

April 2023

Urban Design Brief

Proposed Townhouse Development
Montrose Road, Niagara Falls, ON

Prepared by: Arcadis IBI Group



Introduction

The applicant is proposing to develop a portion of the vacant lands (Parcel ID 30985) along Montrose Road, Niagara Falls, ON, (the “Site”) into a residential townhouse subdivision. The development proposal consists of ninety (91) townhouse units with 107 vehicular parking spaces available in the form of private driveways and visitor spots. The townhouses range in height between 2-3 storeys in multiple configuration types.

Arcadis IBI Group has prepared this Urban Design Brief as part of a concurrent Draft Plan of Vacant Land Condominium, Zoning By-law Amendment, and Site Plan Approval application for the Site. This Brief aims to provide contextual urban design commentary in response to these initiatives, including an outline of the development vision, a review of spatial and policy contexts applicable to the development, and an overall analysis of the appropriateness of the development proposal from an urban design perspective.

Table of Contents

1.0 PROPOSED VISION & PRINCIPLES

1.1	Vision	1
1.2	Design Principles	1

2.0 POLICY CONTEXT & ANALYSIS

2.1	Policy Context	2
2.2	Site Analysis	10

3.0 DESIGN CONSIDERATIONS

3.1	Site Design	13
3.2	Built Form Design	13
3.3	Architectural Design	14
3.4	Landscape Design	14

4.0 DISCUSSION

APPENDIX A - Community Context Map

APPENDIX B - Proposed Architectural Site Plan

APPENDIX C - Proposed Architectural Elevations

APPENDIX D - Proposed Landscape Design

1.0 PROPOSED VISION AND PRINCIPLES

1.1 Vision

The proposed development aims to develop an underutilized parcel of land in order to increase housing opportunities and accommodate future growth within the Niagara Region. The proposed development will increase residential density in the area, supporting more compact, contemporary, and affordable living options.

By providing high-quality Site and architectural designs, the development intends to offer an attractive option for prospective residents, while strengthening physical and visual relationships within the existing community.

A key element of the design vision is to enhance the Montrose Road frontage, while maintaining sensitivity and a level of privacy for the residents.

1.2 Design Principles

- Respectful of existing natural, built form and architectural character patterns.
- Provide density in an attractive and functional manner.
- Contribute to the Public Realm/Enhance Streetscape.
- Support alternative methods of transportation.



Figure 1 Map of Existing Site Conditions (Google Earth 2021)

2.0 POLICY CONTEXT AND SITE ANALYSIS

2.1 Policy Context

The Site is situated within a Settlement Area under the Provincial Policy Statement (PPS) and within the Built-Up Area under the Growth Plan for the Greater Golden Horseshoe. According to the City of Niagara Falls' Official Plan Schedule A - Land Use Map, the Site is located within the urban boundary in a Major Commercial Area. The Site is not located with any secondary plans, special policy or heritage areas, but is near the Garner South Secondary Plan and Special Policy Areas 63 and 69 (Figure 2).

The following section highlights, in a non-exhaustive manner, key and relevant sections within guiding documents and points out their influence on how the Site should be interpreted and potentially developed from an urban design perspective. The *City of Niagara Falls Official Plan (NFOP)*, and the *Niagara Region Urban Design Guidelines (RUDG)* are referenced specifically.

City of Niagara Falls Official Plan (NFOP)

The Official Plan for the Niagara Falls is a document outlining the long term objectives and policies of the City with respect to the growth and development of urban lands; the protection of agricultural lands and the conservation of natural heritage areas; and the provision of the necessary infrastructure.

Part 2, Section 1-Residential will be the focus section.

NFOP 1.2 - Opportunities for a choice of housing including type, tenure, cost and location shall be provided to meet the changing needs of households throughout the Built-up Area and Greenfield Area. In order to achieve this goal, the City shall support the following:

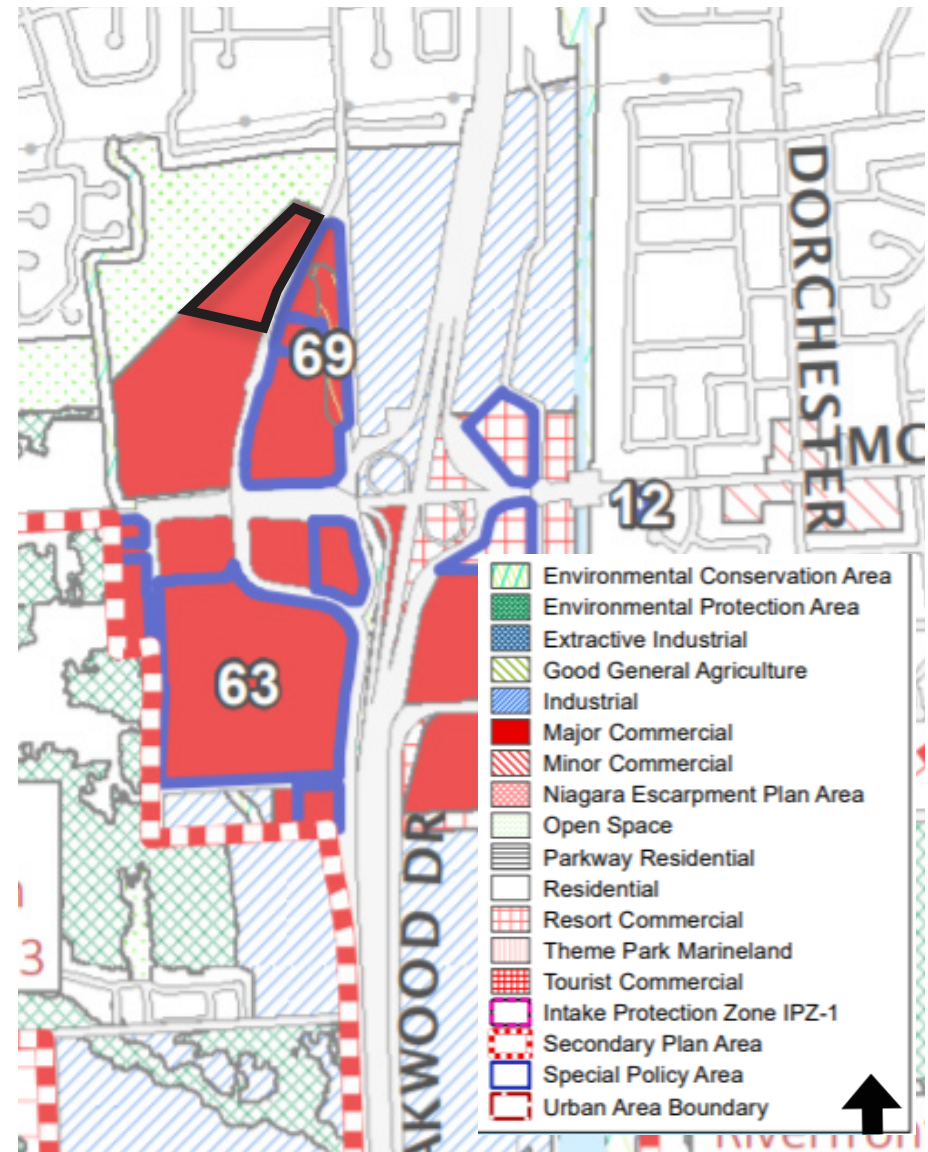


Figure 2 NFOP - Land Use, Schedule A

NFOP 1.2.1 - Multiple unit developments, smaller lot sizes and innovative housing forms.

The proposal offers a multi-unit development on a currently vacant parcel of land within the City of Niagara Falls' Built-up Area.

The total Site is roughly 1.31ha, which equates to roughly 145m² per lot.

The housing forms are a direct result of the compact arrangement of the site, featuring stacked townhouses in blocks of five to six. Units have shared private driveways to maximize efficiency.

NFOP 1.2.2 - Development of vacant land, and more efficient use of under-utilized parcels and existing housing stock.

The proposal aims to make appropriate use of vacant land on Montrose Road. With its close proximity to the McLeod intersection and the QEW Highway, the Site rests on a valuable location for physical connections, particularly for affordable living opportunities and transit-supportive development. Although the Site currently sits idle with vegetative cover, preliminary observations are that the lands hold minimal vegetative quality as they do not feature any mature woodlots, nor is the Site within any natural heritages preservation areas.

NFOP 1.2.4 - Development of housing in conjunction with commercial developments in order to create walkable

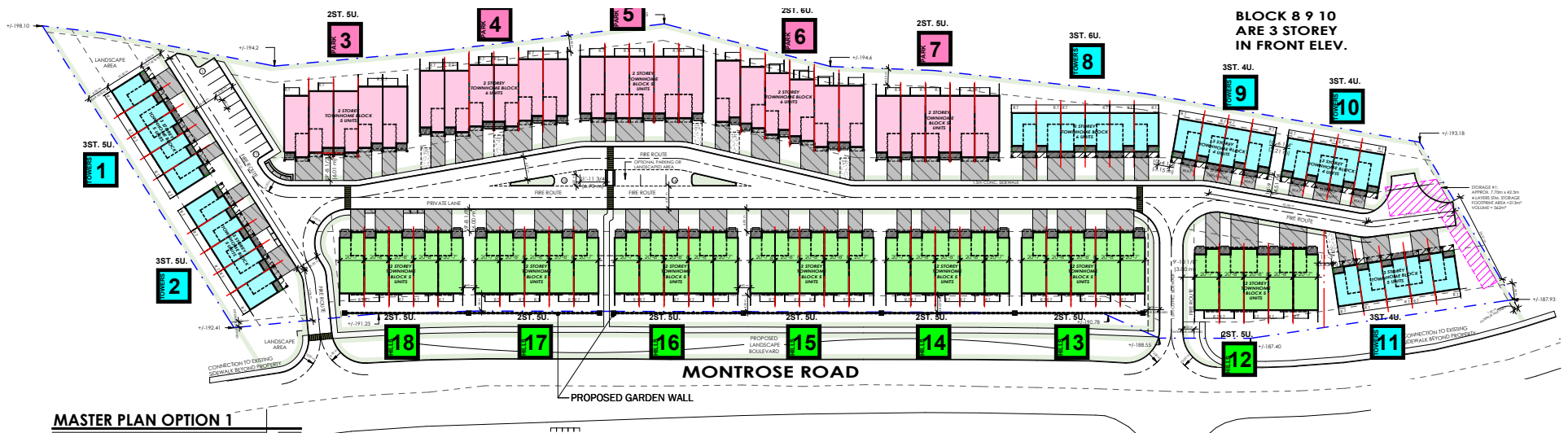


Figure 3 Proposed Site Plan by ACK Architects

neighbourhoods.

The Site is nearby (300-500m, or, roughly a 5 minute walk) numerous commercial and institutional amenities at the intersection of Montrose Road and McLeod Road, which include health services, a community centre, a park, retail stores, a cinema, and various restaurants. Refer to Appendix A for a community context reference map.

NFOP 1.9 - Exposure of new residential development to less compatible land uses such as arterial roadways, highways or railway lines shall be minimized. In order to protect residential development from such uses, studies may be required and appropriate measures such as landscaping, berming or other buffering techniques may be required to determine impacts and recommend mitigation measures.

While not located in direct relation to any of the major infrastructure noted in NFOP 1.9, Montrose Road is a Regional Road, and the Site is opposite lands capable of generating environmental impacts. As a result, a noise study was conducted by Arcadis IBI Group, which recommended the inclusion of an acoustic barrier of some form along a portion of Montrose Road as a result.

In keeping with the vision for the Site, the proposed design aims to incorporate this functional element while maintaining an attractive street frontage for the development.

NFOP 1.15.1 - The character of the existing neighbourhoods within the Built-up Area shall be retained. Accordingly, residential development, intensification and infilling shall

blend into the lot fabric, streetscape and built form of the neighbourhood.

The Site is not currently a contiguous element of any existing neighbourhoods or streetscape, and as a result, is afforded a unique opportunity to define its own. However, nearby to the north is the Niagara Falls South residential neighbourhood, which features 1-2 storey single detached residences as the dominant built form and housing typology. South of the Site, a vacant parcel currently exists, however we understand plans are in development for a similar future residential development. Further south at McLeod Road, Montrose Road features multiple retail complexes.

The lands directly adjacent west of the Site form part of the Charnwood Park, and are in a natural vegetated state. These are to be respected.

Despite lack of a direct physical connection, the proposed townhouse development takes cues from the surrounding context in layout and typology, and appropriately provides a higher density living option near a major intersection. In this way, the Site can act as an intermediary between the low-density residential uses north and the commercial uses south of the Site, enhancing connections and strengthening continuity along Montrose Road.

NFOP 1.15.3 - Generally, development within the Built-up Area should be at a higher density that what currently exists in the neighbourhood. A harmonious mix of single and multiple accommodations will be encouraged through the Built-up

Area so that at any one time a variety of housing types will be available suitable for different age groups, household sizes and incomes.

The proposed townhouse development offers a higher density option than the existing neighbourhood typologies within the immediate context, as those to the north and west feature low density single-detached lots. There are some townhouse complexes along McLeod Road (e.g., McLeod Park) west of Montrose Road, however these developments are based on dated models of similar compact living and site designs.

NFOP 5.1.1 - The design of new development and redevelopment shall specifically address height, setbacks, massing, siting and architecture of existing buildings in order to provide a compatible relationship with development in an area.

The site is without a direct interface to existing built form, however its location being between a low-density residential neighbourhood to the north, and higher-density use at the intersection of Montrose Road and McLeod Road suggests an intermediary form is appropriate, which the proposal provides in 2-3 storey townhouse blocks.

NFOP 5.1.2 - Development shall be designed and oriented to the pedestrian. As such buildings shall be set as close to the street as possible.

The Site's property line along the primary frontage is set back from Montrose Road roughly 12m, forming a large landscape boulevard rather than direct built form relationship along the Regional Road. Given this physical condition, the development

cannot be situated close enough to the street to have a direct physical relationship with the units. In addition, the recommendation for providing a noise barrier of some form along Montrose Road precludes the ability to have a close and direct relationship with the streetscape.

Despite these restrictive factors, the resulting configuration of providing a wide boulevard is generally reflective of surrounding setback patterns, and offers an opportunity to provide beautification measures through enhanced landscaping along the Regional Road.

NFOP 5.1.5 - Parking areas are to be minimized within the front yard of development Sites. Parking shall primarily be located in the rear or side yards of development Sites with sufficient landscaping utilized to create an effective buffer to abutting lands

The proposal positions the internal street and parking areas away from Montrose Road and internal to the site, hidden in view behind the built form and site landscaping.

NFOP 5.1.7 - The number of access points onto arterial roads shall be minimized. Linked parking and driveway areas shall be encouraged. Access points shall be oriented toward major roadways.

The proposed site plan positions two vehicular access points from Montrose Road on opposing ends of the site (north and south). The two entrances facilitate efficient and convenient vehicular circulation.

Private driveways and visitor parking stalls are connected to the internal drive aisles, minimizing the development's impact on the aesthetic and function of Montrose Road.

NFOP 5.3.2 - Low maintenance forms of landscaping shall be encouraged, where possible, with the responsibility for maintenance to be placed on the landowner.

The landscape plan proposes attractive landscaping elements which are local to the Region, featuring species with low-maintenance requirements wherever possible.

NFOP 5.3.3 - The size and extent of new plantings shall be appropriate for the mass and size of the building and surrounding area. Suitable tree types and plant species shall be selected having regard for their purpose, appearance and resilience to conditions of the urban environment.

Species selection, with consideration for size, form, colour, and seasonal interest is suitable to respond to and complement building architecture and soften transitions with adjacent lands.

Proposed tree species have been selected from and are compatible with the Region's pre-approved plant list.

NFOP 5.3.4 - Landscaping, together with other design measures, can assist in mitigating the impacts of development on surrounding lands. Landscaping, where adjacent to buffer areas of natural heritage features, shall be designed to incorporate native species. The City shall encourage the utilization of adequate buffering, screening and other landscaping measures to ensure separation between potentially incompatible uses.

The proposed preliminary landscape plan acknowledges the surrounding natural areas by providing locally appropriate responses through the use of native seed mixes and plant material.

Municipality of Niagara Urban Design Guidelines (RUDG)

The Region's Model Urban Design Guidelines provide desired urban design principles and specific frameworks for a range of development within the Niagara Region. This report references *Section 4 - Residential Development* of the RUDG in particular.

RUDG 4a.1.1. - Positive Image: A positive residential image is a key design consideration for enhancing the quality and character of the overall streetscape and neighbourhood. Housing should incorporate architectural design elements to create a positive street image. Elements such as front-attached garages or blank walls must be avoided.

The proposed architecture, combined with the proposed landscaping aims to offer the positive image sought by the RUDG. Providing visual variety and avoiding repetition and non-descript elements is to be considered wherever possible, especially given the length of the streetscape frontage along Montrose Road.

RUDG 4a.1.2. - Context Sensitive: The mass, scale, and architectural elements of residential buildings should be sensitive to adjoining areas. Design elements such as the

height, building mass, and architectural features should complement the overall neighbourhood character. Context sensitive design will support the creation of a unique sense of place that respects local, cultural, and natural environmental features.

While the proposed development does not adjoin any particular area directly, it takes cues from the contextual composition of the existing community forms, and proposes one similar and appropriate for this particular site.

The mass, scale, and architectural elements complement, while avoiding outright mimicry of the surroundings.

RUDG 4a.1.3. - Housing Variety & Choice: A full range of housing types and tenures should be provided so as to provide options for a wide range of residents/family types. A range of housing types will address changes in market conditions and provide flexibility for people at a variety of income levels..

By providing alternative living options to the available resources in the existing community, the proposed townhouse development supports an increased density and potential broadening of demographics in the area; The Site's location near a commercial retail complex and community centre as well as its proximity to several major transportation corridors (QEW - Provincial, Montrose Road & McLeod Road - Regional) can appeal to a variety of residents and family types who may need quick access to the greater City or Region.

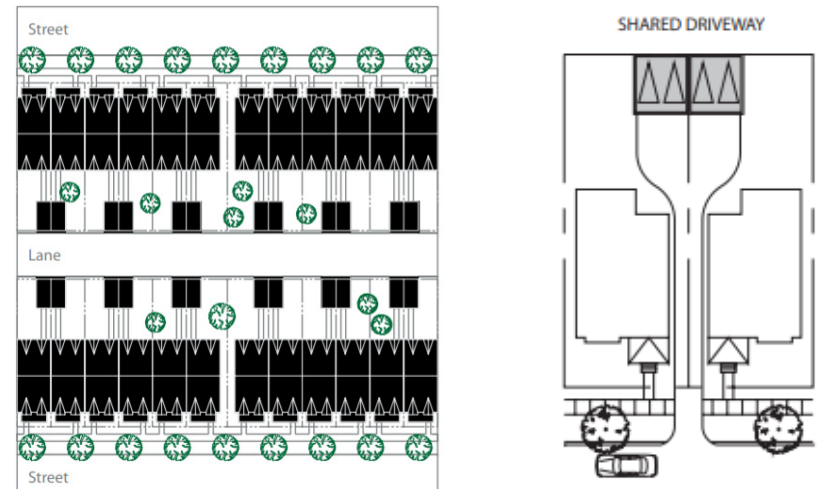


Figure 4 Example of Preferred Townhouse Site Plan Organization (RUDG)

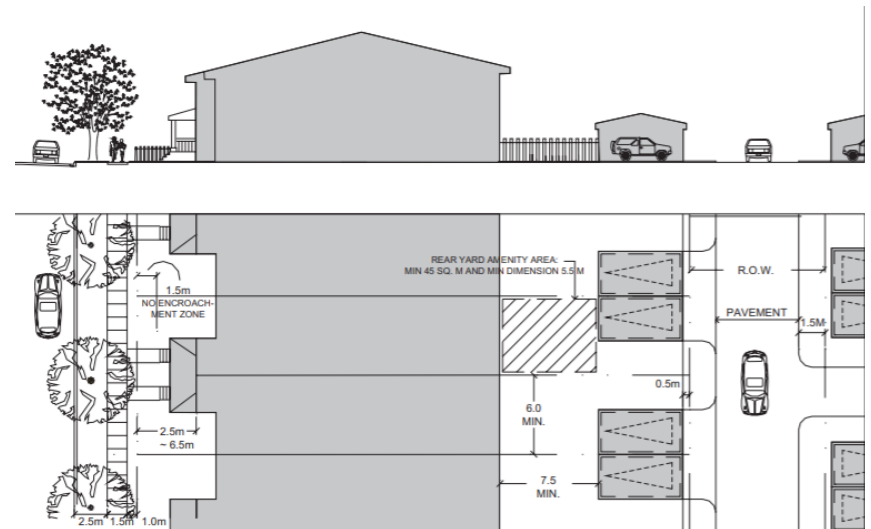


Figure 5 Example of Townhouse Section (RUDG)

RUDG 4a.1.5. - Environmentally Sustainable: Residential development should be designed to achieve a high degree of environmental sustainability and address opportunities for solar orientation and water runoff minimization

The proposed development naturally supports this initiative by providing such efforts as a relatively compact form of living compared to single-detached forms; enhanced landscaping with stormwater management-supporting and maintenance-conscious principles; and high-albedo materiality on the buildings.

RUDG 4a.3.1. - All housing should face adjacent streets and open spaces. Rear lotting should not be permitted unless it is required to achieve a reasonable design objective (such as to limit access to environmentally sensitive open space).

The proposed configuration of the townhouse blocks are orientated inward, facing the street wherever possible. In an effort to also maintain this approach with Montrose Road, the design of the blocks along this frontage respond creatively by providing a 'rear' which mimics a typical frontage (refer to conceptual renderings of the architectural designs of blocks 12 through 18, in Figure 6 and within the Appendices below).

Despite the effort, the presence of a physical acoustic barrier and wide landscaped boulevard along the Montrose Road frontage, limit this relationship and should be taken into consideration when categorizing this as a 'rear' lot.

RUDG 4a.4.1 - All residential front yards should have a minimum 1.5 metre "no encroachment" area. The balance of

the setback may be encroached with non-interior building elements including porches, steps, roof elements, etc.

Frontages of the residential blocks range from 4.51m to 6m in depth.

RUDG 4a.4.2 - A range of front yard setbacks along any street is recommended in order to achieve a diversity of setbacks on the streetscape. However, front yard setbacks should generally be a minimum of 2.5 metres and a maximum of 4.5m.

Internal frontages of the residential units range from 4.51m to 6m in depth. While technically a rear frontage along Montrose Road, the built form setback is roughly 16.3m.

RUDG 4a.6 - Building Height

b) The design of tall buildings should respond to potential negative impacts on adjacent properties, including overshadowing, overlooking, wind-tunnel effects. Therefore, building height and mass should be appropriate to the type and nature of adjoining development.

The proposed townhouse blocks would not be considered tall at 2-3 storeys, and so this guideline item technically does not apply. However, it is a good consideration to make for any height when considering contextual impacts.

It is anticipated that the built form and massing of the proposed development will not have any appreciable impact on adjacent lands with respect to the considerations listed above due to

the immediate physical relationships and the low height of the proposed built form.

RUDG 4a.7 - Architectural Features

a) Architecture expressed throughout residential buildings should be varied and recognize its local context.

The proposed units feature three distinct architectural design variations which are applied strategically to the blocks, depending on physical location and contextual interfaces.

The designs are contemporary in comparison with the existing surroundings, but are respectful and attractive - not disrupting of the local aesthetic or character patterns.

b) Despite the use of various architectural styles, quality should be consistent and building materials and finishes should be complementary.

While each variation is clearly akin to one another, subtle differences in form and articulation provide visual interest and variety between the building blocks.

c) Consistent rhythms of similar but not identical details and architectural elements should be used to reinforce the streetscape and a strong neighbourhood image.

Refer to b) above.

j) Buildings facing or flanking a street, lane or open space should provide a generous amount of window openings to

encourage strong visual connections between the private dwelling and public realm.

The architectural designs of each block feature ample window openings, and the orientation of the blocks ensure the openings face directly on streets and open space.

p) Building projections including porches, decks, canopies and stairs are encouraged as transitional building elements that provide weather protection, dwelling access and active amenity spaces.

The contemporary nature of the architectural designs produces a clean aesthetic and efficient form, with building projections tastefully integrated into the building designs. Covered porches and entryways are integrated into the overall footprints and afford private spaces for shelter and rest.

q) Porch and deck dimensions should be large enough to accommodate furnishings and ensure their active use. The minimum depth for porches and decks should be 2.0m (6.5 feet).

Grade level porches and decks/terraces, and balconies on upper levels afford private, secluded space for residents and are suitable to accommodate minor furnishings. Such are provided for each unit, but vary with type and configuration.

RUDG 4a.8 - Driveways & Garages

b) There should be no projection of the garage from the front

face of the house (measured from the primary building façade not the porch) where there is no front porch and 1.0m where there is a front porch.

Private garages are integrated neatly within the building architecture and do not protrude from the building face.



OPT. 1



OPT. 2

Figure 6 Conceptual Renderings of Units 12-18 - 'Rear' facing on to Montrose Road (ACK Architects)

2.2 Site Analysis

Existing Site

The Site is situated on the west side of Montrose Road, just north of McLeod Road. It has a street frontage of approximately 340m along the Regional artery.

Currently, there is no built form on the property.

The existing topography features berms and sloped ditches along the street edge, with a clear incline from the street into the site (when viewed from a passing car, the site is inclined). There is an abundance of existing vegetation, including some minor deciduous trees, shrubs, grasses, perennials and herbaceous under-story plants, but the appearance suggests they are recent succession species and of low aesthetic value. Relatively new street trees have been planted along the boulevard.

The Site is nearby a variety of land uses including industrial, open space, environmental conservation/protection and tourist commercial. An abundance of existing vegetation in Charwood Park flanks the Site towards the north and west. Parallel to the Site, across Montrose Road are lands currently under construction, which we understand will be a developed into a 4-storey retirement residence and medical art centre, developed by Reichmann International Development Corp.

Existing Neighbourhood

The Site is located within the Westlane Community (NFOP-Community Planning Districts (Schedule D)). The surrounding neighbourhoods contain mostly single-detached homes with

some semi-detached housing options interspersed throughout. Numerous amenities are located within walking distance of the Site including food markets and health centres. Also nearby are restaurants, the MacBain community centre and public parks containing baseball fields, playgrounds, skateparks and basketball courts (refer to Appendix A - Community Context Map).

Noteworthy nearby infrastructure within the community are the QEW and hydro canal. The Site is within 300m of the QEW, providing an easily accessible transportation route that connects the greater City, Region, and beyond.

Streetscape

Montrose road is a Regional arterial road. It varies in configuration, but commonly contains four (4) vehicular lanes and a paved median with turning lanes at intersection approaches. Nearby the Site, a pedestrian sidewalk is located on the east side of Montrose Road, connecting Kinsmen Court to McLeod Road. Designated bike lanes are provided as part of recent road upgrades on both sides of Montrose Road from McLeod Road, continuing northward.

The Montrose Road streetscape surrounding the Site lacks a definitive character as it has limited built form; The majority of the area between the McLeod intersection and residential neighbourhood to the north is currently open space and natural features.

Opportunities and Constraints

The lack of definitive character at this location on Montrose Road poses an opportunity to 'fill in a gap' in the streetscape, and connect the residential lands to the north with the urban activity at the intersection of Montrose Road and McLeod Road. Appropriate development of the Site would strengthen visual and physical connections, while reinforcing built form patterns and the overall quality of this section of Regional Road.

The Site's land designation as Major Commercial in the NFOP can potentially be viewed as a constraint since the proposal does not include any commercial uses, however, the development will support the Plan objectives of enhancing streetscape character, creating transit-supportive infrastructure and providing a mix of living options.

Another potential constraint (and opportunity) of the Site is its close proximity to natural features. Allowing for adequate space and setbacks for buffer plantings along the perimeter can reduce the abrupt transition between built-form the natural landscape, and utilizing the Region's approved plant species list, along with ensuring native species can help to preserve and potentially enhance existing plant communities and wild.

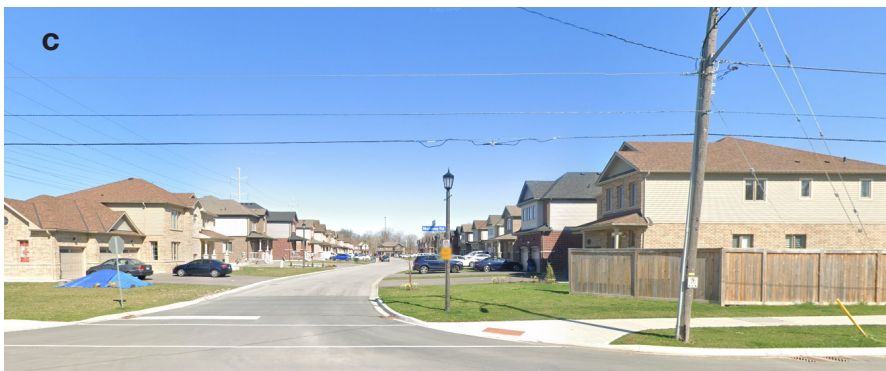


Figure 7 (Photos a through f) Community Context Sampling - Built form and Natural Character: a) Existing Site natural cover, b) 6159 Montrose Rd Townhouses, c) Entrance to Marpin Crt, north of Site, d) Montrose at McLeod intersection, e) Nearby retail commercial, f) McLeod Park residences.

3.0 DESIGN CONSIDERATIONS

3.1 Site Design

The site layout of the proposed development consists of ninety-one (91) townhouse units, dispersed amongst eighteen (18) building blocks. The built form is generally arranged around the perimeter of the elongated site, with inward facing orientation towards a future private street. The exception to this is with the Montrose Road-facing blocks, which are purposefully designed to display 'double frontages' on either side in an effort to avoid a rear lot appearance from Montrose Road.

There are two vehicular access points proposed from Montrose Road at opposite ends of the Site (North and South). Vehicular circulation between the two entrances is facilitated by the internal street which facilitates access to each of the building blocks. Extensions at either end of the development facilitate access to the end units, and provide access to visitor parking spaces which are located to the south. The clearways of the internal drive aisles (approx. 6.0m) would accommodate fire and emergency vehicle access throughout the Site.

One hundred and seven parking spaces are provided (91 driveway & 16 visitor) with each unit having access to a private driveway. The driveways and vehicular lanes are positioned behind the townhouse blocks, shielding much of their view from the street.

Despite the physical shape of the Site being narrow and elongated, the proposed layout generates simple and effective internal circulation for both vehicles and pedestrians. Sidewalks are proposed along Montrose Road, connecting to the existing sidewalk to the south and beyond.

The provision of communal outdoor amenity space is minor;

Two separate areas are provided at the southwest and south east corners of the site, respectively, and neither are substantial in size, or location. Consideration for how these spaces will be programmed should be sought as the design develops to offset these shortcomings.

An additional row of proposed street trees on the west side of the proposed sidewalk will complement the existing street trees which are on the road side, to enhance the pedestrian quality of the boulevard and the image of the development when viewed from the Regional Road.

Built Form Design

There are eighteen (18) total townhouse blocks proposed in three (3) different varieties. Each type is applied to respond to its contextual position on site, considering architectural design, orientation, and use of topography in the arrangement. For example, and as mentioned, the blocks along Montrose Road feature a 'dual frontage' configuration to respond to both the internal street and Montrose Road in an equal manner. These blocks are also limited to 2-storeys to provide a sensitive presence at the street.

The blocks range from 4 to 6 units and 2 to 3 storeys depending type. Refer to architectural site plan and elevations, Appendix B&C, prepared by ACK Architects.

Architectural Design

The proposed architectural design is preliminary and includes optional features depending on preference and block type. In a general sense, the form, articulation and proposed material palette is of high quality, offering contemporary styling.

High contrast in colour between light white and dark grays is carried throughout the development, and applied differently depending on the unit and block type.

Gable roofs are proposed on blocks 12-18, whereas the remainder of the blocks are currently proposing flat roofs.

The primary exterior building materials include metal, glazing and brick in a monotone palette of whites and grays. These materials are commonly seen throughout the surrounding immediate architectural context.

Landscape Design

The proposed landscape design helps provide an attractive pedestrian realm both at the street and within the Site's interior. Exterior landscape elements include accessible pedestrian walkways, street trees and ornamental vegetation. The hard-scape and soft-scape elements function to contrast and compliment the materials and forms of the buildings and maintains the same high level quality as is proposed in the building architecture.

Per the noise study recommendation, an acoustic barrier is

proposed (Figure 8) in the form of a constructed 1.8m high barrier along the Montrose frontage between the two proposed driveway entrances. This is in direct response to the orientation of blocks 12-18 and their layout of proposing sensitive uses (rear yards) along Montrose Road, despite the fact that they are being designed a type of secondary frontages.

The barrier and surrounding landscape is designed with regard for its outward appearance from Montrose Road to mitigate the visual impacts of its conspicuous location. I.e. equal attention has been placed on the design of it's form as well as function.

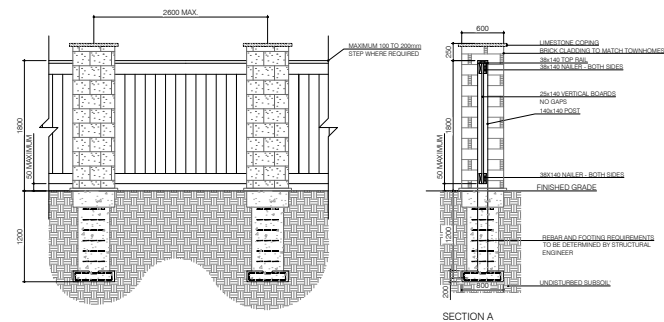


Figure 8 Proposed Design of Noise Barrier

Perhaps an equally important consideration for the Site landscape design is the interface with the natural lands to the west. Throughout the site, the proposed landscape palette is responsive of local and native plant communities, proposing species which will support existing flora and fauna and ensure successful integration, all while being hardy and of low maintenance wherever possible. Moreover, street tree species have been selected from the Region's pre-approved species list to ensure continuity and consistency within the Region.

4.0 DISCUSSION

The proposed development provides additional housing in an area that offers ample and convenient amenities. The density is appropriate as the subject Site sits in a location between existing low-density neighbourhoods, and major commercial areas with access to public transit. As discussed within this report, the proposal achieves many of the key and relevant guides for quality Urban Design listed in the City of Niagara Falls Official Plan and the City of Niagara Falls Urban Design Guidelines. It supports many of the main objectives outlined therein by increasing the housing options available in the area, improving the public realm while minimizing impact on existing built form and natural features, and providing a compatible design that is functional and attractive.

The linear nature of the site poses challenges with respect to achieving some of these guideline best-practices, such as meeting the desire to avoid rear-facing lots, however the proposed design aims to combat these challenges in a number of ways.

Transitions in scale from nearby built form is not a concern given the lack of immediate context for reference, however the proposed density and height should be considered appropriate in this location regardless, given the greater spatial analysis and connective opportunity.

In terms of challenges, the location, size and opportunity offered by the proposed outdoor landscape amenity areas is less than ideal, and is worth noting. Moreover, impacts on adjacent natural lands are expected to be minimal through the application of sensitive interfaces and a complementary

landscape strategy. The necessary inclusion of an acoustic barrier wall along Montrose Road is also a feature which is in most scenarios viewed in an unfavourable light, however it has been designed to elegantly and effectively blend into the streetscape, complementing the built forms through materiality and architectural design.

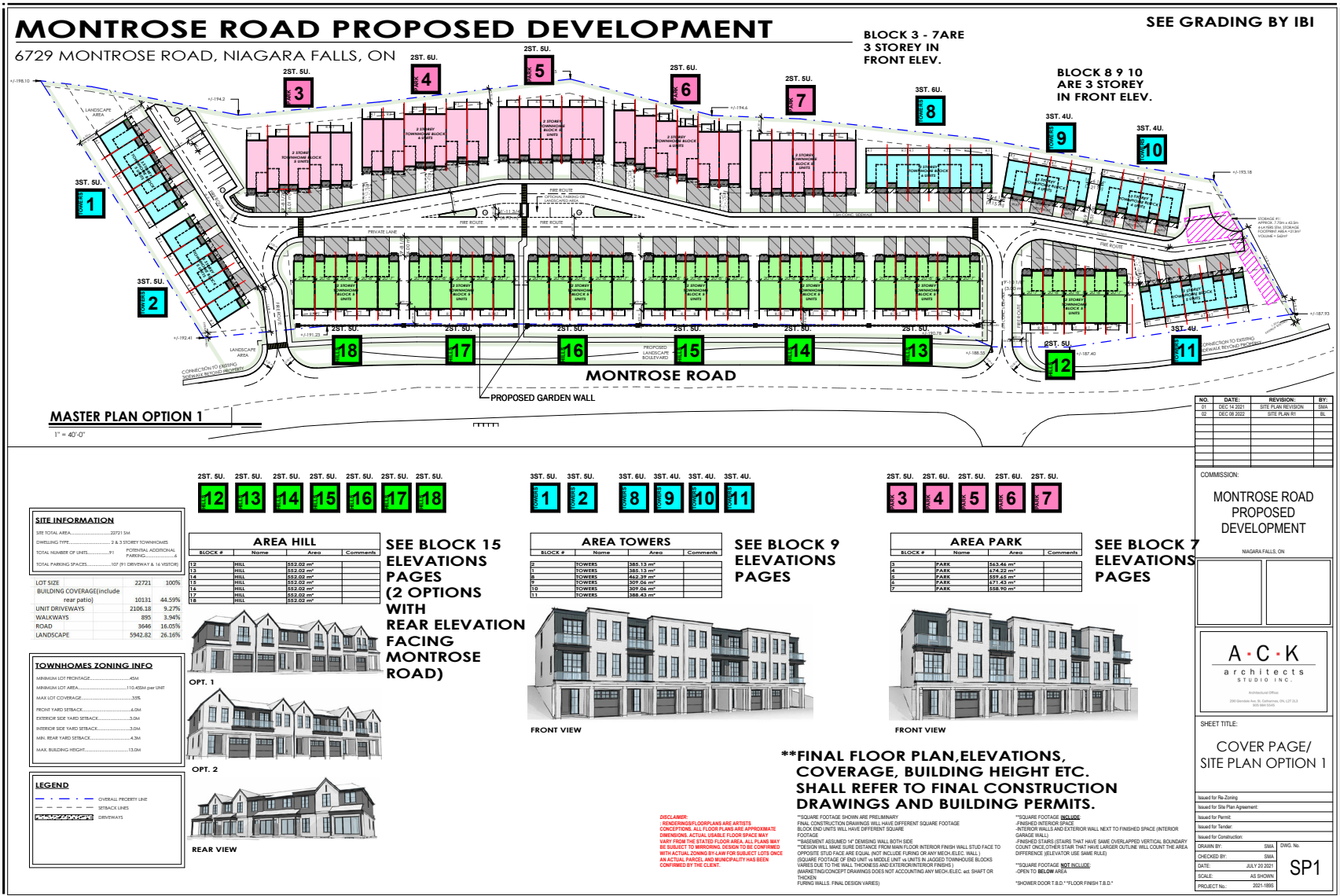
Based on review of the relevant policy, guides and analysis of the contextual setting, it is our professional opinion that the development proposal provides a suitable option for the Site, making use of underutilized lands that are well-served by communal amenities in an actively developing urban area .

Appendix A

Community Context Map



Appendix B Proposed Architectural Site Plan

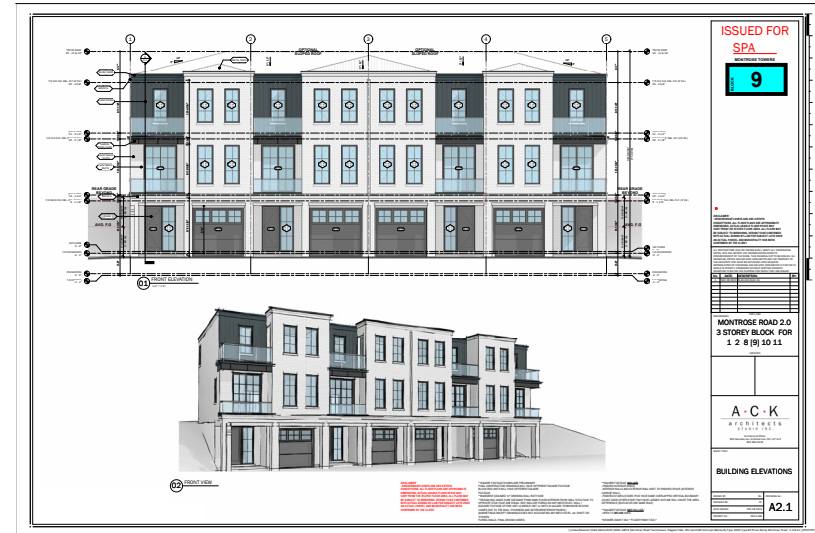


Appendix C

Proposed Architectural Elevations



EXAMPLE - BLOCK 15 FRONT ELEVATION



EXAMPLE - BLOCK 9



EXAMPLE - BLOCK 15 'REAR' ELEVATION, FACING MONTROSE RD



EXAMPLE - BLOCK 7

Appendix D Proposed Landscape Plan

PROPOSED MASTER PLAN PLANTING SCHEDULE									
KEY	BOTANICAL NAME	COMMON NAME	CAL.	CORD	MATURE HEIGHT (M)	MATURE SPREAD (M)	O.C. SPACING (M)	SPRINT	SHRUB
DECIDUOUS TREES									
AF	Acer x hybrid Amelanchier	Amelanchier Freeman Maple	80mm	W.B.	16.0	6.0	6.0	3	
AM	American Hophornbeam	Hophornbeam	80mm	W.B.	18.0	5.0	5.0	7	
CC	Cornus canadensis	Eastern Redstart	80mm	W.B.	10.0	7.0	6.0	8	
CJ	Cornus alternifolia	Japanese Dogwood	80mm	W.B.	15.0	5.0	5.0	3	
GB	Gleditsia triacanthos	Black Locust	80mm	W.B.	15.0	6.0	6.0	2	
LD	Liriodendron tulipifera	Yellow-flowering Tulip Tree	80mm	W.B.	17.0	5.0	5.0	9	
OT	Quercus macrocarpa var. prinus	Prinus White Oak	80mm	W.B.	17.0	10.0	10.0	11	
DV	Quercus prinus	Prinus	80mm	W.B.	10.0	7.0	6.0	8	
PA	Prunella occidentalis	Spiraea	80mm	W.B.	30.0	25.0	10.0	5	
QP	Quercus prinus	Prinus	80mm	W.B.	18.0	6.0	6.0	10	
DM	Quercus macrocarpa	Prinus	80mm	W.B.	20.0	10.0	10.0	8	
TC	Tilia cordata	Linden Tree	80mm	W.B.	21.0	10.0	10.0	6	
									TOTAL 85
CONIFEROUS TREES									
JV	Juniperus horizontalis	Eastern Red Cedar	250mm	W.B.	6.0	2.0	1.0	20	
PP	Pinus strobus	Blue Spruce	80mm	W.B.	18.0	6.0	6.0	8	
PS	Pinus strobus	Eastern White Pine	250mm	W.B.	20.0	8.0	7.0	4	
									TOTAL 33
ORNAMENTAL TREES									
AG	Acer glabrum	Prinus Maple	Clump	W.B.	6.0	5.0	6.0	4	
OK	Quercus macrocarpa	Milky Way Dogwood	Clump	W.B.	6.0	6.0	6.0	6	
PC	Prunella canadensis	Spiraea	Clump	W.B.	16.0	5.0	5.0	6	
									TOTAL 16
SHRUBS									
BJ	Baccharis virginica	Green Velvet Broomrape	30mm	3-pal	0.8	0.8	0.7	88	
CC	Cornus canadensis	Red-twig Dogwood	30mm	3-pal	1.2	2.0	1.2	18	
HE	Hedera helix	English Ivy	30mm	3-pal	1.5	1.5	1.2	20	
PH	Physocarpus opulifolius	Diablo	30mm	3-pal	1.5	1.5	1.2	18	
TR	Taxus canadensis	Canadian Yew	30mm	3-pal	0.8	0.8	0.7	88	
									TOTAL 202
PERENNIALS									
AA	Andropogon scoparius	Little Bluestem	1-pal	0.9	1.0	1.0	122		
CA	Chamaenerion	Red-top	1-pal	1.2	1.0	1.0	71		
ER	Eragrostis canadensis	Common Yellowgrass	1-pal	0.9	0.9	0.9	211		
LI	Liriodendron tulipifera	Yellow-flowering Tulip Tree	1-pal	0.5	0.3	0.3	100		
									TOTAL 504

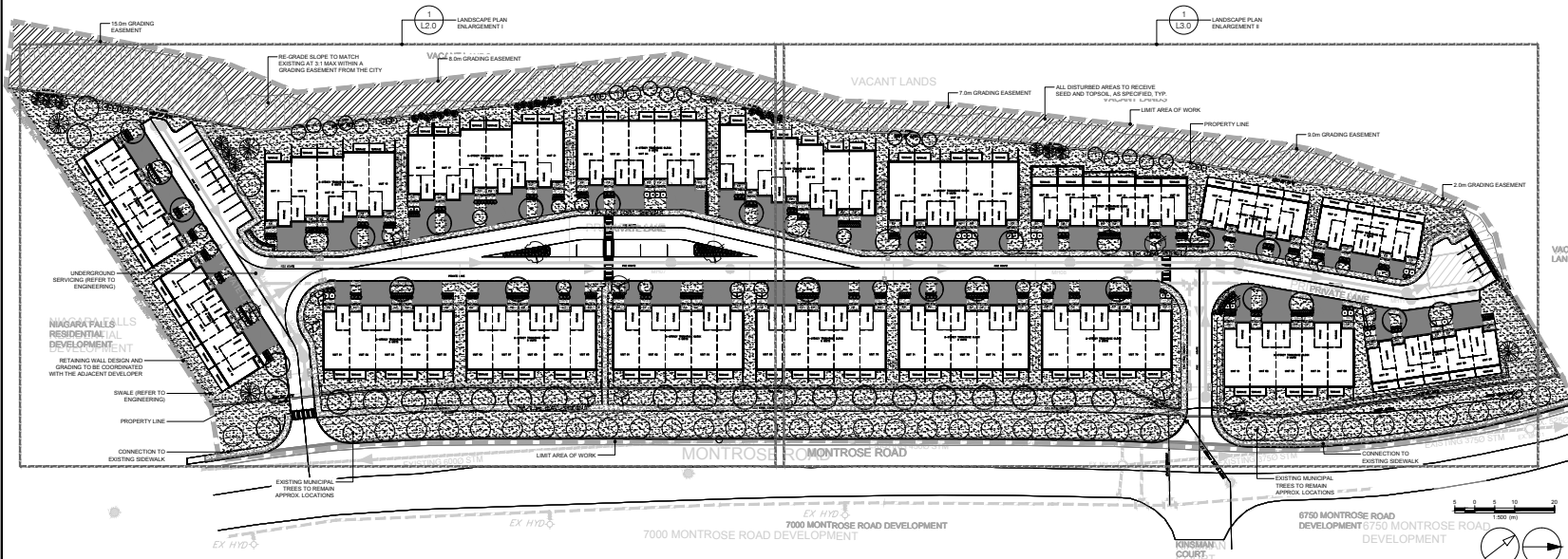
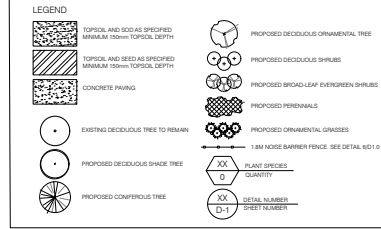
LANDSCAPE NOTES:

- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH BY-LAWS AND CODES PROVIDING A DIRECTION ON THE LOCATION.
- COMPLETE ALL WORK TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT.
- PROVIDE AN CHANGE, DISCONTINUATION OR SUBSTITUTION TO THE LANDSCAPE ARCHITECT FOR REVIEW, OBTAIN APPROVAL FROM THE LANDSCAPE ARCHITECT BEFORE PROCEEDING.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE EXISTING SERVICE LOCATIONS.
- EXACT LOCATION OF PLANT MATERIAL WILL BE DETERMINED BY PLACEMENT OF SITE SERVICES SUCH AS HYDRO VALVES, METERS, UTILITIES ROOM MAIN WATER LATERALS, UNDERGROUND LIGHT STANDOFFS, ETC.
- ALL PLANT MATERIAL LOCATIONS TO BE STAKED OR MARKED OUT AND APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- SUPPLY ALL AND MATERIAL IN ACCORDANCE WITH THE CANADIAN STANDARDS FOR NURSERY STOCK (ANSI Z60).
- INSTALL PLANT MATERIAL ACCORDING TO DETAIL DRAWING.
- DISBURSED SOIL AREAS AROUND TREES AND SHRUBS ARE TO BE COVERED WITH PREPRESSED COVER ANNUALLY SUCH AS CANADA RED OR TORO BANK STRIP MULCH OR APPROVED EQUIVALENT. ALTERNATIVE MULCHES MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.
- CONTRACTOR TO FULFILL LAYOUT DIMENSIONS AS SHOWN PROVIDED TO IT.
- ALL PLANTING SHALL BE IN ACCORDANCE WITH THE DRAWING OR TO IT.
- ACCURATE MATURITY SIZE OF PLANT MATERIAL TO BE SEEDS AS A RATE OF 20% PER PAL. SEEDS TO INCLUDE:
 - Black Eyed Susan (*Rudbeckia hirta*) 2%
 - Blue Veron (*Veronica hecabea*) 2%
 - Donald Broomrape (*Andropogon scoparius*) 2%
 - Canada Red (*Chamaenerion*) 2%
 - Common Yellowgrass (*Eragrostis canadensis*) 2%
 - Diablo (*Physocarpus opulifolius*) 2%
 - English Ivy (*Hedera helix*) 2%
 - Green Velvet Broomrape (*Baccharis virginica*) 2%
 - Little Bluestem (*Andropogon scoparius*) 2%
 - Red-top (*Chamaenerion*) 2%
 - Yellow-flowering Tulip Tree (*Liriodendron tulipifera*) 2%
 - Yew (*Taxus canadensis*) 2%
- FOR LAYOUT INFORMATION AND POWER DISTRIBUTION REFER TO THE ELECTRICAL DRAWINGS.

SEED MIX:

CONTRACTOR TO SOAK NURSERY CRIP AUDIA SAMEN OVER ENTIRE AREA TO BE SEEDS AT A RATE OF 2% PER PAL.

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE EXISTING SERVICE LOCATIONS.
- ACCURATE MATURITY SIZE OF PLANT MATERIAL TO BE SEEDS AS A RATE OF 20% PER PAL. SEEDS TO INCLUDE:
- Black Eyed Susan (*Rudbeckia hirta*) 2%
 - Blue Veron (*Veronica hecabea*) 2%
 - Donald Broomrape (*Andropogon scoparius*) 2%
 - Canada Red (*Chamaenerion*) 2%
 - Common Yellowgrass (*Eragrostis canadensis*) 2%
 - Diablo (*Physocarpus opulifolius*) 2%
 - English Ivy (*Hedera helix*) 2%
 - Green Velvet Broomrape (*Baccharis virginica*) 2%
 - Little Bluestem (*Andropogon scoparius*) 2%
 - Red-top (*Chamaenerion*) 2%
 - Yellow-flowering Tulip Tree (*Liriodendron tulipifera*) 2%
 - Yew (*Taxus canadensis*) 2%



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NIAGARA FALLS, ONTARIO**

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KEY PLAN

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ibi@ibi.com

PROJECT
MONTROSE DEVELOPMENT

**6729 MONTROSE ROAD,
NIAGARA FALLS, ON**

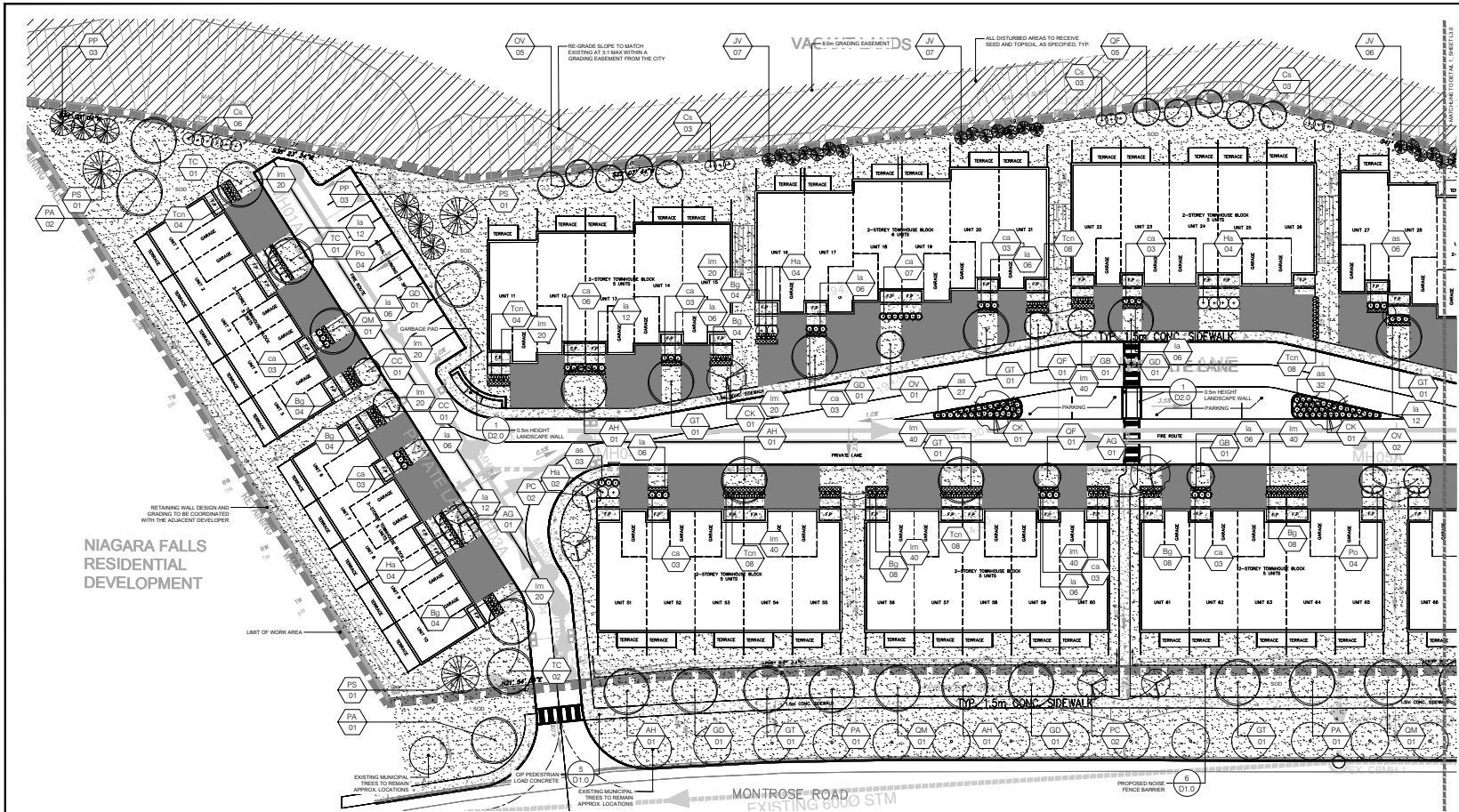
PROJECT NO: 128319
DRAWN BY: LG
PROJECT MGR: CA

CHECKED BY: TO
APPROVED BY: TO

SHEET TITLE
LANDSCAPE PLAN

SHEET NUMBER
L1.0

ISSUE
1



NIAGARA FALLS RESIDENTIAL DEVELOPMENT

LEGEND

- TOPSOIL AND SOD AS SPECIFIED MINIMUM 150mm TOPSOIL DEPTH
- TOPSOIL AND SOD AS SPECIFIED MINIMUM 150mm TOPSOIL DEPTH
- CONCRETE FINISH
- EXISTING DECIDUOUS TREE TO REMAIN
- PROPOSED DECIDUOUS SHADE TREE
- PROPOSED CONIFEROUS TREE
- PROPOSED DECIDUOUS ORNAMENTAL TREE
- PROPOSED DECIDUOUS SHRUBS
- PROPOSED BROAD-LEAF EVERGREEN SHRUBS
- PROPOSED PERENNIALS
- PROPOSED ORNAMENTAL GRASSES
- 1.8m NOISE BARRIER FENCE. SEE DETAIL 6-D10
- PLANT SPECIES QUANTITY
- XX (D-1) DETAIL NUMBER SHEET NUMBER

PROPOSED PLANTING SCHEDULE - L2.0

KEY	BOTANICAL NAME	COMMON NAME	CAL	COND	MATURE HEIGHT (m)	MATURE SPREAD (m)	O.C. (m)	QNTY
DECIDUOUS TREES								
AH	Aster multiflorus	Herbaceous Aster	80mm	W.B.	1.60	1.00	1.00	3
CC	Cornus canadensis	Eastern Reddog	80mm	W.B.	10.0	7.0	6.0	2
CR	Grass (Muhlenbergia)	Prostrate Scented Geranium	80mm	W.B.	15.0	6.0	5.0	2
GD	Garrya elliptica	Kentucky Coffee Tree	80mm	W.B.	17.0	10.0	10.0	3
GT	Quercus macrocarpa	White Oak	80mm	W.B.	17.0	10.0	10.0	3
GS	Salix caprea	Willow	80mm	W.B.	10.0	7.0	6.0	3
HS	Hamamelis virginica	Witch Hazel	80mm	W.B.	30.0	25.0	30.0	3
PA	Prunella americana	Common Plum	80mm	W.B.	18.0	6.0	6.0	7
PC	Prunella pennsylvanica	Black Cherry	80mm	W.B.	30.0	10.0	10.0	3
TC	Tilia cordata	Lime Tree	80mm	W.B.	21.0	10.0	10.0	4
CONIFEROUS TREES								
JV	Juniperus horizontalis	Eastern Red Cedar	200mm	W.B.	6.0	2.0	1.0	20
PP	Pinus strobus	White Pine	200mm	W.B.	18.0	6.0	6.0	6
PS	Pinus resinosa	Eastern White Pine	200mm	W.B.	20.0	8.0	7.0	3
			TOTAL			29		

KEY	BOTANICAL NAME	COMMON NAME	CAL	COND	MATURE HEIGHT (m)	MATURE SPREAD (m)	O.C. (m)	QNTY
ORNAMENTAL TREES								
AG	Acacia gommier	Prickly Maple	Clump	175mm	W.B.	6.0	5.0	3
CK	Cornus kousa	Milly Way Dogwood	Clump	175mm	W.B.	6.0	6.0	3
PC	Prunella pennsylvanica	Safety Pine	80mm	W.B.	10.0	4.0	4.0	4
SHRUBS								
BJ	Buxus x Green Velvet	Green Velvet Boxwood	50mm	3 gal	0.8	0.8	0.7	44
CS	Cornus sericea	Red Dogwood	50mm	3 gal	1.75	2.0	1.2	13
FR	Fraxinus pennsylvanica	White Ash	50mm	3 gal	1.8	1.8	1.2	13
FR	Fraxinus pennsylvanica	White Ash	50mm	3 gal	1.75	1.5	1.2	4
TR	Taxus canadensis	Canadian Tree	50mm	3 gal	0.8	0.8	0.7	40
			TOTAL			123		
PERENNIALS								
AA	Asplenium adnigrum	Black Star Fern	1 gal	0.9	1.0	1.0	10	
CA	Calluna vulgaris	Common Heath	1 gal	1.2	1.0	1.0	10	
LA	Laurencia angustifolia	English Lavender	1 gal	0.5	0.5	0.5	100	
TR	Trifolium repens	White Clover	1 gal	0.8	0.8	0.8	100	
			TOTAL			230		

SEED MIX:
 CONTRACTOR TO SOW NURSE CROP AND/OR SEED OVER ENTIRE AREA TO BE SEED AT A RATE OF 200g/m².
 8-14% RURAL GRASS (Lolium perenne)
 25% Bluegrass (Poa trivialis)
 25% Ryegrass (Lolium reynoldii)
 25% Clover (Trifolium repens)
 25% White Clover (Trifolium repens)
 25% Red Clover (Trifolium pratense)
 25% Lucerne (Medicago sativa)
 25% Timothy (Phleum pratense)
 25% Orchard Grass (Cymbopogon dactyloides)
 25% Brome Grass (Cenchrus ciliaris)
 25% Fescue Grass (Festuca ovina)
 25% Ryegrass (Lolium reynoldii)
 25% Clover (Trifolium repens)
 25% White Clover (Trifolium repens)
 25% Red Clover (Trifolium pratense)
 25% Lucerne (Medicago sativa)
 25% Timothy (Phleum pratense)
 25% Orchard Grass (Cymbopogon dactyloides)
 25% Brome Grass (Cenchrus ciliaris)
 25% Fescue Grass (Festuca ovina)

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 NIAGARA FALLS, ONTARIO**

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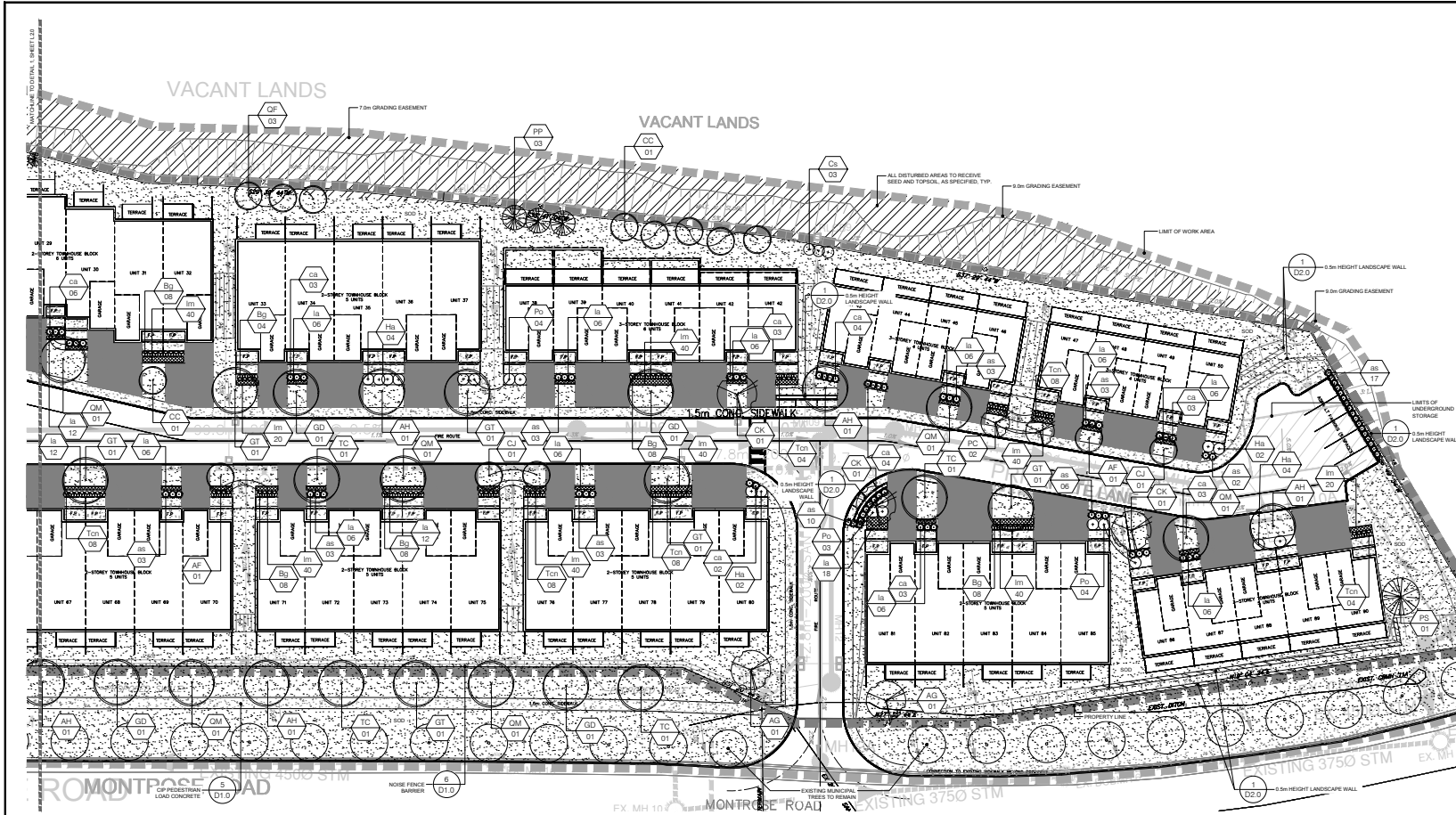
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PROJECT
 MONTROSE DEVELOPMENT
 6729 MONTROSE ROAD,
 NIAGARA FALLS, ON

PROJECT NO: 126319
DRAWN BY: LG
CHECKED BY: TO
PROJECT MGR: CA
APPROVED BY: TO

SHEET TITLE
 LANDSCAPE PLAN
 ENLARGEMENT I

SHEET NUMBER L2.0 **ISSUE** 1

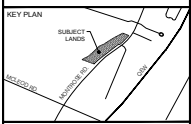


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PROJECT
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6729 MONTROSE ROAD,
NIAGARA FALLS, ON

PROJECT NO:
126219

DRAWN BY:
LG

CHECKED BY:
TO

PROJECT MGR:
CA

APPROVED BY:
TO

SHEET TITLE
LANDSCAPE PLAN
ENLARGEMENT II

SHEET NUMBER
L3.0

ISSUE
1

LEGEND

	TOPSOIL AND SEED AS SPECIFIED		PROPOSED DECIDUOUS ORNAMENTAL TREE
	TOPSOIL AND SEED AS SPECIFIED		PROPOSED DECIDUOUS SHRUBS
	CONCRETE PAVING		PROPOSED BROAD-LEAF EVERGREEN SHRUBS
	EXISTING DECIDUOUS TREE TO REMAIN		PROPOSED ORNAMENTAL GRASSES
	PROPOSED DECIDUOUS SHADE TREE		1.8M NOISE BARRIER FENCE. SEE DETAIL 6.01.0
	PROPOSED CONIFEROUS TREE		PLANT SPECIES QUANTITY
			DETAIL NUMBER SHEET NUMBER

PROPOSED PLANTING SCHEDULE - L3.0

KEY	BOTANICAL NAME	COMMON NAME	CAL.	COND.	MATURE HEIGHT (M)	MATURE SPREAD (M)	D.I.C. (M)	D.I.C. SPACING (M)	QTY.
ORNAMENTAL TREES									
AF	Acer x pennsylvanicum 'Armstrong'	Armstrong Freeman Maple	60 mm	W.B.	16.5	6.0	6.0	3	4
AH	Aster multiflorus	Star-of-Bethlehem	60 mm	W.B.	16.5	15.0	10.0	4	4
CC	Clivia caroliniana	Eastern Redbud	60 mm	W.B.	15.0	7.5	6.0	6	6
GD	Geopelia angustata	Spokane	60 mm	W.B.	15.0	5.0	5.0	3	3
GD	Geopelia angustata	Hardy Holly Tree	60 mm	W.B.	17.0	13.0	10.0	4	4
GD	Geopelia angustata var. integrata	Thomas's Holly Leaf	60 mm	W.B.	17.0	12.0	10.0	6	6
QP	Quercus rubra 'Fastigiata'	English Oak	60 mm	W.B.	16.0	6.0	6.0	3	3
QM	Quercus macrocarpa	Big Oak	60 mm	W.B.	20.0	13.0	10.0	6	6
TC	Thuja occidentalis	Liberty Tree	60 mm	W.B.	21.0	12.0	10.0	4	4
		TOTAL							39
CONIFEROUS TREES									
BP	Buxus sempervirens	Box Hedge	250 mm	W.B.	14.0	6.0	6.0	3	3
PS	Pinus strobus	Eastern White Pine	250 mm	W.B.	30.0	6.0	7.0	1	1
		TOTAL							4

KEY	BOTANICAL NAME	COMMON NAME	CAL.	COND.	MATURE HEIGHT (M)	MATURE SPREAD (M)	D.I.C. (M)	D.I.C. SPACING (M)	QTY.
ORNAMENTAL TREES									
AG	Acer glabrum	Paperbark Maple	Clump	175 cm	W.B.	6.0	5.0	5.0	2
CK	Cornus kousa 'Milly May'	Milly May Dogwood	Clump	175 cm	W.B.	6.0	5.0	5.0	3
PC	Physalis peruviana 'Chamberlain'	Chamberlain Physalis	Clump	60 mm	W.B.	10.0	4.0	4.0	2
		TOTAL							7
SHRUBS									
Ng	Nyssa sylvatica 'Green Velvet'	Green Velvet Sweetgum	50 cm	3 gal	0.8	0.8	0.7	14	14
SD	Sorbus domestica	Red Flower Dogwood	50 cm	3 gal	1.75	2.0	1.2	3	3
PH	Photinia serrulata 'Amersfoort'	Amersfoort Photinia	50 cm	3 gal	1.5	1.5	1.2	12	12
PH	Photinia serrulata 'Dorset'	Dorset Photinia	50 cm	3 gal	1.75	1.5	1.2	11	11
Tn	Taxus canadensis	Canadian Tree	50 cm	3 gal	0.8	0.8	0.7	40	40
		TOTAL							110
PERENNIALS									
AA	Andropogon scoparius/Schizanthus scoparius	Little Bluestem	1 gal	0.9	1.0	1.0	1.0	13	13
CA	Callirhoe coccinea 'Karl Foerster'	Feather Reed Grass	1 gal	1.2	1.0	1.0	1.0	21	21
EL	Elymus elongatus 'Riverside View'	English Broomgrass	1 gal	0.8	0.8	0.8	0.8	100	100
EL	Elymus elongatus 'Riverside View'	Invenged Lily Turf	1 gal	0.5	0.5	0.5	0.5	20	20
		TOTAL							313

SEED MIX:
CONTRACTOR TO SOAK NATURE GROUP ANNUALS OVER ENTIRE AREA TO BE SEEDS AT A RATE OF 20g PER SQ. METER.
#145 - NURSERY ONTARIO ROADSIDE NURSERY BY CSC SEEDS TO BE SEEDS AT A RATE OF 20g PER SQ. METER. SEE MIX TO INCLUDE

Black-eyed Susan (Rudbeckia hirta)	2%
Blue Veron (Ornithogalum nuttallii)	2%
Bluestem (Eleocharis acicularis)	1%
Canada Blue (Elymus canadensis)	2%
Common Bluegrass (Poa annua)	1%
Crackberry (Rumex crispus)	1%
Field-grass (Dactylis glomerata)	2%
Lady Blue (Ornithogalum nuttallii)	2%
New England Aster (Aster novae-angliae)	2%
Shrewsbury (Rumex crispus)	2%
Virginia Blue (Elymus canadensis)	2%
Wild Bergamot (Monarda mollis)	1%

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1	ISSUED FOR SPA	2023-04-04

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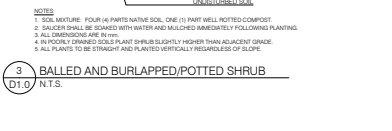
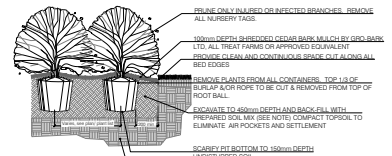
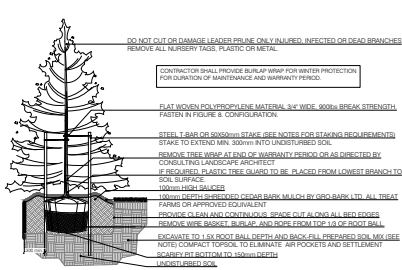
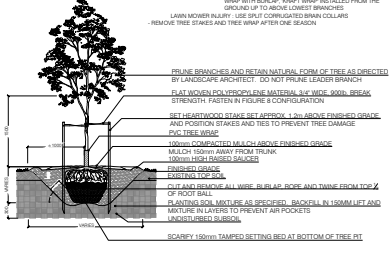
PROJECT
MONTROSE DEVELOPMENT
 6729 MONTROSE ROAD,
 NIAGARA FALLS, ON

PROJECT NO:
 126219
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 LG
 PROJECT MGR:
 CA

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 TO
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 TO

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LANDSCAPE DETAILS

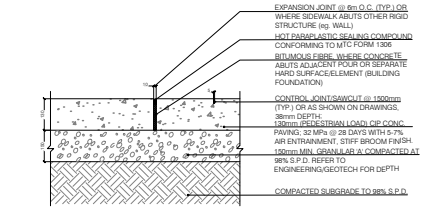
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1



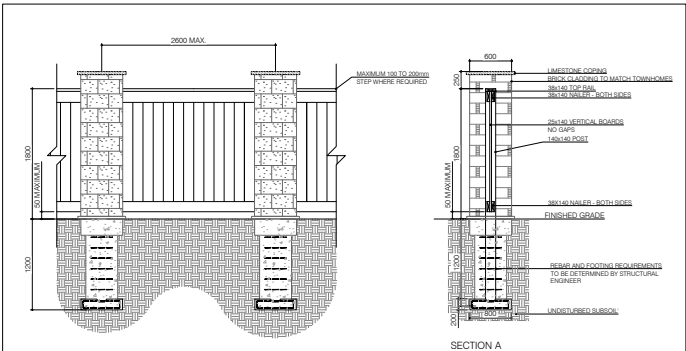
1 BALLED & BURLAPPED/WIRE BASKET DECIDUOUS TREE
 D1.0 N.T.S.

2 BALLED & BURLAPPED/WIRE BASKET CONIFEROUS TREE
 D1.0 N.T.S.

4 CONTAINER GROWN PERENNIAL/GRASS
 D1.0 N.T.S.



5 CIP PEDESTRIAN LOAD CONCRETE
 D1.0 N.T.S.



ELEVATION
 NOTES
 1. CONTRACTOR TO SUBMIT STAMPED SHOP DRAWINGS FOR APPROVAL BY LANDSCAPE ARCHITECT & OWNER
 2. ALL MATERIALS, COMPONENTS AND WORKMANSHIP TO CONFORM TO BUILDING AND LOCAL BY-LAWS
 3. FENCING CONSTRUCTED ON BEHIND
 4. ALL WOOD TO BE PRESSURE TREATED SELECTED MANLY FOR GOOD APPEARANCE ALL MEMBERS SHALL BE FREE OF WANE AND BARK POCKETS ALL TORN GRASS SHALL BE ELIMINATED BY SANDING AND PLANNING MEMBERS EXHIBTING MODERATE TO HEAVY KNOTS SHALL BE WELL DISTRIBUTED THROUGHOUT THE SITE
 5. ALL WOOD TO BEAR LUMBER GRADING STAMP
 6. FASTENERS SHALL HAVE EXTERIOR GRADE FINISHES
 7. ALL GALVANIZING TO BE NOT DIPPED IN CONFORMANCE TO CSA STANDARD C164
 8. DRIVE ALL FASTENER HEADS BELOW SURFACE OF WOOD USE SUFFICIENT SIZE AND QUANTITY OF FASTENERS TO ENSURE A STABLE SECURE STRUCTURE
 9. ALL LUMBER SIZES ARE ACTUAL SIZES RATHER THAN NOMINAL SIZES
 10. CONCRETE TO HAVE MINIMUM COMPRESSIVE STRENGTH OF 20 MPa
 11. SEE LANDSCAPE PLAN FOR NOISE BARRIER FENCE LOCATION
 12. ENSURE NO GAPS BETWEEN VERTICAL FENCE BOARDS
 NOTE: CONTRACTOR TO SUBMIT STAMPED SHOP DRAWINGS FOR APPROVAL BY LANDSCAPE ARCHITECT & OWNER

6 NOISE FENCE BARRIER
 D1.0 N.T.S.



MINI-CRETA 3[®] ARCHITECTURAL

DESCRIPTION: Wall double-sided TEXTURE: Split face with straight edged corners



COMPATIBLE CAPS
See page 140 for product compatibility.

NOTES:
When building a double-sided wall one pallet will cover an average of 21.76 sq. ft.

unit can be used as a regular or vertical unit.

See page 135 to 156 for more technical information.

Specifications per pallet	Imperial	Metric
Cubing	24 ft ³	2.23 m ³
	95.01 lin. ft	28.96 lin. m
Approx. Weight	2,465 lbs	1,118 kg
Minimum radius	7 ft	2.1 m
Number of rows	8	
Coverage per row	3 ft ²	0.28 m ²
Linear coverage per row	11.88 lin. ft	3.62 lin. m

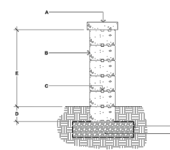
Unit dimensions	in	mm	Units/pallet
Height	2 3/4"	75	32 units
Depth	9 3/4"	250	
Length 1	9 3/4"	230	
Length 2	7 3/4"	180	
Height	2 3/4"	75	24 units
Depth	9 3/4"	250	
Length 1	11 3/4"	300	
Length 2	9 3/4"	250	
Height	2 3/4"	75	8 units
Depth	9 3/4"	250	
Length 1	11 3/4"	300	
Length 2	11 3/4"	300	
Height	2 3/4"	75	16 units
Depth	9 3/4"	250	
Length 1	14 3/4"	375	
Length 2	12 3/4"	325	
Height	2 3/4"	75	16 units
Depth	9 3/4"	250	
Length 1	14 3/4"	375	
Length 2	13 3/4"	350	



1 0.5m HEIGHT LANDSCAPE WALL
D2.0 N.T.S.

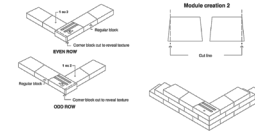
INSTALLATION GUIDE

FREESTANDING WALLS - MINI-CRETA 3[®] AND 6[®]



- MINI-CRETA 3[®] & 6[®]**
- TECH-BLOC CAP UNIT SECURED TO UNIT BELOW WITH FLEXLOCK ADHESIVE
 - MINI-CRETA 3[®] AND 6[®] DOUBLE-SIDED WALL UNITS SECURE EACH OTHER WITH FLEXLOCK ADHESIVE
 - CONNECTOR
 - EMBEDMENT DEPTH, 4" (100 mm) MIN.
 - 29 PSI (200 mm) MAX.
 - SEDIMENT
 - COMPACTED GRANULAR LEVELING PAD, 4" (100 mm) THICK MIN. THICKNESS ACCORDING TO PROJECT SPECIFIC CONDITIONS

90° CORNER OF A DOUBLE-SIDED WALL



- The corner block must be cut to reveal the texture**
- Alternate odd and even rows.
 - Stagger joints from one row to the next.
 - Glue all modules at each row with Flexlock adhesive.
 - Cavities, grooves and connectors are not illustrated to avoid overloading the image.
 - It is possible to alternate the blocks (A, B or C) in the same row to create different patterns. However, a corner block must always be present at the end of a row and must be alternated for each subsequent row.

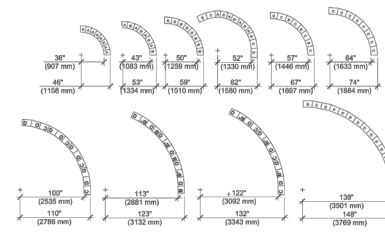
DOUBLE-SIDED WALL - END OF A STRAIGHT WALL



- * It is possible to alternate the blocks (A, B or C) in the same row to create different patterns. However, a corner block must always be present at the end of a row and must be alternated for each subsequent row.

INSTALLATION GUIDE

DOUBLE-SIDED WALL RADIUS - MINI-CRETA 3[®] AND 6[®]



WALL TO BE DESIGNED AS PER MANUFACTURER'S SPECIFICATIONS. STAMPED SHOP DRAWINGS TO BE SUBMITTED FOR REVIEW BY CIVIL & LANDSCAPE ARCHITECTS.

CLIENT
GEMINI CORP

6729 MONTROSE ROAD
NIAGARA FALLS, ONTARIO

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ISSUE	No.	DESCRIPTION	DATE
1	1	ISSUED FOR SPA	2023-04-04

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PROJECT
MONTROSE DEVELOPMENT

6729 MONTROSE ROAD,
NIAGARA FALLS, ON

PROJECT NO: 126219
DRAWN BY: LG
CHECKED BY: TO
PROJECT MGR: CA
APPROVED BY: TO

SHEET TITLE
LANDSCAPE DETAILS

SHEET NUMBER D2.0
ISSUE 1