



Muncaster  
Environmental  
Planning Inc.

August 21, 2025

Antonio Zomparelli  
Senior Project Manager,  
Real Estate Development & Construction  
Sienna Senior Living  
302 Town Centre Boulevard, Suite 300  
Markham, Ontario, L3R 0E8

Dear Mr. Zomparelli:

**RE: Retirement Residence Addition  
1541 St Joseph Boulevard, Orleans  
Environmental Impact Statement and Tree Conservation Report – Update**

I have completed an update to the Environmental Impact Statement (EIS) and Tree Conservation Report for a proposed addition to a retirement residence and associated surface parking at 1541 St Joseph Boulevard on the north side of St Joseph Boulevard in the Greenbelt portion of Orleans, City of Ottawa. The site is described as Part of Lot 10, Concession 1, former Township of Gloucester now the City of Ottawa. For the purposes of this report St Joseph Boulevard is assumed to be in an east-west orientation. This report has been updated since 2013 to include the results of a spring 2025 field review and an assessment of the new concept plan for the addition.

***Background and Project Description***

The 64-bed retirement residence addition and associated surface parking will be built in the location of a former long-term care facility that was removed in 2007 and is thus in a disturbed area. The building addition and parking is referred to in this report as the ‘proposed development area’. Since 2013, regeneration of woody vegetation has occurred and with the new concept plan some of the plantings to the east of the original work areas are now anticipated to be removed (Maps 1 and 2). An additional access off St Joseph Boulevard will be added to the west of the existing access and a driveway, the north portion already constructed, will provide access for deliveries to the northwest portion of the existing residence. Surface parking will be to the west and northwest of the retirement residence addition. Bicycle racks, plantings, and other amenities will also be provided.

Active agricultural lands are to the west of the proposed development area, with RCMP operations and a retirement residence to the south and treed lands along the slope to the north and east, with a golf course further to the north and east. The Regional Road 174 corridor is approximately 200 metres to the north of the proposed development area.

The proposed development area and adjacent lands are within the National Capital Greenbelt. There are no natural areas, as identified in the Region of Ottawa-Carleton's Natural Environment System Strategy in the vicinity of the proposed development area (Brownell and Blaney, 1997). The Greenbelt Master Plan identified the proposed development area and adjacent lands as *Rural Landscape* (NCC, 2013), while the Plan for Canada's Capital designated the area *Rural Land* (NCC, 1999) and Schedule B4 of the City of Ottawa Official Plan identifies the proposed development area and lands to the north as *Greenbelt Rural*. The closest *Core Natural Area* noted in the Greenbelt Master Plan and mapped as *Greenspace* on Schedule B4 of the Official Plan is along the Green's Creek corridor, approximately one kilometre to the west of the proposed development area. The Greenbelt Master Plan notes that the lands to the north of the proposed development area offer panoramas of the Gatineau Hills.

The forests to the north of the proposed development area are part of the Natural Heritage Features Overlay identified on Schedule C11-C of the City's Official Plan. No environmental constraints are identified for the proposed development area or adjacent lands on Schedule C15, with unstable slopes mapped to the southeast of the proposed development area, south of St Joseph Boulevard. There are no Areas of Natural and Scientific Interest or Provincially significant wetlands in proximity to the proposed development area.

### **Methodology**

This EIS and TCR update was prepared following the City's EIS and TCR Guidelines, with guidance from the Natural Heritage Reference Manual (OMNR, 2010). The field surveys and this report were completed by Bernie Muncaster, who has a Master's of Science in Biology and over thirty-six years of experience completing natural environment assessments. A main purpose of the Tree Conservation Report component is to determine any tree stands that should be retained and protected. The operator of the retirement residence addition will be Sienna Senior Living.

The major focus of the EIS component is to determine if Species at Risk utilization is occurring on or adjacent to the proposed development area. Significant woodlands and wildlife habitat will also be assessed. The EIS will provide the methodology to mitigate as required against negative impacts on significant features and functions. To attain this objective, as required mitigation measures will be developed based on field observations of the features and functions of the natural environment. Potential Species at Risk in the general area were identified from Ministry of Natural Resources databases, the Ontario Breeding Bird and Reptile and Amphibian Atlases, and Species at Risk reported for the overall City of Ottawa.

The natural environment features of the proposed development area and adjacent lands were reviewed on the afternoon of April 25<sup>th</sup>, 2012, under partly sunny conditions, with a slight breeze and an air temperature of 10° C. An updated review was completed between 12:50 and 14:10 on May 8<sup>th</sup>, 2025, under partly sunny conditions, with a light breeze and an air temperature of 12° C.

### ***Existing Conditions***

#### Proposed Retirement Residence Addition and Parking

The proposed development area is highly disturbed as it is the location of a former long-term care facility (Photo 1). Cultural meadow vegetation that has grown on the disturbed ground includes bluegrass, crabgrass, common dandelion, wild grape, horseweed, common strawberry, evening primrose, common milkweed, wild carrot, bull thistle, rough-fruited cinquefoil, common burdock, Canada goldenrod, ox-eye daisy, common mullein, Canada thistle, red clover, and white bedstraw, along with staghorn sumac, common buckthorn, red-osier dogwood, tartarian honeysuckle, red raspberry, and slender willow shrubs and regenerating trembling aspen, Manitoba maple, white elm, and white poplar stems. Where regenerating tree stems greater than 10cm diameter at breast height (dbh) are present and in a higher density, the vegetation community is identified as a cultural woodland (Tree group 'G', Photo 6) on Map 1, with a cultural thicket noted where the shrub cover is greater than 25 percent.

A 28cm dbh white cedar identified in the central portion of the proposed development area in 2013 has been removed when the north portion of the surface parking was constructed in 2018. A 60cm dbh Norway maple (Tree 'H', Photo 7) identified for retention in 2013 is in poor condition and is not recommended for retention as it will be immediately adjacent to surface parking. There was no budding in the upper portion of the Norway maple in 2025 and many branches were broken. Several maple and coniferous plantings in the east portion of the redevelopment area are proposed for removal (Photos 2 – 4).

An existing chain-link fence is along or adjacent to the south, east, and north portions of the proposed development area. A deciduous hedgerow of eleven trees is adjacent to the west property line and existing chain-link fencing (Photo 8). The tree trunks in the hedgerow are immediately adjacent to the west property line. Many of the trees are in the range of 35-45cm dbh, with the largest trees up to 65cm dbh and include basswood, red maple, trembling aspen, black cherry, white ash, and Manitoba maple. Many of the trees are in poor condition with truncated trunks, broken major limbs, and fungal growth. Except for the south tree, these trees will need to be removed due to the grading and retaining wall required along the west property line. A 72cm dbh weeping willow is in the southwest corner of the proposed development area, immediately north of the property line (Tree 'F', Photo 5). Some of the limbs on the willow appear dead and there is extensive suckering. A major lateral branch towards the south has been removed. The willow tree is proposed for removal in conjunction with construction of the new west entrance.

The trees proposed for removal are shown on Map 2, with the trees described in Table 1 below. There are no tree trunks in the St. Joseph Boulevard allowance adjacent to the proposed development and co-owned trees do not appear to be present.

Deciduous Forest to the North, including Treed Slope

The slope to the north contains an upland poplar forest. In addition to trembling aspen, bitternut hickory, white ash, white birch, white cedar, basswood, bur oak, white elm and Manitoba maple are common. The largest trees are aspen, Manitoba maple, and hickory in the range of 50cm dbh, with the larger Manitoba maple near the south edge of the forest along the top-of-slope (Photo 9). These trees have typical poor Manitoba maple structure, with nearly horizontal major stems and many broken large lower branches. Staghorn sumac, common buckthorn, prickly gooseberry, tartarian honeysuckle, and nannyberry are common in the understory. The ground flora includes species representing a disturbed condition such as common burdock, wild carrot, wild grape and common strawberry, with blue cohosh and trout-lily also present. The forest is up to 90 metres in width, and is also disturbed with large amounts of yard waste dumping at the south edge, tires and other debris, road noise from the Highway 174 corridor, and an old farm field access laneway in the middle.

The closest point of the development to the top-of-slope and forest edge to the north is the delivery access and north portion of the surface parking, a pathway extension, and associated retaining wall. This installation of the pathway extension and retaining wall will require removal of an approximately five metre width of the south forest edge, which is dominated by Manitoba maple, as shown with orange shading on Map 2.

No channels or other areas with potential aquatic habitat were observed on or adjacent to the proposed development area.

Wildlife observations included woodchuck, red fox, grey squirrel, turkey vulture, black-capped chickadee, white-breasted nuthatch, blue jay, American crow, common raven, song sparrow, chipping sparrow, mourning dove, northern cardinal, American robin, hairy woodpecker and European starling. Domestic cats were also noted along the top of the treed slope. Other than potential wildlife cavities in the white ash in the hedgerow adjacent to the west property line, no potential specialized wildlife functions such as stick nests, fissured bedrock, stone piles, seeps, or pools were observed on or adjacent to the proposed development area.

**Table 1 – Description of Trees and Tree Groups Proposed for Removal (located on Map 2)**

Tree Letter	Species	dbh (cm)	Condition and Comments	Fate
A	Red maple White cedar and pine	18 < 10	Planted trees (Photo 2). Coppice red maple with significant trunk damage but good leaf-out. Smaller planted conifers appear to be in good condition	Maple and conifers to be retained
B	White spruce	18 and 20	Plantings appear to be in good condition (Photo 3)	To be removed
C	Red maple White pine	48 up to 25	Good leaf-out and condition though lack a dominant leader and strong lateral branching (Photo 4). Three planted white pines to the east. Some yellowing on pine needles.	Maple not retained. Pines to be retained where possible

Tree Letter	Species	dbh (cm)	Condition and Comments	Fate
D	White pine	25, 26, and 28	Planted white pines are in generally good condition	To be removed
E	Trembling aspen	up to 18	Regenerating stems, most with trunk leaning	To be removed
F	Weeping willow	72	One of the main trunks historically cut. Lack strong leader, some dead limbs, and extensive suckering, but good leaf-out (Photo 5)	To be removed
G	Trembling aspen Manitoba maple White poplar	up to 32 up to 15 up to 12	Regenerating cultural woodland (Photo 6). Many of the poplars have angled stems. Tartarian honeysuckle and staghorn sumac shrubs also present. Trembling aspen up to 20cm in the northwest portion can be retained	To be removed
H	Norway maple	65	Historically pruned. Significant bark and trunk damage and many larger branches appear dead, with no budding in the upper half of the tree (Photo 7). Other branches have reduced leaf-out	Recommended for removal and replaced with new plantings



*Photo 1 – West portion of the proposed building area for retirement residence addition.  
View looking north from north of St. Joseph Boulevard*



*Photo 2- Planted red maple (Tree Group 'A') is proposed for removal in the east portion of the retirement residence addition. View looking northeast to existing building*



*Photo 3- Planted white spruce (Tree Group 'B') is proposed for removal in the central-east portion of the retirement residence addition. View looking northwest*



*Photo 4 - Planted red maple (Tree Group 'C') is proposed for removal as the central entrance off St. Joseph Boulevard is modified. The adjacent pines are anticipated to be retained. View looking southeast to St. Joseph Boulevard*



*Photo 5 – Weeping willow (Tree ‘F’) in the southwest corner of the redevelopment area, north of St. Joseph Boulevard, is proposed for removal for new west entrance off St. Joseph Boulevard*



*Photo 6 - Regenerating cultural woodland dominated by poplar (Tree Group ‘G’) mostly to be removed in the northeast portion of the redevelopment*



*Photo 7 - Norway maple (Tree 'H') in poor condition in the north portion of the redevelopment area is recommended for removal. View looking northwest*



*Photo 8 – Deciduous hedgerow to west (left) of property line will be retained. View looking northwest from north of St. Joseph Boulevard*



*Photo 9 – Woody vegetation to north of the redevelopment area to be retained within the south portion of the adjacent deciduous forest. View looking north.*

#### Significant Wildlife Habitat and Significant Woodlands

The escarpment feature to the north of the proposed development area is similar to features that have been identified as significant wildlife habitat because they may provide habitats for seasonal concentrations of animals such as snake hibernacula. In addition, the forest to the north may provide nesting habitat for species of special concern such as eastern wood-pewee and eastern whip-poor-will. As described below no impacts are anticipated on the escarpment feature to the north. Significant wildlife migration corridors are not anticipated due to the active Regional Road 174 and St Joseph Boulevard infrastructure corridors and associated developed land uses. No other examples of seasonal wildlife concentrations such as deer yards, amphibian breeding ponds, waterfowl staging and moulting areas, raptor roosts, bird nesting colonies and potential shorebird staging areas were observed on or adjacent to the proposed development area or are reported for the area. No cavity trees that could support bat hibernacula were observed along the south edge of the escarpment closest to the development area. A couple of potential wildlife cavities in a poor condition white ash in the deciduous hedgerow to the west of the proposed development area will not be impacted.

Forested areas in the non-urban area of the City of Ottawa are assessed for significance using the criteria in the Natural Heritage Reference Manual (OMNR, 2010). The contiguous forest to the north of the proposed development area is approximately 6.7 hectares. Given the percent forest cover in the closest rural planning area, a woodland would need to be 20 hectares to be considered significant for the woodland size criterion. The forest to the north of the proposed development area is approximately 90 metres in width and therefore is too narrow to provide

forest interior conditions. There are no adjacent channels or wetlands for which the water protection function would apply. No other significant woodlands criterion such as large tree structure, rare vegetation communities, unique species composition, or economic and social functions, appear to be present. Regardless, the adjacent forest will not be impacted directly and indirect impacts, as discussed below, are not anticipated due to the lack of hydrologic connection, an extended distance (approximately thirty metres) to the forest from future development as the closest parking and delivery access are already constructed, and there is permanent fencing along the south edge of the forest.

### Species at Risk

No Species at Risk, including butternut or black ash, were observed during the field surveys on or adjacent to the proposed development area. Black ash is predominantly found in wetland habitat, which is not present on or adjacent to the proposed development area. The Ontario Ministry of Natural Resources' Make A Map: Natural Heritage Areas website was reviewed again on May 6<sup>th</sup>, 2025. This website allows for a search of Threatened and Endangered species covered by the 2008 Endangered Species Act, as well as other species of interest. Searches were conducted on the 10 km square including the proposed development and the general area (18VR53). Three Species at Risk were noted from the 10 km square. In addition to butternut, which was not observed but is found in a variety of habitats in eastern Ontario, hickorynut is designated threatened and is known from the Ottawa River, including spawning areas at the base of Chaudière Falls. Red-headed woodpecker is designated endangered and prefers open deciduous woodlands. In the Ottawa area, recent observations of the woodpecker are limited to the west portion of the City in the Constance Bay area. Eastern wood pewee, a species of special concern, was also listed for the area in the Make A Map: Natural Heritage Areas database and as indicated above, this species could utilize the deciduous forest to the north of the proposed development area.

The breeding birds listed in the Ontario Breeding Bird Atlas for the 10 km square 18VR53 identified chimney swift, eastern meadowlark, and bobolink as Species at Risk in the overall 10 km square including the proposed development area, as well as barn swallow, which is now designated a species of special concern. Bobolink and eastern meadowlark utilize grass hay fields, with the cultural meadows much too small and lacking suitable grassland species for bobolink or meadowlark. Chimney swift utilizes chimneys for nesting, while barn swallow uses open structures such as barns and bridges for nesting. No suitable structures were observed on or adjacent to the proposed development area.

Northern map turtle and snapping turtle are species of special concern reported in the general area in the Reptile and Amphibian database. No potential turtle habitat is on or adjacent to the proposed development area.

The potential Species at Risk historically reported for the overall City of Ottawa and their habitat requirements were also reviewed, including butternut, black ash, American ginseng, eastern prairie fringed-orchid, butternut, wood turtle, spiny softshell, Blanding's turtle, Henslow's sparrow, loggerhead shrike, eastern meadowlark, bank swallow, bobolink, bald eagle, golden eagle, least bittern, little brown bat, eastern small-footed myotis, northern long-eared bat, eastern

red bat, hoary bat, silver-haired bat, hickorynut, eastern cougar, lake sturgeon, cerulean warbler, and American eel. The habitat requirements of these species along with those listed as special concern were reviewed. None of these Species at Risk was observed during the field surveys and given the general disturbed nature of the proposed development area, no specific habitat characteristics related to the Species at Risk are considered present in the development area other than butternut. As indicated above no wetland habitat for potential turtle utilization is on or adjacent to the proposed development area. No cavity trees or structures were observed that may be used by barn swallow, bank swallow, bats, or chimney swift. As mentioned above no butternut was observed on or within fifty metres of the proposed development area.

### *Impact Analysis and Recommendations*

Other than the escarpment feature to the north of the proposed development area, which may support significant wildlife habitat, no natural heritage features, as identified in the Provincial Planning Statement and OMNR (2010), are on the proposed development area or adjacent lands. The only work proposed along the south forest edge is tree removal, as shown on Map 2, in association with installation of an adjacent pathway extension and retaining wall. The deciduous hedgerow immediately to the west of the west property line will also need to be removed for adjacent grading and installation of a retaining wall. As shown on the Landscape Plan by CSW this tree removal will be compensated for by new plantings of native tree species at a ratio of two new plantings for each hedgerow tree removed.

As identified in Table 1 and shown on Map 2, plantings in the east portion of the proposed development area and regenerating poplar, Manitoba maple, and white elm trees greater than 10cm dbh will be removed as they are within the footprint of the retirement residence addition and associated surface parking. A larger weeping willow and Norway maple will also be removed. The features and function of the removed trees will be replaced with plantings of native trees and shrubs, as shown on the Landscape Plan prepared by CSW.

The revised stormwater management design for the proposed development area by Novatech Engineering Consultants Ltd. will provide infiltration at the north, rear, of the development area to eliminate hard surface runoff down the escarpment, with the exception of the 1:100 year events where sheet drainage will occur onto the escarpment. This 1:100 year run-off will be less than pre-development 1:5 year runoff and will be treated with rip rap to slow down the water's velocity down the escarpment. The landscaped areas abutting the building and the hard parking surfaces and walkways will drain to catch basins structures within the parking lot and will be directed to the underground infiltration chambers.

The proposed development is not anticipated to significantly change the moisture regime over the escarpment relative to the existing conditions except during the 1:100 year event when less runoff will be directed over the escarpment than during existing conditions and the velocity of the runoff will be less. The changes are anticipated to be beneficial to the vegetation and wildlife habitat of the escarpment.

With respect to water quality along the escarpment all runoff up to the 1:100 year storm event will be controlled by the infiltration system and will be directed away from the escarpment. Novatech Engineering Consultants Ltd. report that there is no requirement to provide quality control for the 1:100 year event. That being said, in the event of the 1:100 year storm, the sumps and gooseneck pipes in all the catchbasins will provide some quality control before the catchbasins overflow into the parking lot and down the escarpment.

No Species at Risk were observed on or adjacent to the proposed development area and other than butternut, habitat to support the potential Species at Risk in the development area is not present. Any potential use by snakes, bats or other species of special interest along the escarpment to the north of the development area is not anticipated to be impacted providing the mitigation measures outlined in this report and the stormwater management plan are properly implemented.

The City's Bird-Safe Design Guidelines (City of Ottawa, 2020) are to be incorporated into the building design and also be addressed during the construction, and operational phases of this project. This will involve treating glass to make it more visible as a barrier to birds through minimizing the transparency and reflectivity of glazing, eliminating design traps such as glass passageways or corners that are invisible to birds, designing landscaping to reduce the risk of collisions, designing and managing exterior lighting to minimize impacts on night migrating or nocturnal birds, and turning off or minimizing interior lighting, especially during spring and fall migration periods (City of Ottawa, 2020).

Many helpful wildlife-oriented mitigation measures are detailed in the City's Protocol for Wildlife Protection during Construction (City of Ottawa, 2022). Contractors are to review in detail and understand the City's Protocol for Wildlife Protection during Construction prior to commencement of construction. Listed below are specific mitigation measures associated with the Protocol for Wildlife Protection during Construction (City of Ottawa, 2022).

Given the level of disturbances along the Regional Road 174 and St Joseph Boulevard corridors, including the existing adjacent long-term care facility, lighted golf course and agricultural operations, the extent of noise, light and dust associated with the construction and operation of the retirement residence is not anticipated to be distinguishable from the existing impacts associated with the corridors. As the proposed development area is in an area of disturbance, the removal of some trees for the construction of the retirement residence is not anticipated to have a detectable impact on the ecological features and functions of the surrounding landscape, especially with replacement plantings proposed for the site.

The following mitigation measures are recommended:

1. Sturdy protective fencing, at least 1.3 metres in height, is recommended around the tree retention areas shown on Map 2. Note that if the existing chain link fence is left in place along the west property line and the top-of-slope along the south boundary of the deciduous forest to the north this will provide suitable protection for the adjacent woody vegetation. It is important that the fencing be properly installed and maintained. Signs, notices or posters are not to be attached to any tree. No grading, heavy machinery traffic, stockpiling of material, machinery maintenance and refueling, or other activities that may cause soil compaction is to occur on the development side of the protective fencing. The root system, trunk, and branches of the trees to be retained are to be protected and not damaged unless necessary. Any roots that must be cut are to be cut cleanly to facilitate healing and as far from the tree as possible. Exhaust fumes from all equipment during construction will not be directed towards the canopy of the retained trees.

All of the supports and bracing for the protective fencing should be placed outside of the protected area and should be installed in such a way as to minimize root damage. Also, since a major objective of the temporary barrier is to prevent construction traffic from entering the trees' critical root zones, the barrier should be kept in place until all site construction has been completed in the vicinity of the trees;

2. Several planting areas are shown on the Landscape Plan by CSW. These plantings will provide a diversity of natural environment and aesthetic features, including increasing the extent of woody vegetation on the site, screening, and providing climate benefits. Potential native species to plant include nannyberry, elderberry and dogwood shrubs along with sugar maple, red maple, basswood, balsam fir, white cedar, tamarack, red oak and white spruce trees. Sourcing native species from local seed sources is strongly recommended to ensure adaptability and longevity. These plantings will provide more tree cover than is currently on the proposed development area and will support the City's tree canopy targets;
3. If there is the potential for damage by construction equipment and materials to the branches of trees to be retained these branches should be pruned by a qualified arborist before any construction activity;
4. The extent of exposed soils shall be kept to a minimum at all times. Re-vegetation of exposed, non-developed areas shall be achieved as soon as possible;
5. During construction, sediment and erosion control measures will be implemented as required, including filtering of pumped groundwater, properly installed and maintained silt fencing, and seepage barriers deployed in any temporary drainage ditches, until the construction is completed. These control measures must be properly maintained to maximize their function during construction. For example, silt fencing is recommended along the north edge of the retirement residence addition work area. It is important that the fencing is properly keyed in, maintained as required, including repair of broken

panels and removal of accumulated silt, and removed from the site after the construction is completed and the site is stabilized;

6. The contractor is to be aware of potential Species at Risk in the general area such as butternut. Appendix 1 of City of Ottawa (2022) describes these species. The contact biologist for this project is Bernie Muncaster (613-748-3753). Any Species at Risk sightings are to be immediately reported to the project manager and the Ministry of the Environment, Conservation, and Parks and activities that may impact the species are to be stopped until further direction is received from the Ministry;
7. As recommended in City of Ottawa (2022), prior to beginning work each day thorough visual inspections of the work space and immediate surroundings are to be completed for wildlife. See Section 2.5 of the City's Protocol for Wildlife Protection during Construction (City of Ottawa, 2022) for additional recommendations on construction site management. Any turtles and snakes in a work area are to be relocated to the north. Animals should be moved only far enough to ensure their immediate safety. See Appendix 1 and the links in Section 4 of City of Ottawa (2022) for suggestions on how to effectively relocate turtles and snakes;
8. Municipal by-laws and provincial regulations for noise will be followed and utilities will be located as required in the vicinity of the site prior to construction. Waste will be managed in accordance with provincial regulations;
9. The contractor will have a spill kit on-hand at all times in case of spills or other accidents; and,
10. For the protection of breeding birds, no shrub or tree removal should occur between April 15<sup>th</sup> and August 15<sup>th</sup>, unless a survey by a qualified biologist identifies no nesting activity and the woody vegetation is removed within five days of conducting the survey. No stick nests or other evidence of raptor utilization were observed on or adjacent to the proposed development area.

### ***Schedule of Proposed Works***

Removal of the on-site woody vegetation not to be retained is proposed for 2025, after the breeding bird season. City of Ottawa staff (Forester – Planning) are to be contacted at least two business days prior to any tree removal so staff have the opportunity to verify that the protective fencing has been properly constructed. There are no City/NCC-owned trees adjacent to the proposed development area on the north side of St. Joseph Boulevard.

### *Cumulative Effects*

The Canadian Environmental Assessment Agency (CEAA) defines cumulative effects as...*“the effects on the environment caused by an action in combination with other past, present, and future human actions...”* They occur when two or more project-related environmental effects, or two or more independent projects, combine to produce an augmented effect. These cumulative effects may be positive or negative.

There are no known plans to alter the adjacent land use in the foreseeable future. The area of the proposed retirement residence addition is disturbed and is in the same location as a former long-term care facility. The surrounding landscape is also disturbed except the narrow forest to the north and east. The construction and operation of the retirement residence addition will not have a detectable impact on the features and functions of the forest to the north. It is thus anticipated that any impacts associated with the retirement residence addition on the remaining natural environment would not be detectable relative to the existing conditions or those associated with future projects.

### *Conclusion*

The majority of woody vegetation removals for the construction of the retirement residence addition and parking on a disturbed site are regenerating stems or plantings, with a deciduous hedgerow immediately to the west of the site also to be removed. The removal of the hedgerow trees will be compensated for with plantings on a two to one basis. In addition, there will be numerous on-site plantings as part of the new development.

With proper implementation of the mitigation measures described above, this EIS concludes that it is the professional opinion of the author that construction and operation of the retirement residence addition will not impact the natural environment, including the escarpment to the north of the proposed development area.

### *References*

Brownell, V.R. and C.S. Blaney. 1997. Natural Area Data and Evaluation Record prepared for the Regional Municipality of Ottawa-Carleton, Planning and Property Department.

City of Ottawa. 2020. Bird-Safe Design Guidelines. September, 2020. 24 pp & Append

City of Ottawa. 2022. Protocol for Wildlife Protection during Construction. Revised December, 2022. 14 pp & Append.

National Capital Commission. 1999. Plan for Canada’s Capital. A Second Century of Vision, Planning and Development. 91 pp & append.

National Capital Commission. 2013. Canada’s Capital Greenbelt Master Plan. National Capital Commission. November 2013. 148 pp & Append.

Ontario Ministry of Natural Resources. 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. 2<sup>nd</sup> Edition. March 2010. 233 pp.

Ontario Ministry of Natural Resources and Forestry. 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E. January, 2015. 38 pp.

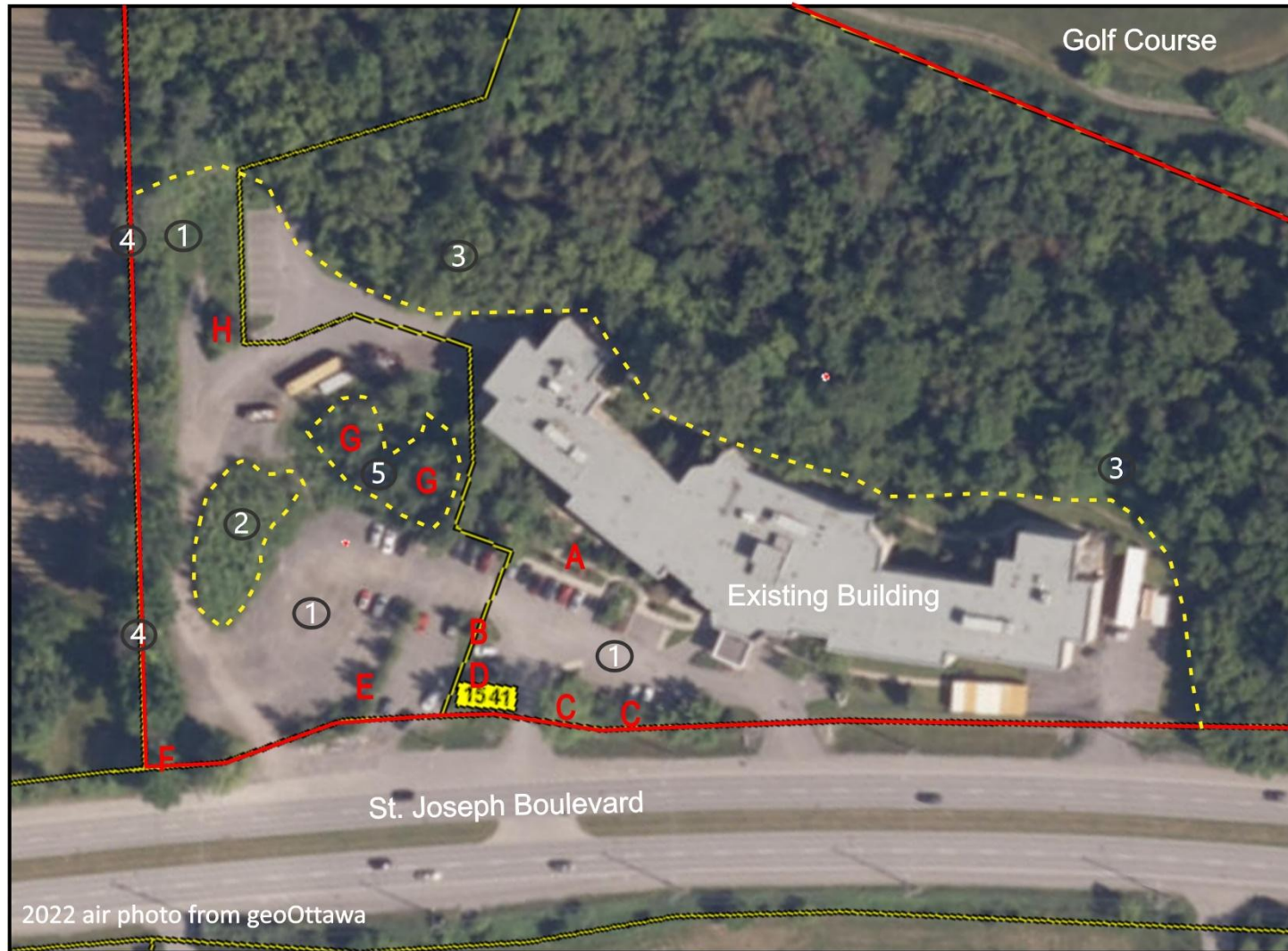
Please call if you have any questions on this updated EIS and Tree Conservation Report.

Yours Sincerely,  
**MUNCASTER ENVIRONMENTAL PLANNING INC.**



Bernie Muncaster, M.Sc.  
Principal

1541 St Joseph Boulevard eister update



Legend

- Overall Site
- Vegetation community
- A-H Trees described in Table 1

Vegetation Communities

- ① Cultural meadow/disturbed area
- ② Cultural thicket
- ③ Upland poplar deciduous forest
- ④ Deciduous hedgerow
- ⑤ Cultural woodland



Approx. Scale 1:1,400



**Map 1**

**FILE: 11-32**

**May 10, 2025**

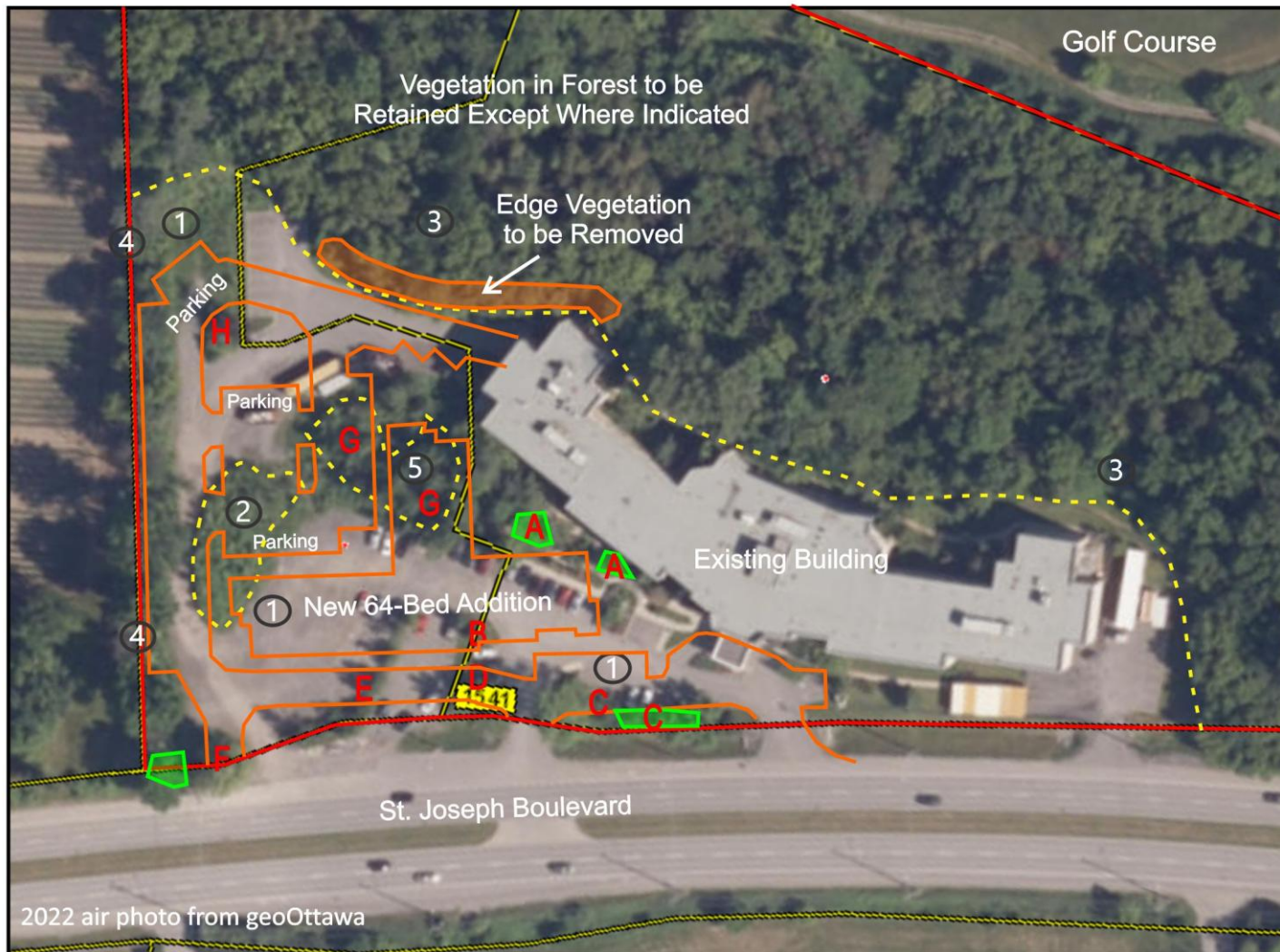
Prepared for: **Sienna Senior Living**

Prepared by:



**EIS/TREE CONSERVATION REPORT  
Existing Vegetation**

**1533 and 1541 St Joseph Boulevard  
Orleans, City of Ottawa**



### Legend

- Overall Site
- Vegetation community
- A-H  
Trees described in Table 1
- Tableland Areas of Tree Retention

### Vegetation Communities

- ① Cultural meadow/disturbed area
- ② Cultural thicket
- ③ Upland poplar deciduous forest
- ④ Deciduous hedgerow
- ⑤ Cultural woodland



Approx. Scale 1:1,400



## Map 2

FILE: 11-32

May 10, 2025

Prepared for: Sienna Senior Living

Prepared by:



EIS/TREE CONSERVATION REPORT  
Proposed Conserved Vegetation

1541 St Joseph Boulevard  
Orleans, City of Ottawa