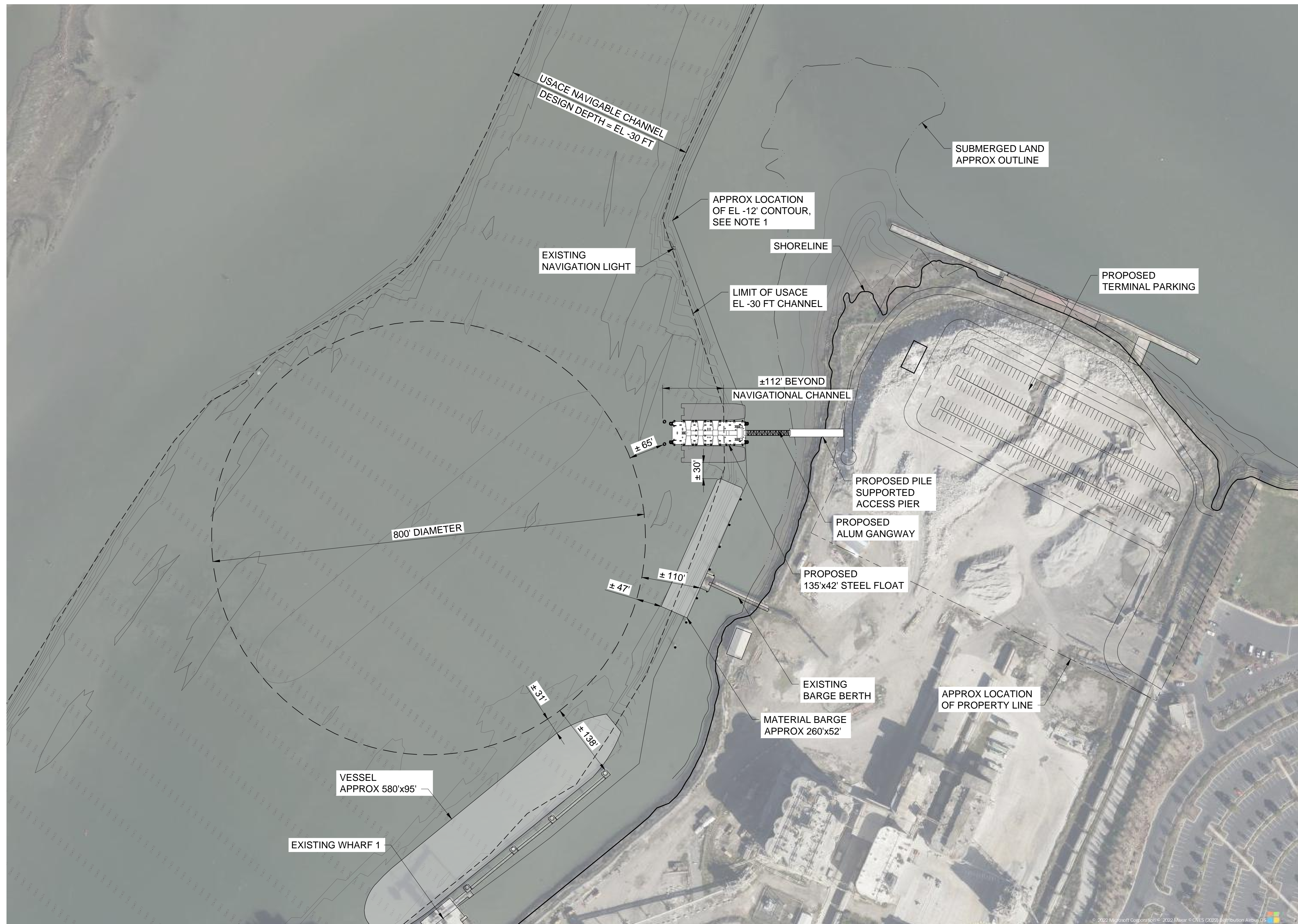
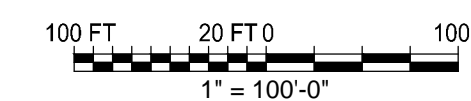
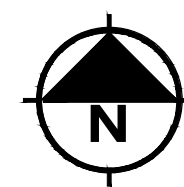


FILE LOCATION: C:\BENTLEY\BENTLEY\DRAWING\GENERIC\A06443 - PORT OF REDWOOD CITY FERRY TERMINAL WEST SIDE LOCATION - TWO BERTH CONCEPT STUDY.dwg; DATE: 1/25/2022 11:32:07 AM; DRAWN BY: PERSON; NOEL_FORTZ



NOTE:
 1. WATER DEPTHS ARE PER USACE HYDROGRAPHIC SURVEY DATED 15-16 MARCH 2022.

1 FERRY TERMINAL - OPTION A
 SK-01 SCALE: 1" = 100'-0"



COWI 555 12th Street, 17th Flr
 Oakland, CA 94607
 Tel.: 510.839.8972
 Fax: 510.839.9715
 Website: www.cowi-na.com

DATE	SYMBOL	REVISIONS	BY	CHECKED	APPROVED

DATE	SUBMITTED	DATE	REVIEWED	DATE

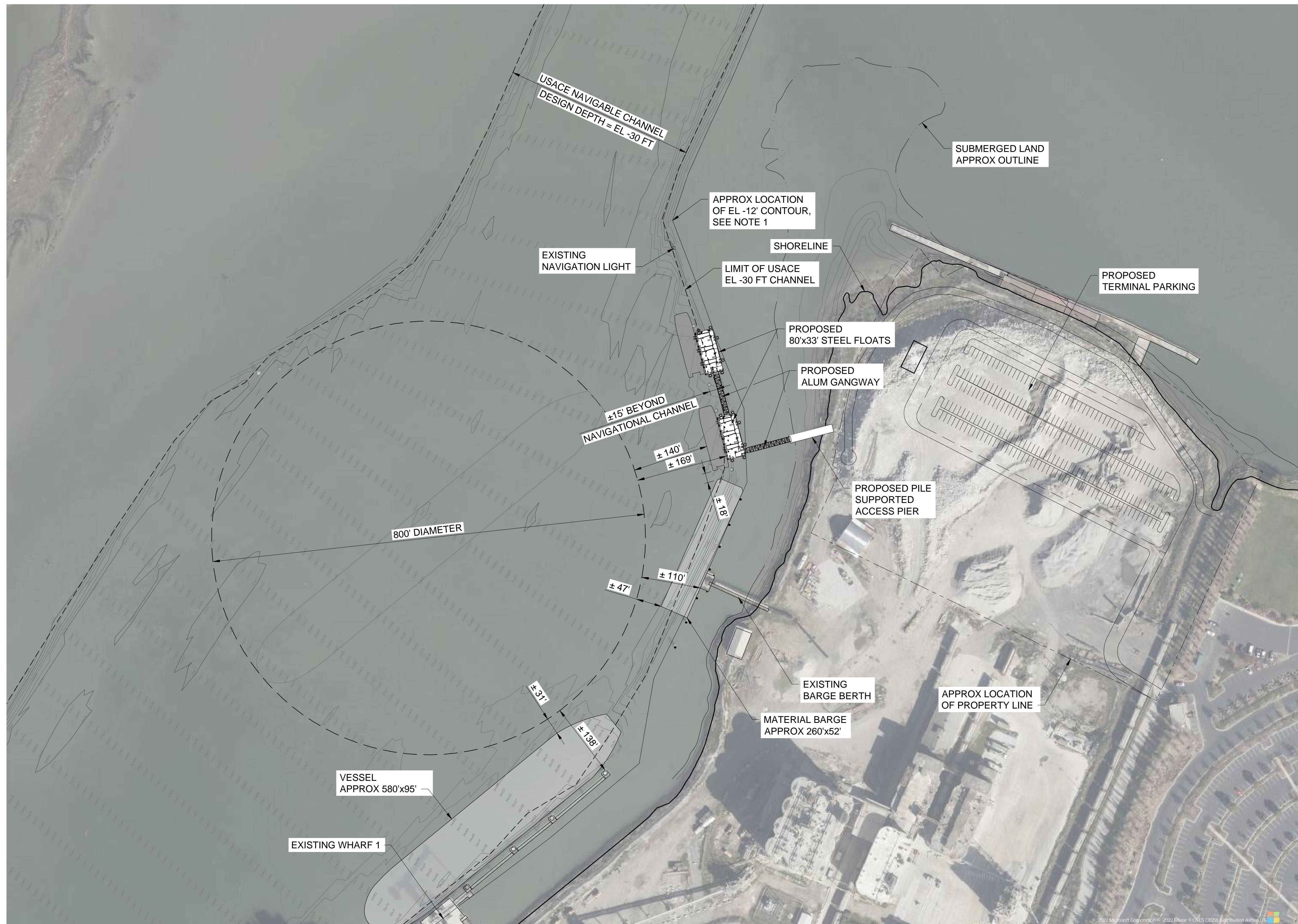
PORT OF REDWOOD CITY
 675 SEAPORT BLVD
 REDWOOD CITY, CA 94063

FILE NO.: SCALE: AS SHOWN AUTOCAD DRAWING FILE: A245143-SK-01.DWG

FERRY TERMINAL WEST SIDE
 TWO BERTH CONCEPT STUDY
 OPTION A

SHEET NO.
SK-01
 1 OF 3 SHEETS

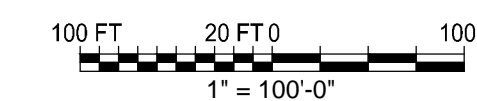
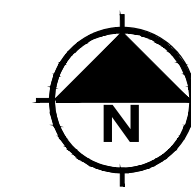
FILE LOCATION: C:\BENTLEY\BENTLEY\DRAWING\DWG\A245143-SK-02.DWG DATE: 1/25/2022 11:32:16 AM DRAWN BY: PERSON: NOEL_FORTZ



NOTE:

1. WATER DEPTHS ARE PER USACE HYDROGRAPHIC SURVEY DATED 15-16 MARCH 2022.

1 FERRY TERMINAL - OPTION B
SK-02 SCALE: 1" = 100'-0"



COWI 555 12th Street, 17th Flr
Oakland, CA 94607
Tel.: 510.839.8972
Fax: 510.839.9715
Website: www.cowi-na.com

DATE	SYMBOL	REVISIONS	BY	CHECKED	APPROVED

DATE	SUBMITTED	DATE	REVIEWED	DATE

PORT OF REDWOOD CITY
675 SEAPORT BLVD
REDWOOD CITY, CA 94063

FILE NO.: SCALE: AS SHOWN AUTOCAD DRAWING FILE: A245143-SK-02.DWG

FERRY TERMINAL WEST SIDE
TWO BERTH CONCEPT STUDY
OPTION B

SHEET NO.
SK-02
2 OF 3 SHEETS

Cost Estimate Option A: West End 135 ft x 42 ft Steel Float (No Dredge)						
m No	Item Name	Description of Components	Quantity		Cost Per Unit	Total Cost
Ferry Terminal						
1	Mobilization/ Demobilization	Indirect Cost	1	LS	\$ 304,000	\$ 310,000
2	Demolition	Demo of existing structures	0	SF	\$ 40	\$ -
3	Ferry Float	135' long x 42' wide x 11' high steel barge with all fittings	5670	SF	\$ 1,110	\$ 6,300,000
4	Float Piles	36" diameter x 1.25" Thick by 120 ft long	4	EA	\$ 91,500	\$ 370,000
5	Fender Piles	Donut Fender Piles	2	EA	\$ 165,000	\$ 330,000
6	Installation	Float Installation	1	LS	\$ 115,000	\$ 115,000
7	Platform	Gangway Access Platform (100' x 12')	1200	SF	\$ 1,500	\$ 1,800,000
8	Platform Piles	10-24" Octagonal PP Piles	10	EA	\$ 36,000	\$ 360,000
9	Gangway	92' x 10' gangway	1	LS	\$ 175,000	\$ 180,000
10	Dredging	Channel and Float	0	CY	\$ 47	\$ -
11	Slope Protection	Wetland Protection	1	LS	\$ 55,600	\$ 56,000
12	Mechanical	Fire Water/Service Water	7770	SF	\$ 30	\$ 240,000
13	Electrical	Electrical/lighting/Comms for Fixed pier, ramps, curb	1	LS	\$ 574,000	\$ 574,000
14		Shore Power	1	LS	\$ 250,000	\$ 250,000
15	Entrance	Misc. Door/Entrances Features	1	LS	\$ 245,000	\$ 245,000
16	Fence	Fence for fixed platform	1	LS	\$ 100,000	\$ 100,000
17	Misc.	Site Furnishings and Installation	1	LS	\$ 200,000	\$ 200,000
					Subtotal	\$ 11,430,000
	Contingency	Allow for 25% Contingency				\$ 2,857,500
					Subtotal	\$ 14,287,500
	Contingency	Allow for 10% Construction Contingency				\$ 1,428,750
					Total Estimated Cost	\$ 15,800,000
Parking Lot						
1	Lot	Parking Lot	1	LS	\$ 2,281,000	\$ 2,300,000
2	Bus Stop	Bus Stop Bench and Structure, Other Misc. Items	1	LS	\$ 100,000	\$ 100,000
					Subtotal	\$ 2,400,000
	Contingency	Allow for 25% Contingency				\$ 600,000
					Total Estimated Cost	\$ 3,000,000
Permitting						
1	Float	Permit Compliance and support	1	LS	\$ 167,000	\$ 167,000
2	Lot	Permit Compliance and support	1	LS	\$ 167,000	\$ 167,000
Total						
					Total Estimated Cost (Float, Parking Lot, Permitting)	\$ 19,134,000
					Total Estimated Cost Escalated to 2023 Construction Date¹	\$ 21,600,000
<p>1) Note ROM values noted here are pre covid pandemic December 2019 dollar amount. Estimated cost subject to increase based on current dollar amount for labor and materials.</p> <p>2) Values were taken from the "Ferry Terminal Comparison btw MBFL and Alameda SPL 03-01-19.xls" from the following folder: \\cowi.net\projects\A085000\A085311\DATA\Calc\Cost Estimate\100% Cost Estimate Review</p>						

Cost Estimate Option B: West End 80 ft x 33 ft Steel Paralle Floats						
m No	Item Name	Description of Components	Quantity		Cost Per Unit	Total Cost
Ferry Terminal						
1	Mobilization/ Demobilization	Indirect Cost	1	LS	\$ 304,000	\$ 310,000
2	2 - Ferry Float	80' long x 33' wide steel barge	5280	SF	\$ 802	\$ 4,240,000
		Steel Pile Brackets and Vertical Fenders				
		Barge Fittings and Design	2	LS	\$ 1,750,000	\$ 3,500,000
3	Float Piles	36" diameter piles x 120' long	12	EA	\$ 91,500	\$ 1,100,000
4	Fender Piles	Donut Fender Piles	4	EA	\$ 165,000	\$ 660,000
5	Installation	Float Installation	2	LS	\$ 115,000	\$ 230,000
6	Platform	Gangway Access Platform (80' long x 12' wide)	960	SF	\$ 1,500	\$ 1,440,000
7	Platform Piles	10-24" Octagonal PP Piles	10	EA	\$ 36,000	\$ 360,000
8	Gangway	92' x 10' gangway	2	LS	\$ 175,000	\$ 350,000
9	Slope Protection	Wetland Protection	1	LS	\$ 55,600	\$ 60,000
10	Mechanical	Fire Water/Service Water	7140	SF	\$ 30	\$ 214,200
11	Electrical	Electrical/lighting/Comms for Fixed pier, ramps, stairs, curb	2	LS	\$ 574,000	\$ 1,148,000
12		Shore Power	1	LS	\$ 250,000	\$ 250,000
13	Entrance	Misc. Door/Entrances Features	1	LS	\$ 245,000	\$ 245,000
14	Fence	Fence for fixed platform	1	LS	\$ 100,000	\$ 100,000
15	Misc.	Site Furnishings and Installation	1	LS	\$ 200,000	\$ 200,000
Subtotal						\$ 14,500,000
	Contingency	Allow for 25% Contingency				\$ 3,625,000
Subtotal						\$ 18,125,000
	Contingency	Allow for 10% Construction Contingency				\$ 1,812,500
Total Estimated Cost						\$ 20,000,000
Parking Lot						
1	Lot	Parking Lot	1	LS	\$ 2,281,000	\$ 2,300,000
2	Bus Stop	Bus Stop Bench and Structure, Other Misc. Items	1	LS	\$ 100,000	\$ 100,000
Subtotal						\$ 2,400,000
	Contingency	Allow for 25% Contingency				\$ 600,000
Total Estimated Cost						\$ 3,000,000
Permitting						
1	Float	Permit Compliance and support	1	LS	\$ 167,000	\$ 167,000
2	Lot	Permit Compliance and support	1	LS	\$ 167,000	\$ 167,000
Total						
Total Estimated Cost (Marine Waterside, Marine Lanside and Permitting)						\$ 23,400,000
Total Estimated Cost Escalated to 2023 Construction Date¹						\$ 26,400,000

1) Note ROM values noted here are pre covid pandemic December 2019 dollar amount. Estimated cost subject to increase based on current dollar amount for labor and materials.

2) Values were taken from the "Ferry Terminal Comparison btw MBFL and Alameda SPL 03-01-19.xls" from the following folder:

[\\cowi.net\projects\A085000\A085311\DATA\Calc\Cost Estimate\100% Cost Estimate Review](http://cowi.net/projects/A085000/A085311/DATA/Calc/Cost Estimate/100% Cost Estimate Review)

Cost Estimate Option C: 135 ft x 42 ft Steel Float with Dredging						
m No	Item Name	Description of Components	Quantity		Cost Per Unit	Total Cost
Ferry Terminal						
1	Mobilization/Demobilization	Indirect Cost	1	LS	\$ 304,000	\$ 310,000
2	Demolition	Demo of existing structures	0	SF	\$ 40	\$ -
3	Ferry Float	135' long x 42' wide x 11' high steel barge with all fittings	5670	SF	\$ 1,110	\$ 6,300,000
4	Float Piles	36" diameter x 1.25" Thick by 120 ft long	4	EA	\$ 91,500	\$ 370,000
5	Fender Piles	Donut Fender Piles	2	EA	\$ 165,000	\$ 330,000
6	Installation	Float Installation	1	LS	\$ 115,000	\$ 115,000
7	Platform	Gangway Access Platform 40' x 12'	480	SF	\$ 1,500	\$ 720,000
8	Platform Piles	4-24" Octagonal PP Piles	4	EA	\$ 36,000	\$ 150,000
9	Gangway	92' x 10' gangway	1	LS	\$ 175,000	\$ 180,000
10	Dredging	Channel and Float ²	7311	CY	\$ 47	\$ 340,000
11	Slope Protection	Wetland Protection	1	LS	\$ 55,600	\$ 56,000
12	Mechanical	Fire Water/Service Water	7050	SF	\$ 30	\$ 220,000
13	Electrical	Electrical/lighting/Comms for Fixed pier, ramps, curb	1	LS	\$ 574,000	\$ 574,000
14		Shore Power	1	LS	\$ 250,000	\$ 250,000
15	Entrance	Misc. Door/Entrances Features	1	LS	\$ 245,000	\$ 245,000
16	Fence	Fence for fixed platform	1	LS	\$ 100,000	\$ 100,000
17	Misc.	Site Furnishings and Installation	1	LS	\$ 200,000	\$ 200,000
					Subtotal	\$ 10,460,000
	Contingency	Allow for 25% Contingency				\$ 2,615,000
					Subtotal	\$ 13,075,000
	Contingency	Allow for 10% Construction Contingency				\$ 1,307,500
					Total Estimated Cost	\$ 14,400,000
Parking Lot						
1	Lot	Parking Lot	1	LS	\$ 2,281,000	\$ 2,300,000
2	Bus Stop	Bus Stop Bench and Structure, Other Misc. Items	1	LS	\$ 100,000	\$ 100,000
					Subtotal	\$ 2,400,000
	Contingency	Allow for 25% Contingency				\$ 600,000
					Total Estimated Cost	\$ 3,000,000
Permitting						
1	Float	Permit Compliance and support	1	LS	\$ 167,000	\$ 167,000
2	Lot	Permit Compliance and support	1	LS	\$ 167,000	\$ 167,000
Total						
					Total Estimated Cost (Float, Parking Lot, Permitting)	\$ 17,734,000
					Total Estimated Cost Escalated to 2023 Construction Date¹	\$ 20,000,000
<p>1) Note ROM values noted here are pre covid pandemic December 2019 dollar amount. Estimated cost subject to increase based on current dollar amount for labor and materials.</p> <p>2) Assumed Square footage of 16,450 ft2, dredge from EL 0 to EL -12. A local bathymetric survey is required in order to determined accurate volume required for dredging.</p> <p>3) Values were taken from the "Ferry Terminal Comparison btw MBFL and Alameda SPL 03-01-19.xls" from the following folder: \\cowi.net\projects\A085000\A085311\DATA\Calc\Cost Estimate\100% Cost Estimate Review</p>						