

CALIFORNIA COASTAL COMMISSION

South Coast District Office
301 E Ocean Blvd., Suite 300
Long Beach, CA 90802-4302
(562) 590-5071



W14a

Filed: 04/08/22
270th Day: 01/05/23
Staff: D.Ziff-LB
Staff Report: 11/02/22
Hearing Date: 11/16/22

STAFF REPORT: PERMIT AMENDMENT

Application No.: 5-19-0345-A2

Applicant: Orange County Parks & California Department of Parks and Recreation

Agent: Winecki Consulting, Inc.

Location: Capistrano Beach County Park, 35005 Beach Road (APNs: 12306009, 12306010, 12306014, 12306015) and Doheny State Beach, 34381 Pacific Coast Highway (APN: 12306005) Dana Point, Orange County

Description of Original Project Approved Pursuant to Permit No. 5-19-0345:
Removal of damaged or imminently threatened public park amenities including sidewalk, boardwalk, stairs, wooden bulkhead, restroom and associated utilities, basketball court, approximately 55 parking spaces, approximately 20 trees, public beach showers, firepits, and light poles; redesign of the park entrance; maintenance of existing sandcubes and armor rock onsite and installation of sandcubes, if needed; and construction of an elevated beach terrace (sandy area with benches and picnic tables) for a period of one year.

Description of Previous Permit Amendment No. 5-19-0345-A1: Extend the term of authorization for the development approved under CDP No. 5-19-0345 for an additional four months (until April 9, 2022).

Description of Proposed Permit Amendment No. 5-19-0345-A2: Implementation of a nature-based adaptation pilot project involving construction of a temporary approximately 1,150 linear-foot buried cobble berm (20 feet high, 125 feet wide) with vegetated sand dunes (5 feet high, 80 feet wide) seaward of the coastal trail at the southeast end of Doheny Beach and the northwest end of Capistrano Beach County Park; approximately 26,800 cubic yards of cut, 36,700 cubic yards of cobble fill, 76,600 cubic yards of berm sand fill, and 29,800 cubic yards of dune sand fill (final amounts dependent on composition of cut materials); replacement of approximately 1,000 linear feet of sandcubes with armor rock; and monitoring and maintenance of site conditions for a period of five years following construction to inform the County's longer term sea level rise adaptation plan.

SUMMARY OF STAFF RECOMMENDATION

As a required follow-up to several emergency coastal development permits (CDPs) issued between 2004 and 2020¹ in response to damage incurred at Capistrano Beach County Park during high tide and storm events, Orange County Parks (OC Parks) submitted CDP Application No. 5-19-0345. At that time, the County was also required to submit a sea level rise adaptation plan for its park facilities. While OC Parks had initiated its adaptation planning process and the preparation of the Capistrano Beach Park Master Plan, the planning timeline did not match the immediate need for interim solutions to avoid additional emergency actions. Thus, OC Parks originally proposed to maintain the developments conducted in emergency situations and install additional protection to remain in place two to five years until the Master Plan effort was completed and approved by the Commission.

On December 9, 2020, the Commission acted on CDP No. 5-19-0345 and approved it with conditions including ones that limited the term of the permit to one year, prohibited the addition of armor rock to the temporary revetment, and required that OC Parks conduct a nature-based adaptation pilot project feasibility study to see if a nature-based solution could be implemented at the site as part of the Master Plan. On June 6, 2021, OC Parks submitted the required study, which suggested that if adequate funds and materials were acquired, the construction of a pilot buried cobble berm on a portion of the site could be feasible. CDP No. 5-19-0345 also required OC Parks to remove the temporarily authorized development at the site—including the sand cube and rock revetment located at the seaward side of the coastal trail, parking lot, and elevated beach terrace—unless it applied for amendment(s) to the permit to extend the temporary authorization, implement the pilot project, or conduct an alternative development plan.

¹ 5-04-491-G, 5-07-039-G, G-5-15-0044 (nullified), G-5-16-0039, G-5-18-0026, G-5-19-0002, G-5-19-0036, and G-5-20-0034

Due to the deadlines associated with the approved development and the need for additional information regarding the adaptation pilot project, OC Parks proposed an amendment to extend the temporary authorization for an additional four months (5-19-0345-A1) by which time the subject CDP amendment application (5-19-0345-A2) would need to be complete. The Commission approved the first CDP amendment, the time extension, on November 19, 2021. The second amendment, to implement a nature-based adaptation pilot project that will inform the Master Plan effort, is now before the Commission.

The subject CDP amendment application involves the proposed construction of a temporary approximately 1,150 linear-foot cobble berm buried beneath vegetated sand dunes seaward of the coastal trail at the southeast end of Doheny Beach and the northwest end of Capistrano Beach County Park. In addition, OC Parks proposes to replace approximately 1,000 linear feet of temporarily authorized sandcubes with armor rock and retention of armor rock temporarily authorized pursuant to the underlying CDP. OC Parks also proposes to implement a monitoring, maintenance, and adaptive management plan for a period of five years following construction that includes triggers for remedial actions such as replanting the vegetation, reconfiguring the berm, and/or removing the development if the data suggests the pilot project is failing.

However, as proposed, there is potential for coastal resources to be impacted during construction activities and for the life of the project. In addition, given that the Commission's action will influence the funding that the pilot project would receive and the final design that would be implemented, special conditions are required to ensure the project is implemented in accordance with the intent of the Commission's action and avoid or minimize impacts to coastal resources. As conditioned, authorization for the temporary development will expire seven years from the Commission's action unless an application to implement a mid- to long-term adaptation strategy is filed as complete.

Therefore, Commission staff recommends the Commission **approve** CDP Amendment No. 5-19-0345-A2, as conditioned, to implement and monitor a nature-based adaptation pilot project to inform a longer-term sea level rise adaptation plan for the area. The motion is on page 5. The standard of review is Chapter 3 of the Coastal Act, with the certified Dana Point Local Coastal Program used as guidance.

PROCEDURAL NOTE: The Commission's regulations provide for referral of permit amendment requests to the Commission if:

- 1) The Executive Director determines that the proposed amendment is a material change, or
- 2) Objection is made to the Executive Director's determination of immateriality, and at least three Commissioners object to the executive directors' designation of immateriality at the next Commission meeting, or the Executive Director determines that the objection raises an issue of conformity with the Coastal Act or certified Local Coastal Program.

In this case, the Executive Director has determined that the proposed amendment is a material change that affects conditions required for the purpose of protecting a coastal resource or coastal access.

TABLE OF CONTENTS

I. MOTION AND RESOLUTION.....	5
II. CHANGES TO CONDITIONS.....	5
III. FINDINGS AND DECLARATIONS	20
A. Project Description and Background	20
B. Coastal Hazards.....	27
C. Public Access and Recreation	34
D. Visual Resources	37
E. Biological Resources and Water Quality	38
F. Archeological and Tribal Cultural Resources.....	42
F. Coastal Act Violations.....	42
G. Local Coastal Program	43
H. California Environmental Quality Act.....	43

APPENDICES

Appendix A – Substantive File Documents

Appendix B – Standard and Special Conditions Pursuant to CDP No. 5-19-0345 through CDP Amendment No. 5-19-0345-A2

EXHIBITS

Exhibit 1 – Project Location

Exhibit 2 – Proposed Project Plans

Exhibit 3 – Proposed Monitoring & Maintenance Plan

Exhibit 4 – Sea Level Rise Projections

Exhibit 5 – Capistrano Beach County Park Master Plan Alternatives (2020)

I. MOTION AND RESOLUTION

Motion:

I move that the Commission **approve** Coastal Development Permit Amendment No. 5-19-0345-A2 pursuant to the staff recommendation.

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit amendment and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves Coastal Development Permit Amendment No. 5-19-0345-A2 on the grounds that the development as amended and subject to conditions will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit amendment complies with the California Environmental Quality Act because feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the amended development on the environment.

II. CHANGES TO CONDITIONS

Unless specifically altered by this amendment, all regular and special conditions attached to Coastal Development Permit 5-19-0345, as amended up through amendment number 5-19-10345-A2, and reflected in **Appendix B**, remain in effect. Language to be deleted is shown in ~~strike-out~~ and new language is shown in **bold, underlined**.

Special Condition 1, Limited Authorization of the Shoreline Protection Elements.

- A. This coastal development permit authorizes the approved shoreline protection (~~sandcubes and armor rock~~) **development for a period of seven years from the Commission's action on this permit (until November 16, 2029)** ~~until April 9, 2022~~). After such time, the authorization for the continuation and/or retention of the **development, including buried cobble berm and** armor rock and sandcubes shall cease. This time period may be extended as described in Part ~~CD~~ of this condition.
- B. ~~No later than June 9, 2021 [six (6) months from the Commission's approval of GDP No. 5-19-0345], the permittee (OC Parks) shall provide a report on the status of the nature-based adaptation pilot project feasibility study and the Capistrano Beach Park Master Plan to the Executive Director. The report shall include recommended benchmarks for completion of these two documents and submittal of the appropriate applications—CDP amendment application, CDP application, and/or Public Works Plan request—to the Coastal Commission's South Coast District office. The Executive Director shall schedule public review and comment on that report at the next available Commission hearing.~~

No later than six (6) months prior to ~~November 16, 2029~~December 9, 2021, the permittees shall apply for a new coastal development permit or **public works plan to implement a mid- or long-term sea level rise adaptation strategy, or for an** amendment to this permit to remove the shoreline protection or modify the term of its authorization, including with respect to any necessary mitigation.

- C. The coastal development permit **or public works plan** application **to implement a mid- or long-term sea level rise adaptation strategy** submitted by the permittees pursuant to Part ~~B~~G of this special condition shall include, at a minimum, **the monitoring results for the pilot project and adequate mitigation to address all coastal resource impacts from emergency actions and unpermitted development that were not fully addressed in CDP No. 5-19-0345, as amended** ~~the nature-based adaptation pilot project feasibility study (Special Condition 6) and the results of the public access surveys (Special Condition 2.D).~~ Provided the new permit application is received and filed as complete before the end of the authorization period listed in Part A of this special condition (i.e. by ~~November 16, 2029~~April 9, 2022), the termination date for that authorization shall be automatically extended until the time the Commission acts on the new application and to allow sufficient time to implement any new or amended project improvements. The application shall also identify and **evaluate potential project alternatives that** address changed circumstances and/or unanticipated impacts associated with the presence of the **temporary cobble and dunes berm and** rock revetment ~~and sandcubes~~, including but not limited to excessive scour and impacts to shoreline processes and beach width, or other impacts from coastal hazards and sea level rise.
- D. Failure to obtain a new coastal development permit, ~~for an~~ amendment to this permit, **or public works plan** authorizing removal of and/or ~~an additional term to retain the shoreline protection~~**implementation of an alternative sea level rise adaptation strategy** shall cause this development to be in violation of the terms and conditions of this coastal development permit.

Special Condition 2, Revised Final Plans.

- A.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit for review and written approval of the Executive Director, two hard copies and one electronic copy of **the following** revised final plans ~~in substantial conformance with the plans submitted September 3, 2020~~ except where required to be modified as follows:
- 1) **Final Project Design Plans for the replacement of all sandcubes/ sandbags onsite with armor rock in substantial conformance with the plans submitted November 3, 2022. The sand within the sandcubes/sandbags shall be deposited on the dry beach and all debris shall be removed and properly disposed of. The toe of the new armor rock shall be located as far landward as feasible and, at the south reach, shall not extend seaward of the approved footprint of the armor rock temporarily authorized pursuant to CDP No. 5-19-0345 or the approved footprint of the temporarily authorized sandcubes. The Mean High Tide**

Line, determined by survey, shall also be included in the final plans where project activities could be at or below the MHTL.

- 2) Final Construction Schedule informed by local storm and tide predictions, grunion run schedule(s), and bird nesting data.
- 3) Final Construction Staging Plans for the replacement of all sandcubes/sandbags onsite with armor rock that avoid or, at a minimum, minimize impacts to public parking and scenic views to the maximum extent feasible.
- 4) Final Public Access Plan that includes:
 - i. Safe public access to or around areas where construction and maintenance activities will occur shall be maintained during all project operations.
 - ii. Coastal trail detour plans that maintain trail access on paved areas as close to the shoreline as feasible (e.g. along Beach Road, if authorized by the property owner). The applicants shall supplement the detour site plan with a comprehensive signage plan that clearly shows, at a minimum, the location, dimensions, material(s), text, and font of each construction, wayfinding, and/or monument sign. The signs shall facilitate, manage, and provide public access to the coastal trail throughout construction and the life of the development.

E. A Final Revetment Monitoring and Maintenance Plan that includes:

- i. Periodic inspections (weekly during summer months [May through September] and monthly during the rest of the year) of the armor rock and surrounding beach area for any errant or displaced rock. If any rock has been displaced from the as-built footprint, it shall be recovered from the beach and either repositioned into the revetment or removed from the site within thirty (30) days of the inspection. Following construction of the approved pilot project, monitoring and maintenance of the armor rock at the north reach of the site may cease.
- ii. Periodic inspections (weekly during summer months [May through September] and monthly during the rest of the year) of the beach conditions seaward and up and down coast of the revetment for indications of scour, presence or absence of a low-tide or high-tide beach fronting the structure, approximation of available recreational beach width fronting the parking area, as well as for the beach width up and down coast and the presence or absence of rip channels, edge waves for other such conditions.
- iii. Annual reporting from the inspections, noting any errant rock that was placed back onto the structure or removed (location and number), beach width estimates and the location and timing of any observed scour areas, edge waves, rip channels, etc. Reports shall be submitted to the Executive Director each year following replacement

of the sandcubes/ sandbags with armor rock and with any application for a new or amended coastal development permit.

- iv. The applicant shall undertake monitoring and maintenance of the revetment in accordance with the approved final Revetment Monitoring and Maintenance Plan. Any proposed changes to the revised Revetment Monitoring and Maintenance Plan shall be reported to the Executive Director. No changes to these approved plans shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

B. PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE PILOT PROJECT AT THE NORTH REACH OF THE SITE, the applicants shall submit for review and written approval of the Executive Director, two hard copies and one electronic copy of the following revised final plans:

- 1) Final Project Design Plans in substantial conformance with the plans submitted and included as Exhibit 2 of the staff report dated November 2, 2022 except where required to be modified as follows:**

~~The applicant shall maintain and reuse the armor rock and sandcubes that currently exist onsite to the maximum extent feasible. No new armor rock shall be placed onsite without an amendment to this permit.~~

~~New sandcubes may be placed as needed to replace damaged or removed sand cubes and a minimal amount of new sandcubes may be added if necessary. Demolition or repair and maintenance (but not demolition and reconstruction) of existing park facilities threatened by further erosion or failure may be conducted as necessary throughout the term of this permit. Prior to undertaking any demolition or repair and maintenance, the applicant shall consult with the Executive Director of the Commission to determine whether separate authorization is required. The footprint of the shoreline protection shall not extend seaward of existing protection, or the linear projection of existing protection, as authorized pursuant to the respective emergency coastal development permit.~~

- i. A final pilot project design prepared by a qualified professional that reflects the proposed +12 ft MLLW beach platform (beach berm) elevation. The vertical reference datum(s) used in the final design plans shall be clearly defined and consistently used throughout the final plans. The Mean High Tide Line, determined by survey, shall also be included in the final plans where project activities could be at or below the MHTL.**
- ii. Dune perimeter and sand retention fencing shall be included and shall be visually permeable and made of natural materials to the maximum extent feasible.**
- iii. Construction and maintenance staging and stockpile areas shall be located on existing paved areas and shall avoid or, at a minimum,**

minimize impacts to public parking and scenic views to the maximum extent feasible.

- 2) Final coastal trail detour plans shall maintain trail access on paved areas as close to the shoreline as feasible (e.g. along Beach Road, if authorized by the property owner). The applicants shall supplement the detour site plan with a comprehensive signage plan that clearly shows, at a minimum, the location, dimensions, material(s), text, and font of each construction, wayfinding, and/or monument sign. The signs shall facilitate, manage, and provide public access to the coastal trail throughout construction and the life of the development.** Pedestrian access shall be extended from the coastal bike trail through the project site in a condition that maximizes accessibility for all people to the extent feasible. **New pedestrian paths, including dune walkover paths, shall not be paved.**
- 3) Final Coastal Dune Planting Plan in substantial conformance with the plans described in the applicants' February 2, 2022 and August 30, 2022 submittals except where requires to be modified as follows:**
 - i. The applicants shall conduct a pre-construction biological survey of the dune reference site to inform the final plant palette, which shall include native, non-invasive, site-appropriate coastal southern foredune species and the weight of seeds and/or number and size of container plants for each dune species.**
 - ii. The plan shall include the planned locations, numbers, and spacing of individual container plant species, including their initial distribution and abundance across the creation area.**
 - iii. The plan shall identify final planting methods including methods of seeding, methods of planting, erosion control during planting, if needed, and temporary irrigation plans, if needed.**
 - iv. The planned abundance, distribution, and percent cover of native coastal dune species shall be based on historical records, relevant literature, and the reference site(s). Successful establishment of the coastal dune habitat area shall be based on the final planting plan.**
 - v. The plan shall include all potential maintenance activities that could be implemented to encourage successful establishment of the dune habitat within the first year post-construction.**

~~C. A Revised Revetment Monitoring and Maintenance Plan, submitted for review and approval of the Executive Director in substantial conformance with the Sandcubes Monitoring and Maintenance Plan (Exhibit 5) submitted September 28, 2020 shall be modified to also require:~~

- ~~1) Periodic inspections (as outlined in the Sandcubes Monitoring and Maintenance Plan) of the sandcubes and surrounding beach area for debris associated with the sandcubes.~~
- ~~2) Immediate removal and disposal of any debris associated with the sandcubes.~~

- ~~3) Replacement or repair of any damaged sandcubes. Replaced or repaired sandcubes shall be located within the as-built footprint of the revetment. No coastal development permit or amendment to this permit shall be required for replacement or repair of any damaged sandcubes within the authorized footprint during the authorized term of this permit.~~
- ~~4) Periodic inspections (weekly during summer months [May through September] and monthly during the rest of the year) of the armor rock and surrounding beach area for any errant or displaced rock. If any rock has been displaced from the as-built footprint, it shall be recovered from the beach and either repositioned into the revetment or removed from the site within thirty (30) days of the inspection.~~
- ~~5) Periodic inspections (weekly during summer months [May through September] and monthly during the rest of the year) of the beach conditions seaward and up and down coast of the revetment for indications of scour, presence or absence of a low-tide or high-tide beach fronting the structure, approximation of available recreational beach width fronting the parking area, as well as for the beach width up and down coast and the presence or absence of rip channels, edge waves for other such conditions.~~
- ~~6) Import and placement of sand shall be conducted in conformance with the Capistrano Beach County Park Sand Compatibility and Use Guidelines prepared for OC Parks by Moffatt & Nichol dated September 2020.~~
- ~~7) Sand placement events shall avoid placement of material on wet sand or in marine waters to the maximum extent feasible.~~
- ~~8) Annual reporting from the inspections, noting any maintenance or replacement of sandcubes (location and number), any errant rock that was placed back onto the structure or removed (location and number), need to import or place sand (number of events, volume of sand and placement location), beach width estimates and the location and timing of any observed scour areas, edge waves, rip channels, etc. Reports shall be submitted to the Executive Director after the first year of monitoring and with any application for a new or amended coastal development permit.~~
- ~~9) The applicant shall undertake monitoring and maintenance of the revetment in accordance with the approved final Revetment Monitoring and Maintenance Plan. Any proposed changes to the revised Revetment Monitoring and Maintenance Plan or Sand Compatibility and Use Guidelines shall be reported to the Executive Director. No changes to these approved plans shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.~~
- 4) Final Pilot Project Monitoring, Maintenance, and Adaptive Management Plan in substantial conformance with the plans submitted and included as Exhibit 3 of the staff report dated November 2, 2022 except where required to be modified as follows:**

- i. The final monitoring plan shall reflect the final approved design plans, including but not limited to replacement of all sandcubes/sandbags with armor rock.
- ii. Include opportunistic beach nourishment methods, including but not limited to access route(s) and staging plans.
- iii. Where one pre-construction survey is not adequate, baseline data or, at a minimum, plans to collect the baseline data required to answer the success evaluation questions shall be included in the final monitoring plan.
- iv. The metrics for dune health shall be revised to incorporate success criteria informed by the approved Final Dune Planting Plan.
- v. Public access surveys should conform with and build upon the final Public Access Survey Plan approved by the Executive Director prior to issuance of CDP No. 5-19-0345.
- vi. If certain monitoring activities are infeasible due to funding constraints, then the applicants shall conduct the maximum amount of monitoring feasible and prioritize measuring tidal water level, wave conditions, overtopping events, seasonal and storm-driven erosion/accretion and cobble movement, and dune establishment, as described in the Monitoring Plan included as Exhibit 3.
- vii. Maintenance activities shall be limited to those required to ensure dune vegetation establishment within the first year post-construction, trash and debris collection and proper disposal, removal of materials from the coastal trail, and the remedial action triggers in the Monitoring Plan as modified under subsection viii below. Beach-compatible material that is removed from the coastal trail and/or other public infrastructure and free from trash shall be placed on the dry beach, if feasible.
- viii. If significant loss of shoreline amenities and/or infrastructure is imminent, then the applicant(s) and/or applicable property owner(s) shall apply for an emergency CDP, if applicable, or an amendment to this CDP to address the issue.
- ix. The remedial action triggers shall be modified as follows:

 - a) If the cobble poses a significant public safety or coastal resource threat, as determined by the Executive Director in consultation with the applicants, then the applicants may nourish the site with beach-compatible sand in accordance with the final approved opportunistic beach nourishment methods or, if new development is proposed to remediate the public safety or coastal resource threat, the applicants shall apply for an emergency CDP, if applicable, or amendment to this CDP to address the public safety or coastal resource threat.
 - b) Where beach scarps greater than three (3) feet in height form and persist for more than two weeks, earth-moving activities shall be

- the minimum necessary to eliminate the scarp and shall, to the maximum extent feasible, be conducted on dry beach to minimize impacts to public access and coastal resources.
- c) If beach and/or coastal dune erosion becomes severe enough that the coastal trail is imminently threatened, the applicants may apply for an emergency CDP, if applicable, or an amendment to this CDP to address the threat. If this trigger is met, removal or maintenance of the armor rock at this location requires a new authorization. The application shall include adaptation alternatives including, but not limited to retreating or temporarily protecting the amenities/ infrastructure in the least environmentally damaging manner.
 - d) The dune success/failure criteria shall be informed by the final approved Dune Planting Plan.
- x. If the required monitoring suggests that any of the failure criteria listed in the final approved monitoring plan have been met, the applicant(s) shall submit a CDP, CDP amendment, or Public Works Plan application that includes relevant monitoring results and an analysis of viable short-, mid-, and long-term adaptation strategies.
 - xi. The applicants shall provide the Executive Director with the date that construction of the pilot project is completed (berm constructed and dunes planted) within three (3) days of completion. Monitoring reports shall be submitted to the Executive Director each year by that date for a period of five (5) years. The final monitoring report shall include an analysis of the feasibility of implementing a nature-based adaptation strategy in the area, a comparison of the different protection methods implemented within the project site, and a discussion about the ability of the vegetated dunes to retain and/or accrete sand.
 - xii. The permittees shall undertake monitoring and reporting in accordance with the approved monitoring and reporting program. Any proposed changes to the approved monitoring and reporting program shall be reported to the Executive Director. No changes to the approved monitoring and reporting program shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

~~The applicant shall prepare a Public Access Survey Plan that, at a minimum, includes:~~

- ~~1) A beach intercept survey that asks visitors:
 - ~~a. To rank the value of Capistrano Beach County Park's public access and recreation amenities including, but not limited to, natural beach area, terraced (elevated) sandy beach, beach parking, bike and pedestrian paths, viewing areas, and picnic tables.~~
 - ~~b. How often they visit the Capistrano Beach County Park.~~~~

- ~~c. The mode(s) of transportation they use to get to Capistrano Beach (i.e. public transit, trolley, personal car, carpool, bicycle, etc.).~~
 - ~~d. Baseline demographic and socioeconomic information to understand who is visiting the beach and inform equitable adaptation planning of public access amenities.~~
- ~~2) A signage plan that encourages public participation in the survey in English and Spanish. The dimensions, material(s), text, font, and location of each sign and/or stencil shall be submitted.~~
 - ~~3) A plan for equitable distribution of the survey throughout the term of permit. The surveys shall be made available in English and Spanish, at a minimum. If electronic survey methods that require access to a smart phone are proposed, paper surveys shall also be provided onsite for the entire duration of the permit term and collected and tabulated along with the electronic data regularly.~~

Special Condition 3, Public Access Program.

PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE PILOT PROJECT AT THE NORTH REACH OF THE SITE, the applicants shall submit for review and written approval of the Executive Director, two hard copies and one electronic copy of a Final Public Access Program, which shall include, at a minimum By acceptance of this permit, the applicant agrees to, and shall ensure, the following:

- A. Safe public access to or around areas where construction and maintenance activities will occur shall be maintained during all project operations.
- B. Use of public parking areas for storage of construction and/or maintenance materials shall be avoided and where avoidance is not possible, shall be minimized to the greatest extent feasible. **Temporary closures of the Capistrano Beach public parking lot shall be avoided or, if necessary for public safety, minimized to the maximum extent feasible, and shall be reported to the Executive Director.**
- C. **A Public Access and Educational Signage Plan that identifies all existing and proposed public access, interpretive, and wayfinding signs and any other project elements that will be used to provide wayfinding assistance to the public or to otherwise identify public access entry points/amenities along the beach. Sign details showing the location, materials, design, and text of all public wayfinding and interpretive signs shall be provided. The signs shall be in both English and Spanish and designed to provide clear information without impacting public views and site character. The plan shall also include:**
 - 1) The permittees shall post the site and areas outside the site that provide access to the site (i.e. coastal trail and entrance to Doheny State Beach) where permission is granted** with a notice, in English and Spanish, indicating expected dates of construction and maintenance activities and/or beach closures.

- 2) Educational signage to inform the public about sea level rise, the nature-based adaptation strategy, and dune habitat and directional signs to facilitate public use of the dune trails.**
- 3) A sign shall be installed in close proximity to the coastal monitoring camera stating that the camera is used for shoreline monitoring only and that personal information about beachgoers will not be collected.**

- ~~D. Following construction and for the duration of this permit, the permittee shall maintain the existing informal access path to the beach on the northernmost portion of the parking lot in a condition that maximizes accessibility for all people to the extent feasible whenever beach area is present.~~
- E. ~~The permittee~~**OC Parks** shall continue to provide free public access and free vehicle parking **at the Capistrano Beach County parking lot** during the entire term of this coastal development permit.
- F. ~~The permittee shall implement the Public Access Survey Plan for the entire term of permit.~~

Special Condition 4, Habitat and Sensitive Species Protection Measures during Project Activities.

- A. Nesting Bird Surveys. For any construction or maintenance activities involving heavy machinery **during nesting season (approximately February 15th through September 15th)**, the permittees shall retain the services of a qualified biologist to conduct nesting bird species surveys in order to determine the presence of bird species including, but not limited to, California least terns, western snowy plovers, great blue herons, and snowy egrets. All project ~~construction~~ activities shall be carried out consistent with the following:
- 1) The applicants shall ensure that the biologist shall conduct the surveys thirty (30) calendar days prior to construction or maintenance activities to detect any active bird nests or breeding behavior in all trees **seaward of Pacific Coast Highway and** within a ~~1500~~**1500**-foot radius of the project site. A follow-up survey must be conducted three (3) calendar days prior to the initiation of construction and nest surveys must continue on a monthly basis throughout the nesting season or until the project is completed, whichever comes first. These surveys shall be submitted to the Executive Director within five days of completion.
 - 2) If an active nest of any shore or wading bird is found ~~within 300 feet of the project, or an active nest for~~ **or** any raptor species is found ~~within 500 feet of the project,~~ the applicant's biologist shall monitor bird behavior and construction noise levels. The nest shall not be removed or disturbed. The biological monitor shall be present during all significant construction activities (those with potential noise impacts) to ensure that nesting birds are not disturbed by construction related noise. Project-related activities may occur only if noise levels are at or below a peak of 65 dB at the nest site(s), **unless an ambient noise study of the project site demonstrates that ambient noise levels exceed 65 dB.** If project-related noise exceeds a peak level of 65 dB **or the ambient noise level** at the nest site(s), sound mitigation measures such as sound shields, blankets around smaller equipment, mixing

concrete batches off-site, use of mufflers, and minimizing the use of back-up alarms shall be employed. If these sound mitigation measures do not reduce noise levels, construction shall cease and shall not recommence until either new sound mitigation can be employed.

- B. An appropriately trained biologist shall monitor all ~~project~~ **construction and maintenance** activities for disturbance to sensitive species or habitat area. Based on field observations, the biologist shall advise the applicants regarding methods to minimize or avoid significant impacts, which could occur upon sensitive species or habitat areas. The biological monitor shall have the authority to stop work if any adverse impacts to sensitive species at the project site and/or within the project vicinity could result from continuation of the proposed development. The applicants shall not undertake any activity that would disturb sensitive species or habitat area unless specifically authorized and mitigated under this coastal development permit or unless an amendment to this coastal development permit for such disturbance has been obtained from the Coastal Commission.
- C. Grunion Monitoring and Avoidance Plan. By acceptance of this permit, the applicants ~~agrees that if feasible, permitted maintenance operations shall avoid seasonally predicted grunion runs, and that if it is infeasible for permitted maintenance operations to avoid seasonally predicted grunion runs, it will~~ **to** abide by the following Grunion Monitoring and Avoidance Plan.
- 1) The applicants ~~shall~~ obtain the seasonally-predicted grunion run schedule from the California Department of Fish and Wildlife website and schedule maintenance to avoid grunion spawning seasons.
 - 2) ~~The applicant shall obtain California Department of Fish and Wildlife and Coastal Commission Executive Director approval, as defined in the Coastal Development Permit conditions.~~
 - 3) ~~Assessment by~~ **If project activities need to be performed during the grunion spawning season,** trained personnel (i.e., qualified biological monitor) **shall assess** of the potential of the beach to support grunion spawning at each outlet where work will occur. Grunion monitoring will be required only at sites **with adequate sandy substrate** ~~that have been identified as~~ **suitable for** ~~these supporting~~ grunion spawning.
 - 4) A monitoring schedule. If **construction or** maintenance needs to be performed during the grunion spawning season in the project area that may support spawning, the predicted grunion run prior to the **construction or** maintenance work will be monitored. The predicted grunion run will be monitored for three nights: the night after the full or new moon phase and the two following nights. The monitoring would occur from the time of the high tide for two hours following the tide or until the grunion stop running if they are still running two hours after the high tide.
 - 5) Results of grunion locations. If grunion are observed to run in the vicinity of the project area, the area where they ran will be marked physically and/or by Global Positioning System (GPS) locations. The density of the grunion throughout the area will be noted.

- 6) The applicants will ensure that **construction and** maintenance workers will avoid the spawning area during all work activities.
- 7) If spawning occurred within portions of a **construction or** maintenance area, work in those areas will be avoided or rescheduled until after the grunion eggs have hatched, **unless stopping work would result in significant loss of project construction materials (i.e. cobble and sand) and approval to conduct work is granted by the Executive Director after coordinating with the California Department of Fish and Wildlife and the Coastal Commission**. This occurs during the two weeks between grunion runs, i.e., the two or three days before every full or new moon or when it has been otherwise determined that the eggs from the run have washed out to hatch.

Special Condition 5, Protection of Water Quality during Construction.

To protect coastal water quality during construction and **maintenance** demolition activities, the applicants shall comply with the following requirements:

A. General BMPs and Procedures

- 1) Best Management Practices (BMPs) designed to minimize adverse impacts resulting from construction and demolition activities shall be implemented prior to the onset of such activity, including BMPs to minimize erosion and sedimentation, minimize the discharge of pollutants and non-stormwater runoff, and minimize land disturbance, as applicable. The description and location of all water quality BMPs to be implemented during construction and demolition shall be specified.
- 2) All BMPs shall be maintained in a functional condition throughout the duration of the construction and **maintenance** demolition activities and shall be promptly removed when no longer required.
- 3) The use of temporary erosion and sediment control products (such as fiber rolls, erosion control blankets, mulch control netting, and silt fences) that incorporate plastic netting shall be prohibited, to minimize wildlife entanglement and plastic debris pollution. Only products with 100% biodegradable (not photodegradable) natural fiber netting shall be allowed.
- 4) All construction methods and equipment to be used shall be specified.

B. BMPs for Construction **and Maintenance** Activities Adjacent to Coastal Waters

- 1) Construction work and equipment operations below the mean high water line shall be minimized to the extent feasible, and, where possible, shall be limited to times when tidal waters have receded from the authorized work areas.
- 2) All work shall be performed during favorable tidal, ocean, wind, and weather conditions that will enhance the ability to contain and remove, to the maximum extent feasible, construction and demolition debris.
- 3) Equipment or construction materials not essential for construction work shall not be allowed at any time in the intertidal zone.

- 4) The footprint of areas within which ~~demolition and construction~~**project** activities are to take place (including staging and storage of equipment, materials, and debris; and equipment fueling and maintenance) shall be minimized to the extent feasible, to minimize impacts on the marine environment. Construction activities shall be prohibited outside of designated construction, staging, storage, and maintenance areas.
- 5) Vegetable-oil-based hydraulic fluids shall be used in heavy equipment used in construction lasting one week or longer overwater or adjacent to coastal waters, if feasible.
- 6) Biodiesel fuel shall be used in heavy equipment used in construction lasting one week or longer overwater or adjacent to coastal waters, if feasible.

C. BMPs for Stockpile and Debris Management

- 1) All demolition and construction materials, equipment, debris, and waste shall be properly stored and contained, and shall not be placed or stored where it may be subject to wave, wind, rain, or tidal dispersion, to prevent pollutants from entering coastal waters, sensitive habitats, and the storm drain system.
- 2) All stockpiles, construction materials, and demolition debris shall be enclosed on all sides, covered during rain events, and not stored in contact with the soil, and shall be located a minimum of 50 feet from coastal waters, sensitive habitat, and storm drain inlets.
- 3) Sediment control BMPs shall be installed at the perimeter of staging and storage areas, to prevent sediment in runoff from construction-related activities from entering coastal waters.
- 4) Demolition or construction debris and sediment shall be removed from work areas each day that demolition or construction occurs, to prevent the accumulation of debris, sediment, and other pollutants that may potentially be discharged into coastal waters.
- 5) All trash and debris shall be disposed of in the proper trash and recycling receptacles at the end of every construction day.
- 6) The applicant shall provide adequate disposal facilities for solid waste, including excess concrete, produced during demolition or construction.
- 7) All debris resulting from ~~demolition or construction~~ **or maintenance** activities, and any remaining construction materials, shall be removed from the project site within 24 hours of completion of the project.
- 8) Debris shall be disposed of at a legal disposal site or recycled at a recycling facility. If the disposal site is located in the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place unless the Executive Director determines that no amendment or new permit is legally required.

D. BMPs for Spill Prevention and Equipment Maintenance

- 1) Spill prevention and control measures shall be implemented to ensure the proper handling and storage of construction products or materials that may

have adverse environmental impacts. The discharge of any construction products or materials into coastal waters shall be prohibited.

- 2) Leaks or spills of fuel, oil, grease, lubricants, hydraulic fluid, chemicals, preservatives, paints, or other construction products or materials shall be immediately contained on-site and disposed of in an environmentally-safe manner as soon as feasible.
- 3) Construction **and maintenance** vehicles operating at the project site shall be inspected daily to ensure there are no leaking fluids and shall be serviced immediately if a leak is found.
- 4) Fueling and maintenance of construction **and maintenance** equipment and vehicles shall be conducted off-site, if feasible. Any fueling and maintenance of mobile equipment conducted on site shall take place at a designated area located at least 50 feet from coastal waters, sensitive habitat, and storm drain inlets (unless these inlets are blocked to protect against fuel spills). The fueling and maintenance area shall be designed to fully contain any spills of fuel, oil, or other contaminants. Equipment that cannot be feasibly relocated to a designated fueling and maintenance area (~~such as cranes~~) may be fueled and maintained in other areas of the site, provided that procedures are implemented to fully contain any potential spills.
- 5) Equipment, machinery, and vehicles shall be washed only in designated areas specifically designed to contain runoff and prevent discharges into coastal waters. Thinners, oils, and solvents shall not be discharged into the sanitary sewer or storm drain systems.

Special Condition 6, Permit Compliance.

- A. The permittees shall undertake and maintain the development in conformance with the special conditions of the permit and the final plans, ~~including but not limited to the reconstruction and construction of shoreline protective devices~~. Any proposed changes to the approved plans shall be reported to the Executive Director in order to determine if the proposed change shall require a permit amendment pursuant to the requirements of the Coastal Act and the California Code of Regulations. No changes to the approved plans shall occur without a Commission-approved permit amendment unless the Executive Director determines that no permit amendment is required.
- ~~B. The permittee shall submit a nature-based adaptation pilot project feasibility study that, at a minimum, analyzes the feasibility of implementation of a nature-based adaptation strategy, in place of some or all of the revetment (armor rock and sandcubes) authorized by this permit, and that can be included as part of a midterm or long-term management plan. A pilot project, such as the construction of a living shoreline or cobble berm, shall be submitted to the Executive Director no later than six (6) months prior to this permit's expiration unless the authorization termination deadline is extended by the Executive Director as outlined in Special Condition 1.D of this permit. If the study indicates that a nature-based strategy is feasible, the permittee shall submit a new coastal development permit application or an application to amend this permit to implement the pilot~~

project. If the pilot project is feasible at the southeastern-most portion of the site, the applicant shall submit an alternatives analysis that includes removal of the southern parking area and restoration of the full beach system to the inland extent of the property.

- C. Upon completion of the Capistrano Beach Park Master Plan or equivalent mid-to long-term adaptation strategy for the project site, the permittee shall submit an application for an amendment to this coastal development permit, a new coastal development permit, or a Public Works Plan to the Commission for review and approval for the portions of the plan that constitute development. If this application is not filed as complete prior to the end of the subject permit term (i.e. by November 16, 2029), the authorization for the development approved under CDP No. 5-19-0345-A2 shall expire unless an interim CDP or CDP amendment application is filed as complete.

Special Condition 8, As-Built Plans.

WITHIN 90 DAYS OF PROJECT COMPLETION, the permittees shall submit as-built plans for the approved temporary buried cobble and sand berm and the temporary rock revetment approved revetment, which include volume of existing rock, volume and number of sandcubes, revetment footprint, revetment toe and crest elevations, locations of public access paths or ramps, locations of drain pipes or outlets, and locations of the fixed or permanent benchmarks from which the elevation and seaward limit of the revetment can be referenced for required monitoring and necessary maintenance.

[NEW CONDITION] **9. Berm and Dunes Construction and Inspection Plan. PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE PILOT PROJECT AT THE NORTH REACH OF THE SITE, the applicants shall provide a Berm and Dunes Construction and Inspection Plan that includes, at a minimum:**

- A. Information regarding the final sources of beach-compatible cobble and sand and a final Nourishment Route. The compatibility of imported sand shall be determined consistent with the Capistrano Beach County Park Sand Compatibility and Use Guidelines approved prior to issuance of CDP No. 5-19-0345. Beach-compatible cobble shall be defined as part of this plan and shall conform to the maximum extent feasible with the naturally-occurring cobble size(s) and material(s) at the site.**
- B. A final berm construction and dunes planting schedule that identifies all phases of construction including but not limited to staging, excavation and sorting of onsite material, and berm/dunes construction activities. The final schedule shall be informed by local storm and tide predictions, grunion run schedule(s), and bird nesting data. The schedule shall minimize impacts to public access and coastal resources where feasible while minimizing the length of the construction period.**
- C. An Excavation and Sorting Plan that will include, at a minimum:**
- 1) Excavation and sorting methods, including how materials will be excavated, where they will be sorted, and what is suitable for reuse.**

- 2) A method whereby all trash would be removed from excavated and/or sorted materials and properly disposed of. If buried debris from past development onsite is uncovered, it shall be documented to inform the longer-term adaptation plan for the area and disposed of properly.
- 3) A determination whether the final approved design, including excavation volumes, has the potential to impact archeological, paleontological, and/or tribal cultural resources. This determination shall be made in consultation with Juaneño/Acjachemen tribal entities. If there is potential for such resources to be impacted, the plan shall include best management practices to avoid or, where avoidance is not feasible, minimize such impacts.
- 4) WITHIN THREE DAYS OF THE COMPLETION OF SEDIMENT EXCAVATION AND SORTING ACTIVITIES, the applicants shall notify the Executive Director of the final required sand and cobble import and export volumes. To the maximum extent feasible, cobble and sand derived from the project site shall be used in the construction of the berm.

[NEW CONDITION] 10. Other Required Approvals. By acceptance of this permit, the applicants agree to obtain all other Local, State, or Federal permits that may be necessary for any aspect of the proposed project, such as permits from the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California State Lands Commission, California Department of Fish and Wildlife, Regional Water Quality Control Board, and/or City of Dana Point. Any proposed changes to the approved final plan that may be required by any other agency shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

III. FINDINGS AND DECLARATIONS

A. Project Description and Background

Project Site

The proposed development is located at a public beach in Dana Point stretching from the southeast end of Doheny State Beach to the end of Capistrano Beach County Park where the Commission approved the construction of a bike path (coastal trail), public beach parking lot, restroom, and other recreational amenities in the early 1980s (**Exhibit 1**). Immediately inland of the site is Beach Road—a private road that provides access to City stormwater treatment facilities to the northwest and the Capistrano Bay District (private gated community of approximately 180 single-family residences) to the southeast—followed by a railway and Pacific Coast Highway. The site is currently developed with the southern parking area and turnaround for Doheny State Beach, a segment of the California Coastal Trail, a public parking lot with landscaping at Capistrano Beach County Park, and shoreline protection in the form of armor rock,

sandcubes,² and large sandbags. The built development at this site has been subject to damage from storm events, flooding, and erosion since the 1960s, with increasing requests for authorization of emergency development in recent years to address such damage, remove significant amenities from the site such as parking, a basketball court, and numerous trees, and restore some level of public access to the site.

Site History

Historically, this stretch of coastline has been relatively narrow due to prior development on the beach and given the general natural transportation of sediment from San Juan Creek downcoast to San Diego. Capistrano Beach receives much of its sand from San Juan Creek and opportunistic beach nourishment events. However, the beach has been narrower in recent history due to the development of the San Juan Creek watershed, coastline, and San Juan Creek channel. In the late 1920s, a pier and a beach club protected by a seawall were constructed on the project site. Storms in the 1960s damaged the pier, beach club, and its seawall. Cars filled with cement were installed as an emergency measure to protect the beach club and may still exist under the project site. The Capistrano Beach Club was demolished in 1969 and the site was purchased by the County in 1979 and the Beach Park was opened the following year. The most recent beach nourishment event occurred in 2016 but given low levels of sediment input from San Juan Creek and net longshore transport of such sediment southeast past Capistrano Beach, the width of the sandy/cobble beach onsite currently ranges from zero feet to approximately 100 feet. During high tides and/or storm events, the amenities onsite are subject to overtopping, erosion, and, in some cases, permanent damage.

Recent Permit History

From 2015 to 2020, OC Parks and/or the City of Dana Point applied for at least one emergency permit each year to address or avoid imminent damages to the public facilities at the site.³ The most recent emergency permits issued required the preparation and submittal of a sea level rise adaptation plan for the site with a follow-up permit application. The follow-up application was received on April 26, 2019 to remove damaged or imminently threatened public park amenities including sidewalk, boardwalk, stairs, wooden bulkhead, restroom and associated utilities, basketball court, approximately 55 parking spaces, approximately 20 trees, public beach showers, firepits, and light poles; redesign of the park entrance; install approximately 870 linear feet of sandcubes (one cubic yard each) over a layer of geotextile; install approximately 840 linear feet of armor rock along the seaward edge of the coastal trail and park facilities; and construct an elevated beach terrace (sandy area with benches and picnic tables) immediately inland of a portion of the proposed revetment at Capistrano Beach County Park for a period of two to five years. The two- to five-year term was proposed to provide

² Sandcubes are geosynthetic bags filled with a cubic yard of sand and stacked three or four high and two deep along the seaward edge of a portion of the coastal trail and the southern end of the Capistrano Beach parking lot.

³ G-5-15-0044 (nullified), G-5-16-0039, G-5-18-0026, G-5-19-0002, G-5-19-0036, and G-5-20-0034

OC Parks with additional time to continue developing an adaptation plan (Capistrano Beach Park Master Plan) for eventual approval by the Commission.

On December 9, 2020, the Commission authorized after-the fact removal of specific public park amenities (listed above); redesign of the park entrance; maintenance of existing sandcubes and armor rock onsite and installation of sandcubes, if needed; and construction of an elevated beach terrace at Capistrano Beach County Park subject to eight special conditions. As conditioned, the authorization was limited to one year from the date of the Commission's December 2020 action and the applicant was required to submit a CDP amendment application to remove the development, implement a nature-based adaptation pilot project (if determined to be feasible) if the amendment application is filed as complete by the authorization expiration date (December 9, 2021), or modify the term of authorization. While OC Parks submitted the required pilot project feasibility study in a timely manner, sufficient detail was not available before the December 9th deadline. Therefore, OC Parks submitted a CDP amendment application, 5-19-0345-A1, to change Special Condition 1 of CDP No. 5-19-0345 to extend the permit term four months to April 9, 2022. The Commission approved the amendment on November 19, 2021.

Since that time, Commission staff has continued to meet with County staff on an at least monthly basis to discuss construction status and condition compliance for CDP No. 5-19-0345, pilot project details to inform the climate adaptation master plan for Capistrano Beach, and progress on site-specific and regional adaptation planning efforts. On April 8, 2022, CDP Amendment Application No. 5-19-0345-A2 for the implementation of a nature-based adaptation pilot project was filed as complete. Commission, OC Parks, and California State Parks staff have coordinated closely on the amendment application during the review period.

Pursuant to the Special Condition 1 of CDP No. 5-19-0345, as amended, the authorization for the development approved under that permit expires at the time the Commission acts on the subject CDP amendment application. In other words, if the Commission acts to approve this amendment, for the period of time between the Commission's action on the subject permit and the Executive Director's issuance of the permit, the proposed development will be approved, but not legally authorized. Therefore, Commission staff treats the improvements to the site temporarily authorized pursuant to the underlying permit as new development despite the fact that it currently exists at the site. If the Commission denies the proposed CDP amendment, the development authorized under CDP No. 5-19-0345, as amended, will become unpermitted.

Alternatives Analyzed

As required under CDP No. 5-19-0345 and requested by Commission staff, OC Parks conducted series of feasibility studies (**Appendix A**) that looked at a variety of alternatives for nature-based shoreline protection strategies and implementation of a nature-based pilot project at different locations throughout the site. The June 2021 Nature-Based Pilot Project Feasibility Study offered five different project concepts: 1) a buried cobble berm seaward of the County's existing park facilities, 2) removal of some of the County's park facilities and installation of a buried cobble berm with vegetated

dunes, 3) removal of all of the County’s park facilities stopping at the private road that provides the only route in and out of the adjacent residential community and construction of a buried cobble berm with vegetated dunes, 4) a buried cobble berm seaward of the coastal trail, and 5) a buried cobble berm with vegetated dunes seaward of the coastal trail. A Beach Nourishment Study was also prepared in July 2021 that looked at the feasibility of constructing and maintaining sand berms of different widths along the full length of Capistrano Beach. In addition, a supplemental appendix to the June 2021 study that reviewed Cobble Berm XBeach Modelling for three alternatives—a cobble berm located seaward of the County’s park facilities at the south end of Capistrano Beach, a cobble berm along the coastal trail at the north end of Capistrano Beach and the south end of Doheny Beach, and removal of some of the parking facilities at Capistrano Beach and implementation of a cobble berm in that location—was prepared in August 2021.

In all cases, the likelihood of success of nature-based solutions is uncertain. Thus, the applicants are proposing a pilot project with multiple years of monitoring. The analyses of project alternatives found that the potential consequences of a pilot project, including a failed pilot project, would be more severe at the south end of Capistrano Beach where the County’s facilities border residential development as compared to the relatively low-risk north end. Thus, the County stated that it would need to propose a revetment or vertical wall adjacent to the private road in association with any nature-based pilot project to reduce the liability risks undertaken by the County. In any case, the feasibility studies suggest that the data collected from a pilot project implemented in the northern portion of the beach could be transferred to understanding appropriate solutions at the south end.

The studies also found that while sand berms/nourishment events at various widths and volumes alone would likely require renourishment and maintenance every five to 20 years and after large storm events, sand and cobble together could provide better protection and with established vegetated dunes, potentially require less maintenance. In addition, as would be expected, the larger the mass of the nature-based protection, the more protection it would provide. However, given that a temporary pilot project is preferred at this time due to the uncertainty surrounding a nature-based strategy’s performance at this site, the final mass of the vegetated cobble berm is somewhat flexible. The outstanding feasibility questions that the County has struggled to answer are if there will be adequate funding for the project and adequate sand supply for nourishment and maintenance. Thus, the County has aimed to maximize the chances the project could be implemented effectively by partnering with California State Parks, managing the scale of the project, and identifying priorities in terms of data collection.

Project Description

Based on a comprehensive analysis of the aforementioned alternatives and past Commission actions on similar projects, the applicants selected the preferred project alternative, which is the alternative that has the highest overall chance of success amongst the different locations and general designs analyzed. Thus, the amendment request before the Commission is as follows:

For the “north reach” (**Exhibit 1**), OC Parks and State Parks propose to implement a nature-based adaptation pilot project (“pilot project”) involving construction of a

temporary approximately 1,150 linear-foot buried cobble berm that is approximately 20 feet high and 125 feet wide (**Exhibit 2**). The cobble would be buried under vegetated sand dunes with a maximum height of 24 feet and a width of approximately 80 feet. There would be designated public trails through the dunes to allow the public to access the sea. The berm would be constructed seaward of the coastal trail at the southeast end of Doheny Beach and the northwest end of Capistrano Beach County Park and would involve approximately 26,800 cubic yards of cut, 36,700 cubic yards of cobble fill, 76,600 cubic yards of berm sand fill, and 29,800 cubic yards of dune sand fill. Final cut/fill volumes would be dependent on the composition of the beach materials onsite during construction. Cobble and sand not reused onsite would be beach-compatible and sourced from local suppliers and/or opportunistic sediment management events.

Currently, there are temporarily authorized sandcubes located immediately seaward of a 530 linear foot portion of the coastal trail on OC Parks' property. As proposed, these sandcubes would be removed, emptied onsite,⁴ and replaced with armor rock. The final design of the proposed cobble berm immediately seaward of this specific stretch of the north reach may be designed with a smaller mass to test the performance of the cobble berm with and without an armor rock backstop.

Following construction, the applicants propose to monitor and maintain the site in accordance with the Pilot Project Monitoring Plan (**Exhibit 3**). The monitoring plan outlines the project goals and success criteria for the project, prioritizes monitoring parameters in case funding is limited, and proposes maintenance and/or remedial actions to be implemented if needed. The goals are: (1) to provide protection from overtopping by storm waves; (2) stabilize the shoreline; (3) avoid/minimize impacts to coastal resources; (4) increase site desirability by beach users; (5) provide data for the engineering design of similar natural coastal protection strategies; and (6) enhance native flora and fauna habitat. The goals would be measured through a variety of metrics ranging from water levels and wave conditions to seasonal and storm-driven erosion/accretion to dune health to people's use of the site. Success of the pilot project is defined as the ability to determine whether the nature-based approach is appropriate for implementation at this site and at similar or adjacent sites as a longer-term solution. The success criteria are organized by performance, public safety, maintenance, and adaptive management.

As proposed, if the success criteria are not met, i.e. the following identified failure events are triggered, the applicants would implement various strategies to protect the built development onsite and maintain public access to the beach. In the case that the cobble adversely impacts public safety or coastal resources (significant dispersal of cobbles or persistent hazardous conditions from cobbles becoming airborne during wave events), the applicants would like to remove the cobble and install sand bags or nourish the beach as an emergency measure. If a beach scarp forms and is greater than three feet in elevation, the grade would be smoothed out. If the beach face migrates inland within ten feet of the coastal trail, then the applicants propose to place sandbags on the

⁴ The sandcubes are filled with beach-compatible sand. No trash or debris will be left onsite.

seaward side of the coastal trail. And, if less than 75% of the dune vegetation survives after the first year, the applicants would conduct one additional planting. If that planting is not successful, then the applicants would not conduct additional plantings but would monitor and record the changing conditions of the dunes. Routine maintenance needs, on the other hand, would be monitored biweekly and include trash clean-up, repair of dune fencing, clearing excess cobble/sand from the coastal trail, and public safety monitoring.

For the “south reach” (**Exhibit 1**), OC Parks proposes to retain the armor rock seaward of the County parking lot and bike path and replace the 220 linear feet of sandcubes and 250 linear feet of sandbags with additional armor rock (**Exhibit 2**). The armor rock would be designed consistent with the final as-built plans for the rock revetment approved pursuant to the underlying permit and would not extend seaward of the existing rock and sandcube revetment toe. Given recent site degradation following high tide events, OC Parks proposes to replace the sandcubes and sandbags as soon as possible.

In addition, given that the authorization for the development approved under CDP No. 5-19-0345, as amended, expires at the time the Commission acts on the subject development, all development approved under that permit is treated as new development in the subject application. Thus, OC Parks is also requesting renewed authorization for the terraced beach area and associated amenities, portable public restrooms, and improvements to the parking lot entrance. Furthermore, a coastal monitoring camera was installed at the south reach without the benefit of a coastal development permit; therefore, OC Parks is also requesting after-the-fact approval of that element.

Standard of Review

The portion of the proposed project located landward of the mean high water line is within the boundaries of the City of Dana Point and would typically require a local coastal development permit. The portion of the proposed project located seaward of the mean high water line is within the Commission’s area of original jurisdiction, where the Commission retains the responsibility to issue coastal development permits. Section 30601.3 of the Coastal Act provides that the Commission may process and act upon a consolidated permit application where a proposed project requires a CDP from both a local government and the Commission, and where the applicant(s), the local government, and the Commission consent to consolidation of the permit application, provided that public participation is not substantially impaired by consolidation, and that Chapter 3 of the Coastal Act is the standard of review for a consolidated permit application. Therefore, because the applicants, local government, and Commission agreed to a consolidated permit application for the underlying permit and consolidation will not substantially impair public participation, the Coastal Commission is the permit issuing authority for the entire proposed project and the standard of review is Chapter 3 of the Coastal Act, with the certified LCP used as guidance. In any case, **Special Condition 10** is imposed to ensure that any other required local, state, or federal entitlements are received.

Section 13166(a) of the Commission’s regulations gives the Executive Director the authority to reject a CDP amendment application if "the proposed amendment would

lessen or avoid the intended effect of...a conditionally approved permit.” In this case, the Executive Director did not reject the amendment application because it proposes the implementation of a nature-based adaptation pilot project that will inform the selection of a longer-term sea level rise adaptation strategy. A study of the feasibility of a pilot project at this location was proposed by OC Parks as required by the underlying permit as mitigation for the impacts on shoreline sand supply through the temporary maintenance of shoreline protection onsite. Thus, the proposed pilot project is consistent with and forwards the intent of the underlying permit conditions, which anticipate and require a longer-term adaptation plan for the area. The proposed continued maintenance of shoreline protection at the south reach, on the other hand, does not lessen the intent of the proposed amendment because it is a short-term strategy that will protect existing public access amenities until alternative adaptation strategies with adequate mitigation can be implemented.

Mid- and Long-term Adaptation Planning

Condition 17 of ECDP No. G-5-19-0002, issued January 15, 2019 (and Condition 16 of ECDP No. G-5-19-0036), required the applicant to either remove the development and restore the site within 60 days or submit a follow-up CDP application that includes an alternatives analysis with a Climate Change Adaptation Plan. In the summer of 2019, Orange County began developing a Master Plan for the County Park at Capistrano Beach. The planning process started with stakeholder interviews and has included three public workshops and other engagement efforts to identify mid-term adaptation alternatives for the next 20 to 30 years. Commission, OC Parks, and City staff coordinate regularly (once a month) on the Master Plan and related efforts.

Thus far, the Master Planning process has resulted in the identification of three (3) alternatives—(1) Protect, (2) Protect and Retreat, and (3) Accommodate and Retreat—based on the public’s prioritization of recreational amenities, which are summarized in **Exhibit 5**. All three alternatives include maintenance of some public access and recreation amenities including the coastal trail, public turnaround area and various amounts of parking, restroom facilities, and seating areas. All three alternatives also include perched sandy beach areas and varying amounts of protection. The subject permit amendment proposal would inform, among other things, whether potential future protection can be in the form of a nature-based solution, how the varying shoreline protection materials (armor rock and buried cobble berm) perform, and what maintenance and associated costs may be needed. The monitoring data collected as part of the proposed permit amendment will inform the final alternatives analyzed in the adaptation plan and selection of an adaptation strategy.

OC Parks is also involved in long-term regional planning efforts and is exploring adaptation measures such as sand nourishment, creation of an offshore reef, and installation of a groin. The County hosted a stakeholders meeting on the South Orange County Coastal Resilience Strategic Plan on July 6, 2022 to get initial feedback on potential alternatives, governance structures, and funding opportunities. A draft plan is anticipated to be released at the end of this year.

B. Coastal Hazards

Coastal Act Policies

Section 30253, *Minimization of adverse impacts*, states, in part:

New development shall do all of the following:

- (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Section 30235, *Construction altering natural shoreline*, states:

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.

Section 30270, *Sea level rise*, states:

The commission shall take into account the effects of sea level rise in coastal resources planning and management policies and activities in order to identify, assess, and, to the extent feasible, avoid and mitigate the adverse effects of sea level rise.

As described in the previous section, the built development at this site has been subject to damage from storm events, flooding, and erosion since the 1960s with increasing requests for authorization of emergency development in recent years to address such damage, remove significant amenities from the site such as parking, a basketball court, and numerous trees, and restore some level of public access to the site. While storm events, sea level rise, and sediment input are hard to predict, this trend is expected to continue and accelerate as sediment supplies remain the same or decrease, as sea levels rise, and as the frequency and intensity of storm events increase due to climate change.

In fact, recent monitoring reports provided by the applicants suggest that coastal hazards from high tides and storm events are changing the shoreline at this location (**Appendix A**). An annual shoreline monitoring report for February 2022 through August 2022 that summarizes data collected from coastal cameras⁵ at four beaches in Orange

⁵ The County's Coastalcoms cameras are in place for environmental monitoring. 3Crowns Technology cleans, maintains, and reports on the service. The cameras do not collect personal data and do not have

County, including Capistrano Beach, found that Capistrano Beach is, on average, approximately 40 feet wide and during that year eroded approximately 12 feet. Staff would note that this only captures six months of data from this past spring and summer and does not, therefore, confirm that there is a longer-term trend, but summer is usually when beaches accrete rather than erode. Additionally, a progress report summarizing aerial monitoring of three State beaches, including Doheny Beach, included observations that while the south-west facing portions of the beach (including the portion that is part of the subject project site) have been able to recover beach width lost during the winter months, the beach also experienced scarp retreat and damage to/loss of parking area during a long period of south-west swell and high tides in August 2021. That same parking area had been damaged by a storm event in July 2020, which rendered that portion of the site unusable.

Coastal Act Section 30270 requires the Commission to consider the effects of sea level rise by identifying and assessing sea level rise impacts and, to the extent feasible, avoiding or mitigating those impacts in planning and permitting decisions. A coastal resiliency study prepared by Moffatt & Nichol for OC Parks in April 2019 (Appendix A), analyzed two sea level rise scenarios (1.6 feet and 3.3 feet) that reflect sea level rise conditions that are higher than the extreme risk aversion (H++) scenarios for 2030 and 2050 as defined in the best available science for California, *Rising Seas in California: An Update on Sea Level Rise Science* (OPC, 2018). The study uses Coastal Storm Modeling System (CoSMoS) data, which projects that with 1.6 feet of sea level rise, the shoreline position with winter erosion could be in line with the middle of the existing parking lot and with 3.3 feet of sea level rise the shoreline position could be at Beach Road. Additionally, a 2014 report on coastal processes at Doheny State Beach⁶ indicates that the site has a shoreline erosion rate of 14 feet per year since 1980, although much of the erosion is episodic. **Exhibit 4** includes graphics from the April 2019 study showing the estimated shoreline position with 1.6 feet and 3.3 feet of sea level rise.

Thus, a no project alternative would likely result in additional damage to and erosion of the parking facilities, coastal trail, landscaping, perched beach area, and potentially the City's stormwater treatment system's outfall pipes.⁷ This could lead to rapid erosion of fill material, exposure of remnants of older development, and closures of the park due to unsafe conditions onsite. Understanding the risks and vulnerabilities the site faces regarding coastal hazards, the applicant is preparing mid- and long-term adaptation plans for the area. Therefore, OC Parks is requesting to maintain the rock revetment

facial recognition ability. Data retrieved is not publicly available and has only been shared with other organizations with written permission (i.e. a consultant working on a restoration project at a County beach).

⁶ *Updated Coastal Processes and Hydraulic/Hydrology Studies for Doheny State Beach*, Coastal Environments, 11 September 2014

⁷ These pipes extend seaward from the City's stormwater facilities located landward of the bike path in the northern portion of the project site. The pipes are located below the beach, but the ends of the pipes have been exposed at times. The stormwater facilities were approved under Local CDP Nos. CDP00-13 and CDP00-19(I). A condition of the development is that no shoreline protective device(s) shall ever be constructed to protect the storm drain outlets.

constructed during emergency actions and authorized to remain for an additional period pursuant to CDP No. 5-19-0345 as amended and implement the proposed nature-based pilot project. OC Parks is also proposing to replace the sandcubes and sandbags onsite with armor rock to reduce marine debris for the longer permit term. The proposed CDP amendment will inform the master planning effort and prevent further damage to the low-cost recreational facilities at the site—access to which has been limited, and at times unsafe during storm events and emergency development activities—until the Master Plan or equivalent longer term adaptation strategy can be reviewed, approved, and implemented.

Coastal Act Section 30253 requires new development to minimize risks to life and property in hazardous areas and assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area. Section 30253 prohibits new development that would “in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.” Coastal Act Section 30251 also requires that development minimize alteration of natural landforms such as this beach area, and that scenic and visual qualities be protected (analyzed later in this report).

Shoreline protective devices can have a variety of negative impacts on coastal resources including adverse effects on shoreline sand supply, scenic qualities, natural landforms, and overall shoreline beach dynamics on and off site, ultimately resulting in the loss of beach. When a shoreline is armored with a shoreline protective device, such as the existing temporarily authorized revetment made up of sandbags, sandcubes, and armor rock, the natural exchange of material from the armored area to the beach or shoreline area and offshore sand supply system is interrupted. In addition, if the shoreline area would have otherwise eroded, there is a measurable loss of material to the beach, shoreline, and offshore sand supply system as a result.

On the other hand, nature-based adaptation strategies like the proposed buried cobble berm/vegetated dunes are an example of a more resilient approach to climate adaptation that incorporates ecological principles into shore protection strategies to support multiple benefits, including hazard adaptation and mitigation, natural resource resilience and enhancement, and recreation and scenic resource preservation. For the purpose of this report, a nature-based adaptation strategy is generally recognized as a coastal adaptation and/or erosion control method that is comprised of natural or mostly natural elements, which contributes to the persistence and enhancement of coastal processes and ecological benefits while also offering protection services to inshore areas. While a wide body of research on these strategies exists for the Atlantic and Gulf coasts, there are limited case studies in California; hence the applicants proposed implementation of a nature-based adaptation strategy at this location as a pilot project to see if it can serve as a mid- to long-term shoreline protection alternative at a site with relatively high wave energy and frequent variations in beach morphology.

While the results of required shoreline monitoring data that was collected between June and September 2021 suggested that there were no changed circumstances, excessive scour, or impacts to shoreline processes or beach width since CDP No. 5-19-0345 was issued (March 3, 2021), the camera data collected between February 2022 and August

2022 found that there was a loss of approximately three feet of beach width. In addition, monitoring data collected between February and October 2022 included observations of frequent damage to sandcubes and scour and tidal action at the armor rock revetment segment.⁸ The proposed development would modify and maintain a shoreline protective device for up to seven additional years for a total of approximately 10-15 years since some of the emergency actions were taken. Armor rock can provide long-term protection of the park amenities through dissipation of wave energy and an engineered rock revetment could be, thus, more than sufficient for interim protection and appropriate in certain areas subject to high wave energy.

Sandbags, on the other hand, are more temporary in nature and have been observed to provide adequate temporary protection (with monitoring and maintenance/replacement) in some locations at this site starting in 2016 when sandbags and sandcubes were installed pursuant to approved ECDPs. Sandcubes are, however, prone to damage (tears and holes) even in the short-term, which can affect the function of the protective device and pollute the beach.⁹ Sandcubes were authorized as a temporary protection measure at this site due to their relatively easy removability and the short term of the associated authorizations (emergency action and/or one-year permit term). Pursuant to the underlying permit, new armor rock was not permitted due to the amount of space required for rock revetments, their documented impacts on sand supply, and requirements for use of mechanized equipment to remove such protective devices.

However, in this case, the subject development is proposed to remain in place for several years (a maximum of seven years, as conditioned; **Special Condition 1**). Thus, the maintenance of sandcubes at the site with their associated potential for pollution of marine waters through degradation is not protective of coastal resources. In addition, the removal of sandcubes can minimize impacts to coastal resources when the geosynthetic bags are cut (so that the beach-compatible sand contents remain on the beach) and properly disposed of. Furthermore, while impacts to sand supply from armor rock are known, the proposed development would be designed to minimize the footprint of the revetment and would extend no further seaward than the rock or sandcubes/sandbags currently onsite, which was required to be the minimum necessary to provide interim protection of the public beach park amenities. At the south reach, this footprint is required to be maintained through the preparation and Executive Director approval of a revised maintenance plan that ensures dislodged rock is replaced within the original footprint (**Special Condition 2**). The armor rock that would replace the sandcubes at the north reach would be located landward of the proposed pilot project and would not be exposed unless a trigger is reached that, as proposed and conditioned (**Special Condition 2**), would require the applicants and/or relevant property owner(s) to submit

⁸ Every survey from May 28, 2022 to October 20, 2022 (the last survey data received), including June 4, 11, 17, 22, 29, July 7, 13, 20, 28, August 3, 11, 17, 25, 31, September 8, 15, 21, 29, identified scour around and high tides reaching the armor rock.

⁹ The applicants considered use of natural materials for sandcubes/bags as an alternative to the standard geotextile bags (often polypropylene plastic), but experts with experience in sandbag performance suggested the natural materials would not withstand the amount of wave action the site often experiences.

an application for an emergency permit or permit amendment to address the pilot project failure, including any proposal to remove or maintain the rock. In any case, the proposed revetment is only authorized for a seven-year period, which is required to be followed by a longer-term sea level rise adaptation plan for the area that addresses impacts to coastal resources, including sand supply, resulting from emergency actions and interim development approvals (CDP No. 5-19-0345, as amended) at this site. If an application for such a plan is not filed as complete by the end of the permit term, then the development, including the armor rock, is no longer authorized.

The level of protection that a nature-based adaptation strategy at this site would provide is unknown. Therefore, the applicants are proposing a pilot project involving construction of a buried cobble berm covered with vegetated dunes that should provide, at a minimum, temporary protection of the coastal trail, as well as other co-benefits including coastal dune habitat for plants, wildlife, and public enjoyment. Based on the feasibility studies prepared by Moffatt & Nichol for OC Parks in the summer of 2021 in accordance with the underlying conditions of CDP No. 5-19-0345,¹⁰ the berm is expected to maintain most of its design width and provide protection and a buffer from wave attack with some potential overtopping and erosion. Similar projects have been approved by the Commission, including living shorelines at Cardiff Beach and Surfer's Point.¹¹ These vegetated buried rock revetment with cobble toe projects were constructed in 2018 and ahead of the 2015/2016 El Niño storm season, respectively, and as maintained/monitored post-construction have experienced relatively natural seasonal erosion and accretion cycles and successfully provided protection with some ecological benefits.

The proposed berm design (e.g. crest elevation, berm face slope/berm width, cobble clast size) was influenced by these case studies and takes into consideration the specific site constraints at this site, including a narrow existing beach width and lack of known sand nourishment source. The final design details, which would in part be informed by the availability of appropriate cobble and sand onsite and the replacement of the north reach sandcubes with armor rock, are required to be submitted to the Executive Director for review and approval (**Special Conditions 2 and 9**). The final approved pilot project design would be adequate to provide temporary protection of the development immediately inland of the proposed berm site. In addition, the different designs at the north reach—buried cobble berm with and without an armor rock backstop—will provide

¹⁰ Special Conditions 1.D and 6.B of CDP No. 5-19-0345, in part, required OC Parks to submit a nature-based adaptation feasibility study and an application to implement such a strategy, if found feasible. The June 2021 feasibility study included a literature review, a discussion of lessons learned from previous nature-based adaptation projects along the west coast (including Commission-approved Cardiff Beach and Surfer's Point living shoreline projects), a Strengths, Weaknesses, Opportunities, Threats Analysis, and a Vulnerability Assessment Scoring Tool Analysis. In addition, in July and August 2021, Moffatt & Nichol supplemented the study with two additional studies that used XBeach Modelling to understand cobble berm and sand nourishment performance, respectively.

¹¹ The Cardiff Living Shoreline Project was approved with conditions by the Commission on November 9, 2017 (CDP No. 6-17-0956) and the Surfer's Point Managed Retreat Project was approved with conditions on November 16, 2006 (CDP Nos. 4-05-148 and A-4-SBV-06-037).

useful information for the evaluation of longer-term adaptation strategies. Therefore, the sandcubes, which as described previously were not intended nor designed to be maintained for several years, currently located seaward of the coastal trail between the Doheny and Capistrano Beach parking lots are required to be removed entirely and replaced with armor rock (**Special Condition 2**). Even if the cobble berm were to be significantly compromised, the proposed Pilot Project Monitoring Plan includes general descriptions of potential adaptive management actions that could be taken.

As proposed by the applicants, these adaptive measures include: (a) if the cobble adversely impacts public safety or coastal resources (significant dispersal of cobbles or persistent hazardous conditions from cobbles becoming airborne during wave events), the applicants would remove the cobble and install sand bags or nourish the beach as an emergency measure, (b) if beach scarp is greater than three feet in elevation, the grade would be smoothed out, (c) if the beach face migrates inland within ten feet of the coastal trail, then sandbags would be placed on the seaward side of the coastal trail, and (d) if less than 75% of the dune vegetation survives after the first year, the applicants would conduct one additional planting before letting nature take its course. However, given the variability of potential site conditions, that at least temporary exposure of cobble is anticipated during the term of the pilot project, unknowns regarding the timing of the triggering events as compared to the life of the pilot project and the completion of the Master Plan, and lack of specific detail provided in the proposed monitoring plan, staff is unable to make findings regarding the appropriateness of these strategies (i.e. whether these actions would be the least environmentally damaging alternatives at the time the trigger is met) at this time. Thus, **Special Condition 2** requires the applicants to revise the proposed pilot project monitoring plan to limit maintenance activities to trash and debris collection and proper disposal, removal of materials (i.e. sand, cobble, trash) from the coastal trail, and certain aspects of the proposed remedial actions: opportunistic sand placement over exposed cobble consistent with the final approved Monitoring and Maintenance Plan, smoothing of scarp that exceeds three feet in elevation, and activities required to ensure dune vegetation establishment within the first year post-construction as described in the final approved Dune Planting Plan.

As conditioned, the proposed project would minimize risks to life and property in an area subject to coastal flooding and storm surge consistent with Coastal Act Section 30253(a)¹² and assure the stability and structural integrity of the new development, including the pilot project, temporary rock revetment, and other park amenity improvements, consistent with part of Section 30253(b). However, Section 30253(b) further requires that the new development neither create nor contribute to erosion or destruction of the area or require the construction of shoreline protective devices. Given the known impacts of shoreline protective devices, like the proposed temporary rock revetment, on shoreline sand supply, scenic qualities, natural landforms, and overall shoreline beach dynamics on and off site, authorization of this element is not fully

¹² This includes the amendments to Special Condition 2 that would allow OC Parks to replace the sandcubes, which are failing following recent high tide events, with armor rock immediately upon issuance of the permit and prior to the required final Executive Director approvals of the pilot project.

consistent with Section 30253(b). The pilot cobble/dune berm is less likely to result in the same impacts to coastal resources due to the use of natural materials compatible with the scenic qualities of the area and natural landforms, as well as anticipated function in a manner that is more reflective of natural beach dynamics.

Similarly, Coastal Act Section 30270 requires the Commission consider the effects of sea level rise in coastal resources planning and management policies and activities in order to identify, assess, and, to the extent feasible, avoid and mitigate the adverse effects of sea level rise. In this case, the proposed retention of a temporary revetment at the south reach of the site does not fully avoid or mitigate the adverse effects of sea level rise for reasons described in more detail in the discussion of project alternatives below. However, the scope of this development—lasting a maximum of seven years—is not intended to immediately avoid or mitigate the adverse effects of sea level rise, but rather to inform future planning efforts. In addition, the impacts of the proposed temporary protection at the south reach would include alteration of the beach for up to seven years in order to protect coastal-dependent uses; thus, the impacts must be fully addressed in a subsequent coastal development application. As such, even as conditioned, the proposed development would not be fully consistent with Coastal Act Sections 30253 and 30270, and thus requires the Section 30235 override discussed in the following subsection.

Section 30235 Override

Coastal Act Section 30235 requires approval of shoreline protective devices in certain, limited situations, including when necessary to protect coastal-dependent uses and existing structures and public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. While sand and cobble berms like the proposed pilot project could be considered shoreline protective devices because they have the potential to alter natural shoreline processes, sand berms are generally utilized on a temporary basis and both sand and cobble have fewer impacts in that they do not fix shorelines or reflect wave energy to the same degree as harder shoreline armoring e.g., seawalls and rip rap. Moreover, placed sand and cobble systems are intended to provide many of the benefits, in terms of public beach access, habitat, and visual resources, of natural beach and dune ecosystems. The proposed rock revetment, on the other hand, is a shoreline protective device that does affect shoreline sand supply, occupies beach area, and provides little habitat or scenic value.

Here, the shoreline protective device would protect coastal-dependent uses and access to a public beach in danger from erosion. Any known existing development that would benefit from the protection provided, including Beach Road, the rail line, and Pacific Coast Highway, are landward enough so as not to be imminently threatened by erosion. The only new development at the south reach that would rely on the revetment's protection is the perched beach area, associated picnic tables and other recreational support amenities, and improved parking lot entrance, which serve to partially mitigate the public access impacts from the shoreline protective device. These uses, as well as the coastal trail and parking lot approved pursuant to past CDPs, are coastal-dependent and provide lower cost recreational opportunities.

Section 30235 also requires that allowable shoreline protective devices must be designed to eliminate or mitigate adverse impacts on local shoreline sand supply. In an effort to minimize the proposed alternative's impacts on shoreline sand supply, the applicants are proposing to limit the term of the permit and monitor and maintain the rock revetment. In addition, the applicants are proposing a nature-based protection method with multiple co-benefits for the north reach and, at the south reach, there is no feasible alternative at this stage to the armoring that could both protect the coastal-dependent uses and remain as close to consistent with all applicable provisions of the Coastal Act as this project would. However, additional conditions are required to eliminate or mitigate the impacts of the proposed shoreline protective devices.

First, the permit term is limited to seven years—two for the applicants to acquire sufficient resources and construct the cobble berm and vegetated dunes and five years to monitor the site—until a mid-term adaptation strategy can be reviewed, approved, and implemented (**Special Conditions 1, 2, and 6**). Second, the final project plans are required to minimize impacts to biological resources and public access; enhance access, coastal habitat, and visual resources; be revised to ensure that any non-maintenance-related changes to the site, including certain adaptive management strategies are reviewed as a new CDP application; and provide useful monitoring data that will inform future sea level rise adaptation at the site (**Special Condition 2**). **Special Conditions 1 and 6** further ensure that a follow-up CDP application, amendment, or public works plan that addresses concerns relating to the vulnerability of the site to coastal hazards, including sea level rise, is submitted in a timely manner and with plans to fully mitigate the impacts on sand supply from shoreline protection devices approved through related emergency actions and CDP No. 5-19-0345, as amended.

Therefore, at this point in time, the temporary armoring is authorized using the “override” provision of 30235 of the Coastal Act.

C. Public Access and Recreation

Coastal Act Policies

Section 30210, *Access; recreational opportunities; posting*, states:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211, *Development not to interfere with access*, states:

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30213, *Lower cost visitor and recreational facilities; encouragement and provision*, states, in part:

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Section 30221, *Oceanfront land; protection for recreational use and development*, states:

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

The public access policies of Chapter 3 of the Coastal Act require maximum access and recreational opportunities, including lower cost opportunities, to be protected and provided. In this case, both the public's access to and use of the natural shoreline and the beach park amenities provide low-cost recreational opportunities. The proposed development is located at an oceanfront public beach park where the Commission approved the construction of a bike path (coastal trail), public beach parking lot, restroom, and other recreational amenities (CDP Nos. P-80-6414 and 5-84-300). Use of the coastal trail, beach, and elevated beach terrace and associated amenities is free. In addition, parking at the Capistrano Beach parking lot is free. Parking at Doheny State Beach requires a fee; however, the southern-most end of the Doheny South Day Use parking area has already naturally retreated due to damage from coastal hazards.

The selected project alternative is proposed, in part, to prevent further damage to these low-cost recreational facilities and proposed viewing and picnic areas—access to which has been limited, and at times unsafe during storm events and emergency development activities—until an adaptation plan for the area is implemented. In addition, public safety concerns could arise if the development onsite is unprotected and experiences further damage. However, the impacts to shoreline sand supply from the proposed protection described in the previous section of this staff report directly impact such access to the sandy/cobble beach, especially during high tides and the winter storm season.

At the north stretch where the proposed buried cobble berm would be located, access would be limited by dune fencing that would protect the habitat, which would benefit the site both ecologically and by allowing the dune plants to establish roots that could serve to keep the cobble berm in place. The applicants propose to address this impact by providing trails through the vegetated dunes and educational signage to inform the public of the pilot project. In addition, in constructing the berm, additional beach-compatible sediment would be imported to the site providing, at least temporarily, more beach area. Furthermore, State Parks is proposing to demolish some of the asphalt and base at the southern-most segment of the Doheny State Beach parking lot, which will restore more beach and reduce coastal squeeze in that area.

At the south stretch (Capistrano Beach), on the other hand, the applicants would be sacrificing public access to the sandy/cobble beach, especially during high tide and storm events, by constructing a temporary rock revetment. The tradeoff is the maintenance of the free public parking area and the proposed terraced beach area, which includes picnic tables. In this case, both the public's access to and use of the

natural shoreline, coastal trail, and beach park amenities provide low-cost recreational opportunities. Thus, the loss of sandy/cobble beach area for the stabilization of built public access and recreation areas (including but not limited to the proposed terraced beach area) could be considered somewhat self-mitigating, but more information is needed regarding which forms of access and recreation maximize public access at this location. As discussed in the Section 30235 override subsection of this staff report, mitigation for the impacts of the proposed short-term use of shoreline protective devices on sand supply (and, thus, public access to the beach) and the impacts of the removal of public access amenities such as showers, restrooms, and firepits is only appropriate for the short-term development proposal, and mitigation for such impacts must be fully addressed as part of the Master Plan.

As required by CDP No. 5-19-0345, OC Parks conducted a Public Access Survey that collected nearly 300 responses to questions about public access at this location. The applicants are planning to continue this effort as part of the proposed Pilot Project Monitoring Plan (**Exhibit 3**). Given that the public amenities provided would also include the dune trails, as proposed, **Special Condition 2** requires the proposed public access surveying to build upon the previous survey efforts to continue informing public perception of the amenities at the site, including the new dunes.

During construction and some maintenance activities, for public safety purposes, public access to the beach would also be limited. Additionally, the applicants propose to stockpile materials in the adjacent parking lots at Doheny and Capistrano beaches. While the temporary storage of construction materials, including sand and cobble, is anticipated to impact public use parking areas during construction of the project (approximately 10 months) and for up to one month during maintenance events,¹³ the staging area within the Doheny parking lot is already blocked off from public use as a result of storm and high tide damage. Furthermore, to maximize public access, **Special Condition 3** is imposed to avoid or minimize use of available parking spaces, including the public parking within the Capistrano Beach lot, for storage and construction staging; meaning, that where feasible, construction and maintenance staging shall be located or concentrated in the paved portion of Doheny State Beach where parking areas were damaged by coastal hazards in 2020 and 2021. The applicants have not provided a construction schedule because they have not yet received all the necessary funds to implement the project nor finalized the design. Thus, **Special Conditions 2 and 9** are imposed to require a final staging plan and construction schedule that minimizes impacts to public access, including parking.

Special Conditions 2 and 3 also aim to maximize public access and low cost recreational opportunities by maintaining safe access around construction and maintenance activities, posting notices in English and Spanish about construction scheduling, continuing to provide free public access and vehicle parking, prohibiting the

¹³ Most maintenance events are anticipated to take one day to one week. However, a larger effort, such as sand replenishment, may take approximately one month.

extension of the footprint of armor rock farther seaward than existing onsite revetments, and maintaining pedestrian access from the coastal bike trail through the project site in a manner that provides accessibility for all people to the maximum extent feasible. Furthermore, to maximize public access for all people, as required by Section 30210, **Special Condition 2** also provides that demolition or repair and maintenance (but not demolition and reconstruction) of existing park facilities threatened by further erosion or failure may be conducted as necessary throughout the term of this permit. However, prior to undertaking any demolition or repair and maintenance, the applicant must consult with the Executive Director of the Commission to determine whether separate authorization is required.

Special Condition 3 requires that following construction and for the duration of this permit, the permittee shall maintain the existing informal access path to the beach on the northernmost portion of the parking lot in a condition that provides accessibility for all people to the maximum extent feasible whenever beach area is present. The applicants have prepared an interim access plan to reroute a portion of the coastal trail, provide pedestrian access along the length of the site, and maintain access from the parking lots to the beach. The applicants have indicated that they will address ADA accessibility requirements and include related improvements as part of the longer-term adaptation effort.

As conditioned, the subject development maximizes public access and recreational opportunities at the site for the duration of the permit and helps inform the Master Plan, including by testing a nature-based solution intended to minimize long-term erosion of the beach, but does not fully address the impacts to public access associated with the shoreline protective device at the southern reach of the site. Thus, the proposed development is not fully consistent with the public access policies of Chapter 3 of the Coastal Act and requires the Section 30235 override discussed above.

D. Visual Resources

Coastal Act Policies

Section 30251, *Scenic and visual qualities*, states:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

The visual resources at the project site include views of the beach and ocean from the coastal trail, parking lots, and PCH and the visual quality of the beach area. The proposed project elements that could impact those resources are the height of the proposed vegetated berm, which would extend up to five feet above the coastal trail, the sandbags, if exposed (not covered with sand), and the storage of construction materials

in the adjacent parking lots. Each of these elements is discussed in more detail below. However, in every case, these elements are temporary and **Special Condition 1** limits the permit term to a maximum of seven years, thereby reducing the potential impacts as compared to a more permanent development.

As currently proposed, the maximum height of the vegetated dunes would be up to five feet above the grade of the coastal trail with additional approximately four-foot-high fencing, meaning that most people walking or biking along the coastal trail would have views of the dune landscape and associated fencing rather than blue water views. Given that the current views from the coastal trail and other public viewpoints include safety cones and tape, damaged cement/asphalt, and sandcubes that are sometimes exposed, the proposed dunes and, if exposed, cobble berm are expected to improve the visual quality of the beach. In addition, the height of the dunes is variable and would likely be, on average, lower than five feet with some potential blue water views from the coastal trail. In any case, to ensure views of the beach and ocean are protected to the maximum extent feasible, **Special Condition 2** requires the dune fencing to be visually permeable and made of natural materials to the maximum extent feasible.

The interim allowances for placement of sand cubes onsite, even with approved maintenance procedures (including opportunistic placement of sand over the sand cubes), did not consistently protect visual resources. The white plastic sandcubes were often exposed and degraded impacting both visual resources and water quality. The removal of all sandcubes and sandbags onsite and replacement with armor rock, as proposed and conditioned (**Special Condition 2**), reduces visual resource impacts from existing conditions.

Finally, the applicants are proposing to store construction materials and equipment in the parking lots at both ends of the buried cobble berm. As currently proposed, the stockpile and staging sites are located at the seaward portions of the lots and may block or otherwise degrade views from the rear portion of the lots, coastal trail, and PCH. While these impacts are temporary and will only exist during construction and some maintenance activities, which are expected to take approximately ten months and up to one month, respectively, **Special Condition 2** requires final construction and maintenance staging plans, which must be reviewed and approved by the Executive Director, to minimize impacts to visual resources. Thus, any temporary impacts to visual resources are minimized and the project would maintain if not enhance the visual quality of the project site as compared to current conditions. For these reasons, as conditioned, the proposed development is consistent with Coastal Act Sections 30251 and 30253.

E. Biological Resources and Water Quality

Coastal Act Policies

Section 30230 of the Coastal Act, *Marine resources; maintenance*, states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will

maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act, *Biological productivity; waste water*, states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30232 of the Coastal Act, *Oil and hazardous substance spills*, states:

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Section 30240 of the Coastal Act, *Environmentally sensitive habitat areas; adjacent developments*, states:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Biological Resources

The proposed development has the potential to impact habitat for a variety of wildlife species that are part of the marine ecosystem afforded protection under Coastal Act Sections 30230 and 30231 of the Coastal Act. Potential habitat for shorebirds, wading birds, and marine species, including grunion, would be impacted through the creation of the buried cobble berm and has been and could continue to be impacted through the loss of trees onsite during previous authorized emergency activities and through the loss of natural beach area, which may not be consistent with these Coastal Act sections. Potential replacement of trees that may provide habitat for bird breeding, nesting, and roosting activities and restoration of sandy/cobble beach habitat is not proposed at this time due to the short-term nature of the permit but would be addressed in the Master Plan and long-term planning efforts for the site. **Special Condition 6** requires the applicant to submit the Capistrano Beach Park Master Plan or similar adaptation plan to the Commission for review and approval.

Construction activities include approximately 26,800 cubic yards of excavation of sand and cobble beach, which is habitat for species that occupy the sandy beach ecosystem.

Without a construction schedule, it is unclear if excavation and deposition of sediment seaward of the mean high tide line would avoid in-water construction activities. Where there is sand, beach infauna would be impacted by excavation and construction activities, but these organisms are abundant and are not listed or considered sensitive. Sensitive species like grunion, which require sandy beaches for spawning, and listed birds such as California least terns and Western snowy plovers have the potential to be found onsite. However, according to the reports provided by the applicants, these two bird species have not recently been sighted in the area. **Special Condition 4** continues to be imposed to require monitoring of the site by a qualified resource specialist to avoid impacts to sensitive species and habitats, nesting and breeding bird surveys during nesting season, and implementation of grunion and sensitive bird avoidance measures during construction and maintenance activities, as applicable. As amended, however, **Special Condition 4** clarifies that nesting bird surveys only need to be conducted for activities during nesting season and only within a 100-foot radius of the site seaward of Pacific Coast Highway. In addition, **Special Condition 4** is modified to update the grunion protection measures to reflect the subject proposal and align with current standards and practices.

Special Condition 2 requires that opportunistic placement of sand on the cobble berm avoid wet sandy areas and marine waters to the maximum extent feasible to minimize impacts to intertidal beach infauna and marine organisms that may be impacted by potential increases in the turbidity of the water. As previously mentioned, complete avoidance of in-water work and sediment deposition may be infeasible in order to replace the sandcubes/sandbags with armor rock ahead of the winter storm season and construct the pilot nature-based protection alternative with a design that would meet the project goals of providing more natural protection for the coastal trail. Thus, **Special Conditions 2 and 9** require the applicants to prepare final construction plans for the rock revetment and pilot project informed by storm and tide predictions, grunion run schedules, and nesting bird data to minimize impacts to coastal resources. In addition, **Special Condition 5** is amended to include best management practices for project activities that may not be able to avoid in water work. Furthermore, sediment deposition and development activities within these areas may require approvals from other agencies including, but not limited to the Army Corps of Engineers and Water Quality Board.

In addition to the special conditions imposed to protect biological resources during construction and maintenance activities, the proposed development also involves the creation of a new coastal dune habitat area. As proposed, the dunes will be seeded and planted with native coastal dune species. **Special Condition 2** requires the applicants to conduct a pre-construction biological survey of the reference dune site, revise the plant palette to include native coastal foredune species found there, and provide final planting plans to be reviewed and approved by the Executive Director. The health and success of the dune establishment is proposed to be monitored as part of the Pilot Project Monitoring Plan; however, because the proposed metrics for dune health are not informed by best available science and a final planting plan, **Special Condition 2** also requires the applicants to include the planned abundance and percent cover of native coastal dune species based on historical records, relevant literature, and the reference site(s) in the final planting plan, revise the monitoring plan to better reflect successful

dune establishment as defined in the final planting plan, and outline allowable maintenance to encourage successful establishment of the habitat during the first year of monitoring.

If the dunes fail to establish within the first year post-planting, the applicants propose to maintain/replace the native coastal dune vegetation. However, after the first year, if dune establishment is not successful, then the applicants would not conduct additional plantings but would monitor and record the changing conditions of the dunes to understand how this particular adaptation strategy might perform without continual maintenance. In so doing, the ecological benefits of the project would not be realized and the remaining berm might not provide the co-benefits typically associated with nature-based adaptation strategies.

As conditioned, the pilot project in the north reach of the site minimizes impacts to sensitive species, biological productivity, and populations of sandy beach and marine organisms and is consistent with Coastal Act Sections 30230, 30231, and 30240. However, because the proposed revetment at the south stretch of the site restricts natural beach erosion and sand movement, beach habitat area is adversely affected. For example, beach narrowing also reduces potential grunion spawning habitat area. Thus, that portion of the development is not fully consistent with the Coastal Act's biological resource protection policies and, thus, the Section 30235 override is required as discussed in the previous section.

Water Quality

Sections 30230 and 30231 also require development to protect water quality through means such as minimizing adverse effects of wastewater discharges and controlling runoff. As proposed, the development would temporarily provide indirect protection of the City of Dana Point stormwater treatment facilities which are located landward of the northwestern portion of the site with outlet pipes that run under the beach and are, at times, exposed. If damaged, these facilities could result in adverse impacts to water quality if untreated stormwater is discharged into the ocean. **Special Condition 6** requires the applicant to conduct development as proposed and conditioned.

Additionally, damaged sandcubes have the potential to impair water quality through the deposition of geosynthetic material on the beach or in the ocean. To minimize such impacts, **Special Condition 2** requires the removal of all sandcubes and sandbags onsite and replace them with armor rock. This condition also requires the sand within the existing bags be deposited onsite, but on the dry sandy beach to minimize impacts from turbidity, and for all associated debris to be removed and properly disposed of.

Furthermore, to avoid water quality impacts during construction and maintenance activities, the Commission imposes **Special Condition 5**, which requires the applicant to follow construction best management practices that prevent construction activities and construction related debris from entering and impacting coastal waters. In addition, as described in the previous subsection, this condition would be revised to minimize water quality impacts during any project activities that may not be able to avoid in-water work or work on wet sand. Furthermore, excavation activities must be carefully monitored to

sort and properly dispose of any debris or trash removed from the site (**Special Condition 9**).

As conditioned, marine resources will be maintained, and special protection will be given to areas and species of special biological significance for the short-term project.

F. Archeological and Tribal Cultural Resources

Section 30244 of the Coastal Act, *Archeological or paleontological resources*, states:

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

The proposed development is located in an area that was highly utilized by Native American tribes for thousands of years and continues to be used by tribes today. In addition, the site that may contain remnants of more recent development beneath the soils. The proposed excavation of approximately 26,800 cubic yards of sediment within an approximately 1,150-foot long, 120-foot wide, and 10-foot deep (below existing grade) area might have the potential to impact archeological resources; however, because the design is not final, the potential impacts are not fully understood. Therefore, **Special Condition 9.C** is imposed to require an excavation and sorting plan that includes a determination made in consultation with the appropriate tribal entities as to whether the project has the potential to affect archeological, including tribal cultural, resources and, if adverse impacts are possible, mitigation measures to avoid or minimize such impacts. As conditioned with reasonable mitigation measures, the project is consistent with Section 30244 of the Coastal Act.

F. Coastal Act Violations

Violations of the Coastal Act occurred at Capistrano Beach County Park, including, but not limited to installation of portions of the armor rock at the site without benefit of the necessary coastal development permit prior to the Commission's December 9, 2020 action to temporarily approve repair and maintenance of the protection onsite. The County is requesting to retain the rock for several more years. In addition, since the Commission's December 9, 2020 action, several changes to the approved development at Capistrano Beach have been made without a determination being made by the Executive Director about whether or not a CDP amendment would be required. These changes include closures of public beach parking lots for extended periods of time without adequate signage as required in the permit conditions of CDP No. 5-19-0345, as amended, replacement of sandcubes with a new sandbag design, and installation of a shoreline monitoring camera.

Any non-exempt development activity conducted in the Coastal Zone without a valid coastal development permit, or which does not substantially conform to a previously issued permit, constitutes a violation of the Coastal Act. The unpermitted sandbags are not proposed to be retained and will be removed by the County. In addition, the shoreline monitoring camera, as conditioned, is temporarily authorized pursuant to this CDP

amendment with appropriate signage to avoid deterring members of the public from accessing the site.

Consideration of the permit amendment application by the Commission has been based solely on consistency of the proposed development with the policies of Chapter 3 of the Coastal Act. Commission enforcement staff will consider its options for a comprehensive resolution of the violations described herein as a separate matter, including, potentially, resolving the remaining issues through the long-term planning efforts and resulting Commission actions. Approval of this permit is possible only because of the conditions included herein, and the applicant's presumed subsequent compliance with said conditions, and failure to comply with these conditions in conjunction with the exercise of this permit would also constitute a violation of this permit and of the Coastal Act. Accordingly, the applicant remains subject to enforcement action for any unresolved violations or violations of this permit, just as it was prior to this permit approval

G. Local Coastal Program

The City of Dana Point has a Certified Local Coastal Program (LCP) that was effectively certified in 1989. Since then, parts of the LCP have been updated through LCP amendments. The proposed development is taking place partially within the City's permitting jurisdiction and partially within the Commission's area of retained permitting jurisdiction under Coastal Act Section 30519(b). OC Parks, the local government, and the Commission agreed to a consolidated permit application.

Section 9.69.030(c) "Authority to Grant Permit" of the City's Certified Implementation Plan (IP)/City's Zoning Code, states that for any development that lies partially within the City and Coastal Commission permit jurisdiction, the Coastal Commission shall be the responsible agency for the issuance of any Coastal Development Permit for the entire development. Thus, the standard of review is Chapter 3 of the Coastal Act and the policies of the certified Dana Point LCP may provide guidance.

H. California Environmental Quality Act

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of a coastal development permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. As conditioned, there are no feasible alternatives or additional feasible mitigation measures available for the short-term development proposal which would substantially lessen any significant adverse effect which the development may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to have a limited term of permit (up to seven years) and mitigate the identified impacts, is the least environmentally damaging feasible alternative,

has no remaining significant environmental effects, and complies with the applicable requirements of the Coastal Act to conform to CEQA.

Appendix A: Substantive File Documents

- 5-19-0345 adopted staff report (includes permit conditions)
- 5-19-0345-A1 adopted staff report (includes permit conditions)
- Capistrano Beach County Park Nature-Based Pilot Project Feasibility Study Report. Prepared June 2021 by Moffatt & Nichol.
- Capistrano Beach County Park Beach Nourishment Study. Prepared July 2021 by Moffatt & Nichol.
- Capistrano Beach County Park Cobble Berm XBeach Modeling – Supplemental Appendix to Nature-Based Pilot Project Feasibility Study. Prepared August 2021 by Moffatt & Nichol.
- Orange County – Shoreline Monitoring Annual Report 2022: Aliso, Capistrano, Poche, and Salt Creek Beaches. Prepared September 2022 by Joshua Reinke, Data Scientist and Operations Manager, 3CrownsTech.
- California State Parks Beach Topography Monitoring Program Progress Report: April 2020 - January 2022. Prepared by Jochen E. Schubert, Daniel Kahl, and Brett F. Sanders, University of Irvine Department of Civil and Environmental Engineering.

Appendix B: Standard and Special Conditions Pursuant to CDP No. 5-19-0345 through CDP Amendment No. 5-19-0345-A2

NOTE: This Appendix B provides a list of all standard and special conditions imposed pursuant to Coastal Development Permit 5-19-0345, as approved by the Commission in its original action and modified and/or supplemented by CDP Amendment Nos. 5-19-0345-A1 and 5-19-0345-A2. Any additions, pursuant to amendment A2, from the previously approved special conditions are shown in **bold**. Thus, this Appendix B provides an aggregate list of all currently applicable adopted special conditions.

STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be

pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. Limited Authorization of the Shoreline Protection Elements.

- A. This coastal development permit authorizes the approved **development for a period of seven years from the Commission's action on this permit (until November 16, 2029)**. After such time, the authorization for the continuation and/or retention of the **development, including buried cobble berm and armor rock**. This time period may be extended as described in Part **C** of this condition.
- B. No later than six (6) months prior to **November 16, 2029**, the permittees shall apply for a new coastal development permit or **public works plan to implement a mid- to long-term sea level rise adaptation strategy, or for an** amendment to this permit to remove the shoreline protection or modify the term of its authorization, including with respect to any necessary mitigation.
- C. The coastal development permit **or public works plan** application submitted by the permittees pursuant to Part **B** of this special condition shall include, at a minimum, **the monitoring results for the pilot project and adequate mitigation to address all coastal resource impacts for emergency actions and unpermitted development that were not fully addressed in CDP No. 5-19-0345, as amended**. Provided the new permit application is received and filed as complete before the end of the authorization period listed in Part A of this special condition (i.e. by **November 16, 2029**), the termination date for that authorization shall be automatically extended until the time the Commission acts on the new application and to allow sufficient time to implement any new or amended project improvements. The application shall also identify and **evaluate potential project alternatives that** address changed circumstances and/or unanticipated impacts associated with the presence of the **temporary cobble and dunes berm and rock revetment**, including but not limited to excessive scour and impacts to shoreline processes and beach width, or other impacts from coastal hazards and sea level rise.
- D. Failure to obtain a new coastal development permit, amendment to this permit, **or public works plan** authorizing removal of and/or **implementation of an**

alternative sea level rise adaptation strategy shall cause this development to be in violation of the terms and conditions of this coastal development permit.

2. Revised Final Plans.

A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit for review and written approval of the Executive Director, two hard copies and one electronic copy of **the following** revised final plans:

- 1) **Final Project Design Plans for the replacement of all sandcubes/ sandbags onsite with armor rock in substantial conformance with the plans submitted November 3, 2022. The sand within the sandcubes/ sandbags shall be deposited on the dry beach and all debris shall be removed and properly disposed of. The toe of the new armor rock shall be located as far landward as feasible and, at the south reach, shall not extend seaward of the approved footprint of the armor rock temporarily authorized pursuant to CDP No. 5-19-0345 or the approved footprint of the temporarily authorized sandcubes. The Mean High Tide Line, determined by survey, shall also be included in the final plans where project activities could be at or below the MHTL.**
- 2) **Final Construction Schedule informed by local storm and tide predictions, grunion run schedule(s), and bird nesting data.**
- 3) **Final Construction Staging Plans for the replacement of all sandcubes/ sandbags onsite with armor rock that avoid or, at a minimum, minimize impacts to public parking and scenic views to the maximum extent feasible.**
- 4) **Final Public Access Plan that includes:**
 - i. **Safe public access to or around areas where construction and maintenance activities will occur shall be maintained during all project operations.**
 - ii. **Coastal trail detour plans that maintain trail access on paved areas as close to the shoreline as feasible (e.g. along Beach Road, if authorized by the property owner). The applicants shall supplement the detour site plan with a comprehensive signage plan that clearly shows, at a minimum, the location, dimensions, material(s), text, and font of each construction, wayfinding, and/or monument sign. The signs shall facilitate, manage, and provide public access to the coastal trail throughout construction and the life of the development.**
- 5) **A Final Revetment Monitoring and Maintenance Plan that includes:**
 - i. **Periodic inspections (weekly during summer months [May through September] and monthly during the rest of the year) of the armor rock and surrounding beach area for any errant or displaced rock. If any rock has been displaced from the as-built footprint, it shall be recovered from the beach and either repositioned into the revetment or removed from the site within thirty (30) days of the**

inspection. Following construction of the approved pilot project, monitoring and maintenance of the armor rock at the north reach of the site may cease.

- ii. Periodic inspections (weekly during summer months [May through September] and monthly during the rest of the year) of the beach conditions seaward and up and down coast of the revetment for indications of scour, presence or absence of a low-tide or high-tide beach fronting the structure, approximation of available recreational beach width fronting the parking area, as well as for the beach width up and down coast and the presence or absence of rip channels, edge waves for other such conditions.
- iii. Annual reporting from the inspections, noting any errant rock that was placed back onto the structure or removed (location and number), beach width estimates and the location and timing of any observed scour areas, edge waves, rip channels, etc. Reports shall be submitted to the Executive Director each year following replacement of the sandcubes/ sandbags with armor rock and with any application for a new or amended coastal development permit.
- iv. The applicant shall undertake monitoring and maintenance of the revetment in accordance with the approved final Revetment Monitoring and Maintenance Plan. Any proposed changes to the revised Revetment Monitoring and Maintenance Plan shall be reported to the Executive Director. No changes to these approved plans shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

B. PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE PILOT PROJECT AT THE NORTH REACH OF THE SITE, the applicants shall submit for review and written approval of the Executive Director, two hard copies and one electronic copy of the following revised final plans:

- 1) Final Project Design Plans in substantial conformance with the plans submitted and included as Exhibit 2 of the staff report dated November 2, 2022 except where required to be modified as follows:
 - i. A final pilot project design prepared by a qualified professional that reflects the proposed +12 ft MLLW beach platform (beach berm) elevation. The vertical reference datum(s) used in the final design plans shall be clearly defined and consistently used throughout the final plans. The Mean High Tide Line, determined by survey, shall also be included in the final plans where project activities could be at or below the MHTL.
 - ii. Dune perimeter and sand retention fencing shall be included and shall be visually permeable and made of natural materials to the maximum extent feasible.

- i. The final monitoring plan shall reflect the final approved design plans, including but not limited to replacement of all sandcubes/sandbags with armor rock.**
- ii. Include opportunistic beach nourishment methods, including but not limited to access route(s) and staging plans.**
- iii. Where one pre-construction survey is not adequate, baseline data or, at a minimum, plans to collect the baseline data required to answer the success evaluation questions shall be included in the final monitoring plan.**
- iv. The metrics for dune health shall be revised to incorporate success criteria informed by the approved Final Dune Planting Plan.**
- v. Public access surveys should conform with and build upon the final Public Access Survey Plan approved by the Executive Director prior to issuance of CDP No. 5-19-0345.**
- vi. If certain monitoring activities are infeasible due to funding constraints, then the applicants shall conduct the maximum amount of monitoring feasible and prioritize measuring tidal water level, wave conditions, overtopping events, seasonal and storm-driven erosion/accretion and cobble movement, and dune establishment, as described in the Monitoring Plan included as Exhibit 3.**
- vii. Maintenance activities shall be limited to those required to ensure dune vegetation establishment within the first year post-construction, trash and debris collection and proper disposal, removal of materials from the coastal trail, and the remedial action triggers in the Monitoring Plan as modified under subsection viii below. Beach-compatible material that is removed from the coastal trail and/or other public infrastructure and free from trash shall be placed on the dry beach, if feasible.**
- viii. If significant loss of shoreline amenities and/or infrastructure is imminent, then the applicant(s) and/or applicable property owner(s) shall apply for an emergency CDP, if applicable, or an amendment to this CDP to address the issue.**
- ix. The remedial action triggers shall be modified as follows:**
 - a) If the cobble poses a significant public safety or coastal resource threat, as determined by the Executive Director in consultation with the applicants, then the applicants may nourish the site with beach-compatible sand in accordance with the final approved opportunistic beach nourishment methods or, if new development is proposed to remediate the public safety or coastal resource threat, the applicants shall apply for an emergency CDP, if applicable, or amendment to**

this CDP to address the public safety or coastal resource threat.

- b) Where beach scarps greater than three (3) feet in height form and persist for more than two weeks, earth-moving activities shall be the minimum necessary to eliminate the scarp and shall, to the maximum extent feasible, be conducted on dry beach to minimize impacts to public access and coastal resources.**
- c) If beach and/or coastal dune erosion becomes severe enough that the coastal trail is imminently threatened, the applicants may apply for an emergency CDP, if applicable, or an amendment to this CDP to address the threat. If this trigger is met, removal or maintenance of the armor rock at this location requires a new authorization. The application shall include adaptation alternatives including, but not limited to retreating or temporarily protecting the amenities/infrastructure in the least environmentally damaging manner.**
- d) The dune success/failure criteria shall be informed by the final approved Dune Planting Plan.**
- x. If the required monitoring suggests that any of the failure criteria listed in the final approved monitoring plan have been met, the applicant(s) shall submit a CDP, CDP amendment, or Public Works Plan application that includes relevant monitoring results and an analysis of viable short-, mid-, and long-term adaptation strategies.**
- xi. The applicants shall provide the Executive Director with the date that construction of the pilot project is completed (berm constructed and dunes planted) within three (3) days of completion. Monitoring reports shall be submitted to the Executive Director each year by that date for a period of five (5) years. The final monitoring report shall include an analysis of the feasibility of implementing a nature-based adaptation strategy in the area, a comparison of the different protection methods implemented within the project site, and a discussion about the ability of the vegetated dunes to retain and/or accrete sand.**
- xii. The permittees shall undertake monitoring and reporting in accordance with the approved monitoring and reporting program. Any proposed changes to the approved monitoring and reporting program shall be reported to the Executive Director. No changes to the approved monitoring and reporting program shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.**

3. Public Access Program. **PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE PILOT PROJECT AT THE NORTH REACH OF THE SITE, the applicants shall submit for review and written approval of the Executive Director, two hard copies and one electronic copy of a Final Public Access Program, which shall include, at a minimum, the following:**

- A. Safe public access to or around areas where construction and maintenance activities will occur shall be maintained during all project operations.
- B. Use of public parking areas for storage of construction and/or maintenance materials shall be avoided and where avoidance is not possible, shall be minimized to the greatest extent feasible. **Temporary closures of the Capistrano Beach public parking lot shall be avoided or, if necessary for public safety, minimized to the maximum extent feasible, and shall be reported to the Executive Director.**
- C. **A Public Access and Educational Signage Plan that identifies all existing and proposed public access, interpretive, and wayfinding signs and any other project elements that will be used to provide wayfinding assistance to the public or to otherwise identify public access entry points/amenities along the beach. Sign details showing the location, materials, design, and text of all public wayfinding and interpretive signs shall be provided. The signs shall be in both English and Spanish and designed to provide clear information without impacting public views and site character. The plan shall also include:**
 - 1) **The permittees shall post the site and areas outside the site that provide access to the site (i.e. coastal trail and entrance to Doheny State Beach) where permission is granted with a notice, in English and Spanish, indicating expected dates of construction and maintenance activities and/or beach closures.**
 - 2) **Educational signage to inform the public about sea level rise, the nature-based adaptation strategy, and dune habitat and directional signs to facilitate public use of the dune trails.**
 - 3) **A sign shall be installed in close proximity to the coastal monitoring camera stating that the camera is used for shoreline monitoring only and that personal information about beachgoers will not be collected.**
- D. **OC Parks shall continue to provide free public access and free vehicle parking at the Capistrano Beach County parking lot during the entire term of this coastal development permit.**

4. Habitat and Sensitive Species Protection Measures during Project Activities.

- A. Nesting Bird Surveys. For any construction or maintenance activities involving heavy machinery **during nesting season (approximately February 15th through September 15th)**, the permittees shall retain the services of a qualified biologist to conduct nesting bird species surveys in order to determine the presence of bird species including, but not limited to, California least terns,

western snowy plovers, great blue herons, and snowy egrets. All project activities shall be carried out consistent with the following:

- 3) The applicants shall ensure that the biologist shall conduct the surveys thirty (30) calendar days prior to construction or maintenance activities to detect any active bird nests or breeding behavior in all trees **seaward of Pacific Coast Highway and** within a 100-foot radius of the project site. A follow-up survey must be conducted three (3) calendar days prior to the initiation of construction and nest surveys must continue on a monthly basis throughout the nesting season or until the project is completed, whichever comes first. These surveys shall be submitted to the Executive Director within five days of completion.
 - 4) If an active nest of any shore or wading bird **or** any raptor species is found, the applicant's biologist shall monitor bird behavior and construction noise levels. The nest shall not be removed or disturbed. The biological monitor shall be present during all significant construction activities (those with potential noise impacts) to ensure that nesting birds are not disturbed by construction related noise. Project-related activities may occur only if noise levels are at or below a peak of 65 dB at the nest site(s), **unless an ambient noise study of the project site demonstrates that ambient noise levels exceed 65 dB.** If project-related noise exceeds a peak level of 65 dB **or the ambient noise level** at the nest site(s), sound mitigation measures such as sound shields, blankets around smaller equipment, mixing concrete batches off-site, use of mufflers, and minimizing the use of back-up alarms shall be employed. If these sound mitigation measures do not reduce noise levels, construction shall cease and shall not recommence until either new sound mitigation can be employed.
- B. An appropriately trained biologist shall monitor all **construction and maintenance** activities for disturbance to sensitive species or habitat area. Based on field observations, the biologist shall advise the applicants regarding methods to minimize or avoid significant impacts, which could occur upon sensitive species or habitat areas. The biological monitor shall have the authority to stop work if any adverse impacts to sensitive species at the project site and/or within the project vicinity could result from continuation of the proposed development. The applicants shall not undertake any activity that would disturb sensitive species or habitat area unless specifically authorized and mitigated under this coastal development permit or unless an amendment to this coastal development permit for such disturbance has been obtained from the Coastal Commission.
- C. Grunion Monitoring and Avoidance Plan. By acceptance of this permit, the applicants agree to abide by the following Grunion Monitoring and Avoidance Plan.
- 1) The applicants shall obtain the seasonally-predicted grunion run schedule from the California Department of Fish and Wildlife website and schedule maintenance to avoid grunion spawning seasons.
 - 2) **If project activities need to be performed during the grunion spawning season**, trained personnel (i.e., qualified biological monitor) **shall assess** the potential of the beach to support grunion spawning where work will occur.

Grunion monitoring will be required only at sites **with adequate sandy substrate** identified as **suitable for** grunion spawning.

- 3) A monitoring schedule. If **construction or** maintenance needs to be performed during the grunion spawning season in the project area that may support spawning, the predicted grunion run prior to the **construction or** maintenance work will be monitored. The predicted grunion run will be monitored for three nights: the night after the full or new moon phase and the two following nights. The monitoring would occur from the time of the high tide for two hours following the tide or until the grunion stop running if they are still running two hours after the high tide.
- 4) Results of grunion locations. If grunion are observed to run in the vicinity of the project area, the area where they ran will be marked physically and/or by Global Positioning System (GPS) locations. The density of the grunion throughout the area will be noted.
- 5) The applicants will ensure that **construction and** maintenance workers will avoid the spawning area during all work activities.
- 6) If spawning occurred within portions of a **construction or** maintenance area, work in those areas will be avoided or rescheduled until after the grunion eggs have hatched, **unless stopping work would result in significant loss of project construction materials (i.e. cobble and sand) and approval to conduct work is granted by the Executive Director after coordinating with the California Department of Fish and Wildlife and the Coastal Commission.** This occurs during the two weeks between grunion runs, i.e., the two or three days before every full or new moon or when it has been otherwise determined that the eggs from the run have washed out to hatch

5. Protection of Water Quality. To protect coastal water quality during construction and **maintenance** activities, the applicants shall comply with the following requirements:

A. General BMPs and Procedures

- 1) Best Management Practices (BMPs) designed to minimize adverse impacts resulting from construction and demolition activities shall be implemented prior to the onset of such activity, including BMPs to minimize erosion and sedimentation, minimize the discharge of pollutants and non-stormwater runoff, and minimize land disturbance, as applicable. The description and location of all water quality BMPs to be implemented during construction and demolition shall be specified.
- 2) All BMPs shall be maintained in a functional condition throughout the duration of the construction and **maintenance** activities and shall be promptly removed when no longer required.
- 3) The use of temporary erosion and sediment control products (such as fiber rolls, erosion control blankets, mulch control netting, and silt fences) that incorporate plastic netting shall be prohibited, to minimize wildlife entanglement and plastic debris pollution. Only products with 100% biodegradable (not photodegradable) natural fiber netting shall be allowed.

- 4) All construction methods and equipment to be used shall be specified.

B. BMPs for Construction **and Maintenance** Activities Adjacent to Coastal Waters

- 1) Construction work and equipment operations below the mean high water line shall be minimized to the extent feasible, and, where possible, shall be limited to times when tidal waters have receded from the authorized work areas.
- 2) All work shall be performed during favorable tidal, ocean, wind, and weather conditions that will enhance the ability to contain and remove, to the maximum extent feasible, construction and demolition debris.
- 3) Equipment or construction materials not essential for construction work shall not be allowed at any time in the intertidal zone.
- 4) The footprint of areas within which **project** activities are to take place (including staging and storage of equipment, materials, and debris; and equipment fueling and maintenance) shall be minimized to the extent feasible, to minimize impacts on the marine environment. Construction activities shall be prohibited outside of designated construction, staging, storage, and maintenance areas.
- 5) Vegetable-oil-based hydraulic fluids shall be used in heavy equipment used in construction lasting one week or longer overwater or adjacent to coastal waters, if feasible.
- 6) Biodiesel fuel shall be used in heavy equipment used in construction lasting one week or longer overwater or adjacent to coastal waters, if feasible.

C. BMPs for Stockpile and Debris Management

- 1) All demolition and construction materials, equipment, debris, and waste shall be properly stored and contained, and shall not be placed or stored where it may be subject to wave, wind, rain, or tidal dispersion, to prevent pollutants from entering coastal waters, sensitive habitats, and the storm drain system.
- 2) All stockpiles, construction materials, and demolition debris shall be enclosed on all sides, covered during rain events, and not stored in contact with the soil, and shall be located a minimum of 50 feet from coastal waters, sensitive habitat, and storm drain inlets.
- 3) Sediment control BMPs shall be installed at the perimeter of staging and storage areas, to prevent sediment in runoff from construction-related activities from entering coastal waters.
- 4) Demolition or construction debris and sediment shall be removed from work areas each day that demolition or construction occurs, to prevent the accumulation of debris, sediment, and other pollutants that may potentially be discharged into coastal waters.
- 5) All trash and debris shall be disposed of in the proper trash and recycling receptacles at the end of every construction day.
- 6) The applicant shall provide adequate disposal facilities for solid waste, including excess concrete, produced during demolition or construction.

- 7) All debris resulting from construction **or maintenance** activities, and any remaining construction materials, shall be removed from the project site within 24 hours of completion of the project.
- 8) Debris shall be disposed of at a legal disposal site or recycled at a recycling facility. If the disposal site is located in the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place unless the Executive Director determines that no amendment or new permit is legally required.

D. BMPs for Spill Prevention and Equipment Maintenance

- 1) Spill prevention and control measures shall be implemented to ensure the proper handling and storage of construction products or materials that may have adverse environmental impacts. The discharge of any construction products or materials into coastal waters shall be prohibited.
- 2) Leaks or spills of fuel, oil, grease, lubricants, hydraulic fluid, chemicals, preservatives, paints, or other construction products or materials shall be immediately contained on-site and disposed of in an environmentally-safe manner as soon as feasible.
- 3) Construction **and maintenance** vehicles operating at the project site shall be inspected daily to ensure there are no leaking fluids and shall be serviced immediately if a leak is found.
- 4) Fueling and maintenance of construction **and maintenance** equipment and vehicles shall be conducted off-site, if feasible. Any fueling and maintenance of mobile equipment conducted on site shall take place at a designated area located at least 50 feet from coastal waters, sensitive habitat, and storm drain inlets (unless these inlets are blocked to protect against fuel spills). The fueling and maintenance area shall be designed to fully contain any spills of fuel, oil, or other contaminants. Equipment that cannot be feasibly relocated to a designated fueling and maintenance area may be fueled and maintained in other areas of the site, provided that procedures are implemented to fully contain any potential spills.
- 5) Equipment, machinery, and vehicles shall be washed only in designated areas specifically designed to contain runoff and prevent discharges into coastal waters. Thinners, oils, and solvents shall not be discharged into the sanitary sewer or storm drain systems.

6. Permit Compliance.

- A. The permittees shall undertake and maintain the development in conformance with the special conditions of the permit and the final plans. Any proposed changes to the approved plans shall be reported to the Executive Director in order to determine if the proposed change shall require a permit amendment pursuant to the requirements of the Coastal Act and the California Code of Regulations. No changes to the approved plans shall occur without a Commission-approved permit amendment unless the Executive Director determines that no permit amendment is required.

- B. Upon completion of the Capistrano Beach Park Master Plan **or equivalent mid-to long-term adaptation strategy for the project site**, the permittee shall submit an application for an amendment to this coastal development permit, a new coastal development permit, or a Public Works Plan to the Commission for review and approval for the portions of the plan that constitute development. **If this application is not filed as complete prior to the end of the subject permit term (i.e. by November 16, 2029), the authorization for the development approved under CDP No. 5-19-0345-A2 shall expire unless an interim CDP or CDP amendment application is filed as complete.**

7. Assumption of Risk, Waiver of Liability and Indemnity. By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards, including but not limited to waves, storms, flooding, erosion, and earth movement, many of which will worsen with future sea level rise; (ii) to assume the risks to the permittee and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

8. As-Built Plans. **WITHIN 90 DAYS OF PROJECT COMPLETION**, the permittees shall submit as-built plans for **approved temporary buried cobble and sand berm and the temporary rock revetment**.

9. Berm and Dunes Construction and Inspection Plan. PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE PILOT PROJECT AT THE NORTH REACH OF THE SITE, the applicants shall provide a Berm and Dunes Construction and Inspection Plan that includes, at a minimum:

- A. Information regarding the final sources of beach-compatible cobble and sand and a final Nourishment Route. The compatibility of imported sand shall be determined consistent with the Capistrano Beach County Park Sand Compatibility and Use Guidelines approved prior to issuance of CDP No. 5-19-0345. Beach-compatible cobble shall be defined as part of this plan and shall conform to the maximum extent feasible with the naturally-occurring cobble size(s) and material(s) at the site.
- B. A final berm construction and dunes planting schedule that identifies all phases of construction including but not limited to staging, excavation and sorting of onsite material, and berm/dunes construction activities. The final schedule shall be informed by local storm and tide predictions, grunion run schedule(s), and bird nesting data. The schedule shall minimize impacts to public access and coastal resources where feasible while minimizing the length of the construction period.
- C. An Excavation and Sorting Plan that will include, at a minimum:

- 1) **Excavation and sorting methods, including how materials will be excavated, where they will be sorted, and what is suitable for reuse.**
- 2) **A method whereby all trash would be removed from excavated and/or sorted materials and properly disposed of. If buried debris from past development onsite is uncovered, it shall be documented to inform the longer-term adaptation plan for the area and disposed of properly.**
- 3) **A determination whether the final approved design, including excavation volumes, has the potential to impact archeological, paleontological, and/or tribal cultural resources. This determination shall be made in consultation with Juaneño/Acjachemen tribal entities. If there is potential for such resources to be impacted, the plan shall include best management practices to avoid or, where avoidance is not feasible, minimize such impacts.**
- 4) **WITHIN THREE DAYS OF THE COMPLETION OF SEDIMENT EXCAVATION AND SORTING ACTIVITIES, the applicants shall notify the Executive Director of the final required sand and cobble import and export volumes. To the maximum extent feasible, cobble and sand derived from the project site shall be used in the construction of the berm.**

10. Other Required Approvals. By acceptance of this permit, the applicants agree to obtain all other Local, State, or Federal permits that may be necessary for any aspect of the proposed project, such as permits from the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California State Lands Commission, California Department of Fish and Wildlife, Regional Water Quality Control Board, and/or City of Dana Point. Any proposed changes to the approved final plan that may be required by any other agency shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.