Verification Report

St. Paul Planting Project 2023

City Forest Credits Project Number 058

August 13, 2024

Matthew Lee
1307 Ashbourne Dr.
Lynchburg, VA 24501

Table of Contents

1	INT	RODUCTION	3
	1.1	PROJECT BACKGROUND	
	1.2	CONTACT INFORMATION	3
	1.3	OBJECTIVE	4
2	VEI	RIFICATION CRITERIA	4
	2.1	GENERAL	4
	2.2	PROTOCOL	4
	2.3	LEVEL OF ASSURANCE	4
3	SCO	OPE OF VERIFICATION	4
4	VEI	RIFICATION PROCESS	5
	4.1	VERIFICATION ACTIVITIES	5
	4.2	CITY FOREST CREDITS AFFORESTATION AND REFORESTATION PROTOCOL REQUIREMENTS	5
5	VEI	RIFICATION FINDINGS	7
6	VEI	RIFICATION RESULTS AND CONCLUSION	8

1 Introduction

Matthew Lee (a Validation and Verification Body (VVB) acting as a third-party verifier) was engaged to verify the St. Paul Planting Project 2023 (Project) St. Paul, Minnesota, for the period of November 24, 2020 through November 16, 2023. The goal of the verification is to ensure that the GHG assertion is materially correct, and that the assertions made by the project are well documented.

1.1 PROJECT BACKGROUND

The City of St. Paul partnered with Green Cities Accord to establish an urban tree planting carbon project that registered trees planted from 2021-2023. The project includes 11,288 trees planted within the city limits of St. Paul, Minnesota from November 24, 2020, through November 16, 2023. The trees were planted in public right-of-way along city streets as well as on other park land where St. Paul has the authority to plant and maintain trees. The City planted 93 species of trees, with a majority including Kentucky coffeetree, Elm, Hackberry, Honeylocust, and River birch species. Green Cities Accord serves as the Project Operator, the entity who undertakes a project, registers the carbon credits, and is ultimately responsible for submitting annual monitoring reports as well as any project documentation necessary throughout the duration of the project.

This project, a collaborative effort between Green Cities Accord and the City of St. Paul, demonstrates the importance of joint efforts in addressing environmental challenges at the local level. This initiative aligns with broader sustainability and climate action goals of the City. The planted trees not only provide carbon sequestration benefits but will also reduce the urban heat island effect, reduce stormwater runoff, and capture particulate air pollution.

1.2 CONTACT INFORMATION

Project Operator

Green Cities Accord (formerly known as "Green Minneapolis")

Address: PO Box 582877 Minneapolis, MN 55458

Contact:

Michaela Neu

Director of Programs & Operations

mneu@greencitiesaccord.org, phone: 612-217-4485

<u>Verifier</u>

Matthew Lee 1307 Ashbourne Dr.

Lynchburg, VA 24501

Contact: leematthew82@gmail.com, phone: 434-426-2448

1.3 OBJECTIVE

The goal of this GHG emission removal verification is to ensure that the GHG assertion made by the Project is materially correct, that the assertions and assumptions used in the offset calculations are appropriate, that the offset calculations conform to the City Forest Credits (CFC) Protocol, and that the Project is in compliance with all CFC requirements relating to eligibility, accounting, and documentation.

2 Verification Criteria

2.1 GENERAL

The Registry will accredit VVBs to act as third-party verifiers who meet the Registry's qualifications and complete training. Those accredited VVBs can then act to verify compliance with this Afforestation and Reforestation Protocol per International Standards Organization 14064-3. Specifically, the Registry adopts and utilizes the following standards from ISO 14064-3:

- Upon receiving a Project Design Document with data on eligibility, quantification of carbon and co-benefits, and a request for credits, the Registry will conduct a validation. If it validates the project at that stage, the Registry will retain a VVB to act as third-party verifier to verify compliance with this Protocol.
- The Registry requires a reasonable level of assurance in the accuracy of the asserted GHG removals to a reasonable level.
- The verification items identified in Tables 1 and 2 are all material elements, and any asserted GHG removals must be free of errors, misstatements, or omissions regarding those elements.
- The Registry will record, store, and track all quantification and verification data and either display it for public review or make it available for public review upon request.

2.2 PROTOCOL

The verification was conducted to the City Forest Credits Afforestation and Reforestation Protocol, version 11, dated February 24, 2023. Verifier confirmed that the version of the protocol listed in the Project Design Document matches the protocol referenced in the Project Implementation Agreement (PIA).

2.3 Level of Assurance

This verification was conducted to a reasonable level of assurance. The Verification Report accurately reflects the documentation contained in the Project Design Document and supporting documents.

3 Scope of Verification

- The Project is located in City of St. Paul, MN, specifically described in the Project Design Document.
- The period is from November 24, 2020, through November 16, 2023.
- The verification includes review of documents, data, imagery, and other evidence provided by the Project Operator; independent checking of selected data; checking of calculations for accuracy and conformance with the Protocol.

4 VERIFICATION PROCESS

4.1 VERIFICATION ACTIVITIES

The verification process consisted of the following activities:

- Verifier checked all requirements in the Protocol, confirmed that documentation satisfies the requirements of the Protocol, and that values extracted from the documents and conclusions drawn from the document are accurate and appropriate
- Verifier checked the documents submitted by the PO which included, Project Description
 Document (PDD), a shapefile of recorded spatial locations of all 11,288 trees, maps showing
 those locations within the region and within the City of St. Paul's municipal boundary, images of
 trees planted with captions identifying locations of the plantings, a series of invoices showing
 tree purchases and payments that correspond to the list of species planted by the PO, and
 signed attestations.
- Verifier reviewed the accuracy of the carbon quantification and City Forest Carbon Forward Removal Credit calculations. Verifier reviewed the Project Operator's assertion that the Project results in total GHG emissions mitigation of 29,755 tons CO₂e over the 26-year Project Duration. Verifier reviewed the Project Operator's assertion that, per Protocol guidelines, 10% of the Project GHG emissions mitigation is issued after initial tree planting, or 2,976 tons CO₂e.
- Verifier submitted to the Project Operator via CFC staff requests for clarification around the invoices, captions for photos submitted and Sustainable Development Goal 14.
- 4.2 CITY FOREST CREDITS AFFORESTATION AND REFORESTATION PROTOCOL REQUIREMENTS

 Verifier reviewed the Project against all CFC Afforestation and Reforestation Protocol requirements and confirmed the following:
 - <u>Project Operator Identity (Section 1.1):</u> Verifier confirmed identity by reviewing Project Operator's bylaws and amendment, W9 and by visiting its website at (https://greencitiesaccord.org/). The Operator's bylaws confirmed incorporation with an

additional amendment submitted documenting the organization's name was changed from Greening Downtown Minneapolis to Green Minneapolis. The organization's name was further changed to Green Cities Accord, based on visiting the organization's website listed above. The W9 submitted by the PO confirms Green Cities Accord is a registered 501c3 nonprofit.

- <u>Project Design Document (Section 3):</u> Verifier reviewed and confirmed Project Design Document is complete and accurate.
- <u>Project Implementation Agreement (Section 1.3, 3, and 4):</u> Verifier confirmed fully executed Project Implementation Agreement on file.
- <u>Location (Section 1.4):</u> Verifier reviewed mapping and location data by opening the submitted tree shapefile data in ESRI's Arc Pro spatial mapping software and confirming the tree points were located in the City of St. Paul, MN. The Verifier also reviewed the various maps submitted by the PO that give regional location context, point data for each tree planted, and a heat map illustrating the density of tree locations. A heat map is an acceptable form documentation of tree locations according to protocol due to the large number of trees planted in this project. The eligibility criteria for an urban tree planting project are met by the tree plantings being planted and located in an incorporated city and the more than three maps and shapefile submitted.
- Land Ownership or Right to Receive Credits (Section 1.7): Verifier confirmed that the City of St. Paul through an Agreement to Collaborate transferred all rights and interests in any and all credits (carbon and associated bundled environmental benefits) to the PO (Green Cities Accord) in furtherance of project administration. The Agreement to Collaborate was signed and dated 5/10/24.
- <u>Commencement (Section 2.4, 3):</u> Verifier reviewed Approval of Application Letter. Verifier reviewed the Attestation of Planting Affirmation and confirmed the date the last project tree was planted on November 16, 2023.
- <u>Project Documentation (Section 3 and Appendix A):</u> Verifier confirmed all required project documentation present.
- Additionality (Section 4): Verifier reviewed for additionality as follows:
 - O Legal requirements test (Section 1.8) no law or ordinance for Project Operator to plant trees.
 - o Performance Standards Baseline (CFC Standard, Section 4.9) per the program wide performance standard baseline showing net tree loss, these trees are additional. The performance standard baseline is attached to the Project Design Document.
 - O The Project did not plant trees on sites that were forested and then cleared of healthy trees (Section 1.9)
 - o Project Operator signed a Project Implementation Agreement with City Forest Credits for 26 years.
 - O The 26-year Project Duration commitment is additional to and longer than any commitment the Project Operator makes to non-carbon project tree plantings.

- o Project Operator completed and signed the Attestation of Additionality (Section 4).
- <u>Permanence (Section 1.3, 2.2, and 8):</u> Verifier confirmed Project Implementation Agreement imposes a legal obligation to Project Operator to conduct this project for 26 years, including a reversal obligation.
- Quantification (Section 10 and Appendix A):
 - O Verifier confirmed Project Operator utilized the "Single-Tree Planting Quantification Method" a CFC quantification methodology described in Appendix A.
 - o Verifier reviewed the accuracy of the data integrity in the quantification methodology.
 - O Verifier reviewed spreadsheets with tree data and the carbon quantification calculations. The number of trees in both of these spreadsheets matched with the geospatial data provided by the PO.
 - O Verifier reviewed the completed and signed Attestation of Planting and Attestation of Planting Affirmation.
- <u>Co-Benefits (Appendix A):</u> Verifier confirmed the calculation of ecosystem co-benefits as set forth in the City Forest Credits quantification tool.
- Attestation of No Double Counting of Credits and No Net Harm (Section 5)
 - Verifier reviewed the completed and signed Attestation of No Double Counting of Credits and No Net Harm.
 - Verifier reviewed the No Double Counting Evidence submitted by the PO which analyzed all CFC tree locations in the greater Minneapolis-St. Paul, MN Metropolitan area by latitude and longitude. The PO's analysis did not return any overlapping tree planting sites indicating no double counting in this project.
 - Verifier compared the Project geospatial data to the registered urban forest carbon afforestation and reforestation projects geospatial database using Esri's Arc Pro Intersect Tool and resulted in a "no output", meaning that there is zero overlap between the Project's tree planting spatial location data with any other projects in the registry's database.

5 Verification Findings

The Project documents and data were reviewed, and the Verifier found that the emission reductions claimed are reasonable and in accordance with the Preservation Protocol.

Verifier requested a page at the beginning of the Attestation of Planting saying ""The following documents represent the majority of invoices for trees planted as part of this project. All invoices are on file with the Green Cities Accord."

The Verifier also requested captions associated with the photos submitted in the Attestation of Planting to aid in geolocating and confirming the planting sites through spatial software (Arc Pro).

The Verifier requested that the Sustainable Development Goal 14 impacts be collapsed into Goal 6. Goal 14 refers to marine and ocean resources while Goal 6 refers to clean water and is more appropriate outcome of the social impacts of the urban tree plantings in St. Paul, MN due to its distance from the coast.

All issues raised by Verifier were clarified or corrected by the Project Operator and all issues were closed by appropriate responses by Green Cities Accord.

6 Verification Results and Conclusion

This verification of the St. Paul Planting Project 2023 for the period November 24, 2020, through November 16, 2023 was completed in a manner consistent with ISO 14064-3 and in conformance with relevant CFC standards and guidelines.

The table below is a summary of the verified GHG emissions removals for the Project for initial credit issuance. These City Forest Carbon Forward Removal Credits are ex-ante credits based on forecasted removals and subject to multiple safeguards, including sampling, and which convert to ex-post at Year 26.

Table 1. Project GHG Removals

Project Name	GHG Removals Attributed to the Project (mtCO ₂ e)	GHG Removals After Deductions for Mortality (20%) (mtCO₂e)	GHG Removals After Deductions for Reversal Pool Account (5%) (mtCO ₂ e)	City Forest Carbon Forward Removal Credits to be Issued to Project (mtCO₂e)	
St. Paul Planting Project 2023	39,152	31,321	29,755	2,976	
Cumulative	39,152	31,321	29,755	2,976	

Table 2. Ecosystem Co-Benefits Per Year After 25 Years

Ecosystem Services	Resource Units	Value	
Rainfall Interception (m3/yr)	75,615	\$541,331	
Air Quality (t/yr)	2.2851	\$10,443	
Cooling – Electricity (kWh/yr)	2,205,871	\$167,426	
Heating – Natural Gas (kBtu/yr)	31,359,410	\$305,275	
Grand Total (\$/yr)		\$1,024,475	

•			• 1	•		_	•			
١	•	PI	rıı	п	ρr	•	ıσı	กล	tı	ıre
1	•	•	•		C .	•	יסי	···	••	

Matthew Lee