

## Option 5 Canal Bridge and Walkway

```
Choose (+h = help +i = items eg 3h):
1) Simple path on air, water or lava
2) Covered path or tunnel
3) Water canal (multiple options)
4) Ice canal (multiple options)
5) Platform
6) Sinking platform
7) Boat bubble lift
Back = 'q' or number + Enter: _
```

### Option 5.1 Simple path on air, water or lava

The turtle places a single solid block below and moves forward, as long as air, water or lava is detected below. (if 0 path length chosen)

It stops when solid block is detected below, or the path length chosen (if > 0) has been reached.

Also works in Nether and End with native blocks

```
Place me on the ground as below ^
Start:  |-|-|-|   - = air/water
        |-|-|-|   - = lava
        |^-|-|   ^ = Turtle
        |x|^|x|

Result: |-|x|-|   - = air/water
        |-|x|-|   - = lava
        |-|x|-|
        |x|x|x|   x = Solid block

Enter to continue
```

### Option 5.2 Covered path or tunnel

Same as above, but with block above if in air, water or lava, or tunnelling.

Useful in Nether for protection from ghastrs

```
Place ^ T at start of path or tunnel
Plan view      Face view
|x|x|x|        x|x|x|x|x|   x = new block
|x|x|x|        x|x|x|x|x|
|x|x|x|        x|x| |x|x|
|x|x|x|        x|x|T|x|x|   ^ T = Turtle
        ^      - - x - -   ground

Floor + ceiling placed for your safety!
Enter to continue
```

### Option 5.3 Water canal (multiple options)

Water canal building can be done with 1 to 4 turtles working together.

There are 2 main options:

One turtle creates the left side towpath and half canal whiler another creates the right side. This can be done with 1 turtle in turn but doubles the time taken.

One section of the canal per turtle:

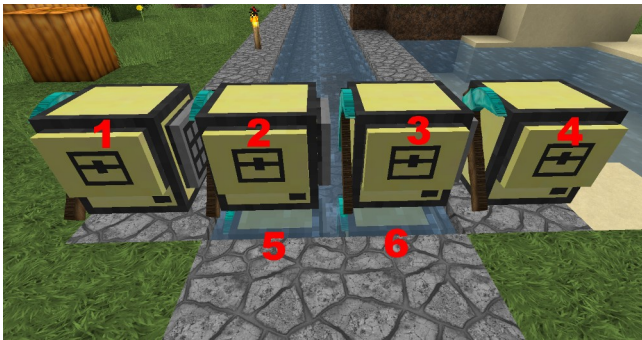
Left towpath, left canal, right canal, right towpath. Ideally use 4 turtles for fastest time, but any combination can be used. Choose option 1 or 2

```
Multiple options for canal building:
| |TITI| | 2 turtles: x W, W x
|x|W|W|x|

|TITITITI| 4 turtles, x, W, W, x
|x|W|W|x|

Option 1 for half canal per turtle
Option 2 for quarter canal per turtle
Choose method 1 or 2
```

There are 6 positions the turtle can be placed.



```

plan view      Cross section view

|×|-|-|×|
|×|-|-|×|
|×|-|-|×|      1 2 3 4 = on ground
|^|^|^|^|      |×|5|6|×| = in water

New canal      1 2 3 4 on ground
Extend existing 1 4 5 6
Extend on ocean 1 4      on solid block

Type position of turtle
  
```

The help screen represents the positions as shown in the screenshot. (Position 1 chosen)

```

Torch spacing? (0-64) 8
Turtle placed left on ground
Canal length? 0 = continuous 20
  
```

Enter a number if torches are required (this option only appears if either towpath is involved) or 0

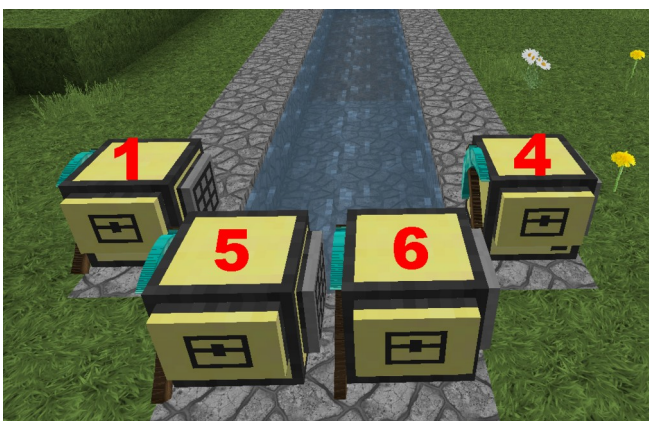
If at the edge of an ocean it is faster to use **option 5.1 simple path on air water or lava** until reaching land.  
Use 2 turtles to maximise speed and efficiency

### Option 5.4 Ice canal (multiple options)

If you have silk touch and can collect pack ice or blue ice, then building an ice canal is the fastest form of transport without teleport or Nether portal corridors.

Existing water canals can be converted, or new ice canals created, even in the Nether, as packed and blue ice survive there.

### Converting an existing water canal



```

New ice canal or convert existing water

|×| | |×| |×| = Slab× or Trapdoor×
|T|I| |×| |I| = Ice (packed or blue)
|×| | |×| |I| = Air (empty block)
|×|I| |T| |T| = Torch (optional)
 1 2 3 4 Turtle position: Towpath
 5 6 Turtle position: Ice Air

position 1 moves to 2, 4 moves to 3
Height=2 blocks ×=Trapdoor >2 ×=Slab
Type turtle position
  
```

The positions on the screenshot correspond with the options on the help screen

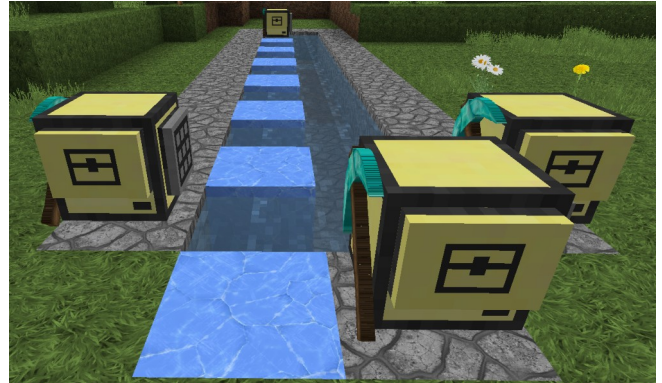
**Important!** Always run position 5 BEFORE position 1, as 1 moves into the same lane as 5 to build the towpath, and is much slower, so is likely to be captured by turtle 5 if launched first.

**Important!** Similarly launch position 6 before position 4 for the same reason

#### Position 5:

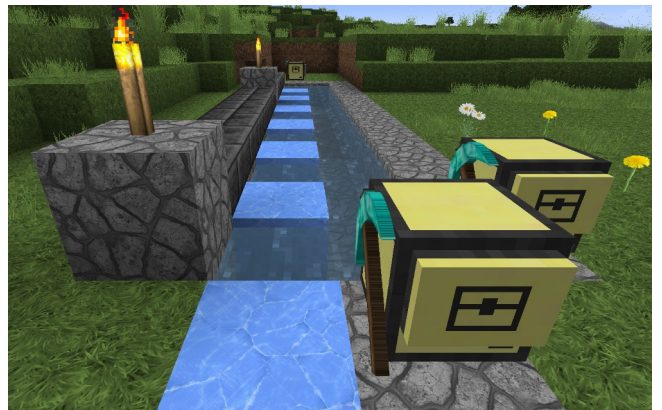
```
Turtle on left side alternate air/ice  
Canal length? 0 = continuous 14_
```

The inventory requests the canal length / 2  
of packed or blue ice



#### Position 1:

```
Torch spacing? (0-64) 8  
Place Ice as well? (y/n) n  
Canal length? 0 = continuous 14_
```



You can use just position 1 on its own, and it will build both the left towpath AND place the ice blocks in the correct position.

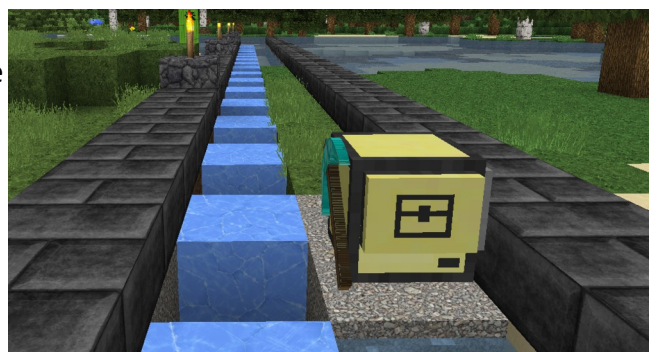
(Position 5 was created as a 'just in case' all you needed was to place ice blocks)

The ice option was answered 'n' as ice blocks are already present, and as they are started at the initial position of turtle 1, would have been placed to make a continuous path of ice, which is wasteful.

#### Position 6:

This would do nothing in the screenshot above, as the canal is in open air and has water next to the ice

If used in this screenshot any blocks at the same level as the ice are removed, along with 3 blocks above. This is more useful if the existing canal runs underground. Water is left alone

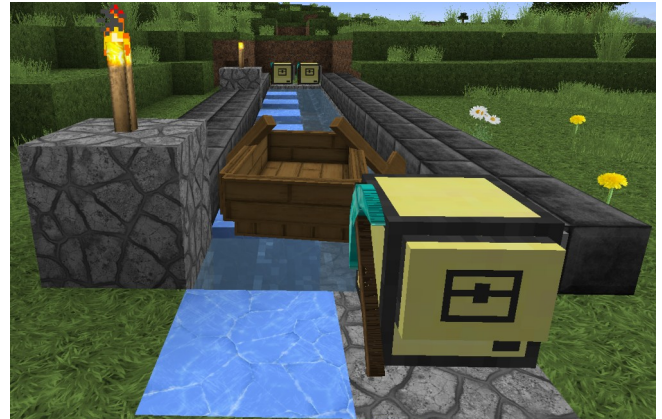




#### Position 4:

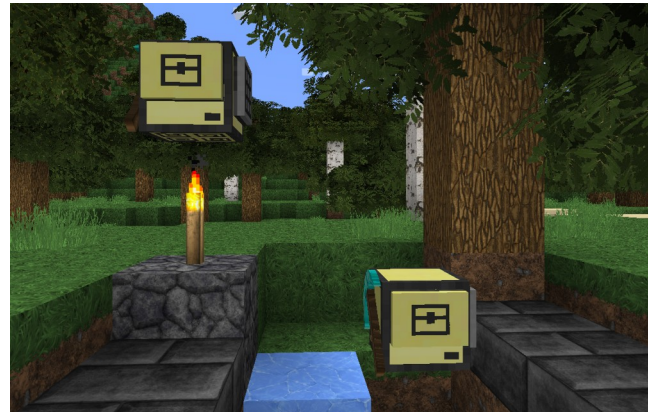
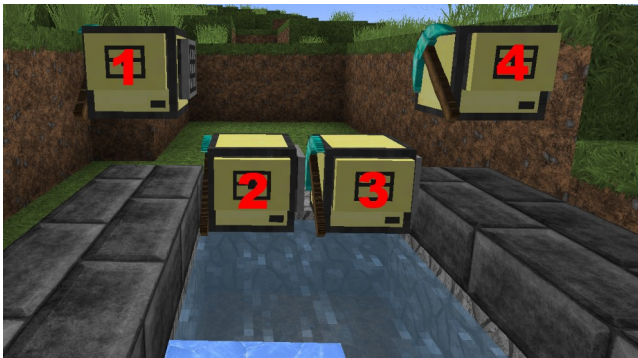
```
Torch spacing? (0-64) 0
Turtle on right side on towpath
Canal length? 0 = continuous 14
```

This builds the right towpath and removes all blocks at water level. If on solid ground, 3 blocks are removed from above, including over towpath



This position should be used unless there is already a slab canal wall

#### Extending an ice canal:



If using position 1 or 4 to extend an existing canal, note that a torch is always placed at the start position (if torches are selected.)

To keep torch spacing consistent, start the turtle on top of an existing torch as shown

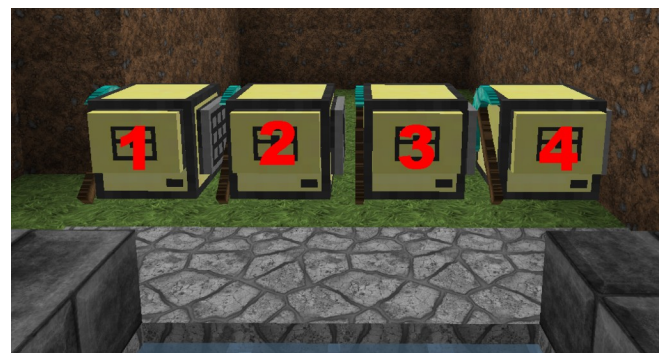
positions 1 and 2 have identical functions, as do positions 3 and 4.

The turtles move from 1 → 2 and 4 → 3

#### Creating a new ice canal:

The turtles move from 1 → 2 and 4 → 3

Best practice is to use positions 2 and 3, and select 'place ice' on 2, then the whole canal can be completed in 1 hit with 2 turtles



### Option 5.5 Platform

```
Place ^ any level air, water or lava.  
| | | | | |  
| x x x x x | x = Block  
| x x x x x |  
| x x x x x |  
| x x x x x |  
| ^ x x x x | ^ = Turtle  
| | | | | |  
Blocks placed under the turtle  
Enter to continue
```

This function builds a rectangle below the turtle.

It can be used over water or lava.

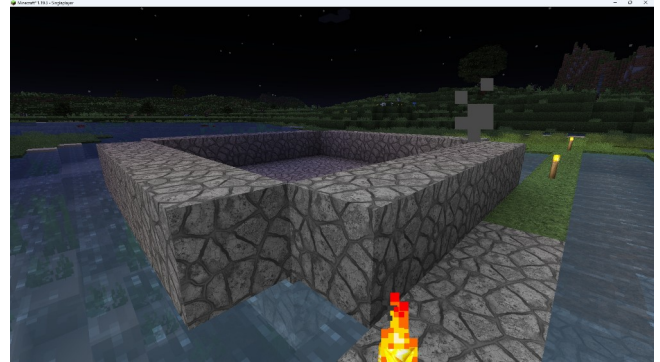
It can place a rectangle in an existing ground area  
such as replacing an area of stone with dirt



```
Platform width 4  
Platform length 4  
Remove blocks above? (y/n) n
```



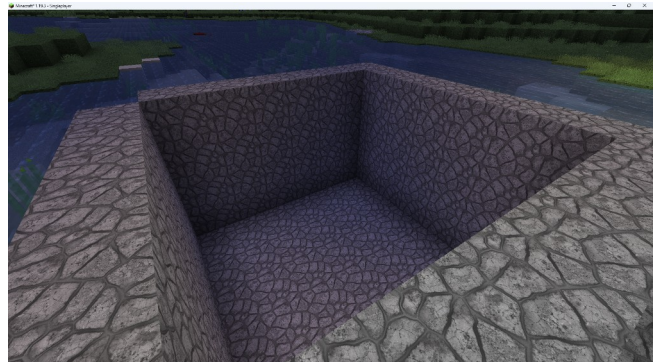
## Option 5.6 Sinking Platform



This function builds a walled enclosure in water (or lava) and places a floor as screenshot.

It then continues downward for the specific depth, finishing with a box shaped enclosure.

This could be used on dry land to create a pit e.g. slime farm or similar construction.



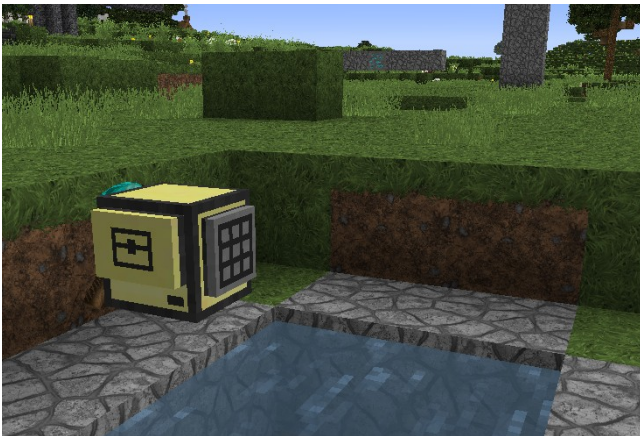
```
Place ^ above water.  
Existing platform replaced below  
  
| |x|x|x|x|x| | * = Block  
| |x|x|x|x|x| |  
| |x|x|x|x|x| |  
| |x|x|x|x|x| |  
| |^|x|x|x|x| | ^ = Turtle  
| | | | | | |  
  
Blocks placed under the turtle  
Enter to continue _
```

```
Width (excluding retaining wall)? 6  
Length (excluding retaining wall)? 6  
Levels to go down? 4
```



### Option 5.7 Boat bubble lift

Simple design using fence gates and soul sand. Boats can travel in both directions



```
Boat Lift (Ice or Water)
Place turtle left side, Source to right

Start          |x| |x| Finish
               |x| |x|
               |x|S|S|x| S = Soul sand
               |x|S|S|x| S = Sand + gate
               |x|W|W|x| ^ = Turtle
               |x|W|W|x|
               |x| |x|
               |x| |x| Ice canal needs
               |x| |x| 2x2 water source

Enter to continue
```

Place turtle next to canal on left towpath.

If using an ice canal, create a 2 x 2 water source at the end of the canal. This can be filled in with ice or blocks when completed

This is a 2 level lift. The back already has a 2 x 2 water source ready for continuation.

The gates need manually opening

