

AMENDMENT NUMBER 1 TO “AGREEMENT FOR CONSULTING SERVICES”

THIS AMENDMENT NUMBER 1 TO AGREEMENT FOR CONSULTING SERVICES (the “First Amendment”) is made and entered into as of March 06, 2025 by and between the CITY OF IRVINE, a municipal corporation (“City”) and DUDEK, a California corporation (the “Consultant”), for the purpose of amending the written “Agreement for Consulting Services” entered into between City and Consultant as of December 07, 2023, City of Irvine contract number 21010 (the “Agreement”).

1. The expiration date of the Agreement is changed from June 30, 2024 to June 30, 2026.
2. PART I, FUNDAMENTAL TERMS, is replaced in its entirety by the following:
 - D1. The City designates the following person/officer to act on City’s behalf:
Aaron Reece, email: areece@cityofirvine.org.
 - D2. The Consultant designates the following person to act on Consultant’s behalf:
Kanami Otani, email: kotani@dudek.com.
3. PART IV, SCOPE OF SERVICES, ATTACHMENT I, is modified in accordance with EXHIBIT I, attached hereto.
4. PART V, BUDGET, remains unchanged for with a not-to-exceed contract value of \$421,481.00.
5. Except as set forth in this First Amendment, all terms, conditions and provisions of the Agreement are unchanged and remain in full force and effect.

(Signatures follow on next page)

IN WITNESS WHEREOF, the parties hereto have caused this First Amendment to the Agreement to be executed by their respective duly authorized agents as of the date first set forth above.

CITY OF IRVINE

Signed by:
By: 
3342447EB1894B8...
Luis Estevez

Its: Acting Director of Public Works & Sustainability


Signed by:
By: 
1809AA719A264C7...
Oliver C. Chi

Its: City Manager

DUDEK

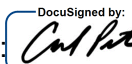
Signed by:
By: 
61A12CB5F28F42F...
Joseph Monaco

Its: CEO/President

Signed by:
By: 
137F17F241E8439...
Helder Guimaraes

Its: CFO

Attest:

DocuSigned by:
By: 
0FCAD01F02E547D...
Carl Petersen

Its: City Clerk

APPROVED AS TO FORM:
RUTAN & TUCKER, LLP

DocuSigned by:
By: 
DABE8686180C4BB...
Jeffrey Melching

Project Approach/Methodology

Project Understanding

The City of Irvine's Urban Forest Master Plan (UFMP) will be a 30-year plan with specific achievable milestones every 3 to 5 years. The City can count on Dudek to design a UFMP with 6 to 10 measurable projects with specific impacts to implement in the short-, medium-, and long-term goals. These steps will collectively achieve the City's long-term goals of canopy cover, reduction of greenhouse gas emissions, and fostering meaningful public engagement.

Each City developing a UFMP is unique and faces different obstacles when progressing towards sustainable urban forest management. Dudek is committed to delivering the final UFMP by June 30, 2026. The information gained throughout the project, necessitated an adjustment in the proposed schedule. The major milestones in the proposed schedule with this contract extension will be met at a minimum.

Task 1: Project Management

Monthly Meetings and Internal Staff Coordination

Dudek will continue to meet monthly (virtually) with City staff to discuss scope of work details, action items, and to clearly communicate progress of the project, ensuring on-time completion of desired deliverables. Monthly meetings will provide an opportunity to discuss community engagement strategies, project findings, and provide insight for developing the UFMP.

These monthly meetings will continue throughout the duration of the project and will be the main communication channel. Additional project communication not addressed during the monthly meetings will occur via email or telephone. Dudek Project Manager Kanami Otani will continuously track work progress, budgets, schedules, and deadlines throughout the project and meet internally with various staff members to coordinate project tasks, as well as keep staff informed on the status of project deliverables.

Task 3: Canopy Cover Analysis

Task 3.1: Establish Tree Canopy Goals

Dudek will work with the City to further refine the city-wide canopy cover goal of 30% in 30-years. Remaining analyses for this task will include tree planting scenarios and metrics required to achieve the canopy cover goal, estimates of costs associated, and developing a long-term planting plan with assigned action items.

Calculations for tree planting scenarios and cost estimates will be conducted for 5- and 10-year goals as well as longer-term goals, indicating how many trees will need to be planted each year to meet canopy and stocking level goals. The sustainability analysis and UFMP process will develop incremental milestone goals for the 3-year to 5-year mark, which considers increasing resiliency of the urban forest and sustainable tree inventory management over time. These incremental goals will support longer 5-, 10-, and 30- year goals of the UFMP, progressing towards sustainable urban forest management.

Task 3.2: Application of Canopy Cover Analysis

The Dudek team of urban foresters and GIS specialists will analyze various map layers of the City to present a clear picture of where to strategically invest resources. Results will be reported as City total canopy coverage, and canopy cover percentages for the following breakdowns: City of Irvine jurisdiction, Commercial/Industrial land uses, Institutional properties (partners), and private residential properties (non-HOAs, HOAs). These breakdowns will help the City discuss the various strategic approaches to enhancing canopy cover within these breakdowns. Strategic areas for tree planting opportunities, such as within private property, school grounds, commercial corridors, parking lots, open spaces, and transportation corridors, will be discussed with City staff and the community to identify opportunities for increasing canopy cover in these targeted areas.

Our graphics staff will take the interpretation of this information and create charts, graphs, and tables that are visually appealing and understandable for inclusion in the final UFMP. This analysis will inform the prioritization of actions and define short- and long-term goals to measure City progress toward its canopy cover goals.

Task 3.3: Recommendations for Strategic Tree Planting

Dudek developed a list of recommended species to accompany the assessment of tree planting opportunities by determining spacing limitations in the ground and air that restrict where trees can be planted, and which species are appropriate for the geographic locations. Spacing restrictions include parkway and median sizes, utility lines, intersections, streetlights, and other components of City infrastructure. Dudek urban foresters will use this information to employ the standard urban forestry principle of “right tree, right place” and further refine where trees can be planted. Dudek will also analyze the inventory data to determine where the City has streets with monocultures tree species. Dudek will use this information to develop strategic plans to create more resilient streetscapes by increasing species diversity over the long-term planning horizon of the project. The strategies will ensure that tree canopy is preserved for current and future residents and maximizes greenhouse gas absorption, economic impact, cultural benefit, and wildfire safety.

Task 4: Status of the Urban Forest

Task 4.2: Environmental Services and Economic Value of Current Inventory

Dudek will use i-Tree software to analyze the tree inventory and to calculate the economic value of the City’s urban forest and the cost benefits of strategic tree and forest investments. The ecosystem services we will examine include carbon sequestration, average pollutant capture, avoided runoff, avoided emissions, and structural and functional value. Dollar amounts will be provided for these benefits, which will be useful for education, long-term planning, and securing tree program funding. We will calculate the City’s return on investment into its urban forest by measuring the current level of investment (ongoing maintenance and management related costs) against what the City receives in ecosystem services and the urban forest’s asset value.

Task 4.3: Assess Carbon Offset from the Project

Utilizing the planting scenarios from Task 3.1, the consultant team will project the carbon offset, economic services, and environmental benefits the future inventory may provide to the City and its community. Similar to Task 4.2, this analysis will include carbon sequestration, average pollutant capture, avoided runoff, avoided emissions, and structural and functional value with dollar amounts. This analysis will show how much environmental benefit and economic value will be gained in the future by projected tree plantings and can be used as a communication tool to advocate for proper funding.

Task 5: Tree Management

Task 5.1: Identify Best Management Practices

This task is in progress. Narrative was not revised.

Development of this section of the UFMP will include a review of City management practices, standards, details, and design practices that relate to trees within the City. Existing management practices will be measured against ISA and American National Standards Institute standards, current climate research, and experience of the consultant team.

Based on this review process, we will document the City's current operations and maintenance procedures involving trees, identify any major challenges within these procedures, along with any challenges posed from local environmental and climate constraints affecting the expansion of the City's tree canopy, provide a summary of our analysis and comparable City standards, make recommendations for altering the maintenance strategies based on best practices, and provide justification for the recommended revisions. Analysis will include comparison against alternative site designs with a goal to protect more trees and maintain canopy cover. Dudek will use the analysis to develop best management practices specific for the City.

Task 5.3: Department Interviews

This task is in progress. Narrative was not revised.

Following the project kickoff meeting, we will meet with representatives from City departments involved in design and/or management activities that may also directly affect tree preservation and green infrastructure design or planning efforts within the City. The intent of the department interviews will be to review the following:

- Existing tree management and protection policies and regulations in comparison to model tree ordinances for potential changes
- Internal protocol and processes for design, tree removal requests, pruning, use of inventory database and GIS, and other maintenance and tree planting activities conducted by the departments
- Financial and human resources dedicated to urban forestry management, plan review, and permitting
- Potential future tree management or planting activities
- City ordinances, regulations, and permits in place that affect tree management, tree protection, tree removal, or tree planting
- Goals, policies, and priorities of each department that relate to tree management, tree protection, or tree planting
- Governance structure and internal efficiencies/deficiencies
- Challenges with current City procedures and protocols
- Urban forest program funding

Following the interviews, we will summarize all relevant information from each department. This information will be an important component in developing the management goals of the UFMP. We will provide meeting minutes summarizing the major discussions from each interview. We expect that up to 8 interviews will be needed for this task.

Task 5.4: Governance Structure, Budget, and Staffing Levels

This task is in progress. Narrative was not revised.

Sustainable management of a City's tree inventory depends on appropriate budget and staffing levels. For this task, Dudek will first identify the current governance structure of City tree management, the departments and staff involved, and their roles in tree management. The review will determine if the current structure is sufficient to support tree management or if improvement is needed in staffing levels, staff training, or efficiencies in inter-departmental communications and implementation of programs and policies.

Following budget and staffing review, we will conduct an analysis of the City's tree program over the past five years to understand how funding has previously been allocated. The analysis will consider costs by annual performance measurements of management actions, such as number of trees planted, cared for, pruned, removed, and other metrics. The analysis will generate a cost for the City to complete each of the listed management tasks. Following this review, Dudek will determine if the current budget and level of staffing will support the implementation of the City's recommended urban forestry goals and provide a recommended budget, staffing needs list, and a list of potential funding sources including state and federal grant funding to meet the needs of the City.

Task 6: Tree Ordinances, Policies, and Planning Document Review

Task 6.1: Review of City's Tree Ordinance and Municipal Code

This task is in progress. Narrative was not revised.

Dudek will focus on a comprehensive review of the City's Urban Forestry Ordinance (Municipal Code), Urban Forestry Guideline Manual, Master Streetscape Plan, City Design Standards, and all policies related to urban forestry. Code review will identify if the current policies and standards meet industry standards and best management practices of sustainable urban forest management. The review will determine if current codes and policies have clearly defined parameters for when a tree is considered protected, methodology in which tree removal requests are considered, analyze if replacement planting requirements are directed towards urban forest goals, and if penalties are sufficient to deter violation of the ordinance.

Dudek will provide a comparative analysis of nearby municipal urban forest programs and ordinances to evaluate how the City's ordinance compares and include a discussion of policies that may be appropriate to modify in future ordinance revisions.

Task 6.2: Review of Existing City Planning Documents

This task is in progress. Narrative was not revised.

Dudek will conduct a comprehensive review of the City's General Plan, Parks Master Plan, and Climate Action and Adaptation Plans. Comprehensive review of City Planning Documents ensures the goals of the UFMP are reflective and cohesive with the goals in other planning documents, ensuring seamless support of City planning goals and easing implementation of the UFMP.

Task 7: Community Engagement

Task 7.2.1: Online Survey

The online survey is complete and a summary of the survey results will be submitted with the UFMP.

Task 7.2.2: Working Group

One (1) working group meetings remains to complete this task.

Urban forest management within any city includes multiple actors across all levels of city staff, elected officials, community organizations, and individual community members, with each actor playing a different role in creating a healthy urban forest. Dudek will assist the City in assembling a working group designed to provide invested community members with a role in creating a management plan that addresses their priorities, issues, and goals. A UFMP that reflects community priorities is more likely to be implemented upon completion and result in achieving goals of the City urban forestry program.

Working group members will be selected based on criteria developed by Dudek and the City, and in partnership with local nonprofit organizations, to verify that a broad range of City staff, elected officials, community-based organizations, and community members are represented. The objectives of the working group meetings will be the following:

- Create a vision statement for the City's urban forest
- Identify priority issues to address in the UFMP
- Develop short-, medium-, and long-term goals
- Identify priority needs to address through public education
- Develop a strategy for public education
- Review the 80% complete version of the draft UFMP document

Task 7.2.3: Collaboration with Community Based Organizations

One (1) CBO Meeting remains to complete this task.

Dudek will work with the City to identify local non-profit and community-based organizations to increase awareness of the UFMP process and bolster participation in the online survey. To do so, Dudek will lead up to two (2) virtual information sessions for the identified partnering organizations. The first meeting will inform interested parties of what a UFMP is, the UFMP process, the important value partnering organizations bring to the project, and how they can support participation in engagement activities. The second meeting will occur during the public comment phase on the draft UFMP to solicit direct input and feedback on the draft UFMP and to ensure that community-based organization partners are represented accurately in the UFMP. The intended result of this task is to develop and foster long-term partnership and community advocacy with key community organizations to help support the implementation of the UFMP by partnering on urban forestry efforts and grant proposals.

Task 8: Strategic Plan

Task 8 narrative was not revised. This task is in progress.

Task 8.1: Strategic Plan Framework

Based on our comprehensive analyses, data synthesis, interviews, and community engagement activities, Dudek will create an actionable strategic plan for the City's urban forest, guiding the City to its vision. This includes considerations for maintaining healthy City-owned trees, expanding canopy cover on private and public land where feasible to support expansion of city-wide canopy coverage. The strategic plan will include the following:

Vision. A statement will be created to establish a vision for the future of the urban forest. This statement will verify that there is a common understanding of the UFMP outcome.

Guiding Principles. Dudek will further refine the vision statement into specific categories based on City, working group, and community member values.

Goals. Dudek will identify the outcomes the City seeks to achieve for each guiding principle. Goals will be specific, measurable, attainable, realistic, and time sensitive.

Actions. Dudek will identify specific tasks that contribute to the goals and that need to be taken to achieve the vision of the UFMP.

The strategic plan will include 6 to 10 projects that can be implemented by the City after completion of the UFMP. These projects will be designed to deliver specific impacts, such as number of trees planted, school greening, or improved shading for commercial corridors. The City will be able to incorporate these projects into future budget planning discussions to ensure funding is available for implementation.

Task 8.2: Implementation Plan

Following the completion of the strategic plan, Dudek, the City, and the working group will develop an implementation plan that assigns responsible parties, identifies costs or funding sources needed, and prioritizes objectives into measurable 3-year to 5-year milestones for the duration of the 30-year plan. The goal of the implementation plan is to verify that the strategic plan is successfully carried out to achieve the City's urban forest long-term vision.

Task 8.3: Monitoring Plan

The UFMP is an adaptive document that should be reviewed periodically to verify that goals and objectives remain realistic and obtainable based on changes to the City's environmental and economic conditions.

Dudek recommends using the Community Assessment and Goal-Setting tool created by Vibrant Cities Lab as a main component of the monitoring plan. The tool provides a clearly defined process to measure and define successful implementation of UFMP goals and objectives. Vibrant Cities Lab is a collaboration of the United States Forest Service, American Forests, and the National Association of Regional Councils, and serves as an online hub of urban forest and tree research, best practices, and planning tools (<http://vibrantcitieslab.com>). The Community Assessment and Goal-Setting Tool is based on research of urban forest sustainability and establishes criteria and indicators to measure urban forest sustainability. The tool asks the user to first assign a numerical rating for select attributes for the current urban forest. The user then selects an additional numerical rating to indicate the desired goal for each urban forest attribute. At the end of the 28-question survey, the user is provided a total score for the current urban forest status and a total score for the goal forest status. The difference between these two numbers is the gap between the current status and the ideally managed urban forest defined by the City. The tool enables the user to continuously monitor measurable outcomes to determine progress toward the completion of goals and objectives.

Task 9: UFMP Development and Presentations

The goal of the final UFMP document is to clearly display the key findings, strategic plan, other pertinent data, and identified, measurable goals to move towards a more sustainably managed urban forest. The final UFMP will be cohesive with the City's General Plan, Parks Master Plan, and Climate Action and Adaptation Plan, and goals of the UFMP will support goals of the various planning documents.

Dudek will create an easy-to-read, visual document the City can use to disseminate the UFMP results over a large audience. The UFMP will include a user-friendly, 30-page executive summary that will visually communicate and

present the UFMP's major findings and recommendations. The remainder of the technical information and graphics will be provided in the body of the UFMP to illustrate important concepts, analysis methods, and supplemental information.

Task 9 narrative was not revised. This task is in progress.

Task 9.1: UFMP Development

Task 9.1.2: Administrative Draft and Public Draft

Dudek will submit an administrative draft to City staff for review. We request that the appropriate City personnel provide comments on the first draft within a 4-week time frame. These edits will be incorporated, visual aids will be added, and the second draft will be made available for public review and comment. Dudek will coordinate with the City to post the second draft on its website and other important media channels. A dedicated email address and set of public comment instructions will be created by Dudek to facilitate receipt and organization of public comments. The open period for public review and comment of the draft of the UFMP will be 30 calendar days. The second draft will be submitted as an electronic copy in Adobe PDF and will include all figures, appendices, and visual aids.

Task 9.1.3: Final Draft

Following completion of the public draft review process, the final UFMP will be developed, incorporating City and public comments. The final copy will be submitted as an electronic copy in Adobe PDF and will include all figures, appendices, and visual aids.

Task 9.2: Presentations to City Council and Planning Commission

Dudek will present at two (2) Planning Commission meetings and one (1) City Council meeting to report on the UFMP process, results of the analysis, and recommendations for the urban forest program. The final presentation intends for the UFMP being adopted by City Council.

Schedule

Table 1 below presents the schedule for completing the tasks described above.

Table 1. Schedule for Urban Forest Master Plan

Tasks	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26
Task 1: Monthly Meetings	Monthly mtgs																
Task 3: Canopy Cover Analysis																	
Task 3.1: Establish Canopy Cover Goals	Canopy Cover Goals																
Task 3.2: Application of Canopy Cover Analysis	Application of Canopy Cover																
Task 3.3: Recommendations for Strategic Tree Planting	Strategic Planting																
Task 4: Status of the Urban Forest																	
Task 4.2: Environmental Services and Economic Value of Current Inventory	Env. and Econ. Value																
Task 4.3: Assess Carbon Offset from the Project	Carbon Offset from Project																
Task 5: Tree Management																	
Task 5.1: Identify Best Management Practices	Identify BMPs																
Task 5.3: Department Interviews	Interviews																
Task 5.4: Governance, Structure, Budget, and Staffing Levels	nce, Structure, and																
Task 6: Tree Ordinances, Policies, and Planning Document Review																	
Task 6.1: Review of City's Tree Ordinance and Municipal Code	Recommendations																
Task 6.2: Review of Existing City Planning Documents	Recommendations																
Task 7: Community Engagement																	
Task 7.2.2: Working Group (2)	WG 3	WG 4															
Task 7.2.3: Collaboration with Community Based Organizations (1)		CBO															
Task 8: Strategic Plan																	
Task 8.1: Strategic Plan Framework	Strategic Plan																
Task 8.2: Implementation Plan	mplementation Plan																
Task 8.3: Monitoring Plan	Monitoring Plan																
Task 9: UFMP Development and Presentations																	
Task 9.1.2: Administrative Draft and Public Draft		Admin/ Public Draft															
Task 9.1.3: Final Draft				Final													
Task 9.2: Presentations to City Council (1) and Planning Commission (2)				Present													