the trail alignments. There was discussion and questions from the
• Public responses are listed below:
  o An individual stated there is an existing dirt road that runs through the scrap yard under the Highland Park Bridge in Sharpsburg that could be used for the alignment through the property.
  o An individual was concerned about the available room adjacent to the roadway through Chapel Harbors. The trail may need to be along the road and the road may need to be shared with bicycle traffic. The road has low volume traffic.
  o An individual was concerned with placing the trail along Papercraft Road and 4th Street in Ohara / Blawnox due to the high volume of truck traffic along the roadway and limited roadway width. The individual suggested using 3rd Street instead of 4th Street.
  o Various individuals expressed concerns with the proximity of the trail in regards to the active railroad.
  o An individual suggested for the alignment of the trail to maintain along railroad property for the entire length instead of going through private property.
  o Various individuals stated they currently use the railroad maintenance road as a walking trail.
  o An individual was concerned with how many times the trail uses a public railroad crossing to cross the railroad tracks.

• Jack (MKA) thanked all attendees for their interest in the project and for their participation during the meeting. Jack stated that MKA has prepared hard copies of the project plan map and people can come up and provide further municipality feedback regarding the trail alignments.

These minutes have been prepared as accurately as possible. If any revisions or additions are necessary, please notify me in a timely manner.

Minutes Prepared and Submitted by:

[Signature]

Steven D. Baird, E.I.T.
Highway Engineer
McTish, Kunkel & Associates
APPENDIX D
TRAIL SURVEY FORM AND RESULTS
1. What is your Zip Code? 

2. How often, on average, do you think you would consider using the trail? (Please circle one response)
   - Daily
   - 1-2 times a week
   - Once a week
   - A Couple times a month
   - Never
   - 3-5 times a week
   - Once a month
   - A few times a year

3. Please identify your age group. (circle one response)
   - 15 and under
   - 26 to 35
   - 46 to 55
   - 66 or older
   - 16 to 25
   - 36 to 45
   - 56 to 65

4. Would any children under the age of 15 use this trail with you? Yes No

5. What is your gender? Male Female

6. What would be your primary activity on the trail? (circle all that apply)
   - Walking/Hiking
   - Biking
   - Jogging/Running
   - XC skiing
   - Other__________

7. Generally, when would you use the trail? (circle one response)
   - Weekdays
   - Weekends
   - Both
   - Never

8. How much time would you generally spend on the trail each visit? (circle one response)
   - Less than 30 minutes
   - 30 minutes to 1 hour
   - 1 to 2 hours
   - More than 2 hours
   - None

9. What would you consider your primary use of the trail to be for? (circle one response)
   - Recreation
   - Health/Exercise
   - Commuting
   - Fitness Training
   - Events
   - Nothing
   - Other__________

10. During a trail visit what secondary activities would you enjoy? (circle all that apply)
    - Tour local history sites
    - Watch wildlife
    - Observe plants/flowers
    - Observe geology
    - N/A
    - Other__________

11. Would having the trail available for your use influence your purchase of: (circle all that apply)
    - Bicycles/supplies
    - Camera gear
    - Outdoor accessories
    - Footwear
    - Clothing
    - Equestrian gear
    - Other__________

12. Approx. how much money did you spend on the items above in the past year for trail use? $__________

13. In conjunction with a trip to the trail, would you purchase any of the following items? (circle all that apply)
    - Beverages
    - Candy/Snack Foods
    - Sandwiches
    - Ice Cream
    - Meals at a restaurant
    - None
    - Other__________

14. Approx. how much money would you spend, per person, on the items above when using the trail? $__________

15. What segment of the proposed trail would you use most often? (circle all that apply)
    - City of Pittsburgh
    - Millvale
    - Shaler
    - Etna
    - Sharpsburg
    - Aspinwall
    - Fox Chapel
    - O'Hara Twp.
    - Blawnox
    - Harmar
    - Cheswick
    - Springdale Borough
    - Springdale Township
    - Frazer
    - Tarentum
    - Brackenridge
    - Harrison

16. Do you use any trails nearby and how do you access the trail?
The results of the 146 completed survey questions are shown in red

1. What is your Zip Code?  See attached chart

2. How often, on average, do you think you would consider using the trail? (Please circle one response)
   Daily 5% 1-2 times a week 21% Once a 20% A 8%
   Never 1% 3-5 times a week 26% Once a 8% A few times a 11%

3. Please identify your age group. (circle one response)
   15 and under 0% 26 to 35 6% 46 to 23% 66 or 15%
   16 to 25 1% 36 to 45 9% 56 to 46%

4. Would any children under the age of 15 use this trail with you? Yes 32% No 68%

5. What is your gender? Male 65% Female 35%

6. What would be your primary activity on the trail? (circle all that apply)
   Walking/Hiking 30% Biking 56% Jogging/Running 4% XC skiing 10% Other_______

7. Generally, when would you use the trail? (circle one response)
   Weekdays 10% Weekends 36% Both 54% Never 0%

8. How much time would you generally spend on the trail each visit? (circle one response)
   Less than 30 minutes 1% 30 minutes to 1 hour 20% 1 to 2 hours 49% More than 2 hours 30%

9. What would you consider your primary use of the trail to be for? (circle one response)
   Recreation 40% Health/Exercise 46% Commuting 9% Fitness Training 3% Events 2% Nothing 0%

10. During a trail visit what secondary activities would you enjoy? (circle all that apply)
    Tour local history sites 10% Watch wildlife 35% Observe plants/flowers 40% Observe geology N/A Other_______

11. Would having the trail available for your use influence your purchase of: (circle all that apply)
    Bicycles/supplies 22% Camera gear 6% Outdoor accessories 17% Footwear 28% Clothing 27% Equestrian gear 0%

12. Approx. how much money did you spend on the items above in the past year for trail use? ≈ $100

13. In conjunction with a trip to the trail, would you purchase any of the following items? (circle all that apply)
    Beverages 30% Candy/Snack Foods 10% Sandwiches 20% Ice Cream 25% Meals at a restaurant 15% None 0%

14. Approx. how much money would you spend, per person, on the items above when using the trail? ≈ $10

15. What segment of the proposed trail would you use most often? (circle all that apply)
    City of Pittsburgh 11% Millvale 14% Shaler 7% Etna 6% Sharpsburg 7% Aspinwall 4% Fox Chapel 4%
    O'Hara Twp. 6% Blawnox 5% Harmar 4% Cheswick 2% Springdale Borough 3% Springdale Township 3%
    Frazer 3% Tarentum 9% Brackenridge 7% Harrison 8%

16. Do you use any trails nearby and how do you access the trail?

Completed surveys provided a variety of answers
Results to Trail Survey Question #1
"What is your Zip Code"
APPENDIX E
TRAIL CONCEPT PLAN
APPENDIX F
LEGAL FEASIBILITY
LIST OF AFFECTED PROPERTIES
<table>
<thead>
<tr>
<th>Property Owner</th>
<th>Property Address</th>
<th>Property Area (Acres)</th>
<th>Property Owner Address</th>
<th>Market Value</th>
<th>Affected Length (ft)</th>
<th>Affected Area (Acres)</th>
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<tr>
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<tr>
<td>Property Owner</td>
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<td>Property Area (in acres)</td>
<td>Map Block Lot No.</td>
<td>Market Value</td>
<td>Affected Acres (LT)</td>
<td>Affected Area (UT)</td>
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<tr>
<td>BEST FOODS, INC.</td>
<td>2001 ALDERWOOD LN</td>
<td>5.00</td>
<td>34</td>
<td>820,000</td>
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<td>BIACOR, INC.</td>
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<td>BLACK &amp; DECKER</td>
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<td>BRAWL &amp; BRAWL</td>
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<td>125,000</td>
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<tr>
<td>BRAWL &amp; BRAWL</td>
<td>123 MAIN ST</td>
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<td>18</td>
<td>125,000</td>
<td>0.00</td>
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APPENDIX G
PHYSICAL INVENTORY AND ASSESSMENT OF THE ROW – TRAIL CORRIDOR DESCRIPTIONS
<table>
<thead>
<tr>
<th>Millvale Trail</th>
<th>0.8 Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong> - The proposed practical and preferred alignment through Millvale exists and it is in use. The alignment will begin at Millvale Riverfront Park and follow the existing bike trail that currently extends from the park to the Shaler Twp. boundary line. The Millvale Riverfront Park currently serves as a trailhead. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Photo of Millvale/City of Pittsburgh boundary in Millvale Riverfront Park.</th>
<th>Photo of Millvale/Shaler boundary looking north from existing trail.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legal Feasibility</strong> - This portion of the trail is an existing trail through the Millvale Riverview Park. Millvale Borough supports the Community Trail Initiative</td>
<td><strong>Property Owners</strong> - Millvale Borough</td>
</tr>
<tr>
<td><strong>Topography</strong> - The existing trail is flat.</td>
<td><strong>Land Use</strong> - Surrounding property is a riverfront park with recreational uses.</td>
</tr>
<tr>
<td><strong>Erosion/Drainage Problems</strong> – N/A</td>
<td><strong>Significant Natural Features</strong> – N/A</td>
</tr>
<tr>
<td><strong>Structures in Corridor</strong> – N/A</td>
<td><strong>Utilities</strong> – To be determined</td>
</tr>
<tr>
<td><strong>Inventory Resources</strong> - Millvale Riverfront Park</td>
<td><strong>Environmental Hazards</strong> – N/A</td>
</tr>
<tr>
<td><strong>Intersections and Access Points</strong> – Connects to Millvale at the northern end of the Riverfront Park under underpass to Grant Avenue and connecting to the main business district.</td>
<td></td>
</tr>
<tr>
<td><strong>Trail Linkages/Connections to Existing Trails</strong> - Connects to the South to Three Rivers Heritage Trail.</td>
<td></td>
</tr>
<tr>
<td><strong>User Demand &amp; Market Analysis</strong> – Millvale Riverfront Park and Trail is a highly visible and highly used facility. Current conditions include a marina, skate park, bait shop, motorized boat launch, and a large shelter for canoe/pontoon/bike rental through the municipality along with the Three Rivers Boathouse.</td>
<td></td>
</tr>
<tr>
<td><strong>ROW Costs</strong> – Practical Alignment – N/A, already acquired. Preferred Alignment – N/A, already acquired.</td>
<td><strong>Preliminary Construction Cost Estimate</strong> – Practical Alignment – N/A, already built Preferred Alignment – N/A, already built</td>
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### Shaler/Etna Segment

<table>
<thead>
<tr>
<th>Description</th>
<th>1.7 miles</th>
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<tbody>
<tr>
<td><strong>Description</strong> - The proposed preferred and practical alignment through Shaler/Etna will follow along an existing railroad service road that parallels the railroad tracks. The service road is along the river side of the railroad tracks and extends to Bridge Street under the 62nd Street Bridge along the Etna / Sharpsburg borough boundary. This alignment intersects with private property and property owned by the Borough of Etna. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Photo of Millvale/City of Pittsburgh boundary in Millvale Riverfront Park</th>
<th>Photo of Shaler/Etna boundary looking south</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Legal Feasibility</strong> - Easement agreements with Norfolk Southern must be negotiated for use of any railroad property. Easement agreements with private property owners must be negotiated.</th>
<th><strong>Preferred Alignment Property Owners</strong> – Norfolk &amp; Southern Railroad Company, Borough of Millvale, Borough of Etna, Davison Sand &amp; Gravel</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Topography</strong> - The topography of the alignment through Shaler / Etna is flat and utilizes an existing railroad service road</th>
<th><strong>Practical Alignment Property Owners</strong> – Norfolk &amp; Southern Railroad Company, Borough of Millvale, Borough of Etna, Davison Sand &amp; Gravel</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Erosion/Drainage Problems</strong> – N/A</th>
<th><strong>Land Use</strong> - The surrounding land use to the alignment in Shaler / Etna is Commercial.</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Structures in Corridor</strong> - The alignment will utilize the existing railroad bridge that crosses over Pine Creek. The existing service road also utilizes the existing bridge.</th>
<th><strong>Significant Natural Features</strong> – The alignment is above the 100-year floodplain for the Allegheny River.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Preferred Alignment Required Right-of-way Property Owner List</strong> – Norfolk Southern Railroad Company, Davidson Sand &amp; Gravel</th>
<th><strong>Utilities</strong> – To be determined</th>
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</table>

<table>
<thead>
<tr>
<th><strong>Practical Alignment Required Right-of-way Property Owner List</strong> – Norfolk Southern Railroad Company, Davidson Sand &amp; Gravel</th>
<th><strong>Environmental Hazards</strong> – N/A</th>
</tr>
</thead>
</table>
**Intersections and Access Points** – The proposed trail in Etna can be accessed at the Etna / Sharpsburg boundary at the 1st Street public railroad crossing under the 62nd Street Bridge. There is a public parking lot adjacent to 1st Street, which can be used for parking. The trail in Shaler can be accessed by the Millvale Riverfront Park Trail where public parking is provided.

**Trail Linkages/Connections to Existing Trails** - Millvale Riverfront Park

**User Demand & Market Analysis** - Trail is adjacent to the urban centers of Shaler and Etna which are suburban areas with a population of approximately 37,700. Many community groups will use this section of the trail for educational as well as recreational trail for hiking, walking and bike riding.

<table>
<thead>
<tr>
<th>ROW Costs</th>
<th>Practical Alignment – $85,000 to $422,000</th>
<th>Preferred Alignment – $85,000 to $422,000</th>
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<tr>
<td>Preliminary Construction Cost Estimate</td>
<td>Practical Alignment – $425,000 to $510,000</td>
<td>Preferred Alignment – $425,000 to $510,000</td>
</tr>
<tr>
<td>Sharpsburg Segment</td>
<td>Varies from 1.3 miles to 1.8 miles</td>
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<tr>
<td>-------------------</td>
<td>---------------------------------</td>
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</tr>
<tr>
<td><strong>Description</strong></td>
<td>The proposed preferred alignment through Sharpsburg will follow the existing railroad service road that parallels the railroad tracks from Bridge Street under 62nd St. Bridge and ends just before the Sharpsburg Riverfront Park. The alignment will connect to the Sharpsburg Riverfront Park and then run along an existing dirt road along the river that extends from the park to the Sharpsburg water plant and Silky's Crow's Nest Restaurant. The Sharpsburg Riverfront Park will serve as a proposed trailhead. The proposed practical alignment in Sharpsburg will take advantage of Main Street and improving biking connections through the Sharpsburg business district. Access to Main Street is available as soon as under the 62nd Street Bridge if needed. Trail users will be able to cross back to the riverfront at 19th Street to connect to Aspinwall through private property. It is also recommended that Freeport Road be upgraded for share the road opportunities. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
<td></td>
</tr>
<tr>
<td><strong>Legal Feasibility</strong></td>
<td>Easement agreements with Norfolk Southern must be negotiated for use of any railroad property. Easement agreements and permissions must be obtained for use of any private property. As ongoing negotiations occur with Norfolk &amp; Southern Railroad, it is recommended that negotiations begin with the other property owners so that a trails segment can be designed and constructed from Sharpsburg Riverfront Park to the Township of Ohara as described above for a trail distance of 1.0 miles.</td>
<td></td>
</tr>
<tr>
<td><strong>Preferred Alignment Property Owners</strong></td>
<td>Sharpsburg Borough, Davidson Sand &amp; Gravel Co., Norfolk &amp; Southern Railroad Co., The Deitch Co., Al &amp; Lois Lampenfeld</td>
<td></td>
</tr>
<tr>
<td><strong>Practical Alignment Property Owners</strong></td>
<td>Sharpsburg Borough, Davidson Sand &amp; Gravel Co.</td>
<td></td>
</tr>
<tr>
<td><strong>Topography</strong></td>
<td>The topography of the alignment through Sharpsburg is relatively flat and utilizes an existing railroad service road, an existing gravel road, and riverfront property.</td>
<td></td>
</tr>
<tr>
<td><strong>Land Use</strong></td>
<td>The surrounding land use to the alignment in Sharpsburg is primarily commercial.</td>
<td></td>
</tr>
<tr>
<td><strong>Erosion/Drainage Problems</strong></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>Significant Natural Features</strong></td>
<td>The alignment is above the 100-year floodplain for the Allegheny River except for a section</td>
<td></td>
</tr>
</tbody>
</table>
between the Sharpsburg Riverfront Park and the Sharpsburg Water Treatment Plant that is within the floodplain.

<table>
<thead>
<tr>
<th>Structures in Corridor – N/A</th>
<th>Utilities – To be determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferred Alignment Required Right-of-way Property Owner List –</td>
<td>Environmental Hazards – N/A</td>
</tr>
<tr>
<td>Davidson Sand &amp; Gravel Co., Norfolk &amp; Southern Railroad Co., The Deitch Co., Al &amp; Lois Lampenfeld</td>
<td></td>
</tr>
<tr>
<td>Practical Alignment Required Right-of-way Property Owner List –</td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

**Intersections and Access Points** - The trail in Sharpsburg can be accessed at the Etna / Sharpsburg boundary at the 1st Street public railroad crossing under the 62nd Street Bridge. The trail can also be accessed at the Sharpsburg Riverfront Park.

**Trail Linkages/Connections to Existing Trails** – None

**User Demand & Market Analysis** - Trail is adjacent to the urban center of Sharpsburg which is suburban areas with a population of approximately 3,600. Many community groups will use this section of the trail for educational as well as recreational trail for hiking, walking and bike riding.

**ROW Costs** –
- Practical Alignment – N/A
- Preferred Alignment – $64,000 to $320,000

**Preliminary Construction Cost Estimate** –
- Practical Alignment – $59,000 to $115,000
- Preferred Alignment – $279,000 to $340,000
<table>
<thead>
<tr>
<th>Township of O’hara (Sec. 1) Segment</th>
<th>Varies from 0.4 miles to “to be determined”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong> - The proposed preferred alignment through the Township of O’hara section 1 will begin along private property along the riverfront and cross under the Highland Park Bridge to the Aspinwall Borough boundary. It is recommended that the practical alignment include improvements to Freeport Road for share the road opportunities. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
<td></td>
</tr>
<tr>
<td><strong>Legal Feasibility</strong> - Easement agreements and permissions must be obtained for use of any private property.</td>
<td><strong>Preferred Alignment Property Owners</strong> – The Deitch Co. <strong>Practical Alignment Property Owners</strong> – N/A</td>
</tr>
<tr>
<td><strong>Topography</strong> - The topography of the alignment through the Township of O’hara Section No. 1 is flat.</td>
<td><strong>Land Use</strong> - The surrounding land use to the alignment in the Township of O’hara Section No. 1 is commercial.</td>
</tr>
<tr>
<td><strong>Erosion/Drainage Problems</strong> – N/A</td>
<td><strong>Significant Natural Features</strong> – The alignment is above the 100-year floodplain for the Allegheny River.</td>
</tr>
<tr>
<td><strong>Structures in Corridor</strong> – N/A</td>
<td><strong>Utilities</strong> – To be determined</td>
</tr>
<tr>
<td><strong>Preferred Alignment Required Right-of-way Property Owner List</strong> – The Deitch Co. <strong>Practical Alignment Required Right-of-way Property Owner List</strong> – N/A</td>
<td><strong>Environmental Hazards</strong> – N/A</td>
</tr>
<tr>
<td><strong>Intersections and Access Points</strong> - There are no direct access points for the trail in the Township of O’hara Section No. 1.</td>
<td></td>
</tr>
<tr>
<td><strong>Trail Linkages/Connections to Existing Trails</strong> – None</td>
<td></td>
</tr>
<tr>
<td><strong>User Demand &amp; Market Analysis</strong> - Trail is adjacent to the urban center of Sharpsburg and Aspinwall which is suburban areas with a population of approximately 8,856. Many community groups will use this section of the trail for educational as well as recreational trail for hiking, walking and bike riding.</td>
<td></td>
</tr>
<tr>
<td><strong>ROW Costs</strong> –</td>
<td><strong>Preliminary Construction Cost Estimate</strong> –</td>
</tr>
<tr>
<td>Practical Alignment – N/A</td>
<td>Practical Alignment – to be determined</td>
</tr>
<tr>
<td>Preferred Alignment – $19,000 to $95,000</td>
<td>Preferred Alignment – $100,000 to $120,000</td>
</tr>
</tbody>
</table>
Aspinwall Segment

<table>
<thead>
<tr>
<th>Description</th>
<th>Varies from 0.4 miles to “to be determined”</th>
</tr>
</thead>
<tbody>
<tr>
<td>The proposed preferred alignment through Aspinwall will begin along private property along the riverfront and connect to the Aspinwall Marina. The alignment will then share the road for the marina entrance to utilize the public railroad crossing to cross the railroad tracks and connect to the existing railroad service road that parallels Freepoint Road. The Aspinwall Marina will serve as a proposed trailhead. The practical alignment will use share the road along Freepoint Road and utilize neighborhood streets. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
<td></td>
</tr>
</tbody>
</table>

**Photo of Aspinwall/City of Pittsburgh boundary looking south along existing railroad service road.**

**Legal Feasibility** - Easement agreements with Norfolk Southern must be negotiated for use of any railroad property. Easement agreements and permissions must be obtained for use of any private property.

**Preferred Alignment Property Owners** – The Deitch Co., NGain LLC, Borough of Aspinwall, Aspinwall Marina Inc.

**Practical Alignment Property Owners** – Borough of Aspinwall

**Topography** - The topography of the alignment through Aspinwall is flat and utilizes riverfront private property and an existing railroad service road that is used for railroad maintenance.

**Land Use** - The surrounding land use to the alignment in Aspinwall is commercial and residential.

**Erosion/Drainage Problems** – N/A

**Significant Natural Features** – The alignment is above the 100-year floodplain for the Allegheny River.

**Structures in Corridor** - There is an overhead railroad bridge that is used to cross the Allegheny River. The structure is show on the picture above.

**Utilities** – To be determined

**Preferred Alignment Required Right-of-way Property Owner List** –

**Environmental Hazards** – N/A
<table>
<thead>
<tr>
<th>The Deitch Co., NGain LLC, Aspinwall Marina Inc.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Practical Alignment Required Right-of-way Property Owner List</strong> –</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Intersections and Access Points</strong> - The trail in Aspinwall can be accessed at the Aspinwall Marina, which provides public parking.</td>
<td></td>
</tr>
<tr>
<td><strong>Trail Linkages/Connections to Existing Trails</strong> – None</td>
<td></td>
</tr>
<tr>
<td><strong>User Demand &amp; Market Analysis</strong> - Trail is adjacent to the urban center of Aspinwall which is suburban areas with a population of approximately 3,000. Many community groups will use this section of the trail for educational as well as recreational trail for hiking, walking and bike riding.</td>
<td></td>
</tr>
<tr>
<td><strong>ROW Costs</strong> –</td>
<td><strong>Preliminary Construction Cost Estimate</strong> –</td>
</tr>
<tr>
<td>Practical Alignment – N/A</td>
<td>Practical Alignment – $20,000 to $50,000</td>
</tr>
<tr>
<td>Preferred Alignment – $17,000 to $82,000</td>
<td>Preferred Alignment – $100,000 to $120,000</td>
</tr>
<tr>
<td>City of Pittsburgh Segment</td>
<td>0.7 miles</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td><strong>Description</strong> - The proposed preferred &amp; practical alignment through the City of Pittsburgh will follow the existing railroad service road on Norfolk &amp; Southern property adjacent to Freeport Road and continue to the railroad crossing for the City of Pittsburgh water treatment plant (PWSA) entrance. This crossing is owned by the City of Pittsburgh. The alignment will utilize the existing crossing and maintain along the PWSA employee access road to the Chapel Harbor Development (O'hara Twp. section 2 boundary line). The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
<td></td>
</tr>
</tbody>
</table>

| Photo of Aspinwall/City of Pittsburgh boundary looking north along railroad service road. |
| Photo of City of Pittsburgh Water Treatment Facility entrance driveway. |

| Legal Feasibility - The trail will be located on Norfolk & Southern right of way to the City of Pittsburgh’s railroad crossing. Easement agreements with Norfolk Southern must be negotiated for use of any railroad property. The trail will then traverse City of Pittsburgh property along their employee access road. The Pittsburgh Water and Sewer Authority have tentatively agreed to allow the share the road trail along this road. |
| Preferred Alignment Property Owners - Norfolk & Southern Railroad Co., Pittsburgh Water and Sewer Authority |
| Practical Alignment Property Owners - Pittsburgh Water and Sewer Authority, City of Pittsburgh |

| Topography - The topography of the alignment through the City of Pittsburgh is flat and utilizes the existing railroad service road and the City of Pittsburgh Water Treatment Facility entrance driveway. |
| Land Use - The surrounding land use to the alignment in the City of Pittsburgh is commercial. |

| Erosion/Drainage Problems – N/A |
| Significant Natural Features – The alignment is above the 100-year floodplain for the Allegheny River. |

| Structures in Corridor – N/A |
| Utilities – To be determined |

| Preferred Alignment Required Right-of-way Property Owner List – Norfolk & Southern Railroad Co., Pittsburgh Water and Sewer Authority |
| Practical Alignment Required Right-of- |

| Environmental Hazards – N/A |
**Property Owner List** – Pittsburgh Water and Sewer Authority

**Intersections and Access Points** - The trail will utilize the City of Pittsburgh Water Treatment Facility entrance railroad crossing to cross the railroad tracks. The trail in the City of Pittsburgh can be accessed at the public parking lot used for the Aspinwall Marina.

**Trail Linkages/Connections to Existing Trails** – None

**User Demand & Market Analysis** - Trail is adjacent to the Waterworks Mall and UPMC St. Margaret hospital. Many community groups and employees in the Waterworks Mall will use this section of the trail for educational, exercise, as well as recreational trail for hiking, walking and bike riding.

<table>
<thead>
<tr>
<th><strong>ROW Costs</strong></th>
<th><strong>Preliminary Construction Cost Estimate</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical Alignment – $15,000 to $76,000</td>
<td>Practical Alignment – $14,000 to $35,000</td>
</tr>
<tr>
<td>Preferred Alignment – $37,000 to $185,000</td>
<td>Preferred Alignment – $106,000 to $135,000</td>
</tr>
<tr>
<td>Township of O’hara (Sec. 2)</td>
<td>1.4 miles</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td><strong>Description</strong> - The proposed preferred alignment through Township of O’hara section 2 will begin along the PWSA entrance road that parallels the railroad (adjacent to Chapel Harbor) and cross the Chapel Harbor retirement home property to connect to the existing walking trail located along Chapel Harbor Drive. The existing trail along Chapel Harbor Drive consists of an approximately 5 ft wide sidewalk used for pedestrians. The existing sidewalk will be used for pedestrian use and Chapel Harbor Drive will be a share the road facility used for bicycles. The alignment will continue along Chapel Harbor Drive and then along Zaenger Drive to Riverfront Drive. The alignment will then cross Zaenger Drive and Riverfront Drive and run along Papercraft Park Road, which extends to the Blawnox Borough boundary line. The trail adjacent to Papercraft Park Road will consist of an 8 ft wide paved surface. The trail in Township of O’hara Section No. 2 can be directly accessed along Chapel Harbor Road. An existing connection to the Squaw Valley Trail is in-place and will connect to the proposed alignment at the Chapel Harbor entrance. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
<td></td>
</tr>
</tbody>
</table>

**Photo of City of Pittsburgh/Township of O’hara Sec. 2 boundary looking at Chapel Harbors.**

**Legal Feasibility** – Easement agreements and permissions must be obtained for use of any private property. The trail will be located on the rights of way of Chapel Harbor Retirement Home, Chapel Harbors at the Water Association, Yacht Club Communities. The portion of the trail along Chapel Harbors Drive and Papercraft Park Road will be within the road right-of-way. Zaenger Drive is owned by Yacht Club Communities. An easement from Chapel Harbors will be required to connect the alignment from the City Pittsburgh section and the existing trail along Chapel Harbors Drive. An easement from Yacht Club Communities will be required to allow the trail to be constructed adjacent to Zaenger Drive. It is recommended that negotiations for the easements from Chapel Harbors and Yacht Club Communities become a priority.

**Photo of Township of O’hara Sec. 2/Blawnox boundary along 4th Street.**

**Preferred Alignment Property Owners** – Chapel Harbor ALF, Yacht Club Co.

**Practical Alignment Property Owners** – Chapel Harbor ALF, Yacht Club Co.
**Topography** - The topography of the alignment through the Township of O'hara Section No. 2 is flat and will utilize the existing roadway and 5 ft wide sidewalk.

**Land Use** - The surrounding land use to the alignment in Township of O'hara Section No. 2 is commercial and residential.

**Erosion/Drainage Problems** – N/A

**Significant Natural Features** – The alignment is above the 100-year floodplain for the Allegheny River.

**Structures in Corridor** – N/A

**Utilities** – To be determined

**Preferred Alignment Required Right-of-way Property Owner List** – Chapel Harbor ALF, Yacht Club Co.

**Environmental Hazards** – N/A

**Practical Alignment Required Right-of-way Property Owner List** – Chapel Harbor ALF, Yacht Club Co.

**Intersections and Access Points** - The trail will run through the Chapel Harbor housing development. The trail in Township of O'hara Section No. 2 can be directly accessed along Chapel Harbor Road. An existing connection to the Squaw Valley Trail is in-place and will connect to the proposed alignment at the Chapel Harbor entrance.

**Trail Linkages/Connections to Existing Trails** – An existing connection to the Squaw Valley Trail is in-place and will connect to the proposed alignment at the Chapel Harbor entrance.

**User Demand & Market Analysis** - Trail is adjacent to the Waterworks Mall and newly developed riverfront property (Chapel Harbor) in Township of O'hara, population of approximately 8,856. Many community groups and employees in the Waterworks Mall will use this section of the trail for educational, exercise, as well as recreational trail for hiking, walking and bike riding. The existing trail along Chapel Harbors Drive is already established and used by the Chapel Harbor at Water Community and the Yacht Club Community. An existing connection to the Squaw Valley Trail is in-place and will connect to the proposed alignment at the Chapel Harbor entrance.

**ROW Costs** –
- Practical Alignment – $17,000 to $86,000
- Preferred Alignment – $17,000 to $86,000

**Preliminary Construction Cost Estimate** -
- Practical Alignment – $120,000 to $170,000
- Preferred Alignment – $350,000 to $420,000
<table>
<thead>
<tr>
<th><strong>Blawnox Segment</strong></th>
<th>Varies from 0.8 miles to 1.0 miles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong> - The proposed practical alignment through Blawnox will begin adjacent to 4th Street and continue adjacent to Centre Avenue. The alignment will use the Centre Avenue public railroad crossing to cross the railroad tracks and follow along the existing railroad service road closest to Freeport Road. The Blawnox Borough Community Park will serve as a proposed trailhead. The alignment will continue along the existing railroad service road that extends to the Township of O’hara section 3 boundary line. The proposed preferred alignment will begin along 4th Street and follow along the municipal boundary to the riverfront. The alignment will follow along the riverfront through private property to the Township of O’hara section 3 boundary line. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
<td></td>
</tr>
</tbody>
</table>

**Photo of Township of O’hara. Sec. 2/Blawnox boundary along 4th Street.**

**Legal Feasibility** - The trail along 4th Street will be a share the road facility. Easement agreements with Norfolk Southern must be negotiated for use of any railroad property.


**Practical Alignment Property Owners** – Norfolk & Southern Railroad Company, Blawnox Borough

**Topography** - The topography of the alignment through Blawnox is flat will utilize sharing the road along 4th St. and the existing railroad service road used for maintenance.

**Land Use** - The surrounding land use to the alignment in Blawnox is commercial, industrial, and residential.

**Erosion/Drainage Problems** – N/A

**Significant Natural Features** – The alignment is above the 100-year floodplain for the Allegheny River.

**Structures in Corridor** – N/A

**Utilities** – To be determined
**Preferred Alignment Required Right-of-way Property Owner List** –  
Royston Laboratories Inc., First Street  

**Practical Alignment Required Right-of-way Property Owner List** –  
Norfolk & Southern Railroad Company

**Environmental Hazards** – N/A

<table>
<thead>
<tr>
<th>Intersections and Access Points</th>
<th>The trail will utilize the public railroad crossing along Centre Avenue. The trail can be accessed in Blawnox at the Blawnox Borough Community Park, with public parking.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Trail Linkages/Connections to Existing Trails</th>
<th>None</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>User Demand &amp; Market Analysis</th>
<th>Trail is adjacent to the urban center of Blawnox, population of approximately 1,600. Many community groups will use this section of the trail for educational as well as recreational trail for hiking, walking and bike riding.</th>
</tr>
</thead>
</table>

| ROW Costs | Practical Alignment – $32,000 to $164,000  
Preferred Alignment – $43,000 to $213,000 |
|----------|---------------------------------------------|

| Preliminary Construction Cost Estimate | Practical Alignment – $200,000 to $240,000  
Preferred Alignment – $250,000 to $300,000 |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Township of O’hara (Sec. 3)</strong></td>
<td><strong>Varies from 3.0 miles to “to be determined”</strong></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td><strong>Segment</strong></td>
<td><strong>Description</strong> - The proposed preferred alignment through Township of O’hara section 3 will begin along the riverfront through private property and continue to River Road. The alignment will continue along River Road to the public railroad crossing just before Freeport Road. The alignment will then continue along the existing railroad service road that parallels the railroad tracks / Freeport Road and extends to the Harmar Township boundary line. No improvements are anticipated for the public railroad crossings. It is suggested for the practical alignment that improvements to Freeport Road be made for Share the Road opportunities. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
</tr>
<tr>
<td><strong>Photo of Township of O’hara Sec. 3 looking north along River Road.</strong></td>
<td><strong>Photo of Township of O’hara Sec. 3 looking north along railroad service road.</strong></td>
</tr>
</tbody>
</table>
| **Legal Feasibility** - Trail along River Rd. will be a share the road facility. Easement agreements with Norfolk Southern must be negotiated for use of any railroad prop. | **Preferred Alignment Property Owners** – JWes Corp., Township of O’hara, Norfolk & Southern Railroad Company  
**Practical Alignment Property Owners** – Township of O’hara, Norfolk & Southern Railroad Company |
| **Topography** - The topography of the alignment through Township of O’hara Section No. 3 is flat and utilizes the area adjacent to River Road and the existing railroad service. | **Land Use** - The surrounding land use to the alignment in Township of O’hara Section No. 3 is commercial and residential.  
**Significant Natural Features** – The alignment is above the 100-year floodplain. |
| **Erosion/Drainage Problems** – N/A | **Utilities** – To be determined |
| **Structures in Corridor** – N/A | **Environmental Hazards** – N/A |
| **Preferred Alignment Required Right-of-way Property Owner List** – JWes Corp., Norfolk & Southern Railroad Company  
**Practical Alignment Required Right-of-way Property Owner List** – Norfolk Southern Railroad Company | **Intersections and Access Points** - – The trail will utilize the public railroad crossings along Boyd Avenue and River Road to cross the railroad tracks. There are no direct access points in Township of O’hara Section No. 3 for public parking to the trail. |
<table>
<thead>
<tr>
<th><strong>Trail Linkages/Connections to Existing Trails</strong></th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>User Demand &amp; Market Analysis</strong></td>
<td>Trail is adjacent to the urban center of Blawnox and Township of O’hara, population of approximately 8,856. Many community groups will use this section of the trail for educational as well as recreational trail for hiking, walking and bike riding.</td>
</tr>
<tr>
<td><strong>ROW Costs</strong></td>
<td><strong>Preliminary Construction Cost Estimate</strong></td>
</tr>
<tr>
<td>Practical Alignment – $3,000 to $17,000</td>
<td>Practical Alignment – $50,000 to $85,000</td>
</tr>
<tr>
<td>Preferred Alignment – $57,000 to $287,000</td>
<td>Preferred Alignment – $312,000 to $390,000</td>
</tr>
<tr>
<td><strong>Harmar Segment</strong></td>
<td>3.1 miles</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>The proposed preferred alignment through Harmar will follow the existing railroad service road that parallels the railroad tracks / Freeport Road and extends to the Cheswick boundary line. The public boat launch properties owned by the Commonwealth of Pennsylvania and the PA Fish and Boat Commission will serve as proposed trailheads. This trail alignment presents major challenges because of a steep hillside, Route 28, Freeport Road and the railroad tracks. Options for the alignment are limited. It is recommended that a practical alignment include biking improvements along Freeport Road and utilize neighborhood streets. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
</tr>
<tr>
<td><strong>Photo of Harmar looking south on Hulton Bridge at railroad service road.</strong></td>
<td><strong>Photo of Harmar/Cheswick looking south along railroad service road.</strong></td>
</tr>
<tr>
<td><strong>Legal Feasibility</strong></td>
<td>Easement agreements with Norfolk Southern must be negotiated for use of any railroad property. Easement agreements and permissions must be obtained for use of any private property.</td>
</tr>
<tr>
<td><strong>Preferred Alignment Property Owners</strong></td>
<td>Norfolk &amp; Southern Railroad Company</td>
</tr>
<tr>
<td><strong>Topography</strong></td>
<td>The topography of the alignment through Harmar is flat and utilizes the railroad service road.</td>
</tr>
<tr>
<td><strong>Land Use</strong></td>
<td>The surrounding land use in Harmar is commercial &amp; residential.</td>
</tr>
<tr>
<td><strong>Erosion/Drainage Problems</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Significant Natural Features</strong></td>
<td>The alignment is above the 100-year floodplain</td>
</tr>
<tr>
<td><strong>Structures in Corridor</strong></td>
<td>The alignment will utilize the existing railroad bridge that crosses Allegheny River inlet adjacent to the Allegheny Valley Sewage Authority. The railroad service road maintains across the existing bridge.</td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td>To be determined</td>
</tr>
<tr>
<td><strong>Preferred Alignment Required Right-of-way Property Owner List</strong></td>
<td>Norfolk &amp; Southern Railroad Company</td>
</tr>
<tr>
<td><strong>Intersections and Access Points</strong></td>
<td>The trail can be accessed in Harmar at the two public boat launches owned by the PA Fish &amp; Boat Commission.</td>
</tr>
<tr>
<td><strong>Environmental Hazards</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Trail Linkages/Connections to Existing Trails</strong></td>
<td>None</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td><strong>User Demand &amp; Market Analysis</strong></td>
<td>Trail use should draw from Harmar and Township of O'hara, population of approximately 3,242. Many community groups will use this section of the trail for educational as well as recreational trail for hiking, walking and bike riding.</td>
</tr>
<tr>
<td><strong>ROW Costs</strong></td>
<td><strong>Preliminary Construction Cost Estimate</strong></td>
</tr>
<tr>
<td>Practical Alignment – $48,000 to $239,000</td>
<td>Practical Alignment – $75,000 to $150,000</td>
</tr>
<tr>
<td>Preferred Alignment – $152,000 to $758,000</td>
<td>Preferred Alignment – $750,000 to $900,000</td>
</tr>
<tr>
<td><strong>Cheswick Segment</strong></td>
<td>Varies from 0.7 miles to 0.8 miles</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td><strong>Description</strong> - The proposed preferred alignment through Cheswick will follow along the existing railroad service road that parallels the railroad tracks and extends to the Springdale Township boundary line. The proposed practical alignment through Cheswick will use the public railroad crossing along Blockdale Street to cross the railroad tracks and onto private property. The alignment will then continue through various private properties along the riverfront and extend to the Rachael Carson Park along S. Duquesne Ave. The Rachael Carson Park along S. Duquesne Ave will serve as a proposed trail head for the practical &amp; preferred alignments. There is public parking available at the Rachael Carson Park. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
<td></td>
</tr>
</tbody>
</table>

| Photo of Harmar/Cheswick looking north along railroad service road. | Photo of Cheswick/Springdale Borough looking south along railroad service road. |

| **Legal Feasibility** - Easement agreements with Norfolk Southern must be negotiated for use of any railroad property. |
| **Preferred Alignment Property Owners** – Norfolk & Southern Railroad Company |

| **Topography** - The topography of the alignment through Cheswick is flat and utilizes the existing railroad service road that is used for railroad maintenance. |
| **Land Use** - The surrounding land use to the alignment in Cheswick is commercial and residential. |

| **Erosion/Drainage Problems** – N/A |
| **Significant Natural Features** – The alignment is above the 100-year floodplain for the Allegheny River. |

| **Structures in Corridor** – N/A |
| **Utilities** – To be determined |

<p>| <strong>Preferred Alignment Required Right-of-way Property Owner List</strong> – Norfolk Southern Railroad Company |
| <strong>Environmental Hazards</strong> – N/A |
| <strong>Intersections and Access Points</strong> - The trail can be accessed in Cheswick at the public parking lot along Blockdale Street and at the Rachael Carson Park along S. Duquesne Ave. |
| <strong>Trail Linkages/Connections to Existing Trails</strong> – None |
| <strong>User Demand &amp; Market Analysis</strong> - Trail is adjacent to the urban center of Cheswick, population of approximately 1,800. Many community groups will use this section of the trail for educational as well as recreational trail for hiking, walking and bike riding. |
| <strong>ROW Costs</strong> – Practical Alignment – $37,000 to $187,000 Preferred Alignment – $33,000 to $165,000 | <strong>Preliminary Construction Cost Estimate</strong> - Practical Alignment – $177,000 to $215,000 Preferred Alignment – $175,000 to $210,000. |</p>
<table>
<thead>
<tr>
<th><strong>Springdale Borough Segment</strong></th>
<th>Varies from 1.5 miles to 1.9 miles.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong> - The proposed practical alignment through Springdale Borough will begin at the public railroad crossing along S. Duquesne Ave. and become a share the road facility along S. Duquesne Ave., Freeport Rd., Coalfax St., Railroad St., Keane St., and Butler St to the Springdale Borough boundary line. The Veterans Memorial Ballfields, Springdale Township VFW, and the public boat launch owned by Springdale Borough along Colfax St. will serve as proposed trail heads. An existing connection to the Rachael Carson Trail is in-place at the Springdale Township VFW, which will serve as a proposed trail head. The proposed preferred alignment through Springdale Borough will follow along the existing railroad service road that parallels the railroad tracks / Freeport Road and extends to the Springdale Township boundary line. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
<td></td>
</tr>
</tbody>
</table>

| **Legal Feasibility** - Easement agreements with Norfolk Southern must be negotiated for use of any railroad property. |
| **Preferred Alignment Property Owners** - Norfolk & Southern Railroad Company, Springdale Borough |
| **Practical Alignment Property Owners** - Springdale Borough |

| **Topography** - The topography of the alignment through Springdale Borough is flat and utilizes the existing railroad service. |
| **Land Use** - The surrounding land use to the alignment in Springdale Borough is commercial, industrial and residential. |

| **Erosion/Drainage Problems** - N/A |
| **Significant Natural Features** - The alignment is above the 100-year floodplain. |

| **Structures in Corridor** - N/A |
| **Utilities** - To be determined |

| **Property Owner Required Right-of-way** - Norfolk Southern, Springdale Borough |
| **Environmental Hazards** - N/A |

| **Intersections and Access Points** - The trail can be accessed in Springdale Borough at the Rachael Carson Community Park and Springdale VFW. |
| **Trail Linkages/Connections to Existing Trails** - An existing connection to the Rachael Carson Trail is in-place at the Springdale Township VFW, which will serve as a proposed trail head for the proposed trail alignment. |

| **User Demand & Market Analysis** - Trail is adjacent to the urban center of Springdale Borough, population of approximately 5,700. Many community groups will use this section of the trail for educational as well as recreational trail for hiking, walking and bike riding. The trail |
will also connect to the Rachael Carson Trail.

<table>
<thead>
<tr>
<th>ROW Costs</th>
<th>Preliminary Construction Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical Alignment – N/A</td>
<td>Practical Alignment – $38,000 to $95,000</td>
</tr>
<tr>
<td>Preferred Alignment – $74,000 to $369,000</td>
<td>Preferred Alignment – $375,000 to $450,000</td>
</tr>
<tr>
<td><strong>Springdale Township Segment</strong></td>
<td>1.3 miles</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Description</strong> - The proposed preferred alignment through Springdale Township will follow along the existing railroad service road that parallels the railroad tracks / Freeport Road and extends to the East Deer boundary line. An existing connection to the Rachael Carson Trail is in-place at the Springdale Township VFW, which will serve as a proposed trail head for the proposed trail alignment. It is recommended that the practical alignment include improvements to Freeport Road for share the road opportunities. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
<td></td>
</tr>
</tbody>
</table>

| **Photo of Springdale Borough/Springdale Township looking north along railroad service road.** |
| **Photo of Springdale Township/East Deer looking south on the New Kensington Bridge at the railroad service road.** |

| **Legal Feasibility** - Easement agreements with Norfolk Southern must be negotiated for use of any railroad property. |
| **Preferred Alignment Property Owners** – Norfolk & Southern Railroad Company |
| **Practical Alignment Property Owners** – Springdale Township |

| **Topography** - The topography of the alignment through Springdale Township is flat and utilizes the existing railroad service road that is used for railroad maintenance. |
| **Land Use** - The surrounding land use to the alignment in Springdale Township is commercial, industrial and residential. |

| **Erosion/Drainage Problems** – N/A |
| **Significant Natural Features** – The alignment is above the 100-year floodplain for the Allegheny River. |

| **Structures in Corridor** – N/A |
| **Utilities** – To be determined |

| **Preferred Alignment Required Right-of-way Property Owner List** – Norfolk Southern Railroad Company |
| **Practical Alignment Required Right-of-way Property Owner List** – N/A |
| **Environmental Hazards** – N/A |

| **Intersections and Access Points** - The trail can be accessed in Springdale Township at the Springdale VFW, which provides public parking and where an existing connection to the Rachael Carson Trail is in-place. |

| **Trail Linkages/Connections to Existing Trails** – An existing connection to the Rachael Carson Trail is in-place at the Springdale Township VFW, which will serve as a proposed trail head for the proposed trail alignment. |
**User Demand & Market Analysis** - Trail is adjacent to the railroad that parallels the Allegheny River in Springdale Township. Springdale Township has a population of approximately 5,700. Many community groups will use this section of the trail for educational as well as recreational trail for hiking, walking and bike riding. The trail will also connect to the Rachael Carson Trail.

<table>
<thead>
<tr>
<th><strong>ROW Costs</strong></th>
<th><strong>Preliminary Construction Cost Estimate</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical Alignment – N/A</td>
<td>Practical Alignment – $26,000 to $65,000</td>
</tr>
<tr>
<td>Preferred Alignment – $65,000 to $324,000</td>
<td>Preferred Alignment – $325,000 to $390,000</td>
</tr>
<tr>
<td>East Deer Segment</td>
<td>Varies from 2.2 miles to 3.1 miles.</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------</td>
</tr>
</tbody>
</table>

**Description** - The proposed practical alignment through East Deer will begin along Freeport Road via a share the road facility and extend to the public railroad crossing at the East Deer Park. The alignment will run through the East Deer Park and private property (PPG Industries) to Ferry Street. The alignment will then continue along Ferry Street and cut through private property (PPG Industries) adjacent to railroad property to a point where the trail can cross the private property to make its way back along the riverfront. The alignment will then follow along the riverfront through private property (1000 Treadway Trust & Holcim Inc.) to the Tarentum Borough boundary line.

The proposed preferred alignment through East Deer will begin along the existing railroad service road that parallels the railroad tracks / Freeport Road and extend to the Air Products entrance. The alignment will utilize the entrance to follow along the riverfront through private property and into the East Deer Park. The alignment will run through the East Deer Park and private property (PPG Industries) to Ferry Street. The alignment will then continue along Ferry Street and cut through private property (PPG Industries) adjacent to railroad property to a point where the trail can cross the private property to make its way back along the riverfront. The alignment will then follow along the riverfront through private property (1000 Treadway Trust & Holcim Inc.) to the Tarentum Borough boundary line.

The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.

| Photo of Springdale Township/East Deer looking north on the New Kensington Bridge at the railroad service road. | Photo of East Deer/Tarentum looking south along riverfront property. |

**Legal Feasibility** -
Easement agreements with Norfolk Southern must be negotiated for use of any railroad property. Easement agreements and permissions must be obtained for use of any private property.
The section from the East Deer Park to Tarentum Borough line should become priority for meeting with private property owners. Successful negotiations for easements could afford the completion of these 1.6 miles of the trail.

|-----------------------------|

**Preferred Alignment Property Owners** –
East Deer Township, ET Blue Grass Clearing LLC, PPG Industries, 100 Treadway Trust, Holcim(US) Inc.

**Topography** - The topography of the

**Land Use** - The surrounding land use to the
<table>
<thead>
<tr>
<th><strong>Erosion/Drainage Problems</strong> – N/A</th>
<th><strong>Significant Natural Features</strong> – The alignment is above the 100-year floodplain for the Allegheny River.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Structures in Corridor</strong> – The alignment will utilize an existing bridge used for pedestrians in the East Deer Park to cross an existing drainage ditch. The bridge appears to be structurally sound.</td>
<td><strong>Utilities</strong> – To be determined</td>
</tr>
<tr>
<td><strong>Preferred Alignment Required Right-of-way Property Owner List</strong> – Norfolk &amp; Southern Railroad Company, Air Products &amp; Chemical Inc., Sanitary Authority, East Deer Township, ET Blue Grass Clearing LLC, PPG Industries, 100 Treadway Trust, Holcim(US) Inc.</td>
<td><strong>Environmental Hazards</strong> – N/A</td>
</tr>
<tr>
<td><strong>Practical Alignment Required Right-of-way Property Owner List</strong> – ET Blue Grass Clearing LLC, PPG Industries, 100 Treadway Trust, Holcim(US) Inc.</td>
<td></td>
</tr>
<tr>
<td><strong>Intersections and Access Points</strong> - The trail in East Deer can be accessed in the East Deer Community Park, where public parking is provided. The alignment will utilize the East Deer Community Park entrance railroad crossing to cross the railroad tracks.</td>
<td></td>
</tr>
<tr>
<td><strong>Trail Linkages/Connections to Existing Trails</strong> – None</td>
<td></td>
</tr>
<tr>
<td><strong>User Demand &amp; Market Analysis</strong> - Trail is adjacent to the urban center of East Deer Township, population of approximately 1,400. Many community groups will use this section of the trail for educational as well as recreational trail for hiking, walking and bike riding. Various employees to the adjacent businesses will use the trail for exercise.</td>
<td></td>
</tr>
<tr>
<td><strong>ROW Costs</strong> – Practical Alignment – $77,000 to $386,000</td>
<td><strong>Preliminary Construction Cost Estimate</strong> - Practical Alignment – $412,000 to $510,000</td>
</tr>
<tr>
<td>Preferred Alignment – $149,000 to $745,000</td>
<td>Preferred Alignment – $775,000 to $930,000</td>
</tr>
</tbody>
</table>
## Tarentum Segment

<table>
<thead>
<tr>
<th>Description</th>
<th>1.5 miles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong> - The proposed practical alignment through Tarentum will begin along private property along the riverfront and then become a share the road facility along Grantham Street to W. 6th Avenue to 4th Avenue to 1st Avenue to the Tarentum Riverfront Park. The alignment will then run through the Tarentum Riverfront Park to the Brackenridge Memorial Park. The proposed preferred alignment will begin along private property along the riverfront and extend to 4th Avenue and then to 1st Avenue to the Tarentum Riverfront Park. The alignment will then run through the Tarentum Riverfront Park to the Brackenridge Memorial Park. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
<td></td>
</tr>
</tbody>
</table>

### Photo of East Deer/Tarentum looking north along riverfront property.

### Legal Feasibility
- A short section of this alignment would cross one commercial property owner with the remaining section on public right-of-way. Easement agreements and permissions must be obtained for use of any private property.

### Topography
- The topography of the alignment through Tarentum is flat and utilizes the roadway to connect to the existing trail in the Tarentum Memorial Park.

### Erosion/Drainage Problems
- N/A

### Structures in Corridor
- The alignment will utilize the existing bridge along 4th Avenue to cross Bull Creek and connect to the Tarentum Memorial Park.

### Preferred Alignment Required Right-of-way Property Owner List
- Holcim Inc., Joseph Greco, Wulfrath Refractories Inc.

### Practical Alignment Required Right-of-way Property Owner List
- Holcim Inc.

### Intersections and Access Points
- The trail in Tarentum can be accessed at the Tarentum Riverfront Park and at the public boat launch in Tarentum, which has public parking.
<table>
<thead>
<tr>
<th>Trail Linkages/Connections to Existing Trails</th>
<th>The trail will connect to the existing trail through the Tarentum Riverfront Park, which has public parking available.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>User Demand &amp; Market Analysis</strong></td>
<td>Trail is adjacent to the urban center of Tarentum Borough and Brackenridge, population of approximately 8,500. Many community groups will use this section of the trail for educational as well as recreational trail for hiking, walking and bike riding. Various employees to the adjacent businesses will use the trail for exercise.</td>
</tr>
</tbody>
</table>
| **ROW Costs**                               | Practical Alignment – $36,000 to $180,000  
Preferred Alignment – $57,000 to $286,000 |
| **Preliminary Construction Cost Estimate**   | Practical Alignment – $168,000 to $225,000  
Preferred Alignment – $283,000 to $350,000 |
<table>
<thead>
<tr>
<th><strong>Brackenridge Segment</strong></th>
<th>0.6 miles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong> - The proposed practical and preferred alignment through Brackenridge will begin at the Brackenridge Memorial Park and follow the existing walking trail that extends through the park. The alignment will then continue as a share the road facility along 1st Avenue to Brackenridge Borough line. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
<td></td>
</tr>
</tbody>
</table>

| **Legal Feasibility** - The practical and preferred alignments will be on public right of way. | **Preferred Alignment Property Owners** – Brackenridge Borough  
**Practical Alignment Property Owners** – Brackenridge Borough |
| **Topography** - The topography of the alignment through Brackenridge is flat | **Land Use** - The surrounding land use to the alignment in Brackenridge is commercial and residential. |
| **Erosion/Drainage Problems** – N/A | **Significant Natural Features** – The alignment is above the 100-yr floodplain. |
| **Structures in Corridor** – N/A | **Utilities** – To be determined |
| **Preferred Alignment Required Right-of-way Property Owner List** – N/A | **Environmental Hazards** – N/A |
| **Practical Alignment Required Right-of-way Property Owner List** – N/A | **Intersections and Access Points** – The trail in Brackenridge can be accessed at the Brackenridge Memorial Park. |
| **Trail Linkages/Connections to Existing Trails** – The alignment will connect to the existing riverfront parks of Brackenridge and Tarentum Borough which have existing walking trails. | **User Demand & Market Analysis** - Trail is adjacent to the urban center of Brackenridge and Tarentum Borough, population of approximately 10,000. Many community groups will use this section of the trail for educational as well as recreational trail for hiking, walking and bike riding. The trail will be adjacent to many residential homes along East 1st Avenue. |
| **ROW Costs** –  
Practical Alignment – N/A  
Preferred Alignment – N/A | **Preliminary Construction Cost Estimate** -  
Practical Alignment – $81,000 to $105,000  
Preferred Alignment – $81,000 to $105,000 |

Photo of Tarentum/Brackenridge looking north along E. 1st Ave. (Brackenridge Memorial Park).  
Photo of Brackenridge/Harrison Township looking north along E. 1st Avenue.
<table>
<thead>
<tr>
<th>Harrison Township Segment</th>
<th>Varies from 5.6 miles to 5.8 miles.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong> - The proposed practical and preferred alignment through Harrison Township will be a share the road facility beginning along River Avenue and continue to Veteran's Way. The alignment will then follow Veteran's Way along the river that extends to the U.S. Army Corps (USACE) property for the Allegheny River Lock Station. The alignment may then either continue along U.S. Army Corps (USACE) property back along River Avenue to Federal Street or stop at the U.S. Army Corps (USACE) property and bear left through private property. The practical alignment will then continue along Federal Street to N. Canal Street, where as the preferred alignment will follow the riverfront through private property and connect the existing railroad service road and extend to the proposed on ramp to the SR 356 Bridge over the Allegheny River. The practical alignment will then continue along N. Canal Street and onto Karns Road. The practical alignment will follow Karns Road till the road turns into Oak Manor Drive. The practical alignment will then cross private property (Mount Airy Cemetery) and may continue on railroad property along the existing railroad service road to the proposed on ramp to the SR 356 Bridge over the Allegheny River. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
<td></td>
</tr>
<tr>
<td><strong>Legal Feasibility</strong> - The trail will begin along River Avenue. A share the road is advisable along River Avenue. The trail will impact 260 feet of private property owner (Mount Airy Cemetery), with the remaining being in the township rights of way, the US Army Corp and Norfolk &amp; Southern Railroad Property. Easement agreements with Norfolk Southern must be negotiated for use of any railroad property. Easement agreements and permissions must be obtained for use of any private property.</td>
<td></td>
</tr>
<tr>
<td><strong>Topography</strong> - The topography of the alignment through Harrison is flat and utilizes the area adjacent to River Ave., Federal St., N. Canal St., and Karns Rd. The alignment will also utilize the existing railroad service road that is used for railroad maintenance.</td>
<td></td>
</tr>
<tr>
<td><strong>Land Use</strong> - The surrounding land use to the alignment in Harrison is commercial, industrial, and residential.</td>
<td></td>
</tr>
<tr>
<td><strong>Erosion/Drainage Problems</strong> – N/A</td>
<td></td>
</tr>
<tr>
<td><strong>Significant Natural Features</strong> – The alignment</td>
<td></td>
</tr>
<tr>
<td>Structures in Corridor – N/A</td>
<td>is above the 100-year floodplain for the Allegheny River.</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Utilities – To be determined</td>
<td></td>
</tr>
<tr>
<td><strong>Preferred Alignment Required Right-of-way Property Owner List</strong> – U.S. Army Corps (USACE) property, Allegheny Ludlum Steel Corp., Norfolk &amp; Southern Railroad Company</td>
<td><strong>Environmental Hazards</strong> – N/A</td>
</tr>
<tr>
<td><strong>Practical Alignment Required Right-of-way Property Owner List</strong> – Mount Airy Cemetery, U.S. Army Corps (USACE) property, Norfolk &amp; Southern Railroad Company</td>
<td></td>
</tr>
</tbody>
</table>

**Intersections and Access Points** - The trail in Harrison can be accessed at the Harrison Ballpark, which provide public parking. The alignment will utilize the public railroad crossing along Federal Street to cross the railroad tracks.

**Trail Linkages/Connections to Existing Trails** – Harrison Hills Park

**User Demand & Market Analysis** - The Trail is adjacent to the urban center and residential area of Harrison Township, population of approximately 11,000. The trail also is adjacent to the Harrison Hills Park. Many community groups will use this section of the trail for educational as well as recreational trail for hiking, walking and bike riding.

**ROW Costs** –
- Practical Alignment – $112,000 to $561,000
- Preferred Alignment – $139,000 to $696,000.

**Preliminary Construction Cost Estimate** –
- Practical Alignment – $576,000 to $790,000
- Preferred Alignment – $1,147,000 to $1,405,000
<table>
<thead>
<tr>
<th><strong>Freeport Borough (Armstrong County) / Allegheny Township (Westmoreland County) Segment</strong></th>
<th>2.5 miles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong> - The proposed practical alignment will begin along the proposed onramp to the SR 356 Bridge over the Allegheny River. The alignment will run adjacent to the proposed onramp and across the SR 356 Bridge over the Allegheny River. Bridge reconstruction includes a bike lane. The alignment will use this bike lane to cross the SR 356 Bridge over the Allegheny River and onto River Landing Drive (share the road facility), which is adjacent to the River Forest Golf Club. The alignment will continue along River Landing Drive and connect to the abandoned railroad bed along the Allegheny River. The abandoned railroad bed is private property and has recently been sold. The new owners of the property have publicly discussed working with Allegheny Township to provide a 1.5 mile transfer of the abandoned railroad bed to the Butler/Freeport trail. The proposed practical alignment will provide a connection to the Butler/Freeport Trail via the old abandoned railroad bed under the north side of the SR 356 Bridge over the Allegheny River and the proposed bike lane across the SR 356 Bridge over the Allegheny River. The proposed trail and amenity development / construction shall be in accordance with the 2010 Standards of the American Disabilities Act of 1990.</td>
<td></td>
</tr>
</tbody>
</table>
| **Legal Feasibility** - The trail will begin along SR 356 Bridge across the Allegheny River. PennDOT has proposed to widen the existing bridge and include a bike lane. The trail will impact one property owner, Allegheny Township of Westmoreland County. | **Preferred Alignment Property Owners** – Allegheny Twp. of Westmoreland Co.  
**Practical Alignment Property Owners** – Allegheny Twp. of Westmoreland Co. |
| **Topography** - The topography of the alignment through Allegheny Township is flat and utilizes the proposed bike lane across the SR 356 Bridge and share the road along River Landing Drive. The alignment will also utilize the abandoned railroad bed from the SR 356 Bridge to the Kiskiminetas River. | **Land Use** - The surrounding land use to the alignment in Allegheny Township is residential. |
| **Erosion/Drainage Problems** – N/A | **Significant Natural Features** – The alignment is above the 100-year floodplain for the Allegheny River. |
| **Structures in Corridor** – N/A | **Utilities** – To be determined |
| **Preferred Alignment Required Right-of-way Property Owner List** – Allegheny Twp. of Westmoreland Co. | **Environmental Hazards** – N/A |
| **Practical Alignment Required Right-of-way Property Owner List** – Allegheny Twp. of Westmoreland Co. | |
| **Intersections and Access Points** - There are no public access points along the trail in Allegheny Township. | |
| **Trail Linkages/Connections to Existing Trails** – Butler/Freeport Trail | |
| **User Demand & Market Analysis** - The Trail is adjacent to the urban center of Freeport and residential area of Allegheny Township, population of approximately 9,964. The trail also is | |
adjacent to the Harrison Hills Park. Many community groups will use this section of the trail for educational as well as recreational trail for hiking, walking and bike riding.

<table>
<thead>
<tr>
<th>ROW Costs</th>
<th>Preliminary Construction Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical Alignment – $214,000 to $1,067,000</td>
<td></td>
</tr>
<tr>
<td>Preferred Alignment – $214,000 to $1,067,000</td>
<td></td>
</tr>
<tr>
<td>Practical Alignment – $395,000 to $500,000</td>
<td></td>
</tr>
<tr>
<td>Preferred Alignment – $395,000 to $500,000</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX H
SAMPLE MUNICIPAL ORDINANCES FOR RIVERFRONT DEVELOPMENT
Section 5.5 PROTECTION OF WATERCOURSES AND WETLANDS

5.5.1 Purpose. The regulations contained in this section are intended to promote the public health, safety, and welfare by ensuring that watercourses and wetlands will be preserved in their natural condition so that they may continue to convey and store water, provide habitat for flora and fauna, and serve as recreational and aesthetic resources.

5.5.2 Setback or open space easement required. No grading, cutting, filling, removal of vegetation, or other disturbance of land shall be permitted within the required setback.

A. The minimum setback for watercourses shall be 50', measured from the top of the channel bank. In addition, land development involving the construction of new buildings shall not be permitted within 100' of the top of the bank of the Allegheny, Monongahela, Ohio, or Youghiogheny Rivers.

B. The setback for wetlands shall be as follows:
   1. Determination of setback area:
      a. Wetlands one acre and over: 50' setback depth, times the perimeter of the wetland (measured in lineal feet) equals the minimum setback area.

   2. Distribution of the required setback area shall be either:
      a. At the uniform setback depth from the delineated edge of the wetland; or
      b. At a variable setback depth, based on a wetland management plan prepared by a certified professional wetlands biologist. In no case, however, shall the setback be less than 10' from the delineated edge of a wetland less than acre in extent; or 20' from the delineated edge of a wetland one acre or more in extent.

C. Minor earth disturbance and construction within the area of the required setback or easement, required for development in other areas of the site, may be allowed in accordance with all regulations of the Department of Environmental Protection and municipal flood plain regulations, where applicable.

D. Construction may also be allowed within the required setback area of rivers to enable the development of uses that require proximity or access to the river, in accordance with applicable federal, DEP, and municipal regulations.

E. In larger subdivisions and land developments, the required setback area should be integrated into a system of public or common open space. In smaller subdivisions and land developments the preservation of these open space areas shall be ensured through recorded easements, deed restrictions, or other means acceptable to the Department and to the municipality.

F. Where the required setback or easement would render a site unusable under the municipality's zoning regulations because of the limited size or dimensions of a parcel of land prior to its subdivision, the Department may reduce the depth of the setback to not less than 50 feet along a river and to not less than 20 feet along other watercourses. Any reduction in depth of setback which may be allowed by the Department does not supersede any requirement for a greater setback imposed by federal, state, or municipal regulations.
WHITEMARSH TOWNSHIP

CONCISE SUMMARY OF "RIVERFRONT DEVELOPMENT DISTRICT" ORDINANCE AMENDING CHAPTER 116, ZONING

NOTICE IS HEREBY GIVEN THAT the Board of Supervisors of Whitemarsh Township, Montgomery County, Pennsylvania, will hold a Public Hearing on Thursday, December 13, 2007 at 7:00 P.M. in the Township Building, 616 Germantown Pike, Lafayette Hill, PA 19444 to inform and obtain public comment and to consider enactment of the following Ordinance:

AN ORDINANCE AMENDING CHAPTER 116, ZONING, OF THE CODE OF WHITEMARSH TOWNSHIP BY ESTABLISHING SPECIFIC REQUIREMENTS ASSOCIATED WITH THE “RIVERFRONT DEVELOPMENT DISTRICT”

The purpose of this Ordinance is to amend Chapter 116, Zoning ("Chapter 116") to create a Riverfront Development Overlay District (the “RDD”) and the establishment of associated provisions, including but not limited to, use, density and setback requirements for new subdivisions and land developments within the RDD.

Specifically, the Ordinance is intended to (i) recognize the unique character and natural resources of the Schuylkill Riverfront and to preserve and enhance the public’s access to the area; (ii) establish reasonable standards for the height and size of buildings, the areas and dimensions of yards and open spaces, the provision of facilities to minimize traffic congestion, noise, glare and pollution so as to lessen the danger to the public safety and surrounding building values from traffic congestion, overcrowding of land and inadequate transportation; and to (iii) establish reasonable development standards for the riverfront area.

A full opportunity will be given to any citizen and all parties in interest attending the hearing to provide public comment. The public is invited to attend the Public Hearing and comment on this proposed Ordinance. Persons with a disability who wish to attend the public hearing and require an auxiliary aid, service or other accommodation to participate in the hearing should contact Whitemarsh Township at (610) 825-3535.

A copy of the entire Ordinance and all exhibits shall be available for inspection during normal business hours at Whitemarsh Township, 616 Germantown Pike, Lafayette Hill, PA 19444. (610) 825-3535.
WHITEMARSH TOWNSHIP BOARD OF SUPERVISORS
ORDINANCE # __________

AN ORDINANCE OF THE TOWNSHIP OF WHITEMARSH AMENDING CHAPTER 116, ZONING, OF THE CODE OF WHITEMARSH TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA, TO ESTABLISH A NEW "RIVERFRONT DEVELOPMENT DISTRICT" AND TO INCORPORATE DEFINITIONS AND REGULATIONS PERTAINING THERETO

WHEREAS, the Whitemarsh Township Board of Supervisors (the “Board”) desires to amend the Code of Whitemarsh Township (the “Code”) by adopting certain amendments to Chapter 116, Zoning, to provide for a new “Riverfront Development District” (the “RDD”) and to incorporate certain definitions and regulations pertaining to the RDD; and

WHEREAS, the Board intends that the RDD be utilized to eliminate certain blighted industrial areas within the Township by permitting the creation of residential and non-residential uses that will be compatible with the communities in or near the RDD.

NOW, THEREFORE, IT IS HEREBY ORDAINED AND ENACTED, by the Board of Supervisors of Whitemarsh Township that Chapter 116, Zoning, of the Code of Whitemarsh Township be amended as follows:

Section One. Amendment to Definitions.

Chapter 116 Zoning, Section 116-11 of Article II "Definitions and Word Usage" of the Code and entitled "Definitions" is hereby amended by adding the following:

"Average Setback" - Average Setback is calculated in the following manner:

\[
\text{Average Setback} = \frac{\text{Length}_1 \times \text{Setback}_1 + \text{Length}_2 \times \text{Setback}_2 + \text{Length}_3 \times \text{Setback}_3 + \ldots + \text{Length}_n \times \text{Setback}_n}{\text{Length}_1 + \text{Length}_2 + \text{Length}_3 + \ldots + \text{Length}_n}
\]

Where each "Length" is the length of the façade of the building segment at the specific setback and where "Setback" is the setback of that segment of the façade from the ultimate right-of-way.

"Building Footprint" - The building footprint shall include all parts of a building that rest, directly or indirectly, on the ground, including, by way of illustration and not by limitation, attached garages, bay-windows with floor space, chimneys, porches, decks supported by posts and with floor heights that are four (4) feet or higher above grade, cantilevered decks with horizontal projections that are four (4) feet or more, and covered breezeways connected to a main building.

"Development Rights" - The rights of the owner of a parcel of land, under land development regulations, to configure that parcel and the structures thereon to a particular intensity for residential uses.

"Public Amenity" - A resource, convenience, facility or benefit available to the general public for their use and/or enjoyment, with or without charge (e.g., restrooms, boat launches, scenic overlooks, recreation facilities, etc.). Access to Public Amenities shall be provided even when located on private land.
"Receiving District" - One or more districts in which the development rights of parcels in the sending district may be used.

"Receiving Parcel" - A parcel of land in the receiving district that is the subject of a transfer of development rights, where the owner of the parcel is receiving development rights, directly or by intermediate transfers, from a sending parcel, and on which increased density and/or intensity is allowed by reason of the transfer of development rights;

"Sending District" - one or more districts in which the development rights of parcels in the district may be designated for use in one or more receiving districts;

"Sending Parcel" - a parcel of land in the sending district that is the subject of a transfer of development rights, where the owner of the parcel is conveying development rights of the parcel, and on which those rights so conveyed are extinguished and may not be used by reason of the transfer of development rights;

"Transferable Development Rights" - the attaching of development rights to specific lands which are desired by a municipality to be kept undeveloped, but permitting those rights to be transferred from those lands so that the development potential which they represent may occur on other lands where more intensive development is deemed more appropriate;

"Transferee" - the person or legal entity, including a person or legal entity that owns property in a receiving district, who purchases the development rights; and

"Transferor" - the landowner of a parcel in a sending district.

Section Two. Addition of RDD District.

Chapter 116 of the Code entitled "Zoning" is hereby amended by providing a new Article XXXVII entitled "Riverfront Development District (RDD)" to read as follows:

§116-278. Legislative Intent.

The Legislative Intent of this Article with respect to the Riverfront Development District (RDD) is to recognize the unique character and natural resources of the Schuylkill Riverfront and to preserve and enhance the public's access to the area. It is further the intent to establish reasonable standards for the height and size of buildings, the areas and dimensions of yards and open spaces, the provision of facilities to minimize traffic congestion, noise, glare and pollution so as to lessen the danger to the public safety and surrounding building values from traffic congestion, overcrowding of land and inadequate transportation and to establish reasonable standards for the riverfront area. It is further the intent of the RDD to:

A. Allow mixed use development and redevelopment with a distinction between the area that is riverfront and the supporting area beyond (to be known as the RDD-1 and RDD-2 sub-districts respectively).

B. Provide a uniformity of design and orderly arrangement of buildings, land uses and parking areas.

C. Acknowledge the unique character of both the area along the riverfront and the area immediately beyond the riverfront.

D. Recognize the proximity of the rail station and the need for transit oriented development and redevelopment.
E. Ensure greater public access to the riverfront and provide for a "greenbelt" along the river.

F. Implement the Comprehensive Plan.

G. Implement Transfer of Development Rights as a tool to promote development and redevelopment while conserving land in other areas of the Township.

H. Promote redevelopment to correct inadequate street patterns and access, abandoned industrial buildings that are obsolete in terms of economic feasibility, or are incompatible with surrounding uses, in order to allow better use of the waterfront properties.

§116-279. Application.

A. Areas where the RDD-1 and RDD-2 sub-districts apply are shown on the Zoning Map of Whitemarsh Township.

B. The RDD shall be deemed to be an overlay on the area designated on the Zoning Map of Whitemarsh Township.

(1) In those areas of Whitemarsh Township where the RDD applies, the requirements of the RDD shall be additive to the requirements of the underlying zoning district(s) and in the event of a conflict, take precedence over the underlying zoning district(s).

(2) Should the RDD boundaries be revised as a result of legislative or administrative actions or judicial decision, the zoning requirements applicable to the area in question shall revert to the requirements of the underlying zoning district(s) without consideration of this Article.

(3) If a structure is otherwise permitted by virtue of the requirements of the RDD, relief from the Zoning Hearing Board from the provisions of Article XXXV Riparian Corridor Conservation District shall not be required, provided approval is recommended to the Board of Supervisors by the Township Engineer.

§116-280. Use Regulations.

A. Residential Uses

(1) Single-family detached.

(2) Single-family attached.

(3) Multi-family.

B. Commercial Uses

(1) Retail (with a maximum floor area limit for any individual use of thirty thousand (30,000) square feet).

(2) Office.

(3) Restaurant, including outdoor dining and take-out service.

(4) Bank or other financial institution.
(5) Child or adult day care center.

(6) Parking structure provided that a freestanding parking structure is considered a building for purposes of computation of building coverage and all other dimensional requirements of this district.

(7) Clubhouse facility as part of a residential development.

(8) Mixed use including any permitted use in the appropriate RDD-1 or RDD-2 Sub-District.

C. Public/Semi Public Uses

(1) Municipal facility.

(2) Fire house, ambulance station, which may include a supporting social club building or facility.

D. Any use of the same general character as any of the uses above is permitted when authorized as a conditional use provided that:

(1) The applicant can demonstrate that traffic and other impacts are similar to those of permitted uses.

E. Conditional Uses

(1) More intensive development pursuant to §116-281.A(7)(d) herein.

F. Additional conditional uses permitted in the RDD-1 Sub-District (Riverfront Area):

(1) Hotel, including meeting room facilities when ancillary and subordinate to the hotel.

(2) Recreational open space, boat club/boat house, river-oriented recreation and marina.

(3) Community center or library.

(4) Cultural center or museum.

(5) School, public or private, primary or secondary.

(6) Fitness center, health club, or racquet club.

(7) Theatre.

(8) Places of worship.

(9) Public/private utilities including telecommunication facilities, satellite antennae and similar equipment on proposed buildings and structures.

G. Drive-in or drive-through uses are specifically prohibited in the RDD-1 and RDD-2 Sub-Districts.
H. In the RDD-1 Sub-District, a minimum of two percent (2%) of the footprint area of a residential development must contain a permitted non-residential use(s); provided, however, that such area shall not be less than two thousand square feet (2,000 sf.).

§116-281. Dimensional Requirements.

A. RDD-1 Sub-District.

(1) Minimum lot area: three (3) acres

(2) Minimum width at building setback line: two hundred feet (200')

(3) Minimum building setbacks:

(a) Perimeter: From all property lines, twenty feet (20') for up to four (4) habitable stories above the floodplain; any portion of the building above four (4) habitable stories must be setback a minimum of thirty feet (30'); any portion of the building above six (6) habitable stories must be setback a minimum of thirty-five feet (35'). The minimum setback from the ultimate right-of-way of abutting streets shall be ten feet (10') with an average of twenty feet (20'). For a building with greater than six (6) habitable stories, the minimum setback from the ultimate right-of-way of abutting streets shall be fifteen feet (15') with an average of twenty-five feet (25').

(b) From other unattached buildings on the same site: equal to the height of the taller abutting building, up to a maximum of seventy feet (70').

(c) From public trails, buildings shall be set back ten feet (10').

(d) In the event that a property abuts a utility or railroad, the setback from any utility or railroad right-of-way shall be ten feet (10').

(4) Minimum parking setback: fifteen feet (15') from all property lines.

(5) Building coverage: maximum of forty percent (40%) of the total lot area, unless an integrated parking structure is utilized, in which case the building coverage may be increased as long as overall impervious coverage requirements are met. A freestanding parking structure is considered a building for purposes of computation of building coverage.

(6) Density: Residential density shall not exceed thirty (30) dwelling units per gross acre, except as otherwise provided in §116-281.A(7)(d), below.

(7) Building Height.

(a) Maximum building height is four (4) habitable stories above the floodplain except in the case of single family houses which shall be a maximum of three (3) habitable stories above the floodplain. The number of stories of an attached parking garage is not regulated as long as it does not exceed the height of the lowest building to which it is attached. In addition, no portion of the parking garage shall be visible from the riverfront access and open space as required by §116-284 herein.

(b) A freestanding parking structure shall not exceed a height of sixty feet (60').
(c) One hundred percent (100%) of a building, other than a freestanding parking structure, shall be permitted to be constructed to the maximum habitable stories above the floodplain as long as no more than seventy-five percent (75%) of the footprint is at one (1) height with the remainder being at least one (1) story lower. This requirement applies to any building of four (4) stories or higher.

(d) For buildings other than freestanding parking structures, residential density may be increased to fifty (50) dwelling units per gross acre and building height may be increased to a maximum of six (6) habitable stories above the floodplain, as a conditional use, provided the following conditions are met:

[1] A right-of-way of at least twenty-five feet (25') in width is provided to the Township perpendicular to the Schuylkill River to provide public access to the river in accordance with §116-284.D.

[2] A red shale macadam area of at least ten feet (10') in width shall be provided within the right-of-way.

[3] Building height shall be varied to allow vistas to the river in accordance with §116-281.A(7)(c) herein.

[4] The building includes more than one (1) level of structured parking above grade and no more than ten percent (10%) of the parking shall be surface parking.

[5] At least seventy-five percent (75%) of the building is residential.

[6] A minimum of five percent (5%) of the parking spaces provided are designated for public use.

[7] At least one of the public amenity(ies) is provided in accordance with §116-283.B herein.

[8] Notwithstanding the provisions of §116-32.B., a parapet wall, cornice or similar projection of sufficient height to screen mechanical equipment on the roof of a building (as seen from the ground) shall be provided but may be excluded in the calculation of height, provided that it shall be no higher than twelve feet (12').

(7) Impervious ground cover: seventy five percent (75%) maximum of the total lot area if the maximum building height is four (4) habitable stories above the floodplain or less. If the maximum building height is greater than four (4) habitable stories above the floodplain, the maximum impervious cover shall be sixty five percent (65%).

(8) Building and impervious coverage are calculated on the area of the tract, excluding the area of riverfront open space along riverfront parcels, in accordance with the requirements of §§116-284.A., B., or C., whichever is applicable.

B. RDD-2 Sub-District.

(1) Each single-family detached dwelling shall be subject to the following minimum area, width and yard requirements and maximum height, building coverage, and impervious ground cover requirements:
(a) Minimum lot area: six thousand square feet (6,000 sf.)

(b) Minimum width at building setback line: forty feet (40’)

(c) Minimum front yard: twenty feet (20’)

(d) Minimum side yard: ten feet (10’)

(e) Rear yard: thirty feet (30’)

(f) Maximum height: thirty-five feet (35’) for the principal building and twenty feet (20’) feet, not exceeding one (1) story, for an accessory building

(g) Maximum building coverage: twenty-five percent (25%) of the total lot area

(h) Maximum impervious ground cover: forty percent (40%) of the total lot area

(2) Each attached single family dwelling unit shall be subject to the following minimum area, width and yard requirements and maximum height, building coverage, and impervious ground cover requirements:

(a) Minimum lot area: two thousand two hundred square feet (2,200 sf.)

(b) Minimum width at building setback line: twenty feet (20’)

(c) Minimum front yard: none required

(d) Minimum side yard, where they occur: fifteen feet (15’)

(e) Minimum rear yard: thirty feet (30’) minimum. Accessory buildings may be situated in the rear yard, but not any closer than five feet (5’) from a side lot line.

(f) Fences and walls. No fence or wall over six feet (6’) in height, except a retaining wall or a wall of a building permitted under the terms of this Chapter, shall be erected within three feet (3’) of the rear lot line of any single-family attached residential lot. In instances where the side lot line does not pass through a common wall, no such fence or wall shall be erected within three feet (3’) of said side lot line.

(g) Maximum height: thirty-five feet (35’) for the principal building and twenty feet (20’), not exceeding one (1) story, for an accessory building

(h) Maximum building coverage: sixty percent (60%) of the total lot area

(i) Maximum impervious ground cover: seventy-five percent (75%) of the total lot area

(3) Buildings other than single family detached or attached dwelling units shall be subject to the following minimum area, width and yard requirements and maximum height, building coverage, and impervious ground cover requirements.
(a) Minimum lot area: ten thousand square feet (10,000 sf.)
(b) Minimum width at building setback line: seventy-five feet (75')
(c) Minimum front yard: none required
(d) Minimum side yard: fifteen feet (15')
(e) Minimum rear yard: thirty feet (30')
(f) Maximum height: three (3) habitable stories above the floodplain with a maximum of thirty-five feet (35') for the principal building and twenty feet (20'), not exceeding one (1) story, for an accessory building
(g) Maximum building coverage: sixty percent (60%) of the total lot area
(h) Maximum impervious ground cover: seventy-five percent (75%) of the total lot area

§116-282. Off-Street Parking and Loading

A. Parking structures, whether freestanding or integral with other uses in the same building, shall have another permitted first (1st) floor use on any portion of the structure visible from any streets, required pathways, or riverfront access or suitable architectural treatment shall be provided. For any parking structures, whether freestanding or integral with other uses in the same building, which contain three or more parking levels, another permitted first floor use on any portion of the structure visible from any streets, required pathways, or riverfront access, shall be mandatory, if the first (1st) floor is out of the floodplain. If the first (1st) floor is within the floodplain, suitable architectural treatment shall be provided. Any additional floors of exposed parking structures shall also have suitable architectural treatment. Suitable architectural treatment shall be as defined in Sections B., C. and D. below and §116-283.A.(2) and (4) herein.

B. When part of a development with other principal uses, a parking structure must use the dominant exterior materials of the adjoining building and be of a similar vernacular style.

C. Exterior materials utilized for parking structures shall effectively and attractively obscure the view to the interior of all parking decks.

D. Parking structures shall be designed such that sloping circulation bays are internal to the structure and not expressed in the exterior treatment of the parking structure.

E. Required off-street parking facilities shall be in accordance with §116-184 except that one and three-quarters (1.75) parking spaces per dwelling unit shall be required for residential uses. As a conditional use, the total number of parking spaces for all of the uses may be reduced based on the following:

(1) In the case of a unified development plan in which there are efficiencies derived by shared parking for uses which have complementary peak demands, the applicant shall submit parking generation data based upon standard methodology (such as that published by the ITE – Institute of Transportation Engineers) sufficient for the Board of Supervisors to determine the appropriate reduction.
(2) In the case of a unified development consisting solely of two (2) or more contiguous uses of the same classification, the Board of Supervisors may permit a reduction of the aggregate amount of required parking based upon a determination that greater efficiency is effected by joint use of a common parking area, but in such case the required number of off-street parking spaces shall not be reduced by more than twenty-five percent (25%).

F. Parking may be permitted in the floodplain and riparian corridor in the RDD without relief from the Zoning Hearing Board from the provisions of Article XXII Floodplain Conservation District and Article XXXV Riparian Corridor Conservation District, provided that a parking evacuation plan is provided by the Applicant and is approved by the Board of Supervisors.

§116-283. Design Standards

A. Architectural criteria

(1) Variations in rooflines shall be used to screen HVAC, telecommunications, utility or other similar or equipment and to provide interest and reduce the scale of large buildings. Roofs should provide a variety of vertical dimensions. Multi-planed and intersecting rooflines are encouraged. Flat roofed designs are discouraged. However, if utilized, then flat roofs shall include architecture/details such as cornices, decorative facings and arches to provide interest to the roof line. Additionally, all roof types should have at least one (1) of the following features:

(a) Overhanging eaves of at least three feet (3');

(b) Sloping roofs with an average slope of between three-to-one (3:1) and one-to-one (1:1) that do not exceed the average height of the supporting walls; or

(c) Three (3) or more roof slope planes.

(2) Specific permitted dominant materials. Each development should be of a single, unified architectural style. The exterior building skin shall be composed of one dominant facing material and not more than two additional materials. The dominant material shall comprise sixty percent (60%) or greater of each building elevation, with the exception of any side that is hidden or otherwise cannot be viewed from an abutting street or from the riverfront. The requirements for dominant building materials herein shall also be applicable to free-standing parking structures and parking structures attached to another principal building.

(a) Dominant exterior materials may include:

[1] Wood (to also include fiber-cement exterior siding with wood texture and finish or equivalent).


[3] Stone, or stone veneer (cultured stone or equivalent).

[4] Concrete masonry unit (CMU). CMU allowed only as split face block or block molded with a textured surface.

(6) Glass, warm and cool tones.

(7) Stucco and synthetic stucco.

(b) Dominant exterior materials may not include:


[3] Smooth-faced CMU.


(3) Architectural style of the development shall be designed to avoid the massive scale and uniform impersonal appearances of a "big box" structure through facade ornamentation, building offsets, window treatments, variation in rooflines, entry treatments and upgraded building materials. The focus should be on varying the spaces among groups of buildings, to avoid creating a walled corridor of long, unbroken rows of buildings along a setback, or a monotonous pattern of buildings across a site. Facades should be divided into increments through the use of architectural features such as bay windows, offsets, recesses and other devices that break or minimize scale. Strong vertical and horizontal reveals, offsets and three dimensional details between surface planes should be incorporated into building design to create shadow lines and to further break up flat surfaces.

(4) Building facades greater than one hundred feet (100') in length, including separate buildings that are attached, shall incorporate one or more architectural features over at least twenty percent (20%) of the length of the facade. There shall be no uninterrupted length of facade that exceeds one hundred feet (100'). These requirements shall also be applicable to free-standing parking structures and parking structures attached to another principal building.

(5) Building facades greater than two hundred fifty feet (250') in length, including separate buildings that are attached, shall incorporate setbacks of at least twenty feet (20') over at least fifty percent (50%) of the length of the facade. In addition, when said buildings contain only one (1) story, they shall include facades that appear to be two (2) stories in height and have architectural features that complement those of the ground floor. Sixty percent (60%) of facades of said buildings which face a street or the riverfront shall be two (2) stories in height or appear to be two stories in height, and all buildings proposed on corner locations shall be or appear to be two (2) stories. When a corner location does not contain a building, a compatible architectural feature shall be provided at the corner, and be of a height similar to a two (2)-story facade.

(6) All ground mounted exposed HVAC units or other utility equipment shall be screened from view. This shall be accomplished through the use of masonry walls and landscaping.

(7) All signage shall be in accordance with §116-287 herein and Article XXVIII of the Zoning Ordinance.
(8) For commercial or office uses, loading facilities shall be provided through screened delivery courtyards, via underground service corridors, or in a similar fashion which is not visually or functionally obtrusive to patrons using the parking areas. Waste receptacles shall be located in areas convenient for on site use and accessible for collections. Loading areas and trash enclosures shall be screened from views by the use of masonry walls, landscaping, or similar measure as approved by the Township.

B. Public amenities shall include the following when required in this district:

(1) Restrooms that are available to the public and will be maintained by the property owner.

(2) Boat launches using the most current specifications of the Pennsylvania Fish and Boat Commission. Boat launches shall include a minimum of five (5) parking spaces or be in accordance with § 116-18 (C)(3), whichever requires a greater number of spaces. No overnight parking of boats or other recreational vehicles shall be permitted in any development in this District. A minimum of fifty percent (50%) of the required parking spaces must be tandem spaces to allow for the parking of vehicles with boat trailers.

(3) Scenic Overlook – Scenic overlook area shall be ADA accessible, and regularly maintained. They shall be made of durable, permanent materials that meet all ANSI specifications. Scenic overlooks shall be lit and designed so that all public safety and security issues are adequately addressed.

(4) Recreation Facilities – If any public recreational facilities are provided, they shall conform to standards set forth by their respective associations (i.e. tennis facilities shall meet United States Tennis Association guidelines). All passive recreation, if surfaced in permanent material, such as asphalt or concrete pathways, shall be ADA compliant.

(5) Public Gathering Places – All public gathering spaces shall be designed to safely provide pedestrians with ingress and egress, shall be adequately lit, and shall be ADA compliant. Adequate seating and trash receptacles shall be provided.

(6) Sculpture Garden - Sculpture gardens shall have ADA compliant access and be adequately lit. All landscaped and hardscaped areas shall be designed so that all public safety and security issues are addressed. There shall be no areas within public gardens where individuals can hide from view. Only sculptures made of durable, permanent material shall be placed in public gardens. If sculpture contains any dangerous or hazardous edges or points, especially around the base, it shall be located a safe distance from the public’s reach. Designed elements such as ha-ha’s or barricades, approved by the Township, may be utilized.

(7) Botanical Garden – Botanical gardens may not include any species considered invasive to the southern Pennsylvania region. Any pathways or walks provided in the public garden shall be ADA compliant. Species that include non-edible, poisonous fruit, thorns, or prickles shall not be utilized.

(8) Fountain – Construction drawings for all public fountains shall be approved by the Township prior to their installation. Once installed, all fountains must be regularly maintained and meet public health standards.
(9) Similar Amenities – A similar amenity when deemed appropriate by the Board of Supervisors. The design of each amenity shall be consistent with the overall design of the development of which it is a part. In addition, uses in the riverfront open space shall be designed in a manner in which they coordinate with nearby facilities along the river, even if these facilities are in adjacent or nearby developments. Durable, attractive materials shall be utilized, with natural colors appropriate to the setting. Use of any bright or deep hues for accent purposes shall only be permitted with the express approval of the Board of Supervisors.

(10) When required, public amenities shall encompass a minimum of five percent (5%) of the lot area of a development.

C. Landscaping and Screening.

(1) Street trees shall be planted in accordance with §105-48 of the Subdivision and Land Development Ordinance for Whitemarsh Township.

(2) Parking lot landscaping shall be in accordance with §105-39 of the Subdivision and Land Development Ordinance for Whitemarsh Township except that all trees planted shall be a minimum of two and one half (2.5) caliper inches.

a. Parking lots consisting of twenty (20) vehicles or more, shall be screened from view by buildings on the site or by incorporating decorative walls, fences, landscaping, or a combination thereof.

b. In no case shall tree trunks or shrubs negatively impact required sight triangles, or interfere with the opening of vehicle doors.

c. Where a parking structure is constructed, the landscaping required in §105-52.B.(2), Option A.(1) shall be utilized to enhance the exterior of the parking structure.

(3) Buffer yards shall be landscaped in accordance with §105-52 of the Subdivision and Land Development Ordinance of Whitemarsh Township.

(4) Public amenity landscaping.

a. Planters and other vessels for containerized landscaping are encouraged, especially at building entrances. All planters shall be safely and securely anchored.

b. Trees located in plazas, sidewalk areas, courtyards, or other highly traveled areas, shall include tree grates and guards, and be subject to Township approval.

(5) Lighting fixtures shall be of a style as approved by the Board of Supervisors.

D. Pedestrian Oriented Development

(1) For all developments the following elements shall be included to create a pedestrian oriented development:

(a) Lighting along all street frontages with lighting fixtures to be of a style as approved by the Board of Supervisors.
Benches, trash receptacles, bicycle racks and other street furniture in a style approved by the Board of Supervisors.

Wide sidewalks and other pedestrian amenities, landscaping, shade trees.

A variety of pavement materials for street surfaces and sidewalks.

Planting strips, located between the curb and sidewalk.

§116-284. Riverfront Access and Open Space

A. An area of not less than one hundred fifty feet (150') in width, parallel to the river, measured from the mean water elevation of the Rivers of the United States/Pennsylvania, shall be provided along the length of the river on each development site. This area shall be offered for dedication to the Township. If the area is not accepted for dedication, an easement for public use must be provided along with maintenance agreements acceptable to the Township. This area shall include:

(1) A red shale macadam trail of at least ten feet (10') in width, the length of the river, to connect to adjoining property trails.

(2) Seating areas at intervals of not more than three hundred feet (300').

(3) Landscaping to enhance the trail, which at a minimum shall include trees in a naturalized setting at the rate of one (1) tree per every fifty feet (50') of trail. Other landscape treatments may be utilized if approved by the Township.

(4) Appropriate lighting fixtures shall be of a style as approved by the Board of Supervisors.

(5) Street furniture located in the floodway shall be anchored in accordance with the requirements of Article II, Floodplain Regulations, §42-7 of the Building Construction Code.

B. The width of the riverfront area may be reduced to no less than one hundred twenty-five feet (125'), provided at least one (1) public amenity is provided for buildings four (4) stories or less, the suitability of which shall be determined by the Board of Supervisors. If the building is greater than four (4) habitable stories, then one (1) additional public amenity must be provided in addition to the requirements of §116-281.A.(6)(d).

C. The width of the riverfront area may be reduced to no less than one hundred feet (100'), provided at least two (2) public amenities are provided for buildings four (4) stories or less, the suitability of which shall be determined by the Board of Supervisors. If the building is greater than four (4) habitable stories, then two (2) additional public amenities must be provided in addition to the requirements of §116-281.A.(6)(d).

D. Public Riverfront access is required in accordance with Chapter 105, Subdivision and Land Development § 105-47.K.
E. Other Public Access. For all parcels with frontage on Hector Street which do not have riverfront access, a connection perpendicular to said street and the Montgomery County Schuylkill River Trail shall be provided. Said right-of-way shall be fifteen feet (15') in width and is subject to the following:

1. This right-of-way shall not be contained within any road right-of-way.

2. The right-of-way shall be offered for dedication to the Township. If the area is not accepted for dedication, an easement for public use must be provided along with maintenance agreements acceptable to the Township.

3. A red shale macadam pathway with a minimum of ten feet (10') in width shall be provided and separated from any vehicular traffic.

4. Lighting fixtures shall be installed along the pathway and shall be of a style as approved by the Board of Supervisors.

5. The access shall contain appropriate signage to direct pedestrians to the Montgomery County Schuylkill River Trail.

§116-285. Transfer of Development Rights Option

A. Intent.

1. The primary purpose of the Transfer of Development Rights (TDR) Section is to permanently preserve open land, agricultural land, sensitive natural areas, and community character that would be lost if the land were developed. In addition, this Section is intended to protect property rights by allowing landowners whose land is intended for preservation to transfer their right to develop to other areas of Whitemarsh Township. Specific objectives include:

   a. To effectively achieve the land use planning goals identified in Whitemarsh Township’s Comprehensive Plan while preserving existing property rights.

   b. To preserve unique community features in residential districts while creating a more efficient land use pattern and provision of services and infrastructure in areas the municipality proposed for growth.

   c. To promote redevelopment of the riverfront area in the Township.

B. This Section is enacted pursuant to the authority granted by §603(c)(2.2) and §619.1 of the Pennsylvania Municipalities Planning Code, under the terms of which development rights are acknowledged to be severable and separately conveyable from a sending area to a receiving area. Compliance with the provisions of this Chapter shall be prerequisites to the use of the transfer of development rights option.

C. Establishment of Sending and Receiving Districts.

1. Any zoning district, including but not limited to the RDD-1 Sub-District, may qualify as a sending district for the purposes of the TDR program.

2. The number of development rights which may be sold shall be computed using the methodology prescribed in this Chapter.
(3) The RDD-1 Sub-District described herein shall be the receiving district for the purposes of the transfer of development rights program.

D. Calculation of Transfer Development Rights.

(1) The total number of development rights available to be severed from a sending area tract shall be determined by multiplying the gross tract area, minus a percentage of any constrained lands as required in subparagraph (4) below, by 0.51, subtracting from such product the number of retained development rights. Products resulting in fractions may be rounded to the nearest whole number; fractions of one-half may be rounded up.

(2) Development rights previously severed or land previously restricted from development by covenant, easement or deed restriction shall not be eligible for severance or transfer under this Chapter and shall be subtracted from any applicable calculation of transferable development rights to the extent of the restriction(s) in force unless and until such time as said covenant, restriction or easement is dissolved or rescinded with agreement of all beneficiaries of such covenant, restriction or easement.

(3) Any sending area tract shall retain at least one development right, unless the tract is joined in a single deed with an adjacent tract or tracts with retained or remaining development right(s). All remaining development rights may be severed from the tract.

(4) When calculating eligible development rights for the sending area, a fifty percent (50%) reduction in development rights shall be made for any portion of that area consisting of the following constrained lands:

(a) Any area within the Floodplain District.

(b) Any area comprising wetlands under the jurisdiction of the United States Army Corps of Engineers and/or the Pennsylvania Department of Environmental Protection.

(c) Any area of steep slope, as defined herein and where the ratio of the change in elevation over the horizontal distance as measured between consecutive two (2) foot contour intervals exceed fifteen percent (15%).

For the purpose of development right determination, areas of constrained lands identified in clauses (a), (b), and (c) above may be determined by an applicant or landowner utilizing current Township mapping, Montgomery County Soils Survey maps, and National Wetlands Inventory information, unless more accurate site data is available and found acceptable to the Township.

E. Right to Transfer Development Rights.

(1) Each transferor shall have the right to sever all or a portion of the rights to develop from the parcel in a sending district and to sell, trade, or barter all or a portion of those rights to a transferee consistent with the purposes above.

(2) The transferee may retire the rights, resell them, or apply them to property in a receiving district in order to obtain approval for development at a density or intensity of use greater than would otherwise be allowed on the land, up to the maximum permitted in subsection (3) below.
(3) Development rights may be utilized by the transferee to increase the allowable residential density of a receiving parcel above the applicable base or conditional limits in §116-281.A(6) and §116-281.A(7)(d). Acquisition of one (1) development right shall entitle the receiving parcel to an increase of five (5) residential dwelling units over the applicable base density of thirty (30) dwelling units per gross acre or conditional use density of fifty (50) dwelling units per gross acre. In no event shall the use of transfer development rights result in an increase in the base or conditional use density by greater than ten (10) dwelling units per gross acre. For each ten (10) development rights purchased, there shall be a corresponding decrease in the required Park and Recreation obligation in accordance with the following:

<table>
<thead>
<tr>
<th>TDRs Purchased</th>
<th>Land To Be Dedicated</th>
<th>Fee-In-Lieu (Residential)</th>
<th>Fee-In-Lieu (Non-Residential)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-19</td>
<td>8%</td>
<td>$800.00</td>
<td>$0.40</td>
</tr>
<tr>
<td>20-29</td>
<td>6%</td>
<td>$600.00</td>
<td>$0.30</td>
</tr>
<tr>
<td>30-39</td>
<td>4%</td>
<td>$400.00</td>
<td>$0.20</td>
</tr>
<tr>
<td>40-49</td>
<td>2%</td>
<td>$200.00</td>
<td>$0.10</td>
</tr>
<tr>
<td>50+</td>
<td>0%</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

(4) Any transfer of development rights pursuant to this ordinance authorizes only an increase in density and shall not alter or waive the development standards of the receiving district, including standards for floodplains, wetlands, and other environmentally sensitive areas, nor shall it allow a use otherwise prohibited in a receiving district.

F. Covenant Restrictions. Except for retained development rights (not to be severed), if any, the sending tract must be permanently restricted from future development by a declaration of restriction of development or other restrictive covenant which meets the following requirements:

(1) Except where any retained development rights are specified, the restrictive covenant shall permanently restrict the entire sending tract from future development of any non-agricultural uses, except for public park land, conservation areas, municipal facilities and similar uses. Where development rights will be severed from less than an entire parcel, the portion of the parcel from which the development rights are transferred shall be clearly identified on a plan of the entire parcel, drawn to scale, the accuracy of which shall be satisfactory to the Township. Such plan shall also include a notation of (i) the number of development rights applicable to the entire parcel, (ii) the number of development rights applicable to the identified portion of the parcel from which the development rights are to be severed, and (iii) the number of development rights which remain available to the remaining portion of the parcel. This plan shall be a part of the restrictive covenant and shall be recorded.

(2) The restrictive covenant shall be approved by the Board of Supervisors of the Township, in consultation with the Township Solicitor. Final plan approval of any subdivision or land development plan proposing the severance or use of TDRs, and endorsement of any Deed of Transferable Development Rights, will be contingent upon the recording of the restrictive covenant at the Montgomery County Recorder of Deeds.
(3) The restrictive covenant shall designate the Township, and/or a bona fide conservation organization acceptable to the Township at its sole discretion, as the beneficiary/grantee, but shall also designate both (a) all future owners of all or a portion of the sending parcel, and (b) all future owners of any portion of the receiving parcel as having separate and independent enforcement rights with respect to the restrictive covenants.

(4) The restrictive covenant shall apply to the tract of land from which development rights are sold, and shall specify the number of development rights to be transferred as well as any to be retained. No portion of the tract area used to calculate the number of development rights to be transferred shall be used to satisfy minimum yard setbacks or lot area requirements for any development rights which are to be retained or for any other development.

(5) All owners of the tract from which development rights are severed shall execute the restrictive covenant(s). All ten holders of the tract from which development rights are severed shall execute a joinder and/or consent to the restrictive covenant(s).

(6) Agricultural uses not in keeping with the intent statement of this Ordinance may be restricted or denied by the Township.

(7) Should the Township acquire ownership of the sending tract, the land may be used for passive recreation coincidental with municipal purposes that allow for possible municipal uses and continue to promote the conservation of open space and preservation of view sheds.

G. Plan Submittal Process.

(1) All applicants for use of transferable development rights shall submit a conditional use application in accordance with the provisions of this Code. In addition, an applicant shall submit a preliminary subdivision and/or land development plan showing development with purchase of development rights; this plan shall meet the requirements of the Township's Subdivision and Land Development Ordinance.

(2) Along with the preliminary plan, an applicant shall submit:

(a) An agreement of sale for all development rights proposed to be purchased from sending area sites.

(b) A note on the plan showing the total number of dwelling units proposed on the site.

(c) A note on the plan showing the total number of dwelling units that could be built on the site when development rights are purchased, the number of dwelling units that can be built without the additional development rights, and the difference between the two. This difference represents the number of additional units that could be constructed on the site.

(d) A note on the plan which shows the proposed number of additional dwelling units and the number development rights that must be purchased, based on the proposed number of additional dwelling units determined in §116-285.D above.
(e) A plan of all sending sites from which the applicant proposes to purchase development rights. This plan shall show all information needed to determine the number of development rights which may be sold. In addition, the plan shall be accompanied by metes and bounds description of the property(ies), as well as each property's parcel number, owner name, and tax block and unit number. If the applicant is purchasing development rights from a portion of a sending area site, this portion shall be shown on the plan and described with metes and bounds.

(f) In order to receive final plan approval, the applicant must agree to record restrictive covenants for all sending area land whose development rights are being used by the applicant. These restrictive covenants must meet the requirements of §116-285.F above. The restrictive covenant on the sending area land shall be recorded first, followed by the Deed of Transfer which transfers the development rights from the sending area landowner to the receiving area landowner.

H. Public Acquisition. The Township may purchase development rights and may accept ownership of development rights through transfer by gift. All such development rights may be resold or retired by the Township. Any such purchase or gift shall be accompanied by restrictive covenants as specified above.

I. Amendment and/or Extinction. The Township reserves the right to amend this Part in the future, and the Township expressly reserves the right to change the manner in which the number of development rights shall be calculated for a tract in the sending area and the manner in which development rights can be conveyed. The Township further expressly reserves the right to terminate any transferable development rights program at any time. No owner of the land or owner of development rights shall have any claim against the Township for damages resulting from a change in this Part relating to the regulations governing the calculation, transfer and use of development rights or the abolition of the transferable development rights program. If the transferable development rights program is abolished by the Township, no developer may attach development rights to any tract in the receiving area after the effective date of the ordinance abolishing the transferable development rights program unless an application in conformity with the provisions of this Part was filed prior to the effective date of such ordinance and thereafter is continuously processed to approval, and, following such approval, a complete subdivision and/or land development application complying such rights is thereafter filed within 6 months from the date of such approval.

§116-286. **Signs Permitted in RDD Riverfront Development District.**

A. General Provisions

(1) All signs in the RDD Riverfront Development District shall be consistent with the overall design concept for the development and be appropriate to the type of activity to which they pertain.

(2) Design elements such as the size, shape, materials, lighting, color, lettering style and the number and arrangement of signs should present a unified appearance.

(3) The color of individual commercial or office signage should coordinate with any awnings that are provided.

(4) Signs anchored in the ground shall not exceed ten feet (10') in height and shall be of a monument type.

(5) All signs must be approved by the Board of Supervisors.
(6) Signs shall be illuminated in accordance with §116-210 with the exception that there shall be no internally illuminated box signs.

B. In the Riverfront Development District, the following signs shall be permitted and no other:

(1) Any sign which may be permitted in any residential district, provided that the use to which it refers is permitted in the RDD Riverfront Development District.

(2) Along each street frontage building façade, one wall sign for each use. The total sign area may be five percent (5%) of the wall area on which it is placed not to exceed thirty five square feet (35 sf.).

(3) Any property which has two (2) or more uses permitted in the district shall be permitted a directory sign. Each business in single and separate ownership shall be entitled to not more than three square feet (3 sf.) of signage, and the total area of the directory sign shall not exceed thirty square feet (30 sf.) per building.

(4) In the RDD-1 District, one freestanding sign is permitted for each property entrance. The area of the sign shall be no larger than twenty-four (24 sf.).

(5) Interior property parking and traffic control signs are permitted in accordance with §116-208.A. Signs are also permitted to direct people to the public trail or other public amenities provided the signs do not exceed four square feet (4 sf.) in area.

(6) Each use located in a building fronting along the river, may have one (1) sign to identify it from the riverfront trail. Said sign may either be on the building or be a monument sign. Said sign shall not exceed twelve square feet (12 sf.).

§116-287. Application and Review of Development Proposals

A. The submission of a sketch plan, in accordance with §105.20 of the Township’s Subdivision and Land Development Ordinance, is strongly encouraged. In addition to the requirements of Section 105-13, the sketch plan shall include building setbacks, building heights, and the size and dimensions for all buildings. However, a sketch plan submission is neither required nor mandatory. The sketch plan is not subject to a formal review by Township Professionals.

B. All submissions, including Sketch, Preliminary and Final plans, shall include:

(1) A site plan to include buildings, pedestrian access, river access (both physical and visual) and open space areas.

(2) Architectural plans for any proposed buildings in adequate detail to indicate building setback, footprint dimensions, building heights, and building mass. Architectural elevations or sections in adequate detail to indicate how proposed buildings will affect views to the river and across the river to the hills and ridges. Architectural drawings showing concepts for facades, roof design and materials for buildings, structured parking facilities, signs as well as proposed lighting, street furniture and sidewalk design.
(3) Landscape plan showing the general location of all landscaping and buffer areas and the mature height of all proposed vegetation, differentiating between trees and shrubs.

(4) Any other pertinent data as the Planning Commission or Board of Supervisors may require.

(5) A Transportation Impact Study (TIS) is required for all applications in the RDD-1 Sub-District. Applications in the RDD-2 Sub-District are required to submit a TIS in accordance with the provisions of §106-21.(9)(c) of the Subdivision and Land Development Ordinance.

C. In a review of a sketch plan, the Planning Commission shall provide the Applicant with general guidance as to whether the design, layout and other features of the proposed development are in keeping with the intent and purposes of this Ordinance and will consider whether any of the following criteria have been met:

(1) The plan meets or exceeds applicable provisions.

(2) The plan is in best interest of the health, safety and welfare.

(3) General site considerations (including site layout, open space, and topography; orientation and location of buildings; circulation and parking; setbacks; height; walls; fences and similar elements) and general architectural considerations (including the character, scale and quality of design) have been designed and incorporated to invite pedestrian circulation in this area, will maintain a usable open space area along the river, will provide unobstructed views of the river from nearby streets and will not unduly restrict view of the ridges and hills across the Schuylkill River.

Section Three. Amendment to Conditional Use Procedures.

Chapter 116 Zoning, Section 116-37 of Article V “Residential Districts Generally” of the Code and entitled “Conditional Use Procedures” is hereby amended as follows:

A. The opening sentence shall be modified to read as follows:

“Conditional use permits as defined in §106-31 of this Code shall be granted when the following conditions are met:

B. A new subparagraph “F” is hereby added and shall read as follows:

F. In any instance where the Board of Supervisors is required to consider a request for a conditional use in accordance with the provisions of this chapter, the Board shall:

(3) Determine whether the conditional use is specifically authorized by a provision of this Chapter.

(2) Determine that the proposed use will be compatible with the character of the neighborhood and that the use of property adjacent to the area of the proposed use is adequately safeguarded, if necessary.

(3) Determine that the proposed use or change will not have a harmful effect on local vehicular or pedestrian traffic due to any of the following:
(a) Size or bulk of the proposed use or change.

(b) Expected daily and peak hour traffic generated by the proposed use or change.

(c) Location of entrance and exit drives or new streets.

(d) Design and capacity of off-street parking facilities.

(4) Determine that the proposed use is consistent with the policies contained within the Whitemarsh Township Comprehensive Plan and the Whitemarsh Township Open Space Plan.

(5) Determine that the surrounding neighborhood will not be subjected to objectionable noise, lighting, glare, heat, ventilation, smoke, fumes, vapors, dust, dirt, gases or radioactive or electrical disturbances by the proposed use or change.

(6) Determine that the design of the proposed development minimizes adverse effects, including visual impacts, of the proposed use on adjacent properties.

(7) Determine that the proposed use will comply with the regulations of the zoning districts in which it is located and this Chapter generally, including but not limited to, all lot, yard and bulk regulations, parking and loading regulations, sign regulations, flood plain regulations and all other applicable ordinances.

(8) Determine that the proposed use or change does not unduly burden sanitary sewers, school, police, fire, park, stormwater management or other public facilities or services whether or not provided by the Township.

Section Four. Affirmation.

Except as specifically amended by this Ordinance, Chapter 116 of the Whitemarsh Township Code is hereby ratified and confirmed in its entirety.

Section Five. Severability.

If any sentence, clause, section or part of this ordinance is, for any reason, found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections or parts hereof. It is hereby declared as the intent of the Board of Supervisors that this ordinance would have been adopted had such unconstitutional, illegal or invalid sentence, clause, section or part thereof not been included herein.

Section Six. Conflict.

All ordinances or parts of ordinances conflicting with any provisions of this Ordinance are hereby repealed insofar as the same affects this Ordinance.

Section Seven. Effective Date.

This Ordinance shall become effective at the earliest possible date permitted by the provisions of the Whitemarsh Township Home Rule Charter.
ENACTED AND ORDAINED by the Whitemarsh Township Board of Supervisors this ___ day of ________________, 200__.

ATTEST:

CHRISTOPHER R. VAN DE VELDE
SECRETARY

WHITEMARSH TOWNSHIP,
a Home Rule Charter Municipality

By:

JOSEPH P. CORCORAN, III
CHAIRMAN
forward a copy of the application, with accompanying documents to the Allegheny County Planning Commission via registered or certified mail and to the Bureau of Building Inspection for their review; and

(ii) If, after consideration by City Council, an application is approved, the Zoning Administrator shall so notify via registered or certified mail the Pennsylvania Department of Community Affairs in writing within five (5) working days after the date of City Council approval, together with the application and all documentation. A Certificate of Occupancy shall not be issued for a special hazard conditional use approved by City Council until thirty (30) days after receipt of notification by the Department of Community Affairs. If an application is disapproved by the Department of Community Affairs, the Zoning Administrator shall not issue a permit.

906.02.G.3 Special Exceptions

Uses that are allowed as Special Exceptions in the underlying zoning district shall be allowed as Special Exceptions in the floodway fringe area of an FP-O District, provided that:

(a) The use shall not be a special hazard, development which may endanger human life, or a mobile home; nor shall it in any other way constitute or contribute to increased hazards to life or dangers to the public health, safety or welfare during time of flood;

(b) Any substantial improvement or new construction shall meet all requirements for elevation above flood level or flood proofing applicable to the particular category of use and structure;

(c) In the case of new development or construction, the Board shall determine that the proposed use is necessary in the proposed location and that there are no feasible alternative locations outside of the FP-O District; and

(d) In the case of alterations or enlargements, which do not constitute substantial improvements, the Board may impose requirements for arrangement of uses, mechanical systems and other elements within a structure and/or for flood proofing which are reasonably related to the minimization of flood damages and dangers to life during time of flood.

906.03. RF-O, Riverfront Overlay District.

906.03.A Purpose

Pittsburgh's river corridors, consisting of rivers, adjacent lands and islands are natural, scenic and development resources of regional significance. In recognition of the Commonwealth's trusteeship of the rivers for the benefit of all people, the RF-O, Riverfront Overlay District is intended to:
ARTICLE III. OVERLAY ZONING DISTRICTS

1. Maintain an open space area with the potential for public access along the banks of the rivers;

2. Improve the scenic quality of the City’s riverfronts;

3. Establish a classification of land and water area; and

4. Establish an application, review and permitting procedure appropriate to these special lands and waters.

It is further intended that the regulations applicable to the RF-O District shall permit and encourage development in accordance with goals, objectives and policies found in the City’s Riverfront Plan and in those plans and policy documents adopted from time-to-time by the Planning Commission.

906.03.B Special Definitions

The following special definitions shall apply throughout the RF-O District regulations of this section:

1. Access means a means of approaching or the right to approach, enter and use.

2. [Reserved.]

3. Commercial boat facility used for public admission by charge or charter means water oriented development, not including regular public transit service requiring a Port Authority license, which makes available to the public via admission charge or charter, private boats capable of providing meals, excursions or entertainment with a capacity of twenty (20) or more persons.

4. Corridor means a long narrow strip of land assembled by covenant or deed with an existing, previous or potential common use.

5. [Reserved.]

6. Floodway means the channel of a river and adjacent land area that shall be reserved in order to discharge the waters of the base flood (100-year flood) as depicted on maps prepared by the Federal Emergency Management Agency (dated 15 December 1981 as amended).

7. Launching Ramp means a constructed or altered segment of the river bank or shore used for the purpose of enabling a recreational boat to be placed into the water from a trailer or other apparatus used to transport or store the boat.

8. Preservation, Conservation and Development Map means the map depicting the zoning subdistricts of the RF-O District maintained in the office of the Zoning Administrator.

9. [Reserved.]

10. Riverbank means rising ground bordering a river.

11. Water enhanced facility or use means recreation, entertainment or restaurant facilities or uses which achieve greater value or beauty as a result of a location on or near a river.

12. Water oriented facility or use means a facility or use which by its nature is required to be on or adjacent to a river; without such adjacency the use could not exist.

13. Yard, Riverfront means the area created by the Riverfront Setback requirements of Sec. 906.03.E.
906.03.C General Review Criteria

All uses within the RF-O District shall comply with the Riverfront Development Review Criteria adopted by the Planning Commission. All uses within the RF-O that include the riverbank shall comply with the Riverbank Treatment section of the Riverfront Development Review Criteria adopted by the Planning Commission.

906.03.D Development Review Procedures

In addition to any other applicable review procedures and requirements, an applicant for approval of a Certificate of Occupancy in the RF-O District shall submit a riverfront development application in a form established by the Zoning Administrator and made available to the public. The application and required support material shall demonstrate compliance with all of the standards and criteria of this section. Upon receipt of a complete application, the Zoning Administrator shall process the riverfront development application in accordance with the procedures that are applicable to the proposed use. No Certificate of Occupancy shall be issued for a use that does not comply with the regulations and standards of the RF-O District and all other applicable requirements.

906.03.E Riverfront Setbacks

In addition to the setback standards of the underlying zoning district, there shall be provided and maintained a Riverfront Setback, not less than fifty (50) feet in depth, measured landward from the normal or full pool elevation, for all property that falls within fifty (50) feet of the Allegheny, Ohio or Monongahela Rivers. Required Riverfront Setbacks shall be landscaped and maintained in good condition. Riverfront Setbacks shall be kept free of trash, storage and parked vehicles. No structures or use shall extend into required Riverfront Setbacks, except for the following, which may be authorized by the Zoning Administrator in accordance with the Administrator Exception procedures of Sec. 922.08:

906.03.E.1 Riverfront Setbacks for Planned Unit Development Districts, where potential for continuous public access along the riverfront length of the property is not provided.

The Zoning Administrator shall approve a waiver of the required riverfront setback for Planned Unit Developments which cannot provide potential for continuous public access, provided that the Zoning Administrator shall determine that the proposed landscaping, riverfront treatment, and open space meet the purpose of the RF-O District. While the open space provided under this section need not provide the potential for continuous public access along the entire river bank length of the applicant's property, it shall provide substantial potential for public access to the river bank; shall provide as much potential for public access to the river bank as is physically possible; and shall provide a means to assure the potential for public access through the applicant's property to adjacent riverfront properties.

906.03.E.2 Exception to Riverfront Setback Requirement

The Zoning Administrator may grant a waiver from the riverfront setback requirement provided that:
(a) Landscaping, riverfront treatment and open spaces are in accord with the purpose of the Riverfront Overlay District; and

(b) The open space along the riverfront length of the property need not provide the potential for continuous riverfront access if the project provides the maximum amount of potential access as is physically possible, and if the project provides a means to assure the potential for public access through the applicant's property to adjacent riverfront property.

906.03.E.3 Water Enhanced or Water Oriented Uses and Structures

Water enhanced or water oriented use or structures whose function physically precludes the ability to provide a riverfront setback.

906.03.F Use Regulations

Within the RF-O District development may occur, land may be used and structures may be erected, altered or enlarged for uses allowed in the underlying zoning district, as further regulated by the provisions of this section.

906.03.F.1 Preservation Subdistrict

The following use regulations shall apply within the Preservation Subdistrict of the RF-O District.

(a) Uses Permitted By-Right

All uses permitted by-right in the underlying zoning district shall be permitted by-right in the Preservation Subdistrict provided that:

(1) No development shall be permitted by-right on slopes in excess of twenty-five (25) percent;

(2) No development shall be permitted by-right within the floodway; and

(3) Parks and Recreation (Limited) uses shall be permitted by-right in the RF-O District regardless of whether such use is permitted by-right in the underlying zoning district.

(b) Administrator Exceptions

All primary uses listed as Administrator Exceptions in the underlying zoning district shall be Administrator Exceptions in the Preservation Subdistrict provided that:

(1) No development shall be allowed as an Administrator Exception on slopes in excess of twenty-five (25) percent;

(2) No development shall be allowed as an Administrator Exception within the floodway; and

(3) Parks and Recreation (General) uses shall be Administrator Exceptions in the RF-O District regardless of whether such use is an Administrator Exception in the underlying zoning district.

(c) Special Exceptions
All uses listed as Special Exceptions in the underlying zoning district shall be Special Exceptions in the Preservation Subdistrict provided that

(1) No development shall be allowed as a Special Exception on slopes in excess of twenty-five (25) percent; and

(2) No development shall be allowed as a Special Exception within the floodway.

(d) Conditional Uses

All uses listed as Conditional Uses in the underlying zoning district shall be allowed as Conditional Uses in the Preservation Subdistrict provided that no development shall be allowed as a Conditional Use within the floodway. In addition, the following uses shall be considered a Conditional Use in accordance with the procedures of Sec. 922.06:

(1) New construction or development in a Preservation Subdistrict on slopes in excess of twenty-five (25) percent provided:

(i) No construction or development occurs on slopes in excess of thirty-three (33) percent;

(ii) No construction or development occurs in a floodway;

(iii) The development does not affect more than fifteen (15) percent of the site's land area which is in the Preservation Subdistrict.

(iv) It is not possible to locate the development on a portion of the site which is not in the Preservation Subdistrict; and

(v) Council may impose additional restrictions reasonably necessary to protect the health, safety or welfare; to protect the capacity of the flood plain; to improve or maintain the scenic quality of the rivers or riverfronts.

906.03.F.2 Conservation Subdistrict

The following uses regulations shall apply within the Conservation Subdistrict of the RF-O District.

(a) Uses Permitted By-Right

All uses listed as permitted by-right in the underlying zoning district shall be permitted by-right in the Conservation Subdistrict provided that:

(1) No development shall be permitted in a Conservation Corridor other than pedestrian walkways, local roadways (as defined by functional classification), surface parking involving no structure and recreation facilities involving no structure; and

(2) Parks and Recreation (Limited) uses shall be permitted by-right in the RF-O District regardless of whether such use is permitted by-right in the underlying zoning district.

(b) Administrator Exceptions

All uses listed as Administrator Exceptions in the underlying zoning district shall be Administrator Exceptions in the Conservation Subdistrict, according to the provisions of Sec. 922.08, provided that no Administrator Exception use
shall be allowed with a Conservation Corridor. The development of a use that is permitted As-of-Right in the underlying zoning district shall be considered an Administrator Exception when located within a Conservation Corridor. In addition, the following uses shall also be Administrator Exceptions in the Conservation Subdistrict:

(1) Water Oriented Uses

Water oriented uses, other than launching ramps, marinas with more than seventy-five (75) boat slips, or commercial/boat operations for public admission charge or charter, provided no development occurs in a conservation corridor other than pedestrian walkways, local roadways, surface parking involving no structure and recreation facilities involving no structure.

(2) Parks and Recreation (General)

Parks and Recreation (General) uses shall be Administrator Exceptions in the RF-O District regardless of whether such use is an Administrator Exception in the underlying zoning district.

(3) Construction or Development in a Conservation Subdistrict of the Riverfront Overlay District

New construction or development in a Conservation Subdistrict of the RF-O District for water-oriented facilities or uses such as marinas, docks, boating and fishing facilities, recreational uses and open space uses, including structures:

(i) No new construction or development shall be authorized in a floodway for any use which does not require direct access to a river, other than recreation and open space uses, or for which an alternative location outside of a floodway is possible;

(ii) To the maximum extent feasible, any new construction or development on a site which is partially within a floodway shall be located on portions of the site which are not within the floodway;

(iii) If feasible in relation to the use and in relation to the character of adjacent areas, public access to the riverfront shall be provided in connection with any new development or construction;

(iv) All requirements of the Site Plan Review procedures of Sec. 922.04 have been met; and

(v) Parking is provided in accord with the regulations of Chapter 914.

(4) Construction or Development in a Conservation Corridor

New construction or development in a Conservation Corridor provided that:

(i) An alternate development-free continuous corridor of at least the same width as the Conservation Corridor is provided on the Administrator Exception applicant's property;

(ii) The provided alternate corridor abuts the Conservation Corridors on adjacent properties and forms a continuous corridor;
(iii) The alternate corridor provided the same general type of potential use as the delineated Conservation Corridor considering such factors as topography, landscaping, surface treatment, vehicular conflicts, and the condition of immediate environs;

(iv) It is not possible to locate the development on a portion of the site which is not a Conservation Corridor; and

(v) The Zoning Administrator may impose additional restrictions reasonably necessary to protect the health, safety or welfare; to protect the capacity of the flood plain; to improve or maintain the scenic quality of the rivers and riverfronts.

(c) Special Exceptions

All uses listed as Special Exceptions in the underlying zoning district shall be Special Exceptions in the Conservation Subdistrict in accordance with the provisions of Sec. 922.07, provided that no Special Exception Use shall be allowed within a Conservation Corridor.

(d) Conditional Uses

All uses listed as Conditional Uses in the underlying zoning district shall be allowed as Conditional Uses in the Conservation Subdistrict according to the provisions of Sec. 922.06 provided that no Conditional Uses shall be allowed within a Conservation Corridor. The following uses shall also be Conditional Uses in the Conservation Subdistrict:

(1) Water Enhanced Uses

New construction or development in a Conservation Subdistrict of the RF-O District for water enhanced facilities or uses such as recreation, entertainment or restaurant facilities or uses, open to the public, which achieve greater value or beauty as a result of a location on or near a river; marinas with more than seventy-five (75) boat slips; launching ramps; commercial boat operations for public admission charge or charter; public utility and mass transportation facilities; in accordance with all other provisions of this Zoning Ordinance applicable to the specific use and zoning district and provided:

(i) No new construction or development shall be authorized in a floodway for any use not open to the public which does not require direct access to a river, other than recreational uses involving no structures and open space uses, or for which an alternative location outside of a floodway is possible;

(ii) To the maximum extent feasible, any new construction or development on a site which is partially within a floodway shall be located on portions of the site which are not within the floodway;

(iii) If feasible in relation to the use and in relation to the character of adjacent areas, public access to the riverfront shall be provided in connection with any new development or construction; and

(iv) Council may impose additional restrictions reasonably necessary to protect the health, safety or welfare; to protect the
capacity of the flood plain; to improve or maintain the scenic quality of the rivers and riverfronts.

(2) Launching Ramps

Launching ramps that are not located in a Planned Development District;

(3) Marinas

Marinas with more than seventy-five (75) boat slips when not located in a Planned Development District;

(4) Commercial Boat Operations that are Available for Public Admission Charge or Charter

Commercial boat operations that are available for public admission charge or charter when they are not located in a Planned Development District; and

(5) Public Utility and Mass Transportation Facilities

Public utility and mass transportation facilities.

906.03.F.3 Development Subdistrict

The following uses regulations shall apply within the Development Subdistrict of the RF-O District.

(a) Uses Permitted By-Right

All uses listed as permitted by-right in the underlying zoning district shall be permitted by-right in the Development Subdistrict. In addition, Parks and Recreation (Limited) uses shall be permitted by-right in the RF-O District regardless of whether such use is permitted by-right in the underlying zoning district.

(b) Administrator Exceptions

All uses listed as Administrator Exceptions in the underlying zoning district shall be Administrator Exceptions in the Development Subdistrict. In addition, the following uses shall also be Administrator Exceptions in the Development Subdistrict:

(1) Water Oriented Uses

Water oriented uses, other than launching ramps, marinas with more than seventy-five (75) boat slips and commercial boat operations for public admission charge or charter.

(2) Parks and Recreation (General)

Parks and Recreation (General) uses shall be Administrator Exceptions in the RF-O District regardless of whether such use is an Administrator Exception in the underlying zoning district.

(3) Construction or Development in a Development Subdistrict of the Riverfront Overlay District

New construction or development in a Development Subdistrict of the RF-O District for water-oriented facilities or uses such as marinas,
docks, boating and fishing facilities, recreational uses and open space uses, subject to the following standards:

(i) No new construction or development shall be authorized in a floodway for any use which does not require direct access to a river, other than recreation and open space uses, or for which an alternative location outside of a floodway is possible;

(ii) To the maximum extent feasible, any new construction or development on a site which is partially within a floodway shall be located on portions of the site which are not within the floodway;

(iii) If feasible in relation to the use and in relation to the character of adjacent areas, public access to the riverfront shall be provided in connection with any new development or construction;

(iv) All requirements of the Site Plan Review procedures of Sec. 922.04 have been met; and

(v) Parking is provided in accord with the regulations of Chapter 914.

(c) Special Exceptions

All uses listed as Special Exceptions in the underlying zoning district shall be Special Exceptions in the Development Subdistrict.

(d) Conditional Uses

All uses listed as Conditional Uses in the underlying zoning district shall be allowed as Conditional Uses in the Development Subdistrict. The following uses shall also be Conditional Uses in the Development Subdistrict:

(1) Water Enhanced Uses

New construction or development in a Development Subdistrict of the RF-O District for water enhanced facilities or uses such as recreation, entertainment or restaurant facilities or uses, open to the public, which achieve greater value or beauty as a result of a location on or near a river; marinas with more than seventy-five (75) boat slips; launching ramps; commercial boat operations for public admission charge or charter; public utility and mass transportation facilities; in accordance with all other provisions of this Zoning Ordinance applicable to the specific use and zoning district and provided:

(i) No new construction or development shall be authorized in a floodway for any use not open to the public which does not require direct access to a river, other than recreational uses involving no structures and open space uses, or for which an alternative location outside of a floodway is possible;

(ii) To the maximum extent feasible, any new construction or development on a site which is partially within a floodway shall be located on portions of the site which are not within the floodway;

(iii) If feasible in relation to the use and in relation to the character of adjacent areas, public access to the riverfront shall
be provided in connection with any new development or construction; and

(iv) Council may impose additional restrictions reasonably necessary to protect the health, safety or welfare; to protect the capacity of the flood plain; to improve or maintain the scenic quality of the rivers and riverfronts.

(2) Launching Ramps
Launching ramps that are not located in a Planned Development District;

(3) Marinas
Marinas with more than seventy-five (75) boat slips when not located in a Planned Development District;

(4) Commercial Boat Operations that are Available for Public Admission Charge or Charter
Commercial boat operations that are available for public admission charge or charter when they are not located in a Planned Development District; and

(5) Public Utility and Mass Transportation Facilities
Public utility and mass transportation facilities.

(Ord. No. 2-2005, § 1C, eff. 1-25-05)


906.04.A Purpose

The LS-O, Landslide-Prone Overlay District regulations require subsurface investigations by a registered professional and approval of construction plans by the Chief of the Bureau of Building Inspection prior to issuance of a Certificate of Occupancy for any development in the LS-O District. The purpose of these regulations is to reduce the risk of damage or hazards of life that may occur as a result of construction and land operations on lands susceptible to movement or sliding of earth.

906.04.A.1 Warning and Disclaimer

The mapped delineations of land that may be subject to sliding or subsidence do not necessarily include all land that is subject to those hazards. While it is the purpose of the regulations contained in this section to afford reasonable protection against damages caused by construction on or use of hazard-prone land, neither the mapped delineations nor any regulations contained in this section shall create any liability on the part of the City, its officers or employees for damages that may occur.

906.04.B Effect of District Regulations