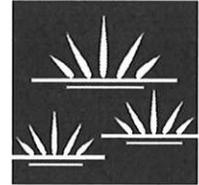


GLENN LUKOS ASSOCIATES

Regulatory Services



April 24, 2017

Mr. Ben Gold
Toll Brothers, Inc.
725 West Town & Country Road
Suite 200
Orange, California 92868

SUBJECT: Biological/Regulatory Overview for the Approximately 121-Acre Lake Forest Nursery Site, Lake Forest, Orange County, California

Dear Mr. Gold:

Glenn Lukos Associates, Inc. (GLA) visited the above-mentioned property multiple times between July 2016 and April 2017 to determine the presence of potential development constraints.¹ For the purpose of this report, constraints are considered to be sensitive biological and jurisdictional resources that may: 1) require partial or complete avoidance of resources, 2) require permits from one or more regulatory agencies, 3) require mitigation to offset impacts to resources, 4) result in a seasonal delay to development, and/or 5) require additional focused surveys.

Sensitive resources considered for this analysis include special-status species (e.g., Threatened and Endangered, Species of Special Concern, etc.), special-status habitats, nesting birds, waters of the United States (including wetlands) subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps) and the Regional Water Quality Control Board, and waters of the State (including riparian vegetation) subject to the jurisdiction of the California Department of Fish and Wildlife (CDFW). Impacts to special-status species and habitats must be addressed during project review under the California Environmental Quality Act (CEQA). In addition, federally listed species (Threatened or Endangered) are regulated by the U.S. Fish and Wildlife Service (USFWS) pursuant to the Federal Endangered Species Act (ESA). Species listed as Threatened or Endangered by the State of California are regulated by CDFW pursuant to the California Endangered Species Act (CESA). Wildlife that are assigned other designations by CDFW (i.e., Species of Special Concern, Fully-Protected species, etc.), and plants given special status by the California Native Plant Society (CNPS) are not granted additional protection, except that impacts to these species may need to be evaluated pursuant to CEQA.

¹ Please note, the biological constraints analysis will alert the client to potential constraints in development of the property. Additional analysis may be necessary to support any permitting that may be required and/or to satisfy local or lead agency requirements under CEQA. Separate and more detailed surveys may be required for the permitting/approval process, if needed.

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1.0 SITE LOCATION AND DESCRIPTION

The approximately 121-acre property (site, property) is located in Lake Forest, Orange County, California [Exhibit 1 – Regional Map]. The property is located approximately 0.1 mile south of State Route 241, immediately southeast of Bake Parkway, immediately southwest of Rancho Parkway, approximately 0.1 mile northwest of Lake Forest Drive, and approximately 0.25 mile northeast of Dimension Drive. It is depicted on the U.S. Geological Survey (USGS) El Toro, California topographic quadrangle (dated 1968 and photorevised in 1982) within an unsectioned portion of Township 6S, Range 8W [Exhibit 2 – Vicinity Map].

Adjacent land uses include residential and commercial to the northwest, commercial to the northeast, Serrano Creek and commercial and light industrial to the southeast, and commercial and light industrial to the southwest.

Exhibit 3 provides an aerial image of the site along with the extent of three potential jurisdictional features on site.

2.0 METHODOLOGY

GLA senior biologist Zack West and regulatory specialist April Nakagawa visited the property on July 27 and 28, 2016 to conduct a site review. Additional follow-up visits were made by Zack West and senior regulatory specialist Thienan Pfeiffer on October 6 and November 17, 2016, and various times during March and April, 2017. Site reconnaissance was conducted in such a manner as to allow inspection of the entire site by direct observation, including the use of binoculars. The property was inspected to determine whether any special-status species, habitats, or potential jurisdictional areas are present on site.

In addition to site reconnaissance, evaluation of the property included a review of the California Natural Diversity Database (CNDDDB) for the El Toro quadrangle and surrounding quadrangles,² a review of the California Native Plant Society (CNPS) on-line inventory,³ a soil map review, and review of various documents provided by Toll Brothers, Inc.

² California Department of Fish and Wildlife. July, 2016. Natural Diversity Database: RareFind 5.

³ California Native Plant Society. 2016. On-Line Inventory of Rare and Endangered Plants of California (Eighth Edition).

3.0 RESULTS

3.1 Existing Conditions

The site consists of an active commercial nursery operation with an elevation ranging from approximately 670 feet above mean sea level (amsl) to 750 feet amsl, is relatively flat with a single rolling hill, and gently slopes from northeast to southwest. Soils at the site are mapped as Capistrano Sandy Loam, Cieneba Sandy Loam, Cropley Clay, Myford Sandy Loam, Riverwash, and Sorrento Loam by the U.S. Department of Agriculture Natural Resource Conservation Service (NRCS).

Agricultural land uses consisting of an active nursery operation occupy the vast majority of the site. Nursery activities have remained active since 1979, causing a general lack of native vegetation communities on the site, with the exception of a small patch of remnant coastal sage scrub occurring within the southeastern corner of the site and riparian forest located within Serrano Creek along the southeastern boundary of the site. A water quality treatment ditch designed to infiltrate flows prior to leaving the property bisects the site and is routinely maintained free of vegetation. Developed areas consisting of equipment maintenance buildings and nursery offices were also observed at the site.

Plant species detected within the remnant coastal sage scrub include species such as lemonade berry (*Rhus integrifolia*), California sagebrush (*Artemisia californica*), telegraph weed (*Heterotheca grandiflora*), and coast prickly pear (*Opuntia littoralis*). Plant species detected within the riparian forest include a mix of native and non-native species such as Eucalyptus (*Eucalyptus* sp.), coast live oak (*Quercus agrifolia*), western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), Goodding's black willow (*Salix gooddingii*), mule fat (*Baccharis salicifolia*), toyon (*Heteromeles arbutifolia*), Spanish dagger (*Yucca gloriosa*), and mission prickly-pear (*Opuntia ficus-indica*). The agricultural land use, consisting of the active nursery operation, contains a variety of non-native ornamental plant species, grown in containers for commercial resale.

Animal species observed consist of common avian species, and include common raven (*Corvus corax*), western kingbird (*Tyrannus verticalis*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), California towhee (*Melospiza crissalis*), house finch (*Haemorrhous mexicanus*), Bewick's wren (*Thryomanes bewickii*), and Say's phoebe (*Sayornis saya*).

The site is located within the County of Orange Central and Coastal Subregion Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) non-reserve area. As a signatory jurisdiction to the NCCP/HCP, the City of Lake Forest must ensure and verify that

any project that is under their discretionary approval meets the requirements and conditions of the NCCP/HCP.

3.2 Special-Status Plants

Species were considered based on a number of factors, including: 1) species identified by the July 2016 CNDDDB as occurring (either currently or historically) on or in the vicinity of the property; and 2) any other species that are known to occur within the vicinity of the property, or for which potentially suitable habitat occurs on site.

No special-status plants were observed on site during the general survey. Forty-six special-status plant species were identified by the CNDDDB as occurring within the vicinity of the site. Of these, eight species were determined to have a reasonable potential to occur within the remnant coastal sage scrub and/or associated with Serrano Creek within the site, with a likelihood of occurrence ranging from very low to moderate. These species range in regulatory status and include Malibu Baccharis (*Baccharis malibuensis*; California Rare Plant Rank [CRPR] 1B.1), Allen's pentachaeta (*Pentachaeta aurea* var. *allenii*; CRPR 1B.1), Nuttall's scrub oak (*Quercus dumosa*; CRPR 1B.1), big-leaved crown-beard (*Verbesina dissita*; CRPR 1B.1), intermediate mariposa lily (*Calochortus weedii* var. *intermedius*; CRPR 1B.2), white rabbit-tobacco (*Pseudognaphalium leucocephalum*; CRPR 2B.2), chaparral ragwort (*Senecio aphanactis*; CRPR 2B.2), and Plummer's mariposa lily (*Calochortus plummerae*; CRPR 4.2).

3.3 Special-Status Animals

Species were considered based on a number of factors, including: 1) species identified by the July 2016 CNDDDB as occurring (either currently or historically) on or in the vicinity of the property; and 2) any other special-status species that are known to occur within the vicinity of the property, or for which potentially suitable habitat occurs on site.

No special-status animals were observed on site during the general survey. Fifty-four special-status animal species were identified by CNDDDB as occurring within the vicinity of the site. Of these, eighteen species were determined to have a reasonable potential to occur within the site, with a likelihood of occurrence ranging from very low to moderate, and for some of which use of the site is restricted to foraging opportunities. These species range in regulatory status and include least Bell's vireo (*Vireo bellii pusillus*; federally listed as Endangered and state listed as Endangered), coastal California gnatcatcher (*Poliophtila californica californica*; federally listed as Threatened; California Species of Special Concern [SSC]), white-tailed kite (*Elanus leucurus*; state Fully Protected [FP]), American peregrine falcon (*Falco peregrinus anatum*; foraging only; FP), pallid bat (*Antrozous pallidus*; foraging only, as long as buildings remain in active use; SSC), coastal whiptail (*Aspidoscelis tigris stejnegeri*; SSC), long-eared owl (*Asio otus*; SSC),

burrowing owl (*Athene cunicularia*; SSC), Mexican longue-tongued bat (*Choeronycteris mexicana*; foraging only, as long as buildings remain in active use; SSC), northern harrier (*Circus cyaneus*; foraging only; SSC), western mastiff bat (*Eumops perotis californicus*; foraging only, as long as buildings remain in active use; SSC), yellow-breasted chat (*Icteria virens*; SSC), western red bat (*Lasiurus blossevillii*; SSC), San Diego desert woodrat (*Neotoma lepida intermedia*; SSC), pocketed free-tailed bat (*Nyctinomops femorosaccus*; foraging only, as long as buildings remain in active use; SSC), big free-tailed bat (*Nyctinomops macrotis*; SSC), coast horned lizard (*Phrynosoma blainvillii*; SSC), and yellow warbler (*Setophaga petechia*; SSC).

Species for which the site only provides foraging habitat (American peregrine falcon, pallid bat, Mexican longue-tongued bat, northern harrier, western mastiff bat, and pocketed free-tailed bat) are not expected to pose a constraint to development.

3.4 Special-Status Habitats

A review of the July 2016 CNDDDB identified the following special-status habitats as occurring within the vicinity of the property: California walnut woodland, canyon live oak ravine forest, Riversidean alluvial fan sage scrub, Southern California arroyo chub/Santa Ana sucker stream, southern coast live oak riparian forest, southern cottonwood willow riparian forest, southern interior cypress forest, southern mixed riparian forest, southern riparian forest, southern riparian scrub, southern sycamore alder riparian forest, southern willow scrub, and valley needlegrass grassland.

Riparian forest occurs within Serrano Creek along the southeastern site boundary. No additional special-status habits occur within the site.

3.5 Nesting Birds

The property contains vegetation (trees, shrubs, and herbaceous vegetation) with the potential to support nesting birds. Impacts to nesting birds are prohibited under the Migratory Bird Treaty Act and California Fish and Game Code.⁴ The presence of vegetation with the potential to support nesting birds may represent a seasonal constraint to development if not removed at the appropriate time of the year. As long as trees, shrubs, and herbaceous vegetation with the potential to support nesting birds are removed outside of the nesting season (September to January), then no further actions are recommended. If vegetation must be removed during the

⁴ The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R.21). In addition, sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs.

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nesting season (February 1 through August 31), a nesting bird survey should be conducted prior to any removal to prevent any impacts to active nests. If active nests are identified on site, then adequate buffers should be provided around the nests, as determined by a qualified biologist, until all young have fledged or the nests are no longer active.

3.6 Jurisdictional Waters

Three drainages occur within the site: Serrano Creek occurs along the southeastern boundary of the site, a small unvegetated ephemeral drainage located along the southwestern boundary of the site, and a water quality treatment ditch that bisects the property from northeast to southwest.

The water quality treatment ditch is regularly maintained free of wetland or riparian vegetation and sediment for maximum capacity, on site retention, and treatment of flows.

Each of these three features may be subject to regulation as waters of the United States (WoUS) by the Corps under Section 404 of the federal Clean Water Act (CWA), WoUS/waters of the State (WoS) by the Los Angeles Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA and under the Porter-Cologne Water Quality Control Act (Porter-Cologne), and by CDFW under Section 1602 et Seq. of the California Fish and Game Code (Section 1602).

In addition to the three distinct drainages within the site, dozens of smaller irrigation ditches occur throughout the entire property and drain toward the larger drainages. The irrigation ditches exist for the sole purpose of conveying irrigation runoff and are generally one to three feet in width and do not support any wetland or riparian vegetation. While these irrigation ditches arguably support no beneficial uses, it is possible, although improbable, that they would be regulated as a water of the State under Porter-Cologne.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Resources Requiring Partial or Complete Avoidance

Although not expected, if plant species listed as state or federally threatened or endangered are present within the site, and/or non-listed special-status plant species are determined to be present and are determined to comprise or contribute to a population that may be considered significant under the CEQA, complete or partial avoidance of these species may be required. The NCCP/HCP affords coverage to many special-status plants; if any covered species was determined to be present on the site, avoidance would not be required.

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No avoidance is expected to be required for species for which the site provides only foraging habitat (American peregrine falcon, pallid bat, Mexican longue-tongued bat, northern harrier, western mastiff bat, and pocketed free-tailed bat).

4.2 Resources Requiring Permits

Although the potential is considered low, if coastal California gnatcatchers, least Bell's vireo, or state or federally listed plant species are found to occupy the site, development of areas supporting these species may require take authorization pursuant to Section 7 or 10 of the ESA, and/or an incidental take permit pursuant to Section 2080.1 and/or 2081 of CESA. The NCCP/HCP affords coverage to many special-status plants and animals; if any covered species was determined to be present on the site, take coverage would be provided under the NCCP.

Development of any portion of the site determined to be WoUS/WoS under CWA Sections 401 and 404, Porter-Cologne, and 1602 would require a 404 Permit from the Corps, Water Quality Certification from the RWQCB, and a Streambed Alteration Agreement from CDFW. Based on preliminary evaluation, development of the three drainages on site would require these permits.

No permits are expected to be required for species for which the site provides only foraging habitat (American peregrine falcon, pallid bat, Mexican longue-tongued bat, northern harrier, western mastiff bat, and pocketed free-tailed bat).

4.3 Resources Requiring Mitigation

If coastal California gnatcatchers occupy the disturbed coastal sage scrub on site, least Bell's vireo occupy riparian areas located within Serrano Creek, or if state or federally listed plant species occur within the site, development of areas supporting these species may require mitigation under the ESA and/or CESA, as would be determined through the Section 7 or Section 10 consultation process and/or Section 2080.1 or 2081 application process. The NCCP/HCP authorizes payment of an in-lieu fee by non-participating landowners to mitigate impacts to coastal sage scrub, gnatcatchers, and other covered species within identified areas in participating jurisdictions.

No mitigation is expected to be required for species for which the site provides only foraging habitat (American peregrine falcon, pallid bat, Mexican longue-tongued bat, northern harrier, western mastiff bat, and pocketed free-tailed bat).

Compensatory mitigation is generally required for impacts to areas determined to be WoUS/WoS under CWA Sections 401 and 404, Porter-Cologne, and Section 1602. Considering conditions documented within the site, it is anticipated that development of Serrano Creek, the water quality

treatment ditch, and or the unvegetated ephemeral drainage may likely require mitigation, as to be determined during the aquatic permitting process. See maintenance recommendations below.

4.4 Resources Requiring Seasonal Avoidance

Although the potential is considered low, if least Bell's vireo is found to be nesting within riparian vegetation associated with Serrano Creek, an applicable avoidance buffer (generally 500 feet for listed species) should be provided around the nest(s), as determined by a qualified biologist, until all young have fledged or the nests are no longer active.

If coastal California gnatcatchers are found to be nesting within the remnant coastal sage scrub in the southeastern corner of the site, minimization measures pursuant to the NCCP/HCP would be required. These measures include removal of coastal sage scrub outside of the breeding season, surveys for gnatcatchers prior to removal of habitat, etc.

If white-tailed kites are found to be nesting within the large trees found within Serrano Creek, an applicable avoidance buffer should be provided around the nest(s), as determined by a qualified biologist, until all young have fledged or the nests are no longer active.

Although the potential is considered low, if burrowing owls are determined to occupy the site during the burrowing owl breeding season (February 1 through August 31), and are determined to be paired or breeding, avoidance will be required until all young have fledged or until breeding activities have ceased. If breeding burrowing owls are identified on site, then adequate buffers should be provided around the burrows, as determined by a qualified biologist, until the burrows are no longer active. If burrowing owls are found to occupy the site outside of the burrowing owl breeding season, or are found within the breeding season but are not yet paired or breeding, passive exclusion of the non-paired burrowing owls may be required and would require approval of a relocation plan through coordination with CDFW, and may require mitigation, potentially including designation of preserved lands and construction of artificial burrows.

Impacts to colonial bat species are prohibited under the California Fish and Game Code and could potentially be considered significant pursuant to CEQA, depending on the size of the colony. If buildings on site are allowed to become vacant, they could act as potential roosting habitat for colonial bat species identified in 3.3, above. If used as a maternity or winter roost, these features may require avoidance from approximately May to August for a maternity roost or late October to March for a winter roost. It is recommended that buildings on site are sealed or demolished upon becoming vacant, to prevent potential bat colonization.

The presence of vegetation with the potential to support nesting birds may represent a seasonal constraint to development if not removed at the appropriate time of the year. It is recommended

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that vegetation with the potential to support nesting birds should be removed from September 1 through January 31, outside of the nesting season.

No seasonal avoidance is expected to be required for species for which the site provides only foraging habitat (American peregrine falcon, pallid bat, Mexican longue-tongued bat, northern harrier, western mastiff bat, and pocketed free-tailed bat).

4.5 Resources Requiring Additional Surveys

A focused rare plant survey is recommended during the appropriate blooming period(s) to determine whether special-status plant species occupy portions of the site such as Serrano Creek and/or the remnant coastal sage scrub.

A focused survey is recommended to determine whether coastal California gnatcatchers occupy the remnant coastal sage scrub on site. If surveys are to occur during the coastal California gnatcatcher breeding season (March 15 through June 30), six (6) surveys shall be conducted at least seven (7) days apart. If surveys are to occur outside of the coastal California gnatcatcher breeding season (July 1 through March 14), nine (9) surveys shall be conducted at least fourteen (14) days apart.

A focused survey is recommended to determine whether least Bell's vireo nest within the portion of Serrano Creek located along the southeastern boundary of the site. This survey is to occur between April 10 and July 31, and include eight (8) survey visits that shall be conducted at least ten (10) days apart.

It is the opinion of GLA based upon the professional judgement of the investigators that the portion of Serrano Creek that occurs along the southeastern boundary of the site does not contain the biological parameters necessary to support southwestern willow flycatcher (*Empidonax traillii extimus*) breeding habitat; however, it is recommended as a prudent measure to conduct a focused survey for this species. This survey is to occur between May 15 and July 17, and include five (5) survey visits that shall be conducted with one (1) survey visit between May 15 and May 31, one (1) survey visit between June 1 and June 21, and three (3) survey visits between June 22 and July 17. The three (3) survey visits between June 22 and July 17 shall be conducted at least five (5) days apart.

A focused burrowing owl survey is recommended during the burrowing owl breeding season survey window (February 15 to July 15) to determine whether breeding burrowing owls occupy the site. Focused burrowing owl surveys consist of four (4) visits with: at least one visit between February 15 and April 15, and three additional visits at least twenty-one (21) days apart, between April 15 and July 15, with at least one visit after June 15.

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If vegetation must be removed during the nesting season (February 1 through August 31), a nesting bird survey should be conducted prior to any removal to prevent any impacts to active nests, and if active nests are identified onsite, then adequate buffers should be provided around the nests, as determined by a qualified biologist, until the nests are no longer active.

No additional survey requirements are expected for species for which the site provides only foraging habitat (American peregrine falcon, pallid bat, Mexican longue-tongued bat, northern harrier, western mastiff bat, and pocketed free-tailed bat).

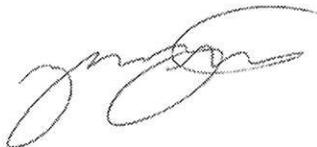
4.6 Discussion

For planning purposes, permanent impacts to Serrano Creek would likely require a mitigation ratio of between 2:1 to 3:1 due to the riparian habitat present within the creek. Based on the lack of riparian habitat and other aquatic resources, permanent impacts to the treatment ditch or the unvegetated ephemeral drainage would likely require mitigation at a 1:1 ratio. However, based on preliminary discussion with the Regional Water Quality Control Board, impacts to waters of the State on a linear foot basis would not require mitigation at a 1:1 basis due to the lack of beneficial resources. All mitigation would be determined during the permitting process and would be made at the discretion of each regulatory agency. These impacts could be mitigated on site through the establishment of a new linear feature through the project site and/or through the enhancement and/or rehabilitation of Serrano Creek (coordination with the land owner would be necessary). Any onsite mitigation area would also likely require implementation of a 5-year Habitat Mitigation and Monitoring Plan, recordation of a legal instrument to conserve the mitigation area as permanent open space, and an endowment to cover long-term management activities.

If you have any questions regarding this report, please call me at (949) 837-0404, ext. 22 or 34, respectively.

Sincerely,

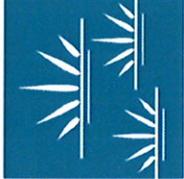
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Zack West
Senior Biologist/Regulatory Specialist
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Thienan Pfeiffer
Senior Regulatory Specialist



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Exhibit 1



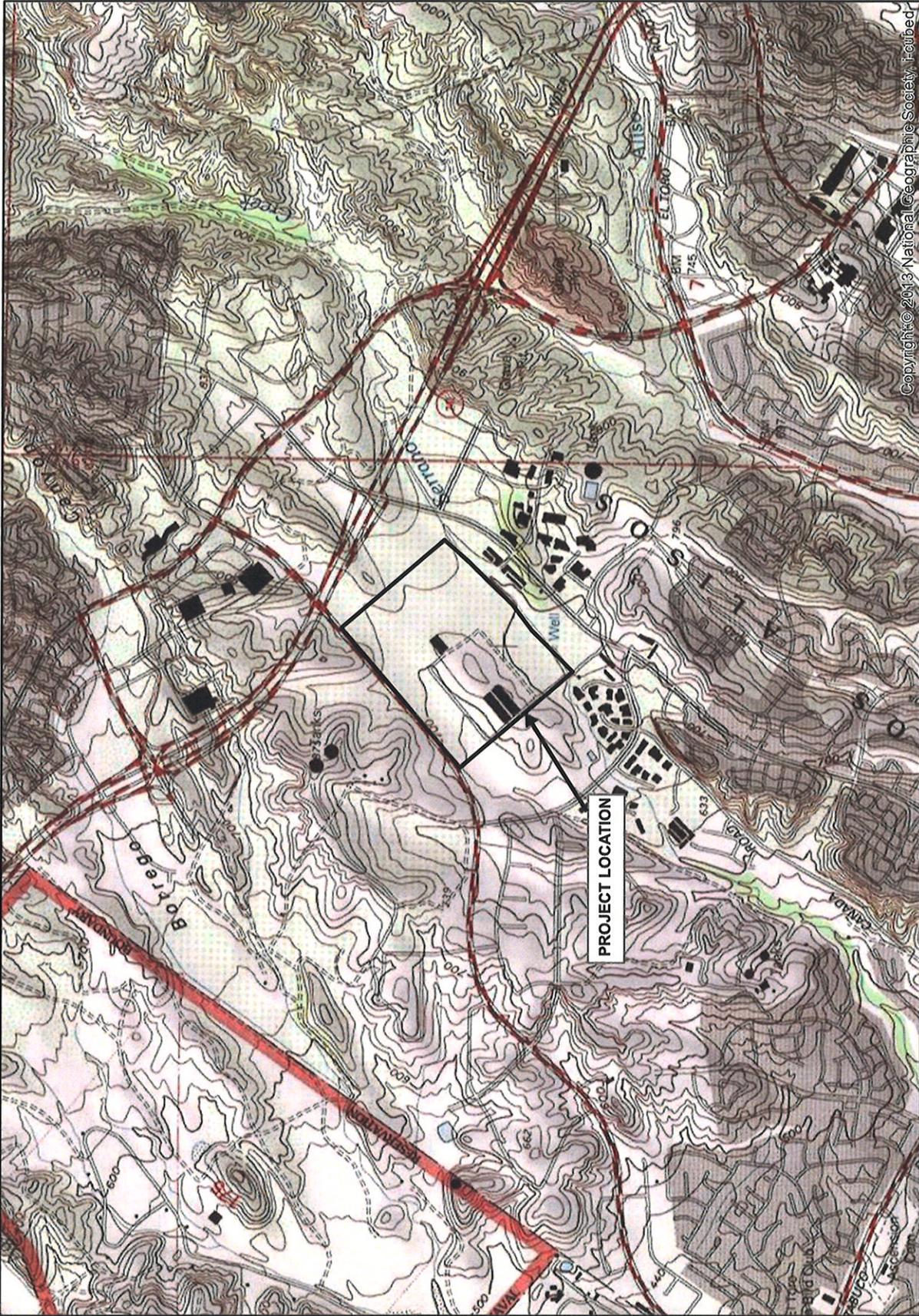
Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri-Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

LAKE FOREST NURSERY PROJECT

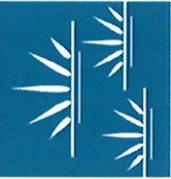
Regional Map

Source: ESRI World Street Map





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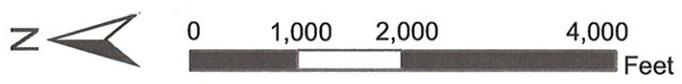


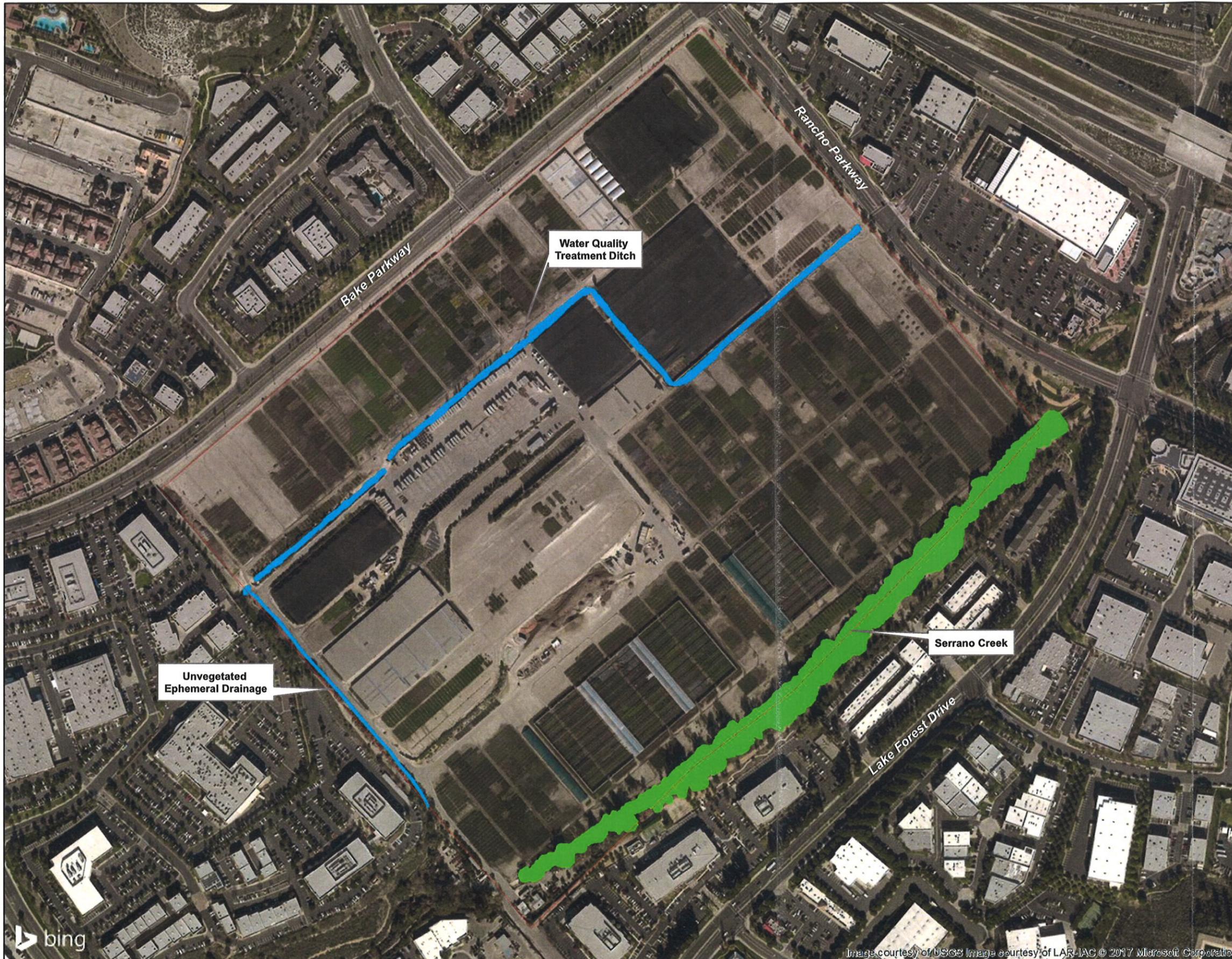
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Exhibit 2

**LAKE FOREST
NURSERY PROJECT**
Vicinity Map

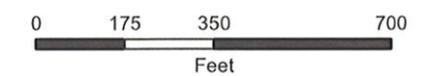
Adapted from USGS El Toro, CA quadrangle





Legend

- Parcel Boundary
- Corps/RWQCB Non- Wetland Waters
- CDFW Riparian



LAKE FOREST NURSERY PROJECT
Potential Jurisdictional Constraints

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Exhibit 3



Image courtesy of USGS Image courtesy of LAR-IAC © 2017 Microsoft Corporation

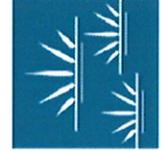
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Photograph 1: View of the active nursery operation from the southwest corner of the site looking toward the southeast.



Photograph 2: View of Serrano Creek along the southeastern boundary of the site looking toward the southwest.



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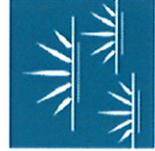
Exhibit 4

LAKE FOREST NURSERY
PROJECT

Site Photographs



Photograph 3: View of Serrano Creek from the southeast corner of the site looking toward the northeast.



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Exhibit 4



Photograph 4: View of Serrano Creek along the central portion of the southeastern boundary of the site looking toward the southwest.

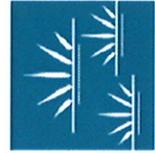


LAKE FOREST NURSERY
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Site Photographs



Photograph 5: View of the southwestern portion of the water quality treatment ditch looking toward the northeast.



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Exhibit 4



Photograph 6: View of the central portion of the water quality treatment ditch looking toward the northeast.

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Site Photographs