

OHIO RIVER

AREA-WIDE BROWNFIELDS PLANNING PROJECT

Multiple Communities - One River

MONACA U.S. EPA AREA-WIDE BROWNFIELDS PROJECT

Draft Plan Presentation

September 27, 2012

A regional brownfields planning effort funded by the **U.S. Environmental Protection Agency** and lead by **Monaca Borough** in partnership with **Midland Borough**, the **City of Aliquippa**, the **Borough of Coraopolis** and the **Ohio River Trail Council**.



LANDSCAPE ARCHITECTURE
PLANNING

STROMBERG / GARRIGAN & ASSOCIATES



Key Facts:

- Ohio River Brownfields Corridor is approximately 40 miles in length; the beginning of the 981 miles long waterway ending in Cairo, Illinois, where it flows into the Mississippi River.
- This project includes four target communities in two counties – Allegheny and Beaver
- The Ohio River is the source of drinking water for more than three million people.
- Non-point source pollution from urban runoff contributes significant amounts of contaminants to the river.
- The Ohio River System which includes its navigable tributaries annually accounts for 270 billion tons of commodities worth over \$30 billion and supports approximately 100,00 jobs and \$3 billion in annual income.
- Although this stretch has suffered from major steel plant closings since the late 1970s there is a significant amount of existing and new industrial activity including steel plants, specialty manufacturing and major new investment as a result of the shale gas industry and new technology businesses (PACyber) and the proposed Shell Ethanol (Cracker) Refinery.

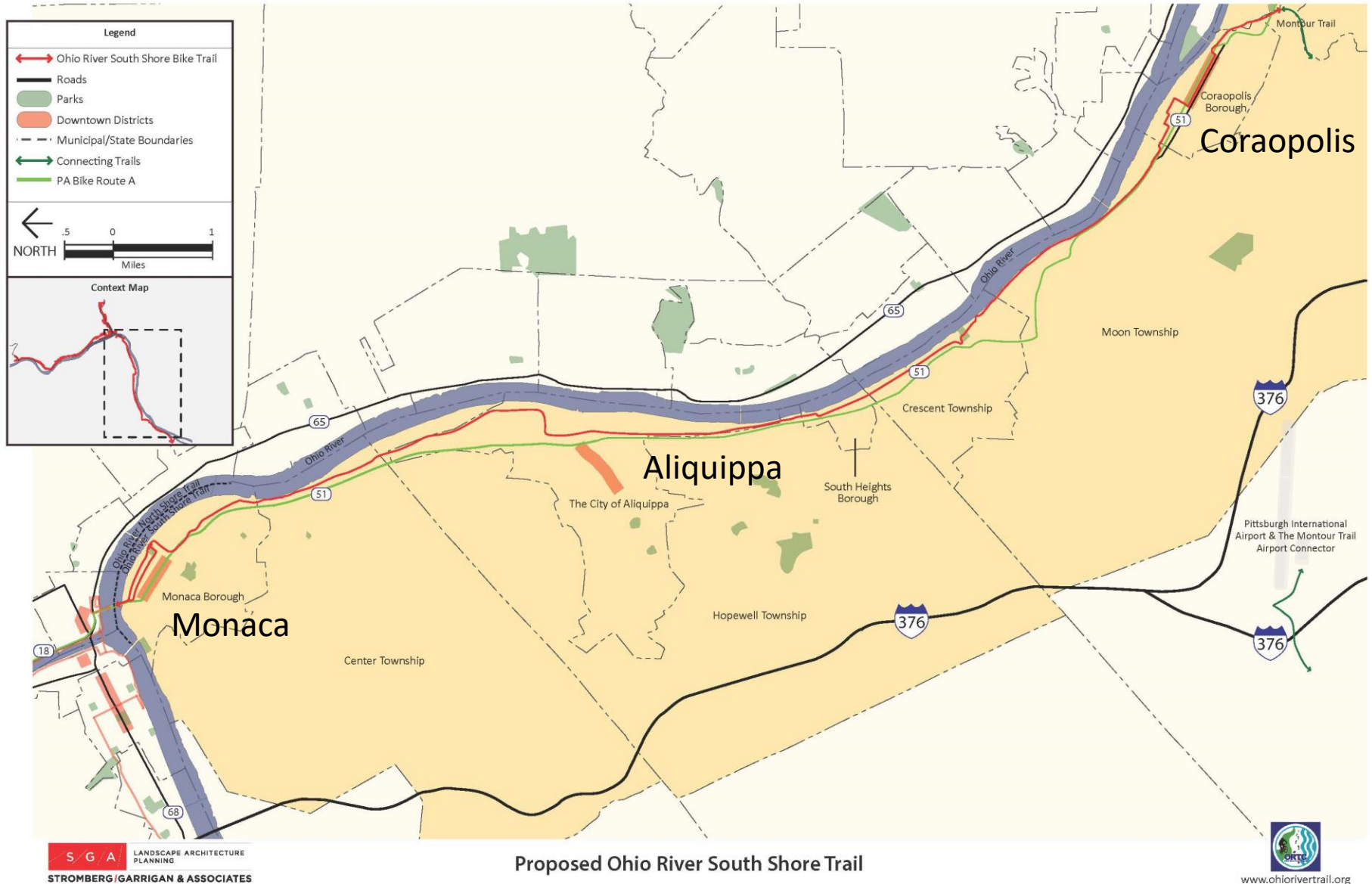
The Ohio River Brownfields Corridor



The Ohio River Trail Corridor



The Ohio River Trail Corridor



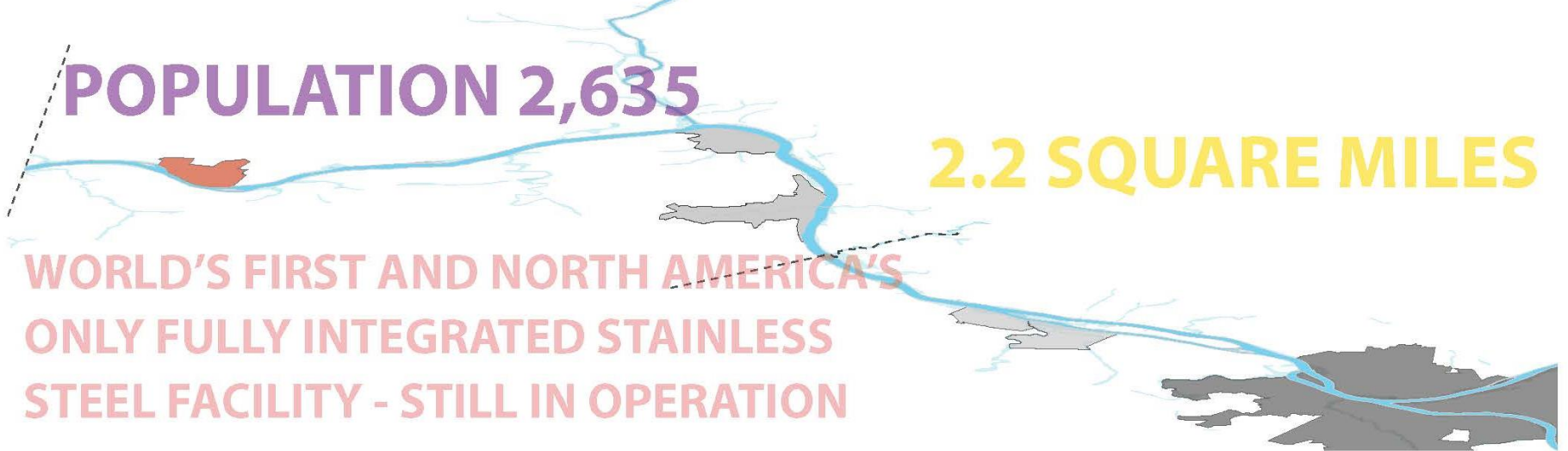
Midland Borough

FOUNDED IN 1906 BY MIDLAND
STEEL COMPANY

POPULATION 2,635

2.2 SQUARE MILES

WORLD'S FIRST AND NORTH AMERICA'S
ONLY FULLY INTEGRATED STAINLESS
STEEL FACILITY - STILL IN OPERATION



Midland – West



Midland – East



Midland Borough

Analysis Conclusions

- Active steel plants and support industries generate truck traffic that creates conflicts with PACyber School expansion and major “main street infill redevelopment along Midland Avenue.
- Private developers interested in several block long infill redevelopments along western end of Midland Avenue requires support infrastructure, especially parking.
- Part of the proposed Ohio River Trail connection through the Borough travels along Railroad Avenue
- Stormwater management and pre-treatment areas are needed.

Planning Proposals and Priority Projects

- Create proposed Steel Way as a new “green street” to create truck route access from the east Route 68 to main gate of Allegheny Ludlum plant to remove the majority of truck traffic from Midland Avenue through the center of town.
- Redevelop west end Railroad Avenue parcel from 3rd to 4th Avenue for public parking lot.
- Upgrade Railroad Avenue as a green alleyway to support Ohio River Trail and provide rain gardens at street end parks.

Midland Borough

Conservation Concerns

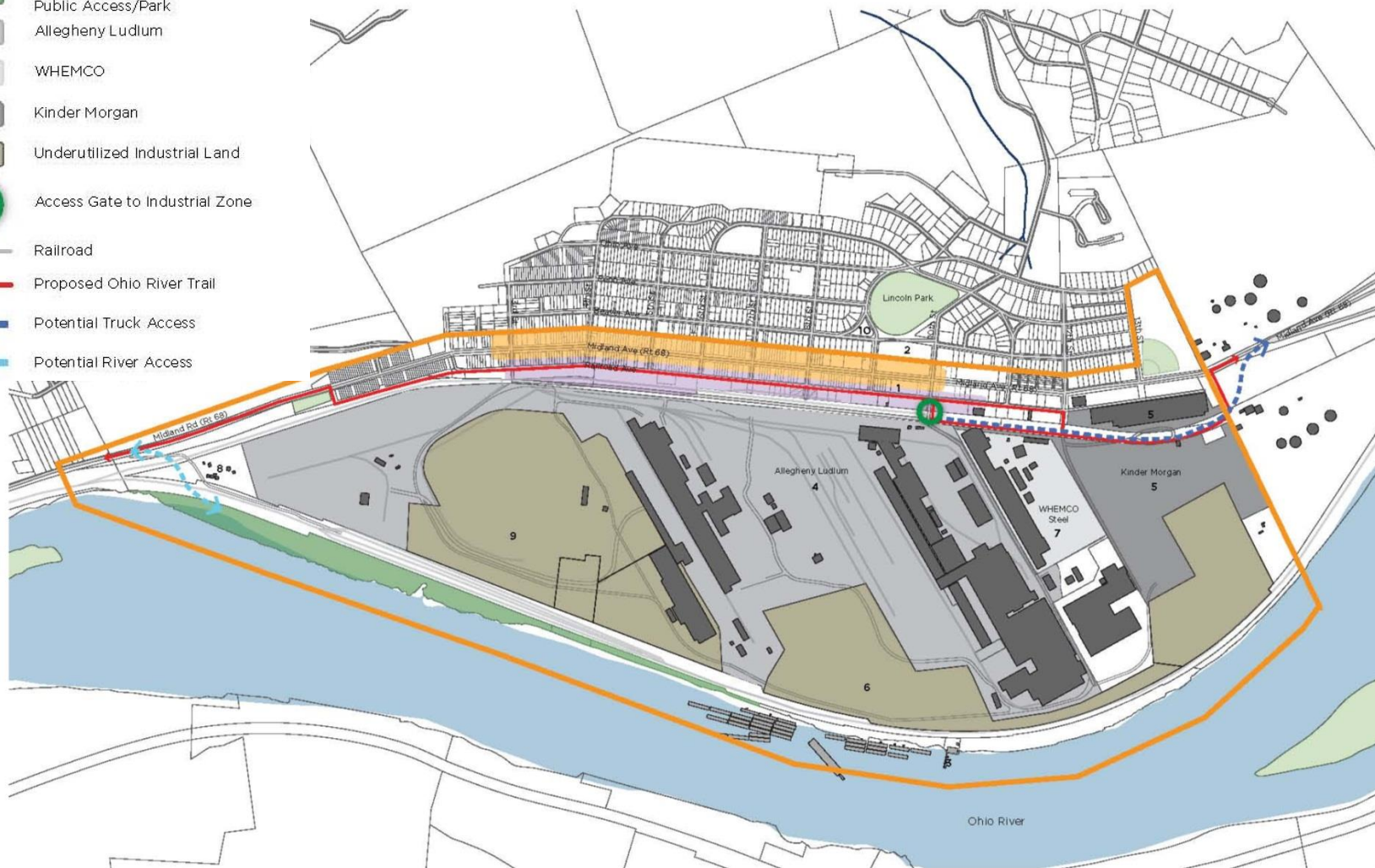
- George Island Nat. Wildlife Refuge is not accessible to local community.
- Neglected river's edge is divided by railroad, neglected, full of invasive plant species and at risk for soil erosion due to steep embankments.
- Stormwater runoff from the hills above Midland harms quality of Ohio River and is detrimental to local threatened species of mussels and other aquatic life.
- Stormwater runoff from industrial sites harms local river quality.

Proposed Infrastructure Solutions

- Physical access to George Island should remain nonexistent to protect ecosystem, however, placing the Island on display from proposed “overlook park” could raise community awareness and promote birding tourism.
- Managing a riverfront zone park or conservation area could promote the clearing of invasives and the replanting of native habitat for threatened local species of Osprey (*Pandion haliaetus*).
- ‘Green Alley’ along Railroad Avenue and its interconnected pocket stormwater parks could help capture stormwater runoff prior to its release in the river, positively impacting water quality.
- Swale systems intertwined with industrial zone green streets captures contaminated stormwater while providing a dedicated alternate route for truck traffic.

LEGEND

- Traditional Main Street
Redevelopment Corridor
- Economic Development
Infrastructure Corridor
- Potential Riverfront
Public Access/Park
- Allegheny Ludlum
- WHEMCO
- Kinder Morgan
- Underutilized Industrial Land
- Access Gate to Industrial Zone
- Railroad
- Proposed Ohio River Trail
- Potential Truck Access
- Potential River Access



SCALE: Not to Scale NORTH

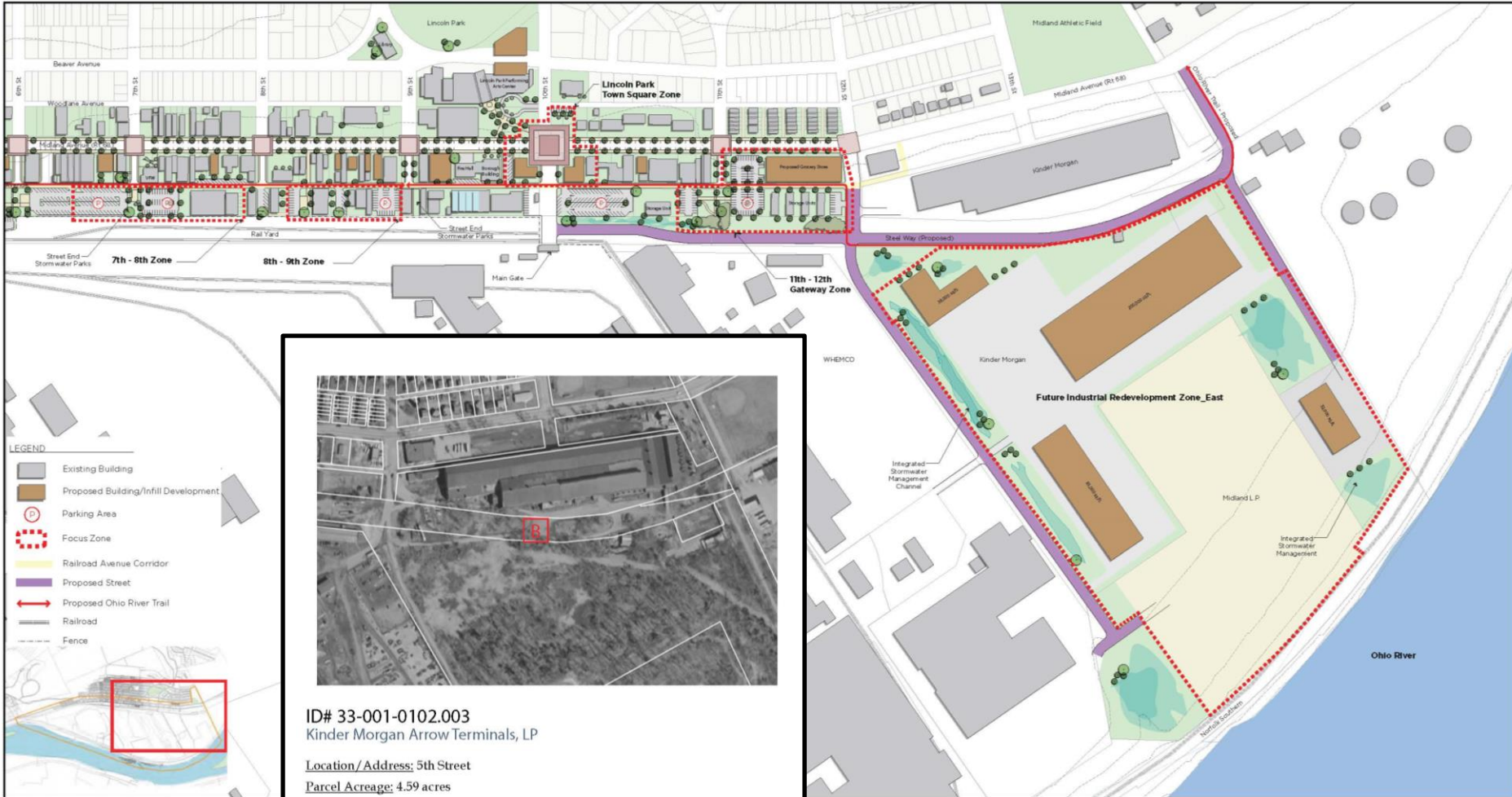
Midland – East

Proposed Steel Way “green street”



Allegheny Ludlum
Steel Main Gate

Midland



ID# 33-001-0102.003

Kinder Morgan Arrow Terminals, LP

Location/Address: 5th Street

Parcel Acreage: 4.59 acres

Current Ownership: Kinder Morgan Arrow Terminals, LP

Current Use/Description: N/A

Parcel History/Historical Use: N/A

Environmental Data Utilized: N/A

Potential Constraints/Considerations for Reuse: N/A

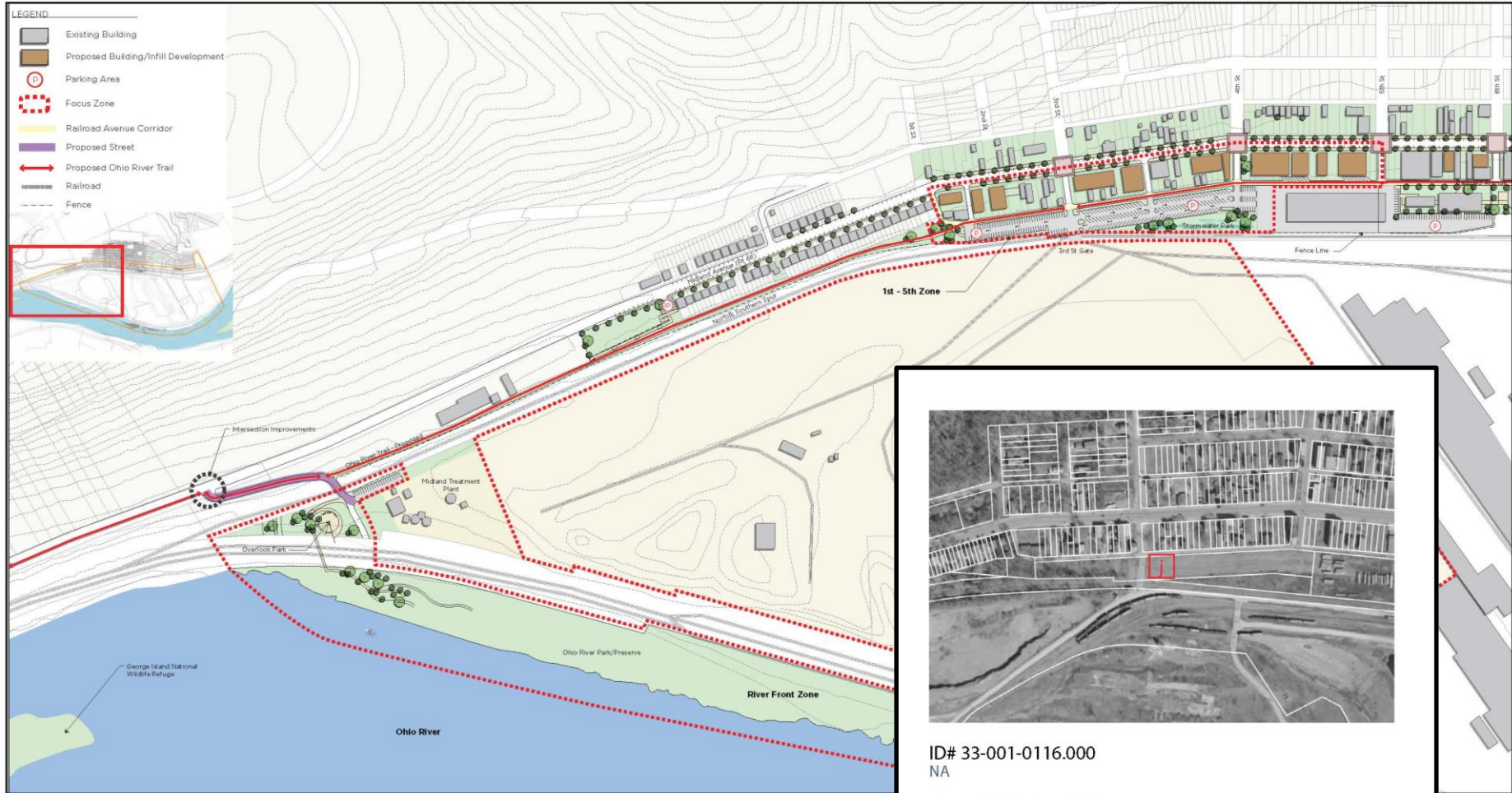
Identification of Data Gaps and Recommended Future Actions: N/A

Midland



Proposed parking lot to support infill redevelopment with stormwater management/rain gardens

Midland



ID# 33-001-0116.000
NA

Location/Address: Midland Avenue

Parcel Acreage: 3.96 acres

Current Ownership: Centennial Murphy Hill, LLC

Current Use/Description: Vacant

Parcel History/Historical Use: N/A

Environmental Data Utilized: N/A

Potential Constraints/Considerations for Reuse: N/A

Identification of Data Gaps and Recommended Future Actions: N/A

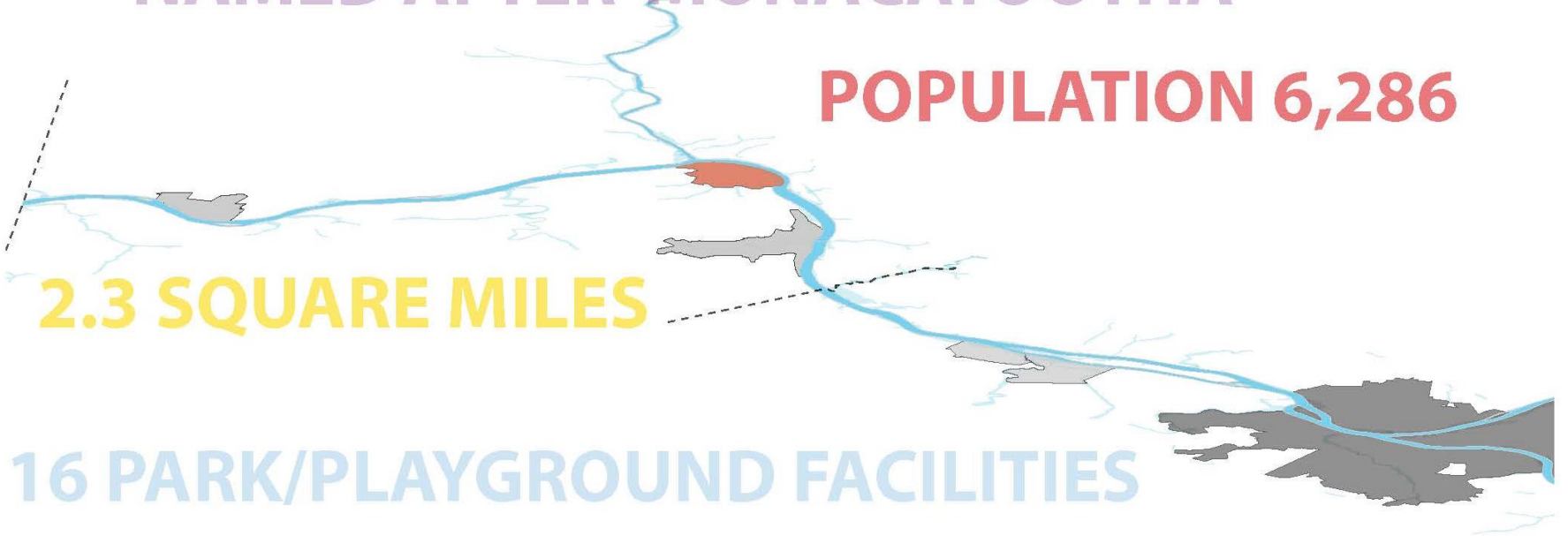
Monaca Borough

NAMED AFTER 'MONACATOOHA'

POPULATION 6,286

2.3 SQUARE MILES

16 PARK/PLAYGROUND FACILITIES



Monaca Borough



Monaca Borough

Analysis Conclusions

- Former Colona Steel plant has a specialty metals fabricator but the bulk of the site is vacant and is located at key location on the river and is adjacent to residential neighborhoods. Property is owned by development company based in NJ.
- East Rochester – Monaca Bridge access divides neighborhood context and the intersection of 17th Avenue and Pennsylvania Avenue is confusing and hinders economic development.
- Part of the proposed Ohio River Trail connection through the Borough travels through Colona Steel site area.
- Potential for McClymonds transfer coal facility to close.
- Industrial area has poor vehicular access and circulation.
- Stormwater management and pre-treatment areas are needed (CSO).

Planning Proposals and Priority Projects

- Improve 17th Street Gateway Corridor and intersection with roundabout and create proposed Monaca River Boulevard access to river.
- Promote first phase mixed-use infill redevelop between 17th Avenue and Monaca River Boulevard.
- Construction proposed Ohio River Trail from Monaca Field and along proposed Monaca River Boulevard.
- Partner with owner of Colona Steel site to promote mixed-use redevelopment and site improvements to support existing industrial.

Monaca Borough

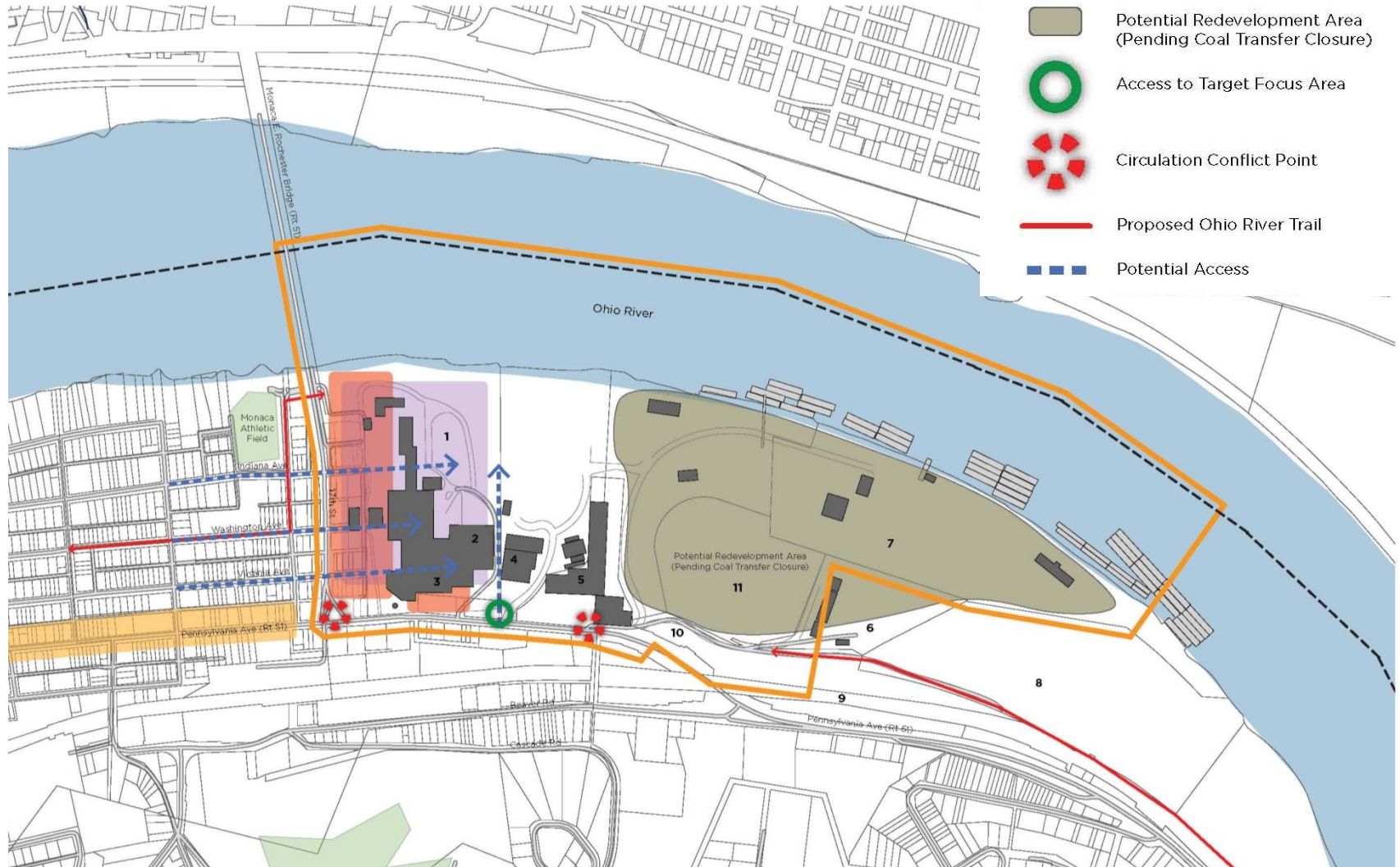
Conservation Concerns

- The extreme slope of the river bank on the site makes the area prone to soil erosion filling the river with sediment and reducing habitat space on land.
- 17th Street divides the site from the community hindering involvement in conservation projects.
- Stormwater runoff from McClymonds and Colona Transfer sites flows over river embankment and into Ohio River untreated.
- Raw material from the transfer sites may be difficult or impractical to remove once industry has left.

Proposed Infrastructure Solutions

- U.S. Fish and Wildlife suggests several conservation measures for the site including a 100'-300' wide buffer. Incorporating a 'riverfront promenade' could bring people to the rivers edge without harming this buffer.
- Continuing the existing street grid through 17th Street helps bring the community into the site. Creating a paralleling 'Ohio River Boulevard' could double as a green corridor complete with bioswales and other stormwater detention systems used to treat site runoff prior to its outflow into the Ohio River.
- Developing portions of existing industrial sites as parkland with incorporated stormwater systems could detain and treat stormwater, removing sediments and slowing flow, prior to its discharge in the river.
- These leftover raw material mounds could be covered by soil caps and used as landscape mounds housing programs such as sledding in the winter months and kite flying in the summer.

Monaca –



LEGEND

- Traditional Main Street Redevelopment Corridor
- Target Focus Area
- Sub Focus Area
- Potential Redevelopment Area (Pending Coal Transfer Closure)
- Access to Target Focus Area
- Circulation Conflict Point
- Proposed Ohio River Trail
- Potential Access

Monaca –



Monaca –



Monaca –



Reuse Concept Plan 2 with roundabout



Reuse Concept Plan 1 with traffic circle



Current traffic patterns at the intersection of 17th Avenue and Pennsylvania Avenue/PA Route 51

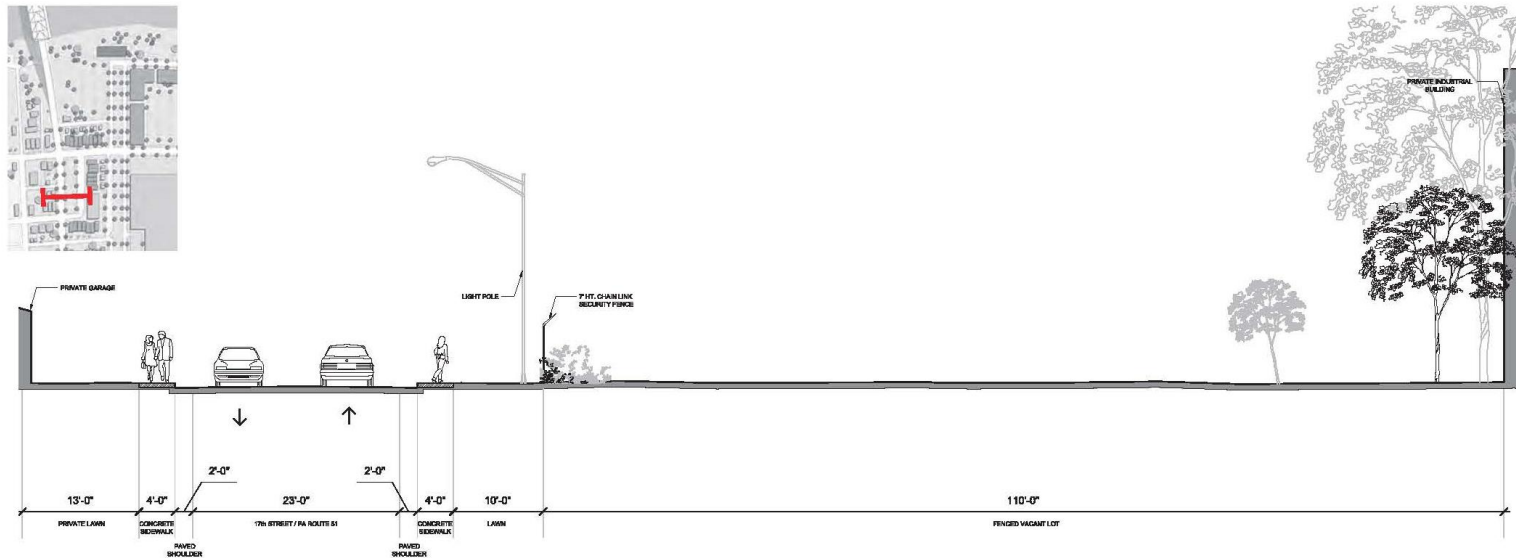


*Before/After photos of a four-way intersection transformed into a traffic circle reaffirm the gateway potential of such an investment. Downtown Monaca could benefit greatly from a similar transformation as it would help to clearly define the commercial core.
Source: USDOT*

Monaca –



The proposed design for 17th Street / PA Route 51 looking north after street improvements , a public square and stormwater management technologies are implemented



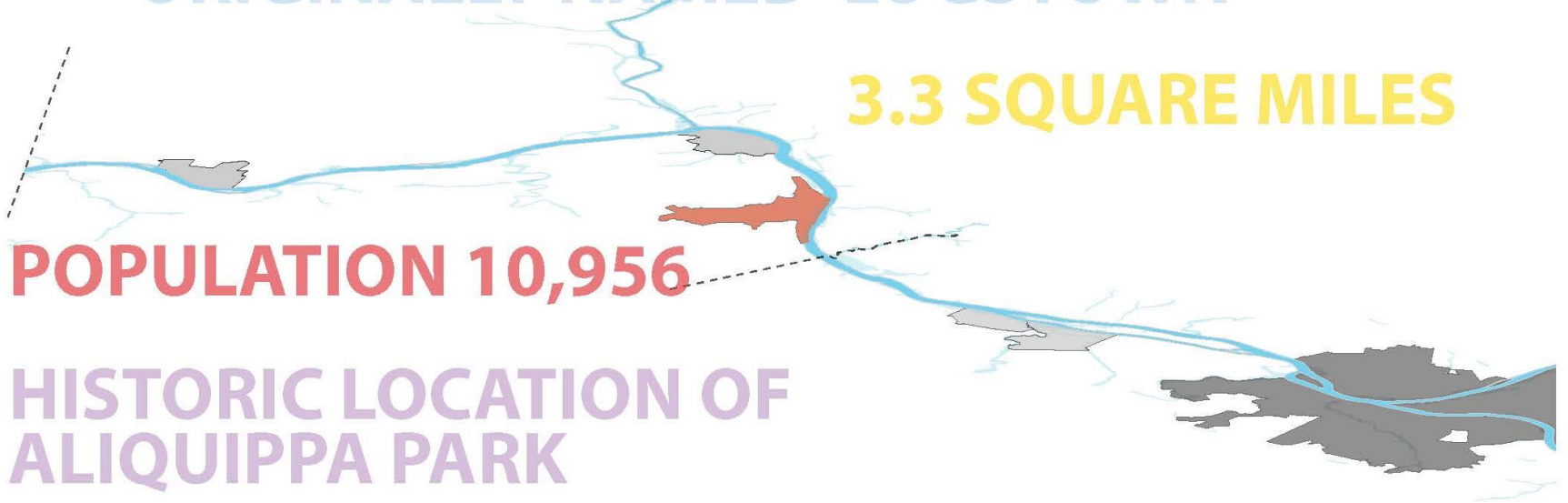
City of Aliquippa

ORIGINALLY NAMED 'LOGSTOWN'

3.3 SQUARE MILES

POPULATION 10,956

HISTORIC LOCATION OF
ALIQUIPPA PARK



City of Aliquippa

Analysis Conclusions

- Vehicular and pedestrian access to major industrial area and river hindered by deficient design of Franklin Avenue underpass.
- Community has strong desire to gain public access to river's edge and San Rocco festival looking for larger festival site.
- Industrial redevelopment is the main emphasis for the overall riverfront with the exception of the area adjacent to Logstown Run.
- Stormwater management and pre-treatment areas are needed (CSO), Logstown Run outfall severely impaired.
- BCED recently constructed a major Woodlawn Road connector roadway to West Aliquippa.

Planning Proposals and Priority Projects

- Acquire Logstown Run outfall and perform major habitat restoration, stormwater management improvements and public park connection to extend Franklin Avenue to the river with trail connection.
- Improve vehicular circulation from existing Franklin Avenue underpass into Cronimet property and Steel Street connection to remove turning conflicts at underpass.
- Work with BCED to create public festivals ground, boat launch and vehicular access on their riverfront property not suitable for industrial redevelopment and improve access
- Create defined parking areas to serve industrial uses during weekdays and public riverfront park parking during weekends and evening.

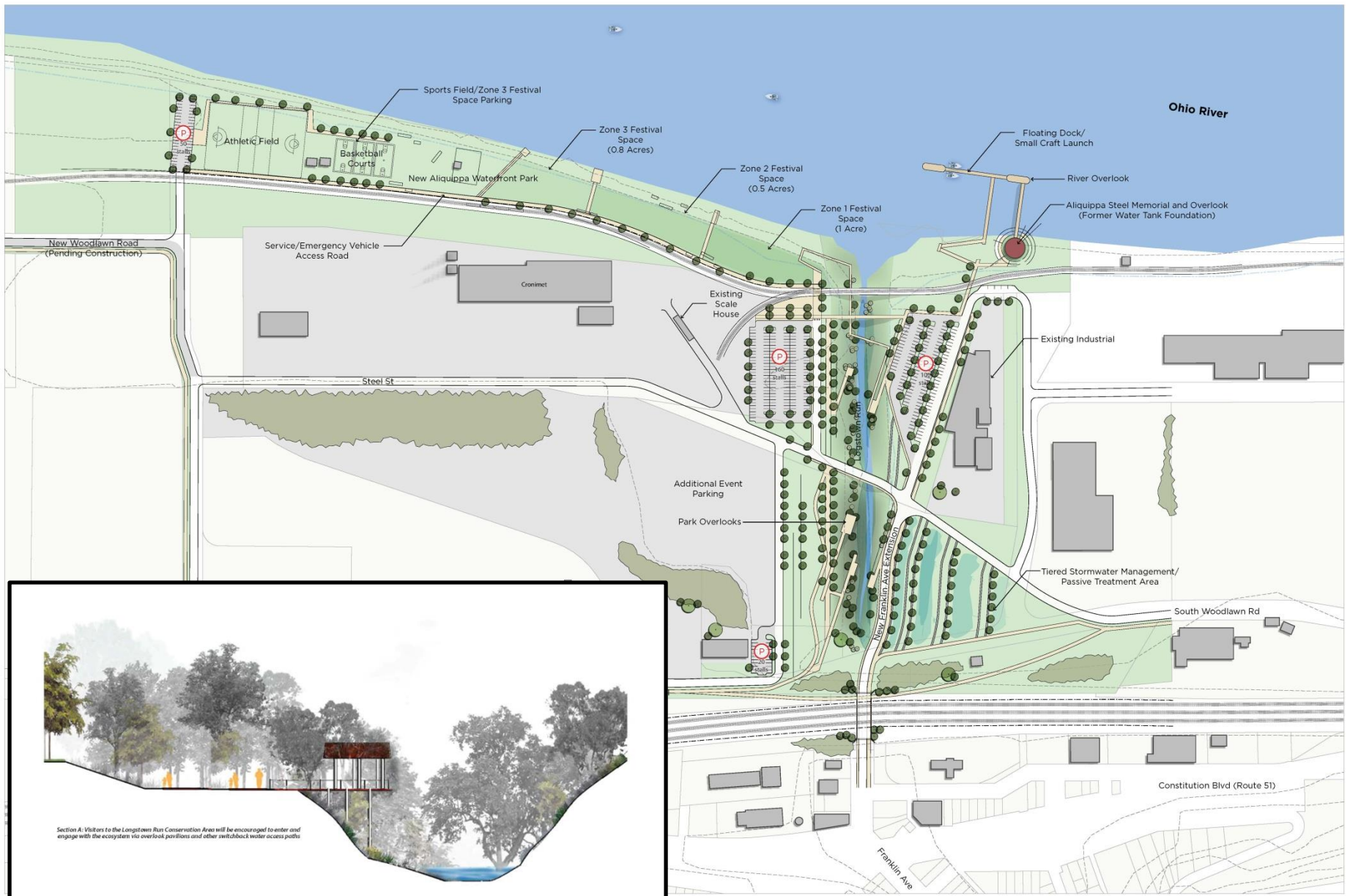
City of Aliquippa

Conservation Concerns

- Community does not have adequate access to the site making conservation efforts and community involvement challenging.
- Logstown Run, which daylights below the Franklin Avenue underpass, carries debris and pollution from the City of Aliquippa and the surrounding industrial sites directly into the Ohio River.
- Ohio River bank in this section is steep with a max slope of 86%. Though currently vegetated, this condition could result in severe soil erosion harming several threatened species in the area including Mapleleaf freshwater mussel and the Pink Heelsplitter mussel.

Proposed Infrastructure Solutions

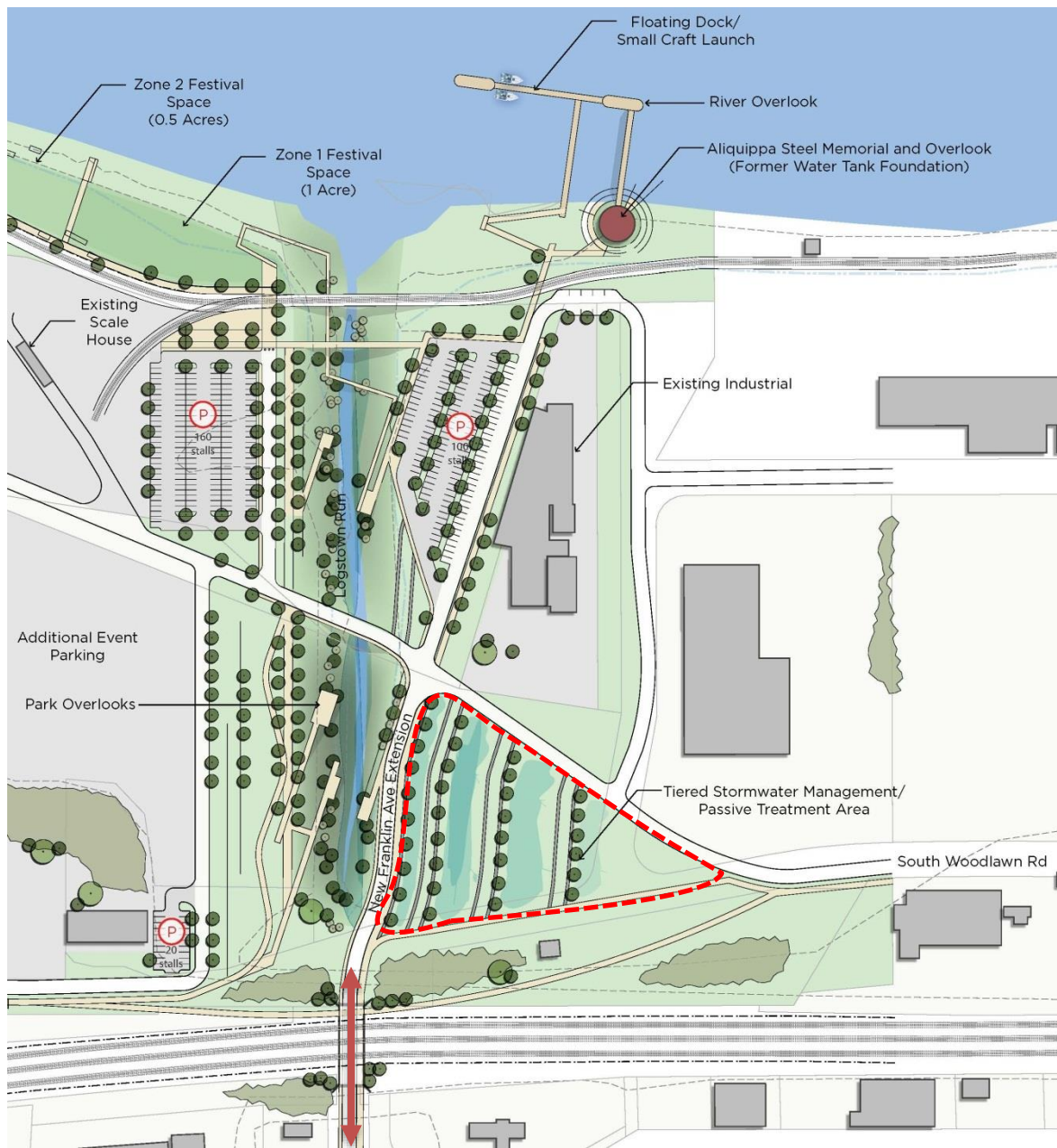
- Improving vehicular and pedestrian circulation through the Franklin Avenue underpass by widening the tunnel, increasing lane widths and adding bike lanes and sidewalks would invite the community to the site and river.
- Redesigning the Logstown Run corridor, improving its bank conditions and creating debris catchments for water in the run as well as stormwater flowing in from surrounding sites could improve water quality prior to its release into the Ohio River. Creating light-footed park overlooks invites the community into this process without disrupting the natural systems at work.
- Working with BCED to preserve the narrowest section of the river bank downstream from the Logstown Run outlet as park space could promote river bank stability while providing a unique and much needed public gather space.

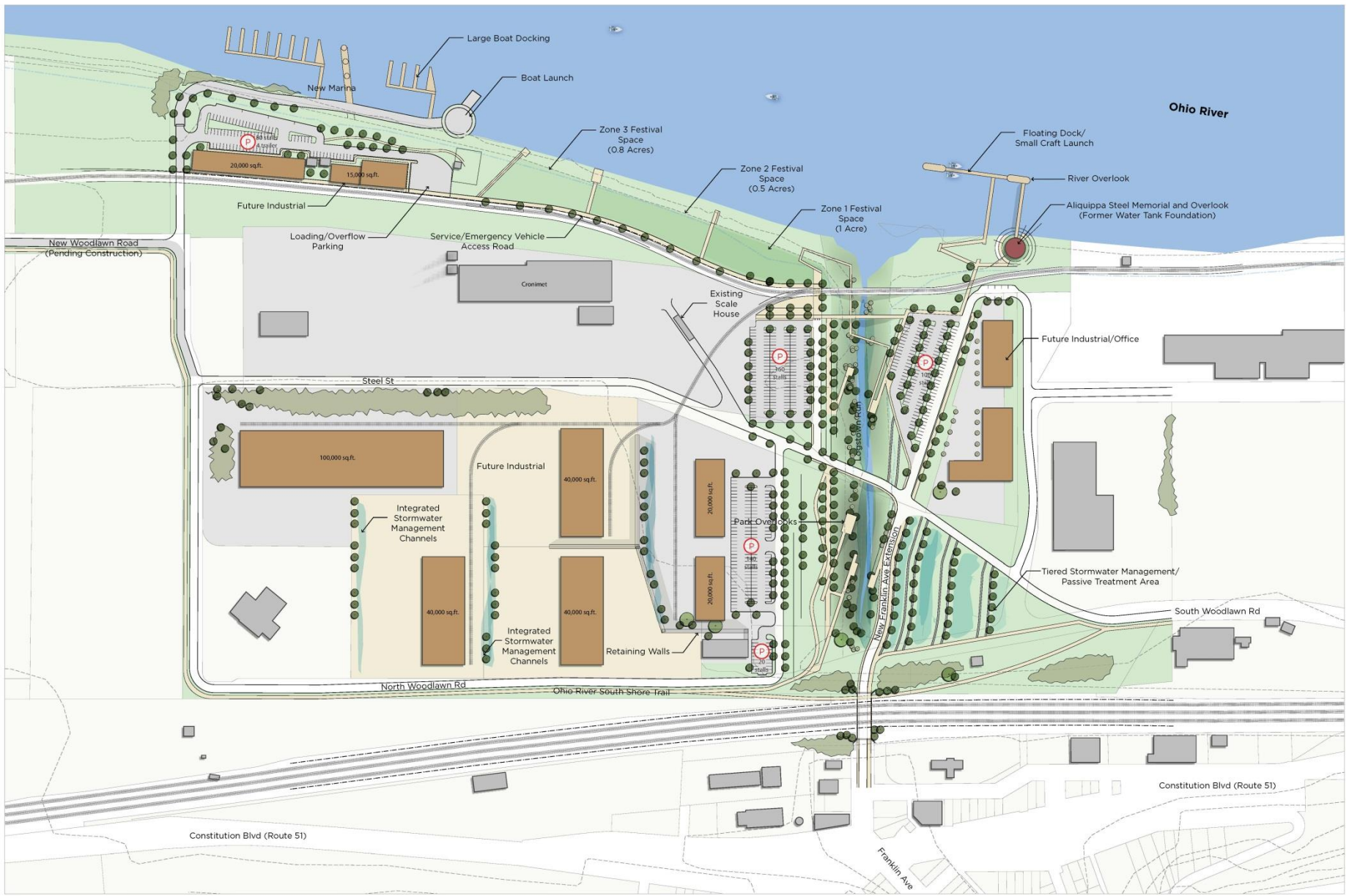


Aliquippa Schematic Reuse Strategy 1 - Infrastructure Framework With Waterfront Park and Regional Stormwater Management

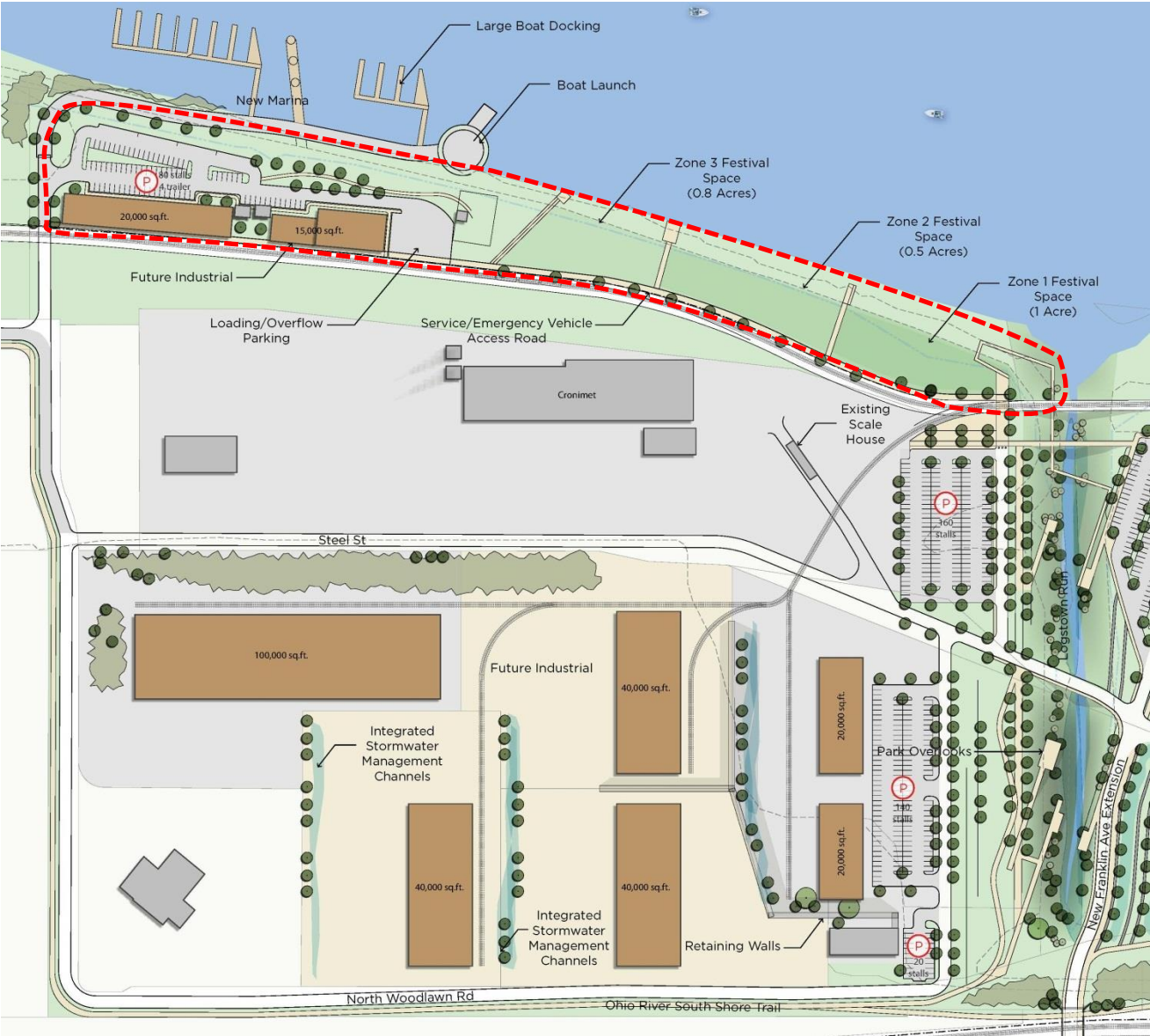
U.S. EPA Ohio River Communities Area-Wide Brownfields Planning Project

Aliquippa –





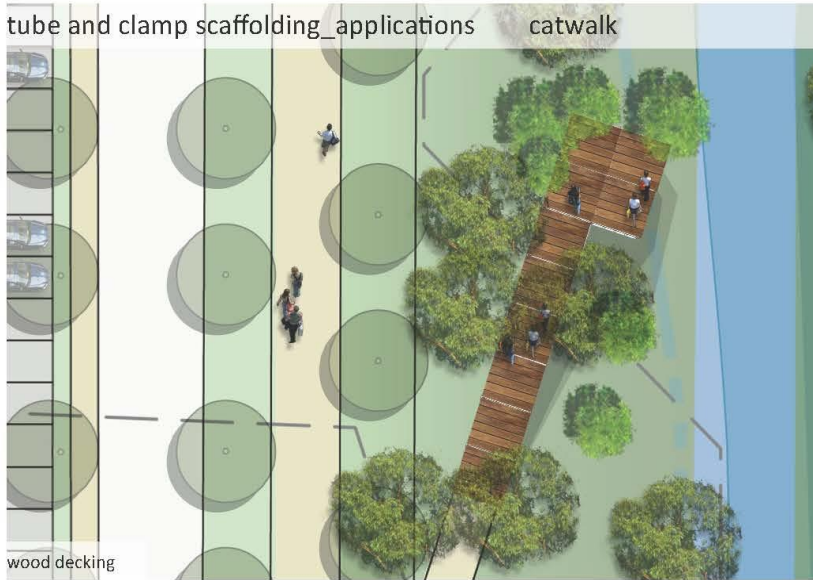
Aliquippa –



Aliquippa –

tube and clamp scaffolding_applications

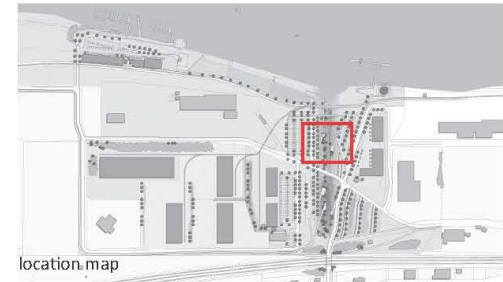
catwalk



wood decking



decking and catwalk guard options_wood



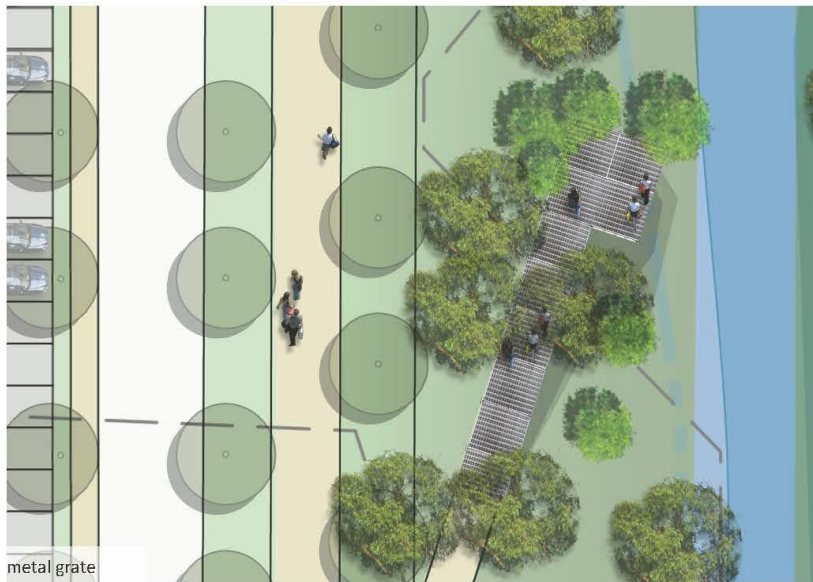
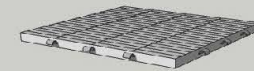
location map

decking and catwalk surface treatment options

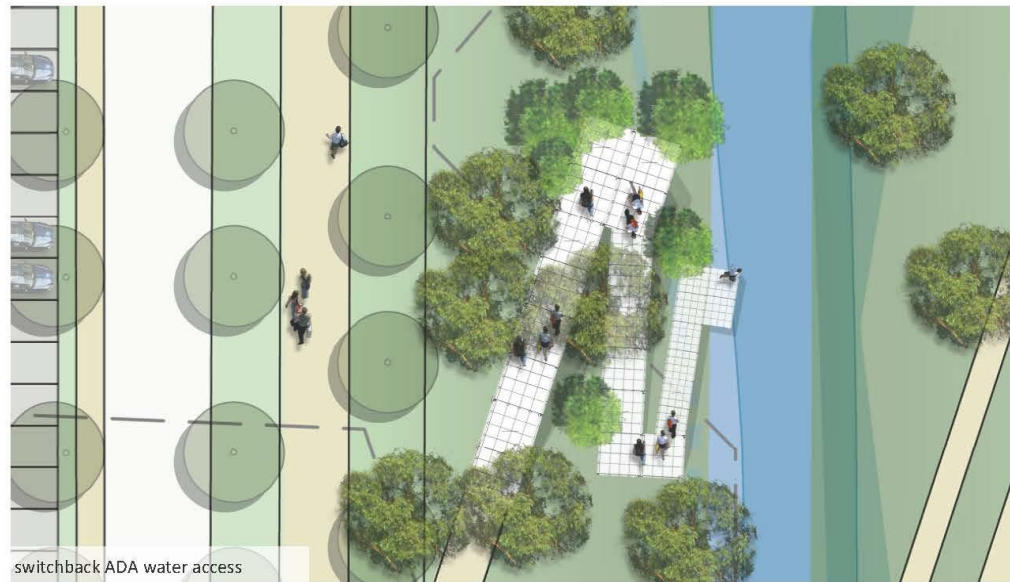
wood decking



metal grate



metal grate



switchback ADA water access

Aliquippa –

Festival Space



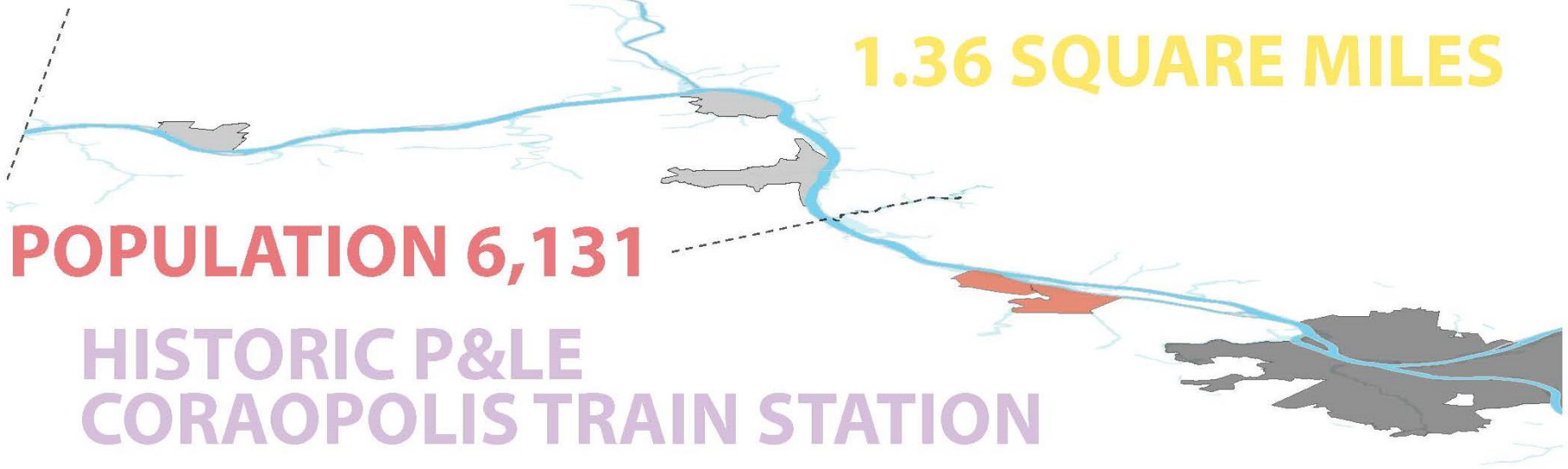
Coraopolis Borough

'MAIDEN CITY' IN GREEK

1.36 SQUARE MILES

POPULATION 6,131

HISTORIC P&LE
CORAOPOLIS TRAIN STATION



Coraopolis Borough – Riverfront and Station Areas

Analysis Conclusions

- Riverfront is at a very desirable location along Ohio River back channel for redevelopment. And key property owner is actively exploring development options.
- Robert Morris University has expressed an interest in create a strong presence in the town and has major recreation facility on Neville Island across the back channel from study area, including new rowing boathouse facility. RMU has a significant on campus housing shortage.
- Allegheny County proposing major recreation/soccer complex on adjacent riverfront site.
- Historic Station owned by Coraopolis Community Foundation and undertaking major capital campaign for restoration.
- Proposed Ohio River Trail runs adjacent or through both areas.
- Stormwater management and pre-treatment areas are needed (major CSO issues).

Planning Proposals and Priority Projects - Riverfront

- Create 3rd Avenue extension into riverfront site to support multi-family residential , park, boathouse/launch and Ohio River Trail.
- Support RMU/landowner discussions regarding boathouse project and potential student housing (both areas).

Planning Proposals and Priority Projects – Station Area

- Facilitate the create Neville Avenue Extension to serve station.
- Redevelop station as a regional transit and student shuttle multi modal hub.
- Assemble adjacent properties for mixed-use infill (student housing) and create town square.

Coraopolis Borough – Riverfront

Conservation Concerns

- Two key run outlets deposit into the Ohio River, McCabe Run and Montour Run. Both carry sediment, pollution and debris from Coraopolis which then collects in the river, as can be seen in aerial photos of the outlet points.
- Steep and narrow river banks in this area have led the U.S. Fish and Wildlife Service to declare that this area should be considered for additional ‘conservation measures.’
- Economic sustainability should be factored into overall conservation efforts as the site is located in a favorable development location just across the Ohio River from several of RMU’s recreation facilities.

Proposed Infrastructure Solutions

- Downstream jetties and other fluvial sediment control measures can be incorporated into the design helping to improve water quality before it joins the Ohio River.
- Many conservation measures put forth by the U.S. Fish and Wildlife Service would be best accomplished through conserving several of the sites properties and maintaining them as dedicated parkland. This land could be planted with native vegetation, providing both riverbank vegetation stabilization and improved habitat conditions for local wildlife.
- Allowing for development when appropriate increases the economic sustainability of the project and makes other conservation efforts on site more viable. As such, two multistory residential housing complexes could be placed on what is today the Montour Supply site.

Coraopolis – Riverfront



Coraopolis – Riverfront





Coraopolis – Riverfront



Coraopolis – Station Area



Coraopolis Borough –Station Areas

Conservation Concerns

- Historic Station owned by Coraopolis Community Foundation.
- Developed land makes for increasingly impervious surfaces and therefor increased stormwater runoff concerns.
- Downtown Coraopolis lacks public green space or outdoor public gathering space.

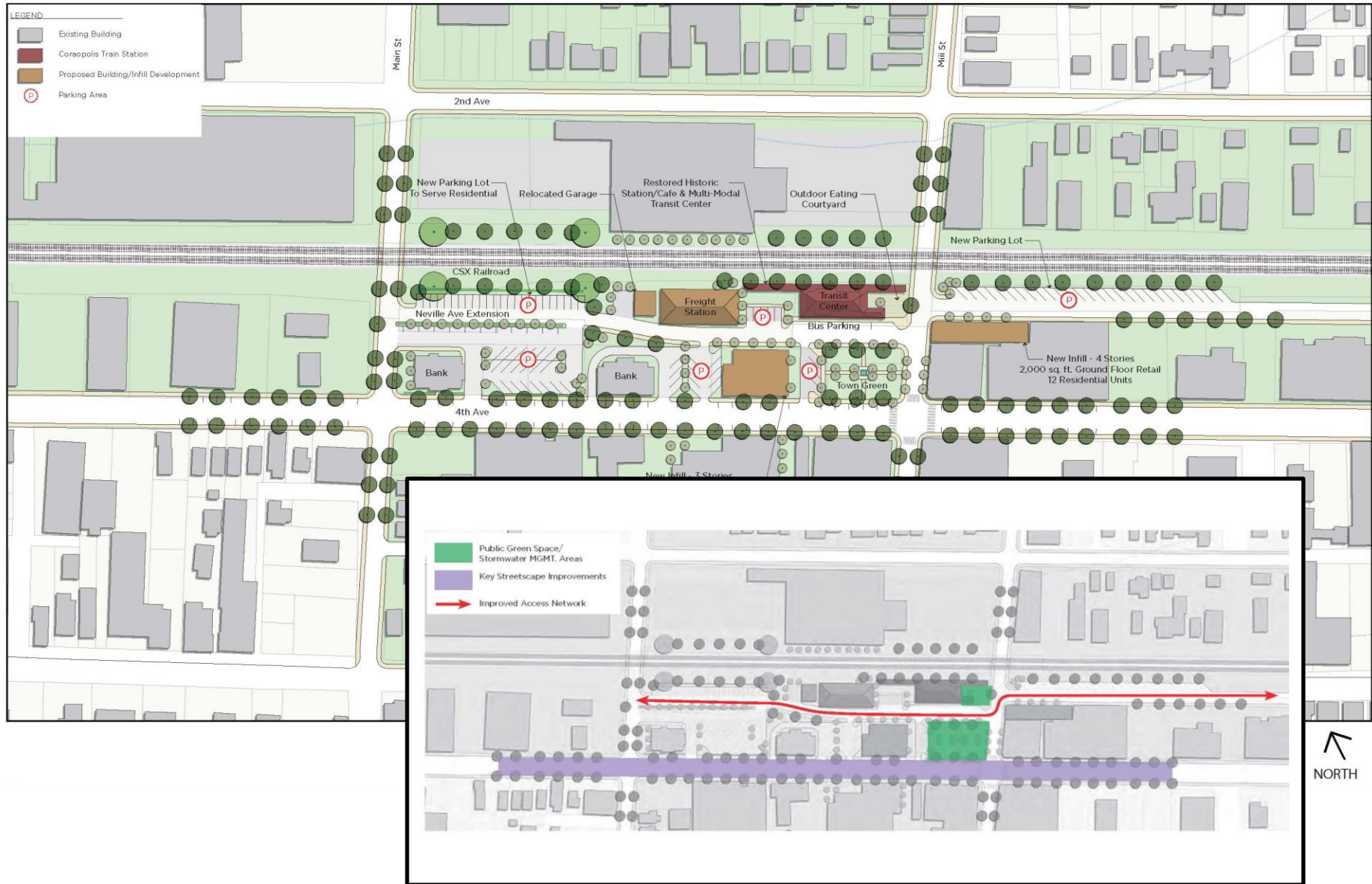
Proposed Infrastructure Solutions

- Redeveloping the Historic Station as a regional transit and student shuttle hub would reaffirm the building as a major community hub and make further restoration/conservation efforts more attainable.
- Incorporating passive stormwater management techniques and other Low Impact Development (LID) strategies such as vegetated filter strips, bioswales, rain gardens and cisterns can help offset the increase in impervious surfaces often created by new development.
- Conserving a segment of the redevelopment site could provide the community with a public park space within the downtown corridor. This space or ‘Town Green’ could double its functionality by also incorporating passive stormwater techniques into its design.

Coraopolis – Station Area



Coraopolis – Station Area



Coraopolis – Station Area with Transit Center and Town Square

