Urban Shift

A Review of Calgary's CFB Redevelopment and the Case for Implementing Urbanism

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Prepared for:

The City of Calgary

Canada Lands Company CLC Limited

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Tsix URBANISTS Inc.

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FORWARD: AGENTS OF CHANGE

Emerging out of the Second World War with a ramped-up industrial base, a considerable energy surplus, and a population inspired by the promises of progress, North America embarked on an approach to development that is unparalleled in both its scope and scale. Roughly 85% of the continent's built environment is a product of this sixty-five year postwar development boom. From planning and regulation, through financing and construction, to the industries, businesses, and lifestyles it supports, postwar development has shaped every aspect of contemporary North American culture.

Abandoning the traditional wisdom of centuries of urbanism for an experimental sub-urban pattern of single-use pods connected by a road system devised for the soul purpose of moving automobiles, the postwar period has introduced a completely new scale to development. For the first time in the millennia-long history of human settlements, the scale of the human being as the focus of development has been replaced by another measure: the spatial requirements of the automobile.

Today, as the suffering global economy calls attention to our dependence on the suburban development industry and its addiction to foreign energy sources, the future of development is being reconsidered. Additionally, a strengthening environmental ethic has been fueled by twenty years of increasingly quantified analysis of social, fiscal, and ecological issues that clearly identify the automobile scale of North American suburbanism as the crux of the matter. But the major challenge in addressing automobile-focused suburbanism's scale is how it is inextricable from its scope; the shift back to human-scaled urbanism is complicated by pervasive financial, regulatory, and cultural systems.

Achieving an environment that supports the development of human-scaled urbanism requires three conditions. The first is a clear understanding of the fundamental differences between automobile-focused suburbanism and human-scaled urbanism – a broad-based, explicit, and committed *Urban Shift*. The second is the adaptation and evolution of the systems that currently support automobile-focused suburbanism to provide for the development of human-scaled urbanism by-right – *Systems of Change*. The condition that links the two together, both instigating an *Urban Shift* and then introducing, developing, and sustaining *Systems of Change*, are the *Agents of Change*.

Agents of Change are committed to achieving an environment that supports the development of human-scaled urbanism. *Agents of Change* understand that urbanism is politically bipartisan: where government and local autonomy can be balanced; where social justice and private enterprise can co-exist; where proven ideas from abroad can be calibrated to local conditions; and where volunteerism, social capital, and democracy thrive. *Agents of Change* are citizens, community leaders, developers, professionals, government employees, and elected officials – all dedicated to the collaboration required for the achievement of a sustainable human habitat. T-Six Urbanists are committed *Agents of Change*. We are honored to have the opportunity to work with the Canada Lands Company CLC Limited, and the City of Calgary in the historic project of achieving an *Urban Shift* in our City.

1. EXECUTIVE SUMMARY

This study was originally commissioned under the title: *Review of Innovations in Garrison Woods and Garrison Green*. However, the terms of reference for this study called for something else entirely. Jointly commissioned by the City of Calgary and the Canada Lands Company CLC Limited (CLC), the real intent was to review the tortured approvals process the CLC was undergoing surrounding their redevelopment of the former Calgary Canadian Forces Base (CFB). Where Garrison Woods, the completed first phase of the CFB redevelopments, had set a new bar for sustainable redevelopment in Calgary, had proven naysayers wrong with its market success, and is today the undisputed "poster-child" for the City's most progressive planning policies, approvals for the subsequent phases of Garrison Green and Currie Barracks have been mired down in an increasingly contentious process.

In late 2008, as approvals for Currie Barracks ground to a stand still, the City's four General Managers and the CLC convened a special meeting with the intent of resuscitating the process and setting it upon a more productive track. It was the lack of a clear understanding of why projects that were meeting the City's most progressive policy aspirations were running so counter to the City's approvals regulations that prompted the commissioning of this study.

Seeking an understanding of the specific issues obstructing approvals for the CFB redevelopments, as well as an appreciation of the broader roadblocks confronting the implementation of progressive City policy aimed at meeting sustainability objectives, this study has drawn from both local and North America-wide experiences. The development of this study has involved a review of both the City's approvals framework as well as previous studies of this framework, an analysis of the approvals process as it has applied to both the CFB redevelopments as well as a variety of other built and ongoing projects, interviews with City elected officials and staff, local consultants, developers, and community-based citizen leaders, and survey of North America-wide experiences.

Through this process, a singular conclusion emerged. The basic finding of this study is that recent and emerging policy for the City of Calgary that is based on addressing issues of sustainability, and which the CFB redevelopments embody, is fundamentally at odds with the City's approvals framework. The reason for this incompatibility comes down to the distinction between two types of development: automobile-focused suburbanism, which the City's approvals framework was established to achieve; and human-scaled urbanism, which is what the City's recent sustainability-oriented policy is mandating.

With this understanding, the original confusion between the title under which this study was commissioned and its actual purpose became clear; the false assumption that the City of Calgary will achieve its sustainability policy objectives through

an evolutionary process of innovations sits at the root of the approvals issues that have confronted the CLC. The subsequent title of this study, *Urban Shift*, is the realization of the basic incompatibility between the City's current suburbanism and its intended urbanism. This study establishes the basis for an *Urban Shift*, calls for its explicit recognition in policy, and lays out a detailed road map of how to achieve an approvals framework that supports human-scaled urbanism in Calgary. The study is organized as follows:

- *A Distinction of Types* introduces the fundamental differences between automobile-focused suburbanism and human-scaled urbanism, and discusses "innovation" in the context of this Urban Shift;
- *The Story of Garrison Woods*, *Garrison Green, and Currie Barracks* reviews the approvals saga that has confronted the CLC in the context of this Urban Shift;
- *Immediate Recommendations* lays out the basic findings of this study;
- *Systems of Change* assembles these findings into an actionable approvals framework for urbanism, including a detailed means of integrating an Urban Shift into the new draft Municipal Development Plan; and,
- *The Appendices* offer precedents from around North America of municipalities that have had successes in implementing urbanism and associated examples of policy frameworks that support an Urban Shift.

It is hoped and expected that Urban Shift will provide the basis for moving beyond the reactionary resistance to sustainable design innovation that currently paralyzes both the entire development approvals process as well as informed discussion of its issues within Calgary. The simple ability to distinguish between suburbanism and urbanism offers the opportunity to productively revive debates that have become intractable both within and between City Council, City Administration, the Development Industry, and the general citizenry. More importantly, Urban Shift establishes the means for the City of Calgary to fulfill its responsibilities in achieving its approved policy objectives. Finally, Urban Shift provides industry with the tools to legitimately attempt urban development and creates the opportunity for market-based competition between greenfield automobile-focused suburbanism and human-scaled urbanism in Calgary.

2. A DISTINCTION OF TYPES

OVERVIEW

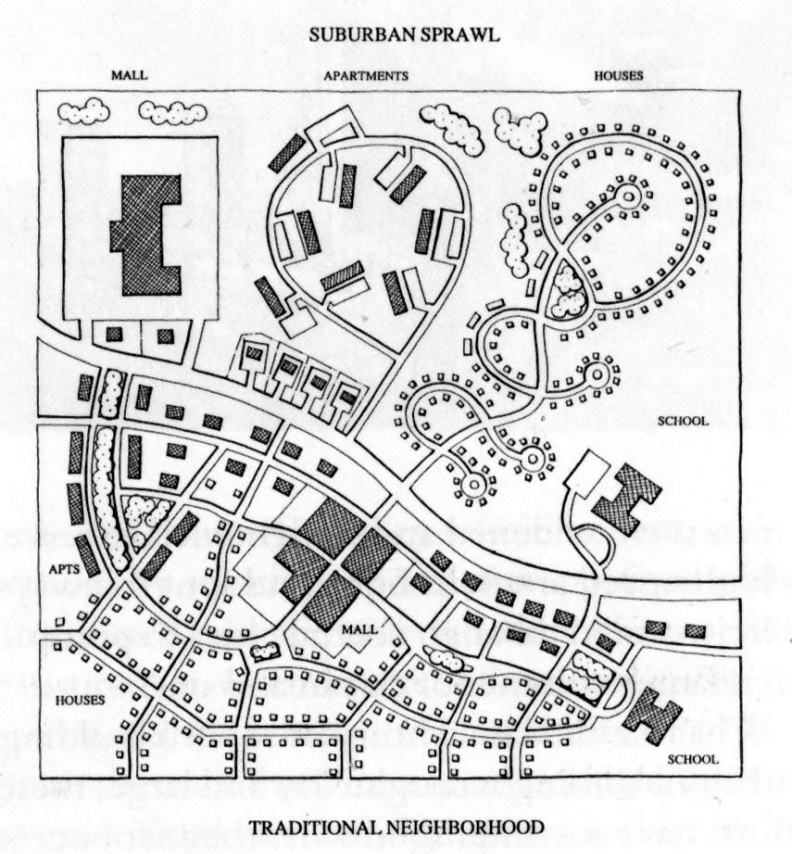
The primary assertion of this study is that Calgary's current regulatory environment is born out of automobile-focused, segregated land use development patterns that are fundamentally incongruent with the creation of urbanism. Both causing and complicating this is the general failure to recognize that there are in fact only two fundamental development types, and that each is distinct from the other: automobile-focused suburbanism and human-scaled urbanism. It is for this reason that, despite overwhelming support for urbanism in broad policy, recent urban projects in Calgary have come about only through exceptional circumstances. These exceptional circumstances and the incredible difficulties involved with their approvals readily explain why urban projects represent only a small minority of the City's recent development project inventory. That these difficulties are the result of the fundamental incongruency between these two types is less readily understood.

> ***"This report was commissioned specifically to develop an understanding of why the Canada Lands Company's plan for Currie Barracks recently ground to a near standstill in the City's approvals process."***

This report was commissioned specifically to develop an understanding of why the Canada Lands Company (CLC)'s plan for Currie Barracks recently ground to a near standstill in the City's approvals process. It was further intended that this understanding would shed a broader light as to why it is so hard for the City to achieve "innovation" in terms of sustainability. At the root of these questions is a distinction of types between urbanism and suburbanism. This section is intended to introduce and establish their specific natures as the basis for understanding both the saga of the Calgary Canadian Forces Base (CFB) redevelopments as well as the recommendations following from this understanding.

URBANISM AND SUBURBANISM: THE TWO TYPES DEFINED

The emergence and history of automobile-focused suburbanism is well documented. Over the past two decades it has been the subject of intense analysis, quantification, and critique from a multitude of sources and disciplines. While perhaps still not generally well understood, responses to this form of suburbanism have deeply affected the practices and directions of the planning, development, and building industries. In fact, most of Calgary's recent broad policy, including the draft Municipal Development Plan (MDP), and the Calgary Region's draft Calgary Regional Plan are implicit products of the ongoing critique of automobile-focused suburbanism and a corresponding shift towards human-scaled urbanism. This



This classic diagram by DPZ & Co. Illustrates the differences between urbanism and suburban sprawl.

section is not intended to rehash or summarize this critique. Rather this section aims to identify and acknowledge the two types, describe them concisely, and then suggest how an understanding of their distinction clarifies broad policy intents regarding the future of our city.

> ***"Human settlement patterns can be understood in terms of two possible types: Automobile-Focused Suburbanism and Human-Scaled Urbanism."***

In the first place, the term "type" is intended to distill the essential characteristics of a concept into its fundamental definition. Accordingly, human settlement patterns can be understood in terms of two possible types, each with a range of variations. Within the North American context they are Automobile-Focused Suburbanism and Human-Scaled Urbanism. The elements that define each type, the scale at which they operate (the human versus the automobile) – and the systemic way in which they shape our City are introduced in the diagrams and discussions that follow.

Automobile-Focused Suburbanism

Automobile-focused development patterns have dominated planning and development practices throughout North America for the past six decades. They are “sub” urban because they are less than, or not quite urban. This intentional distinction was originally tied to earlier forms of suburbia’s thematic quest to mix the “best” of country and city. Today, “suburban” has also taken on the connotation of its fiscal, social, and environmental repercussions, as the effects of this relatively new and experimental development pattern are being increasingly understood. Sometimes called “sprawl,” the contemporary North American version of suburbanism is defined by its automobile-enabled vast spatial scale interwoven with a strict separation of land uses. This should not be confused with other elements associated with the term “sprawl” such as ultra-low densities, piece-meal development, and an absence of adequate infrastructure planning – none of which are prerequisites for automobile-focused suburbanism. In essence, the spatial requirements of the private automobile have defined contemporary North American suburbanism as 1) a gross simplification of the urban city into its constituent parts, and 2) a privatized environment where public spaces are primarily focused on service-related functions.

The pattern of contemporary North American suburbanism has evolved into a “dendritic” system, which refers to its tree-like form; local roadways are routed onto progressively larger, faster moving, and increasingly pedestrian-unfriendly thoroughfares. The continent-wide dominance of this “functional classification” system for roadways into Locals, Collectors, and Arterials, prevents the connectivity essential for urbanism and has virtually eliminated multi-modal thoroughfares (Complete Streets in the language of the draft Calgary Transportation Plan). Hand-in-hand with increasingly automobile-oriented road networks, zoning standards have evolved to strictly separate and regulate land uses, while providing minimum standards on form. Zoning systems create segregated land use “pods,” and when connected by a dendritic road system, each pod allows fairly accurate prediction of daily car trips between pods.

This in turn has provoked the further refinement of the pods, the roads that connect them, and the regulatory standards and processes that perpetuate this system. Recent initiatives for pedestrian-oriented transportation systems, mixed-use development types, and integration of environmental systems remain subservient to the standards of suburban single-use zoning and automobile-focused transportation requirements. Ironically, this system has been found dysfunctional not only to humans, but also to mobility as new arterials consistently perform at a ‘D’ (failing) or lower level of service.

A Distinction of Types

Comparing Human-Scaled Urbanism and Automobile-Focused Suburbanism

Automobile-Focused Suburbanism

- Communities are not conceptualized in terms of walking distance, and are only limited by the scale of a car trip and ownership boundaries.
- A disconnected “dendritic” street system pushes directs traffic, through a limited number of routes, onto progressively larger roadways.
- Local trips are car trips, and walking is focused on recreational pathway systems. Local trips often require use of regional arterial roadways.
- Traffic moves fast between large, congested intersections.
- Larger streets coincide with fast moving traffic, large intersections that are hostile to pedestrians. Car mobility trumps street access and pedestrian movements.
- Traffic calming is achieved through loops and dead-ends, pushing increased traffic downstream in the system.
- Larger, faster moving streets must be backed onto, or relegated to inward-focused multi-family parcels.
- “Open Space” is focused on large multi-function recreation areas, linear back-of-lot pathways, and areas not suitable for parcels.
- Land uses are dispersed in course grained pods, promulgated by zoning.
- Housing types may very by pod, but are all essentially tied to an autmobile-dependant lifestyle.
- Local retail requires a car trip, except for those who must walk, or the few that are in immediate proximity.
- Regional Retail is exclusively automobile-focused.

Human-Scaled Urbanism

- Neighbourhoods are conceptualized at the scale of the 5-minute walked, roughly 80-200 acres.
- An interconnected street network forms a system of urban blocks. Streets allow multiple, direct routes to destinations for vehicles and pedestrians.
- Local trips can be made internally, reducing local traffic on regional streets thereby allowing smaller regional streets that can be directly fronted by buildings.
- Traffic moves slow, but steady.
- Larger streets coincide with increased development intensities and therefore increased pedestrian activity.
- Traffic calming is achieved through narrow streets, intersection geometry, and traffic signs/signals.
- Slower, streets with good streetscapes allow all streets to be fronted on by development parcels.
- “Open Space” is defined by “Civic Space” and includes a range of types from small, more detailed urban plazas and squares, to larger parks and greenways.
- Land-uses are fine grained, integrated, and diverse.
- There are a range of housing types and lifestyles.
- Urban blocks allow a clear pedestrian oriented frontage, with service functions in the rear.
- Local retail and is pedestrian oriented a accessible by walking or a direct car trip.
- Regional retail is mixed use, walkable, and transit connected.

Human-Scaled Urbanism

Human-scaled settlement patterns have existed for millennia and, despite assuming various forms according to local cultures, climates, and technologies, have identifiable universal characteristics that typologically define "urbanism." The form of urbanism, at any density, relates to the spatial requirements of the human being which translates into compact, walkable, and mixed-use increments of settlement. Based on centuries of traditional wisdom, urbanism was the primary human settlement pattern in North America until almost the middle of the 20th Century. As a result, urbanism defines the core of most of North American's cities and towns and is identifiable by its structure of blocks and interconnected streets - often laid out in a grid pattern but sometimes deflecting and curving in response to topography, previously established pathways, or the will of its designer.

The perimeter of an urban block faces a public right-of-way that is shaped by building frontages, and streets function as public spaces as well as multimodal thoroughfares. Urban streets are a "front-stage" environment and the interiors of blocks frequently have a secondary semi-public access for "backstage" utility functions such as parking and servicing. Block structure also expands along urban streets forming urban public spaces such as greens, squares, and plazas which are a primary civic amenity, particularly for the higher densities inherent to urbanism.

The transportation pattern of traditional North American urbanism is a "dense network" of interconnected streets. The urban network allows multiple and direct routes to destinations for both pedestrians and vehicles and more intense streets serve an increased intensity of both pedestrian and vehicular activity. This is antithetical to the "functional classification" system inherent to suburbanism. Ironically, human-scaled urbanism better serves automobile mobility as internal trips relieve congestion from regional roadways and less trips are made by car.

In terms of land use, urbanism is fundamentally mixed-use, with residential functions everywhere save for special exceptions; multiple functions are horizontally and vertically distributed along streets and distinguished primarily by intensity of built form rather than use. Accordingly and where possible, contemporary urban projects have learned to regulate by form, rather than use, as segregated suburban land use zoning and its attendant automobile-focused transportation practices present formidable barriers to the achievement of urbanism.

THE NATURE OF INNOVATION

Innovation is by definition the introduction of new methods, ideas, and products into established systems, contexts, and markets. As such, innovation is an important concept to understand within the context of an Urban Shift. Additionally, this study was originally commissioned under the title, "A Review of Innovations in Garrison Woods and Garrison Green." The implication is that the CFB redevelopments have introduced something new to Calgary's Land Use and Transportation planning processes. While this is certainly true, a prominent question presents itself: *What are these projects innovating towards?* In the struggle to answer that question, two misconceptions are revealed.

> ***"Urbanism and suburbanism are different in kind and there is no path of evolutionary innovations that will necessarily link the two."***

The first misconception arises out of the default assumption that despite superficial differences, the CFB redevelopment projects are in the same boat as every other project currently making their way through Calgary's lengthy approvals pipeline. Each is pursuing "innovations" to the extent that it can or has to in an attempt to comply with policy. At the same time each is also trying to comply with established standards. But standards are by definition the opposite of innovation. As a result, confusion arises as to what specific innovations approvals should be based on, the relationship between standards and innovations, and the weight that should be granted to a project's innovations as it complies with standards. The suggestion that "sustainability" is the measure is not at all helpful until sustainability is defined.

Fortunately, although current policy is somewhat general, it clearly begins to define what sustainability looks like on the ground: mixes of land uses, complete streets, and other pedestrian-oriented environments, etc. – which is to say, *urbanism*. As the goal is urbanism, focusing on innovation in and of itself allows change for the sake of change to take center stage. Projects that are clearly suburban then stand in the same line with urban projects, and the measure of success defaults to compliance with standards. As discussed below in *The Story of Garrison Woods, Garrison Green, and Currie Barracks*, in the tension between innovation and standards, the default to standards is central to the problems that have confronted the CFB experience – clearly innovation in and of itself offers cold comfort as a potential solution.

This leads to the second misconception, which assumes that by means of a series of incremental innovations to established practices and processes, Calgary's development patterns will transform over time from their current status quo to something more sustainable. The entire point of this section, *A Distinction of Types*, is to assert that urbanism and suburbanism are different in kind and there is no path

of evolutionary innovations that will necessarily link the two. If there has been any meaningful "innovation" within the CFB redevelopments, it has not been in the minute design details that have challenged accepted standards and bogged down the approvals process; the innovation is rather much more fundamental. The real "innovation" of the CFB redevelopments has been their shift from automobile-focused suburbanism to human-scaled urbanism. To further understand the nature of the two distinct types as they relate to innovation, it is worth briefly exploring how innovations evolve within each type.

INNOVATION *WITHIN* THE TWO TYPES

Through the interview process, it was brought to our attention on a number of occasions that Calgary is actually very innovative. From the first suburban lake communities on the prairies in the 70s, to a recent project like Quarry Park that utilizes "Low Impact Development" principles and seeks to locate jobs away from Calgary's Downtown core, it can be clearly demonstrated that the history of Calgary's suburban development has been characterized by consistent innovation. In fact, following from the discussion of automobile-focused suburbanism above, it can be argued that through constant innovations in planning and development, Calgary's suburbanism could be considered a leading example of the type, and has actually avoided many of the pitfalls that define "sprawl".

Another example of innovation within the automobile-focused suburban type that can be observed within Calgary involves the evolution of retail development: from the introduction of parking lots in front of neighbourhood centers in the 50's; through the enlargement of these centers in the 60's (Brentwood); the creation of enclosed malls in the 60's-70's (Chinook Center); the development of big box power centers in the 80's-90's (Crowfoot Crossing); to the recent arrival of lifestyle centers (Deerfoot Meadows and Trinity). What is critical to understand is that all of these innovations have been within the distinct type of automobile-focused suburbanism and have been important refinements in terms of maximizing the effectiveness of their collective suburban intent. This clearly lends further weight to the argument that innovation in and of itself is not an inevitable path towards the achievement of policy.

"The term innovation can be accurately applied to both the evolution of urbanism and suburbanism."

But this is not to suggest that innovation processes cannot serve policy. While there are many examples of evolution within the suburbanism of the last half century, urbanism has a far longer and more dramatic history of innovation. Examples include: Spain's Law of the Indies, the orderly settlement regulations that laid-out colonial towns throughout the Spanish Americas and can be experienced in the built form of Southern U.S. cities such as Taos and Santa Fe, New Mexico; New York City's 18th Century reintroduction of the grid into western urbanism as a physi-

Innovation and Variation *Within* Types

Automobile-Focused Suburbanism

Radburn New Jersey: The First

Early Calgary Suburb

Early Calgary Lake Community

2nd Generation Lake Community

Recent Lake Community

Human-Scaled Urbanism

The Manhattan Gridiron

The Calgary Gridiron

Modified Grid, Calgary (The Bridges)

Formal Grid, Calgary (Inverness)

Modified Grid, Calgary (Garrison Woods)

cal expression of the capitalism that was driving the city; Haussman's revolutionary renovation of the congested and unhealthy medieval squalor of 18th Century Paris into the 19th Century urbanism of broad avenues and spectacular public spaces that makes the City of Lights one of the world's best; the CPR's late 19th Century use of grid patterns in the cities and towns that built Canada; and the rediscovery of urbanism in the 1980's with the New Urbanism, it's tentative reintroduction into Calgary with McKenzie Towne (1994), and its reestablishment with Garrison Woods and The Bridges at the turn of the Millennium.

Each of these examples are based in universal urban patterns found throughout the world and over millennia. While there are many inherent subtleties between the urbanism of different places and different times, it is fundamental to understand that there are tangible and measurable human patterns that link them all together. Further, their evolution can be attributed to a clear sequence of innovations within the type. The point of this line of argument is not to marginalize or eliminate the pursuit of innovation, but rather to clearly demonstrate that the term innovation can be accurately applied to both urbanism and suburbanism in order to reiterate that innovation in itself is not enough to achieve policy intents and that the range of development patterns available to the City of Calgary as it innovates towards sustainability are exactly two: those based on the human (urban) and those based on the car (suburban).

INNOVATION *BETWEEN* THE TWO TYPES

In the section *Immediate Recommendations*, further along in this report, the fifth and final recommendation, "Plan for a System Shift," calls for the formidable task of preparing for a City-wide innovation from the distinct type of automobile-focused suburbanism, to the distinct type of human-scaled urbanism. While there are evolutionary steps, or innovations, that can be made to prepare for and bring about such a change, the task of innovating between types is not an evolutionary process; it is a fundamental shift - in this case, an *Urban Shift*. It is first a shift in mentality, secondly a shift to standards that support policy, and thirdly a shift in the market and built reality of our city. As discussed in the chapter *Systems of Change*, an Urban Shift does not mean that Calgary needs to abandon its suburbanism. What it does mean is that the Urban type must be given the opportunity to compete with suburbanism on a level playing field defined by triple-bottom line sustainability.

> ***"... the task of innovating between types is not an evolutionary process; it is a fundamental shift - in this case, an Urban Shift."***

After decades of focusing on suburban development patterns, the 80's and 90's were characterized by a market-based rediscovery of the "inner city." Responding to the to the urban "bones" of these environments, an informal Urban Shift has been underway for decades now in communities such as the Downtown, the Beltline, and Cliff Bungalow-Mission. This informal shift has been bolstered by recent

Innovation and Variation *Within* Types (Continued)

Automobile-Focused Suburbanism	Human-Scaled Urbanism
Calgary Enclosed Mall	Modified Grid, Stapleton, Colorado
Calgary Power Centre	Modified Formal Grid, Barcelona
Calgary "LID" Suburban Center	Organic Blocks, New England
Walkable Lifestyle Mall, Virginia	Organic and Formal Blocks, Paris
Belmar, Denver: Enclosed Mall	Innovation *Between* Types Belmar Redeveloped to Urban Center

policy such as the Centre City Plan and the East Village Area Structure Plan. However, it should be emphasized that most of Calgary's inner city neighbourhoods are born out of urbanism, and this DNA has served as an important safeguard in the wake suburban-focused regulation. And while a city-wide Urban Shift would unlock more of Calgary's inner-city's potential in more places, what about redevelopment in areas that do not yet have an urban pattern, and new development in greenfield environments?

In Calgary, the beginnings of a greenfield Urban Shift began with McKenzie Towne in the early '90s, a "neo-traditional" project that sought to achieve a walkable, mixed use, and compact development pattern. As an early effort, totally unsupported by policy, the project was gradually eroded to a point where its built legacy exhibits only a few significant departures from its suburban counterparts. More significant shifts are evident in the subsequent Bridges redevelopment, the CLC's Garrison Woods and Garrison Green communities, and some of the City's emerging TOD planning efforts - all projects that have depended on considerable special treatment from the City, and the patient money of public sector developers. Also, they are all brownfield and grayfield redevelopments as opposed to greenfield development.

In spite of significant built success and increasing support from broad policy, the underlying desire and need for a formal Urban Shift in Calgary continues to be widely misunderstood and consistently miscalculated. Without a deliberate innovation between types, all of Calgary's potentially urban projects face the danger of becoming hybrids.

THE DANGER OF HYBRIDS

Our current automobile-focused suburban regulatory system presents a dangerous slippery slope, where innovations towards urbanism are often misinterpreted as a singular issues of street types, land use districts, or stormwater management, etc. While this approach works for innovations within the Suburban Type, it is dangerous for urban projects. What *Innovation Between the Two Types* suggests is that suburbanism it is actually ingrained into every aspect and scale of Calgary's current regulatory system. Use-based zoning, F.A.R. (floor area ratio), intersection spacing, homogenized open space regulations and management, and stormwater regulations are only a few of the practices that conspire against the viability and admissibility of urbanism. Any one of these singular issues can lead an urban project into significant delay, revision, and compromise into Hybridism.

> ***"The questionable results of Hybrid developments are now well documented, and developers are right in their fear of a system that at once pulls for urbanism in policy, but pushes against it in implementation."***

Currently, broad policy, and mid-level policy plans such Area Structure Plans, Area Redevelopment Plans, and Community Plans are all pointing towards urbanism in one form or another. But the implementation processes and standards do not support and match these intentions. As a result, an internal conflict is set in motion where the general misunderstanding of urbanism as a distinct type, the existing suburban standards, and the ensuing inevitable project delays force urban development patterns into compromises towards the suburban type. Increasingly the result is a hybrid between the two. These Hybrids exhibit the easiest aspects of urbanism such as street orientation, a general mix of uses, and more decorative open spaces, while ignoring more important but more difficult issues such as connectivity, a fine grain of uses and residential types, and well conceived public space.

The questionable results of Hybrid developments are now well documented, and developers are right in their fear of a system that at once pulls for urbanism in policy, but pushes against it in implementation. And it is not only developers that are disappointed; hybrids have consistently fallen short in public expectations, environmental performance, and function for both pedestrians and vehicles. Because Garrison Woods, Garrison Green, and now Currie Barracks, have been unyielding in the pursuit of urbanism, and thanks to the long-suffering patience of the CLC, these projects offer an invaluable case study for Calgary's pending Urban Shift.

3. THE STORY OF GARRISON WOODS, GARRISON GREEN, AND CURRIE BARRACKS

OVERVIEW

Canada Lands Company CLC Limited's (CLC) three-phased redevelopment of the former Canadian Forces Base (CFB) in Calgary – Garrison Woods (approved in 1998, now complete), Garrison Green (underway), and Currie Barracks (recently underway) – are part of a small number of projects over the past couple decades that have challenged the suburban focus of the City's municipal planning and transportation administration. Like other urban projects such as McKenzie Towne (approved in 1994), and the Bridges (approved in 2002), the CLC projects have come about only under special circumstances. While no urban project in Calgary to date has been achieved without some degree of compromise to the final results, it is these special circumstances that have permitted each to overcome the barriers posed by the City's suburban development standards and processes. As a result, each one of these projects remains very much an exception to the City's suburban business as usual.

> ***"In the absence of standards and processes that support and incentivize an urban approach to development, projects such as Garrison Woods, Garrison Green, and Currie Barracks will remain exceptions within the City of Calgary."***

But as Garrison Woods has become the City's best urban success story, perceptions of, and expectations for, the project have transitioned from that of "special exception" into that of "model." This transition has coincided with the sustainability-driven urban focus of Calgary's recent high-level policy. Additionally, since Garrison Woods, administration has implemented the CPAG process which is theoretically intended to increase collaboration between City Business Units in approvals decision making. Unfortunately, rather than paving the way for Garrison Green, Currie Barracks, and other urban projects, the new environment is resulting in an increasingly difficult and congested approvals process as City Departments are no longer treating these projects as exceptional and are subjecting urban plans to conventional suburban standards.

In the absence of standards and processes that support and incentivize an urban approach to development, projects such as Garrison Woods, Garrison Green, and Currie Barracks will remain exceptions within the City of Calgary. In fact, the major lesson learned by the private sector in their early foray into urbanism with McKenzie Towne, was to avoid such attempts in the future – a consensus that largely remains today. The Bridges, like the East Village and several TOD's (all currently underway), represent the overwhelming majority of Calgary's urban projects inven-

tory and are exceptional in that they are driven not by the private sector, but the City itself. Bridging the gap between the private sector-driven McKenzie Towne and the City of Calgary's urban efforts is the CLC's redevelopment of Calgary's CFB.

As a crown corporation with a public mandate that exceeds that of a private corporation, the CLC has been driven to pursue an urban outcome for the redevelopment of the CFB – largely disregarding what the private sector would consider insurmountable feasibility barriers. Also, the CLC has been better able to endure the City's increasing approvals barriers than its private counterparts due to the crown corporation's "patient money." Finally, as an instrument of the Federal Government, with an accordingly broader vision, the CLC is obligated to achieve a higher standard than a private company (or even the City) would require themselves to meet.

But while these exceptional circumstances have made Garrison Woods, Garrison Green, and Currie Barracks possible, and therefore unsuitable as models, the fact is that the CLC is a business and has realized considerable financial profit from its CFB redevelopments to date. Further, and most importantly to this study, the CLC functions as a private developer in terms of its relationship with the development approvals process. Accordingly, understanding the story of Garrison Woods, Garrison Green, and Currie Barracks offers valuable lessons. This section explores the CLC CFB redevelopment experience as an indicator – a case study for the challenges the City faces as it seeks to retool for sustainable urbanism in conjunction with the impending MDP.

EARLY POLICY APPROVALS

The *CFB East Community Plan* was approved in 1998 and set broad policy for the development of the area under the name "Garrison Woods." At this time, Council had not yet committed to their "Eleven Sustainability Principles," and the project was only meagerly supported by generalized policies from the 1998 MDP and the largely marginalized *Sustainable Suburbs Study*. In spite of this, the progressive Community Plan was well received and the policy planning process, starting in the Fall of 1997, was completed with approvals by the Spring of 1998 – well under a year. Along with a description of the project, the Community Plan contained a multitude of general policies aiming to ensure that the project could be developed in a more urban, pedestrian-friendly manner than current standards and practices allowed at the time.

MODEL OR EXCEPTION?

Early on, the urban aspirations of Garrison Woods were met with skepticism from many City departments and the McKenzie Towne-conditioned development community. However, with an entrepreneurially-minded Council setting the tone, administration was willing to take on the inherent risk of trying something new – as

long as it was not risking setting precedent by doing so. This willingness was further enabled by administration's ability to assign a small team of experienced planners to the project who had, in the period prior to CPAG, the ability to make final decisions. Aware of the many barriers to implementation posed by the City's standards, the CLC was eager to have the opportunity to demonstrate success in its first phase and tacitly pursued the "special exception" strategy. While the road blocks amassing around Currie Barracks would require formalization of this agreement through designation as an "Innovation Zone," Garrison Woods enjoyed a less formal, but more coordinated environment; a broad recognition that it was not a model but a special circumstance with the ability to be granted exceptions to many City standards as per the Community Plan.

> ***"What all of this was to mean, especially in light of the incredible market success of Garrison Woods, was that the project that was supposed to be an exception was becoming a model."***

The policy plans, including the later *CFB West Master Plan*, reflected this agreement citing the development as "unique" and "exceptional" not only in its respect for the area's military history, but in its urban form as well. This was not to last. In the decade following the approval of the *CFB East Community Plan*, Council and administration were in the process of adopting a number of policies geared to achieving sustainability through urbanism. These policies include the establishment of "triple-bottom-line" criteria for decision-making, the *Transit Oriented Development Guidelines* (2004), various other Smart Growth-inspired policies, and, most importantly, the kick-off of the new MDP process through the public participation of Imagine Calgary. As a direct result of Imagine Calgary, and in order to set clear direction for the subsequent PlanIt Calgary process, Council made even more explicit the City's emerging commitment to urbanism by establishing their Eleven Sustainability Principles (2007). What all of this was to mean, especially in light of the incredible market success of Garrison Woods, was that the project that was supposed to be an exception was becoming a model.

IMPLEMENTATION BARRIERS IN THE DETAILS

In spite of the momentum of urban-oriented broad policy in Calgary, in spite of on-the-ground project success to the extent that Garrison Woods is now one of the City's favorite showcase projects, and in spite of the plan for Currie Barracks achieving a gold certification from the cutting-edge LEED for Neighborhood Development international third-party rating system, approvals for the CLC have become increasingly difficult to obtain. In fact, the situation had become so difficult that by 2008 there was a growing generalized consensus and resignation within administration that, "another Garrison Woods just wasn't possible in Calgary anymore." In late 2008, the City's General Managers sat down in a unique meeting with the CLC in order to break through a series of approvals barriers for Currie

Barriers in the Details: Examples of Project Delays

- Garrison Woods: In the implementation of Garrison Square and surrounding townhouses, City standards were demanded for proposed custom walkways and urban park amenities in spite of supporting policy.

- Garrison Green: The central Peacekeepers Park was forced toward city park standards in size, details, and function in spite of the success of the more intimate and urban Garrison Square.

- An Outline Plan rezoning for an 8.8 acres site “took as much time to rezone as it did to get the approvals for all of the CFB East Community Plan and associated Outline Plan” due to road widths around park, park standards for a small green, and the degree of urbanism in surrounding townhouses.

- The dry pond defining Flanders Park could not be planted or amenitized.

- Lots facing a green were assigned addresses on the lanes, rather than a street.

Barracks that had brought the project to a stand still. The result was the granting of an "executive" approval, the effects of which – including the commissioning of this study – are yet to be fully understood.

But difficulties in obtaining implementation approvals have not been unique to the CLC's third phase of Currie Barracks. They started right away with the implementation of Garrison Woods as the Policy Planning was handed over to the Implementation Planning side of the approvals process. Most of the difficulties have arisen at the level of Outline Plans (Land Use), Tentative Plans (Subdivision), and Development Permits, and have typically centered on design details. It is important to note that although some revisions at these detailed levels are an important function of any municipality's approving authority, the extraordinarily long approvals timelines and the entrenchment of positions within individual City Departments that have arisen from these seemingly small details, sit at the root of the problem. The major disconnect that is affecting the CLC specifically, as well as the shift to urbanism in Calgary generally, are the standards by which the approving authority bases its decisions – even in cases where innovations have been approved in principle through the policy of the Community Plans. A small number of select examples from Garrison Woods and Garrison Green are presented to the left and on the following page.

> ***"The major disconnect that is affecting the Canada Lands Company specifically, as well as the shift to urbanism in Calgary generally, are the standards by which the approving authority bases its decisions."***

BATTLE LINES IN THE FINAL STAGE: CURRIE BARRACKS

While the *CFB East Community Plan* (1998) is the policy document one might expect for an innovative project such as Garrison Woods, the nature of the subsequent *CFB West Master Plan* (2000) indicates an emerging recognition of the system-based issues with urbanism that were preventing a comfortable evolution of the CLC projects from "special exceptions" into "models." Where the *CFB East Community Plan* contains both a tremendous amount of detail and theory, the *CFB West Master Plan* contains even more. During the drafting of the *CFB West Master Plan*, as Garrison Woods was facing increasing difficulties on the implementation side of the approvals process, the strategy that the CLC and Planning Policy apparently undertook was to make policy increasingly detailed. As such, the approved *CFB West Master Plan* is not only an in-depth description of the project's design at almost the Outline and Tentative plan levels of detail, but also includes a competent and fairly extensive treatise on Urban Design as well. Accompanying the increase in the size of policy was a formalization of the special exception model with the official recognition of CFB West as an "Innovation Zone," and the subsequent development of "Customized Design Criteria."

Barriers in the Details: Examples of Project Delays (Continued)

- General Street width of 9.0 metres (otherwise excepted beyond minor details.)

- Garrison Green: Street standards of Garrison Woods not used as precedent, requiring renewed debate, longer approvals process, and compromised standards.

- Garrison Woods: City cul-de-sac standards demanded for two areas requiring turnarounds.

- Custom street sign blades

- Upgraded lighting and walkway amenities

The decision to increase the detail and length of policy, the formalization of exceptional circumstance, and the development of "customized criteria" as opposed to alternative standards were perhaps pursued in the hopes of capturing the weight of Council approval as it pertained to the details of the design. They were also probably driven by the fact that these were the only real tools available to the CLC and Policy Planning as proponents of urbanism within a suburban approvals system. The largely unexamined reality is that over the last decade there has been an increasing rift between Policy Planning – which is driven by (and driving) the City's increasing embrace of sustainable urbanism-oriented policy and best practices – and Implementation Planning – which remains constrained by existing suburban standards, and unintentionally further embedded in those standards through the establishment of the CPAG process.

Unfortunately, the pursuit of increasingly detailed policy on a plan-by-plan basis inherently works against the evolution of urban projects from special exception to model by functionally making each project a special exception; it also does nothing to address the root issue of underlying suburban standards which, once the project is handed over to the Implementation Planning side of the process, is where the overwhelming majority of barriers occur.

"Unfortunately, the pursuit of increasingly detailed policy on a plan-by-plan basis inherently works against the evolution of urban projects from special exception to model by functionally making each project a special exception."

Currie Barracks is a case in point. Since the early phases of Garrison Woods, the final stage of the Calgary CFB redevelopment, Currie Barracks, was expected to be the crowning jewel of the entire process where all the "bugs" had been worked out, and where all innovative intentions could be realized. There was much to support the probability of this intention:

- The *CFB West Master Plan* was granted a Council directed "Innovation Zone" status which explicitly allows City departments to try new standards and ideas;
- The unqualified physical and market success of Garrison Woods has been acknowledged and co-opted by the City as they've made the project a marketing tool showcasing Calgary's commitment to sustainability;
- Recent and emerging Broad Policy clearly indicates that Garrison Woods is an important model for future development patterns;
- That Garrison Woods has been built provides on-the-ground verification of its success and functionality. Risk adverse City departments have the opportunity to observe, measure, and test so that they may further refine these clearly acceptable innovations;
- Council has approved the *Currie Barracks Customized Design Criteria* specifically to break through the barriers posed by suburban parks, roads, and stormwater standards;

Evaluating Currie Barracks

As described later in this report, in the sections *Immediate Recommendations* and *Systems of Change*, developing the means to standardize evaluations of urbanism is a critical component in the achievement of broad sustainability objectives. But at the same time, the need to standardize must also be balanced with an understanding of the critical role that design plays in achieving urban outcomes. Also as discussed in *Systems of Change*, the difference between an urban and a suburban expression of the same land use program – the difference between a power centre and surroundings, and a real neighborhood – is at essence a question of design. As such, the first task in evaluating Currie Barracks must be the essential determination as to whether it is urban or not. Urban Shift is fundamentally about a difference in kind as opposed to a difference in degree, and while there are probably innumerable refinements and improvements that could be applied to any project, understanding, acknowledging, and accommodating urbanism is the essential first step for Calgary today.

Fortunately, much of this work has already been done. In the same way that it is counterproductive to Calgary's sustainability objectives to treat urban projects such as Currie Barracks as special exceptions, it is equally counterproductive to treat Calgary's situation as unique; there is a wealth of information, methods, processes, and means towards the achievement of sustainable urbanism that have been deployed and refined throughout North America. Rather than "reinventing the wheel" with "made in Calgary" solutions, lessons already learned abroad should be embraced by the City and calibrated to our particular circumstances.

In terms of evaluating Currie Barracks, there are many systems that offer third-party evaluations rating sustainability at a variety of scales and according to different sets of criteria. Of these, the pilot LEED for Neighbourhood Development (LEED-ND) program is a tool perfectly geared to municipal requirements. In keeping with the requirements for an Urban Shift, the basis of LEED-ND is a fundamental determination as to whether a project meets a base-line standard – whether it is or is not sustainable urbanism. Like other LEED programs it further employs a sophisticated system for determining degree of sustainability. But beyond the preeminence of the LEED-ND system, Canada Lands has fortunately already voluntarily participated within the program.

Based on the internationally (and City of Calgary) recognized LEED system, LEED-ND is the result of an Urban Shift within the LEED organization. Decades of testing and measurement of on-the-ground outcomes have led to the conclusion that while important, individual building projects are not of

- Following the late 2008 special meeting of the General Managers, direct orders to grant approvals for Currie Barracks were presented to all four City Departments; and,
- The plan for Currie Barracks has subsequently been awarded a Gold rating within the internationally recognized LEED for Neighbourhood Development pilot program, offering further proof of both the CLC's commitment to the City's sustainability objectives and the project's realization of current best practices.

Given all of this support, general expectations and assumptions have been that the approvals process for Currie Barracks would be unproblematic – or at very least, less problematic – as it reaped both the benefits of Garrison Woods' success as well as the increasingly explicit support of policy and policy-makers. Unfortunately, the opposite has proven to be true. Here is a selection of some of the current issues complicating approvals for Currie Barracks:

- In spite of Council approval of the *Currie Barracks Customized Design Criteria*, and the area's status as an "Innovation Zone," street standards used in Garrison Woods and Garrison Green were rejected by the CPAG team in open disregard of approved policy – this issue is ongoing and is central to this report;
- Where other Municipalities throughout North America are waving many required studies as an incentive to developers to undertake urban projects, administration is requiring that the CLC provide additional and extraordinary Traffic and Storm Water Management studies in order to further justify the third phase;
- Under the new Land Use Bylaw (1P-2007), which did not exist when the *CFB West Master Plan* was adopted, Development and Building Permits are now required for park features, creating additional layers to an already congested approvals process and providing additional opportunities for disparate CPAG teams to demand fall backs to suburban standards;
- Additional circulation to multiple departments is being demanded in order to secure approvals for parks spaces; and,
- Approvals time lines have become unreasonably protracted and do not follow Council approved processes such as those contained in the *Customized Design Criteria* – as of writing, the Tentative Plan for the first phase of Currie Barracks, submitted in August 2007, is still awaiting approval.

THE MORAL OF THE STORY

The commissioning of this report was part of Council and the General Managers' response to the incredible disconnect between the expected and the actual approvals process for Currie Barracks. Through extensive interviews and meticulous review of boxes upon boxes of files, the picture that emerges can easily be interpreted as expected: the story of a massive bureaucracy gradually innovating from a conventional development approach towards the incorporation of more sustainable development practices. Also a widely accepted part of the narrative is that this difficult transition has been further complicated by an unprecedented boom period that strained administration's human resources in terms of both work loads as well

themselves sufficient: walkable, compact, mixed-use urbanism is a fundamental prerequisite for real sustainability. The LEED-ND pilot program is the result of collaboration between three internationally recognized organizations, all with deep ties to sustainability and/or urbanism:

- The U.S. Green Building Council (U.S.G.B.C.), which manages the LEED programs;
- The Natural Resources Defense Council (NRDC), which is primarily focused on the preservation of natural and rural landscapes; and,
- The Congress for the New Urbanism (CNU), which for three-decades has been the international source for expertise and innovation in urban-oriented design, process, and regulation.

LEED-ND was introduced on a test basis in 2007, and Currie Barracks was one of two Calgary-based projects accepted into the 240 international project pilot program. The LEED-ND pilot program offered early adopters the opportunity to participate in the refinement of this historic system and test the sustainability of their proposed plans. Pragmatically, it also offered a means to further differentiate projects within their local markets, and with their local approving authorities. After two years of successful testing, LEED-ND is expected to officially launch in the summer of 2009 – thanks in part to the participation of the CLC. In October of 2008, Currie Barracks officially received the first LEED-ND Gold rating in Canada for a plan with policy approval. While a LEED-ND Gold rating has not made the positive impact on Calgary's approving authority that was hoped for by the CLC and proponents within the City, it is as clear and objective a testament to the sustainability of Currie Barrack's urbanism as can be currently rendered.

As such, this report will not include a comprehensive evaluation of the urban sustainability of the Currie Barracks plan – with a LEED-ND Gold rating it would be redundant, and further perpetuate the City's inability to transition the project from exception into model. However, this is not to assert that LEED-ND is a perfect system – although it is certainly a much more effective verification than could be achieved independently by any consultant anywhere as a component of a report such as this. This is also not to assert that Currie Barracks is a perfect plan. While there are insights that can be offered as to areas where design processes and standardized evaluations of urbanism can be brought into closer alignment, conclusive confirmation that the plan for Currie Barracks is urban must, at this point, be sufficient. However, as these insights are critical to an Urban Shift they are discussed in the sections *Agents of Change*, *Immediate Recommendations*, and *Systems of Change*.

as the ability to retain qualified staff. But there is more to the story than that. While there is general acknowledgement that approvals issues throughout the City's bureaucracy go beyond staffing issues and are the results of CPAG-based conflicts amongst and between generalists and specialist positions in different City Departments, the source of these conflicts is not well understood. This investigation has found that approvals delays within CPAG are the result of the growing disconnect between increasingly urban policy planning and a stubbornly suburban approvals process. Additionally, this disconnect has likely been exacerbated by the general transition over the past decade from a more entrepreneurial to more managerial culture within the City's bureaucracy.

> ***"The moral of the story of Calgary's CFB redevelopments is that innovation and urbanism will remain anathema to the majority of the City's development industry, and a source of frustration and confusion for citizens, elected officials, and the many members of administration who demand real change. This will continue until systems that support urban outcomes are put into operation"***

At the root of this disconnect is the distinction between urban and suburban approaches, processes, and types. The answer to the question as to why, with all of the exceptional circumstances in their favor, the CLC would be as, or more, victimized by these general failures in the approvals process than the slate of conventional projects that the City has approved during the same course of time has everything to do with the conflict provoked by the urban nature of the CFB projects. When the problems that have confronted approvals for Garrison Woods, Garrison Green, and Currie Barracks are framed within the context of the struggle to achieve urbanism through a system designed to output suburbanism, the essential piece of the puzzle falls into place. The moral of the story of Calgary's CFB redevelopment is that innovation and urbanism will remain anathema to the majority of the City's development industry, and a source of frustration and confusion for citizens, elected officials, and the many members of administration who demand real change. This will continue until systems that support urban outcomes are put into operation.

4. IMMEDIATE RECOMMENDATIONS

OVERVIEW

One of the primary methods of this report were extensive interviews conducted with the development industry, elected officials, City staff, and representatives of citizen organizations. These one-on-one interviews varied in focus, content, and outcome but were all undertaken with the following premise:

The Calgary CFB projects are successful developments that are clearly aligned with Council priorities and City policy. In spite of their success and a desire, as expressed in policy, for these projects to serve as a model for future growth, there have been two unfortunate realizations: 1) that approvals for these projects have become increasing difficult to obtain; and, 2) that, even if the exceptional circumstances of a Canada Lands Company could be replicated, it would be difficult if not impossible to implement a project of similar scope and caliber elsewhere in the city.

Given this premise, interviewees were asked what they understood innovation to mean, what they saw as barriers to innovation, and what they would recommend as solutions. Through the disparate insights, observations, and discussions that ensued, a general pattern became increasingly clear. Barriers to approvals are currently systemic and are not relegated to just those projects seeking to achieve sustainable design innovation. Further, the source of implementation delays for both sustainable urbanism and conventional suburbanism are largely the same – the growing disconnect between policy intent and the processes and standards from which that intent is realized. Disturbingly, the result seems to be a worst-case outcome that challenges the general expectation within administration that the City is gradually but inexorably innovating towards sustainable urbanism. Instead, Hybridization is occurring where urban projects are being “dumbed down” - when they are feasible at all - and suburban projects are being “green-washed” with superficial “innovations” in order to seem to be achieving sustainability.

As discussed in a Distinction of Types, without a better baseline understanding of sustainable urbanism, and more suitable approach to its regulation, innovation will not be a means towards sustainability but an end in itself that continues to frustrate the actual achievement of policy. This section provides discussion of the many barriers that were identified during the interview process, and how they collectively call for an Urban Shift as the critical step in solving Calgary’s current problems with implementing “sustainable design innovation.”

A SYNOPSIS OF CURRENT IMPLEMENTATION BARRIERS

1. **Systemic Incongruence**

   The basic finding in all of our interviews has been that the City is both broadly and specifically failing to do what its stated intentions are. This systemic incongruence was described using many terms, including "fundamental disconnect," a "say-do gap," and a lack of "unified corporate direction." On top of this, the City is also failing to adequately communicate and explain those intentions – both internally and to the public. The result is confusion which, in turn, increases systemic incongruence, further impedes communication, and so on. The current situation is an "every man/business unit/approvals process for themselves" environment hidden behind a "corporate culture" that cannot change course because it pathologically will not publicly criticize itself in any meaningful way. The result is not only bad for sustainable design innovation; it is generally bad for business and morale both within the City and within the development industry.

   The essential ingredient in correcting this systemic incongruence is the establishment of a base-line understanding from which clear direction can emerge. Urban Shift is based on the fundamental premise that the City's current regulatory environment is founded on essentially unsustainable, car-focused, segregated land-use suburban development patterns. In spite of direction from broad policy and upper management, this suburbanism is systematically incongruent with the implementation of sustainable urbanism. The lack of a basic understanding of urbanism as a distinct approach to development, and as the specific solution to sustainability that the City's broad policy principles have endorsed, is the fundamental barrier to sustainable design innovation within Calgary. All of the following barriers listed here are symptomatic of this of this basic issue, and any attempts to correct them on an individual basis will only serve as a stopgap bandage, risking proliferation of the problem downstream in the system.

2. **Lack of Urban-Oriented Design Standards**

   All discussions surrounding the approvals processes for the CFB projects revealed a significant lack of both guiding principles and accepted standards supporting urban projects. When every policy plan must be an urban design manual in its own right, and design criteria must be customized exceptions to accepted standards, the barriers to implementation are self evident. This is a deeply entrenched problem that has not been solved by the new Land Use Bylaw, and is only preliminarily addressed within the new draft Municipal Development and Transportation Plans. Although symptomatic of the basic lack of appreciation for urbanism, a lack of appropriate standards is one of the most significant barriers to implementing sustainable urbanism and achieving the intents of broad policy.

3. **CPAG**

All interviewees with working knowledge of the City's approvals process had much to say regarding CPAG. Most agreed that in theory, CPAG is a great idea. Collaboration, departmental integration, and the idea of the generalist are crucial to urbanism. Unfortunately this process is not *people proof*. Even when development applications do not seek innovation, they enter a system that is conflict based (see below) and consistently derailed by competing objectives among CPAG members. Specific issues include:

- The lack of a unified understanding of urbanism puts the generalist at complete disadvantage to the established standards of the specialists – especially when the generalist is typically the junior member of the CPAG team.
- Until recently, the required unanimous approval by all CPAG team members allowed a single member, who may not actually have the power to say "yes," to impose an entrenched barrier with an indeterminate timeline. While the recently granted ability of File Managers to make arbitrating decisions is definitely a positive development, without the systemic change discussed throughout this section, it will probably be insufficient.
- There is a lack of consistent File Manager assignment, creating inefficiency and disconnection in the CPAG process. Subsequently, overburdened managers must review new cases, leading to poor customer service.
- Comments on Detailed Team Reviews often reappear after the have already been addressed, often due to changing team members.
- Pre-Application meetings are a missed opportunity for idea exchanges, consensus building, and preliminary direction. They more often establish early barriers that discourage innovation and problem solving.

4. **Conflict-Based System**

In the description of their frustrations, all interviewees identified that the system is based on conflict rather than collaboration: ward-based Alderman compete for support; siloed departments serve specialists protecting their "turf" and approval authority; implementation staff is reluctant to go along with upper management's willingness to approve innovations when accountability still rest on their shoulders; and, Developers are squared-off against Planners and CPAG members – each mistrustful and suspicious of the other. Although it is expected that some amount of conflict will exist in any bureaucracy and can be an important "check and balance," the integrative nature of urbanism cannot be achieved without the Approving Authority playing more of an *Enabling Authority* role.

5. **Accountability to Policy**

It is evident through a review of the Currie Barracks approvals process that Council directives and approved policy plans are not being fully respected. This may be due to a lack of education and/or experience on the part of implementation staff. Other possibilities include communication issues and outright insub-

ordination. While all of these certainly play a role, they are merely symptomatic of the over-arching reason: current urban-focused policy simply cannot be achieved by the City's suburban-focused approvals standards and processes.

6. **Innovation: Evolution vs. Revolution**

   Our interviews revealed two completely incompatible attitudes towards the concept of innovation. Some interviewees were adamant that the City was inevitably innovating towards sustainability and that gradual change was preferable. The other group was equally as adamant that the City's approvals process had reached a point where it was completely dysfunctional; it was neither headed in the direction of true sustainability, nor was any longer permitting functional suburbansim – this group was in favor of revolutionary change. Both groups were roughly the same size. What is perhaps most interesting is that on a scale with the most knowledgeable and committed to sustainability on one end, and the least knowledgeable and unconcerned with sustainability on the other, the evolutionary group constituted the middle of the pack while the revolutionary group was an interesting agreement of the two extremes. The findings of this study are in line with the desire for significant change as gradual change is founded on the false assumption that there is a direct progression between suburbanism and urbanism. Without an Urban Shift, hybridization will be rampant – innovation will continue to be co-opted as green-washing for otherwise suburban projects while at the same time fail to adequately support the achievement of sustainable urbanism.

7. **Individual Departments:**

   a. Planning: The primary role of planning is to represent the generalist's perspective, seeking to tie the pieces together and realize the greater vision of the City. While most departments have standards to rely on, planning must craft custom policy for each planning effort. This often results in a lack of authority, a watering-down of intentions, and confusion from numerous large policy reports. Further, an inconsistency between design policy and the standards that will implement those policies consistently force significant compromise, marginalizing planning's role and undermining their credibility.

   b. Transportation: In spite of a decade long effort, there is still not an approved palette of urban street standards. This forces engineers, and the department in general, to continually consider their risk exposure to approving custom street designs. As a result, their decisions have not been consistent, nor have they benefited from precedent. Additionally, even within the draft Transportation Plan, there is little recognition of the operational benefits of the "dense network" inherent to urbanism, and a continued default to operating from the standpoint of the suburban "dendritic" system. Finally, like Planning, there is a growing disconnect between the more progressive broad policy of transportation and the roads standards needed to implement those policies.

c. Urban Development: Current engineering standards are geared toward suburban development patterns and are resistant to customization. Reliance on extraordinary studies and entrenchment regarding minor details causes significant delays and additional project costs.

d. Parks: Like Transportation, Parks approaches their jurisdiction in terms of suburban standards. Central to the problem is the concept of park maintenance funding that equally distributes funds on a per acre basis. Calgary has a heritage of many high-quality urban squares and plazas such as Tomkins Park, Central Memorial Park, and Olympic Plaza that do not operate in this fashion. There must be an Urban Shift in policy that allows for park maintenance dollars to accommodate the smaller urban parks that are the primary amenity spaces within higher density urban environments. Additionally, current park standards do not recognize or allow for how smaller urban public spaces need to employ more refined, customized details. And finally, the realization of streets serving as the most significant component of the City's public realm should be integrated within the larger mandate of Parks. In the Urban Shift, a more suitable name for the "Parks" department might migrate toward the more inclusive term "Civic Space."

e. Fire Department: Of the above departments, the Fire Department is the only one excluded from CPAG. They are at once the department most aligned with the goals and standards of sustainable urbanism, and one of the most formidable barriers. It is clear that to date the Fire Department has not been properly engaged anywhere in the City, and as a result have retreated and entrenched to protect their primary function of life safety against uncertainty in standards. Their relationship with Transportation and Canada Lands has been tumultuous at best. In spite of knowledge of progressive urban design techniques for aligning fire and life safety considerations in urban communities, workable standards are elusive and will probably remain so until an Urban Shift creates the opportunity to allow the Fire Department to collaborate in the establishment of urban standards respectful of their critically significant role in the practical workings of our City.

   It should also be noted that in 2004, the Fire Department was engaged by Transportation to communicate their design parameters. In the absence of a clear response and to clarify these parameters, they reissued those parameters with illustrations as the "Street Design Parameters" document in 2008. While this document has subsequently been a source turf-based controversy, it appears from review of these standards and the Alberta Fire Code, that a solution that aligns with both the requirements of sustainable urbanism and the CFB's Street Design Parameters should be possible.

IMMEDIATE RECOMMENDATIONS

It is the fundamental premise of this report that current standards and procedures are fundamentally incongruent with urbanism. As such, many of the following Immediate Recommendations deal only with symptoms and will not be effective in dealing with the root cause of the problem. Individually, these recommendations offer temporary solutions and/or essential first steps, as the larger, more daunting task of a broad shift to urbanism discussed in Systems of Change is achieved.

1. **Adopt and Enforce Common Urban Policy**

   Current policy reports dealing with the complexities of urbanism and the need to counter existing standards have become overbearing in their size and breadth. Each report must reinvent and justify the principles of urbanism resulting in inconsistencies between policy reports and the inability to enforce the myriad related policies. Common issues include designing streets to balance cars and pedestrians, providing a range of housing types, low impact design, and the nature of parks and playgrounds.

   Drawing from well established and refined tools developed throughout North America, a common language of principles and concepts that support urbanism can be adopted at once, enforced as a single entity, and therefore free policy and design reports to focus on the particulars of a given development proposal. This Common Urban Policy will also address Systemic Incongruence by establishing an easily understood unified message. The current MDP review process has the opportunity to consolidate these ideas into an effective common urban policy.

2. **Assemble a Special Approvals Team for Urbanism**

   The three precedent-setting urban projects in Calgary, McKenzie Towne, the Bridges, and the CFB redevelopment, were all founded with the aide of some sort of special approvals mechanism. In McKenzie Town it was the “Innovation Committee.” In the Bridges it was the “Consolidated Infrastructure Committee.” And for the CFB redevelopment it has been the “Innovation Zone.” All of these have been ineffective in the face of the current regulatory environment.

   A special CPAG approvals team under the guise of Sustainable Urbanism, or some other distinguishing name, should be charged with obtaining all implementation approvals for projects that qualify. The pre-application period would serve as a qualification survey, as well as a collaborative ideas-based discussion on the part of the applicant and the City.

   A single file manager should be assigned to the case, with an emphasis on consistency. Each CPAG team member would require education in the Common Urban Policy discussed above, the approvals issues inherent with urbanism, and an understanding of sustainability objectives from a generalist point of

view. Members should be empowered to approve, and should answer directly to a higher authority such as a General Manager. A succession plan for each member would require new additions to be fully informed and educated, providing a smooth transition into the project. Starting as a test case, this model would be replicated as needed as new developments fall in line with emerging urban-focused policy.

3. **Adopt Enforceable Design Criteria for Sustainable Neighbourhoods/Urbanism**

The political power shifting of the decade-long effort to establish appropriate urban street standards is disingenuous to the important efforts of broad policy now aiming at urbanism. It is time to get the job done, not emotionally or politically, but practically and rationally using best practices from across North America. But it is not only streets standards that are at issue. Comprehensive design criteria and standards must be established for urban neighbourhood design, form-based land use regulation, park and public space design, storm water management, and a host of other details that have proven, through the CFB approvals processes, to be incompatible with existing standards.

The first action should be the approval of an urban street palette. This should be established through a collaborative session involving Planning, Transportation, and the Fire Department, as well as utilizing North American engineering talent well versed in urban/walkable street and network standards. The session should be mediated by a qualified 3rd party, and the results delivered to Council as a technical recommendation backed by the consensus of all parties.

Secondly, urban parks standards and storm water management should be developed and adopted. The approved *Customized Design Criteria* developed for Currie Barracks provide an excellent starting point for both of these efforts. Ultimately, as discussed in the following section, a comprehensive alternative set of standards would include an urban public works manual and a form-based code that includes neighbourhood design criteria.

4. **Develop Urban Parks Management Policy**

Calgary has a rich heritage of high quality public squares, plazas, and streets in its inner city. It also has a conspicuous absence of such amenities elsewhere in the city. Current Parks' policy is based on suburban standards. In addition to the design standards indicated in the previous recommendation, it will be necessary to re-conceptualize the manner in which Parks are managed and maintained. There are several possible approaches, but it is crucial that the funding not be based on equal per acre distribution. Design and maintenance funding should instead take into account the population densities that are served by individual parks and the more intense use of smaller public spaces as a result.

5. **Plan for a System Shift**

The recent releases of Calgary's draft Municipal Development Plan and the draft Calgary Regional Plan point to significant changes of course in the way the City and the Region are intending to develop in the future. The vision mandates that new development is compact, mixed-use, walkable, and served by transit. In short, these major plans are calling for a shift to urbanism. As this report points out, our current system is designed to produce something different than the prescribed vision. And as the saga of the CFB East approvals process has shown us, no amount of special consideration, supporting policy, or awards can overcome these fundamental disconnects. Urban Shift is first about making a cognitive adjustment to understand urbanism as a distinct type, different in kind from automobile-focused suburbanism. But it is also about the necessity of shifting the system to support this new understanding. Systems of Change discusses the tools that are available by which a comprehensive plan to shift the system may be undertaken in order to firmly place the City of Calgary on the path to sustainability.

5. SYSTEMS OF CHANGE

OVERVIEW

Through the many investigations and interviews conducted for this study, opinions and speculation regarding what changes might proceed from a report such as this were far ranging. Where Immediate Recommendations offers a list of several suggestions that directly proceeded from these interviews and investigations, this section draws from North American best practices and experience in order to place these recommendations within the context of a more comprehensive approach towards achieving an Urban Shift. It must be emphasized that while *Systems of Change* addresses how to achieve an Urban Shift, the vision for an Urban Shift is not itself a proposal of this report. Rather, this report has concluded that an Urban Shift is required in order to achieve the vision that has already emerged from the City's own policy, the Imagine Calgary process, and is embodied by the draft Municipal Development Plan. *Systems of Change* identifies the means that will allow the City to actually enable its own policy, a responsibility that the municipal government has to itself, the building industry, and – most importantly – to its citizens.

Proceeding from Imagine Calgary and PlanIt Calgary, the new draft Municipal Development Plan (MDP) and Calgary Transportation Plan (CPT) come at a formidable point in Calgary's real estate market. During "boom times," municipalities often find themselves unable to keep up with the pace of development applications and growth, often postponing more "progressive" planning for the "future." However, when more progressive policies do manage to emerge from a busy City Hall, the hungry market is generally more willing to accept changes just to keep pace with demand. But in a market down-cycle, a new situation takes shape. Just when City resources have a reprieve from the furious pace of growth that allows more time and consideration for progressive planning, the industry becomes more conservative, and the tax base begins to suffer. Without the right mechanisms and strategies in place to realize progressive policy during an economic downturn, there is a significant danger that it will be rendered ineffectual.

While *Systems of Change* offers a critical strategy for responding to push-back from the building industry during the roll-out of progressive policy in the face of current market conditions, its primary purpose is to consider the larger context for the City's desired Urban Shift. And while another key component to this strategy will be the development of a more in-depth municipal understanding of total-cost and triple-bottom-line accounting that compares the long-term costs between automobile-focused suburbanism and sustainable human-scaled urbanism, *Systems of Change* is more focused on enabling the City to meet its responsibilities. Where justifying and incentivising sustainable urbanism is important, the basic task of enabling the implementation of policy is far more critical. This section proposes and describes these necessary *Systems of Change*, and then lays out how such a strategy might be enabled through the new draft MDP.

INNOVATION: EVOLUTION VS. REVOLUTION REVISITED

The long process of developing and approving the new MDP is intended to lead to a number of key changes to policy and standards which, over time, will lead to the development of more sustainable communities and the overall improvement of our city along the triple-bottom-line of sustainability. This is the "slow change," or evolutionary approach. Unfortunately, local, and North American, experience demonstrates that it is not this easy. There remain the issues of a failure to address the "Systemic Incongruence" within the current regulatory environment, and the absence of a direct path from current practices to sustainable urbanism. Slow change also brings on the problems of internal education and communication that have shown, through the interviews, to be difficult and inconsistent in a large bureaucracy.

But the proof is in the outcome. It is likely that efforts through slow change will be compromised, and the built results hybrid half-measures that fall closer to the side of status quo. Once again, exceptional measures will be required to push a handful of hopeful urban projects through a machine designed to produce suburbanism. Then, a decade or so later, having moved another increment toward sustainability, we will once again have to lay our unfinished business on the steps of the next MDP review process. . . Why not start that process now?

THE SOLUTION OF A PARALLEL SYSTEM

The current draft MDP is a progressive document that clearly aims for sustainable human-scaled urbanism. At the same time, it has been forced to include many of the aspects of the current status quo's automobile-focused suburbanism. The opportunity, compatible with the most progressive intentions of the draft MDP, would be to permit evolutionary innovation from suburbanism to urbanism to play out as intended while a more progressive process is developed, tested, and deployed.

To this end, Urban Shift proposes a parallel regulatory system that enables Sustainable Urban Neighbourhoods, by right. It must be stressed that this does not mean that other development efforts will fall below the prescriptions and plans set out in the new MDP. This means that as the whole of the City moves forward to improve triple-bottom-line performance, and tackle many of the credible projects set out in the MDP, a parallel effort will enable urban projects that aspire to the most progressive standards of the MDP's intent as well as environmental benchmarks set out in third-party rating systems such as LEED ND.

As Garrison Woods has proven, it takes more than mere successful demonstration to enable urban development in Calgary. The Parallel System would provide a laboratory for a comprehensive set of regulatory devices that in time, if the market demanded, could come to replace the current system. City officials would gain the means to pursue progressive urban development initiatives within a controlled scope, the development industry would expand their options for development, and citizens will gain more lifestyle choices and new civic amenities.

THE SUSTAINABLE URBAN NEIGHBOURHOODS CODE:

1. **Code Overview**

   The Sustainable Urban Neighbourhood Code proposes the establishment of a comprehensive parallel development code enabling urbanism by-right. This code should integrate land use, public works, transportation, and the approvals process, all tied together under common policy. Project eligibility would be through review of candidate applications checked against adherence to the common urban policy. Projects would include redevelopment sites as well as greenfield sites. The code could be expanded to other applications and should be incentivized in a fair manner. The following offers a brief outline of a possible code.

2. **Clear Vision, Common Policy**

   In the current flurry of urban-based policy emerging from the Calgary Regional Partnership and the recently released draft MDP and CTP, it is not yet evident whether a clear vision for the City will emerge. Fortunately, the MDP is presented as a "living document" that can accommodate an Urban Shift and hopefully refine and simplify the City's vision as it pertains to urbanism. In the meantime, using a parallel code as a basis, the strongest vision statements from the MDP can be organized to form a vision by principle.

   In *Immediate Recommendations* the first recommendation calls to "Adopt and Enforce Common Urban Policy." As part of a comprehensive urban code, a concise set of principles should be developed to explicitly establish the legal intent and municipal policy for creating sustainable urbanism. An example of this policy is offered in *Appendix A*. The current draft MDP offers many of these principles throughout, but does not adequately assemble them in a unified message or for ease of use. Using the principles offered in *Appendix A* as a basis, deployment with MDP-specific terms should be approved as part of the "living" MDP and will form a unified set of common policies suitable for urban projects.

3. **Simplified, Consistent Plan Hierarchy**

   When measured by the range of an automobile trip, the size of neighbourhoods and "community plans" are not tied to a consistent scale. As a result, sub-regional level plans do not adequately integrate walkability and human scale into regional planning. In the Parallel System, the first task of the Sustainable Urban Neighbourhood Code will be to structure the city into consistent walkable neighbourhood increments at a regional/sub-regional scale. It will also be necessary to determine areas that are potentially compatible with the Parallel System, and those that will remain part of the existing system – these could be both greenfield and redevelopment sites. Current best practices utilize the "Neighbourhood Unit" as a fundamental building block for compact, walkable, and mixed use metropolitan regions. Neighbourhoods Units are generally measured in increments of the 400m radius (5-minute walk) pedestrian shed, and

are preferably 160 acres but can range between 80 to 200 acres depending on circumstance. The use of the Neighbourhood Unit is currently proposed as part of the new MDP. Tied to common urban policy, urban subdivision standards and a form-based land use code, this could be reconceptualized as a "Sustainable Neighbourhood Unit." A possible plan hierarchy for the Parallel System's urban code might include:

a. ***Regional Plan***, adopted by resolution of council. The regional plan would identify neighbourhood units and their connective corridors, and then distinguish between those currently rezoned under the new codes, future neighbourhoods targeted to be designed/redesigned under the code, and those areas not under consideration for the parallel code (which would remain subject to existing RCS's under the existing Land Use Bylaw). More detailed subregional plans may be instituted for greenfield areas if necessary. The common policy would establish the basis and principles for neighbourhood units.

b. ***Neighbourhood Plans***, adopted as Area Structure Plans and Area Redevelopment Plans. These would be singular or multiple neighbourhoods based on the increment of the Sustainable Neighbourhood Unit and would be designed at the level of the block. Plans would indicate form-based land use districts, civic and green spaces, thoroughfare assignments, along with the additional requirements of ARPs and ASPs as per the MGA. Area Structure Plans would "activate" the parallel code under the regional plan. Neighbourhood plans would be regulated and approved under the Urban Subdivision Standards (See Below).

c. ***Land Use Designation***, enacted through Outline Plans at the scale of individual Neighbourhood Units and reflecting the associated Neighbourhood Plan.

d. ***Subdivision and Phase One Approvals***, enacted by the Tentative Plan at the increment of subdivision and phasing and regulated under the Form Based Land Use Code and the Urban Public Works Manual. (See below)

e. ***Parcel Plans,*** enacted by a Development Permit at the scale of the building and regulated under the Form Based Land Use Code and other instruments as necessary.

4. **Urban Subdivision Standards**

The barriers to urbanism are often oversimplified to issues of narrowing street types and expanding new land use districts. Unfortunately, as this document attests, it is not that easy. Adopting urban street standards and mixed-use land use districts only establishes the ingredients for urbanism, it does not describe how those ingredients are assembled into the more complex recipe for urbanism. Urban subdivision standards regulate design at the scale of the neighbourhood, focusing on the form and dispersion of civic and natural space, network connectivity, the establishment of a range of lifestyle choices (as opposed to

housing choices), the overall form of the neighbourhood, and its internal and external connective structure of corridors. More than any other component of the Parallel System's urban code, Urban Subdivision Standards prevent hybridization to suburbanism, and are at the critical intersection of design with sustainable urbanism.

5. **Form-Based Land Use Code**

International experience over the past two decades has determined that zoning and segregated–land use approaches are not compatible with urbanism. When the very reason for zoning is to fundamentally separate uses, new mixed-use zoning categories that "put the uses back together" are immediately at odds with the very DNA of suburbanism and have accordingly proven ineffective. Based on suburbanism, Calgary's new Land Use Bylaw does not adequately address urbanism. To deal with this, "Form-Based Codes" have emerged as a current best practice for implementing urbanism by-right throughout North America. At the heart of the Parallel System's urban code would be the adoption of a form-based code applicable throughout the City. A definition and description of form based codes from the "Form Based Codes Institute" follows below.

*"**Form Based Codes:** A method of regulating development to achieve a specific urban form. Form-based codes create a predictable public realm primarily by controlling physical form, with a lesser focus on land use, through city or county regulations."*

"Form-based codes address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. The regulations and standards in Form-based codes, presented in both diagrams and words, are keyed to a regulating plan that designates the appropriate form and scale (and therefore, character) of development rather than only distinctions in land-use types. This is in contrast to conventional zoning's focus on the micromanagement and segregation of land uses, and the control of development intensity through abstract and uncoordinated parameters (e.g., FAR, dwellings per acre, setbacks, parking ratios, traffic LOS) to the neglect of an integrated built form. Not to be confused with design guidelines or general statements of policy, Form-based codes are regulatory, not advisory."

- Form Based Codes Institute, www.formbased codes.com

6. **Urban Public Works Manual**

While the Form-Based Land Use Code deals mainly with the development of private lots, the Urban Public Works Manual focuses on the details of the public realm including street types, green space and civic space configuration and design, and infrastructure related issues including storm water management. As discussed in *Immediate Recommendations*, "Enforceable Design Criteria"

would reduce arbitrary decisions and establish a baseline for the competent and creative design of the public realm. This manual should be integrated explicitly with the Parallel System's urban code, particularly the Form-Based Land Use Code and the Urban Subdivision Standards.

7. **Supplementary Regulations**

   The Parallel System's urban code should be extendable to other areas of consideration. These may include green building, high-performance infrastructure, architecture, affordable housing, accessibility, and any number of additional elements as required.

8. **Integrated Public Engagement**

   There are a number of ways to undertake public engagement. While each project requires a specific consideration, the overall recommended approach would be the multiple-day design Charrette. While other public engagement methods might be suitable in a greenfield situation, the redevelopment process has proven well served by the Charrette format allowing for a complexity of land owners, residents, and other affected stakeholders to integrate their efforts toward a broadly accepted and well-founded design plan. But regardless of the method employed, it is recommended that redevelopment/existing neighbourhood plans be pursued at the increment of the Sustainable Neighbourhood Unit (80-200 acres) and employ a transparent, public, and design-based process.

9. **Special CPAG Approvals Team**

   As identified in the previous chapter, one of the proposals in *Immediate Recommendations* is to "Assemble a Special Approvals Team for Urbanism." This approvals team would initially be the principal administrators of the Parallel System's urban code and would ensure that team members were experts in urbanism. Part of the team's responsibilities would be to enforce policy accountability, improve application timing and approvals, and undertake succession planning as new members are added. As an immediate recommendation, this special team would be established not only as a stop-gap measure, but more importantly, as a test model. As the Parallel System's urban code is developed and implemented, this team would play an important part in refining the approach and process. As the urban code grows in influence and corresponding market share, the Special Approvals Team for Urbanism would be replicated as necessary and simply become one of many Approvals Teams for Urbanism.

INTEGRATION WITH THE MDP

This study has coincided with the release of the drafts for the new MDP and CTP. This timeliness reinforces the urgency for an Urban Shift in Calgary, and offers an important opportunity to pursue the recommendations proposed in this study. Fortunately, the draft MDP contains within it many of the essential elements for an Urban Shift. Unfortunately, coupled with the draft CPT, it also allows a flexibility that if not resolved and better understood, may lead to problematic hybridizations

between suburban and urban typologies. Most dangerous, however, is the growing discomfort from the development community, as the MDP's remarkably strict broad policies, such as those identified for "Unplanned Greenfield Development," have not been granted the proper tools for implementation.

Fortunately, the draft MDP has been proposed as a "living document" that can grow and change with time. Section 1.8 of the Draft MDP states: "The MDP is a living document, meaning it will be kept current by reviewing, updating and amending it from time to time. Parts 2, 3 and 4 of the MDP have been organized as logical place holders for future Policies that can be incorporated into the MDP." A placeholder at 4.3 is made available for future use for specific policies. This study's proposed Parallel System's Sustainable Urban Neighbourhoods Code might be a candidate for this section.

It should also be noted that the draft MDP already distinguishes between "existing" developments and neighbourhoods, and those that will be "new" or "redeveloped." This establishes the precedent for differentiation between areas that would be regulated under the existing code, and those that would be candidates for the Parallel System. This trend also continues throughout many aspects of the document. The next step would be to explicitly call out the two types – automobile-focused suburbanism and human-scaled urbanism – as we have identified in this study, and allow each to be regulated under an appropriate mechanism. This study's proposed Parallel System's Sustainable Urban Neighbourhoods Code could be integrated with the MDP as follows:

- **4.3 Placeholder:** Establish a Parallel System called the Sustainable Urban Neighbourhoods Code, clarify how it differs from current practices, explain how it would be implemented, and designate what places within Calgary might be eligible for regulation within this Parallel System.
- **8.3.1 Regional Context Studies:** Part 5 of the MDP identifies the development of regional context studies, the terms of reference for which are undefined in the current draft. Upon development of the Sustainable Urban Neighbourhoods Code, one aspect of these terms might be the identification of potential Neighbourhood Units within the Parallel System's Regional Plan (described above in "Simplified, Consistent Plan Hierarchy").
- **8.3.2 Local Area Plans:** Also identified within Part 5, and throughout the MDP, are the development of Local Area Plans that could be analogous with the Parallel System's Sustainable Neighbourhood Units and enacted as Neighborhood Plans through ASPs and ARPs (described above in "Simplified, Consistent Plan Hierarchy").
- **2.4 Urban Design Guidelines:** Action 2, calling for the development of Urban Design Guidelines, would be ideally addressed by a Form Based Code for the context, and an Urban Public Works Manual for streetscape and civic space details (described above in "Form-Based Land Use Code" and "Urban Public Works Manual"). These elements of the Parallel System would be the ideal way to address many of the issues and parameters identified within the draft MDP including: high density mixed use development; transit stations (TOD); urban boulevards; complete streets; tall buildings; coordinated street furniture plan; and, a coordinated Street and Pedestrian Lighting Plan.

- **3.2 Activity Centres:** As Urban Shift has clearly demonstrated, current standards will not support Activity Centres as the mixed-use, urban environments that the draft MDP envisions. Under the Parallel System's Sustainable Urban Neighbourhoods Code this problem would be solved, and Activity Centres that do not meet urban criteria could be regulated under the current standards and LUB.
- **3.3 Corridors:** As with Activity Centres, the Parallel System's Sustainable Urban Neighbourhoods Code could ensure the development of Corridors as the urban, mixed-use environments envisioned by the MDP, as well as better integrate them with the CPT's Complete Streets. The Parallel System would also encourage Corridors to function as the connection between lineally deployed Sustainable Neighbourhood Units and urban Activity Centres.

- **4.1.4 Established Retail Areas:** As with both Activity Centres and Corridors, the draft MDP's identification of the opportunity to redevelop existing commercial centres into mixed-use urban environments would be made feasible by the Parallel System's Urban Code. Additionally, the Urban Code would address Section 2.4.7 of the MDP, which identifies the need to create urban design guidelines for the development and redevelopment of regional shopping sites.
- **3.5.1 Planned Greenfield Residential:** As identified within the draft MDP, these are areas that would generally not be regulated under the Parallel System, and would instead continue under the current standards and LUB.
- **3.5.2 Unplanned Greenfield Residential:** More than any other section, the draft MDP's policy for areas identified as "Unplanned Greenfield Residential" requires an Urban Shift. As this study has demonstrated, policy-based demands for urbanism within a regulatory and historical context of automobile-focused suburbanism are deeply problematic. Without a new regulatory system and a better understanding of what is at stake, the backlash from the development industry for this will be intense and the pressure for hybridization or abandonment of the policy will be overwhelming. Further, the saga of the CFB redevelopment shows that without adequate tools to achieve urbanism, this backlash may be warranted. The proposed Parallel System would provide such tools and remove the rational basis for objection to such policy, as well as establish the opportunity for market-based competition between greenfield automobile-focused suburbanism and human-scaled urbanism in Calgary.
- **5.2.4 Support Intensification:** Intensification without urbanism will exacerbate current traffic issues and will not align with policy aimed at sustainability. The Parallel System would provide not only clear, consistent guidelines for achieving urban intensification, but it would also help guide the staging and prioritization for such efforts.
- **Context and Integration of other Design Parameters:** Currently deployed within the draft MDP, many of the proposed design parameters such as the street palette, green infrastructure, parks, solar orientation, building height, and others, do not exist within a clear context of each other. Also unclear is where and how they might best be applied given their immediate surroundings. The Parallel System offers a clear mechanism for organizing these concepts by context, and rationally allocating their application.
- **Provide Regulation Consistency and Simplification:** Throughout the MDP, there are several instances where the call for mixed-use, urban environments will invariably lead to the need for overbearing policy reports and custom direct control land use districts for each distinct application. The common set of rules proposed within the Parallel System would simplify this, and provide consistency throughout the City so that innovative energy can be focused on specific design, not on how such design is to be regulated and approved.

APPENDICES

A. **Sample Common Urban Policy**
B. **Report Methodology**
C. **North American Context - General**
D. **North American Context - Form-Based Codes**
E. **North American Context - SmartCode**

Note: For the .pdf version, Appendices C-D are included in a separate digital file.

APPENDIX A: SAMPLE COMMON POLICY

DISCUSSION

The following common policy represents the Intent of the model SmartCode with some minor variations for the Alberta context. This policy is derived from the Charter of the New Urbanism.

THE REGION

a. The region should retain its natural infrastructure and visual character derived from topography, woodlands, farmlands, riparian corridors and lakeshores.

b. Growth strategies should encourage infill and redevelopment in parity with new development.

c. Development contiguous to urban areas should be structured as Sustainable Neighborhood Units and be integrated with the existing urban pattern.

d. Development non-contiguous to urban areas should also be organized in the pattern of Sustainable Neighborhood Units.

e. Affordable Housing should be distributed throughout the region to match job opportunities and to avoid concentrations of poverty.

f. Transportation Corridors should be planned and reserved in coordination with land use.

g. Green Corridors should be used to define and connect the urbanized areas.

h. The region should include a framework of transit, pedestrian, and bicycle systems that provide alternatives to the automobile.

THE COMMUNITY

a. New and infill Sustainable Neighborhood Units should be complete, compact, and walkable, and should use green buildings and high performance infrastructure.

b. New and infill Sustainable Neighborhood Units should be the preferred pattern of development and Districts specializing in a single use should be the exception.

c. Ordinary activities of daily living should occur within walking distance of most dwellings, allowing independence to those who do not drive.

d. Interconnected networks of thoroughfares should be designed to disperse and reduce the length of automobile trips.

e. Within neighbourhoods, a range of housing types and price levels should be provided to accommodate diverse ages and incomes.

f. Appropriate building densities and land uses should be provided within walking distance of transit stops.

g. Civic, institutional, and commercial activity should be embedded in town centres, not isolated in remote single-use complexes.

h. Schools should be sized and located to enable children to walk or bicycle to them.

i. A range of Open Space including Parks, Squares, and playgrounds should be distributed within neighbourhoods and town centres.

THE BLOCK AND THE BUILDING

a. Buildings and landscaping should contribute to the physical definition of thoroughfares as civic places.

b. Development should adequately accommodate automobiles while respecting the pedes-

trian and the spatial form of public areas.

c. The design of streets and buildings should reinforce safe environments, but not at the expense of accessibility.

d. Architecture and landscape design should grow from local climate, topography, history, and building practice.

e. Buildings should provide their inhabitants with a clear sense of geography and climate through energy efficient methods.

f. Civic Buildings and public gathering places should be provided as locations that reinforce community identity and support self-government.

g. Civic Buildings should be distinctive and appropriate to a role more important than the other buildings that constitute the fabric of the city.

h. The preservation and renewal of historic buildings should be facilitated, to affirm the continuity and evolution of society.

i. The harmonious and orderly evolution of urban areas should be secured through form-based codes.

THE TRANSECT

a. Communities should provide meaningful choices in living arrangements as manifested by distinct physical environments.

b. The Transect Zone descriptions within an Urban Design Code shall constitute the intent of this plan with regard to the general character of each of these environments.

APPENDIX B: REPORT METHODOLOGY

1. **Initiation Meeting:** An initiation meeting was held with the T-Six team, and the Client Team which included representatives from Canada Lands Company CLC Limited, and The City of Calgary Implementation Planning unit, to refine and confirm the projects methodology, expected deliverables, and timelines. This meeting initiated the "Research Framework" below, as well as weekly project status report updates to the City of Calgary through an assigned project coordinator.

2. **Compile a "Research Framework"** : The Research Framework was started at the Initiation Meeting. Specific case studies, potential interviews and research material were compiled. The compilation of the framework was managed by the T-Six research assistant as a Word document and was added-to/edited via email correspondence. While flexible, this document allowed the project team to organize contacts and leads, set expectations, allow input to research from the City, and ultimately limit the scope of research. Agreement to this framework resulted in "project plan" approval.
3. **North America Context Research:** Through "cold" research such as literature review and internet search, a survey of the implementation of innovative policies was conducted on a North American Context. This was enhanced through the direct experience and contacts associated with T-Six and Placemakers in the North American Context. The most relevant findings were compiled into the final report as appendices.
4. **Current Process Review:** A review of the current process was conducted by meetings with City staff, a review of current literature, and other sources. This was not project specific, but provided a concise basis from which to review
5. **Garrison Woods/Garrison Green Application Review:** The City provided the approved plans for Garrison Woods and Garrison Greens as well as all CPAG and other relevant correspondence from the original applications. Much of the information was collected from CLC as it was difficult to target the specific information within the City's records collection.
6. **Recent Application Reviews:** Originally it was intended that the City would provide T-six with recent subdivision and outline plans to review how they integrate Sustainability and Smart Growth principles and (where applicable or possible) how these innovations were affected by the approvals process. However, consultant and developer interviews replaced this by providing first-hand insight into the approval process. The T-six project team also critiqued some recently approved "innovative" plans internally.
7. **City Process Interviews:** The T-Six and Client Team determined relevant City departments and people for interviews. T-six contacted, secured and conducted all interviews. Some potential interviews could not be completed due to communication difficulties. Meetings were held exclusively between T-Six and the department being interviewed to avoid outside influence.
8. **Consultant and Developer Interviews:** T-Six and the Client Team determined appropriate developer and consultant contacts for one-on-one interviews. These interviews were often related to experience with the CFB redevelopment, however people were also interviewed from other projects in order to obtain a more

complete view of issues.

9. **Compile Findings:** Key findings from the reviews and interviews were complied and condensed by the T-six team as part of an internal review.
10. **Develop Key Recommendations:** T-Six met with the Client Team on a number of occasions to discuss key findings and possible recommendations. These recommendations were later refined by the T-six team and used as an outline to frame the final report.
11. **Compile a Draft Report for Review:** A Draft Report was submitted for review on April 1, 2009. Following circulation to the City team and CLC for review, a collaborative meetings and discussions were conducted with the T-Six and the client team to discuss possible refinements and corrections to the recommendations. Note that changes are at the discretion of the consultant to ensure a true third party review. This also coincides with the required "report to project sponsor".

Intentionally Blank