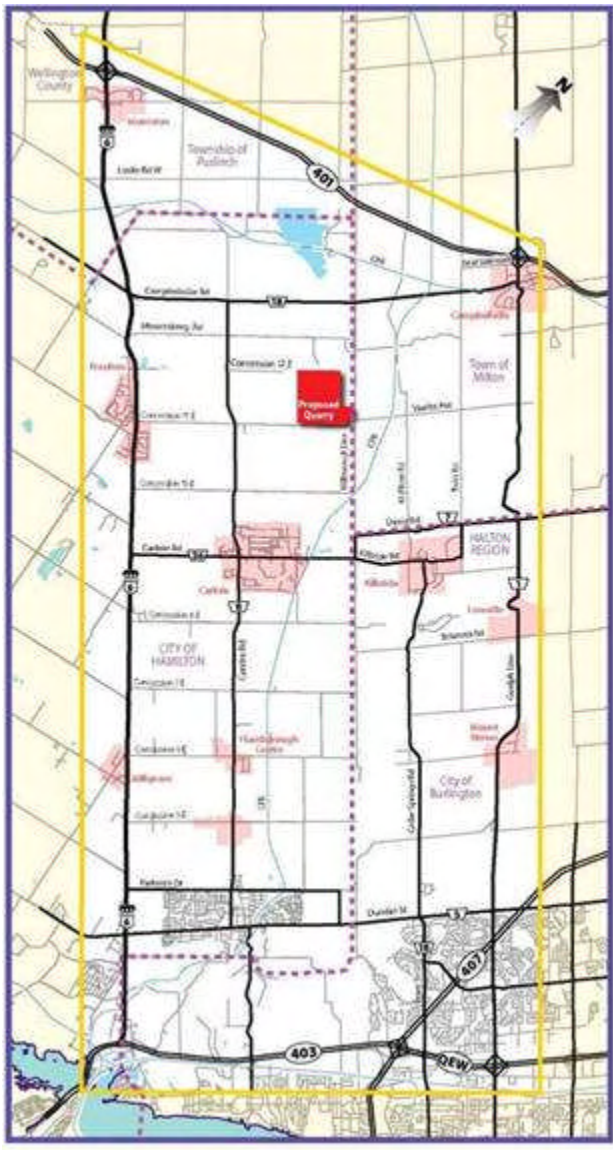


## 8. SELECTION OF ALTERNATIVE HAUL ROUTES

As required by the CART Terms of Reference, the study adopted a process for identifying, screening, analyzing, and evaluating alternative haul routes. This process has six steps and can be summarized as follows:

1. **Identification of initial long list of alternative haul routes** - Identify all reasonable potential haul routes in the study area. (The study area is shown in **Exhibit 8-1**) The result is an initial long list of alternative haul routes for input from the public and stakeholders.



**Exhibit 8-1: Study Area**

2. **1st stage screening of initial long list of alternative haul routes** - Conduct an initial screening of the initial long list of alternative haul routes. Use the routes' environmental impacts for the screening criteria. The result is an initial short list of alternative haul routes which can be presented to the public and stakeholders for their input.
3. **2nd stage screening of selected alternative haul routes** - Conduct a detailed screening of the environmental impacts of alternative haul routes that were initially screened out, but which might have merit. Determine whether the routes should be included for consideration. The result is the final short list of alternative haul routes.
4. **Analyze the short list of alternative haul routes.**
5. **Evaluate the short list of alternative haul routes.**
6. **Select the preferred haul route(s).**

**Section 8** of this report describes the first set of three steps. **Section 8.1** identifies the initial list of haul routes for consideration. **Section 8.2** describes the first stage screening the haul route alternatives and **Section 8.3** describes the second stage screening.



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## **8.2 1st Stage of Screening of Initial Long List of Alternative Haul Routes**

All of the alternative haul routes on the initial long list were reviewed and screened link by link to eliminate routes that had a significant number of adverse impacts and disadvantages. The alternative haul routes had a total of 27 links.

Each link was reviewed individually. The screening was applied at a high level and used available secondary source data. The elimination of a link as a potential haul route did not depend on a single criterion, but on the overall advantages and disadvantages of the road link.

The following screening criteria were applied:

- Avoid settlements and built-up areas
- Avoid schools and parks
- Avoid roads with significant engineering and safety deficiencies
- Avoid significant impacts on the natural environment
- Avoid routes that would need extensions or new road construction (to minimize environmental impacts)

### **8.2.1 Eliminated Road Links**

The screening eliminated 16 road links. They are shown in **Exhibit 8-3**.

The eliminated links are listed below with a brief summary of the high level rationale used in the elimination. **Section 8.2.2** provides a comprehensive analysis of all 27 route links.

#### **Link 2 Centre Road – From Concession 11 E to Carlisle Road**

Constraints include:

- Passes through the heart of the Carlisle community
- Passes by two schools
- Passes by community centre and park
- Reconstruction and widening required

#### **Link 3 Centre Road – From Carlisle Road to Dundas Street**

Constraints include:

- Passes through the heart of the Carlisle community
- Passes through Flamborough Centre
- Passes through Concession 5 E settlement area
- Passes through Waterdown
- Passes by four schools and four parks
- Reconstruction and widening required

**Link 4 Milborough Line – From Highway 401 to Campbellville Road**

Constraints include:

- Not an existing truck route
- Questionable feasibility for new 401 interchange
- Passes by Mountsberg Wildlife Centre
- Significant engineering deficiencies
- Major reconstruction and widening required

**Link 6 Milborough Line – From Concession 11 E to Derry Road**

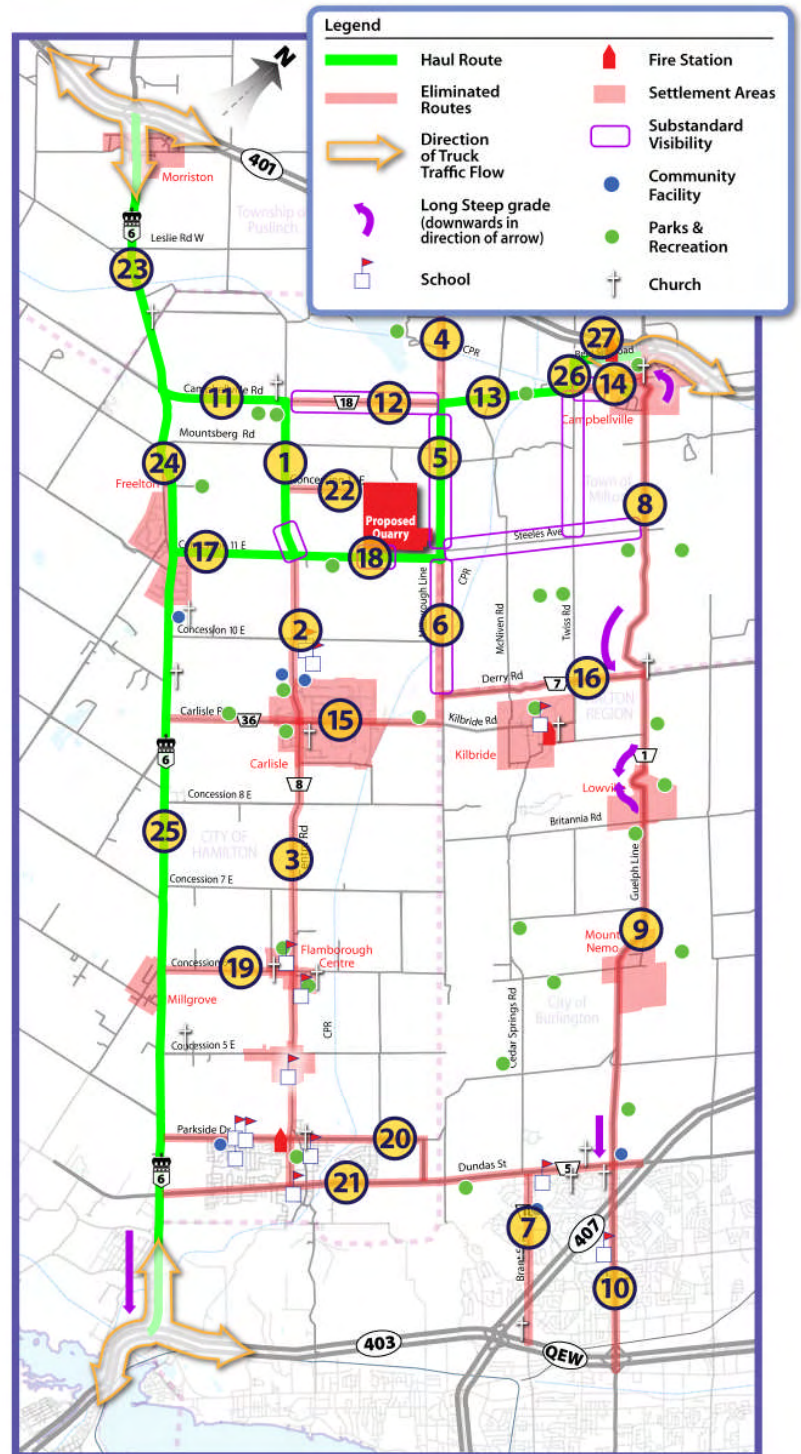
Constraints include:

- Not an existing truck route
- Significant engineering and safety deficiencies
- Major reconstruction and widening required
- Potential impacts on Environmentally Significant Area

**Link 7 Brant Street – From Dundas Street to QEW**

Constraints include:

- Passes through heavily built up area in Burlington
- Numerous homes backing on to Brant
- Numerous businesses along Brant
- Cannot access QEW Niagara without going on Fairview or Plains Road



**Exhibit 8-3: Eliminated Haul Route Linkages**

**Link 8 Guelph Line – From Highway 401 to Derry Road**

Constraints include:

- Passes through the heart of Campbellville
- Passes by many businesses
- Potential conflicts with auto traffic and pedestrians
- Passes by church, and several parks/conservation areas
- Long steep grades north of Derry Road and south of Campbellville
- Guelph Line not easily accessible for trucks from the quarry site

**Link 9 Guelph Line – From Derry Road to Dundas Street**

Constraints include:

- Passes through Lowville community
- Passes through Mount Nemo community
- Potential conflicts with auto traffic and pedestrians
- Passes by parks and conservation area
- Long steep grades in Lowville area and north of Dundas Street
- Guelph Line not easily accessible for trucks from the quarry site

**Link 10 Guelph Line – From Dundas Street to QEW**

Constraints include:

- Passes through heavily-built up area in Burlington
- Numerous homes backing on to Guelph Line
- Numerous businesses along Guelph Line
- Guelph Line not easily accessible for trucks from the quarry site

**Link 12 Campbellville Road – From Centre Road to Milborough Line**

Constraints include:

- Significant visibility problems with ‘roller coaster’ alignment
- Major reconstruction required with significant implications to adjacent properties/accesses expected

**Link 14 Campbellville Road – From Twiss Road to Guelph Line**

Constraints include:

- Passes through Campbellville built-up area
- Numerous homes and driveways
- Deficient road alignment at CP crossing
- Passes by Campbellville Conservation Area:
- Major physical constraints at Guelph Line intersection for turning truck traffic
- Cannot access 401 without passing through business heart of Campbellville

**Link 15 Carlisle Road – From Highway 6 to Milborough Line**

Constraints include:

- Passes through heart of Carlisle community
- Passes by a park and conservation area
- Potential conflicts with autos and pedestrians
- Reconstruction and widening required
- Numerous homes and businesses

**Link 16 Derry Road – From Milborough Line to Guelph Line**

Constraints include:

- Milborough not suitable access route to Derry
- Reconstruction and widening required.

**Link 19 Concession 6 E – From Highway 6 to Centre Road**

Constraints include:

- Passes through Flamborough Centre,
- Not easily accessible for trucks from quarry site

**Link 20 Parkside Drive – From Centre Road to Evans Road**

Constraints include:

- Passes through Waterdown built-up area
- Numerous homes along the route
- Significant conflicts with pedestrians and auto traffic

**Link 21 Dundas Street – From Centre Road to Evans Road**

Constraints include:

- Passes through heart of Waterdown
- Significant conflicts with pedestrians and auto traffic
- Significant traffic congestion and delays

**Link 22 Concession 12 E**

Constraints include:

- Not an existing truck route
- Significant impacts on the natural environment
- Significant reconstruction and widening required

**8.2.2 Evaluation of Each Haul Route Link**

Each of the 27 route links were then considered in detail in terms of the advantages and disadvantages associated with the evaluation criteria listed in the City of Hamilton's Terms of Reference. The results are summarized in tabular format in **Appendix B**.

This section summarizes the main findings. There are no known cultural heritage characteristics to evaluate at this time.

In addition to this discussion, **Section 8.4** provides further explanation regarding the qualitative assessment and comparison that was used to help develop the short list of haul routes.

### 8.2.2.1 Link 1: Centre Road from Campbellville Road to Concession 11 E

**Advantages:** This route link is an existing designated truck route with no restrictions on vehicular traffic. There are no businesses along this link, and it is not located in a heavily built-up area.

**Disadvantages:** The Mountsberg Baptist Church and Cemetery are located on the west side of Centre Road near Campbellville Road, but worship takes place on Sunday at 9:45 am when the quarry is not planned to be in operation. There are approximately 45 driveways along this link, and the link is also part of an on-street bike route. During weekdays, approximately 23 school buses use this link daily.



Photo 8 - 1: Mountsberg Baptist Church and Cemetery

**Conclusion:** Given the proximity of this road section to the proposed site, and the potential to minimize impacts to the social, economic and cultural aspects of the community, the road section is recommended for consideration as a potential haul route.

### 8.2.2.2 Link 2: Centre Road from Concession 11 E to Carlisle Road

**Advantages:** This route link is an existing designated truck route with no restrictions to vehicular traffic. South of Concession 10 E, however, there is a bridge that restricts loads to a maximum of 30 tonnes.

**Disadvantages:** The link is part of an on-street bike route, and passes through the heart of the Carlisle community. The link includes six businesses, two schools (Balaclava Elementary School and Our Lady of Mount Carmel Catholic School) and several community facilities (Carlisle Community Centre, the Hamilton Public Library, Carlisle Medical Centre, and Flamborough Carlisle Memorial Park). On weekdays, approximately 54 school buses use this link daily.



Photo 8 - 2: Our Lady of Mount Carmel Catholic School



Photo 8 - 3: Balaclava Elementary School



Photo 8 - 4: Flamborough Carlisle Memorial Park



Photo 8 - 5: Carlisle Medical Centre

**Conclusion:** If additional heavy truck traffic was introduced to this recreational-oriented area, this link would likely experience impacts that are disadvantageous to the social and economic environment. For this reason, it is recommended that this route link not be carried forward as a potential haul route.

### 8.2.2.3 Link 3: Centre Road from Carlisle Road to Dundas Street

**Advantage:** This route link is a designated truck route with no restrictions.

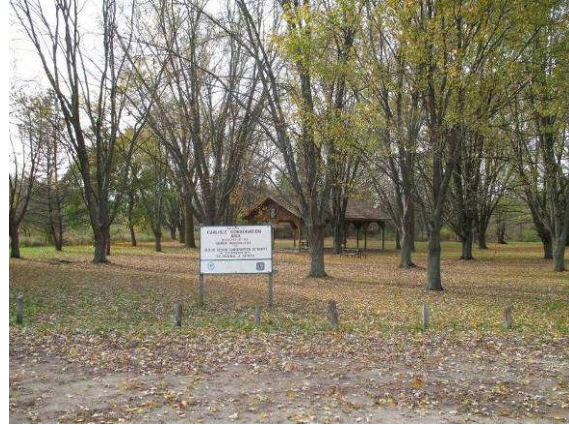
**Disadvantages:** Several natural areas are located along this route. These areas are classified as ESAs, and include the Carlisle Conservation Area located on the west side of Centre Road between Carlisle Road and Concession 8 E. Disturbance to the natural areas should be avoided where possible.

There are community recreational facilities, public-use parks, and open spaces along this link. The link passes through four settlement areas (Carlisle community, Flamborough Centre, Waterdown community, and the Concession 5 E settlement area), four schools

(Riverwalk Country Day Montessori School, Guardian Angels Elementary School, Flamborough Centre Elementary School and St. Thomas School), several parks (Flamborough Centre Community Park, Centre Park and Waterdown Memorial Park), and two churches (Carlisle United Church and Cemetery, and St. Thomas The Apostle Church). In addition to these community features, there are also 27 businesses along the link. On weekdays, approximately 232 school buses use this link daily.



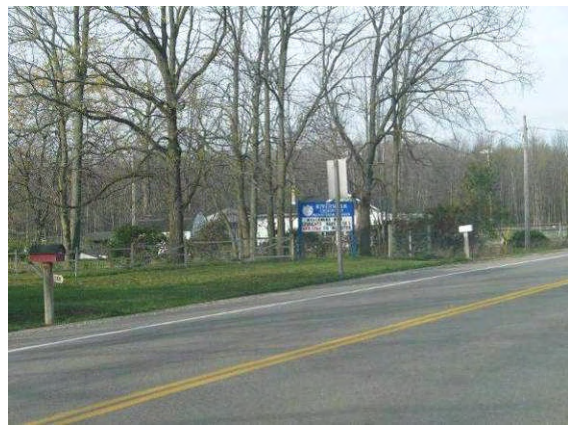
**Photo 8 - 6: Carlisle United Church and Cemetery**



**Photo 8 - 7: Carlisle United Church and Cemetery**



**Photo 8 - 8: Flamborough Centre Elementary School**



**Photo 8 - 9: Riverwalk Country Day Montessori School**



Photo 8 - 10: Flamborough Leisure Park Centre



Photo 8 - 11: Carlisle Community Centre



Photo 8 - 12: Business along Centre Road



Photo 8 - 13: Business along Centre Road



Photo 8 - 14: Business along Centre Road



Photo 8 - 15: Business along Centre Road



Photo 8 - 16: Business along Centre Road



Photo 8 - 17: Business along Centre Road



Photo 8 - 18: Business along Centre Road



Photo 8 - 19: Business along Centre Road



Photo 8 - 20: Business along Centre Road



Photo 8 - 21: Business along Centre Road

The link includes a cautionary on-street bike route, and site observations show that there is heavy traffic congestion through the Waterdown community during the peak traffic hours. Since Link 2 (**Section 8.2.2.2**) was not carried forward, this route link is discontinuous from the proposed site.

**Conclusion:** Given the concentration of schools, community facilities, and businesses, and the corresponding impacts to the social, economic and cultural aspects of the community, it is recommended that this route link not be carried forward as a potential haul route.

#### 8.2.2.4 Link 4: Milborough Line from Highway 401 to Campbellville Road

**Advantages:** This route link is a designated truck route with seasonal load restrictions. Few residential dwellings and businesses are located along this link.

**Disadvantages:** There is an existing railway crossing with lights-only traffic control and an on-street bike route. There is an ESA, conservation land, and the Mountsberg Wildlife Centre which is open year round and hosts a variety of activities for all ages.

A new interchange with Highway 401 has been suggested by the public for this section of Milborough Line. Current road conditions will not, however, support an interchange. A significant change to the character of the roadway would be required. The link also has some significant engineering deficiencies that will require major reconstruction and road widening.



Photo 8 - 22: Mountsberg Conservation Area

**Conclusion:** Although very few residential dwellings and businesses are located along this route, the construction of a new interchange will result in a significant change to the area. For this reason, it is recommended that this link be reassessed in the second stage evaluation of potential haul routes.

#### 8.2.2.5 Link 5: Milborough Line from Campbellville Road to Concession 11 E

**Advantages:** This link provides the most direct access from the quarry site to Highway 401 and destinations to the east, but the link has a seasonal load restriction. Community facilities along the link are limited.

**Disadvantages:** Along this link, there is an on-street suggested bike route that passes approximately 23 residential driveways. On weekdays, approximately 11 school buses use this link daily. There is an ESA and a business. As visibility on the link is substandard, reconstruction and widening will be required.



Photo 8 - 23: Sample driveway along Milborough Line

**Conclusion:** This link offers the potential to minimize the overall impacts to the social, economic and cultural aspects of the overall community of the study area by avoiding other more sensitive areas. It is therefore recommended that this link be carried forward as a potential haul route.

#### 8.2.2.6 Link 6: Milborough Line from Concession 11 E to Derry Road

**Advantage:** This road link has no advantages to note at this time.

**Disadvantages:** This link is not a designated truck route, and does not provide a direct route to Highway 401. Like link No. 5 (**Section 8.2.2.5**), visibility on the link is substandard. As there are significant engineering deficiencies, the link would require reconstruction and widening.

On-street bike route passes numerous residential driveways and a business. On weekdays, approximately 25 school buses use this link daily. Near Concession 10 E, there is a rail crossing that is controlled by lights only. The link passes several ESAs.



Photo 8 - 24: Business along Milborough Line

**Conclusion:** Given the potential impacts to the terrestrial environment and the minimal strategic benefit of this particular road link, it is recommended that this link not be carried forward for further consideration as a potential haul route.

### 8.2.2.7 Link 7: Brant Street from Dundas Street to QEW

**Advantage:** This link is a truck route with no restrictions.

**Disadvantages:** The link passes through a heavily-built up area in Burlington, and numerous businesses and homes back onto Brant Street. Several community facilities are located along the link: Kingsbridge School, the Brant Hill Community Centre and Library, and two churches (Brant Hills Presbyterian Church, and Prince of Peace Lutheran Church).

**Conclusion:** Given the discontinuous nature of the route from the proposed quarry site, and given that the QEW Niagara cannot be accessed without going through Fairview Road or Plains Road, it is recommended that this link not be carried forward for further consideration as a potential haul route.

### 8.2.2.8 Link 8: Guelph Line from Highway 401 to Derry Road

**Advantage:** This link is a truck route with no restrictions and no designated cycling facilities.

**Disadvantages:** This link does not provide access to Highway 401 without passing through the business heart of the Campbellville community. Additional truck traffic passing through Campbellville may create conflicts with vehicular traffic and pedestrians. On Guelph Line, just south of Campbellville, there is a rail crossing controlled by lights and gates.

Within Campbellville, there are seven businesses (with numerous other businesses to the south), two churches (St. David's Presbyterian Church and Cemetery, and St. Andrew's Anglican Church), and the Campbellville Ball Park. The link also passes several conservation lands including: Campbellville Conservation Area, Crawford Lake Forestry Tract, and Crawford Lake Conservation Area. North of Derry Road and south of Campbellville, the grades are long and steep. On weekdays, approximately 30 school buses use this link daily.

The geometric conditions at the intersection of Guelph Line and Campbellville Road are not conducive to expansion. It is not advisable to increase the truck traffic, particularly truck traffic turning left off Campbellville Road to go north, or coming south and turning right, .



**Photo 8 - 25: Guelph Line, near construction zone at Highway 401 Interchange**



**Photo 8 - 26: Guelph Line at the heart of Campbellville**

**Conclusion:** Given that this route includes long steep, grades north of Derry Road and south of Campbellville, the challenging Guelph Line and Campbellville Road intersection, and large potential social and economic impacts, it is recommended that this link not be a carried forward for further consideration as a potential haul route.

### 8.2.2.9 Link 9: Guelph Line from Derry Road to Dundas Street

**Advantage:** This road link is a truck route with no restrictions to vehicular traffic and no on-street cycling facilities.

**Disadvantages:** The link passes through two settlement areas (Lowville and Mount Nemo). There are long steep grades in Lowville and north of Dundas Street. The link includes recreational facilities, such as the Crosswinds Golf and Country Club and Lowville Golf Club, and community facilities such as the Happy Times for Kids Day Care. On weekdays, approximately 47 school buses use this link daily.

There are several parks and conservation lands including Mount Nemo Conservation Area, the Lowville Park, and Burlington Memorial Gardens.



**Photo 8 - 27: Crosswinds Golf and Country Club**

**Conclusion:** Given that truck traffic would have to negotiate several steep grades, and given the potential impacts to Lowville and Mount Nemo's social environment, it is recommended that this link not be carried forward for further consideration as a potential haul route.

#### **8.2.2.10 Link 10: Guelph Line from Dundas Street to QEW**

**Advantage:** This road link is part of a truck route with no restrictions.

**Disadvantages:** The link passes through a heavily built-up area in Burlington. There are numerous homes, businesses, churches and schools. Community facilities that might be impacted include three churches (St. John's Anglican Church, Calvary Baptist Church, and Glad Tidings Pentecostal Church), and one high school (MM Robinson High School.) On weekdays, approximately eight school buses travel this link daily.

**Conclusion:** Given the discontinuous nature of the route, it is recommended that this link not be carried forward for further consideration as a potential haul route.

#### **8.2.2.11 Link 11: Campbellville Road from Highway 6 to Centre Road**

**Advantage:** This link is part of a truck route with seasonal load restrictions.

**Disadvantages:** The link passes by an ESA and two businesses, one of which is the Campbellville Training Centre just west of Centre Road. The Mountsberg Baptist Church and Cemetery is located on the west side of Centre Road near Campbellville Road, but worship takes place on Sunday at 9:45 am when the quarry is not proposed to be in operation.

There are 15 residential driveways along the link. On weekdays, approximately six school buses use this link daily.



Photo 8 - 28: Campbellville Training Centre



Photo 8 - 29: Mountsberg Baptist Church



Photo 8 - 30: Business along Campbellville Road

**Conclusion:** While it will be necessary to provide consideration for potential impacts to the cultural and economic aspects of the community in this area, the road section does offer direct accessibility to Highway 6 while avoiding other more sensitive areas. It is therefore recommended that this link be carried forward as a potential haul route.

### 8.2.2.12 Link 12: Campbellville Road from Centre Road to Milborough Line

**Advantage:** This link is part of a truck route with seasonal load restrictions.

**Disadvantages:** The link passes through two ESAs. There are five businesses and approximately 38 residential driveways. On weekdays, approximately five school buses use this link daily.



Photo 8 - 31: Business along Campbellville Road      Photo 8 - 32: Business along Campbellville Road

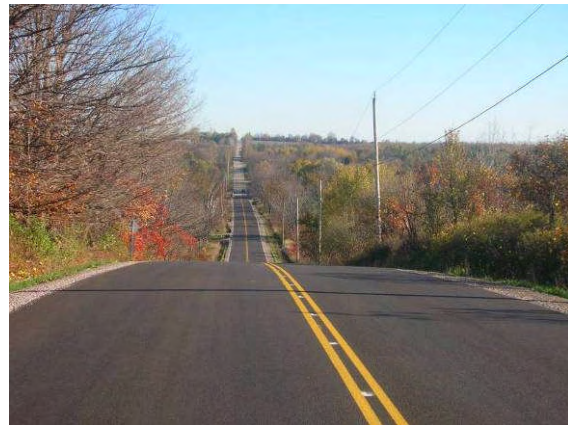


Photo 8 - 33: Business along Campbellville Road      Photo 8 - 34: 'Roller-coaster' alignment along this route link on Campbellville Road

The link has visibility problems due to the 'roller-coaster' alignment. Major road reconstruction and grading would be required to improve the vertical alignment. This would require property acquisition, and would have a substantial impact on adjacent residential dwellings.

**Conclusion:** Although the reconstruction necessary on this link is expected to have significant impacts to existing land uses, and to have terrestrial and social implications, the close proximity of this road section to the proposed site and the link's resulting potential as a haul route merit further consideration. As a result, this link was listed for reassessment during the second stage evaluation.

### 8.2.2.13 Link 13: Campbellville Road from Milbrough Line to Twiss Road

**Advantage:** This link is part of a truck route with year round load restrictions.

**Disadvantages:** West of Twiss Road, the link intersects a CP rail crossing that is controlled by lights only. There are 17 residential driveways and a single business along the link. On weekdays, approximately eight school buses use this link daily. The link passes by Laking Tract and Thomas William Harrison Tract, and is part of an on road suggested bike route.



Photo 8 - 35: Laking Tract



Photo 8 - 36: Thomas William Harrison Tract

**Conclusion:** While it will be necessary to provide consideration for potential impacts to the social aspects of the community in the area, the road section offers the potential of providing access to and from the proposed site while avoiding other more sensitive areas. It is recommended that this link be carried forward as a potential haul route.

### 8.2.2.14 Link 14: Campbellville Road from Twiss Road to Guelph Line

**Advantage:** This link is part of a truck route with year round load restrictions.

**Disadvantages:** East of Twiss Road, the link intersects a CP rail crossing with lights and gates. The horizontal alignment at this crossing is deficient.

The link passes through the built-up area of Campbellville, and has many businesses and residential driveways. Major physical building constraints at the Guelph Line intersection will impede turning truck traffic. (See description for Link 8 in Section 8.2.2.8).



**Photo 8 - 37: Campbellville Conservation Area**      **Photo 8 - 38: Business along Campbellville Road**

This route link is part of an on road suggested bike route, and passes by the Campbellville Conservation Area. On weekdays approximately four school buses use this link daily.

**Conclusion:** Since trucks cannot access Highway 401 without passing through the business heart of the Campbellville community (resulting in significant social impacts), it is recommended that this link not be carried forward as a potential haul route.

#### 8.2.2.15      **Link 15: Carlisle Road from Highway 6 to Milborough Line**

**Advantage:** This route is a designated truck route with seasonal load restrictions.

**Disadvantages:** The link passes through a CP railway crossing controlled by lights only. The link also passes an ESA just east of Highway 6, Courtcliffe Park, the Carlisle Conservation Area west of Centre Road, and the Carlisle Golf and Country Club.



**Photo 8 - 39: Courtcliffe Park**



**Photo 8 - 40: Carlisle Conservation Area**

This link is designated as an on-street bike route, and runs through the heart of the Carlisle community where numerous homes and businesses are located. On weekdays, approximately 36 school buses use this link daily.



**Photo 8 - 41: Carlisle Golf and Country Club**



**Photo 8 - 42: Business along Carlisle Road**



**Photo 8 - 43: Business along Carlisle Road**



**Photo 8 - 44: Business along Carlisle Road**



**Photo 8 - 45: Southeast corner of Carlisle Road and Highway 6**



**Photo 8 - 46: Southeast corner of Carlisle Road and Highway 6**



**Photo 8 - 47: Northeast corner of Carlisle Road and Highway 6**

Vehicles and pedestrian movements at numerous driveways and accesses along the link could potentially be impacted.

**Conclusion:** Given the potential social, economic, cultural and terrestrial impacts, it is recommended that this route link not be carried forward for consideration as a potential haul route.

#### 8.2.2.16 Link 16: Derry Road from Milborough Line to Guelph Line

**Advantage:** This route is a designated truck route with seasonal load restrictions.

**Disadvantages:** The link has significant engineering and safety deficiencies which would require attention if the truck use increased. Several businesses are located along the link, and east of Twiss road, the link is a suggested on road bike route. On weekdays, approximately 16 school buses use the link daily. As Milborough Line south of Concession 11 is not recommended as a potential haul route, there is no connection to Derry Road from the site.



**Photo 8 - 48: Business along Derry Road**



**Photo 8 - 49: Business along Derry Road**



Photo 8 - 50: Business along Derry Road



Photo 8 - 51: Business along Derry Road

**Conclusion:** Given the potential social and economic impacts, and given the limited strategic importance of this road section to the proposed quarry's traffic, it is recommended that this link not be carried forward as a potential haul route.

#### 8.2.2.17 Link 17: Concession 11 E from Highway 6 to Centre Road

**Advantage:** As this route provides direct access from the quarry site to Highway 6, the link would be easily accessible for trucks travelling to and from the proposed quarry site.

**Disadvantages:** The link is not an existing truck route. It passes by an Area of Natural and Scientific Interest (ANSI) and an ESA. The link has approximately 37 existing driveways that could potentially be impacted, and it is a cautionary, unsigned on-street bike route. On weekdays, approximately nine school buses use this link daily.

**Conclusion:** It will be necessary to provide consideration for potential impacts to the terrestrial and social aspects of the community in this area, but the road section offers the potential for providing accessibility to traffic travelling to and from the proposed site and for avoiding other more sensitive areas. It is recommended that this route be carried forward as a potential haul route.

#### 8.2.2.18 Link 18: Concession 11 E from Centre Road to Milborough Line

**Advantage:** This route borders the site and is therefore easily accessible to trucks travelling to and from the quarry site.

**Disadvantages:** The link is not an existing truck route, and it passes by an ESA and Lawson Park. Approximately 44 existing driveways and accesses along the link could potentially be impacted. On weekdays, approximately five school buses use this link daily.



Photo 8 - 52: Lawson Park

**Conclusion:** While it will be necessary to provide consideration for the potential social impacts on the community in this area, the road section offers the potential for providing accessibility to the traffic travelling to and from the proposed site, and for avoiding other more sensitive areas. It is recommended that this route be carried forward as a potential haul route.

#### 8.2.2.19 Link 19: Concession 6 E from Highway 6 to Centre Road

**Advantage:** This route link is a designated truck route with seasonal load restrictions.

**Disadvantages:** The link is part of an on-street bike route, and passes through the heart of the Flamborough community where several parks and recreational facilities are located. Facilities that could potentially be impacted include two parks (Flamborough Centre Community, and Centre Park), two churches (Community Church, and Flamborough Christian Fellowship), and a school (Flamborough Centre Elementary School). On weekdays, approximately 10 school buses use this link daily.

**Conclusion:** Given the nature of the social and cultural considerations, and the lack of suitable connection to Concession 6 E, it is recommended that this route not be carried forward as a potential haul route.

#### 8.2.2.20 Link 20: Parkside Drive from Highway 6 to Evans Road

**Advantage:** This route link is a designated truck route with no restrictions west of Beeforth Road. East of Beeforth Road, the route link is a designated truck route with seasonal load restrictions.

**Disadvantages:** The link is part of an on-street bike route west of Beeforth Road. The link passes through the built-up area of Waterdown where there are numerous homes and businesses. Community facilities on this link include the Flamborough YMCA, the Waterdown Memorial Park, three schools (Allan A. Greenleaf School, Guy Brown School, and Waterdown District Secondary School), one church (James United Church) and Fire Station #24. The link has a CP railway crossing controlled by lights and gates.

**Conclusion:** Given the potential social impacts on the area, and given the discontinuous nature of this road section from the proposed site (due to recommendations made in this report for other links), it is recommended that this route be excluded as a potential haul route.

#### **8.2.2.21 Link 21: Dundas Street from Highway 6 to Guelph Line**

**Advantage:** This route is a designated truck route with no load restrictions.

**Disadvantages:** The link passes through the heart of the Waterdown community where there are numerous homes and businesses. Community facilities that may be impacted include two schools (St. Thomas, and Kingsbridge School), two churches (Nelson United Church and Cemetery, and St. John's Anglican Church), and New City Park.

**Conclusion:** Given the potential social impacts to the area and local community facilities, it is recommended that this route be excluded as a potential haul route.

#### **8.2.2.22 Link 22: Concession 12 E**

**Advantage:** This route link borders the proposed quarry site.

**Disadvantages:** The link is not an existing truck route. Most of the link route runs through a large ESA, and the link terminates at sensitive wetlands. Although the link is close to the proposed site, the existing link would need to be extended, requiring construction on protected wetlands.

**Conclusion:** Given the considerable environmental impacts, it is recommended that this road section be excluded as a potential haul route.

#### **8.2.2.23 Link 23: Highway 6 from Highway 401 to Campbellville Road**

**Advantage:** This route link is part of an existing designated truck route with no restrictions. The link provides direct access to Highway 401.

**Disadvantages:** The passes through an ESA and through the Morriston community which currently experiences congested conditions resulting from high volumes of truck traffic. The road link passes approximately 32 residential driveways and approximately 20 commercial driveways. A community feature that may be impacted is the Church of the Seventh Day Adventist Reform Movement. On weekdays, approximately six school buses use this link daily.



Photo 8-52: Business Plaza in Morriston Community

**Conclusion:** Given that Highway 6 is a provincial roadway designed to service all types of vehicles, it is recommended that this link be carried forward as a potential haul route.

#### 8.2.2.24 Link 24: Highway 6 from Campbellville Road to Concession 11E

**Advantage:** This route link is part of an existing designated truck route with no restrictions. The link provides access to Highway 401 and Highway 403.

**Disadvantages:** The link passes through an ESA and the Freulton community. It passes approximately 9 residential driveways and approximately five commercial driveways. A community feature that may be impacted includes the Carlton-Freulton Cemetery. On weekdays, approximately ten school buses use this link daily.



Photo 8-53: Carmel Cemetery in Freulton Community

**Conclusion:** Given that Highway 6 is a provincial roadway designed to service all types of vehicles, it is recommended that this link be carried forward as a potential haul route.

**8.2.2.25 Link 25: Highway 6 from Concession 11 E to Highway 403**

**Advantage:** This route link is part of an existing designated truck route with no restrictions. The link provides direct access to Highway 403.

**Disadvantages:** The link passes through ESAs and the Millgrove community. It passes approximately 128 residential driveways and approximately 61 commercial driveways. A community feature that may be impacted is the United Church of Hamilton Conference. On weekdays, approximately 73 school buses use this link daily.

**Conclusion:** Given that Highway 6 is a provincial roadway designed to service all types of vehicles, it is recommended that this link be carried forward as a potential haul route.

**8.2.2.26 Link 26: Twiss Road from Campbellville Road to Reid Sideroad**

**Advantages:** This route link is part of an existing designated truck route with no restrictions on vehicle types. Because this link provides access to Reid Sideroad and avoids going through Campbellville, it is likely to provide potentially fewer impacts than routes that pass through other more sensitive areas.

**Disadvantages:** The link intersects a CP rail crossing where there are three rail tracks. The crossing is controlled by lights and gates. This link passes several industrial businesses and three residential driveways.

**Conclusion:** Given that this link is part of an existing designated truck route, and that it avoids Campbellville and sensitive areas, it is recommended that this road section be carried forward as a potential haul route.

**8.2.2.27 Link 27: Reid Sideroad from Twiss Road to Guelph Line**

**Advantage:** This route link is part of an existing designated truck route with no restrictions to vehicular traffic. The link provides access to Highway 401 without going through Campbellville.

**Disadvantages:** The link passes by the Campbellville Emergency Response Centre (Fire Station #2) and a business. It passes 13 driveways in total. On weekdays, approximately four school buses use this link daily.