

SAN FRANCISCO PLANNING DEPARTMENT

Notice of Preparation of an Environmental Impact Report

Date: February 2, 2011
Case No.: **2010.0016**E

Project Title: Beach Chalet Athletic Fields Renovation

BPA Nos.: N/A

Zoning: Public Use District

Open Space Height and Bulk District

Coastal Special Use District

Block/Lot: 1700/001

Lot Size: 4,195,976 square feet

Project Sponsor Dan Mauer, Recreation and Park Department

(415) 581-2542

Lead Agency: San Francisco Planning Department

Staff Contact: Don Lewis – (415) 575-9095

don.lewis@sfgov.org

Reception: 415.558.6378

1650 Mission St. Suite 400 San Francisco,

CA 94103-2479

Fax: 415.558.6409

Planning Information: 415.558.6377

PROJECT DESCRIPTION

The Beach Chalet Athletic Facility is approximately 10.9 acres in size and is located at the western end of the 1,017 acre Golden Gate Park, close to the Great Highway and the Beach Chalet Restaurant. The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of the four existing grass soccer fields to synthetic turf. The proposed project also includes the installation of ten 60-foot-tall athletic field light standards to allow for evening use. The new light standards would be placed within the perimeter of the field area and are anticipated to be turned on until 10 p.m. on a daily basis. In addition to the turf conversion and lights, the project would include the following: installation of pedestrian and spectator amenities throughout the facility and adjacent parking lot; the installation of black vinyl fencing around the fields; the installation of a play structure, picnic tables and barbeque pits; the construction of a new maintenance shed; the renovation of the existing restroom building involving modification of existing openings and construction of a concrete paved entry plaza; irrigation and storm drainage improvements; and, re-configuration and expansion of the existing 50-space parking lot to accommodate approximately 20 additional stalls. The project would also involve the removal of 14 trees and 44 shrubs. Golden Gate Park is listed on the National and California Registers of Historic Places as a historic district containing 133 contributing resources, including the soccer fields and the restroom building.

FINDING

This project may have a significant effect on the environment and an Environmental Impact Report is required. This determination is based upon the criteria of the State CEQA Guidelines, Sections 15063 (Initial Study), 15064 (Determining Significant Effect), and 15065 (Mandatory Findings of Significance), and for the reasons documented in the Environmental Evaluation (Initial Study) for the project, which is attached.

PUBLIC SCOPING PROCESS

Pursuant to the State of California Public Resources Code Section 21083.9 and California Environmental Quality Act Guidelines Section 15206, a public scoping meeting will be held to receive oral comments concerning the scope of the EIR. The meeting will be held on February 23rd at 6:30 p.m. at the Golden Gate Park Senior Center, 6101 Fulton Street at 36th Avenue. Written comments will also be accepted at this meeting and until 5:00 p.m. on March 4th, 2011. Written comments should be sent to Bill Wycko, San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103.

If you work for a responsible State agency, we need to know the views of your agency regarding the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the EIR when considering a permit or other approval for this project. Please include the name of a contact person in your agency.

Bill Wycko

Environmental Review Officer

To Responsible Agencies, Trustee Agencies, and Interested Parties:

February 2, 2011

1650 Mission St. Suite 400 San Francisco, CA 94103-2479

RE: CASE NO 2010.0016E: Beach Chalet Athletic Fields Renovation
NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT

Reception: 415.558.6378

Fax:

A Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the above-referenced project, described below, has been issued by the Planning Department. The NOP/Notice of Public Scoping Meeting is either attached or is available upon request from **Don Lewis**, whom you may reach at **(415)** 575-9095 or at the above address. It is also available online at http://www.sfgov.org/site/planning_index.asp?id=80504. This notice is being sent to you because you have been identified as potentially having an interest in the project or the project area.

415.558.6409Planning

Information: **415.558.6377**

<u>Project Description</u>: The Beach Chalet Athletic Facility is approximately 10.9 acres in size and is located at the western end of the 1,017 acre Golden Gate Park, close to the Great Highway and the Beach Chalet Restaurant. The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of the four existing grass soccer fields to synthetic turf. The proposed project also includes the installation of ten 60-foot-tall athletic field light standards to allow for evening use. The new light standards would be placed within the perimeter of the field area and are anticipated to be turned on until 10 p.m. on a daily basis. In addition to the turf conversion and lights, the project would include the following: installation of pedestrian and spectator amenities throughout the facility and adjacent parking lot; the installation of black vinyl fencing around the fields; the installation of a play structure, picnic tables and barbeque pits; the construction of a new maintenance shed; the renovation of the existing restroom building involving modification of existing openings and construction of a concrete paved entry plaza; irrigation and storm drainage improvements; and, re-configuration and expansion of the existing 50-space parking lot to accommodate approximately 20 additional stalls. The project would also involve the removal of 14 trees and 44 shrubs. Golden Gate Park is listed on the National and California Registers of Historic Places as a historic district containing 133 contributing resources, including the soccer fields and the restroom building.

The Planning Department has determined that an EIR must be prepared for the proposed project prior to any final decision regarding whether to approve the project. The purpose of the EIR is to provide information about potential significant physical environmental effects of the proposed project, to identify possible ways to minimize the significant effects, and to describe and analyze possible alternatives to the proposed project. Preparation of an NOP or EIR does not indicate a decision by the City to approve or to disapprove the project. However, prior to making any such decision, the decision makers must review and consider the information contained in the EIR.

The Planning Department will hold a **PUBLIC SCOPING MEETING** on **February 23**rd **at 6:30 p.m. at the Golden Gate Park Senior Center, 6101 Fulton Street at 36**th **Avenue**. The purpose of this meeting is to receive oral comments to assist the Planning Department in reviewing the scope and content of the environmental impact analysis and information to be contained in the EIR for the project. Written comments will also be accepted until 5:00 p.m. on **March 4**th, **2011**. Written comments should be sent to Bill Wycko, San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103.

If you work for an agency that is a Responsible or a Trustee Agency, we need to know the views of your agency as to the scope and content of the environmental information that is relevant to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the EIR when considering a permit or other approval for this project. We will also need the name of the contact person for your agency. If you have questions concerning environmental review of the proposed project, please contact **Don Lewis** at **(415)** 575-9095.

INITIAL STUDY

Case No. 2010.0016E Beach Chalet Athletic Fields Renovation

TABLE OF CONTENTS

A.	Proj	ect Description	1
В.	Proj	ect Setting	7
C.	Con	npatibility with Existing Zoning and Plans	10
D.	Sum	nmary of Environmental Effects	12
E.	Eval	luation of Environmental Effects	13
	1.	Land Use and Land Use Planning	13
	2.	Aesthetics	15
	3.	Population and Housing	17
	4.	Cultural Resources	18
	5.	Transportation and Circulation	20
	6.	Noise	21
	7.	Air Quality	24
	8.	Greenhouse Gas Emissions	26
	9.	Wind and Shadow	37
	10.	Recreation	38
	11.	Utilities and Service Systems	39
	12.	Public Services	42
	13	Biological Resources	44
	14.	Geology and Soils	46
	15.	Hydrology and Water Quality	49
	16.	Hazards and Hazardous Materials	53
	17.	Mineral and Energy Resources	55
	18.	Agriculture and Forest Resources	56
	19.	Mandatory Findings of Significance	57
F.	Dete	ermination	58
G.	List	of Preparers	59

TABLE OF CONTENTS

LIST OF FIGURES

Figure 1	Project Location Map	2
	Project Site Plan	
O		
	LIST OF TABLES	
Table 1	GHG Reductions from the AB 32 Scoping Plan Sectors	28
Table 2	Regulations Applicable to the Proposed Project	32

INITIAL STUDY 2010.0016E – Beach Chalet Athletic Fields Renovation

A. PROJECT DESCRIPTION

Project Location and Site Characteristics

The project site is located at the western end of the 1,017 acre Golden Gate Park, close to the Great Highway and the Beach Chalet Restaurant, and. is approximately 473,300 square feet or 10.9 acres in size (see Figure 1, Project Location, p. 2). The site currently contains four natural turf soccer fields surrounded by an eight-foot-tall metal chain link fence, an approximately 50-space asphalt parking lot accessed from John F. Kennedy Drive, a restroom building, and a maintenance shed. Surrounding the fenced-in fields are trees and shrubs with pathways. The site slopes slightly downward toward the west. The project site would remain in its current use as a soccer field complex within an urban park.

Golden Gate Park is listed on the National and California Registers of Historic Places as a historic district containing 133 contributing resources. Both the soccer fields and the restroom building at the Beach Chalet Athletic Fields are listed as contributing features of the park. Golden Gate Park contains several Article 10 Landmark buildings and structures, including Landmark No. 179: The Beach Chalet (also listed on the National Register as an individual resource) and Landmark No. 210: The Millwright Cottage and Murphy Windmill, which are located within approximately 300 feet of the project site. Nearby neighborhoods include the Outer Sunset district located to the south of Golden Gate Park and the Outer Richmond, which lies to the north of the park.

Proposed Project

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of the four existing grass soccer fields to synthetic turf. The proposed project also includes the installation of ten 60-foot-tall athletic field light standards to allow for evening use. The new light standards would be placed within the perimeter of the field area and are anticipated to be turned on until 10 p.m. on a daily basis. In addition to the turf conversion and lights, the project would include the following: installation of pedestrian lighting at the pedestrian paths north of the site, the parking



Figure 1 – Project Location Map Beach Chalet Athletic Fields Renovation Source: Planning Department GIS, January 2011

lot, and the proposed picnic area; the installation of black vinyl fencing around the fields; the installation of player benches and bleachers at all fields; the installation of picnic tables and barbeque pits at the southeastern corner of the fields; the construction of a new maintenance shed; the construction of three new pedestrian pathways paved in a crushed stone aggregate; the renovation of the existing restroom building involving modification of existing openings; the construction of a concrete paved entry plaza surrounding the restroom building with metal railings, seating, and planters; the construction of a concrete raised platform designed to accommodate pedestrian traffic across the fields and spectator seating; the installation of a new play area and structure; the installation of new bicycle racks, drinking fountains, and trash/recycling receptacles; irrigation and storm drainage improvements; and, re-configuration and expansion of the existing 50-space parking lot to accommodate approximately 20 additional stalls. The project would also involve the removal of 14 trees and 44 shrubs. Figure 2 on page 4 shows the site plan of the proposed facility.

The Beach Chalet Athletic Fields were built more than 75 years ago and were last renovated in 1998. As part of the Recreation and Park Department's (RPD) rest and re-growth program, one of the four existing fields is always out of use, leaving just three fields for play. Due to the heavy use, abundant gopher holes, and year-round wet conditions, these fields are in poor condition and require a considerable amount of maintenance. The renovation of Beach Chalet Athletic Fields with lights and synthetic turf would increase the amount of playable times on these fields. Currently, the four fields together can host 4,738 hours of annual play while the proposed project would add 9,582 hours of new play each year, for a total of 14,320 hours.

Project construction would span approximately 10 months and would require standard earth moving equipment for grading, large trucks for hauling, and a small crane to lift the proposed light standards. The project would cost approximately 9.8 million dollars.

Each component of the proposed project is described in detail below.

Field Area

The total area of the four fields would be approximately 314,000 square feet (7.2 acres) in size. The project would slightly enlarge the space dedicated to the soccer fields compared to existing conditions (by approximately 6% or 19,300 square feet) to accommodate modern field dimensions and safety zones. The surfacing proposed is an all weather synthetic turf. The new surfacing would allow for all

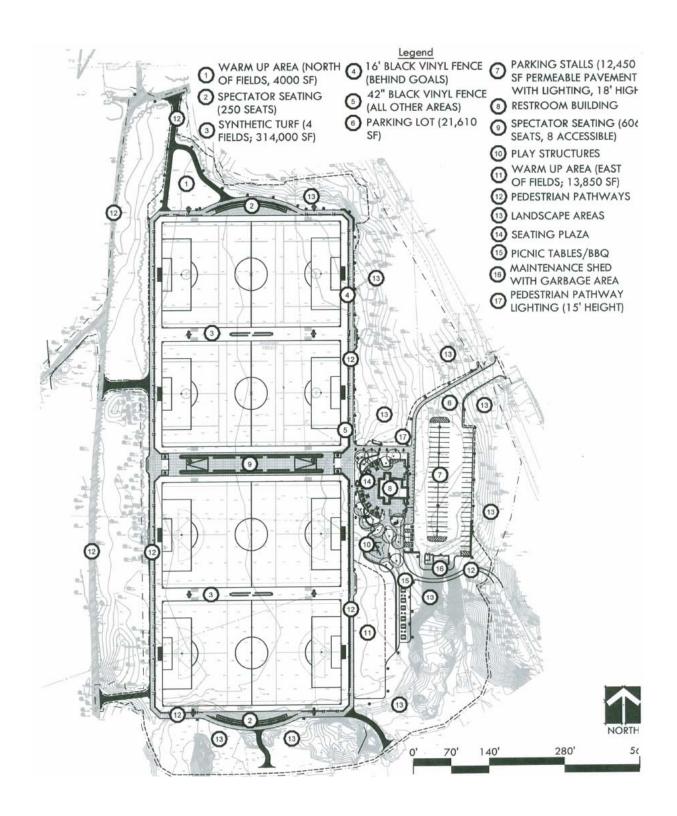


Figure 2 - Project Site Plan **Beach Chalet Athletic Fields Renovation**

Source: Verde Design

four fields to be used at once and for much longer durations due to the elimination of rest periods required by natural lawn, and can be used in wet weather conditions.

The synthetic turf is comprised of three components: fiber, infill and backing. The fiber, which consists of polyethylene, is intended to be grass-like in appearance and is soft and extremely durable. The playing surface would use an infill between the turf fibers to provide stability. The infill would be comprised of about 70% styrene butadiene rubber (SBR) and 30% sand. The SBR infill, commonly called "tire crumb", is recovered from scrap tires and from the tire re-treading process. The fiber and infill are supported by a backing that is made up of a combination of permeable woven and un-woven polypropylene fabrics that provide strength and vertical drainage. The product would meet or exceed all parameters established by the San Francisco Recreation and Park Department: Synthetic Task Force – Findings and Department Recommendations and the newly developed turf specification developed in coordination with the Department of the Environment.¹

In addition, the project proposes to renovate two existing natural grass warm-up areas. One warm-up area would be east of the soccer fields and would be approximately 13,850 square feet in size while the other warm-up area would be north of the soccer fields and would be approximately 4,000 square feet in size. These warm-up areas would be located on existing grassy turf areas surrounding the fields.

Lighting and Fencing

Proposed with the field renovations are ten 60-foot-tall light standards made of galvanized steel. Four poles that would be located at the north and south ends of the facility would have light fixtures oriented at the two end fields, while the six poles that would be located within the fields would have back-to-back light fixtures oriented to illuminate the two interior fields that they separate. The light standards would use shielded lamps. Each pole would have 40 luminares, and each luminare would be 1500W MZ.

In addition to the light standards, the project proposes new 15-foot-tall pedestrian pathway light standards and 18-foot-tall parking lot light standards. All lighting would be controlled by an on-line automated control system which would allow staff to turn all the lights off upon park closure or at an appropriate time following field closure.

5

The Synthetic Task Force met for five months in 2008 from June through October. The Task Force was comprised of 16 members from various city agencies including other experts such as a representative from California Environmental Protection Agency and a doctor from UCSF.

New black vinyl chain-link fencing 42 inches in height would line the perimeter of the field except in the areas behind the soccer goals where 16-foot-tall, black vinyl fencing would be provided to ensure that soccer balls remain on the fields, replacing the existing 8-foot-tall metal chain link fencing around the fields. The fence would be intended to allow spectators to have an open view to the fields while reducing the visibility of the fence against the park's landscaped backdrop.

Parking Lot

The existing 25,320-square-foot parking lot with approximately 50 stalls on the eastern side of the project site would be renovated, reorganized, and reconstructed. The parking lot would have a drop-off area and would be expanded by 8,740 square feet, or approximately 35%, to allow for approximately twenty additional stalls, for a total of approximately 70 spaces in an area approximately 34,060 square feet in size of which 12,450 square feet would be permeable pavement. The location of the existing vehicular ingress and egress from John F. Kennedy Drive would remain the same. The existing maintenance shed located between the parking area and the fields would be removed and replaced with a new 13-foot-tall maintenance shed that would be located at the south end of the parking lot and would include a garbage collection area. Bicycle racks are proposed along with drinking fountains and trash/recycling receptacles adjacent to the multiple field entrances.

Plaza Area and Restroom Building

The existing restroom building, located between the parking area and the fields, would be renovated and a new "plaza" area with seating would be created on the west side of the building. The 2004 National Register nomination lists the Beach Chalet Soccer Fields restroom building as a contributing feature of the Golden Gate Park National Register Historic District, along with ten other restroom buildings constructed during the park's period of significance of 1871 to 1943.² The project would modify the building's hipped roof by extending the existing slope of the roof by approximately four feet at the perimeter of the building to create a peak where it is now flat in the center. The restroom renovations would also include expanded fixture counts, new partitions, sinks, and fixtures. Accessibility upgrades, baby changing stations, and registration and concession windows would also be part of the design.

6

Nelson, Douglas. NPS Form 10-900, Golden Gate Park. July 2003, revised June 2004. On file for review at the San Francisco Planning Department, National Register Historic District Files, 1650 Mission Street, Suite 400, San Francisco, CA 94103.

Additional amenities proposed for the plaza area include a small playground to the south of the restroom and plaza and picnic tables and permanent barbeque pits. The playground area footprint would be approximately 775 feet square feet in size and surrounded by landscaping. The proposed project also incorporates new vegetation into the plaza and the slope between the plaza and the athletic fields.

An access path would lead from the parking stalls down a sloped walk to the plaza and playground areas before continuing down to the field level roughly five feet below the park lot/plaza elevation. A stairwell would also serve the plaza area as a means of egress to the fields.

Field Circulation and Viewing

Proposed circulation at the field level includes a new concrete pathway that would circle the fields to provide a means of access to the four fields for players and spectators, and for RPD maintenance staff. Spectator seating for approximately 250 visitors is proposed at the north and south ends of the facility, in addition to a 606-seat seating area on a walkway bisecting the field area at grade level (approximately 30" above fields) from east to west between the two center fields. There would also be approximately 190 spectator seats in the plaza area off of the field.

B. PROJECT SETTING

Golden Gate Park is the third most visited park in the country.³ The Beach Chalet Athletic Fields are located at the western end of the park, close to the Great Highway and the Beach Chalet Restaurant. Figure 1 illustrates the location of the proposed project. The park is approximately 1,017 acres in size while the Beach Chalet Athletic Facility is approximately 10.9 acres in size. The Beach Chalet Athletic fields are accessible by vehicle from the north, south, east and west by connectors to JFK Drive. Access by foot or bicycle is possible in all major directions through existing pathways and roadways surrounding and through the park.

The project site is located in the western end of the park (west of Crossover Drive), which is less intensely developed than the eastern end of the park yet contains several active recreational areas among the woodland, including the Golf Course, the Archery field, the Bercut Equitation Field, and the

_

³ Center for City Park Excellance, Trust for Public Land. "The Most Visited City Parks," 2007.

46th Avenue playground. The recreational features in the western end of the park are generally located in the lowland meadows while the hills are reserved for woodland. The western end of the park contains eight lakes and there are natural open grassy areas at the Golf Course, Speedway Meadow, Elk Glen Meadow, Lindley Meadow, Polo Fields, Bison Paddock, Disc Golf Course, and the Archery field.

To the south of the project site, the nearest residential areas are located on the south side of Lincoln Way in the Outer Sunset neighborhood, while to the north, the nearest residential area is located on the north side of Fulton Street in the Outer Richmond neighborhood. Both residential areas are located approximately 1,000 feet from the project site. To the west of the project site is the Great Highway and Ocean Beach, while to the east is the Golden Gate Park Golf Course.

The project site consists of four natural turf fields set within a three-sided earthen bowl facing the ocean to the west. The site is bounded by the Great Highway to the west and JFK Drive to the northeast, and includes a bathroom facility, a parking lot, and a maintenance shed to the east of the four fields. The project site is surrounded by landscaped and cultivated trees and shrub, consisting of Monterey cypress, mirror tree, and turf grasses. The project area encompasses landscaped natural turf soccer fields surrounded by landscaped forests and developed driveway/pathways, a parking lot, a restroom and other related facilities.

Other projects proposed or under construction in the vicinity of the project site, which would be considered in the analysis of potential cumulative impacts, include:

- (1) The Millwright Cottage and Murphy Windmill Renovation which includes the historic restoration of the windmill, as well as the seismic stabilization of the adjacent cottage. These projects have been in design and construction over the last eight years and are anticipated to be completed by the end of 2011;
- (2) The Polo Fields Resod project included the removal and replacement of the existing turf and irrigation system with new sod and irrigation equipment. Construction activities were started in September 2010 and concluded in December 2010;
- (3) The Golden Gate Park Stables were scheduled to be renovated several years ago but the private funding for this project did not materialize. The project included new stables to house the horses, a

new main office and reception building and improvements to various stable amenities. In order to make the area safe in the interim, deteriorated bleachers/stables were removed. There is no formal schedule for the remaining work; and

- (4) The San Francisco Public Utilities Commission (SFPUC) Water Treatment Facility is a proposal initiated by the SFPUC to install a water treatment facility above grade in the east end of the Richmond/Sunset Treatment Area. This project is intended to take secondary effluent water and treat it so that it can be used to irrigate Golden Gate Park, Lincoln Park/Golf Course and the Presidio Golf Course. This project is currently in the planning stage and will require approval from all appropriate city agencies.
- (5) San Francisco Planning + Urban Research (SPUR) is currently working with the National Park Service, California State Coastal Conservancy, and SF Public Utilities Commission on a new long-range planning effort for Ocean Beach. The plan is intended to consider issues such as public access, environmental resources, coastal management, infrastructure planning, and interagency coordination. SPUR has conducted public workshops on the process. The project is not currently in the process of environmental review.

Project Objectives

The project sponsor's objectives for the Beach Chalet Soccer Fields renovation project are as follows:

- Increase the amount of athletic play time on the Beach Chalet Soccer Fields.
- Improve public access to the Beach Chalet Soccer Fields.
- Increase ground-sports athletic opportunities on the north side of San Francisco.
- Provide a safe, optimal recreation facility and amenities for athletes, spectators, and park users.
- Reduce ongoing maintenance and resource needs.
- Improve safety and increase nighttime use of the west end of Golden Gate Park.
- Remain consistent with Golden Gate Park Master Plan.

⁴ http://www.spur.org/ocean-beach, accessed on January 25, 2011.

C. COMPATIBILITY WITH EXISTING ZONING AND PLANS

	Applicable	Not Applicable
Discuss any variances, special authorizations, or changes proposed to the <i>Planning Code</i> or Zoning Map, if applicable.		\boxtimes
Discuss any conflicts with any adopted plans and goals of the City or Region, if applicable.		\boxtimes
Discuss any approvals and/or permits from City departments other than the Planning Department or the Department of Building Inspection, or from Regional, State, or Federal Agencies.		

San Francisco General Plan

The San Francisco General Plan, which provides general policies and objectives to guide land use decisions, contains some policies that relate to physical environmental issues. In 2007, the Planning Department reviewed the renovation of athletic playfield complexes at six locations across the city, which included conversion of the fields from grass to synthetic turf, the installation of field lighting, fencing, irrigation, and other landscape and building improvements. The proposed project at Beach Chalet was included in this review. On May 17, 2007, the Department determined that the projects were consistent with the Eight Priority Policies of Section 101.1 of the Planning Code, that there would be no adverse effect on parks and open space or their access to sunlight vistas, and is in conformity with the General Plan.⁵ The proposed project would not obviously or substantially conflict with any such policy, and would be consistent with the San Francisco General Plan and with applicable zoning designations. Since the proposed project is undergoing further environmental review, a General Plan Referral is required.

The General Plan includes a Recreation and Open Space Element, which frames the City's policies regarding parks, recreation facilities, and open spaces. The Recreation and Open Space Element (ROSE) was adopted in 1986, and an update to the ROSE was completed in 2009 and is currently undergoing environmental review. The ROSE addresses use of existing facilities and identifies parameters for planning and development of additional facilities as opportunities arise. Both the 1986 and the 2009 ROSE contain policies that specifically address Golden Gate Park, as well as general policies that are applicable to Golden Gate Park. The proposed project does not obviously or substantially conflict with any policies in either the ROSE or the 2009 draft ROSE Update.

Memorandum from Dean Macris, Director of Planning, to Yomi Agunbiade, General Manager of San Francisco Recreation and Park Department, May 17, 2007.

Plans and Policies

In November 1986, the voters of San Francisco approved Proposition M, the Accountable Planning Initiative, which added Section 101.1 to the Planning Code to establish eight Priority Policies. These policies, and the sections of this Environmental Evaluation addressing the environmental issues associated with the policies, are: (1) preservation and enhancement of neighborhood-serving retail uses; (2) protection of neighborhood character (Question 1c, Land Use); (3) preservation and enhancement of affordable housing (Question 3b, Population and Housing, with regard to housing supply and displacement issues); (4) discouragement of commuter automobiles (Questions 5a,b,f and g, Transportation and Circulation); (5) protection of industrial and service land uses from commercial office development and enhancement of resident employment and business ownership (Question 1C, Land Use); (6) maximization of earthquake preparedness (Questions 13a-d, Geology, Soils, and Seismicity); (7) landmark and historic building preservation (Question 4a, Cultural Resources); and (8) protection of open space (Questions 8a and b, Wind and Shadow, and Questions 9a and c, Recreation). Prior to issuing a permit for any project which requires and Initial Study under the California Environmental Quality Act (CEQA), prior to issuing a permit for any demolition, conversion, or change of use, and prior to taking any action which requires a finding of consistency with the General Plan, the City is required to find that the proposed project or legislation would be consistent with the Priority Policies. As noted above, the consistency of the proposed project with the environmental topics associated with the Priority Policies is discussed in the Evaluation of Environmental Effects, providing information for use in the case report for the proposed project. The case report and approval motions for the proposed project would contain the Department's comprehensive project analysis and findings regarding consistency of the proposed project with the Priority Policies.

Golden Gate Park Master Plan

The Golden Gate Park Master Plan was adopted by the Recreation and Park Commission in October of 1998.⁶ The Park Master Plan is a comprehensive planning document that includes general objectives and policies for the Park, management strategies, and specific objectives and policies relating to Park landscape, circulation, recreation facilities, visitor facilities, buildings and monuments, utilities and infrastructure, Park maintenance and operations and special area plans. As discussed in the Master

⁶ Golden Gate Park Master Plan Final Environmental Impact Report, File No. 95.243E. This document is available for review at 1650 Mission Street, Suite 400, San Francisco, CA.

Plan, the western portion of the Park contains most of its larger meadows, lakes, and relatively natural areas, as well as facilities for activities and sports, and is more pastoral and sylvan than the eastern part.

The Park Master Plan included a proposal for an additional soccer field on the site of the former Richmond Sunset Water Treatment Plan, which is immediately south of the proposed project. Because the use of synthetic turf was not contemplated at the time of the Master Plan's development, there are no recommendations or policies that address synthetic turf. In addition, lighting of the existing grass soccer fields to extend use hours was also not considered because the fields were already at or beyond their use limits for proper maintenance. The Plan addresses lighting in the park by designating night use areas in the park, and lighting in other areas would generally be limited to a minimal amount of street lighting for safety.

The renovation of the Beach Chalet Athletic Fields facility with synthetic turf and lighting for extended use does not appear to conflict with any adopted plans and goals for the City for the purposes of the California Environmental Quality Act (CEQA). As mentioned above, the proposed project would require a General Plan Referral which would analyze the project's consistency with the General Plan.

D. SUMMARY OF POTENTIAL ENVIRONMENTAL EFFECTS

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor. Those environmental topic areas for which the proposed project may result in a potentially significant impact (and which will therefore be discussed in the EIR) and/or for which mitigation would be required to reduce a significant impact to a less-than-significant level are indicated below.

	Land Use	\boxtimes	Air Quality		Geology and Soils
\boxtimes	Aesthetics		Wind and Shadow	\boxtimes	Hydrology and Water Quality
	Population and Housing		Recreation	\boxtimes	Hazards/Hazardous Materials
\boxtimes	Cultural Resources		Utilities and Service Systems		Mineral/Energy Resources
\boxtimes	Transportation and Circulation		Public Services		Agricultural Resources
	Noise	\boxtimes	Biological Resources	\boxtimes	Mandatory Findings of Signif.

E. EVALUATION OF ENVIRONMENTAL EFFECTS

Topics:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
1.	LAND USE AND LAND USE PLANNING— Would the project:					
a)	Physically divide an established community?			\boxtimes		
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the <i>General Plan</i> , specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?					
c)	Have a substantial impact upon the existing character of the vicinity?			\boxtimes		

Impact LU-1: The proposed project would not physically divide an existing community. (Less than Significant)

The project proposes the renovation of four existing grass soccer fields with new synthetic turf and the installation of ten 60-foot-tall athletic field light standards to allow for evening use. Land use impacts are considered significant if they disrupt or divide the physical arrangement of an established community, or if they have a substantial impact on the existing character of the vicinity. The proposed project would increase public recreational use hours, but the project would not cause a significant land use impact as the use of the project site would remain the same. The project would continue the existing athletic use of the site, and the surrounding uses would be expected to continue in operation and to relate to each other as they do presently, without disruption from the proposed project. The proposed project would not disrupt or divide the physical arrangement of existing uses on or adjacent to the project site or impede the passage of persons or vehicles. Therefore, the project would not physically divide an established community and would have a less-than-significant impact. Impacts on the visual character of the site and the historic resources in the area will be discussed in the appropriate sections of the Environmental Impact Report (EIR).

Impact LU-2: The proposed project would be consistent with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. (Less than Significant)

The proposed project would not conflict with applicable plans, policies, and regulations such that an adverse physical change would result (see Section C. Compatibility with Existing Zoning and Plans). In

addition, environmental plans and policies are those, like the *Bay Area Air Quality Plan*, that directly address environmental issues and/or contain targets or standards, which must be met in order to preserve or improve characteristics of the City's physical environment. The proposed project would not obviously or substantially conflict with any such adopted environmental plan or policy. Therefore, the proposed project would have no effect on existing plans and zoning.

Impact LU-3: The proposed project would not have a substantial impact upon the existing character of the project's vicinity. (Less than Significant)

The project site is currently developed with soccer fields, a parking area, and a restroom building. Although the proposed project would change the appearance of the site, and the amount of use of the site is expected to increase, the project would not result in a significant land use impact as the existing use of the project site would remain the same. The project would be consistent with the character of the area in terms of its proposed use and physical compatibility, and would not substantially alter other public use and enjoyment of the park. Therefore, the project would not have a substantial impact upon the existing land use character of the project's vicinity. The EIR will address the impacts of the proposed project on the visual and historic character of the site.

LU-4: The proposed project, in combination with past, present and reasonably foreseeable future projects in the vicinity of the site, would result in less-than-significant cumulative impacts to land use. (Less than Significant)

Cumulative projects in the project vicinity include the Millright Cottage and Murphy Windmill Renovation, the Polo Fields Resod, Golden Gate Park Stables, the SFPUC Water Treatment Facility, and the Ocean Beach Master Plan. With the exception of the Water Treatment Facility, the other park activities mentioned above are generally not changing use or intensifying development. Any land use impact associated with the Water Treatment Facility would not change the land use and impact of the proposed project.

The project would not result in any significant cumulative land use or planning impacts, since it would not divide an established community or cause a substantial adverse change in land use character in the project vicinity, and thus could not contribute to any overall cumulatively considerable change in land use character. The proposed project would also not conflict with any applicable environmental plans.

For the reasons discussed above, the proposed project's impacts related to land use, both individually and cumulatively, are considered less than significant. However, the EIR will include a discussion of

land use for informational purposes. The EIR will also include a discussion of the applicable planning and zoning as well as an evaluation of the project's consistency with such regulations. The EIR will also discuss the project's relationship to the General Plan.

Тор	oics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
2.	AESTHETICS—Would the project:					
a)	Have a substantial adverse effect on a scenic vista?	\boxtimes				
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and other features of the built or natural environment which contribute to a scenic public setting?					
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?					
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area or which would substantially impact other people or properties?					

Impact AE-1: The proposed project would have a potentially significant effect on scenic views and vistas. (Potentially Significant)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf and the installation of ten 60-foot-tall athletic field light standards. The project does not propose new buildings or structures. It is not expected that the project would result in a substantial change to a scenic vista, as no sizable structures that might block views are proposed, and the facility is currently in use as an athletic field. However, the EIR will contain an analysis of visual impacts that will consider scenic vistas, including views of the western portion of Golden Gate Park from offsite locations. In the absence of this information, this impact is considered potentially significant.

Impact AE-2: The proposed project would not substantially damage any scenic resources. (Less than Significant)

No scenic resources exist on or adjacent to the project site, and there would be no effect on scenic resources. The project would involve the removal of trees and shrubs; however these trees and shrubs

are not considered scenic resources because they are part of the overall forested landscape surrounding the park, rather than individually scenic trees or shrubs, and the overall visual character of this vegetation would remain.

Impact AE-3: The proposed project would result in a change to the existing character of the project site and could degrade the visual character or quality of the site and its surroundings. (Potentially Significant)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf and the installation of ten 60-foot-tall athletic field light standards to allow for evening use. The proposed project includes the addition of artificial light, which has the potential to affect the night-time character of the site and park.

The project proposes new fencing, a new maintenance shed, the renovation of the restroom building, and conversion of the grass fields to artificial turf. In addition, the project would introduce new furnishings (benches and bleachers; picnic tables and barbeque pits; and new bicycle racks, drinking fountains, and trash/recycling receptacles) to the project site.

The proposed project has the potential to adversely affect the existing visual character of the project site. This topic will be further discussed in the EIR.

Impact AE-4: The proposed project would create a new source of light and glare, which could adversely affect day or nighttime views in the area and could substantially impact other people or properties. (Potentially Significant)

The project proposes pedestrian lighting for safety and field lighting for nighttime use of the athletic fields. The proposed pedestrian light standards would add minimal indirect lighting to the project site for several hours in the evening while the new 60-foot-tall field light standards may be visible through the trees or from elevated locations from certain views, in particularly at the edge of the Beach Chalet restaurant site and the historic Millwright Cottage/Murphy Windmill site, and the illumination would be visible at night. For these reasons, the proposed project has the potential to result in a significant effect with regard to substantial light and glare, and this topic will be analyzed and evaluated in the EIR.

Impact AE-5: The proposed project, in combination with past, present, and reasonably foreseeable future development in the vicinity, could result in significant impacts to aesthetic resources. (Potentially Significant)

For the reasons discussed above, the proposed project's impacts related to aesthetics, both individually and cumulatively, could result in significant impacts to aesthetic resources, and this topic will be discussed in the EIR.

Тор	oics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
3.	POPULATION AND HOUSING— Would the project:					
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?					
b)	Displace substantial numbers of existing housing units or create demand for additional housing, necessitating the construction of replacement housing?					
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?					

Impact PH-1: The proposed project would not induce substantial population growth in San Francisco, either directly or indirectly. (Less than Significant)

In general, a project would be considered growth inducing if its implementation would result in substantial population increases and/or new development that might not occur if the project were not implemented. While the proposed project would increase use of the Beach Chalet facility, it is intended to address an existing shortage of fields and would not be expected to enable or encourage other growth. While it is the goal of the project sponsor to increase the use of the existing facility, the project would not directly or indirectly result in a significant increase in population. Project-related effects with respect to population growth would be less than significant.

Impact PH-2: The proposed project would not displace substantial numbers of people or existing housing units or create demand for additional housing, necessitating the construction of replacement housing. (No Impact)

As noted above, the project does not include development of any new housing or commercial uses, and there would be no residents displaced as a result of the project.

Impact PH-3: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would have a less-than-significant impact on population and housing. (Less than Significant)

As the project proposes the renovation of an athletic facility, there would be no contribution to any cumulative effect on population and housing. It would not contribute to any population and housing impacts associated with the recycled water facility or with any other potential development in the vicinity. For the reasons discussed above, the proposed project's effects related to population and housing, both individually and cumulatively, are considered less than significant.

Тор	oics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
4.	CULTURAL RESOURCES— Would the project:					
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code?					
b)	Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?					
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?					
d)	Disturb any human remains, including those interred outside of formal cemeteries?					

Impact CP-1: The proposed project is considered historically significant for the purposes of CEQA, and the project could therefore result in potentially significant impacts on historic architectural resources. (Potentially Significant)

The Planning Department determined that the project site is a historical resource as defined under CEQA. Under the California Register Criteria of Significance, Golden Gate Park is historically

significant under Criterion 1 (Events) and Criterion 3 (Architecture) in the areas of landscape architecture and social history as "one of the pioneering examples of the large urban park in the United States" and as "the first naturalistic landscape park in the west." The park is also listed on the national and California Register as a historic district containing 133 contributing resources and 56 non-contributing resources. The soccer fields and the restroom building were constructed in the 1930s and fall within the Golden Gate Park's period of significance (1871 to 1943).

The project would remove the existing natural turf at the soccer fields and replace it with synthetic turf. The project would also modify the restroom building and introduce several new features to the site. The proposed project has the potential to cause a substantial adverse change in the Beach Chalet Athletic Fields or the Golden Gate Park such that the significance of the historic district could be materially impaired. This topic will be discussed in the EIR.

Impact CP-2: The proposed project could result in damage to, or destruction of, as-yet unknown archaeological or human remains, should such remains exist beneath the project site. (Less than Significant)

The project would require excavation to a depth of approximately 10 feet below the existing ground surface (bgs) for the installation of ten 60-foot-tall light standards and approximately 1 foot bgs for other project elements. The Planning Department reviewed the project for impacts to archeological resources and determined that no CEQA-significant archeological resources are expected within project-affected soils.⁸ No mitigation is required.

Impact CP-3: The proposed project would result in a less-than-significant impact to paleontological resources. (No Impact)

There are no known paleontological resources at the project site, nor would any such resources be expected to be present based on the soil characteristics and the absence of any known paleontological resource in the area. Therefore, the proposed project would not be expected to have impacts on paleontological resources.

Nelson, Douglas. NPS Form 10-900, Golden Gate Park. July 2003, revised June 2004. On file for review at the SF Planning Department, National Register Historic District Files, 1650 Mission Street, Suite 400, San Francisco, CA 94103.

Archeological Response for Beach Chalet Athletic Fields Renovation, Memorandum from Don Lewis/Randall Dean, Major Environmental Analysis, January 28, 2010. This document is available for public review at the Planning Department, 1650 Mission Street, 4th Floor, as part of Case File No. 2010.0016E.

Impact CP-4: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, could result in cumulative impacts to cultural resources. (Potentially Significant)

The proposed project would not have cumulative effects on archaeological or paleontological resources, and therefore, the proposed project would not contribute to potentially significant cumulative effects related to archeological or paleontological resources. However, as stated above, the project has the potential to impact historic resources and this topic will be addressed in the EIR.

Тор	oics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
5.	TRANSPORTATION AND CIRCULATION— Would the project:					
a)	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?					
b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways (unless it is practical to achieve the standard through increased use of alternative transportation modes)?					
c)	Result in a change in air traffic patterns, including either an increase in traffic levels, obstructions to flight, or a change in location, that results in substantial safety risks?					
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?					
e)	Result in inadequate emergency access?	\boxtimes				
f)	Result in inadequate parking capacity that could not be accommodated by alternative solutions?					
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., conflict with policies promoting bus turnouts, bicycle racks, etc.), or cause a substantial increase in transit demand which cannot be accommodated by existing or proposed transit capacity or alternative travel modes?					

The proposed project would not result in a change of air traffic patterns, and thus would not result in substantial safety risks related to air traffic. Therefore, topic 5c is not applicable to the proposed project.

Impact TR-1: The proposed project could conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, could conflict with an applicable congestion management program, could result in substantially increased hazards, could result in inadequate emergency access, could conflict with adopted policies, plans, or programs or otherwise decrease the performance or safety of such facilities, or cause a substantial increase in transit demand which cannot be accommodated by existing or proposed transit capacity or alternative travel modes, and could result is significant cumulative impacts. (Potentially Significant)

The proposed project would increase the use of the existing athletic facility, and the trips generated by this intensification would result in increased demand on the local transportation system, including increased transit demand, parking demand, and traffic, which could result in significant transportation impacts.

Project effects on transportation and circulation, including intersection operations, transit demand and impacts on pedestrian and bicycle circulation, and parking, as well as construction impacts, will be analyzed in the EIR.

Тор	oics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
6.	NOISE—Would the project:					
a)	Result in exposure of persons to or generation of noise levels in excess of standards established in the local <i>General Plan</i> or noise ordinance, or applicable standards of other agencies?					
b)	Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?					
c)	Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?					
d)	Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?					
e)	For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?					
f)	For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?					
g)	Be substantially affected by existing noise levels?					

The project site is not within an airport land use plan area, nor is it in the vicinity of a private airstrip. Therefore, topics 6e and 6f are not applicable.

Impact NO-1: The proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity, and it would not expose persons to noise levels in excess of standards established in the local general plan or noise ordinance. (Less than Significant)

The Beach Chalet Athletic Fields is not currently affected by elevated noise levels due to proximity to existing high volumes of traffic and commercial or industrial activity.⁹

There would be no impact to ambient noise levels by the project in operation, because the project does not include construction of buildings, or noise from conditioning indoor air, nor program noise-generating recreational uses. The project site would remain an athletic facility and no new noise exposure of the proposed project is anticipated, as the project site is located in an urban park and is not located in an area with elevated noise levels in the existing environment. Therefore, operational noise would not be significant.

Impact NO-2: During construction, the proposed project would not result in a temporary or periodic increase in ambient noise levels and vibration in the project vicinity above levels existing without the project. (Less than Significant)

Project construction would temporarily increase noise in the project vicinity. Construction equipment would generate noise that could be considered an annoyance by occupants of nearby properties and park users. Noise from construction activities, especially impact tools, could result in noise peaks that may temporarily disrupt recreational activities. However, the improvements are not anticipated to generate noise levels in excess of standards established in the San Francisco General Plan or by the San Francisco Noise Ordinance. Construction noise levels would fluctuate depending on construction phase, equipment type and duration of use, and the distance between noise source and listener. According to the project sponsor, project construction would be approximately 10 months and would require standard earth moving equipment for grading, large trucks for hauling, and a small crane to lift the proposed light standards.

Construction noise is regulated by the San Francisco Noise Ordinance (Article 29 of the *Police Code*), amended in November 2008. The ordinance requires that noise levels from individual pieces of construction equipment, other than impact tools, not exceed 80 dBA at a distance of 100 feet from the

^

 $^{^{9}\ \} Noise\ map\ presented\ on\ DPH\ website: http://www.sfdph.org/dph/EH/Noise/default.asp.\ Assessed\ on\ October\ 19,2010.$

source. Impact tools (jackhammers, hoerammers, impact wrenches) must have both intake and exhaust muffled to the satisfaction of the Director of Public Works. Section 2908 of the Ordinance prohibits construction work between 8:00 p.m. and 7:00 a.m., if noise would exceed the ambient noise level by 5 dBA at the project property line, unless a special permit is authorized by the Director of Public Works. The project must comply with regulations set forth in the Noise Ordinance.

Sensitive receptors are people requiring quiet, for sleep or concentration, such as residences, schools, or hospitals, and people themselves who may be relatively more susceptible to adverse health impacts from their environment, such as immune-compromised individuals, populations with elevated levels of chronic illness, children, and the aged. There are no known sensitive noise receptors surrounding the Beach Chalet Athletic Facility that have the potential to be adversely affected by construction noise. Construction activities other than pile driving typically generate noise levels no greater than 90 dBA (for instance, for excavation) at 50 feet from the activity, while other activities, such as concrete work, are much less noisy. Closed windows typically can reduce daytime interior noise levels to an acceptable level. Although construction noise could be annoying at times, it would not be expected to exceed noise levels commonly experienced in an urban environment, and would not be considered significant. Moreover, no other construction projects are proposed in close enough proximity to the project site such that cumulative effects related to construction noise would be anticipated. The nearest receptors are located in the residential areas approximately 1,000 feet to the north and south of the project site.

Given the above-mentioned City noise regulations and the temporary nature of construction work, construction noise would have a less-than-significant effect on the environment.

Generally, traffic must double in volume to produce a noticeable increase in average noise levels. Traffic volumes are not anticipated to double on area streets as a result of the proposed project; therefore, the proposed project would not cause a noticeable increase in the ambient noise level in the project vicinity, nor would the project contribute to any potential cumulative traffic noise effects.

Impact NO-3: The proposed project would not be substantially affected by existing noise levels. (Less than Significant)

The project site is located in the west end of the Golden Gate Park, and there are no surrounding land uses that generate substantial noise.¹⁰

Impact NO-4: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would result in less-than-significant cumulative noise impacts. (Less than Significant)

As noted in the "Project Setting", there are several projects proposed in the vicinity of the project site. None of the proposed projects are expected to substantially increase traffic noise levels or generate operational noise in excess of typical urban park noise levels. Each of these projects would require environmental review to determine if mitigation and other noise control measures would be required. Therefore, construction noise would be reduced to the maximum extent feasible. Moreover, for each project, the period of noisiest activity would be much less lengthy than the duration of the entire construction period, substantially reducing the potential for overlap between projects' phases of maximum construction noise. Given this, and given that the proposed Beach Chalet Athletic Fields project would not include pile driving, which is typically the most disruptive activity in terms of construction noise, the proposed project would not contribute considerably to any potential cumulative construction noise impacts.

Торі	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
7.	AIR QUALITY Where available, the significance criteria established district may be relied upon to make the following details.				r air pollutio	on control
a)	Conflict with or obstruct implementation of the applicable air quality plan?	\boxtimes				
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?					

 $^{^{10}\ \} Noise\ map\ presented\ on\ DPH\ website:\ http://www.sfdph.org/dph/EH/Noise/default.asp.\ Assessed\ on\ October\ 19,2010.$

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?					
d)	Expose sensitive receptors to substantial pollutant concentrations?					
e)	Create objectionable odors affecting a substantial number of people?					

Impact AQ-1: Implementation of the proposed project could result in conflict or obstruction of the local applicable air quality plan, violate an air quality standard or contribute substantially to an existing or projected air quality violation, result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard, or expose sensitive receptors to substantial pollutant concentrations. (Potentially Significant)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf. Synthetic turf products are known to contain metals and volatile organic compounds (VOCs) that have potential for human health toxicity. Possible routes of exposure to chemicals are inhalation, ingestion, and skin absorption. VOCs are released into the air (called off-gassing) from rubber pellets made from ground-up rubber tires, a fill material used for some synthetic turfs. While there is no demonstrable evidence to date that concludes that synthetic turf results in elevated risks to human health, the EIR would provide further information on the turf. Therefore, the EIR will evaluate the proposed project's air quality impacts.

Impact AQ-2: The proposed project would not create objectionable odors affecting a substantial number of people. (No Impact)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf. The project would not result in a perceptible increase or change in odors on the project site or in the vicinity of the project site, as it would not include uses prone to generation of odors.

Topics:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
8.	GREENHOUSE GAS EMISSIONS— Would the project:					
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?					
a)	Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?					

Environmental Setting

Gases that trap heat in the atmosphere are referred to as greenhouse gases (GHGs) because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHG's has been implicated as the driving force for global climate change. The primary GHGs are carbon dioxide, methane, nitrous oxide, ozone, and water vapor.

While the presence of the primary GHGs in the atmosphere are naturally occurring, carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) are largely emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Emissions of carbon dioxide are largely by-products of fossil fuel combustion, whereas methane results from off-gassing associated with agricultural practices and landfills. Other GHGs include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and are generated in certain industrial processes. Greenhouse gases are typically reported in "carbon dioxide-equivalent" measures (CO₂E).¹¹

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.¹²

26

Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in "carbon dioxide-equivalents," which present a weighted average based on each gas's heat absorption (or "global warming") potential.

¹² California Climate Change Portal. Frequently Asked Questions About Global Climate Change. Available online at: http://www.climatechange.ca.gov/publications/fags.html. Accessed November 8, 2010.

The Air Resources Board (ARB) estimated that in 2006 California produced about 484 million gross metric tons of CO₂E (MMTCO₂E), or about 535 million U.S. tons.¹³ The ARB found that transportation is the source of 38 percent of the State's GHG emissions, followed by electricity generation (both instate and out-of-state) at 22 percent and industrial sources at 20 percent. Commercial and residential fuel use (primarily for heating) accounted for 9 percent of GHG emissions.¹⁴ In the Bay Area, fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) and the industrial and commercial sectors are the two largest sources of GHG emissions, each accounting for approximately 36% of the Bay Area's 95.8 MMTCO₂E emitted in 2007.¹⁵ Electricity generation accounts for approximately 16% of the Bay Area's GHG emissions followed by residential fuel usage at 7%, off-road equipment at 3% and agriculture at 1%.¹⁶

Regulatory Setting

In 2006, the California legislature passed Assembly Bill No. 32 (California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires ARB to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions).

Pursuant to AB 32, ARB adopted a Scoping Plan in December 2008, outlining measures to meet the 2020 GHG reduction limits. In order to meet these goals, California must reduce its GHG emissions by 30 percent below projected 2020 business as usual emissions levels, or about 15 percent from today's levels.¹⁷ The Scoping Plan estimates a reduction of 174 million metric tons of CO₂E (MMTCO₂E) (about 191 million U.S. tons) from the transportation, energy, agriculture, forestry, and high global warming potential sectors, see Table 1, below. ARB has identified an implementation timeline for the GHG reduction strategies in the Scoping Plan.¹⁸ Some measures may require new legislation to implement, some will require subsidies, some have already been developed, and some will require additional

¹³California Air Resources Board (ARB), "California Greenhouse Gas Inventory for 2000-2006— by Category as Defined in the Scoping Plan." http://www.arb.ca.gov/cc/inventory/data/tables/ghg inventory scopingplan 2009-03-13.pdf. Accessed March 2, 2010.

¹⁴ Ibid.

Bay Area Air Quality Management District, Source Inventory of Bay Area Greenhouse Gas Emissions: Base Year 2007, Updated: February 2010. Available online at: http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/Emission%20Inventory/regionalinventory2007 2 10.ashx. Accessed March 2, 2010.

¹⁶ Ibid.

¹⁷ California Air Resources Board, California's Climate Plan: Fact Sheet. Available online at: http://www.arb.ca.gov/cc/facts/scoping-plan-fs.pdf. Accessed March 4, 2010.

California Air Resources Board. AB 32 Scoping Plan. Available Online at: http://www.arb.ca.gov/cc/scopingplan/sp-measures-implementation-timeline.pdf. Accessed March 2, 2010.

effort to evaluate and quantify. Additionally, some emissions reductions strategies may require their own environmental review under CEQA or the National Environmental Policy Act (NEPA).

Table 1. GHG Reductions from the AB 32 Scoping Plan Sectors¹⁹

GHG Reduction Measures By Sector	GHG Reductions (MMT CO₂E)					
Transportation Sector	62.3					
Electricity and Natural Gas	49.7					
Industry	1.4					
Landfill Methane Control Measure (Discrete Early	1					
Action)						
Forestry	5 20.2					
High Global Warming Potential GHGs Additional Reductions Needed to Achieve the GHG	20.2					
Cap	34.4					
Total	174					
Other Recommended Measures						
Government Operations	1-2					
Agriculture- Methane Capture at Large Dairies	1					
Methane Capture at Large Dairies Additional GHG Reduction Measures						
Water	4.8					
Green Buildings	26					
High Recycling/ Zero Waste	20					
Commercial Recycling						
Composting						
Anaerobic Digestion	9					
Extended Producer Responsibility						
Environmentally Preferable Purchasing						
Total	42.8-43.8					

AB 32 also anticipates that local government actions will result in reduced GHG emissions. ARB has identified a GHG reduction target of 15 percent from current levels for local governments themselves and notes that successful implementation of the plan relies on local governments' land use planning and urban growth decisions because local governments have primary authority to plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions.

The Scoping Plan relies on the requirements of Senate Bill 375 (SB 375) to implement the carbon emission reductions anticipated from land use decisions. SB 375 was enacted to align local land use and transportation planning to further achieve the State's GHG reduction goals. SB 375 requires regional transportation plans, developed by Metropolitan Planning Organizations (MPOs), to incorporate a "sustainable communities strategy" in their regional transportation plans (RTPs) that would achieve GHG emission reduction targets set by ARB. SB 375 also includes provisions for

¹⁹ Ibid.

streamlined CEQA review for some infill projects such as transit-oriented development. SB 375 would be implemented over the next several years and the Metropolitan Transportation Commission's 2013 RTP would be its first plan subject to SB 375.

Senate Bill 97 (SB 97) required the Office of Planning and Research (OPR) to amend the state CEQA guidelines to address the feasible mitigation of GHG emissions or the effects of GHGs. In response, OPR amended the CEQA guidelines to provide guidance for analyzing GHG emissions. Among other changes to the CEQA Guidelines, the amendments add a new section to the CEQA Checklist (CEQA Guidelines Appendix G) to address questions regarding the project's potential to emit GHGs.

The Bay Area Air Quality Management District (BAAQMD) is the primary agency responsible for air quality regulation in the nine county San Francisco Bay Area Air Basin (SFBAAB). As part of their role in air quality regulation, BAAQMD has prepared the CEQA air quality guidelines to assist lead agencies in evaluating air quality impacts of projects and plans proposed in the SFBAAB. The guidelines provide procedures for evaluating potential air quality impacts during the environmental review process consistent with CEQA requirements. On June 2, 2010, the BAAQMD adopted new and revised CEQA air quality thresholds of significance and issued revised guidelines that supersede the 1999 air quality guidelines. The 2010 CEQA Air Quality Guidelines provide for the first time CEQA thresholds of significance for greenhouse gas emissions. OPR's amendments to the CEQA Guidelines as well as BAAQMD's 2010 CEQA Air Quality Guidelines and thresholds of significance have been incorporated into this analysis accordingly.

Impact GG-1: The proposed project would generate greenhouse gas emissions, but not in levels that would result in a significant impact on the environment or conflict with any policy, plan, or regulation adopted for the purpose of reducing greenhouse gas emissions. (Less than Significant)

The most common GHGs resulting from human activity are CO₂, CH₄, and N₂O.²⁰ State law defines GHGs to also include hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. These latter GHG compounds are usually emitted in industrial processes, and therefore not applicable to the proposed project. Individual projects contribute to the cumulative effects of climate change by directly or indirectly emitting GHGs during construction and operational phases. Direct operational emissions include GHG emissions from new vehicle trips and area sources (natural gas combustion). Indirect

_

Governor's Office of Planning and Research. *Technical Advisory- CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review.* June 19, 2008. Available at the Office of Planning and Research's website at: http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf. Accessed March 3, 2010.

emissions include emissions from electricity providers, energy required to pump, treat, and convey water, and emissions associated with landfill operations.

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing soccer fields to synthetic turf and the installation of ten 60-foot-tall athletic field light standards to allow for evening use. The proposed project would result in additional vehicle trips and an increase in energy use. The proposed project would not result in an increase in overall water usage when compared to existing conditions but the project would generate indirect emissions from the energy required to pump, treat and convey water. The project would also result in an increase in discarded landfill materials. Therefore, the proposed project would contribute to annual long-term increases in GHGs as a result of operations associated with energy use, water use and wastewater treatment, and solid waste disposal.

As discussed above, the BAAQMD has adopted CEQA thresholds of significance for projects that emit GHGs, one of which is a determination of whether the proposed project is consistent with a Qualified Greenhouse Gas Reduction Strategy, as defined in the 2010 CEQA Air Quality Guidelines. On August 12, 2010, the San Francisco Planning Department submitted a draft of the City and County of San Francisco's Strategies to Address Greenhouse Gas Emissions to the BAAQMD.²¹ This document presents a comprehensive assessment of policies, programs and ordinances that collectively represent San Francisco's Qualified Greenhouse Gas Reduction Strategy in compliance with the BAAQMD's 2010 CEQA Air Quality Guidelines and thresholds of significance.

San Francisco's GHG reduction strategy identifies a number of mandatory requirements and incentives that have measurably reduced greenhouse gas emissions including, but not limited to, increasing the energy efficiency of new and existing buildings, installation of solar panels on building roofs, implementation of a green building strategy, adoption of a zero waste strategy, a construction and demolition debris recovery ordinance, a solar energy generation subsidy, incorporation of alternative fuel vehicles in the City's transportation fleet (including buses and taxis), and a mandatory composting ordinance. The strategy also identifies 42 specific regulations for new development that would reduce a project's GHG emissions.

San Francisco's climate change goals as are identified in the 2008 Greenhouse Gas Reduction Ordinance as follows:

_

²¹ San Francisco Planning Department. *Strategies to Address Greenhouse Gas Emissions in San Francisco*. 2010. The final document is available online at: http://www.sfplanning.org/index.aspx?page=1570.

- By 2008, determine the City's 1990 GHG emissions, the baseline level with reference to which target reductions are set;
- Reduce GHG emissions by 25 percent below 1990 levels by 2017;
- Reduce GHG emissions by 40 percent below 1990 levels by 2025; and
- Reduce GHG emissions by 80 percent below 1990 levels by 2050.

The City's 2017 and 2025 GHG reduction goals are more aggressive than the State's GHG reduction goals as outlined in AB 32, and consistent with the State's long-term (2050) GHG reduction goals. San Francisco's Strategies to Address Greenhouse Gas Emissions identifies the City's actions to pursue cleaner energy, energy conservation, alternative transportation and solid waste policies, and concludes that San Francisco's policies have resulted in a reduction in greenhouse gas emissions below 1990 levels, meeting statewide AB 32 GHG reduction goals. As reported, San Francisco's 1990 GHG emissions were approximately 8.26 million metric tons (MMT) CO2E and 2005 GHG emissions are estimated at 7.82 MMTCO2E, representing an approximately 5.3 percent reduction in GHG emissions below 1990 levels.

The BAAQMD reviewed San Francisco's Strategies to Address Greenhouse Gas Emissions and concluded that the strategy meets the criteria for a Qualified GHG Reduction Strategy as outlined in BAAQMD's CEQA Guidelines (2010) and stated that San Francisco's "aggressive GHG reduction targets and comprehensive strategies help the Bay Area move toward reaching the State's AB 32 goals, and also serve as a model from which other communities can learn."²²

Based on the BAAQMD's 2010 CEQA Air Quality Guidelines, projects that are consistent with San Francisco's Strategies to Address Greenhouse Gas Emissions would result in a less than significant impact with respect to GHG emissions. Furthermore, because San Francisco's strategy is consistent with AB 32 goals, projects that are consistent with San Francisco's strategy would also not conflict with the State's plan for reducing GHG emissions. As discussed in San Francisco's Strategies to Address Greenhouse Gas Emissions, new development and renovations/alterations for private projects and municipal projects are required to comply with San Francisco's ordinances that reduce greenhouse gas emissions. Applicable requirements for a municipal project are shown below in Table 2.

_

Letter from Jean Roggenkamp, BAAQMD, to Bill Wycko, San Francisco Planning Department. October 28, 2010. This letter is available online at: http://www.sfplanning.org/index.aspx?page=1570. Accessed November 12, 2010.

Table 2. Regulations Applicable to the Proposed Project

Regulation	Requirement	Project	Discussion
	requirement	Compliance	21004351011
	Transportation	on Sector	
Commuter Benefits Ordinance (Environment Code, Section 421)	All City employees are offered commuter benefits for transit and vanpool expenses. The City Hall bike room provides secure bicycle parking, showers and lockers for bicycle commuters. City employees are also eligible for telecommuting and alternative work schedules.	 ☑ Project Complies ☑ Not Applicable ☑ Project Does Not Comply 	The proposed project is a municipal project that would be required to comply with all City ordinances.
Emergency Ride Home Program	All City employees are automatically eligible for the emergency ride home program.	 ☑ Project Complies ☑ Not Applicable ☑ Project Does Not Comply 	The proposed project is a municipal project that would be required to comply with all City ordinances.
Healthy Air and Smog Ordinance (Environment Code, Chapter 4)	Requires all new purchases or leases of passenger vehicles and light-duty trucks to be the cleanest and most efficient vehicles available on the market. There are also requirements for medium and heavy duty vehicles and for phasing out highly polluting vehicles (diesel MUNI buses).	 ☑ Project Complies ☑ Not Applicable ☑ Project Does Not Comply 	The proposed project is a municipal project that would be required to comply with all City ordinances.
Biodeisel for Municipal Fleets (Executive Directive 06-02)	Requires all diesel using City Departments to begin using biodiesel (B20). Sets goals for all diesel equipment to be run on biodiesel by 2007 and goals for increasing biodiesel blends to B100.	 ☑ Project Complies ☑ Not Applicable ☑ Project Does Not Comply 	The proposed project is a municipal project that would be required to comply with all City ordinances.
Clean Construction Ordinance (Administrative Code, Section 6.25)	Effective March 2009, all contracts for large (20+ day) City projects are required to: • Fuel diesel vehicles with B20 biodiesel, and • Use construction equipment that meet USEPA Tier 2 standards or best available control technologies for equipment over 25 hp.	 ☑ Project Complies ☑ Not Applicable ☑ Project Does Not Comply 	The proposed project is a municipal project that would be required to comply with all City ordinances.
Bicycle Parking in City-Owned and Leased Buildings (Planning Code, Section 155.1)	Class 1 and 2 Bicycle Parking Spaces Class 1 Requirements: (A) Provide two spaces in buildings with 1-20 employees. (B) Provide four spaces in buildings with 21 to 50 employees. (C) In buildings with 51 to 300 employees, provide bicycle parking equal to at least five percent of the number of	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply	The proposed project does not involve the construction of a new building.

Regulation	Requirement	Project Compliance	Discussion
	employees at that building, but no fewer than five bicycle spaces. (D) In buildings with more than 300 employees, provide bicycle parking equal to at least three percent of the number of employees at that building, but no fewer than 16 bicycle spaces. In addition to the Class 1 bicycle parking spaces provide Class 2 bicycle parking. Class 2 Requirements: (A) In buildings with one to 40 employees, at least two bicycle parking spaces shall be provided. (B) In buildings with 41 to 50 employees, at least four bicycle parking spaces shall be provided. (C) In buildings with 51 to 100 employees, at least six bicycle parking spaces shall be provided. (D) In buildings with more than 100 employees, at least eight bicycle parking spaces shall be provided. Wherever a responsible City official is required to provide eight or more Class 2 bicycle parking spaces, at least 50 percent of those	Compliance	
Bicycle parking in parking garages (Planning Code, Section 155.2)	parking spaces shall be covered. (A) Every garage will supply a minimum of six bicycle parking spaces. (B) Garages with between 120 and 500 automobile spaces shall provide one bicycle space for every 20 automobile spaces. (C) Garages with more than 500 automobile spaces shall provide 25 spaces plus one additional space for every 40 automobile spaces over 500 spaces, up to a maximum of 50 bicycle parking spaces.	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply	The proposed project does not involve the construction of a new building or garage.
Transportation Management Programs (Planning Code, Section 163)	Requires new buildings or additions over a specified size (buildings >25,000 sf or 100,000 sf depending on the use and zoning district) within certain zoning districts (including downtown and mixed-use districts in the City's eastern neighborhoods and south of market) to implement a Transportation Management Program and provide onsite transportation management brokerage services for the life of the building.	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply	The proposed project does not involve the construction of a new building or addition.

Regulation	Requirement	Project Compliance	Discussion
	Energy Efficien		
Resource Efficiency and Green Building Ordinance (Environment Code, Chapter 7)	The ordinance specifies requires for all city buildings as well as requirements for construction and demolition debris recycling, and requirement for new construction. All new construction must comply achieve at a minimum the LEED® Silver standard. These buildings are required to perform commissions to ensure achievement of design standards. All other buildings are required to meet the following minimum specifications related to energy efficiency: 1. Toilets must use no more than 1.6 gal/flush 2. Showerheads must use no more than 1.5 gal/ min. 3. All lighting and electrical fixtures must meet specified requirements. 4. All fluorescent lamps must be replaced	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply	The proposed project does not involve the construction of a new building.
	Waste Reducti	on Sector	
Resource Efficiency and Green Building Ordinance (Environment Code, Chapter 7)	The ordinance requires all demolition (& new construction) projects to prepare a Construction and Demolition Debris Management Plan designed to recycle construction and demolition materials to the maximum extent feasible, with a goal of 75% diversion. The ordinance specifies requires for all city buildings to provide adequate recycling space	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply	The proposed project does not involve the demolition of an existing building or the construction of a new building.
Resource Conservation Ordinance (Environment Code, Chapter 5)	This ordinance establishes a goal for each City department to (i) maximize purchases of recycled products and (ii) divert from disposal as much solid waste as possible so that the City can meet the state-mandated 50% division requirement. Each City department shall prepare a Waste Assessment. The ordinance also requires the Department of the Environment to prepare a Resource Conservation Plan that facilitates waste reduction and recycling. The ordinance requires janitorial contracts to consolidate recyclable materials for pick up. Lastly, the ordinance specifies purchasing requirements for paper products.	 ☑ Project Complies ☑ Not Applicable ☑ Project Does Not Comply 	The proposed project is a municipal project that would be required to comply with all City ordinances.
Mandatory Recycling and Composting	The mandatory recycling and composting ordinance requires all persons in San Francisco to separate	Project Complies	The proposed project is a municipal project that would be required to comply with all City ordinances.

Regulation	Requirement	Project Compliance	Discussion
Ordinance (Environment Code, Chapter 19)	their refuse into recyclables, compostables and trash, and place each type of refuse in a separate container designated for disposal of that type of refuse.	☐ Not Applicable ☐ Project Does Not Comply	
Construction Recycled Content Ordinance (Administrative Code, Section 6.4)	Ordinance requires the use of recycled content material in public works projects to the maximum extent feasible and gives preference to local manufacturers and industry.	 ☑ Project Complies ☑ Not Applicable ☑ Project Does Not Comply 	The proposed project is a municipal project that would be required to comply with all City ordinances.
	Environment/Conse	ervation Sector	
Street Tree Planting Requirements for New Construction (Planning Code Section 143)	Planning Code Section 143 requires new construction, significant alterations or relocation of buildings within many of San Francisco's zoning districts to plant on 24-inch box tree for every 20 feet along the property street frontage	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply	The proposed project does not involve the construction of a new building.
Environmentally Preferable Purchasing Ordinance (Formerly Precautionary Purchasing Ordinance)	Requires City Departments to purchase products on the Approved Green Products List, maintained by the Department of the Environment. The items in the Approved Green Products List has been tested by San Francisco City Depts. and meet standards that are more rigorous than ecolabels in protecting our health and environment.	 ☑ Project Complies ☑ Not Applicable ☑ Project Does Not Comply 	The proposed project is a municipal project that would be required to comply with all City ordinances.
Tropical Hardwood and Virgin Redwood Ban (Environment Code, Chapter 8)	The ordinance prohibits City departments from procuring, or engaging in contracts that would use the ordinance-listed tropical hardwoods and virgin redwood.	 ☑ Project Complies ☑ Not Applicable ☑ Project Does Not Comply 	The proposed project is a municipal project that would be required to comply with all City ordinances.
Wood Burning Fireplace Ordinance (San Francisco Building Code, Chapter 31, Section 3102.8)	Bans the installation of wood burning fire places except for the following: • Pellet-fueled wood heater • EPA approved wood heater • Wood heater approved by the Northern Sonoma Air Pollution Control District	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply	The proposed project does not involve the construction of a new building.
Regulation of Diesel Backup Generators (San Francisco Health Code, Article 30)	Requires: All diesel generators to be registered with the Department of Public Health All new diesel generators must be equipped with the best available air emissions control technology.	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply	The proposed project would not require a diesel backup generator.

Depending on a proposed project's size, use, and location, a variety of controls are in place to ensure that a proposed project would not impair the State's ability to meet statewide GHG reduction targets outlined in AB 32, nor impact the City's ability to meet San Francisco's local GHG reduction targets. Given that: (1) San Francisco has implemented regulations to reduce greenhouse gas emissions specific to new construction and renovations of private developments and municipal projects; (2) San Francisco's sustainable policies have resulted in the measured success of reduced greenhouse gas emissions levels; (3) San Francisco has met and exceeded AB 32 greenhouse gas reduction goals for the year 2020; (4) current and probable future state and local greenhouse gas reduction measures will continue to reduce a project's contribution to climate change; and (5) San Francisco's Strategies to Address Greenhouse Gas Emissions meet BAAQMD's requirements for a Qualified GHG Reduction Strategy, projects that are consistent with San Francisco's regulations would not contribute significantly to global climate change. The proposed project would be required to comply with these requirements, and was determined to be consistent with San Francisco's Strategies to Address Greenhouse Gas Emissions.²³ As such, the proposed project would result in a less than significant impact with respect to GHG emissions.

The San Francisco Recreation and Park Department's (RPD) actions to reduce operational greenhouse gas emissions toward the City's goal of an 80 percent reduction by 2050 include the following: (1) Energy Efficiency and Conservation: The RPD is working with the Energy Efficiency Services of the San Francisco Public Utilities Commission (PUC) to reduce energy use through the selection of operational equipment such as electrical fixtures and sprinkler heads, design standards enforcement, and use of the San Francisco Greening Checklist for exterior spaces; (2) Renewable Energy Generation: The RPD is working with the PUC to assess its facilities' solar potential and identify potential co-generation sites; (3) Information Technology (IT): IT energy conservation measures include power management tools for all personal computers and monitors. The RPD plan includes full compliance by the third quarter of fiscal year 2010 with the City's adopted policy of the Committee on Information Technology (COIT); (4) Green Building: The RPD plan includes compliance with the City's Environmental Code to achieve Leadership in Energy and Environmental Design (LEED) certification; (5) Fleets and Fuel: The RPD has identified specific plans to retire older vehicles to achieve fuel savings, maintenance cost savings, and lower residual costs for older vehicles. Further, the RPD only purchases clean light-duty passenger cars and trucks; (6) Employee Commute: The RPD plan includes measures

Greenhouse Gas Analysis: Compliance Checklist. January 25, 2011. This document is on file and available for public review in Case File No. 2010.0016E at the Planning Department, 1650 Mission Street, Suite 400.

to reduce vehicle trips traveled by promoting alternative transportation incentives to its employees; (7) Zero Waste: The RPD is close to realizing its goal of 100 percent compliance with the City's recycling initiative; (8) Green Product Purchasing: The RPD uses the City's Approved Catalog to purchase environmentally conscious products; (9) Carbon Sequestration: The RPD promotes the City's urban forestry program through tree planting campaigns and supports other City departments in their participation in the urban forest program; and (10) Community Wide Emissions: The RPD actions include providing community support to reduce greenhouse gas emissions through programs related to recycling, biodiversity, bicycling, and community education.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
9.	WIND AND SHADOW—Would the project:					
a)	Alter wind in a manner that substantially affects public areas?					
b)	Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas?					

Impact WS-1: The proposed project would not alter wind in a matter that substantially affects public areas. (Less than Significant)

The proposed project would not include buildings or other structures that would alter wind on the newly renovated project site, nor on surrounding development. The proposed light standards would not be of sufficient bulk to create substantial ground-level wind acceleration. Therefore, the project would not result in significant effects related to wind.

Impact WS-2: The proposed project would not create new shadow in a manner that could substantially affect outdoor recreation facilities or other public areas. (Less than Significant)

Section 295 of the *Planning Code* was adopted in response to Proposition K (passed November 1984) in order to protect certain public open spaces from shadowing by new structures during the period between one hour after sunrise and one hour before sunset, year round. Section 295 restricts new shadow upon public spaces under the jurisdiction of the Recreation and Park Department by any structure exceeding 40 feet unless the City Planning Commission finds the impact to be insignificant. The proposed project would not include buildings or other structures that would cast substantial

shadows on the Beach Chalet Athletic Facility, nor on surrounding park property. The proposed light standards would be greater than 40 feet tall but would not be of sufficient bulk to cast substantial shadow. Therefore, no shadow effects would ensue as a result of the proposed project.

Impact WS-3: The proposed project, in combination with other past, present, or reasonably foreseeable future projects, would not result in significant cumulative wind and shadow impacts. (Less than Significant)

The proposed project would not contribute to any cumulative significant wind or shadow impacts.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
10.	RECREATION—Would the project:					
a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?					
b)	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?					
c)	Physically degrade existing recreational resources?	\boxtimes				

Impact RE-1: The proposed project would increase the use of existing neighborhood parks or other recreational facilities, but not to an extent that substantial physical deterioration of the facilities would occur or be accelerated. (Less than Significant)

The proposed project would renovate the existing athletic facility in order to increase the amount of playable time. The existing grass soccer fields are currently in poor condition and replacing these fields with synthetic turf would be intended to increase the safety, performance, and accessibility of the fields while reducing maintenance costs and water usage. The proposed project would include new pedestrian pathways, a new picnic area with picnic tables and barbeque pits, and a new playground area. Therefore, the proposed project would not result in a substantial physical deterioration of the existing athletic facility. Nonetheless, this topic would be discussed in the EIR for information purposes.

Impact RE-2: The project would require the construction of recreational facilities that may have a significant effect on the environment. (Potentially Significant)

The project site is a recreational facility that would be renovated in order to increase the amount of playable times at this existing facility. The project would include a recreation facility, but would not create an additional indirect need for additional recreation facilities. The impacts of the recreation facility construction are analyzed in this Initial Study and will be further analyzed in the EIR, and the EIR will conclude whether impacts associated with recreational facility construction would be significant.

Impact RE-3: The proposed project could physically degrade existing recreational facilities. (Potentially Significant)

The proposed project would renovate the existing athletic facility by converting the four existing grass soccer fields to synthetic turf. The soccer fields are used by the public for other activities besides soccer although the facility is programmed for soccer use, and the project site is located in an area of the city that provides other recreation opportunities. This issue will be analyzed in the EIR to determine if there would be a substantial loss of recreation opportunities with the proposed project.

Impact RE-4: The proposed project could considerably contribute to recreational impacts in the project site vicinity. (Potentially Significant)

Potential cumulative impacts will be considered in the EIR.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
11.	UTILITIES AND SERVICE SYSTEMS—Would the project:					
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?					
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?					
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?					
d)	Have sufficient water supply available to serve the project from existing entitlements and resources, or require new or expanded water supply resources or entitlements?					

Topics:		Potentially Significant Impact	Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
e)	Result in a determination by the wastewater treatment provider that would serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?					
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?					
g)	Comply with federal, state, and local statutes and regulations related to solid waste?					

Loce Than

Impact UT-1: Implementation of the proposed project would result in no effect on wastewater collection and treatment facilities. (No Impact)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf and the installation of ten 60-foot-tall athletic field light standards. The project would not require substantial expansion of wastewater/stormwater treatment facilities or an extension of a sewer trunk line as the project site is currently served by existing facilities.

Impact UT-2: Implementation of the proposed project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (Less than Significant)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf and the installation of ten 60-foot-tall athletic field light standards. The project sponsor's current plan is to capture storm water and deliver it to the storm water system using Best Management Practices established by the SFPUC. RPD would work closely with SFPUC, and other governing agencies, to determine whether the storm water could be recharged back into the water table. Regardless of the use of storm water recharge, the existing storm water drainage facilities would be adequate to accommodate the site's drainage, and implementation of the proposed project would not require the construction of new storm water drainage facilities or expansion of existing facilities.

Impact UT-3: The SFPUC has sufficient water supply and entitlements to serve the proposed project, and implementation of the proposed project would not require expansion or construction of new water treatment facilities. (Less than Significant)

The project proposes the renovation of the Beach Chalet Athletic Fields facility, including the conversion of four existing grass soccer fields to synthetic turf and the installation of ten 60-foot-tall athletic field

light standards. The new synthetic surface requires no irrigation and implementation of the proposed project would reduce water use by up to the 1.5 million gallons of water used per field each year. The existing grass soccer fields are currently irrigated using groundwater. With the installation of synthetic turf, this groundwater (approximately 6 million gallons/annual) would no longer be required and would remain in the aquifer. Any reduction in natural ground water recharge would appear to be offset by the reduction in water use resulting from the discontinuation of soccer field irrigation. Therefore, the proposed improvements would not substantially increase the existing demand for water consumption, and the proposed project would not have a significant effect on water supply.

Impact UT-4: The proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. (Less than Significant)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf and the installation of ten 60-foot-tall athletic field light standards. Synthetic turf has a warranty of eight years and the project sponsor anticipates that the expectancy of these fields would be between ten and twelve years based on research at other similar installations. Through the Synthetic Playfields Task Force, an end-of-life recycling program for synthetic turf, which includes stringent purchasing standards and recommends purchasing turf from companies that use recycled content, is in place. San Francisco's solid waste, following the sorting of recyclable materials at the Recology transfer station near Candlestick Park, is disposed of at the Altamont Landfill in Alameda County and is required to meet federal, state and local solid waste regulations. With waste diversion and expansions that have occurred at the Altamont Landfill, there is adequate capacity to accommodate San Francisco's solid waste. Given the nature of the proposed improvements which do not include residential or commercial uses, the proposed project would not substantially increase solid waste volumes and impacts from solid waste generation or impacts on solid waste facilities would be less than significant.

Impact UT-5: The construction and operation of the proposed project would follow all applicable statutes and regulations related to solid waste. (Less than Significant)

Solid waste generated in San Francisco is transported to and disposed of at the Altamont Landfill. The landfill has a permitted peak maximum daily disposal of 11,150 tons per day and is currently operating at approximately 4,000 to 5,000 tons per day. The landfill has an annual solid waste capacity of 2,226,500 tons for the City of San Francisco. However, the City is well below its allowed capacity, generating approximately 550,000 tons of solid waste in 2005.

Recycling, composting, and waste reduction efforts are expected to increasingly divert waste from the landfill. The City Board of Supervisors adopted a plan in 2002 to recycle 75 percent of annual wastes generated by 2010. The project would be expected to participate in the City's recycling and composting programs and other efforts to reduce the solid waste disposal stream. The Altamont Landfill is expected to remain operational for 20 or more years, and has current plans to increase capacity by adding 250 additional acres of fill area. With the City's increase in recycling efforts and the Altamont Landfill expansion, the City's solid waste disposal demand could be met through at least 2026. Given the existing and anticipated increase in solid waste recycling and the proposed landfill expansion in size and capacity, and the fact that no residential or commercial uses are proposed, the impacts on solid waste facilities from the project would be less than significant.

Impact UT-6: In combination with past, present, and reasonably foreseeable future development in the project site vicinity, the proposed project would have a less-than-significant cumulative impact on utilities and service systems. (Less than Significant)

Given that existing service management plans address anticipated growth in the region and the nature of the proposed project which does not include residential or commercial uses, the project would not have a significant cumulative effect on utility service provision or facilities.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact	Not Applicable
12.	PUBLIC SERVICES— Would the project:					
a)	Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any public services such as fire protection, police protection, schools, parks, or other services?					

Impact PS-1: The proposed project would not increase demand for police service, and would not result in substantial adverse impacts associated with the provision of such service. (Less than Significant)

The proposed project includes additional lighting and promotes nighttime activity in the area. The anticipated increased intensity of use is not expected to either increase the service calls to the San

Francisco Police Department (SFPD) or increase crime prevention activities and additional policing of the project area. The closest police station to the Beach Chalet Athletic Facility is the Richmond Station located at 461 6th Avenue. No new stations are proposed in the project vicinity; however, the proposed project is consistent with planned and expected growth and the SFPD has sufficient resources to accommodate the proposed project. Given the nature of the proposed project, it would not necessitate the construction of a new police station. Overall, the project would not have a significant effect on police protection services.

Impact PS-2: The proposed project would not increase demand for fire protection services, and would not result in substantial adverse impacts associated with the provision of such service. (Less than Significant)

The project site is served by San Francisco Fire Department Station No. 23, located at 1348 45th Avenue at Judah Street, and by Station No. 34, located at 499 41st Avenue at Geary Boulevard. The proposed project is not expected to increase the demand for fire protection services within the project area. By implementation of the proposed project, the number of calls for services from the renovated facility could increase as a result of increased recreational use but would not likely be substantial in light of the existing demand and capacity for fire suppression and emergency medical services in the City. The proposed project would also not create the need for new fire protection facilities that would result in impacts to the physical environment. Overall, the proposed project would result in less-than-significant impacts related to fire protection services.

Impact PS-3: The proposed project would not directly or indirectly generate school students and there would be no impact on existing school facilities. (No Impact)

The proposed project would not contribute to the need for new school facilities, and would result in no impacts to the physical environment.

Impact PS-4: The proposed project would result in an incremental increase in the use of nearby parks, but this increased use would result in a less than significant impact. (Less than Significant)

The renovation of Beach Chalet Athletic Fields with lights and synthetic turf would increase the amount of playable time on these fields in the Golden Gate Park. Currently, the existing fields can host 4,738 hours of annual play while the proposed project would add 9,582 hours of new play each year, for a total of 14,320 hours. Given the nature of the proposed project, which would improve the existing athletic facility with the intent for increased use, the project would not necessitate the need for new or physically altered parks.

The total area of the four fields would be approximately 314,000 square feet in size. Although the soccer fields are used for other purposes, the existing and proposed fields are intended for soccer use. The natural turf on the periphery of the soccer fields would remain at the project site. The loss of the natural turf soccer fields (about 7 acres) would represent a loss of grassy areas. However, there are similar open grassy areas near the project area (e.g. the nearby golf course and the archery range). Additional open areas are present at Lake Merced, Stern Grove/Pine Lake Park, McCoppin Square, Sutro Heights Park, Lincoln Park, and also at scattered lawns and open spaces along the Great Highway, at Fort Funston, and on nearby Golden Gate National Recreation Area (GGNRA) lands.

Impact PS-5: The proposed projects would increase demand for government services, but not to the extent that would result in significant physical impacts. (No Impact)

The proposed project would not increase the demand for libraries, community centers, and other public facilities.

Impact PS-6: The proposed project, combined with past, present, and reasonably foreseeable future projects in the vicinity, would result in less-than-significant cumulative impacts to public services. (Less than Significant)

The proposed project is not expected to incrementally increase demand for public services, especially not beyond levels anticipated and planned for by public service providers. Thus, project-related impacts to public services would not be cumulatively considerable.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact	Not Applicable
13.	BIOLOGICAL RESOURCES— Would the project:					
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?					
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?					
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?					

Topics:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact	Not Applicable
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?					
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?					
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?					

The project area does not contain any wetlands as defined by Section 404 of the Clean Water Act. Therefore, topic 12c is not applicable to the proposed project.

Impact BI-1: The proposed project could have an (1) impact on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service, (2) could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, (3) could conflict with local tree protection regulations, (4) could conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, and (5) could make a contribution to cumulative biological impacts. (Potentially Significant)

The project site provides suitable forage and shelter for a wide variety of common and uncommon (migratory) wildlife bird species. The non-native landscape trees that line the soccer fields may provide suitable nesting habitat for a variety of common bird species. Construction of the project would eliminate about seven acres of natural turf that is utilized for foraging by a variety of wildlife species. The loss of the natural turf would incrementally reduce foraging habitat for common and migratory birds in the region. The proposed project would require the removal of 44 shrubs and 14 trees located within and immediately adjacent to the project area and could have an effect in nesting birds. In addition, the project proposes the installation of ten 60-foot-tall light standards. The project site is not currently lit at night, and the new lighting could create a new strike hazard for birds and may also disrupt the flight paths of migratory birds. Therefore, the project has the potential to impact biological resources, and this topic will be analyzed and evaluated in the EIR.

Тор	ics:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
14.	_	OLOGY AND SOILS— ould the project:					
a)	sub	pose people or structures to potential ostantial adverse effects, including the risk of s, injury, or death involving:					
	i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)					
	ii)	Strong seismic ground shaking?			\boxtimes		
	iii)	Seismic-related ground failure, including liquefaction?					
	iv)	Landslides?				\boxtimes	
b)		sult in substantial soil erosion or the loss of soil?			\boxtimes		
c)	Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onor off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?						
d)	Tab	located on expansive soil, as defined in ole 18-1-B of the Uniform Building Code, ating substantial risks to life or property?					
e)	the disp	ve soils incapable of adequately supporting use of septic tanks or alternative wastewater posal systems where sewers are not available the disposal of wastewater?					
f)		ange substantially the topography or any que geologic or physical features of the site?					

The project site is not located on expansive soil and septic tanks and/or alternative waste water disposal systems would not be required. As such, topic 13d and 13e are not discussed in detail below.

Impact GE-1: The proposed project would result in exposure of people and structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, expansive soils, seismic ground-shaking, liquefaction, or lateral spreading, but the impact would be less-than-significant. (Less than Significant)

The San Francisco General Plan Community Safety Element contains maps that show areas of the City subject to geologic hazards. These maps indicate that the project site is located in an area subject to nonstructural damage ground shaking from earthquakes along the San Andreas (Map 2) and Northern Hayward (Map 3) Faults, and other faults in the San Francisco Bay Area. The project site is located in

an area of liquefaction potential (Map 4) and is not located within a tsunami run-up area (Map 6). The project site is not within a mapped area of potential landslide hazard (Map 5) or subject to potential inundation due to reservoir failure (Map 7).

The proposed project would be expected to be subject to nonstructural damage ground shaking, corresponding to a Modified Mercalli Scale shaking intensity of VII,²⁴ from an earthquake along the San Andreas or Hayward faults. In addition, as previously mentioned, the project is located in areas of liquefaction potential.²⁵

A range of effects due to ground shaking could occur in the event of an earthquake on one of the regional faults, including structural damage directly from ground shaking, or from secondary effects, such as differential settlement, lateral spreading, and liquefaction. Such damage could place people at risk of injury, and differential settlement can fracture or sever underground utility conduits.

The final building plans for the proposed fencing, light poles, and restroom building would be reviewed by the Department of Building Inspection (DBI). In reviewing building plans, DBI refers to a variety of information sources to determine existing hazards and assess requirements for mitigation. Sources reviewed include maps of Special Geologic Study Areas and known landslide areas in San Francisco as well as the building inspectors' working knowledge of areas of special geologic concern. Potential geologic hazards would be mitigated during the permit review process through these measures. To ensure compliance with all Building Code provisions regarding structure safety, when DBI reviews the geotechnical report and building plans for a proposed project, they will determine the adequacy of necessary engineering and design features. Past geological and geotechnical investigations would be available for use by DBI during its review of building permits for the site. Also, DBI could require that additional site-specific soils report(s) be prepared in conjunction with permit applications, as needed. Therefore, potential damage to structures from geologic hazards on the project site would be mitigated through DBI's requirement for a geotechnical report and review of the building permit application pursuant to DBI implementation of the Building Code.

The impacts would therefore be less than significant.

The Modified Mercalli (MM) intensity scale is commonly used to measure, and to describe in lay terms, earthquake effects due to ground shaking. The MM values for intensity range from I (earthquake not felt) to XII (damage nearly total). Intensities ranging from IV to X could cause moderate to significant structural damage.

²⁵ City and County of San Francisco, Community Safety Element, General Plan, April 1997.

Impact GE-2: The proposed project site would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. (No Impact).

As shown on the official State of California Seismic Hazards Zone Map for San Francisco prepared under the Seismic Hazards Mapping Act of 1990,²⁶ the project site does not lie within an area subject to landslide (Map 5 of the Community Safety Element). Therefore, there would be no impact.²⁷

Impact GE-3: The proposed projects would not result in substantial loss of topsoil or erosion. (Less than Significant)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf. Soil would be removed, but not in a manner that increases the potential for erosion or dust generation. This impact would be less than significant.

Impact GE-4: The proposed project would not result in impacts to site topographical features. (No Impact)

The proposed project is located in the western part of San Francisco in close proximity to Ocean Beach and is generally flat with no unique topography. The proposed project would have no impact with respect to topographical features of the site.

Impact GE-5: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the site vicinity, would result in less-than-significant impacts related to geology and soils. (Less than Significant)

Geological impacts are generally site-specific and the proposed project would not have the potential to have cumulative effects with other projects. Cumulative development would be subject to the same design review and safety measures as the proposed project. These measures would render the geologic effects of cumulative project to less-than-significant levels. Thus, the project would not have a significant effect on geological or soil resources, nor would the project contribute to any significant cumulative effects on geology or soils.

²⁶ The Seismic Hazards Mapping Act was developed to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and from other hazards caused by earthquakes. This act requires the State Geologist to delineate various seismic hazards zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones.

²⁷ City and County of San Francisco, Community Safety Element, General Plan, April 1997.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact	Not Applicable
15.	HYDROLOGY AND WATER QUALITY— Would the project:					
a)	Violate any water quality standards or waste discharge requirements?					
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?					
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion of siltation on- or off-site?					
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?					
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?					
f)	Otherwise substantially degrade water quality?	\boxtimes				
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other authoritative flood hazard delineation map?					
h)	Place within a 100-year flood hazard area structures that would impede or redirect flood flows?					
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?					
j)	Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?					

Impact HY-1: The proposed project has the potential to violate water quality standards or otherwise substantially degrade water quality. (Potentially Significant)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf. Some of the materials found in synthetic turf contain heavy metals, such as zinc, that have the potential to leach into groundwater and the

environment. Therefore, the proposed project has the potential to have a significant effect on water quality and this topic will be addressed in the EIR.

Impact HY-2: The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. (No Impact)

Groundwater is not currently used as a drinking water supply in the City and County of San Francisco. Construction of the proposed project would not increase impervious surface coverage on the site nor would the project reduce infiltration and groundwater recharge, unless PUC does not permit RPD to recharge, which would be determined once project details, such as the infill type, is finalized. Nonetheless, RPD would work closely with PUC to determine the appropriate requirements. Therefore, the proposed project would not substantially alter existing groundwater or surface flow conditions.

Impact HY-3: The proposed project would not result in altered drainage patterns that would cause substantial erosion or flooding. (No Impact)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf and the installation of ten 60-foot-tall athletic field light standards. The proposed synthetic turf fields are permeable; however, the PUC may require RPD to capture and treat run-off water depending on project details, such as the type of infill that would be used. Nonetheless, the proposed project would not measurably affect current runoff or groundwater. Therefore, neither groundwater resources nor runoff and drainage would be adversely affected.

Impact HY-4: The proposed project would not contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems but could provide substantial additional sources of polluted runoff. (Potentially Significant)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf and the installation of ten 60-foot-tall athletic field light standards. Some of the materials found in synthetic turf contain heavy metals that have the potential to leach. Therefore, the proposed project has the potential to have a significant effect on water quality and the topic will be addressed in the EIR.

Impact HY-5: The proposed project would not expose people, housing, or structures, to substantial risk of loss due to flooding. (Less than Significant)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf and the installation of ten 60-foot-tall athletic field light standards. The project site is not prone to flooding.

Flood risk assessment and some flood protection projects are conducted by federal agencies including the Federal Emergency Management Agency (FEMA) and the U.S. Army Corps of Engineers (Corps). The flood management agencies and cities implement the National Flood Insurance Program (NFIP) under the jurisdiction of FEMA and its Flood Insurance Administration. Currently, the City of San Francisco does not participate in the NFIP and no flood maps are published for the City. However, FEMA is preparing Flood Insurance Rate Maps (FIRMs) for the City and County of San Francisco for the first time. FIRMs identify areas that are subject to inundation during a flood having a 1 percent chance of occurrence in a given year (also known as a "base flood" or "100-year flood").

FEMA refers to the flood plain that is at risk from a flood of this magnitude as a special flood hazard area ("SFHA"). Because FEMA has not previously published a FIRM for the City and County of San Francisco, there are no identified SFHAs within San Francisco's geographic boundaries. FEMA has completed the initial phases of a study of the San Francisco Bay. On September 21, 2007, FEMA issued a preliminary FIRM of San Francisco for review and comment by the City. The City has submitted comments on the preliminary FIRM to FEMA. A final FIRM may be released in 2010, after FEMA completes the more detailed analysis that Port and City staff requested in 2007. Meanwhile, the City published its own interim flood plain maps in 2008.28

FEMA has tentatively identified SFHAs along the City's shoreline in and along the San Francisco Bay consisting of Zone A (in areas subject to inundation by tidal surge) and Zone V (areas of coastal flooding subject to wave hazards).²⁹ In August 2008, the San Francisco Board of Supervisors passed Ordinations 188-08 to enact a floodplain management program to govern new construction and substantial improvements in flood-prone area of San Francisco, and to authorize the City's participation in NFIP.

City and County of San Francisco, 2008. Intermit Floodplain Maps. July.

City and County of San Francisco, Office of the City Administrator, National Flood Insurance Program Flood Sheet, http://www.sfgov.org/site/uploadedfiles/risk_management/factsheet.pdf, accessed October 19, 2010.

Specifically, the proposed floodplain management ordinance includes a requirement that any new construction or substantial improvement of structures in a designated flood zone must meet the flood damage minimization requirements in the ordinance. The NFIP regulations allow a local jurisdiction to issue variances to its floodplain management ordinance under certain narrow circumstances, without jeopardizing the local jurisdiction's eligibility in the NFIP. However, the particular projects that are granted variances by the local jurisdiction may be deemed ineligible for federally backed flood insurance by FEMA. The Board of Supervisors will consider the revised Floodplain Management Ordinance, which incorporates the changes requested by FEMA, sometime within this year (2010). According to the preliminary maps, the project site is not located within Zone A or Zone V, and is therefore not expected to be subject to significant flood hazards (and would not expose persons, structures, or housing to such hazards).

Maps published in 2007 by the Bay Conservation and Development Commission (BCDC) indicate that, with a potential sea level rise of 5 feet-generally accepted as the higher bound of the range of anticipated rise in sea level by 2100 due to global warming-areas of San Francisco along the Bay shoreline, which does not include the project site, could be inundated.³⁰ Continued emissions of greenhouse gases and the associated increase in global warming can be expected to have serious consequences for San Francisco, the Bay Area, California, and beyond.

Impact HY-6: The proposed project would note expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow. (Less than Significant)

The project site is not in an area subject to tsunami run-up, or reservoir inundation hazards (Maps 6 and 7 in the General Plan Community Safety Element). Therefore, the project is not expected to expose people or structures to risk from inundation by seiche, tsunami, or mudflow.

Impact HY-7: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the site vicinity, would result in less-than-significant cumulative impacts to hydrology and water quality. (Potentially Significant)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf and the installation of ten 60-foot-tall athletic field light standards. Some of the materials found in synthetic turf contain heavy metals and known carcinogens, including zinc, lead, cadmium, and mercury. These compounds are known to

Bay Conservation and Development Commission, "San Francisco Bay Scenarios for Sea Level Rise: San Francisco," 2007. Available on the internet at: http://www.bcdc.ca.gov/index.php?cat=56.

leach into groundwater and the environment. The proposed project could have a significant impact on water quality standards, groundwater, drainage, or runoff, and thus, would have the potential to contribute considerably to cumulative impacts. Therefore, effects related to hydrology and water quality will be analyzed and discussed in the EIR.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
16.	HAZARDS AND HAZARDOUS MATERIALS Would the project:					
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?					
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?					
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?					
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?					
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?					
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?					
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?					
h)	Expose people or structures to a significant risk of loss, injury or death involving fires?					

The project site is not located within an airport land use plan area or in the vicinity of a public or private airstrip nor is it within one-quarter mile of a school. As such, Topics 16c, 16e, and 16f are not discussed in detail below.

Impact HZ-1: The proposed project could create a significant hazard through routine transport, use, disposal, handling or emission of hazardous materials. (Potentially Significant)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf. Some of the materials found in synthetic turf have the potential to leach into groundwater and the environment, and have potential for human health toxicity. There is no evidence that suggests that the presence of such materials in synthetic turf poses any substantial public health or safety hazards resulting from hazardous materials. Nonetheless, this topic will be evaluated and further addressed in the EIR.

Impact HZ-2: Demolition and excavation of the project site would not result in handling and accidental release of contaminated soils and hazardous building materials associated with historic uses. (Less than Significant)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf and the installation of ten 60-foot-tall athletic field light standards. The project site is not included on the Department of Toxic Substances Control list of hazardous material sites in San Francisco. Therefore, there are no potential hazards that would result from current or past uses on the site.

Impact HZ-3: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less than Significant)

The project proposes the renovation of the Beach Chalet Athletic Fields facility including the conversion of four existing grass soccer fields to synthetic turf and the installation of ten 60-foot-tall athletic field light standards. Impacts to emergency response or evacuation plans would be less than significant.

Impact HZ-4: The proposed project would not expose people or structures to a significant risk of loss, injury or death involving fires. (Less than Significant)

San Francisco ensures fire safety and emergency accessibility within new and existing developments through provisions of its Building and Fire Codes. The project would conform to these standards, which may include development of an emergency procedure manual and an exit drill plan for the proposed project. Potential fire hazards (including those associated with hydrant water pressure and blocking of emergency access points) would be addressed during the permit review process. Conformance with these standards would ensure appropriate life safety protections. The impact would be less than significant.

Impact HZ-5: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the site vicinity, would result in less than significant impacts related to hazards and hazardous materials. (Less than Significant)

Impacts from hazards are generally site-specific, and typically do not result in cumulative impacts. Cumulative development projects described in the "Project Setting" would be required to follow applicable regulations for hazardous materials, which would reduce any hazard to less than significant. Overall, the project would not contribute to cumulatively considerable significant effects related to hazards and hazardous materials.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
17.	MINERAL AND ENERGY RESOURCES— Would the project:					
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?					
b)	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local <i>General Plan</i> , specific plan or other land use plan?					
c)	Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner?					

Impact ME-1: The proposed project would not result in the loss of availability of a known mineral resource or a locally-important mineral resource recovery site. (No Impact)

All land in San Francisco, including the project site, is designated Mineral Resource Zone 4 (MRZ-4) by the CDMG under the Surface Mining and Reclamation Act of 1975 (CDMG, Open File Report 96-03 and Special Report 146 Parts I and II). This designation indicates that there is not adequate information available for assignment to any other MRZ and thus the site is not a designated area of significant mineral deposits. There are no operational mineral resource recovery sites in the project vicinity whose operations or accessibility would be affected by the construction or operation of the project.

Impact ME-2: Implementation of the proposed project would not encourage activities which would result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner. (Less than Significant)

The proposed project would not have a substantial effect on the use, extraction, or depletion of a natural resource. In addition, the project would not, in and of itself, generate a significant demand for energy and a major expansion of power facilities. The renovation of Beach Chalet Athletic Fields with synthetic turf would reduce field maintenance and water use.³¹ For this reason, the project would not cause a wasteful use of energy and would not have a significant effect on natural resources.

Impact ME-3: The proposed project, in combination with the past, present, and reasonably foreseeable future projects in the site vicinity, would result in a less-than-significant cumulative impacts to energy and minerals. (Less than Significant)

As described above, no known minerals exist at the project site, and therefore the project would not contribute to any cumulative impact on mineral resources. The cumulative development projects described in the "Project Setting" are not located on sites designated as areas of significant mineral deposits. Cumulative impacts to energy and mineral uses would be less than significant.

Торі	ics:	Sig. Impact Identified in PEIR	Project Contributes to Sig. Impact Identified in PEIR	Project Has Sig. Peculiar Impact	Addressed Below
18.	AGRICULTURE AND FOREST RESOURCES: In d significant environmental effects, lead agencies may Assessment Model (1997) prepared by the California assessing impacts on agriculture and farmland. In ditimberland, are significant environmental effects, lead California Department of Forestry and Fire Protection Forest and Range Assessment Project and the Forest measurement methodology provided in Forest Protection	refer to the 0 a Dept. of Co etermining what a agencies m n regarding the est Legacy As	California Agricult nservation as an nether impacts to nay refer to inform ne state's invento sessment project	tural Land Evaluat optional model to forest resources, nation compiled by try of forest land, i and forest carbo	ion and Site use in including the ncluding the n
<u> </u>	Nould the project				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
C)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland of Statewide Importance, to non-agricultural use?				

 $^{^{31}}$ The proposed project could save approximately 1.5 million gallons of water per field each year.

Impact AF-1: The proposed project would not result in the conversion of farmland or forest lands to non-farm or non-forest use, nor would it conflict with existing agricultural or forest use or zoning. (No Impact)

The project site is located in the western end of the Golden Gate Park. The California Department of Conservation's Farmland Mapping and Monitoring Program identify the site as "Urban and Built-up Land" (Department of Conservation, 2002). Because the site does not contain agricultural uses and is not zoned for such uses, the proposed project would not convert any prime farmland, unique farmland, or Farmland of Statewide Importance to non-agricultural use, and it would not conflict with existing zoning for agricultural land use or a Williamson Act contract, nor would it involve any changes to the environment that could result in the conversion of farmland. Accordingly, these criteria are not appropriate to the proposed project. Although the project involves tree removal, it is not considered a major forestry impact.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact	Not Applicable
19.	MANDATORY FINDINGS OF SIGNIFICANCE—Would the project:					
a)	Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?					
b)	Have impacts that would be individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)					
c)	Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?					

The EIR will address potential impacts, including cumulative impacts, related to aesthetics, cultural resources, transportation and circulation, air quality, biological resources, hydrology and water quality, and hazards and hazardous materials.

F. DETERMINATION

On th	e basis of this initial study:				
	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.				
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.				
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.				
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.				
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.				
	Tolla Dreff				
	Bill Wycko Environmental Review Officer				
	for				
	John Rahaim Director of Planning				
	DATE Shay 1,2011				

G. INITIAL STUDY AUTHORS AND PROJECT SPONSOR TEAM

INITIAL STUDY AUTHORS

Planning Department, City and County of San Francisco Major Environmental Analysis 1650 Mission Street, Suite 400 San Francisco, CA 94103

> Environmental Review Officer: Bill Wycko Senior Environmental Planner: Sarah B. Jones

Environmental Planner: Don Lewis

PROJECT SPONSOR TEAM

Recreation and Park Department Dawn Kamalanathan, Capital Program Manager Dan Mauer, Project Manager