Stantec

Memo

To:	Tyler Wood, Quarterra	From:	Jared Elia
	492 9th Street, Suite 300, Oakland		Walnut Creek
Project/File:	625 Willow Avenue, Hercules	Date:	May 19, 2025

Reference: 625 Willow Ave - Biological Survey

This memorandum (memo) was prepared to discuss the 2025 biological surveys conducted by Stantec Consulting Inc. (Stantec) in comparison to the Biological Assessment Report prepared by Ground Zone Environmental (GZ) in 2020 (Ground Zone Environmental, January 27, 2020). Surveys were conducted by Ground Zone Environmental on May 3, 7, 27, June 19, and July 16, 2014, and December 16, 2019 and January 9, 2020. The following information describes the survey results from Ground Zone Environmental, the survey methods by Stantec and any changes that have occurred between 2020 and 2025.

1 Introduction

The proposed project will occupy an underutilized 6.72-acre parcel at the intersection of Highway 80 and Highway 4 in the City of Hercules, CA (Appendix A; Figure 1). It is envisioned to provide much needed attainable and affordable housing close to transit, shopping, and other community services. The project utilizes the majority of the parcel but sets aside approx. 1.63 acres as natural open space. There will be a 50 foot buffer between the development areas and the aquatic resources, reducing potential impacts to biological resources.

The three-story energy-efficient apartment buildings are intended to serve a variety of household sizes with one-, two-, and three-bedroom units. Each building will be all-electric and will comply with the energy requirements of CalGreen, Title 24, and NGBS silver rating. A resident clubhouse is incorporated near the project entrance. This building incorporates on-site leasing and community maintenance services. Parking is conveniently located in the center of the site. Much of it is covered with solar carports with battery storage to generate additional power.

2 Methods

Prior to Stantec conducting a biological reconnaissance survey on April 17, 2025, the GZ Biological Assessment Report (GZ, 2020) was reviewed to identify observations of special-status species, potentially suitable habitat for special-status species and database results for special-status species occurrences within or adjacent to the project.

Stantec conducted pedestrian surveys within the entire project area, identifying vegetation communities that could support special-status species, any special-status plants or wildlife observations and general plant and wildlife. Stantec used a handheld GPS device to mark datapoints and photo points of interest, along with verifying vegetation communities mapped in the GZ Biological Assessment Report (GZ 2020).

3 Results

GZ identified a total of 24 special-status plant species were considered to have at least some potential to occur in the project region (on the basis of inclusion on federal or state lists or California Native Plant Society lists). Ten potential grassland plants were the focus of surveys during field studies. None were observed. Because of the marginal suitability of the site due to historic ground disturbance and presence of many invasive non-native plant species over most of the site, no special status plant species would be expected to be present.

GZ identified a total of 36 special-status animal species that are known to occur within the vicinity of the project site (primarily found on state and federal lists of special status animal species). Of these, several protected bird species potentially nest in trees on the site. The California red-legged frog is known to inhabit the aquatic and adjacent associated upland habitats. San Francisco dusky-footed woodrat, and western pond turtle are additional protected species that have a moderate to high potential to be present. The remaining special status animal species are considered to have low potential to occur onsite.

The GZ Biological Assessment identified five plant communities within the project area, including non-native annual grassland, native perennial grassland, willow riparian woodland, emergent wetland and coyote brush scrub. A focused search for special-status plants determined that none were onsite (GZ 2020). Stantec determined that plant communities within the project area include non-native annual grassland, willow riparian woodland, emergent wetland and coyote brush scrub, but did not observe native perennial grassland (see Attachment A; Figure 2). The mapped native perennial grassland was located on the north facing slope on the eastern slope near the emergent wetland where wild-rye (*Leymus triticoides*) was seen growing with no other plant species observed. This indicates it may have been part of a reseeding effort associated with some ground disturbance as Stantec also observed signs of old silt fence and erosion control measures. This native perennial grassland appears to have been overtaken by non-native grasses and vegetation with no observations of wild-rye. In addition, no special-status plants were observed during the Stantec reconnaissance survey.

The GZ Biological Assessment determined that California red-legged frog (*Rana draytonii*) and western pond turtle (*Actinemys marmorata*) were likely to be present due to suitable habitat within the project area and documented occurrences of these species within or directly adjacent to the project area. Other species that could occur onsite include special-status birds and raptors (i.e. Cooper's hawk [*Accipiter cooperii*] and yellow warbler [*Dendroica petechia brewsteri*]).

Stantec agrees that the emergent wetland and unnamed creek provides suitable aquatic habitat for California red-legged frog and western pond turtle as the unnamed creek is a tributary to Refugia Creek. Based on the CNDDB occurrences of California red-legged frog within the project area, suitable aquatic habitat onsite and hydraulic connectivity to downstream areas, California red-legged frog could disperse from Refugio Creek into the project area within the unnamed creek. The unnamed creek within the project area also provides suitable aquatic habitat for western pond turtle as this species could disperse up and downstream from the project site where documented occurrences of this species are known. These two special-status species are the most likely to occur onsite within the unnamed creek and surrounding wetland/riparian area; therefore, avoidance of the emergent wetland and riparian area are recommended. Avoidance and minimization measures are recommended during construction to prevent

inadvertent impacts to these species and their habitat through the installation of silt fence or similar material.

4 Conclusion

Stantec determined that the development portion of the project within the non-native grassland area has low potential for special-status species as no burrows or suitable nesting/breeding habitat was observed. The unnamed creek, surrounding wetland and riparian area are outside the development portion of the project and there is no plan to impact these areas; therefore, the potential to impact California red-legged frog, western pond turtle or their habitat is unlikely. As stated above, to ensure there are no direct or indirect impacts to these species or their habitat, avoidance and minimization measures should be implemented. GZ Biological Assessment also concluded that avoiding construction activities within the wetland and open water portion of the site would eliminate negative impacts to California red-legged frogs and western pond turtle.

Stantec also mapped a buffer line (see Attachment A; Figure 3) that they determined would be a safe limits of construction to ensure there are no direct or indirect permanent or temporary impacts to these species habitats or jurisdictional features, which the GZ Biological Assessment also concluded is an appropriate strategy. Site photos are included in Attachment B.

Sincerely,

Stantec Consulting Services Inc.

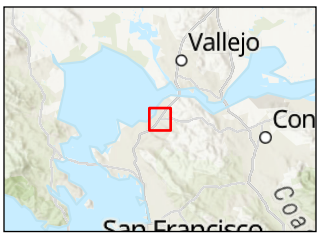
Jared Elia Senior Biologist
Senior Biologist
Phone: (925) 627-4510
jared.elia@stantec.com

Attachments:

- Attachment A – Figures
- Attachment B – Photos

Reference: **625 Willow Ave - Biological Survey**

Appendix A – Figures



Study Area

0 1,000 2,000 Feet

(At original document size of 8.5x11)
1:24,000

N

Stantec

Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, California State Parks, Esri, TomTom, Garmin, FAO, NOAA, USGS, Bureau of Land Management, EPA, NPS, USFWS, Esri, CGIAR, USGS, Maxar
3. Background: Topographic map from services on map.dfg.ca.gov.ags

Project Location
T02.0N R04.0W S14
Mare Island, CA 7.5' USGS Topo Quad

Prepared by KDLP on 2025-04-30
IR by JE on 2025-04-30

Client/Project 185706973
Quarterra Multifamily Communities, LLC
625 Willow Ave

Figure No.
1

Title
Project Location

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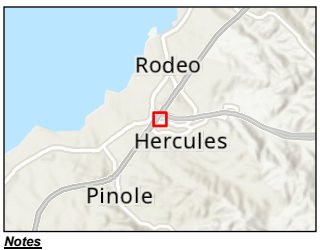

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2. Data Sources: Maxar, Microsoft, Esri, NASA, NGA, USGS, Esri Community Maps Contributors, California State Parks, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, California State Parks, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

3. Background: Topographic map from services on

Study Area

Habitats

- Coyote Brush Scrub
- Cattail Marsh
- Willow Riparian
- Non-Native Grassland

NWI

- Freshwater Emergent Wetland
- Riverine

0 100 200 Feet

(At original document size of 8.5x11)
1:2,400

N

Stantec

Project Location
T02.0N R04.0W S14
Mare Island, CA 7.5' USGS Topo Quad

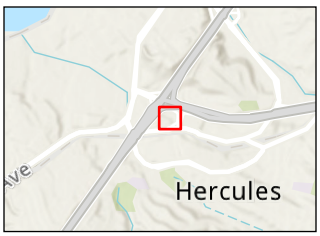
Prepared by KDLP on 2025-04-30
IR by JE on 2025-04-30

Client/Project 185706973
Quarterra Multifamily Communities, LLC
625 Willow Ave

Figure No.
2

Title
Vegetation Communities

V:\185\Active\185706973\03_data\gis_cad\gis\pro\625_WillowAve_1\625_WillowAve_1.aprx Revised: 2025-04-30 By: kdelapena



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3. Background: Topographic map from services on

Study Area
Limits of Disturbance

Habitats

Coyote Brush Scrub
Cattail Marsh
Willow Riparian

NWI

Riverine

0 50 100 Feet
(At original document size of 8.5x11)
1:1,200

N

Stantec

Project Location
T02.0N R04.0W S14
Mare Island, CA 7.5' USGS Topo Quad

Prepared by KDLP on 2025-04-30
IR by JE on 2025-04-30

Client/Project
185706973
Quarterra Multifamily Communities, LLC
625 Willow Ave

Figure No.
3

Title
Limits of Disturbance

V:\185706973\03_data\gis_cad\gis\pro\625_WillowAve_1\625_WillowAve_1.aprx Revised: 2025-04-30 By: kdelapena

Reference: **625 Willow Ave - Biological Survey**

Appendix B - Photos

Reference: **625 Willow Ave - Biological Survey**

Photo 1. Development area facing north.

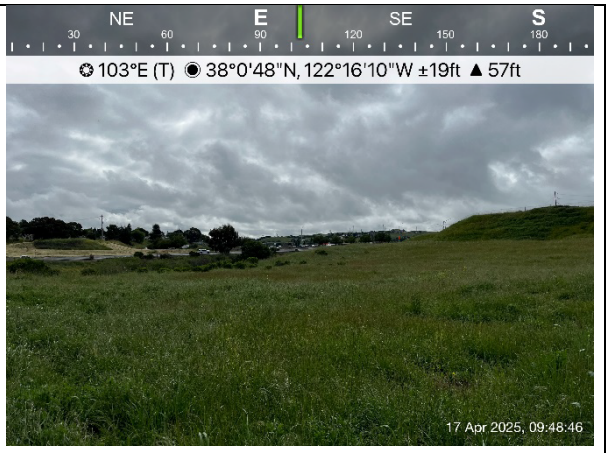

Photo 2. Development area facing east.

Photo 3. Northern limits of development area facing unnamed creek.

Photo 4. Northern limits of development area facing unnamed creek.

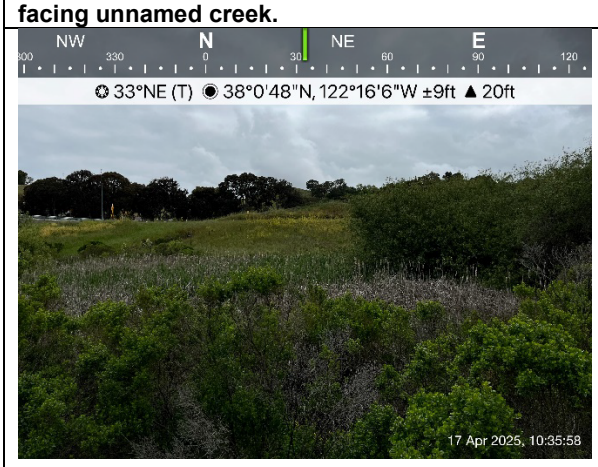

Photo 5. Willow riparian area and coyote brush scrub facing northeast.

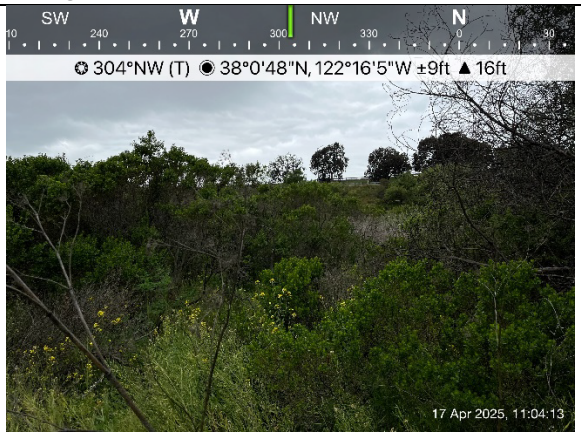

Photo 6. Willow riparian and coyote brush scrub facing northwest.

Reference: **625 Willow Ave - Biological Survey**

Photo 7. Cattail marsh facing north.

Photo 8. Coyote brush scrub and development area limits on the left side of the photo.

Photo 9. Cattail marsh facing west.

Photo 10. Coyote brush scrub at limits of cattail marsh and development area.

Photo 11. Limits of disturbance near willow riparian and cattail marsh.

Photo 12. Development limits near the willow riparian and cattail marsh.