-- Thruway --

Thruway is a two-player connection game with many twists and turns. Two not-so-civil engineers attempt to build a thruway across the landscape while his or her opponent contests the right of way.

-- Components --

The game of Thruway requires the following components:

- 120 road section tiles; 60 gray concrete tiles and 60 black asphalt tiles.
- One 11 x 11 square landscape game board with 121 parcels of land cells. Thruway can be played on larger n x n boards which offer more strategic play.

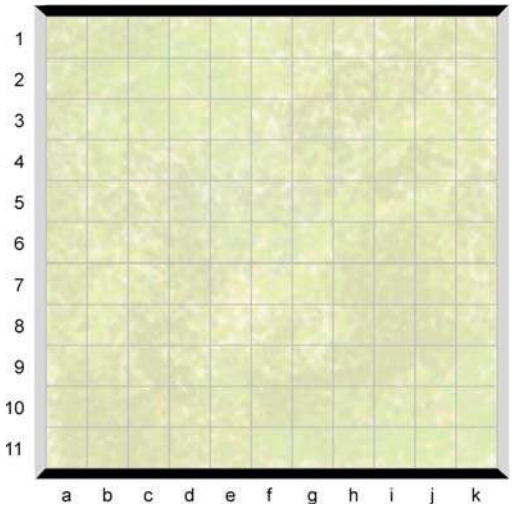

Figure 1. Game board setup
The game board is empty at the start of the game.

-- Setup --

- The landscape game board is empty at the beginning of the game.
- Each civil engineer player takes a set of tiles in reserve.

-- Game Play --

In Thruway, players attempt to be the first to pave an indestructible road of horizontally and/or vertically adjacent road sections connecting their two sides of the landscape. The concrete player tries to connect the east and west borders. The asphalt player tries to connect the north and south borders.

The concrete player plays first. Then on the asphalt player's first turn only, if he or she feels the concrete player has too much advantage from the placement of the concrete tiles, the asphalt player may opt to trade tiles and roles. The asphalt player becomes the concrete player and vice versa. Whether or not roles are reversed, the asphalt player then takes a turn. Player turns then alternate for the rest of the game. Players may not pass a turn unless they have no legal move. Consecutive passes can never occur.

During a turn, an engineer may do any one of the following three actions:

1. Pave a road without replacement,
2. Pave a road with replacement, or
3. Resolve a crossroads dispute by swapping tiles.

To pave a road without replacement, a player places two of his or her road sections on two horizontally or vertically adjacent empty parcels of land. See Figure 2.

To pave a road with replacement, a player places two of his or her road sections on two horizontally or vertically adjacent parcels of land, where one parcel is empty and other parcel contains an opponent's road section. The replaced road section is recycled to its owner's reserve. Sections of road that can be replaced in this manner are at risk, destructible. That is, they can change from asphalt to concrete or concrete to asphalt.

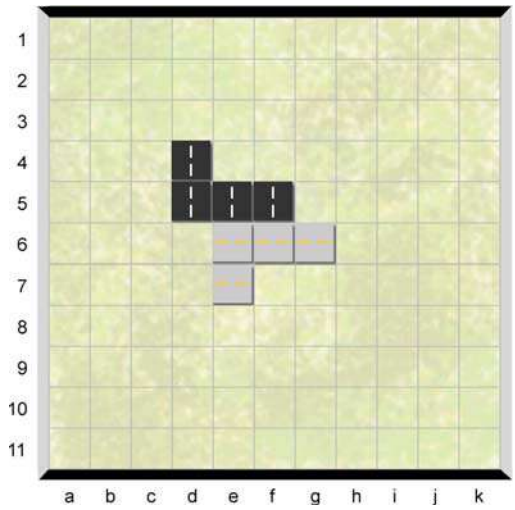

Figure 2. Pave a road with no replacement
The concrete player has played f6-g6 and e6-e7 and the asphalt player has played e5-f5 and d4-d5.

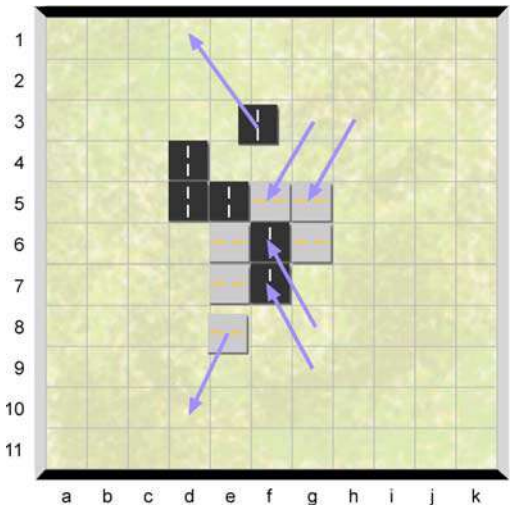

Figure 3. Pave a road with replacement
The concrete player has played f5-g5 replacing asphalt's f5. Asphalt has played f6-f7 replacing concrete's f6. E5, f5, e6 and f6 form a crossroads dispute!

When a 2 x 2 square of land parcels is occupied by four road sections where asphalt and concrete roads occupy the two diagonals, this is called a crossroads dispute.

A player may resolve a crossroads dispute in either of two ways:

1. by swapping any asphalt and concrete road sections along an edge of the 2 x 2 square, or,
2. if possible, by paving with replacement.

When swapping is used to resolve the dispute, only one swap per player turn is allowed. New crossroad disputes may arise due to the resolution of a dispute. In this case, the resolution of the newly formed dispute(s) may not *immediately* recreate the first dispute. This restriction, which prevents position repetition, applies only to your opponent's immediate response. On later player turns, the resolution can be reversed by either player. Sections of road that are part of a crossroads dispute are at risk, destructible, and may, in effect, change ownership.

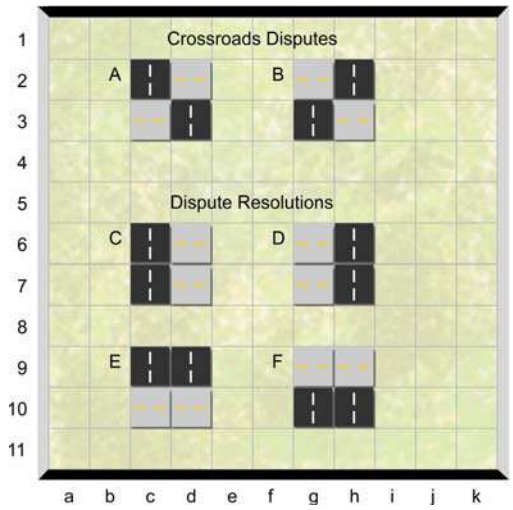

Figure 3. Disputes and Resolutions
A and B represent the only two possible dispute configurations. Resolve a dispute by swapping edge tiles. C, D, E and F are the only possible resolutions to either dispute configuration.

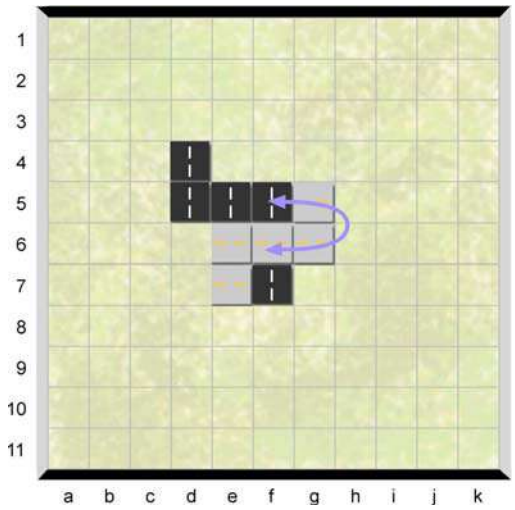

Figure 4. Dispute Resolved by Swapping
Here the concrete player has swapped the right edge tiles, f5 and f6 in Figure 3. F6 is indestructible…for the moment. If the asphalt player replaces e6 or g6, it's at risk again!

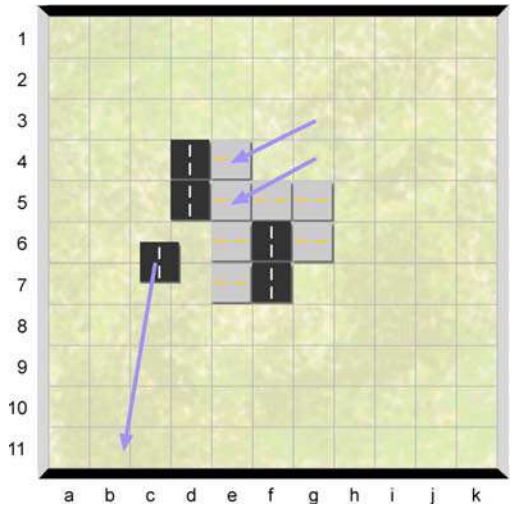

Figure 5. Dispute Resolved by Paving
Concrete has played e5-e4 in Figure 3, removing asphalt's e5 and settling the dispute.

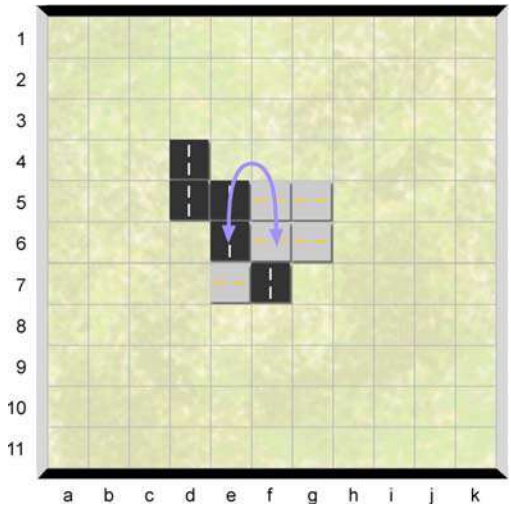

Figure 6. Dispute Transference
Resolving one dispute may lead to another dispute. Here e6 and f6 were swapped. E6, f6, e7 and f7 form a new dispute.

A road section is **indestructible**, only if, all its adjoining north, south, east and west land parcels (that exist on the game board) have been paved by either player and it is not part of a crossroads dispute.

Goal: The first civil engineer to pave a thruway (connected path) of horizontally and/or vertically adjacent indestructible road sections connecting their two sides of the landscape wins the game. Note that both players can not win simultaneously, not even following a crossroads resolution!

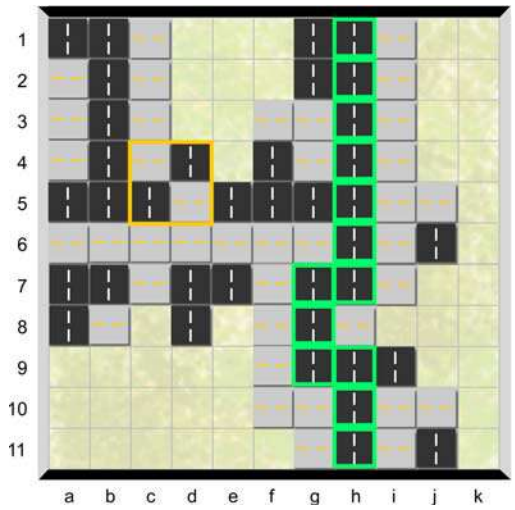

Figure 7. An Indestructible Thruway
Thruway is highlighted in green. Note that the crossroads dispute, highlighted in yellow, has no bearing on the thruway. Asphalt wins!

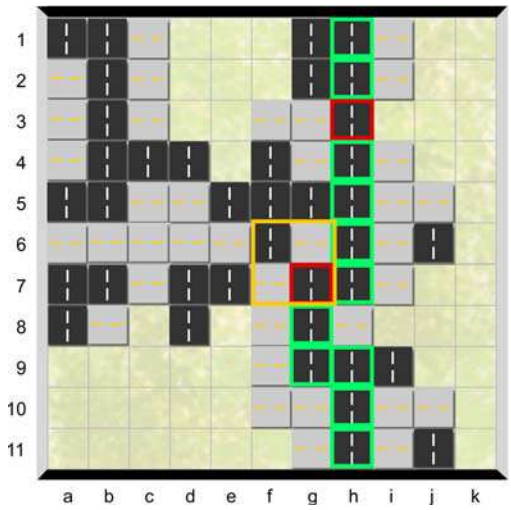

Figure 8. An Destructible Road
The red highlighted sections are vulnerable; h3 by paving with replacement and g7 by dispute resolution by swapping.

-- Playing Tips --

The number of empty parcels adjacent to an occupied parcel (called approaches) gives an indication of which player will likely be the final owner of the occupied parcel.

An odd number (1 or 3) of approaches indicate vulnerability. For example, in Figure 8, asphalt's h3 has one vulnerable side. Concrete could play h3-i3 and take over h3.

An even number (2) of approaches is more stable. For example, in Figure 8, f10 has two approaches. If the asphalt player uses one approach to change f10 to asphalt, the concrete player could then use the other approach to change it back to concrete.

Note that you can change the number of approaches by simply occupying an adjacent empty parcel without replacing the target parcel.

Play along the edge of the landscape has a different feel from the center of the board. The approach counts are reduced by one or two.

Crossroads disputes should be carefully considered. They can "travel" down parallel roads. For example in Figure 8, swapping f7 and g7 "moves" the dispute downward to f7, g7, f8 and g8. Disputes can quickly change the game's momentum from one player to the other. Most of the time it is best to resolve the dispute immediately in your favor otherwise your opponent will probably resolve the dispute in his or her favor.