

## **XV. CONSTRUCTION COSTS**

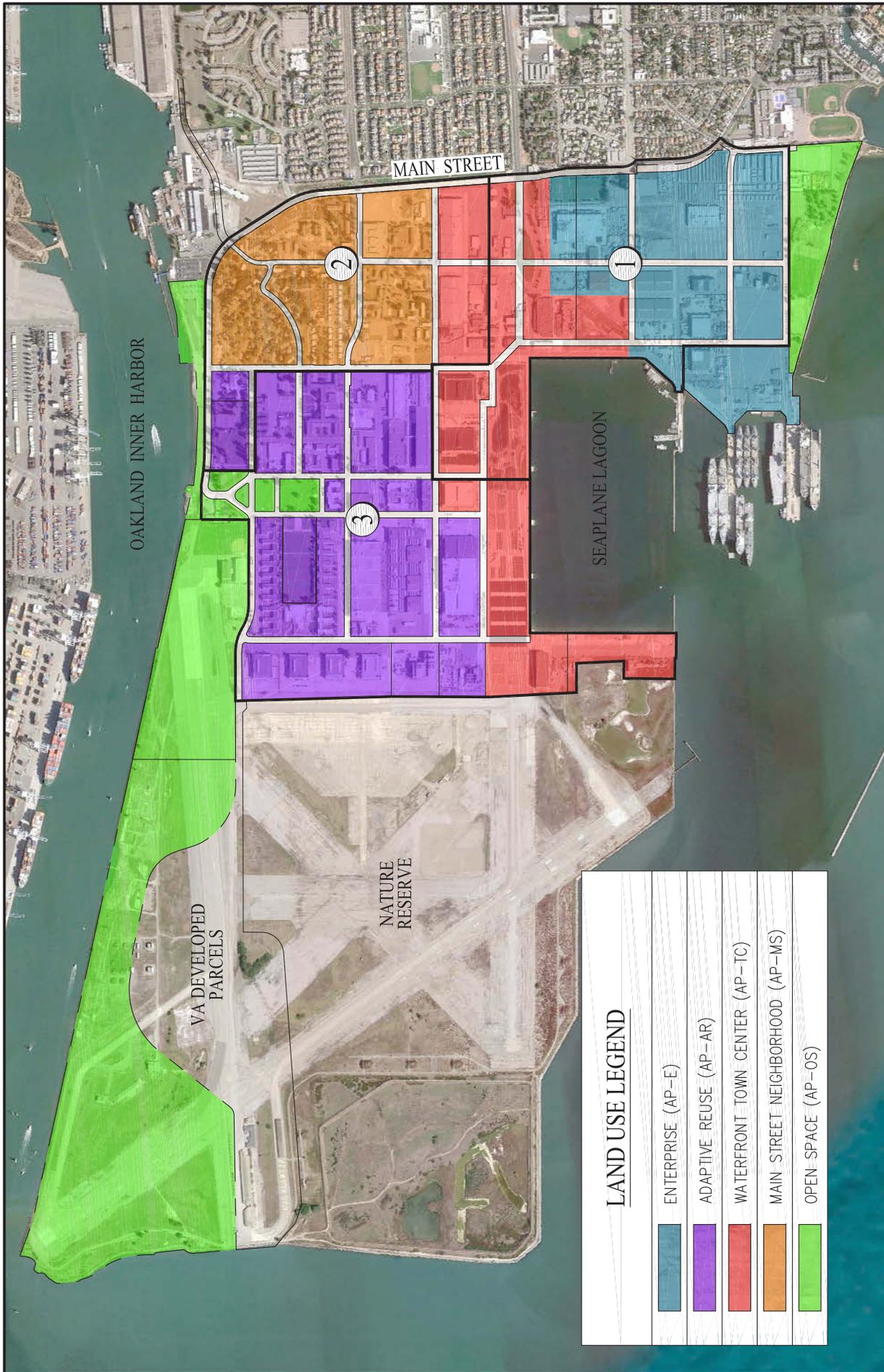
### **A. Backbone Infrastructure Costs**

The Alameda Point backbone infrastructure described in the MIP is estimated to cost approximately \$550 to 575 million. These costs are based in 2013 dollars and do not include cost escalations over time. Financial cash flow models for the Project will need to account for cost (and revenue) escalations over the life of each of the proposed development projects.

The Project Site is assumed to be constructed in three large phases for cost estimating purposes. See Figure 63 depicting the assumed three phases for the cost estimate. The gross areas within each phase are as follows: Phase 1 = 192 acres, Phase 2 = 139 acres and Phase 3 = 266 acres. Table 14 outlines the various categories of costs for each phase and provides an overall total estimated cost. These construction costs represent the backbone infrastructure only. There are other costs associated with the on-site / in-tract improvements that will be constructed within the development blocks that are not included in this cost estimate.

As discussed in the Phasing and Implementation Section XIII, it is likely that the three larger phases will be sub-phased into smaller development areas. The Sub-Phase 1A “North”, “South” and “Town Center” scenarios depicted in Figure 56 through Figure 58 represent potential locations and configurations of an initial phase of development at Alameda Point. The backbone infrastructure construction costs associated with the Sub-Phase 1A “North” scenario are estimated to be approximately \$40 million. Sub-Phase 1A “North” includes 23.5 acres of developable area, net of the backbone street rights-of-ways. The backbone infrastructure construction costs associated with the Sub-Phase 1A “South” scenario are estimated to be approximately \$67.5 million. Sub-Phase 1A “South” includes 55 acres of developable area, net of the backbone street rights-of-ways. The backbone infrastructure construction costs associated with the Sub-Phase 1A “Town Center” scenario are estimated to be approximately \$62.7 million. Sub-Phase 1A “Town Center” includes 32 acres of developable area, net of the backbone street rights-of-ways. These estimated costs includes those associated with the improvements necessary to support this initial phase as well as the proportionate contribution from this sub-phase to other site-wide improvements that will be constructed with later phases.

The implementation of the MIP shall be consistent with the City Council Adopted Fiscal Neutrality Policy for Alameda Point.

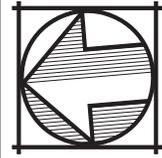


**LAND USE LEGEND**

	ENTERPRISE (AP-E)
	ADAPTIVE REUSE (AP-AR)
	WATERFRONT TOWN CENTER (AP-TC)
	MAIN STREET NEIGHBORHOOD (AP-MS)
	OPEN SPACE (AP-OS)

**ALAMEDA POINT  
MASTER INFRASTRUCTURE PLAN**  
CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA  
DATE: MARCH, 2014 SCALE: 1" = 1,500'  
**Carlson, Barbee, & Gibson, Inc.**

**FIGURE 63  
ESTIMATE PHASING**



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**Table 15 - Backbone Infrastructure Construction Costs**

	Description	PHASE 1	PHASE 2	PHASE 3	TOTAL
	<b>BACKBONE INFRASTRUCTURE</b>				
1	DEMOLITION / SITE PREPARATION	\$34,385,000	\$41,795,000	\$3,430,000	\$79,610,000
2	ENVIRONMENTAL REMEDIATION	BY OTHERS	BY OTHERS	BY OTHERS	BY OTHERS
3	FLOOD PROTECTION AND SITE GRADING	\$44,827,000	\$39,129,000	\$27,379,000	\$111,335,000
4	DEWATERING	\$4,069,000	\$2,955,000	\$2,680,000	\$9,704,000
5	SANITARY SEWER	\$11,993,000	\$3,186,000	\$3,677,000	\$18,856,000
6	STORM DRAIN	\$13,958,000	\$8,800,000	\$8,905,000	\$31,663,000
7	POTABLE WATER	\$4,760,000	\$4,310,000	\$5,385,000	\$14,455,000
8	RECYCLED WATER	\$1,148,000	\$507,500	\$875,000	\$2,530,500
9	DRY UTILITIES	\$6,286,000	\$5,961,000	\$5,321,000	\$17,568,000
10	ON-SITE STREET WORK	\$23,455,000	\$20,029,000	\$13,411,000	\$56,895,000
11	TRANSPORTATION	\$15,884,000	\$35,030,000	\$4,021,000	\$54,935,000
12	PARKS AND OPEN SPACE	\$39,369,000	\$15,898,000	\$23,911,000	\$79,178,000
13	PUBLIC BENEFITS	\$1,250,000	\$17,913,000	\$-	\$19,163,000
	<b>SUBTOTAL (to the nearest \$10,000)</b>	<b>\$201,380,000</b>	<b>\$195,510,000</b>	<b>\$99,000,000</b>	<b>\$495,890,000</b>
	<b>SOFT COSTS</b>				
14	CONSTRUCTION ADMIN	\$6,444,000	\$6,256,000	\$3,168,000	\$15,868,000
15	PROFESSIONAL SERVICES	\$24,166,000	\$23,461,000	\$11,880,000	\$59,507,000
16	FEES	\$7,990,000	\$7,740,000	\$4,701,000	\$20,431,000
17	IMPROVEMENT ACCEPTANCE	\$806,000	\$782,000	\$396,000	\$1,984,000
	<b>SUBTOTAL (to nearest \$10,000)</b>	<b>\$39,410,000</b>	<b>\$38,240,000</b>	<b>\$20,150,000</b>	<b>\$97,790,000</b>
	<b>TOTAL (to the nearest \$10,000)</b>	<b>\$240,790,000</b>	<b>\$233,750,000</b>	<b>\$119,150,000</b>	<b>\$593,680,000</b>

The backbone infrastructure construction costs include demolition, flood protection and site grading, utility systems, on-site street improvements, street improvements off-site as required in the mitigation measures outlined in the EIR, parks and open space and public benefits. The cost estimate in the MIP includes items, such as parks, that could be subject to future policy decisions by the City Council. These may also be considered during the preparation and adoption of an infrastructure/impact fee program for Alameda Point. These construction costs also include a 25% contingency applied to all costs to account for items that are not fully characterized at this time. Other budgets that are associated with design and construction of the backbone infrastructure are included, such as construction administration, professional services, plan review and inspection, and improvement acceptance. The following is a list of the general categories of improvements included in the cost estimate. Also, see the Appendix for the detailed cost estimate summary which includes the estimated costs associated with each individual improvement.

- Demolition / Site Preparation
  - Demolition and abatement of existing structures
  - Removal and/or slurry filling of existing utilities to be abandoned

- Flood Protection & Site Grading
  - Corrective Geotechnical Measures – shoreline stabilization and liquefaction remediation
  - Construction of perimeter flood protection measures
  - Import of material to raise elevations for perimeter flood protection measures and Development Areas
  - Mass grading of development blocks
  
- Utility Systems
  - Sanitary sewer system – pipelines, manholes and lift stations
  - Stormwater system – pipelines, manholes, inlets, pump stations, multi-purpose basins and outfalls
  - Potable water system – pipelines, appurtenances and fire hydrants
  - Recycled water system – pipelines and appurtenances
  - Dry utility system – joint trench, conduits, wires, substructure and street lights
  - Installation of utilidors
  - Remediation measures for encountered groundwater contamination and industrial waste lines
  
- On-Site Street System
  - New on-site street construction – pavement, curbs, gutters, sidewalks, landscaping and striping
  - Reconstruction of existing on-site streets – pavement, curbs, gutters, sidewalks, landscaping and striping
  - Traffic calming
  
- Transportation Improvements
  - Off-site improvements as outlined in the mitigation measures of the EIR
  - Participation to BRT System
  - Parking lot expansion at the existing ferry terminal
  - New ferry terminal in Seaplane Lagoon
  - Transit center
  - Shuttle system
  - TDM
  - Surface Parking Lots consistent with public parking strategy as contemplated in the proposed zoning ordinance amendment and Transportation Demand Management Plan.

- Parks and Open Space
  - Seaplane Lagoon frontage
  - Regional Sports Complex
  - Enterprise Park
  - Bay Trail
  - Other parks and open space areas
  - Seaplane Lagoon Frontage (based on Town Center and Waterfront Precise Plan)
  
- Other Public Benefits
  - Fire station
  - Pro-Rata Share of Public Works satellite corporation yard
  - Bay Trail extension (Northwest Territories & VA Property)

## **B. Value Engineering and Potential Cost Reductions**

The value engineering options that are described throughout the MIP could result in the backbone infrastructure construction costs being reduced by \$11.5 million. The feasibility of implementing these value engineering opportunities will be evaluated through the final design process for the backbone infrastructure. The backbone infrastructure will evolve with the planning of Alameda Point and additional value engineering opportunities are expected to be identified and considered in effort to minimize construction costs, where possible and appropriate.

As previously described, the Dept. of Veteran Affairs is planning a project in the VA Property, west of the Development and Reuse Areas within Alameda Point. This project includes a VA Outpatient Clinic and a Columbarium Cemetery that will require extension of infrastructure systems to this project location. If the VA project is constructed prior to redevelopment commencing in the northwest portions of Alameda Point, specifically within West Redline Avenue and Lexington Street, then the VA will install infrastructure components outside of the VA Property. This infrastructure will provide access and utility service to the Reuse Areas, the Regional Sports Complex and the Northwest Territories. The City of Alameda and the VA have entered into a non-binding term sheet that contains provisions for the scenario that the VA installs infrastructure outside the VA Property. In this scenario, the infrastructure shall be designed to support the future development demand anticipated within Alameda Point. This scenario would result in the VA installing infrastructure improvements that would otherwise need to be installed to support the redevelopment of Alameda Point and therefore reducing the construction costs for Alameda Point by approximately \$12.5 million.

## **C. Public Services**

Willdan Financial Services (Willdan) has prepared an analysis of the cost of providing municipal services to the project, as well as revenues for the City expected to be generated there. The analysis includes services costs and the cost of maintaining the infrastructure needed for the plan (where the City is the party responsible for providing maintenance). The fiscal analysis includes the regular (weekly, monthly, annual, etc.) maintenance costs, such as chip seal of road surfaces, but not the cost of replacement of infrastructure that is being newly constructed as part of the development of Alameda Point. Willdan has prepared an estimate of the net fiscal impact of the project.

In addition to capital improvements, the Financing Plan for Alameda Point may include fiscal mitigation measures, such as a services assessment or special tax if necessary, to ensure that the Alameda Point development does not have a net negative fiscal impact on the City.

Not included in the analysis, however, is the cost of replacement at the end of the expected lifespan of the infrastructure. As with any other infrastructure in the City, most infrastructure replacement costs are built into the rates and fees associated with services, such as water, wastewater, and electricity. This approach, in which the users pay for the eventual replacement cost of the facilities they are using, is appropriate and financially sound.