



# Update on Monarch Bay Shoreline Development Project



City Council Meeting  
April 3, 2017





# BLUE DOLPHIN

SAN LEANDRO MARINA  
LUNCHEON

## ENTREES

Steamed Clams (Plain or Bordelaise)	2.75
Fresh Filet of Sole (Fried)	1.95
Jumbo Prawns (Fried)	1.95
Grilled Eastern Oysters	1.95
Deep Fried Halibut Steak	2.25
Shrimp Creole Scallops	1.95
Abalone Steak, Pan Fried	1.95
Fresh Crab Omelet	2.45
Broiled Swordfish (Our Specialty)	2.25
Froggies Sauté Meuniere	2.65
Broiled Salmon Meuniere	1.95
Fish Kebab	2.45
Served with Rice Pilaf and Peas	2.65
Prime Rib, au Jus	1.95
Slim and Trim Plate	2.75
Ground Filet of Beef or Broiled Swordfish Steak	2.35
with Cottage Cheese and Tomatoes	2.65

## SPECIAL SALADS

Crab Meat Salad or Louie	3.85
Combination Shrimp and Louie	1.95
Shrimp Louie	
Tossed Green Salad with Crab and Shrimp	2.85
Crisp Tossed Green Salad	3.50
Patrician Pineapple	2.85
Marina Special (A Meal in Itself)	2.85
Lobster Meat, Crab Legs, Prawns, Shrimp and Anchovies	1.85
The Pampered Tomato	1.15
Fresh Tomato Stuffed with Tasty Crab Salad	2.85

**STEAK SPECIAL**  
Jr. Filet Mignon  
Potatoes, Cole Slaw  
— \$2.45 —

**NEW YORK STEAK**  
A La Minute  
Steer Beef, Potatoes and Garnishes  
— \$3.25 —

**TOURNADOES**  
SELECT CUTS OF BEEF, WRAPPED IN BACON  
Potatoes, Cole Slaw  
— \$2.45 —

## HOT and COLD SANDWICHES

Roast Prime Rib	2.85
Filet Burger	1.65
Pot Roast	1.65
Abalone Sandwich	1.95
Club House Sandwich	2.25
Cold Baked Ham	1.65
Turkey Sandwich	1.65

## BEVERAGES

Coffee	.25
Tea (Per Pot)	.25
Ice Tea	.25
Milk	.25
Sanka	.25

## SOUPS and CHOWDERS

Coney Island Clam Chowder	.50
Boston Clam Chowder (Cream)	.50
Clam Broth	.50
Soup du Jour	.50

## DESSERTS

Ice Cream	.40
Sherbet	.40
Requefort Cheese	.40
Cheese Cake	.40
Chocolate Sundae	.40
Melon in Season	.40
Nut Roll	.40

## APPETIZERS and COCKTAILS

Blue Points on Half Shell (Half Doz.)	2.25
Eastern Oysters Supreme	1.35
Cracked Crab (Whole) (In Season)	2.00
Shrimp or Crab Cocktail Supreme	1.35
Lobster Cocktail Supreme	1.35

## CHEF'S DAILY SPECIALS

Choice of Soup or Salad	\$1.95
<b>MONDAY</b>	
ROAST SIRLOIN OF BEEF	
FRESH SOLE ALMANDINE	
<b>TUESDAY</b>	
BEEF STEW	\$1.95
JUMBO PRAWNS SAUTE, ITALIANO	
<b>WEDNESDAY</b>	
BLUE DOLPHIN SPECIAL	\$1.95
Eggs, Ground Filet, Spinach, Mushrooms	
PAN BROILED FRESH SEA BASS	
<b>THURSDAY</b>	
CORNEB BEEF AND CABBAGE	\$1.95
BAKED FRESH HALIBUT, PARMIGIANA	
<b>FRIDAY</b>	
CHEESE OMELET	\$1.95
SHRIMP CREOLE	
<b>SATURDAY</b>	
CHICKEN LIVERS with MUSHROOMS	\$1.95
EGGS BENEDICT	

Above Orders Served with a Bottomless Cup of Coffee

## BANQUET ROOMS

TARPON • STURGEON • BARRACUDA • MARLIN  
Parties — 2 to 600

# Blue Dolphin



1975



Current

# Monarch Bay – San Leandro Shoreline Development Illustrative Site Plan 9/26/16



# Monarch Bay Shoreline Development BCDC Sea Level Rise Guidelines

All projections reported in this document assume a base year of 2000, and are summarized in Table 3-2. These projections are to be used for projects south of Cape Mendocino.

Table 3-2 SLR projections, in inches, form 2000. Source: CO-CAT (2013); CCC (2015); and NRC (2012).

Year	Central projection	Central upper range	Central lower range	Lower bound	Upper bound
2030	5.67	7.64	3.70	1.69	11.69
2050	11.02	14.65	7.40	4.84	23.94
2100	36.18	46.22	26.14	16.69	65.51

# Monarch Bay Shoreline Development Geotechnical Investigation



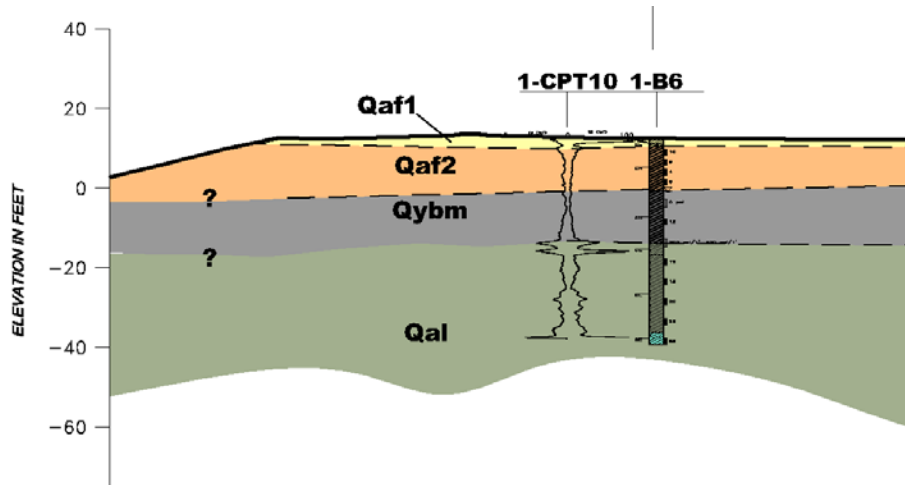
~35 exploration locations

Historic shoreline impact  
on Young Bay Mud

- EXPLANATION  
ALL DIMENSIONS ARE APPROXIMATE
- 1-B13 BOREHOLE (ENVEO, 2016)
  - 1-CPT24 CONE PENETRATION TEST (ENVEO, 2016)
  - D-E GEOTECHNICAL CROSS SECTION LOCATIONS (REFER TO FIGURES 26-29)
  - 5-6 SLOPE STABILITY ANALYSIS CROSS SECTION LOCATIONS (REFER TO GEOTECHNICAL REPORT)
  - HISTORIC SHORELINE (SIS COAST SURVEY, 1955)
  - HISTORIC WATER BODIES (SIS COAST SURVEY, 1955)



# Monarch Bay Shoreline Development Soil Conditions



## EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- Qaf1** EXISTING FILL, CLAYEY SAND TO SANDY LEAN CLAY WITH GRAVEL
- Qaf2** EXISTING FILL, DREDGED BAY MUD (FAT CLAY)
- Qybm** YOUNG BAY MUD, SOFT TO MEDIUM STIFF, HIGH PLASTICITY CLAY (HOLOCENE)
- Qal** ALLUVIUM, STIFF TO VERY STIFF, LEAN CLAY WITH OCCASIONAL SILTY SAND LENSES

— — — GEOLOGIC CONTACT

————— EXISTING GROUND SURFACE

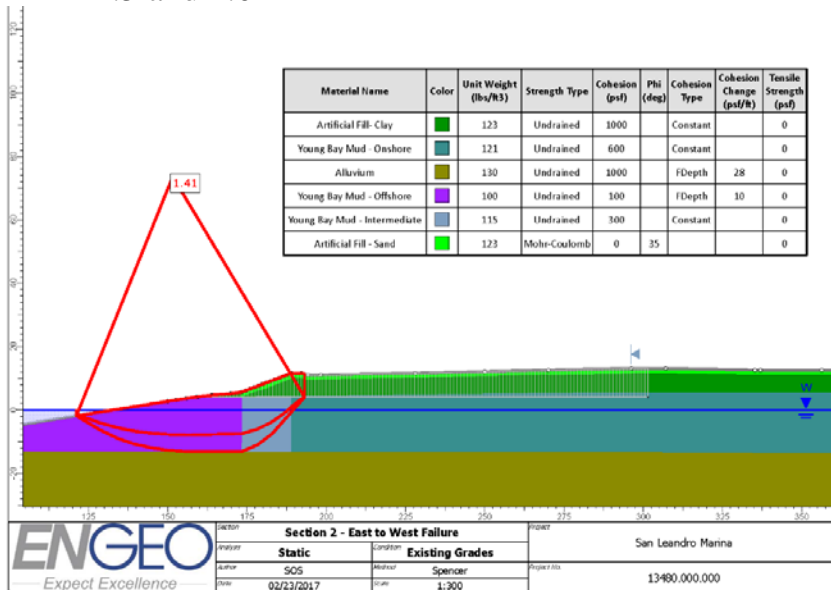
## *Geotechnical Concerns*

- Existing Fill
- Expansive Soils
- Liquefaction Settlement
- Shallow Groundwater
- Consolidation Settlement of Young Bay Mud
- Slope Stability

# Monarch Bay Shoreline Development

## Slope Stability

- Ratio of shear strength resistance / mobilized shear stress (from gravity, surcharge, earthquake shaking, etc)
- Static and seismic loading
- Target Factors of Safety
  - 1.5 and 1.0



### RESULTS:

- Proposed Development required to satisfy BCDC Sea Level Rise Guidelines for 2100 Upper Bound (66")
  - Static: < 1.5
  - Seismic: < 1.0
- Conclusion: Geotechnical mitigation needed for development, based on existing and proposed grades.
- Outer and inner basin stability, ~8,600 linear feet



# Monarch Bay Shoreline Development Geotechnical Mitigation Measures

1. Surcharge Program
  - Increase shear strength of soil
2. Steel Sheet Pile Wall
  - Piles can serve as sea wall and provide increased shear resistance
3. Cantilevered Wall on Concrete Pier Foundation
  - Similar to steel sheet pile wall
4. Drilled Displacement Piles
  - Soil column displaced and backfilled with grout
5. Deep Soil Mixing
  - Soils mixed with grout to increase shear strength

# Monarch Bay Shoreline Development

## Geotechnical Mitigation Measures - Costs

1. Surcharge Program
  - Infeasible
2. Steel Sheet Pile Wall
  - \$2,000 / linear foot ~ = \$17.2 MM
3. Cantilevered Wall on Concrete Pier Foundation
  - \$1,500 / linear foot ~ = \$12.9 MM
4. Drilled Displacement Piles (buildings only)
  - \$935 / linear foot ~ = \$8.1 MM
5. Deep Soil Mixing
  - \$700 / linear foot ~ = \$6.0 MM
  - Will allow for more cost-effective sea wall option (Keystone wall, CMU wall, or similar)
  - 250,000 cubic yards of import still required ~ = \$6MM
  - Total Deep Soil Mixing = + \$12MM

# BCDC 100' Shoreline Band



Table 3-2 SLR projections, in inches, form 2000. Source: CO-CAT (2013); CCC (2015); and NRC (2012).

Year	Central projection	Central upper range	Central lower range	Lower bound	Upper bound
2030	5.67	7.64	3.70	1.69	11.69
2050	11.02	14.65	7.40	4.84	23.94
2100	36.18	46.22	26.14	16.69	65.51

# Monarch Bay Shoreline Development



# Monarch Bay Shoreline Development Illustrative Site Plan



# Monarch Shoreline Development Conceptual Park Master Plan



# Monarch Bay Shoreline Development Diagram Plan



# Monarch Bay Shoreline Development Park Program



ACTIVE/ PASSIVE EVENT



PROMENADE



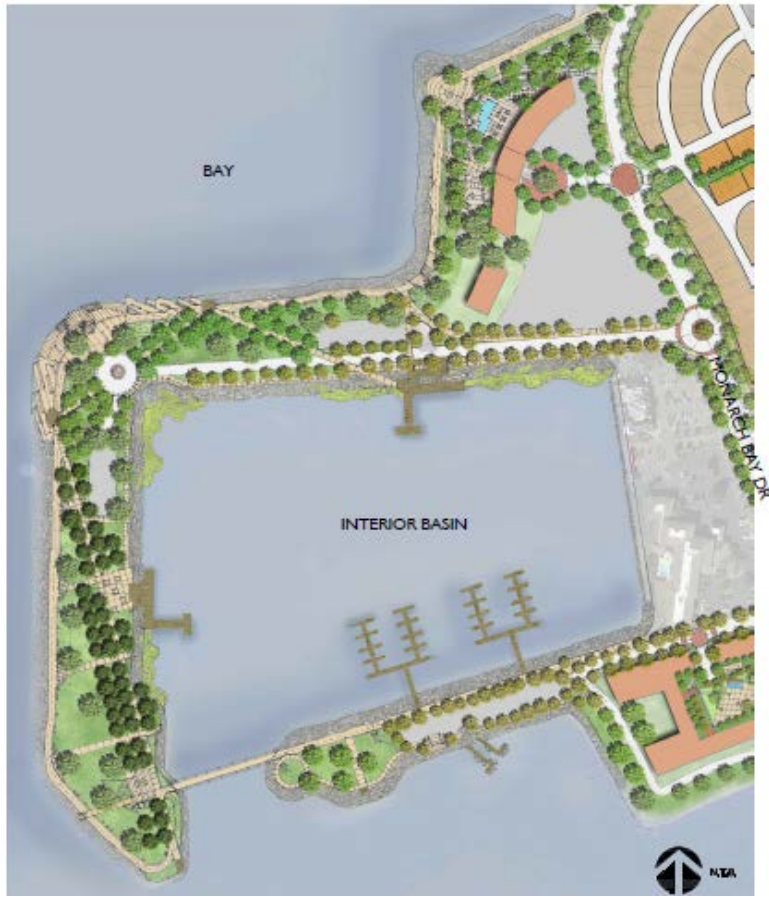
FOOD TRUCKS



ART EXPERIENCE



# Monarch Bay Shoreline Development Park Program



WATER ACTIVITIES



ENVIRONMENTAL EDUCATION

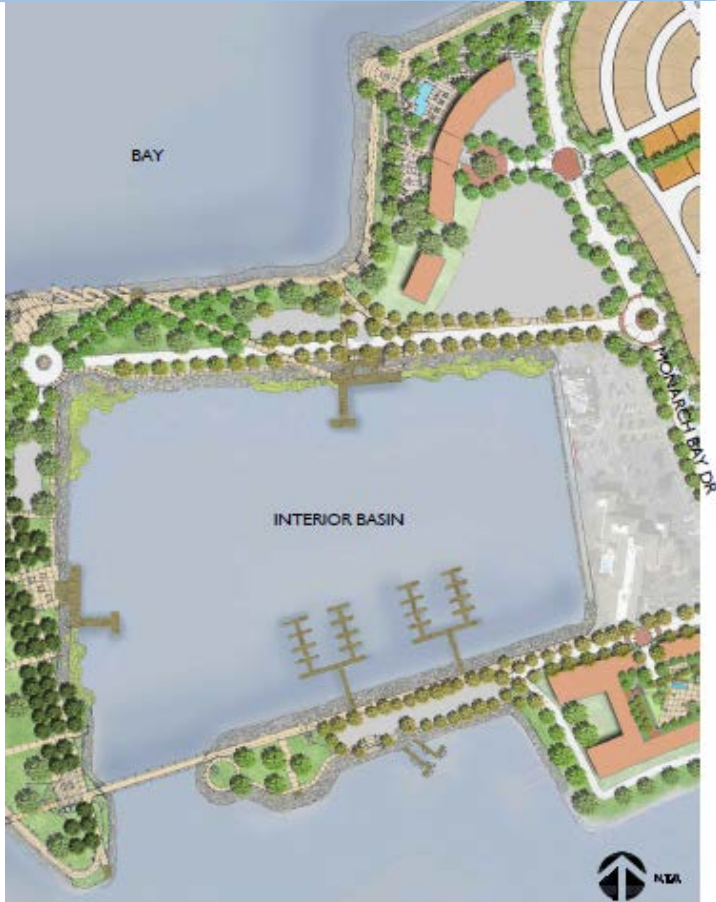


SMALL BOATING



VIEWING

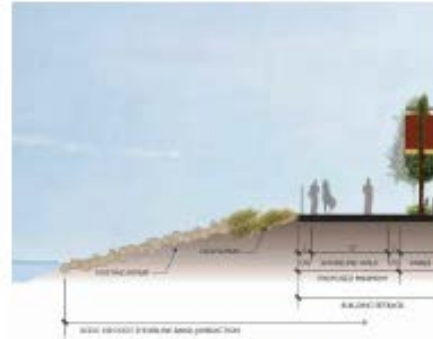
# Monarch Bay Shoreline Development Park Program



PICNIC



CHILDRENS PLAY



3 DIMENSIONAL EDGE - BAY



3 DIMENSIONAL EDGE - INTERIOR BASIN