Verification Report

Camp Lakota Woodland Preservation Project

City Forest Credits Project Number 46

January 11, 2024

Zachary Boerman

131 Curtice Rd

Rochester, NY 14617

TABLE OF CONTENTS

1 INTRODUCTION

City Forest Credits engaged Zachary Boerman (a Validation and Verification Body (VVB) acting as a third-party verifier) to verify the Camp Lakota Woodland (Project), located in McHenry County, IL, for the reporting period November 21, 2023 through November 20, 2026. 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

As part of the Chicago Region Carbon Program, the McHenry County Conservation Foundation and the McHenry County Conservation District preserved 70.3 acres of primarily 100 – 200-year-old oak and hickory woodland at the former Camp Lakota in Unincorporated McHenry County IL.

The project area was acquired by the McHenry County Conservation Foundation in June 2021, and will be transferred to the McHenry County Conservation District by 2026. The goal is for the Camp Lakota forest to become part of McHenry County Conservation District's Brookdale Conservation Area. Visited by more than 11,000 people annually, Brookdale is a 1,645-acre site that offers visitors the opportunity to hike, horseback ride, fish, cross country ski, snowshoe, or picnic. Expanding Brookdale to include the Camp Lakota grounds will expand recreation opportunities and increase habitat, allowing species that are sensitive to genetic isolation to maintain viable populations.

1.2 CONTACT INFORMATION

Project Operator
Shawna Flavell
McHenry County Conservation Foundation: Lost Valley Visitor Center
7210 Keystone Rd
Richmond, IL 60071
sflavell@mchenryconservation.org
(815) 338-6228

Verification Body
Zachary Boerman
131 Curtice Rd
Rochester, NY 14617
zmboerma@gmail.com
(585) 794 - 7584

1.3 OBJECTIVE

The goal of this GHG emission reduction 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 Tree Planting 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 the asserted GHG removals to a reasonable level.
- The verification items identified in the 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 Tree Preservation Protocol, version 12.40, February 22, 2023.

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 encompasses land in McHenry County, IL, within parcels 07-28-200-003, 07-27-100-001, 07-27-100-003 specifically described in the Project Design Document.

- The Project area was acquired by the McHenry County Conservation Foundation on June 25, 2021 and, as outlined in the declaration of development restrictions, the Foundation has agreed not to cut down, destroy, or remove trees located on the Property, except as necessary to control or prevent hazard, disease or fire or to improve forest health.

- The Project avoids emission of CO_2 from trees and soil, by avoiding conversion of forest to non-forest land cover and avoiding conversion of forest soil to impervious surface.

- The Project duration is 40 years, beginning November 21, 2023. The Project Operator commits to protecting the trees within the Project Area and monitoring the project carbon stocks for the entire Project duration.

- The verification includes a review of supporting documents, data, imagery and other evidence provided by the Project Operator; independent checking of selected data; independent review of ownership records, tax maps, and municipal zoning ordinances; analysis of inventory and plot sampling data and i-Tree Eco-based carbon stock calculations as well as checking of calculations for accuracy and conformance with the Protocol. All forest carbon input values were independently checked and calculations were independently replicated.

4 VERIFICATION PROCESS

4.1 VERIFICATION ACTIVITIES

The verification process consisted of the following activities:

- Verifier checked all requirements in the Protocol (outlined in 4.2), confirmed that documentation satisfies the requirements of the Protocol, and that values extracted from the documents and conclusions drawn from the documents are accurate and appropriate.

- Verifier independently checked mapping and calculated values in each stage of calculations.

- Verifier reviewed the credit calculations. Verifier reviewed the Project Operator's assertion that the Project results in GHG emissions mitigation of 11,622 tons of CO_2e.

4.2 CITY FOREST CREDITS TREE PRESERVATION PROTOCOL REQUIREMENTS

4.2.1 Eligibility

Verifier reviewed the Project against all CFC Tree Preservation Protocol requirements and confirmed the following:

- Project Operator Identity (Section 1.1): Verifier confirmed the Project Operators identity by visiting their website at www.mchenryconservation.org. Verifier also confirmed that the Project Operator is the landowner by reviewing the Project parcel deeds.

- Project Documentation (Section 3): Verifier reviewed and confirmed Project Documentation including Project Design Document is complete and accurate.

- Project Implementation Agreement (Section 1.2): Verifier reviewed and confirmed that the fully executed Project Implementation Agreement signed August 18, 2023 is on file.

- Project Location (Section 1.3): Verifier reviewed the provided maps and shapefile and confirmed that the Project area is located within a Metropolitan Planning Agency area of Chicago Metropolitan Agency for Planning (CMAP) region. This satisfies section 1.3 D of the Protocol.

- Defining the Project Area (Section 1.4): Verifier confirmed that 96% of the Project Area is covered by tree canopy after reviewing the provided i-Tree Canopy Cover Assessment and Tree Benefits Report. This satisfies Protocol section 1.4 C that states the Project Area must have at least 80% canopy cover in locations that receive 20" of precipitation per year.

- Land Ownership or Right to Receive Credits (Section 1.5): Verifier confirmed that there is a clear title to carbon credits and the Project Operator has legal authority to create and dispose of greenhouse gas offsets generated on the project lands.

- Demonstrating Preservation and Threat of Loss (Section 4):
    - Verifier confirmed that trees within the Project Area were not protected from removal prior to the Project. Previously, trees in the Project Area were subject to A-1 agricultural zoning. A-1 zoning allows for non-forest use including agricultural production and the construction of residences.
    - Verifier confirmed that trees within the Project Area are now preserved from removal by a recorded declaration of development restrictions signed Oct. 24, 2023 and filed Nov. 21, 2023.
    - The Project Operator has committed to meeting the permanence requirements.
    - Prior to the Preservation Commitment action by the Project Operator, there was threat of conversion of the project lands to non-forest cover. The threat of conversion was verified in accordance with Protocol section 4.4 A. Attachment 9 of the Project Design Document shows 57.39% of the parcels boundary adjacent to developed or improved uses. This was further confirmed by using McHenry County's interactive zoning map to assess the land use surrounding the Project Area.

- No Double Counting and No Net Harm (Section 5):
    - Verifier confirmed that Attestation of No Double Counting and No Net Harm is on file.
    - Verifier compared the Project geospatial data to the registered urban forest carbon preservation projects geospatial database using ArcMap and determined there is no overlap with other registered carbon projects.

- Monitoring and Reporting (Section 8): Verifier confirmed that Project Operator has a plan for monitoring and reporting over the Project Duration, and the plan is plausible and reasonable.

4.2.2 Additionality

Verifier reviewed and confirmed that Project lands met the additionality requirements of the Protocol:

- Prior to the Project, lands were not protected from conversion by easement, zoning, or other legal mechanism.

- Zoning allows development including removal of existing trees.

- The trees in the Project Area face some risk of removal or conversion out of forest demonstrated by 57% of the perimeter being adjacent to agricultural or residential development.

- Project Operator signed an Attestation of Additionality on October 12, 2023.

4.2.3 Permanence

The Project Operator has committed to CFC that the Project Operator will protect the trees on the Project Area for 40 years. The recorded declaration of development restrictions protecting the Project Trees and lands is permanent.

4.2.4 Accounting

The Project documents an on-site plot sample forest inventory, and uses required factors in carbon stock and offset calculations.

The Project Operator elected to quantify the stored carbon stock in compliance with CFC Protocol Section 11.1 B. To meet these requirements, the Project Operator contracted Davey Resource Group (DRG) to provide on-site plot-sample inventory. The sample established 43 sample plots sized at 1/10th-acre. Within every plot, each live tree was inventoried that was at least 5” in diameter at 4.5’ above the ground, where the height above the ground is measured on the uphill side of the tree. Species diameter and overall tree condition were recorded for each tree. The Verifier confirmed the above sampling method resulted in a standard error of 9%.

The Verifier confirmed that all 43-sample plots fell within the outlined 70.3 acres of the Project Area via the plot location map supplied by the Project Operator.

The Verifier confirmed that the tC/ac of biomass calculated by the Project Operator is correct. This number was verified by repeating the calculation (biomass tC/ac = (metric tons of carbon–standard error)/Project Area acre) where metric tons of carbon and standard error were supplied by the Project Operators i-Tree Eco carbon biomass results. tCO2e/ac was then verified by dividing tC/ac by the ratio of the molecular weight of carbon dioxide to that of carbon (44/12). The Verifier confirmed that the measurement of 147.43 tCO2e/ac is correct for the Project Area using this method.

Following the Protocol outlined in 11.2 A, the Verifier confirmed that based on its agricultural zoning, 90% of the Accounting Stock on the Project Area can be claimed as avoided biomass emissions.

The Project Operator elected to follow Protocol Section 11.4 A to claim avoidance of emissions from soil carbon caused by conversion of soils to impervious surfaces in the Project Area. The zoning ordinance provided by the Project Operator indicates that there is no maximum impervious surface restriction for A-1 zoning. Therefore, in accordance with 11.4 A, 90% of the project area (or 63.27 acres) is eligible to be converted to impervious surface.

Section 1.3 of the Protocol also stipulates that per acre of avoided impervious surface, the Project may claim 120 metric tonnes of carbon dioxide equivalent of avoided soil carbon emissions per acre of net avoided impervious surface. The Verifier confirmed that this allows the Project to account for 7,592 tCO2e of avoided soil emissions.

4.2.5 Leakage

Offset accounting makes deductions for expected displacement of emissions following the requirements of the Protocol.

The Verifier confirmed that the Project Operator accurately followed Protocol section 11.5 A to determine that, of the total number of tonnes of avoided biomass emissions from within the Project Area, 18.3% are assumed to be emitted from development displaced from the Project Area. After repeating the calculations to remove the Displaced Biomass Emissions from the total Avoided Biomass Emissions, the Verifier confirmed the total Credits from Avoided Biomass Emissions (7,621 tCO2e) is correct.

The Verifier confirmed that the Project Operator accurately followed Protocol Section 11.5 B to determine that, of the total number of tonnes of Avoided Soil Carbon Emissions from within the Project Area, 30.3% are assumed to be emitted from development displaced from the Project Area. After repeating the calculations to remove the Displaced Soil Emissions from the total Avoided Soil Carbon Emissions, the Verifier confirmed the total Credits from Avoided Soil Emissions (5,292 tCO2e) is correct.

5 VERIFICATION FINDINGS

All issues raised by Verifier were clarified or corrected by the Project Operator and all issues were closed by appropriate responses by the McHenry County Conservation Foundation.

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. The Verifier makes no further recommendations.

6 VERIFICATION RESULTS AND CONCLUSION

This verification of the Camp Lakota Woodland Project for the reporting period November 21, 2023 through November 20, 2026 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 emission reduction or removals.

Table 1. Project GHG Removals

Project Name	Issuance Year	GHG Reductions and Removals Attributed to the Project ($mtCO_2e$)	Reversal Pool Account (10%) ($mtCO_2e$)	Emission Reductions to be Issued to Project ($mtCO_2e$)
Camp Lakota Woodland Project	2024 (after verification)	9,184	918	8,266
	2024 (November 21, 2024, annual anniversary of Preservation Commitment recordation)	3,729	373	3,356
Cumulative		12,913	1,291	11,622

The Project Operator calculated ecosystem co-benefits using the CFC tool to determine dollar values of other ecosystem services. The Verifier corroborated the CFC tool inputs and outputs to produce the values below. The Verifier does not make an assessment to the plausibility of these values.

Table 2. Ecosystem Co-Benefits Per Year

Ecosystem Services	*Resource Units*	*Value*
Rainfall Interception (m3/yr)	22,334.3	$159,909.75
Air Quality (t/yr)	0.6082	$831.85
Cooling – Electricity (kWh/yr)	145,517	$11,044.71
Heating – Natural Gas (kBtu/yr)	2,633,382	$25,635.39
Grand Total ($/yr)		**$197,421.71**

Because the Project area is greater than 50 acres, credits will be issued attributable to the equivalent of 50 acres of the Project area annually until all credits have been issued.

Verifier Signature

Zachary Boerman