movements an hour or about 300,000 movements a year.

# "Remote" gates

Mirabel planners chose what is known as the "remote gate conception". which involves total separation between the aircraft and the terminal, with the use of mobile units to transport passengers. It also means that aircraft can move on and off parking stands unaided, that servicing can take place unimpeded by other activities and that all types and sizes of aircraft can be accommodated. The design provides for 18 remote gates which are in groups of six around three service areas on the apron. The mobile units, called passenger transfer vehicles (PTVs) - 14 of which will be in service this year - can each accommodate 150 passengers and travel up to 20 miles an hour. A special system allows the PTV to be elevated to the loading door of any size of aircraft.

For connecting flights, an additional four gates were included in the design — attached as "nose-in" positions at an aeroquay.

Once the aircraft has reached its final stop, passengers will board the PTV and be driven to the deplaning section of the terminal building. Outgoing passengers will be issued with a boarding pass which indicates the number of the PTV boarding sector in the outbound security area. In total, there will be three boarding sectors, each equipped with six PTV loading docks.

All passengers, whether departing or



The terminal complex and commercial administration area seen from the West.

arriving, will follow a straight line through the terminal with no change in level — a walking distance of no more than 280 feet, which is considerably less than prescribed international standards.

#### Parking

A three-level parking structure measuring 1,200 by 300 feet can accommodate 2,500 vechcles. Other parking facilities consist of a holding area for taxis and buses, which leads to both ends of the processing curb, and lots at either side of the parking structure for terminal employees. Employees and other workers involved in airfield servicing, maintenance and operations, will park in the facilities of their

various employers.

Total parking capacity within the central area has been estimated at 6,000 vehicles.

## New de-icing process

Mirabel's master plan includes the world's first de-icing station located between the first two runways instead of at individual aircraft parking positions. This will permit recovery of the de-icing fluid as a major pollution-control measure and the fluid will be contained and processed for re-use.

## Access to airport

This year, the airport will be served by more than half a dozen highways and a fully integrated public transportation system consisting of more than 30 buses on regularly scheduled runs between Montreal, Mirabel and Dorval.

A rapid transit system will also be installed, about 1980, which will use electric trains capable of speeds of more than 100 miles an hour and cover the distance from downtown Montreal in 30 minutes. The guideways or rails will pass directly through the terminal buildings.

#### STOL aircraft

Provision has been made to accommodate STOL (short-take-off and landing) aircraft, including if necessary the development of a landing strip 2,000 by 150 feet in the northwestern corner of the airport. STOL facilities would be provided with convenient access to the

