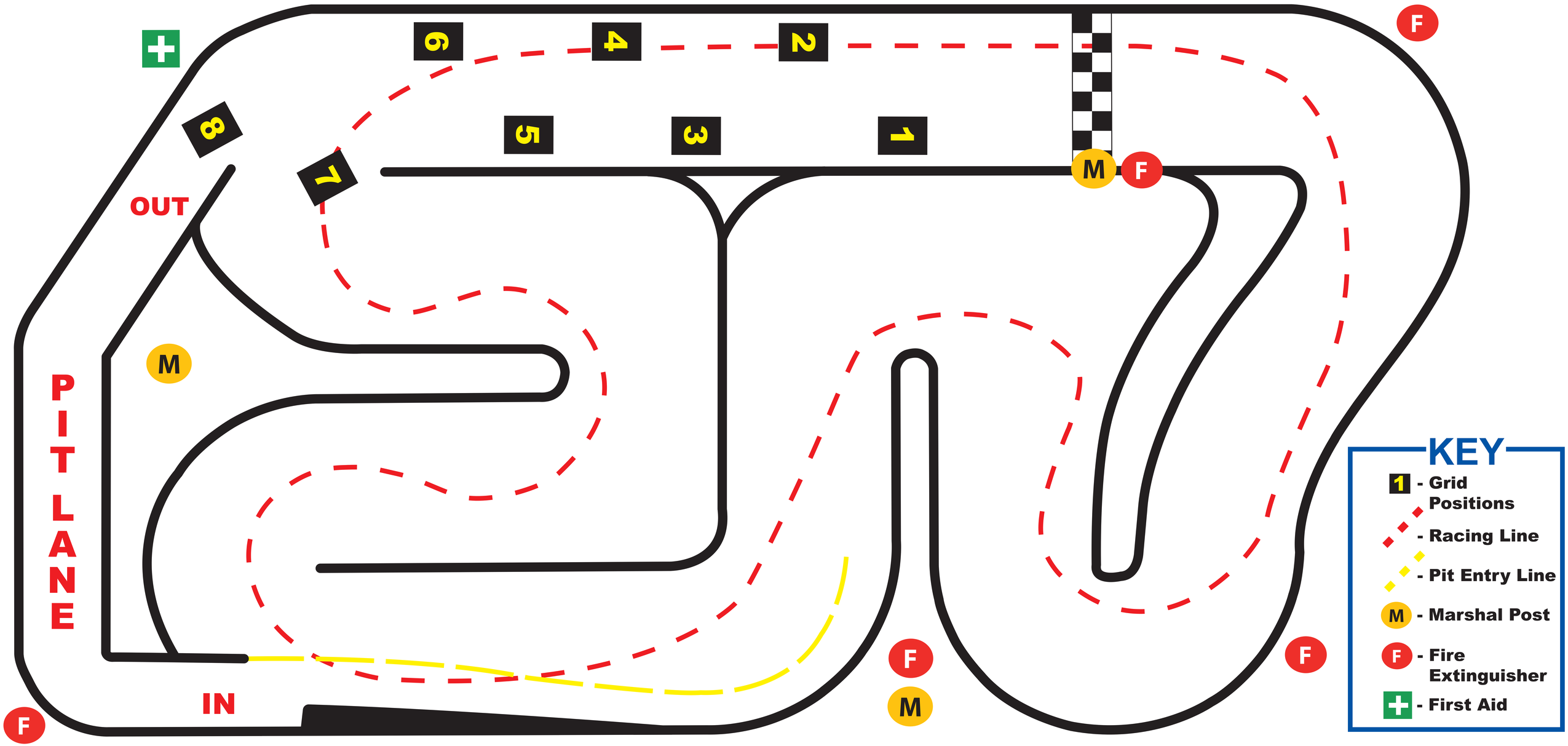CIRCUIT LAYOUT