

## Evaluation of Alternative Solutions

### Do Nothing

#### Description:

- Some movements at the intersections of Mohawk Road with McNiven Rd/Lime Kiln Rd, Cayuga Ave, and Filman Rd operate at an unacceptable level (LOS F during peak times).
- Queues at the Filman Road intersection are expected to extend west and reach the 403 highway off ramp posing a high risk to safety.
- Does not improve pedestrian or cyclist safety or comfort.
- Does not conform to the Ancaster Transportation Master Plan (2011) recommendations (three lanes with a two-way centre left-turn lane, bicycle lanes and sidewalks).
- No improvement to network connectivity (for active transportation).
- No impact to trees.

### Option 0: Three Lane Cross Section with Two-Way Left Turn Only

#### Description:

- Improves traffic operations within the study area.
- Vehicles are able to use the two-way left-turn lane to manoeuvre around waste collection trucks.
- Does not improve pedestrian or cyclist safety or comfort.
- Does not conform to the Ancaster Transportation Master Plan (2011) recommendations (three lanes with a two-way centre left-turn lane, bicycle lanes and sidewalks).
- No impact to trees.
- This alternative solution does not fully address the problems and opportunities of the project and therefore is not recommended.

**Option 1: Three Lane Cross Section with Bicycle Lanes and Sidewalks on Both Sides****Description:**

- Improves traffic operations within the study area.
- Vehicles are able to use the two-way left-turn lane to manoeuvre around waste collection trucks.
- Provides dedicated facilities for pedestrians and cyclists on both sides of the road that separate them from vehicles.
- Dedicated cycling facilities are provided. No physical separation between vehicles and cyclists.
- Some potential for conflicts between cyclists and vehicles turning at intersections.
- Moderate level of comfort for cyclists. Dedicated space provided however, no physical separation is provided adjacent to vehicles that may be travelling at high speeds (from the Highway 403 ramp). High level of comfort for pedestrians.
- 45 trees impacted.
- Provides a continuous pedestrian route connecting with the sidewalk on the south side of Mohawk Road west of McNiven Road/ Lime Kiln Road.
- Requires major aerial utility relocation on southside.

**Option 2: Three Lane Cross Section with Cycle Tracks and Sidewalks on Both Sides****Description:**

- Improves traffic operations within the study area.
- Vehicles are able to use the two-way left-turn lane to manoeuvre around waste collection trucks.
- Provides dedicated facilities for pedestrians and cyclists on both sides of the road that separate them from vehicles.
- Dedicated cycling facilities are provided that are physically separated from vehicles.
- Some potential conflicts between cyclists and vehicles turning at intersections given the set back of the cycle track from the travel lanes and high speeds of bicycles on cycle tracks.
- High level of comfort for cyclists. Cyclists are physically separated from vehicles. High level of comfort for pedestrians.
- 45 trees impacted.
- Provides a continuous pedestrian route connecting with the sidewalk on the south side of Mohawk Road west of McNiven Road/ Lime Kiln Road.
- Requires major aerial utility relocation on southside.

**Option 3A: Three Lane Cross Section with Multi-Use Trail on South Side Only****Description:**

- Improves traffic operations within the study area.
- Vehicles area able to use the two-way left-turn lane to manoeuvre around waste collection trucks.
- Provides shared space for pedestrians and cyclists on one side of the road only.
- Provides cycling facilities for cyclists that separate them from vehicles. However, the space is shared with pedestrians in east and westbound directions.
- High potential for conflicts between cyclists and vehicles turning at intersections as cyclists may be crossing from side streets and in both directions.
- High level of comfort for pedestrians and cyclists. Sufficient space is provided for cyclists and pedestrians to share space that is physically separated from vehicles.
- 37 trees impacted.
- Provides a continuous pedestrian route connecting with the sidewalk on the south side of Mohawk Road west of McNiven Road/ Lime Kiln Road.
- Requires major aerial utility relocation on southside.

**Option 3B: Three Lane Cross Section with Multi-Use Trail on South Side and Sidewalk on North Side****Description:**

- Improves traffic operations within the study area.
- Vehicles area able to use the two-way left-turn lane to manoeuvre around waste collection trucks.
- Provides shared facilities for pedestrians and cyclists on both sides of the road that separate them from vehicles.
- Provides cycling facilities for cyclists that separate them from vehicles. However, the space is shared with pedestrians on the south side.
- High potential for conflicts between cyclists and vehicles turning at intersections as cyclists may be crossing from side streets and in both directions.
- High level of comfort for both pedestrians and cyclists. Sufficient space is provided for cyclists and pedestrians that is physically separated from vehicles.
- 45 trees impacted.
- Provides continuous pedestrian route connecting with the sidewalk on the south side of Mohawk Road west of McNiven Road/ Lime Kiln Road.
- Requires major aerial utility relocation on southside.

**Option 4A: Three Lane Cross Section with Multi-Use Trail on North Side Only****Description:**

- Improves traffic operations within the study area.

- Vehicles area able to use the two-way left-turn lane to manoeuvre around waste collection trucks.
- Provides shared space for pedestrians and cyclists on one side of the road only.
- Provides cycling facilities for cyclists that separate them from vehicles. However, the space is shared with pedestrians in east and westbound directions.
- High potential for conflicts between cyclists and vehicles turning at intersections as cyclists may be crossing from side streets and in both directions.
- High level of comfort for pedestrians and cyclists. Sufficient space is provided for cyclists and pedestrians to share space that is physically separated from vehicles.
- 32 trees impacted.
- Does not provide a continuous pedestrian route connecting with the sidewalk on the south side of Mohawk Road west of McNiven Road/ Lime Kiln Road.
- Requires minor aerial utility relocation on southside.
- This alternative solution is preferred.

#### Option 4B: Three Lane Cross Section with Multi-Use Trail on North Side and Sidewalk on South Side

##### Description:

- Improves traffic operations within the study area.
- Vehicles area able to use the two-way left-turn lane to manoeuvre around waste collection trucks.
- Provides shared facilities for pedestrians and cyclists on both sides of the road that separate them from vehicles.
- Provides cycling facilities for cyclists that separate them from vehicles. However, the space is shared with pedestrians on the north side.
- High potential for conflicts between cyclists and vehicles turning at intersections as cyclists may be crossing from side streets and in both directions.
- High level of comfort for both pedestrians and cyclists. Sufficient space is provided for cyclists and pedestrians that is physically separated from vehicles.
- 47 trees impacted.
- Provides continuous pedestrian route connecting with the sidewalk on the south side of Mohawk Road west of McNiven Road/ Lime Kiln Road.
- Requires major aerial utility relocation on southside.

**Option 5: Three Lane Cross Section with Sidewalks on Both Sides****Description:**

- Improves traffic operations within the study area.
- Vehicles are able to use the two-way left-turn lane to manoeuvre around waste collection trucks.
- Provides dedicated space for pedestrians on both sides of the road.
- Does not conform to the Ancaster Transportation Master Plan (2011) recommendations (three lanes with a two-way centre left-turn lane, bicycle lanes and sidewalks).
- Improves pedestrian safety and comfort but does not improve cyclist safety or comfort.
- 23 trees impacted.
- Provides continuous pedestrian route connecting with the sidewalk on the south side of Mohawk Road west of McNiven Road/ Lime Kiln Road.
- Does not connect to an existing bicycle lane network.
- Requires minor aerial utility relocation on southside.
- This alternative solution does not fully address the problems and opportunities of the project and therefore is not recommended.