ARE THEY MONORAIL ??
MO*NO*RAIL n. 1. A single rail serving as a track for passenger or freight vehicles. In most cases rail is elevated, but monorails can also run at grade, below grade or in subway tunnels. Vehicles are either suspended from or straddle a narrow guideway. **Monorail vehicles are WIDER than the guideway** that supports them.

www.monorails.org
The keyword is Monorail vehicles are WIDER than the guideway that supports them.
To differentiate monorail systems from other transport modes, the Monorail Society (see at www.monorails.org) further clarifies the definition of a monorail such that the beam in a monorail system is narrower than the vehicle.
Monorails are often but not exclusively elevated, sometimes leading to confusion with other elevated systems such as the Docklands Light Railway (DLR), Vancouver SkyTrain and the JFK AirTrain. Monorail vehicles are often at first glance similar to other light rail vehicles, and can be both manned and unmanned. Monorail vehicles can also be found in singular rigid format, articulated single units, or as multiple units coupled into 'trains'. In common with other advanced rapid transit systems, some monorails are driven by linear induction motor. In common with other dual rail systems, the vehicle bodies are connected to the beam via bogies, allowing curves to be negotiated.
Unlike some trams and light rail systems, modern monorails are always partitioned from other traffic and pedestrians. Monorails are both guided and supported via interaction with the same single beam, in contrast to other guided systems such as Rubber-tyred metros, such as the Sapporo Municipal Subway; or guided buses or trams, such as Translohr. Monorails also do not use pantographs.

A tramway on Tramlink route 1 on Croydon Tramlink in London

VTA light rail, San Jose, California

Rubber tires and guide bars of a Montreal Metro train

Central rail-guided rubber-tyred rolling stock serial 5000, Sapporo City Transportation Bureau, Japan. Built by Kawasaki Heavy Industries Rolling Stock Company. Photo taken at Minami Hiragishi Station, 2006.

Bombardier Guided Light Transit operation in Nancy, France

Translohr vehicles are now providing tram-like service in Clermont-Ferrand.

The diamond-shaped pantograph of the Swiss cogwheel loco in Schynige Platte, built in 1911.
Based on above definition, a number of competing designs divided into two broad classes:

- **Straddle-Beam** monorails, and
- **Suspended** monorails
The most common type of monorail in use today is the *straddle-beam monorail*, in which the train straddles a reinforced concrete beam in the range of two to three feet (~0.6-0.9 m) wide. A rubber-tired carriage contacts the beam on the top and both sides for traction and to stabilize the vehicle. The straddle-beam style was popularized by the German company **ALWEG** (*Axel Lennart Wenner Gren*).
e.g. of Straddle-Beam Monorail

www.youtube.com

LAS VEGAS MONORAIL
There is also a form of suspended monorail developed by the French company SAFEGE (Societe Anonyme Francaise d'Etude de Gestion et d'Entreprises) in which the train cars are suspended beneath the wheel carriage. The Chiba Urban Monorail is presently the world's largest suspended monorail network.
e.g. of Suspended Monorail

The Schwebebahn Wuppertal, the world's first suspended monorail

[Links: www.google.com and www.youtube.com]
The primary advantage of monorails over conventional rail systems is that they require minimal space, both horizontally and vertically. Monorail vehicles are wider than the beam, and monorail systems are commonly elevated, requiring only a minimal footprint for support pillars.

A monorail track is usually less expensive to build than a comparable elevated conventional rail line of equal capacity.

Due to a smaller footprint they are seen as more attractive than conventional elevated rail lines and block only a minimal amount of sky.

Monorail is, by design, a grade-separated system. They do not interfere with existing transport modes.

They are quieter, as modern monorails use rubber wheels on a concrete track.

Unlike conventional rail systems, straddle monorails wrap around their track and are thus not physically capable of derailing.

Rubber-tired monorails can climb steeper grades better than ordinary steel wheel trains.
Monorail vehicles are not compatible with any other type of rail infrastructure, which makes (for example) through services onto mainline tracks impossible.

Monorail tracks do not easily accommodate at-grade intersections.

In an emergency, passengers may not be able to immediately exit because an elevated monorail vehicle is high above ground and not all systems have emergency walkways.

Turnouts, especially at high speeds, tend to be difficult.

Monorail infrastructure and vehicles are often made by separate manufacturers, with different manufacturers using incompatible designs.
WHEN WILL THE JAKARTA MONORAILS BE BUILT ???????
THANK YOU