11.6. Health and Safety Element

Alameda Point has a number of physical features that pose potential risks for persons and property, including flooding, seismic, geologic and soils hazards. In addition, manmade hazards associated with the presence of hazardous materials exist.

State law requires a safety element to outline policies that will protect the community from both natural and human-induced disasters. Many of the health, safety and hazards policies addressed in the citywide General Plan's Health and Safety Element are applicable to Alameda Point. This section considers seismic, geology, flood and fire hazards, environmental cleanup, and emergency management in the specific context of Alameda Point.

Potential health, safety, and natural hazards impacts at Alameda Point will be addressed by integrating the redevelopment of Alameda Point into the City's existing programs and measures intended to ensure the health, safety and comfort of residents.

11.6.1. Water Quality and Flooding Hazards

11.6.1.1. Water Quality

The Plan Area currently has aging storm drain infrastructure. Stormwater run-off is a significant source of pollutants throughout the San Francisco Bay watershed. Alameda County has established the Alameda countywide Clean Water Program, as required by provision C.3 of the countywide municipal stormwater National Pollutant Discharge Elimination System permit, which program will apply to the Plan Area. Policies are intended to protect the Bay and Estuary water resources.

11.6.1.2. Flooding Hazards

The Health and Safety Element description of the general conditions related to flooding that affect the City applies to Alameda Point. In addition, areas within Alameda Point are subject to flooding due to the large amounts of impervious surfaces in the Plan Area, deteriorating storm drains and flat, low-lying topography. Surface water occurs as sheetflow which is conveyed to receiving water through the stormwater drainage system. There are no creeks or natural water courses crossing the site to collect floodwater. Alameda Point has been studied by the U.S. Army Corps of Engineers but has not been mapped by the Federal Emergency Management Agency. As shown on *Figure 11-6: Alameda Point Flood Plains and Sea Level Rise*, areas of Alameda Point are subject to flooding and would be susceptible to damage in the event of a 100-year flood. Projected sea level rise would exacerbate the flood risks. The Bay Conservation and Development Commission ("BCDC") has stated that sea level

rise should be considered for all public use areas surrounding the San Francisco Bay. Other sources of potential flooding include high tide events, wind and wave run-up and localized stormwater runoff impacts. Grading plans must account for these factors and potential sea-level rise. Engineering solutions must be consistent with Federal Emergency Management Agency standards in order to protect lives and property within the Plan Area.

11.6.2. Seismic and Geologic Hazards; Soils

The Health and Safety Element characterization of the general seismic and geologic conditions that affect the City pertains to Alameda Point. Alameda Point is partially protected from inundation and damage from tsunamis due to restricted hydraulic access at Golden Gate. The Plan Area is relatively flat with shallow gradients toward San Francisco Bay or the Oakland-Alameda Estuary from a slight, centrally-located east-west ridge. Alameda Point soils consist of surface and near-surface layers of sandy and silty un-engineered fill, underlain by young Bay Mud that is underlain by Yerba Buena mud (old Bay Mud). As shown on *Figure 11-7: Alameda Point Geotechnical Conditions* most of the Plan Area is subject to liquefaction. Accordingly, soil stabilization and suitable building foundations will be required to establish the structural integrity of new construction. These factors combined with the likelihood of primary and secondary effects of ground movement due to earthquakes require careful engineering analysis of subsurface conditions prior to redevelopment.

11.6.3. Fire Hazards

Alameda Point does not contain open space that creates a risk of wildland fire. Redevelopment of the Alameda Point with more intensive uses will necessitate facility improvements to the peak-load water supply system to ensure the safety of future residents and structures from urban fires.

11.6.3.1. Emergency Management: Evacuation Routes and Minimum Road Widths

Reasonable access for emergency equipment and civilian evacuation is necessary to protect life, property and natural resources. The current roadway system is composed of streets of adequate width to accommodate emergency evacuations of the existing limited on-site population. The street system associated with future redevelopment of the Plan Area must be designed to establish and maintain primary evacuation routes that are integrated into the citywide plan for emergency preparedness. Additionally, fire access roads must be designed to ensure fire and emergency access.

11.6.4. Hazardous Materials and Waste Management

Hazardous materials resulting from prior industrial and military activities are present at Alameda Point. Previously, within the former NAS Alameda, there were two landfills, a municipal airfield, an army base, an oil refinery, various manufacturing facilities as well as former NAS Alameda facilities. During its peak, former NAS Alameda produced hazardous waste and residual hazardous waste exists on-site. Alameda Point has been designated a federal Superfund site, which establishes the U.S. Environmental Protection Agency as the lead agency for the coordination of clean-up of the site. A Federal Facilities Agreement has been signed between the Navy and the U.S. EPA in which the parties agree to a schedule and funding program for cleanup of the site.

As a part of its obligations under CERCLA and other federal laws, the Navy has started clean up Alameda Pont under the oversight of other federal and state agencies. The objective of the cleanup activities is to reduce contaminants to levels necessary for residential or commercial applications within their respective designated areas.

11.6.5. Guiding Policies: Health and Safety

- Support improvement programs that address urban runoff and flooding.
- Manage runoff from Alameda Point together with existing City programs.
- Require all proposed reuse activity in Alameda Point to be in compliance with the Regional Water Quality Control Board stormwater recommendations.
- Restrict the installation of water supply wells in the uppermost aquifer at Alameda Point to reduce the potential use, or migration of, groundwater affected by the release of hazardous materials.
- Support development of a water-quality testing program for all existing water supply wells in Alameda Point to determine the safe uses or appropriate discharge of pumped water.
- Coordinate incorporation of Alameda Point into the City of Alameda Urban Runoff Program to reduce potential water quality degradation related to urban runoff.
- Identify and implement improvement programs to address periodic flooding at Alameda Point.
- To protect human health and safety, incorporate engineering strategies for soil stabilization and building design to preserve and protect structures and their inhabitants.

- Ensure adequate facility improvements to the peak-load water supply system to protect the safety of future residents and structures from urban fires.

- Mitigate factors and conditions in Alameda Point that are conducive to fire hazards.

- Identify effective means of dealing with fire disasters should they occur.

- Continue to support cleanup of contaminated lands.

11.6.6. Implementation Measure: Health and Safety

- Support preparation of a Flood Insurance Study by Federal Emergency Management Agency for Alameda Point end use flood control maps and other agency regulations related to sea level rise, to determine areas subject to potential flooding and establish flood protection proposals to protect occupants new buildings and, where determined reasonably feasible, historic buildings and structures at Alameda Point.

- Development at Alameda Point should implement a network of water quality integrated management practices including Plan Area design practices, construction practices and post-construction water quality control measures to mitigate the potential construction and post-construction impacts from the Project on the surrounding beneficial uses of the San Francisco Bay.

- Development within the Plan Area should implement a variety of source control and stormwater management measures to prevent pollutant discharge at the source. Such measures should meet or exceed the Alameda County Clean Water Program standards. These facilities should be designed to comply with the hydraulic design criteria presented in Provision C.3d of the municipal stormwater permit requirements.

- To facilitate prevention, control and correction of the erosion of soils, beaches and shorelines should be maintained with shoreline protection design solutions to make those areas safe, attractive and accessible.

- To protect water quality, development should integrate new pipelines, structures and outfalls designed to meet City of Alameda Flood Control standards along with water quality features

designed to provide stormwater treatment consistent with the Alameda Countywide Clean Water Program.

- Development should include improvements to the water delivery systems for adequate emergency fire response in the Plan Area.

- Development should allow for the expansion of the City's fire protection and fire-fighting capability into Alameda Point to service the emergency needs of all residents and businesses of the area.

- Consider extending Alameda's current level of emergency medical service into Alameda Point as reuse activities and residential buildout proceed.

- Make reasonable efforts to identify "critical facilities" in Alameda Point area, as defined in Alameda's 1976 Safety Element, and integrate them into the City's existing "critical facilities" list and emergency provision plan.

- Provide information about contamination and clean-up activities and make the information available to the public.

- Create a land use and construction permitting program that requires consideration of residual contamination. The permitting program should include:

    - A means for tracking deed restrictions;

    - A means for tracking remediation to help ensure that future land uses are compatible;

    - A method for classifying land uses by exposure scenario;

    - Identification of areas that might require special construction precautions;

    - A system for ongoing communication with the environmental regulatory agencies.

11.7. Noise Element

Existing sensitive receptors in the Plan Area and adjacent areas include residential areas, the Coast Guard day care center, and educational facilities located off Singleton Avenue and the USCG housing area. Proposed new educational and day care facilities and residential neighborhoods may also be sensitive receptors in the future. Protected species may also be affected by noise.

11.7.1. Current and Projected Noise Levels

The Health and Safety Element identifies citywide noise sources and noise contours that are applicable to Alameda Point. It identifies aircraft and surface traffic as the City's primary noise sources. Aircraft noise in Alameda is generated by flights from two airports—Metropolitan Oakland International and San Francisco International. Former NAS Alameda, while still owned by the Navy, is no longer an operating airport. The Plan Area is over 2 miles from operating airports. Accordingly, aircraft flights generate noise levels ranging from 50 to 70 dBA in the Plan Area. Airport noise, which is a significant factor in certain areas of the City, is not anticipated to affect development of Alameda Point or current or future sensitive receptors in the Plan Area.

Other noise sources in the Plan Area include specific industrial activities, which have a localized effect on directly adjacent land uses. The highest surface street noise levels within the Plan Area occur along Main Street, north of Atlantic Avenue (60 to 65 dBA). Construction and hauling may also generate noise affecting sensitive receptors. Proposed water uses including a marina and ferry service in the Seaplane Lagoon may generate noise in areas adjacent to the water.

The land use program described in Section 11.2 of this Community Plan does not propose any specific uses that are incompatible with the citywide General Plan's Noise Element, which this Community Plan incorporates by reference pursuant to Public Resources Code Section 21083.3.

11.7.2. Guiding Policies: Noise

- Be sensitive to temporary construction noise generated by construction and truck routes near sensitive receptors.

- Consideration should be given to using water access for construction related activities.

- Consider the effects of sound generating water-related activities to residential communities.

- Be sensitive to noise impacts upon sensitive receptors, if any, from operation of transit and light industrial uses.

- Consider the effects of excess noise generated by development of Alameda Point, if any, upon protected species in adjacent areas.

11.7.3. Implementation Measures: Noise

- Address temporary construction noise generated by truck routes by taking into account in development of truck routes the presence of existing neighborhoods and sensitive receptors and routing trips along commercial roadways to the greatest extent feasible.

- Avoid incompatible noise from uses in noise sensitive areas, if any.

- Comply with laws and regulations relating to noise standards for residential uses.

11.8. Energy and Sustainability Element

The implementation of a successful development in Alameda Point will rely upon denser, more clustered new development and the inclusion of multiple energy efficient forms of transportation such as public transit, carpooling, walking and bicycling. Development should meet or, where feasible, exceed state and local mandates with respect to reduction in greenhouse gas emissions and conservation of resources.

11.8.1. Guiding Policies: Energy and Sustainability

- Pursue state policies designed to encourage infill development in order to minimize vehicle miles traveled and to promote accessibility to transit, both significant in the reduction of greenhouse gas emissions.

- Expand the City's transit options by including more energy efficient modes of travel.

- Take advantage of citywide incentives for the use of energy efficient technologies.

- Promote the implementation of sustainable energy practices and green technology.

- Create opportunities for alternative energy generation wherever feasible.

- Make information available regarding energy conservation techniques, products and methods.

- Preserve resources, including energy and water resources, by incorporating energy and water efficiency measures into homes and offices and using recycled water, when available, for irrigation.

- Divert a significant amount of waste away from landfills and promote use of recyclable materials that will reduce the overall impact of the project on the environment.

- Encourage and provide incentives for sustainable architectural and site planning design and construction standards for all structures in the community in a manner that results in an integrated approach to green buildings and helps steer the designs away from expensive green measures and toward cost-effective solutions.

11.8.2. Implementation Measures: Energy and Sustainability

- Cluster homes and mixed uses adjacent to a new ferry and transit center and develop pedestrian and bicycle corridors providing access to these transit nodes.

- Locate parks, bikeways and walkways in proximity to public schools and residential areas and as connectors to commercial areas to promote physical activity and community interaction.

- Provide linkages via transit to the major job centers in the region through development of on-site transit including shuttle service to BART and development of a ferry terminal.

- Encourage transit uses through use of the Eco-pass, which requires monthly purchase by residents and businesses of transit passes.

- Construct a recycled water pipeline distribution system and connect to the EBMUD recycled water supply, when available.

- Require installation of water efficient fixtures for residential and commercial toilets, faucets, appliances and showers.

- New construction should meet or exceed Title 24 building energy standards.

- Through the Specific Plan and design guidelines, establish criteria allowing for segregation and recycling of waste to help Alameda divert more waste from landfills by providing facilities for segregating and sorting of waste into commingled dry recyclables, compostable and non-recyclable/recoverable waste with a goal of meeting the diversion rate set forth in Measure D.

- Incorporate into the Specific Plan mechanisms for implementation of sustainable architecture and construction methods.

- Participate in the implementation of alternative energy production where and when appropriate.

11.9. Amendments to the Community Plan

This Community Plan is being adopted by the voters of the City of Alameda. This Community Plan may only be amended in accordance with the Alameda Point Revitalization Initiative.

11.10. Severability

If any provision of this Community Plan is found to be unconstitutional or otherwise invalid by any court of competent jurisdiction, the invalidity shall not affect the remaining provisions of this Community Plan. In such case, the remaining provisions of the Community Plan may be implemented without the invalid provisions.

11.11. Effect of Community Plan

This Community Plan is intended to satisfy all the requirements of a community plan as required by Public Resources Code section 21083.3. If a court of competent jurisdiction determines that one or more of the mandatory elements of a Community Plan has not been satisfied by this document, the surviving goals, policies, and implementation measures shall continue to be effective as an amendment to the General Plan and it is the intent of the City to adopt such modifications as are necessary to satisfy the purposes and intent of the Initiative.

11.12. Interpretation

This Community Plan is intended as the guiding policy document for development in Alameda Point. To the extent that this Community Plan may conflict with more generalized policy documents, such as the other provisions of the City's General Plan, this Plan should be considered a refinement which

amends those other policy documents. It is recognized that aspects of this Community Plan are also subject to refinement as additional information becomes available, more detailed plans are prepared or errors are discovered. In general, such refinements will be accomplished without the need to amend this Community Plan so long as they substantially conform with this Community Plan. Errata or updates may be issued from time to time as appropriate.

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