



Precautions:

- As this work may impede train movement, it may have to be scheduled to minimize delay, possibly after the system has finished service for the day
- A qualified SkyTrain employee must be in attendance while the work is being done
- The SkyTrain employee will have radio contact with SkyTrain control and be able to request trains be stopped or power removed
- NOTE: Intentional entry into Automatic Train Control Territory is not permitted. Accidental entry must be reported and documented.

LIMIT 4

The worker or equipment is required to enter Automatic Train Control Territory.

Precautions: No person or equipment may enter ATC without ATC protection having been implemented. This may mean waiting until the completion of revenue service.

Contact SkyTrain's Wayside or Safety department (604)520-3641 or after hours (604)520-5555



Equipment Limits of Approach

Contractor Hazards

Overview

SkyTrain is an automated rail-transit system carrying over 160-180,000 passengers per day on fairly quiet trains traveling at speeds of up to 90 kph. With potentially 400 people on board each train, colliding with an object or a person could lead to a catastrophic accident. The procedures contained in this brochure are intended to ensure the safety of those people working near the SkyTrain system and the safety of SkyTrain's passengers and employees.

Potentially Hazardous Work

Work activities occurring close to SkyTrain can create hazards to trains, tracks, passengers or employees.

Work of particular concern includes activities that might:

- Result in a collision with SkyTrain's buildings, guideway (columns or beams) and especially trains
- Involve heavy equipment working within 10 meters of the guideway i.e. cranes or excavation equipment
- Involve the storage of flammable products such as gasoline or combustible materials such as wood
- Leads to persons entering Automatic Train Control Territory either inadvertently or purposefully

SkyTrain



Examples include:

- √ Scaffolding erected adjacent to station or track
- √ Tall equipment next to the guideway (cranes or bucket trucks)
- √ A new building that provides easy access or results in material/s falling into the guideway.
- Examples include:
 - √ Painting of stations or buildings adjacent to the guideway
 - √ Cranes working above Automatic Train Control Territory while transporting materials
 - √ Work that blocks emergency escapes routes
 - √ Any work creating smoke, fumes, or other airborne hazards which could enter stations

Prior to any work commencing in the vicinity of the SkyTrain system, the company preparing to commence work must determine which of these is a possibility and take adequate precautions

Limits of Approach

The closer the “Planned Work” is to take place near SkyTrain’s Automatic Train Control Territory, the greater the hazard. There are four limits of approach as shown in the following diagram. Each LIMIT warrants slightly different precautions.



LIMIT 1

You are within limit one when you are within ten meters of a SkyTrain station or the drip-line of the Guideway. Note: the drip-line is a line which extends from the edge of the guideway (track) to the ground below. The area of SkyTrain’s concern extends from the ground up to and beyond the guideway due to the dangers of falling objects into the track from above.

Precautions:

- Before commencing work, contact SkyTrain’s, Wayside or Safety department at (604)-520-3641 or after hours at (604)-520-5555
- Prominently display at the worksite SkyTrain’s emergency number (604)-520-5555
- Ensure that all employees are made aware of SkyTrain’s “LIMITS of APPROACH”
- Equipment within LIMIT 1 should be arranged so that an equipment failure would not lead to accidental entry into the track (i.e. crane collapse).

LIMIT 2

You are within limit 2 when you are within 3 meters of Automatic Train Control Territory but not closer than 1 meter (if beside or above tracks)

Or when you are within 1 meter of the guideway beams or columns but you remain below the guideway (below track level) or if the activity is presenting an undue risk to SkyTrain patrons entering or exiting a station (check with SkyTrain if unsure).

Precautions:

- If work is being performed within an area defined as LIMIT 2, a qualified SkyTrain employee MUST be present to monitor the work.

LIMIT 3

You enter LIMIT 3 when work is being done within 1 meter of Automatic Train Control Territory (beside or, beside & above the tracks) and there is a chance that a worker or equipment could inadvertently penetrate the train territory or work is being performed directly above the tracks (including materials being lifted or moved directly over Automatic Train Control Territory)

