

**CALIFORNIA COASTAL COMMISSION**

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# W22b

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## STAFF REPORT: REGULAR CALENDAR

**Application No.:** 1-17-0159

**Applicant:** Gavin and Brian Hone (Water Planet)

**Agent:** Julian Berg

**Location:** At 76 South G Street, Arcata, Humboldt County (APNs 503-211-035, 503-211-036, 503-211-037 & 503-211-038).

**Project Description:** Redevelopment of a light industrial park including: (1) merging four parcels totaling 1.6 acres into two parcels and adjusting the lot line between the two resultant parcels; (2) demolishing three existing warehouses totaling 5,653 square feet; (3) constructing a 15,089-square-foot, two-story retail, office, and warehouse building, and a 1,600-square-foot open air warehouse; and (4) making additional improvements to the site including changes to landscaping, signage, circulation, parking, and stormwater management.

**Staff Recommendation:** Approval with conditions.

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### SUMMARY OF STAFF RECOMMENDATION

The applicant proposes to redevelop a light industrial park located at 76 South G Street in Arcata, Humboldt County. As part of the proposed development, three existing warehouse

buildings would be demolished to make room for a new commercial/industrial building and attached open-air warehouse on the eastern half of the property. An existing 7,640-square-foot, commercial/industrial building on the western half of the property would be retained. Circulation, parking, and stormwater management on the project site would be reconfigured to facilitate the simultaneous use of the existing western building and the new eastern building complex. In addition, the applicant proposes to merge the four underlying parcels into two parcels and adjust the lot line between the two resulting parcels to allow for the existing western building and the new eastern building complex to be located on separate lots.

The major issues raised by this application are the project's consistency with the Commission's water quality and coastal hazard policies. The proposed project would increase the amount of permeable surface on the 1.6-acre property by 10,918 square feet, but 84% of the site would remain impermeable. The applicant has submitted a preliminary post-construction stormwater management plan proposing a number of low-impact development (LID) measures (including vegetated drainage swales, rainwater catchment tanks, permeable cobble surfaces, tree planting, and soil amendments) to capture and treat all runoff from the impervious surfaces on the property during a 24 hour, 85<sup>th</sup> percentile storm event. Staff recommends **Special Condition 8** requiring a final post-construction stormwater management plan to ensure LID measures are installed as proposed and maintained for the life of the development.

The proposed development is located on diked and filled former tidelands within the 100-year floodplain, an area of high liquefaction potential, and the tsunami run-up zone. To minimize flooding hazards, the new buildings would have a twelve foot finished floor elevation, two feet above the current base flood elevation. To minimize liquefaction hazards, the buildings foundations would be embedded in the engineered fill rather than directly in native soils. To minimize tsunami hazards, the applicant has prepared a tsunami safety plan that includes training for property management staff and information, maps, and placards for occupants about how to evacuate in the event of a tsunami.

To ensure the project is implemented as proposed and further minimizes risk to life and property in an area of high geologic and flood hazard and assures structural integrity and stability given projected sea level rise, Commission staff recommends a number of conditions, including requirements for (1) the submittal of final project plans for the Executive Director's review and approval including final grading and foundation plans stamped by a licensed engineer; (2) conformance with the applicant's proposed tsunami safety plan; (3) future removal of the development if any public agency requires the structure to be removed; (4) assumption of risk, waiver of liability, and indemnity; (5) disclosure of permit conditions in future marketing and sale of the subject property; and (6) recordation of a deed restriction imposing the special conditions of this permit on the property owner and any future owners.

Staff believes that the proposed development, as conditioned, is consistent with all applicable Chapter 3 policies of the Coastal Act. The motion to adopt the staff recommendation of **approval with special conditions** is found on [page 4](#).

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## I. MOTION AND RESOLUTION

### Motion:

*I move that the Commission **approve** Coastal Development Permit Application No. 1-17-0159 subject to the conditions set forth in the staff recommendation.*

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

### Resolution:

*The Commission hereby approves Coastal Development Permit 1-17-0159 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. 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

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation.** Any questions of intent of 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

This permit is granted subject to the following special conditions:

1. **Notice of Parcel Merger and Lot Line Adjustment.** WITHIN 90 DAYS OF ISSUANCE OF COASTAL DEVELOPMENT PERMIT 1-17-0159 (unless extended by the Executive Director for good cause), the permittee shall submit a certified copy of the recorded final Notice of Parcel Merger and Lot Line Adjustment approved by the City of Arcata that conforms with the resultant parcel boundaries approved by CDP 1-17-0159. The final Notice of Parcel Merger and Lot Line Adjustment shall not be recorded until issuance of Coastal Development Permit 1-17-0159.
2. **Encroachment Permit.** PRIOR TO COMMENCEMENT OF CONSTRUCTION, the permittee shall submit to the Executive Director for review and written approval, evidence of an encroachment permit from the City of Arcata or evidence that no such encroachment permit is required. The encroachment permit or exemption shall evidence the ability of the permittee to develop within the public right of way as conditioned herein.
3. **State Lands Commission.** PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT 1-17-0159, the applicant shall provide to the Executive Director a written determination from the State Lands Commission that: (A) no State or public trust lands are involved in the development; or (B) State or public trust lands are involved in the development and all permits required by the State Lands Commission have been obtained; or (C) State or public trust lands may be involved in the development, but, pending a final determination, an agreement has been made with the State Lands Commission for the approved project as conditioned by the Commission to proceed without prejudice to that determination.
4. **Submittal of Final Plans.**
  - A. PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT 1-17-0159, the permittee shall submit, for the review and written approval of the Executive Director, two full-size sets of the following final plans:
    - i. A site plan that substantially conforms with the site plan submitted to the Commission, titled Plan Sheet A-1 dated May 16, 2017 (See Exhibit 4, pg.1),
    - ii. Grading plans that substantially conform with the cut/fill sections submitted to the Commission, titled Plan Sheet C1 and dated May 17, 2017.
    - iii. Floor plans, elevations, cross sections, and foundation plans for the new commercial/industrial building and attached open-air warehouse that substantially conform with the plans submitted to the Commission, titled Plan

Sheets A-2, A-3, A-4, and A-5 dated February 7, 2017 and Plan Sheet A-6 dated May 16, 2017 (See Exhibit 4, pgs. 3-4 & 6-8).

- iv. Landscaping plans that substantially conform with the plans submitted to the Commission, titled Plan Sheets LA-1 and LA-2 dated May 16, 2017 (See Exhibit 4, pgs. 10-11).
  - v. Signage plans that substantially conform with the master signage plan and details submitted to the Commission, titled Plan Sheet A-7 and dated September 30, 2016 (See Exhibit 4, pg. 9).
- B. All recommendations of the engineering geologic soils report titled “Engineering Geologic Soils Exploration Report,” prepared by Lindberg Geologic Consulting and dated April 28, 2017 shall be adhered to including recommendations for site preparation, cut and fill slopes, structural fills, compaction standards, foundation design, drainage, erosion and sediment control and all other recommendations. The permittee shall submit evidence that an appropriate licensed professional has reviewed and approved final grading plans for the project site and foundation plans for the new commercial/industrial building and attached open-air warehouse, and certified that the final plans are consistent with the recommendations specified in the Engineering Geologic Soils Exploration Report.
- C. The permittee shall undertake development in conformance with the approved final plans unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviations.

## 5. Landscaping Restrictions

- A. The use of rodenticides containing any anticoagulant compounds is prohibited.
- B. All irrigation systems shall limit water use to the maximum extent feasible. If using potable water for irrigation, only drip or microspray irrigation systems may be used.
- C. No plant species listed as problematic and/or invasive by the California Native Plant Society (<http://www.CNPS.org/>), the California Invasive Plant Council (formerly the California Exotic Pest Plant Council) (<http://www.cal-ipc.org/>), or as may be identified from time to time by the State of California shall be employed or allowed to naturalize or persist on the site. No plant species listed as a “noxious weed” by the State of California or the U.S. Federal Government shall be utilized within the property.
- D. All vegetated landscaped areas on the project site shall be maintained in a litter-free, weed-free, and healthy growing condition throughout the life of the project and, whenever necessary, shall be replaced with new plant materials.

## 6. Design Restrictions

- A. Lighting: All exterior lights, including lights attached to the outside of any structures, shall be low-wattage, shielded, and have a directional cast downward such that no light will shine beyond the boundaries of the property.
- B. Signage: The two freestanding signs along South G Street shall be no greater than 8.5 feet tall with a total of 84.6 square feet of signage as depicted on Plan Sheet A-7,

“Master Signage Plans and Details” (Exhibit 4, pg. 9). No neon, flashing, or electronic signage is allowed.

7. **Construction and Demolition Responsibilities.** In accordance with the permittee’s erosion and sediment control plan (titled Plan Sheets EC-1 and EC-2 and dated May 18 and 17, 2017, respectively) the permittee shall comply with the following construction-related requirements:
- A. All ground disturbing activity and asphaltic-concrete paving operations shall be performed during dry-weather periods only, when the National Weather Service’s Northwestern California forecast for the Eureka area predicts a less than 50 percent chance of precipitation for the timeframe in which the work is to be conducted. If rainfall is forecast after construction has commenced and before construction is complete, any exposed soil areas shall be promptly mulched with weed-free straw or covered with sheeting and secured with sand bagging or other appropriate materials before the onset of precipitation. Adequate and effective erosion and sediment control measures shall be used to prevent sediment-laden water from entering coastal waters and wetlands;
  - B. No construction or demolition materials, debris, or waste shall be placed or stored where it may be subject to entering coastal waters or wetlands. All onsite stockpiles of construction and demolition debris shall be contained at all times to minimize discharge of sediment and other pollutants;
  - C. Suitable BMPs, such as storm drain inlet protection, silt fences around the site perimeter, fiber rolls around construction storage areas, and stabilized construction exits/entrances, shall be placed as proposed to prevent sediments and other pollutants from reaching waterways. These BMPs shall be installed prior to any clearing or grading activities. Further, sediment built up at the base of BMPs shall be removed before BMP removal to avoid any accumulated sediments from being mobilized post-construction;
  - D. To minimize wildlife entanglement and plastic debris pollution, the use of temporary rolled erosion and sediment control products with plastic netting (such as polypropylene, nylon, polyethylene, polyester, or other synthetic fibers used in fiber rolls, erosion control blankets, and mulch control netting) is prohibited. Any erosion-control associated netting shall be made of natural fibers and constructed in a loose-weave design with movable joints between the horizontal and vertical twines;
  - E. Any excess excavated material and other debris resulting from construction and demolition activities shall be removed immediately upon completion of component construction, and shall be disposed of at a disposal site outside the coastal zone or within the coastal zone pursuant to a valid coastal development permit. Any potentially hazardous waste materials would be disposed of at an approved Class II landfill that is equipped to handle hazardous waste;
  - F. No uncured concrete or runoff from uncured concrete shall be allowed to enter coastal waters. Concrete paving and grinding operations, and storm drain inlet protection best management practices shall be employed to prevent concrete grindings, cutting slurry, and paving rinsate from entering drop inlets or sheet-

flowing into coastal waters. Concrete delivery vehicle wash-out maintenance at the project site is prohibited;

- G. Any fueling, maintenance, and washing of construction equipment shall occur in confined upland areas specifically designed to control runoff and located more than 100 feet away from coastal waters; and
- H. Fuels, lubricants, and solvents shall not be allowed to enter coastal waters or wetlands. Hazardous materials management equipment including oil containment booms and absorbent pads shall be available immediately on-hand at the project site. Any accidental spill shall be rapidly contained and cleaned up.

**8. Post-Construction Stormwater Management Plan.**

- A. PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT 1-17-0159, the permittee shall submit, for the review and written approval of the Executive Director, a final Post-Construction Stormwater Management Plan that substantially conforms with (1) the Stormwater Control Plan prepared by Streamline Planning dated May 15, 2017 (Exhibit 6); (2) the landscaping plans titled Plan Sheets LA-1 and LA-2 and dated May 16, 2017 (Exhibit 4, pgs.10-11); and (3) the site plan titled Plan Sheet A-1 and dated May 16, 2017 (Exhibit 4, pg.1).
  - i. The final Post-Construction Stormwater Management Plan shall demonstrate that:
    - a. The following Low Impact Development (LID) measures shall be incorporated at the project site as proposed: increasing the overall area of pervious surface, planting of additional non-invasive vegetation that provides water quality benefits, amending soils to enhance infiltration, installing a rain garden with a vegetated swale, directing runoff from impervious surfaces to permeable areas for onsite infiltration, and installing rain barrels to capture and store roof-top runoff for later use in onsite irrigation;
    - b. The suite of LID measures incorporated at the project site shall be sized, designed, and managed to infiltrate, retain on-site, or treat at a minimum, the runoff from all impervious surfaces produced by the 85<sup>th</sup> percentile 24-hour storm event; and
    - c. Post-development BMPs shall be continually operated, inspected, and maintained to protect water quality for the life of the development.
  - ii. The final Post-Construction Stormwater Management Plan shall include:
    - a. A description of the LID approach to stormwater management that will be used including a schedule for installation or implementation of all post-development BMPs;
    - b. A site plan, drawn to scale, showing the property boundaries, building footprints, runoff flow directions, relevant drainage features, structural BMPs, impervious surfaces, permeable pavements, and landscaped areas.
    - c. A description and calculations demonstrating that the 85<sup>th</sup> percentile design storm runoff volume from all impervious surfaces will be retained on-site; and



- d. A description and schedule for the ongoing management of all post-development BMPs (including operation, maintenance, inspection, and training) that will be performed for the life of the development, if required for the BMPs to function properly.
  - B. The permittee shall undertake development in accordance with the Post-Development Stormwater Management Plan, unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviations.
- 9. **Protection of Archeological Resources.** If an area of cultural deposits or human remains is discovered during the course of the project, all construction shall cease and shall not recommence until a qualified cultural resource specialist, in consultation with the Tribal Historic Preservation Officers of the Wiyot Tribe, the Bear River Band of Rohnerville Rancheria, and the Blue Lake Rancheria, analyzes the significance of the find and prepares a supplementary archaeological plan for the review and approval of the Executive Director, and either: (a) the Executive Director approves the Supplementary Archaeological Plan and determines that the Supplementary Archaeological Plan's recommended changes to the proposed development or mitigation measures are *de minimis* in nature and scope, or (b) the Executive Director reviews the Supplementary Archaeological Plan, determines that the changes proposed therein are not *de minimis*, and the permittee has thereafter obtained an amendment to CDP 1-17-0159.
- 10. **Conformance with Tsunami Safety Plan.** The permittee shall implement as proposed the "Water Planet Light Industrial Complex Tsunami Safety Plan" dated April 19, 2017 and attached as Exhibit 9. The permittee shall undertake development in conformance with the approved tsunami safety plan unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviations.
- 11. **Coastal Hazard Response.** By acceptance of this Permit, the applicant agrees, on behalf of itself (or himself or herself, as applicable) and all successors and assigns, that the landowner shall remove the development authorized by this Permit, including, but not limited to, the new commercial/industrial building and attached open-air warehouse, if any government agency has ordered that the structures are not to be occupied due to damage or destruction from coastal flooding, tsunami run-up, liquefaction, or other coastal hazards; or if any public agency requires the structures to be removed. If any portion of the development at any time encroaches onto public property, the permittee shall either remove the encroaching portion of the development or apply to retain it. Any application to retain it must include proof of permission from the owner of the public property. The permittee shall obtain a coastal development permit for removal of approved development unless the Executive Director determines that no coastal development permit is legally required.
- 12. **Assumption of Risk, Waiver of Liability and Indemnity.** By acceptance of this permit, the permittee acknowledges and agrees (i) that the site may be subject to hazards, including but not limited to ground shaking, flooding, liquefaction, and tsunami run-up; (ii) to assume the risks to the permittee and the property that is the subject of this permit of injury and

damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

13. **Disclosure of Permit Conditions.** Disclosure documents related to any future marketing and sale of the subject property, including but not limited to specific marketing materials, sales contracts and similar documents, shall notify buyers of the terms and conditions of this coastal development permit including but not limited to the fact that the site is subject to extreme coastal hazards including, but not limited to flooding, liquefaction, and tsunamis run-up. A copy of this permit shall be provided in all real estate disclosures.
14. **Deed Restriction.** PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT 1-17-0159, the applicant shall submit to the Executive Director for review and approval documentation demonstrating that the applicant has executed and recorded against the property governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the special conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the property. The deed restriction shall include a legal description and site plan of the property governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the property.

## IV. FINDINGS AND DECLARATIONS

### A. PROJECT DESCRIPTION

The applicant proposes to redevelop a light industrial park located at 76 South G Street in Arcata, Humboldt County (Exhibits 1-2). The property currently consists of four separate legal lots with a combined area of 69,735 square feet (1.6 acres). Existing retail, warehouse, and office space occupy the southern two parcels (APNs 503-211-36 and 503-211-38), while the northern parcels (APNs 503-211-35 and 503-211-37) are paved with asphalt and presently used for parking and outdoor storage of materials and supplies. Currently 98.8% of the site is covered in impervious surfaces with only 839 square feet of permeable area.

As part of the proposed development, three existing warehouse buildings would be demolished to make room for a new commercial/industrial building and attached open-air warehouse on the eastern half of the property. The existing commercial/industrial building on the western half of the property would be retained. This existing building to be retained has a footprint of 7,640 square feet with retail, office, storage, and warehouse space.

Circulation, parking, and stormwater management on the project site would be reconfigured to facilitate the simultaneous use of the existing western building and the new eastern building complex. In addition, the applicant proposes to merge the four existing lots into two lots and adjust the lot line 20 feet between the two resulting lots to allow for the existing western building and the new eastern building complex to be located on separate individual parcels. See Exhibit 3 for existing and proposed parcel configurations and Exhibit 4 for site, construction, and landscaping plans.

### **Proposed Construction and Demolition**

The first floor of the proposed new two-story, commercial/industrial building on the eastern portion of the property would include 3,200 square feet of retail space and 9,180 square feet of warehouse space; and the second floor would provide 2,706 square feet of office and storage space. In addition, a 1,600-square-foot open-air warehouse would be attached to the building. The new building and attached warehouse would have a total footprint of 13,980 square feet with a maximum building height of 39 feet. Three existing open-air metal warehouses (2,133, 775, and 2,745 square feet in size, respectively) would be removed in order to accommodate the new building.

1,384 cubic yards of fill would be added to the site to create a finished building pad elevation of 11.5 feet (NAVD88). A six-inch-thick concrete pad foundation would result in a final elevation of 12 feet for the proposed new building. The new building would be set back from the north, east, and south property lines by approximately eleven feet. These areas totaling 4,298 square feet would be covered in three to four-inch-thick cobble over weed cloth. A photovoltaic solar system would be installed on the roof of the new building.

Currently runoff from the site drains westerly towards South G Street. Under the proposed project, 6,744 square feet of landscaping would be installed on the site and all roof and pavement runoff would ultimately be directed toward the landscaped areas, including a new rain garden with a large vegetated swale at the northwest corner of the property. The proposed landscaping is non-invasive, predominately native, and supported by drip irrigation. Before entering landscape areas, a portion of the roof runoff from the new building would be directed into rain catchment tanks with a total capacity of at least 10,050 gallons to be installed at the northeast corner of the property.

Under the proposed project, vehicular circulation on the subject property would be improved with a new circular 20-foot-wide fire lane looping around the site between the existing and new buildings and exiting out of a proposed new second driveway onto South G Street. Forty-eight parking spaces would be installed as well as 23 bicycle spaces and 3 motorcycle spaces (currently there are only twelve delineated vehicular parking spaces on the parcel). Eleven of the bike parking spaces would be located in a 256-square-foot covered area adjacent to the main entrance of the new building. New concrete walks would be added to the fronts of the existing building and the new building's retail space, and a covered berth for loading/unloading would be installed in front of the new building's warehouse space. Finally, two freestanding signs totaling 84.5 square feet would be installed adjacent to South G Street.

In total, 13,247 square feet of the site (approximately 18% of the property) would be resurfaced with asphalt and 2,047 square feet of new concrete walks and curbing would be installed. Overall there would be a net gain of 10,918 square feet of permeable surface on the property for a total of 11,042 square feet of permeable surface comprised of landscaping and cobble over weed cloth.

The applicant has submitted a plan detailing the best management practices (BMPs) to be implemented to control runoff and minimize erosion, sedimentation, and the discharge of pollutants resulting from construction and demolition activities (Exhibit 5). The applicant has also submitted a preliminary post-construction stormwater management plan indicating that all runoff from the 58,693 square feet of impervious surfaces on the property would be captured and treated onsite during a 24 hour, 85<sup>th</sup> percentile storm event (Exhibit 6).

### **Parcel Merger and Lot Line Adjustment**

The property currently consists of four separate lots that were created by Parcel Map (PM 2754, Bk 25 of Parcel Maps, pg. 9) in 1990 (See Exhibit 3, pg. 1). The four lots are currently under the same ownership. In order to facilitate the proposed development, a parcel merger would be required to ensure that buildings do not encroach onto or over property lines. The applicant proposes to merge Parcel 1 with Parcel 2 and Parcel 3 with Parcel 4 resulting in two lots of 38,994 square feet and 30,740 square feet, respectively. The property line between these two resultant lots would be adjusted 20 feet to the west to accommodate both the existing building on the front lot and the proposed new construction on the lot in the rear. The resultant lots would have respective surface areas of 45,519 square feet (Parcel A) and 27,215.7 square feet (Parcel B) (See Exhibit 3, pg. 2-3).

The City of Arcata's conditions of approval of the merger and lot line adjustment under the Subdivision Map Act require that a deed restriction be added to the Notice of Parcel Merger and Lot Line Adjustment that identifies appropriate easements for access, utilities, and parking in the event that one or both of the resultant lots are sold and no longer held under the same ownership.

## **B. SETTING & BACKGROUND**

The 1.6-acre property is locally zoned Light Industrial and served by municipal water and power. The property is one of a string of commercial/industrial developments that line the eastern side of South G Street. The property is surrounded to the north and east by a construction/junk yard, to the south by multiple heavy commercial and light industrial uses, and to the west by South G Street and the Arcata Marsh & Wildlife Sanctuary.<sup>1</sup> Grazed seasonal wetlands and Highway 101 exist further east of the project site beyond the junk yard.

The project site and all the properties on South G Street are diked and filled former tidelands of Humboldt Bay (as evidenced by an 1870 US Coast Survey map). An aerial image from 1931 shows the subject property as agricultural land, and aerial images from 1954 and 1958 indicate that the existing building to be retained on the western portion of the lot was constructed in the mid-1950s.

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<sup>1</sup> The Arcata Marsh is primarily comprised of freshwater, brackish, and salt marshes, tidal sloughs, mudflats, and grassy uplands with over five miles of walking and biking paths.

Soil excavations on the property in April 2017 revealed a layer of fill below the surface pavement ranging from one to three feet in depth composed of compacted aggregate base atop densely-compacted river run gravels (Exhibit 8). Below the fill, a layer of silty fine sand was found above stiff massive clay. Groundwater was encountered three to four feet below the ground surface and appeared perched on the underlying clay.

The property is flat with less than 2% slope. Based on a recent topographic survey completed for the project in March 2017, elevations at the site range from approximately eight to eleven feet (NAVD88). The property is located within the tsunami run-up zone, the 100-year floodplain, and an area of high liquefaction potential.

In July and September 2016, SHN Engineers & Geologists conducted a wetland delineation and determined that no wetlands exist on the subject property and that the nearest wetland is more than 150 feet to the east of the subject property, between the adjacent junkyard and the agricultural field to the east (Exhibit 7). The edge of the wetland ranges from 175 to 206 feet from the proposed new commercial/industrial building and attached warehouse.

### **C. STANDARD OF REVIEW**

The proposed project is located within the Commission's retained jurisdiction. The City of Arcata has a certified local coastal program (LCP), but the site is within an area shown on State Lands Commission maps over which the state retains a public trust interest. Therefore, the standard of review that the Commission must apply to the development is the Chapter 3 policies of the Coastal Act.

### **D. OTHER AGENCY APPROVALS**

#### **The City of Arcata**

The City of Arcata's Planning Commission approved a Design Review Permit, Lot Line Adjustment Permit, and Minor Use Permit for the project on December 13, 2016 (167-016-DR2-LLA-MUP). The City granted its approval subject to 20 project-specific special conditions and 13 general conditions, including a requirement that a Notice of Parcel Merger and Lot Line Adjustment be recorded. To ensure that the resultant parcels described in the notice to be recorded are consistent with those analyzed herein, **Special Condition 1** requires the applicant to submit the Notice of Merger and Lot Line Adjustment for review by the Executive Director within 90 days of Commission approval of CDP 1-17-0159.

The project also includes the addition of a second driveway onto City right-of-way on South G Street to improve vehicular circulation. **Special Condition 2** requires the applicant to submit evidence of having obtained the necessary encroachment permit for the driveway from the City of Arcata prior to the commencement of construction.

#### **California State Lands Commission (SLC)**

The SLC has direct jurisdiction and authority over ungranted sovereign tidelands and submerged lands underlying the State's navigable waterways (ocean, bays, sloughs, lakes, and rivers) as well as over lands subject to the public trust. The project area includes diked and filled former tidelands that are subject to the public trust. To ensure that the applicant has the legal ability to

undertake all aspects of the project on these public lands, **Special Condition 3** requires that the applicant submit evidence that the SLC has granted any necessary authorization.

## **E. MAINTENANCE OF BIOLOGICAL PRODUCTIVITY & QUALITY OF COASTAL WATERS**

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 water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

The proposed project involves redevelopment of a 1.6-acre, paved, upland property zoned and designated for light industrial use. Butcher Slough and associated wetlands are located across South G Street approximately 60 feet to the west of the subject property, and grazed seasonal wetlands are located approximately 150 feet east of the property, on the far side of an adjacent, separately-owned junkyard. Proposed project construction and demolition methods, post-construction stormwater management, and lighting and landscaping design all have the potential to impact these nearby wetlands and associated wildlife.

### **Construction-related impacts to the biological productivity and quality of coastal waters**

The proposed redevelopment of the property includes demolition of existing buildings, construction of a new building and attached warehouse, resurfacing of approximately 15,000 square feet of the site with new asphalt and concrete surfaces, and removal of existing pavement to accommodate the new building foundations and 10,918 square feet of additional permeable surfaces. Proposed demolition and construction activities could result in sediments, debris, or hazardous materials entering nearby wetlands and impairing the biological productivity and quality of coastal waters. To minimize temporary impacts from demolition and construction, the applicant has submitted a plan for erosion and sediment control (attached as Exhibit 5). The plan includes (1) a site plan delineating proposed staging and stockpiling areas and the proposed locations of all temporary construction-phase BMPs, (2) a list of proposed BMPs, and (3) a schedule for the management of BMPs including installation, maintenance, and removal.

The site plan depicts a number of construction-phase BMPs, including, but not limited to, the installation of silt fencing around the perimeter of the property, the installation of fiber rolls around construction storage areas and downslope of construction and demolition activities, and the placement of straw mulch over temporarily disturbed areas. In addition, the list of proposed BMPs includes requirements for (1) performing all ground disturbing activity and asphaltic-concrete paving operations during dry-weather periods only; (2) prohibiting the placement or storage of construction or demolition materials, debris, or waste where it may be subject to entering coastal waters or wetlands; (3) installing sediment control structures prior to any clearing or grading and removing sediment build-up at the base of the structures prior to structure removal; (4) prohibiting the use of temporary rolled erosion and sediment control products with plastic netting to minimize wildlife entanglement; (5) removing any excess excavated material and other debris resulting from construction and demolition activities immediately upon completion of component construction, and disposing of such waste at a disposal site outside the coastal zone or within the coastal zone pursuant to a valid coastal development permit; (6) employing concrete paving and grinding operations, and storm drain inlet protection best management practices to prevent concrete grindings, cutting slurry, and paving rinsate from entering drop inlets or sheet-flowing into coastal waters; (7) conducting all fueling, maintenance, and washing of construction equipment in confined upland areas specifically designed to control runoff and located more than 100 feet away from coastal waters; and (8) maintaining hazardous materials management equipment including oil containment booms and absorbent pads immediately on-hand at the project site to rapidly contain and clean up any accidental spill. The Commission finds that the proposed plan is adequate to minimize erosion and sedimentation and the pollution of runoff and coastal waters during construction and demolition activities. To ensure that the applicant implements the erosion and sediment control plan as proposed, **Special Condition 7** requires that the proposed construction-phase BMPs be implemented.

The Commission thus finds that the proposed development, as conditioned, maintains the biological productivity and quality of coastal waters consistent with the requirements of Coastal Act Section 30231.

### **Impacts on water quality from post-construction stormwater runoff**

The subject 1.6-acre property is currently covered in pavement and buildings with only 839 square feet of permeable surface. The project includes among other development, the construction of a commercial/industrial building and attached open-air warehouse with a 13,980 square foot footprint, the resurfacing of 13,247 square feet of the subject property with new asphalt for vehicular parking, loading, and access, the installation of 2,047 square feet of new concrete areas for curbing, sidewalks, and bike parking, the installation of 4,298 square feet of cobble over weed cloth, and the installation of 6,744 square feet of landscaping.

Although the redevelopment will result in a net gain of 10,918 square feet of pervious surface, the property will remain largely impervious (58,693 square feet or 84% of the property will be covered in impervious surfaces). Impervious surfaces block the natural infiltration of rainfall into the ground, which increases the volume and rate of stormwater runoff, changes the timing and duration of runoff flows, and impedes the filtration of pollutants that naturally occurs in soil.

Such changes in stormwater runoff can lead to increased flooding, diminished groundwater replenishment, decreased stream base flows, higher stream temperatures, altered salinity in estuaries, and increased pollutant transport to waterways and the ocean.

To prevent stormwater runoff from the redeveloped property from resulting in the conveyance of sediment, debris, and pollutants into nearby coastal waters and wetlands, the applicant proposes a number of Low-Impact Development (LID) measures to capture and retain runoff onsite as depicted and described in the submitted site plan (Exhibit 4, pg. 1), landscaping plan (Exhibit 4, pgs. 10-11), and stormwater control plan (Exhibit 6). As mentioned above, the proposed redevelopment directs all roof and pavement runoff towards 6,744 square feet of onsite landscaped areas, including a new rain garden with a large vegetated swale at the northwest corner of the property. Speed humps will be installed at both entrances to route stormwater into the adjacent self-retaining landscaped areas through curb cuts. Additional curb cuts will be spaced along all curbs around parking areas and driveways to allow stormwater runoff to enter the permeable landscaped areas at intervals designed to reduce both volume and velocity. In addition, before entering landscaped areas, a portion of the roof runoff from the new building will be directed into rainwater catchment tanks with a total capacity of at least 10,050 gallons to attenuate peak flows and reduce the first-flush effect. The rainwater catchment tanks will have an overflow pipe to allow collected rainwater to flow into new landscaped beds along the northern property line, and continue on to the drainage swale proposed in the northwest corner of the property. Where roof runoff is not directed into rainwater catchment tanks, roof downspouts will be directed into new drainage swales. The overall site will slope generally towards the north and west to ensure all runoff enters the permeable areas for infiltration and treatment. In addition, the new building will be surrounded on the north, south and east sides by an approximately 10-foot-wide swath of permeable three-to-four-inch-thick cobble over weed cloth to help infiltrate roof runoff and reduce the amount of water flowing toward landscaped areas to the north and west.

The stormwater control plan indicates that all runoff from the 58,693 square feet of total impervious surface on the property will be captured and treated onsite during a 24 hour, 85<sup>th</sup> percentile storm event. The Commission finds that the proposed LID measures will prevent sediments and pollutants from the site from discharging into adjacent wetlands and coastal waters.

The proposed landscaping, drainage swales, and other LID measures may become less effective overtime if not properly maintained. To ensure LID measures are installed as proposed and maintained to effectively infiltrate stormwater for the life of the project, **Special Condition 8** requires submittal of a final post-construction stormwater management plan for the project site. Special Condition 8 requires that the final plan demonstrate that: (1) LID measures are installed as proposed; (2) the proposed suite of LID strategies are sited, designed, and managed to infiltrate, retain on-site, or treat at a minimum, the runoff produced by the 85<sup>th</sup> percentile 24-hour design storm; and (3) post-development BMPs are continuously operated, inspected, and maintained to protect water quality for the life of the development.

As previously mentioned, the applicant has submitted site and landscaping plans that include 6,744 square feet of vegetated landscaping. This vegetation will help trap and filter runoff from the buildings and parking lot and will prevent the erosion of underlying sediments. **Special**



**Condition 4** requires final site and landscaping plans that substantially conform with submitted plans. In addition, **Special Condition 5** requires, among other landscaping restrictions, that all vegetated landscaped areas on the project site shall be maintained in a litter-free, weed-free, and healthy growing condition throughout the life of the project and, whenever necessary, shall be replaced with new plant materials.

The Commission finds that as proposed and conditioned, the development will improve stormwater detention and infiltration on the project site, and reduce stormwater runoff volume, flow rate, and pollutants, and thus protect the biological productivity and quality of nearby wetlands and coastal waters. The Commission finds that the proposed development, as conditioned, maintains the biological productivity and quality of coastal waters consistent with the requirements of Coastal Act section 30231.

#### **Disturbance to wildlife from lighting**

The development includes the installation of new exterior lighting on the subject property. Artificial night lighting can have a variety of significant direct and cumulative effects on flora and fauna, including disruption of light-dark photosynthesis cycles and circadian rhythms, disruption of foraging behaviors and increased risks of predation, and inference with vision and migratory orientation. These impacts can result in reductions in biological productivity, reductions in the population of otherwise threatened, endangered, or rare species, elevated incidences of collisions between birds and structures, or fixation of large numbers of arthropods on the lighting source attraction to the point of fatal exhaustion, negatively affecting their populations and reproductive success, as well as the food web they support.

The applicant has submitted plans for exterior lighting on the new building and new freestanding signs that depict night-sky-friendly lighting (See Plan Sheets A-2 and A-7, pages 3 and 9 of Exhibit 4). To ensure that lighting is installed as proposed, **Special Condition 4** requires the submittal of final plans that substantially conform with submitted plans. In addition, to ensure that all future exterior lighting installed on the site minimizes impacts to wildlife, **Special Condition 6** requires that all exterior lights, including lights attached to the outside of any structures, shall be low-wattage, shielded, and have a directional cast downward such that no light will shine beyond the boundaries of the property and disrupt nearby wetland habitat and wildlife. The Commission finds that the proposed development, as conditioned, maintains the biological productivity and quality of coastal waters consistent with the requirements of Coastal Act Section 30231.

#### **Disturbance to wildlife from landscaping**

New landscaping will be installed at the project site including plantings in various proposed new bioretention/filtration features around the site. If implemented poorly, new landscaping could negatively impact the biological integrity of the area from (1) the introduction of exotic invasive plant species or other genetically incompatible plantings or (2) the use of rodenticides. If invasive species are planted on the project site, they could displace native species and alter the composition, function, and biological productivity of surrounding habitats. The use of rodenticides can also negatively impact surrounding habitats as certain rodenticides, particularly those utilizing blood anticoagulant compounds such as brodifacoum, bromadiolone and

diphacinone, have been found to pose significant primary and secondary risks to non-target wildlife present in urban and urban/wildland areas.

The applicant has submitted a detailed landscaping plan with a plant list that includes native and non-invasive plant species, and a planting and maintenance plan that does not incorporate the use of rodenticides (See Plan Sheets LA-1 and LA-2, pages 10 and 11 of Exhibit 4). To ensure that landscaping is installed and maintained as proposed, **Special Condition 4** requires the submittal of final landscaping plans that substantially conform with submitted plans. In addition, to ensure that all future landscaping improvements do not negatively impact nearby wetland habitat and wildlife, **Special Condition 5** (1) prohibits the utilization of plant species listed as problematic or invasive, or identified as noxious weeds; and (2) prohibits the use of rodenticides containing any anticoagulant compounds. The Commission finds that the proposed development, as conditioned, maintains the biological productivity and quality of coastal waters consistent with the requirements of Coastal Act Section 30231.

### **Conclusion**

The Commission finds that the proposed project, including proposed construction and demolition methods, post-construction stormwater management, and lighting and landscaping design, as condition, will maintain the biological productivity and quality of nearby coastal waters and wetlands consistent with Coastal Action Section 30231.

## **F. COASTAL HAZARDS**

Section 30253 of the Coastal Act states in applicable part:

*New development shall do all of the following:*

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

Section 30253 requires in part that new development minimizes risk to life and property in areas of high geologic and flood hazards, assures structural integrity and stability, and neither creates nor contributes significantly to erosion. The proposed project entails development in an area subject to significant exposure to geologic and flood hazards including strong earthquake shaking, liquefaction, tsunami inundation, and flooding.

### **Ground shaking, rupture, and liquefaction**

The project site is within a seismically active area in which large earthquakes may be expected to occur during the economic lifespan of the development. The project site is also in an area of high liquefaction potential. To address these significant geologic risks, Lindberg Geologic Consulting conducted a geotechnical investigation of the subject property and prepared a geotechnical report for the proposed project titled “Engineering Geologic Soils Exploration Report” and dated April 28, 2017 (See Exhibit 8). The geotechnical investigation included subsurface explorations to

expose, observe, and assess the in-situ soil profile beneath the proposed new building. A layer of fill ranging from one to three feet in depth was found beneath the asphalt surface, composed of compacted aggregate base atop densely-compacted river run gravels. Beneath the fill, a layer of silty fine sand was found above stiff massive clay. Groundwater was encountered three to four feet below the ground surface and appeared perched on the underlying native clay.

According to the report, based on the distance from the project site to the nearest recognized, active fault trace 0.6 miles from the site (the Fickle Hill Fault), the potential for surface fault rupture at the proposed building site is low. In addition, based on the medium density of native clays found in the subsurface explorations and the lack of saturated, loose, poorly-graded sand or silt in the soil profile, the report concludes that liquefaction potential is moderate to low. The report also concludes that the native soils found below the existing ground surface appear suitable as subgrade bearing material for the proposed development.

As described in the subsection on flood hazards below, engineered fill is required to elevate the new building's finished floor above the base flood elevation. As a result, the building's foundation will be embedded in fill rather than directly in native soils. The report therefore provides recommendations for removing existing fill and for selecting, placing, compacting, and testing engineered fill. The applicant's architect has also indicated that building foundations will likely include column footings that extend below the fill prism.

As part of **Special Condition 4**, the Commission requires the applicant to submit final project plans for the Executive Director's review and approval that are consistent with the recommendations contained in the April 2017 geotechnical report prepared by Lindberg Geologic Consulting including recommendations for site preparation, cut and fill slopes, structural fills, compaction standards, and foundation design, among other recommendations. To further assure the stability and structural integrity of the new development and minimize risks to life and property from ground shaking and liquefaction, Special Condition 4 also requires that an appropriate licensed professional review and approve final grading plans for the project site and foundation plans for the new commercial/industrial building and attached open-air warehouse, and certify that the final plans are consistent with the recommendations specified in the Engineering Geologic Soils Exploration Report. The Commission thus finds that the proposed development as conditioned will assure the stability and structural integrity of the new development and minimize risks to life and property from ground shaking and liquefaction consistent with the requirements of Coastal Act Section 30253.

### **Tsunami hazards**

The subject property, along with many others around Humboldt Bay, are shown on emergency planning maps published in 2009 by the California Emergency Management Agency, California Geologic Survey, and University of Southern California as being within the zone of potential inundation by a tsunami. The Cascadia subduction zone which is located approximately 40 miles west of the project site is estimated to be capable of producing earthquakes of magnitude 9.0. If the region were to suffer a major seismic event along the Cascadia Subduction Zone, a local tsunami could hit the Humboldt Bay shoreline within minutes with tsunami run-up on the subject property. The precise maximum depth of inundation for a tsunami has not been determined for the subject property. While other development sites with direct beach frontage or proximity to

open ocean waters have been assessed as being potentially subject to modeled inundation of 30 feet or more above mean sea level, given the sites' distance from the mouth of Humboldt Bay, the large mudflat and marsh plain configuration of Arcata Bay, and the intervening fill including railroad embankment, road prism, and City-maintained levees between the subject property and the bay, such a wave height would be expected to at least partially attenuate before reaching the subject property.

The flooding risk from tsunamis can best be minimized through warnings of imminent tsunamis and timely evacuation from tsunami wave run-up zones. The City of Arcata has established tsunami alarms and evacuation routes intended to reduce life-safety risk. In addition, the applicant has submitted a tsunami safety plan for the proposed development titled "Water Planet Light Industrial Complex Tsunami Safety Plan" and dated April 19, 2017 (Exhibit 9). The plan (1) specifies how tsunami risk will be communicated to occupants of the project site; (2) includes measures to be taken in the event of a tsunami including measures for staff to assist less physically mobile people during an evacuation; and (3) provides training instructions for property management staff. The plan includes provisions for the posting of information placards that explain tsunami risks, the need for evacuation if strong earthquake motion is felt or alarms are sounded, and the location of evacuation routes. The plan also includes a depiction of the proposed placards and a map of their proposed locations in the new and existing buildings on the subject property. To ensure implementation of the tsunami safety plan as proposed, **Special Condition 10** requires the applicant to implement the plan. As conditioned, the Commission finds that adequate tsunami related warning and evacuation information will be provided to minimize risks to employees and visitors of the site from the hazards of tsunamis consistent with the requirements of Coastal Act Section 30253.

### **Flood hazards and sea level rise**

The flat, low-lying project site is located on the eastern side of South G Street on diked and filled former tidelands of northern Humboldt Bay (Arcata Bay). Tidally influenced Butcher's Slough and associated wetlands are located directly across South G Street to the west, within the 307-acre Arcata Marsh and Wildlife Sanctuary. South of the project site, a string of light industrial properties line the eastern edge of South G Street as the road heads south towards Arcata Bay and then jogs east to join Highway 101. The City's wastewater treatment plant (WWTP) and corporation yard lie south of South G Street, abutting the current shoreline of Arcata Bay one-quarter-to-one-half mile to the south of the project site. The structures armoring the shoreline include levees that line the Arcata Marsh and Wildlife Sanctuary and City's WWTP, and a historic railroad revetment that travels along the bayward edge of South G Street. A large agricultural property (75+ acres) comprised of grazed seasonal wetlands lies to the east of the project site between the light industrial properties on South G Street and Highway 101. These grazed wetlands are hydrologically connected to Arcata Bay through culverts under the railroad revetment and South G Street.

The subject property ranges in elevation from eight to eleven feet relative to vertical datum NAVD88 and lies within the FEMA-mapped 100-year flood zone. The portion of the property where the buildings will be constructed ranges in elevation from 10 to 10.7 feet. The base flood

elevation affecting the property is ten feet (NAVD88).<sup>2</sup> To avoid flooding during the 100-year storm event, the applicant proposes a finished floor elevation for the newly proposed commercial/industrial building and attached open-air warehouse of 12 feet (NAVD88), two feet above base flood elevation. To achieve this elevation, the applicant proposes to add 1,284 cubic yards of engineered fill to the site to create a finished pad height of 11.5 feet (NAVD88) and then construct the building on a six-inch-tall concrete slab.

The current mean monthly maximum water (MMMW) elevation on Humboldt Bay is 7.74 feet (NAVD 88 as measured at NOAA's North Spit Tide Gage) and the average annual king tide elevation is 8.78 feet (NAVD 88). During extreme tidal events, storm surge, and periods of heavy stormwater runoff, water can reach up to two feet above tidal baseline elevations, with water levels during recent extreme tides in December 2016 and January 2017 reaching over 9 feet (NAVD 88) at the North Spit tide gage (9.5 feet on December 14, 2016 and 9.4 feet on January 11, 2017). As previously discussed, the project site currently ranges in elevation from 8 to 11 feet, while the finished floor elevation of the new building structures will be built at 12 feet elevation. While the new buildings will be built above the highest tides currently experienced on Humboldt Bay, portions of the site are below current average king tides (8.78 feet). However, the project site is protected from tidal influence by the road prism of South G Street, a railroad revetment, and, in certain locations, levees that line the Arcata Marsh and Wildlife Sanctuary and the City's WWTP.

Even though the project site is not located directly on the shoreline, inland properties that are at a lower elevation than the bay are at risk of flooding. There are vulnerable segments of the complex shoreline protecting the subject property where overtopping could occur and tidal waters could extend inland. For example, a portion of the shoreline in the project area is only protected by a stretch of railroad revetment that is below ten feet in elevation and at immediate risk of overtopping by extreme tides, storms, and El Niño events. In 2013, Trinity Associates produced a Shoreline Inventory and Map for Humboldt Bay, and prepared a Shoreline Sea Level Rise Vulnerability Assessment that identified 26.2 miles of shoreline segments around Humboldt Bay (21.0 miles of dikes and 5.1 miles of railroad berm) highly vulnerable to breaching and/or overtopping. The railroad berm to the south of the site was one of the shoreline segments rated as highly vulnerable (Laird 2013).

The project site could become subject to tidal inundation under future sea level rise if the intervening shoreline structures were overtopped. Furthermore, regardless of whether shoreline structures are overtopped or fortified, the risk of backwater flooding on the subject property will increase with sea level rise. Higher tides impair the drainage of stormwater runoff and creek channels that discharge to the bay, thereby increasing backwater flooding of lands adjacent to the channels and upstream. The subject property is in close proximity to a variety of wetlands and waterways including Butcher Slough directly across South G Street. Even if shoreline structures

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<sup>2</sup> The currently adopted National Flood Insurance Program, Flood Insurance Rate Map Number 06023C0852F (effective November 4, 2016) shows the entire property to be within "Zone A" of the 100-year flood zone with "no Base Flood Elevations determined." Based on draft updates to the relevant Flood Insurance Rate Map and discussions with the City engineer, the surveyor determined that the Base Flood Elevation of 10 feet is appropriate for the site.

are fortified, higher tides resulting in decreased drainage capacity in the area could result in more frequent and severe backwater flooding of the project site in the future.

Humboldt Bay is experiencing the greatest rate of relative sea level rise in the State (due to active land subsidence), with up to 0.9 feet of rise expected by 2030, 1.9 feet by 2050, and 5.3 feet by 2100.<sup>3</sup> The table below shows best, average, and worst-case scenario MMMW and mean annual maximum water levels (MAMW) for Humboldt Bay.<sup>4</sup>

<b>Sea Levels &amp; Project Sea Levels for Humboldt Bay (NAVD88)</b>			
		<b>MMMW*</b>	<b>MAMW<sup>o</sup></b>
Current Levels		7.74	8.78
2030	Best case	8.14	9.18
	Average	8.34	9.38
	Worst case	8.64	9.68
2050	Best case	8.44	9.48
	Average	8.84	9.88
	Worst case	9.64	10.68
2100	Best case	9.74	10.78
	Average	10.94	11.98
	Worst case	13.04	14.08

\*MMMW = mean monthly maximum water level

<sup>o</sup>MAMW = mean annual maximum water level (i.e., average King Tide)

Relative sea level rise rates are expected to accelerate in the latter half of this century and there is less certainty and a greater range in estimated water elevations for 2100 (predictions range from 2.0 to 5.3 feet of sea level rise for the Humboldt Bay area). However, even if the shoreline barriers to inundation are compromised, the new buildings at 12 feet elevation (NAVD88) would be protected from flooding from tidal inundation given worst case scenario sea level rise projections through 2050 and an average scenario projection through 2100.

According to the applicant's engineer, raising the development another two feet to protect from the worst-case scenario king tide in 2100 would be cost prohibitive for the applicant. Not only would the land under the 13,980-square-foot building footprint need to be raised another two feet, nearly doubling the amount of engineered fill required for the base of the buildings, but major foundation elements and column footings would need to extend two more feet, ADA-accessible ramps would need to be installed, and adjacent vehicular access, parking, and walkways would need to be raised. In addition, alternative methods of elevating the buildings such as elevating the buildings on raised piers or on a first floor that is not used for habitable space, are not feasible in this case. Based on the nature of the use of the buildings primarily for

<sup>3</sup> Relative sea level rise estimations from: Trinity Associates (2015, February). *Sea Level Rise Adaptation Planning Project: Phase II Report*, based on: Northern Hydrology and Engineering (2014). *Humboldt Bay Sea Level Rise Hydrodynamic Modeling and Inundation Vulnerability Mapping*.

<sup>4</sup> Ibid.

warehousing for storing materials and equipment and operating forklifts for moving such materials, the floor of the warehouses must be constructed to support heavy loads which makes constructing a raised floor supported above ground on piers and perimeter foundations at higher elevations even more protected from flood waters infeasible.

The proposed development is a commercial industrial structure largely comprised of warehousing. This type of development does not engender the same level of risk as a residential structure or critical facility. Given the range of sea level rise projections, the infeasibility of other elevation alternatives, and the fact that the proposed new development is largely warehousing with no residential structures or critical facilities, the Commission finds that constructing the buildings at a base elevation of twelve feet (NAVD88) minimizes risks to life and property in an area of high flood hazard consistent with Coastal Act Section 30253.

#### **Additional measures to minimize hazard risks**

While the proposed project has been designed to minimize geologic and flooding risks, the commercial/industrial development may become uninhabitable at some point in the future. Failure to remove uninhabitable structures threatens the safety of all people and property in the flood zone, as the structures may break apart and debris carried away in flood waters could injure people and damage structures. To minimize risks from severe damage to the structures from geologic or flood hazard events, **Special Condition 11** requires removal of the development if any government agency has ordered the structures not to be occupied due to damage or destruction from coastal flooding, tsunami wave run-up, liquefaction, or other coastal hazards or if any public agency requires the structures to be removed.

The Commission's experience in evaluating proposed developments in areas subject to geologic and flood hazards has been that development has continued to occur despite periodic episodes of heavy damage from flooding or seismic events. Development in such dynamic environments is susceptible to damage due to such long-term and episodic processes. Past occurrences statewide have resulted in public costs (through low interest loans, grants, subsidies, direct assistance, etc.) in the billions of dollars. As a means of allowing continued development in areas subject to these hazards while avoiding placing the economic burden for damages onto the people of the State of California, applicants are regularly required to acknowledge site hazards and agree to waive any claims of liability on the part of the Commission for allowing the development to proceed. Accordingly, **Special Condition 12** requires the applicant to assume all risks for developing at this location.

To ensure that potential future buyers have specific notice of the hazards and special condition requirements attached to the property prior to purchase, **Special Condition 13** requires that disclosure documents related to any future marketing and sale of the subject property include a notification to buyers of the terms and conditions of this coastal development permit, including the fact that the site is subject to extreme coastal hazards. To further ensure that potential buyers of the property are aware of the geologic and flood hazard risks associated with the site and the ongoing requirements of the conditions of this permit, **Special Condition 14** requires a deed restriction to be recorded against the property involved in the application that records the conditions of this permit as covenants, conditions, and restrictions on the use and enjoyment of the property.

## **Conclusion**

Thus, as conditioned, the project minimizes risks to life and property in an area of high geologic and flood hazard consistent with Coastal Act Section 30253.

## **G. ARCHAEOLOGICAL RESOURCES**

Section 30244 of the Coastal Act states:

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

The project area lies within the traditional territory of the Wiki division of the Wiyot tribe. The tribe is understood to have included three tribal divisions (Patawat, Wiki, and Wiyot), each associated with a water-related resource (the Mad River, Humboldt Bay, and the lower Eel River, respectively) and each speaking a common language (Selateluk). Settlements existed all around Humboldt Bay and along the banks of many of the streams and sloughs in the region. Today, representatives of the Wiyot Tribe are the Table Bluff Reservation Wiyot Tribe, the Blue Lake Rancheria, and the Bear River Band of the Rohnerville Rancheria.

Although the project is located just inland of the current shoreline of Humboldt Bay, the property consists of diked and filled former tidelands that were part of the bay until the late 1800s. The proposed project involves excavating below the one to three feet of fill covering the subject property to ensure that the new building is placed on a stable substrate. The project was referred to the Tribal Heritage Preservation Officers (THPOs) of the Table Bluff Reservation Wiyot Tribe, the Blue Lake Rancheria, and the Bear River Band of the Rohnerville Rancheria. All three THPOs responded indicating that the project is not located in a known archaeologically sensitive area, and recommending that protocols for the evaluation and protection of archaeological resources discovered during construction be made a condition of project approval.

In response to the request of the THPOs, to ensure protection of any cultural resources that may be discovered at the site during project construction, the Commission attaches **Special Condition 9** requiring that if an area of cultural deposits is discovered during the course of the project, all construction must cease and a qualified cultural resource specialist, in conjunction with the three Wiyot area THPOs, must analyze the significance of the find. To recommence construction following discovery of cultural deposits, the applicant is required to submit a supplementary archaeological plan for the review and approval of the Executive Director, who determines whether the changes are de minimis in nature and scope, or whether an amendment to this permit is required.

Therefore, the Commission finds that the project, as conditioned, is consistent with Coastal Act Section 30244.

## **H. VISUAL RESOURCES**

Section 30251 of the Coastal Act states in applicable part:



*The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality of visually degraded areas.*

The proposed redevelopment of the subject property will be compatible with the character of the surrounding area which is a mix of commercial and industrial developments adjoining marsh and bay lands, and agricultural lands. Although the project is in close proximity to open space and agricultural fields, it is located among other active commercial and industrial uses along the eastern side of South G Street. The development will be visible from South G Street to the west and Highway 101 to the east, although the existing building and newly proposed landscaping will partially screen the new building from South G Street, and a junkyard will partially screen the new building from the highway.

Compared to the existing commercial/industrial developments on the property, the proposed project will improve the visual quality of the site. The subject property is currently developed with 13,840 square feet of metal and wood-framed industrial buildings and is almost completely covered by buildings, asphalt or other impervious surface with only 839 square feet of landscaping. Under the proposed project, there will be a net gain of 5,905 square feet of landscaping including 64 new trees and an interpretive native plant rain garden with a picnic bench and vegetated wetland swale.

The applicant has submitted proposed exterior finishes and color samples demonstrating that the new mixed-use building will have earth-tone, muted colors. The applicant has also submitted specifications for exterior lighting that is low-wattage, shielded, and directionally downcast. The project includes two new freestanding-signs at the front of the property along South G Street. The signs are 32 and 52.5 square feet in size respectively, and are enclosed within cedar frames on cedar posts with concrete footings. The sign structures are 8.5 feet tall and are illuminated by shielded, downcast lighting recessed beneath the signs' roofs. As proposed, the development will be visually compatible with the character of the surrounding area.

To ensure protection of visual resources, the Commission attaches **Special Condition 4** requiring, prior to commencement of construction, Executive Director approval of final construction plans for the new commercial/industrial building and attached open-air warehouse and final plans for site landscaping, signage, and exterior lighting that substantially conform with the submitted plans. In addition, the Commission attaches **Special Condition 6** imposing design restrictions on the development, including requirements that (1) all exterior lights shall be low-wattage, shielded, and directionally downcast; and (2) the new freestanding signs adjacent to South G Street shall be no larger than proposed and that no neon, flashing, or electronic signage shall be used.

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Section 30251 of the Coastal Act.

## **I. PUBLIC ACCESS**

Section 30210 of the Coastal Act requires that maximum public access shall be provided consistent with public safety needs and the need to protect natural resource areas from overuse. Section 30212 of the Coastal Act requires that access from the nearest public roadway to the shoreline be provided in new development projects, except where it is inconsistent with public safety, military security, or protection of fragile coastal resources, or where adequate access exists nearby. Section 30211 of the Coastal Act requires that development not interfere with the public's right to access gained by use or legislative authorization. Section 30214 of the Coastal Act provides that the public access policies of the Coastal Act shall be implemented in a manner that takes into account the capacity of the site and the fragility of natural resources in the area. In applying Sections 30210, 30211, 30212, and 30214, the Commission is also limited by the need to show that any denial of a permit application based on these sections or any decision to grant a permit subject to special conditions requiring public access is necessary to avoid or offset a project's adverse impact on existing or potential access.

The project will not adversely affect public access. The subject site is separated from the tidal reaches of Humboldt Bay by intervening development and roadways. The project will not displace any existing public access facilities, as the project will redevelop a private light industrial property where no public access currently exists and there is no history of public use. In addition, adequate coastal access and recreational amenities for hiking, cycling, bird-watching, wildlife viewing, and boating exist nearby at the Arcata Marsh and Wildlife Sanctuary.

The proposed project to redevelop a 1.6-acre light industrial property will likely result in a greater intensity of use of the site which may draw more people near the Humboldt Bay shoreline. However, given the type of use of the site (i.e., weekday, work hour use) and the large amount of nearby public recreational and access facilities including 4.5 miles of trails and multiple parking lots in the Arcata Marsh and Wildlife Sanctuary, the incremental increase on demand for public access in the area generated by the project will not be significant.

The Commission thus finds that the proposed development, as conditioned, will not have any significant adverse effects on public access, and is consistent with the requirements of Coastal Act Sections 30210, 30211, 30212, and 30214.

## **J. CALIFORNIA ENVIRONMENTAL QUALITY ACT**

The City of Arcata served as the lead agency for the purposes of CEQA review. The City filed a notice of exemption for the project pursuant to Sections 15332 and 15305 of the CEQA Guidelines which exempt infill development projects and minor alterations in land use limitations, respectively. Section 13906 of the Commission's administrative regulation requires Coastal Commission approval of CDP applications to be supported by a finding showing the application, as modified by any conditions of approval, is 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 any feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effect the proposed development may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. As discussed above, the proposed project has been conditioned to be consistent with the policies of the Coastal Act. No public comments regarding potential significant adverse environmental effects of the project on coastal resources were received prior to preparation of the staff report. As conditioned, there are no other feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impacts which the activity may have on the environment. Therefore, the Commission finds that the proposed repair and maintenance project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act to conform to CEQA.

**APPENDIX A  
SUBSTANTIVE FILE DOCUMENTS**

Application File for Coastal Development Permit (CDP) No. 1-17-0159.

Laird, A. of Trinity Associates (2013). Humboldt Bay shoreline inventory, mapping, and sea level rise vulnerability assessment. Prepared for the State Coastal Conservancy.

Laird, A. of Trinity Associates (2015, February). Sea Level Rise Adaptation Planning Project: Phase II Report.

Northern Hydrology & Engineering. (2015, April). Humboldt Bay: Sea level rise, hydrodynamic modeling, and inundation vulnerability mapping – Final report. Prepared for the State Coastal Conservancy and Coastal Ecosystems Institute of Northern California.