The velocity is modeled as

with nine parameters and .

We show in this note that can be expressed in terms of . This is done according to the boundary conditions.

Boundary conditions: .

We have

From (3) and (4), we find in two ways:

and fromwe get

We rewrite as

(7)

where

Next, we show that

From (5) and (7), we can get

and

respectively.

Letting (8)=(9), we have

So,

(10)

From (1), we have

(. (11)

From this equation, we get (12)

From (2), we get

Multiplying by and collecting like terms:

.

Multiplying by and collecting like terms, we get

. (13)

From the above equation, we get (14)

From (12, 14), we get

(15)

(16)

From (5), (17)

Note: In the above formulas, we use the following expressions:

, ,

and