June 8, 2015

Albert A. Webb Associates
3788 McCray Street
Riverside, CA 92506
(951) 320-6052
Fax (951) 786-0594
Attn: Cheryl DeGano, Principal Environmental Analyst

SUBJECT: Biological Constraints Analysis for a 100-acre Project Site located in the City of Ontario, San Bernardino County, California

Dear Cheryl:

Amec Foster Wheeler prepared this constraints analysis for the 100-acre project site located in the City of Ontario, San Bernardino County, California. The following letter describes the literature review, methodology, and findings.

1.0 PROJECT UNDERSTANDING

Amec Foster Wheeler understands that the proposed project consists of the development of two optional survey areas and a connector to the existing Inland Empire Utilities Agency (IEUA) Pipeline. The first survey area is a 56-acre area northwest of the intersection of Schaefer Avenue and Vineyard Avenue, hereafter referred to as the western parcel. The second survey area is a 40-acre property located southeast of the intersection of Schaefer Avenue and Carpenter Street, hereafter referred to as the eastern parcel. A proposed pipeline will travel east along Schaefer Avenue from the first survey area and then south on Carpenter Street until it connects to the second project area.

2.0 Methods

The constraints analysis began with a review of the most recent California Natural Diversity Data Base (CNDDB June, 2015) and California Native Plant Society Electronic Inventory (CNPSEI 2015). The project site was then evaluated based on 2014 aerial photographs to understand current land use and identify areas with potentially significant biological resources. The San Bernardino Southwestern Area Soils Series (USDA1986) was reviewed to identify the extent of Delhi sands within the project site. A site visit was conducted to ground-truth existing site conditions and determine the potential for significant biological resources to occur within the project site. The perimeter of the parcels will be walked to identify suitable habitat for any sensitive plant or animal species or other sensitive biological resources. A list of potentially significant biological resources was prepared to aid in the assessment for potential occurrence and overall constraints for future development of the project site.

3.0 Constraints Analysis

Weather conditions during the site visit included clear skies, wind ranging from 0 to 2 miles-per-hour, and a temperature of approximately 64 degrees Fahrenheit. The following includes the results of the constraints analysis.

3.1 Literature Review

The literature review was conducted on June 1, 2015. Based on the CNDDB (June 2015) and CNPSEI (June 2015) there are twenty-one special status plant and wildlife species that occur within a 5-mile radius of the project site. The closest recorded occurrences are two burrowing owls (*Athene cunicularia*) within a half-mile of the proposed project site. Both of these occurrences were recorded in 1921.

Sensitive plant and wildlife species observed within three miles of the project site based on the CNDDB include San Bernardino aster (*Symphyotrichum defoliatum*), lucky morning glory (*Calystegia felix*), and silvery legless lizard (*Anniella pulchra pulchra*).

Additional species recorded to occur within 5-miles of the project site include Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*), smooth tarplant (*Centromadia pungens* ssp*. laevis*), Santa Ana sucker (Catostomus santaanae), coast horned lizard (*Phrynosoma blainvillei*), Swainson's hawk (*Buteo swainsoni*), least Bell's vireo (*Vireo bellii pusillus*), tricolored blackbird (*Agelaius tricolor),* pallid bat (*Antrozous pallidus*).

Additional sensitive plant species recorded in the CNPSEI within the Guasti 7.5-minute quad include Catalina mariposa lily (*Calochortus catalinae*), Parry's spineflower (*Chorizanthe parryi* var. *parryi*), California sawgrass (*Cladium californicum*), paniculate tarplant (*Deinandra paniculata*), California muhly (*Muhlenbergia californica*), prostrate vernal pool navarretia (*Navarretia prostrata*), and Brand's start phacelia (*Phacelia stellaris*).

The eastern parcel and the eastern portion of the pipeline contains mapped Delhi sands soil. There is also a small portion of the northwestern corner of the western parcel that also contains mapped Delhi sands soil. This soil series is a key component to Delhi sands flower loving fly (*Rhaphiomidas terminatus abdominalis*). This species is listed as a federally endangered species under the federal Endangered Species Act.

3.2 Site Visit

A site visit was conducted by senior biologist Scott Crawford on June 2, 2015. The following paragraphs describe each project element including the western parcel, eastern parcel, and pipeline right-of-way (ROW) between the two parcels.

Western parcel

The western parcel is currently under active agricultural (alfalfa). There is an existing dirt access road that surrounds the agricultural field. The edges of the parcel are considered disturbed and provide suitable habitat for burrowing owl. Suitable habitat for this species includes (but is not limited to) areas of grasslands, scrub lands, and agricultural lands characterized by low-growing vegetation. Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels, but may use man-made burrows, such as cement culverts, debris piles, or openings between asphalt and pavement. There are approximately ten large ornamental trees along the western parcel boundary and a pair of transmission lines bisecting the property that provide suitable habitats for nesting birds. The active agricultural fields provide suitable nesting habitat for ground nesting birds such as western meadowlark (*Sturnella neglecta*), horned lark (*Eremophila alpestris*), and killdeer (*Charadrius vociferus*). The western parcel does not provide any suitable habitat for any of the remaining twenty sensitive plant and wildlife species identified as potentially occurring within the project site. This portion of the project does not contain any mapped Delhi sands soils.

Eastern parcel
The eastern parcel is currently under active agricultural (vegetables). The disked agricultural field extends to the western extent of the project site. There is an existing dirt access road that runs along the southern and eastern boundaries of the project site. The western edge of the parcel is adjacent to a windrow of eucalyptus trees (located just off-site). There is also a windrow of eucalyptus trees and tamarisk trees adjacent to the eastern boundary (also off-site), both of which provide suitable habitat for nesting birds. These areas contain an earthen berm, relatively unvegetated, with suitable perching and nesting areas for avian species. There is a single transmission line that runs northeast-southwest within the southern half of the parcel that provides suitable habitat for a number of nesting bird species. The northern portion of the eastern parcel contains an industrial storage yard for a boring and pipe jacking company. This portion of the eastern parcel is extremely disturbed and is used for pipe storage, pipe maintenance, as well as storage for irrigation equipment associated with the active agricultural field on-site. This portion of the project contains mapped Delhi sands.

The key habitat elements required by the Delhi sands flower-loving fly, include unconsolidated Delhi sands supporting California buckwheat (*Eriogonum fasciculatum*) and telegraph weed (*Heterotheca grandiflora*). These key habitat requirements for the Delhi sands flower-loving fly are not present within the project site. The northern portion of this parcel contains an industrial storage facility with compacted soils. The southern portion of this parcel has been disturbed by agricultural activities since the 1930's, but does contains isolated patches of unconsolidated Delhi Sands.

The eastern parcel does not provide any suitable habitat for any of the remaining twenty sensitive plant and wildlife species identified as potentially occurring within the project site.

Pipeline Right-of-Way
The proposed pipeline ROW extends from the southeastern corner of the western parcel to the northwestern corner of the eastern parcel. The ROW consists of an existing paved road (Schaefer Avenue and Carpenter Street), with adjacent disturbed areas. The eastern half of the ROW contains mapped Delhi sands, however, there is no unconsolidated soils along the road margins. There is suitable habitat for burrowing owl along the edges of the pipeline ROW. There are a few mature trees along the southern edge of the ROW that provide suitable habitat for nesting birds. There is no suitable habitat to support any of the remaining twenty sensitive plant and wildlife species potentially occurring with the project site.

4.0 Constraints Findings

Based on the existing conditions within the project site, there is suitable habitat for burrowing owl and nesting birds protected under the federal Migratory Bird Treaty Act. There is no suitable habitat for Delhi sands flower-loving fly or any of the other twenty sensitive plant and wildlife species potentially occurring within the project site. However, the USFWS has often required surveys within areas that contain evidence of unconsolidated Delhi sands, regardless of the quality of associate habitat.

4.1 Burrowing owl.

A burrow survey is recommended to identify if any suitable burrows occur within the project site. Based on the results of the burrow search, a focused survey may or may not be warranted. If this species is determined to be absent from the project site, no additional effort will be required. If a burrowing owl is determined to be present on the project site, mitigation measures may include, but are not limited to, avoidance of the nesting season and passive or active relocation. Passive relocation involves excluding the burrowing owl from burrows by means of a one-way trap door. Active relocation involves the capture and physical relocation of the owl. Any mitigation measures will require consultation with the City and/or the California Department of

Fish and Wildlife (CDFW). CDFW typically won't allow relocation efforts during the nesting season.

4.2 Nesting birds

If construction occurs during nesting bird season (typically February 1 to August 31) a pre-construction nesting bird survey will be required within 30-days prior to any vegetation removal or soil impacts. If no active nests are observed, construction activities may proceed with no further effort will be required. If nesting birds are observed on-site, an avoidance area must be established to ensure that construction activities will not cause a nest to fail. Typically, a minimum buffer area surrounding the nest must be avoided by all construction activities until the nestlings have fledged the nest. The buffer zones distance is often determined on a case by case basis, depending on the species, by the biological monitor in consultation with CDFW. A biological monitor will be required to monitor the progress of the nesting birds. Construction activities may encroach within the buffer area at the discretion of the biological monitor in consultation with CDFW. Once the nestlings have fledged the nest, construction activities may proceed within the buffer area with no further restrictions with regard to nesting birds.

5.0 Action Items

For the purposes of this constraints analysis, all three project components (western parcel, eastern parcel, and pipeline ROW, will require the same additional surveys/bio monitoring. In order for the proposed project to move forward, both parcels and the pipeline ROW will require:

- A final Biological Resources Assessment Report;
- A burrowing-owl protocol survey (if suitable burrows are present)
- Pre-Construction nesting bird survey. Must be conducted within 30-days prior to any vegetation removal or soil disturbance.
- Nesting bird monitoring (Optional) depending on the pre-construction survey results, and only if construction occurs within the nesting season.

Delhi sands flower-loving fly surveys will not be required on any portion of the western proposed project option. USFWS informal consultation will be required to rule out the possibility of conducting focused surveys within the eastern parcel. Should you have any questions or comments regarding this constraints analysis and would like to discuss them in detail, please do not hesitate to contact me at (951) 369-8060.

Sincerely,



Scott Crawford
Biology Group Manager
Amec Foster Wheeler
Environment & Infrastructure, Inc.
Senior Environmental Scientist
AMEC Environment & Infrastructure