

BID SOLICITATION {RFP} 17DPP00070

**T0838 CHARTER SERVICES: OCEAN SERVICES AND CREW FOR
TRAWL SURVEY – NJDEP BUREAU OF FISHERIES**

EXHIBIT LIST

EXHIBIT A: NEW JERSEY TRAWL SURVEY SAMPLING MAP

EXHIBIT B: THREE-IN-ONE TRAWL DIAGRAM

EXHIBIT C: THREE-IN-ONE TRAWL SPECIFICATIONS

**EXHIBIT D: SPECIFICATIONS FOR BRIDLE AND
GROUNDWIRE, CHAFING GEAR, AND COD END SAMPLING
LINER**

EXHIBIT E: TRAWL DOOR SPECIFICATIONS

**EXHIBIT F: NEW JERSEY OCEAN TRAWL SURVEY VESSEL
OPERATIONS LOG**

EXHIBIT A: NEW JERSEY TRAWL SURVEY SAMPLING MAP

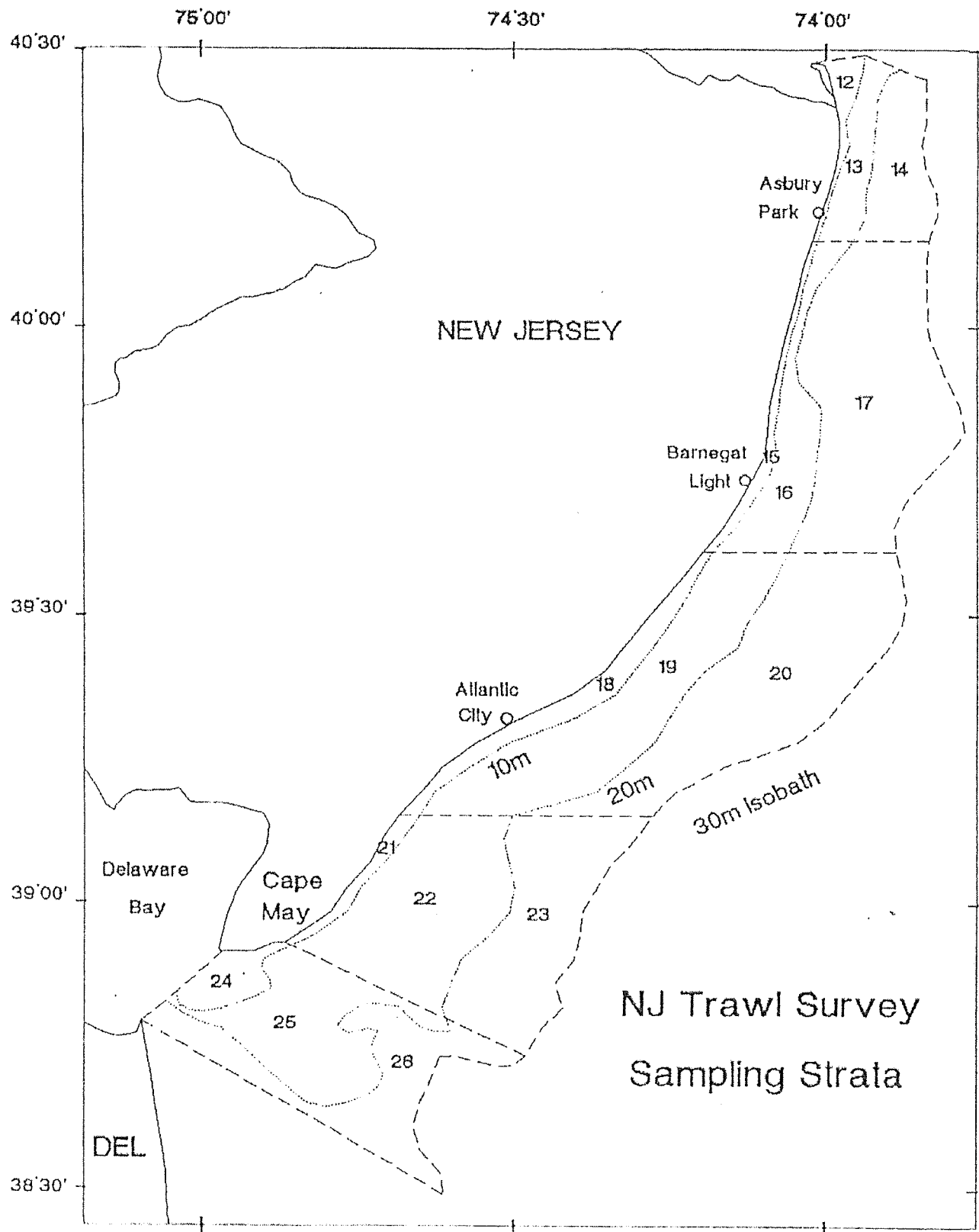


EXHIBIT B: THREE-IN-ONE TRAWL DIAGRAM

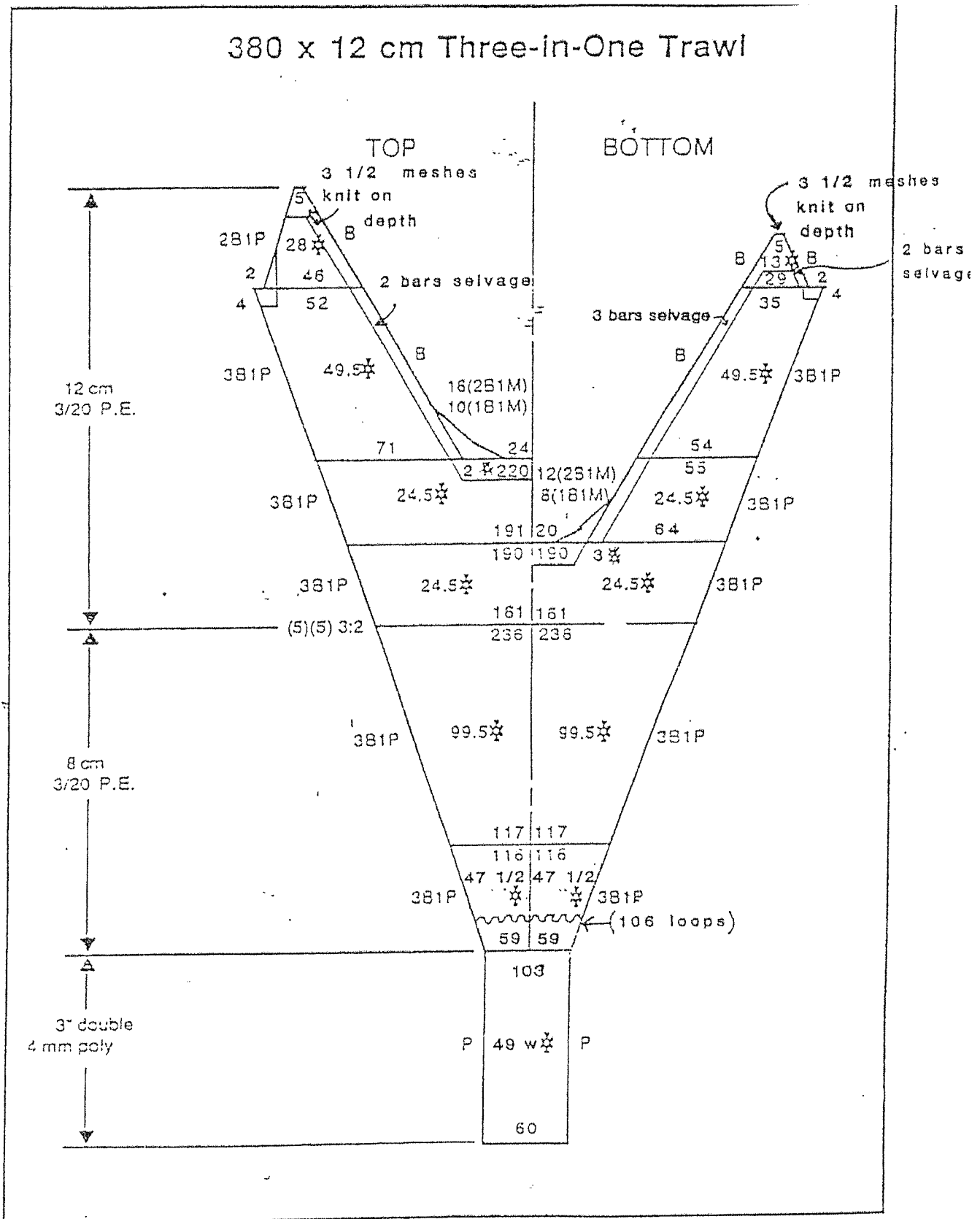


EXHIBIT C: THREE-IN-ONE TRAWL SPECIFICATIONS

General:

Fishing circle circumference:	380 x 12 cm meshes
Headrope length:	2506 cm (82')
Footrope length:	3052 cm (100')
Up & down line length:	696 cm (22' 9 1/4")

Materials:

Forward netting:	mesh size:	12 cm stretch mesh
	tolerance:	+0.5 cm, -0.25 cm
	twine size:	#3/20 twisted polyethylene
Rear netting:	mesh size:	8 cm stretch mesh
	tolerance:	+0.5 cm, -0.25 cm
	twine size:	#3/20 twisted polyethylene
Codend netting:	mesh size:	3" stretch mesh
	tolerance:	+1/2", -1/4"
	twine size:	double 4mm poly
Selvaqe:	mesh size:	12 cm stretch mesh
	tolerance:	+0.7 cm, - 0.7 cm
	twine size:	6 end, 16 carrier polyester
Hanging lines:		5/8" ENRC combination rope
Hanging twine:		#42 twisted nylon type H
Fishing line wrap:		1/2" hollow braid polypropylene
End ropes:		3-strand nylon 5/8"
Netting seams:		Double #3/12 twisted polyethylene

Rigging:

Sweep: 3" rubber cookies on 9/16" wire rope. Two equal sections with 788 cm, total length 10 cm less than fishing line, 1 center section at 888 cm fitted with 1 lb leads 10 cm apart or five between each toggle.

Drop chains: 3/8", six links long, spaced 60 cm apart with 3/4" toggles.

Flotation: Thirty-two 8" center-hole floats, 24 at headrope center in groups of four, each group spaced 80 cm apart and a group of 4 at each wing starting 1 m behind jib end on 5/8" polyplus.

Chain extensions: 1/2" Trawlex chain.

EXHIBIT D: SPECIFICATIONS FOR BRIDLE AND GROUNDWIRE, CHAFING GEAR, AND COD END SAMPLING LINER

Bridle and Groundwire Specifications

Top Bridle:	1/2" wire rope, 20 fathoms long.
Bottom Bridle:	3/4" wire rope, 20 fathoms long, covered with 2 3/8" rubber cookies.
Groundwire:	3/4" wire rope, 10 fathoms long, covered with 2 3/8" rubber cookies.
Hardware:	8" x 3/4" delta plate with three swivels.

Chafing Gear Specifications

Standard cod end chafing gear shall be attached to each net. Chafing gear shall be approximately 30 meshes wide by 50 meshes long.

Cod End Sampling Liner Specifications

The cod end sampling liner shall consist of #147 style white knitted nylon netting, or equivalent, of 1/4 inch stretched mesh.

A sampling liner shall be attached to the cod end of each net at the skirt provided (see item 7, under "construction") and extend the entire length of the cod end.

EXHIBIT E: TRAWL DOOR SPECIFICATIONS

Type:	Thyboron, Type 11
Material:	Steel
Size:	Length: 58", Width: 48", Surface Area: 19.6 ft ² , Weight Plates: 3x311lbs, Total Weight: 792 lbs.
Frontside Setup:	22 links, 11mm LL tow chain @ 5+7
Backside Setup:	11mm LL, Top chain: 10 links (9+1 hanging), Bottom chain: 9 links, Long chain: 19 links (18+1 hanging)

EXHIBIT F: NEW JERSEY OCEAN TRAWL SURVEY VESSEL OPERATIONS LOG

CRUCODE					STATION			STRATUM		BLOCK		TOW TIME	
												min	
												sec	

YEAR				MONTH		DAY	

TIME OF DAY					
hr		min		sec	

DEPTH (feet)		START		MIN		MAX		END	

LOCATION		START				END			
LATITUDE									
LONGITUDE									

CABLE OUT (m)			COURSE (°)			TOW SPEED (knots)		TOW LENGTH (n.m.)	

WEATHER		BAROMETER				WIND DIRECTION (°)			WIND SPEED (knots)	

WAVE HEIGHT (ft)		SWELL DIRECTION (°)			SWELL HEIGHT (ft)	

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OBSERVATIONS/PROBLEM/DEVIATIONS