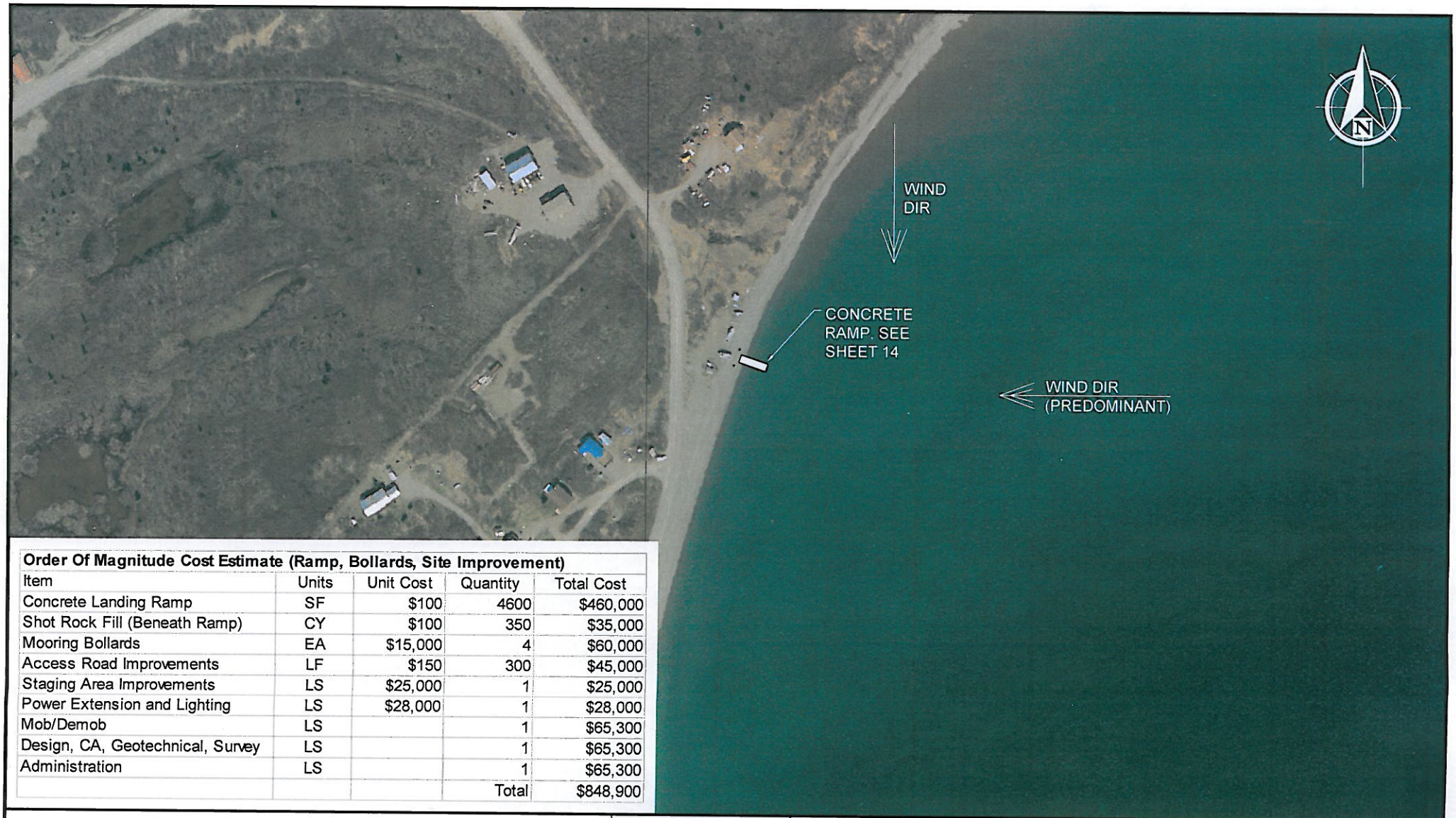


Order Of Magnitude Cost Estimate (Ramp, Bollards, Site Improvement)

Item	Units	Unit Cost	Quantity	Total Cost
Concrete Landing Ramp	SF	$100	4600	$460,000
Shot Rock Fill (Beneath Ramp)	CY	$100	350	$35,000
Mooring Bollards	EA	$15,000	4	$60,000
Access Road Improvements	LF	$150	300	$45,000
Staging Area Improvements	LS	$25,000	1	$25,000
Power Extension and Lighting	LS	$28,000	1	$28,000
Mob/Demob	LS		1	$65,300
Design, CA, Geotechnical, Survey	LS		1	$65,300
Administration	LS		1	$65,300
			Total	$848,900

SCALE IN FEET

100 0 100 200 300

PND Engineers, Inc. is not responsible for safety programs, methods or procedures of operation, or the construction of the design shown on these drawings. Where specifications are general or not called out, the specifications shall conform to standards of industry. Drawings are for use on this project only and are not intended for reuse without written approval from PND. Drawings are also not to be used in any manner that would constitute a detriment directly or indirectly to PND.

REV	DATE	DESCRIPTION

DATE: _____

1506 West 36th Avenue
Anchorage, Alaska 99503
Phone: 907.561.1011
Fax: 907.563.4220
www.pndengineers.com

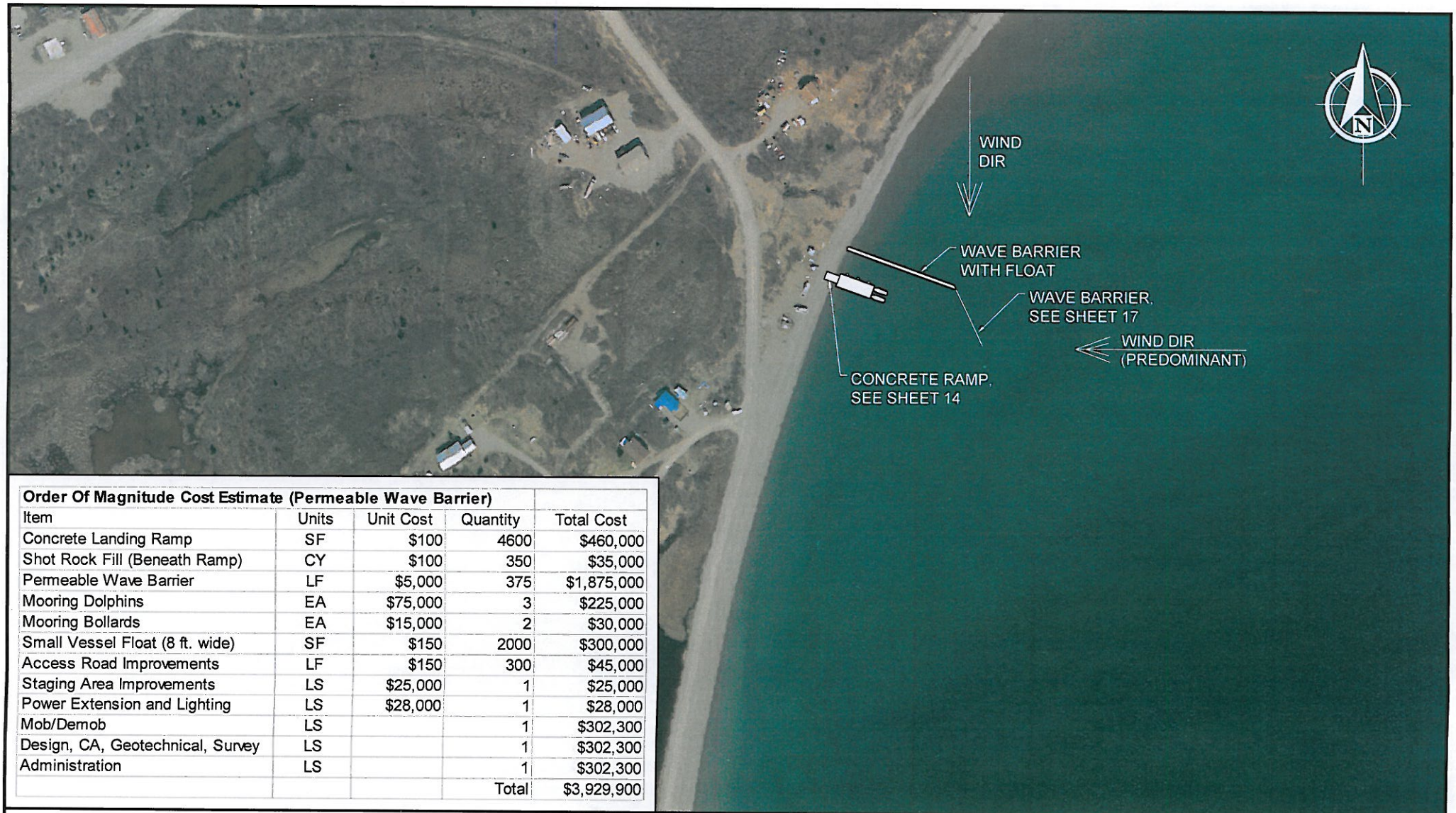
PND ENGINEERS, INC.

PROJECT: **LAKE ILIAMNA MULTIPLE COMMUNITY BARGE LANDING DESIGN PROJECT**

TITLE: **ILIAMNA BARGE LANDING RAMP AND MOORING BOLLARDS OPTION**

DESIGNED BY:	PK	DATE:	12/24/08
CHECKED BY:	XXX	PROJECT NO:	081090

SHEET NO. 04 OF 17



Order Of Magnitude Cost Estimate (Permeable Wave Barrier)				
Item	Units	Unit Cost	Quantity	Total Cost
Concrete Landing Ramp	SF	$100	4600	$460,000
Shot Rock Fill (Beneath Ramp)	CY	$100	350	$35,000
Permeable Wave Barrier	LF	$5,000	375	$1,875,000
Mooring Dolphins	EA	$75,000	3	$225,000
Mooring Bollards	EA	$15,000	2	$30,000
Small Vessel Float (8 ft. wide)	SF	$150	2000	$300,000
Access Road Improvements	LF	$150	300	$45,000
Staging Area Improvements	LS	$25,000	1	$25,000
Power Extension and Lighting	LS	$28,000	1	$28,000
Mob/Demob	LS		1	$302,300
Design, CA, Geotechnical, Survey	LS		1	$302,300
Administration	LS		1	$302,300
			Total	$3,929,900

SCALE IN FEET

100 0 100 200 300

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REV	DATE	DESCRIPTION

DATE: _____

1506 West 36th Avenue
Anchorage, Alaska 99503
Phone: 907.561.1011
Fax: 907.563.4220
www.pndengineers.com

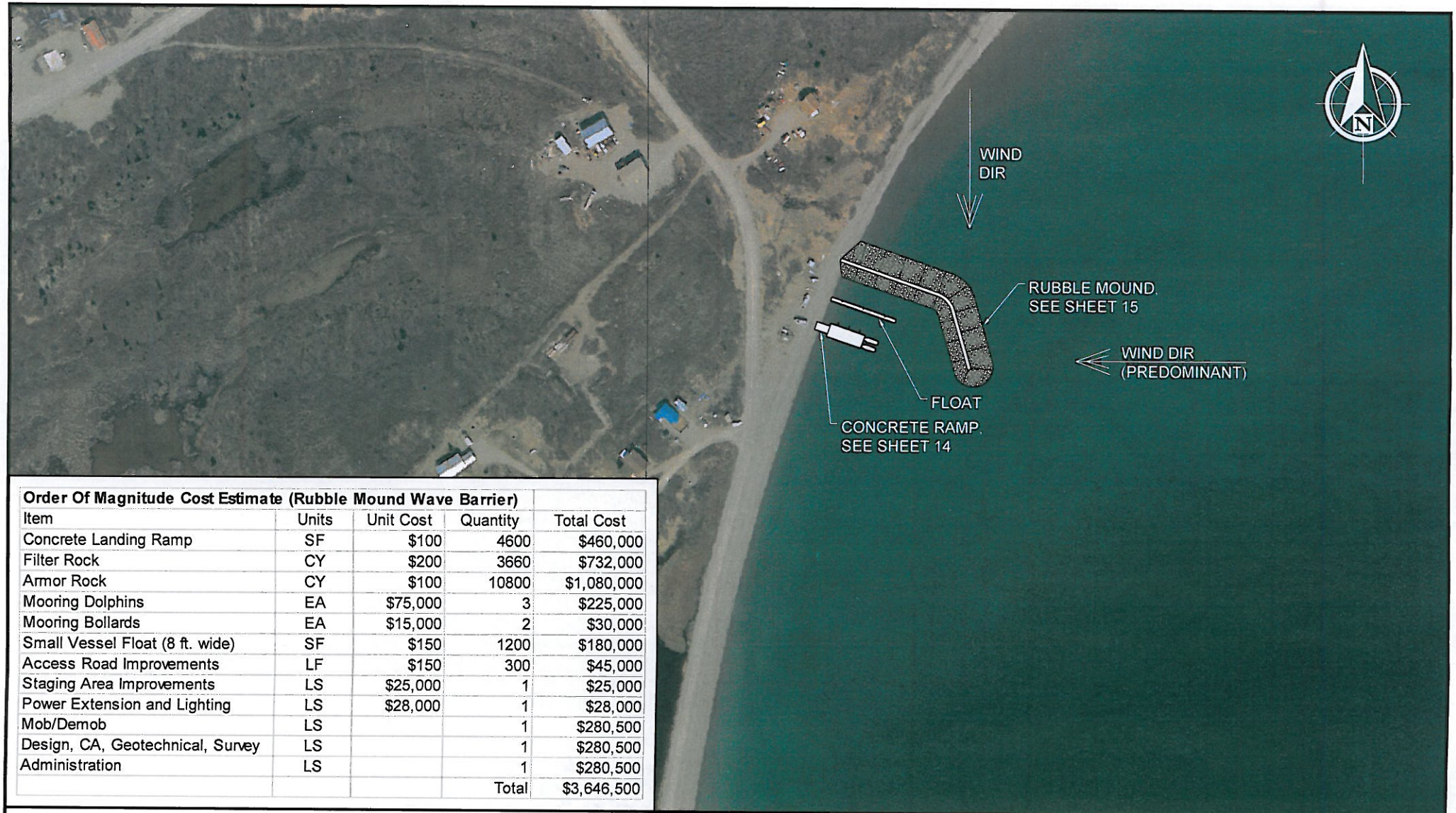
PND ENGINEERS, INC.

PROJECT: LAKE ILIAMNA MULTIPLE COMMUNITY BARGE LANDING DESIGN PROJECT

FILE: ILIAMNA BARGE LANDING PERMEABLE WAVE BARRIER OPTION

DESIGNED BY:	PK	DATE:	12/24/08
CHECKED BY:	XXX	PROJECT NO:	081090

SHEET NO. 05 OF 17



Order Of Magnitude Cost Estimate (Rubble Mound Wave Barrier)

Item	Units	Unit Cost	Quantity	Total Cost
Concrete Landing Ramp	SF	$100	4600	$460,000
Filter Rock	CY	$200	3660	$732,000
Armor Rock	CY	$100	10800	$1,080,000
Mooring Dolphins	EA	$75,000	3	$225,000
Mooring Bollards	EA	$15,000	2	$30,000
Small Vessel Float (8 ft. wide)	SF	$150	1200	$180,000
Access Road Improvements	LF	$150	300	$45,000
Staging Area Improvements	LS	$25,000	1	$25,000
Power Extension and Lighting	LS	$28,000	1	$28,000
Mob/Demob	LS		1	$280,500
Design, CA, Geotechnical, Survey	LS		1	$280,500
Administration	LS		1	$280,500
			Total	$3,646,500

SCALE IN FEET

100 0 100 200 300

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REV	DATE	DESCRIPTION

DATE: _____

1506 West 36th Avenue
Anchorage, Alaska 99503
Phone: 907.561.1011
Fax: 907.563.4220
www.pndengineers.com

PND ENGINEERS, INC.

PROJECT: **LAKE ILIAMNA MULTIPLE COMMUNITY BARGE LANDING DESIGN PROJECT**

TITLE: **ILIAMNA BARGE LANDING RUBBLE MOUND OPTION**

DESIGNED BY:	PK	DATE:	12/24/08
CHECKED BY:	XXX	PROJECT NO:	081090

SHEET NO. **06** OF 17