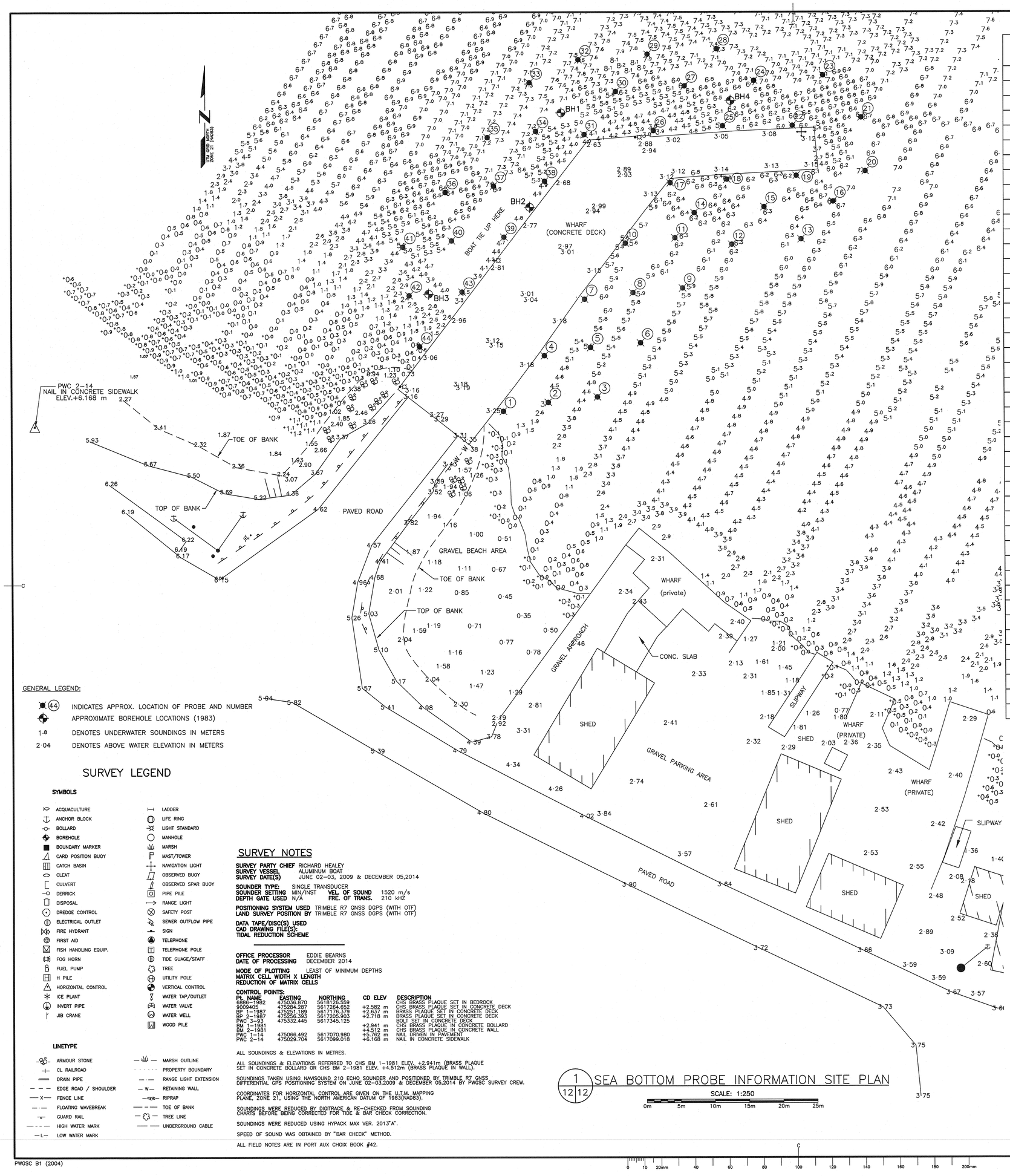

PROBE #	PENETRATION	TYPE OF MATERIAL
# 1	0.10m	GRAVEL, ROCKY AND SANDY BOTTOM
# 2	0.10m	GRAVEL, ROCKY AND SANDY BOTTOM
# 3	0.25m	GRAVEL, ROCKY AND SANDY BOTTOM
# 4	0.10m	GRAVEL, ROCKY AND SANDY BOTTOM
# 5	0.20m	GRAVEL, ROCKY AND SANDY BOTTOM
# 6	0.25m	GRAVEL, ROCKY AND SANDY BOTTOM
# 7	0.30m	GRAVEL, ROCKY AND SANDY BOTTOM
# 8	0.50m	GRAVEL, ROCKY AND SANDY BOTTOM
# 9	0.50m	GRAVEL, ROCKY AND SANDY BOTTOM
# 10	0.20m	GRAVEL, ROCKY AND SANDY BOTTOM
# 11	0.30m	GRAVEL, ROCKY AND SANDY BOTTOM
# 12	0.40m	GRAVEL, ROCKY AND SANDY BOTTOM
# 13	0.40m	GRAVEL, ROCKY AND SANDY BOTTOM
# 14	0.40m	GRAVEL, ROCKY AND SANDY BOTTOM
# 15	0.40m	GRAVEL, ROCKY AND SANDY BOTTOM
# 16	0.50m	GRAVEL, ROCKY AND SANDY BOTTOM
# 17	0.20m	GRAVEL, ROCKY AND SANDY BOTTOM
# 18	0.20m	GRAVEL, ROCKY AND SANDY BOTTOM
# 19	0.20m	GRAVEL, ROCKY AND SANDY BOTTOM
# 20	0.30m	GRAVEL, ROCKY AND SANDY BOTTOM
# 21	0.20m	GRAVEL, ROCKY AND SANDY BOTTOM
# 22	0.25m	GRAVEL, ROCKY AND SANDY BOTTOM
# 23	1.50m	SOFT & MUDDY BOTTOM
# 24	1.00m	SOFT & MUDDY BOTTOM
# 25	0.30m	ROCK MATTRESS MATERIAL
# 26	0.30m	SOFT & MUDDY BOTTOM
# 27	1.40m	SOFT & MUDDY BOTTOM
# 28	+2.0m	SOFT & MUDDY BOTTOM
# 29	+2.0m	SOFT & MUDDY BOTTOM
# 30	1.10m	SOFT & MUDDY BOTTOM
# 31	0.50m	SOFT & MUDDY BOTTOM
# 32	+2.0m	SOFT & MUDDY BOTTOM
# 33	+2.0m	SOFT & MUDDY BOTTOM
# 34	0.50m	ROCK MATTRESS MATERIAL
# 35	1.50m	SOFT & MUDDY BOTTOM
# 36	1.20m	SOFT & MUDDY BOTTOM
# 37	0.50m	GRAVEL, ROCKY AND SANDY BOTTOM
# 38	0.20m	GRAVEL, ROCKY AND SANDY BOTTOM
# 39	0.15m	GRAVEL, ROCKY AND SANDY BOTTOM
# 40	0.30m	GRAVEL, ROCKY AND SANDY BOTTOM
# 41	1.40m	SOFT & MUDDY BOTTOM
# 42	0.30m	GRAVEL, ROCKY AND SANDY BOTTOM
# 43	0.25m	GRAVEL, ROCKY AND SANDY BOTTOM
# 44	0.20m	GRAVEL, ROCKY AND SANDY BOTTOM

GENERAL LEGEND:

- (44) INDICATES APPROX. LOCATION OF PROBE AND NUMBER
- APPROXIMATE BOREHOLE LOCATIONS (1983)
- 1·8 DENOTES UNDERWATER SOUNDINGS IN METERS
- 2·04 DENOTES ABOVE WATER ELEVATION IN METERS

SURVEY LEGEND

SYMBOLS

- ACQUACULTURE
- ANCHOR BLOCK
- BOLLARD
- BOREHOLE
- BOUNDARY MARKER
- CARD POSITION BUOY
- CATCH BASIN
- CLEAT
- CULVERT
- DERRICK
- DISPOSAL
- DREDGE CONTROL
- ELECTRICAL OUTLET
- FIRE HYDRANT
- FIRST AID
- FISH HANDLING EQUIP.
- FOG HORN
- FUEL PUMP
- H PILE
- HORIZONTAL CONTROL
- ICE PLANT
- INVERT PIPE
- JIB CRANE
- LADDER
- LIFE RING
- LIGHT STANDARD
- MANHOLE
- MARSH
- MAST/TOWER
- NAVIGATION LIGHT
- OBSERVED BUOY
- OBSERVED SPAR BUOY
- PIPE PILE
- RANGE LIGHT
- SAFETY POST
- SEWER OUTFLOW PIPE
- SIGN
- TELEPHONE
- TELEPHONE POLE
- TIDE GUAGE/STAFF
- TREE
- UTILITY POLE
- VERTICAL CONTROL
- WATER TAP/OUTLET
- WATER VALVE
- WATER WELL
- WOOD PILE

LINETYPE

- ARMOUR STONE
- CL RAILROAD
- DRAIN PIPE
- EDGE ROAD / SHOULDER
- FENCE LINE
- FLOATING WAVEBREAK
- GUARD RAIL
- HIGH WATER MARK
- LOW WATER MARK
- MARSH OUTLINE
- PROPERTY BOUNDARY
- RANGE LIGHT EXTENSION
- RETAINING WALL
- RIPRAP
- TOE OF BANK
- TREE LINE
- UNDERGROUND CABLE

SURVEY NOTES

SURVEY PARTY CHIEF RICHARD HEALEY
SURVEY VESSEL ALUMINUM BOAT
SURVEY DATE(S) JUNE 02–03, 2009 & DECEMBER 05,2014

SOUNDER TYPE: SINGLE TRANSDUCER
SOUNDER SETTING MIN/INST **VEL OF SOUND** 1520 m/s
DEPTH GATE USED N/A **FRE. OF TRANS.** 210 kHZ

POSITIONING SYSTEM USED TRIMBLE R7 GNSS DGPS (WITH OTF)
LAND SURVEY POSITION BY TRIMBLE R7 GNSS DGPS (WITH OTF)

DATA TAPE/DISC(S) USED
CAD DRAWING FILE(S):
TIDAL REDUCTION SCHEME

OFFICE PROCESSOR EDDIE BEARNS
DATE OF PROCESSING DECEMBER 2014

MODE OF PLOTTING LEAST OF MINIMUM DEPTHS
MATRIX CELL WIDTH X LENGTH
REDUCTION OF MATRIX CELLS

CONTROL POINTS:

PL NAME	EASTING	NORTHING	CD ELEV	DESCRIPTION
6886-1982	475036.870	5618128.359		CHS BRASS PLAQUE SET IN BEDROCK
9009405	475284.287	5617264.652	+2.582 m	CHS BRASS PLAQUE SET IN CONCRETE DECK
BP 1-1987	475251.189	5617176.379	+2.637 m	BRASS PLAQUE SET IN CONCRETE DECK
BP 2-1987	475256.393	5617205.903	+2.718 m	BRASS PLAQUE SET IN CONCRETE DECK
PWC 3-93	475332.445	5617345.125		BOLT SET IN CONCRETE DECK
BM 1-1981			+2.941 m	CHS BRASS PLAQUE IN CONCRETE BOLLARD
BM 2-1981			+4.512 m	CHS BRASS PLAQUE IN CONCRETE WALL
PWC 1-14	475066.492	5617070.980	+5.762 m	NAIL DRIVEN IN PAVEMENT
PWC 2-14	475029.704	5617099.018	+6.168 m	NAIL IN CONCRETE SIDEWALK

ALL SOUNDINGS & ELEVATIONS IN METRES.

ALL SOUNDINGS & ELEVATIONS REFERRED TO CHS BM 1-1981 ELEV. +2.941m (BRASS PLAQUE SET IN CONCRETE BOLLARD OR CHS BM 2-1981 ELEV. +4.512m (BRASS PLAQUE IN WALL).

SOUNDINGS TAKEN USING NAVISOUND 210 ECHO SOUNDER AND POSITIONED BY TRIMBLE R7 GNSS DIFFERENTIAL GPS POSITIONING SYSTEM ON JUNE 02–03,2009 & DECEMBER 05,2014 BY PWGSC SURVEY CREW.

COORDINATES FOR HORIZONTAL CONTROL ARE GIVEN ON THE U.T.M. MAPPING PLANE, ZONE 21, USING THE NORTH AMERICAN DATUM OF 1983(NAD83).

SOUNDINGS WERE REDUCED BY DIGITRACE & RE-CHECKED FROM SOUNDING CHARTS BEFORE BEING CORRECTED FOR TIDE & BAR CHECK CORRECTION.

SOUNDINGS WERE REDUCED USING HYPACK MAX VER. 2013"A".

SPEED OF SOUND WAS OBTAINED BY "BAR CHECK" METHOD.

ALL FIELD NOTES ARE IN PORT AUX CHOIX BOOK #42.

1/12|12 SEA BOTTOM PROBE INFORMATION SITE PLAN

SCALE: 1:250

0m 5m 10m 15m 20m 25m

NOTES:

- DIVERS USED 2M STEEL ROD & 5LB. HAMMER
- BOTTOM AROUND CRIBWORK CONSISTED OF ROCK MATTRESS.

NOTES:

1. PROBES WERE COMPLETED IN DECEMBER, 2014 BY CENTRAL DIVING LTD.
2. REFUSAL DEPTH OF PROBES ARE NOT NECESSARILY INDICATIVE OF BEDROCK OR DENSE HARD BOTTOM ELEVATIONS.
3. PROBES WERE COMPLETED USING A 10mm DIAMETER STEEL ROD, 2m LONG WHICH WAS DRIVEN TO REFUSAL INTO THE SEA FLOOR BY THE DIVER STRIKING IT WITH A 3kg HAMMER.
4. DO NOT SCALE FROM DRAWINGS.
5. ALL DIMENSIONS IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.
6. ALL ELEVATIONS IN METERS.
7. CAUTION THAT THIS INVESTIGATION IS MADE AVAILABLE FOR REVIEW, AND INTENDED TO PROVIDE GENERAL SITE INFORMATION ONLY. ANY INTERPOLATION AND/OR ASSUMPTION MADE RELATIVE TO THIS INVESTIGATION IS THE CONTRACTORS RESPONSIBILITY.
8. LOCATION OF PROBES SHOWN SHALL BE CONSIDERED APPROXIMATE.

C 0 10 20mm 40 60 80 100 120 140 160 180 200mm

PWGSC B1 (2004)

Public Works and Government Services Canada / Travaux Publics et Services gouvernementaux Canada

PROVINCE OF NEWFOUNDLAND AND LABRADOR
PEGNL PERMIT HOLDER
This Permit Allows
Meridian Engineering Inc.
To practice Professional Engineering in Newfoundland and Labrador. Permit No. as issued by PEG ... N0453 ... which is valid for the year 2015.

STAMP
REGISTERED PROFESSIONAL ENGINEER
PEGNL Newfoundland and Labrador
GRADY FISHER
15/03/12
NEWFOUNDLAND & LABRADOR

revisions		date
E	ISSUED FOR TENDER	15/03/12
D	ISSUED FOR 100% REVIEW	15/02/27
C	ISSUED FOR 99% REVIEW	15/01/22

project / projet

WHARF RECONSTRUCTION PORT AU CHOIX, NL

drawing / dessin

SEA BOTTOM PROBE INFORMATION

designed C. FISHER / conçu
date NOVEMBER 2014
drawn R. SNOW / dessiné
date NOVEMBER 2014
approved / approuvé
date
Tender / Soumission
PWGSC Project Manager / Administrateur de projets TPSGC

project number / no. du projet
R.075163.001

drawing no. / no. du dessin
C12 OF 12

E-DRM/GDD-E: 513841