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STAFF REPORT: REGULAR CALENDAR

Application No.: **4-17-0779**

Applicant: **Santa Barbara County Flood Control District**

Project Location: East Beach, 600 E. Cabrillo Blvd., City of Santa Barbara

Project Description: Remove and replace an existing 164 sq. ft. concrete storm drain outlet box with a new 164 sq. ft. concrete storm drain outlet box in the same footprint.

Staff Recommendation: Approval with conditions

SUMMARY OF STAFF RECOMMENDATION

Staff recommends **approval** of the proposed development with **five special conditions** regarding 1) construction best management practices, 2) timing of construction, 3) protection of public access, 4) biological monitoring, and 5) assumption of risk.

The storm drain system for the east side of the City of Santa Barbara is the largest storm drain system in the City and has been functioning for over 40 years. The terminus of the outlet structure for the storm drain consists of a 164 sq. ft. concrete box, and is located in the surf zone on East Beach, at approximately 600 E. Cabrillo Blvd. Because the outlet is constantly exposed to wave action and the erosive marine environment, the concrete box structure and associated metal flap gate has deteriorated to a point beyond repair, and now must be completely replaced for the system to continue functioning. The applicant is proposing to replace the existing concrete box outlet structure with a new concrete box outlet structure of the same dimensions, capacity, and footprint as the existing outlet box. The anticipated design life for the new outlet box is 50 years.

Construction activities for the proposed project are anticipated to take one month. Sand will be temporarily cleared from around the outlet structure, resulting in less than 500 sq. ft. of disturbance. A temporary sheet pile barrier will then be constructed to keep seawater out of the

construction site. The existing concrete outlet box will be demolished and removed, and a new, identical outlet box will be constructed. Subsequently, the sheet pile barrier will be removed and any displaced sand around the outlet structure will be replaced. The applicant anticipates that heavy equipment such as a bulldozer, excavator, loader, work truck, and crane may be used to perform the work. Fueling and staging will take place in a paved area covering 6 parking spaces in the East Beach parking lot, located approximately 2,000 feet east of the worksite.

Because the proposed project involves construction activities and the use of heavy machinery on the beach, it has the potential to impact coastal water quality and marine resources. Thus, staff recommends Special Condition One (1) to require the use of construction Best Management Practices, which will ensure that potential impacts to marine resources are minimized.

The proposed staging and construction sites for the project include the public beach parking lot and the public beach that are used by the public for access and recreation. In order to protect this public access, staff recommends Special Condition Two (2), which limits the timing of construction to avoid the peak beach use season. Special Condition Three (3) has also been included to minimize the area of public beach and parking area that is closed by construction activities.

In order to protect sensitive wildlife species and habitats that may occur in the area near the project site, staff recommends Special Condition Two (2), which limits the timing of construction in order to avoid the nesting and breeding seasons of sensitive species. Special Condition Four (4) has also been included to require biological monitoring before and during construction, to ensure that any potential impacts to sensitive species are effectively avoided.

Finally, Special Condition Five (5) requires the applicant to assume all risk associated with the permitted development, which is located in an area that is subject to numerous coastal hazards.

With the special conditions described above, the Commission staff believes the project will be carried out consistent with Coastal Act policies related to marine and biological resources, public access, hazards, and water quality. The Commission staff recommends the Commission approve CDP Application No. 4-17-0779 as conditioned. The standard of review is the Chapter 3 policies of the Coastal Act. The motion and resolution to act on this staff recommendation follow below on page 4.

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APPENDICES

EXHIBITS

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** Coastal Development Permit Application No. 4-17-0779 pursuant to the staff recommendation.*

Staff Recommendation of Approval:

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

Resolution:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on the grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. 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.

III. SPECIAL CONDITIONS

1. Construction Best Management Practices

It shall be the applicant's responsibility to assure that the following occurs during all project operations:

A. Prior to the commencement of construction, the limits of the work areas and staging areas shall be delineated in cooperation with a qualified biologist, limiting the potential area affected by construction and ensuring that all environmentally sensitive habitats adjacent to construction areas are avoided during construction. All vehicles, equipment and materials stockpiles shall be restricted to pre-established work areas and haul routes and to established or designated staging areas. Clearing shall be limited to the minimal footprint necessary and for the shortest time necessary to avoid impacts to environmentally sensitive habitat areas and coastal waters. Construction equipment and vehicles shall remain as high on the upper beach as possible and avoid contact with ocean waters to the maximum extent feasible during construction. Disturbance to beach wrack shall also be minimized to the maximum extent feasible.

B. Best Management Practices (BMPs) shall be designed to control erosion from the disturbed area and prevent sediment and potential pollutants from entering coastal waters and/or native habitat plant communities during construction activities. The BMPs shall be implemented prior to or concurrent with construction and maintained throughout the project. 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 (such as polypropylene, nylon, polyethylene, polyester, or other synthetic fibers) shall be avoided, to minimize wildlife entanglement and plastic debris pollution.

C. Temporary stockpiles of excavated sediment should be protected with geo-fabric or other appropriate cover. Permanent stockpiling of excavated material on site shall not be allowed. Any and all debris resulting from construction activities shall be removed from the beach prior to the end of each work day. All excavated beach sand shall be redeposited on the beach and graded to natural beach contours at the end of construction.

D. During construction, all trash shall be properly contained, removed from the worksite, and disposed of on a regular basis. No construction materials, debris, or waste shall be placed or stored where it may be subject to wave or tidal erosion and dispersion. Any

debris inadvertently discharged into coastal waters shall be recovered immediately and disposed of consistent with the requirements of this coastal development permit.

E. Any fueling and maintenance of construction equipment shall occur within designated staging areas. Mechanized heavy equipment and other vehicles used during the construction process shall not be refueled or washed within 100 feet of coastal waters.

F. Fuels, lubricants, and solvents shall not be allowed to enter coastal waters. Hazardous materials management equipment including oil containment booms and absorbent pads shall be available immediately on-hand at the project site, and a registered first-response, professional hazardous materials clean-up/remediation service shall be locally available on call. Any accidental spill shall be rapidly contained and cleaned up.

2. Timing of Construction

In order to avoid impacts to sensitive wildlife species as well as public recreation, all project operations on the beach shall be prohibited from March 1 through September 2. This includes staging, construction of the sheet pile barrier, removal of the existing outlet box, construction of the new outlet box, and removal of the sheet pile barrier. In addition, all work shall take place during daylight hours, and lighting of the beach is prohibited.

3. Protection of Public Access

Public access shall be protected throughout the duration of project construction by complying with the following:

A. Beach area closures during construction shall be minimized and limited to the area immediately adjacent to the storm drain outlet project site. Safe public access to and along the beach and recreation facilities around the project site, including the multi-modal pedestrian path, shall remain open and available for public use during construction operations.

B. Use of public parking areas for staging and storage of construction equipment, materials and parking of construction staff vehicles shall be minimized to the extent feasible, shall not exceed a total of 6 parking spaces and shall not reduce the current number of ADA-compliant parking spaces.

4. Biological Monitoring

At least two (2) weeks prior to commencement of any work, the applicant shall retain the services of a qualified biologist or environmental resource specialist with appropriate qualifications acceptable to the Executive Director. Project activities shall be carried out consistent with the following:

A. The environmental resource specialist shall conduct a survey of the project site one week prior to all work to ensure that initiation of work will not impact any sensitive species or habitats and shall survey the project site each day prior to commencement of any demolition or construction activities to determine whether any sensitive wildlife species are present. The results of these surveys shall be submitted for the review and approval of the Executive Director. In the event that any sensitive wildlife species are present on the project site, no construction activities shall occur until any and all sensitive species have left the project area or its vicinity, to ensure adverse effects to such resources are avoided. If the presence of any such sensitive species requires review by other resource agencies, such as the United States Fish and Wildlife Service and/or the California Department of Fish and Wildlife, then no development activities shall be allowed or continue until any such authorizations are received. Project activities shall resume only upon written approval of the Executive Director.

B. The environmental resource specialist shall require the applicant to cease work should any breach in permit compliance occur or if any unforeseen sensitive habitat issues arise. The environmental resource specialist shall immediately notify the Executive Director if activities outside of the scope of this coastal development permit occur. If significant impacts or damage occur to sensitive wildlife species or sensitive habitat, the applicant shall be required to create a program to adequately mitigate such impacts and to restore the respective habitat if necessary. This program shall then be processed as an amendment to this coastal development permit.

5. 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 from storm waves, surges, erosion, and flooding; (ii) to assume the risks to the applicant 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.

Prior to issuance of the Coastal Development Permit, the applicant shall submit a written agreement, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition.

IV. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION AND SETTING

The storm drain system for the east side of the City of Santa Barbara was constructed by the Santa Barbara County Flood Control District in 1977 and the system conveys storm water and

discharges it into the Pacific Ocean through a concrete outlet structure located at East Beach in Santa Barbara, at approximately 600 E. Cabrillo Blvd (Exhibits 1 and 2). The outlet is located on the sandy beach and in an area below the mean high tide line that was granted to the City of Santa Barbara by the California State Lands Commission. The City of Santa Barbara and Santa Barbara County Flood Control District then executed a joint exercise of powers agreement in 1976 to create the Santa Barbara Eastside Storm Water Control Authority, which was authorized to construct and maintain the storm drain system.

East Beach is a relatively wide, sandy beach that is frequented by both residents and tourists, and there are several visitor-serving facilities near the outlet structure. The City of Santa Barbara maintains a multi-modal pedestrian path that runs parallel to the shore approximately 100 ft. behind the outlet structure, and a public restroom is located approximately 250 ft. northwest of the outlet. A public parking lot for East Beach is located approximately 2,000 ft. east of the outlet. Cabrillo Pavilion is located just beyond the parking lot, approximately 2,800 ft. east of the outlet. Stearns Wharf is located approximately 3,200 ft. west of the outlet.

The terminus of the existing outlet structure is located within the surf zone and consists of an 11 ft.-9 in. by 14 ft. (164 sq. ft.) concrete box that contains a metal flap gate and a concrete overflow structure above the flap gate (Exhibit 3). The flap gate prevents beach sand from intruding into the system, and opens to allow water discharge when sufficient pressure builds up in the system. In the event that beach sand does build up against the flap gate, thereby closing the system, the concrete overflow structure is designed to allow the pressurized water in the system to bypass the flap gate and flush the sand from in front of the flap gate. Once enough sand is flushed away, the back pressure opens the flap gate. This outlet structure design has worked well during the approximately 40 years that the system has been in operation.

Because the outlet is constantly exposed to wave action and the erosive marine environment, the County Flood Control District has indicated that the concrete box structure and metal flap gate of the storm drain outlet has deteriorated to a point beyond repair, and now must be completely replaced for the system to continue functioning. The applicant has proposed to replace the existing concrete box outlet structure with a new concrete box outlet structure of the same dimensions, capacity, and footprint as the existing outlet (Exhibit 4). The anticipated design life for the new outlet box is approximately 50 years.

Construction activities for the proposed project are anticipated to take one month. Because the system must be dewatered and construction cannot take place when the outlet is open and actively discharging water, all construction activities must take place outside of the rainy season (approximately November – March). Sand will be temporarily cleared from around the outlet structure, resulting in less than 500 sq. ft. of disturbance. A temporary sheet pile barrier will then be constructed to keep seawater out of the construction site. If seawater does enter the construction site, it will be pumped back into the ocean. The existing outlet structure will be demolished and removed, and a new, identical outlet structure will be constructed. Subsequently, the sheet pile barrier will be removed and any displaced sand around the outlet structure will be replaced. The applicant anticipates that heavy equipment such as a bulldozer, excavator, loader, work truck, and crane may be used to perform the work. Fueling and staging will take place in a

paved area covering 6 parking spaces in the East Beach parking lot, located approximately 2,000 feet east of the worksite. The proposed project is not considered repair and maintenance work that is exempt from the requirement of a coastal development permit pursuant to Section 30610(d) of the Coastal Act and Section 13252 of the California Code of Regulations because the location of work on the beach and in the surf zone, and the use of mechanized equipment on the beach to conduct the work may involve a significant risk of adverse environmental impacts.

Although the Commission has previously certified a Local Coastal Program for the City of Santa Barbara, the proposed project is located in an area subject to tidal action where the Commission has retained jurisdiction over the issuance of coastal development permits. The Commission's standard of review for the proposed development is the Chapter 3 policies of the Coastal Act.

B. PUBLIC ACCESS AND RECREATION

Section 30210 of the Coastal Act 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 of the Coastal Act 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 30221 of the Coastal Act 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.*

Coastal Act Sections 30210, 30211, and 30221 mandate that maximum public access and recreational opportunities be provided on oceanfront land, and that development not interfere with the public's right to access the coast. The existing storm drain outlet box is located within the surf zone on East Beach, which is utilized by visitors of both local and regional origin. In its current location within the surf zone, access along the beach is available on the dry sand behind the outlet box. Access is also sometimes available seaward of the outlet box, depending on the level of the tide and the operational status of the outlet (i.e. whether the flap gate is open and water is being discharged). Since the outlet is proposed to be replaced in the same location, existing public access is not anticipated to change. Any effects of sea level rise on East Beach

(which are discussed in more detail below) will result in the outlet being located further into the water, allowing the public lateral beach access behind the outlet box.

The construction of the proposed project will involve the use of heavy machinery on the beach for demolition of the existing outlet box and construction of the new outlet box. The equipment proposed to be used includes bulldozers, excavators, loaders, work trucks, and cranes. Fueling and construction staging will take place in a portion of the paved East Beach public parking lot located approximately 2,000 feet to the east of the worksite. Staging will occupy a total of six (6) parking spaces, which equals roughly 1,080 square feet. Disturbance at the outlet site will be limited to less than 500 square feet of the beach. Construction of the proposed project is anticipated to take one month to complete. Thus, six public parking spaces and a portion of the public beach where the outlet box is located will be temporarily unavailable to the public during construction of the proposed project. This has the potential to impact public access and recreation in the area.

The peak beach use season runs through the summer from May to September. Scheduling construction operations outside of the peak beach use season will serve to minimize impacts to public access. Therefore, the Commission finds it necessary to require **Special Condition Two (2)**, which prohibits all project construction operations on the beach during the summer season (the Friday prior to Memorial Day in May through Labor Day on September 2). However, the beach is still used by many visitors outside of the summer season. Therefore, the Commission is also requiring **Special Condition Three (3)** to minimize the public recreation areas that are closed during construction. The closed areas shall be limited to the areas immediately adjacent to the project site. All beach areas and recreation facilities outside this immediate vicinity, including the multi-modal pedestrian path located landward of the storm drain outlet, shall remain open and available for public use during construction operations. Shoreline access will remain available at all hours for the majority of the beach, and in no case will the public be prevented from walking along the beach behind the surf zone. In addition, Special Condition 3 requires that the use of public parking areas for staging and storage of construction equipment, materials and parking of construction staff vehicles shall be minimized to the extent feasible, and shall not exceed a total of six parking spaces nor reduce the current number of ADA-compliant parking spaces.

In summary, the subject proposal does not represent a significant decrease in the public's ability to use and gain access to the shoreline. The Coastal Act requires that existing public access opportunities be protected and enhanced when possible. In this case, the majority of the beach will remain accessible to the public at all hours during construction, and a small number of nearby parking spaces will be temporarily impacted for the limited period of construction, which is anticipated to be one month.

For all of these reasons, the Commission finds that the proposed project, as conditioned, will not significantly impact recreational opportunities and public access in the project area and is consistent with Coastal Act Sections 30210, 30211, and 30221.

C. MARINE RESOURCES

Section 30230 of the Coastal Act 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 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 30233 of the Coastal Act states:

> *a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*
>
> *1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.*
> *2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*
> *3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.*
> *4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*
> *5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
> *6) Restoration purposes.*
> *7) Nature study, aquaculture, or similar resource dependent activities.*

b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems.

c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

d) Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients that would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provision of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for these purposes are the method of placement, time of year of placement, and sensitivity of the placement area.

Section 30240 of the Coastal Act states:

a) Environmentally sensitive habitat areas shall be protected against a 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.

Marine Resources and Water Quality

Sections 30230 and 30231 of the Coastal Act mandate that marine resources and coastal water quality shall be maintained and where feasible restored, protection shall be given to areas and species of special significance, and that uses of the marine environment shall be carried out in a manner that will sustain biological productivity of coastal waters. Section 30240 of the Coastal Act states that environmentally sensitive habitat areas shall be protected and that development within or adjacent to such areas must be designed to prevent impacts which could degrade those resources.

Construction of the proposed project would involve limited excavation and replacement of sand for the demolition and reconstruction of the concrete storm drain outlet box. Sand would be temporarily cleared from around the outlet, resulting in less than 500 sq. ft. of disturbance. A

temporary sheet pile barrier would then be constructed to keep seawater out of the construction site while the outlet box is replaced. Subsequently, the sheet pile barrier would be removed and any displaced sand around the outlet box would be replaced. The applicant anticipates that heavy equipment, such as a bulldozer, excavator, loader, work truck, and crane, may be used to perform the work. This work would result in a temporary disturbance of the sandy beach and surf zone within a limited area during construction. Construction equipment, materials, and demolition debris could pose a significant hazard if used or stored where subject to wave contact or situated in a manner that creates a hazard for beach users. Storage or placement of construction materials, debris, or waste in a location subject to wave erosion and dispersion or which may be discharged into coastal water via rain would result in adverse impacts upon the marine environment that would reduce the biological productivity of coastal waters. For instance, construction debris entering coastal waters may cover and displace soft bottom habitat. In addition, the use of machinery in coastal water not designed for such use may result in the release of lubricants or oils that are toxic to marine life. Sediment discharged into coastal waters may cause turbidity which can shade and reduce the productivity of eelgrass or kelp beds, as well as reducing foraging avian and marine species' ability to see food in the water column.

As such, this construction activity could increase pollution into the Pacific Ocean if not properly mitigated. To avoid this possibility, the Commission finds that it is necessary to require **Special Condition One (1)** for the implementation of construction Best Management Practices (BMPs). These include: timely removal of construction debris, prevention of fuel or oily waste discharge from heavy machinery, enclosure of construction materials, storage of construction materials away from the intertidal area, and trash and debris collection at the end of each work day. These measures must be incorporated into the proposed project's construction methods to assure that water quality protection is maximized.

Coastal Act Section 30233 states that the filling of open coastal waters shall only be permitted for certain allowed uses, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. The proposed project involves replacing an existing storm drain outlet box of the same dimensions and in the same footprint within the surf zone, the temporary clearance of sand around the existing outlet box, which will be replaced upon completion of reconstruction, and a temporary sheet pile barrier to keep seawater out of the construction site and will be removed at the completion of reconstruction. Thus, the project as proposed does not result in any new fill. Furthermore, Coastal Act Section 30233(a)(4) allows fill for incidental public service purposes such as maintenance of existing intake and outfall lines. The proposed work to replace the outfall box is both incidental and for a necessary public service purpose. There is no feasible less damaging alternative and the recommended special conditions discussed below and the preceding section of this report will mitigate the potential adverse environmental effects of the proposed project. Therefore, the proposed development complies with Section 30233 of the Coastal Act.

Sensitive Species and Habitats

Because the proposed project is located on the beach and within the surf zone, the proposed construction activity has the potential to temporarily impact existing coastal and marine habitats

that are utilized by sensitive wildlife species. Several sensitive species are expected to be present seasonally in the vicinity of the proposed project. These include California grunion, Western snowy plover, and California least tern. California least tern, a federally endangered bird species, are known to forage along East Beach. East Beach is also designated critical habitat for Western snowy plover, a federally threatened bird species. The breeding season for snowy plovers and least terns along the Pacific coast extends from early March to September. The majority of California's wintering snowy plovers roost and forage in loose flocks on sand spits and dune-backed beaches, with some occurring on urban and bluff-backed beaches. The proposed project has the potential to temporarily displace and disturb these sensitive species during construction operations. The California grunion also spawns on the sandy beaches in the project vicinity immediately following high tides from March to August. The eggs are incubated in the sand until the following series of high tide conditions, approximately 10 to 15 days, when the eggs hatch and are washed into the sea. California grunion is a species of concern due to its unique spawning behavior. Project activities within the intertidal zone may disturb adult grunion during the run period and/or may bury incubating grunion eggs. Thus mitigation measures are necessary to protect these species, pursuant to Coastal Act Sections 30230 and 30240. In order to minimize the potential for adverse impacts on these sensitive species, **Special Condition Two (2)** has been required to restrict the timing of construction so that all project operations are prohibited between March 1 and September 2. This period between March and September encompasses the primary spawning season for grunion, as well as the nesting seasons for snowy plovers and least terns. Special Condition 2 also requires that all work shall take place during daylight hours, and lighting of the beach is prohibited.

Furthermore, to ensure that any potential disturbance to sensitive species from construction activities is minimized, **Special Condition Four (4)** requires that a qualified environmental resource specialist conduct pre-construction surveys and monitor ongoing construction activities to determine whether any sensitive species are present. In the event that any sensitive wildlife species are present on the project site, no construction activities shall occur until any and all sensitive species have left the project area or its vicinity, to ensure adverse effects to such resources are avoided. This condition also calls for all project activities to cease in the event that the environmental resource specialist encounters any breach in permit compliance or any unforeseen impacts to sensitive species or habitats. If significant impacts or damage occur to sensitive species or sensitive habitat, the applicant shall be required to submit a revised or supplemental restoration program to adequately mitigate such impacts. The revised, or supplemental, program is required to be processed as an amendment to this coastal development permit.

In addition, to ensure that construction material, debris or other waste associated with the project activities do not have any significant negative impacts on sensitive species, **Special Condition One (1)** require Construction Best Management Practices and the removal of any excavated material from the project site. Special Condition 1 requires that the limits of the work areas and staging areas shall be delineated in cooperation with a qualified biologist, limiting the potential area affected by construction and ensuring that all environmentally sensitive habitats adjacent to construction areas are avoided during construction. All vehicles, equipment and materials stockpiles shall be restricted to pre-established work areas and haul routes and to established or

designated staging areas. Clearing shall be limited to the minimal footprint necessary and for the shortest time necessary to avoid impact to sensitive habitat and coastal waters. Further, construction equipment and vehicles shall remain as high on the upper beach as possible and avoid contact with ocean waters and intertidal areas to the maximum extent feasible during construction, and disturbance to beach wrack shall also be minimized to the maximum extent feasible. All excavated beach sand is also required to be redeposited on the beach and graded to natural beach contours at the end of construction.

Through the implementation of these special conditions, any potential for adverse impacts to marine and biological resources from the proposed project will be minimized. Therefore, the Commissions finds that the proposed project, as conditioned, is consistent with Coastal Act Sections 30230, 30231, 30233, and 30240.

D. SHORELINE DEVELOPMENT AND HAZARDS

Section 30253 of the Coastal Act states:

> *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.*
>
> *c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development.*
>
> *d) Minimize energy consumption and vehicle miles traveled.*
>
> *e) Where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.*

Section 30253 of the Coastal Act mandates that new development provide for geologic stability and integrity, and minimize risks to life and property in areas of high geologic, flood, and fire hazard. The Santa Barbara coast has been subject to substantial damage as a result of storm and flood occurrences, geological failures, and firestorms. Therefore, it is necessary to review the proposed project and project site against the area's known hazards. Developments located in or near the ocean have the potential for damage caused by wave energy. The proposed project is located entirely within the surf zone, and is therefore especially susceptible to flooding and/or wave damage from storm waves and storm surge conditions.

The existing outlet structure has been in operation in its current location for over 40 years. During that time, the harsh conditions of the marine environment have degraded the concrete of the outlet box, but have not significantly damaged the remainder of the outlet structure landward of the outlet box or impacted the overall functionality of the storm drain system. The proposed project is to replace the damaged outlet box in the same dimensions and footprint, and the

anticipated design life for the reconstructed outlet structure is 50 years. Thus, the development is expected to be reasonably safe from coastal hazards in the area.

There is no evidence that the outlet's existence has contributed to increased coastal hazards or altered the natural shoreline processes of the beach over the past 40 years. By replacing the outlet box in the same location, the risk of creating hazards or altering shoreline processes in the future is minimized. The outlet structure is not expected to cause any net accretion or erosion of sand, or change wave energy dynamics along the shoreline.

Sea Level Rise

Sea level has been rising for many years. As an example in the Santa Monica Bay area, the historic rate of sea level rise, based on tide gauge records, has been 1.8 mm/yr. or about 7 inches per century[1]. In the past century, average global temperature has increased by about 0.8°C (1.4°F), and average global sea level has increased by 7 to 8 in (17 to 21 cm) (IPCC 2013). Sea level at the San Francisco tide gauge has risen 8 in (20 cm) over the past century, and recent reports developed by the California Ocean Protection Council (OPC) project that by the year 2100, sea levels may rise by approximately 3.1 to 6.6 feet in the area near the project site, with the potential for rapid ice loss to result in an extreme scenario of 10.2 feet of sea level rise (Griggs et al., 2017; OPC 2018). Recent observations of sea level along parts of the California coast have shown some anomalous trends, however; there is a growing body of evidence that there has been a slight increase in global temperature and that an accelerated rate of sea level rise can be expected to accompany this increase in temperature.

The State of California has undertaken significant research to understand how much sea-level rise to expect over this century and to anticipate the likely impacts of such sea-level rise. In 2013, the Ocean Protection Council (OPC) adopted the National Research Council (NRC) report, "Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past Present and Future", as best available science for the State of California, and recommended in its 2013 State Sea Level Rise Guidance that state agencies and others use these projections in their planning processes. The Coastal Commission also adopted the NRC report as best available science its 2015 Sea-level Rise Policy Guidance. Two subsequent OPC reports have updated the best available science, including the Rising Seas in California: An Update on Sea-Level Rise Science, released in April 2017 by a working group of OPC's Science Advisory team, and the State of California Sea Level-Rise Guidance: 2018 Update. The OPC's most recent projections in its statewide sea-level rise guidance is that in this area sea levels may rise between 1.7 and 3.3 feet by the year 2070 (the anticipated duration of the proposed project), though there is a risk of much more significant sea-level rise depending on various uncertainties, including the dynamics of ice sheet loss. The projection is given in a range largely because climate models that predict future climate conditions include inherent uncertainties stemming from uncertainties about the climate system, which in an area of developing science. Additionally, researchers cannot know exactly how much greenhouse gases we will continue to emit over the coming decades – large-scale curtailment of greenhouse gas emissions would keep sea-level rise towards the lower end of the projections, while business as usual emissions scenarios would result in the higher end of the

[1] Lyles, S.D., L.E. Hickman and H.A. Debaugh (1988) *Sea Level Variations for the United States 1855 – 1986.* Rockville, MD: National Ocean Service.

projections. Because the world has continued along the "business as usual" scenario (and data suggests temperatures and sea-level rise are tracking along the higher projections), the Coastal Commission Sea Level Rise Guidance relies on projections associated with this "business as usual" emission scenario. The OPC has also recommended that medium/high risk aversion be used to inform decision-making for less adaptive, more vulnerable projects or populations that will experience medium to high consequences as a result of underestimating sea-level rise and lower ability to adapt. In the case of the proposed project, this means looking at 3.3 feet of sea level rise over the 50-year anticipated life of the replaced outlet box.

As our understanding of sea-level rise continues to evolve, it is possible that sea-level rise projections will continue to change as well (as evidenced by the recent updates to best available science). While uncertainty will remain with regard to exactly how much sea-levels will rise and when, the direction of sea-level change is clear and it is critical to continue to assess sea-level rise vulnerabilities when planning for future development. Importantly, maintaining a precautionary approach that considers high or even extreme sea-level rise rates and includes planning for future adaptation will help ensure that decisions are made that will result in a resilient coastal California.

On the California coast, the effect of a rise in sea-level will be the landward migration of the intersection of the ocean with the shore, which will result in increased flooding, erosion, and storm impacts to coastal areas. On a relatively flat beach, with a slope of 40:1, a simple geometric model of the coast indicated that every centimeter of sea-level rise will result in a 40 cm landward movement of the ocean/beach interface. For fixed structures on the shoreline, such as a seawall, an increase in sea-level will increase the inundation of the structure. More of the structure will be inundated or underwater than is inundated now and the portions of the structure that are now underwater part of the time will be underwater more frequently.

Accompanying this rise in sea-level will be an increase in wave heights and wave energy. Along much of the California coast, the bottom depth controls the nearshore wave heights, with bigger waves occurring in deeper water. Since wave energy increases with the square of the wave height, a small increase in wave height can cause a significant increase in wave energy and wave damage. Combined with the physical increase in water elevation, a small rise in sea-level can expose previously protected back shore development to increased wave action, and those areas that are already exposed to wave action will be exposed more frequently, with higher wave forces. Structures that are adequate for current storm conditions may not provide as much protection in the future.

In evaluating the design of the proposed project with respect to sea level rise, alternative locations for the outlet structure were considered. Moving the outlet further landward would delay the potential impacts of sea level rise, as it would likely increase the elevation of the structure. However, this would change the pressure dynamics of the entire system, and could necessitate reconstructing a larger portion of the storm drain system. Thus reconstructing the outlet in the same location minimizes the total portion of the drain system that will be affected. Furthermore, moving the outlet further landward now would remove it from the surf zone until a significant amount of sea level rise occurred. During the time the outlet would be outside the surf

zone, its functionality would be impaired. As mentioned above, the outlet structure is specifically designed to operate within the surf zone, as it depends on wave-induced erosion to assist in opening the flap gate and keeping it open. Finally, moving the outlet further landward would limit public access, especially when the outlet gate is open and water is being actively discharged.

As described above, this storm drain system relies on pressure to function. The system is designed so that pressures of at least 20 feet of head above the elevation of the outlet structure can build up without adversely affecting the storm drain's function. The existing outlet structure has a current elevation of 0.29 feet below mean sea level. In its current configuration, it is estimated that the existing flap gate will open as long as backpressure can exceed the sea water surface elevation by at least two feet of head. This means that the sea water surface elevation would need to be over 17.5 feet above the outlet structure to have any operational effect on the storm drain. Within the 50-year lifespan of the project, the upper prediction of sea level rise is 3.3 feet. This would put the outlet structure at approximately 3.6 feet below mean sea level, which is much less than the 17.5 feet that would be necessary to affect the system. Thus, the functionality of the proposed project will not be adversely impacted by anticipated sea level rise during its design life expectancy.

The Coastal Act recognizes that any beachfront development may still involve the taking of some risk with respect to coastal hazards. The Commission finds that due to the possibility of high waves, storm surges, erosion, and flooding, the applicant must assume these risks as conditions of approval. Because the risk of harm cannot be completely eliminated, the Commission requires the applicant to waive any claim of liability against the Commission for damage to life or property which may occur as a result of the permitted development, as detailed in **Special Condition Five (5)**. The applicant's Assumption of Risk, Waiver of Liability and Indemnity, when executed and recorded on the property deed, will show that the applicant is aware of and appreciates the nature of the hazards which exist on the site, and that may adversely affect the stability or safety of the proposed development. **Special Condition Five (5)** also requires the applicant: to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; 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 to indemnify and hold harmless the Commission, its offers, 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 feed incurred in defense of such claims), expenses, and amounts paid in settlements arising from any injury or damage due to such hazards.

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Coastal Act Section 30253.

E. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096(a) of the Commission's administrative 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 that the activity may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to any public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed in detail above, the proposed project, as conditioned, is consistent with the policies of the Coastal Act. Feasible mitigation measures, which will minimize all adverse environmental effects, have been required as special conditions. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is consistent with the requirements of the Coastal Act and CEQA.

APPENDIX 1

Substantive File Documents

File for CDP No. 4-17-0779; Joint Exercise of Powers Agreement for Santa Barbara Eastside Storm Water Control Authority, dated August 17, 1976; Design Memorandum prepared by Matt Griffin, dated December 12, 2017; Design Memorandum prepared by Matt Griffin, dated May 10, 2019; Electronic communication between Kenneth Foster (California State Lands Commission) and Seth Shank (Santa Barbara County Flood Control District), dated November 30, 2017; Final Coastal Hazards/Sea-Level Rise Vulnerability Assessment Report for Cabrillo Pavilion Arts Center and Bathhouse Renovation Project, dated January 2015.