

**Defining Land Use Types:**

Section 3.1 (above) provides a summary description of the land use environment along each of the road LINKS contained in the five Alternative Haul Routes. In preparing this analysis, the consulting team has categorized existing land uses into a series of Land Use Types, to include (1) Agricultural, (2) Woodlots and Conservation Lands, (3) Business, (4) Community / Recreational, and (5) Residential / Vacant. Each of the five Alternative Haul Routes contains a full mix of all of the land use types.

Below represents a summary of how each land use type was defined.

**Agricultural:**

Agricultural areas are lands primarily consisting of horticulture, field crops, pasture land, animals, and barns.

**Woodlots and Conservation Lands:**

Woodlots and Conservation areas are lands primarily consisting of woodlots and environmental features, including those lands owned by Conservation Halton. Specific examples include Laking Tract and Thomas William Harrison Tract which are both located along Campbellville Road, in between Milborough Line and Twiss Road. Detailed examination of all natural heritage features and landforms is contained within the Flamborough Quarry Haul Route Study: Natural Environment Report prepared by Savanta Inc.

**Business:**

Business areas include commercial and industrial uses. These areas include business uses within settlement and hamlet clusters, including gas stations, restaurants, furniture shops, convenience stores, coffee shops, and auto shops, as well as business uses located in a linear pattern along rural road frontages, including self-storage facility, pipeline company, lumber facility, farm equipment shops, equestrian training centres, landscaping and garden centres, trucking companies, farm markets, and kennels.

**Community / Recreational:**

Community / recreational areas include public facilities and open space, including churches, schools, community centres, parks, and a cemetery. A specific example of Community / Recreational also includes the Lawson Park Family Camping Resort on Concession Road 11, just east of Centre Road.

Residential / Vacant :

Residential / vacant areas include residential land uses within settlement cluster or hamlet areas, and those rural residential properties located in a linear pattern along a road. These areas also include lands identified as vacant along the haul routes. The following settlements or hamlets were measured: Morriston, Freelon, Millgrove, Harper's Corners and Campbellville. As well, residential properties within the estate residential developments referred to as Timberrun Estates and Stonebury Place were included in this land use type.

**Assigning a Level of Importance to each Land Use Type**

It is important to have a general understanding of the varying degrees of importance and sensitivity for each Land Use Type to road improvements. While it is recognized that Team Specialists are providing more precision related to the sensitivity of land uses to specific technical criteria, including natural environment, agriculture, social and business impacts, cultural heritage / archaeology, air quality, noise, health risk assessment, geotechnical analysis, structural and stormwater management, and transportation, it is important for the purpose of this Land Use analysis to acknowledge the varying degrees of general sensitivity for the Land Use Types identified above.

In general, it is expected that community / recreational land uses and residential land uses will be more sensitive to possible road allowance widening associated with road alterations, than agricultural, woodlots and conservation lands, and business uses.

**Measuring the Area of Each Land Use Type**

The inventory of Existing Land Uses was completed in March 2008 for the roads contained within the Alternative Haul Routes (including Highway 6). In order to evaluate the area of existing land uses eliminated by grading associated with road alterations to accommodate Rural Cross-Section designs, the Total Property Required for road alterations was measured using the five different Land Use Types identified above. Measuring each Land Use Type was undertaken by Team Specialist Gartner Lee Limited using a combination of the following methods:

- Measurement of approximate frontage and depth of anticipated land required for road alterations, by land use type, using land ownership mapping
- Field measurement by vehicle reconnaissance and site visits

The Total Property Required for grading associated with road alterations to accommodate Rural Cross-Section designs was measured by Land Use Type along the Alternative Haul Routes using a combination of the above noted measurement methods, and the resultant measured total for each existing land use type was recorded.

The result provides an opportunity to view and compare the approximate proportional land use mix, by land use type, of existing land uses along the road frontages within each Alternative

Haul Route (excluding Highway 6). The results are represented in pie charts illustrated below. One pie chart has been prepared for each Alternative Haul Route (all excluding Highway 6).

As noted above, road alterations are not required for Highway 6 or for Reid Side Road to accommodate Rural Cross-Section Designs for truck traffic associated with the proposed quarry. Accordingly, there will be no road allowance widening outside of the existing ROW along Highway 6 or Reid Side Road to accommodate road alterations related to the Rural Cross-Sections along the Alternative Haul Routes. Accordingly, Highway 6 is not included in the analysis of Criteria #1 (the potential for removal of existing land uses from road improvements).

### **5.2.3 Analysis**

The potential for removal of existing land uses due to road alterations requires an analysis of the total property required (TPR) for road alterations to accommodate Rural Cross-Section Designs (outside of the existing road right-of-way), and an analysis of the land use types to be affected by such road alterations.

In order to measure the criteria indicator “*Area and importance of existing land use eliminated by road improvements*”, it is necessary to examine the proportional mix of land use types contained within each of the Alternative Haul Routes, and the Total Property Required (TPR) for grading associated with road alterations.

The analysis presented below illustrates in pie chart format the percentage of Total Property Required (TPR) for each land use type existing along the road frontages within each of the Alternative Haul Routes, excluding Highway 6. As noted in Section 5.2.1.1 above (Assumptions), Highway 6 is currently a viable transportation corridor which has been planned to accommodate significant truck traffic in a safe, rapid and efficient manner and, accordingly, no road alterations are required along Highway 6.

#### **5.2.3.1 HAUL ROUTE No. 1**

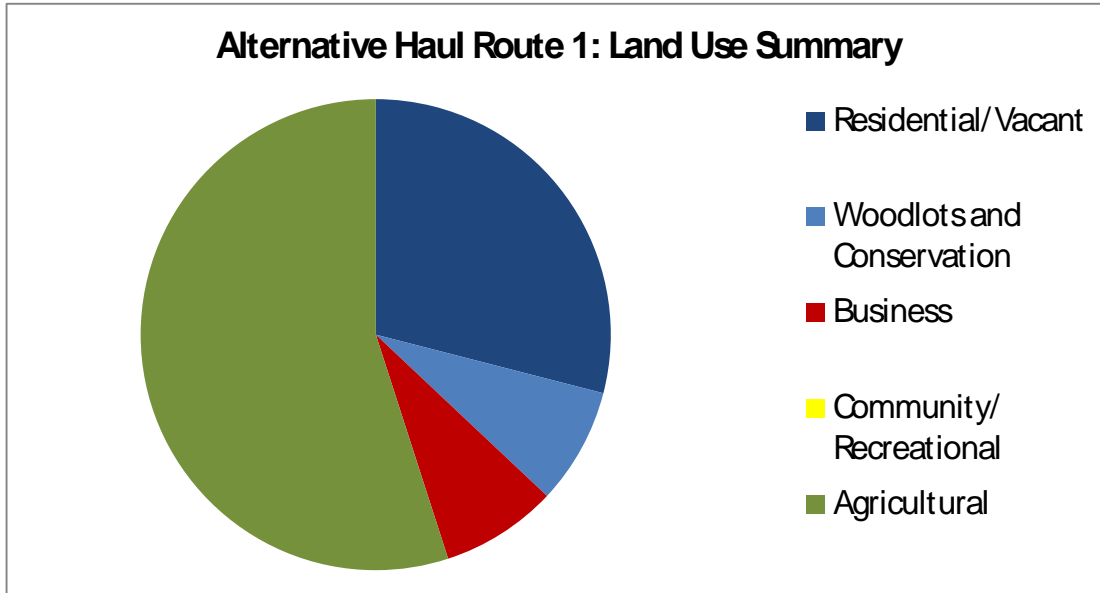
Haul Route 1 contains lands along Concession Road 11, from Highway 6 to Milborough Line. This route is predominantly comprised of agricultural areas and residential / vacant land uses. The residential land uses are comprised of rural residential properties, settlement residential properties, including several dwellings along Concession Road 11 in Freelon, and the estate residential development referred to as “Stonebury Place”. Stonebury Place is a secluded executive estate residential development, accessing Concession Road 11 from Stonebury Place Court. It is important to note that none of the estate residential dwellings in Stonebury Place directly access Concession Road 11. Accordingly, it is anticipated that road alterations along Concession Road 11 will not directly impact any of these estate residential dwellings. Similar to Stonebury Place, the Lawson Park Family Camping Resort is accessed from Concession Road 11, but there is no direct access to individual campsites from Concession Road 11. Potential land use impacts to the Camping Resort resulting from road alterations may be limited to the parking

area of the Camping Resort. As well, it is important to note that there are lands owned by the Roman Catholic Diocese of Hamilton on the south side of Concession 11, just east of Highway 6 in Freelton; however, discussions with the Diocese have confirmed that there are no immediate plans to develop these lands and, accordingly, this parcel has been classified as agricultural land use for the purposes of this analysis.

As noted on **Figure 28**, Alternative Haul Route 1 proposes the Rural Type 1 Cross Section and Rural Type 3 Cross Section. These Cross Sections proposed by iTRANS for this Alternative Haul Route will provide the benefit of bike lanes (Type 3) and better pavement and road design. As noted on Table 1, the road alterations associated with these Rural Cross Section Types are anticipated to require road allowance widening of approximately **6.0 m of land along LINK 17 (Concession 11 west of Centre Road)**, and **2.0 m of land along LINK 18 (Concession 11 east of Centre Road)**. In summary, the Total Property Required to accommodate grading associated with road alterations along Alternative Haul Route 1 is anticipated to be **21,462 m<sup>2</sup>**. Utilizing lands from adjacent properties along this Alternative Haul Route to accommodate the proposed road alterations will widen lands predominantly occupied by agricultural / natural areas, and some residential land uses. The Lawson Park Family Camping Resort is located along Concession Road 11; however, iTRANS has confirmed that road allowance widening will not be required along the frontage of the Lawson Park Family Camping Resort for road alterations associated with the Rural Cross-Section because the existing pavement is not centred on the existing right-of-way (ROW) and actually curves toward the northern side of the ROW at that particular location. Accordingly, road allowance widening to accommodate the Rural Cross Section in the vicinity of Lawson Park Family Camping Resort is only required on the north side of the road. No road allowance widening will be required from the frontage of Lawson Park.

As noted earlier in this report, it is expected that residential land uses will be more sensitive to road alterations than agricultural, woodlots and conservation lands, and business uses. Since potential road allowance widening along this Alternative Haul Route would appear to primarily impact agricultural and residential / vacant lands, with agricultural and woodlots/conservation representing approximately 63% of the lands fronting along this haul route, it is anticipated that road alterations would have **medium land use impact** on the existing land uses along Alternative Haul Route 1.

Chart 1: Potential Road Allowance Widening Land Use Summary for Haul Route 1



### 5.2.3.2 HAUL ROUTE No. 2

Haul Route 2 contains lands along the east portion of Concession Road 11, along Centre Road, and along Campbellville Road to Highway 6. This route contains predominantly agricultural lands and residential / vacant lands, and traverses a portion of the Mountsberg community. The residential land use type is comprised of rural residential uses and settlement residential uses within the estate residential development of “Stonebury Place”. As noted above, Stonebury Place is a secluded executive estate residential development, accessing Concession Road 11 from Stonebury Place Court, and none of the estate residential dwellings in Stonebury Place directly access Concession Road 11. Accordingly, it is anticipated that road alterations along Concession Road 11 will not directly impact any of these estate residential dwellings. Further, as noted above, the Lawson Park Family Camping Resort is located along this route. The Lawson Park Family Camping Resort is accessed from Concession Road 11, but there is no direct access to individual campsites from Concession Road 11. Potential land use impacts to the Camping Resort resulting from road alterations may be limited to the parking area of the Camping Resort.

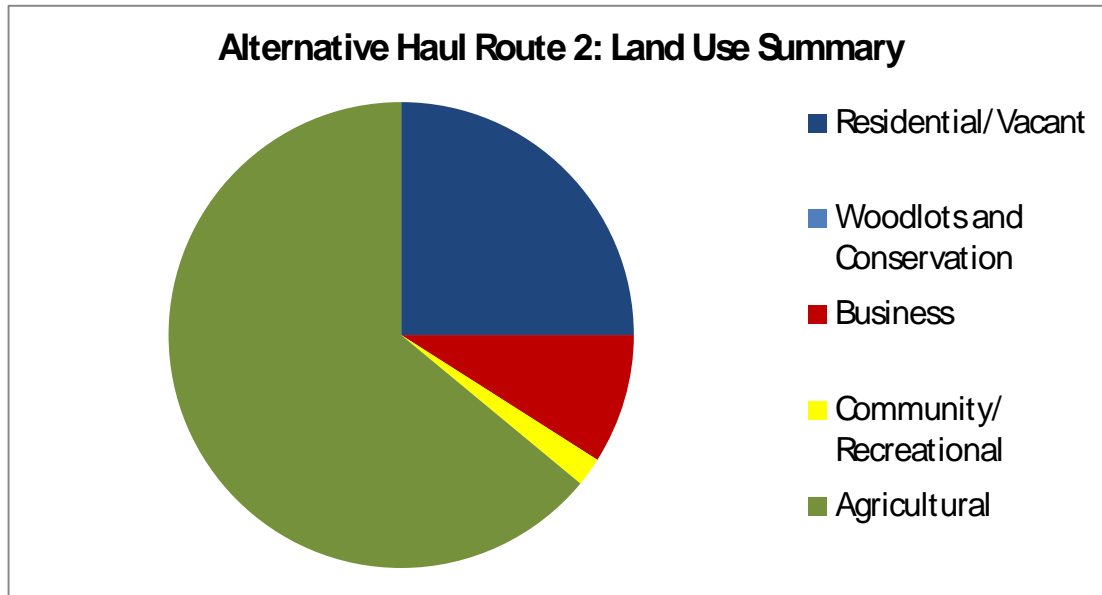
As noted on **Figure 28**, the Type 1 Rural Cross Section and Type 3 Rural Cross Sections are proposed by iTRANS for this Alternative Haul Route, and will provide the benefit of bike lanes (Type 3) and better pavement and road design. As noted on Table 2, the road alterations associated with these Rural Cross Section Types are anticipated to require road allowance widening of approximately **6.0 m of land along LINK 1 (Centre Road)**, and **2.0 m of land along LINK 18 (Concession 11 east of Centre Road) and LINK 11 (Campbellville Road)**. In summary, the Total Property Required to accommodate road alterations along Alternative Haul

Route 2 is anticipated to be **22,628 m<sup>2</sup>**. Utilizing lands from adjacent properties along this Alternative Haul Route to accommodate the proposed road alterations will widen lands predominantly occupied by agricultural uses and residential land uses.

The community / recreational land uses existing along this Haul Route include the Lawson Park Family Camping Resort, the Mountsberg Baptist Church on Campbellville Road (at Centre Road), and the Mountsberg Community Centre on Centre Road. However, iTRANS has confirmed that road allowance widening will not be required along the frontage of the Lawson Park Family Camping Resort or the Mountsberg Baptist Church for road alterations associated with the Rural Cross-Sections because the existing pavement is not centred on the existing right-of-way (ROW) and actually curves away from these land uses (i.e. curves on northern side of the ROW at Lawson Camping, and on southern side of ROW at Baptist Church). Accordingly, road allowance widening to accommodate the Rural Cross Section in the vicinity of Lawson Park Family Camping Resort and Mountsberg Baptist Church is only required on the opposite side of the road. No widening will be required from the frontage of Lawson Park or the Mountsberg Baptist Church.

As noted earlier in this report, it is expected that community / recreational land uses and residential land uses will be more sensitive to road alterations than agricultural, woodlots and conservation lands, and business uses. Potential road allowance widening along this Alternative Haul Route will primarily impact agricultural lands and residential/vacant lands, with agricultural representing approximately 64% of the lands fronting along this haul route. However, it is important to note that the Mountsberg Community Centre is anticipated to be directly affected by road allowance widening along this route. Accordingly, it is anticipated that road alterations would have **medium land use impact** on the existing land uses along Alternative Haul Route 2.

Chart 2: Potential Road Allowance Widening Land Use Summary for Haul Route 2



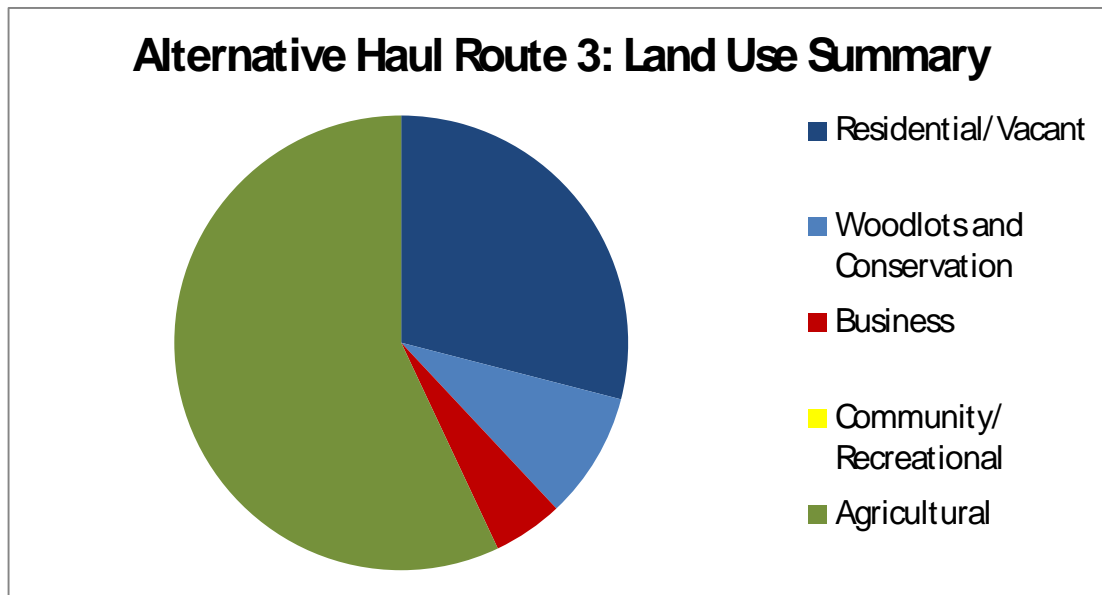
### 5.2.3.3 HAUL ROUTE No. 3

Haul Route 3 includes lands along Milborough Line, Campbellville Road, Twiss Road and Reid Side Road. This route contains predominantly residential / vacant land uses along Milborough, and agricultural areas and woodlots and conservation along Campbellville Road. This route traverses the north border of the Hamlet of Campbellville, and also borders a number of existing industrial uses along Twiss Road. Business uses, including those industrial uses along Twiss Road, are generally anticipated to have little or no sensitivity to road alterations. The residential land uses along this route consists of rural residential, settlement residential within the Hamlet of Campbellville (along Reid Sideroad), and the estate residential development referred to as “Timberrun”. Timberrun is a secluded executive estate residential development, accessing Mountsberg Road from Timberrun Court, which is adjacent to Milborough Line. It is important to note that all of the estate residences in Timberrun Court are accessed off Mounstberg Road, from Timberrun Court, and the only exposure this estate residential development has to the Alternative Haul Route includes some rear yards adjacent to Milborough Line. None of these estate residential dwellings directly access, or have frontage on, the proposed Haul Route. Accordingly, it is anticipated that road alterations along Milborough Line will not directly impact any of these estate residential dwellings. While there are community / recreational land uses located along Reid Side Road (Hamlet of Campbellville), which is a road LINK in this Haul Route, there are no anticipated road alterations along this road (as noted in Section 5.2.1.1 (Assumptions) above). Accordingly, there is no anticipated potential for removal of community / recreational land uses as a result of road alterations along Reid Side Road.

As noted on **Figure 28**, the Type 1 Rural Cross Section and Type 3 Rural Cross Sections are proposed by iTRANS for this Alternative Haul Route, and will provide the benefit of bike lanes (Type 3) and better pavement and road design. As noted on Table 3, the road alterations associated with these Rural Cross Section Types are anticipated to require road allowance widening of approximately **3.0 m to 7.5 m land along LINK 5 (Milborough Line), 6.0 m of land along LINK 13 (Campbellville Road), and 2.0 m of land along LINK 26 (Twiss Road)**. In summary, the Total Property Required to accommodate road alterations along Alternative Haul Route 3 is anticipated to be **34,110 m<sup>2</sup>**. Interestingly, Reid Side Road currently provides sufficient land within its existing ROW and, accordingly, no additional land is required outside of the Reid Side Road ROW to accommodate road alterations for this Alternative Haul Route.

Potential road allowance widening along this Alternative Haul Route to accommodate the proposed road alterations will displace lands predominantly occupied by residential / vacant lands along Milborough Line, and woodlots and conservation uses, and agricultural areas along Campbellville Road. Specifically, residential/vacant lands comprise approximately 29% of the lands to be impacted by road allowance widening along this route, and agricultural and woodlots comprise approximately 66%. Further, minor displacement of business uses along Twiss Road is anticipated. Accordingly, it is anticipated that road alterations would have **medium land use impact** on the existing land uses along Alternative Haul Route 3.

Chart 3: Potential Road Allowance Widening Land Use Summary for Haul Route 3



#### **5.2.3.4 HAUL ROUTE No. 4**

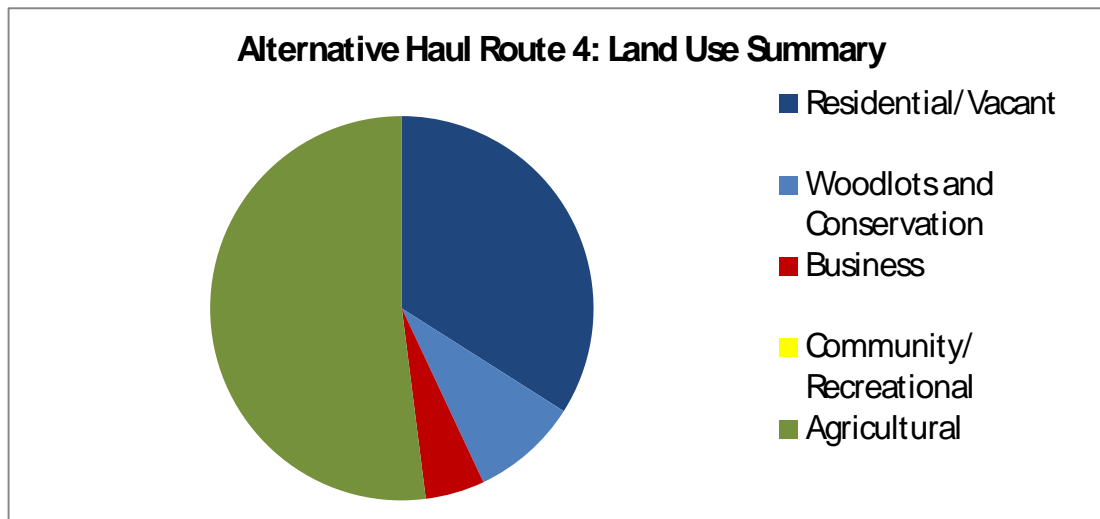
Haul Route 4 is comprised of a combination of Haul Route 1 and Haul Route 3. This route contains predominantly residential / vacant lands and agricultural areas. The eastern direction of this route traverses the north border of the Hamlet of Campbellville, and also borders a number of existing industrial uses along Twiss Road. As noted above, the residential land use type in this Alternative Haul Route is comprised of rural residential properties, residential dwellings in the Hamlet of Campbellville, and the estate residential development referred to as “Timberrun”, as well as some dwellings within Freelton (at Concession 11 and Highway 6) and Stonebury Place. As already noted, the dwellings within Stonebury Place and Timberrun Court do not directly access, or have frontage on, the proposed Haul Route. Accordingly, it is anticipated that road alterations will not directly impact any of these estate residential dwellings. The community / recreational land uses existing along this Haul Route include the Lawson Park Family Camping Report located along Concession Road 11. While it is recognized that individual camp sites do not directly access Concession Road 11, potential land use impacts to the Camping Resort resulting from road alterations may be limited to the parking area of the Camping Resort. As well, it is important to note that there are lands owned by the Roman Catholic Diocese of Hamilton on the south side of Concession 11, just east of Highway 6 in Freelton; however, discussions with the Diocese have confirmed that there are no immediate plans to develop these lands and, accordingly, this parcel has been classified as agricultural land use for the purposes of this analysis.

As noted on **Figure 29**, the Type 1 Rural Cross Section, Type 2 Rural Cross Section and Type 3 Rural Cross Sections are proposed by iTRANS for this Alternative Haul Route. All Cross Sections will provide better pavement and road design, and the Type 3 Rural Cross Section will provide the benefit of bike lanes. As noted on Table 4, the road alterations associated with these Rural Cross Section Types are anticipated to require road allowance widening of approximately **3.0 m to 7.5 m land along LINK 5 (Milborough Line), 6.0 m of land along LINK 13 (Campbellville Road), 2.0 m of land along LINK 18 (Concession 11 east of Centre Road) and LINK 26 (Twiss Road), and 2.5 m along LINK 17 (Concession 11 west of Centre Road)**. In summary, the Total Property Required to accommodate road alterations along Alternative Haul Route 4 is anticipated to be **48,370 m<sup>2</sup>**.

The Lawson Park Family Camping Resort is located along Concession Road 11; however, iTRANS has confirmed that road allowance widening will not be required along the frontage of the Lawson Park Family Camping Resort for road alterations associated with the Rural Cross-Section because the existing pavement is not centred on the existing right-of-way (ROW) and actually curves toward the northern side of the ROW at this particular location. Accordingly, road allowance widening to accommodate the Rural Cross Section in the vicinity of Lawson Park Family Camping Resort is only required on the north side of the road. No property will be required from the frontage of Lawson Park.

As well, as noted above, Reid Side Road currently provides sufficient land within its existing ROW and, accordingly, no additional land is required outside of the Reid Side Road ROW to accommodate road alterations for this Alternative Haul Route. Potential road allowance widening along this Alternative Haul Route to accommodate the proposed road alterations would primarily impact lands occupied by agricultural uses and woodlot / conservation (approximately 61%), and residential /vacant lands (approximately 34%). Furthermore, there is a larger amount of Total Property Required (TPR) to accommodate road alterations along this Alternative Haul Route because it utilizes more road length. Accordingly, it is anticipated that road alterations would have **medium-high land use impact** on the existing land uses along Alternative Haul Route 4.

Chart 4: Potential Road Allowance Widening Land Use Summary for Haul Route 4



### **5.2.3.5 HAUL ROUTE No. 5**

Haul Route 5 is comprised of a combination of Haul Route 2 and Haul Route 3. This route contains predominantly residential / vacant areas and agricultural areas. Similar to Alternative Routes 3 and 4, the eastern direction of this route traverses the north border of the Hamlet of Campbellville, and also borders a number of existing industrial uses along Twiss Road. As well, the residential land use type in this Alternative Haul Route is comprised of rural residential properties, residential dwellings in the Hamlet of Campbellville, and the estate residential development referred to as “Timberrun”, as well as the estate development of Stonebury Place. As well, this route traverses the community of Mountsberg, along Centre Road. As already noted, the dwellings within Stonebury Place and Timberrun Court do not directly access, or have frontage on, the proposed Haul Route. Accordingly, it is anticipated that road alterations will not directly impact any of these estate residential dwellings. As well, the Lawson Park Family Camping Resort is located along this route. While it is recognized that individual camp sites do

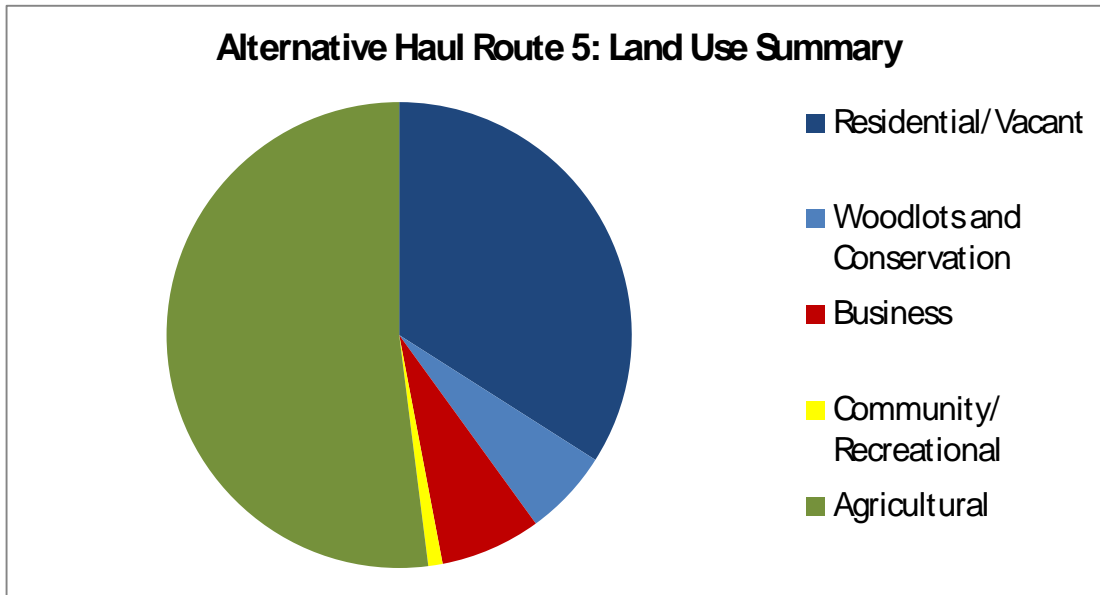
not directly access Concession Road 11, potential land use impacts to the Camping Resort resulting from road alterations may be limited to the parking area of the Camping Resort. The community / recreational land uses existing along this Haul Route include the Lawson Park Campground, Mountsberg Baptist Church on Campbellville Road (at Centre Road), and the Mountsberg Community Centre on Centre Road.

As noted on **Figure 30**, the Type 1 Rural Cross Section, Type 2 Rural Cross Section and Type 3 Rural Cross Sections are proposed by iTRANS for this Alternative Haul Route. All Rural Cross Sections will provide better pavement and road design, and the Type 3 Rural Cross Section will provide the benefit of bike lanes. As noted on Table 5, the road alterations associated with these Cross Section Types are anticipated to require road allowance widening of approximately **3.0 m to 7.5 m land along LINK 5 (Milborough Line), 6.0 m of land along LINK 13 (Campbellville Road), 2.0 m of land along LINK 18 (Concession 11 east of Centre Road), LINK 11 (Campbellville Road) and LINK 26 (Twiss Road), and 2.5 m along LINK 1 (Centre Road)**. In summary, the Total Property Required to accommodate road alterations along Alternative Haul Route 1 is anticipated to be **49,833 m<sup>2</sup>**.

The Lawson Park Family Camping Resort is located along Concession Road 11; however, iTRANS has confirmed that road allowance widening will not be required along the frontage of the Lawson Park Family Camping Resort or the Mountsberg Baptist Church for road alterations associated with the Rural Cross-Sections because the existing pavement is not centred on the existing right-of-way (ROW) in these locations, and actually curves away from these land uses. Accordingly, road allowance widening to accommodate the Rural Cross Sections in the vicinity of Lawson Park and the Baptist Church is only required on the opposite side of the road. No property will be required from the frontage of Lawson Park or the Baptist Church.

As well, as noted above, Reid Side Road currently provides sufficient land within its existing ROW and, accordingly, no additional land is required outside of the Reid Side Road ROW to accommodate road alterations for this Alternative Haul Route. Potential road allowance widening along this Alternative Haul Route will primarily impact lands occupied by agricultural and woodlot/conservation lands (approximately 58%), and residential/vacant lands (34%). Furthermore, there is a larger amount of Total Property Required (TPR) to accommodate road alterations along this Haul Route, because the Haul Route utilizes more road length. Accordingly, it is anticipated that road alterations would have **medium-high land use impact** on the existing land uses along Alternative Haul Route 5.

Chart 5: Potential Road Allowance Widening Land Use Summary for Haul Route 5



#### 5.2.4 Results of Analysis of Criteria #1

The analysis presented above illustrates in pie chart format the percentage of Total Property Required (TPR) for grading associated with road alterations to accommodate the Rural Cross-Sections, organized by existing land use type, along the road frontages within each of the Alternative Haul Routes (excluding Highway 6) and provides a qualitative evaluation of each haul route on this basis. The evaluation is based on the percentage of each land use type subject to potential road allowance widening to accommodate the grading requirements of the proposed road alterations along each route, and the general importance or sensitivity of each of the land use types to road alterations.

The road alterations applicable to each Alternative Haul Route are presented as Representative Rural Cross Sections (**Figure 27**) which have been designed by iTRANS to bring each road LINK to design standards acceptable for safe and efficient truck traffic, and to safely accommodate on-street cycling. The proposed Rural Cross Section type for each LINK relates to the anticipated volume of truck traffic and cyclists on each road LINK (**Figures 28, 29 and 30**).

Existing Right-of Ways (ROW) for roads along the Alternative Haul Routes (excluding Highway 6) vary between 18.5 m and 23 m, and the approximate ROW required for Representative Rural Cross-Section 1 is 22 m, for Representative Rural Cross-Section 2 is 22.5 m, and for Representative Rural Cross Section 3 is 26 m. Accordingly, it is anticipated that road allowance widening may be required for some lands along the Alternative Haul Routes, outside of the existing ROW, to accommodate the proposed Representative Rural Cross-Section. The

anticipated widening for each road LINK within each Alternative Haul Route is summarized in Tables 1 - 5.

The analysis presents that the anticipated road allowance widening among the five Alternative Haul Routes ranges from 7.5 m (along portions of Milborough Line) to 0 m along Reid Side Road (summarized on Table 1 to Table 5). The analysis notes that it is assumed that the road allowance widening will occur (and be divided across) both sides of the road, where feasible, and it is anticipated that widening of lands will be balanced to minimize impact on land use types considered to be more sensitive to road alterations (i.e. residential and institutional land uses), where possible. Further, there are no road alterations required along Highway 6 and Reid Side Road, since they are currently viable transportation corridors which can accommodate significant truck traffic in a safe, rapid and efficient manner.

Examination of the types of land uses to be subject to potential road allowance widening and the approximate area of land to be widened suggests that there will generally be **MEDIUM-HIGH land use impacts** along Alternative Routes 2, 3, 4 and 5, and **MEDIUM land use impacts** along Alternative Route 1 resulting from road alterations.

### **5.3 Analysis of Criteria #2: Potential for Disruptive Effects on Planned Development Areas**

#### **5.3.1 Assumptions**

**Planned Development Areas (Planned Land Uses)** are defined as areas which are designated for development in long range comprehensive policy documents (i.e. Official Plan), but are not yet built.

There are three Planned Development Areas identified along the five Alternative Haul Routes. The Planned Development Areas are described in terms of their character and sensitivity to increased truck traffic in the discussion below.

#### **5.3.2 Methodology**

The methodology involved in analyzing the potential for disruptive effects on Planned Development Areas involves defining, locating and characterizing Planned Development Areas, and qualitatively measuring the compatibility (and sensitivity) of the Planned Development Area to increased truck traffic. Specifically, the analysis uses the following indicators:

- Number, character of planned development areas
- Sensitivity of planned development to increased truck traffic

As noted above, there are three Planned Development Areas identified along the five Alternative Haul Routes, including the Flamborough Power Centre, Bridlewood Estates and Chestnut Grove Estates. These are discussed and characterized in the analysis, below.

### **5.3.3 Analysis**

The potential for disruptive effects to Planned Development Areas requires an analysis of the three known Planned Development Areas, and a characterization of each in terms of their sensitivity to increased truck traffic.

The analysis presented below refers to each of the Planned Development Areas separately, identifies the location of each, and characterizes each in terms of proposed land use type and anticipated sensitivity to increased truck traffic.

#### **5.3.3.1 Flamborough Power Centre**

The Flamborough Power Centre is located on lands at the southeast corner of Highway 5 and Highway 6 in the City of Hamilton. These lands are designated “Urban Area” in the Rural Hamilton Official Plan and are designated to permit the Flamborough Power Centre, which is planned to consist of big box retail and grocery / food store development. Currently, these lands are vacant field and no development has occurred to date. This Planned Development Area is located on lands potentially impacted by all five Alternative Haul Routes, since each Haul Route will ultimately utilize Highway 6, albeit at different anticipated volumes.

Highway 6 is a Provincial Highway, and is identified as designated truck route. Accordingly, this Planned Development Area was planned in anticipation of continued active truck traffic along Highway 6.

This Planned Development Area is characterized as an Urban Area and given its location adjacent to Highway 6 which is a heavily-travelled road and a designated truck route, this Area is anticipated to be very compatible to potential increased truck traffic associated with the applicable Alternative Haul Routes. Accordingly, it is anticipated that this Planned Development Area will have low sensitivity to potential increased truck traffic along Highway 6.

#### **5.3.3.2 Bridlewood Estates**

**Bridlewood Estates** is located in the Hamlet of Campbellville in the Town of Milton. The Planned Development Area is on lands located on the south side of Reid Side Road, just west of Guelph Line in Campbellville. The lands for Bridlewood Estates are designated “Hamlet Residential” in the Town of Milton Official Plan. Bridlewood Estates is an estate residential development to include 29 single detached estate homes. Currently, Stokes Trail and Kingsbury Circle have been constructed; however none of the proposed 29 units have begun construction.

This Planned Development Area is located on lands potentially impacted by Alternative Haul Route 3, Alternative Haul Route 4, and Alternative Haul Route 5.

Reid Side Road was built as a haul route, in accordance with an agreement dated December 12, 1977 between Springbank Sand and Gravel Company, the Town of Milton and the Region of Halton. Specifically, the road was constructed as a haul route in order to significantly reduce the volume of truck traffic travelling through the Hamlet of Campbellville. Accordingly, this Planned Development Area was planned on a road that anticipates continued active truck traffic.

This Planned Development Area is an Estate Residential development within the limits of the Hamlet of Campbellville. These Estate Residences will be built as luxury custom homes on large estate lots. The development is advertised as follows: *“Situated on striking oversized homesites overlooking wooded areas, pasture and scenic views, your lifestyle is secure in this Carson Reid Community that implores pride and stature. Bridelwood Estates in Campbellville exemplifies stately living in one of Ontario’s finest preserved treasures”*. **Figure 31** illustrates a sample dwelling elevation for the estate development.

Review of the Site Plan (**Figure 32**) indicates that Unit 1 and Unit 29 are the two units located closest to Reid Side Road. Specifically, Unit 29 is located adjacent to Reid Side Road, separated by a generous side yard, and Unit 1 is separated from Reid Side Road by a pond and wooded area. It is apparent that this Planned Development Area anticipated continued truck traffic along Reid Side Road and has incorporated these natural buffers along the road frontage, as a result. Given the seclusion and wooded areas within and adjacent to this Estate Residential development, as well as the planned buffers along Reid Side Road, the anticipated sensitivity and impacts associated with increased truck traffic along Reid Side Road is low.

Accordingly, given the nature of this development, and the fact that this development is located directly adjacent to Reid Side Road which currently experiences truck traffic, it is anticipated that this Planned Development will have **medium-low sensitivity** to increased truck traffic along Reid Side Road.

### **5.3.3.3 Chestnut Grove Estates**

**Chestnut Grove Estates** is located on the north side of Campbellville Road, in between Centre Road and Highway 6. These lands are designated “Rural Area” in the Rural Hamilton Official Plan, and are identified as Site Specific Area No. R-6(a) in the new Rural Hamilton Official Plan. Chestnut Grove Estates has special policy permission for an estate residential development to consist of 13 single detached estate homes. Currently, Chesswood Trail has been constructed and of the 13 proposed homes, two are currently under construction. This Planned Development Area is located on lands potentially impacted by Alternative Haul Route 2 and Alternative Haul Route 5.

Campbellville Road is a designated truck route with seasonal load restrictions. While it is anticipated that an increase in truck traffic along Campbellville Road would contribute to a potential increase in noise, dust, and air quality, these impacts are discussed and documented in technical analysis prepared by other Team Specialists. This Planned Development Area has been planned on a seasonal truck route, in anticipation of continued active truck traffic.

This Planned Development Area is an Estate Residential development within the Rural Area. As shown on the Site Plan (**Figure 33**), lots are generously sized, with a minimum lot area of 2.92 acres and a maximum lot area of 10.2 acres. Furthermore, there are no driveways planned to access Campbellville Road directly. **Figure 34** is a photo of one of the dwellings under construction, and it is apparent that these Estate Residences will be built as luxury custom homes on large estate lots.

This Planned Development Area was apparently planned to recognize there will be continued seasonal truck traffic along Campbellville Road, because there are large lots proposed and none of the lots provide direct access onto Campbellville Road. Accordingly, it is anticipated that this Planned Development Area will have medium-low sensitivity to increased truck traffic along Campbellville Road.

#### **5.3.4 Results of Analysis of Criteria # 2**

The analysis presented above characterizes each of the three Planned Development Areas.

The Flamborough Power Centre has anticipated low sensitivity to potential increased truck traffic, because this Planned Development Area is located along a road that currently contains high volume truck traffic. Further, it is apparent that this Planned Development Area was planned to recognize and anticipate continued truck traffic along this road.

The Chestnut Grove Estates Planned Development Area and the Bridlewood Estates Planned Development Area both have anticipated medium-low sensitivity to potential increased truck traffic along Campbellville Road. Campbellville Road is a designated (seasonal) truck route, and Reid Side Road was built to accommodate truck traffic, and this has apparently been recognized through the planning and design of Chestnut Grove Estates and Bridlewood Estates.

### **5.4 Analysis of Criteria #3: Conformity with Applicable Plans and Policies**

#### **5.4.1 Assumptions**

Traditional tools for land use planning and regulation include a combination of provincial, regional and local policy directives, legal instruments, administrative practices and means of promoting community participation in planning.

The applicable Official Plans contain information related to functional classifications and right-of-way widths of major highways and roads. In some instances (i.e. Region of Halton Official Plan), this information is contained within the Appendix and therefore is not technically or legally part of the Official Plan. Notwithstanding whether this information is a technical part of the Official Plan, this information has been included in the analysis of this criteria.

The Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development. The Greenbelt Plan builds upon the existing policy framework established in the Provincial Policy Statement (PPS), and provides permanent protection to the agricultural land base and the ecological features and functions occurring on the landscape. The Niagara Escarpment Plan is a senior planning policy document in the Province. While these Plans alone do not provide a level of precision that is required in the evaluation of the five Alternative Haul Routes, policies contained within these Plans contribute to the evaluation on a general basis.

It is noted that in addition to municipal Official Plan road classifications and policies, municipal by-laws are in place that implement heavy traffic permission / prohibitions in municipalities. These by-laws enable municipalities to enforce policies related to preferred truck routes, heavy traffic regulations, and seasonal restrictions. In fact, it is acknowledged that following the commencement of this Haul Route Analysis, the Town of Milton enacted By-Law No. 075-2008 (Heavy Traffic Prohibitions) which has the effect of prohibiting heavy traffic along the LINKS contained in Alternative Haul Route 3 in Milton (Reid Side Road, Twiss Road, and Campbellville Road). Evaluation of the Alternative Haul Routes requires an analysis of conformity to the Official Plans, which is provided below. If a preferred haul route is identified which requires amendments to municipal by-laws to permit heavy traffic, it is expected that the necessary amendment(s) will be applied for and processed accordingly, by the affected municipality.

#### **5.4.2 Methodology**

The following analysis examines the criterion “**Conformity with applicable plans and policies**” using the following indicators:

- Degree of conformity with Official Plans
- Degree of conformity with the Greenbelt Plan
- Degree of conformity with the Niagara Escarpment Plan

The analysis presented below is divided into three sections. First is an examination of municipal jurisdiction and related Official Plans and policies. The applicable Official Plan road functional classifications and right-of-way widths for each of the LINKS in the five Alternative Haul Routes are examined for the indicator “degree of conformity with Official Plans”.

Second, a review of the Provincial Policy Statement and Greenbelt Plan are provided, and third, a review of the Niagara Escarpment Plan is provided for those sections of the Alternative Haul Routes traversing lands within the Niagara Escarpment. In these documents, policies related to roads, infrastructure and mineral aggregate resources were assessed in the evaluation of the last two indicators: “degree of conformity with Greenbelt Plan” and “degree of conformity with Niagara Escarpment Plan”.

### **5.4.3 Analysis of Official Plan Conformity**

A summary of the degree of conformity with applicable Official Plans for each of the five Alternative Haul routes is outlined below. The analysis refers to each of the Alternative Haul Routes and identifies the applicable municipal jurisdiction(s) the road LINKS are governed by. The analysis assess the municipal road classification referred to in the applicable Official Plan, and assigns a level of municipal Official Plan conformity based on road classification and associated function.

It is important to note that the new Rural Hamilton Official Plan (adopted September 2006) does not contain policies related to the Transportation Network; rather, these policies are anticipated to be addressed through the City’s new Urban Official Plan exercise (not yet available). Accordingly, road LINKS within the City of Hamilton have been evaluated using the Region of Hamilton-Wentworth Official Plan and Town of Flamborough Official Plan, which are in effect.

#### **5.4.3.1 HAUL ROUTE No. 1**

Haul Route No. 1 contains lands within the municipal jurisdictions of County of Wellington, City of Hamilton, and City of Burlington (Region of Halton).

Highway 6 is identified as a Provincial Highway in the County of Wellington Official Plan, the Region of Hamilton-Wentworth Official Plan, Town of Flamborough Official Plan, and the City of Burlington Official Plan. This road classification applies to roadways under the jurisdiction of the Ontario Ministry of Transportation. Provincial Highways function as major roadways which carry large volumes of traffic at relatively high speeds. This high speed, high functioning road provides for high volumes of truck traffic, and utilizing this Highway in Alternative Haul Route 1 conforms to the applicable municipal Official Plans.

Concession Road 11 is identified as a Local Road in the Town of Flamborough Official Plan. Local roads function to provide direct access to abutting properties and have maximum right-of-way widths of up to 20.0 m. As noted in **Figure 27** (Three Representative Rural Cross Sections) and **Figure 28** (Alternative Haul Routes 1, 2 and 3 Showing Preferred Rural Cross-Section Type), it is anticipated that Concession Road 11 may require road allowance widening to accommodate the preferred Rural Cross-Section. In that regard, amendment to the classification of road type in the Town of Flamborough Official Plan may be required.

Furthermore, Policy D.5.6 in the Flamborough Official Plan notes the following with regard to Local Roads:

*“Where alternative routes can be found and where the volume of truck traffic is detrimental to the amenity of abutting residential areas, the use of Local Roads in residential areas by trucks not engaged in making local deliveries to the residences shall be prohibited.”*

Recognizing that proposed road alterations to accommodate preferred Rural Cross Sections for Highway 6 would conform to municipal Official Plans, and that Concession Road 11 will require an amendment to the Town of Flamborough Official Plan to accommodate a ROW in excess of the permitted 20.0 maximum for Concession Road 11 if a Rural Cross Section is selected, this Alternative Haul Route has a **medium degree of conformity** with the municipal Official Plans.

#### **5.4.3.2 HAUL ROUTE No. 2**

Haul Route No. 2 contains lands within the municipal jurisdictions of County of Wellington, City of Hamilton, and City of Burlington (Region of Halton).

As noted above, Highway 6 is identified as a Provincial Highway in the County of Wellington Official Plan, the Region of Hamilton-Wentworth Official Plan, the Town of Flamborough Official Plan, and the City of Burlington Official Plan. This road classification applies to roadways under the jurisdiction of the Ontario Ministry of Transportation. Provincial Highways function as major roadways which carry large volumes of traffic at relatively high speeds. This high speed, high functioning road provides for high volumes of truck traffic, and utilizing this Highway in Alternative Haul Route 2 conforms to the applicable municipal Official Plans.

Centre Road is identified as an Arterial Road in the Region of Hamilton-Wentworth Official Plan, and a Regional Road in the Town of Flamborough Official Plan. Arterial Roads / Regional roads are strategic links in the road network whose primary function is to carry relatively high volume of long distance traffic within and through Flamborough and to provide access to Provincial Highways. Basic right-of-way widths are permitted to be 26 to 36 metres when there is only partial or no control of access to abutting land uses, and up to 60 m when there is full control over access to abutting land uses. As noted on **Figure 28**, (Alternative Haul Routes 1, 2 and 3 Showing Preferred Rural Cross Section Type), Centre Road is anticipated to require a ROW of 26.0 m to accommodate grading and road alterations associated with preferred Rural Cross Section Type No. 3. This is ultimately in accordance with the Region of Hamilton-Wentworth Official Plan and the Flamborough Official Plan Road Network.

Campbellville Road (east of Highway 6) is identified as an Arterial Road in the Regional Official Plan, and a Regional Road in the Town of Flamborough Official Plan. As noted above, Arterial Roads / Regional roads are strategic links in the road network whose primary function is to carry relatively high volume of long distance traffic within and through Flamborough and to provide

access to Provincial Highways. Basic right-of-way widths are permitted to be 26 to 36 metres when there is only partial or no control of access to abutting land uses, and up to 60 m when there is full control over access to abutting land uses. As noted on **Figure 28**, (Alternative Haul Routes 1, 2 and 3 Showing Preferred Rural Cross Section Type), Campbellville Road is anticipated to require a ROW of 22.0 m to accommodate grading and road alterations associated with preferred Rural Cross Section Type No. 1. This is ultimately in accordance with the Region of Hamilton-Wentworth Official Plan and the Flamborough Official Plan Road Network.

As noted above, Concession Road 11 is identified as a Local Road in the Town of Flamborough Official Plan. Local roads function to provide direct access to abutting properties and have maximum right-of-way widths of up to 20.0 m. As noted in **Figure 28** (Alternative Haul Routes 1, 2 and 3 Showing Preferred Rural Cross-Section Type), it is anticipated that Concession Road 11 may require road allowance widening to accommodate the preferred Rural Cross-Section. In that regard, amendment to the classification of road type in the Town of Flamborough Official Plan may be required.

Recognizing that proposed road alterations to accommodate preferred Rural Cross Sections for Centre Road, Campbellville Road and Highway 6 would conform with the municipal Official Plans, and that Concession Road 11 may require an amendment to the Town of Flamborough Official Plan to accommodate a ROW in excess of the permitted 20.0 maximum for Concession Road 11 if a Rural Cross Section is selected, this Alternative Haul Route has a **medium-high degree of conformity** with the municipal Official Plans.

### **5.4.3.3 HAUL ROUTE No. 3**

Haul Route No. 3 contains lands within the municipal jurisdictions of City of Hamilton and Town of Milton (Region of Halton).

Reid Side Road is not identified in the Region of Halton Official Plan or the Town of Milton Official Plan as a Major Transportation Facility (i.e. Highway, Arterial, or Collector). Accordingly, it is assumed Reid Side Road is classified as a Local Road. Local Roads are intended to service residential neighbourhoods or employment area travel demands. Local Roads connect individual properties to Collectors and Arterials. ROW requirements for a Local Road are maximum 20.0 m ROW. However, Reid Side Road currently exceeds this ROW, and has existing 25.0 ROW. Since road alterations are not required for Reid Side Road to accommodate a possible Rural Cross Section, it is concluded that Reid Side Road conforms to the Official Plan.

Twiss Road is not identified in the Region of Halton Official Plan or the Town of Milton Official Plan as a Major Transportation Facility (i.e. Highway, Arterial, or Collector). Accordingly, it is assumed Twiss Road is classified as a Local Road. Local Roads are intended to service residential neighbourhoods or employment area travel demands. Local Roads connect individual properties to Collectors and Arterials. ROW requirements for a Local Road are maximum 20.0

m ROW. It is anticipated that if Twiss Road were to accommodate a preferred Rural Cross Section, it would require approximately 22.0 m ROW. Since this ROW is in excess of the maximum 20.0 allowable for a Local Road, it is anticipated that an amendment to the classification of road type and/or maximum ROW in the Town of Milton Official Plan may be required.

Campbellville Road (between Milborough Line and Twiss Road) is identified as a Minor Arterial Road in the Region of Halton Official Plan, in the Official Plan's Appendix VII. While this not technically a part of the Region's Official Plan, it is worthwhile to understand the Region's intent for this road. Minor Arterials are meant to serve mainly local traffic demands, accommodate local truck traffic, connect urban nodes within the same municipalities, and carry moderate to high volumes of traffic, and distribute traffic to and from Major and Multi-Purpose Arterials. The Region's Official Plan specifies that ROW requirements are up to 35 m for Minor Arterials. Campbellville Road is identified as an Arterial Road in the Town of Milton Official Plan. Similarly, ROW requirements allow for up to 35 m ROW, and Arterial Roads are intended to serve mainly regional and local traffic demands. **Figure 28** illustrates an anticipated ROW of 26.0 m to accommodate the preferred Rural Cross Section Type No. 3 for Campbellville Road. This proposal would be in accordance with the Region of Halton Official Plan and Town of Milton Official Plan.

Milborough Line represents the municipal boundary between the Region of Halton and the City of Hamilton. Milborough Line is not identified as a Major Transportation Facility in the Region of Halton Official Plan or the Region of Hamilton-Wentworth Official Plan, or as an Arterial or Regional Road in the Town of Flamborough Official Plan. It is identified as a Collector Road in the Town of Milton Official Plan. Collector Roads serve local traffic demands and connect Collector and Local Roads to Arterials, and Collector Roads may have ROW of up to 26.0 m. As noted on **Figure 28**, Milborough Line is proposed to accommodate the Type 3 Preferred Rural Cross Section with 26.0 m ROW, which would be in accordance with the ROW provisions for Collector Roads in Milton.

Recognizing that proposed road alterations to accommodate preferred Rural Cross Sections for Reid Side Road, Milborough Line, and Campbellville Road would not require amendments to the applicable Official Plans, and that Twiss Road may require an amendment to the Town of Milton Official Plan to accommodate a ROW in excess of the permitted 20.0 maximum if a Rural Cross Section is selected, this Alternative Haul Route has a **medium-high degree of conformity** with the municipal Official Plans.

#### **5.4.3.4 HAUL ROUTE No. 4**

Haul Route No. 4 (a combination of Routes 1 and 3) contains lands within the municipal jurisdictions of County of Wellington, City of Hamilton, City of Burlington (Region of Halton) and Town of Milton (Region of Halton).

Highway 6 is identified as a Provincial Highway in the County of Wellington Official Plan, the Region of Hamilton-Wentworth Official Plan, Town of Flamborough Official Plan, and the City of Burlington Official Plan. Provincial Highways function as major roadways which carry large volumes of traffic at relatively high speeds. This component of the Haul Route conforms to the applicable municipal Official Plans.

Concession Road 11 is identified as a Local Road in the Town of Flamborough Official Plan. Local roads function to provide direct access to abutting properties and have maximum right-of-way widths of up to 20.0 m. If a Rural Cross Section is preferred for this road, it is anticipated road allowance widening may be required to accommodate the preferred Rural Cross-Section. In that regard, amendment to the classification of road type in the Town of Flamborough Official Plan may be required.

Reid Side Road is not identified in the Region of Halton Official Plan or the Town of Milton Official Plan as a Major Transportation Facility (i.e. Highway, Arterial, or Collector). Accordingly, it is assumed Reid Side Road is classified as a Local Road. Local Roads are intended to service residential neighbourhoods or employment area travel demands. ROW requirements for a Local Road are maximum 20.0 m ROW; however, Reid Side Road currently exceeds this ROW, and has existing 25.0 m ROW. Since road alterations are not required for Reid Side Road to accommodate a possible Rural Cross Section, it is concluded that Reid Side Road conforms to the Official Plan.

Twiss Road is not identified in the Region of Halton Official Plan or the Town of Milton Official Plan as a Major Transportation Facility (i.e. Highway, Arterial, or Collector). Accordingly, it is assumed Twiss Road is classified as a Local Road. ROW requirements for a Local Road are maximum 20.0 m ROW. As shown on **Figure 29** (Alternative Haul Route 4 Showing Preferred Rural Cross Section), it is anticipated that if Twiss Road were to accommodate a preferred Rural Cross Section, it would require approximately 22.0 m ROW. Since this ROW is in excess of the maximum 20.0 m allowable for a Local Road, it is anticipated that an amendment to the classification of road type and/or maximum ROW in the Town of Milton Official Plan may be required.

Campbellville Road (between Milborough Line and Twiss Road) is identified as a Minor Arterial Road in the Region of Halton Official Plan and as an Arterial Road in the Town of Milton Official Plan. Minor Arterials in the Regional Official Plan and Arterials in the Town's Official Plan can have up to 35.0 m ROW and are meant to serve mainly local traffic demands, accommodate local truck traffic, connect urban nodes within the same municipalities, carry

moderate to high volumes of traffic, and distribute traffic to and from Major and Multi-Purpose Arterials. **Figure 29** illustrates an anticipated ROW of 26.0 m to accommodate the preferred Rural Cross Section Type No. 3 for Campbellville Road. This proposal would be in accordance with the Region of Halton Official Plan and Town of Milton Official Plan.

Milborough Line represents the municipal boundary between the Region of Halton and the City of Hamilton. Milborough Line is not identified as a Major Transportation Facility in the Region of Halton Official Plan or the Region of Hamilton-Wentworth Official Plan, or as an Arterial or Regional Road in the Town of Flamborough Official Plan. It is identified as a Collector Road in the Town of Milton Official Plan. Collector Roads serve local traffic demands and connect Collector and Local Roads to Arterials, and Collector Roads may have ROW of up to 26.0 m. As noted on **Figure 29**, Milborough Line is proposed to accommodate the Type 3 Preferred Rural Cross Section with 26.0 m ROW, which would be in accordance with the ROW provisions for Collector Roads in Milton.

Recognizing that proposed road alterations to accommodate preferred Rural Cross Sections for Highway 6, Reid Side Road, Campbellville Road and Milborough Line would conform to municipal Official Plans, and that Concession Road 11 and Twiss Road will probably require amendments to the Official Plans to accommodate the increased ROW for the preferred Rural Cross Sections, this Alternative Haul Route has a **medium degree of conformity** with the municipal Official Plans.

#### **5.4.3.5 HAUL ROUTE No. 5**

Haul Route No. 5 (a combination of Routes 2 and 3) contains lands within the municipal jurisdictions of County of Wellington, City of Hamilton, City of Burlington (Region of Halton) and Town of Milton (Region of Halton).

Highway 6 is identified as a Provincial Highway in the County of Wellington Official Plan, the Region of Hamilton-Wentworth Official Plan, Town of Flamborough Official Plan, and the City of Burlington Official Plan. Provincial Highways function as major roadways which carry large volumes of traffic at relatively high speeds. This component of the Haul Route conforms to the applicable municipal Official Plans.

Concession Road 11 is identified as a Local Road in the Town of Flamborough Official Plan. Local roads function to provide direct access to abutting properties and have maximum right-of-way widths of up to 20.0 m. If a Rural Cross Section is preferred for this road, it is anticipated road allowance widening may be required to accommodate the preferred Rural Cross-Section. In that regard, amendment to the classification of road type in the Town of Flamborough Official Plan may be required.

Centre Road is identified as an Arterial Road in the Region of Hamilton-Wentworth Official Plan, and a Regional Road in the Town of Flamborough Official Plan. Arterial Roads / Regional roads are strategic links in the road network whose primary function is to carry relatively high volume of long distance traffic within and through Flamborough and to provide access to Provincial Highways. Basic right-of-way widths are permitted to be 26 to 36 metres. As noted on **Figure 30**, (Alternative Haul Route 5 Showing Preferred Rural Cross Section Type), Centre Road is anticipated to require a ROW of 22.5 m to accommodate grading and road alterations associated with preferred Rural Cross Section Type No. 2. This is ultimately in accordance with the Region of Hamilton-Wentworth Official Plan and the Flamborough Official Plan Road Network.

Campbellville Road (east of Highway 6) is identified as an Arterial Road in the Regional Official Plan, and a Regional Road in the Town of Flamborough Official Plan. As noted above, Arterial Roads / Regional roads are strategic links in the road network whose primary function is to carry relatively high volume of long distance traffic within and through Flamborough and to provide access to Provincial Highways. Basic right-of-way widths are permitted to be 26 to 36 metres and, as noted on **Figure 30**, (Alternative Haul Route 5 Showing Preferred Rural Cross Section Type), Campbellville Road is anticipated to require a ROW of 22.0 m to accommodate grading and road alterations associated with preferred Rural Cross Section Type No. 1. This is ultimately in accordance with the Region of Hamilton-Wentworth Official Plan and the Flamborough Official Plan Road Network.

Reid Side Road is not identified in the Region of Halton Official Plan or the Town of Milton Official Plan as a Major Transportation Facility (i.e. Highway, Arterial, or Collector). Accordingly, it is assumed Reid Side Road is classified as a Local Road. Local Roads are intended to service residential neighbourhoods or employment area travel demands. ROW requirements for a Local Road are maximum 20.0 m ROW; however, Reid Side Road currently exceeds this ROW, and has existing 25.0 m ROW. Since road alterations are not required for Reid Side Road to accommodate a possible Rural Cross Section, it is concluded that Reid Side Road conforms to the Official Plan.

Twiss Road is not identified in the Region of Halton Official Plan or the Town of Milton Official Plan as a Major Transportation Facility (i.e. Highway, Arterial, or Collector). Accordingly, it is assumed Twiss Road is classified as a Local Road. ROW requirements for a Local Road are maximum 20.0 m ROW. As shown on **Figure 30** (Alternative Haul Route 5 Showing Preferred Rural Cross Section), it is anticipated that if Twiss Road were to accommodate a preferred Rural Cross Section, it would require approximately 22.0 m ROW. Since this ROW is in excess of the maximum 20.0 m allowable for a Local Road, it is anticipated that an amendment to the classification of road type and/or maximum ROW in the Town of Milton Official Plan may be required.

Campbellville Road (between Milborough Line and Twiss Road) is identified as a Minor Arterial Road in the Region of Halton Official Plan and as an Arterial Road in the Town of Milton Official Plan. Minor Arterials in the Regional Official Plan and Arterials in the Town's Official

Plan can have up to 35.0 m ROW and are meant to serve mainly local traffic demands, accommodate local truck traffic, connect urban nodes within the same municipalities, carry moderate to high volumes of traffic, and distribute traffic to and from Major and Multi-Purpose Arterials. **Figure 30** illustrates an anticipated ROW of 26.0 m to accommodate the preferred Rural Cross Section Type No. 3 for Campbellville Road. This proposal would be in accordance with the Region of Halton Official Plan and Town of Milton Official Plan.

Milborough Line represents the municipal boundary between the Region of Halton and the City of Hamilton. Milborough Line is not identified as a Major Transportation Facility in the Region of Halton Official Plan or the Region of Hamilton-Wentworth Official Plan, or as an Arterial or Regional Road in the Town of Flamborough Official Plan. It is identified as a Collector Road in the Town of Milton Official Plan. Collector Roads serve local traffic demands and connect Collector and Local Roads to Arterials, and Collector Roads may have ROW of up to 26.0 m. As noted on **Figure 30**, Milborough Line is proposed to accommodate the Type 3 Preferred Rural Cross Section with 26.0 m ROW, which would be in accordance with the ROW provisions for Collector Roads in Milton.

Recognizing that proposed road alterations to accommodate preferred Rural Cross Sections for Highway 6, Reid Side Road, Centre Road, Campbellville Road (between Milborough and Twiss, and between Highway 6 and Centre) and Milborough Line would conform to municipal Official Plans, and that Concession Road 11 and Twiss Road will probably require amendments to the Official Plans to accommodate the increased ROW for the preferred Rural Cross Sections, this Alternative Haul Route has a **medium degree of conformity** with the municipal Official Plans.

#### **5.4.4 Degree of Conformity with the Provincial Policy Statement and Greenbelt Plan**

The municipal planning applications submitted in connection with the proposed St. Marys Flamborough Quarry were submitted and deemed to be complete by the municipality in Fall 2004. Accordingly, the applicable policies are those that were in effect in 2004, including the 1997 Provincial Policy Statement. However, in addition to reviewing the applicable 1997 Provincial Policy Statement, this report examines the possible implications of the new policies, including the 2005 Provincial Policy Statement and the 2005 Greenbelt Plan.

The 1997 Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development, and recognizes that there are complex inter-relationships among environmental, economic and social factors in land use planning. These policies protect mineral aggregate resources, while maintaining important agricultural areas and conserving archaeological, cultural and natural heritage resources.

*“1.1.1 (b) Rural areas will generally be the focus of resource activity, resource-based recreational activity and other rural land uses;*

- (e) *A coordinated approach should be achieved when dealing with issues which cross municipal boundaries, including:*
  - a. *infrastructure and public service facilities;*

The Combined Aggregate Resource Team (CART) provides a coordinated approach for this study. CART is actively involved in the review and comment of the Haul Route Study, and includes members from the Region of Halton, Town of Milton, City of Hamilton, Niagara Escarpment Commission and Conservation Halton.,

*“1.1.3 Long term economic prosperity will be supported by:*

- a) *making provisions such that infrastructure and public service facilities will be available to accommodate projected growth;*
- f) *optimizing the long-term availability and the use of agricultural and other resources; and*
- g) *planning so that major facilities (such as airports, transportation corridors, sewage treatment facilities, waste management systems, industries and aggregate activities) and sensitive land uses are appropriately designed, buffered and/or separated.*

*2.1.1 Prime agricultural areas will be protected for agriculture. Permitted uses and activities in these areas are: agricultural uses; secondary uses; and agriculture-related uses. Proposed new secondary uses and agriculture-related uses will be compatible with, and will not hinder, surrounding agricultural operations.*

An examination of agricultural areas and potential impacts along the Alternative Haul Routes is contained within the Flamborough Quarry Haul Route Study: Agricultural Report prepared by Conna Consulting Inc. The conclusions of that study note that while there is a significant level of agricultural activity along the proposed haul route alternatives, there is generally relatively lower level of agricultural productivity within the large portions of the Study Area. Recommendations are presented in the report related to the design and operation of the haul route, to minimize impacts on agriculture

*2.2.1 Mineral resources (mineral aggregates, minerals and petroleum resources) will be protected for long term use.*

*2.2.3.1 As much of the mineral aggregate resources as is realistically possible will be made available to supply mineral resource needs, as close to markets as possible.*

The St. Marys Flamborough Quarry is ideally located to serve market demands in the GTA. The more circuitous the Haul Route, the less compliant it is with the Provincial Policy Statement. Of the five alternative Haul Routes, Route 3 appears to be the shortest and most direct route to Provincial Highway 401.

- 2.3.1 *Natural heritage features and areas will be protected from incompatible development.*
- a) *Development and site alteration will not be permitted in:*
    - a. *significant wetlands south and east of the Canadian Shield; and*
    - b. *significant portions of the habitat of endangered and threatened species.*
  - b) *Development and site alteration may be permitted in:*
    - a. *fish habitat;*
    - b. *significant wetlands in the Canadian Shield<sup>2</sup>;*
    - c. *significant woodlands south and east of the Canadian Shield<sup>2</sup>;*
    - d. *significant valleylands south and east of the Canadian Shield<sup>2</sup>;*
    - e. *significant wildlife habitat; and*
    - f. *significant areas of natural and scientific interest if it has been demonstrated that there will be no negative impacts on the natural features or the ecological functions for which the area is identified.*
- 2.3.2 *Development and site alteration may be permitted on adjacent lands to a) and b) if it has been demonstrated that there will be no negative impacts on the natural features or on the ecological functions for which the area is identified.*
- 2.3.3 *The diversity of natural features in an area, and the natural connections between them should be maintained, and improved where possible.*

An examination of natural heritage features and environmental features and functions along the Alternative Haul Routes is contained within the Flamborough Quarry Haul Route Study: Natural Environment Report prepared by Savanta Inc. The study provides an overview of aquatic and terrestrial natural heritage features along the Alternative Haul Routes, and the study recommends mitigation measures including wedge restoration planting, minimizing the number of watercourse crossings (through selection of the preferred route), culvert replacement / extension for watercourse crossing(s), wildlife crossing planning, and traffic adjustments to accommodate key wildlife movement periods.

- 2.5.1 *Significant built heritage resources and cultural heritage landscapes will be conserved.*

An examination of built heritage resources and cultural heritage landscapes along the Alternative Haul Routes is contained within the St. Marys Flamborough Quarry Haul Route Study: Cultural Heritage and Archaeology Report prepared by Archaeologix Inc. The conclusions of that study note that the archaeological potential for historic sites and pre-contact Aboriginal sites were deemed to be moderate to high along stretches of road that have not been impacted by prior construction, sloping of the land or poor drainage. The areas of moderate to high archaeological

potential will be assessed by the standard shovel test pit method at an interval of five metres. As well, the report examines seventeen built heritage sites, including houses and barns, and seven cultural landscape units comprised of farmsteads, homesteads, two village complexes, one church complex, and one waterscape. When the final haul route has been determined, a more detailed architectural and historical study of relevant sites should be undertaken.

As noted above, while the applicable policies include the 1997 PPS, which were in effect at the time of the municipal application submission in 2004, it is helpful to examine the possible implications of new policies contained in the 2005 PPS and Greenbelt Plan. The 2005 Provincial Policy Statement (PPS) provide policy direction on matters of provincial interest related to land use planning and development. The Greenbelt Plan builds upon the existing policy framework established in the 2005 Provincial Policy Statement (PPS), and provides permanent protection to the agricultural land base and the ecological features and functions occurring on the landscape. While these Plans alone do not provide a level of precision that is required in the evaluation of the five Alternative Haul Routes, policies contained within these Plans contribute to the evaluation on a general basis.

The PPS and Greenbelt Plan provide for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural environment. These Plans contain policies that support improved land use planning and management, thereby contributing to a more effective and efficient land use planning system.

Section 2.5.2.1 of the PPS requires that *“as much of the mineral aggregate resources as is realistically possible shall be made available as close to markets as possible”*. Accordingly, the more circuitous the Haul Route, the less compliant it is with the Provincial Policy Statement.

Similarly, the Greenbelt Plan recognizes that infrastructure is important to economic well-being and quality of life in southern Ontario, and that new and/or expanding facilities will be required in the future to serve the substantial growth projected for southern Ontario.

The lands subject to the Alternative Haul Routes for the Flamborough Quarry are located within the “Protected Countryside” designation in the Greenbelt Plan, and portions of the study area are subject to policies for Natural Heritage System, as well. Policies in the Greenbelt Plan for lands designated “Protected Countryside” include the following:

- “3.1.4.1. Rural areas support, and provide the primary locations for a range of recreational, tourism, institutional and resource-based commercial / industrial uses. They also contain many historic highway commercial, non-farm residential and other uses which, in more recent times, would be generally directed to settlement areas but which are recognized as existing uses by this Plan and allowed to continue and expand subject to the existing use policies of section 4.5. Notwithstanding this policy or the policies of Section 5.3, municipal official plans may be more restrictive*

*than this Plan with respect to the types of uses permitted within rural area.”*

It is important to note that the Protected Countryside contains a Natural Heritage System that provides a continuous and permanent land base necessary to support human and ecological health in the Greenbelt and beyond. The Natural Heritage System includes areas of the Protected Countryside with the highest concentration of the most sensitive and/or significant natural features and functions. The Greenbelt Plan has policies to protect areas of natural heritage which indicate that any new development or site alteration on the portion of the subject lands identified as Natural Heritage System must maintain any connectivity between natural features, and cannot have negative effects on key natural heritage features or key hydrologic features or their functions. An examination of natural heritage features and environmental features and functions along the Alternative Haul Routes is contained within the Flamborough Quarry Haul Route Study: Natural Environment Report prepared by Savanta Inc.

In the Greenbelt Plan, it is noted that infrastructure is important to economic well-being, human health and quality of life in southern Ontario and the Greenbelt. It is acknowledged that “*existing infrastructure must be maintained and new infrastructure will be needed to continue serving existing and permitted land uses within the Greenbelt*”. Policies in the Greenbelt Plan related to General Infrastructure include the following:

- “4.2.1.1 All existing, expanded or new infrastructure subject to and approved under the Canadian Environmental Assessment Act, the Environmental Assessment Act, the Planning Act, the Aggregate Resources Act, the Telecommunications Act or by the National or Ontario Energy Boards, or which receives a similar environmental approval, is permitted within the Protected Countryside, subject to the policies of this section and provided it meets one of the following two objectives:*
- a. It supports agriculture, recreation and tourism, rural settlement areas, **resource use** or the rural economic activity that exists and is permitted within the Greenbelt; or*
  - b. It serves the significant growth and economic development expected in southern Ontario beyond the Greenbelt by providing for the appropriate infrastructure connections among urban growth centres and between these centres and Ontario’s borders.”*

The Greenbelt Plan provides permission for necessary infrastructure associated with meeting the needs of the Province, provided all planning, design and construction practices minimize the amount of the Greenbelt, and particularly the Natural Heritage System, traversed, disturbed, and/or occupied by such infrastructure. Further, the Greenbelt Plan notes the importance of optimizing capacity and coordination with different infrastructure services so that the existing rural landscape character of the Greenbelt Area is supported and reinforced.

The detailed road alteration design on the Alternative Haul Routes will ensure minimal negative impacts to the Protected Countryside and the Natural Heritage System. Further, mitigation measures are outlined in the Flamborough Quarry Haul Route Study: Natural Environment Report prepared by Savanta Inc. to ensure minimal impacts to the natural environment resulting from the haul route.

New and expanding infrastructure is permitted in the Greenbelt Plan, and policies in the Plan require that the location and construction of infrastructure and expansions in the Protected Countryside should be minimized, where possible, to minimize any disturbance of the existing landscape.

Alternative Haul Route No 1 and Alternative Haul Route No. 2 provide for moderately direct routes to the market. Accordingly, these routes have a **medium degree of conformity** with the PPS and Greenbelt Plan.

It is concluded that Haul Route No. 3 is the most direct Alternative Haul Route to the market, and accordingly, Alternative Haul Route No. 3 has **medium-high degree of conformity** with the PPS and Greenbelt Plan.

Alternative Haul Route No. 4 and Alternative Haul 5 are lengthier and occupy more lands within the Greenbelt Plan. In fact, these routes require the largest amount of land for road alterations, when compared to Alternative Haul Route 1, 2 and 3. Accordingly, Alternative Haul Route 4 and Alternative Haul Route 5 have **medium-low degree of conformity** with the PPS and Greenbelt Plan.

#### **5.4.5 Degree of Conformity with the Niagara Escarpment Plan**

The Niagara Escarpment Plan is a senior planning policy document in the Province. Similar to the Greenbelt Plan, the Niagara Escarpment Plan builds upon the existing policy framework established in the Provincial Policy Statement (PPS). While this Plan alone does not provide a level of precision that is required in the evaluation of the five Alternative Haul Routes, policies contained within this Plan contribute to the evaluation on a general basis.

Portions of Alternative Haul Routes 1, 2, 4 and 5 are located on lands within the Niagara Escarpment Plan, along Highway 6. Further, Alternative Haul Route No. 3 includes lands that are adjacent to (not within) the Niagara Escarpment Plan Area in Campbellville. Accordingly, it is worthwhile to review applicable Niagara Escarpment Plan land use designations for lands adjacent to each Alternative Haul Route.

Section 2.15 in the Niagara Escarpment Plan has the following policies related to transportation and utilities:

“2.15 The objective is to design and locate new and expanded transportation and utility facilities so the least possible change occurs in the environment and the natural and cultural landscape.

1. All new and reconstructed transportation and utility facilities shall be designed and located to minimize impact on the escarpment environment and be consistent with the objectives of this Plan.”

As noted earlier in this report, Highway 6 is currently a viable transportation corridor which has been planned to accommodate significant truck traffic in a safe, rapid and efficient manner. Accordingly, it has been determined by iTRANS Consulting Limited that no road alterations are required along Highway 6. Accordingly, it is concluded that Alternative Haul Route No. 1, 2, 4 and 5 have a **high level of conformity** with the Niagara Escarpment Plan.

Similarly, Alternative Haul Route No. 3 does not include lands within the jurisdiction of the Niagara Escarpment Plan; rather, this route includes lands adjacent to the limits of the Niagara Escarpment Plan. Accordingly, it is concluded that Alternative Haul Route No. 3 has a **high level of conformity** with the Niagara Escarpment Plan

## **6.0 Summary and Conclusions**

This analysis of potential impacts to existing and planned land uses represents a component to the study that is being undertaken to understand the impacts of road alterations and the potential increased truck traffic movement along the five Alternative Haul Routes identified by iTRANS Consulting Inc.

This analysis presents a summary of the anticipated road alterations required to accommodate the truck traffic associated with the Alternative Haul Routes, and reviews the general mix of land use types existing along the road frontages within each of the Alternative Haul Routes. The analysis presents that road allowance widening along the Alternative Haul Routes to accommodate the proposed road alterations may be necessary if a Rural Cross Section is preferred. The anticipated widening of land outside the ROW among the five Alternative Haul Routes ranges from 7.5 m (along portions of Milborough Line) to 0 m along Reid Side Road, and it is anticipated that the ROW widening will be balanced to minimize impact on land use types considered to be more sensitive to road alterations (i.e. residential and institutional land uses), where possible.

Examination of the types of land uses to be affected by widening and the approximate area of land to be widened suggests that there will generally be **medium land use impacts** along Alternative Haul Routes 1, 2 and 3, and **medium-high land use impacts** along Alternative Haul Routes 4 and 5. Further, there are no road alterations required along Highway 6, since Highway 6 is currently a viable transportation corridor which can accommodate significant truck traffic in a safe, rapid and efficient manner.

Further, the analysis concludes that because each of the three Planned Development Areas located along the Alternative Haul Routes have been planned along a designated truck route or a route that was constructed to sustain truck traffic, these Planned Development Areas have low sensitivity and moderately low sensitivity to increased truck traffic. Specifically, Alternative Haul Route No. 1 is anticipated to have low sensitivity to increased truck traffic, and Alternative Haul Route No. 2, 3, 4 and 5 are anticipated to have medium-low sensitivity to increased truck traffic.

Finally, this analysis examines each Alternative Haul Route's conformity with applicable plans and policies and concludes that each of the Alternative Haul Routes have a high degree of conformity to the Niagara Escarpment Plan.

Further, Alternative Haul Route 1 has medium degree of conformity with the PPS, Greenbelt Plan and applicable Official Plans.

Alternative Haul Route 2 has medium-high degree of conformity with Official Plans, and medium degree of conformity with Greenbelt Plan and PPS.

Alternative Haul Route 3 has medium-high degree of conformity with municipal Official Plans and PPS and Greenbelt Plan.

Finally, both Alternative Haul Route 4 and Alternative Haul Route 5 have medium degree of conformity with municipal Official Plans and medium-low degree of conformity with the PPS and Greenbelt Plan.

**Respectfully Submitted,**

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