



September 26, 2011

David Rocha  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, California 92629

Subject: **Nest Survey Report for Dana Point Harbor (Areas 1-16), City of Dana Point, Orange County, California**

Bakersfield  
661.334.2755

Fresno  
559.497.0310

Irvine  
714.508.4100

Palm Springs  
760.322.8847

Sacramento  
916.383.0944

San Bernardino  
909.884.2255

San Ramon  
925.830.2733

Dear Mr. Rocha:

This letter report addresses the findings of the biological survey focusing on identification of trees used for nesting within the past 5 years in the areas 1 through 16 of Dana Point Harbor, hereinafter referred to as survey area, as requested by OC Dana Point Harbor.

### **Project Site Location**

Dana Point Harbor is regionally located south of Pacific Coast Highway (State Route 1), northwest of the San Diego County line and southeast of State Route 133 (Exhibit 1). The Harbor can be found on the Dana Point, California, United States Geological Survey (USGS) 7.5-minute, topographic map, Sections 22 and 23, Township 8 South, Range 8 West (Exhibit 2). Specifically, the survey area is located south of the intersection of Street of the Golden Lantern and Dana Point Harbor Drive within Dana Point Harbor (Exhibit 3).

### **Methodology**

The nest survey was conducted on August 31, 2011, September 1, 6, 7, and 8, 2011, by MBA biologists Diana Lloyd and Tommy Molioo. All woody trees and palm trees with nests or that exhibited evidence of nesting were mapped and documented.

Criteria used in determining whether a tree has been used for nesting, roosting, and breeding in the past 5 years consisted of observing nest material, birds building nests, birds incubating eggs or birds feeding young. Corvids, raptors, and herons make large, sturdy nests that remain on the tree even after nesting is complete. These types of birds re-use the previous year's nest, making it easy to tell if a tree is used for nesting even after all nesting activity has ceased.

### **Results**

No active nesting was observed during the survey. Of the 721 trees surveyed, 26 had nests in them. These nests appear to have been used for several years. Table 1 below lists the nesting tree species and corresponding number and the Harbor Area in which the tree is found. Trees with single nests were largely found within eucalyptus trees planted in Areas 1, 2, 3, 6, 7, 8 and 15. These single nests are likely used by either crows or raptors. Trees with multiple nests were found in Area 8, and 16. These multiple nest trees are likely used by shorebirds (e.g. herons, egrets) which nest together in heronries. Due to the time of year, and lack of nesting activity, it was impossible to tell what species of bird used which nest.

**Table 1: Summary of Nesting Tree Species and Numbers by Corresponding Harbor Area**

Tree Number	Area	Tree Species	Nest Site Observations
194	2	<i>Eucalyptus cladocalyx</i>	1 nest observed in tree. Possibly a crow or raptor nest.
197	2	<i>Eucalyptus cladocalyx</i>	1 nest observed in tree. Possibly a crow or raptor nest.
443	3	<i>Eucalyptus cladocalyx</i>	2 nests observed in tree. Possibly a crow or raptor nest.
480	3	<i>Eucalyptus cladocalyx</i>	1 nest observed in tree. Possibly a crow or raptor nest.
531	7	<i>Platanus racemosa</i>	1 nest observed in tree. Possibly a crow or raptor nest.
546	8	<i>Eucalyptus cladocalyx</i>	1 nest observed in tree. Possibly a crow or raptor nest.
562	8	<i>Eucalyptus cladocalyx</i>	2 nests observed in tree. Possibly a heronry.
593	8	<i>Eucalyptus cladocalyx</i>	1 nest observed in tree. Possibly a crow or raptor nest.
608	8	<i>Eucalyptus cladocalyx</i>	1 nest observed in tree. Possibly a crow or raptor nest.
752	15	<i>Eucalyptus cladocalyx</i>	1 nest observed in tree. Possibly a crow or raptor nest.
781	16	<i>Eucalyptus cladocalyx</i>	5 nests observed in tree, appears to be a heronry.
782	16	<i>Eucalyptus cladocalyx</i>	2 nests, appears to be a heronry.
783	16	<i>Eucalyptus cladocalyx</i>	1 nest, appears to be part of adjacent heronry.
784	16	<i>Eucalyptus cladocalyx</i>	7 nests observed in tree, appears to be a heronry.
785	16	<i>Eucalyptus cladocalyx</i>	5 nests observed in tree, appears to be a heronry.
786	16	<i>Eucalyptus cladocalyx</i>	6 nests observed in tree, appears to be a heronry.
787	16	<i>Eucalyptus cladocalyx</i>	1 nest observed in tree, appears to be part of adjacent heronry.
790	16	<i>Eucalyptus cladocalyx</i>	1 nest observed in tree, appears to be part of adjacent a heronry.
791	16	<i>Eucalyptus cladocalyx</i>	18 nests observed in tree, appears to be a heronry.
792	16	<i>Eucalyptus cladocalyx</i>	1 nest observed in tree, appears to be a heronry.
793	16	<i>Eucalyptus cladocalyx</i>	2 nests observed in tree, appears to be a heronry.
794	16	<i>Eucalyptus cladocalyx</i>	7 nests observed in tree, appears to be a heronry.
797	16	<i>Eucalyptus cladocalyx</i>	1 nest observed in tree, appears to be part of adjacent a heronry.
800	16	<i>Eucalyptus cladocalyx</i>	1 nest observed in tree, appears to be part of adjacent a heronry.
803	16	<i>Eucalyptus cladocalyx</i>	2 nests observed in tree, appears to be a heronry.
818	16	<i>Eucalyptus cladocalyx</i>	1 nest observed in tree, appears to be part of adjacent a heronry.

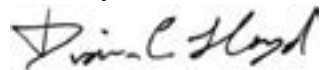
Bird activity was low to moderate during the survey, and nocturnal herons were observed roosting in several trees as noted in Table 1. The avian species observed include the following:

- American crow (*Corvus brachyrhynchos*)
- Anna's hummingbird (*Calypte anna*)

- Barn swallow (*Hirundo rustica*)
- Black-crowned night heron (*Nycticorax nycticorax*)
- Black phoebe (*Sayornis nigricans*)
- Brewer's blackbird (*Euphagus cyanocephalus*)
- Bushtit (*Psaltiriparus minimus*)
- Cooper's hawk (*Accipiter cooperii*)
- Forster's tern (*Sterna forsteri*)
- Great egret (*Ardea alba*)
- Green-backed heron (*Butorides virescens*)
- Heerman's gull (*Larus heermanni*)
- House sparrow (*Passer domesticus*)
- Mourning dove (*Zenaida macroura*)
- Northern mockingbird (*Mimus polyglottos*)
- Nuttall's woodpecker (*Picoides nuttallii*)
- Red-tailed hawk (*Buteo jamaicensis*)
- Rock dove (*Columba livia*)
- Western gull (*Larus occidentalis*)

If you have any questions regarding this letter or the findings, please call me at 714.508.4100.

Sincerely,

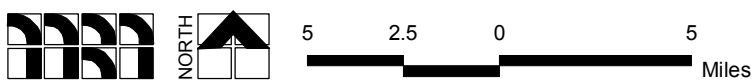


Diana Lloyd  
Project Manager/Biologist  
**Michael Brandman Associates**  
220 Commerce, Suite 200  
Irvine, CA 92602

Enclosures:  
Exhibit 1 – Regional Location Map  
Exhibit 2 – Local Vicinity map, Topographic Base  
Exhibit 3 – Local Vicinity map, Aerial Base  
Exhibit 4 – Tree Location Index Map, and Detailed Maps 4a-4d  
Appendix A – Representative Photographs



Source: Census 2000 Data, The CaSIL, MBA GIS 2011.



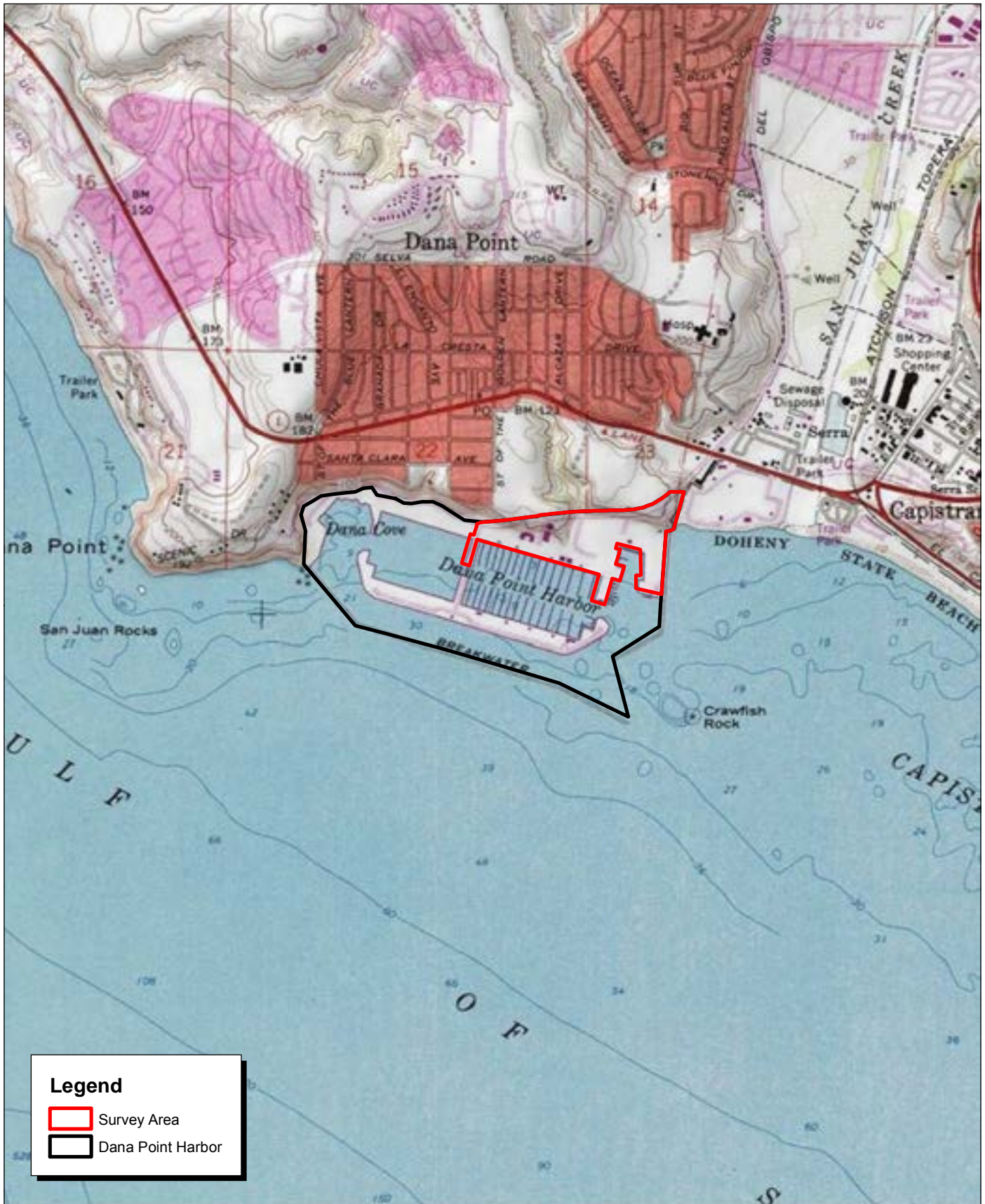
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## Exhibit 1 Regional Location Map

DANA POINT HARBOR  
NEST SURVEY REPORT



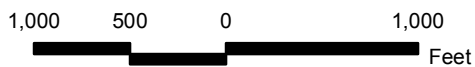


Source: NGS USA Topographic Maps, Dana Point, CA (1975) 7.5' DRG.





Source: NAIP Orange County, CA (2009).



### Exhibit 3 Local Vicinity Map Aerial Base

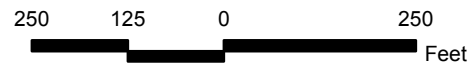




Source: ESRI World Imagery.



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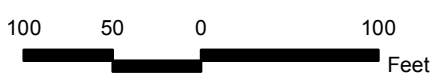
## Exhibit 4 Tree Location Index

DANA POINT HARBOR  
NEST SURVEY REPORT





Source: ESRI World Imagery.

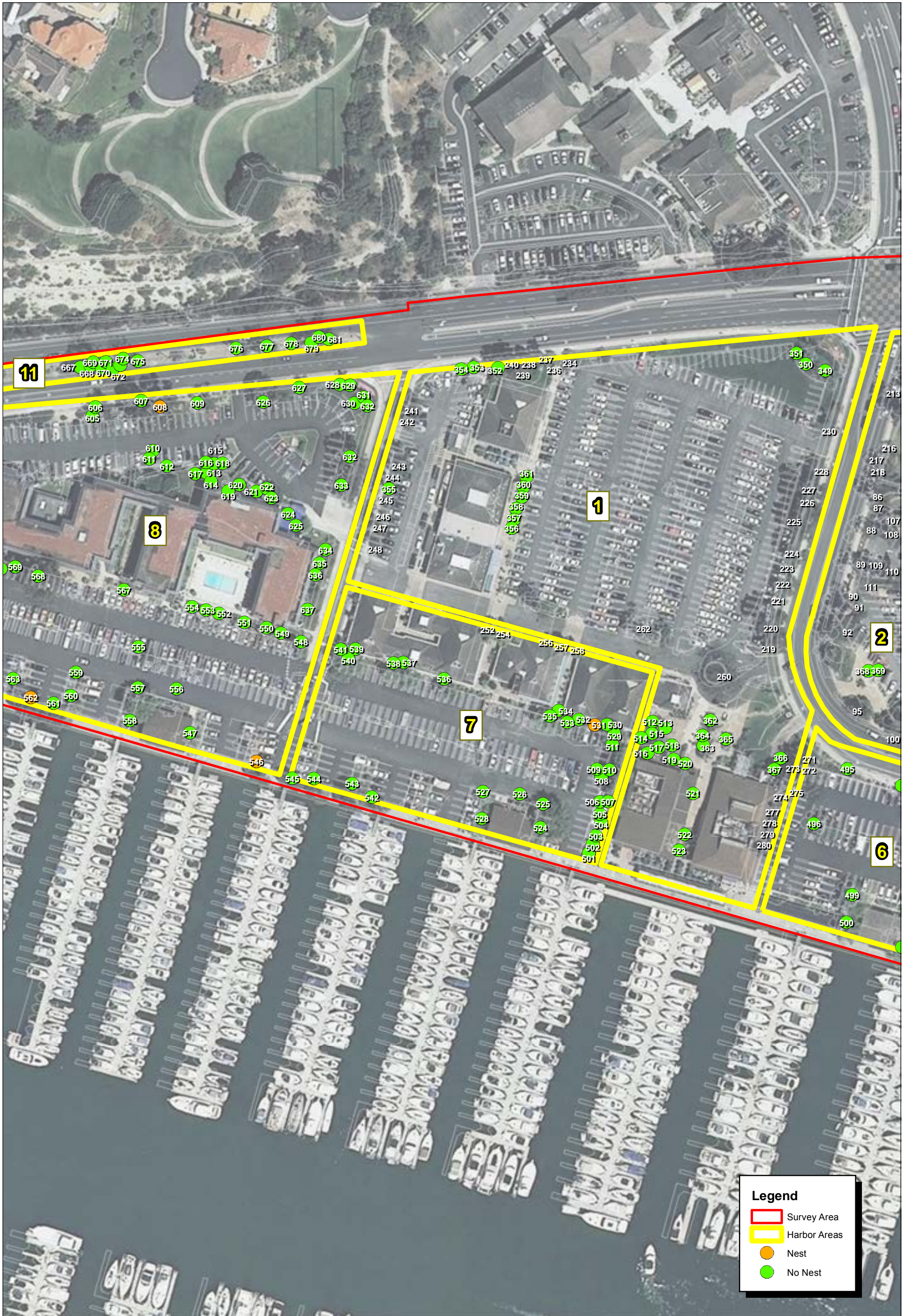


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Exhibit 4a  
Inset Tree Map

DANA POINT HARBOR  
NEST SURVEY REPORT

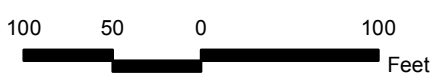




Source: ESRI World Imagery.



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## Exhibit 4b Inset Tree Map

DANA POINT HARBOR  
NEST SURVEY REPORT





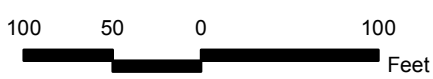
**Legend**

- Survey Area
- Harbor Areas
- Nest
- No Nest

Source: ESRI World Imagery.



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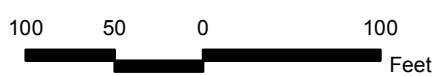
**Exhibit 4c  
Inset Tree Map**

DANA POINT HARBOR  
NEST SURVEY REPORT





Source: ESRI World Imagery.



### Exhibit 4d Inset Tree Map

DANA POINT HARBOR  
NEST SURVEY REPORT





Photograph 1: Tree 531 with single crow or raptor nest.



Photograph 2: Tree 531 closeup view of nest.

Source: Michael Brandman Associates (2011).



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## Appendix A Site Photographs 1 and 2

DANA POINT HARBOR  
NEST SURVEY REPORT





Photograph 3: Tree 791 with heronry. This tree supports 18 nests.



Photograph 4: Up close view of heronry in tree 791.

Source: Michael Brandman Associates (2011).



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## Appendix A Site Photographs 3 and 4

DANA POINT HARBOR  
NEST SURVEY REPORT





Photograph 5: Tree 784 with heronry. This tree supports 7 nests.



Photograph 6: Tree 752 with single crow or raptor nest.

Source: Michael Brandman Associates (2011).



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## Appendix A Site Photographs 5 and 6

DANA POINT HARBOR  
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