

Naples Seawalls, Phase 1 (Northeast Quadrant) City of Long Beach

Key Considerations	Proposed Waterside Seawall	Landside Seawall Option 1 (Jet-grouted seawall)	Landside Seawall Option 2 (Secant wall with reinforced steel casing)	Hybrid Seawall (Landside on North & Waterside on South)
Impact to existing mature trees	11	67	67	44
Construction duration	120 working days	180 working days	380 working days	180 - 220 working days
Significant construction concerns	None	Size/Weight of construction equip.; limited work area; access; existing infrastructure		
Requires cutting existing tiebacks during construction	No	No, but significant risk of failure due to condition of tie-rods	Yes, but new tie rods installed for shoring support	No
Contractor liability/risk (the higher, the more limited # of available bidders and increased cost)	Low (Many available contractors)	Medium-High	High (limited available contractors)	Medium-High
Level of protection	Provides highest level of protection	Meets requirements	Meets requirements	Meets requirements
Construction cost estimate	\$13.6M	\$25.3M	\$36.3M	\$22 - 27M
Noise/Vibration/Construction Impacts	Low	Medium	High	Medium-High
Narrows canal width	Yes, by 3-4' (requires mitigation)	No	No	No
Impact to public access area	Increased by 3-4'	Reduced by 5-7'	Reduced by 5-7'	Reduced by 5-7' on Northside
Impacts existing landscaping adjacent to homes	No	Yes	Yes	Yes on Northside; No on Southside
Allows future seawall to be constructed on landside with minimal constructability issues	Yes	No	No	No on Northside; Yes on Southside
Requires future seawall to be constructed on waterside	No	Yes	Yes	No on Southside; Yes on Northside
Completion if construction begins August 2013	January 2014	April 2014	January 2015	April 2014 - June 2014