Contract No. 005-083

"The Fargo Project: World Garden Commons"

Submitted by City of Fargo

Principal Investigator: Maegin Elshaug*

Directives C & D

PARTICIPANTS

Sponsor	Cost Share
City of Fargo (cash)	\$350,000
Artplace American Foundation (cash)	\$200,000
Local Foundation (cash)	\$ 10,000
City of Fargo (in-kind)	<u>\$ 20,000</u>
Subtotal Cash Cost Share	\$ 580,000
North Dakota Industrial Commission	<u>\$350,000</u>
	<u>\$ 350,000</u>
Total Project Cost	\$ 930,000

Project Schedule – 6 months Project Deliverables:

Contract Date - 10/9/2015 Status Report: October 31, 2015 \checkmark Start Date - 8/1/2015 Status Report:* March 31, 2016* \checkmark Completion Date - August 31, 2018^+ Status Report: August 31, 2016* \checkmark

Status⁺ Report: December 31, 2016^ ✓

Status Report: July 1, 2017 ✓ Status Report: December 31, 2017 ✓ Final Report: August 31, 2018 ✓

OBJECTIVE/STATEMENT OF WORK:

This project will transform an 18-acre storm water detention basin into a public commons that will restore wildlife habitat as well as provide new opportunities for outdoor recreation. Removal of existing concrete channel and establishment of vegetation and earthwork will set the natural back drop.

STATUS:

Contract 005-083 - Has been executed.

11/23/2015 - Status report received. The report states: End of August through September. The City decided to have construction drawings go through a peer review by a water resources manager. Bids were received in July and coordination between contractors and their contracts occurred in August after on-site coordination for construction phasing was formalized. Demolition began with construction of an earth ramp to get equipment in the site. Channel removal began at the north end and continued south (approximately 100 feet of channel remains and removal will occur in 2016). Earth work and landscape contractors coordinated to minimize disturbance. One inch rainfall delayed project several weeks to dry the basin before work could be completed.

Months of October and November. Landscape contractor continued on work that was in a dry area (construction of the Listening Garden, which is outside of Outdoor Heritage Funds). Discussion occurred to determine extent of grading improvements of the channel to create a more natural stream since post demolition it was observed that more movement of restored channel was occurring than desired. Restoration contractor began restoration work for control of invasive plants and installed sweet grass

plugs near new channel. In addition an overseed occurred at the conclusion of this construction season. Management plan being determined for 2016 restoration activities. Installation of seeding and erosion control blanket. For the overlook area, soil borings and preliminary design was finalized.

Next Steps in 2015: Construction of rock lane to stabilize stream on east-west channel. Hydromulch areas of disturbance after earthwork completion. Remove stockpiled material that is unsuitable for grading and fill material. Confirming grading plan and fill materials needs.

Photos of the work are included in the status report.

The applicant has requested a no-cost extension to allow for another construction season to complete the project. The no-cost extension has been granted.

3/31/2016 - Status Report received. The report states: November through March: About 80% of the concrete channel is removed. Additional grading needed to occur due to new information regarding base flow of inlet and ground water table.

Stockpiled material that was unsuitable for grading and fill was removed from the basin. The anticipated construction of a rock vane to stabilize stream on the east-west channel was delayed. The construction was slated during the winter while the ground was frozen, however, due to the warmer temperatures, the rock vane was not able to be constructed. After site visits in March, it was determined that over the course of the winter, the channel had eroded more than anticipated. Due to the adaptive management focus of the project, the rock vane is anticipated to be constructed, although the location has changed. Additional techniques for stream restoration are under discussion.

We are installing monitoring equipment this spring n order to be able to measure ground water and erosion effects for the new water system more closely and adapt grading and vegetation based on rainfall events and to monitor erosion. Willows will be planted to induce channel movement.

Construction documents are currently underway. Anticipated bidding for portions for the Overlook of the project begins in May, with earliest construction start in June.

Next steps in 2016:

- Continued earthmoving and site restoration
- Full removal of concrete channel (partial removal of channel occurred in 2015. Portions are used to access the site with less disturbance.)
- Continued seeding, plantings and vegetation establishment (much of this work will occur after earthwork)
- Earthwork preparation for the Overlook
- Construction of Boardwalk

The applicant has requested and the Commission has granted a no-cost extension to complete the project by December 31, 2016. The amendment has been drafted and is awaiting execution.

June 9, 2016 - The amendment has been signed.

8/31/2016 - Status Report states in part: April through August: Last fall and winter a portion of the channel was eroding. A rock vane was anticipated to be constructed last winter on frozen ground,

however, warmer temperatures did not allow. In the spring, it was found that the channel had eroded more than previously thought. Due to the adaptive management focus of the project, we reevaluated the location and restoration techniques. The rock vane was installed mid-April and is functioning as anticipated.

Construction documents have been finalized for the reconstruction of the inlets and outlet project (site restoration, earthmoving, seeding and plantings), and is currently under bid. The bid opening will be on September 14. The anticipated construction is over the winter, while ground is frozen, for minimal disturbance.

We anticipated the full removal of the concrete channel in 2016. However, the reconstruction of the inlets and outlet, and with the equipment needed for demolition and earthmoving, the remaining concrete will stay in place for access with the anticipation it will be removed by Spring 2017.

The bids for the Overlook feature were opened in June. The bids came in much higher than anticipated and all bids were rejected. We are currently working on re-prioritizing features within the site. The Overlook is not anticipated to be constructed this year. Funding from the Outdoor Heritage Fund was to cover a portion of the costs of the Overlook.

Site restoration (seeding, plantings, vegetation establishment) continues on the site. We are finding that in the undisturbed areas, the site has many native species, and we continue to take steps to encourage that growth while managing invasive species. The restoration methods on areas of disturbance require more intensive restoration, however, we plan to seed and plant as much as possible to encourage establishment.

Technical construction of the boardwalk was explored, and determined to be much more intrusive to the site than anticipated with requirements for footings in the basin due to soils. We are discussing other options of boardwalk types, but do not anticipate that feature will be built this year, as originally planned. Funding from the Outdoor Heritage Fund was to cover to cover a portion of the costs of the Boardwalk.

Monitoring equipment is in place. We are hoping to receive reports yet this year regarding vertical water quality and groundwater quality.

Next steps in 2016:

- -Continued earthmoving and site restoration
- -Award bids for the inlet/outlet reconstruction
- -Begin construction of inlet/outlet project
- -Continued seeding, plantings and vegetation establishment (much of this work will occur after earthwork)

1/5/2017 - Status Report states in part: September through December: In September we entered into contract for reconstruction of the inlets and outlets project (site restoration, earthmoving, seeding and plantings), with construction slated on frozen ground in the winter months (beginning November) to allow for minimal disturbance.

Also in September we had our second annual Community Table event at the site, part of the national movement of Welcoming Week. This event was a partnership hosted by many area non-profit organizations. Over 200 people attended the event.

In October, restoration by induced stream meandering occurred on the site within the high-flow channel area along the north side of the basin. By creating small disturbance areas using rock and willow cuttings, the disturbance is much less than re-grading the site and restoring with plant materials. The induced stream meandering will be monitored and continue as needed into 2017.

In mid/late December we only just broke ground on construction of the inlets and outlets due to the above average temperatures and rainfall in November. Substantial completion of the project was to occur the week of December 19, however, with the warmer weather and additional rainfall, construction will continue into 2017.

Site restoration (seeding, plantings, and vegetation establishment) continued during the fall and winter months. We are finding that in the undisturbed areas, the site has many native species and we continue to take steps to encourage that growth while managing invasive species. The restoration methods on areas of disturbance require more intensive restoration, however, we plan to seed and plant as much as possible to encourage establishment.

As noted in the August report, technical construction of the boardwalk was explored and determined to be much more intrusive to the site than anticipated with requirements for footings in the basin due to soils. We are discussing other options of boardwalk types, but do not anticipate that feature will be built this year, as originally planned. Funding from the Outdoor Heritage Fund was to cover a portion of the costs of the boardwalk.

Next steps in 2017:

- Continue earthmoving and site restoration, including construction of accessible entrances into the site
- Continue seeding, plantings and vegetation establishment (much of this work will occur after earthwork)
- Value engineer, rebid and construct the Overlook (partially funded through OHF)
- Construction of boardwalk and natural play area
- Continue monitoring vertical water quality and groundwater quality
- Continue induced stream meandering as required

August, 2017 - Due to construction issues and the need to rebid portions of the project a no cost extension to August 31, 2018 has been granted.

July, 2017 – Status report states: In late winter and spring, the Overlook was redesigned, and included in the project was the north boardwalk, trails and further site restoration (including earth moving, seeding, plantings, and vegetation establishment.) Through design discussions, it was decided that two boardwalks were needed for crossing the stream and that the north boardwalk would be completed as part of the Overlook project. The south boardwalk, which is much smaller, was completed separately.

In late spring, the contract for reconstruction of the inlets and outlets was completed. Much of the work occurred in early winter/late spring with colder weather conditions and frozen ground, as November and December were warmer and wetter than anticipated and January temperatures were to frigid for equipment.

In April we had a service project to complete the south boardwalk on site. The project was constructed in less than a day, and provided the first dry crossing in the basin. As part of an Earth Day event, frogs and 2 species of tadpoles were introduced to the site. We will find out if both species exist when a survey on aquatic species is completed. We also intend to introduce brook stickleback later this fall into the plunge pool, which was built with the inlets and outlet reconstruction. This work is outside the OHF.

Site restoration continued in spring and early summer. We are finding that in the undisturbed areas, the site has many native species, and we continue to take steps to encourage growth while managing invasive species. The restoration methods on areas of disturbance require more intensive restoration. However, we plan to seed and plan as much as possible to encourage establishment.

We continue to monitor the induced meandering and anticipate further restoration by creating small disturbance areas using rock and willow cuttings. These disturbances allow us to be less intrusive and more intentional with site restoration.

Next steps in 2017 and 2018:

- -Rebid and construct the Overlook, trails, north boardwalk, and earthmoving.
- -Continue seeding, plantings and vegetation establishment.
- -Continue monitoring vertical water quality and groundwater quality.
- -Continue induced stream meandering as required.

Photos were also included and are available in the full report on the website.

May, 2018 – Status report for July 2 – December 31 2017 states: In July and August, we held a Summer Series event in which almost every Sunday from 1-4, a group held a community event on the site. Events were open to all and included a meal. The 8 events were well attended. This work was outside the OHF.

In August 2017, we entered into a contract with a general contractor to construct the Overlook, trails, north boardwalk, and natural play area. This is anticipated to be one of the last large projects at the site. Much of the structural work was done in the fall and into early winter when the ground was frozen. The work, including: completion of the structures, natural play area, seeding, plantings, and site restoration is anticipated to be done in June 2018.

Site restoration continued in the fall. We have found that in the undisturbed areas, the site has many native species. We continue to take steps to encourage that growth which managing invasive species. The restoration methods on areas of disturbance require more intensive restoration. However, we plan to seed and plant as much as possible to encourage establishment. In the fall, we began introducing planting plugs in irregular "amoeba" shapes to encourage the plants to extend into other areas. We will continue with additional plugs and plantings in Spring 2018.

In September, additional work was done to induce meandering of the stream and address erosion issues.

Next steps in 2018:

- -Completion of Overlook, trails, north boardwalk, and natural play area.
- -Continue seeding, plantings and vegetation establishment.
- -Continue monitoring vertical water quality and groundwater quality.
- -Continue induced stream meandering as required.
- -Continue programming on site (this work is outside the OHF.)

Photos were also included and are available in the full report on the website.

October, 2018

Status report for 1/18 – 8/18 received. The report states in part:

Overlook, trails, north boardwalk, and natural play area was constructed along with seeding and plantings. We anticipate this to be the last of the major construction within the basin.

On Earth Day, the NDSU Natural Resources Management Club held an event for the community to build artistic bird houses. Approximately 10 bird houses were installed at varying hieghts on the basin slop to provide habitat for existing species and encourage establishement of new spiecies.

Site restoration (seeding, plantings, vegetation establishment) continued through August. We have found many native species in undisturbed areas and encourage that growth while managing invasive specieies. The restoration methods on areas of disburbance require more intensive restoration. However, we plan to seed and plant as much as possible to encourage establishment. We continued planting plugs in irregular "amoeba" shapes to encourage the plants to extend into other areas in August.

Final Report

A 1 page final report has been submitted that summarizes the activities of the project. This report is available on the website.

The contract is now closed.

Revised 11/1/2018

^{*}Notes changes from original contract

[^]Notes additional changes to amended contract

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