MEMORANDUM

COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

DATE: **March 22, 2023**

TO: **Planning Commission**

FROM: **Michael Schaller, Senior Planner**

SUBJECT: Tunitas Creek County Park Lighting Plan (PLN2021-00485)
Condition of Approval No. 25

On October 26, 2022, the Planning Commission conditionally approved an application from the Parks Department ("applicant") for a Coastal Development Permit for the construction of a County Park at Tunitas Creek. During consideration of the CDP, the Commission expressed concerns regarding the potential for impacts to nighttime visual resources due to proposed pathway lighting. The applicant's plans referenced lighting for the proposed park but lacked sufficient detail to allay the Commission's concerns. After consideration of the entirety of the project, the Commission approved the CDP with a condition of approval (No. 25 – see attached decision letter) requiring the Parks Department to submit a lighting plan for review by the Commission prior to construction.

On January 30, 2023, the Parks Department submitted the attached memo describing the proposed lighting for the ADA accessible path of travel from the mid bluff area to the parking area. Parks Department is proposing to use small LED lights which will be embedded in the underside of the handrails to be constructed along the ADA accessible path. The LED lights will be set to only emit approximately one foot candle (FC) of light, which is the California Building Code requirement for egress paths out of buildings including movie theaters. By comparison, interior lighting in a home typically operates in the 5 to 40 FC range.

The lights will be activated by a manual switch as the Parks Department intends to turn off the pathway lights as part of its daily closing routine. In addition, there will be a timer, which will automatically turn off the system as a failsafe to ensure no lights are left on overnight. The applicant is proposing to set the timer for two hours after activation. No other lighting is proposed for the park in order to ensure minimal impacts to visual resources.

LCP Compliance

Policy 8.18 (*Development Design*) – This policy requires development to blend with the environment and be as unobtrusive as possible. Exterior lighting shall be limited to the minimum necessary for safety. All lighting must be designed and shielded so as to confine direct rays to the parcel where the lighting is located.

As stated previously, the Parks Department is proposing to install the LED lighting fixtures on the underside of the handrailing going up the pathway. These lights will be focused downwards and will only illuminate a small area (approximately 2 ft. diameter) at each light location. Because the handrail will be at roughly waist height, the intensity of the light can be at a low level (at approximately 1 FC), and will be designed to transmit light at the yellow end of the color spectrum (as opposed to transmitting at the harsher blue end of the color spectrum).

Upon consideration of all of these elements, Staff believes that the proposed lighting plan complies with Policy 8.18 of the County LCP and recommends its approval.

attachments

_Memorandum (4-3-17).dotx

County of San Mateo - Planning and Building Department

ATTACHMENT A

COUNTY OF SAN MATEO
PLANNING AND BUILDING

455 County Center, 2nd Floor
Redwood City, CA 94063
650-599-7310 T
www.planning.smcgov.org

November 2, 2022

San Mateo County Parks Department
Hannah Ormshaw
455 County Center, 4th Floor
Redwood City, CA 94063
Email to: hormshaw@smcgov.org

Subject: **LETTER OF DECISION**
File Number: PLN2021-00485
Location: 20901 Cabrillo Highway, San Gregorio
APN: 081-060-020, -030, and -130

On October 26, 2022, the San Mateo County Planning Commission considered a Coastal Development Permit, pursuant to Section 6328.4 of the County Zoning Regulations, to construct public access improvements at Tunitas Creek Beach County Park in the unincorporated San Gregorio area of San Mateo County. This project is appealable to the California Coastal Commission.

Based on information provided by staff and evidence presented at the hearing the Planning Commission approved the Coastal Development Permit, County File Number PLN 2021-00485, by adopting the required findings and conditions of approval contained in Attachment A.

Any interested party aggrieved by the determination of the Planning Commission has the right of appeal to the Board of Supervisors within ten (10) business days from such date of determination. The appeal period for this matter will end at **5:00 p.m. on November 9, 2022.**

The approval of this project is appealable to the California Coastal Commission. Any aggrieved person may appeal this decision to the California Coastal Commission within 10 working days following the Coastal Commission's receipt of the notice of Final Local Decision. Please contact the Coastal Commission's North Central Coast District Office at 415/904-5260 for further information concerning the Commission's appeal process.

The County and Coastal Commission appeal periods are sequential, not concurrent, and together total approximately one month. A project is considered approved when these appeal periods have expired, and no appeals have been filed.

Please direct any questions regarding this matter to Project Planner Michael Schaller mschaller@smcgov.org.To provide feedback, please visit the Department's Customer Survey at the following link: http://planning.smcgov.org/survey.

Sincerely,

Janneth Lujan
Planning Commission Secretary

Cc: San Mateo County Parks
Department of Public Works
Building Inspection Section
Coastside Fire Protection
California Coastal Commission

Attachment A

County of San Mateo Planning
and Building Department

FINDINGS AND CONDITIONS OF APPROVAL

Project File Number: PLN 2021-00485 Hearing Date: October 26, 2022

Prepared By: Michael Schaller
Senior Planner

Adopted By: Planning Commission

FINDINGS

Regarding the Environmental Review, Found:

1. That, the Mitigated Negative Declaration adopted by the Board of Supervisors on December 14, 2021, adequately analyzes the proposed project pursuant to the California Environmental Quality Act ("CEQA"), and that no subsequent environmental review is required pursuant to CEQA Guidelines Section 15162 (*Subsequent EIRs and Negative Declarations*).

Regarding the Coastal Development Permit, Found:

2. That the project, as described in the application and accompanying materials required by Zoning Regulations Section 6328.7 and as conditioned in accordance with Section 6328.14, conforms with the plans, policies, requirements, and standards of the San Mateo County Local Coastal Program with regards to the protection of biotic and visual resources, as well as shoreline access and recreation resources.

3. Where the project is located between the nearest public road and the sea, or the shoreline of Pescadero Marsh, that the project is in conformity with the public access and public recreation policies of Chapter 3 of the Coastal Act of 1976 (commencing with Section 30200 of the Public Resources Code) and Chapter 3 of the Coastal Act of 1976. As discussed throughout the staff report, the intended purpose of the project is to provide safe public access to Tunitas Beach where no authorized access currently exists.

4. That the project conforms to the specific findings required by policies of the San Mateo County Local Coastal Program. As discussed in Section A (2) of this staff report, protection measures will be implemented to prevent any impact to biological resources, including San Francisco garter snake and California red- legged frog.

CONDITIONS OF APPROVAL

Current Planning Section

1. The approval applies only to the proposal as described in this report and materials submitted for review and approval by the Planning Commission on October 26, 2022. The Community Development Director may approve minor revisions or modifications to the project if they are found to be consistent with the intent of and in substantial conformance with this approval.

2. **Mitigation Measure AIR-1:** In order to meet the BAAQMD fugitive dust threshold, the following BAAQMD Basic Construction Mitigation Measures shall be implemented:

    a) Any exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

    b) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

    c) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

    d) All vehicle speeds on unpaved roads shall be limited to 15 mph.

    e) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

    f) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

    g) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

    h) Post a publicly visible sign with the telephone number and person to contact at the County of San Mateo Parks Department regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

3. **Mitigation Measure BIO-1:** To the extent feasible, the previously mapped CNDDB occurrences of the coastal marsh milk-vetch shall be avoided and set back from the proposed project development by at least 50 feet.

   a) Prior to the initiation of construction activities, a qualified botanist shall conduct protocol-level surveys to verify the absence of the special-status plant species listed on Table A: Special-Status Species Evaluated for the Project of the Initial Study. The surveys shall be conducted in accordance with the California Department of Fish and Wildlife (CDFW's) *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*. A series of pre-construction special-status plant surveys shall be conducted multiple times during the growing season to account for both early and late-blooming plant species. The surveys shall be conducted by a qualified biologist within the proposed project footprint and within a 50-foot buffer to allow for assessment of required avoidance setbacks from any special-status plants identified. The proposed project shall be at least 50 feet away from any special-status plant detected during pre-construction surveys. The previously mapped occurrences of coastal marsh milk-vetch shall be avoided and set back from the proposed project development by at least 50 feet.

   b) If special-status plants are found in the project site, the population size and occupied area of special-status plant populations identified during the field survey, and with potential to be impacted, will be estimated. A "population" will be defined as the group of individuals of a species present within a 0.10-mile radius. In addition, the population shall be photographed and flagged to maximize avoidance, as well as to estimate the percentage of the population affected. If feasible, the project shall be redesigned or modified to avoid direct and indirect impacts on special-status plant species.

   c) Special-status plants to be avoided shall be protected from disturbance by installing environmentally sensitive area fencing (orange construction barrier fencing or a suitable alternative). Protective fencing shall be installed under the direction of a qualified biologist as necessary to protect the plant and its habitat; where feasible, the environmentally sensitive area fencing shall be installed at least 50 feet from the edge of the population. The location of the fencing shall be shown on the site plans and marked in the field with stakes and/or flagging. The specifications shall contain clear language that prohibits construction activities, vehicle operation, material and equipment storage, and other surface disturbing activities within the fenced environmentally sensitive area.

   d) If impacts to special-status plants are unavoidable and less than 5% of a population would be impacted, prior to any ground-disturbing activities, the County shall preserve the seed bank within the impact area by removing and retaining the topsoil prior to the implementation of construction activities.

Following completion of construction, the County shall monitor the impact area for two years. Any non-native invasive plant species occurring within this area during the monitoring period shall be removed under the supervision of a qualified biologist.

e) If appropriately timed focused botanical surveys cannot be conducted prior to construction activities in areas identified by a qualified biologist as potentially supporting listed plants, then the County will assume presence of the plant species in question.

4. **Mitigation Measure BIO-2**: If trees within the Monterey pine forest are impacted (trimmed or removed), a focused monarch butterfly survey shall be conducted to determine if monarchs roost in the on-site trees. If found, potential impacts to the trees shall be avoided, especially during the winter when monarchs are more likely to be present. The following measures, as adapted from the County of San Mateo Routine Maintenance Program Environmental Impact Report, shall be considered in order to avoid potential impacts to existing or suitable roost sites:

a) If, based on a review of current CNDDB records or the latest information available from the Xerces Society (https://xerces.org/state-of-the-monarch-butterfly-overwintering-sites-in-california/) historically or currently occupied overwintering habitat for the monarch butterfly is determined to exist in or adjacent to the work area where ground disturbing activities are planned to occur, the County shall implement applicable protection measures as follows:

b) Areas supporting overwintering habitat for the monarch butterfly shall be identified by a qualified biologist and maintenance activities during fall and winter months when monarch butterflies are present shall be avoided to the extent practicable.

c) Historically or currently occupied trees/groves shall be protected from disturbance by the establishment of a 100-foot buffer zone around the tree/grove. The buffer shall be measured from the outside edge of the dripline of the monarch grove. If maintenance activities within 100 feet of a historically or currently occupied tree/grove are unavoidable, the County shall prepare and implement an impact minimization plan in consultation with the U.S. Fish and Wildlife Service (USFWS).

d) No herbicides or pesticides shall be applied to the buffer area, and to the extent feasible, maintenance personnel and equipment shall not operate within such areas.

5. **Mitigation Measure BIO-3:** For ground-disturbing activities within and in proximity to creeks or within riparian woodlands or riparian scrub habitats, the following measures shall be implemented to reduce potential impacts to special-status amphibian and reptile species, including California red-legged frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, and western pond turtle. Where applicable, these measures were adapted from the County of San Mateo Routine Maintenance Program Environmental Impact Report.

   a) A qualified biologist shall conduct employee education training for personnel working on construction or demolition activities. Personnel shall be required to attend the presentation, which shall describe the life cycles and ecology of the California red-legged-frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, western pond turtle, and all other special-status species that could occur on the project site. The training shall also include materials concerning the following topics: sensitive resources, resource avoidance, permit conditions, and possible consequences for violations of State or Federal environmental laws. The training shall cover the mitigation measures, environmental permits, and regulatory compliance requirements, as well as the roles and authority of the monitors and biologists. Printed training material and an attendance sheet shall be provided at the session.

   b) Prior to implementation of construction work, the County or County's biologist shall submit to the USFWS and CDFW for its review and approval the qualifications of proposed wildlife biologists who will perform pre-activity surveys and on-site monitoring.

   c) No more than 24 hours prior to the date of initial ground disturbance, a pre-activity survey for the California red-legged frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, and western pond turtle shall be conducted by a qualified biologist in the construction area. The survey shall consist of walking the work area limits to ascertain the possible presence of the species. The qualified biologist shall investigate all potential areas that could be used by these species, including examination of mammal burrows. If any adults, subadults, juveniles, tadpoles, or eggs are found, the qualified biologist shall contact the USFWS and/or CDFW to determine if moving any of the individuals is appropriate. If the USFWS/CDFW approves moving animals, the biologist and USFWS/CDFW shall identify a suitable relocation site, and the County shall ensure the qualified biologist is given sufficient time to move the animals from the work site before ground disturbance is initiated. Only qualified biologists shall capture, handle, and monitor the California red-legged frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, and western pond turtle.

   d) To minimize harassment, injury, death, and harm to these species, one of the following two measures shall be implemented:

(1) An approved, qualified biologist(s) shall be on-site during all initial construction activities, such as clearing and grubbing of vegetation that may result in take of or impacts to the California red-legged frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, and western pond turtle as determined by the biologist; or

(2) Prior to pre-activity surveys, personnel shall enclose the work area with an exclusion fence with a minimum height above grade of 42 inches. Where installation of exclusion fencing completely around the work area is not feasible, exclusion fencing shall be installed between the work area and any adjacent vegetation or sensitive habitat where special-status wildlife species could occur. The bottom of the fence shall either be buried a minimum of 6 inches below ground or otherwise secured in a manner approved by the USFWS/CDFW and shall remain in place during all construction activities in order to prevent special-status amphibians and reptiles from entering the work area. Escape ramps, funnels, or other features that allow animals to exit the work area, but which will prohibit the entry of such animals, shall be provided in the exclusion fencing. A qualified biologist shall conduct a pre- activity survey of the fence installation area immediately prior to (i.e., the day of) the commencement of installation and shall be present to monitor fence installation. The exclusion fencing shall be inspected daily by construction personnel and maintained for the duration of the project.

e) The qualified biologist(s) shall be given the authority to freely communicate verbally, by telephone, electronic mail, or in writing at any time with construction personnel, any other person(s) at the work area, otherwise associated with the construction work, the USFWS, the CDFW, or their designated agents. The qualified biologist shall have oversight over implementation of all mitigation measures and shall have the authority and responsibility to stop work activities if they determine any of the associated requirements are not being fulfilled. If the qualified biologist(s) exercises this authority, the USFWS/CDFW shall be notified by telephone and electronic mail within 24 hours.

f) The project shall minimize adverse impacts to the California red-legged frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, and western pond turtle by limiting, to the maximum extent possible, the number of access routes, ground disturbance area, equipment staging, storage, parking, and stockpile areas. Prior to initiating construction work that involves ground-disturbing activities, equipment staging areas, site access routes, sediment removal, and transportation equipment and personnel parking areas, debris storage areas, and any other areas that may be disturbed shall be identified, surveyed by the qualified biologist, and clearly identified with fencing. The fencing shall be inspected by construction personnel and maintained daily until construction is complete.

g) To the extent feasible, construction activities shall be conducted from April through October during the dry season when these semi-aquatic species are less likely to be found in a work area. To the extent practicable, ground- disturbing activities shall be avoided from October through April because that is the time period when California red-legged frogs and other semi-aquatic species are most likely to be moving through upland areas. When ground- disturbing activities occur between November 1 and March 31, the County shall ensure that daily monitoring by the qualified biologist is completed for California red-legged frogs and other special-status amphibians and reptiles.

h) To avoid harassment, injury, death, and harm to individual San Francisco garter snakes, immediately prior to (i.e., the day of) the initiation of construction e activities that have potential for take of the San Francisco garter snake, a USFWS and CDFW-approved biologist shall conduct daytime surveys throughout the project site. The approved biologist shall be present during initial ground-disturbing activities (i.e., clearing and grubbing) within 250 feet of the work area to monitor for individual garter snakes. If a San Francisco garter snake is observed within the work area, either during the pre-activity survey or at any time, activities that could potentially harm the individual shall cease and the USFWS and CDFW shall be contacted immediately. Work shall not re- commence without written approval from CDFW. The on-site biologist shall be the contact for any employee or contractor who might inadvertently kill or injure a garter snake or anyone who finds a dead, injured, or entrapped San Francisco garter snake.

i) For vegetation removal in suitable San Francisco garter snake habitat, vegetation shall be cut down to 3 inches by hand-tools (weedwhacker, etc.). Once the ground is visible, a visual survey for San Francisco garter snakes shall be conducted. If no special-status amphibians or reptiles are found in the area, removal of vegetation may continue very slowly with a biological monitor walking in front of the equipment to observe.

j) When a California red-legged frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, or western pond turtle is encountered in the work area, all activities that have the potential to result in the harassment, injury, or death of the individual shall be immediately halted. The qualified biologist shall then assess the situation in order to select a course of action that shall avoid or minimize adverse impacts to the animal. To the maximum extent possible, contact with the animal shall be avoided and the individual shall be allowed to move out of the work area to a secure location on its own volition.

k) California red-legged frogs, San Francisco garter snakes, California giant salamanders, Santa Cruz black salamanders, and western pond turtles that are in danger shall be relocated and released by the qualified biologist outside the work area within the same riparian area or watershed. If relocation of the

individual outside the work area is not feasible (i.e., too many individuals are observed per day), the biologist shall relocate the animals to a USFWS/CDFW pre-approved location. Prior to the initial ground disturbance, the County shall obtain approval of the relocation protocol from the USFWS/CDFW in the event that a California red-legged frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, or western pond turtle is encountered and needs to be moved away from the work site. Under no circumstances shall the animal be released on a site unless the written permission of the landowner has been obtained by the County. The qualified biologist shall limit the duration of the handling and captivity of the animals to the minimum amount of time necessary to complete the task. If the animal must be held in captivity, it shall be kept in a cool, dark, moist, aerated environment, such as a clean and disinfected bucket or plastic container with a damp sponge. The County shall immediately notify the USFWS and CDFW once the animal and the site is secure.

l) If California red-legged frog egg masses are present and work cannot be postponed until after hatching, a buffer of vegetation at least 10 feet in diameter shall be left around any egg masses found. The County shall keep a record of any sites where egg masses are found and will conduct vegetation removal between June 15 and October 15. Work within the channel shall avoided in order to avoid dislodging egg masses. Construction activities shall be performed from the banks.

m) If California giant salamander eggs or larvae are found, the qualified biologist shall establish a buffer around the location of the eggs/larvae and work may proceed outside of the buffer zone. No work shall occur within the buffer zone. Work within the buffer zone shall not occur until the time that eggs have hatched and/or larvae have metamorphosed, or the County shall contact CDFW to develop site appropriate avoidance and minimization measures.

n) If an active western pond turtle nest is detected within the activity area, a 10- foot buffer zone around the nest shall be established and maintained during the breeding and nesting season (April 1 – August 31). The buffer zone shall remain in place until the young have left the nest, as determined by a qualified biologist.

o) To minimize harassment, injury, death, and harm in the form of temporary habitat disturbances, all vehicle traffic shall be restricted to established roads, sediment removal and access areas, equipment staging, storage, parking, and stockpile areas. These areas shall be included in pre-activity surveys and, to the maximum extent possible, established in locations disturbed by previous activities to prevent further adverse impacts. Vehicles shall observe a 20-mile per hour speed limit within work areas, except on Highway 1. Off-road traffic outside of designated and fenced work areas shall be prohibited.

p) A litter control program shall be instituted at the project site. All workers shall ensure their food scraps, paper wrappers, food containers, cans, bottles, and other trash are deposited in covered or closed trash containers. The trash containers shall be removed from the site at the end of each working day.

q) For on-site storage of pipes, conduits and other materials that could provide shelter for special-status amphibians and reptiles, materials shall be securely capped prior to storage, or an open-top trailer will be used to elevate the materials above ground. This method is intended to reduce the potential for animals to climb into the conduits and other materials.

r) To the maximum extent practicable, no construction activities shall occur during rain events or within 24-hours following a rain event. Prior to maintenance activities resuming, a qualified biologist shall inspect the work area and all equipment/materials for the presence of special-status amphibians and reptiles. The animals shall be allowed to move away from the work site of their own volition or moved by the qualified biologist.

s) To the maximum extent practicable, night-time construction activities shall be minimized or avoided by the County. Because dusk and dawn are often the times when the California red-legged frog most actively moving and foraging, to the maximum extent practicable, earth-moving and other project activities shall cease no less than 30 minutes before sunset and shall not begin again prior to 30 minutes after sunrise. Artificial lighting in the work area shall be prohibited during the hours of darkness.

t) Plastic monofilament netting (erosion control matting), loosely woven netting, or similar material in any form shall not be used at the project site because amphibians and reptiles can become entangled and trapped in them. Any such material found on site shall be immediately removed by the qualified biologist, maintenance personnel, or County contractors. Materials utilizing fixed weaves (strands cannot move), polypropylene, polymer or other synthetic materials shall not be used.

u) Trenches or pits 1-foot or deeper that are going to be left unfilled for more than 48 hours shall be securely covered with boards or other material to prevent special-status amphibians and reptiles from falling into them. If this is not possible, the County shall ensure wooden ramps or other structures of suitable surface that provide adequate footing for the animal are placed in the trench or pit to allow for their unaided escape. Auger holes or fence post holes that are greater than 0.1-inch in diameter shall be immediately filled or securely covered so they do not become pitfall traps for the animal. The qualified biologist or trained construction personnel shall inspect the trenches, pits, or holes prior to their being filled to ensure no animals are in them. The trench, pit, or hole also shall be examined by the qualified biologist each workday morning at least one hour prior to initiation of work and in the late afternoon no

more than one hour after work has ceased to ascertain whether any individuals have become trapped. If the escape ramps fail to allow the animal to escape, the qualified biologist shall remove and transport it to a safe location or contact the USFWS/CDFW for guidance.

v) As part of the U.S. Army Corps of Engineers (Corps) permit application, a USFWS take permit (Biological Opinion) may be needed for the California red- legged frog and San Francisco garter snake, since they are federally listed species. CDFW may recommend a Section 2081 Incidental Take Permit if the proposed project has the potential to impact the San Francisco garter snake, since this species is listed by the State of California. The Parks Department shall comply with all conditions of incidental take permits issued for the project. Conditions may include, but are not limited to, development of revegetation and restoration plans and procedures, environmental awareness training, pre- construction wildlife surveys, and/or biological monitoring, some, or all of which are already included as part of the mitigation measures described herein. (None of the other remaining special-status species are State-listed).

6. **Mitigation Measure BIO-4A:** If construction activities occur between February 1 and August 31, pre-activity survey for nesting birds (special-status and common bird species) shall be conducted by a qualified biologist to ensure that no nests would be disturbed during project implementation. These surveys shall be conducted no more than seven days prior to the initiation of construction activities. During this survey, the biologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, coastal strand, coastal dunes, structures) in and immediately adjacent to the impact areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the biologist shall determine the extent of a construction-free buffer zone to be established around the nest (typically 300 feet for raptors and 100 feet for other species), to ensure that no nests of species protected by the Migratory Bird Treaty Act and/or California Fish and Game Code would be disturbed during project implementation. The boundary of each buffer zone shall be marked with fencing, flagging, or other easily identifiable marking if construction work occurs immediately outside the buffer zone. No trees or shrubs shall be disturbed that contain active bird nests until all eggs have hatched, and young have fully fledged (are no longer being fed by the adults and have completely left the nest site), or if the nest is determined by the biologist to no longer be active.

   If possible, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are planned for removal as part of the project shall be removed prior to the start of the nesting season (e.g., prior to February 1).

7. **Mitigation Measure BIO-4B:** To the extent feasible, construction activities within 600 feet of suitable snowy plover breeding habitat shall occur outside the plover breeding season of March 1 through September 14. If construction activities occur within 600 feet of suitable snowy plover breeding habitat during the nesting season

(March 1 through September 14), a pre-activity survey shall be conducted by a qualified biologist within 7 days prior to the start of the activity to determine whether active nests are present. If an active snowy plover nest is detected within 600 feet of the construction area, the qualified biologist, in coordination with USFWS personnel, shall determine an appropriate buffer that should remain free from construction activities. The buffer shall be determined based on the sensitivity of the nest, the presence of visual barriers (such as dunes) between the construction activities and the nest, and the level and proximity of existing human activity around the nest when it was established. The buffer shall remain in place until the nest is no longer active. If broods of unfledged snowy plover young are present, no construction activities shall occur within 300 feet (or as otherwise determined by a qualified biologist in coordination with the USFWS) of a brood.

As part of the Corps permit application, a USFWS take permit (Biological Opinion) may be needed for the western snowy plover, since this species is federally listed. The Parks Department shall comply with all conditions of incidental take permits issued for the project.

8. **Mitigation Measure BIO-5:** No more than two weeks prior to the beginning of ground disturbance that could disturb San Francisco Dusky-Footed Woodrat (SFDFW) houses, a qualified biologist shall survey the work areas. If SFDFW houses are found, the houses shall be flagged and construction fencing or flagging that will not impede the movement of the SFDFW shall be placed around the nest to create a 10-foot buffer (where feasible). If a SFDFW house is identified in a work area, the following shall be implemented:

   a) Physical disturbance of the house shall be avoided if feasible. If possible, a minimum 10-foot buffer shall be maintained between maintenance construction activities and each nest to avoid disturbance. In some situations, a smaller buffer shall be allowed if in the opinion of a qualified biologist removing the nest would be a greater impact than that anticipated as a result of the project.

   b) If a Dusky-footed woodrat nest cannot be avoided, prior to the beginning of construction activities, a qualified biologist shall disturb the SFDFW house to the degree that all SFDFW leave the house and seek refuge outside of the maintenance activity area. Relocation efforts shall avoid the nesting season (February - July) to the maximum extent feasible. Disturbance of the SFDFW house shall be initiated no earlier than one hour before dusk to minimize the exposure of woodrats to diurnal predators. Subsequently, the biologist shall dismantle and relocate the house material by hand. All material from dismantled houses shall be placed in a pile, preferably against a log or tree trunk, in suitable habitat located at least 20 feet from, but otherwise as close as possible to, the original house locations, to provide material for SFDFW to construct new houses. During the deconstruction process, the biologist shall attempt to assess if juveniles SFDFW are present in the house. If immobile juveniles are observed, the deconstruction process shall be discontinued until a

time when the biologist believes the juveniles will be fully mobile. A 10-foot- wide no-disturbance buffer shall be established around the nest until the juveniles are mobile. The house may be dismantled once the biologist has determined that adverse impacts on the juveniles would not occur. All disturbances to SFDFW houses shall be documented in a construction monitoring report and submitted to CDFW.

c) A qualified biologist shall set two traps around each of the SFDFW houses to be relocated. Traps shall be set within one hour prior to sunset, and baited with a mixture of peanut butter, oats, and apples, or other suitable bait. Traps shall also be equipped with cotton bedding and covered with cardboard. The traps shall be checked the following morning, within one-and-a-half hours of sunrise. If a SFDFW is captured, it shall be placed in a quiet area while its house material is relocated; the SFDFW will then be released at the relocated structure. If no SFDFW are captured after the first night, the biologist shall set the traps for one additional evening to increase the probability of capturing the SFDFW and ensuring a safe relocation. If no SFDFW are captured at a given house after two nights, it shall be assumed that the house is not currently occupied. Trapping shall only be conducted outside the breeding season, which for SFDFW is from February through the end of July. If a litter of young is found or suspected while dismantling a house for relocation, the house material shall be replaced, any trapped SFDFW shall be returned to the house, and the house shall be left alone for 2 to 3 weeks, after which time the house shall be rechecked to verify that the young are capable of independent survival, as determined by the qualified biologist, before proceeding with dismantling of the house.

9. **Mitigation Measure BIO-6A:** Prior to demolition, a qualified biologist should conduct an additional survey during the summer maternity season (ideally June) to determine whether the unoccupied house supports a Townsend's big-eared bat maternity colony or whether the site is only used by wintering bats or by males. If the roost is occupied, and can be avoided, a qualified biologist should develop a plan to preserve and secure the roost for future use by bats.

a) Prior to building demolition or modification, a qualified biologist should conduct a focused survey for bats within any structures to be demolished. If any bats are found, but they do not represent an active maternity roost, they shall be excluded from the building through installation of one-way doors, closure of potential entry points, or use of acoustic deterrents. Alternatively, opening up the structure (i.e., removal of boards from windows and doors, removal of roof sections) should increase wind flow through the structure and may also deter bats from roosting. A qualified biologist shall consult on the methods used to exclude bats.

b) If a maternity colony is present, then no demolition or modification of the roost site, nor of any areas within 100 feet of the roost site and any points of ingress

or egress, should occur during the period April 1 to August 31 (or until young are demonstrated to be flying well). After August 31 (or after the young are flying), then bat exclusion can proceed. No exclusion should occur during rainy or cold conditions.

c) If a Townsend's big-eared bat maternity colony is confirmed in the unoccupied house, and demolition or modification (to the point that bats no longer use the building) of this structure cannot be avoided, replacement maternity roost habitat should be provided on the site. Note that bat boxes and bat condominiums do not provide suitable replacement habitat for Townsend's big- eared bats. Rather, larger, more cavernous bat structures are required to replace maternity roost habitat for this species. The replacement roost structure should be designed and sited in consultation with a qualified biologist. The structure should be monitored for a period of 5 years to determine whether it is occupied. Success of the habitat replacement should be achieved if the roost structure is determined by a qualified biologist to provide similar thermal and light conditions to those that exist in the unoccupied house that is currently being used as a roost site.

10. **Mitigation Measure BIO-6B:** A qualified biologist shall conduct a survey to look for evidence of bat use within two weeks prior to the onset of work activities. If evidence of bat occupancy is observed, or if high-quality roost sites are present in areas where evidence of bat use might not be detectable (such as a tree cavity), an evening survey and/or nocturnal acoustic survey may be necessary to determine if roosting bats are present and to identify the specific location of the bats. If no active maternity colony or non-breeding bat roost is located, project work can continue as planned. If an active maternity colony or non-breeding bat roost is located, the construction work shall be redesigned to avoid disturbance of the roosts, if feasible. If an active maternity colony is located, and the project cannot be redesigned to avoid removal or disturbance of the occupied tree or structure, disturbance shall not take place during the maternity season (March 15 – July 31), and a disturbance-free buffer zone (determined by a qualified bat biologist) shall be established during this period. If an active non-breeding bat roost is located, and the project cannot be redesigned to avoid removal or disturbance of the occupied tree or structure, the individual bats shall be safely evicted between August 1 and October 15 or between February 15 and March 15 (as determined in consultation with CDFW). Bats may be evicted through exclusion only after notifying and obtaining approval from CDFW. Trees with roosts that need to be removed shall first be disturbed at dusk, just prior to removal that same evening, to allow bats to escape during the darker hours. Roosts may only be removed once the bats are no longer occupying the roost, at which time, a plan approved by CDFW may be implemented for removal of the roost. The plan shall describe appropriate methods for the removal of the roost. As part of CDFW's approval, a new roost site may be required to be created on the project site. Active day roosts of tree-foliage bats may be removed upon permission of CDFW.

a) If feasible, trees planned for pruning or removal as a part of the project, shall be pruned or removed during the fall to avoid the maternity roosting period of resident bats (mid-April to August season). Western red bats are less likely to be present and roosting in the trees on and adjacent to the project site during the spring and summer, but other bats may be roosting during this period. Because bats may be present at any time, a pre-construction survey by a qualified biologist shall be required as outlined above regardless of timing of tree or structure removal and a suitable buffer zone established around detected roosts.

b) Pruned limbs or cut trees shall be left on the ground in place for at least 24 hours after cutting to allow any bats that may be roosting in the trees to leave the roosts prior to chipping the branches or removing the cut material from the site. Before any construction activities begin in the vicinity of the identified bat roosts on the project site, an approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the bats and their habitat, the specific measures that are being implemented to conserve the bat roosts for the project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session. A qualified biologist shall conduct the training session.

11. **Mitigation Measure BIO-7A:** If native riparian trees or shrubs are impacted during project construction, the impacted trees shall be replaced at a minimum 1.5:1 ratio meaning 1.5 acres of riparian habitat shall be restored/created for every 1 acre of riparian habitat impacted by the project. The native riparian species shall be replaced in-kind preferably from phytophthera-free container stock as appropriate, propagated from local genetic stock (i.e., San Francisco Bay region). Any temporarily disturbed areas within the riparian woodland shall be seeded with an appropriate native seed mix. Appropriate permits from CDFW and possibly RWQCB would need to be obtained and any monitoring and reporting requirements stated within the permits, including preparation and implementation of a mitigation and monitoring plan would have to be completed.

12. **Mitigation Measure BIO-7B:** If needed, the project shall design and construct low impact stream crossings that would include a wooden walkway/boardwalk, or similar structure to avoid potential impacts to the streams. The crossings shall be designed to accommodate high flows and be regularly maintained. Footings for the crossings shall be sited fully outside of the banks and channel of the streams.

13. **Mitigation Measure BIO-7C:** The project contractor shall implement applicable BMPs, and conservation measures detailed in the County of San Mateo Watershed Protection Program's Maintenance Standards and the San Mateo Countywide Pollution Prevention Program Construction BMPs during construction.

14. **Mitigation Measure BIO-7D:** To protect water quality during construction and maintenance, the following measures shall be included on the construction specifications, with construction oversight by a qualified biologist or biological monitor:

    a) Stationary equipment such as motors, generators, and welders located within 100 feet of the stream shall be stored overnight at staging areas and shall be positioned over drip pans.

    b) Any hazardous or toxic materials deleterious to aquatic life that could be washed into a basin shall be contained in watertight containers or removed from the project site.

    c) All construction debris and associated materials stored in staging areas shall be removed from the work site upon completion of the project.

    d) Whenever possible, refueling of equipment shall take place within turnouts or staging areas at least 50 feet from the top of bank or other wetland.

    e) All refueling shall be conducted over plastic bags filled with sawdust or other highly absorbent material. Clean-up materials for spills shall be kept on hand at all times. Any accidental spills of fuel or other contaminants shall be cleaned up immediately. The project contractor shall install protective fencing prior to and during construction to keep construction equipment and personnel from impacting riparian vegetation outside of work limits. A qualified biologist or biological monitor with the education and experience necessary to delineate riparian vegetation shall supervise the installation of protective fencing.

15. **Mitigation Measure BIO-7E:** The Parks Department shall obtain a Coastal Development Permit as required for project activities. The Parks Department shall comply with all conditions of permit issued for the project. Conditions may include, but are not limited to, development of revegetation and restoration plans and procedures, environmental awareness training, pre-construction wildlife surveys, and/or biological monitoring, some, or all of which are already included as part of the mitigation measures described above.

16. **Mitigation Measure BIO-7F:** A Revegetation Plan shall be prepared by a qualified biologist to revegetate and restore impacted habitat. This plan shall include a list of appropriate species, planting specifications, monitoring procedures, success criteria, and a contingency plan if success criteria are not met.

17. **Mitigation Measure BIO-8A:** Impacts to areas of wetland and other water shall be avoided to the greatest extent possible. If impacts to areas of wetlands and other water is unavoidable, the area impacted shall be confined to the smallest area possible.

18. **Mitigation Measure BIO-8B:** For project activities that impact wetlands or other waters requiring permits from the Corps, RWQCB, and/or CDFW, the project proponent shall obtain permits and comply with all permit requirements. For on- site, in-kind mitigation, the County shall mitigate impacts to wetlands by restoring, preserving, and managing wetlands and aquatic habitats, or substantially improve the quality of highly degraded wetlands and aquatic habitats at a ratio of 1.5:1 (meaning 1.5 acres of wetlands or other waters shall be restored/created for every 1 acre of wetlands and other waters permanently impacted by the project). For off- site, in-kind mitigation, the County shall acquire, preserve, enhance, and manage lands that provide similar ecological functions and values to the wetlands and other waters impacted by project. The acquisition and preservation/enhancement of these higher quality lands shall occur at a ratio of 3:1 (meaning 3 acres of wetlands or other waters shall be acquired, preserved, and enhanced for every 1 acre of wetlands and other waters impacted by the project). Enhancement may include modification of existing management, limited planting, or invasive plant removal, or other activities to enhance wetland/aquatic habitat functions and values.

19. **Mitigation Measure CULT-1A:** Archaeological Monitoring. During project construction, archaeological monitoring shall be conducted for any ground- disturbing activities in the project site, including grubbing or removal of vegetation. A qualified archaeologist shall (1) identify any archaeological resources that may be present; and (2) ensure that if human remains are identified they are treated in an appropriate and respectful manner and provisions outlined in Section 7050.5 of the California Health and Safety Code are followed. If previously unidentified cultural materials are unearthed during construction, work shall be halted in that area until a qualified archaeologist can assess the significance of the find. If major adjustments are made to the horizontal or vertical extent of the project site, then an archaeologist shall be consulted to determine if further identification efforts are recommended.

20. **Mitigation Measure CULT-1B:** Unidentified Archaeological Resources. The potential for encountering previously unidentified buried archaeological cultural resources in the project site is moderate based on the geological landforms and on the presence of previously recorded archaeological sites identified within and adjacent to the project site. If deposits of prehistoric or historical archaeological materials are encountered during project activities that are not monitored, all work within 50 feet of the discovery shall be redirected and a qualified archaeologist contacted to assess the situation and make recommendations regarding the treatment of the discovery. Project personnel shall not collect or move any archaeological materials or human remains and associated materials. Archaeological cultural resources shall be avoided by project activities. If such resources cannot be avoided, they shall be evaluated for their CRHR eligibility, under the direction of a qualified professional archaeologist, to determine if they qualify as a historical resource under CEQA. If the deposit is not eligible, a determination shall then be made as to whether it qualifies as a unique archaeological resource under CEQA.

If the deposit is not a historical, unique archaeological or tribal cultural resource, avoidance is not necessary. If the deposit is eligible for the CRHR or is a unique archaeological resource and cannot be avoided by project actions that may result in impacts, such impacts must be mitigated. Mitigation may consist of, but is not limited to, recording the resource; recovery and analysis of archaeological deposits; preparation of a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate. Upon completion of the study, the archaeologist shall prepare a report documenting the methods and results of the investigation and provide recommendations for the treatment of the archaeological materials discovered. The report shall be submitted to the County and to the Northwest Information Center.

21. **Mitigation Measure GEO-1:** If paleontological resources are encountered during the course of ground disturbance, work in the immediate area of the find shall be redirected and a paleontologist shall be contacted to assess the find for scientific significance. If determined to be significant, the fossil shall be collected from the field. The paleontologist may also make recommendations regarding additional mitigation measures, such as paleontological monitoring. Scientifically significant resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a museum repository. If scientifically significant paleontological resources are collected, a report of findings shall be prepared to document the collection.

22. **Mitigation Measure HAZ-1:** The Parks Department shall hire a qualified contractor to prepare a site-specific Health and Safety Plan (HSP). The HSP shall establish soil management and control specifications for excavation, grading, and construction activities, including procedures for evaluation of soil disposal options, and health and safety provisions for monitoring the exposure of construction workers to contaminants. The HSP shall be submitted to the County for review and approval. The County shall review and approve the HSP, and the project contractor shall implement the recommended soil management and control specifications.

23. **Mitigation Measure UTIL-1:** Prior to issuance of the Coastal Development Permit, the Parks Department shall prepare a study examining the hydrologic conditions of the site to determine if there is adequate water to supply the residence and if the water extracted will not adversely affect a water-dependent sensitive habitat or result in depletion of the aquifer. The study shall also determine whether the water quality meets potable water standards. If the study determines that insufficient water supply is available, then the proposed ranger residence shall be removed from the project design.

    a) In addition, the Parks Department shall coordinate with the State of California Water Resources Control Board to secure an approval of the right to extract water from Tunitas Creek. If approval is denied and another water source

cannot be secured, the ranger residence shall be removed from the project design.

b) If the ranger residence is constructed, for the first three years, the County shall monitor the impact of the water extraction on groundwater and surface levels, water quality, and plant and animal species of water-dependent sensitive habitats to determine if the preliminary pumping restrictions adequately protect the sensitive habitats and what measures should be taken if and when adverse effects occur. If monitoring shows impacts to water-dependent sensitive habitats, the pumping rate shall be reduced until it is clear that such impacts will not occur.

24. All significant size trees (12-inch diameter or greater) removed for this project, shall be replaced at a 1:1 ratio, with native, drought tolerant species.

25. Prior to the installation of any project related lighting fixtures, the applicant shall submit a lighting plan to the Planning Department for review and approval by the Planning Commission. Said plan shall include cut sheets and photos of example lighting as necessary to demonstrate how the proposed lighting will protect nighttime visual resources.

County of San Mateo - Planning and Building Department

ATTACHMENT B

CSW | ST2

TUNITAS CREEK BEACH

MEMORANDUM

TO: Mario Nastari and Nicholas Calderon

FROM: Robert Stevens, PE, TE, Julia Harberson, PE, and Brianna Bright, EIT

DATE: December 26, 2022

SUBJECT: Tunitas Creek Beach Site Lighting

This memorandum summarizes the design of lighting for the accessible path of travel from the mid bluff to the parking area serving the Tunitas Creek Beach Park (Park). Please note, lighting at the mid bluff and on the ranger residence, which was originally proposed in application PLN 2021-00485 as considered by the Planning Commission on October 26, 2022, has been removed based on some of the concerns expressed. While most activity at the park will occur during the day, visitors may stay late to enjoy the sunset from the beach or the mid-bluff. We understand the San Mateo County Parks Department (Department) seeks to accommodate this activity. To ensure visitors including those with children, the elderly, and those with mobility challenges can safely make their way up the pathway and to the parking lot, the Department proposes to provide lighting in strategic locations along the pathway.

We recognize that other beach parks in the region do not provide lighting. However, we believe that Tunitas Creek Beach is unique in that visitors have to traverse a significant distance of 1,800 feet and 100 feet of elevation change to access the site's amenities at the mid bluff from the parking area. Further, based on feedback received during the public engagement process, providing access to and from the mid bluff for people of all ages and abilities was a priority of the public. Therefore, Tunitas Creek Beach is the only coastal park in San Mateo County (that we know of) that has been specifically designed to maximize access for all people. This memorandum details our approach to facilitating safe egress from the Park while limiting the light pollution.

Lighting levels are measured in the unit of foot candle (FC), which is defined as one lumen per square foot. For reference, the interior of a home may have light levels ranging from 5 to 40 FC. The higher the FC, the brighter the light. The California Building Code prescribes lighting levels for specific uses such as emergency egress routes within a building. While we are not aware of any requirements to maintain minimum lighting levels for use at a recreational facility that is generally open only during daylight hours, we recommend providing lighting along the pathway to accommodate visitor egress during dusk conditions as previously described. We offer the following guidelines to help establish minimum lighting levels at the Park:

- The California Building Code requires an average of 1 FC of light along a path of egress from a building.
- The Illuminating Engineering Society's "Lighting Handbook" suggests that exterior areas should have an average 1 FC and a range of 0.5 to 2 FC for safety.

- The 2015 Edition of the California State Parks "Accessibility Guidelines" notes that there shall be 1 FC of lighting provided for safe egress from campfire or assembly areas

We recommend providing an average 1 FC of illuminance along the pathway. Since the pathway has a handrail along its entire alignment, we recommend using a fixture that can be integrated into the rail. The LEDpod by Klik as shown in Figure 1 is an example of a fixture that we suggest using for the Park.

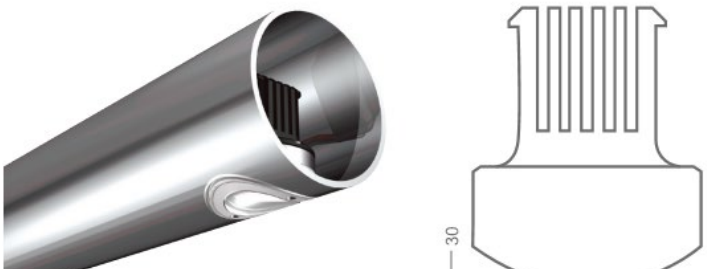


Figure 1. Handrail light fixture.

This fixture features an energy efficient light emitting diode (LED) that is recessed within the handrail. Due to the fixture's design, the light is directed downward onto the pathway and does not cast light above the handrail. Moreover, the proposed lighting plan only has lights in the handrail on one side of the path. This plan will prevent light from spilling onto the surrounding landscape and polluting the night sky. Designed properly, similar to Figure 2, this fixture will not impact visitors and others' ability to enjoy the sunset or view bright stars at dusk. The design of the LED does not impact use of handrail, nor will it become hot to the touch. Figure 2 illustrates the installation of these light fixtures at an outdoor area in Colorado.

Figure 2 This photograph illustrates the proposed fixture lighting a pathway at the Red Rocks Amphitheater located near Denver, Colorado. Note the difference in the pathway lighting versus the up lighting used to illustrate the rock formation.

These fixtures will be activated by a photocell that turns them on at low light levels, generally at sunset. The project will install a manual switch as the Parks Department intends to turn off the pathway lights as part of its daily closing routine. In addition, there will be a timer, which will automatically turn off the system as a failsafe to ensure no lights are left on overnight. Initially, we recommend setting this timer at 2 hours after activation.

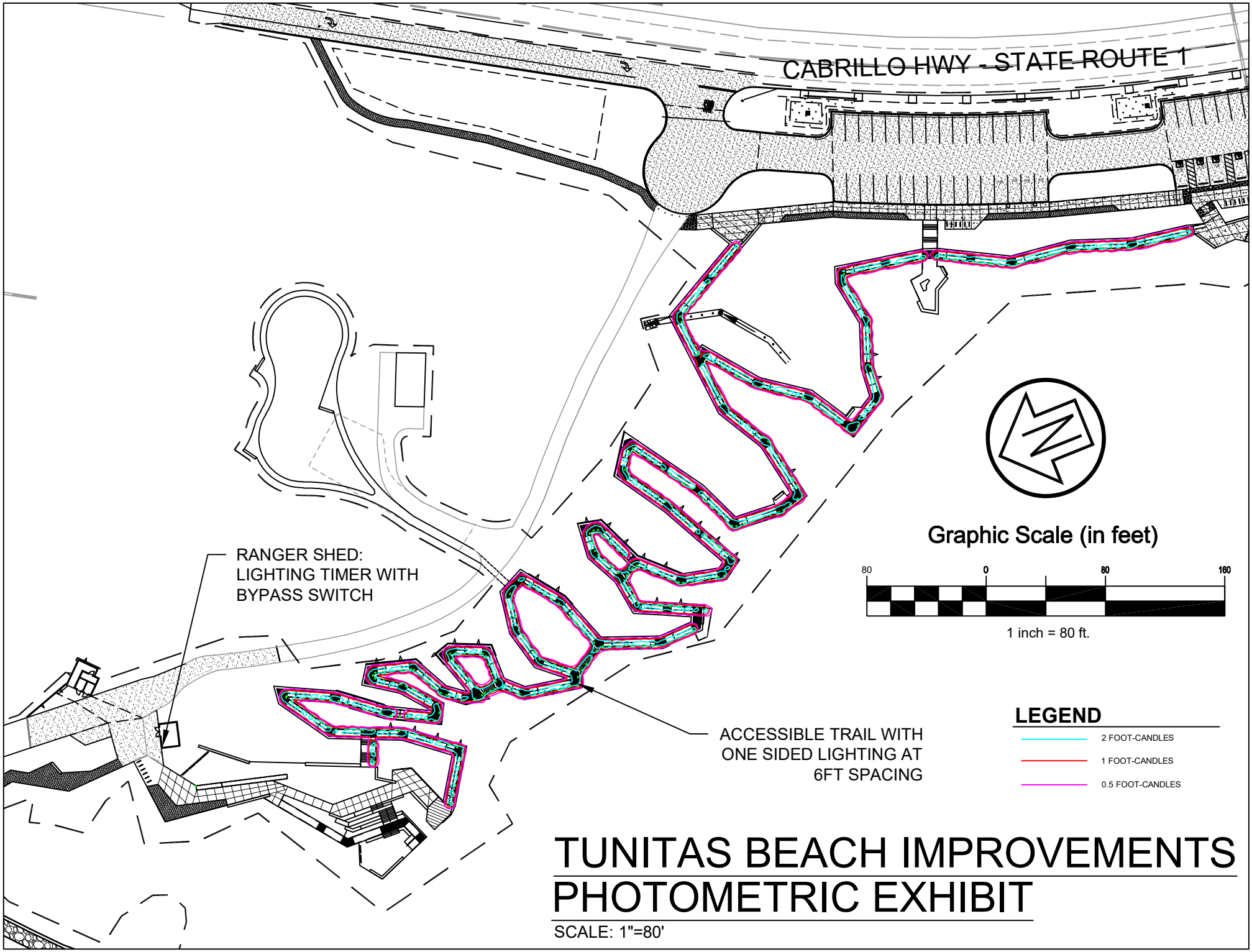
To evaluate lighting levels along the pathway, we completed a photometric simulation analysis using software provided by Design Master Photometrics. This application allows us to simulate lighting levels using specific light distribution data provided by the manufacturer. We provide the results of the analysis in the attached exhibit, which includes 1.5-watt light fixtures installed at about every 6 feet on one side of the pathway using a 3,000 Kelvin (K) luminaire.

The attached exhibit provides the anticipated light distribution along the pathway at 0.5, 1, and 2 FC. These light levels are similar to elevation contours on a map. Each line represents a continuous lighting level. The red line illustrates the 1 FC light level, which is generally consistent with recommendations previously noted. Providing lighting that does not vary from bright to dim is important as human eyes cannot rapidly adapt to changes in light levels. As shown, lighting remains within the pathway and does not spill into the surrounding area. We anticipate the lighting to be very similar to the pathway lighting as shown in Figure 2 that is free from glare.

All LEDS used in typical lighting applications produces white light in a range of wavelengths visible to the human eye which vary from 380 to 700 nanometers (nm). Note that lower wavelengths appear blue and higher are red in color. The LED used in this specific application is the Cree XT-E, which produces light at all the visible wavelengths previously noted, but the wavelength with peak power occurs at about 600 nm.

We measure the appearance of the light, referred to as color temperature, in the unit of Kelvin (K). Color temperatures over 5000 K are considered “cool colors” and have a blue tint. Light with a “warm color” is within the range of 2,000 to 3,000 K and have an orange to yellow-white appearance. For this project, the fixture we recommend is consistent with the American Medical Association’s recommendations that outdoor lighting should have a color temperature no greater than 3,000 K. Finally, the planting adjacent to the pathway will not include night blooming plants where the lights could attract night pollinators.

If we can provide any additional information, please contact me at 415.533.1864 or rstevens@cswst2.com.



TUNITAS BEACH IMPROVEMENTS
PHOTOMETRIC EXHIBIT

SCALE: 1"=80'