Crowley Oaks
Validation Report

Document Prepared by City Forest Credits

February 2, 2023

PROJECT OVERVIEW

Project Name	Crowley Oaks
Project Registry Number	033
Project Type	Tree Preservation
City Forest Credits Protocol Version	Version 11.40, February 7, 2022
Project Start Date	November 7, 2022
Project Location	Alden Township, McHenry County, Illinois
Project Operator	The Land Conservancy of McHenry County

SUMMARY

Provide a few sentences about the overall project

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.

ELIGIBILITY

Project Operator Identity (Section 1.1)

Criteria
A Project requires at least one Project Operator ("PO"), an entity organized and licensed under the laws of its jurisdiction, or a governmental body, which undertakes a Project, registers it with the registry of City Forest Credits (the "Registry"), and is ultimately responsible for all aspects of the project and its reporting.

Issue Validated
The Land Conservancy of McHenry County is the project operator. To document that it is an entity organized and licensed under the laws of its jurisdiction, The Land Conservancy of McHenry provided City Forest Credits with their organization bylaws.

Permanence – Project Duration and Reversals

A. Project Duration (Section 1.2 and 2.2)

Criteria
Project Operator must sign a Project Implementation Agreement with the Registry setting forth the Project Operator's obligation to comply with the protocol. Project Operator must monitor and report for 40 years.

Issue Validated
The Land Conservancy of McHenry County and City Forest Credits signed a Project Implementation Agreement on November 29, 2022 for the Crowley Oaks project (Project Registry Number 33). The project has a 40-year duration under City Forest Credits Tree Preservation Protocol Version 11.40.

B. Reversals (Section 9)

Criteria
A "Reversal" is loss of stored carbon such that the remaining stored carbon within the Project Area is less than the amount of stored carbon for which Registry credits have been issued. The Registry will retain in a Reversal Pool account 10% of all credits issued to preservation projects. This Reversal Pool account shall be used to compensate for Unavoidable Reversals.

Issue Validated
The Project Design Document and request for credits based on GHG mitigation includes a 10% deduction for the Reversal Pool of credits. 857 were contributed from this Project to the Registry Reversal Pool. The carbon quantification and Reversal Pool deduction were verified by the Validation and Verification Body, Zachary Boerman.

Project Location (Section 1.3 and 1.4)

Criteria
Project Area must be located in parcels within or along the boundary of at least one of the urban area criteria. The Project Operator must specify the Project Area and provide an electronic map of the Project area with geospatial location.

Issue Validated
The Project is located in Alden Township, which lies within the planning boundary of the Chicago Metropolitan Agency for Planning, a regional metropolitan planning agency. This meets protocol criteria Section 1.3 D. The Project Operator has provided maps as supporting evidence, including geospatial location, regional-scale, and project area maps.

The 45-acre Project Area includes portions of a contiguous parcel number:

Jurisdiction / Location	Parcel Number	Description / Notes
Alden Township, McHenry County	02-20-300-015	Project area included in part of parcel – 45 acres
		Total 45 acres

The Project Area is in a location that receives more than 20 inches of precipitation per year and has more than 80% tree canopy, meeting protocol criteria Section 1.4 C. The Project Operator has provided an iTree report to demonstrate the percentage of canopy cover for the Project Area and shows that it has a 100% canopy cover.

Ownership or Eligibility to Receive Potential Credits (Section 1.5)

Criteria
Project Operator must demonstrate ownership of potential credits or eligibility to receive potential credits.

Issue Validated
The Land Conservancy of McHenry County is the landowner for the Crowley Oaks, meeting protocol criteria Section 1.5 A. The Project Operator provided the Deed (4 Crowley Oaks Recorded Deed) as supporting documentation.

Demonstration of Threat of Loss (Section 4.2, 4.3, 4.4)

Criteria
Project Operator must demonstrate that prior to the Preservation Commitment, the project trees were not preserved from removal. The Project Area must be in a land use designation that allows for at least one non-forest use and is not in an overlay zone that prohibits all development. The Project Area must also meet one of three conditions that demonstrate threat of loss as described in Section 4.4 A, B, or C such as surrounding developed or improved uses, per acre value, or fair market value.

Issue Validated
The Project Operator signed an Attestation of Additionality on November 4, 2022 stating that prior to the start of the Project, the trees in the Project Area were not protected by easement, recorded encumbrance, or protected zoning status.

The Project meets criteria 4.4 A, which is over 30% of the Project Area is bordered by non-forest, developed or improved uses. 37% of the Project Area is bordered by farmland and 10.6% is residential, totaling 47.6% of the perimeter is adjacent to a developed or improved use.

Tree Preservation Commitment (Section 4.1)

Criteria
Project Operator must demonstrate that trees in the Project Area are preserved for at least 40 years.

Issue Validated
Project Operator approved a Declaration of Development Restrictions on November 7, 2022 which protects the forest in the Project Area for 40-years. As included in the Declaration of Development Restrictions, the declarants preserve the trees on the property for a period of no less than 40 years. It

prohibits cutting down, destroying, ore removing trees located on the Property, except as necessary to control or prevent hazard, disease or fire or to improve forest health. Recreational, non-motor-use trails have negligible or de minimis impacts on biomass and carbon stock are permissible. The project meets protocol criteria Section 4.1.

Project Submittal Dates (Section 2.1, 2.3)

Criteria
Project must submit applications to the Registry within two years of the date of the Preservation Commitment. The Preservation Commitment must be recorded no later than 6 months after Registry Approval of the Project Application. Projects whose Preservation Commitment dates from prior to November 1, 2017 are not eligible.

Issue Validated
Project Operator submitted the application on July 6, 2022, and the registry approved the Application on July 6, 2022. The Preservation Commitment effective date is November 7, 2022, and it was recorded on November 10, 2022, which meets protocol criteria Section 2.1 and 2.3.

Carbon Quantification (Section 11)
Criteria
Project Operator must follow the carbon stock and soil carbon quantification methods outlined in Section 11 of the Protocol.

Issue Validated
Project Operator hired an independent consultant, Davey Resource Group (DRG), to conduct an on-site assessment of the carbon stock, per protocol criteria Section 11.1.B. DRG conducted a sample forest assessment adhering to the standards set in CFC Tree Preservation Protocol Section 11.1.B. 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. The plot data were used as input for iTree Eco to quantify the carbon biomass across the entire Project Area. The tree canopy percentage was measured using i-Tree Canopy.

Forest composition was provided as supporting documentation, but forest age was not necessary for carbon quantification for this project.

Per Protocol Section 11.2.A, 90% of Accounting Stock is at risk of conversion. Crowley Oaks is zoned as Agriculture. Section 11.2 in CFC's Tree Preservation Protocol allows for 90% of the Accounting Stock on the Project Area is the "Avoided Biomass Emissions" on agricultural lands. Attachment 7 provided by the project operator captures the relevant sections of the zoning regulations that are applicable.

Project Operator quantified the avoidance of emissions from soil carbon caused by conversion of soils to impervious surfaces under Protocol Section 11.4. The project area is zoned as Agriculture and the applicable zoning and development rules do not limit impervious area. Section 11.4 in CFC's Tree Preservation Protocol allows for 90% of the Project Area in agricultural zoning (where annual crops and plowing are common practices in that region) to be eligible for conversion to impervious surface.

A deduction of 18.3% for displaced development was included in carbon quantification, per Protocol Section 11.5.

The Carbon Quantification Summary is as follows:

Project Area (acres)	45
Does carbon quantification use stratification (yes or no)	No
Accounting Stock (tCO$_2$e)	7,042
On-site avoided biomass emissions (tCO$_2$e)	6,338
On-site avoided soil carbon emissions (tCO$_2$e)	4,860
Deduction for displaced biomass emissions (tCO$_2$e)	1,160
Deduction for displaced soil emissions (tCO$_2$e)	1,473
Credits from avoided biomass emissions (tCO$_2$e)	5,178
Credits from avoided soil emissions (tCO$_2$e)	3,387
Total credits from avoided biomass and soil emissions (tCO$_2$e)	8,566
Credits attributed to the project (tCO$_2$e), excluding future growth	8,566
Contribution to Registry Reversal Pool Account	857
Total credits to be issued to the Project Operator (tCO$_2$e) *(excluding future growth)*	7,709

Project Operator asserts that the Project results in GHG emissions mitigation of 7,709 tons CO$_2$e issued to the project.

Co-Benefits Quantification (Section 11.6)

Criteria
Project Operator follows co-benefit quantification for rainfall interception, air quality, and energy savings, per protocol criteria Section 11.6.

Issue Validated
Project Operator has followed the co-benefits quantification method using the templates provided by City Forest Credits. Project Operator included 100 percent deciduous, and 0 percent coniferous for the 45-acre Project Area. The following table documents the quantified ecosystem services in resource units and avoided costs.

Ecosystem Services	*Resource Units*	*Value*
Rainfall Interception (m3/yr)	12,172.9	$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**

Additionality (Section 6)

Criteria

The City Forest Credits Standard and Tree Preservation Protocol (Section 6) ensure additionality for every carbon project. A project activity is additional if it can be demonstrated that the activity results in emission reductions or removals that are in excess of what would be achieved under a "business as usual" scenario and the activity would not have occurred in the absence of the incentive period provided by the carbon markets.

Projects must demonstrate the following:

- Prior to the start of the project, the trees in the project area cannot be protected via easement or recorded encumbrance or in a protected zoning status that preserves the trees.
- The zoning in the project area must currently allow for a non-forest use.
- The trees in the project area face some risk of removal or conversion out of forest.

The Tree Preservation Protocol sets out three tests to determine whether the trees or forest in a project area face a threat or risk of tree removal or conversion out of a forested use, as described in Section 4.4. Taken together, these elements allow crediting only for unprotected trees, at risk of removal, which are then protected by a project action of preservation, providing additional avoided GHG emissions.

Additionality is embedded also in the quantification methodology. Projects cannot receive credits for trees that would have remained had development occurred, nor can they receive soil carbon credits for soil that would have been undisturbed had development occurred.

Project Operator must sign an Attestation of Additionality.

Issue Validated

Project Operator has demonstrated that prior to the start of the project the trees were not protected, the zoning allows for a non-forest use, and the trees are at risk of removal or conversion out of forest. Project Operator has followed the carbon quantification methodology to demonstrate how the number of credits to be issued. Project Operator signed the Attestation of Additionality on November 4, 2022.

No Double Counting of Credits and No Net Harm (Section 5)

Criteria

The City Forest Credits Standard describes safeguards and the "No Net Harm" Principle in Section 5. Project activities shall not cause net harm to the environment or urban communities. Project Operator must sign an Attestation of No Net Harm.

The City Forest Credits Standard describes prevention of double-counting in Section 5. Project Operator must sign an Attestation of No Double Counting of Credits.

Issue Validated

Project Operator has submitted a signed Attestation of No Double Counting and No Net Harm on November 4, 2022, and the Registry sees no evidence of net harm from this project. The Registry has reviewed the records of prior projects to confirm that the Project Area for this project has not already received credits under the CFC standard.

Monitoring and Reporting (Section 8)

Criteria
Project Operator must report on tree conditions across the Project Area for the Project Duration. Reports must be submitted no less frequently than on the triennial anniversary of the date of the first Verification Report.

Issue Validated
The Land Conservancy of McHenry County, as a Nationally Accredited Land Trust, has a requirement to monitor every property it owns or holds an easement on every year. The Project Area described herein will be included in that monitoring program and required reports will be submitted as required every third year. The Land Conservancy of McHenry County will submit triennial monitoring reports for the project duration as specified in the protocol.

Social Impacts (Section 12)

Criteria
Project Operator shall use the Carbon Project Social Impact template to evaluate the SDGs to determine how a Project provides social impacts that contribute towards achievement of the global goals, as described in Section 12.

Issue Validated
Project Operator has submitted a completed Carbon Project Social Impact document. The project meets protocol criteria Section 12.

VERIFICATION REPORT

CFC reviewed the Verification Report to ensure it accurately reflects the documentation contained in the Project Design Document and supporting documents.

VALIDATION CONCLUSION

All the information provided in this validation report is free of material misstatement, to the best of our knowledge. The project complies with the validation criteria outlined in the City Forest Credits Standard and Tree Preservation Protocol Version 11.40.

Approved by City Forest Credits on February 2, 2023.