

**SURVEY NOTES**

SURVEY PARTY CHIEF: DARRYL GREEN  
 SURVEY VESSEL: SCOTIA SURVEYOR  
 SURVEY DATE(S): JUNE 10-11, 2015  
 SOUNDING TYPE: ROSS SWEEP SYSTEM  
 SOUNDING SETTINGS: INST VEL. OF SOUND 1477 m/s  
 DEPTH GATE USED: N/A FRE. OF TRANS. 190-210 kHz  
 LAND SURVEY POSITION BY: RTK GPS TRIMBLE R7  
 RAW DATA FILE(S): BAL162M.ZIP (HYPACK)  
 CAD DRAWING FILE(S): BAL162A.DWG  
 TIDAL REDUCTION SCHEME: REF TO NS MON. 11457, ELEV. 60.46m ABOVE CD,  
 REF TO CHS BM 65N9002, ELEV. 3.828m LOCATED IN PICTOU. CHART DATUM GSC DATUM  
 DIFFERENCE OF 0.92m APPLIED TO NS MON 11457 LISTED GSC ELEVATION.

OFFICE PROCESSOR: S. DUFFY  
 DATE OF PROCESSING: JUNE 2015

MODE OF PLOTTING: AVERAGE DEPTHS  
 MATRIX CELL WIDTH X LENGTH: 1.2m BY 3.0m

CONTROL POINTS: NAD83 (ORIGINAL) UTM ZONE 20  
 RL NAME EASTING NORTHING G.D. ELEV. DESCRIPTION  
 NS 11457 583288.272 5078297.984 +60.46 LRIS CONTROL  
 PT "501" 583979.341 5079006.325 +2.98 PWGSC  
 PT "502" 583993.715 5078919.420 +2.98 PWGSC

NOTE: WHARF STRUCTURES AND LAND FEATURES ON THIS PLAN WERE OBTAINED FROM REALTY PLAN S-9324 REVISED IN 2006.

TOPO ELEVATIONS SURVEYED ON JUNE 10, 2015.

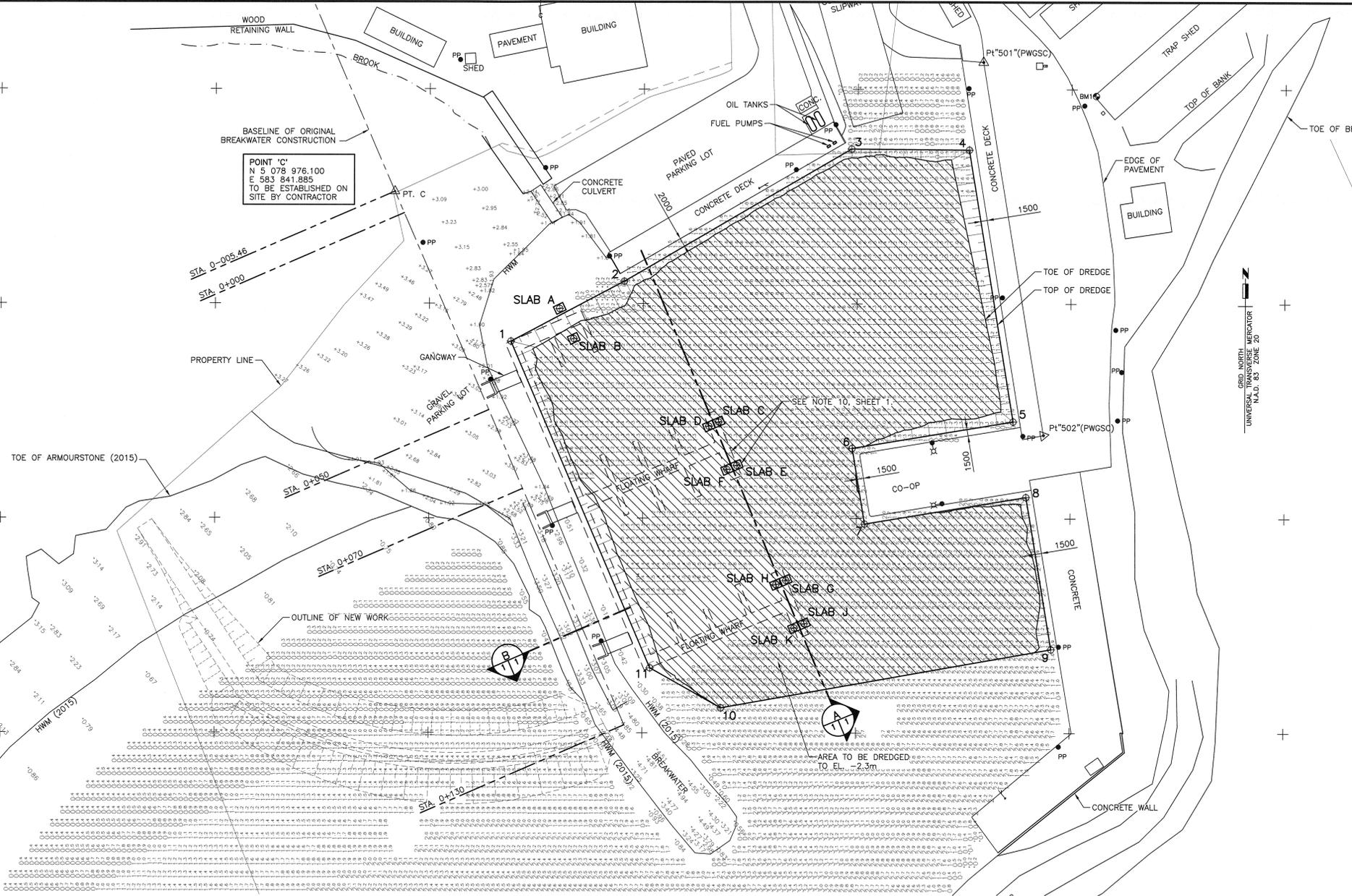
SOUNDINGS WERE ROUNDED ACCORDING TO CANADIAN HYDROGRAPHIC SERVICE SURVEY STANDARDS.

**LEGEND**

- ▲ PWGSC HORIZONTAL CONTROL
- PWGSC VERTICAL CONTROL
- /M SOUNDING/TOPOGRAPHIC ELEVATION
- ⊕ HORIZONTAL CONTROL POINT
- ⊕ TOPOGRAPHIC ELEVATION
- +3.00 POWER POLE
- PP DERRICK
- X NAVIGATION LIGHT

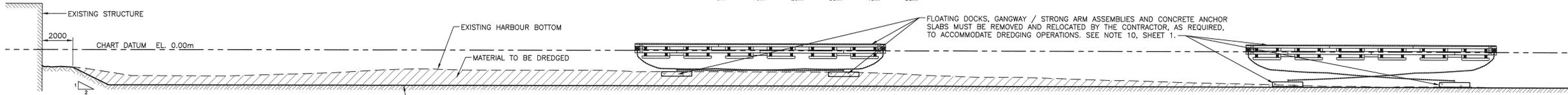
| DREDGE COORDINATES |               |                 |
|--------------------|---------------|-----------------|
| MARK               | EASTING       | NORTHING        |
| 1                  | E 583 869.082 | N 5 078 941.195 |
| 2                  | E 583 895.546 | N 5 078 955.193 |
| 3                  | E 583 948.593 | N 5 078 986.095 |
| 4                  | E 583 976.171 | N 5 078 985.887 |
| 5                  | E 583 986.639 | N 5 078 922.584 |
| 6                  | E 583 949.003 | N 5 078 916.342 |
| 7                  | E 583 951.928 | N 5 078 898.710 |
| 8                  | E 583 989.683 | N 5 078 904.973 |
| 9                  | E 583 995.667 | N 5 078 869.518 |
| 10                 | E 583 918.455 | N 5 078 855.830 |
| 11                 | E 583 901.805 | N 5 078 865.126 |

| CONCRETE ANCHOR SLAB CENTER POINTS |               |                 |
|------------------------------------|---------------|-----------------|
| MARK                               | EASTING       | NORTHING        |
| SLAB A                             | E 583 880.472 | N 5 078 948.825 |
| SLAB B                             | E 583 883.791 | N 5 078 941.829 |
| SLAB C                             | E 583 917.770 | N 5 078 922.436 |
| SLAB D                             | E 583 915.468 | N 5 078 921.461 |
| SLAB E                             | E 583 922.049 | N 5 078 912.333 |
| SLAB F                             | E 583 891.747 | N 5 078 911.358 |
| SLAB G                             | E 583 983.623 | N 5 078 885.560 |
| SLAB H                             | E 583 831.321 | N 5 078 884.584 |
| SLAB J                             | E 583 987.902 | N 5 078 875.457 |
| SLAB K                             | E 583 935.600 | N 5 078 874.481 |



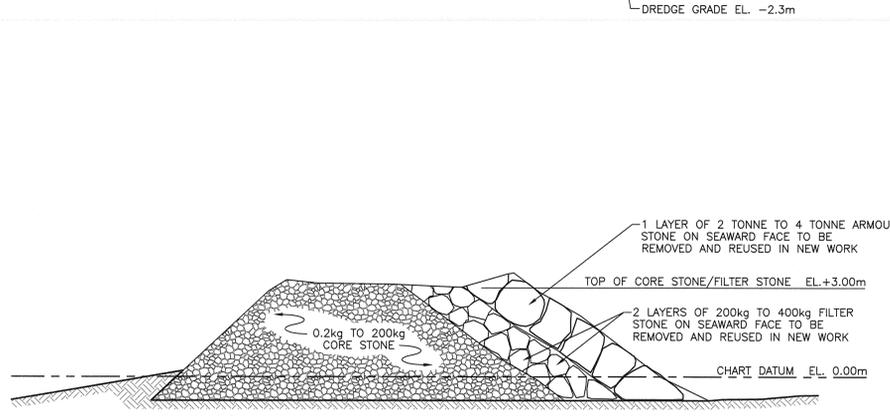
**EXISTING CONDITIONS AND DREDGE PLAN**

SCALE: 1:500  
 0m 10m 20m 30m 40m 50m



**DREDGE SECTION**

SCALE: 1:125  
 0m 1 2 3 4 5 6 7 8 9 10m

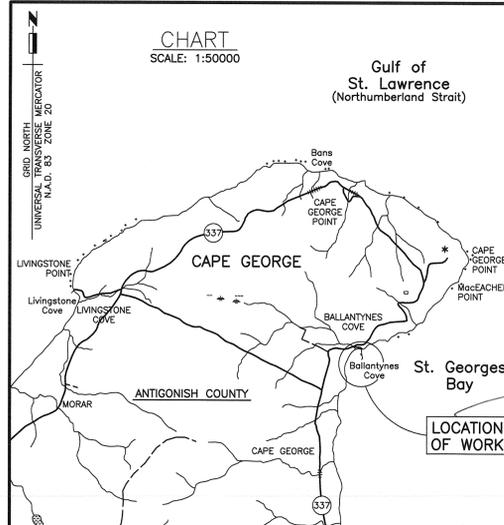


**EXISTING CONDITIONS SECTION**

SCALE: 1:100  
 0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

**GENERAL NOTES**

1. THE WORK UNDER THIS CONTRACT CONSISTS OF, BUT IS NOT LIMITED TO, THE FOLLOWING:
  - a) REMOVAL AND SALVAGE OF EXISTING ARMOURSTONE AND FILTERSTONE BETWEEN STA 0+050 AND STA 0+130. SALVAGED MATERIAL TO BE USED IN CONSTRUCTION OF NEW CONTAINMENT BERM.
  - b) SUPPLY & INSTALLATION OF NEW CONTAINMENT BERM.
  - c) DREDGING OF AREA SHOWN ON DRAWING TO ELEVATION -2.30m. DISPOSAL OF DREDGE MATERIAL IN NEW CONTAINMENT AREA.
2. ELEVATIONS REFER TO BENCHMARK - BM 65 - AT TOP OF CONCRETE SLAB OF FISHERIES STORAGE SHED, WHERE INDICATED ON SITE PLAN; WHICH HAS AN ELEVATION OF 3.31 METRES ABOVE CHART DATUM.
3. CHART DATUM IS, BY INTERNATIONAL AGREEMENT, A PLANE BELOW WHICH THE TIDE WILL SELDOM FALL. THE CANADIAN HYDROGRAPHIC SERVICE HAS ADOPTED THE PLANE OF LOWEST NORMAL TIDE (L.N.T.) AS CHART DATUM. AS THE RISE, FALL AND RANGE OF TIDES VARIES DAILY, THE CANADIAN TIDE AND CURRENT TABLES, AS ISSUED BY THE CANADIAN HYDROGRAPHIC SERVICE, SHOULD BE CONSULTED FOR TIDAL PREDICTIONS AND OTHER TIDAL INFORMATION RELATING TO WORK.
4. THE CONTRACTOR SHALL BE HELD TO HAVE VISITED THE SITE AND TO HAVE BECOME FAMILIAR WITH THE EXISTING CONDITIONS PRIOR TO COMMENCING WORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THE ENGINEER IN WRITING OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE PLAN BEFORE STARTING WORK.
5. GRID NORTH REFERS TO UNIVERSAL TRANSVERSE MERCATOR PROJECTION COORDINATES, NORTH AMERICAN DATUM 1983, ZONE 20.
6. ALL DIMENSIONS SHOWN ARE IN MILLIMETRES AND ELEVATIONS ARE IN METRES. DO NOT SCALE FROM DRAWINGS, FIGURED DIMENSIONS ARE TO BE FOLLOWED.
7. DREDGING OPERATIONS ARE NOT TO UNDERMINE THE EXISTING BREAKWATERS.
8. DREDGE SIDE SLOPES AT 1 VERTICAL TO 2 HORIZONTAL.
9. FLOATING DOCKS, GANGWAY / STRONG ARM ASSEMBLIES AND CONCRETE ANCHOR SLABS MUST BE REMOVED AND RELOCATED BY THE CONTRACTOR, AS REQUIRED, TO ACCOMMODATE DREDGING OPERATIONS. ALL CONCRETE ANCHOR SLABS AND COMPONENTS MUST BE REINSTATED TO ORIGINAL LOCATIONS (COORDINATES PROVIDED ON PLAN) AND CONDITION FOLLOWING COMPLETION OF DREDGING. FLOATS TO BE SECURED "IN WATER" FOR WINTERIZATION AS PER TYPICAL ARRANGEMENT UNDER GUIDANCE FROM THE HARBOUR AUTHORITY. IN SPRING, CONTRACTOR WILL BE RESPONSIBLE TO REINSTATE FLOATING DOCKS, GANGWAY / STRONGARM ASSEMBLIES AS PER PRE-DREDGE LAYOUT PRIOR TO APRIL 15, 2017 TO ENSURE THEY ARE FULLY OPERATIONAL FOR START OF LOBSTER SEASON.



|           |                   |          |
|-----------|-------------------|----------|
| 0         | ISSUED FOR TENDER | AUG 2016 |
| revisions |                   | date     |

project BASIN DREDGING AND CONTAINMENT CELL CONSTRUCTION  
 BALLANTYNES COVE  
 ANTIGONISH COUNTY NOVA SCOTIA

**EXISTING CONDITIONS, REMOVALS AND DREDGE PLAN AND SECTION**

|                 |                 |                                |
|-----------------|-----------------|--------------------------------|
| designed        | ROSALIA GALANTE | conçu                          |
| date            | AUGUST 2016     |                                |
| drawn           | GEORGE PROSPER  | dessiné                        |
| approved        | AUGUST 2016     | approuvé                       |
| date            |                 |                                |
| Project Manager |                 | Administrateur de projets TPSC |
| project number  | R.076163.001    | no. du projet                  |
| drawing no.     | SHT 1 OF 2      | no. du dessin                  |