

Doc # 28142

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**DEPT. OF THE ENVIRONMENT**

SEP 20 2002

**YARMOUTH DISTRICT  
OFFICE  
YARMOUTH, N.S.**

**16617**

Nova Scotia Department of Environment and Labour,  
13, First Street,  
Yarmouth,  
B5A 1S9

Sept 17th 2002

**DFO - BIO  
RECORDS OFFICE**

SEP 26 2002

File: CSB 5550-1

Attention: Mr. Bob Petrie, Regional Manager

Dear Mr. Petrie,

**re: Whites Cove Quarry - Blasting Plan**

In accordance with Section 10 (Blasting) part i) of the Terms and Conditions of Approval for the Whites Cove quarry (Approval No. 2002-026397 please find enclosed three copies of the Blasting Plan.

The setback distance and charges comply with Table 1 (Setback distance (m) from centre of detonation of a confined explosive to fish habitat to achieve 100 kPa guideline criteria for various substrates) on page 15 of the Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters (Canadian Technical Report of Fisheries and Aquatic Sciences 2107).

Following your review would you kindly forward to the Department of Fisheries and Oceans for their approval.

Yours Truly,



**Paul G. Buxton P.Eng.  
Project Manager**

**000976**

CONSULT

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**BLAST DESIGN**

<b>LOCATION:</b>	Whites Point Quarry
<b>BLAST #:</b>	Test
<b>NUMBER OF HOLES</b>	50
<b>HOLE DIAMETER</b>	4"
<b>HOLE DEPTH</b>	16' to 26'
<b>SUB DRILL:</b>	3'
<b>BURDEN:</b>	8'
<b>SPACING:</b>	8'
<b>MAX LBS/DELAY</b>	85.5 lb
<b>COLLAR:</b>	6'
<b>TYPE OF EXPLOSIVES:</b>	Apex Super 4000, 75mm x 400mm toe load, 9 lbs/hole.  Amex 11 Column load
<b>PRIMERS:</b>	90 gram
<b>DETONATORS:</b>	Handidet 25/500ms
<b>TOTAL WT OF EXPLOSIVES:</b>	3015 lbs
<b>TOTAL TONNES BLASTED:</b>	4.123.8 tonnes

**NOTE:** Collar of holes to be stemmed with crushed stone.

# ARCHIBALD DRILLING & BLASTING

## WHITES POINT QUARRY

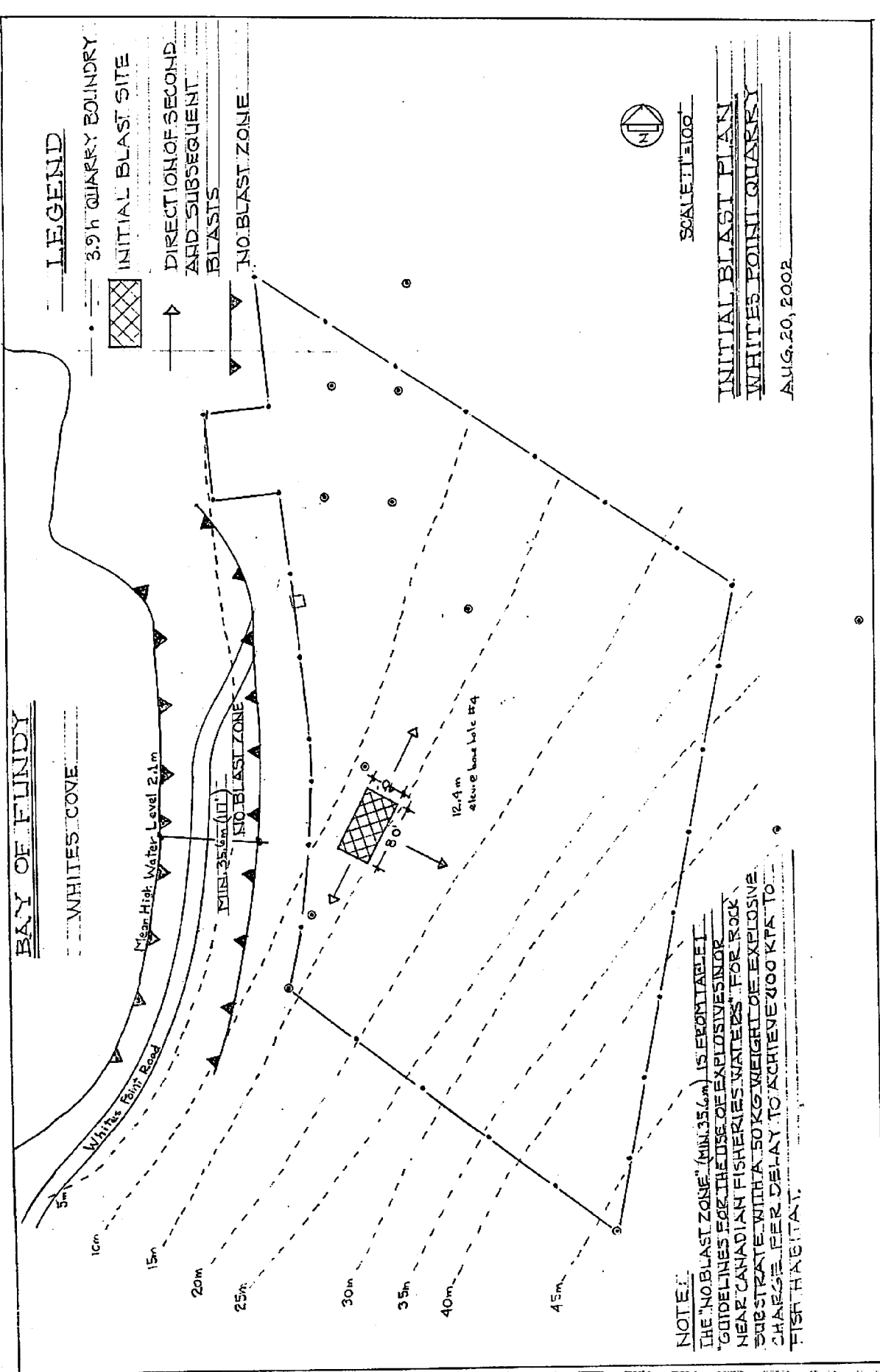
Pattern 8 x 8 ft = 4.74 tonne per ft of bore hole 4 in  
 Subdrill 3 ft included = 150 ft  
 $4.74 \times 870 = 4,123.8$  Tonne  
 Total ft loaded = 720 ft  
 Total wt of explosives = 3015 lb

*Hole Depth*

	FACE									
16	16	16	16	16	16	16	16	16	16	16 - 130 ft
18	18	18	18	18	18	18	18	18	18	18 - 150 ft
19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5 - 165 ft
22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5 - 195 ft
26	26	26	26	26	26	26	26	26	26	26 - 230 ft
										<u>870 ft</u> total

DESIGN: Blast001
DESCRIPTION: 10032002
DESIGN DATE: 10/03/2002
LOCATION: 10032002
SCALE: Not to scale
ICI EXPLOSIVES SHOTPlus v1.94

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**NOTE:**  
 THE "NO BLAST ZONE" (MIN. 35.6m) IS FROM THE  
 "GUIDELINES FOR THE USE OF EXPLOSIVES IN  
 NEAR CANADIAN FISHERIES WATERS" FOR ROCK  
 SUBSTRATE WITH A 50 KG WEIGHT OF EXPLOSIVE  
 CHARGE PER DELAY TO ACHIEVE 100 KTS TO  
 FISH HABITAT.

**INITIAL BLAST PLAN**  
**WHITES POINT QUARRY**  
 AUG. 20, 2002

**BAY OF FUNDY**  
**WHITES COVE**

**LEGEND**

- 3.9h QUARRY BOUNDARY
- ▨ INITIAL BLAST SITE
- DIRECTION OF SECOND AND SUBSEQUENT BLASTS
- - - - NO BLAST ZONE



SCALE 1:100