

Verification Report

Crowley Oaks

City Forest Credits Project Number 033

February 1, 2023

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1 INTRODUCTION

City Forest Credits engaged Zachary Boerman (a Validation and Verification Body (VVB) acting as a third-party verifier) to verify the Crowley Oaks (Project), Alden Township, McHenry County, IL, for the reporting period November 7, 2022 through November 6, 2025. 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 Land Conservancy (TLC) of McHenry County preserved 45-acre known as Crowley Oaks (the Project) in Alden Township in McHenry County, IL. Crowley Oaks is part of a larger 83.5 acre Conservation Area that includes old-growth oak-hickory woodland. Many bur oak (*Quercus macrocarpa*) white oak (*Quercus alba*) and red oak (*Quercus rubra*) trees on this property pre-date European settlement of the region. In addition, there are younger white oak (*Quercus alba*), and shagbark hickory (*Carya ovata*) growing throughout, which is a good sign of regeneration. TLC has just started to restore the property to remove invasive trees and shrubs from around the oaks. The site is contiguous with nearly 200 additional acres of old-growth oak woods. The long-term goal for the area is to preserve and restore the entire oak woodland complex for the benefit of woodland birds like Ovenbird, Scarlet tanager and others. The property is zoned for agricultural use, and surrounding land use is a combination of farmland and large-lot residential development.

1.2 CONTACT INFORMATION

Project Operator

The Land Conservancy of McHenry County
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Verification Body

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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 11.40, February 7, 2022.

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 within tax parcel 02-20-300-015, specifically described in the Project Design Document.
- The Land Conservancy of McHenry County purchased these parcels on August 17, 2020, and within the declaration of development restrictions, have 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 CO₂ 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 7, 2022. 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 7,709 tons CO₂e.
- Verifier submitted a request for clarification to the Project Operator pertaining to DRG's sampling design and associated raw inventory data. Discrepancies were found between the Project Area used by the Project Operator and the Project Area used by DRG in sampling. The increased acreage in the sampling design resulted in unnecessary plots being added to the data. This issue was reviewed and corrected by the Project Operator. Updated versions of the following files were provided after the correction: Project Design Document, Carbon Quantification workbook, Plot Location Map, Raw Inventory Data workbook, i-Tree Eco report, and Carbon Biomass Quantification.

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 identity of the Project Operator by reviewing the operators most recent annual charitable trust report (form AG990-IL). This was further confirmed by a review of the Land Conservancy of McHenry County's bylaws, which states their current 501(c)(3) status. Verifier confirmed the Project Operator is the landowner by reviewing 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 fully executed Project Implementation Agreement on file.
- Project Location (Section 1.3): Verifier reviewed mapping information and confirmed it is located in Alden Township in McHenry County, IL. This satisfies section 1.3 D of the protocol because McHenry County falls within the Chicago Metropolitan Agency for Planning's service area.
- Defining the Project Area (Section 1.4): Verifier confirmed that canopy cover totals 100% for the Project Area by reviewing the provided i-Tree Canopy Cover Assessment and Tree Benefits Report. This satisfies Protocol section 1.4 C that states that the Project Area must have at least 80% canopy cover in locations that receive at least 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 zoning that allowed at least one non-forest use, including agricultural development.
 - Verifier confirmed that trees within the Project Area are now preserved from removal by a recorded declaration of development restrictions signed November 7, 2022.
 - 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 according to Protocol section 4.4 A. Over 30% of the Project Area is bordered by non-forest, developed or improved uses. The Project Area's perimeter is surrounded by 37% agricultural use and 10.6% residential development, which exceeds the 30% threshold.

- No Double Counting and No Net Harm (Section 5): Verifier confirmed that Attestation of No Double Counting and No Net Harm is on file.

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 as evidenced by 47.6% of the perimeter being adjacent to developed or improved uses.
- Project Operator signed an Attestation of Additionality on November 4, 2022.

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 are 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 as outlined in the 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 33 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. Verifier confirmed this sampling design achieved a standard error of 7%.

The Verifier confirmed that all 33-sample plots fell within the outlined 45 acres of the Project Area via the plot location map supplied by the Project Operator. This was confirmed after Verifier noted a discrepancy in the initial plot locations map, which included an excess of 8.64 acres and 17 additional plots in the sampling area. DRG supplied updated maps and raw inventory data are consistent with the Project Operators Project Design Document.

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 156.49 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 the Project Areas' 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 and development rules applicable to the Project Area do not limit impervious area; therefore, the Verifier agrees that 90% of the area (41 acres) can be claimed as avoided impervious surface.

The Verifier confirmed that with 41 acres of avoided impervious surface in the Project Area, and the stipulation in section 11.4 of the Protocol that allows the Project to claim 120 metric tonnes of carbon dioxide equivalent of avoided soil carbon emissions per acre of net avoided impervious surface, the Project accounts for 3,387 tCO₂e of avoided soil carbon 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 (5,178 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 (3,387 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 Land Conservancy of McHenry County.

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 Crowley Oaks for the reporting period November 7, 2022 through November 6, 2025 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	GHG Reductions and Removals Attributed to the Project (mtCO₂e)	Reversal Pool Account (10%) (mtCO₂e)	Emission Reductions to be Issued to Project (mtCO₂e)
Crowley Oaks	8,566	857	7,709
Cumulative	8,566	857	7,709

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

<i>Ecosystem Services</i>	<i>Resource Units</i>	<i>Value</i>
Rainfall Interception (m ³ /yr)	12,172.90	\$87,156.20
Air Quality (t/yr)	0.5095	\$767.10
Cooling – Electricity (kWh/yr)	95,825	\$7,273.08
Heating – Natural Gas (kBtu/yr)	1,791,752	\$17,442.30
Grand Total (\$/yr)		\$112,638.68

Because the Project Area is less than 50 acres, all credits are issued in the first year.

Verifier Signature

A handwritten signature in black ink, appearing to read 'Zachary Boerman', with a stylized flourish at the end.

Zachary Boerman