

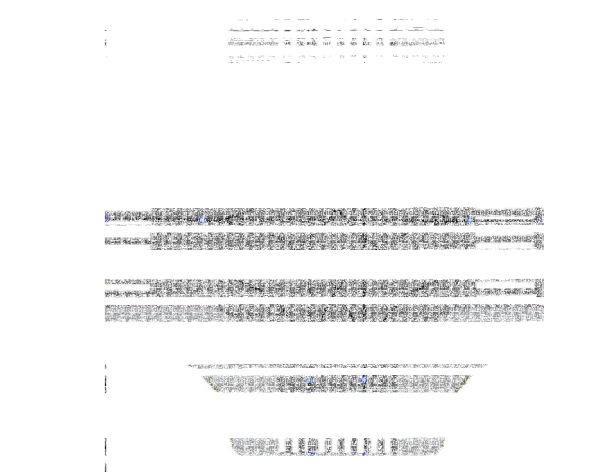
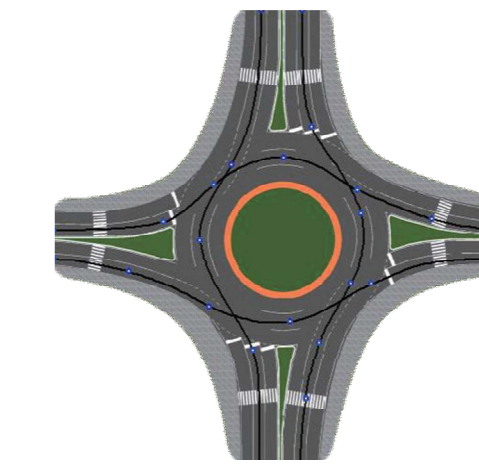
SUSTAINABLE INTERSECTION



Advantages

Advantage 1: Safety

These diagrams point out the difference in vehicle conflict points at a basic roundabout (8) and 4-leg intersection (32)



Advantage 2: Minimize the energy waste and environmental pollution

Reducing the noise due to the low speed
Reducing the waiting time, the fuels loss and the pollution



Advantage 2: Save Money, Save Time

- No signal equipment to install, power, and maintain
- May require less right-of-way
- Less pavement may be needed
- Less waiting time than the signal light intersection



Concept

The green-intersection is a roundabout intersection which has the center island and leading direction island. Vehicles transfer closely the orbit of roundabout.

Shaping Factor

Shaping Factor 1: Central Island

- The diameter of central island is entirely dependent upon the inscribed circle diameter and the required circulatory roadway width
- Special design with apron. It can be used to accommodate the occasional large vehicle.

Shaping Factor 2: Circulatory Roadway Width

Circulatory roadway should not arrange over 3 to 4 lane. Ensure enough the width for trucks, containers, buses going through

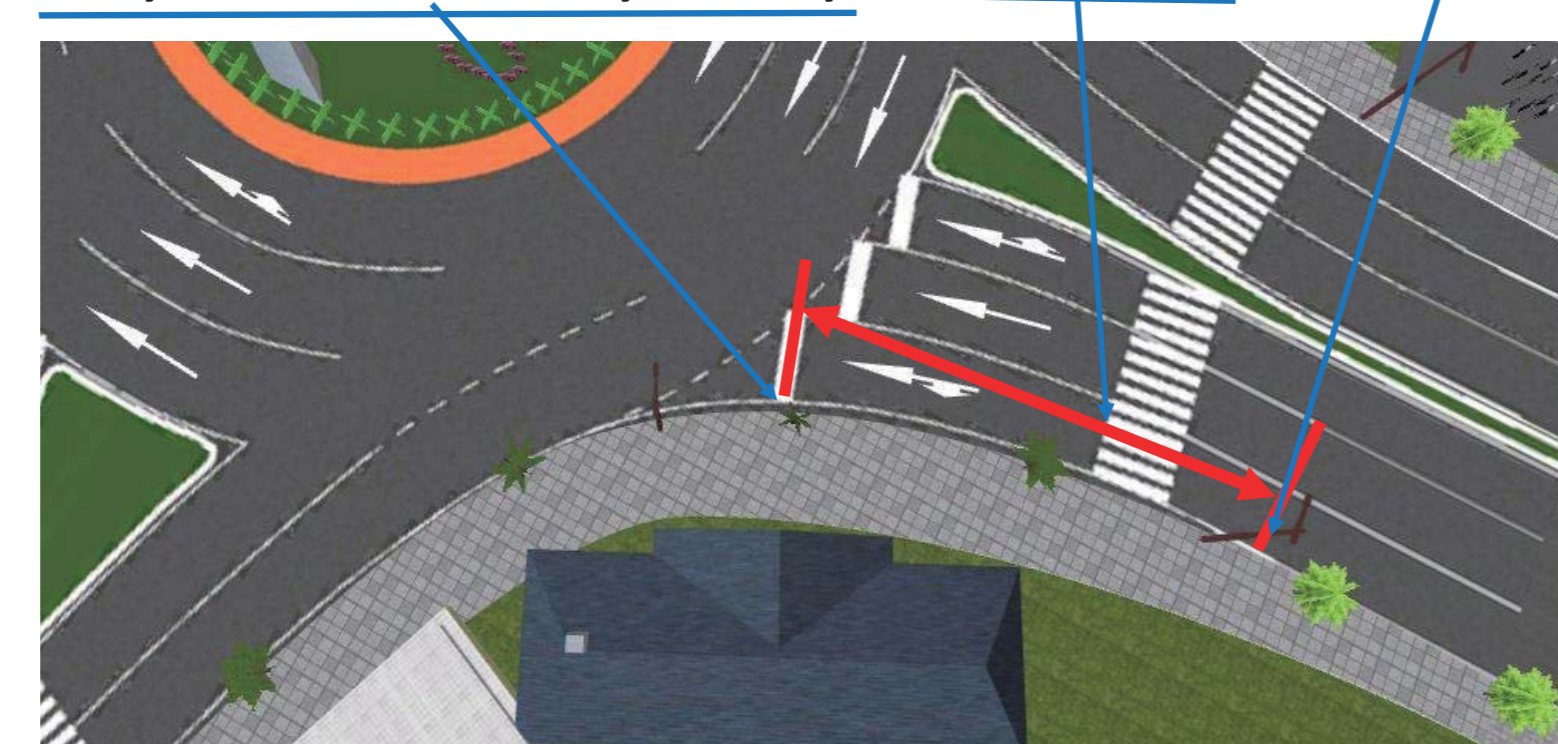
No require the long mixing lane or no mixing lane



Shaping Factor 3: Entry and Exit Roadway

- Entry and exit road are tangential to the circular lane around island.
- Entry road with the flared shape to limit the vehicle speed

Point perpendicular to junction of inner entry cover and circulatory roadway



Area Zoning

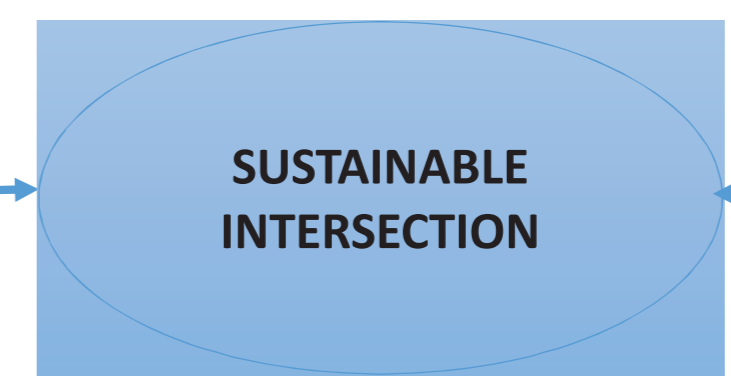


- Intersection 1 – located at Takeshita Street leading to Yumenoshima stadium with the Olympic statue is the highlight attracting the tourist to the Stadium.
- Intersection 2 change two continuous 4-leg intersection into 5-leg intersection which increase the safety. In addition, it is a highlight in the South of the stadium.



Sustainable Development

- The high passing capacity meets the increasing transport demand not only for the Olympic but also for the sustainable development in the future in Tokyo
- Ensure transporting in case occurring earthquake



- Make a green-ecology city
- Minimize the noise and pollution
- => In accordance with the development trend in the world

- Saving energy
- No much costs for build, manage and exploit
- No much costs for rebuild when is affected by the disaster : earthquake, volcano...