

Envisioning a Black River Pathway

12 December, 2012

Creating a Heritage Destination through Social Development

Cape Town, South Africa

Prepared for: City of Cape Town's Environmental
and Heritage Management Department

In conjunction with: Maitland Garden Village and Oude
Molen Eco Village Community Members



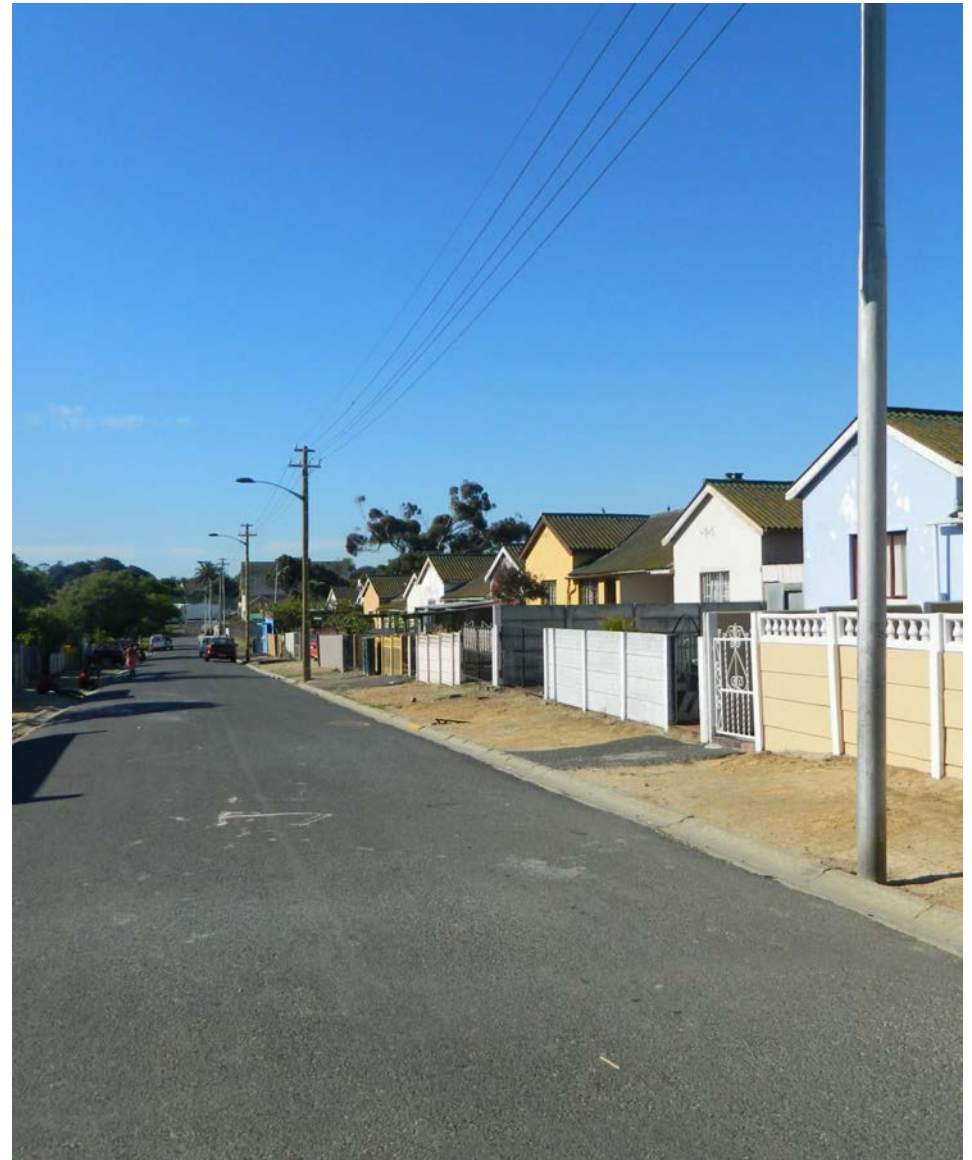
WPI

Overview

This proposal outlines a vision for a pathway along the Black River that will bring walkers to the river and encourage them to explore two nearby communities, Maitland Garden Village and Oude Molen Eco Village. The pathway will help promote Maitland Garden Village and Oude Molen as a destination for visitors interested in learning more about the unique heritage of each community and to see new community initiatives firsthand.

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Massachusetts, USA. All are in their third year, studying for various degrees, and have travelled to Cape Town to the university's project centre to complete a degree requirement called the Interactive Qualifying Project. This requires students to complete a project relating to socioeconomic issues by conducting research during a preparation phase for two months and an on-site execution phase for two subsequent months. This project was done in conjunction with the City of Cape Town's Environmental and Heritage Management Department as sponsors.



A Maitland Garden Village street

Introduction

The Black River corridor presents many opportunities for development, such as a pathway from the Hazendale community to the Observatory. In this proposal we focus on developing a pathway between land spanning Maitland Garden Village (MGV) and Oude Molen Eco Village. This project has the potential to start connecting these communities to neighboring ones, such as Langa and Observatory. Such a pathway, we believe could support economic and social development in Oude Molen and Maitland Garden Village. The ultimate objective of the pathway is to make the corridor a destination for Cape Town visitors and nearby communities, thus fostering a relationship between these groups and the river. This relationship, we hope, will help catalyse the long term process of ecological restoration of the highly polluted Black River.

The pathway vision presented in this proposal aims to build on community assets of both of MGV and Oude Molen, notably gardening and heritage. We describe opportunities for community gardening along the pathway as well as small scale agriculture enterprises. We also discuss how each community's unique history could be told to visitors through a walking tour.



Current dirt footpath behind Oude Molen

Purpose of Proposal

The purpose of this pathway proposal is to create a vision for a multi-functional pathway along a specific section of the Black River that includes MGV and Oude Molen. We hope to stimulate interest and discussion that will lead to the eventual building of a pathway to benefit the natural environment, walkers and recreational users, and the residents of MGV and Oude Molen. Our proposed pathway builds on the natural and community assets we've found in the course of our research such as community initiated programmes and beautiful, open space. The proposal incorporates the needs and valuable suggestions from the following involved stakeholders:

- Our project sponsor: City of Cape Town's Environmental and Heritage Management Department
- Maitland Garden Village Organisations
- Two Rivers Urban Park Committee
- City of Cape Town's Property Management Department
- City of Cape Town's Parks and Recreation Department

This proposal builds on the work undertaken last year by a student team from Worcester Polytechnic Institute. That proposal examined a larger scale pathway along the Black River, as shown in the map to the right. Our team focuses on a limited area spanning MGV and Oude Molen as is indicated by a red box. In this narrower focus we consider how the pathway can best encourage social and economic development in the two communities. We identify features that can be incorporated into the pathway design to aid the Black River ecological restoration as well as strengthen community initiatives.



WPI 2011 Proposed Black River Pathway with a red box around this proposal's area of focus

Why a Pathway?

Behind MGV and Oude Molen, there is no formal pathway that local residents or others can use for travel along the Black River. However, the “desire lines”, or footpaths created by continual community use, indicate that people do in fact walk along the river. Since the desire lines aren’t planned and are often challenging to travel, the surrounding communities would benefit from a formal pathway that makes the area easily walkable. This need includes a bridge that pedestrians can use to cross the Black River. Currently, there is no safe way for pedestrians to cross over the river and M5 which causes local residents to resort to crossing the expressway in traffic. One concerned resident of Maitland Garden Village says,

“Crossing the M5 is dangerous. Quite a few people last year were bumped by cars and one died.”

With a pathway that emphasises accessibility and safety, the number of people who regularly walk the pathway will increase, thus

benefiting the communities and promoting inter-community and tourist engagement.

While Maitland Garden Village has challenges related to poverty and social isolation, the pathway can help enhance current initiatives led by community organisations. A pathway through this area has a large potential for job creation through tourism. A walking tour through the area will be the main focus for tourism efforts, since this is an effective method to highlight the heritage in MGV and other assets to both MGV and Oude Molen.

Additional job opportunities could primarily benefit MGV. It is likely to have positive effects on Oude Molen as well and allow their current businesses to further develop. If these needs are adequately met, the

positive effects on the greater area, Two Rivers Urban Park (TRUP), are potentially substantial.

It is also feasible for the pathway to link with community gardens in MGV. Since the gardens are a source of pride for the villagers, this will be a way for residents to increase ornamental gardening and food production initiatives. With more visitors and residents using pathways along the Black River, we would hope this renewed interest could inspire the long term restoration of the river. A pathway,

we believe, is the first step for this initiative.



Landscape behind Oude Molen



M5 expressway traffic



Desire lines behind Oude Molen Eco Village

Goals

The goals of our proposal have been developed through conversations with MGVS and Oude Molen residents, the City of Cape Town, TRUP Committee, and other stakeholders for the pathway. The goals are community supported, strategic, and can be implemented both in the short and longer term.

Incorporate gardening initiatives

Gardening initiatives, such as a community garden and multiple backyard gardens dispersed

throughout the community, already exist in MGVS and Oude Molen. Including them in the pathway and creating new gardens will pay tribute to the agricultural history within both communities. The pathway will also serve as a means to develop a small community based agriculture business as we describe in Appendix A.

Increase TRUP connectivity

A pedestrian bridge is needed to connect TRUP, which is divided by

the Black River and M5 highway. In this proposal we assess alternatives to accommodate non-motorised travel throughout TRUP.

Plan a walking tour

A walking tour through MGVS and Oude Molen is an effective way to highlight the heritage and community assets. We have investigated the logistics for a walking tour and have created a implementation plan.

Focus on asset based community development

Community assets will be used in determining features to incorporate along the pathway. Community leaders in both MGVS and Oude Molen will help explore and sustain pathway initiatives.



Open space behind Oude Molen Eco Village



Garden in Oude Molen

Asset Based Features

There are many pathway developments that exemplify different features involving gardening heritage and community agriculture. The following features are ones that are applicable to MGV and Oude Molen and can be included in the pathway.



Old MGV club house



Green Point Park pathway



Historical huts in Green Point Park

Heritage

Maitland Garden Village was founded in 1922, originally as a community for soldiers after World War I. The architecture and layout of the village is characteristic of this time period; the houses are semi-detached with English influenced architecture, and the layout is in a grid pattern with a public field in the center. The history seen in the structures and historical street names is supplemented by the knowledge that residents have of the village's past.

Because heritage is so rich in MGV, it is a valuable asset to the pathway. Heritage features will focus on agricultural history which can also be shown through interpretative signage and walking tours.



MGV sports team

Agriculture history

Maitland Garden Village started as a food grounds for French Huguenot agriculture. Once it became a residential area, it was named from the lush gardens that flourished in the resulting village. Gardens were central to people in the village and were reflected in community activities such as gardening competitions. The gardens currently kept are quite beautiful and well maintained. Walking through the village, there are gardens lining the streets, maintained by volunteers that wish to preserve this piece of MGV heritage. Agriculture is a large part of childhood education and is embedded in the school curriculum. Children visit the Food Garden Village in Oude Molen to experience the process of growing, preparing, and cooking garden vegetables. The school and crèche also have a garden where food is grown and used for lunchtime meals. Gardening is a part of MGV's past as well as future. For this reason, many residents would like to see the gardening competitions return to MGV and have this piece of their heritage restored.

Interpretive signage

Including interpretative signs along the Black River pathway will be interesting and informative for those who travel it. Pedestrians who are casually walking along the pathway can enjoy reading about the river and community history at their leisure, while those on a walking tour can supplement the guide's speaking. Interpretative signs will be dispersed at critical points along the pathway at each major attraction point. Examples of interpretative signs for along the Black River can be found in Appendix C.



A welcome sign at the Liesbeek River



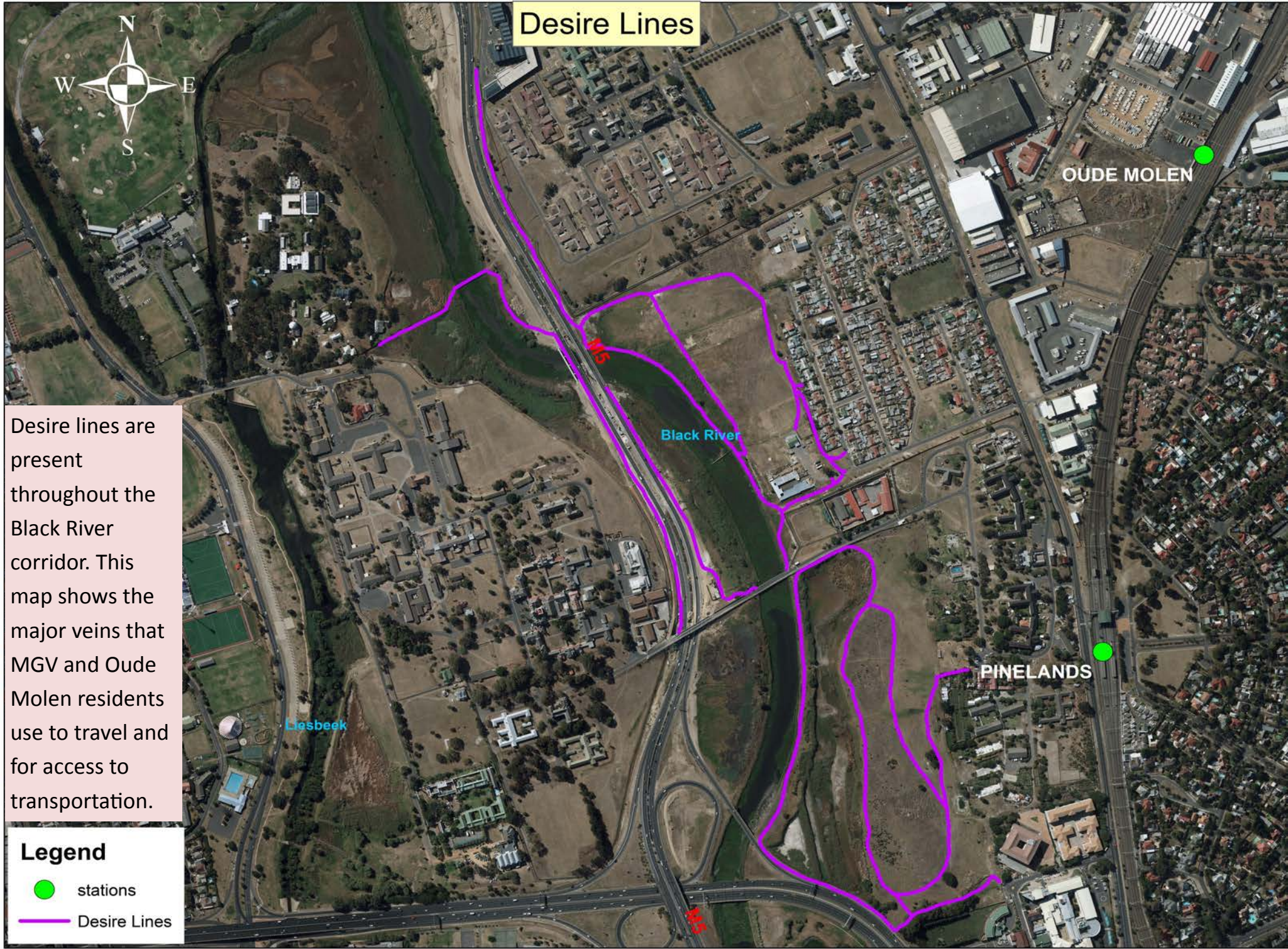
A caution sign at Green Point Park



Interpretive signage at Green Point Park



Interpretive signage at Green Point Park

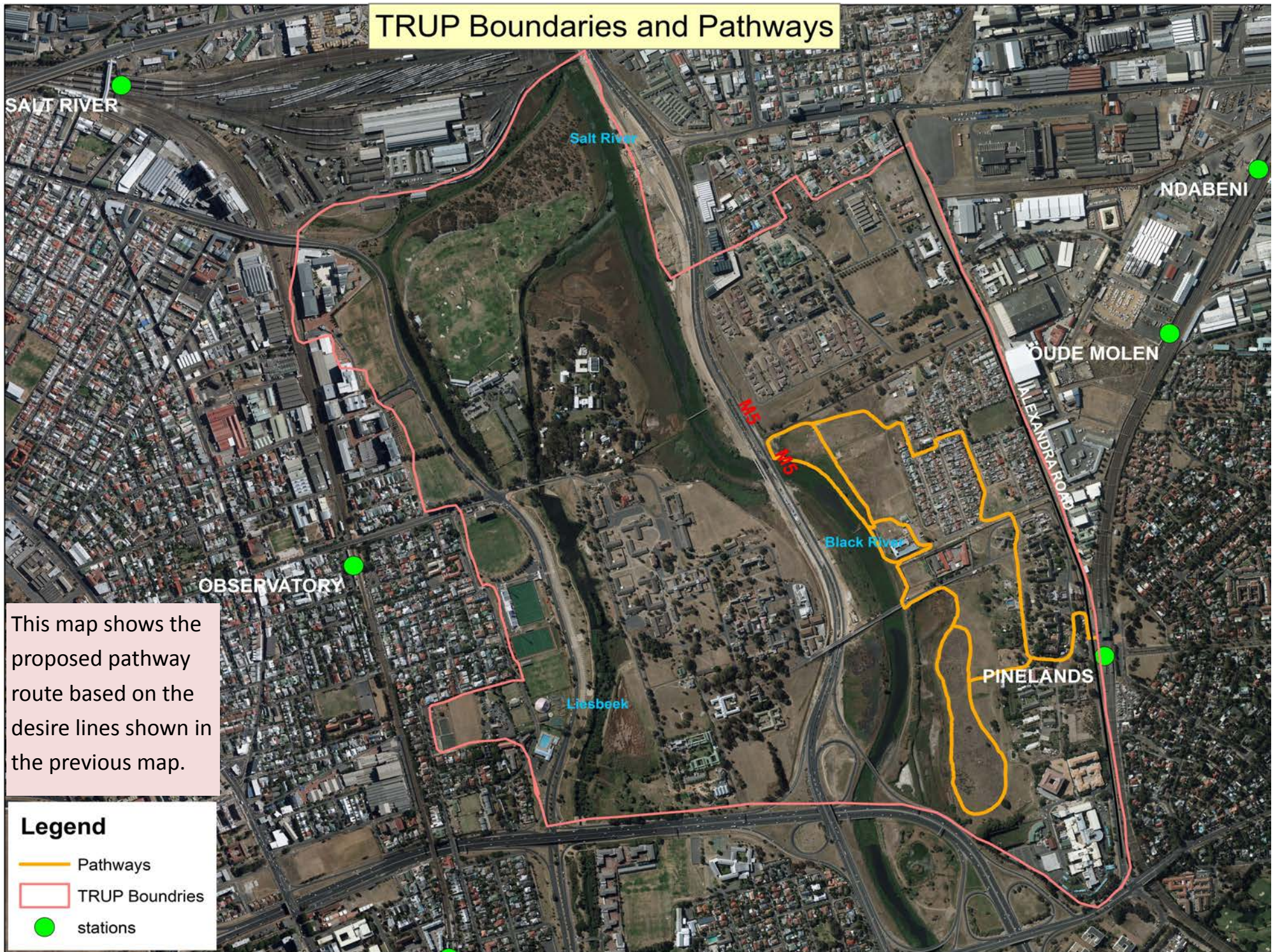


Desire lines are present throughout the Black River corridor. This map shows the major veins that MGV and Oude Molen residents use to travel and for access to transportation.

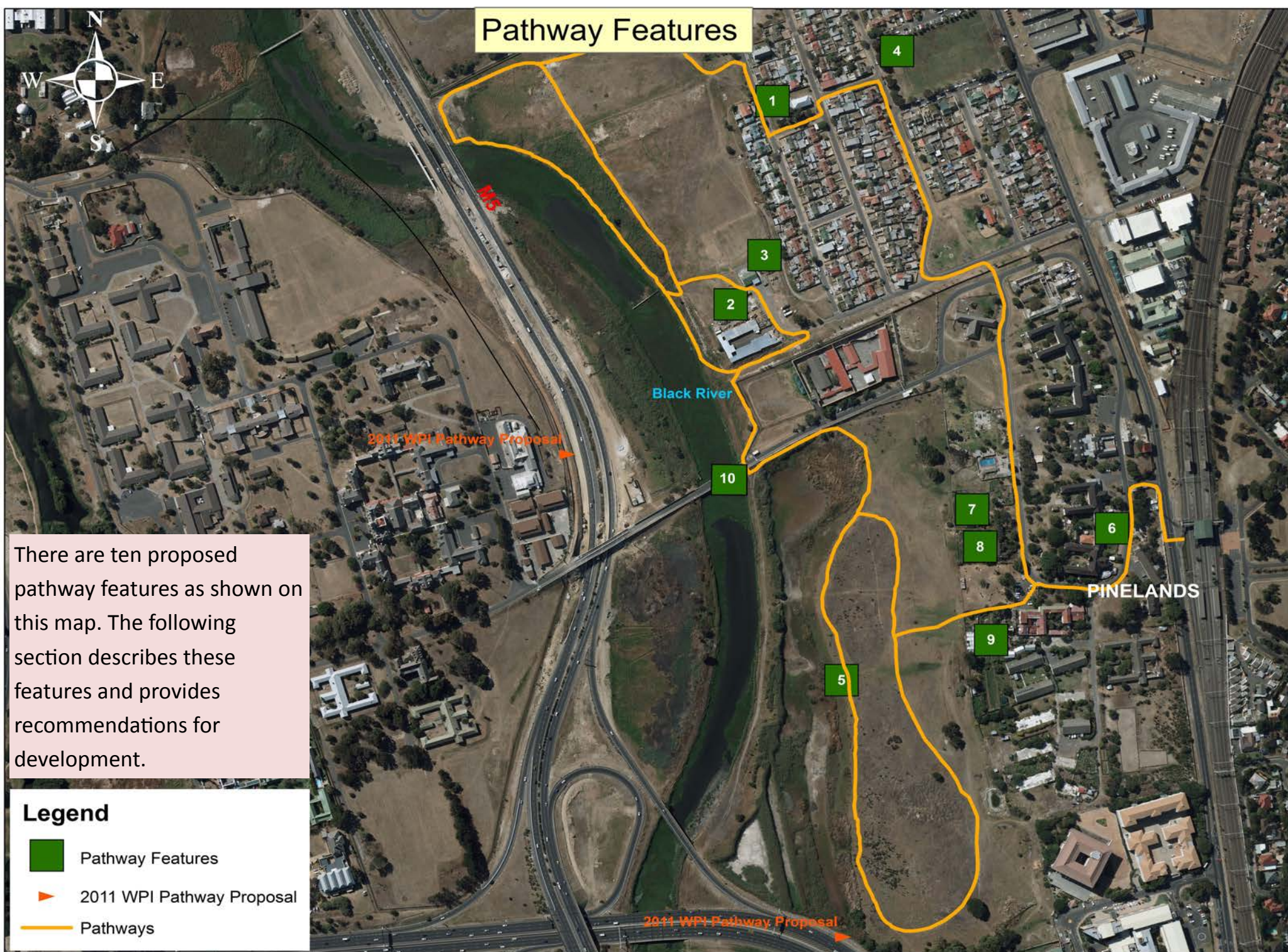
- Legend**
- stations
 - Desire Lines

Desire lines along the Black River

TRUP Boundaries and Pathways



Proposed pathway route with TRUP boundaries



Proposed pathway with ten designated features

Feature 1: Community Garden Beginnings

A community garden within the Methodist Church grounds is an initiative started by the Gardening Club in 2012. This garden is maintained by club members who grow vegetables such as lettuce and squash. Some of the challenges in this garden are purchasing tools and locating supplies. This is largely a community donated effort to help inspire MGW residents to continue agricultural initiatives.

In addition to MGW's first community garden, this site has social and historical significance. The Methodist Church is a centre for community congregation and has a community venue in the backyard which is used for community meetings. As a site along the pathway, the community garden will show the community involvement and strive for improvement. It is a hub of collaboration and innovation.

Beyond this community garden, residents in MGW maintain beautiful home and public gardens. These are also important features for walkers along the pathway and can serve as an attraction for interested visitors.

Recommendations

- Add interpretive signage to explain the history of gardening in MGW and the Methodist Church's role in community involvement
- Include a sampling table of locally grown fruits and vegetables
- Add a selling table for MGW crafters and artists
- Add a flower garden to show the variety of MGW garden types
- Train gardeners for expanding the community garden initiative
- Gauge interest in reinstituting gardening competitions and implement as necessary
- Invite visitors to view competing gardens



Gardeners in the community garden



The community garden behind the Methodist Church

Feature 2: Community Garden Expansion

Cape Town is the first and only city in South Africa that has policies promoting urban agriculture. The city's policy was passed in 2007 (CoCT, 2007) to allow the poor to grow food for food security, to allow commercially sustainable agriculture and create jobs, to allow disadvantaged individuals to have a stake in land for agricultural development, and to help skill development in all facets of life (Frayne, Battersby-Lennard, Fincham, Haysom, 2009). A community garden would allow residents to grow food for their families with less financial assistance.

The pathway has the potential for linking this part of Cape Town history and culture through another community garden designed in phases as described in the following pages. The community garden can be an educational venue along the pathway where interpretive signage teaches the history of community gardens and farming in Cape Town and the historical significance of different plants.

Garden Layout

A community garden is a feature that will help the community create jobs, make MGV a destination, and educate community youth. It is also important for preserving MGV's history, which is deeply rooted in gardening. Finding the space for this initiative is a challenge but there have been several locations marked as possibilities.

Based on the research done thus far, the old driving range land located in the back corner of MGV is the best option for this land. There are multiple benefits including a standing structure that can be used for storage and office space, additional space that can be used for a multipurpose centre, and room for expansion as the community garden grows. The MGV community is looking to form a gardening agreement with the municipality.

The final product would include four phases for a community gardening project with room for negotiating phases 3 and 4 for other recreational opportunities. In phase 1, we anticipate an initial vegetable garden, phase 2 we anticipate as an

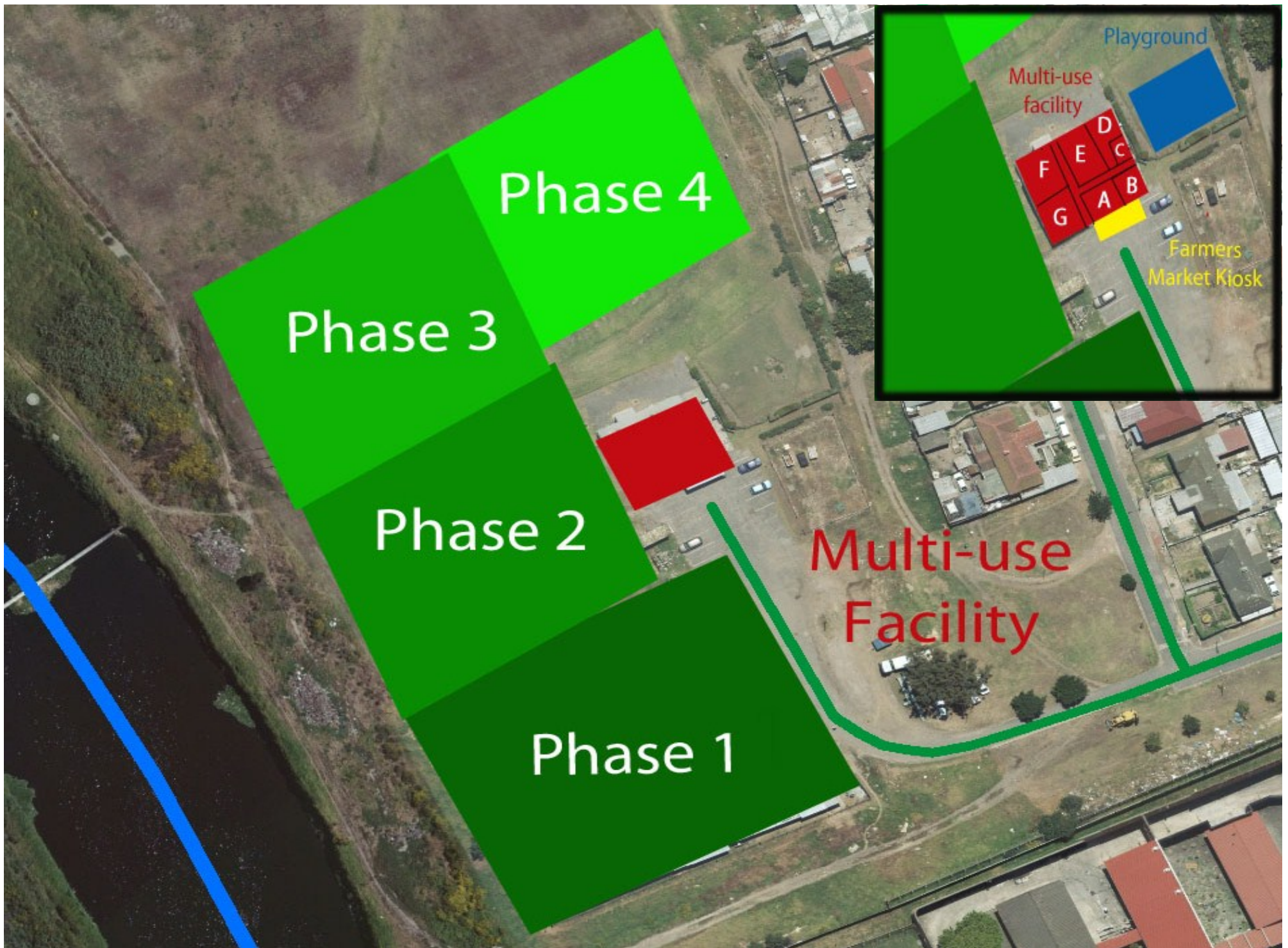
expansion as interest grows, and phases 3 and 4 are reserved for further community gardening or other agriculture initiatives.

In addition to these plans, a farmer's market near the garden where local produce is sold could serve as another attraction in MGV as well as a method for job creation. The proposed location of this market is next to phase 1 so there is an

educational aspect where people can see where their food is grown. Schools can use the garden as a platform for gardening education as well. A playground could also serve as a community asset near the community garden to occupy the youth in a supervised location as adults work in the garden. These features will all help make the community garden an integral part of the community life.



Public garden space along an MGV street



Proposed phasing of the expanded community garden with special breakdown of the standing facility

Phase 1

The intention of the first phase is to establish a community garden that grows vegetables for community consumption and selling. Composting is also a potential asset of this garden. The initial production will be small-scale and involve a few individuals. A business scheme for this is included in Appendix A.

Another point of community uplifting is the education of youth. Because the youth already have a programme during the school year with Food Garden Village, the community gardens can be used as an educational resource during the holidays. Knowledgeable community members can teach the youth how to grow and maintain a garden. This can occupy the youth's time in a constructive manner.



Phase 1 section



Current land for phase 1



Potential

Phase 2

Phase 2 is in the vicinity of the phase 1 section, still between the MGV residential area and the Black River. This phase serves as an expansion possibility once the initial garden is proven stable and successful. This includes a build-up of community interest that can sustain a larger enterprise. The ultimate goal of this is to create an agriculture business that allows community members to secure employment through selling organic produce grown locally.



Current land for phase 2



Phase 2 section



Potential

Phases 3 and 4

Phases 3 and 4 are planned as further expansions as the community gardening project grows. These phases provide an opportunity for a farmer's market near the garden. The MGV and Oude Molen community are interested in selling and buying locally grown produce. This will also help in establishing the pathway as a destination for people since a farmer's market has the appeal of organic, fresh produce and the convenience of food shopping. There is space available for both vendors and parking in the area. Phases 3 and 4 would be contingent on the success of the community gardening project and would take into account competing needs for the land.



Phase 3 and 4 sections

Recommendations

- Find interested gardeners to pilot the project in phase 1
- Once the garden becomes successful and sustainable, start an education programme for the school holidays
 - Teach agriculture techniques
 - Teach how to live from a vegetable garden
- Expand to the planned phase 2
- Begin gauging interested in CSA and execute the program as interest builds
- Gauge interest in participation in a farmer's market
- If there is interest, start the planning for a farmer's market
- Create an advertising and marketing strategy
- Expand to other crafts and locally made items if community has an interest
- Expand to phases 3 and 4 as skill and development allows



Potential

Community Supported Agriculture (CSA)

CSA is a buying/selling scheme where farmers grow produce for members who buy a share of the harvest in advance. This scheme helps the grower establish a sustainable and committed relationship with the customer and have access to funds up front to help pay for materials and other expenses. In MGv, travelers can stop by on their way to or from work to pick up the produce or hikers can make a weekly trip to the area. This will also help make MGv an attraction. Appendix A has more information on CSA.

Community Gardens



Feature 3: Playground

A playground is a pathway feature that will allow for both community and visitor recreation. The proposed location of the playground is near the community garden. This allows community members to work in the garden while their children play in a supervised atmosphere. For visitors, this can provide a similar supervised situation during a lunch picnic or break.

The structure of the playground can be very useful for educational and heritage purposes. There are many structures around Cape Town, such as those in Green Point Park, that show early, historical housing. A close example of this is the living structures that used to be in Food Garden Village in Oude Molen. As in Oude Molen, a playground could mimic early living situations by being in the shape of early housing. A playground could also provide an education platform for agriculture education. Games could share an agriculture theme that compliments the community garden. These games could centre around early living food growing and cooking.



Historical hut at Green Point Park



Current MGW playground

Recommendations

- Hire a design company or look within the city to mimic housing in the playground design
- Design agriculture games and themes on the playground, perhaps through the painting
- Build the playground in close proximity to the community garden for chaperoning purposes
- Include sufficient lighting to ensure child safety
- Find volunteers to perform weekly cleanups



Food Garden Village historical play hut

Feature 4: Delville Square

The Maitland Garden Village soccer field is situated in the middle of Delville Square, a name which comes from the Battle of Delville Wood. In this battle, South African soldiers fought alongside the British during World War I. Maitland Garden Village homes were originally built for the soldiers returning from such World War I battles. The square offers an opportunity to pay tribute to South Africa's World War I soldiers, as well as recount stories of the battle and struggles upon returning home. Because many villagers are lifelong residents of the area and many of their fathers fought at the Battle of the Delville Wood, they are able to share stories and recollections from their parents.

These attributes make MGV an ideal location for a memorial to commemorate this historic event in South African history. It is a great chance to link the MGV community, which was founded by WWI soldiers, to the greater South African story. This memorial would help make MGV a destination for interested tourists, thus bringing interest to the pathway and the Black River.



Delville Square Sign in MGV

Recommendations

- Add a memorial plaque or stone slab to commemorate the fallen South African soldiers at the Battle of Delville Wood
- Use interpretive signage to give a history of the Battle of Delville Wood
 - Include a living history with quotes and stories from MGV residents
- Use interpretive signage showing the field's use as a cultural and social centre for the community (soccer games, Maitland Garden Village Day, Carol by Candlelight)



MGV public field at Delville Square



Royal Air Force memorial plaque

Feature 5: Wetlands

There are several areas throughout the Black River Corridor that are considered wetlands including our area of focus, behind Maitland Garden Village and Oude Molen. This area is a sensitive wetlands area which includes multiple species of birds and plant life. Currently, this plant life also includes invasive species such as the purple loosestrife and the water hyacinth.

The pathway would allow people to enjoy the wetlands and learn about ecological challenges. This could be done either independently by reading interpretative signs along the river or aided by a guided walking tour. Interpretative signage would highlight important heritage of the area, including the history of the river and its canalisation, the fifty and one hundred year flooding that occurs, pollution history, and the natural and invasive plant life around the river. In a guided walking tour, this would be supplemented with the guide's additional knowledge of the area, along with any older stories about this local use of the area.

Since the wetlands area is open, it presents opportunities for recreation. With a pathway that is

formed over the community footpaths and desire lines, there is opportunity for the horses from Oude Molen to move throughout for horse rides as well as space for walkers and bikers to travel. This will make the pathway multifunctional and allow for a variety of recreational opportunities.

Recommendations

- Include interpretive signage about the ecology of the Black River (plant life, invasive species, wild life, river pollution)
- Keep the area open and natural
- See Appendix D about water hyacinth cleanup
- Plant indigenous trees and include a picnic area in the shade



Wetlands behind Oude Molen



Wetlands behind MG

Wetlands



Wooden bench by wetlands



Picnic table behind Oude Molen



Wetlands plant lift



Purple loosestrife by the Black River

Feature 6: Oude Molen Micro Businesses



A few examples of micro businesses in Oude Molen

Oude Molen is a village comprised of micro-enterprises. Oude Molen has shrunk in size since its peak in the 1990s but a variety of artists, cultivators, and business owners still live and work there. There are approximately 70 tenants that hold leases from the provincial government and approximately 300 people are employed through these micro entrepreneurship (Holmes, 2012).

A pathway and these micro businesses can be mutually beneficial. A pathway will bring more traffic through Oude Molen to these micro businesses, generating revenue for tenants and employees. The micro businesses will keep people interested in the pathway and possibly generate repeat visitors.

Recommendations

- Host markets where each business congregates to share information, goods and food
- Advertise the businesses to surrounding communities
- As traffic increases, invite the businesses to invest in the Black River restoration project

Oude Molen Businesses



Feature 7: Food Garden Village

Food Garden Village is a nonprofit farm in Oude Molen that aims to empower local community members through agricultural education. Food Garden Village provides a variety of programmes for uplifting local community groups such as educating adults about starting and sustainably maintaining a garden, rehabilitating patients at Valkenberg Hospital, and engaging children in productive activities. Small plots of land within the Food Garden Village are allotted to these individuals and groups to plant and harvest while others take the knowledge from the training and begin their own gardens. These multiple initiatives held on the same land create a sustainable gardening scheme.



Food Gardening Village receives support from the Food Basket for Africa because of the educational nature of the farm. This aid was used mostly as founding capital to help the programme become more sustainable. Since the creation of the programme, the garden has begun to generate compost and seeds instead of buying them, and it has started collecting rainwater to limit the use of the provincial water mains. Food Garden Village also sells some produce to local consumers, enabling the employment of waged workers in addition to directly feeding those who help keep the land.

Food Garden Village has begun to provide services to both Maitland Garden Village's youth and adults. Children from MGCV come to the Food Garden Village in the afternoons to tend to their plots, learn about the garden, and eat the fresh produce they have grown. Adolescents from MGCV are employed to work for an hour a



week to help maintain the garden as a whole. Many MGCV adult community members have undergone training for creating their own backyard gardens and some have their own plots in Food Garden Village.

As a feature on the pathway, Food Garden Village can show that agriculture is embedded in the surrounding communities. It is an integral part of the education system and is often a quality source of food for families. Hands on opportunities for tourists to experience some of the agricultural habits of MGCV and Oude Molen residents would bring an interactive aspect to the pathway experience. Food Garden Village also shows a successful model for growing and selling agriculture, and

could expand on the business aspect through selling to tourists. This could provide more employment opportunities for MGCV and Oude Molen while continuing to make the pathway a destination, both for learning and fresh, organic produce.

Recommendations

- Use interpretive signage to reinforce the importance of gardening in the surrounding communities
- Participate in the farmer's market creation once the MGCV community garden is established
- Allow visitors to enter the garden and learn about agriculture in MGCV's curriculum
- Offer a hands on activity such as participating in seed saving, composting, and harvesting
- Introduce a water catchment system to increase sustainability
- Expand educational opportunities to outside visitors

Food Garden Village



Feature 8: Oude Molen Horses

The horses throughout Oude Molen are one of the community's main attributes. For the people who run and maintain the stables, it is another one of Oude Molen's businesses that provides an income. To the people who enjoy the horse rides, it's a fun way to spend time in Oude Molen.

In conjunction with the maintenance of the stable, the workers are also able to re-use the manure from the horses in an ecofriendly manner. The resulting fertilizer is used for Oude Molen gardens.

Horse riding will account for a significant portion of the pathway use. For this reason, in areas that horses will travel regularly, the material of the pathway must undergo careful consideration. With

material such as asphalt, frequent use will cause erosion quickly. A brick pathway in this area could cause issues for the horses, since they don't typically wear horseshoes and the bricks could damage their hoofs. Pathway material should accommodate both pedestrians and horses.

Recommendations

- Consider horse friendly and durable material to build a pathway
- Create a method for booking horse rides on line in conjunction with a tour website
- Offer a horse riding option as part of a walking tour



Horse pen



Horses along the Black River



Oude Molen horse



Horses in a stable



Horse riding through Oude Molen

Feature 9: Millstone Café

The Millstone Café, one of the many businesses in Oude Molen, is an excellent ending point for a walking tour through the Maitland Garden Village and Oude Molen area. The café offers various breakfast and lunch options, as well as fresh squeezed juices, baked desserts, jams, honey, bread, and coffee to purchase for home. With more people visiting MGV and Oude Molen, there are more potential customers for business, which will be a real benefit to the café. This is a good spot for visitors to sit down and enjoy lunch before leaving Oude Molen or independently exploring the area.

Recommendations

- Market as a main attraction for having lunch after visiting MGV and Oude Molen
- Participate in proposed markets with the goods sold in the café
- Host communitywide and social events in this venue
- Start catered picnics in the open, wetlands area behind Oude Molen



Sign outside the Millstone Café



Picnic area at the restaurant



Deck seating at the restaurant

Feature 10: Pedestrian bridge

Before 2011, residents of MGVB used a footbridge to cross the Black River Parkway safely. When the Black River highway was improved in 2011 to form the M5 expressway, this footbridge was removed, leaving pedestrians with no access to the other side of the river or highway.

Connecting Communities with Bridge Access

There is another auto bridge in Oude Molen that leads across the expressway near Valkenberg Hospital. This bridge is private and a permit is necessary to allow access. The bridge was supposed to afford access to pedestrians to cross over the highway and river when the previous bridge was demolished, but when residents attempt to do so, the guards refuse admittance. The remaining safe methods to cross the highway and river is to take public transportation or drive, which is indirect and costly. Not everyone can afford public transportation or a lengthy commute, and a journey that once took a few minutes now

takes closer to an hour. This has caused people to cross the multilane expressway on foot. Adults are especially worried about children travelling to the pools in the summertime and one notes that,

“Kids can’t cross the road and it is quite dangerous for them. They need access quite urgently or there will be accidents now that it is summertime.”

Residents cross the road for multiple reasons. The main reason for the community crossing the M5 is to get to the hospital in both emergencies and/or to visit close family and friends. The community also used the footbridge to reach the bird sanctuary and other available transportation points such as trains and busses. In the summer, children used the bridge to access a pool to cool off in the warm weather. Consequently, there is a great need for pedestrian bridge access.

Recommendations

- As soon as possible, open the Valkenberg Bridge for pedestrian use past the first boom
- Fix the electrical problems that cause barbed wire to block the pathway leading from the Valkenberg Bridge
- In the long term, allot money and build a new bridge that will solve safety issues crossing the M5 and Black River



Sign at Valkenberg Bridge



Valkenberg Bridge



Location of the old pedestrian bridge and the current Valkenberg Bridge

Walking Tours

The rich heritage of Maitland Garden Village presents opportunities for historical education for pathway users, community interaction and connection, and economic growth. Walking tours are a way to connect heritage, agricultural, economic, and recreational aspects along the pathway. Through guided tours or self-guided tours via interpretive signage, pathway walkers can engage in an interactive tour experience of Maitland Garden Village, the Black River and its wetlands, and Oude Molen Eco Village, a neighbouring community. The diversity of pathway features including history, community gardens, local businesses, and recreational spaces, are suitable for a wide array of audiences.

Recommendations

- Finalise walking tour route
- Find interested tour guides from the Maitland Garden Village community
- Advertise a walking tour through brochures strategically placed in tourism outlets (see Appendix B for a sample brochure)



View from MGW

Tour Experience

1. Delville Square

The Battle of Delville Wood, which took place in WWI, is an important battle in South African history. It was the first major battle that South Africa took part in and many soldiers lost their lives. An explanation of the historical significance of this battle will be interesting and educational and commemorate the lost lives. Free time for visitors to look around the square and view the memorial is advised.

2. Methodist Church Community Garden

A community garden behind the Methodist Church in MGv started in early 2012. This has been a good model for the beginning of a community garden and has yielded a successful first crop for the first year. Here, visitors can look around the garden and potentially sample the vegetables that are grown.

3. Expanding the Community Garden

This will serve as an educational stop for visitors on the tour to learn about newer gardening initiatives. The guide can also talk about the scheme of producing and selling agriculture used in MGv (see Appendix A for suggestions), as well as the other current uses of the land. In the future, visitors can peruse and buy fresh produce at a farmers market and children can play at a nearby playground.



4. Food Garden Village

This is a stop that can allow a hands on gardening experience in Oude Molen. Visitors can learn about seed saving, composting, and harvesting.

5. Oude Molen Stables

Including this on the pathway tour provides a chance to learn about the horses and potentially book future visits for horse rides along the pathway. Visitors have a chance to

pet and interact with the horses and learn how the horse stables are run and how they contribute to sustainability through manure creation.

6. Wetlands Free Time

Walks along the community footpaths can be guided through the tour, but are also easily self-guided. This allows free time to explore the natural beauty of the area and learn about the wetlands through the interpretative signage along the pathway. Visitors can sit in the shaded picnic areas as well.

7. Millstone Café

The café is locally run in Oude Molen is a great ending spot for the tour. Here you can sit down and enjoy freshly prepared breakfast or lunch, as well as purchase a variety of desserts, juices, and jams. From here, visitors can go back to enjoy other attractions in MGv and Oude Molen.

Creating Connections through the Pathway Experience

The proposed pathway, which focuses on the land behind Oude Molen and MG V, is part of a larger potential pathway throughout the Black River corridor. There are other destinations in TRUP that could be connected via the large-scale pathway that WPI's 2011 Black River Pathway team proposed. Connecting Oude Molen and MG V to the rest of TRUP will allow both community members and pathway visitors easy access to destinations within TRUP, connecting the park and defining it as a destination as a whole. The following are some of the assets within TRUP that could benefit by connecting with a pathway.

Valkenberg Hospital

Valkenberg Hospital is a psychiatric institute, located across the M5 and Black River from MG V and Oude Molen. The hospital complex has beautiful grounds and buildings that contain historic significance. There is a need for security around these buildings so patients are not disturbed by thru traffic. The only bridge with pedestrian access is currently from Oude Molen to Valkenberg Hospital, which poses a

challenge for how to efficiently allow people across the bridge with minimal disruption to patients. Although patient privacy is a concern, working with the Valkenberg Hospital administration could yield promising results for showcasing the historic area in a respectful way.

Raapenberg Bird Sanctuary

The Raapenberg Bird Sanctuary is another destination within TRUP that would be connected via this pathway. The sanctuary can be a large tourist attraction for those looking to experience the wildlife of South Africa. The Raapenberg Bird Sanctuary would also need to be connected via the Valkenberg Bridge.



Birds on the Black River

Transportation

Mobility within TRUP is currently limited, especially for pedestrians who want to cross the Black River and M5 expressway. For pedestrians, the only access point across the river is the Valkenberg Bridge, which has restricted access of those crossing it.



Train and tracks

Public transportation is also ineffective for trying to get from one side of the park to the other. To access the Bird Sanctuary from MG V via the metro, for example, one must go from the Pinelands Rail Station to Observatory Rail Station, which are on two separate lines. One must travel back towards Cape Town to the Salt River Station. When one could just walk across a

bridge, taking a train ride that could take twenty minutes is quite inconvenient and not conducive to creating a flowing pathway. The Observatory side of TRUP also contains bus routes that are potentially useful for community members in MG V and Oude Molen.

Recommendations

- Bring the pathway to the Observatory side of the Black River to incorporate the bird sanctuary
- Include the bird sanctuary and other Observatory features on the pathway
- Speak with Valkenberg Hospital personnel to incorporate the historic buildings into the pathway
- Make plans to extend the pathway to other communities such as Langa and Hazendale
- Open up transportation opportunities to decrease geographic isolation



Map showing transportation and other points of attraction surrounding the Black River

Appendix A: Sustainable Agriculture Opportunities

One of the ways of increasing entrepreneurship is to focus on agricultural opportunities. “Sustainable Garden Options for Monwabisi Park,” which was completed in 2009, did extensive work analysing the environment they were working in, educating the community on gardening techniques, researching different type of implementable gardens, and working with other groups around obstacles to ensure their efforts wouldn’t be offset. The team felt that an initial effort to see what would grow well and what people would like to see in their garden is essential for the sustainability of the gardens once they left. Education and different gardening techniques for the plan were also important to provide the groundwork for knowledge and flexibility (Madden *et al.*, 2009). These are all aspects of a gardening start-up project that need to be considered for this year’s work along the Black River. Overall, the research and collaboration that the group did in Cape Town is a tool for us to learn, and the most successful aspects are something our group should look at closely.

Urban Agriculture in Oude Molen Eco Village and Maitland Garden Village

Urban agriculture is the process of growing and distributing food around a community. It is mainly used to grow food and generate income since it provides security in both of these respects. If we can work through challenges effectively, this would stimulate continual and permanent improvements rather than a temporary solution for Oude Molen and MGTV. This is ideal because the rewards of job creation, fresh produce, and pride in the gardening can help to solve many of these practical issues.

One way to improve effectiveness of agricultural initiatives in OMEV and MGTV is to make sure to include enthusiastic community members who are willing to help with agricultural improvements. It has been specifically noted that women are ideal contributors, since in post-apartheid Cape Town women have been recognised for their agricultural work and contribution to stability in their communities (Slater, 2001).

According to Rachel Slater’s article, “Women in Cape Town,” they have benefited their communities by being resourceful and creating social networks while working with urban agriculture (2001).

Although there are different plans for how to implement urban agriculture into MGTV and OMEV and improve the communities socially, it is important to watch out for common challenges that may compromise the project’s efficacy. Case studies in towns of the Eastern Cape Province have shown limited success due in part to expenses, community education, partnerships, and methodology (Thornton, 2008). It has been found that many times, profits are small or none, meaning that the gardens end up only being of use to the gardener (Thornton, 2008); such a situation is not sustainable. To make sure we avoid these common traps, we will account for them in a successful plan for the development of the garden and pathway through Oude Molen and MGTV.

CSA Potential along the Black River

Studies show that in parts of South Africa there is potential for agriculture

and that communities are interested in subsistence gardening, commercial gardening, and small-scale livestock farming (Thornton, 2009). These low-intensity agricultural initiatives could potentially be an asset in terms of income for the MGTV community members, as many are already quite involved with their own gardens. In conjunction with their growing efforts, if they sold produce at farmers markets, directly to established restaurants or businesses, or through Community Supported Agriculture (CSA) programmes they could generate additional income. Community Supported Agriculture is a model by which growers and members are mutually bound in a beneficial relationship, where the members support the grower either through monetary or labour support or both, and the grower provides regular instalments of farm produce shares for their customers. The Black River pathway could be an effective way to facilitate such activity, especially seeing as the pathway has the potential to connect people from a nearby metro stop and Oude Molen Eco Village to Maitland Garden Village. If members strategically use the pathway for farmers markets or pick-up locations for CSA shares, they could sell produce to pathway users.

Appendix A: Sustainable Agriculture Opportunities

The owners of a farm running a CSA need to have a clear understanding of how many paying members they need and how many people they need for work-shares (labour in exchange for shares) in order to sustain the farm. The CSA model allows them to be financially stable while at the same time acquire much needed manpower. Having a shared sense of responsibility amongst the people involved in a CSA is extremely important to its success.

The CSA shares are of particular importance because these entail a mutual commitment between the grower and the customer, where a payment at the beginning of the season is received in exchange for produce in instalments throughout the season. That mutual commitment holds both sides accountable; the grower needs to harvest their best to produce and the customer needs to be ready to invest and support the grower's efforts. Once customers commit, there is a guaranteed income and customer-base for the grower. Micro-enterprises like CSA and farmers markets can evolve the pathway into a destination as they provide pathway users with a more engaging experience.

Commercial Agriculture Sustainability along the Black River Pathway

As experienced in a farmers market in Worcester, Massachusetts, USA, one of the most important logistical considerations appears to be how to get the community involved and to enjoy it. The farmers market in Worcester started in 2009 in Main South, a low-income neighbourhood, and has become more successful and more impactful to the community with each year. In its initial stages, lots of advertising and discussion within the community occurred, so as to reach out to people about the market and to gauge their interest in it. Some things to consider were the types of produce people would like to see, and what types of activities could be made available at the market, especially for people with children. From discussions and creative visioning, the farmers market has become more than just a place to purchase produce, but an event at which people in the Worcester community come to spend their Saturday mornings. Every Saturday, the market includes live music performances, arts and crafts, and games for children and people to enjoy. By considering such activities,

we can make the pathway a destination for the surrounding communities.

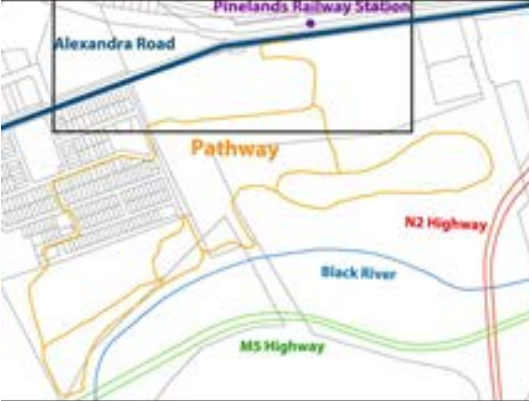
Building agricultural entrepreneurship endeavours to be sustainable is another significant characteristic to consider. One way that CSA strives to be sustainable is through education (Hayden, 2012). If consumers realise the environmental impact of CSA, researchers seem to believe that the likelihood of these consumers becoming committed core CSA members is higher. Moreover, experiencing CSA, such as visiting and working on the farm, and reading about CSA, all help consumers to create a connection with CSA, as well as a deeper connection with nature and the origin of their food (Hayden, 2012). These educational efforts appear to make a difference in consumers' experience of CSA and long-term lasting effects on the consumers' perception of the importance of CSA.

Another aspect to consider when employing CSA is having an organisational framework that will uphold it from year to year, such as a group of people or an organisation that is committed to its running and success. One of the problems that some researchers found with small-


hold gardens and farms was that they were not sustainable, and had a large variance in their usage from time to time (Thornton, 2009). To ensure the sustainability of any commercial agriculture project, whether CSA or farmers market, there needs to be an organised network of people to assume responsibility of it to keep it up and running. With the hopes of bringing agricultural entrepreneurship to the Black River Pathway, it is imperative that we set up a relationship with an organisation or group to oversee the running of such commercial agriculture projects.

Appendix B: MGV and Oude Molen Brochure

Connect to us here!




From the N2, take exit 10 and merge onto Raapenberg Road towards Pinelands. Turn left onto Alexandra Road and enter into Oude Molen Eco Village to begin your adventure!




For more information and to schedule a tour contact us at:
Tel: 555 555 5555


For more information and to schedule a tour contact us at:
Tel: 555 555 5555
Email: blackrivertours@blahblah.com

Green Light Project





*The Authentic Cape Town
Interactive Experience*



**Black River
Historical Tours**

Appendix B: MGV and Oude Molen Brochure



Maitland Garden Village and Oude Molen Eco Village

Maitland Garden Village and Oude Molen Eco Village both have rich histories and beautiful vistas that provide wonderful opportunities for visitors to receive an authentic, interactive experience. A pathway connecting these villages highlights recreational, agricultural, and historical features within the communities as well as micro-businesses.

Walking Tours

Walking tours will take you through Maitland Garden Village, Oude Molen Eco Village, and around the Black River wetlands to experience the area's rich heritage and great vistas.



Heritage

Both MGV and Oude Molen have historical features that are showcased along the pathway. The unique architecture of MGV homes are characteristic of the English semi-detached houses of the World War I era. Oude Molen's buildings have been repurposed from psychiatric wards.



Gardens

Maitland Garden Village showcases gardens which were once celebrated through gardening competitions. Today, Maitland Garden Village is home to a community garden, crèche garden, and beautiful home gardens.



Micro-Businesses

Oude Molen is home to many sustainable micro-businesses. Come shop, eat, and play!

- Animal Touch Farm
- Bottled Angels
- Braai Area
- Food Garden Village
- Horse Stable
- Millstone Café
- Oude Molen Pool
- The Play Shed
- Riverlodge
- The Eco Theatre
- And many more...



Appendix C: Sample Interpretive Signage

The Methodist Church Garden



Started by the **Green Light Project**, the Methodist Church Garden serves to provide locally grown food to those in need and will donate crops to initiatives such as the Maitland Garden Village soup kitchen. The garden is maintained by enthusiastic members of the Gardening Club and is the first community garden in Maitland Garden Village.



The Green Light Project



The Green Light Project is a community based organization aiming to integrate Maitland Garden Village's community strengths into clubs that plan events and activities. Currently, there are nine clubs:

- Sports
- Elderly
- Gardening
- Dancing
- Awareness
- Music
- Fundraising
- Drum Majorettes
- Health

Expanded Community Garden



This land used to be a driving range but was turned into a community, multipurpose area in 2013. The community garden is maintained by the **Green Light Project** and the soccer field is maintained by Maitland Garden Village's Soccer Club.

Farmer's markets are hosted here every other Saturday. The produce is completely organic and locally grown.

Note: The suggested image for this is the mentioned farmers market. As this is a future development, there is no current image displayed.

Appendix C: Sample Interpretive Signage

Delville Square



Between 14 July and 3 September, 1916, the Battle of Delville Wood took place in northern France. The battle was between the German and the British and was the first major battle involving the South African 1st Infantry Brigade on the Western Front. South African forces lost 766 men before they were relieved on 19 July.

Currently, there is a South African memorial in Delville Wood to commemorate the fallen soldiers.

Note: The suggested image for this is the South African Battle of Delville Wood monument in France. Due to copy-writing, there is no current image displayed.



BETTER TOGETHER

Welcome to Oude Molen Eco Village!



Oude Molen Eco Village is a community of micro-businesses that came from renovating a mental institution. It was envisioned in 1997 by a social entrepreneur and has hosted as many as 75 businesses at a time. The future for Oude Molen Eco Village is unclear as Province owns the land and operates on short term leases.

We hope you enjoy exploring what the area has to offer! For more information, please contact 555-555-5555.

Food Garden Village



Food Garden Village is an education programme initiated by John "Jonno" Kennedy. The objective of the garden is to teach children and other interested community members how to grow vegetables and live from a garden. A school programme in Maitland Garden Village visits the garden multiple times a week as part of their curriculum. The garden is funded by Food Basket for African and has a partnership with Pick N Pay.



Appendix C: Sample Interpretive Signage

The Black River Pollution



The Black River was canalised in 1943 and through the second half of the 20th century became polluted when industrial companies and treatment plants began using it for waste removal. The river pollution and poor water quality is a contributing factor to the water hyacinth problem and various health risks.

Despite this, the area still has natural beauty and there is potential for ecological restoration.



Wetlands



These wetlands are home to many bird species though flock numbers have declined in recent years. This is largely due to the polluted river environment. Despite this, the Raapenberg Bird Sanctuary remains as a safe haven for the local birdlife.



Water Hyacinth
The water hyacinth is an invasive species that grows in flowing water and is a particular problem for the Black River. The city invests time and money as a yearly effort to remove this growing problem. Special engineering is required for the delicate removal process.



Millstone Café



Note: The suggested image for this is the Old Mill. Due to restrictions within this project, there is no current image displayed.

Oude Molen Eco Village gets its name from the Old Mill that used to be present in this location. The Millstone Café pays homage to the mill and serves freshly squeezed juices and other delicious meals.

Appendix D: Water Hyacinth on the Black River

One of the main points that would come up in the wetlands region through signage is the water hyacinth issue surrounding the river. This invasive species not only poses an aesthetic problem to the area, but a challenge for the engineering and hydraulics of the river as well. If not removed properly, water hyacinth blocks the surface of the water and restricts water flow. In this area, which is also next to the newly renovated M5 highway, restricted water flow could cause structural damage to the highway and crack the foundation of the portion that passes over the Black River. In addition, water hyacinth reduces the amount of oxygen that the river wildlife is able to obtain,

negatively affecting any aquatic species that exist in the river if the plant isn't removed regularly.

The water hyacinth infestation of the Black River is constant, and it requires constant attention and frequent removal. The main time for the water hyacinth to be removed is during the spring and summer months. Water hyacinth is removed with machinery and left to dry out, reducing the volume to ten per cent of its original volume, prior to being transported to a landfill. In addition, for removal along the Black River, the use of approved herbicides is recommended and seen as cost effective. This is

currently seen as the safest way to clear the water hyacinth and prevent the spreading of seeds to other bodies of water.

Although the water hyacinth is taken only to landfills at the moment, there are ideas circulating for other ways to make use of the plant. One way to use it would be through composting. Since the hyacinth reproduces asexually, it would need to be properly shredded to eliminate the risk of later seeding, prior to being composted and used. The water hyacinths would also need to be tested for heavy metals to ensure they are suitable for composting. In addition to the jobs that come from

the water hyacinth removal, composting the water hyacinth would create additional jobs for people. However, this idea is met with skepticism that composting is truly a safe alternative to the current method of depositing in a landfill. The main concern is the proximity to water where the compost is used; if it were later used too close to water, there is a risk of invading an uncontaminated body of water with the hyacinth. Research and risk evaluation are the best ways to determine if composting is a viable alternative to dumping in a landfill.



Water hyacinth behind MGV, courtesy of the City of Cape Town



Water hyacinth at the mouth of the Liesbeek River, courtesy of the City of Cape Town



Water hyacinth growing on a water pipe, courtesy of the City of Cape Town

Appendix E: Recommended City Implementation

The following is a diagram showing future steps for city departments to develop the pathway. There are two major progressions that can occur simultaneously: driving range land development and the pathway development. From each one, there are subsequent steps listed in order of priority.

	Non-motorised transport	Storm water management	Environmental and Heritage Management	Parks and Recreation	Sports and Recreation	Property Management	Other
1. Driving range land							
a. Land lease				X		X	
b. Gardening agreement				X			
c. Playground			X Schedule 17 Advertising		X		Economy Development
2. Pathway development							
a. Build a pathway	X			X			
b. Build a pedestrian/ cyclist bridge	X		X				
c. Interpretive signage	X	X	X	X			
d. Make MGV a heritage area			X				

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Acknowledgements

Our team would like to acknowledge the following individuals who we have worked with over this project period:

Juan Namdo—A sponsor liaison from the Environmental and Heritage Management Department

Crispin Barrett—A sponsor liaison from the Environmental and Heritage Management Department

Clive James—A sponsor liaison from the Environmental and Heritage Management Department

Megan Lukas—A liaison to the Two Rivers Urban Park Committee

Damian Wentzel—A representative from the Environmental and Heritage Management Department who helped with project mapping

Ronell Trout—A liaison to the MGV community

Sheila Galant—A liaison to the MGV community

Martin Julies—The leader of the MGV Gardening Club

Jonno Kennedy—The director of Food Garden Village in Oude Molen

Rob Small—The Harvest of Hope resource and mobilization manager

All the city representatives who we met with: **Peter Koen, Pauline McConney, Raafiq Kolia, Johan de Goede, Cindy Jacobs**

Scott Jiusto—Our project advisor from Worcester Polytechnic Institute

Bob Hersh—Our project advisor from Worcester Polytechnic Institute



Sponsored by the City of Cape Town's Environmental
& Heritage Management Department



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