The St. Lambert Lock will lift the ship some 15 feet from the level of Montreal harbour to the level of Laprairie Basin through which the ship channel sweeps in a great arc  $8\frac{1}{2}$ miles long between its protecting embankments to the second lock.

## b) Cote Ste, Catherine Lock

The Cote Ste. Catherine Lock, like the other six new seaway locks and the seven lift locks on the Welland Ship Canal, has been built to the following standard dimensions:

useabl	e length	730	feet
width		80	feet
depth	over lock sills	30	feet

This lock, which will require 24 million gallons of water to fill, can be filled or emptied in less than ten minutes. It will lift ships from the level of Laprairie Basin through 30 feet to the level of Lake St. Louis.

The function of this lock is to by-pass the Lachine Rapids. Beyond it, the channel runs 72 miles before reaching Lake St. Louis.

Over this channel at one point tower the piers which give Honore Mercier highway bridge 120 feet of clearance for ships. Further upstream the Canadian Pacific Railway bridge has had two lift spans installed to allow for the passage of ships. These lift spans can be raised or lowered in a minute and a half.

## c) Lake St. Louis & the Beauharnois Locks

Entering Lake St. Louis the ship will proceed some 12 miles by dredged channels before reaching the <u>Lower</u> <u>Beauharnois Lock</u> at the west end of the Lake.

The minimum width of St. Lawrence Seaway channels is 200 feet when provided with two embankments, 300 feet when there is only one embankment, and 450 feet in the open reaches. The depth in canals and channels is 27 feet.

The Lower Beauharnois Lock by-passing the Beauharnois Power House lifts the ship 41 feet so that it may pass through a short canal to the <u>Upper Beauharnois Lock</u>, where it is again lifted 41 feet so as to reach the level of Lake St. Francis; after some 13 miles in the Beauharnois Canal, the ship enters Lake St. Francis. It sails westward for some 30 miles by dredged channels to the head of the lake.

All locks and channels to this point have been built by Canada's St. Lawrence Seaway Authority.

## d) United States Locks:

The ship canal leaves Lake St. Francis at the southwest corner and before long crosses the International Boundary just opposite St. Regis, Quebec. From here to the first lock on the United States side is only five miles. Entering the Snell Lock, the ship is lifted 45 feet into the Wiley-Dondero Canal (10 miles long) and is then lifted another 38 feet by the Eisenhower