

**MINTO COMMUNITIES INC.
HARMONY STAGE II
4025 STRANDHERD DRIVE
CITY OF OTTAWA**

**PLANNING RATIONALE
AND INTEGRATED ENVIRONMENTAL REVIEW STATEMENT
IN SUPPORT OF A
DRAFT PLAN OF SUBDIVISION,
OFFICIAL PLAN AMENDMENT
AND
ZONING BY-LAW AMENDMENT**

Prepared By:

NOVATECH
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario
K2M 1P6

July 18th, 2017

Novatech File: 116011
Ref: R-2017-115

July 18th, 2017

City of Ottawa
Planning & Growth Management Department
110 Laurier Avenue West, 4th Floor
Ottawa, ON K1P 1J1

Attention: Jean-Charles Renaud, Planner II

Dear Mr. Renaud:

**Reference: Minto Harmony Stage II
4025 Strandherd Drive
Planning Rationale and Integrated Environmental Review Statement
Our File No.: 116011**

Novatech has prepared the attached Planning Rationale & Integrated Environmental Review Statement on behalf of Minto Communities Inc. as part of a Draft Plan of Subdivision and Zoning Amendment application for the Harmony Stage II development at 4025 Strandherd Drive in Barrhaven.

A Subdivision, Zoning Amendment, and Official Plan Amendment was submitted on April 11, 2016 (D01-01-16-0009, D02-02-16-0026, D07-16-16-0004) for the entire Harmony development parcel, and subsequently amended to apply only to the Stage I lands, east of the School Block located at 4005 Strandherd Drive. The Stage II lands subject to this application are located west of the School Block and are proposed for residential development with a mix of single detached, townhouse, and back-to-back units. A park block and Stormwater management block are also part of the proposed development.

The attached Planning Rationale outlines the proposed revisions as part of the Stage II development, summarizes the relevant studies, and demonstrates that the proposal is consistent with relevant provincial and municipal policy documents.

Should you have any questions, comments or concerns please do not hesitate to contact me.

Sincerely,

NOVATECH



Anna Froehlich, M.Pl
Planner

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1.0 INTRODUCTION

Novatech has been retained by Minto to prepare a Planning Rationale in support of a Draft Plan of Subdivision and Zoning Amendment for the residential development referred to as Harmony Stage II, located on a portion of 4025 Strandherd Drive.

A Subdivision, Zoning Amendment, and Official Plan Amendment application was submitted on April 11, 2016 (D01-01-16-0009, D02-02-16-0026, D07-16-16-0004) for the entire Harmony development parcel, which extends from the Kennedy-Burnett Stormwater Facility in the east, to Borrisokane Road in the west. Since this submission, the centrally located school block, 4005 Strandherd Drive, was severed from the subdivision to allow it to go through a separate accelerated approvals process. Changes to the proposed uses on a portion of the lands west of the school block meant that these lands were also removed from the original submission and are now being addressed as a separate Stage II development.

The Stage II lands are proposed for residential development with a mix of single detached, townhouse, and back-to-back units. A centrally located park block and a stormwater management block are also part of the proposed development. A Zoning By-Law Amendment is required as the site is currently zoned Development Reserve – DR.

This Rationale will outline the various aspects of the proposal and illustrate that the proposed development is consistent with relevant provincial and municipal policies. An Integrated Environmental Review has been prepared as part of this report as required under Section 4.7 of the Official Plan. The purpose of an Integrated Environmental Review is to demonstrate how supporting studies influenced the design of the development with respect to effects on the environment and compliance with the appropriate policies of Section 4 of the Official Plan.

1.1 Site Location and Context

The subject site is Stage II of the Harmony development, located west of the South Nepean Town Centre in Barrhaven. The Harmony site is south of Strandherd Drive and north of the Jock River, between Borrisokane Road to the west and the Kennedy-Burnett Stormwater Facility to the east. The Stage II Lands are located on a portion of the site, west of the School Block, as shown on Figure 1.



Figure 1: Site Location and Context

The site is currently vacant and is a part of the overall Harmony development which has a municipal address of 4025 Strandherd Drive. The Stage II lands are legally described as Part of Lots 14 and 15, Concession 3 (Rideau Front), Geographic Township of Nepean, now City of Ottawa. The overall Harmony site has an area of 34.16 hectares, and the Stage II lands have an approximate area of 6.6 hectares, with approximately 368 metres of frontage on Strandherd Drive.

The subject land was formerly part of the Clarke family farm, and the fields were sold to Minto in 2009. The Clarke family home is located on the west end of the site on a separate parcel surrounded on three sides by the subdivision lands. The Clarke family still own and live on this property, which contains a single family dwelling and some outbuildings at the rear of the property. The proposed subdivision has been designed to respect this existing site. The Stage II lands border the Clarke Family parcel to the east.

The following describes the existing or planned land uses adjacent to the subject site:

North: Strandherd Drive borders the site to the north and separates the development lands from the established residential areas of Barrhaven. Directly north of the Site is a Tartan Homes subdivision constructed in 2011 containing singles and semi-detached dwellings.

There is a commercial plaza and a residential care facility by Viva Retirement Communities northwest of the site, across the intersection of Tartan Drive and Strandherd Drive. The Ottawa Christian School is located adjacent to the retirement home.



Figure 2: Existing residential subdivision north of Strandherd Drive

East: The subject Stage II lands are bordered to the east by the School Block being developed in concert with the overall Clarke Lands development. East of the future school is Stage I of the Harmony development, now draft approved, which consists of a mix of low-rise residential uses and a local commercial block adjacent to the intersection of Strandherd Drive and the future Chapman Mills Drive.

There is an existing residential subdivision, Mattamy's Barrhaven Mews, northeast of the subject site and south of Strandherd Drive. The street network of Stage I is integrated with the existing Madrid Avenue and Waterlily Way developed as part of the Mattamy subdivision.



Figure 3: Barrhaven Mews, facing west on Waterlily Way. The Stage I lands are visible on the left (south) side of the image.

The Kennedy-Burnett stormwater facility borders the Stage I lands to the east, and the South Nepean Town Centre is located directly east of the stormwater facility.



Figure 4: Kennedy-Burnett Storm Pond with Nepean South Town Centre on the left. View from Strandherd Drive

South: A block has been set aside for a future Bus Rapid transit (BRT) corridor south of the subject site, as designed through the Chapman Mills Environmental Assessment Process. South of the BRT block the lands are constrained by the Jock River floodplain. The Jock River is located approximately 550 metres south of the subject site.

West: The Stage II lands are bordered to the west by the Clark Family parcel and Blocks 122 and 123 of the Draft Approved Stage I subdivision (D07-16-16-0004). These blocks are designated in the Official Plan for future employment uses.

Borrisokane Road forms the western boundary of the overall Harmony site. The Foster Stormwater Management Pond, a City of Ottawa stormwater facility, is located on the lands directly west of the Borrisokane Road and Strandherd Drive intersection. The lands further west are currently undeveloped.

1.2 Planning Context

1.2.1 City of Ottawa Official Plan

The subject property is designated as General Urban Area and Employment Area on Schedule B of the City of Ottawa Official Plan, as shown on Figure 5 below.

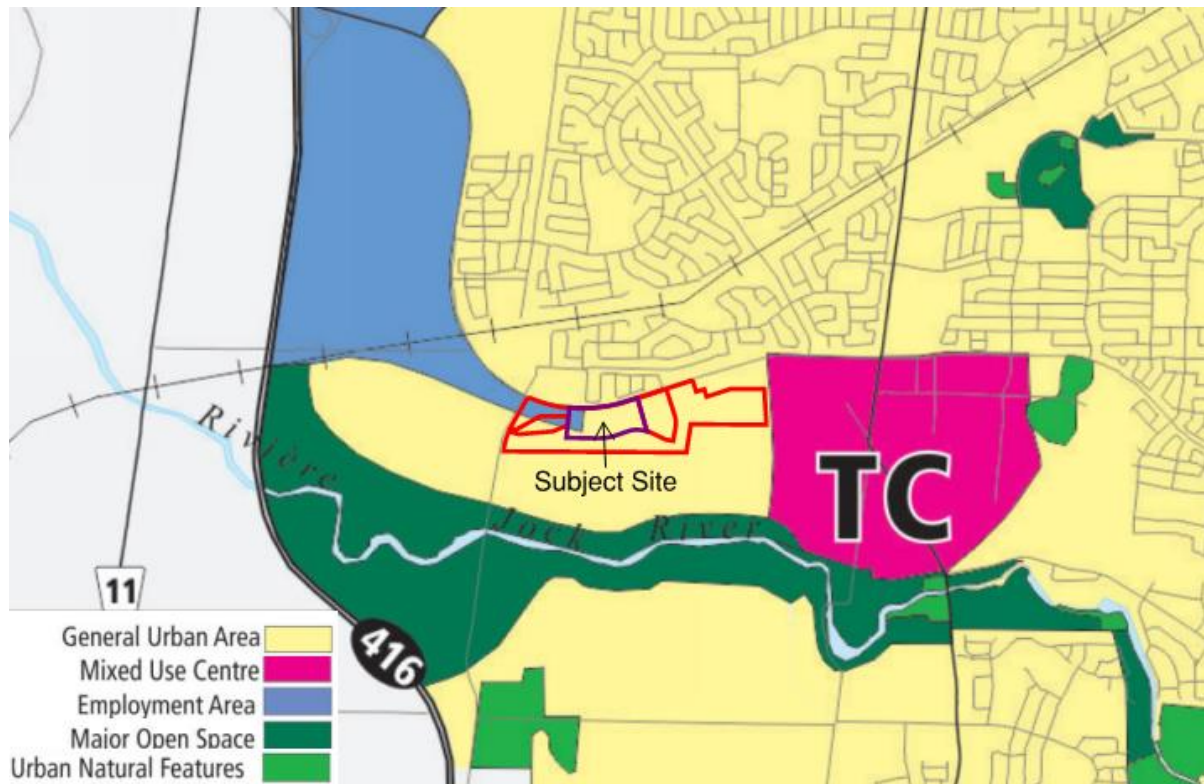


Figure 5: Official Plan Schedule B

The General Urban Area (3.6.1) designation permits a wide range of uses, including housing with a variety of densities, employment, retail, service, cultural, leisure, entertainment and institutional uses.

The Employment Area Designation (3.6.5) is intended to provide *for a wide range of economic activities, job opportunities and pay scales, from advanced technology to traditional jobs*. The areas of the City designated Employment Area are designed to maintain a sufficient supply of land for long-term economic needs by reserving large parcels of land with good access to major transportation routes. The City has recently completed a comprehensive review, culminating in the Ottawa Employment Land Review Final Report (Hemson Consulting and Urban Strategies Inc., November 2016), which considered the overall supply of Employment Lands in the City and made recommendations as to areas that were surplus to requirements and that should be removed from the Employment Area designation. The eastern portion of the 416 Business Park, within the Harmony Lands, was identified as a candidate for conversion. These lands are furthest from the 416 interchange and are cut off from the rest of the Employment Area by Borrisokane Road and the Foster Stormwater Management Facility.

A motion at Committee on November 22, 2016 (Motion N^o PLC 36/3) approved the conversion of the portion of the Employment Area Designation within the Harmony Stage II lands, as shown on Schedule E9, provided as Figure 6, below. Through Official Plan Amendment 180, the designation of these lands reverted back to General Urban Area, consistent with the rest of the Stage II lands. The proposed development is permitted in the General Urban Area.

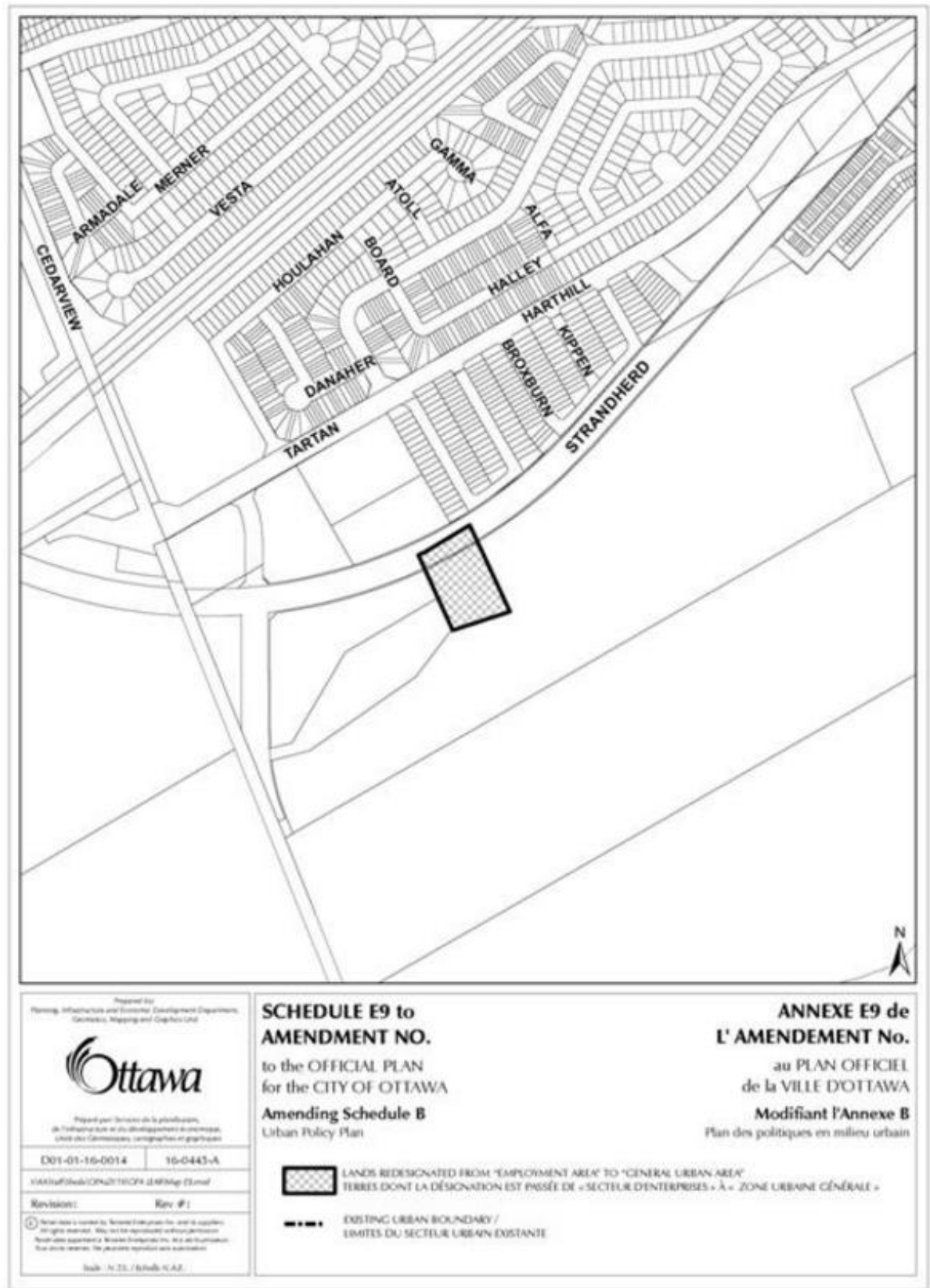


Figure 6: Official Plan Amendment Schedule E9 amending Employment Lands boundary

The Stage II lands have frontage on Strandherd Road which is identified as an Arterial Road on schedule E, as shown on Figure 7. The extension and realignment of Chapman Mills Drive and Jockvale Road are identified as a proposed Major Collector and a proposed Collector, respectively.

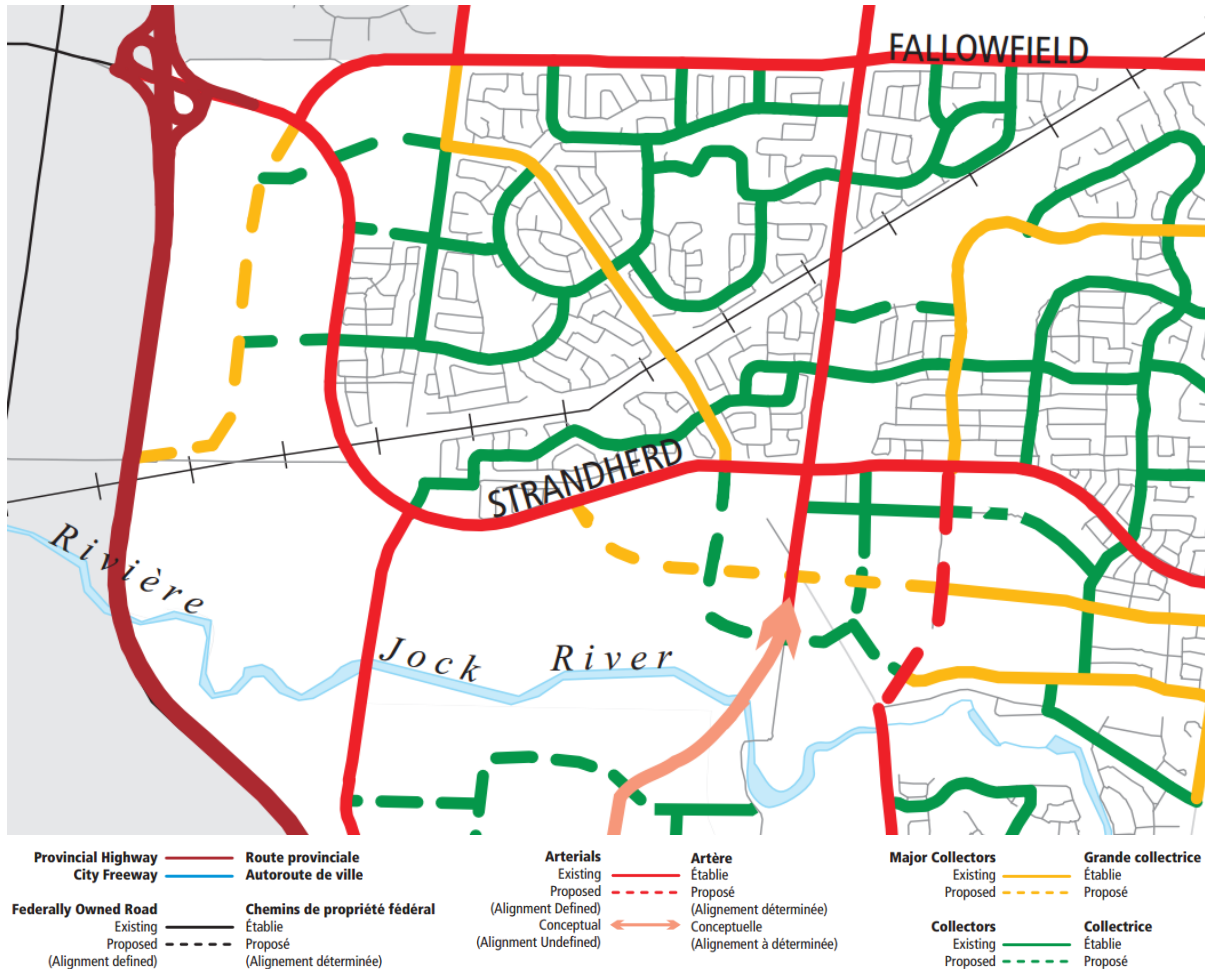


Figure 7: Official Plan Schedule E

Strandherd Drive is designated as a city-wide on-road cycling route on Schedule I, and the north side of the Jock River is also identified as a city wide cycling route. A community off road multi-use pathway is shown adjacent to the Kennedy-Burnett Stormwater Ponds east of the site, and crossing the subject site diagonally between the Jock River and Strandherd Drive as shown on the excerpt of Schedule I provided as Figure 8.

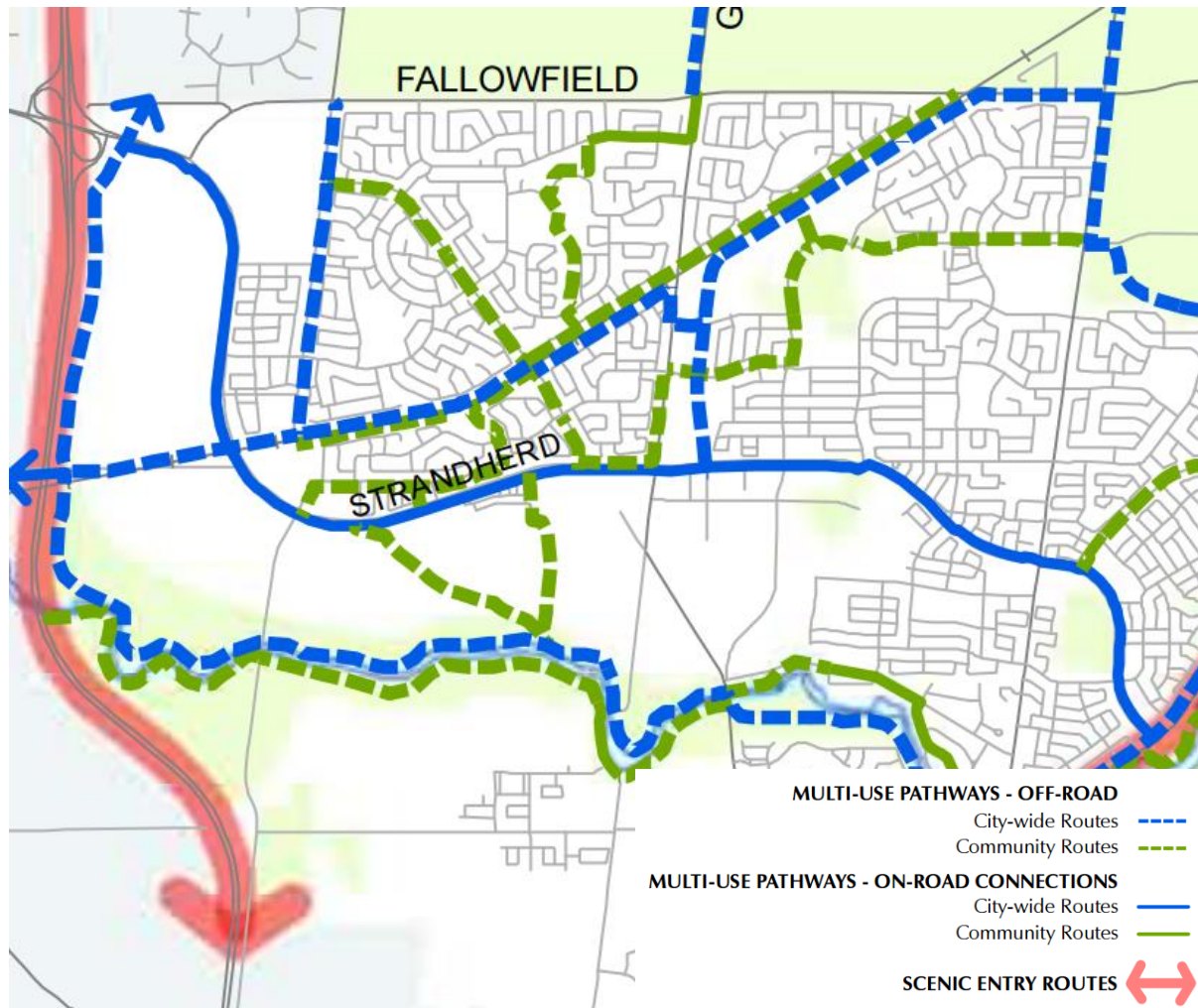


Figure 8: Official Plan Schedule I

The site is shown as being constrained by the Jock River Floodplain, identified on Schedule K, 'Environmental Constraints'. As part of the development, the existing channel north of the Clarke Family parcel is being diverted to a constructed channel south of the proposed BRT corridor. A Cut-Fill permit (RV5-03/05) has been approved by the RVCA, and the development area of the site is no longer constrained by floodplain.

1.2.2 South Nepean Secondary Plan

Both the Harmony Stage I and Stage II lands are part of Area 8 of the South Nepean Secondary Plan. This area is intended as a mixed-use development and is designated Residential, Prestige Business Park, Local Commercial and Commercial Recreation. The schedule is loosely drawn and a road pattern is not identified. The Stage II lands are generally designated as Residential on Schedule A5, as shown on Figure 9.

The boundary between the Residential and Prestige Business Park designation is imprecise as shown on Schedule A5. The boundary is clearly defined through the recent Official Plan Amendment 180, which maintains an Employment Area designation on the westernmost

portion of the overall Harmony lands, west of the Stage II Site. This generally conforms to the location of the Prestige Business Park Designation in the Secondary Plan.

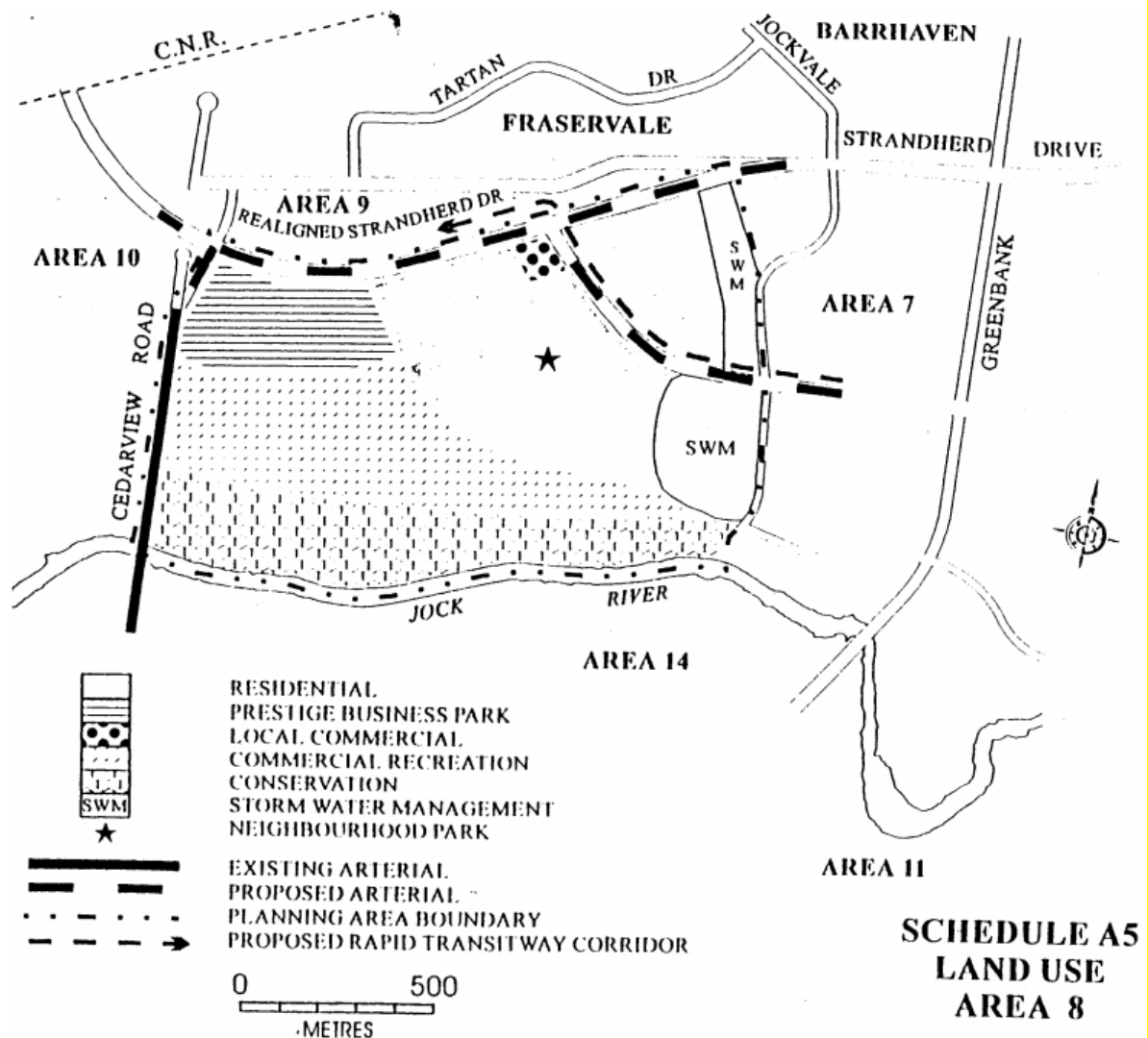


Figure 9: Area 8 South Nepean Secondary Plan Schedule A5

The alignment of the arterial and proposed rapid transitway corridor shown on Schedule A5 has been finalized through the Chapman Mills Drive Extension and BRT Corridor Environmental Assessment Study. The preferred alignment shows the arterial road turning north through the Stage I lands, while the Bus Rapid Transit continues west, south of the Stage II lands. The development of both Stage I and Stage II has been coordinated with the road and transit design. The conceptual alignment is shown as Figure 10.

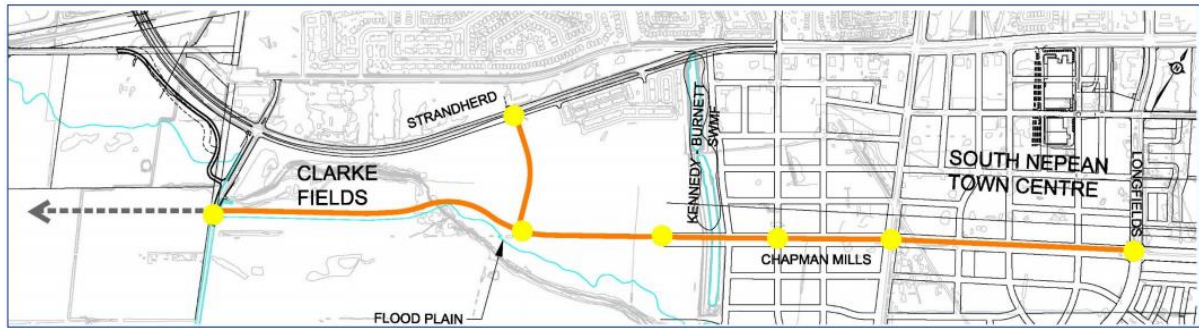


Figure 10: Preliminary preferred alignment from Chapman Mills Drive Extension and BRT Corridor EA Study September 28, 2015 Open House

1.2.3 Existing Zoning (City of Ottawa Zoning By-Law 2008-250)

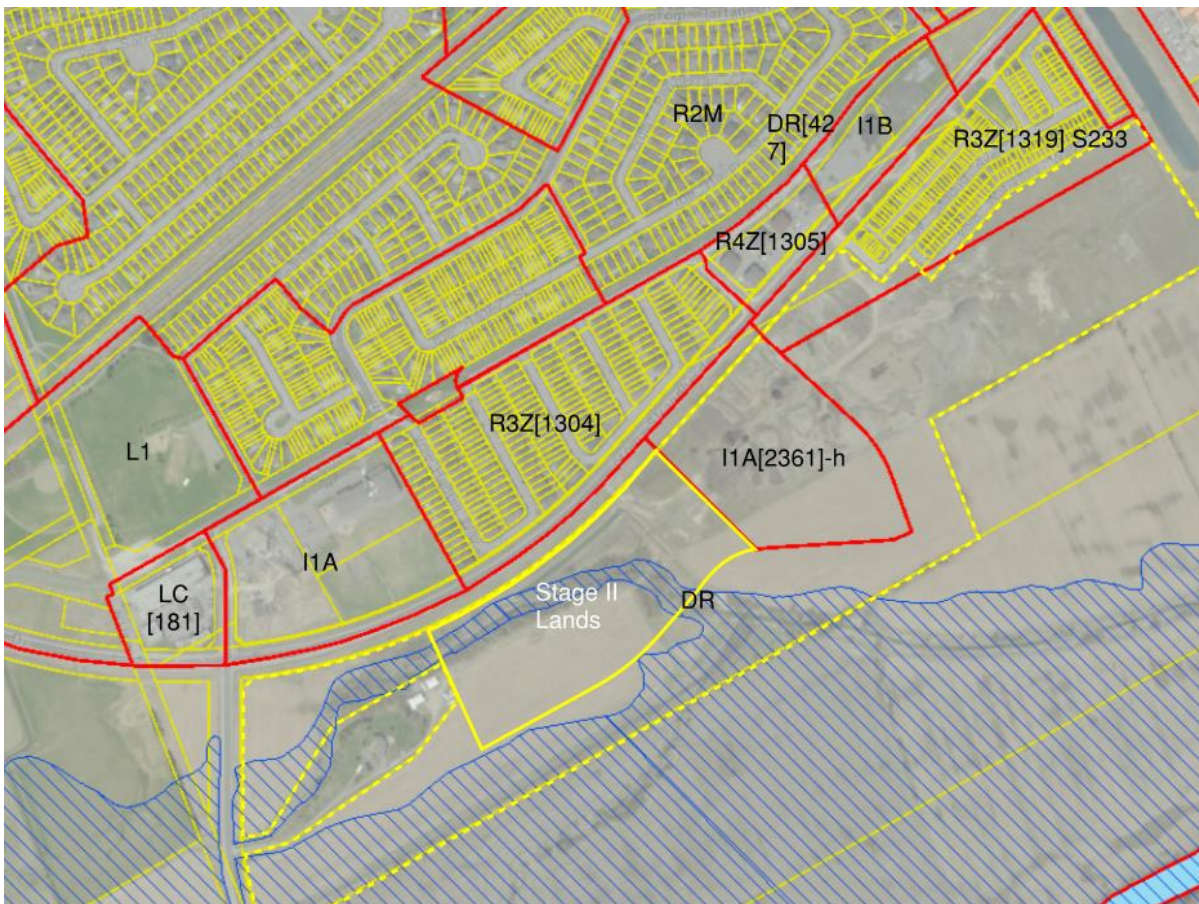


Figure 11: Existing Zoning

The subject site is currently zoned DR – Development Reserve. The purpose of the Development Reserve Zone is to recognize lands intended for future urban development in areas designated as General Urban Area and Developing Community in the Official Plan. The DR zone is essentially a placeholder to prevent development before studies have been completed and approved. These studies have been completed through the subdivision

process and the site will be rezoned to support the proposed development. The proposed Zoning Amendment is discussed in Section 5 of this rationale.

The existing zoning map also shows floodplain surrounding the Jock River and tributaries of the Fraser Clarke Drain, including a branch north of the Clarke Family Parcel. This watercourse has been relocated south of the BRT corridor, as approved by the RVCA. It is anticipated that the floodplain overlay show in the City of Ottawa Zoning By-law will be amended through a future comprehensive zoning amendment update to match the new floodline. The relocation of this watercourse is further discussed in Section 3.8.

2.0 PROPOSED DEVELOPMENT

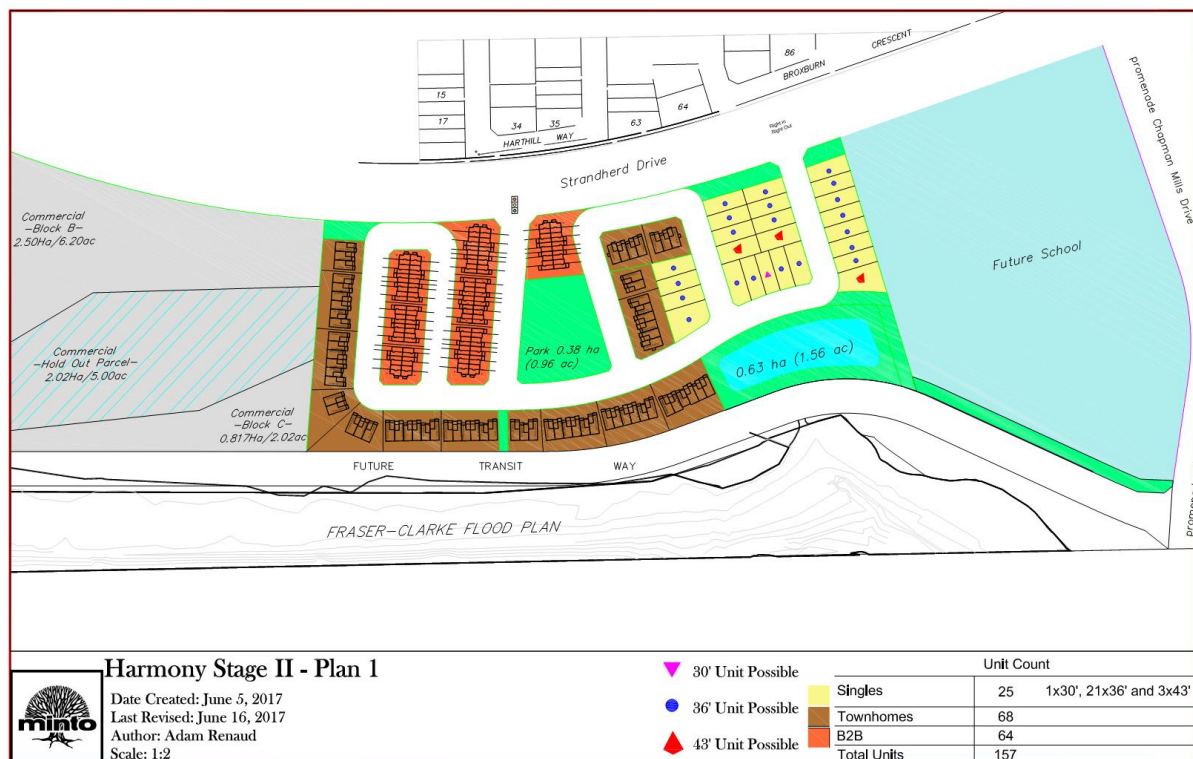


Figure 12: Stage II Concept Plan

The proposed development is a mixed density residential subdivision with a range of single detached, townhouse and back-to-back units, a centrally located park block, and a stormwater management pond adjacent to the future school.

The Draft Plan, provided as Appendix A, has intentionally been drawn to allow for some flexibility in the distribution of unit types, depending on market conditions. The Concept Plan provided as Figure 12 shows how the lands could be developed with a specific distribution of singles, townhomes and back-to-backs. As shown on the concept plan, the proposed development would have a total of 157 units, with 25 singles on lots ranging from 30 feet (9.1 metres) to 43 feet (13.1 metres) in width, 68 townhouse units, and 64 back-to-back units.

The street network has been designed with one full-movement signalised intersection on Strandherd Drive, and a second right-in-right-out intersection approximately 175 metres to the east. The signalized intersection is located roughly halfway between Borrisokane Road and the future Chapman Mills Drive. The spacing is consistent with TAC guidelines for arterial signal spacing. An internal east west street will connect the two entrance streets, with a P-loop and crescent extending north and creating window streets along Strandherd Drive. The primary entrance street (Street no. 2 on the Draft Plan) will have right-of-way of 20 metres, with all other streets designed to an 18 metre right-of-way.

The neighbourhood park has been centrally located within the Stage II residential area, and is located along the primary entrance street to act as a gateway feature, similar to the park in Stage I, which acts as a gateway feature along Chapman Mills Drive. The location allows for efficiency in the road grid pattern given the irregular shape of the subdivision, and sets the park back from Strandherd Drive, as requested by City Staff. The park also lines up with a pathway block providing access to the BRT transit way and future Jock River district park to the South. The neighbourhood park will act as a “stepping stone” of greenspace for pedestrians and cyclists travelling between Strandherd Drive and the district park. Residential units fronting on streets surrounding the park on three sides will provide passive surveillance and ensure the park feels safe, open and central to the community.

Stormwater management is addressed through a stormwater management pond located in the southeast corner of the site, adjacent to the future school. Greenspace around the pond, and a pathway connection from Street no. 1, leading to a pathway block south of the school, will ensure the pond is an integrated feature of the community. A figure showing the conceptual sidewalk and pathway network is provided as Figure 13.

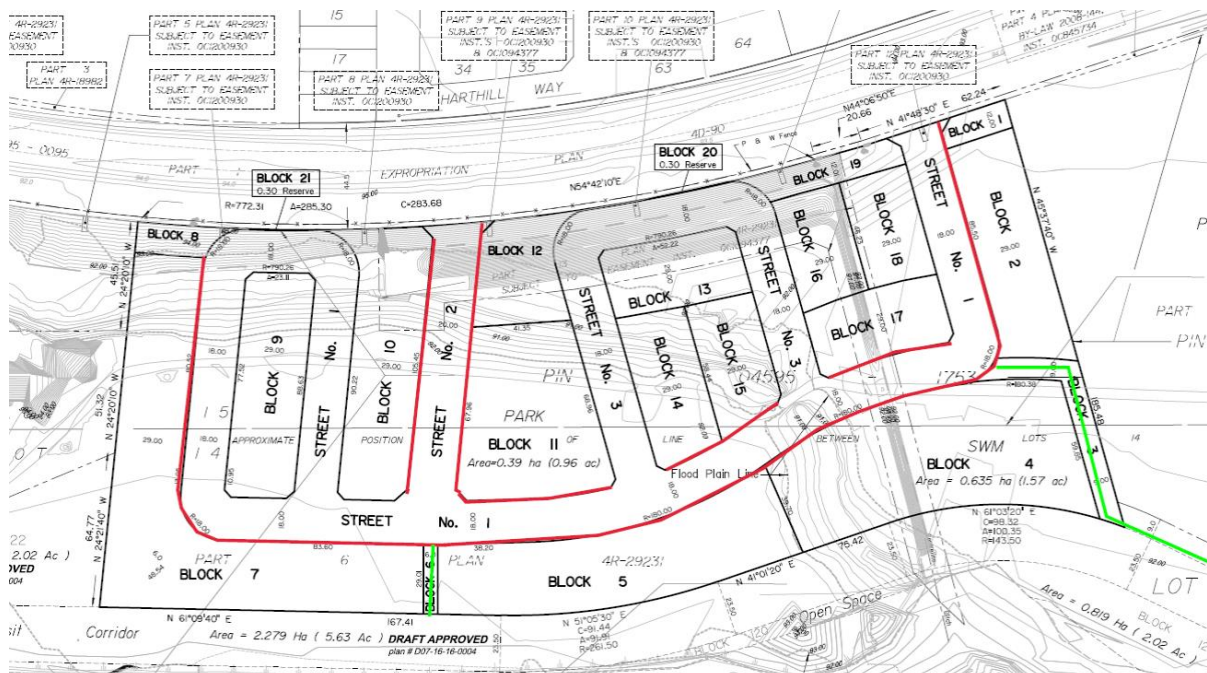


Figure 13: Proposed Sidewalk and Pathway network (proposed sidewalks shown in red, pathways in green)

The development will be an attractive addition along Strandherd Drive, with a combination of window streets creating an open and inviting community, and vegetated greenspace buffers sheltering the amenity areas of units siding on Strandherd Drive, and softening the streetscape.

3.0 OVERVIEW OF TECHNICAL STUDIES

The application is a revision to the previous Draft Plan of Subdivision for the overall Harmony development. Many of the technical studies were prepared for the entire site including both the Stage I and Stage II lands. Where necessary, updated reports have been prepared for the revised Stage II development, as summarised below.

3.1. Archaeological Assessment

Section 4.6.2 of the Official Plan states development proposed on lands that have been identified as having archaeological potential on the City's Archaeological Resource Potential Mapping Study will be required to prepare an archaeological assessment. Golder Associates conducted a Stage 1 and 2 Archaeological Assessment (Revised Report March 2015) of the subject site between April and June of 2010. The assessments concluded that a Stage 3 archaeological assessment be undertaken for a portion of the site. The remaining areas were not found to require a Stage 3 archaeological assessment and were recommended for clearance by the Ministry of Tourism, Culture and Sport.

As recommended, a Stage 3 Archaeological Assessment (February 2013) of the identified portions of the site was conducted by Golder Associates in June and July 2013. The report recommended that no further archaeological work be required.

The Archaeological Assessment Reports were reviewed by the Ministry of Tourism, Culture and Sport and a letter was provided in June 2014, confirming that the Ministry is satisfied with the fieldwork and reporting and concurring that there are no archaeological concerns for this area.

3.2. Environmental Impact & Tree Conservation Report

An Environmental Impact Statement and Tree Conservation Report for Harmony Stage II has been prepared by Dillon Consulting Limited (July 2017). The EIS/TCR has been prepared following the City of Ottawa Tree Conservation Report Guidelines and Section 4.7.8 of the Official Plan. The property is not located near any provincially significant wetlands, significant valleylands, areas of natural and scientific interest. It does not contain significant wildlife habitat, or additional natural heritage constraints, and no Species at Risk or Species at Risk habitat was identified within the Study Area. Assessment for potential fish habitat within the Fraser Clarke Watercourse has been dealt with through the permitting process for the relocation of the watercourse, discussed in Section 3.8 of this Rationale.

A Significant Woodland was identified within the proposed Stage II development area, following the Fraser Clarke drain. Approximately 1.66 ha of the forest community is located within the Stage II area. At the time the woodland was evaluated for the previous submission

(April 2016), this woodland did not meet the criteria for significance as it contained no interior habitat. However, based on the evaluation criteria outlined in the Official Plan Amendment No. 179, the woodland within the Study Area is considered significant as it is greater than 0.8 ha in size and is older than 40 years old. The woodland also meets the criteria for significance under the Natural Heritage Reference Manual (MNRF, 2010) as it is located within 30 m from of a watercourse that contains fish habitat. Many of the trees identified within the northwestern portion of the forest were in poor health or already dead. The vast majority of these trees were mature ash and likely died from the Emerald Ash Borer infestation. The other trees within the forest were assessed to be in fair to good condition. However, many maples and elms within the forest also appear to be in a declining state. A permit for the clearing of the woodland associated with the Fraser Clark drain was first issued in 2009 by the City of Ottawa, and was updated in July 2016.

The report concludes that aside from this woodland community, there is little natural vegetation and wildlife habitat within the Study Area, and that few negative environmental impacts are likely to occur as a result of the proposed development. It is recommended that an effort be made to incorporate mature trees and specimen trees into the proposed development where possible, subject to grading and engineering, (i.e., parkland etc.) and along the relocated Fraser Clarke Watercourse corridor along the southern boundary of the development. Overall, no negative residual impacts are anticipated as a result of this development providing that the recommended mitigation measures are implemented.

3.3. Environmental Site Assessment

A Phase I Environmental Site Assessment was prepared by Paterson Group (December 2014) to investigate potential site contamination by current or past uses. The results of the historical research, personal interviews, and the site inspection did not identify any potential environmental concerns with respect to the subject site or within the Phase I ESA study area. Based on the results of the assessment the report concludes that a Phase II Environmental Site Assessment is not required for the property.

3.4. Geotechnical Investigation

An update to the Geotechnical Investigation was prepared by Paterson Group (PG1984-3, December 2016) to provide geotechnical recommendations for the Stage II residential development. The geotechnical investigation for Stage I has previously been detailed in Paterson File PG1984-2, dated June 29, 2016.

The subsoil conditions at this site generally consist of a deep stiff to firm silty clay deposit. The investigation concluded that conditions within the Stage II lands are generally favourable for the construction of dwellings, provided that the grade raise is within an acceptable range. Moderate grade raises are required for the routine shallow footing foundations expected to be used, and to address site servicing constraints. It is expected that final grade raises will be approximately 0.8 to 1.8 m above existing grades. Specific grade raise restrictions based on boreholes and testing are set out in the report.

Given the moderately sensitive clay, it is recommended that tree planting be limited to low water demand trees. The minimum recommended distance from foundations is set at 4.5 metres, however the distance is dependent on the nature of the tree, the depth of the clay crust in a specific location and the final grade raise.

Within the parameters of the recommended grade raise restrictions, and following the mitigation measures outlined in the report, the site was determined to be suitable for the proposed development.

3.5. Noise Control Feasibility Study

A Noise Control Feasibility Study was prepared by J.L. Richards and Associates in July 2017 to assess the potential environmental noise impact on the proposed residential development. The Study assesses noise levels generated in order to determine noise attenuation measures required to satisfy the Part 4 Phase 1 criteria of the City of Ottawa Environmental Noise Control Guidelines (approved by City Council January 2016).

Predicted noise levels are expected to exceed the City of Ottawa ENCG and MOE criteria for daytime outdoor living areas for the proposed units adjacent to Strandherd Drive, Borrisokane Road, Chapman Mills Drive, and the proposed BRT. To address these exceedances, Minto has revised the subdivision plan to reduce the reliance of noise barriers as the primary noise mitigation tool. Building orientation and increased setbacks from the transportation noise source have been used to reduce noise levels for residential units in close proximity to a significant transportation noise source.

Due to its proximity to the Harmony Stage 2 development, Strandherd Drive has the highest noise impact on the development. To help mitigate the impact, Minto revised its conceptual layout to include a setback of 12m of open space between Strandherd Drive and the flanking units as well as single loaded “window” streets to minimize the number of lots backing onto Strandherd Drive. Back-to-back stacked units have also been oriented to help mitigate the noise for the development. Despite Minto’s efforts to naturally mitigate the transportation noise, some noise barriers will be required to protect outdoor living areas. Preliminary calculations indicate that 2.5 m high noise barriers will satisfactorily mitigate noise levels for the outdoor living areas for each of the residential blocks, where required.

The report recommends that the City of Ottawa accept the Harmony Stage 2 Concept Plan submitted and include a condition for the proponent to complete a Noise Impact Study (NIS) as per the City of Ottawa ENCG 2016. The NIS will identify noise warning clauses to be registered on title and confirm the location and heights of the noise barriers. With these mitigating measures, the development will meet requirements for noise control.

3.6. Servicing Brief

Section 4.4.2.1 of the Official Plan requires development application to be supported by an assessment of the adequacy of public services. A Servicing Brief (June 2017) was prepared by J.L Richards and Associates for the Stage II development, outlining the proposed servicing

strategy in accordance with previous servicing studies developed for the subject area and the November 2009 Servicing Study Guidelines for Development Applications in the City of Ottawa.

Multiple servicing studies have been completed with respect to the municipal infrastructure servicing of the Harmony Stage II development:

- Infrastructure Master Plan (City of Ottawa, November 2013);
- Draft Kennedy-Burnett Potable Water Master Servicing Study (Stantec Consulting Ltd., April, 2014);
- South Nepean Collector Sewer Alignment Finalisation Report (Novatech Engineering Consultants Ltd., revised December 2014); and
- Servicing Options for Lands Surrounding the Kennedy-Burnett SWMF (Novatech Engineering Consultants Ltd., revised January 2017).

In addition to the above noted studies, an Environmental Assessment was carried out for the expansion of the existing Kennedy-Burnett Stormwater management Facility, approved by the City's Planning Committee on June 27th, 2017. An Environmental Assessment for the Chapman Mills Drive extension has also been completed, and an Environmental Assessment for the future BRT corridor is ongoing.

Potable Water

Potable water for Harmony Stage II will be supplied by a future 406 mm diameter watermain along Strandherd Drive. This watermain is planned to extend from Fallowfield Road to Greenbank Road as per the City of Ottawa's Infrastructure Master Plan. It is understood that construction of the 406mm watermain will coincide with the proposed urbanization of Strandherd Drive. Should the Harmony Stage 2 development be constructed with occupancy in advance of the commissioning of the Strandherd Drive 406 mm diameter watermain, it is anticipated that interim water servicing for the Harmony Stage 2 lands can be provided by connections to existing local watermains.

Sanitary Servicing

Sanitary servicing for the Harmony Stage II will be provided by connection to the South Nepean Collector (SNC) in Chapman Mills Drive. Construction of the 900 mm dia. Phase 2 SNC extension is complete and is anticipated to be operational up to Strandherd Drive by the end of the 2017 construction season. A servicing corridor (Block 126) south of the future school will provide a connection via local gravity sewer to outlet to the SNC, just north of the future BRT corridor.

Sanitary servicing for the future development blocks (Blocks 122 and 123) to the west of Harmony Stage 2 could be accommodated by the Stage 2 sanitary sewer system via a servicing corridor anticipated to be located at the north-west corner of the Stage 2 lands. The SNC has adequate capacity to accommodate the proposed development and future development on Blocks 122 and 123.

Stormwater Management

The proposed storm servicing approach for Harmony Stage II consists of a wet pond for the Stage II lands to address water quality treatment and water quantity controls prior to discharge to the Fraser Clarke Watercourse.

Currently, stormwater quality control for the existing Fraser Fields residential subdivision located immediately north of Strandherd Drive is provided by a temporary wet pond facility, located immediately south of Strandherd Drive within the Harmony Stage 2 lands. Once the pond for the Stage II development is constructed, flows from the Fraser Fields development can be redirected via the Harmony Stage II storm sewers to be treated in this pond, and the temporary pond can be decommissioned.

3.7. Community Transportation Study

A Community Transportation Study (CTS) is required by Section 4.3 of the Official Plan when a subdivision or rezoning application is submitted and may have an impact of the transportation network in the surrounding area.

Parsons prepared a revised Community Transportation Study (July 2017) for the proposed Stage II development and evaluated the potential impact on the surrounding area in combination with several other planned developments occurring in the study area. Planned developments, including the CitiGate Corporate Campus and a smaller commercial and institutional development planned at 4401 Fallowfield, have been accounted for in the projected background traffic analysis presented in this report.

The analysis indicates that several intersections were shown to operate with poor levels of service and multiple critical movements, but that this is likely due to the construction on Strandherd Drive. The existing screenline is operating with residual capacity and can accommodate additional traffic growth and development. Several mitigation measures were investigated to mitigate operational constraints including: optimized signal timing throughout the Study Area and a southbound right turn lane at Borrisokane Road and Strandherd Drive.

Each phase of development will undergo a Traffic Impact Study and RMA process to monitor the development's impact in the context of the overall transportation plan for the area. The findings and analysis in the CTS lead to the recommendation that the Harmony Stage II development can proceed from a transportation perspective.

3.8. Fraser Clarke Drain Relocation

Prior to development, an approximately 1km reach of the Fraser Clarke Watercourse and associated floodplain crossed the western half of the subject property north of the Clarke Family Parcel, as shown in Figure 16. An application to alter a waterway was submitted to the Rideau Valley Conservation Authority (RVCA) and reviewed in 2009 (RV5-03/05). Permission was granted for the watercourse to be relocated along the southern property line of the overall development, as shown in Figure 17. A revised application to approve deepening the ditches along Borrisokane Road and minor grading changes along north limit of Block 119 has been

submitted to the RVCA in June 2017 (RV5-57-12). Works to divert flows and to fill the original channel are planned later this summer/fall, subject to RVCA approval of the above

The open space block (Block 119) on the draft approved Stage I subdivision (D07-16-16-0004), south of the proposed BRT corridor, reflects the floodplain of the approved realigned channel following completed cut/fill works. It is anticipated that the floodplain overlay show in the City of Ottawa Zoning By-law will be amended either through a comprehensive zoning amendment update by the City and RVCA to reflect changes to the floodplain.

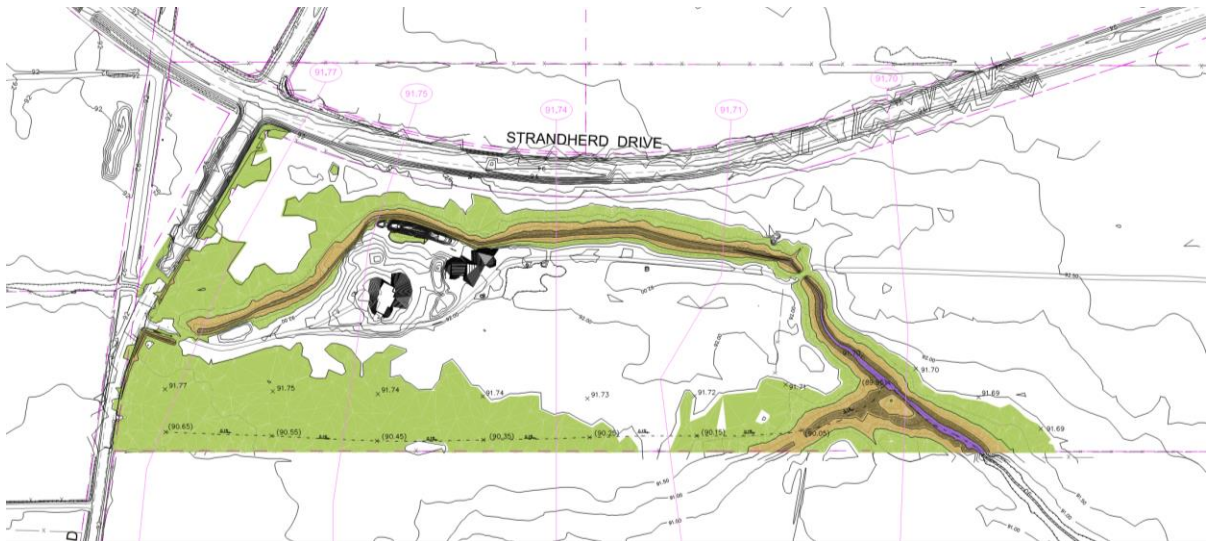


Figure 16: Pre-development Fraser Clarke Drain and floodplain (Stantec 2009)



Figure 17: Constructed channel and extent of floodplain following cut/fill (Stantec 2009)

4.0 PLANNING POLICY REVIEW

4.1 Provincial Policy Statement

The 2014 Provincial Policy Statement (PPS) provides policy direction on land use planning and development matters of provincial interest, as set out in section 2 of the Planning Act. All decisions affecting planning matters are required to “be consistent with” policies of the PPS.

Section 1.1 of the PPS speaks to managing and directing land use to achieve efficient and resilient development and land use land patterns.

Policy 1.1.1 states that healthy, liveable and safe communities are sustained by promoting efficient land use patterns with a range and mix of uses arranged as to minimize land consumption and servicing costs. Further, development patterns should avoid environmental or public health and safety concerns, conserve biodiversity, and consider the impacts of a changing climate.

The Stage II lands contribute to the overall range of residential unit types proposed within the Harmony subdivision, which includes a range of urban dwelling types and supportive uses such as parks, schools, open spaces and commercial amenities for both the local and wider community. The proposed uses have been arranged as a modified grid street and pathway pattern, integrated with surrounding development, to minimize land consumption and promote active transportation.

The proposed development is located on lands designated by the City of Ottawa as settlement area.

Policy 1.1.3.2 requires land use patterns within settlement areas to be based on:

b) densities and a mix of land uses which:

1. efficiently use land and resources;
2. are appropriate for, and efficiently use, the infrastructure and public service facilities which are planned or available, and avoid the need for their unjustified and/or uneconomical expansion;
3. minimize negative impacts to air quality and climate change, and promote energy efficiency;
4. support active transportation;
5. are transit-supportive, where transit is planned, exists or may be developed, and;
6. are freight-supportive.

The proposed development is based on the Land Use Schedule for Area 8 of the South Nepean Secondary Plan, with the proposed residential uses conforming to the Plan. Infrastructure and public service facilities, including stormwater management facilities, road pattern, parkland, schools and commercial services have been coordinated with adjacent developments and with the wider South Nepean Urban Area. Transportation and transit will

be based on the approved Chapman Mills Drive Extension and BRT Corridor Environmental Assessment Study.

A Community Transportation Study (CTS) (July 2017) was prepared by Parsons. The CTS provides an analysis of the existing transportation network and makes recommendations about the capacity of the surrounding transportation network and mitigation measures to alleviate operational constraints. The CTS has been summarized in this Planning Rationale under Section 3.7.

As discussed in Section 1.6 of this report, servicing and stormwater management has been coordinated with the servicing strategy for the surrounding South Nepean Urban Area. No servicing constraints were identified that could not be addressed through normal engineering practices and in-line with intended servicing strategy for the area.

Section 1.1.3.6 of the PPS states that new development should occur adjacent to the existing built-up area and allow for the efficient use of land. The proposed development is located within the City of Ottawa's designated Urban Area and is occurring adjacent to recently developed lands.

Public Spaces, Recreation, Parks, Trails and Open Space

Policy 1.5.1 states that healthy, active communities should be promoted by planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity.

Streets and pathways have been arranged in a modified grid pattern, connected to existing and planned adjacent development. This arrangement creates a dense, continuous network of pedestrian connections to adjacent communities, open spaces and future planned bus and cycling facilities. The proposed development includes a centrally located neighbourhood park that is within 400m of all proposed dwellings.

The CTS prepared by Parsons addresses the required road, transit, pedestrian, and cycling facilities necessary to support the proposed subdivision. The proposed development will have adequate provisions for transit and active modes of transportation, including easy access to local pedestrian, bicycle, and transit systems as identifies in the City of Ottawa Pedestrian Plan and Cycling Plan (2013).

Infrastructure and Public Service Facilities

Section 1.6 of the PPS states that infrastructure shall be provided in a coordinated, efficient and cost-effective manner to accommodate projected needs. The proposed development will be wholly on municipal services. The Servicing Brief, discussed under Section 3.6 of this report, demonstrates that there is adequate infrastructure to support the proposed subdivision.

Transportation Systems

Section 1.6.5 of the PPS promotes safe, energy efficient transportation systems that facilitate the movement of people and goods. The Community Transportation Study addresses impacts on the adjacent community and confirms that the proposed subdivision can be safely and adequately accommodated. Additional detail is provided in this Planning Rationale under Section 3.7.

Wise Use and Management of Resources

Section 2.0 of the PPS - Wise Use and Management of Resources speaks to protecting natural heritage, water, agriculture, mineral aggregate, petroleum, cultural heritage and archaeological resources.

As discussed in Section 3 of this Rationale, and EIS/TCR was prepared by Dillon Consulting, which confirms that there are no areas of natural and scientific interest, significant wetlands, or significant valleylands on or adjacent to the subject property. The area evaluated as significant woodland has been assessed and many of the trees are in poor condition. A tree removal permit has been issued through the cut-fill process. The Jock River is located approximately 500m south of the site, and will not be negatively impacted by the proposed development. There are no cultural heritage resources identified on the property, and Stage 1, 2 and 3 Archaeological Assessments conducted by Paterson Group concluded that there are no archaeological concerns for this area

We find that the proposed development is consistent with Section 2.0 of the PPS.

Health and Safety

Section 3.0 of the PPS - Protecting Human Health and Safety focuses on reducing the potential for public cost or risk to residents from natural or human-made disasters.

There are no erosion or dynamic beach hazards on or adjacent to the site, and no past mineral resource extraction, aggregate operations, or petroleum resource operations are known to have occurred. As discussed in Section 3 of this Rationale, a Phase 1 Environmental Site Assessment was prepared by Paterson Group (2014). The Phase 1 ESA did not identify any evidence to suggest past or present soil contamination and further assessment was not recommended. The cut/fill works undertaken for the relocation of the Fraser Clarke Drain have moved the flood plain south of the BRT corridor to a block to be preserved as open space.

4.2 City of Ottawa Official Plan

As previously discussed, the subject property is designated General Urban Area on Schedule B of the City of Ottawa Official Plan. The Employment Area designation has been amended to General Urban Area as discussed in Section 1.2.1. The proposed uses are permitted within the General Urban Area.

Section 3.6.1 of the Official Plan provides policy for directing development within the General Urban Area designation. Policy 2 of Section 3.6.1 of the Official Plan states that the evaluation of development applications, studies, other plans and public works undertaken by the City in the General Urban Area will be in accordance with Section 2.5.1 and Section 4.11, Urban Design and Compatibility.

Policy 1 of Section 4.11 states that when evaluating compatibility of development applications, the City will have regard for the policies of the site's land use designation, and all applicable site specific plans, policies and urban design guidelines. The subject property is within the boundaries of Area 8 of the South Nepean Secondary Plan, discussed in further detail in Section 4.3 of this rationale.

Section 4.11, Urban Design and Compatible Development, discusses the relationship between new and existing development and provides policies to evaluate the compatibility of a development with regard to Views, Building Design, Massing and Scale, and Design Priority Areas.

- Views: no significant viewsheds were identified on the subject property;
- Building Design: Good building design contributes to successful neighbourhood integration and the compatibility of new development with the existing or planned character of its surroundings. The proposed detached, townhouse and back-to-back dwellings will display strong architectural design elements and address the public realm.
- Massing and Scale: All proposed development is low-rise, and is compatible and complementary in scale to the existing surrounding development. Massing and scale are regulated through zoning which is further discussed in Section 6.
- High-Rise Buildings: No high-rise buildings are being considered as part of this proposed development.
- Outdoor Amenity Areas: Single detached and townhouse dwellings will have access to private rear yard amenity areas. The development has been designed with window streets to allow dwellings to front toward Strandherd Drive, providing an attractive streetscape and sheltering rear yard amenity areas while minimizing the requirement for noise barriers. Landscaped buffers adjacent to Strandherd Drive will allow for noise barriers to be disguised or integrated as a landscape feature where they are required.
- Design Priority Area: the subject property is not located in a design priority area.

We find that the proposed development is generally consistent with Section 4.11 of the Official Plan.

Section 2.5.1, sets out design objectives qualifying how the City wants to influence the built environment and provides specific design objectives as to how the City of Ottawa wants to influence the built environment. These design objectives are addressed below:

1. To enhance the sense of community by creating and maintaining places with their own distinct identity.

The proposed development will contribute to making Barrhaven a complete community with a mix of housing forms and densities. The development includes a central neighbourhood park and is within walking or cycling distance of schools and commercial services.

2. To define quality public and private spaces through development.

Street oriented dwellings will help to frame the public realm and create a consistent setback to define private amenity spaces. Street oriented dwellings facing the neighbourhood park along three streets will provide passive surveillance and “eyes” on the park.

3. To create places that are safe, accessible and are easy to get to, and move through.

The subdivision is designed around a modified grid street network, integrated with surrounding development. Pathway blocks connecting to the future transitway and district park along the Jock River, and along the stormwater management pond, connecting to the future school will increase permeability and encourage walking and cycling. Transit routes along the planned transit corridor and along Chapman Mills Drive ensure that the new development will be well served by public transit. The Community Transportation Study prepared by Parsons demonstrates that the proposed development can proceed from a transportation perspective.

4. To ensure that new development respects the character of existing areas.

Buildings within the proposed development will be of a consistent quality and character in order to establish a community identity and sense of coherence. The townhouses and back-to-back townhouses proposed along Streets 1 and 2 are similar to the existing residential development in the adjacent Barrhaven Mews. The proposed street layout and widths, block length, and lot layout are consistent with other developing neighbourhoods in Barrhaven.

5. To consider adaptability and diversity by creating places that can adapt and evolve easily over time and that are characterized by variety and choice.

The proposed development consists of a variety of dwelling types and sizes, ranging from single detached dwellings to back-to-back townhouse units, to accommodate for economic and demographic diversity.

6. To understand and respect natural processes and features in development design.

The subdivision has been designed to respect natural processes, features and floodplain constraints present on the site. Stormwater management for the development is integrated with the stormwater system for the surrounding area and accounts for quality and quantity control. The realigned channel of the Fraser Clarke Drain maintains the volume of the Jock River floodplain while moving the floodline boundary south of the future BRT corridor and out of the development lands. The EIS prepared by Dillon Consulting (March 2016) recommends that the relocated watercourse be re-vegetated with native species to ensure the area

provides functional habitat replacing both the form and ecological function of the area removed.

7. To maximize energy-efficiency and promote sustainable design to reduce the resource consumption, energy use, and carbon footprint of the built environment.

The mix of residential dwelling types allows for a more urban density development, making efficient use of the land available. The development will be well connected to transit routes along the BRT Corridor and Chapman Mills Drive, and a network of sidewalks and multi-use pathways will encourage active transportation. The mixed-use nature of the community, with a school, parks and commercial services within walking distance of the adjacent Barrhaven Town Centre, will reduce reliance on car travel and lead to an overall reduction in carbon footprint/emissions.

4.3 South Nepean Secondary Plan

Both Stage I and Stage II of the Harmony development are located within Area 8 of the South Nepean Urban Area Secondary Plan. Area 8 is intended to provide a mix of primarily residential uses as well as employment uses to provide a land use pattern which complements the adjacent planning areas and Town Centre lands. The proposed development is located on lands designated as Residential.

Development Policies

Section 4.1 sets out population targets for Area 8 of 700 residential units accommodating approximately 1700 residents. The proposed development will contribute 157 units to this total. The Harmony Stage I includes 267 units, and the existing Barrhaven Mews, in the northeast corner of the Area 8 lands has approximately 200 residential units. Lands owned by Mion, southeast of the Stage I lands are expected to develop with an additional 200-250 units. This will result in approximately 820 - 870 residential units in Area 8, which generally conforms to the target set out in the Secondary Plan, and is in line with City policy for increasing urban density surrounding Town Centres and in areas well served by transit.

Policy 4.1 also includes a target for overall employment in Area 8 of 350 jobs, primarily to be located within the Prestige Business Park designation shown on Schedule A5. The proposed amendment reduces this area to be consistent with the Official Plan Employment Area designation. Blocks 122 and 123 to the west are intended for future employment uses, and depending on how they develop, the area is sufficient that they could still meet this target.

As set out in Section 4.3.1, the residential lands are intended to accommodate a mixture and diversity of housing types including the proposed single detached, townhouse, and back-to-back townhouse units.

Section 4.3.1.4 sets out more specific residential Development Requirements:

1. The maximum building height for ground oriented residential development shall not exceed 10.7 metres.

The proposed R3YY zoning proposed for the ground oriented residential dwellings permits a maximum building height of 12 metres. An Official Plan Amendment covering both the Stage I and Stage II lands has been proposed to amend this policy and permit ground oriented residential development up to 12 metres in height, as regulated by zoning.

2. Direct access to Strandherd Drive for any residential development is not permitted.

No direct access from Strandherd Drive is proposed for any of the residential development. A combination of window streets and vegetated buffers will create an attractive yet separated street edge.

3. The neighbourhood park identified on Schedule A5 shall be designed to be a focal point of the residential area and should be surrounded by public streets on all sides.

The proposed neighbourhood park is not identified on the Secondary Plan schedule but is proposed as an additional park for the Stage II neighbourhood. It is centrally located within the development and is surrounded by streets on three sides. City Staff specifically did not want the park to extend to Strandherd Drive. An amendment to the Secondary Plan will be required to address streets on three rather than all sides.

4. Setbacks next to Main Street shall be minimized.

Chapman Mills is the identified Main Street, and it is located on the Stage I lands, separated from Stage II by the future school.

5. No rear lotting of development shall be permitted along the Main Street Arterial identified on Schedule A5.

As discussed above, Chapman Mills is located off site in Phase I.

6. Residential subdivisions next to the Jock River floodplain shall accommodate public and/or private linkages to the Jock River.

Linkages will be provided to the Jock River and flood plain via proposed public sidewalks and a pathway connection (Block 6) as shown on Figure 13. A pathway connection is also provided south of the school, providing access to Chapman Mills.

7. No single detached or semi-detached uses shall front on to Strandherd Drive or Main Street. Uses fronting on these streets shall be limited to medium or high density uses or non-residential uses in accordance with the provisions of Subsection 4.3.1.3.

No single detached or semi-detached uses will front on Strandherd Drive.

Section 5 of the South Nepean Secondary Plan for Area 8 addresses Transportation Policies. Section 5.3 provides policies for Pedestrains and Bicycles.

1. The road network shall be designed to encourage alternate modes of transportation including cycling and walking.

A conceptual sidewalk and pathway network for the development was provided as Figure 13. The subdivision is linked to the wider network of sidewalks and pedestrian pathways throughout the community to provide convenient access to surrounding areas and services, encouraging active transportation. The City of Ottawa Pedestrian Plan (2013) identifies sidewalks along both sides of Strandherd Drive from Borrisokane Road to approximately Andora Avenue where a multi-use pathway extends along the north side of the road and a sidewalk continues along the south side. On Strandherd Drive pedestrian signals are located at Borrisokane Road and Andora Avenue.

Strandherd Drive is identified in the City of Ottawa Cycling Plan (2013) as a spine or City-Wide route. Existing facilities along Strandherd Drive include paved shoulders from Fallowfield Road to just east of Andora Avenue. Existing bike lanes begin east of Greenbank Road. Chapman Mills Drive is identified as an on-road cycling route in the 2006 South Nepean Town Centre Community Design Plan between Longfields Drive and the Kennedy-Burnett Drain. No facilities have been identified for the extension west of the SW Transitway. Major pathways are identified throughout the study area in the ultimate cycling network.

The development is well integrated with transit along Chapman Mills, Strandherd Drive and the future BRT Transitway south of the development.

2. Pedestrian sidewalks shall be provided on at least one side of all Local Roads and both sides of the Main Street Arterial.

An amendment to remove this policy from both the Stage I and Stage II lands has been proposed through the Official Plan Amendment submitted with the Stage I application. Sidewalks will be provided along one or both streets providing access to Strandherd Drive, to the park, or to the pathway connections leading to the school. Sidewalks are not required along short stretches of local residential streets where there will be very low levels of vehicle traffic. A similar amendment was approved for the existing Barrhaven Mews development.

Section 6 of the South Nepean Secondary Plan for Area 8 provides direction on Urban Design. Section 6.1 sets out the following design guidelines:

1. Developments adjacent to Strandherd Drive and Main Street shall contain architectural facades that present a positive image for South Nepean. Building heights adjacent to these streets shall be low profile and generally limited to three storeys, with the exception of the Prestige Business Park which may be higher as permitted by Subsection 4.3.2. 2.

The proposed development will present a positive image for South Nepean as seen from Strandherd Drive, with a combination of window streets with units fronting toward Strandherd Drive, and vegetated buffers adjacent to side yards to disguise noise barriers and soften the streetscape. The proposed development is low rise and will be limited to three storeys.

2. Where possible, existing stands of trees and vegetated areas should be integrated within the landscaping of new developments.

The required grade raise may make it difficult to retain existing vegetation, however opportunities will be assessed if possible through detailed design.

3. The Main Street shown in Area 8 provides an opportunity for the creation of a streetscape theme and identity that contributes to a sense of place and linkage to the Activity Centre. Streetscaping lighting, signage as well as built form issues are to be treated consistently along this important street.

The Chapman Mills Main Street is offsite of the Stage II development. Development along Chapman Mills Drive is discussed in the Planning Rationale for Stage I.

4. The future design of storm water management facilities shall provide for pedestrian and cycling paths that connect to the adjacent areas and to the Jock River. Whenever the storm water facilities are reconstructed or new facilities are built, their design should have a more natural shoreline and vegetation than existing facilities.

A pathway block (Block 3) along the proposed adjacent to the stormwater management pond within the development. This will be linked to a pedestrian and cyclist connection south of the School Block.

5. The rural landscape of the Jock River floodplain should be conserved.

The Jock River floodplain is located south of the subject site, across the future BRT transitway corridor. The floodplain lands are intended to be part of a future City district park.

6. The intersections of Strandherd Drive with Main Street and with Cedarview Road are to have special treatments through signage, lighting, street furniture and landscaping.

As noted above, the intersection of Strandherd Drive and Chapman Mills Drive is outside of the scope of the Stage II development.

7. Large open parking areas next to Strand herd or to the Main Street shall be discouraged.

No open parking areas are proposed adjacent to Strandherd Drive.

8. For additional direction on the streetscape design next to Strandherd Drive, reference should be made to the design guidelines for Areas 9 & 10.

The road design has been integrated with the detailed design for the widening of Strandherd Drive and with the Environmental Assessment for Chapman Mills Drive and the BRT transitway. The streetscape design is consistent with the design guidelines for Areas 9 and 10.

4.4 Urban Design Guidelines for Greenfield Development

The proposed subdivision has been designed with regard to the City's Urban Design Guidelines for Greenfield Development. These guidelines illustrate the City's expectations during the development review process for greenfield neighbourhoods within the Urban Area of the City of Ottawa. They provide guidance regarding the relationship between adjacent sites and between a site and the public street, rather than addressing details of individual properties, such as commercial plazas or parks. The proposed development follows guidelines for structuring layout, and achieves many of the guidelines for Residential Building and Site Design.

5.0 PROPOSED ZONING BY-LAW AMENDMENT

The Stage II lands are currently zoned DR - Developent Reserve Zone. In order to permit the proposed development as described, it is proposed the residential areas of the site be zoned R3YY[2145], consistent with the low rise residential zoning for Stage I. The park and stormwater management block should be rezoned as O1 – Open Space. The proposed zoning is provided as Figure 18 and as Appendix C.

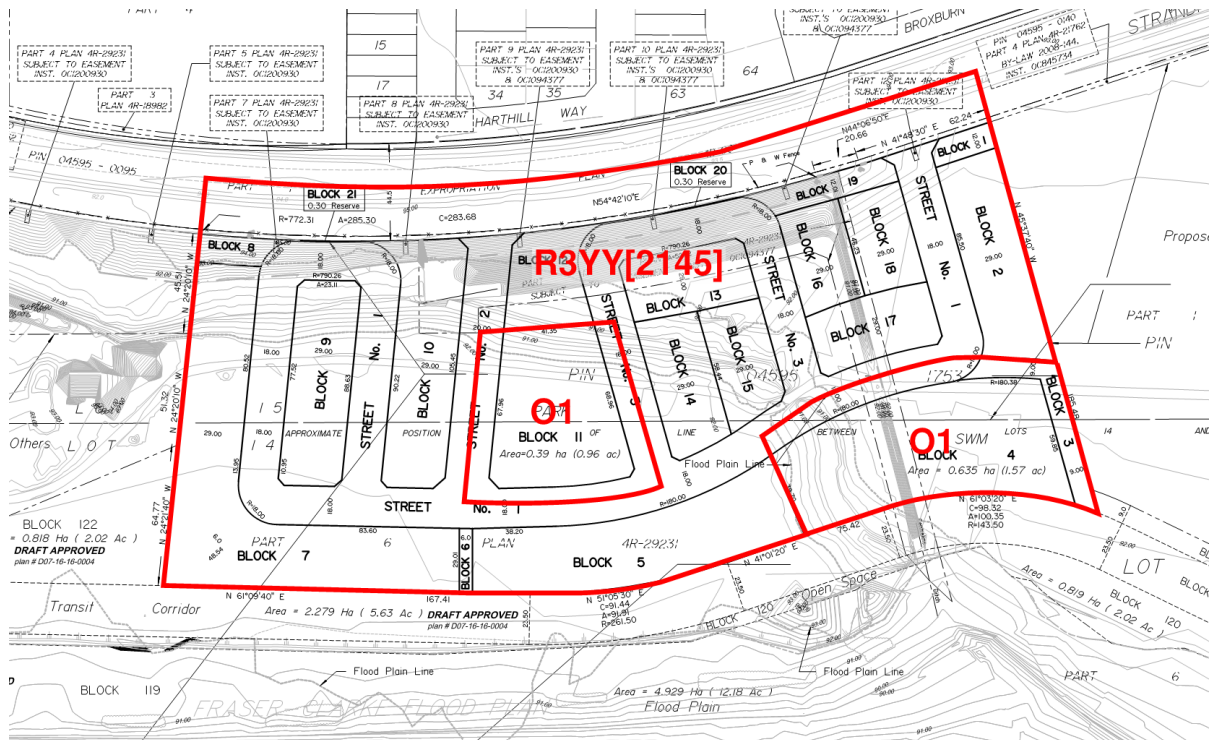


Figure 18: Proposed Zoning

6.0 CONCLUSION

The proposed development is consistent with the Provincial Policy Statement, conforms to the City of Ottawa Official Plan, City of Ottawa Urban Design Guidelines for Greenfield Neighbourhoods. This planning rationale supports the development of the proposed residential and open space uses and demonstrates that the design of the proposed subdivision is compatible with existing and planned surrounding uses and functions well within the surrounding context. The proposed development is an appropriate and desirable addition to the community and represents good planning.

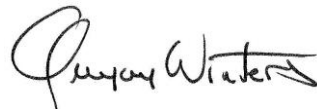
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Prepared By:



Anna Froehlich, M.Pl
Planner

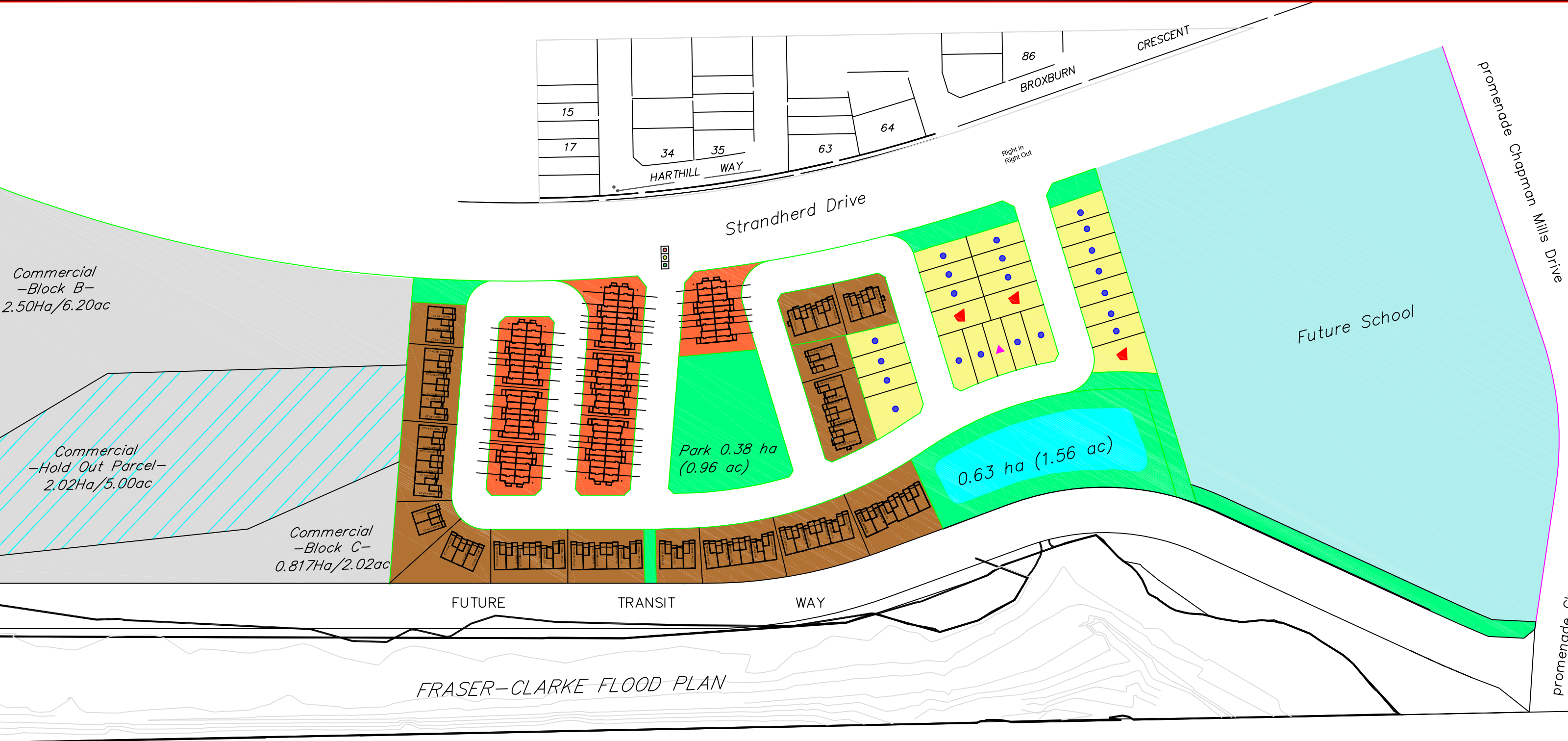
Reviewed by:



Greg Winters, MCIP, RPP
Senior Project Manager

Appendix A:
Draft Plan

Appendix B:
Concept Plan



Harmony Stage II - Plan 1

Date Created: June 5, 2017
Last Revised: June 16, 2017
Author: Adam Renaud
Scale: 1:2

- 30' Unit Possible
- 36' Unit Possible
- 43' Unit Possible

Unit Count		
Singles	25	1x30', 21x36' and 3x43'
Townhomes	68	
B2B	64	
Total Units	157	

Appendix C:
ZBLA Schedule

