AMENDMENT TO
"AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES"

THIS AMENDMENT TO AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES is made and entered into as of November 14, 2023 by and between the CITY OF IRVINE, a municipal corporation ("City") and, DUDEK, a California corporation ("Consultant"), for the purpose of amending the written "Agreement for Professional Consulting Services" entered into between City and Consultant as of July 01, 2022, City of Irvine contract number 20536 (the "Agreement"). Consultant is included on the City of Irvine Consultant Team List.

1. PART V, BUDGET, is modified to implement a not-to-exceed project contract value of $708,297.00 for the Scope of Work in accordance with EXHIBIT I, attached hereto.

2. Except as set forth in this 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 Amendment to the Agreement to be executed by their respective duly authorized agents as of the date first set forth above.

CITY OF IRVINE

By: DocuSigned by: Oliver C. Chi 7809AA719A2B4C7...

Oliver C. Chi

Its: City Manager

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

Joseph Monaco, AICP

Its: President / CEO

By: DocuSigned by: Oliver C. Chi 7809AA719A2B4C7...

Oliver C. Chi

Its: City Manager

By: DocuSigned by: Helder Guimaraes 137F17F241F8439...

Helder Guimaraes

Its: Chief Financial Officer

Attest:

By: DocuSigned by: 0FCAD91F02E547D...

Carl Petersen

Its: City Clerk

APPROVED AS TO FORM:
RUTAN & TUCKER, LLP

By: DocuSigned by: Jeffrey Melching DABE8686180C4BB...

Jeffrey Melching

Cover Letter

October 18, 2023

Mr. Steve Torelli
City of Irvine
Submitted electronically: Storelli@cityofirvine.org

Subject: Proposal for the Gateway Residential Project CEQA Documentation

Dear Steve Torelli:

Dudek is pleased to be invited to provide a scope and fee based on the Gateway Village Plan as outlined in the Request for Proposals dated September 14, 2023, and the updated scope document sent October 4, 2023, which clarified that a North Irvine Transportation Mitigation (NITM) Comprehensive Traffic Study is required. The project is the development of an approximately 76-acre residential village and adjacent Jeffery Open Space Trail referred to as the "Analysis Area." We understand that either a Specific Plan or a vesting tract map will be prepared. The project will also require a General Plan Amendment and a zone change. It is assumed that the trails, open space north of the residential village, and linkage to the North Irvine Conservancy Open Space are covered in other California Environmental Quality Act (CEQA) documents or will be assessed in a CEQA document by the Irvine Conservancy, and thus, are not included in this scope of work.

The project has the following components:

- Extension of the Jeffery Open Space Trail – 10.5 acres
- Creation of Gateway Park South – 6 acres
- Residential Village with 875 dwelling units – 61 acres
- North Park area – 2.5 acres
- North slope area – 2.2 acres
- Bike trail – 3,650 linear feet

Adjacent to the project area (but not part of the project):

- Irvine Ranch Conservancy Native Seed Farm (existing condition) – 20 acres
- Special use sites (existing lease sites) – Ecology Institute, city support facilities, natural landscape restoration – 10 acres and 12 acres
- Gateway Park North (All American Asphalt site) – small amphitheater, outdoor classrooms, native gardens – 12 acres

We are confident that our successful track record with the City of Irvine (City) coupled with our extensive expertise in CEQA documentation will result in a positive collaboration with your team. Our transportation subconsultant

LSA has worked in the Irvine area for more than 45 years and has conducted hundreds of traffic, access, and parking studies in the City. LSA is extremely familiar with the City's General Plan (including the Circulation Element), Traffic Study Guidelines (including the NITM requirements), Transportation Design Procedures, Irvine Transportation Analysis Model, and the level-of-service results from previously conducted analyses and studies on the performance of intersections and roadway segments citywide.

Dr. Rachel Struglia, PhD, AICP will serve as primary contact and project manager for this contract. We look forward to being part of the team and working with the City on this important project. Feel free to contact Dr. Struglia if you have questions at 949.373.8318 or via email at rstruglia@dudek.com.

Sincerely,

Joseph Monaco, AICP
President/CEO

Rachel Struglia, PhD, AICP
Project Manager

Joseph Monaco is authorized to sign on behalf of Dudek.

Table of Contents

SECTIONS

APPENDICES

Environmental Impact Report Scope of Work

Task 1: Project Initiation

Our scope of work is based on our understanding of the project's anticipated environmental issues, the setting in which the project is planned, and on our experience working in the City of Irvine (City). Dudek will prepare a project environmental impact report (EIR) in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15161 and the City's CEQA Manual, dated April 2020.

Task 1A Project Kickoff

The Dudek project manager will attend one project kickoff meeting with representatives from the City and project team. The purpose of the kickoff meeting is to compile the relevant background data and reports; clearly define the project for the purposes of the environmental analysis; finalize the cumulative projects list with the City; discuss the project schedule and important assumptions for achieving the schedule; identify all anticipated discretionary actions; establish early communication among various project team members and the protocols for ongoing communication; and familiarize the Dudek team with the issues and concerns that the project team determines to be important for analysis in the EIR. Based on the discussions and issues raised during the kickoff meeting, the Dudek project management team will refine the scope of work, schedule, and budget, if necessary.

List of Deliverables

- Attendance at one project kickoff meeting
- Data needs list

Task 1B Notice of Preparation and Public Scoping Meeting

Following the project kickoff meeting, Dudek will draft and circulate a Notice of Preparation (NOP) for the proposed project. The purpose of the NOP is to solicit input from the public and agencies on the scope and content of the forthcoming EIR. Per the City's CEQA Manual (April 2020), the City may forego the initial study if an EIR is clearly required for a project. Therefore, this scope does not include an initial study unless requested by the City, in which case, Dudek will prepare an amendment request. During the 30-day review period for the NOP, Dudek will lead one public scoping meeting in coordination with the City. The date, time, and location of the public scoping meeting will be discussed during the project kickoff meeting and disclosed in the NOP and will occur at or near the middle of the 30-day public review period. During the scoping meeting, Dudek will present an overview of the project, discuss the CEQA review process highlighting each opportunity members of the public will have to review project materials and provide input, and open the meeting to receive public input on the scope of the analysis to be included in the EIR. Dudek assumes that the scoping meeting will be in person, and that Dudek will be responsible for preparing and delivering the presentation during the meeting. Dudek will also take notes on the oral comments received during the meeting. Within 1 week of the scoping meeting, Dudek will provide the City a summary of comments received at the meeting. This task includes up to 8 hours of project manager time to attend staff level and/or public meetings.

List of Deliverables:

- Presentation for scoping meeting
- Attendance at one in-person scoping meeting
- Summary of scoping comments

Task 2: Technical Analyses

Task 2A Aesthetics

Dudek will prepare an aesthetics assessment that documents the existing visual environment (and quality of views) and describes the potential impacts to views and visual character associated with development of the project. The approximately 61-acre Residential Village site near the intersection of Jeffrey Road and Portola Parkway will be a focal point of the evaluation due to its location along a large roadway, current use of the site for agricultural production, and general lack of substantial vertical development.

To gain a better understanding of existing visual character and view quality, Dudek will conduct a single photographic field inventory of the site and surrounding area. Public vantage points from which elements of the project may be viewed as prominent features in the landscape will be visited, and views from these locations will be photodocumented. Observations and photographs from the photographic field inventory will be referenced in the Existing Conditions section of the aesthetics analysis. Views to scenic features in the surrounding area ("scenic vistas"), the proximity of state scenic highways to the project site, and existing sources of daytime and nighttime light and glare in the area will also be described in the Existing Conditions section

The aesthetics analysis will focus on potential impacts to scenic vistas, conflicts with zoning or other regulations governing scenic quality, and impacts to daytime and nighttime views due to new sources of substantial lighting and glare. Since the project site is over 10 miles from the nearest highway included in the State Scenic Highways Program, no impacts to scenic resources with a state scenic highway are anticipated.

Dudek will rely on architectural renderings and visual simulations provided by the architectural design team for the project. It is assumed that visual simulations will be provided from key observation points from public viewpoints, such as Portola Parkway and Jeffrey Road. Dudek will use the architectural renderings and visual simulations as a basis for the visual analysis in the EIR and anticipates that visual simulations can be used in the evaluation of impacts to scenic vistas and conflicts with existing regulations governing scenic quality. Project impacts on daytime and nighttime views will be analyzed and assessed through assumed compliance with relevant City of Irvine Municipal Code standards for light and glare. The potential for the project to generate glare will be informed through review of development plans that identify architectural materials to be used on building exteriors and conceptual lighting plans for recreational elements of the project. Dudek assumes that formal lighting plans or photometric studies will not be prepared for the project.

Task 2B Agricultural Resources

Dudek will identify baseline conditions for agricultural resources within the project area using available information. The California Department of Conservation Farmland Mapping and Monitoring Program data will be used to identify important farmland. Other information sources include California Department of Conservation Williamson Contract data, the Northern Sphere EIR, California Department of Fish and Wildlife easement geographic information system (GIS) data, and U.S. Department of Agriculture Natural Resources Conservation Service crop data. Dudek will describe the regulatory setting, including the Williamson Act and local general plan policies and right to farm ordinances. Dudek will identify potentially significant impacts related to the conversion of agricultural land to urban uses, and present feasible mitigation measures to reduce such impacts.

Task 2C Air Quality Assessment

Air Quality

Dudek will assess the air quality impacts of the project utilizing the significance thresholds in Appendix G of the CEQA Guidelines and the South Coast Air Quality Management District's (SCAQMD) emissions-based thresholds as the basis. After reviewing all available project materials, Dudek will prepare a request for any outstanding data needed to conduct the analysis. If precise information on a particular factor is not available from the City, Dudek will make every effort to quantify these items using the best available information for comparable data sources.

Local and regional climate, meteorology, and topography as they affect the accumulation or dispersal of air pollutants will be presented in the air quality assessment. Current air quality conditions and recent trends in the South Coast Air Basin, where the project is located, will be described on the basis of California Air Resources Board and U.S. Environmental Protection Agency annual air quality monitoring data summaries. Federal, state, and local regulatory agencies responsible for air quality management will be identified, and applicable federal, state, and local air quality policies, regulations, and standards will be summarized.

Dudek will estimate emissions associated with construction of the proposed project using the California Emissions Estimation Model (CalEEMod). The analysis of short-term construction and emissions will be based on scheduling information (e.g., overall construction duration, phasing, and phase timing) and probable construction activities (e.g., construction equipment type and quantity, workers, and haul trucks) developed by the City and/or standardized approaches. For budgetary purposes, six construction model runs are assumed, which may consist of the following: Jeffery Open Space Trail extension, Gateway Park South, Residential Village, Irvine Ranch Conservancy Native Seed Farm, Gateway Park North, and the two Special Use Sites, with the bike trail, North Park area, north slope area, and other smaller improvements incorporated into the appropriate construction modeling scenarios based on timing and/or adjacency. Dudek will then evaluate the significance of the construction emissions based on the SCAQMD significance criteria.

Dudek will also assess the project's potential to cause or contribute to exceedances of ambient air quality standards at sensitive receptors near the project using the SCAQMD's localized significance thresholds (LSTs). For projects with a total site area of 5 acres or less, the assessment may use the simple "lookup table" approach provided by SCAQMD. As it is assumed that the project would disturb less than 5 acres per day, the LST assessment will use the lookup table approach provided by SCAQMD and the construction emission estimates from CalEEMod. If the project's mass grading phase would exceed 5 acres in 1 day, a refined LST analysis using a dispersion model will be required and can be provided under a separate scope and budget.

The project would result in toxic air contaminant emissions, namely diesel particulate matter (DPM), from off-road construction equipment and heavy-duty trucks during construction. As the project is in close proximity to existing sensitive receptors (residential development to the south, southeast, southwest, and west of the project, which are as close as 125 feet), a construction health risk assessment is proposed as discussed separately below. Based on the anticipated phased nature of the project, construction activity may also expose future on-site receptors to toxic air contaminants, which will also be evaluated in the health risk assessment.

CalEEMod will also be used to estimate project-generated operational criteria air pollutant emissions associated with mobile, energy, and area sources. Based on the project description at this time, no off-road equipment or stationary sources of emissions are anticipated for operations. Because the project includes land uses that may not have an exact match in CalEEMod, an appropriate surrogate will be identified, but project-specific information is preferred if available. Dudek will use the project-specific trip generation rates and other available specifics such

as trip length to estimate mobile source emissions. Energy and area source emissions (e.g., natural gas combustion and consumer products) will be estimated using the default values in CalEEMod for the proposed land uses unless project specifics are available. Dudek will estimate criteria air pollutant emissions for one buildout year. No existing or baseline emission estimates are anticipated to be required. Specifically, it is assumed that the existing All American Asphalt plant will be removed and remediated prior to project development and will not be evaluated as part of this EIR. Dudek will then evaluate the significance of the operational emissions based on the SCAQMD significance thresholds and will identify feasible mitigation measures to reduce emissions, if required. If it is anticipated that construction and operational activities would overlap, associated maximum overlapping emissions will be estimated and compared to the SCAQMD operational thresholds consistent with SCAQMD informal guidance.

Dudek will qualitatively evaluate whether traffic associated with the project could lead to potential exposure of sensitive receptors to substantial localized concentrations of air pollutant emissions, specifically carbon monoxide "hot spots." For budgetary purposes, it is assumed that no quantitative carbon monoxide hotspot modeling will be required. In addition, Dudek will qualitatively evaluate health effects of criteria air pollutant emissions. For budgetary purposes, it is assumed that the project would not include stationary sources of toxic air contaminants and that no operational health risk assessment is required. No operational LST analysis is anticipated to be required based on the proposed land uses.

All current Appendix G thresholds will also be evaluated, including the potential for the project to result in other emissions such as odors or to impede attainment of the current SCAQMD air quality management plan. Details of the analysis (e.g., criteria air pollutant emission calculations) will be included in an appendix.

Greenhouse Gas Emissions

The greenhouse gas (GHG) emissions assessment will include a setting and background discussion consisting of a summary of the greenhouse effect and global climate change, potential changes to the global climate system and to California, and emission inventories at the national, state, and local levels. It will also include a summary of the key federal, state, and local regulatory actions and programs to reduce GHG emissions.

Dudek will estimate the GHG emissions associated with construction of the project using CalEEMod, based on the same construction scenario utilized in the air quality analysis. Construction emissions will be amortized and added to the operational emissions. Dudek will estimate project-generated operational GHG emissions, which will include those associated with area sources, mobile sources, energy use (natural gas and electricity), water supply, wastewater, solid waste disposal, and refrigerants. When project details are not available, CalEEMod default values will be used to calculate direct- and indirect-source GHG emissions. Dudek will present the estimated annual operational GHG emissions and amortized construction GHG emissions in metric tons of carbon dioxide equivalent per year in the analysis.

Dudek will assess the significance of the project with respect to the Appendix G thresholds; specifically, whether a project would (1) generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and (2) conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. The City is in the process of developing their climate action and adaptation plan (CAAP) and has completed the draft GHG emissions inventory. While the CAAP may be a qualified plan for GHG emissions reductions under CEQA and allow for individual project tiering or streamlining, that mechanism is not available at this time. As such, we will work with City staff to identify an appropriate threshold approach for evaluating the potential project-generated GHG emissions impacts that does not conflict with the overarching goals of the CAAP.

Dudek will also qualitatively evaluate the project's potential to conflict with other applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions such as state regulations (2030 and 2045 reduction goals identified in Senate Bill (SB) 32 and Assembly Bill (AB) 1279, respectively), California Air Resources Board scoping plans, and the Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategy. Of importance, Dudek will work with the project team to identify the appropriate threshold and approach prior to initiating the analysis.

Energy

The energy analysis will summarize electricity, natural gas, and petroleum energy sources and provide the relevant regulatory framework. Dudek will prepare an energy assessment for the project per Appendix G of the CEQA Guidelines, including whether the project would (1) result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation, and (2) conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The project will be assessed with regard to construction and operational energy consumption of electricity, natural gas, and petroleum, which will be quantified using CalEEMod data from the GHG assessment and/or project specifics. Project elements that would reduce the project's energy demand during construction and operations will be identified in the analysis and quantified as available. Dudek assumes that the applicant or its representatives will provide a list of the project's energy conservation measures prior to initiating air quality and GHG emissions modeling, as the energy analysis will be prepared consistent with the emissions modeling assumptions.

Construction Health Risk Assessment

During construction, the primary toxic air contaminant of concern would be DPM from heavy-duty trucks and any on-site off-road equipment. To evaluate the potential for project construction to expose nearby sensitive receptors and future on-site sensitive receptors to toxic air contaminants that would result in a health risk impact, Dudek will use the American Meteorological Society/U.S. Environmental Protection Agency Regulatory Model (AERMOD), which is required by SCAQMD to conduct dispersion modeling, and the California Air Resources Board's Hot Spots Analysis and Reporting Program Version 2 (HARP2) to calculate the health impacts. The health impact calculations in HARP2 are based on the Office of Environmental Health Hazard Assessment's Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments. The dispersion of DPM and associated health risk impacts on sensitive receptors will be determined using AERMOD, HARP2, local meteorological data obtained from SCAQMD, and the estimated annual average DPM emissions. The maximum cancer risk at the appropriate receptors (e.g., proximate residential receptors) and future on-site receptors will be tabulated. Cancer risk isopleths (i.e., lines of equal cancer risk) will be plotted on figures showing the project site if the maximum cancer risk exceeds the SCAQMD significance threshold of 10 in 1 million. The assessment will also include the estimated chronic (long-term) hazard indices due to non-cancer health effects associated with DPM. The hazard indices will be tabulated at the appropriate locations and plotted on figures similar to that showing estimated cancer risks if they exceed the SCAQMD significance threshold of 1.0. If the health impacts exceed the thresholds of significance, we will suggest appropriate mitigation measures to reduce the health impacts. A summary of the methodology and results will be provided in the air quality section of the EIR, and detailed results will be provided in an appendix.

Task 2D Biological Resources Assessment

Dudek will complete a full biological evaluation of the 76-acre Gateway development area (including Jeffrey Open Space Trail) to support the CEQA document. This scope also includes a constraints-level biological resources assessment of the additional approximately 50-acre off-site components that may be under a separate CEQA

document (i.e., trails and other open space amenities north of the Gateway project). The combined on-site and off-site baseline biological resources assessment would provide vital information to assist in the planning of improvements to ensure avoidance and minimization of impacts to special-status biological resources and to verify compatibility with the open space reserve.

Dudek will conduct a general biological reconnaissance survey to develop a baseline vegetation community/land cover map of the on-site and off-site project area and to serve as the basis for species habitat assessments and on-site project impact analysis. Prior to conducting the reconnaissance-level survey, Dudek will review the available data from the Orange County Central-Coastal Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) and Natural Communities Coalition, U.S. Department of Agriculture soils maps, California Natural Diversity Database, the California Native Plant Society Inventory of Rare and Endangered Plants, U.S. Fish and Wildlife Service occurrence data, and U.S. Fish and Wildlife Service National Wetlands Inventory data in order to identify special-status species and resources that are known to occur or may potentially occur in the vicinity of the project site. The vegetation community/land cover map will be based on the Manual of California Vegetation – 2nd Edition (2008) (alliance-level), with a crosswalk to Gray and Bramlett (1992) classification to conform with the Central-Coastal NCCP/HCP. In addition, the survey will provide a general inventory of plant and wildlife species detected by sight, calls, tracks, scat, or other signs and will inform a determination of the potential for special-status species occurrences, the location of potentially jurisdictional waters and wetlands, and potential wildlife corridors and nursery sites. Vegetation communities and any incidentally observed special-status species will be digitized into a GIS format and included in the on-site and off-site biological resources maps.

Jurisdictional Wetlands Delineation

Dudek will also conduct a delineation of jurisdictional aquatic resources within portions of the on-site project area (i.e., 76-acre Gateway development) proposed for development (i.e., creek crossings for roads) or directly adjacent to development (i.e., to ensure adequate avoidance of jurisdiction boundaries). For purposes of this scope and cost estimate, up to a 5-acre study area is assumed, consisting of Hicks Canyon Wash and existing agricultural ponds in the southwest corner of the site. Dudek will map the regulatory jurisdiction of the California Department of Fish and Wildlife pursuant to Sections 1600–1603 of the California Fish and Game Code; the U.S. Army Corps of Engineers pursuant to Section 404 of the federal Clean Water Act; and waters of the state under the jurisdiction of the Regional Water Quality Control Board pursuant to Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. The jurisdictional wetlands delineation will be conducted in accordance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual (TR Y-87-1), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), and relevant current regional guidance. Hydrology, vegetation, and soils will be examined at potential wetland sites and will be recorded on wetland determination data forms; indicators of potential non-wetland waters will be assessed to determine the presence and location of the ordinary high water mark, which will be recorded using current ordinary high water mark data forms. The extent of jurisdictional waters of the United States/state, including wetlands, as well as California Department of Fish and Wildlife streambeds and associated riparian habitat, collectively termed jurisdictional aquatic resources, will be developed in a GIS layer. The results will be presented in a stand-alone aquatic resources delineation report suitable for submittal to the resource agencies for concurrence and to support potential permit applications that are required for project development activities.

Biological Resources Technical Report

The results of the general biological reconnaissance survey and focused surveys will be presented in a biological resources technical report for the 76-acre Gateway development project (Gateway BRTR). A separate biological constraints report will be prepared for the off-site study area (approximately 50 acres), encompassing potential trails and other open space improvements. Both reports will document the findings of the site reconnaissance and database/literature review. Both reports will include a discussion of the existing conditions within the study area and an evaluation of the potential for special-status plant or wildlife species to occur on or immediately adjacent to the project site. Both reports will also address regulated waters and wetlands, wildlife movement corridors, and the applicability of local policies and ordinances including the Central-Coastal NCCP/HCP. Both reports will include project figures of existing biological conditions, representative photographs of the project area, and appendices including cumulative species lists and focused survey reports.

The Gateway BRTR will include an impact analysis and determination of significance in accordance with thresholds established by the lead agency, as well as recommended mitigation measures to reduce impacts to less than significant, where feasible.

This scope of work does not include any regulatory permitting tasks such as amendment to the NCCP/HCP, incidental take for listed species not covered by the NCCP/HCP, or permits required under the Clean Water Act, Fish and Game Code, or Porter-Cologne Water Quality Act. In addition, a scope of work and cost estimate for potential focused surveys for special-status species are provided in the Other Studies section of this proposal.

Task 2E Cultural Resources Assessment

Baseline Cultural Resources Inventory for CEQA Compliance

The following tasks serve to provide an assessment of impacts to cultural resources in conformance with CEQA regulations and City guidelines and requirements. Dudek understands that the City is lead agency on this project for purposes of CEQA compliance and that no federal nexus has been identified that would require compliance with Section 106 of the National Historic Preservation Act. The specific tasks required to prepare the CEQA-compliant cultural resources assessment are identified below. Any changes to the scope or assumptions provided herein may result in the need for an additional separate scope and fee estimate. The proposed development is limited to the 61-acre Gateway Site and approximately 15-acre Jeffery Open Space Trail extension, comprising approximately 76 acres (project site) as mapped in the Request for Proposals (RFP) exhibit for the proposed project. However, for the purposes of this scope, Dudek will incorporate a desktop cultural resource review of the approximately 126-acre Gateway development area that surrounds the 76-acre site as part of the baseline study for cultural resources to provide an understanding of the archaeological sensitivity within and surrounding the proposed project site. Survey of this expanded area is not included in the present scope of work.

Background Research

Dudek will conduct a records search of the California Historical Resources Information System (CHRIS) database for the approximately 126-acre Gateway development area and a 0.5-mile radius at the South Central Coastal Information Center (SCCIC), which houses cultural resource records for Orange County. The purpose of the records search is to identify any previously recorded cultural resources that may be located within the Gateway development area, which encompasses the proposed project site. In addition to a review of previously prepared site records and reports, the records search will also review historical maps of the project area, ethnographies, the National Register of Historic Places, the California Register of Historical Resources, and the lists of California

State Historical Landmarks and California Points of Historical Interest. Finally, a review of historical maps and aerials will be conducted to better determine the history of land use and disturbance within the Gateway development area and vicinity. Dudek assumes that the direct and indirect costs incurred to conduct the CHRIS records search at the SCCIC will not exceed $1,500 (this does not include labor). Due to limitations and staff shortages incurred as a result of the pandemic, the SCCIC response time for records searches and access to SCCIC data has been delayed. Therefore, it is anticipated that a draft Phase I Cultural Resources Assessment Report will be provided within 10–12 weeks of contract authorization and formal notice to proceed. If the records search results are provided earlier than expected, this timeline could potentially be minimized.

Native American Coordination

Sacred Lands File Search

Upon written notice to proceed, Dudek will contact the California Native American Heritage Commission (NAHC) for a review of their Sacred Lands File. This task is independent of efforts in compliance with AB 52 and SB 18, government-to-government processes between the CEQA lead agency and California Native American Tribes.

Fieldwork

As part of the assessment of impacts to cultural resources for the proposed project, a pedestrian survey will be conducted following archival research. The intent of the pedestrian survey is to identify cultural resources that may be present within the area of the proposed development. With this goal in mind, a survey of the 126-acre Gateway development area is not necessary. Instead, the pedestrian survey will focus on the 76-acre proposed project site. The survey will consist of an intensive-level pedestrian survey by Dudek archaeologist/s for all accessible portions of the proposed project site with exposed ground surface utilizing transects spaced no more than 15 meters (approximately 50 feet) apart, where feasible. Other developed portions of the proposed project site will be spot-checked. At least one cross-trained cultural specialist will be present during survey with the intent of identifying any paleontological resources should they be present. Should resources be identified, they will be mapped using iPad technology with ESRI Collector software and Avenza PDF Maps software for future assessment purposes. Dudek assumes that no newly or previously discovered archaeological resources will be encountered requiring formal recordation. No artifacts, samples, or specimens will be collected during the survey. Should any resources be encountered during the survey that require recordation or collecting, Dudek will work with you to determine an appropriate scope of work and associated costs. The survey is anticipated to take two archaeologists no more than three 8-hour days, including travel. In the event that additional, small areas requiring survey are identified, we will be glad to work with you to assess if this can be completed within the scoped 3 days of survey. This information will be required prior to initiation of the survey in order to avoid multiple mobilizations. Additional survey days would require an adjusted scope and cost.

For the purposes of this scope and cost, Dudek assumes that Native American monitors will not be required during the survey. If it is determined that a Native American monitor is required to be present during the pedestrian survey, Dudek will provide an augment to this scope of work and associated costs, accordingly. Dudek further assumes that no built environment resources more than 45 years old will be identified that will require recordation and evaluation. Additionally, it is assumed that arrangements will be made by the City to ensure all areas of the proposed project site will be accessible and safe to survey. If the technicians conducting the survey are not able to access an area with exposed ground due to locked gates or unsafe conditions that are able to be remedied, another survey may be required at an additional cost.

Report

Dudek will prepare a cultural resources inventory letter report that will summarize the results of the CHRIS records search, California State Native American Heritage Commission Sacred Lands File search, background research, pedestrian survey, a brief project description, a review of the geotechnical report prepared for the proposed project site (if available) and any management recommendations pursuant to applicable state and local regulations. The report will provide an assessment of the potential for the proposed project site to contain cultural resources. Dudek assumes no more than one draft for review and revisions, if necessary, and one final version of the cultural resources inventory report will be required (electronic copies).

CEQA Document Sections

The results of the cultural resources investigative tasks listed above will be summarized in the following CEQA document sections, as appropriate.

Cultural Resources

Dudek will prepare a CEQA document Cultural Resources section that will summarize the results of the CHRIS records search and background research. The section will discuss the proposed project's potential to impact cultural resources in conformance with CEQA and will provide mitigation measures and recommendations as appropriate.

Tribal Cultural Resources

Dudek will prepare a CEQA document Tribal Cultural Resources section that will summarize the results of the CHRIS records search, background and ethnographic research, and all of the City's AB 52 and SB 18 efforts for the proposed project, including notification and consultation with applicable tribes. In addition, the section will provide a brief analysis of potential project-related impacts to Tribal Cultural Resources in conformance with CEQA and will provide mitigation measures and recommendations as appropriate. A full communication log and associated documentation will be provided by the City as part of the tribal coordination efforts conducted pursuant to AB 52 and SB 18 for review and integration into the Tribal Cultural Resources section of the CEQA document.

OPTIONAL TASK: Native American Outreach/Consultation Support

Assembly Bill 52: The proposed project is subject to compliance with AB 52, which requires lead agencies to provide tribes who have requested notification with early notice of the project and, if requested, consultation to inform the CEQA process with respect to Tribal Cultural Resources. While AB 52 is a government-to-government process between the CEQA lead agency and California Native American tribes, Dudek can assist the lead agency, in this case the City, with their Native American consultation obligations pursuant to AB 52. Assistance with these efforts would be accomplished by the following: (1) contact the California State Native American Heritage Commission to request a review of their Sacred Lands File and obtain a list of tribal representatives with potential knowledge of cultural resources within the project area, and (2) write notification letters subject to the City's approval and placement on City letterhead for dissemination by the City's staff via email and U.S. Postal Service certified mail to each of the eligible tribal representatives pursuant to AB 52. The letter will include but may not be limited to the following: location of proposed project site and associated figure(s), a summary of the proposed project and objectives including extent of ground-disturbing activities (if known), agency contact information, and a clear statement requesting all communication within 30 days of receipt of notification under AB 52.

Senate Bill 18: The proposed project involves an amendment to the General Plan and is therefore subject to compliance with SB 18. Much like AB 52, SB 18 requires lead agencies to provide tribes who are listed with and

provided by the Native American Heritage Commission with early notice of the project and, if requested, consultation to inform the CEQA process with respect to Tribal Cultural Resources, with a 90-day period to respond and request consultation from the date on which they receive notification. If SB 18 is triggered and support with tasks associated with SB 18 is desired by the City, Dudek can assist the City with their Native American consultation obligations pursuant to SB 18 with the same efforts outlined under the services outlined above for AB 52.

It is assumed that AB 52 and SB 18 formal consultation or other tribal outreach, if required, will be conducted by the City and no attendance of Dudek staff to virtual or in-person meetings will be required. If it is determined that support outside of the estimated scope and cost is required or desired to assist in the City's tribal consultation process pertaining to this proposed project, Dudek will provide an augment to this scope of work and associated costs, accordingly.

Geology, Soils, and Paleontology

Based on maps available from the California Geological Survey, no Alquist-Priolo fault zones are located in the vicinity of the project sites. The primary area of proposed development (i.e., the Residential Village) is located at the mouth of Hicks Canyon, which is underlain by alluvial sediments that are potentially liquefiable in the event of a strong earthquake.

The geology and soils environmental setting will be prepared using any site-specific geotechnical reports and publicly available information, including the California Geological Survey, U.S. Geological Survey, U.S. Department of Agriculture, and City of Irvine General Plan (Seismic Element and Conservation and Open Space Element), and impacts will be evaluated with respect to construction and operation, based on the most current version of Appendix G of the CEQA Guidelines. Construction impacts are typically short-term, erosion related, and less than significant with implementation of the Construction General Permit (for projects with ground disturbance greater than 1.0 acre), which includes implementation of a stormwater pollution prevention plan and associated best management practices. Long-term operational impacts would be primarily related to structural stability in relation to faulting, seismicity, and associated ground failure following construction. It is assumed that construction would be completed in accordance with the 2022 California Building Code and City of Irvine Building and Safety requirements. Impacts would only be considered significant in the event that project construction and operation would exacerbate the potential for geologic hazards to occur.

As per CEQA and the Society of Vertebrate Paleontology mitigation guidelines, Dudek's qualified Orange County paleontologists will complete a paleontological resources desktop review and inventory, which will include paleontological records searches through the Natural History Museum of Los Angeles County and the Cooper Center in Santa Ana (Orange County's official fossil repository), geological map review, paleontological and geological literature review, and an intensive paleontological survey of the proposed project site. One of the surveyors conducting the archaeological survey will be dual trained in archaeological and paleontological surveying techniques; thus, no additional costs for the paleontological survey are necessary, other than survey coordination by Dudek's paleontological team and creation of georeferenced geological maps by the Dudek GIS team. The desktop analysis and records search results will provide information necessary to determine the paleontological sensitivity of the proposed project site. Dudek will prepare a paleontological resources technical memorandum to support the EIR that will include all necessary information, including the paleontological survey, map, and literature review results, to provide recommendations for future management considerations or treatment.

Task 2F Hazards and Hazardous Materials

Peer Review of Phase I ESA and Phase II ESA

In response to item 2E of the RFP, Dudek hazardous materials specialists will conduct a peer review of the Phase I Environmental Site Assessment (ESA) and Phase II ESA conducted by a third party for the project site. The review and findings will be summarized in a memo report. The report will include the following:

A. A summary of the Phase I ESA and Phase II ESA
B. Assessment of accuracy and completeness of the Phase I ESA as compared to ASTM E1527-21 or E2247-16, the Phase II ESA as compared to ASTM E1903-19, and both documents as compared to CEQA Appendix G Checklist for Hazards and Hazardous Materials
C. Evaluation of potential impacts
D. Identification and discussion of data gaps, if any
E. Determination as to adequacy of findings and recommendations

The peer review for the Phase I ESA and Phase II ESA will be conducted by an environmental professional as defined in ASTM 1527-21 and Section 312.10 of Code of Federal Regulations Title 40 and a licensed professional engineer or professional geologist/hydrogeologist.

Hazards and Hazardous Materials for the EIR

In response to item 2E of the RFP, Dudek hazardous materials specialists will evaluate impacts due to current and past use/storage of hazardous substances and potential impacts on sensitive receptors and public safety plans in accordance with CEQA. Impacts shall be evaluated with regard to the construction and operation components of the project, including proposed use/handling of hazardous materials/wastes. Potential environmental concerns will be identified and mitigation recommended, as necessary. The hazards and hazardous materials assessment for the EIR will include:

A. Review of federal, state, and local regulatory agency records per Government Code Section 65962.5 for sites within and adjacent to the project sites, including the Regional Water Quality Control Board's GeoTracker website, Department of Toxic Substance Control's EnviroStor website, and California Environmental Protection Agency's Regulated Site Portal
B. Incorporation of findings of Phase I ESA and Phase II ESA
C. Review of other available ESA/investigation/remediation reports and relevant regulatory documents for the project site and adjacent or nearby sites that would potentially impact the project site
D. Review of the National Pipeline Mapping System for hazardous material pipelines
E. Review of CalGEM for oil and gas wells
F. Evaluation of local safety plans, emergency response plans, and wildland fire zones
G. Evaluation of potential impacts to nearby airports
H. Evaluation of potential impacts to nearby school sites

Impacts will be evaluated with regard to the construction and operations components of the proposed project, including proposed use/handling of hazardous materials/wastes. Mitigation measures will be proposed based on potential impacts due to hazards and hazardous materials and the findings of the Phase I ESA and Phase II ESA, as applicable.

Task 2G Noise

As part of the project's EIR, Dudek will conduct a noise study of the proposed project. The analysis will address potential noise and vibration impacts from construction and operation of the project at adjacent noise-sensitive uses. Residential land uses are located to the south and west of the proposed project site. These land uses could experience significant noise increases resulting from construction noise, particularly from the Residential Village component of the project. Additionally, traffic generated by the various project components could result in increased traffic noise at noise-sensitive receivers along nearby arterial roadways. This scope of work assumes that the existing All American Asphalt plant (currently located on site) will have been removed prior to project commencement and is not a part of this project analysis.

A field noise study will be conducted to measure existing on- and off-site ambient noise conditions. Sound-level data will be collected over 10- to 15-minute periods at up to six on-site and nearby noise-sensitive land use locations, and 24-hour noise measurements will be conducted at up to two locations. Potential impacts from excavation and grading, as well as construction noise and vibration at nearby noise-sensitive land uses, will be evaluated based on construction equipment data to be provided by the project applicant or from typical construction activities associated with similar construction projects and noise modeling methods developed by the Federal Highway Administration. Vibration during construction will also be assessed using methodology and guidance developed by the Federal Transit Administration. Long-term (operational) noise effects from traffic on adjacent arterial roadways will be evaluated using the project's traffic study and the Federal Highway Administration's Traffic Noise Model version 2.5.

The significance of noise impacts will be assessed based on the relevant City, state, and federal thresholds. If significant noise impacts are identified, mitigation measures to reduce impacts to a less-than-significant level (where feasible) will be recommended. The regulatory background and noise environment, methodology, results of the noise analysis, findings of potential effects, and mitigation measures will be detailed in a technical noise report and summarized in the noise section of the project's EIR.

Task 2H Transportation

Dudek is partnering with LSA for the transportation analysis. LSA will be responsible for preparing a traffic study to determine the potential traffic effects from the proposed project under interim-year (5-year horizon), long-range (20-year horizon), and buildout (20+ years out) conditions. The project design, including access and circulation, is subject to the findings of the traffic study.

The traffic study will be developed in accordance with the applicable sections of the City's Traffic Study Guidelines (March 2023) and Transportation Design Procedures (TDPs) (February 2007) and consistent with the project description provided in the RFP. A comprehensive NITM traffic study is required per Council Ordinance No. 03-61.

The following presents the detailed tasks for Task 2H.

Scoping Agreement

LSA will schedule a pre-application conference with City transportation staff to discuss the project and the requirements of the traffic study. LSA will request conceptual site plan(s) for the proposed project that indicate existing and potential building locations, access points, internal drive aisles, and parking configurations. For purposes of this scope and budget, Alternative Five (as provided in the RFP) will constitute the preliminary site plan. This alternative shows one access driveway on Portola Parkway and three access driveways on Jeffrey Road.

Subsequent to the pre-application conference, LSA will submit a scope of work that is consistent with the City's Traffic Study Guidelines to City staff for review. A project site plan will be included as part of the scope of work, as will a preliminary analysis of project trip generation, distribution, and assignment. The scope of work will be submitted to City staff for review within 2 weeks of notice to proceed.

LSA will work with City staff to obtain approval of the scope of work prior to proceeding with the transportation analysis. We anticipate that up to two revisions to the scope of work will need to be prepared to respond to City comments. During this process, LSA will request any available traffic count data and will confirm the cumulative development projects in the vicinity of the project study area (if necessary).

Existing and Future Roadway Network

LSA will document conditions of the surrounding roadway network, including speed limits, number of travel lanes, traffic signal locations, intersection configurations, and non-motorized and transit facilities in the project vicinity. Vehicular and pedestrian traffic control, channelization, and other relevant characteristics and factors will also be documented at the study area intersections.

Existing Traffic Operations

The study area (intersections and roadway segments) will be developed in consultation with City staff and consistent with the NITM Program Nexus Study (April 30, 2003). LSA will request traffic count data for the arterial study area intersections and roadway segments from the City. It should be noted that the approved Traffic Analysis of Great Park Neighborhoods District 2 VTPM 2021-204 & VTPM 2022-163 and District 3 VTPM 2021-201 project (Urban Crossroads 2023) includes traffic counts for the NITM study area that were conducted in 2022. LSA will discuss the use of this data with City staff.

If existing traffic counts are unavailable at the study area locations, LSA will coordinate with an independent count firm (Counts Unlimited) to collect new a.m. and p.m. peak-period traffic counts at the study area intersections when schools are in session. Traffic counts will not be conducted during the week of any holidays. All traffic counts will (1) be collected according to standard traffic engineering requirements; (2) include surveys of Tuesday, Wednesday, or Thursday; and (3) be conducted between 7:00 a.m. and 9:00 a.m. for the a.m. peak hour and between 4:00 p.m. and 6:00 p.m. for the p.m. peak hour. The highest 1-hour period within each 2-hour count period is considered the peak hour of commute traffic. For purposes of this scope and budget, the cost to collect any new traffic count data is not included. LSA will submit a budget amendment should new data collection be required.

The a.m. and p.m. peak-hour intersection level of service (LOS) analysis at signalized study area intersections will be conducted using intersection capacity utilization methodology based on the Irvine Transportation Analysis Model TransCad (ITAM TC), and unsignalized study area intersections will be conducted using the Highway Capacity Manual (HCM) methodology. The HCM Method will also be used for freeway ramp intersection LOS. Volume-to-capacity (V/C) will be identified for the NITM study area roadway segments, freeway mainline, and ramp locations.

Pedestrian and bicycle facilities will be documented for all study area intersections. Sight distance at access points and proximity of access points to other existing drives or intersections for pedestrians and bicyclists will be evaluated.

Project Trip Generation, Distribution, and Assignment

Weekday daily, a.m. peak-hour, and p.m. peak-hour trip generation will be calculated using trip rates from the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition (2021). The project trip distribution will be based on the ITAM TC model runs (select zone assignments) for the building condition.

Traffic Study Scenarios

LSA will determine the existing operations of the study area intersections and roadway segments and analyze the traffic effects of the proposed project on the study area intersections for interim-year, long-range, and buildout horizons for approved conditions. The following analysis scenarios will be required:

- Existing Conditions
- Interim Year (5-Year Horizon), No Project, and With Project Scenarios (Approved): These scenarios will evaluate forecasted traffic volumes 5 years out based on the ITAM TC short-term conditions. The With Project scenario will evaluate traffic volumes based on project elements expected to be in place within the next 5 years.
- Long-Range (20 Years Out), No Project, and With Project Scenarios (Approved): These scenarios will evaluate forecasted traffic volumes based on the ITAM TC long-range conditions. The With Project scenario will evaluate traffic volumes based on project elements expected to be in place in 20 years.
- Buildout of the City (20+ Years Out), No Project, and with Project Scenarios (Approved): These scenarios will evaluate forecasted traffic volumes based on the ITAM TC buildout conditions, considering adopted General Plan land uses and the Master Plan of Arterial Highways. The With Project scenario will evaluate traffic volumes based on project elements expected to be in place in 20 years.

LSA will request that the City provide the latest baseline ITAM TC files for the interim-year, long-range, and buildout scenarios for use in the analysis. LSA will prepare the No Project and With Project ITAM TC model runs for the project and post-process the data for purposes of the traffic analysis.

Per the agreement between the Cities of Lake Forest and Irvine, the project trip difference identified from ITAM TC will be applied to Lake Forest intersections based on the Lake Forest Transportation Model baseline traffic volumes.

Project Impact Analysis and Mitigation Improvements

LOS at the study area intersections, roadway segments, freeway mainline, and ramp locations will be calculated in the No Project and With Project conditions for all scenarios. The With Project LOS will be compared to the No Project LOS to determine project LOS impacts based on the City's LOS thresholds used for comprehensive NITM traffic studies.

Physical and/or operational improvements will be identified to reduce or offset LOS impacts that may result in the interim-year, long-range, and buildout scenarios.

If the analysis identifies a direct project LOS impact at a location where there are no proposed NITM improvements, the required improvement(s) will be determined to mitigate the impact. However, if the project is adding to an existing deficiency, the fair share responsibility of the required improvement(s) to mitigate the LOS impact will be determined. The fair share responsibility will be determined consistent with the NITM procedures.

Access Analysis

An access analysis will be prepared consistent with the City's TDPs for evaluating all proposed driveways with development of the proposed project. LSA will review project volume forecasts at each access location and determine the adequacy of the interface with the arterial street system using the City's TDPs.

The project peak-hour trips (ITE trip generation) will be assigned in and out of the project access driveways. Trip distribution and driveway allocation will be determined using the distribution patterns from the most recent version of the ITAM TC. An exhibit will be provided that shows the existing Without Project and Existing Plus Project turning volumes at the access driveways to the project site. An exhibit will also be provided to depict the project driveways and any adjacent and opposing driveways. The exhibits will be drawn roughly to scale, with the distances between driveways and intersections dimensioned. The adjacent and opposing driveways to the project site will be included as part of the access analysis.

The access analysis will address specific design requirements of the City based on the proposed access plan and the project trip assignment. This analysis is to verify that the project will meet or exceed the requirements within the City's TDPs, which are anticipated to include:

- **TDP-1:** Turn-lane pocket lengths
- **TDP-3:** Left-turn in/out access
- **TDP-4:** Right-turn lanes at uncontrolled driveways
- **TDP-10:** Distance between driveways and intersections
- **TDP-14:** Driveway lengths
- **TDP-15:** Gate stacking analysis (if applicable)

A summary of the proposed project and results of the access analysis will be prepared. Based upon these results, recommendations will be presented for the design of the project access driveways and interface with adjacent streets. These recommendations will be consistent with the City's TDPs. For purposes of this scope and budget, the preparation of a deviation request for any specific design criteria not met is not included. LSA will work with the applicant to recommend physical changes in order to meet the TDPs. If a deviation request is required, a budget amendment will be submitted.

Pedestrian and Bicycle Access Analysis

A pedestrian and bicycle access analysis will evaluate pedestrian and bicycle connections and circulation within the study area. The pedestrian and bicycle access analysis will include:

- Identification of existing and proposed pedestrian paths and bicycle facilities
- Recommendations regarding pedestrian and bicycle enhancements to improve pedestrian and bicycle access and circulation
- Discussion of how the relevant policies of General Plan Objectives B-3 (Pedestrian Circulation) and B-4 (Bicycle Circulation) will be met with implementation of the proposed project

Vehicle Miles Traveled Analysis

LSA will conduct a vehicle miles traveled (VMT) analysis for the proposed project. SB 743 required changes to CEQA regulations, introducing VMT as the new metric for determining project traffic impacts (in lieu of LOS). The

Irvine City Council adopted the City's new Traffic Study Guidelines in June 2020 and the revised Traffic Study Guidelines in March 2023.

LSA will review the project to determine whether it is screened out from a VMT analysis. If not, LSA will calculate the project's VMT based on the ITAM TC. The project VMT will be compared to the regional VMT to determine potential CEQA impacts. LSA will communicate the results of the VMT analysis immediately in case mitigation measures would be required. This scope of services does not include the cost to conduct a detailed evaluation of potential mitigation measures. LSA will submit a budget amendment should a more detailed VMT mitigation analysis be required by City staff. The results of the VMT analysis will be incorporated into the traffic study.

Documentation of Analysis and Findings

A draft traffic study will be prepared documenting all analyses, findings, and conclusions for City staff review. Up to two revisions of the traffic study are included in this scope and budget.

Meetings

This proposal includes up to 8 hours of meeting time for LSA's staff to prepare for and attend client, City staff, and/or public hearings.

Task 2I Other Studies

There may be other studies required depending upon changes in regulations and development of the project description. These studies are identified below.

Fuel Modification Plan

Orange County Fire Authority requires fuel modification plans for new projects within fire hazard severity zones and wildland urban interface settings. Dudek can prepare conceptual and precise fuel modification plans for the project meeting Orange County Fire Authority requirements, if necessary. If fuel modification zones cannot achieve the baseline width of 170 feet, Dudek will provide an alternative materials and methods letter along with necessary technical justifications.

Wildfire Evacuation Plan

Based on 2022 California Attorney General's Office guidance, projects within wildland urban interfaces and/or fire hazard severity zones are recommended to prepare wildfire evacuation plans. Dudek can prepare a wildfire evacuation plan for the project that incorporates evacuation modeling to determine if the project would represent an impact on evacuations of existing populations. The evacuation plan provides a comprehensive analysis, conclusions, and recommendations that will inform the environmental analysis and EIR Wildfire section.

Biological Focused Species Surveys

At this stage, the type and extent of focused biological surveys can only be estimated. A final focused survey plan would be developed following completion of the baseline biological resource mapping and consultation with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife, as well as review of comments from an NOP. For purposes of this cost estimate, the following focused surveys (each completed according to currently accepted protocols) are assumed to be required within suitable habitat within and directly adjacent to the 76-acre

Gateway development area. Assumptions regarding the general acreage of suitable habitat for each survey is included below.

- Spring, summer, and fall rare plant surveys – 10 acres
- California gnatcatcher (*Polioptila californica californica*) – 5 acres
- Burrowing owl (*Athene cunicularia*) – 70 acres
- Least Bell's vireo (*Vireo bellii pusillus*) – 5 acres
- Western spadefoot toad (*Spea hammondii*) – 5 acres
- Special-status bats – 70 acres
- Crotch bumblebee (*Bombus crotchii*) – 70 acres

Task 3: Preparation of the Administrative Draft EIR

Dudek will use input from the scoping process to prepare the Administrative Draft of the EIR. The Administrative Draft will be prepared in conformance with the criteria, standards, and provisions of CEQA, the California Public Resources Code Section 21000 et seq., and the state CEQA Guidelines 15161. The Administrative Draft EIR will include all project plans, maps, renderings, technical reports, and any other data obtained or used in preparation of the Administrative Draft EIR. Dudek will provide an electronic version in both Word and PDF. Our scope includes two rounds of review and revision to the Administrative Draft EIR. Following each round of review, Dudek will revise accordingly and then resubmit for review, and will revise accordingly.

The Administrative Draft of the EIR will include the following sections:

Table of Contents

The table of contents will contain a list of EIR contents, including text discussions and lists of tables and exhibits. It will also include a list of appendices that will be attached to the EIR.

Executive Summary

Pursuant to Section 15123 of the CEQA Guidelines, the summary will contain an overview of the proposed project including a list of discretionary actions that will be required. The summary will include a summary of impacts and mitigation measures, known areas of controversy including issues raised by agencies and the public during the NOP period, and a summary of alternatives to the proposed project.

Section 1. Introduction

The Introduction section of the EIR will define the purpose, scope, and legislative authority of the EIR, CEQA requirements, and other pertinent environmental rules and regulations. The Introduction will explain the structure and required contents of the EIR and its relationship to other potential responsible or trustee agencies. This section will also describe the type of EIR and level of environmental review envisioned for this document. An overview of the EIR's format, content, and processing requirements will also be provided in this introductory section. Finally, a list of all documents provided by reference will be provided.

Section 2. Project Description

This section will describe the location of the project within the regional and local context. Per CEQA Guidelines Section 15124, the project description also includes a statement of objectives and a general description of the

project's technical, economic, and environmental characteristics. The project description also includes a discussion of the intended uses of the EIR and a list of permits and approvals required to implement the project.

Section 3. Environmental Impact Analysis

The Draft EIR will briefly discuss all environmental topics in the CEQA Checklist in Appendix G of the CEQA Guidelines. Each environmental impact section will be set up with the following sections.

- Environmental Setting
- Relevant Plans, Policies, and Ordinances
- Thresholds of Significance
- Methodology
- Impact Analysis
- Mitigation Measures
- Significance After Mitigation
- Cumulative Impacts
- References

Section 4. Alternatives to the Proposed Project

In order to accurately define alternatives, Dudek will work with the project team to clearly articulate project objectives. The EIR can then most effectively assess alternatives in light of CEQA's mandate to reduce significant project-related impacts while meeting the project's basic objectives. Dudek proposes a two-tiered approach to the alternatives analysis, which is to (1) describe the alternatives screening process, and (2) describe and analyze those alternatives selected for detailed study. This will allow the EIR to demonstrate the consideration given to a sufficiently broad range of alternatives.

The alternatives screening process will provide an opportunity for the EIR to describe the process used to identify alternatives. The section will describe a range of alternatives initially considered, including their ability to meet screening criteria. Alternatives not carried forward for detailed analysis will be identified, and the reason for rejection of these alternatives will be specified.

For those alternatives described in detail, the EIR will qualitatively address the anticipated environmental impacts, focusing on the environmental issue areas fully analyzed in the body of the EIR. This scope of work assumes two project alternatives in addition to the No Project Alternative.

Section 5. Other CEQA Considerations

The EIR will also discuss all significant unavoidable adverse impacts. The EIR will discuss any potential growth-inducing and irreversible impacts of the project. Potential sources of growth inducement and their corresponding impacts, such as removal of obstacles to growth, will be qualitatively analyzed to the extent that they are applicable.

Section 6. List of Preparers

This section will include references, acronyms and abbreviations, and the preparers of the EIR.

Appendices

The Draft EIR Appendices will include the NOP, letters in response to the NOP, and the technical reports and memoranda supporting the environmental analysis and conclusions within the EIR.

List of Deliverables

- Administrative Draft EIR No. 1
- Revised Administrative Draft EIR No. 2

Task 4: Public Draft EIR

Dudek will prepare a Public Draft of the EIR for a 45-day public review period that incorporates all of the comments on the Administrative Draft EIR and Revised Administrative Draft EIR. Dudek will prepare and distribute up to 10 electronic copies of the Draft EIR on CD or flash drive; one electronic copy in Word format; and one electronic copy in PDF format. Dudek will electronically post the project EIR to the State Clearinghouse on behalf of the City. As appropriate, to save paper and other resources, appendices will be provided on CD or flash drive when hard copies of the EIR are printed.

Dudek will also be responsible for preparation of the Notice of Completion (NOC) for the State Clearinghouse and the Notice of Availability (NOA), as well as any applicable filing fees. Dudek will distribute the NOC along with the Draft EIR to the State Clearinghouse and responsible agencies, trustee agencies, and any other interested parties pursuant to the City's mailing list. It is assumed that the City would be responsible for distribution of the NOA to area property owners, local organizations, and departments within the City (some of which will also receive a copy of the Draft EIR), as well as publication of the NOC or NOA in a local newspaper and on the City's website. Dudek would be responsible for transmittal of the NOA to the Orange County Clerk, along with applicable filing fees, which are $50.

List of Deliverables:

- Public Draft EIR (one bound copy with appendices on CDs or flash drives, a web-ready digital file, and Word documents of all EIR sections and appendices for City use)
- Draft and Final NOC
- Draft and Final NOA
- Electronic posting to State Clearinghouse
- Posting of NOA with the county clerk

Task 5: Final EIR and Mitigation Monitoring and Reporting Program

The Response to Comments volume of the Final EIR will include all comments received, responses to those comments, and standard introductory material. The mitigation monitoring and reporting program (MMRP) will be provided separately but prepared concurrently with the Final EIR. All comments will be numbered (to indicate comment letter and comment number), and the responses to those comments will be similarly numbered to allow easy correlation. In addition, where the text of the Draft EIR must be revised, the text will be isolated as text changes in the Response to Comments volume, indicating deleted text by strikeout and inserted text by double underline. The text of the Draft EIR will not be revised. The Final EIR will collectively consist of the Draft EIR, the Response to Comments document, and the technical appendices.

It is assumed that the Final EIR would be provided at least 10 days prior to consideration for certification by the City to any commenting public agency and any member of the public who has requested the document. Further,

the MMRP will be designed so that it is compliant with all adopted mitigation measures during project implementation. The MMRP will be in table format and will specify project-specific mitigation measures and standard conditions of approval that are applicable to the project. Mitigation timing and responsible parties will also be identified. The objective of the MMRP is to verify that studies are compliant with Public Resources Code Section 21081.6, as mandated by AB 3180, which requires that a lead agency adopt an MMRP at the time an EIR is certified. All mitigation measures included in the Draft EIR will be incorporated into the MMRP.

An estimated budget has been prepared for the Responses to Comments effort based on receiving 50 individual comments (note that one comment letter can contain multiple individual, discrete comments) on the Draft EIR. While the actual scope and extent of public comments (in either written or oral format) cannot be definitively determined at this time, we have tried to provide a conservative, yet realistic, estimate of the scope of work that would be required for this project.

A digital copy of the Administrative Final EIR will be provided to the City for review and comment (two rounds of review). Once the City has provided their comments/recommendations, Dudek will finalize the Final EIR and MMRP for public review. Upon final signoff by the City, five bound copies and one CD or flash drive copy of the Final EIR and MMRP will be provided. This scope assumes providing only the Responses to Comments volume and does not include reprinting the complete circulated Public Draft EIR.

List of Deliverables:

- One digital copy of the Administrative Final EIR in Word and PDF formats for review
- One revised copy of the Administrative Final EIR in Word and PDF format
- One bound copy and one CD or flash drive copy of the Final EIR

Task 6: EIR Certification Support

Task 6A Findings of Fact and Statement of Overriding Considerations

Dudek will prepare draft Findings of Fact for each significant effect identified in the Final EIR and prepare a Statement of Overriding Considerations if unavoidable significant impacts are identified. As required by the CEQA Guidelines, one of three findings must be made for each significant effect and must be supported by substantial evidence in the record. The Statement of Overriding Considerations will rely on input from the project team regarding the benefits of the project. Dudek will consult with the project team to review and finalize the findings and statement of overriding considerations for the City's ultimate adoption. Both the Findings of Fact and Statement of Overriding Considerations will be prepared and submitted electronically to the City for simultaneous review. Upon receipt of review comments, both documents will be finalized and submitted again to the City electronically for attachment to the Staff Report to support EIR certification.

List of Deliverables:

- Administrative Draft Findings of Fact and Statement of Overriding Considerations (in Word and PDF)
- Final Findings of Fact and Statement of Overriding Considerations (in Word and PDF)

Task 6B Public Hearing Attendance

Dudek's project manager and up to two additional Dudek team members will attend a total of four public hearings —two hearings before the planning commission and two hearings before the city council. During these hearings, Dudek team members will be available to support City staff with presentations about the findings within the EIR

and answer technical questions raised during the hearings. The budget includes up to 25 hours of public meeting time for the project manager and supporting technical leads, as needed.

List of Deliverables:

- Attendance at two planning commission hearings
- Attendance at two city council hearings

Task 6C Notice of Determination

Once the Final EIR has been certified by the City, within five business days of certification Dudek will prepare and file the Notice of Determination (NOD) with the county clerk and the Office of Planning and Research. The cost estimate includes payment of the California Department of Fish and Wildlife filing fee for an EIR ($3,889.25 in 2023 including $50 county processing fee), which would be filed at the county clerk along with the NOD.

List of Deliverables:

- Draft and Final NOD
- Filing of NOD with county clerk

Task 7: Meetings and Coordination

Task 7A Meeting Attendance

In addition to the meetings identified under Tasks 1 through 7, members of the Dudek project management team will attend a maximum of six 2-hour project progress meetings and twelve 1-hour conference calls with City staff during preparation of the NOP and EIR, as deemed necessary by the project team.

List of Deliverables:

- Attend or participate in up to six 2-hour project progress meetings
- Participation in up to twelve 1-hour conference calls

Task 7B Project Management and Coordination

The purpose of this task is to manage the Dudek project team; manage the EIR preparation effort; and maintain constant, close communication between the members of the project team. This task is intended to keep the project on time and within budget and verify all work products are of the highest quality. Dudek will coordinate the team's work for the communication of issues, transmittal of comments, financial management, and other project management matters.

Appendix A

Fee Proposal

Fee Estimate

Dudek has prepared a summarized cost estimate (Table 1) with all costs, including other studies and a detailed spreadsheet for the required services that is competitive yet accurately reflective of the level of effort required to complete the scope of services based on our understanding of the project with the information made available to date. We understand that things are likely to change during refinement of the project description. In an effort to keep costs at a minimum, there will be minimal printing of the draft documents and notices. If additional printed copies are requested by any member of the project team, Dudek will revise this budget accordingly. Factors that could increase the scope of work and estimated costs include, but are not necessarily limited to, any of the following:

- Attendance at additional meetings
- Additional printing of copies of reports
- Analysis of additional issues beyond those discussed in this proposal, or a more detailed level of analysis than described in this proposal
- Changes in the project requiring re-analysis or rewriting of report sections
- Collection of additional data

Table 1. Estimated Fees

Task	Estimated Fees
Task 1 Project Initiation	
1A Project Kickoff	$2,073
1B Notice of Preparation and Scoping Meeting	$15,310
Task 2 Technical Analyses	
Aesthetics	$6,145
Agricultural Resources	$7,290
Air Quality Assessment	$51,780
Biological Resources Assessment	$76,378
Cultural Resources Assessment	$19,218
Geology, Soils, and Paleontology	$19,725
Hazards and Hazardous Materials	$16,615
Noise	$23,759
Transportation (traffic studies by others)	$124,325
Other Studies	
Fuel Modification Plan	$15,000
Wildfire Evacuation Plan	$45,000
AB 52 and SB 18 Consultation Support	$2,597
Biological Focused Species Surveys	$75,834

Table 1. Estimated Fees

Task	Estimated Fees
Task 3 Administrative Draft EIR	$84,460
Task 4 Public Draft EIR	$28,800
Task 5 Final EIR and MMRP	$33,620
Task 6 EIR Certification Support	
6A Findings of Fact and Statement of Overriding Considerations	$17,400
6B Public Hearing Attendance	$6,440
6C Notice of Determination	$5,223
Task 7 Meetings and Coordination	
7A Meeting Attendance	$12,945
7B Project Management and Coordination	$18,360
Total (CEQA and technical studies)	**$569,866**
Total (other studies)	**$138,431**
Grand Total (professional labor and other direct costs)	**$708,297**

		Dudek Labor Hours and Rates																											Subconsultant Fees		
	Project Team Role:	Project Director/ Environmental	Specialist III	Analyst I	Senior Specialist II	Senior Specialist II	Analyst III	Senior Specialist III	Senior Specialist I	Specialist III	Specialist I	Analyst IV	Specialist II	Senior Specialist II	Analyst II	Analyst I	Analyst V	Senior Specialist III	Senior Specialist II	Specialist III	Principal Hydrogeologist/Engineer II	Project Hydrogeologist V/ Engineer V	Project Hydrogeologist I/ Engineer I	Senior Specialist I	Senior Specialist IV	Analyst III	GIS Analyst IV	Technical Editor III	Publications Specialist III				
	Team Member:	Project Director/ Environmental	Laura Masterson	Tracy Ortega	Joshua Saunders	Brian Grattidge	Erin Lucett	Senior Specialist III	Senior Specialist I	Specialist III	Specialist I	Analyst IV	Linda Kry	Adam Giacinto	Jennifer De Alba	Brenda Rogers	Roshanne Bakhtiary	Jennifer Reed	Matthew Morales	Michael Williams	Glenna McMahon	Audrey Herschberger	Project Hydrogeologist I/ Engineer I	Perry Russell	Michael Greene	Carson Wong	GIS Analyst IV	Technical Editor III	Publications Specialist III	TOTAL DUDEK HOURS	DUDEK LABOR COSTS	Transportation Services LSA Fee	OTHER DIRECT COSTS	TOTAL FEE
	Billable Rate:	$255.00	$165.00	$85.00	$210.00	$210.00	$105.00	$225.00	$195.00	$165.00	$140.00	$115.00	$150.00	$210.00	$95.00	$85.00	$130.00	$225.00	$210.00	$165.00	$280.00	$185.00	$145.00	$195.00	$235.00	$105.00	$165.00	$150.00	$110.00					
Task 1	**Project Initiation**																																
1.1	Project Kick-off	8																												8	$2,040.00		$32.50	$2,072.50
1.2	Notice of Preparation and Public Scoping Meeting	24	8	16																							8	4	8	68	$11,600.00		$3,710.00	$15,310.00
	Subtotal Task 1	**32**	**8**	**16**																							**8**	**4**	**8**	**76**	**$13,640.00**		**$3,742.50**	**$17,382.50**
Task 2	**Technical Analyses**																																
2.1	Aesthetics			32	16																									48	$6,080.00		$65.00	$6,145.00
2.2	Agricultural Resources					28	4																				6			38	$7,290.00			$7,290.00
2.3	Air Quality, Energy, Greenhouse Gas Emissions, HRA																	36	208											244	$51,780.00			$51,780.00
2.4	Biological Resources Assessment	60						26	96	44	16	100															60	24	14	440	$75,910.00		$468.00	$76,378.00
2.5	Cultural Resources Assessment												34	15	16	36	24										4			129	$16,610.00		$2,607.75	$19,217.75
2.6	Geology, Soils and Paleontology																			20				72			4			96	$18,000.00		$1,725.00	$19,725.00
2.7	Hazards and Hazardous Materials																				10	26	52				3	5	2	98	$16,615.00			$16,615.00
2.8	Hydrology and Water Quality																							108						108	$21,060.00			$21,060.00
2.9	Noise																								37	134	5			176	$23,590.00		$169.00	$23,759.00
2.1	Transportation	8																												8	$2,040.00	$122,285.25		$124,325.25
	Subtotal Task 2	**68**		**32**	**16**	**28**	**4**	**26**	**96**	**44**	**16**	**100**	**34**	**15**	**16**	**36**	**24**	**36**	**208**	**20**	**10**	**26**	**52**	**180**	**37**	**134**	**82**	**29**	**16**	**1385**	**$238,975.00**		**$5,034.75**	**$366,295.00**
Task 3	**Administrative Draft EIR**	**80**	**80**	**80**																							**40**	**80**	**40**	**400**	**$63,400.00**			**$63,400.00**
Task 4	**Public Draft EIR**	**20**	**40**	**40**																							**20**	**40**	**40**	**200**	**$28,800.00**			**$28,800.00**
Task 5	**Final EIR and MMRP**	**40**	**40**	**60**																							**8**	**40**	**40**	**228**	**$33,620.00**			**$33,620.00**
Task 6	**EIR Certification Support**																																
6.1	FOF and SOC	8	40	40																								24	16	128	$17,400.00			$17,400.00
6.2	Public Hearing Attendance	25																												25	$6,375.00		$65.00	$6,440.00
6.3	NOD	2		2																										4	$680.00		$4,543.14	$5,223.14
	Subtotal Task 6	**35**	**40**	**42**																								**24**	**16**	**157**	**$24,455.00**		**$4,608.14**	**$29,063.14**
Task 7	**Meetings and Coordination**																																
7.1	Meeting Attendance	50																												50	$12,750.00		$195.00	$12,945.00
7.2	Project Management and Coordination	72																												72	$18,360.00			$18,360.00
	Subtotal Task 7	**122**																												**122**	**$31,110.00**		**$195.00**	**$31,305.00**
	Total Hours	**397**	**208**	**270**	**16**	**28**	**4**	**26**	**96**	**44**	**16**	**100**	**34**	**15**	**16**	**36**	**24**	**36**	**208**	**20**	**10**	**26**	**52**	**180**	**37**	**134**	**158**	**217**	**160**	**2568**				
	Total	**$101,235.00**	**$34,320.00**	**$22,950.00**	**$3,360.00**	**$5,880.00**	**$420.00**	**$5,850.00**	**$18,720.00**	**$7,260.00**	**$2,240.00**	**$11,500.00**	**$5,100.00**	**$3,150.00**	**$1,520.00**	**$3,060.00**	**$3,120.00**	**$8,100.00**	**$43,680.00**	**$3,300.00**	**$2,800.00**	**$4,810.00**	**$7,540.00**	**$35,100.00**	**$8,695.00**	**$14,070.00**	**$26,070.00**	**$32,550.00**	**$17,600.00**		**$434,000.00**	**$122,285.25**	**$13,580.39**	**$569,865.64**
Optional Services																																	
Task 8	**Optional: AB 52 and SB18 Tribal Consultation Support**												**4**	**4**	**8**															**16**	**$2,200.00**		**$396.75**	**$2,596.75**
Task 9	**Optional: Focused Surveys**																																
9.1	Spring, Summer, Fall Rare Plants	2						12	12			4															4			34	$6,670.00		$468.00	$7,138.00
9.2	California Gnatcatcher	2							24			4															4	2	2	38	$6,830.00		$234.00	$7,064.00
9.3	Burrowing Owl	4							24		24	4															4			60	$10,180.00		$624.00	$10,804.00
9.4	Least Bell's Vireo	4						12		36		4															4			60	$10,780.00		$468.00	$11,248.00
9.5	Western Spadefoot Toad	4						24		24		4															4			60	$11,500.00		$468.00	$11,968.00
9.6	Special-Status Bats	4							32		32	4															4			76	$12,860.00		$468.00	$13,328.00
9.7	Crotch Bumblebee	4							32	32		4															4			76	$13,660.00		$624.00	$14,284.00
	Subtotal Task 9	**24**						**48**	**124**	**92**	**56**	**28**															**28**	**2**	**2**	**404**	**$72,480.00**		**$3,354.00**	**$75,834.00**
	Total Optional + Base Hours and Fee	**421**	**208**	**270**	**16**	**28**	**4**	**74**	**220**	**136**	**72**	**128**	**38**	**19**	**24**	**36**	**24**	**36**	**208**	**20**	**10**	**26**	**52**	**180**	**37**	**134**	**186**	**219**	**162**	**2988**	**$508,680.00**	**$122,285.25**	**$17,331.14**	**$648,296.39**

Appendix B

Resumes

Rachel Struglia, PhD, AICP

PROJECT DIRECTOR

Rachel Struglia is a principal and project manager with 26 years' experience preparing California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) documents in both the public and private sectors. Dr. Struglia is experienced in managing CEQA documents for large development and infrastructure projects and has completed EIRs for general plan environmental impact reports (EIRs) and specific plans, mixed use infill projects, including mall redevelopments, residential, commercial, industrial, and university campus projects.

Education

University of California, Irvine
PhD, Environmental Analysis and Design

Arizona State University
MS, Justice Studies

University of Connecticut
BA, Anthropology

University of California, Riverside, Extension
Certificate in Educational Facilities Planning

Certifications

American Institute of Certified Planners (AICP)

Professional Affiliations

American Planning Association

Association of Environmental Professionals

Orange County Water Association

Relevant Project Experience

Village at Laguna Hills Addendum to the City of Laguna Hills General Plan EIR, City of Laguna Niguel, California. Served as project manager for the fifth Addendum to the City of Laguna Hills General Plan EIR for the Village at Laguna Hills project, which analyzed the changes in the project since the Five Lagunas project approval. The project was within the scope of the previously certified General Plan EIR, which adequately described the proposed uses, activities, and development intensity/density for the purposes of CEQA. The project includes the redevelopment of the existing Laguna Hills Mall property through the demolition of approximately 562,653 square feet of the existing mall, construction of approximately 250,000 square feet of new commercial space, construction of 465,000 square feet of offices, construction of 512 additional multifamily dwelling units within five buildings for a total of 1,500 units, a new hotel with 100 to 150 rooms, and construction of ancillary infrastructure, parking, utility, and landscaping improvements. The project and Addendum were approved in March 2022.

City of Irvine 2022-2025 Consultant Team Program: Environmental Impact Analysis (Ongoing). Project manager for the on-call for the City of Irvine for environmental impact analysis and has completed an environmental document for a 172-room Home 2 Suites by Hilton hotel project in the Irvine Business Complex. Managed the team that prepared the air quality, greenhouse gas emissions, energy, and noise technical studies to support the findings of the Addendum to the Irvine Business Complex Vision Plan and Mixed-Use Overlay Zoning Code Environmental Impact Report within four months. The project was successfully completed and approved in November 2022.

Costco/Vineyard II Retail Development Project EIR, City of Murrieta, California. Served as project manager for a new retail center, with Costco Wholesale as the anchor, located at the intersection of I-215 and Clinton Keith Road. The 26.3-acre vacant site includes construction and operation of 225,362 square feet of new development, including a Costco Wholesale and gas station, and, in adjoining parcels, standalone retail, fitness center buildings

and in-line stores, one casual dining restaurant with drive-through and window service, one drive-through fast-food restaurant, and 1,215 parking spaces. The project was approved by Planning Commission, appealed to and unanimously approved by City Council, then threatened with litigation that ultimately was not brought. The EIR was certified in October 2020.

Santa Monica City Yards Master Plan EIR, City of Santa Monica, California. Served as project manager for an EIR for the City of Santa Monica to evaluate the reconfiguration of a 14.7-acre parcel known as "City Yards," with new buildings and streetscape and enhanced sustainability features. The project is located within an industrial use zone across from the Bergamot Arts Center. Historically, the project site was used for clay mining operations until the City of Santa Monica acquired the project site in 1947 for a new municipal landfill, which resulted in subsidence. The same buildings constructed in the 1940s have continued to house the City's maintenance operations, resulting in inefficient use of space and on-site circulation as more city operations functions were added over the years. The Master Plan seeks to reconstruct the City Yards with new buildings in a new configuration to meet the needs of the City, optimize on- and off-site access through an improved streetscape, and enhance environmental sustainability. One of the challenges of the Master Plan was how to phase the project to keep operations of the City Yards ongoing during construction over a 10-year period. While the City initially only sought approval for Package A, which included the first three phases of construction, the comprehensive EIR assessed all 10 phases of construction. Impacts were assessed at a project level in order to minimize the need to do multiple CEQA documents for subsequent phases, and for defensibility of the analyses overall so that cumulative impacts were properly accounted for. The project was approved and the EIR for the proposed project was certified by the City's Planning Commission in January 2019.

Fullerton and Cypress College Master Plan PEIRs, North Orange County Community College District, Fullerton, California. Served as project manager for the Facilities Master Plan Program EIRs for both colleges. Both colleges anticipated student growth over the 10-year planning horizon that would necessitate new instructional buildings and facilities and renovation of existing facilities. Each PEIR included in-depth analysis of historic properties on and adjacent to campus, noise, traffic, and parking. The Cypress College and Fullerton College projects were approved, and the EIRs certified by the Board of Trustees in December 2016 and December 2017, respectively.

IS/MNDs, City of Downey, California. Acted as project manager for several projects that redeveloped commercial frontage along Firestone Boulevard in the City of Downey. These projects included a new Jack In The Box restaurant, a block rezoning project to bring the zoning into conformance with the uses along Firestone Boulevard and which also included a condominium development, a new Aldi market, and a new 140-room Marriott hotel. This work was completed for the City of Downey from 2013 to 2018.

Facilities Master Plan PEIR, PS17-08, Orange County Sanitation District, Fountain Valley, California. Served as project manager. Dudek was contracted in March 2019 to prepare a Program EIR for OC San's 2017 Facilities Master Plan. The analysis covers projects included in a 20-year Capital Improvement Program to ensure that OC San can sustain its infrastructure, meet future regulatory requirements, and continue to provide reliable service to the public. It is composed of projects necessary to upgrade, replace, and rehabilitate aging facilities across OC San's system in central and northern Orange County. These include facilities at Reclamation Plant No. 1 in Fountain Valley and Treatment Plant No. 2 in Huntington Beach, the sewer collection system, and improvements at various pump stations. The project area spans 15 cities, as well as jurisdictional areas, in the County of Orange. The EIR is a combined Program/Project EIR, including 30 projects that are assessed at the project level and 45 at the program level. An innovative aspect of the project is an interactive project map and a web-based approach to public scoping developed by Dudek. This EIR was certified in December 2020, and the first Notice of Determination under the Facilities Master Plan was filed in February 2021.

KEN WILHELM

PRINCIPAL IN CHARGE: PRINCIPAL / TRANSPORTATION

LSA

EXPERTISE

- Transportation Planning and Traffic Impact Assessment
- Transportation Funding Applications
- Data Collection and Analysis
- Parking Demand Analysis
- Bicycle Planning

EDUCATION

B.A., Chapman University, Sociology, 1990

PROFESSIONAL EXPERIENCE

Principal, Transportation and Traffic Division, LSA, Irvine, California, 1996–Present

Research Analyst, Real Estate/Engineering Services Branch, Metropolitan Water District of Southern California, 1996

Transportation Planner, Transportation and Aviation Division, P&D Consultants, Inc., 1995

Planner II, County of Orange, Transportation Long Range Planning Division, Environmental Management Agency, 1991–1995

AFFILIATIONS

Orange County Traffic Engineering Council

Institute of Transportation Engineers

PROFESSIONAL RESPONSIBILITIES

Mr. Wilhelm has more than 32 years of direct experience in the management and preparation of traffic, parking, and bicycle studies throughout California. His primary responsibilities include the supervision, design, and technical analyses of private development and public capital improvement projects as they relate to mobility and the regional circulation system. Mr. Wilhelm has extensive experience in processing traffic impact studies, parking demand analyses, and operational studies through public agencies as part of entitlements and capital improvement programs. He also has experience in the preparation and review of city Circulation Elements, EIRs, and bicycle transportation plans. Mr. Wilhelm has assisted agencies with acquiring transportation funding through federal, State, and local grant programs. He has managed dozens of traffic impact studies, access analyses, and parking studies for a mix of projects.

PROJECT EXPERIENCE

Concordia University Campus Master Build Out Plan
Irvine, California

Mr. Wilhelm served as Principal in Charge and Project Manager to assist with the process of updating the University's Master Plan. This process included outreach with adjacent neighborhoods and working through the entitlement process with the City of Irvine. LSA worked closely with the project team to determine appropriate parking supply, and physical and operational improvements to alleviate queuing on campus. Consideration has been given to the community's concerns regarding traffic volumes at the currently shared gated access to/from the university. LSA prepared a comprehensive traffic study and parking demand analysis to support the EIR for the Master Plan.

Great Park Community Ice Facility Traffic Study
Irvine, California

Mr. Wilhelm prepared a trip and parking generation analysis for a proposed community ice facility in Irvine. The ice rink facility was proposed to include public skating, youth and adult figure skating, youth and adult hockey leagues, skating instruction, and special events. The analysis was based on observations at existing ice rink facilities within Orange County to estimate vehicle trip and parking generation characteristics. Trip and parking rates were developed based on these surveys and applied to the number of sheets (rinks) proposed. Subsequently, Mr. Wilhelm completed a TIA for the expansion of the ice facility within the Great Park. The analysis included an evaluation of intersections and project driveways. The study analyzed a new road within the Great Park as part of the Western Sector Development Phase (688 acres). The ice facility will include four sheets of ice with 4,000 seats and will be the training site for the Anaheim Ducks. The Irvine City Council adopted the project in February 2016.

City of Irvine, Great Park Water Park Traffic Study
Irvine, Orange County, California

Mr. Wilhelm served as the Principal in Charge for the traffic impact analysis for this project. The analysis utilized ITAM to forecast daily and peak-hour traffic conditions in existing and 2020 conditions at various intersections near

the Great Park area. The analysis provided LOS, ADT, and ICU at the study area intersections for these forecast scenarios with and without the new water park facility to analyze short-term potential impacts.

Irvine Business Complex Traffic Impact Analyses
Irvine, California

By virtue of LSA's IBC work for over 25 years, Mr. Wilhelm demonstrates a level of understanding few can rival. LSA has participated in over 75 land development and/or capital improvement projects in the IBC alone (or the equivalent of over three projects per year for the last 25 years, through both recessions and economic downturns). With this experience, LSA has amassed a concrete understanding of the plans, policies, and procedures for the characterization and analysis of major mixed-use urban village projects. Mr. Wilhelm and LSA staff have used this experience to develop methods to identify internal trip capture, pedestrian attractions, transit provisions, and land-use interactions for a multitude of individual land uses and their combinations. Since adoption of the IBC Vision Plan in 2010, Mr. Wilhelm has worked with the City of Irvine and private developers to meet the transportation goals of this area with 15,000 residential dwelling units and 48 million square feet of nonresidential uses.

City of Carson, Creek at Dominguez Hills Recreation
Carson, California

Mr. Wilhelm served as Principal in Charge and Project Manager for the technical traffic analysis, and worked closely with Dudek, the environmental consultant. LSA coordinated with the Los Angeles County Department of Public Works on a Memorandum of Understanding (MOU) and completed a Traffic Impact Analysis. Levels of service (LOS) were identified at 31 intersections for project scenarios required by the County. The parking study was prepared to ensure that the anticipated parking demand on a typical weekday and weekend could be accommodated within the proposed parking supply on site. The parking study considered the parking needs for each of the proposed uses by time of day. LSA developed operational strategies to ensure no localized parking shortfalls occur and the site has sufficient parking supply to meet the anticipated weekday and weekend demand. Events on site at the multi-sports complex and clubhouse were included in the parking analysis.

Platinum Triangle Stadium District Update Parking
Anaheim, California

Mr. Wilhelm served as the Principal Task Manager to prepare a traffic and parking analysis in support of an environmental document for a Master Site Plan of the Stadium District. The project involves the collaboration between the land operator, the development team, and the City of Anaheim. A traffic analysis was prepared to confirm the mitigation required in Supplemental EIR 339 and identify any new impacts based on development of residential, office, and entertainment uses surrounding the Anaheim Stadium. A phasing implementation plan was prepared to identify the timing of physical improvements concurrent with the phased land use. An event management plan will be prepared to ensure adequate ingress and egress for the site during typical work days and special events on site.