

# **SV-MV Marine Surveyors B.C. Ltd.**

**453 Head St., Victoria B.C., V9A 5S1**

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**SV-MVmarinesurveyors.com - (Credentials)**



**Requested By:**

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**For:**

**SV-MV Marine Surveyors Ltd.  
Westbay Marina Village, 453 Head St., Victoria, B.C. V9A 5S1  
Tel: 250-588-8869**

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**to provide:**

**Navigation Control Plan/Report for towing the pontoons (10 of 30m x 7m and 4 of 6m x 7m) from D jetty in Colwood to Constance Cove.**

- **Rigging and towing arrangement**
- **Marshalling plan while under tow**
- **Towing speed and calculated freeboard while under tow**
- **Bollard pull calculation for tandem towing**
- **Temporary mooring arrangement at Constance Cove**
- **Itemized list of remedial work to make them seaworthy**

## **#1. Rigging & Towing**

**5 – (30m x 7m) + 2 – (6m x 7m) – will be moved from D-Jetty to Constance Cove for 1<sup>st</sup> Jetty Assembly. Remainder will stay in Colwood until required. This inspection / Navigation Control Plan is valid for both moves.**

**ONLY - 1 – (30m x 7m) section can be towed at a time X5**

**NOTE: Due to the sheer mass of float / shape / depth 12' below waterline and moving within the confines of Esquimalt Hbr.. This tow will be very 'restricted in ability to maneuver' from the start of the operation getting away from the float marshalling area by Fueling Jetty across to D.N.D. and Public Works assets going into Constance Cove.**

**2 – (6m x 7m) can be moved with same towing configuration below with added floats for security.**

**X2 - Tugs required / 1 - medium and 1- small**

**Each component (30m x 7m) should be towed with long bridle to prevent prop wash into Float while in transit. The small tug power-lashed on stern of Float for **marshalling / security of tow.****

### **Temporary mooring arrangement at Constance Cove**

**Ruskin Construction will have barge anchored in Constance Cove so Floats can be secured and staged for assembly at new jetty.**

### **Towing Speed**

**1 to 2 kts.**

3/6

**Freeboard while under Tow**

**1- meter**



**Bollards pull Calculation - 30T -  
Manufacturer Specifications**



**\*\* 30 T. Bollard Pull Capacity \*\***

**\*\* Sighted - ALL CORRECT \*\***

**Remedial work to make them Seaworthy**

**\*\*\* remove inspection covers on each Float = (4 per float) – X7 \*\*\***

- **\*\* Remove water – secure covers for transit – the day before move \*\***  
**\* Monitor till day of move \***



**Note – these Inspection Compartments (X4) are the access to the mechanical area to join floats together on site. Fore and aft compartments off of these Voids have foam injection which will be removed on site for assembly.**

**SURVEYOR'S CERTIFICATION:**

**I certify that, to the best of my knowledge and belief:**

**The statements are fact contained in this report. The reported analyses, opinions and conclusions are limited only by the reported assumptions from my personal, professional analyses and conclusions.**

**I have no present or prospective interest in or personal interest or bias with respect to the parties involved.**

**I have made a personal inspection of the Floats subject of this report.**

**This report is submitted without prejudice and for the benefit of whom it may concern.**



**Michael Hollywood Lt(N) CD ret.**

**Examinations of all floating platforms or vessels are made in good faith and carried out as thoroughly and as carefully as possible. SV-MV Marine Surveyors Ltd. and or its representatives cannot accept liability or responsibility under any circumstances.**