

Attachment B

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**AMENDMENT NO. 7
TO PROFESSIONAL SERVICES AGREEMENT
BETWEEN COUNTY OF MONTEREY AND
ECOSYSTEMS WEST CONSULTING GROUP**

THIS AMENDMENT NO. 7 to the Professional Services Agreement between the County of Monterey, a political subdivision of the State of California (hereinafter, "County") and EcoSystems West Consulting Group (hereinafter, "CONTRACTOR") is hereby entered into between the County and the CONTRACTOR (collectively, the "Parties") and effective as of the last date opposite the respective signatures below.

WHEREAS, CONTRACTOR entered into a Professional Services Agreement with County on May 7, 2009 (hereinafter, "Agreement"); and

WHEREAS, Agreement was amended by the Parties on April 30, 2010 (hereinafter, "Amendment No. 1", including Exhibit A-1 – Scope of Services/Payment Provisions), April 29, 2011 (hereinafter, "Amendment No. 2"), May 11, 2011 (hereinafter, "Amendment No. 3", including Exhibit A-2 – Scope of Services/Payment Provisions), June 27, 2012 (hereinafter, "Amendment No. 4"), June 7, 2013 (hereinafter, "Amendment No. 5"), and December 19, 2014 (hereinafter, "Amendment No. 6", including Exhibit A-3 – Scope of Services/Payment Provisions); and

WHEREAS, annual Piperia Plan Studies and reporting continue to be required for 2015 for The Pebble Beach Company's Del Monte Forest Preservation and Development Plan (hereinafter, "Project" or "Plan"); and

WHEREAS, additional funding is necessary to allow CONTRACTOR to provide 2015 Piperia Plan Studies for completion of the Project as required by the Plan for the management, protection and restoration of Yadon's Piperia; and

WHEREAS, the Parties wish to further amend the Agreement to increase the amount by \$60,282.50 to allow CONTRACTOR to provide 2015 Piperia Plan Studies for completion of the Project as identified in the Agreement and as amended by this Amendment No. 7.

NOW, THEREFORE, the Parties agree to amend the Agreement as follows:

1. Amend Paragraph 1, "Services to be Provided", to read as follows:

The County hereby engages CONTRACTOR to perform, and CONTRACTOR hereby agrees to perform, the services described in **Exhibits A, A-1, A-2, A-3 and A-4** in conformity with the terms of this Agreement. The services are generally described as follows: Provide 2009 – 2015 Piperia Plan Studies for The Pebble Beach Company's Del Monte Forest Preservation and Development Plan. The 2015 Piperia Plan Studies included in this Agreement are described in Exhibit A-4, Scope of Services/Payment Provisions.

Amendment No. 7 to Professional Services Agreement
EcoSystems West Consulting Group
2009-2015 Piperia Plan Studies for The Pebble Beach Company's
Del Monte Forest Preservation and Development Plan
RMA – Planning
Term: February 1, 2009 – June 30, 2016
Not to Exceed: \$232,231.50

2. Amend Paragraph 2, "Payments by County", to read as follows:

County shall pay the CONTRACTOR in accordance with the payment provisions set forth in Exhibits A, A-1, A-2, A-3 and A-4, subject to the limitations set forth in this Agreement. The total amount payable by County to CONTRACTOR under this Agreement shall not exceed the sum of \$232,231.50.

3. Amend Paragraph 4, "Additional Provisions/Exhibits", by adding "Exhibit A-4, Scope of Services/Payment Provisions".
4. All other terms and conditions of the Agreement remain unchanged and in full force.
5. This Amendment No. 7 shall be attached to the Agreement and incorporated therein as if fully set forth in the Agreement.
6. The recitals to this Amendment No. 7 are incorporated into the Agreement and this Amendment No. 7.

Amendment No. 7 to Professional Services Agreement
EcoSystems West Consulting Group
2009-2015 Piperia Plan Studies for The Pebble Beach Company's
Del Monte Forest Preservation and Development Plan
RMA – Planning
Term: February 1, 2009 – June 30, 2016
Not to Exceed: \$232,231.50

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment No. 7 to the Agreement which shall be effective as of the last date opposite the respective signatures below.

COUNTY OF MONTEREY

CONTRACTOR*

By: _____
Director of Planning

EcoSystems West Consulting Group
Contractor's Business Name

Date: _____

By: _____
(Signature of Chair, President or Vice President)

Its: William Devilla, sole proprietor
(Printed Name and Title)

Date: 11/13/15

Approved as to Form and Legality
Office of the County Counsel

By: _____
Deputy County Counsel

Date: 11-19-15

By: _____
(Signature of Secretary, Asst. Secretary, CFO,
Treasurer or Asst. Treasurer)

Its: _____
(Printed Name and Title)

Date: _____

Approved as to Fiscal Provisions

By: _____
Auditor/Controller

Date: 11/18/15

Approved as to Indemnity, Insurance Provisions

By: _____
Risk Management

Date: _____

*INSTRUCTIONS: IF CONTRACTOR is a corporation, including limited liability and non-profit corporations, the full legal name of the corporation shall be set forth above together with the signatures of two specified officers. If CONTRACTOR is a partnership, the name of the partnership shall be set forth above together with the signature of a partner who has authority to execute this Agreement on behalf of the partnership. IF CONTRACTOR is contracting in an individual capacity, the individual shall set forth the name of the business, if any, and shall personally sign the Agreement.

Amendment No. 7 to Professional Services Agreement
EcoSystems West Consulting Group
2009-2015 Pipheria Plan Studies for The Pebble Beach Company's
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Term: February 1, 2009 - June 30, 2016
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EXHIBIT A - 4 - SCOPE OF SERVICES/PAYMENT PROVISIONS

DURATION: February 2015–January 2016

SCOPE

In this Project year of 2015 - 2016, EcoSystems West Consulting Group (EcoSystems) shall continue to monitor research plots established between 2005 and 2007 to inform habitat management, enhancement, and transplantation projects for Yadon's piperia (*Piperia yadonii*)—a federally endangered orchid found within the Del Monte Forest (DMF). The studies were identified by the Project Adaptive Management Team (AMT) as priorities for research as part of Phase 1A testing of the Final Piperia Plan, which was being developed to mitigate impacts of the DMF Preservation and Development Plan (DMF/PDP). Though changes to the proposed development may render the Final Piperia Plan as unnecessary as previously outlined, the research program has been recognized by the AMT as invaluable for informing management of protected habitat within the DMF in order to conserve *Piperia yadonii*. Moreover, results of the research can be used to design successful enhancement projects to mitigate the impacts of other future development within the region. Also, utilizing the entire eleven (11) year dataset, EcoSystems can determine status and trends in the *Piperia yadonii* populations, particularly as they relate to variability of habitat and interannual variability due to climate. EcoSystems shall also, evaluate the effectiveness of experimental trials to promote plant establishment.

This scope of work describes monitoring of previously established research studies for the twelve (12) month period beginning in February 2015 through January 2016. In addition, following the completion of this year's field data gathering, EcoSystems shall enter the data for the past three (3) year period through 2015, conduct statistical analysis to evaluate the status and trends of *Piperia yadonii* populations over that period and the eight (8) previous years, and present the findings in a Final Piperia Plan Studies Report which shall serve as the culmination of this phase of the research and monitoring.

TASKS

Task 1: Conduct California Environmental Quality Act (CEQA) Review of the Proposed Pebble Beach DMF Plan Development Impacts on *Piperia yadonii*

Because modifications to the proposed development Project rendered mass salvage and translocation of *Piperia yadonii* tubers unnecessary, this scope of work *does not* include additional effort to design a salvage and transplantation process, as were included as part of Task 1 in prior scopes of work and reports.

Task 2: Investigate Horticultural Techniques for *Piperia yadonii*

Question

What horticultural techniques will facilitate successful use of *Piperia yadonii* materials during research and testing, and ultimately in enhancement projects?

Background

In 2006, EcoSystems established a series of trials to examine techniques to successfully translocate and store *Piperia yadonii* tubers obtained from the development area at MNOUV (known geographic reference area) within the DMF, as well as store seed used in experiments evaluating factors influencing seedling establishment in the other areas (EcoSystems West Consulting Group 2007). Ongoing monitoring of these trials can increase understanding of the ecology of *Piperia*

EXHIBIT A – 4 – SCOPE OF SERVICES/PAYMENT PROVISIONS

yadonii, and be used to design habitat management and enhancement efforts. The following ongoing tasks are recommended to obtain answers to the original questions posed.

Task 2.1: Evaluate Tuber Storage

In the fall of 2006, EcoSystems established a study comparing the efficacy of storing tubers in flats with soil in a lath house, a greenhouse, and within the Monterey Pine Forest. In the fall of 2007, the tubers were excavated and examined, then re-potted into larger containers that allow monitoring of individual demographic performance. The following tasks shall increase understanding of *Piperia yadonii* tuber biology through evaluation of their performance *ex situ*.

- 2.1.1 Monitor Vegetative Status:** In the spring of 2015, EcoSystems shall examine whether each tuber produced a vegetation plant, and if so, measure the number of leaves and longest leaf length.
- 2.1.2 Monitor Reproductive Status:** In the summer of 2015, EcoSystems shall determine the proportion of vegetation plants that reproduced, were diseased, and/or browsed.

Task 2.2: Evaluate Success of Translocated *Piperia yadonii*

In the fall of 2006, a tree spade was used to translocate five (5) soil cores containing *Piperia yadonii* from three (3) donor sites to three (3) receiver sites within MNOUV. In the spring of 2007, five (5) unmoved control plots were established to facilitate examination of the effects of translocation. In addition to informing success of tuber salvage and translocation, this study shall increase understanding of *Piperia yadonii* biology needed to inform conservation, by for example, helping understand what constitutes appropriate habitat for the endangered orchid, as tubers were translocated into apparently suitable but unoccupied habitat. The following steps are proposed to evaluate success of the transplantation treatment.

- 2.2.1 Monitor Vegetative Plant Status:** In the spring of 2015, EcoSystems shall measure the following in each of the five (5) translocation cores and five (5) control plots:
- Number of vegetative *Piperia*: one (1) leaf, two (2) leaf, and total
 - Mean longest leaf length (determined by measuring the longest leaf of ten (10) randomly chosen plants in each plot)
- 2.2.2 Monitor Reproductive Plant Status:** In the summer of 2015, EcoSystems shall measure the following within each of the five (5) translocation cores and five (5) control plots:
- Number of *Piperia* that initiated production of an inflorescence
 - Number of *Piperia* that were browsed and/or diseased
 - Mean reproduction (capsule production) of ten (10) randomly chosen plants

Task 2.3: Seed Storage Studies

This study has been completed in 2008. No additional studies are proposed.

Task 2.4: Horticultural Techniques Data Entry and Analysis

This subtask shall be conducted during this Project year of 2015 to 2016 to the last three (3) years of field monitoring. All data shall be entered into a database and statistically analyzed and summarized in the 2015 *Piperia* Studies Final Report.

EXHIBIT A – 4 – SCOPE OF SERVICES/PAYMENT PROVISIONS

Task 3: Experimental Evaluation of *Piperia yadonii* Regeneration Niche and Establishment Following Exotic Plant Removal

Question

What factors might influence establishment of *Piperia yadonii* from seed following exotic plant removal? In areas of apparently suitable but unoccupied habitat, does adding seed independently or in combination with litter removal promote establishment of *Piperia yadonii*?

Background

In the spring of 2006, EcoSystems established a small-scale manipulative experiment to evaluate the independent and interactive effects of factors hypothesized to influence seedling establishment following removal of three (3) types of exotic plants most commonly observed in or adjacent to habitat occupied by *Piperia yadonii*: 1) French broom, 2) *Acacia* species (there are more than one (1) in the DMF/PDP areas), and 3) rattlesnake grass. This experiment also included litter removal and seed addition treatments designed to examine the independent and interactive effects of removing litter and adding the seed of *Piperia yadonii* to establish populations of the rare plant in exotic plant treatment areas, as well as areas of apparently suitable but unoccupied habitat. In 2007, additional litter removal and seed addition plots were added to the ten (10) experimental blocks located within suitable but unoccupied habitat, allowing examination of the effects of inter-annual variability in weather on *Piperia yadonii* establishment.

EcoSystems proposes the following steps to evaluate the effects of these experimental treatments to inform design of enhancement treatments, as well as management of *Piperia yadonii* habitat.

- 3.1 **Monitor Vegetative Plant Status:** In the spring of 2015, EcoSystems shall revisit each of the 176, 1 m² plots established in this experiment to measure the following:
 - Number of vegetative *Piperia*: one (1) leaf, two (2) leaf, and total
 - Mean longest leaf length (determined by measuring the longest leaf of ten (10) randomly chosen plants in each plot)
- 3.2 **Monitor Reproductive Plant Status:** In the summer of 2015, EcoSystems shall revisit the treatment plots that had vegetative *Piperia* in the spring to measure following:
 - Number of *Piperia* that initiated production of an inflorescence
 - Number of *Piperia* that were browsed and/or diseased
 - Mean reproduction (capsule production) of ten (10) randomly chosen plants
- 3.3 **Regeneration and Establishment Following Exotic Plant Removal Analysis and Reporting:** This subtask shall be conducted during this Project year of 2015 to 2016 to the last three (3) years of field monitoring. All data shall be entered into a database and statistically analyzed and summarized in the 2015 *Piperia* Studies Final Report.

Task 4: Examine Habitat Factors Influencing *Piperia yadonii* Performance

Question

What habitat factors influence the interannual variability in *Piperia yadonii* individual and population performance?

EXHIBIT A – 4 – SCOPE OF SERVICES/PAYMENT PROVISIONS

Background

The *Piperia yadonii* habitat characterization indicated that, within the DMF, *Piperia yadonii* occurs within a range of habitat conditions, in terms of plant community composition, soil conditions, and vegetation structure (EcoSystems West Consulting Group 2006). However, it is not currently known whether habitat conditions influence individual plant or patch performance, and thus population persistence. Indeed, there is little basic information available about the demographic rates for *Piperia yadonii*. This information can increase understanding of the biology of *Piperia yadonii* needed to inform habitat management and enhancement, as well as to evaluate their effectiveness.

4.1 Examine Vegetative Plants: The fifty-four (54) permanent *Piperia yadonii* sites established in the fourteen (14) DMF/PDP areas west of Highway 1 as part of the *Piperia yadonii* Habitat Characterization shall be revisited during the spring of 2015 to collect the following data:

- Number of vegetative *Piperia*: one (1) leaf, two (2) leaf, and total
- Mean longest leaf length (determined by measuring the longest leaf of ten (10) randomly chosen plants in each plot).
- Status of the five (5) target (marked) plants (aboveground vs. dormant, size if aboveground)

4.2 Monitor Reproductive Plant Status: In the summer of 2015, EcoSystems shall revisit the permanent plots to measure following:

- Number of *Piperia* that initiated production of an inflorescence
- Number of *Piperia* that were browsed and/or diseased
- Mean reproduction (capsule production) of ten (10) randomly chosen plants
- Reproductive status of the five (5) target plants (whether flowered, browsed, diseased, and number of fruits produced)

4.3 Data Analysis and Reporting: This subtask shall be conducted during this Project year 2015 to 2016 to the last three (3) years of field monitoring. All data shall be entered into a database and statistically analyzed and summarized in the 2015 *Piperia* Studies Final Report.

Task 5: Establish Herbivory Effects of Experiment – Not applicable at this time.

Task 6: Coordinate AMT

As part of the work on this Project, EcoSystems shall coordinate and participate in the AMT that shall review and guide direction of these studies. Since this shall be the culmination of the *Piperia* Plan Studies, EcoSystems proposes one (1) final AMT meeting at the County of Monterey to present the final report findings. This meeting would occur sometime in January 2016.

Task 7: Project Management

Project management shall consist of short phone updates with County Project staff and The Pebble Beach Company Project staff. No formal progress reports shall be prepared as a cost savings measure.

EXHIBIT A – 4 – SCOPE OF SERVICES/PAYMENT PROVISIONS

Task 8: Prepare Final Report of *Piperia yadonii* Studies from 2005 to 2015

EcoSystems shall prepare a Final Report documenting results of our research conducted since 2005 to inform habitat management, enhancement, and transplantation projects for *Piperia yadonii* —a federally endangered orchid found within the DMF. Specifically, EcoSystems shall enter and analyze data that has been collected in the field during 2013, 2014, and 2015 but has not yet been entered into the Project database since the most recent report was prepared in 2011, which evaluated results from 2005-2011. EcoSystems shall conduct statistical analyses to evaluate the status and trends in *Piperia yadonii* populations in 2013 and 2015. McGraw and Buck 2011 shall be used as the basis for the Final Report.

The report shall address three (3) main questions that we explored with our experimental research:

1. What horticultural techniques will facilitate successful use of *Piperia yadonii* materials during research and testing, and ultimately in enhancement projects?
2. What factors might influence establishment of *Piperia yadonii* from seed and success of *Piperia yadonii* establishment following exotic plant removal? In areas of apparently suitable but unoccupied habitat, does adding seed independently or in combination with litter removal promote establishment of *Piperia yadonii*?
3. What habitat factors influence *Piperia yadonii* individual and population performance?

EXHIBIT A - 4 - SCOPE OF SERVICES/PAYMENT PROVISIONS

Table 2. Cost Proposal to Conduct Determination of Habitat and Reproductive Requirements for Yadon's Piperia: 2015 Studies and Final Report

EcoSystems West Consulting Group

10/20/2015

Expense Type	Personnel	Subtask								Subtask 4.1	Subtask 4.2	Subtask 4.3	Task 6	Task 7	Task 8	Total	Rates	Total Cost
		2.1	2.2	2.4	3.1	3.2	3.3	4.1	4.2									
Technical	Project Manager (Bill Davilla)	2	2	4	2	2	4	4	4	4	4	8	16	8	8	60	\$130.00	\$7,800.00
Support	Lead Botanists (McGraw/Buck)	8	16	36	10	10	40	96	60	70	8	16	100	470	100	470	\$105.00	\$49,350.00
Total Hours	Word Processing/Report Production/Graphics	10	18	40	12	12	44	100	64	74	0	16	16	16	16	16	\$80.00	\$1,280.00
Total Cost Labor		\$1,100	\$1,940	\$4,300	\$1,310	\$1,310	\$4,720	\$10,600	\$6,820	\$7,870	\$1,880	\$3,760	\$12,820			346		\$58,430.00
ODCs	Mileage (total miles all trips)	200	400	0	300	200	0	800	600	0	200	0	0	0	0	2700	\$0.575*	\$1,552.50
	Field Equip/Supplies	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$50.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$50.00		\$50.00
	Photocopy/Graphics Reproduction	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$250.00		\$250.00
Total ODCs		\$115	\$230	\$0	\$173	\$115	\$0	\$510	\$345	\$0	\$165	\$0	\$200			\$200		\$1,852.50
Total Cost by Subtask		\$1,215	\$2,170	\$4,300	\$1,483	\$1,425	\$4,720	\$11,110	\$7,165	\$7,870	\$2,045	\$3,760	\$13,020					\$60,282.50
Grand Total			\$7,695			\$7,628			\$26,145	\$2,045	\$3,760	\$13,020						

- Task 2: Investigate Horticultural Techniques for *P. yadonii*
- Subtask 2.1: Evaluate Tuber Storage
- Subtask 2.2: Evaluate Success of Translocated *Piperia yadonii*
- Subtask 2.4: Horticultural Techniques Data Entry and Analysis
- Task 3: Experimental Evaluation of *Piperia yadonii* Regeneration Niche and Establishment Following Exotic Plant Removal
- Subtask 3.1: Monitor Vegetative Plant Status
- Subtask 3.2: Monitor Reproductive Plant Status
- Subtask 3.3: Regeneration and Establishment Following Exotic Plant Removal Data Entry and Analysis
- Task 4: Habitat Factors Influencing *P. yadonii* Performance
- Subtask 4.1: Monitor Vegetative Plant Status
- Subtask 4.2: Monitor Reproductive Plant Status
- Subtask 4.3: Habitat Factors Data Entry and Analysis
- Task 6: Coordinate Adaptive Management Team
- Task 7: Project Management
- Task 8: Prepare Final Report of Piperia Studies from 2005 to 2015

* Auto mileage will be billed at standard IRS rate

EXHIBIT A – 4 – SCOPE OF SERVICES/PAYMENT PROVISIONS

PAYMENT PROVISIONS

Invoices for services performed under the AGREEMENT shall be submitted quarterly based upon a percentage of task completion and delivery of the final product and shall include the following:

1. Invoice Coversheet

*EcoSystems West Consulting Group
2009-2015 Piperia Plan Studies and CEQA Review for The Pebble Beach Company's
Del Monte Forest Preservation and Development Plan*

Date: _____ Invoice No. _____

Original Agreement Term: February 1, 2009 to April 30, 2010
Original Agreement Amount: \$ 24,999.00 (\$24,999.00 base budget plus \$0.00 project contingency)

Amendment No. 1: \$ 24,965.00 (\$24,965.00 base budget plus \$0.00 project contingency)
Extension of Term to April 30, 2011

Amendment No. 2: Extension of Term to June 30, 2012

Amendment No. 3: \$ 64,165.00 (\$64,165.00 base budget plus \$0.00 project contingency)

Amendment No. 4: Extension of Term to June 30, 2013

Amendment No. 5: Extension of Term to June 30, 2015

Amendment No. 6: \$ 57,820.00 (\$57,820.00 base budget plus \$0.00 project contingency)
Extension of Term to June 30, 2016

Amendment No. 7: \$ 60,282.50 (\$60,282.50 base budget plus \$0.00 project contingency)

Total Agreement Amount: \$232,231.50 (\$232,231.50 base budget plus \$0.00 project contingency)

Prior Invoices: \$ _____ This Invoice: \$ _____
(Under this Agreement)

This Invoice: \$ _____ Remaining Balance: \$ _____

Approved as to Work/Payment: _____ Date _____
Joseph Sidor, Associate Planner

All Invoices Are To Be Sent To:
Diana Lemos, Account Clerk
County of Monterey Resource Management Agency - Planning
168 W. Alisal Street, 2nd Floor, Salinas, CA 93901
Telephone: (831) 755-5220

2. Invoice Detail

Each invoice shall indicate the hours worked by task and by staff member, with the corresponding billing rates.