REPORT TO THE CALGARY PLANNING COMMISSION

DEVELOPMENT PERMIT	ITEM NO: 02	
	CPC DATE:	2011 July 7
	DP NO:	DP2010-4492

SUNNYSIDE (Ward 7 – Alderman Farrell)



PROPOSAL:

New: Multi-Residential Development (101 Unit Apartment, 8 Storeys)

APPLICANT:	OWNER:	
Battistella Developments	1479955 Alberta Ltd. (Simon Battistella)	
MUNICIPAL ADDRESS:	LEGAL DESCRIPTION:	
1037 2 Ave NW;	(Plan 2448 O, Block 1, Lots 21-27)	
233, 235, 237 & 241 9A St. NW	(Map 21C)	
EXISTING LAND USE DISTRICT(S): DC 74D2010		

AREA OF SITE: 0.195 ha \pm (0.482 ac \pm)

CURRENT DEVELOPMENT:	4 Unit Apartment Building;
	Single-Detached Dwellings (4)

ADJACENT DEVELOPMENT:

NORTH:	2 Avenue NW; Commercial development (C-COR1 f2.8h13);
	4 storey Multi-Residential Development (M-C2)

SOUTH: Single-Detached Dwellings (M-C2)

EAST: LRT Tracks; Park space (S-CS); Single Detached Dwellings (M-CGd72)

WEST: At-grade Parking Lot, Commercial development (C-COR1 f2.8h13)

DEVELOPMENT SUMMARY			
RULE	BYLAW STANDARD	PROPOSED	RELAXATION
DENSITY	Minimum 30 units	101 units	N/A
HEIGHT (as per DC Guideline)	26.0 m	26.0 m	N/A
SETBACKS			
Setback from 2 Ave (North)	0.0 m	0.3 m	N/A
Setback from Neighbour (South)	0.0 m	0.4 m	N/A
Setback from 9A St. (East)	0.0 m	0.2 m	N/A
Setback from lane (West)	0.0 m	1.1 m	N/A

RULE	BYLAW STANDARD	PROPOSED	RELAXATION
PARKING	Shared Entry:	Residential	N/A
	0.9 stalls/unit (86 stalls)	99 stalls	
	0.1 visitor stalls/unit (10 stalls)		
	No Shared Entry:	Visitors:	
	1.0 stalls/unit (6 stalls)	11 stalls	
	0.15 visitor stalls/unit (1 stall)		
LANDSCAPING	40% less 4% reduction (Street-oriented) = 36%	43.9%	N/A

Roof: Concrete Pavers & Plantings (Roof-top Terrace), reflective coloured ballast Windows: Clear Silicate Glass (Non-Reflective)

SUMMARY OF CIRCULATION REFEREES		
CPTED ASSESSMENT Crime Prevention Through Environmental Design	No concerns.	
ENVIRONMENTAL MANAGEMENT	No concerns.	
URBAN DESIGN REVIEW COMMITTEE	Comments provided. See report.	
SPECIAL REFEREE(S) Kensington BRZ	See Appendix V	
COMMUNITY ASSOCIATION	Comments provided. See Appendix IV.	
Hillhurst/Sunnyside		

PLANNING EVALUATION

Introduction

This application is for a 101 unit multi-residential development (apartment building) located at the corner of 2 Avenue NW and 9A Street NW within the community of Sunnyside. The site was recently redesignated by Council to a Direct Control District (Bylaw 74D2010).

The DC Guidelines refer to the M-H2 district of Bylaw 1P2007. See Appendix II.

Site Context

The subject site is strategically located at the intersection of 2 Avenue and 9A Street NW within a one block walking distance of the Sunnyside LRT and positioned a block east of 10 Street NW, which is one of the main commercial corridors within Kensington Village. To the east, across the LRT track are a series of small triangular-shaped parks. Beyond these parks are single-detached dwellings. Directly north of the site are four storey multi-residential buildings which front onto 9A Street NW. To the south of the subject site, there are a series of single storey and one and a half storey homes built between 1911 and 1946.

The subject property (consisting of 5 properties), contains 4 single-detached homes and a two storey apartment building located at the corner of 9A Street NW and 2 Avenue NW. This building is a landmark due to its unique art-deco style architecture and has been designated by Council as having significant heritage value. For this reason, Heritage Planning has requested a series of interpretative elements be placed on site to commemorate the history of this building. See section below.

Land Use District

The subject site is designated Direct Control and is subject to the Multi-Residential - High Density Medium Rise (M-H2) District with exceptions. The DC District is designed to support a variety of multi-residential forms. Sites are typically located on strategic parcels in transit and transportation corridors with high density. Key provisions of the land use district are:

- Minimum density of 150 uph (min. 30 units, 101 proposed). No maximum density.
- Maximum height of 26 m (as stipulated in the DC Guidelines).
- Podium Setback/Envelope: Parcel sharing a property line with a street or site designated M-C2 ..., the maximum height is 10 m within 3.0 m of shared property line (as per the DC Guideline). Under the M-H2 District, the building height is restricted to 10 m within 4.0 m of a shared property line.
- Provides opportunities for street-oriented multi-residential development.

Site Characteristics

The site slopes gently from south to north, with the lowest point located at the northeast corner (intersection of 9A Street NW and 2 Avenue NW). Boulevard trees line 9A Street NW frame the development, providing a nice experience for pedestrians walking along the street.

Legislation & Policy

The Hillhurst/Sunnyside Area Redevelopment Plan (ARP) was approved by Council in 1988 January and most recently amended in 2009 February. The majority of policies most applicable to this development appear in Part II of the document which focuses on Transit Oriented Development (TOD).

This Plan provides a vision for residents "to live, work, shop and play without the need of a car". This vision emphasizes medium-density mid-rise development, located on major streets and locations where development supports transit use, creates a vibrant pedestrian realm, and maintains existing community character. New buildings will be oriented towards the pedestrian, with well-articulated streetwalls built along the sidewalk with a steady rhythm of front doors and

windows. Building elements above three and four stories are stepped back to create uniform cornice lines and maintain sun access to the street and sidewalk.

The subject site falls within the medium-density mid-rise area which has been designed to accommodate higher density due to its proximity to the LRT station and to provide a transition for residents in the Sunnyside residential neighbourhood located east of 9A Street.

The proposed development complies with the general intent of policies stated within the Hillhurst/Sunnyside ARP, including;

- Creating redevelopment which is sensitive to the neighbouring context through building scale and design, while encouraging innovation in design.
- Development of built forms and uses other than loading and vehicle access in rear lane in order to create activity and natural surveillance.
- Contribute to the distinctive and eclectic character of the area, including the traditional small lot pattern of development.
- Designing buildings which are articulated and detailed in a manner that reinforces existing development rhythms.
- Encouraging an environmentally sustainable neighbourhood and building design.

See Appendix III for a complete review of all policies relevant to this proposed development.

Site Layout & Building Design

The overriding principle of this design was to locate the apartment building to meet the tenets of street-oriented design as described in the Land Use Bylaw. As such, the lower portion of the building was stepped forward of the homes along 9A Street NW and placed close to the property line along 9A Street NW and 2 Avenue NW, creating a positive intimate experience for the pedestrian. The principle entrance into the building is from 9A Street NW, with a secondary entrance placed along 2 Avenue NW. Access to the underground parkade, including loading and garbage removal occurs at the rear of the building off the lane.

Building Design

Podium Section:

The proposed building resembles two components – a podium and tower section. The 2 storey podium section consists of 16 two-storey townhouse units and 12 apartment units. The majority of the townhouse units face onto 9A Street NW and are designed to mimic the rhythm of the single-detached homes along the 9A Street NW. The townhouse units wrap around the north side of the building, facing onto 2 Avenue. All 12 apartment units at the podium level face west onto the lane. Two of these units are at grade and gain their access by a sidewalk from 2 Avenue NW which runs parallel to the lane.

Individual Street-Oriented Entries:

All ground floor units have individual entries with raised patios delineated by concrete planters and a 1.1 metre high aluminum picket fence. Vertical fin elements composed of burnished block project past the main façade and extend the full two storeys, providing further building articulation and added separation between the townhouse units. While entries along 9A Street NW are set into the building, those along 2 Avenue NW are flush to the façade and carry more a commercial feel. For added definition, grey metal open canopies have been placed above each of these entries. These compliment the yellow and grey canopies which accent the main entrances along 9A Street NW and 2 Avenue NW respectively. To complete the design, burnished block has been added in areas where the building transitions along 2 Avenue NW, providing a nice contrast to the glass and grey metal panels.

Potential Future Commercial:

To facilitate future support commercial uses (as outlined in Section 3.13 of the Hillhurst/Sunnyside ARP) the two end units at the corner of 9A Street NW and 2 Avenue NW have been designed so that the residential units can easily be converted to a commercial use should opportunities arise.

Tower Mid-Rise:

The core of the building consists of floors 3 through 8. At the third storey, the apartment units step back around the entire building, offsetting the townhouse units below. The roof areas of the townhouse units act as terraces for the third storey apartment units. From 9A Street NW, the entire tower section is staggered half way back as seen on the south facade, adding articulation and interest to the building. A number of bedrooms on the 4th, 6th and 7th floors also extend past the balconies to the outer facade. For added affect, these bump outs have been accented with yellow metal and appear on the front (East) and rear (West) elevations. The tower is capped off by the mechanical penthouse which provides access to a roof-top amenity space. See Landscaping for more details.

The apartment building incorporates a variety of materials, most notably glass panels which extend from floor to ceiling on all floors. This is offset by vertical columns of grey metal which extend to the top of the building's parapet. The metal panelling is used further to frame the mechanical penthouse which extends the full length of the building.

The total gross floor area of the building on all 8 floors is 9694.49 square metres. The building (including the mechanical penthouse) has a FAR of 4.97. The overall building height is 26.0 m which meets the maximum height limit as prescribed in the DC Guidelines. Refer to Appendix I for details of the building plans.

Heritage Commemoration/Interpretive Feature:

With direction from Heritage Planning, the applicant will be providing several historic features in commemoration of the existing building located at 1037 – 2 Avenue NW. The features will include 2 bronze medallions and two commemorative wall mounted plaques. The bronze medallions will be located within the public sidewalk at the corner of 2 Avenue NW and 9A Street NW, the other adjacent to the lane within the small plaza seating area. Both commemorative plaques will be located on site, one near the northeast corner of the building, the other behind the bench seating at the northwest corner of the site.

Financing the Public Realm:

The Area Redevelopment Plan requires that all new development pay a development levy or levies based on each square metre of building towards the cost of public improvements that serves the entire area. One of these improvement measures is the upgrading of streetscapes and open spaces elsewhere within the community.

In response to this initiative, LUPP has formalized the costing for developers as \$726.13 per unit for residential development. Based on the proposed development of 101 units, the required developer charge is \$73,338.64. In support of this community initiative, the developer has agreed to pay the required contribution as indicated in the Conditions of Approval.

CPAG has determined that this contribution will be held by The City until the levy is formally established.

CPTED - Crime Prevention Through Environmental Design

The application was reviewed by the Calgary Police Service and no concerns were noted.

Environmental Site Assessment

A Phase 1 Environmental Site Assessment (ESA) was submitted by the applicant. Upon review, Environmental Management (Urban Development) found the report satisfactory. No further update or modifications were required.

Urban Design Review Panel

The proposed development was reviewed by the Urban Design Review Panel. The following lists the main comments provided by the Panel and how they were addressed during the review of this application.

Urban Design Review Panel Comment	Response
The roof terrace requires handicapped accessibility.	Development has not been targeted for the accessibility market.
Greater legibility of 9A Street NW entrance	 Improvements were made by: Widening the formal entry area into the building. Placing yellow metal canopy over entrance Locating building identification signage on top of canopy. Inset address into landscaped wall along 9A Street NW.
Class 2 bicycle storage creates bottleneck on tight 9A Street NW access.	Three (3) Class 2 Bicycle stalls have been placed by the front entrance. The remaining are located along 2 Avenue NW (5 stalls) and off the lane at the northwest corner of the building (3 stalls).
Recommends a sidewalk cut through the boulevard on 9A street NW to allow for better access to building.	5 separate sidewalk cuts currently exist through the 9A Street NW boulevard along the length of the subject site. See Landscape Plan (DPL-1)
The applicant is encouraged to adhere to an elevated standard of execution in both public realm and building facades (for example consideration of metal rather than EIFS).	The exterior material proposed on the elevations will either be a metal or EIFS panel depending upon the type of window wall system chosen.

Landscaping

Landscaping has been proposed at the ground, third and most notably roof-top level. At-grade, each unit has a raised amenity space delineated by hedge and decorative fencing. The hedge and fencing detail carries the same character as some of the existing homes along 9A Street NW. Similarly at the third level, raised planters have been used to separate each private deck and provide privacy between units.

At the roof-top, the south facing terrace will provide nearly 400 square metres of landscaped common amenity area, designed with pathways, low level planters with shrubs and a variety of plantings, ornamental grasses, bench seating, open areas and a fireplace. This space will be available for all residents to use and can be accessed by stairs from the 8 floor level.

Sufficient trees have been placed at grade to meet bylaw requirements. Additional trees exist within the boulevard along 9A Street NW and will be protected at all times during construction. No boulevard trees will be removed to accommodate this development.

Site furniture such as benches, bicycle racks will be provided in certain locations on site, including a heritage medallion which will be located at the northwest corner of the site. The heritage medallion will commemorate the heritage building which previously existed on site.

Bylaw Relaxations

Under Bylaw 1P2007, hard landscaping should not comprise more than 50 percent (390.4 square metres) of the required landscaping (780.8 square metres) when a street-oriented multiresidential building is being proposed. According to the plans, hard landscaping makes up 432.19 square metres or 55.35 percent of the total required landscaping; a relaxation of 42.79 square metres. Administration recommends a relaxation to the required hard landscaped area as the overall hard surface area is slightly above the area allowed and is offset by an abundance of soft landscaping (grass and planters), especially at grade. Furthermore, over one-third of the hard landscaping proposed is provided on the roof-top amenity area, which has been designed for active and passive use.

Site Access & Traffic

No Traffic Impact Assessment was required.

All vehicular access including loading/unloading and garbage pickup will occur along the rear of the building, directly off the paved lane. The lane is located behind (West) of the subject site and runs parallel to 9A Street NW.

Parking

No parking study was required.

According to Bylaw 1P2007, the proposed development requires 92 residential and 11 visitor stalls. Underground parking is accessed off the lane and meets bylaw standards with the provision of 99 residential and 11 visitor stalls.

Bicycle parking meets the Bylaw standards, with the provision of 51 Class 1 and 11 Class 2 stalls. The secured Class 1 stalls are located within Parkade Level 1, while the Class 2 stalls are placed strategically around the building.

Site Servicing for Utilities

Existing onsite sanitary and storm connections are available to service the proposed development. No upgrades to the existing servicing are required to support demand generated by proposed development.

Note: The redesign plan for 2 Avenue NW (from 9A Street NW to 10 Street NW) has been included in Appendix VI for information purposes only. It is not predicated on the construction of the subject development proposal.

Environmental Sustainability

The proposal is seeking to design to the BuiltGreen Program certification. BuiltGreen projects are 3rd party certified, energy efficient and environmentally responsible homes. The purpose of the BuiltGreen Program is to promote, encourage, enable and recognize environmentally responsible residential construction practices. There are six areas of focus:

- 1. Environmental concern;
- 2. Increased energy efficiency and reduced pollution;
- 3. Healthier indoor air;
- 4. Reduction in water usage;
- 5. Preservation of natural resources; and,
- 6. Improved home durability and reduction in maintenance.

The Natural Resources Canada EnerGuide Rating System is part of the certification process. All BuiltGreen buildings benchmark their energy efficiency against the EnerGuide Rating System. The BuiltGreen checklist includes an energy efficiency requirement, and a menu of options in categories, addressing a range of "green" items from which the builder can select to meet the Bronze, Silver, Gold and Platinum achievement levels. The proposed development will be a BuiltGreen Platinum Building. See Appendix VII.

The proposed development will include a variety of sustainable initiatives, including the following:

- Water and energy efficient plumbing fixtures and appliances.
- Using structural elements containing recycled materials and locally sourced building materials and supplies.
- Automated lighting systems to be used in all public areas the majority which are fluorescent or LED.
- Rain water capture on mechanical penthouse to be used to water plantings on roof-top amenity space.
- Efficient irrigation system using rain sensors and drip feed will be used for all vegetation proposed at the ground and third storey level.
- All temporary power used to construct the building will be provided by Green renewable energy.

Community Association Comments

The Hillhurst/Sunnyside Community Association was circulated the initial application and amended plans/renderings to keep them informed and engaged in the process. The following is a response to their most recent letter which can be cross-referenced in Appendix IV.

- 1. Architectural and Urban Design
 - a. The sun-shadow study as shown in the report was reviewed internally by Urban Design specialist and found acceptable. Limited amounts of shadowing is expected on the North side of 2 Avenue NW during the months of May through September, considered the critical shadow period in which most cases are measured. The ARP set a height limit of 26 m with a 3 metre stepping of the building beyond 12 m in height as a design mechanism to mitigate the impact of shadowing and massing adjacent to the public realm. This development achieves both these principles.
 - b. With direction from the Urban Design Review Panel (UDRP) and Urban Design (LUPP) the proposed plans/renderings were reviewed with respect to building design, its massing and proposed height. The following characteristics were identified:
 - All four building sides have been articulated through the use of different materials, colours and building stepbacks.
 - The building was designed only with a two storey podium (one less than ARP allows) to provide a better pedestrian experience and be more sympathetic to adjacent homes along 9A Street NW.
 - The building meets the required bylaw setbacks on all four sides. In fact, the building exceeds the bylaw setback requirement on 9A Street NW.
 - The building does not exceed the FAR (Floor Area Ratio) allowed under the land use district.
 - The building does not exceed the maximum building height as prescribed in the DC Guidelines (26 m).
 - c. With direction from UDRP and Urban Design Specialist, administration upon further review is satisfied that the proposed development provides a balance between vertical and horizontal elements. By introducing colour and solid partitions between balconies within the tower section, the impact of the glazing is lessened.
 - d. 2 Avenue NW transitions from commercial activity along 10 Street NW to a residential neighbourhood on 9A Street NW. Since the building is primarily residential, the applicant envisioned the primary residential entrance being placed along 9A Street NW. To address the community's concerns a secondary entrance was placed off 2 Avenue NW, allowing residents and visitors access into the building.
 - e. From the initial design, modifications were made to address 2 Avenue NW by creating a corner feature and replacing the burnished block with a glass, thereby carrying a similar architectural design along 2 Avenue NW. These changes also provided opportunities for this end unit to convert to a live/work unit or support commercial use such as a coffee shop or hair salon. Although administration did consider reorienting the units to face 2 Avenue NW, concern was expressed about breaking up the building's appearance along 9A Street NW. In the end, the design remained the same to keep the strong rhythm of residential units already established along the street.

- f. The proposed architecture and use of materials do reflect a modern building design. However, softer elements such as the burnished block, wood doors and at-grade landscaping present a more traditional residential experience at the pedestrian level, reflecting the general character of the neighbourhood.
- g. In response to the Prior to Release condition, the applicant will be consulting with Heritage Planning to provide several features in commemoration of the existing historic building located at 1037 – 2 Avenue NW. The features will include 2 bronze medallions and two commemorative wall mounted plaques. The bronze medallions will be located within the public sidewalk at the corner of 2 Avenue NW and 9A Street NW, the other adjacent to the lane within the small plaza seating area. The commemorative plaques will both be located on site, one near the northeast corner of the building, the other behind the bench seating at the northwest corner of the site.
- h. The proposed development offers a variety of units and sizes ranging from a 400 square foot ft studio to a 1200 square foot townhouse unit. This will ensure a diverse mix of people of varying demographic and economic backgrounds. In exploring partnerships with the Homeless Foundation and Norfolk Housing, the challenge for these agencies has been ongoing management and support services for their clients, especially within a building not owned or controlled by the agency. According to the applicant, they are still having ongoing discussions with the Attainable Homes Calgary Corporation to see if their model of providing equity to buyers and supporting mortgage insurance can work in this project.
- 2. Transit Oriented Development (TOD)

Transit Oriented Development (TOD) policies are designed to encourage a reduction in car usage, not necessarily car ownership. The proximity to local services (especially a grocery store), transit and LRT stops will ensure that the average car usage of an individual is substantially reduced. To encourage less car ownership, the applicant has committed to team up with a car-share agency to provide an on-street vehicle that is both available to residents of proposed development and the broader community.

3. Sustainable Design Elements

The developer proposes to construct a building to the BuiltGreen Program certification. The BuiltGreen checklist includes an energy efficiency requirement, and a menu of options in categories, addressing a range of "green" items from which the builder can select to meet the Bronze, Silver, Gold and Platinum achievement levels. As designed, the proposed building will achieve a BuiltGreen Platinum standard.

Although the developer has expressed no intention to apply for LEED certification, for purposes of comparison, a LEED checklist was prepared by the applicant and found the building compares to a LEED Silver standard.

Public Consultation

Throughout the course of the application, the applicant and Administration committed to engaging the Community Association and general public in discussions about the proposal to best understand resident's comments at the grass-roots level. The following events took place:

- 2010 September 16 Applicant attended public open house hosted by community association. Formal application was not made until 2010, November 27.
- 2010 November 18 Members of LUPP attended meeting with Alderman, and members of Kensington BRZ and Community Association to discuss implementation of ARP policies. Request was made to develop a report detailing the enhancement of the 2 Avenue NW public realm.
- 2010 December 13 Administration and applicant attended 2nd public open house.
- 2011 January 17 Circulation to Hillhurst/Sunnyside Community Association
- 2011 March 14 Administration and applicant attended 3rd public open house.
- 2011 May 19 Administration arranged meeting attended by applicant, Alderman and representatives of community association to discuss proposed renderings and letter provided by Community Association.

Adjacent Neighbour Comments

No comments were received.

CONCLUSION:

The proposal is supported for the following reasons:

- 1. The proposed development complies with the objectives and policies of the Hillhurst/Sunnyside Area Redevelopment Plan and the rules of Bylaw 1P2007.
- 2. The proposed multi-residential development will be one of the first medium density mid-rise residential developments under the amended ARP and will contribute to the ongoing redevelopment of Sunnyside and continued viability of the Kensington BRZ.
- 3. The proposed development is well defined at the podium level through the use of colour, building articulation, change of materials, landscaping and lighting providing a pleasant experience for pedestrians walking past the building. The variety of unit types and sizes provides opportunities for different homeowners such as families, seniors and young professionals all to reside in the same building.

CORPORATE PLANNING APPLICATIONS GROUP RECOMMENDATION: APPROVAL

Recommend that Calgary Planning Commission **APPROVE** the application with the following conditions:

Prior to Release Requirements

The following requirements shall be met prior to the release of the permit. All requirements shall be resolved to the satisfaction of the Approving Authority.

Planning:

1. Submit a total of seven (7) complete sets of Amended Plans (file folded and collated) to the Planning Generalist that comprehensively address the Prior To Release conditions of all Departments as specified below.

In order to expedite the review of the Amended Plans, please include the following in your submission:

- a. Three (3) of the plan sets shall highlight all of the amendments.
- b. Three (3) detailed written responses to the Conditions of Approval document that provides a point by point explanation as to how each of the Prior to Release conditions were addressed and/or resolved.
- In addition to the full sized plans requested above, please submit one (1) 11 x 17 complete set of plans for the purpose of the Development Completion Permit (DCP) process.

Please ensure that <u>all</u> plans affected by the revisions are amended accordingly.

- 2. Amend the plans to show the following modifications:
 - Label one residential and one visitor stall as dedicated for handicapped parking.
 - Design a covered awning for weather protection above the main and secondary entrance for 9A Street NW and 2 Avenue NW respectively.
 - · Clearly label the proposed exterior materials on all elevations.
 - Show proposed locations of the heritage plaques on landscape plan (DPL-1)
 - Provide confirmation in writing from Transportation Planning and/or Urban Development (Roads) that an off-site parking stall will be permitted to facilitate the car-sharing initiative.

Heritage:

- The applicant shall provide design details, location, and proposed text for the historic interpretive elements (i.e plaques and medallions) to the satisfaction of the Senior Heritage Planner.
- 3. Remit payment (certified cheque, bank draft) for contribution to Public Realm Improvements as per the Hillhurst/Sunnyside ARP.

a) Payment is based on the following:

\$726.13 per unit x 101 units = \$73,338.64

Urban Development:

4. Remit a performance security deposit (certified cheque, bank draft, letter of credit) for the proposed infrastructure listed below within the public right-of-way to address the requirements of the Business Unit. The amount of the deposit is calculated by Roads and is based on 100% of the estimated cost of construction.

The developer is responsible arrange for the construction of the infrastructure either with their own forces or may elect to have the City construct the infrastructure on their behalf.

If the developer elects to construct the infrastructure with their own forces, the developer will need to enter into an Indemnification Agreement at the time of construction and the deposit will be used to secure the work.

<u>Roads</u>

- Rehabilitation of existing driveway crossings, sidewalks, curb and gutter, etc. should it be deemed necessary through a site inspection by Roads personnel. Including concrete paver sidewalk along 9A Street NW, should it be damaged during construction.
- b. Construction of the 2 Avenue NW Streetscape Project (Southside)
- 5. Remit payment (certified cheque, bank draft) for the proposed infrastructure listed below within the public right-of-way to address the requirements of the Business Units. The amount is calculated by the respective Business Unit and is based on 100% of the estimated cost of construction.

The developer is responsible to coordinate the timing of the construction by City forces. The payment is non-refundable.

Roads

a. Street lighting upgrading adjacent to 9A Street NW and 2 Avenue NW.

Parks:

- 6. Amend the Site and Landscape plans to show proposed servicing locations and demonstrate that the proposed servicing falls outside the drip lines of the existing and proposed boulevard trees located adjacent to the development parcel to the satisfaction of the Director, Parks.
- 7. Amend the plans to indicate the species of the proposed trees planted along 2 Avenue NW. Two (2) American elms and two (2) Mountain Ashes are suggested.

Permanent Conditions

Planning:

- 8. The development shall be completed in its entirety, in accordance with the approved plans and conditions.
- 9. No changes to the approved plans shall take place unless authorized by the Development Authority.
- 10. A Development Completion Permit shall be issued for the development **before the development is occupied**. A Development Completion Permit is independent from the requirements of Building Permit occupancy. Call Development Inspection Services at 403-268-5491 to request a site inspection for the Development Completion Permit.
- 11. Upon completion of the main floor (storey) subfloor of the apartment building, the geodetic elevation of the constructed main floor (storey) subfloor must be submitted to and approved by the Development Authority prior to any further construction proceeding. Fax confirmation to 403-268-8178 to the attention of 'Bylaw Checker Geodetics'.
- 12. Submit proof of formal BuiltGreen certification, at such time as certification is officially issued, by third party certification program.

- 13. Contributions to Public Realm Improvements as per Hillhurst/Sunnyside ARP:
 - a) Shall be deposited and held in a Planning Development and Assessment capital project account, on an interim basis, and transferred to the Hillhurst/Sunnyside Public Realm Improvement fund, upon formal establishment of the fund.
 - b) Expenditure of funds directed to the improvement of the triangular open spaces as identified on Map 3.4 Urban Design Initiatives shall be determined based on future priority criteria for the Hillhurst/Sunnyside Public Realm Improvement fund.
 - c) Payment is non-refundable except in the event of expiry of the development permit prior to commencement of construction, in which case the funds shall be refunded.
 - d) Expenditure of the funds shall not commence until construction has commenced.
- 14. All roof top mechanical equipment shall be contained within the roof pitch and shall not be visible from thoroughfares or sidewalks.
- 15. Loading and delivery shall take place in the designated loading stall as shown on the approved plans and shall, at no time, impede the safety of pedestrian movements and use of the parking lot.
- 16. Handicapped parking stalls shall be located as shown on the approved plans released with this permit.
- 17. All trees and shrubs shown on the approved site plan to be retained shall be protected during all phases of construction. Any trees or shrubs which die must be replaced on a continuing basis with trees or shrubs of comparable species and size to the satisfaction of the Development Authority.
- 18. All areas of soft landscaping shall be provided with an underground sprinkler irrigation system as identified on the approved plans.
- 19. All areas of soft landscaping shall be irrigated as shown on the approved plans.
- 20. The walls, pillars and ceiling of the underground parkade shall be painted white or a comparable light colour.
- 21. The light fixtures in the parkade shall be positioned over the parking stalls (not the drive aisles).
- 22. All stairwell doors and elevator access areas shall be installed with a transparent panel for visibility.

Urban Development:

- 23. The subject parcels shall be consolidated onto a single title.
- 24. The developer shall be responsible for the cost of public work and any damage during construction in City road right-of-ways, as required by the Manager, Urban Development. All work performed on public property shall be done in accordance with City standards.

- 25. Indemnification Agreements are required for any work to be undertaken adjacent to or within City rights-of-way, bylawed setbacks and corner cut areas for the purposes of **crane operation**, shoring, tie-backs, piles, **sidewalks**, **lane paving**, lay-bys, utility work, +15 bridges, culverts, etc. All temporary shoring, etc., installed in the City rights-of-way, bylawed setbacks and corner cut areas must be removed to the satisfaction of the Manager of Urban Development, at the applicant's expense, upon completion of the foundation. Prior to permission to construct, contact the Indemnification Agreement Coordinator, Roads at 403-268-3505.
- 26. The owner, and those under their control, shall develop an erosion and sediment control drawing and implement good housekeeping practices to protect onsite and offsite storm drains, and to prevent or mitigate the offsite transport of sediment by the forces of water, wind and construction traffic (mud-tracking) in accordance with the current edition of the *Guidelines for Erosion and Sediment Control*. Some examples of good housekeeping include stabilization of stockpiles, stabilized and designated construction entrances and exits, lot logs and perimeter controls, suitable storm inlet protection and dust control. The developer, or their representative, shall designate a person to inspect all controls and practices every seven days and within 24 hours of precipitation or snowfall events.
- 27. Contain storm run-off on site.
- 28. The grades indicated on the approved Development Permit (DP) plans must match the grades on the Development Site Servicing Plan (DSSP) for the subject site. **Prior to the issuance of the development completion permit (DCP)**, the developer's Consulting Engineer must confirm under seal that the development was constructed in accordance with the grades submitted on the development permit (DP).
- 29. If **during construction** of the development, the developer, the owner of the titled parcel, or any of their agents or contractors becomes aware of any contamination, the person discovering such contamination shall immediately report the contamination to the appropriate regulatory agency including, but not limited to, Alberta Environment, Alberta Health Services and The City of Calgary (311).

If **prior to or during construction** of the development the developer, the owner of the titled parcel, or any of their agents become aware of contamination on City of Calgary lands or utility corridors, the City's Environmental Assessment & Liabilities division shall be immediately notified (311).

Transportation:

30. 2 Avenue NW between 9A Street NW and 10 Street NW shall be designed according to the Sunnyside Hillhurst ARP design. The applicant is responsible to construct the south side of 2 Avenue NW in accordance with this design within the area noted.

Parks:

- 25. Public trees located on the boulevard adjacent to the development site shall be retained and protected during all phases of construction by installing a temporary fence around the extent of the branches ("drip line") and ensuring no construction materials are stored inside this fence.
- 26. In order to ensure the integrity of existing public trees and roots, construction access is not permitted through 9A Street NW.
- 27. In order to ensure the integrity of existing public trees and roots, new walkway shall not extend past the city sidewalk onto the boulevard.
- 28. Caution required when removing existing walkways as there are a few in the boulevard within 2m of trunks. Urban Forestry must be onsite to mitigate any damage.

Paul Maddock 2011/June

Sunnyside Condos By Battistella 9A STREET NW PROJECT NO. 5158

RE-ISSUED FOR DEVELOPMENT PERMIT:

JUNE 20, 2011

DRAWING LIST:

COVER SHEET PROJECT DATA, LOCATION ARCHITECTURAL:

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SHADOW STUDY		Sector
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AMENDMENT LOC2009-0109 BYLAW NUMBER 74D2010

Council Approved: 2010 July 5

SCHEDULE B



DC DIRECT CONTROL DISTRICT

Purpose

- 1 This Direct Control District is intended to:
 - (a) limit height and setbacks in accordance with local area policy.

AMENDMENT LOC2009-0109 BYLAW NUMBER 74D2010

Compliance with Bylaw 1P2007

2 Unless otherwise specified, the rules and provisions of Parts 1, 2, 3 and 4 of Bylaw 1P2007 apply to this Direct Control District.

Reference to Bylaw 1P2007

3 Within this Direct Control District, a reference to a section of Bylaw 1P2007 is deemed to be a reference to the section as amended from time to time.

Permitted Uses

4 The permitted uses of the Multi-Residential – High Density Medium Rise (M-H2) District of Bylaw 1P2007 are the permitted uses in this Direct Control District.

Discretionary Uses

5 The discretionary uses of the Multi-Residential – High Density Medium Rise (M-H2) District of Bylaw 1P2007 are the discretionary uses in this Direct Control District.

Bylaw 1P2007 District Rules

5 Unless otherwise specified, the rules of the Multi-Residential – High Density Medium Rise (M-H2) district of Bylaw 1P2007 apply in this Direct Control District.

Building Setbacks

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(1) The minimum building setback from a property line shared with a street for a street oriented multi-residential building is zero metres.

- (2) The minimum building setback from a property line shared with a lane is zero metres.
- (3) Where a parcel shares a property line with another parcel, the minimum building setback is zero metres when the adjoining parcel is designated as a:
 - (a) commercial district;
 - (b) special purpose district,
 - (c) M-C2, M-2, M-H1, M-H2, M-H3, M-X2; or,
 - (d) Direct Control District referencing the above.

Building Height

- (1) Unless otherwise referenced in subsections (2), (3) and (4), the maximum *building height* is 26.0 metres.
 - (2) Where a parcel shares a property line with a street or a parcel designated as a M-C2, M-2, M-H1, M-H2, M-H3, M-X2, or Direct Control District referencing the above, the maximum building height is:
 - (a) 10.0 metres measured from grade within 3.0 metres of that shared property line; and
 - (b) 26.0 metres measured from grade at a distance greater than 3.0 metres from that shared property line.

AMENDMENT LOC2009-0109 BYLAW NUMBER 74D2010

(3) Where a parcel shares a property line with a lane, the maximum building height is:

- 10.0 metres measured from grade within 6.0 metres of that shared property line; and
- (b) 26.0 metres measured from *grade* at a distance greater than 6.0 metres from that shared *property line*.
- (4) Where a parcel shares a property line with a parcel designated as a commercial or special purpose district, the maximum building height is:
 - (a) 10.0 metres measured from grade within 1.2 metres of that shared property line; and
 - (b) 26.0 metres measured from grade at a distance greater than 1.2 metres from that shared property line.

Hillhurst/Sunnyside ARP Policy	Compliance	Non- Compliance	Comments
3.1 Land Use			
3.1.3 Medium-Density Mid-Rise Area 1. New development within the Medium Density Mid-Rise Area should be limited to medium-density multi-family residential developments and includes townhouses, apartments, and live/work units.	÷		Development is multi-residential and includes townhouses and apartments
 Retail commercial uses should be discouraged within residential developments, however, a limited range of support commercial uses may be permitted. 	·		No commercial development has been proposed as part of this DP, however two ground floor units the north end of building have been designed to accommodate future support
4. Live/work units are encouraged throughout the Medium- Density Mid-Rise Land Use Policy Area	÷		Live/work has not been shown on plans, but would be possible in the development
3.1.5 Density The maximum density for the site is 5.0 FAR	•		Proposed density is 4.97 FAR
3.2 Built Form and Site Design			
3.2.1 General Policies 1. The Maximum building height is 26 metres.	•		Proposed building is 26 m in height.
 Development of built forms and uses other than loading and vehicle access is encouraged in rear lanes in order to create activity and natural surveillance. 	•		Two units have been provided on the lane.

Hillhurst/Sunnyside ARP Policy	Compliance	Non- Compliance	Comments
6. New development should contribute to the distinctive and eclectic character of the area, including the traditional small lot pattern of development. Buildings should be articulated and detailed in a manner that reinforces existing development rhythms. Building materials and colour palettes should be compatible with existing development.	•		The narrow two-storey townhouse units along 9A Street have been designed to mimic the natural rhythm of the homes along 9A Street.
7. All new residential units should be provided with private outdoor amenity space, either exclusive to an individual unit or as a common amenity available to all units within a development. Common amenity space may be provided at or above grade. Amenity spaces should be located and designed to ensure privacy of adjacent low-density residential areas.	•		Amenity space has been provided for through balconies, front porches and rooftop patio.
8. New buildings should be designed to ensure universal access for all citizens. Where feasible, buildings should be designed to eliminate the need for access ramps. Where this is not feasible, the ramps should be designed to have minimal impact on the sidewalk and should not intrude into the sidewalk throughway.	•		Universal access has been provided for the proposed building.
New development should strive for a LEEDTM rating through consideration of sustainable built forms and an integrated approach to building infrastructure systems.			Developer is seeking to design to a BuiltGreen Platinum standard.
10. All new developments should provide for the collection and pick-up of recyclable materials.	•		Recycling storage provided for within the building.

Hillhurst/Sunnyside ARP Policy	Compliance	Non-	Comments
11. All new developments should provide for common private parking and storage of bicycles. Reference should be made to the Land Use Bylaw and the Bicycle Parking Handbook.	•		Bike storage provided for within underground parking area.
12. All areas of a parcel not required for buildings, vehicular access, loading or garbage enclosures should be landscaped.	ė		Hard and soft landscaping provide for within these areas.
14. Ensure that landscaping does not compromise security by preventing clear views from the street to pathways, open space or car parking areas.	•		Landscaping will not compromise views onto the street. Shrubs and fencing to be no greater than 1.1 m in height.
17. New development should be designed in accordance with the principles of Crime Prevention Through Environmental Design (CPTED) where feasible.	•		A CEPTED review was done. No concerns were expressed by Calgary Police Service.
 3.2.3 Residential Areas 3.2.3 Residential Areas 1. A variety of building forms are encouraged including, but not limited to: Low- and mid-rise buildings; Low- and mid-rise buildings; Buildings or collections of buildings that create internal courtyards or mews; and Street fronting dwelling units, courtyard oriented dwelling 	•		Proposed development is in a mid-rise form and provides for street fronting dwelling units and laneway units.
units and laneway dwelling units. 2. At-grade residential units that front a public sidewalk or publicly accessible private sidewalk should have individual, primary entrances (e.g., front doors) providing direct access to and from that public sidewalk or publicly accessible private	•		At-grade units all have access from front door to the adjacent sidewalk.

Hillhurst/Sunnyside ARP Policy	Compliance	Non- Compliance	Comments
 All at-grade residential units should be designed to provide visual privacy from any public or internal sidewalks without the need for high or non-transparent privacy fences or walls that detract from the active street edge. 			Picket fencing and landscaping used to provide for visual privacy from the sidewalk.
 Front yard gardens with low fences or hedges should be provided for each street-level dwelling unit. 	•		Landscaped area provided for each ground floor unit.
5. In multi-unit developments, building facades should be articulated to indicate individual ground floor units.	÷		Individual entries with picket fencing and unit addressing, architectural features and lighting are all used to distinguish and articulate each
8. To create a consistent streetwall, building facades should maintain a uniform cornice line of 3 storeys or a maximum height of 10 metres. Building elements above the 10 metre cornice should maintain a minimum stepback of 3 metres.			ground floor unit. Cornice line provided at top of second storey. Building steps back 3 metres over most of the development.
3.3 Urban Design and Public Realm			
 3.3.1 General Policies 1. Opportunities for public art should be incorporated throughout the pedestrian realm as part of the streetscape design, especially along 10 Street NW. 			Developer is providing heritage medallions along 2 Avenue near the northeast and northwest corners of the site.
 Landscape design should incorporate indigenous vegetation that also provides habitat for a variety of birds and small animals. 	•		Several shrubs proposed are berry producing and will provide a good habitat for birds and small animals.

Hillhurst/Sunnyside ARP Policy	Compliance	Non- Compliance	Comments
The creation of new publicly accessible plazas, outdoor seating and pocket parks will be encouraged by allowing buildings to be set back from the property line in order to accommodate these publicly accessible amenities.	•		Seating area has been provided at north west corner of the development.
3.3.2 Streetscape Design			
 A coherent design theme specific to the TOD Area should be applied to all streetscape elements along all streets. 	•		Theme is being applied as per standard currently under development by City Administration.
2. Street furniture, street lighting, signage, and landscaping should be oriented towards the pedestrian.	•		Streetscape design is being incorporated into the redesign of 2 Åvenue currently under review by City Administration.
 3.3.3 Design for Climate Pedestrian connections and waiting areas should incorporate durable paving that is resistant to salt and snowplow damage. 	•		Standard and coloured concrete along both street frontages will provide a durable salt resistant surface for safe pedestrian movement.
4. Use of colour, light, urban furniture and natural materials are encouraged to counter the dreary effects of winter days.			Seating area at northwest corner of site will incorporate bright yellow benches to match the colour scheme of pods as seen on east and west elevations.
5. Incorporate coniferous trees into landscape design to provide natural colour in the winter and to act as a valuable windscreen.	÷		Coniferous trees are proposed along lane to provide a contrasting colour in wintertime.

Hillhurst/Sunnvside ARP Policy	Compliance	Non-	Comments
		Compliance	
3.4 Mobility			
3.4.1 Street Network			
3. Encourage and support the development of uses and built forms, other than loading and vehicle access that create activity	÷		Units have been provided on the lane both on the ground floor and the second floor. Building
in and provide natural surveillance of the rear lanes in accordance with the design principles of Crime Prevention Through Environmental Design (CPTED). Portions of a building adiacent to rear lanes should be designed and constructed to a	1 , 1		materials have been carried around the building to the lane.
similar quality and level of detail as the front of the building.			
6. Where possible, building setbacks should be modulated at intersections to create plazas that improve visibility at	N/A		Sidewalk bulb out is already provided for at the intersection of 2 AV and 9A ST.
intersections.			
 3.4.2 Pedestrian and Bicycle Network 8. Where development is located on a corner, the pedestrian 	0		Existing sidewalk to remain in current state
environment should be enhanced by extending the major street	•		however existing street trees provide attractive
landscaping and sidewalk conditions onto the side street.			landscape conditions along 9A Street NW.
9. Pedestrian routes should be barrier-free for people of all			Wheel chair let down provide at intersection.
types of physical ability.			
11. In accordance with the Land Use Bylaw standards in place at the time of application, bicycle parking is required for all new			Bike parking provided for on-site.
develo pments.	•		
18. A minimum throughway zone dimension of 2 metres should			Sidewalk and boulevard provides the minimum
be maintained on all streets. Wore clear width may be required closer to the LRT Station due to higher pedestrian volumes.	•		2 metre clearance width for pedestrian traffic.

Hillhurst/Sunnyside ARP Policy	Compliance	Non- Compliance	Comments
19. Where roadside zone dimensions cannot be achieved due to existing building encroachments, mature landscaping, driveways, outdoor seating, etc., priority should be given to maintain the pedestrian throughway dimension.	•		Sidewalk and boulevard provides the minimum 2 metre clearance width for pedestrian traffic.
3.4.3 Parking and Loading			
 The total amount of parking required for any new development may be reduced by employing various Transportation Demand Management (TDM) measures. 	•		Residents will rely less on regular automobile use due to proximity to LRT and transit stops and opportunities for bicycle usage.
 Underground parking is strongly encouraged to accommodate the majority of parking requirements. Underground parking shall be secure, well lit and well ventilated. 	٠		All parking has been provided for underground.
6. Parking entrances should be integrated into the building or landscape, and exposed walls should be architecturally treated. Good visibility should be provided for vehicles at access points to enhance the safety of pedestrians and the security of the building.	5		Parking entrance has been integrated into the building.
10. Loading activities should occur at the rear of buildings with access provided from a rear lane.	•		Parking and loading access provided from the lane.
11. Waste and recycling should be stored within buildings in order to avoid waste disposal facilities being located in rear lanes.	•		Waste and recycling stored inside the building.

Comments based on the Hillhurst/Sunnyside Area Redevelopment Plan for DP2010-4492	cy (Establish nyside Area R	edevelopmer	ty Planning) it Plan for DP2010-4492
Hillhurst/Sunnyside ARP Policy	Compliance	Non- Compliance	Comments
12. Encourage innovative solutions for waste and recycling collection that minimize negative impacts on the pedestrian environment and minimize the outside surface area require for on-site garbage and recycling collection.	•		Waste and recycling stored inside the building and accessed from the rear lane.



Hillhurst Sunnyside Community Association

8 April 2011

Planning Implementation City of Calgary, Mail Code 8073 5-L1-7, Municipal Building - 800 Macleod Tr. SE P.O Box 2100, Calgary, AB Canada T2P 2M5

Attn: Mr. Paul Maddock, Planner II

Re: Development Permit #2010-4492 at 1037 2 Avenue NW, Battistella Developments Summary Review Letter, Hillhurst-Sunnyside Community Planning Committee

Dear Mr. Maddock,

On behalf of the Hillhurst-Sunnyside Community Association Community Planning Committee (CPC), I would like to thank you for participating in the public review meeting on 14 March 2011 regarding the development permit application at the above-mentioned address. The public meeting and this letter is the third of each, where we also hosted a pre-application public review meeting with the developer-applicant on the 16 September 2010, a post-application meeting on 13 December 2010, and submitted detailed letter reviews following both meetings.

As currently proposed, we cannot offer our support of this development permit application. Having reviewed this proposal based on the detailed policies of the Hillhurst-Sunnyside Area Redevelopment Plan (ARP) and having reviewed numerous oral and written submissions from residents of the community, the Committee asks three critical questions that frame our rationale for withholding support:

- 1) How can this proposal be substantially improved to embody the architectural and urban design excellence required of development that proposes to capitalize on maximum allowable building heights and floor area ratios, as per the ARP policies?
- 2) How can this proposal be substantially improved to qualify as transit-oriented development?
- 3) What sustainable design measures can this proposal employ as per the ARP policies and in doing so help satisfy answers to questions 1 and 2?

It is the Committee's strong opinion that the proposal has not substantively evolved from the conceptual design reviewed by the community at a pre-application meeting some seven months ago. The pre-application conceptual design offered a good preliminary vision of programming, at-grade relationships, and a reflection of the ARP's basic envisioned building envelope – a good starting point, and with lots of potential for refinement and improvement.

The developer-applicant's willingness to engage with the community at such an early stage was welcome, appreciated, and promising. So, we have offered encouragement but with strong critique. In

1320 – 5 Ave NW, Calgary, Alberta T2N 0S2 Ph: 403- 283-0554 Fax: 403- 270-3130, www.hillhurstsunnyside.org





Hillhurst Sunnyside Community Association

our letters (enclosed), delivered to The City and developer-applicant following the two subsequent public review meetings, we offered detailed feedback on the proposal. We offered important observations and general suggestions, but left detailed solutions to the developer-applicant and their design team. However, the subsequent refinement to the design concept has not substantively addressed our feedback. It is our opinion that the changes that have occurred are minor.

In authoring this summary review letter we have labored over how best to communicate our feedback – how to effectively reiterate, but underline, the key concerns. We appreciate that this application is fairly advanced in The City review process, but we believe effectively addressing these concerns is critical and necessary. This proposal represents one of the first major TOD projects in Hillhurst-Sunnyside and will set an important precedent – a precedent which must reflect the intent and spirit of the ARP, if the implementation of its policies is to be successful.

We have decided to frame our withholding of support around the three key above-mentioned questions, and to offer specific recommendations for design revision to satisfy these questions.

 How can this proposal be substantially improved to embody the architectural and urban design excellence required of development that proposes to capitalize on maximum allowable building heights and floor area ratios, as per the ARP policies?

Key ARP Policy Reference: The maximum heights shown in Table 3.2 (or on Map 3.3) are <u>not</u> <u>guaranteed entitlements</u>. In order to achieve these maximums, projects will need to meet high standards of architectural and urban design quality that ensure projects make positive contributions to the public realm. (Part II TOD, Section 3.2.1.2).

- a. Make preservation of sunlight penetration within the public realm a priority along the adjacent section of high-order pedestrian corridor on 2nd Avenue NW. One of the ARP's guiding principles is to, "protect and/or replace important sunny public places" (Part II TOD, Section 2.2.5). The design test should be that the majority of this corridor enjoys at least five hours of sunlight from the spring through to the fall. To achieve this objective, use a sun-shadow building model to establish additional multiple tiered stepbacks within the north-end massing of the building, establishing the first additional stepback at no greater a height than the ultimate right-of-way of 2nd Avenue NW. (General references: Avenues & Mid-Rise Building Study, May 2010, Brook Mcllroy Planning + Urban Design/Pace Architects)
- b. The proposal can be characterized as unexceptional, design by maximum allowable building envelope, and creating an imposing monolithic massing. Create more variation in the building envelope through modulation in height (see 1.a.), but also greater fenestration of multi-storey sections of the primary vertical planes of the north-south aligned façades.





Hillhurst Sunnyside Community Association

- c. Improve variation in vertical and horizontal planes along the north-south aligned façades and achieve a greater mix of building materials (primarily achieving a reduction of glass), and do so, through removing private individual balconies for a portion of the units, and off-set amenity space requirements through additional communal amenity areas as required.
- d. The principal frontage of the building is 2nd Avenue NW, as this is the frontage where the pedestrian will predominately experience the building, and it is the façade at the terminal eastward view of the 2nd Avenue NW pedestrian corridor. Relocate the primary entrance, 'front door', of the building to 2nd Avenue NW. The north elevation should be reflective of design elements that announce it as the principal façade.
- e. Substantially improve the corner condition at 9A Street and 2nd Avenue NW. The orientation of Units 1.7 and 1.8, and the location and accessibility of the each Unit's entry via stairs is awkward and unappealing. The 'fish-bowl' side glass wall relationship of Unit 1.7 parallel with 2nd Avenue is highly problematic. Reorient the front-on relationship of Units 1.7 to 1.10 to mimic that of Units 1.3 to 1.6, to offer a steady rhythm of townhouse doors and front-yard amenities areas along 2nd Avenue NW. Variations on this design solution could achieve equal improvements to the corner condition's current design failures.
- f. Replace the proposed burnished block material with a more traditional and higherquality masonry to better complement the general area context and, specifically, the predominant heritage use of masonry in the established built-form of the neighbourhood's village area. This masonry should not only be the primary material used at-grade (first two storeys), but it should be extended into the primary façades as vertical columns.
- g. Celebrate the local history and culture of the existing on-site heritage building proposed for demolition (included on the The City of Calgary's Inventory of Evaluated Historic Resources) and enhance the neighbourhood's unique 'sense of place' by creating a landmark public art installation (sculpture or similar).
- h. Programming of unit tenure is part of the urban design excellence expected within the ARP, where a healthy mixing of unit tenure can help maintain and enhance the established vibrant socio-economic mix within the community. The proposal is programmed to be solely market-oriented housing, and should include a portion of nonmarket housing to address a fundamental ARP policy, which states:

Developers of large-scale projects are strongly encouraged to partner with nonprofit agencies or The City of Calgary in order to provide non-market housing units within a market development (Part II TOD, Section 3.1.1.8).





2) How can this proposal be substantially improved to qualify as transit-oriented development?

a. As proposed, there are no fundamental characteristics that make this proposal an identifiable transit-oriented development. Yet this proposal seeks to capitalize on the full redevelopment potential provided in the ARP's TOD policies. Specifically, the proposal does nothing to encourage a reduction of private automobile ownership and usage in the community. In fact, the proposal seeks an over-dedication of parking stalls beyond that of the minimum required by the Land Use Bylaw (LUB). This does not meet the intent and spirit of the ARP and serves to negatively overburden the community with additional vehicle traffic and environmental impacts, which were never envisioned as acceptable externalities resulting from increased TOD densities.

The subject property is immediately proximate to an LRT Station, integrated with a highly walkable and bicycle-friendly infrastructure, and located within a dense mixed-use complete inner-city neighbouhood. It is our strong opinion that the site offers no better opportunity to set a new precedent for TOD in The City. The developer-applicant should seek a relaxation of the minimum parking stall ratio per unit to that of 0.66 parking stalls per unit, or one-third less that of the required 1.0 parking stalls per unit (includes visitor stall requirements).

We note that a dedication of 1.0 parking stalls per unit for inner-city multi-family developments is the lowest ratio allowed according to the LUB. However, a relaxation can be supported, and should be encouraged, by The City according to The City's Transit Oriented Development Policy Guidelines (Council Adopted 6 December 2004), which states in Section 8.1, "A reduction of the required Bylawed parking stalls should be considered in TOD station areas".

Integral to this relaxation, we encourage that a private communal car-share system be established for the building, where multiple stalls and vehicles are provided on-site within the underground parking facility and made available for use by the residents of the building. The maintenance of this system would be the responsibility of the condoowners association. Such a system would ensure that building residents have a viable, flexible, option for automobile usage should it be required on occasion.

This recommendation has multiple benefits beyond those mentioned, where having potentially not constructed a full third floor of underground parking infrastructure, the proposal would: substantially reduce its environmental construction and lifecycle footprint through reduced energy and material inputs; and, reduce the cost of construction, which should translate into greater affordability of market-rate units.



Hillhurst Sunnyside Community Association

With The City's support, we strongly encourage the developer-applicant to be a leader and set an innovative and progressive precedent both locally and for all development in TOD nodes within Calgary.

3) What sustainable design measures can this proposal employ as per the ARP policies and in doing so help satisfy answers to questions 1 and 2?

Key ARP Policy Reference: New development should strive for a LEED rating through consideration of sustainable built forms and an integrated approach to building infrastructure systems. (Part II TOD, Section 3.2.1.9).

a. This proposal does not include any substantive LEED or similar sustainable design elements, as envisioned by the ARP's policy. In our opinion, the proposed Built Green design strategy is unexceptional, where many of the touted 'sustainable' design measures are common building design practices for a project of this magnitude.

Given the ARP policy, the developer-applicant should, at a minimum, pursue a LEED Gold certification. Such a certification would be aligned with The City's own public buildings LEED Gold certification policy, and also complement The City's emerging policy to reduce green house gas emissions by 80% by 2050. Applying The City's own sustainability policies to major TOD projects should be commonsense, standard, practice. As an alternative to LEED, a suite of Net-Zero building practices and technologies could be employed. There is established local Net-Zero design expertise and Calgary-based demonstration projects, which are associated with the Canada Mortgage and Housing Corporation's Equilibrium sustainable housing demonstration initiative.

- b. At the very least, the proposal should respond to the ARP policies and include one or two substantive and progressive sustainable design measures, such as one of the following recommendations:
 - Enhance the proposed communal roof top amenity and establish a robust living green-roof system, one which provides a growing environment for substantive vegetation, with the opportunity for food growing for residents of the building.
 - Seek a relaxation of parking dedication by one-third the minimum required in the LUB and establish a private on-site communal car-share system.
 - Install substantive renewable energy production infrastructure (i.e. solar collection system).





Hillhurst Sunnyside Community Association

Thank you for considering this summary review letter. It is our hope that if The City Development Authority finds merit to our recommendations, or similar design solutions, and if the developerapplicant embraces redesign, the application will receive our support.

We welcome an open and on-going dialogue. Please contact the undersigned should you wish to discuss this letter further and/or additional consultation steps.

Sincerely,

David White, Chairperson Community Planning Committee Hillhurst-Sunnyside Community Association

Cc: Mr. Paul Battistella, Battistella Developments Alderman Druh Farrell, Ward 7 Mr. Mark Sasges, Planning Implementation, The City of Calgary Ms. Mary Axworthy, Land Use Planning & Policy, The City of Calgary Mr. David Down, Urban Design & Heritage, The City of Calgary Ms. Deborah Cooper, Established Community Planning, The City of Calgary Mr. Steve Jones, Established Community Planning, The City of Calgary Ms. Annie MacInnis, Kensington Business Association Board, Hillhurst-Sunnyside Community Association Members, Hillhurst-Sunnyside Community Planning Committee

Enclosure:

CPC Review Letter – Battistella Developments Proposal at 1037 Avenue NW, 5 Oct 2010 CPC Review Letter – Battistella Developments Proposal at 1037 Avenue NW, 23 Jan 2011





13 April 2011.

Planning Implementation City of Calgary, Mail Code 8073 5-L1-7, Municipal Building – 800 MacLeod Tr. SE P.O. Box 2100, Calgary, AB, Canada, T2P 2M5

Attn: Mr. Paul Maddock, Planner II

Re: Development Permit #2010-4492 at 1037 2 Avenue NW, Battistella Developments Summary Review Letter, Kensington Business Revitalization Zone (BRZ)

Dear Mr. Maddock,

The Board of Directors of the Kensington Business Revitalization Zone (BRZ) would like to offer their full support for this development permit application as presented.

The BRZ Board views the approved Streetside and proposed Battistella developments as critical components for the implementation of Plan-it, Imagine Calgary, the new transportation plan and much-needed densification around the Sunnyside LRT.

As the first established older community to achieve a current ARP and a plan for a future guided by the principles and vision of the Plan-it and Imagine Calgary documents, Kensington is sometimes referred to as the poster child for Transit Oriented Development. The BRZ believes that this vision of a better Calgary and a thriving, attractive, commercially viable, unique Kensington shopping and living district will only be possible if we are able to attract development to Kensington.

The BRZ vision of commercial viability represents more that the community focused vision of the ARP. A wider, more complete vision of a more vibrant, more successful Kensington shopping district requires proactive, deliberate, intentional densification and needs to address the deficiencies for the business district of an existing parking shortfall of 150 parking spaces which would be further exacerbated by the reduced parking requested by the Hillhurst Sunnyside Community Association for this DP.

A better Kensington involves more residents within Hillhurst, Sunnyside and the Kensington shopping district. To achieve this goal involves welcoming and indeed encouraging development. The Kensington BRZ fully and whole heartedly supports this DP as presented. We believe developments like this one must be encouraged if Kensington is to achieve Council's approved priority to increase density around inner city LRT stations. Kensington needs to be seen by developers as an area that welcomes and supports good, appropriate development projects that will further council's priorities. The BRZ would regret a developer like Battistella choosing to build elsewhere.

Regarding the three points raised by the Community Association, we would counter with these thoughts.

We urge the city to ensure the full maximum allowable parking component is attained. While the ARP and TOD vision encourages less reliance on cars, the current reality for the Kensington shopping district is that this BRZ suffers from a public perception that 'there is no parking in Kensington so don't bother to go'. The BRZ, already deficient in parking, would suffer further if residents and visitors from this development used our nearby public parking rather than it being available for our shoppers.

With respect to any shadowing that the proposed building may present, there seems to be little or no interference with private residences. We have no objection regarding shadowing that the proposed building might present. Any shadowing issues would seem to the Board to be minimal and of limited impact given the possible development of the Anthill site to the west, the width of 2nd Ave to the north, and the LRT line and a park to the east.

The Board is also satisfied that the 'green' environmental measures proposed for this project are more than sufficient and a "Gold" LEED designation is not required.

The Kensington BRZ is struggling to survive in the current economic climate. We welcome partnership with quality developers like Battistella and urge the city to approve this DP as presented and as soon as possible.

We look forward to helping the city move forward in implementation of Plan-it and Imagine Calgary. Our hope for reinvestment and for development and revitalization in the Kensington shopping area hinges on timely approval of several good developments such as this DP to encourage other developers to see Kensington as a thriving district that welcomes development and understands the bold vision for a better city contained in Plan-it and Imagine Calgary. Without significant re-development and the resultant increased customer pool soon, the Kensington shopping district is in real danger of losing many of the smaller businesses that make Kensington a wonderful place.

We welcome this new era of development for the Kensington BRZ confident that with the able city staff we have been working with these past years our joint goal of a more successful, better Kensington that embodies all the goals of Plan-it and Imagine Calgary will be evident for all to see and an inspiration for other shopping districts especially those with LRT stops. Sincerely,

Annie MacInnis per the Board of Directors of the Kensington BRZ

Annie MacInnis, Executive Director, Kensington BRZ 301 10 St, NW, Calgary, AB, T2N 1V5 www.VisitKensington.com

cc: Mr. Paul Battistella, Battistella Developments Alderman Druh Farrell
Mr. Simon Battistella
Mr. Mark Sasges, Planning Implementation, The City of Calgary
Ms. Mary Axeworthy, Land Use Planning and Policy, the City of Calgary
Mr. David Down, Urban Design and Heritage, The City of Calgary
Ms. Deborah Cooper, Established Community Planning, The City of Calgary
Mr. Steve Jones, Established Community Planning, The City of Calgary
Mr. David White, Chair, HSCA Community Planning Committee

Kensington Business Revitalization Zone (BRZ), 301 10 Street NW, Calgary, AB, T2N 1V5, p: 283-4810; f: 1-866-451-5721; kensingtonbrz@shaw.ca







BUILT GREEN™ CHECKLIST

Effective January 1, 2011

The Built Green[™] program has four levels of achievement, shown below as Bronze, Silver, Gold and Platinum. Points are awarded based on the minimum *EnerGuide* rating with additional points selected from each of the eight other areas of the checklist to give a cumulative total. Each separate category has minimum point totals that must be selected.

Built Green™ Level (For Detached, Semi- Detached & Row House Units)

Checklist Categories

EnerGuide for New Houses Rating

- I. Operational Systems
- II. Building Materials
- III. Exterior & Interior Finishes
- IV. Indoor Air Quality
- V. Ventilation
- VI. Waste Management VII. Water Conservation

VIII. Business Practices

 Bronze
 Silver
 Gold
 Platinum

 72
 75
 77
 82

 76 Points
 10 Points
 100 Points
 120 Points

CHECKLIST CRITERIA

Five fundamental pillars serve as a basis for each item to be considered in the checklist. Each line item must meet at least one of the criteria listed in the left hand column, where two or more of the subsidiary points listed on the right must be addressed.

Alternative Construction

· Durability

Innovation

- Resource Use
- Energy Efficiency
- · Recycled Content
- · Indoor Air Quality

Quality

ENERGUIDE RATING

This rates the energy efficiency and energy consumption of the home using the EnerGuide Rating System and HOT2000 software. House are modeling and tested by a Certified Energy Advisor working with the Built Green Society. Information such as home orientation, home dimensions, insulation values, type of heating system, construction material, window type and window design are input into HOT2000 in order to calculate a rating. An average rate of air changes per hour (ACH) is initially used for the calculation. Prior to completion of each house, a mandatory blower door test is performed and the actual rate of air changes per hour is then input into HOT2000 and the final EnerGuide rating is calculated. This standard applies to low-rise detached, semi-detached and row houses and small multi family buildings under 4 stories.

CHECKLIST REQUIREMENTS

In order to properly verify the Built Green[™] program, for each item chosen from the checklist, a verification must be ready to be supplied, if the home is randomly chosen to be audited. The Builder will be given a short amount of time to compile verifications and supply them to the auditor. Forms of verification include: Installing Contract Letter, Supplier Verification Letter, Invoice or Purchase Order as well as an On-Site visual verification. Please ensure each verification has the required information included, as verifications missing required details will be rejected.

AUDIT VERIFICATION REQUIREMENTS

Built Green[™] will conduct a visual verification of a portion of the Built Green[™] Checklist to maintain quality control and program credibility on every Built Green home registered with the 2010 checklist. If deficiencies are found, follow-up full verification of several projects will be implemented. This full verification will asses the entire checklist at the expense of the Builder. Supporting documentation provided by the builder shall met at least one of the following criteria: on-site verification or written documentation including when and from whom the product was purchased, as well as when, where and by whom it was installed, including contact information for each company.

Version: 2011-1

· Measurable or Validated

· Promotion of greater use

· Environmental Impact

Juili	Green" "		
ider No	ame: Batlistella		
201201-012	dress: 9A St.		
OPER	ATIONAL SYSTEMS minimum 32		
1-1	All ductwork joints and penetrations sealed with low toxic mastic or aerosolized sealant system.	3	3
1.0	Duct mastic is a preferred flexible seatant that can move with the expansion, contraction, and vibration of the duct system components. A high quality duct system greatly minimizes energy loss from ductwork. The additions to the system should be sized and designed to deliver the correct airflow to each room.	2	2
1-2	Install individual unit programmable ENERGY STAR thermostal (2 pts. total for all units).	4	-
	A set back thermostal regulates the heating/cooling system to provide optimum comfort when the unit is occupied and to conserve energy when it is not. Builders are encouraged to instalt a override system to ensure adequate temperatures for building durability.		
1-3	Install high efficiency, sealed combustion heating systems, all units or common system (min. 92% AFUE).		3
	High efficiency lumaces or bollers such as condensing systems, reduce energy consumption and consequently fossil fuel reliance.		
1-4	Calculate design heat loss and properly size HVAC equipment and/or implement a boiler management system to match the system operation to building loads and optimize controls for maximum energy savinas.	2	2
	A property sized heating and cooling system can reduce costs as well as conserve energy. When property sized, HVAC equipment will run for longer periods which increases the efficiency and durability of the equipment due to less cycling on and off.		
1-5	Centrally locate HVAC systems inside the building's heated envelope and reduce duct length. Roof top units are poorly insulated and waste heat is lost to the evironment rather that added to the building. High efficiency heating systems with shorter distribution distances require less energy.		I
1-6	Install HVAC systems with variable speed motors (ECM).		3
	A variable speed fan motor is designed to vary its speed based on the buildings heating and air conditioning requirements. Working in conjunction with the thermostal, it keeps the appropriate air temperature circulating through the home, reducing temperature variance in the home, it also provides greater air circulation and filtration, better temperature distribution, humidity control, higher efficiency and quiet performance.		
1-7	Units contain mulitple heating/cooling zones, thermostatically controlled zones (2 zones = 2pts., 3 zones = 3pts., 4 zones = 4pts.). Biliclency can be significantly improved by only heating or cooling when occupants are present and by only heating/cooling to the exact desired temperature. Different desired temperatures can be set in each room or space and an individual zone can be turned off	2	2 10
1-8	when not occupied. This type of system results in a dramatic reduction of energy consumption and operating costs. Install ground/ air/water/solar source heat pump system, either radiant or forced air to supply majority of space heating and cooling loads.		10
	Heat pumps can significantly reduce primary energy use for building heating and cooling. The renewable component displaces the need for primary fuels, which, when burned, produce greenhouse gases and contribute to global warming. Please Note: Effectiveness of heat pums is related to climate zone and energy costs. Please consult with specialist or engineer to confirm effectiveness.		
1-9	Provide electricity (1 pt.) and/or natural gas (1 pt.) direct metering for each unit. Direct metering in a Multi Context may require significant additional expenses above and beyond prorated condominium energy fees and holds individuals responsible for energy use.	1	1 to
1-10	Install and balance an individually controlled active Heat Recovery Ventilator (HRV) and/or solar/geo fresh air pre-heating for each unit (4 pts.) and/or common area (2 pts.) and/or buildings exhaust air (3 pts.)		2 10
	HRVs exhaust return air out of the home while bringing in fresh air for ventilation. The process used to do this takes advantage of the heat		
1-11	in the exhaust of to preheat the incoming air, saving energy. Install and balance an active Heat Recovery Ventilator (HRV) and/or solar/geo fresh air pre-heating for		2
	building common area. HRV exhaust returns air out of the home while bringing in fresh air far ventilation. The process used to do this takes advantage of the heat in the exhaust air to preheat the incoming air, thereby saving energy.		
1-12	Install and balance an active Heat Recovery Ventilator (HRV) and/or solar/geo fresh air pre-heating for the building's exhaust air.		3
	This would apply when a building has a large amount of exhaust air (ie, from a restaurant or health club). A HRV would help to recapture much of the heat in the air being exhausted.		
1-13	Install district high efficiency domestic hot water heating system (3 pts.) or an instantaneous "tankless" domestic hot water system in each unit (3 pts.),		3
	Hot water heater is direct vented with a closed combustion system. All air for combustion is taken directly from the outside. A direct system utilizes a co-axial vent pipe (pipe inside a pipe) draws combustion air in through the outer pipe, and exhausts the products of combustion through the inner pipe. A power vented heater exhausts air out of the building via a positive exhaust during main burner operation. Both systems eliminate the need for conventional chimneys or live systems. A lankless water heater does not have a storage tank to keep heated ail day, or a pilot light; it burns gas only when you need hot water. This eliminates standby heat loss and its higher efficiency will save on utility costs.		
1-14	Hot water storage lanks insulated by manufacturer to a minimum R-15.	2	2
	An insulation blanket will reduce the standby heat loss of the hot water in the tank.		
1-15	Install solar/air/water/geo (solar fraction >50%) DHW Heating System to supply a minimum of 25% of the peak DHW heating load and 70% of the total DHW energy load. A substantial amount of energy is wasted heating water in a fradillonal gas system. Using renewable sources will reduce the consumption		2

1-16	Provide roof area (min. 10% area of total) designed for future solar collector (Make solar ready; with solar or PV conduit Installed).		1
	A root area with an appropriate slope allows for the effective addition of future solar air, water heating or photovoltaics. Install urban wind/photovoltaic electrical generation system which supplies (10%-2 pts., 20%-4 pts., 50%-8		
1-17	pts., 100%-10 pts.) of design electrical load for the private area(s) of the building. This does not include electric heat. Urban wind and photovoltaics use renewable energy to generate electricity for the home, greatly reducing reliance on non-renewable		2 to 10
	energy sources and also reducing green house gas emissions. Install photovoltaic electrical generation system which supplies 50% (1 pt.) or 100% (2 pts.) of electrical		
1-18	needs for the common areas. This does not include electric heat. Photovoltaics use the sun's energy to generate electricity for the home, greatly reducing reflance on non-renewable energy sources and also reducing green house gas emissions.		1 or 2
1-19	50% (2 pts.) or 100% (4 pts.) of electricity used during construction of the project is generated by wind power or equivalent green power certificate. This practice encourages and promotes the use of renewable, sustainable energy resources as well as reducing green house gas	4	2 or 4
1-20	emissions. 50% (2 pts.) or 100% (4 pts.) of electricity used by homeowner during first year of occupancy is generated by wind power or equivalent green power certificate (prepaid by builder). This practice encourages and promotes the use of renewable, sustainable energy resources as well as reducing green house gas	4	2 or 4
1-21	emissions. Install a central drainwater heat recovery system (1 p1.) or Individual units at each shower (1 pt. per showe max 3 pts.).	r	1 to 3
	Drainwater heat recovery units enable an exchange of heat from greywater to the incoming water. This pre-heating reduces the amoun of energy required for the hot water lank.	,	
1-22	Sealed combustion gas fireplace with electronic ignition or electric fireplace for all fireplaces.		2
	Sealed combustion fireplaces involve a double-walled special vent supplied by the manufacturer that normally vents through a sidewall in a horizontal position. The inner surface removes the flue gases and the outer container provides for passage of combustion air.		
1-23	Install fireplace fan kit to circulate warm air into room on all fireplaces. A fan kit allows the heat generated by a fireplace to be transferred into the home more effectively.		2
1-24	All windows in the project are ENERGY STAR labeled.	2	2
	ENERGY STAR labelled windows save energy by insulating better than standard windows, making the home more comfortable all year round, reducing outside noise and can result in less condensation forming on the window in cold weather.		
1-25	All Electric ranges use below 480 kwh/yr. based on EnerGuide rating system.		
	EnerGuide label often reduces fuel consumption by approximately 20%.		
1-26	Refrigerators(1 pt.), Dishwashers (1 pt.), clothes washers (1 pt.) and/or combo washer dryer (2 pts.) are all ENERGY STAR labeled products. An ENERGY STAR label for refrigerator indicates the product has met strict requirements to reduce energy consumption.	3	1 to 4
1-27	All Clothes dryers have an energy performance auto sense dry setting which utilizes a humidity sensor for energy efficiency.	1	1
1-28	Sensor saves energy by shutting dryer off when clothes are dry rather than leaving it on for a specified time. Other building appliances (ie. TV, LCDs, security systems) are energy efficient/Energy Star rated.		1
1.20	An ENERGY STAR label indicates the product has met strict requirements to reduce energy consumption.		
1-29	Exposed Exterior Accessibility Ramps heated with renewable energy or waste heat. This practice encourages and promotes the use of renewable, sustainable energy resources as well as reducing green house gas		2
1-30	emissions. Install properly supported ceiling fan wired rough-in far each unit.	1	1
1-31	Intended to allow for future temperature equalization . Install interior motion sensor light switches. 1 point for every 10 switchs for a maximum of 3 points.	3	1 to 3
	Motion sensor switches prevent lights from staying on in rooms that are unoccupied. This helps reduce electricity consumption.		
1-32	Install lighting with an automation control system capable of unified automation control of lighting loads for all common areas	2	2
	Lighting and automation control systems prevent lights from slaying on in rooms without occupants, thereby reducing electricity consumption.		
1-33	Install automatic lighting system (2 pts.) and/or ventilation system (2 pts.), which are triggered by movement or CO levels, for garages/ parkade. Automating will allow better control and energy etiliciency.	4	2 to 4
1-34	Exterior Lighting follows IESNA illumenance requirements for recommended practice manual: Lighting for Exterior Environments. This addresses light pollution issues. The illuminating Engineering Society of North America can be found online at: lesna.org and the		2
	"Ughling for Exterior Environments" guide (IESNA RP-33-99) can be purchased there.		
1-35	Common Area III with high efficiency lamps.	1	
	incandescent lights lose much of their energy as heat rather than light and therefore are not as energy efficient as many of the other options available.		
1-36	Minimum 25% (1 pt.), 50% (2 pts.) or 100% (4 pts.) of light fixtures are L.E.D., fluorescent or have compact fluorescent light bulbs installed in each unit. Fluorescent, compact fluorescent and LE.D bulbs use 50% less energy than standard bulbs and last up to ten times longer.	2	1, 2 or 4
1-37	Minimum 50% of recessed lights in the entire building use halogen bulbs.		1
1-38	Halogen bulbs are slightly more energy efficient, last longer and provide a more effective task light than conventional bulbs. All EXIT signs are photoluminescent or LED.	2	2
	Photoluminescent exit signs use no power as the light is supplied by a phosphorous chemical that absorbs light until needed and then omits II.		
		Pag	a 2 of 9

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	no recessed lights. Prevent heated air from exhausting through celling. Air light light lixtures lead to a more airtight, energy efficient home. TOTAL SECTION POINTS	43	
BUIL	DING MATERIALS minimum 10		
2-1	Insulated Concrete Forming system (ICF's) used below grade (2 pts.) and/or above grade (2 pts.). Insulating Concrete Forms (ICFs) are hollow building elements made of plastic toam that are assembled, otten like building blocks, into the shape of a building's exterior walls. The ICFs are tilled with reinforced concrete to create structural walls. Unlike traditional forms, the ICFs are left in place to provide insulation and a surface for finishes.		2 to 4
2-2	Minimum of R-7.5 insulation installed under entire basement/foundation slab under conditioned space.	1.1	2
	Insulation installed under the basement stab will reduce the downward heal transfer into the ground below the stab, especially when hydronic in-stab heating is installed, insulation under the stab can reduce temperature swings in the heated space and respond quicker to new changes in thermostal settings. Attached garage, parking and/or loading dock overhead doors are insulated with R8 to R12 (1 pt.) or		
2-3	An insulated overhead garage door will reduce heat loss.	2	1 or 2
2-4	Attached garage/parking walls and ceiling are insulated to NBC minimum (R12 for walls, R34 for ceilings).		1
	A fully insulated garage acts as a butter zone, reducing heat loss.		
2-5	Non-solvent based damp proofing (seasonal application).		
	Water based damp proofing products use water as a Thinner. Oil based dampproofing give off a number of volatile organic compounds (VOCs) as the solvent evaporates after application. These VOCs can be a strong irritant and can add to air poliution.		
2-6	Paint Parkade semi gloss white to reduce number of required lighting fixtures. Using high reflectance white paint allows for fewer lights to be used in the parkade area.	1	1
2-7	Steel studs made from a recycled steel (min. 75%) is used to replace wood studs (min.15%). Recycling steel reduces landlill waste and saves on wood consumption.		л
2-8	Use Optimum Value Engineering (OVE) to reduce wood use in traming: - Exterior and interior wall stud spacing at 24" on-center (2 points) or 19.2" on-center (1 pt.). - Elimination of headers at non-bearing interior and exterior walls. (1 pt.) - Use of header hangers instead of jack studs. (1 pt.) - Elimination of cripples on hung windows. (1 pt.) - Elimination of double plates, use single plates with connectors by lining up roof framing with wall & floor framing (1 pt.) - Use of two stud corner framing with drywall clips or scrap lumber for drywall backing instead of studs. (1		1 to 7
	nt 1 For more details on Optimum Value Engineering (OVE) traming principles see www.buildingscience.com.		
2-9	Walls and roof designed as 24" module to reduce waste.		2
2-10	A 24° module takes into account the size of sheets of OSB or plywood, stud spacing, carpet size etc. Use of insulated headers (either manufactured or site built open insulated single headers) with minimum	1	1
	insulation value of R10.		
2-11	Install manufactured insulated rim/band joist or build on site by setting back joists to allow rigid insulation filler of a minimum R10.	2	2
2-12	Rim and band joists can either be insulated on site or can be pre-manutactured (often insulated with a foamed plastic). Structural insulated panel system (SIPS) used for walls (3 pts.) and/or for roofs (2 pts.). Reduces thermal migration and controls alr leakage – Keeps heating and cooling costs to a minimum compared to a conventionally tramed wall.		2 10 5
2-13	All insulation used in the project is certified by a third party to contain a minimum recycled content: 40% (1 pt.) or 50% (2 pts.). Recycled content means less landfill waste and raw material use. Also, according the the North American Insulation Manufacturer's Association, insulation with recycled content takes less energy to produce than using all raw materials.	2	1 or 2
2-14	Insulation levels meet or exceed the MNECB (may include Roof-R28, Walls R14, Floor R14).		1
	Model New Energy Code minimums will help to keep heating and cooling costs to a minimum compared to a conventionally tramed wall.		
2-15	Replace exterior wood sheathing with installed insulating sheathing. Using less materials when not required saves the forest reserves, reduces thermal migration and controls air leakage; it also keeps heating and cooling costs to a minimum compared to a conventional wall.		2
2-16	Deck (1pt.),balcony surfaces (1pt.), and/or veranda structure (1 pt.) made from a third-party certified sustainable harvested wood source or third-party certified sustainable concrete. The issue of sustainable forest management (SFM) is considered to be of such importance by the Canadian forest industry that, in 1993, a group of 22 organizations representing virtually all of the industry came together to form the Canadian Sustainable Forestry Certification Cadition. The cadition regroups several different certification standards that each have their strengths and weaknesses. For more information, see www.stms.com. Concrete produced from aggregates derived from a pit or quarry with a valid reclamation plan approved by Materials and Resources Canada or the governing provincial body.		1 to 3
2-17	Dimensional lumber from a third-party certified sustainable harvested source used for floor framing (1 pt.), wall framing (2 pts.), and/or roof framing (1 pt.). Saves old growth forests by using trees from a second generation forest.		1 10 4
	Environmentally engineered flooring system (ie. Uses reclaimed/recycled/rapidly renewable wood waste.	-	

materials. 2-19 Environmentally engineered products for all load bearing beams (ie. Uses reclaimed/recycled/rapidly renewable wood waste, flyash concrete, recycled steel). Engineered products include wood products, concrete and recycled steel. 2-20 Environmentally engineered products for all exterior window and door headers. Engineered products include wood products, concrete and recycled steel. 2-21 Engineered products include wood products, concrete and recycled steel. 2-22 Engineered stud material for 10% of stud wall framing. Use of Engineered lumber products saves old growth torest by using components from second generation forests and recycled materials. 2-22 Engineered plate material and/or finger-jointed plate material. Use of recycled materials saves old growth forest. 2-23 Finger-jointed studs for 90% of non-structural stud wall framing. Use of recycled anderials saves old growth forest. 2-24 Recycled and/or recovered content gypsum wallboard, recycled content (min. 15%). Recycled content reduces landlill waste and the use of new materials. 2-25 Recycled content exterior wall sheathing (min. 50% pre or post consumer). Recycled content reduces landlill waste and the use of new materials. 2-24 Recycled content gapsum wallboard, saving the torest reserves, reduces thermal migration and controts all leakage: it also keeps heating of austerial of 38 product, saving the torest reserves, reduces thermal migration and controts all leakage: it also keeps heating and cooling costs to a minimum compared to a conveni	
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2-28 wall penetrations (2 pts). All sill plates sealed with foam aaskets or a continuous bead of acoustical sealant	
(1 pl.).	3 110
2-29 Builder has installed a green roof over 50% (3 pts.), 75% (5 pts.) or 100% of total roof area (7 pts.).	3.5
Green roots are defined as a system of plants, growing medium and root/waterproof membrane that acts as a whole to maximize the available environmental benefits of improving air temperature (reduced heat Island effect), air pollution, storm water management and green space. Extensive or 2-6" Thickness typically requires 30-40 lbs/sqft structural support, while Intensive roots (6"-4") require significant	3.54
structural support. Builder has incorporated exterior horizontal and/or vertical shading devices for glazing (2 pls.), or exterior	
2-30 operational shading devices (4 pts.). Shading windows from solar heat gain is a key design strategy for passive cooling and to reduce cooling loads on active HVAC systems in multi buildings. Light shelves and/or louvres can be optimized to allow for winter solar gain, while reducing overheating during the	2.0
summer.	
2-31 All decks or balconys are thermally broken from the envelope by R10 (1 pt.), or fully separated (3 pts.).	1 10
TOTAL SECTION POINTS	14
EXTERIOR and INTERIOR FINISHISES minimum 10/V	
3-1 Exterior doors with a minimum of 15% recycled and/or recovered content.	1
Recycled or recovered content ensures we keep our landfill use to a minimum.	
3-2 All exterior doors manufactured from fiberglass, Fiberglass doors insulate better than steel skinned or wood doors, have a longer lifespan, do not warp, twist or crack, and therefore reduce landfill use.	'
3-3 Exterior window frames contain a minimum of 10% recycled content. Reusing materials such as plastics reduces landfill usage, which may not be biodegradable.	1
3-4 Exterior window frames are made from third-party certified sustainable harvested wood. Uses trees from a forest managed system that prevents clear cutting trees, and replants trees to replace from which they we been harvested.	2
3-5 Concrete used in home has a minimum supplementary cementing material of 25% (1 pt.) and/or 40% (2 pts.) is within the scope of proper engineering practices. For every one tonne of Portland cement generated, eighth tenths of a fon of carbon dioxide is produced. Supplementary cementitious	i to
products include fly ash, blast furnace slag as well as metakaolin. 3.4 Natural cementitious stone/stucco/brick or fiber cement siding – complete or combination thereof for	
100% of exterior cladding. Strong, long lasting, lireproof material.	
3-7 Exterior trim and finish is made of recycled content (50% min., pre or post consumer) material, durable and	
fire rated; trim (1 pt.) and/or wall finish (4 pts.). Fiber cement (ascia and soffit, made with recycled content from sawmill waste and Portland cement, is a strong, long lasting and fireproof material.	1 to
3-8 Exterior trim (3 pts.) and /or siding materials (4 pts.) have recycled and/or recovered-content (min. 50% pre- or post-	
consumer).	3 to
Recycled and/or recovered-content frim materials reduce the amount of new material used in production by gluing up miss scraps into large pieces, which conserves natural resources and reduces landfill usage.	
3-9 Exterior trim materials are manufactured from OSB.	- j
Trim materials monufactured from OSB uses a laminating process to make larger pieces from smaller pieces or strands of wood. The process saves old growth forests by using trees from torest managed systems that prevents clear cutting trees, and replants trees in areas	
from which they have been harvested.	Page 4 of 9

3-10	All exterior trim is clad with pre-finished metal (1 pt. over top wood backings, 2 pts. without wood	2	1102
	bockings), Trim clad with pre-linished metal is a durable long lasting product that requires no maintenance, reduces waste in landtills due to long life of product.		1
	Deck or balcony surfaces made from recycled materials: 50% (1 pt.), 75% (2 pts.), 100% (3 pts.), and/or from		
3-11	low maintenance materials (2 pts.) (Deck surfaces should not need maintenance of any kind, including	2	1,2,3 or 5
	painting, for a minimum of 5 years). Substituting recycled material outdoors avoids the use of pressure treated and high mildew resistant wood that may otherwise be harvested from disappearing old growth or rain forests. Material which losts longer and reduces landfill usage tends to require little to no maintenance, saving replacement costs and reducing energy spent.		7
3-12	Install 25-year (2 pts.), 30-year (3 pts.), 35-year (4 pts.), 40-year (5 pts.), or 50-year (6 pts.) roofing material	2	2, 3, 4, 5 0
	with manufacturer's warranty. A longer warrantied roof system saves money in replacement costs, and reduces the use of landfills due to the longevity of the product.		1 9
	A briger wardnined tool system saves money in replacement costs, and readers are do or another save to the longer of an eleven	-	T
3-13	Minimum 25% recycled-content roofing material.		3
	Recycled content roof material reduces the use of new resources, and waste in landfills.		-
3-14	Interior doors made with recycled and/or recovered content (min.15%-1 pt.) and/or from third-party certified sustainable harvested sources (2 pts.).	1	1 10 3
	Recycled or recovered content ensures we keep our landfill use to a minimum.		1 .
3-15	Interior doors made from third-party certified sustainable harvested sources. Uses trees from a lorest managed system that prevents clear cutting trees, and replants trees to replace from which they have been harvested.	-	2
3-16	Domestic wood from reused/recovered or remilled sources - 500 square foot minimum for flooring or all		6
0.0	cabinets or all millwork. Reused, recovered or re-milled sources eliminate the need for new resources, saves energy, transportation costs, and forestry from		1
3-17	depletion. All carpet padding made from natural or recycled textile, carpet cushion or tire waste.		2
	Natural or recycled-content carpet padding is a good use of reuseable resources. Rebond still qualifies.		
3-18	Install carpet that has a minimum of 50% recycled content.	-	2
	Recycled-content carpet is a good use of renewable resources, lessens off gases, and improves air quality. 100% recycled or recovered content underlayment or use of concrete finishes to enable the flooring to	-	Г
3-19	remain concrete. Concrete linkhes such as stamped or stained concrete etc.		1
3-20	Install a minimum of 300 square feet per unit of laminate flooring.	2	2
0-20	Laminate flooring is made up of sustainable raw materials.		_
	Bamboo, cork or hardwood flooring used in home (min. 300 square feet installed). Products must be third-		3
3-21	party certified to be from managed forests or from certified sustainable sources. Cork flooring comes from stripping the bark oft cork oak, which regenerates itself. The cork tiles are moisture, rot and mold resistant, providing a floor that can last over 30 years, Bamboo flooring is a good use of natural resources because it is last growing, durable and flexible.		1 -
3-22	All ceramic tile installed in the project has a minimum of 25% recycled-content.		2
	Reduces landfill usage.		-
3-23	MDF casing and baseboard used throughout the project.	1	1 1
	MDF casing is created from sawdust and glues, utilizing all wood waste to create usable product.		1 1
3-24	Finger-jointed casings, baseboards and jambs used throughout the project. Finger-jointed casing and baseboards maximize wood usage, buy using small pieces of wood glued together to create longer pieces. The process saves old growth forests by using trees from forest managed systems that prevents clear cutting trees, and replants trees in areas from which they have been harvested.		_
3-25	Solid hardwood trim from third party certified sustainable harvested sources approved for millwork (2 pts.)		2 to 4
	and/or cabinets (2 pts.). This process saves old growth forests by using trees from forest managed systems that prevents clear cutting trees, and replants trees in the tree when the same tree to be precised.		_
3-26	areas from which they have been harvested. Paints or finishes with minimum of 20% recycled content.	1	1
0 10	Paints or finishes made form recycled content are environmentally friendly because recycling paint reduces the hazardous waste in landfills.		-
	Natural granite, concrete, recycled glass or stone counterlops in 100% of the kitchen (2 pts.) and all other	3	1 10 3
3-27	countertop areas (1 pt.).		
2.00	Natural product is more durable; easy to clean and maintain and is resistant to heat and scoring.		7 2
3-28	100% agricultural waste or 100% recycled wood particle board used for shelving. Products such as wheat board are made from agricultural waste.		- ·
3-29	PVD finish on all door hardware (1 pt.) PVD finish on all faucets (1 pt.).	2	1 10 2
	Physical Vapor Disposition (PVD) provides a more durable product; no toxic wastes are produced making II.		-
	TOTAL SECTION POINTS	2.0	
		16	
			_
		_	_

4-1 Install pleated media filter (1 pt.) or an electrostatic air cleaner (2 pts.) or an electronic air cleaner (3 pts.) or a HEPA filtration system (6 pts.) or an ultraviolet air purifier (2 pts.) in conjunction with the HVAC system.

1 1.2.3 or 6

	often the most efficient of all the media air filter types and are a whole house air filter. By increasing the surface area for collecting dust, atrificent the pleated air filter is less restricted. The electrostalic air cleaner is a permanent washable air filter that traps and removes abhome particles from the air before being circulated through the turnace and into the home. An Electronic Air Cleaner ofters a superior level of filtration by using advanced, 3-stage filtration technology to trap and filter airbome particles like dust, cat dander and smoke. It works by placing an electric charge on airbome particles, and then collecting the charged pollutants like a magnet. The air cleaner cells can be washed in your distwasher or sink. HEPA stands for High-Efficiency Particle Aresting, HEPA filtration ofters the highest particulate removal available - 99.97% of particles that pass through the system including dust, cat dander, certain bacteria, pollens and		
-2	Install power drum humidifier (1pt.) or a drip type humidifier (2 pts.) in conjunction with the HVAC system.		1
	Proper humidily provides a more comfortable living environment at a lower temperature, so you can turn down your thermostal for energy savings. Controlling humidity also means moisturizing day at to prevent damage to hardwood floors and woodwork. Power drum humidiliers direct like heated air through o water-laden evaporator sleeve which absorbs moisture and then returns to the heating system for distribution throughout the home.		
-3	Install drip type humidifier on HVAC system. Proper humidify provides a more comfortable living environment at a lower temperature, so you can turn down your thermostal for energy savings. Controlling humidity also means molsturizing dry air to prevent damage to hardwood floots and woodwork. Flow-through humidifiers direct the alritow from your heating and cooling system to pass through a molsture filled pad, so the alistream picks up molsture evenly and distributes it throughout the home.	2	2
-4	Install in-line ventilation fan with programmable timer (separate switch from lighting) in each unit. A programmable timer ensures necessary, regular, automatic mechanical ventilation of the housing units.		1
-5	Install passive Heat Recovery Ventilator (HRV-2 pts.) or and active Heat Recovery Ventilator/ Energy Recovery Ventilator (HRV or ERV-4pts.) in each unit . A Heat Recovery Ventilator (HRV) is an air exchanger that exhausts humid, state, polluted air out of the housing unit and draws in tresh, clean autdoor air, invisible pollutants produced by common household substances, plus dust and excess humidity that get trapped in today's houses, can increase your risk of chronic respiratory lines and your home's risk of serious structural damage. A passive HRV unit does not have its own internal (an and is 100% tumace assisted. It works by tying the exhaust side of the unit to the supply dr plenum which forces air to exhaust from the housing unit and at the same time tresh air enters from outside through the unit and into the cold air return duct work. Much like the HRV the ERV recovers head. It also recuperates the energy trapped in molsture; this greatly improves the overall recovery efficiency. In dry climates and humidflied homes the ERV limits the amount of molsture expelled from the hore. In humid climates and air conditioned homes, when it is more humid outside than inside, the ERV limits the amount of molsture coming into the housing unit.		210
-6	Install thermostat that indicates the need for the air filler to be changed or cleaned. This leature displays filter maintenance reminders on the thermostat. Regular furnace maintenance is required to keep your mechanical equipment turning efficiently and problem free as well as ensuring a healthy indoor air environment.		,
-7	All combustion appliances are sealed with no possibility of backdroft (if units are individualy heated).		3
	Sealed-combustion appliances draw all their combustion air from the outdoors, which eliminates any chance of back dratting. This leature is especially heipful in well sealed housing units. These types of appliances do not negatively affect indoor air quality.		
-8	Install hardwired carbon monoxide detector outside main sleeping areas, if combusion spillage susceptible appliances are used in the unit.	1	1
-9	Carbon monoxide detectors warn against high levels of toxic carbon monoxide. Power vacuum all HVAC ducting prior to occupancy by homeowner. This process helps eliminate pollutants that drop into the HVAC ducting during the construction process from being circulated into the houring unit.		2
10	Central vacuum system vented to exterior has Carpet and Rug Institute (CRI) IAQ approval. A central vacuum system collects dust centrally, while exhausting to the exterior so that dust mittes and bacteria do not have the opportunity to re-circulate. The result is cleaner, healthter air.		1
-11	All insulation in the project is third-party certified or certified with low or zero formaldehyde. Formaldehyde may cause eye, nose, and throat initiation, headaches, loss of coordination, nausea, damage to liver, kidney, and central nervous system.	2	2
-12	Low formaldehyde sub floor sheathing.	3	3
	Formaldehyde is coloriess gaseous organic compound, water soluble, with a characteristic pungent and stilling smell. Building matericis low in or tree of formaldehyde glues are used in the floor underlayment, cabinetry and elsewhere to protect the indoor air quality.		
13	Low formaldehyde underlayment is used in the project. (ANSI A208.1 – 1993 concentration 0.3 ppm).	1	,
	Low formaldehyde (phenol) and formaldehyde-free binders (PMDI) are available and becoming more common. FSC certified OS8 is becoming more common, reducing environmental impacts on air, water, social quality.		
14	Low formaldehyde particle board/MDF used for cabinets (ANSI A208.2 – 1994 concentration 0.3 ppm). Urea formaldehyde-tree libreboard can be used in the same way as conventional fibreboard, but with the added caution of greater	1	3
15	potential for water damage. Low formaldehyde particle board/MDF used for shelving (ANSI A208.2 – 1994 concentration 0.3 ppm).	1	1
16	Zero formaldehyde particle board/MDF used for cabinets (2 pts.) and/or for shelving (2 pts.). Cabinets made from formaldehyde free particleboard or MDF eliminate the Volallie Organic Compounds (VOC) that olfgas into the		210
17	home, resulting in healthler indoor air quality. All interior wire shelving is factory powder coated.		2
18	Vinyl coating on conventional shelving units offgas VOC toxins. Water-based urethane finishes used on all site-finished wood floors. Water-based poxy: Generatly referred to as "epoxy-modified finish," water-based epoxy links differs from its solvent-based counterpart in that the community it lines that the counterpart for modified finish.		2
19	that the epoxy restrints listeff the catalyst for an acrylic or urethane resin. All wood or laminate flooring in the project is factory finished, installing a pre-linished floor eliminates the time, the dust and the odors associated with the on-site sanding and finishing of an unfinished product.	2	2
-20	Water-based Lacquer or paints are used on all sile built and installed millwork, including doors, casing and baseboards. Water based Interior linkh products reduces VOC off-gassing which improves indoor air quality.		3
-21	Interior paints are used that have low VOC content (2 ptsStandards are less than 250 grams/liter of VOCs and/or Interior paint is used that has no VOC's in base paint-prior to tint (3 pts.).	3	210

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4-22	Volatile Organic Compounds (VOC) are a class of chemical compounds that can cause short or long-term health problems. A high level of VOCs in paints/finishes oil gas and can have detrimental effects to a building's indoor air quality and occupant health. Any paint with VOC's in the range of 5 grams/filter or tess can be called "Zero VOC", according to an EPA standard. Some manufacturers may claim "Zero- VOC's", but these paints may still use colorants, biocides and lungicides with some VOC's. Adding a color tint usually brings the VOC level up to 10 grams/filter, which is still quite low. Carpet and Rug Institute (CRI) IAQ label on all carpet used in unit (2 pts.) and/or on all underlay used in		1 to 3
	Unit (1 pt.). To identify carpet products that are truly low-VOC, CRI has established a labeling program. The green and while logo displayed on carpet samples, of the CRI indoor Air Quality Carpet Testing Program, in shownrooms informs the consumer that the product type has been tested by an independent laboratory and has met the criteria tor very low emissions. The adhesives used to install carpets and the latex rubber by some manufacturers to adhere face fibers to backing materials generate volatille organic compounds (VOCs). Carpets also cover large surfaces within an interior environment and can provide "sinks" for the absorption of VOCs from other sources.		
4-23	Natural wool carpet in all living areas. Natural wool carpets are durable and use less secondary backing materials and chemicals. Ottgassing is typically caused by the secondary backings and chemical additives in synthetic carpets, for controlling mildew, fungus, fire and tot.		2
4-24	All vinyl or linoleum sheet flooring is installed with low VOC adhesives (1 ptLow VOC = standard is less than 150 grams per litre) and/or are replaced by hard surface flooring (2pts.) and/or natural linoleum replaces vinyl (1pt.).		1 10 4
4-25	Low VOC adhesive or backing minimizes the amount of VOC off-gassing, therefore improving IAQ. Natural linoleum in place of any vinyl sheet flooring, Linoleum installed with low VOC adhesives. (Low VOC = standard is less than 150 grams per litre).		2
	Natural lineleum is made from natural linseed and other abundant renewable materials.		
4-26	All ceramic tiles are installed with low VOC adhesives and plasticizer-free grout. (Low VOC = standard is less than 150 grams per litre). Most adhesives are still based on SB latex, which releases large quantities of volatile organic compounds (VOCs). The volatile solvents are used to emulsity (or liquety) the resin that acts as the bonding agent. However, water-based adhesives emit tar less VOCs than their conventional solvent based counterparts. There are three types of low-VOC formulas: water-based (latex and acrylics): reactive (silicone and polyurethane); and exempt solvent-based (VOC-compliant solvent). While all three technologies yield low- or zero-VOC caulis.	1	
4-27	sealants, and adhesives, their performance is slightly different. All vinyl flooring in units are replaced by hard surface flooring.	2	2
4-28	See detail below. All carpet in units are replaced by hard surface flooring. Hard surface flooring is generally more durable and improves the IAQ within a building. Carpets collect dust, dust mites and other allergens which when disturbed become airborne particulates, directly affecting the health of the occupants.		4
WAS	STE MANAGEMENT minimum 7		
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WAS	Comprehensive recycling program for building site including education, site signage and bins. A comprehensive recycling program that is strictly followed significantly reduces the amount of waste ending up in landfills. Currently it is estimated that up to 50% of landfill waste is construction related.	2	2
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5-1 5-2 5-3	Comprehensive recycling program for building site including education, site signage and bins. A comprehensive recycling program that is strictly followed significantly reduces the amount of waste ending up in landfills. Currently it is estimated that up to 50% of landfill waste is construction related. Collection of waste materials from site by a waste management company that is a current member of a provincial recycling council or equivalent association and verifies that a minimum of 10% of the materials collected from the construction site have been recycled. Not only does this reduce overall waste of product, it ensures that as much product at possible is being utilized for the production of future resources. Suppliers and Trades recycle their own waste. (1 pt. per trade, max. 4 pts.). Trades being responsible for recycling and removal of waste not only reduces landfill waste, but also promotes a cleaner and safer working environment. Minimum 25% (2 pts.) or 50% (4 pts.) by weight of waste materials collected from construction site is diverted from waste stream. Trades being responsible tor recycling and removal of waste not only reduces landfill waste, but also promotes a cleaner and safer working environment.	4	4
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5-1 5-2 5-3 5-4 5-5	Comprehensive recycling program for building site including education, site signage and bins. A comprehensive recycling program that is strictly followed significantly reduces the amount of waste ending up in landtills. Currently it is estimated that up to 50% of landfill waste is construction related. Collection of waste materials from site by a waste management company that is a current member of a provincial recycling council or equivalent association and verifies that a minimum of 10% of the materials collected from the construction site have been recycled. Not only does this reduce everali waste of product, it ensures that as much product as possible is being utilized for the production of future resources. Suppliers and Trades recycle their own waste. (1 pt, per trade, max. 4 pts.). Trades being responsible for recycling and removal of waste not only reduces landfill waste, but also promotes a cleaner and safer working environment. Minimum 25% (2 pts.) or 50% (4 pts.) by weight of waste materials collected from construction site is diverted from waste stream. Trades being responsible for recycling and removal of waste not only reduces landfill waste, but also promotes a cleaner and safer working environment. Use of recycled materials derived from local construction sites (1 pt, for each different product used, max. of 3 pts.). Products recycled from the construction site, such as mulched wood cut ofs or mulched gypsum are often useable as either clay/ soil water releation additives or for organic burning. Trees and natural features on site protected during construction. The protection of existing frees and other natural features such as streams, ponds and other vegetation reduces environmental impact, and acosystem impact. Many of these features can be protected simply by following good waste management procedures. Shared fransportation benefits: provide one parking stall for a car-sharing vehicle (1 pt.), and/or a car sharing vehicle as one component of condimimum association (3 pt	4	4 1 to 4 2 or 4
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5-1 5-2 5-3 5-4 5-5 5-6	Comprehensive recycling program for building sile including education, sile signage and bins. A comprehensive recycling program that is strictly followed significantly reduces the amount of waste ending up in landfills. Currently it is estimated that up to 50% of landfill waste is construction related. Collection of waste materials from sile by a waste management company that is a current member of a provincial recycling council or equivalent association and verifies that a minimum of 10% of the materials collected from the construction sile have been recycled. Not only does this reduce everalt waste of product, it ensures that as much product as possible is being utilized for the production of future resources. Suppliers and frades recycle their own waste. (1 pt. per frade, max. 4 pts.). Trades being responsible for recycling and removal of waste not only reduces landfill waste, but also promotes a cleaner and safer working environment. Minimum 25% (2 pts.) or 50% (4 pts.) by weight of waste materials collected from construction site is diverted from waste stream. Trades being responsible for recycling and removal of waste not only reduces landfill waste, but also promotes a cleaner and safer working environment. Use of recycled materials derived from local construction sites (1 pt. for each different product used, max of 3 pts.). Preducts recycled from the construction site, such as muched wood cut alts or mulched gypsum are often useable as either clay/ soll water retention additives or for organic burning. Trees and natural features on site protected during construction. The protection of existing frees and other natural features such as streams, ponds and other vagetation reduces environmental impact, and ecosystem impact. Many of these features can be protected simply by following good waste management procedures. Shared transportation benefits: provide one parking stall for a car-sharing vehicle (1 pt.), and/or a car sharing vehicle as one component of condimimum association (3 pts	4	4 1 to 4 2 or 4 1 to 3
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5-1 5-2 5-3 5-4 5-5 5-6 5-7 5-8	Comprehensive recycling program for building site including education, site signage and bins. A comprehensive recycling program that is sticitly followed significantly reduces the amount of waste ending up in landills. Currently it is estimated that up to 50% of landill waste is construction related. Collection of waste materials from site by a waste management company that is a current member of a provincial recycling council or equivalent association and verifies that a minimum of 10% of the materials collected from the construction site have been recycled. Not only does this reduce overall waste of product, it ensures that as much product as possible is being utilized for the production of future resources. Suppliers and Trades recycle their own waste. (1 pt. per trade, max. 4 pts.). Trades being responsible for recycling and removal of waste not only reduces landill waste, but also promotes a cleaner and safer wasting environment. Minimum 25% (2 pts.) or 50% (4 pts.) by weight of waste materials collected from construction site is diverfed from waste stream. Trades being responsible for recycling and removal of waste not only reduces landill waste, but also promotes a cleaner and safer wasting environment. Use of recycled materials derived from local construction sites (1 pt. for each different product used, max of 3 pts.). Products recycled from the construction site, such as mulched waod cut sits or mulched gypsum are often useable as either clay/ selit water releasion additives or for organic burning. Trees and natural features on site protected during construction. The protection of existing frees and other natural leatures such as streams, pands and other vegetation reduces environmental impact, and ecosystem impact. Many of these features can be protected simply by following good wate management procedures. Shared fransportation benefits: provide one parking stall for a car-sharing vehicle (1 pt.), and/or a car sharing vehicle to share atlows occupants to two without their own v	4	4 1 to 4 2 or 4 1 to 3

By installing built in recycling centers, which can be as simple as labeled containers (paper, cardboard, cans, plastics, etc), homeowners are more likely to utilize the pre-existing facilities and thus contribute to the reduction in landfill waste. Providing a composter promotes a reduction in wastes heading to the landfill by giving homeowners an option for organic waste such as food leftovers. Provide a central recycling center for the housing project (1 pt.--min. of paper, glass and tin recycling) 5-11 1 1102 and/or install trash compactor for unit or building (1 pt.). Providing a recycling center will promote recycling among the homeowners/occupants. Installing a trash compactor, while not actually reducing the mass of waste, does help by reducing it's volume, which over time can make a significant difference to landfill levels. TOTAL SECTION POINTS 16 6-1 CSA approved single flush toilet averaging 1.6 GPF or less installed in all bathrooms. 2 Lower flow toilets can save a substantial amount of water over time. Install a dual flush or 1.2 GPF toilet in one or more bathrooms in each unit (2 pts. for one bathroom, 3 pts. for 3 2 or 3 6-2 These tollets offer a choice between two water levels for every flush; 1.6 GPF (6 LPF) or 0.8 GPF (3 LPF). 6-3 Install waterless urinals in men's public facilities. The Average public urinal uses approximately 400 litres of water/day or 3.8-10 litres per flush. Waterless urinals are more sanifary, reduce maintenance, installation costs and are only marginally more expensive to purchase. Insulate the first three feet of the water lines on the hot water lank with flexible pipe insulation where units 6-4 contain independent DHW system (1 pt.) and/or insulate all hot water lines to all locations (2 pts.). Minimizing the heat loss in the water line will decrease the initial water wasted by delivering hot water faster. Minimizing the heat loss in the water line will decrease the initial water wasted by delivering hot water faster. 3 6-5 3 Install hot water recirculation line. Having the hot water re-circulated from the hot water source to the lixture points will decrease the initial water wasted by delivery the hol water laster Install low flow faucet aerators on all bathroom and kitchen sinks (1 pl.) and/or install hands free lavatory 1 1105 6-6 or kitchen faucets in each unit (4 nts.) Law flow faucets may be included if flow rate is a maximum of 3.8 L/ minute on bathroom sinks and/or 6.8 L/minute on kitchen sinks. Battery powered electronic sensor minimizes the spread of germs and saves water. Supply front loading clothes washer in each unit. 3 3 6-7 Front loading clothes washers conserve water by design, as they are only required to fill up the washing compartment 1/3 full to effectively wash clothing. Additionally they use up to 75% less environmentally damaging laundry detergent. AND they also conserve electrical or gas energy by significantly reducing drying time for clothes with a more thorough spin cycle. 1 Install water saving dishwasher that uses less than 26.0 L/water per load in each unit. 1 6-8 Water saving distwasher uses technology to reduce both the amount of water required as well as electrical energy requirements. The EnerGuide appliance directory put out by Natural Resources Canada has a comprehensive listing of all manufacturers and models of dishwashers and other appliances with water usage and energy efficiency ralings. Install permeable paving materials for driveways and walkways. 2 6-9 Permeable paving materials allow rainwater to flow back into the ground instead of into storm sewers. 3 Install a water meter in every unit. 6-10 Installing a water meter in each unit makes the occupants more aware or and responsible for water use. Install Efficient Irrigation Technology (1 pl.) in conjunction with a collection system (1 pt.)- 50% of irrigation 3 6-11 1 to 3 needs: 3 pts. for all). Show Storm Water Management plan & design; water efficient inigation systems, sensors, regulators, micro drip feed systems etc. Plan for neighbourhood storm water management principles and strategies including run-off and controlling rates. Provide a list of drought tolerant plants and a copy of the local municipality water usage guide to 6-12 homebuyers with closing package. Most municipalities provide a guide that gives the water requirements of various plants and grasses. When property designed. landscaping choices can significantly contribute to water conservation. 6-13 Reduce lawn/turf to 50% of landscaped area. Lawns require a large amount of water to maintain. By reducing the amount of lawn, water use can also be reduced. Builder captures rainwater for use in atrium, patio garden feature and/or landscaping. 6-14 6-15 Greywater is collected, treated and reused throughout the project TOTAL SECTION POINTS 16 VII. BUISNESS PRACTICE minimum 9 Products used for the project are manufactured within 800 km. (1 pt. for each product to a max. of 5 7-1 2 1 to 5

¹ products). Products made closer to the location of use will have less embodied energy. Basically this means that the shorter the transportation distance the less energy used in moving the product. Less energy used means fewer emissions. Builder provides Built Green homeowner manual and/or educational walkthrough and/or Green systems

7-2 billider provides boll oreen normed when manada analysi education at watk mough analysi oreen system. Manadam education is an important component to any high performance building. If the fechnology is not used correctly, if will diminish the efficiency.

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-3	Builders office and show homes purchase a minimum of 50% (1 pt.) up to 100% (2 pts.) solar, wind or renewable energy. Wind Energy is a cleaner way to provide energy. Lower emissions benefit the environment.	2	1 to
-4			1.5
-4	Manufacturers and/or suppliers purchase 50% or more solar, wind or renewable electricity.		1
	Wind Energy is a cleaner way to provide energy. Lower emissions benefit the environment.		
-5	Builder supplies a minimum of 8" of topsoil as finish grading throughout site. Compared to subsoil materials, topsoils usually have higher aggregate stability, lower bulk density, and more favourable pore size distributions which leads to higher hydraulic conductivity, waterholding capacity, and aeralion porosity.	2	2
6	Development sile provides community amenity space for not for profit community services.	-	2
7-7	Development site provides for Publically Accessible Private Space.		
	le. Atitums, open courtyards etc. which are part of the residential project but have links to/tor public access.		
	Development includes a diversity of housing types including 20% live/work units (2pts.), 25% mixed use (2		
-8	pts.) facilities and/or 20% with separate basement suite units (2pts.) This type of development encourages neighborhoods where people can live, work shop etc. without having to drive.		21
	Builder has written environmental policy which defines their commilment (which must include an office	-	
-9	recycling program and energy efficient lighting).	1	3
	A stalement of commitment helps to emphasize priority and ultimately define a corporate culture.		
	Manufacturer and/or supplier has a written environmental policy which defines their commitment (this		
10	must include an office recycling program and energy efficient lighting). (1 pt. per supplier/manufacturer,	2	11
	max, of 2 bis.).		
	Doing business with others committed to the environment helps to promote the ideals of being earth friendly.		
11	Builder has written an environmental policy which prioritizes milestones for future net zero housing		
	developments.		
	The next step toward easing our reliance on non-renewable energy is net zero housing. Net zero houses produce as much energy as they		
	consume using renewable sources such as solar, thermal, wind, geoexchange etc.		
12	Make provision Truck Management Plan, to avoid high congestion areas during construction.		
	A truck management plan would minimize the impact of trucks in the construction neighborhood. Features include scheduled arrivals/departures, resuse of materials to reduce truck traffic, communication with community and specific hours of work designated.		
13	Delivery Area wheel washed/ treated during construction.		
10	Wheel wash area will cut down on dust pollution in the neighborhoods where construction is taking place.		
14	Builder's company vehicles are hybrid or bio-diesel vehicles (1 pt. per vehicle to max. of 3 pts.). A commilment to the environment shouldn't stop al construction. Using a hybrid vehicle produces lower harmful emissions. Diesel construction vehicles converted to bio-diesel reduce fuel consumption by up to 75%.		
15	Builder uses radiantly supplied cold weather construction practice.		
	Propane heaters under tarps are often inefficient; this results in a great deal of wasted energy while reducing the quality of workmanship. Alternatives may include manufacturing components indoors.		
16	Environmental certification for builder's place of business (building, office etc). Many commercial buildings have been rated with various energy efficiency standards. Does your company work within an ENERGY STAR or LEED certified office building?		
	Builder agrees to construct and label a min. of 50% of all projects to the Built Green™ standard per		2
17	calendar year. (3 pts. for 50% or 5 pts. for 100%). A commitment to the environment from the builder can expand energy efficiency exposure to a large number of home owners and	5	34
	other home builders. Every Built Green project that is built is a reduction in material use, a reduction of green house gas emissions, less		
	waste and better efficiency.		
18	Contracted trades and/or suppliers have successfully taken Built Green™ Builder Training. (1 pt. per	1	11
	Company, max 3 pts.). Using trades or suppliers who have successfully taken Bullt Green Bullder Training means that there is common understanding about what needs to be done and how it will be accomplished, streamlining the process.		
	TOTAL PROTION DOWNER	17	
	TOTAL SECTION POINTS		
	TOTAL SECTION POINTS		
		143	