Welcome to the City of Vancouver ISMP Joint Workshop

What's happening?

We are here

Phase 1

What do we want?

Oct - Dec 2013

TAG #1

December 5, 2013

Phase 2

What do we have?

Jan - Apr 2014

Joint Workshop

March 13, 2014

Phase 3 ⟷ Phase 4

Phase 3

How do we get there?

May - Dec 2014

Stakeholder Workshop

(Spring 2014)

Phase 4

How do we stay on track?

May - Dec 2014

Public Consultation

(Fall 2014)

Agenda for Today

Activity	Time
Welcome, Introduction	1:30 – 2:00
Community Mapping	2:00 – 2:20
Concurrent Interactive Sessions Session A – Design Opportunities & Challenges Session B – Policy Framework Opportunities & Challenges	2:20 – 3:40
Wrap Up & Next Steps	3:40 – 4:00

Why are we doing this?

- Bring together experts from various City of Vancouver departments and external government groups and educators.
- Ensure we are all aware of current best practices and current policies used in the City and region.
- Be aware of the policy requirements and expectations of approving agencies and higher levels of government.
- Expand and accelerate the technical understanding of issues and potential solutions across a wide range of professional disciplines.

Goals of the Workshop

- Introduce results of GIS and mapping analysis of current conditions in the study area, grouped by land use typologies.
- Review a summary of current policy and existing Stormwater Management Framework in the City.
- Work together to understand ‘what we have’ as far as current staff interest in investigating best practices – either in design or in policy tools.

Draft Vision

Vancouver is a fully developed city, with on-going redevelopment and densification to accommodate strong economic growth, affordability, and vibrant and inclusive neighbourhoods for generations to come. The Vision for the Vancouver ISMP is to treat Vancouver's abundant rainwater as a resource, encouraging beneficial reuse in a wide range of land uses to reduce potable water demand, while restoring and celebrating the role of urban watersheds in supporting urban and natural ecosystems and providing clean water to receiving environments.

Key Principles

1. Balance the responsibility to implement rainwater management solutions among private and public sectors.
2. Pursue rainwater management solutions that have multiple benefits – that meet many cross-discipline and cross-departmental aspirations.
3. Ensure that constructed rainwater management solutions are evaluated and lessons-learned are shared for continuous improvement.
4. Recognize that there may be variation in rainwater management solutions among different land use typologies.
5. Identify area of the City that have natural hazards or conditions that would restrict the type of rainwater management technique used (e.g. reduced reliance on infiltration).

Key Principles

6. Redevelopment of streets, parks or private lands provides opportunities for incremental rainwater management – leading to significant improvements, but over time.
7. Continue to show leadership by example, with the City showcasing projects that demonstrate success in rainwater management.
8. Where possible, the objective of daylighting creeks is supported, within the constraints of urban conditions.
9. Solutions must balance capital, operations and maintenance considerations, and anticipate needs for maintenance funds.
10. Rather than creating new programs or bylaws, adapt existing to be clear and consistent regulations and requirements.

Key Principles

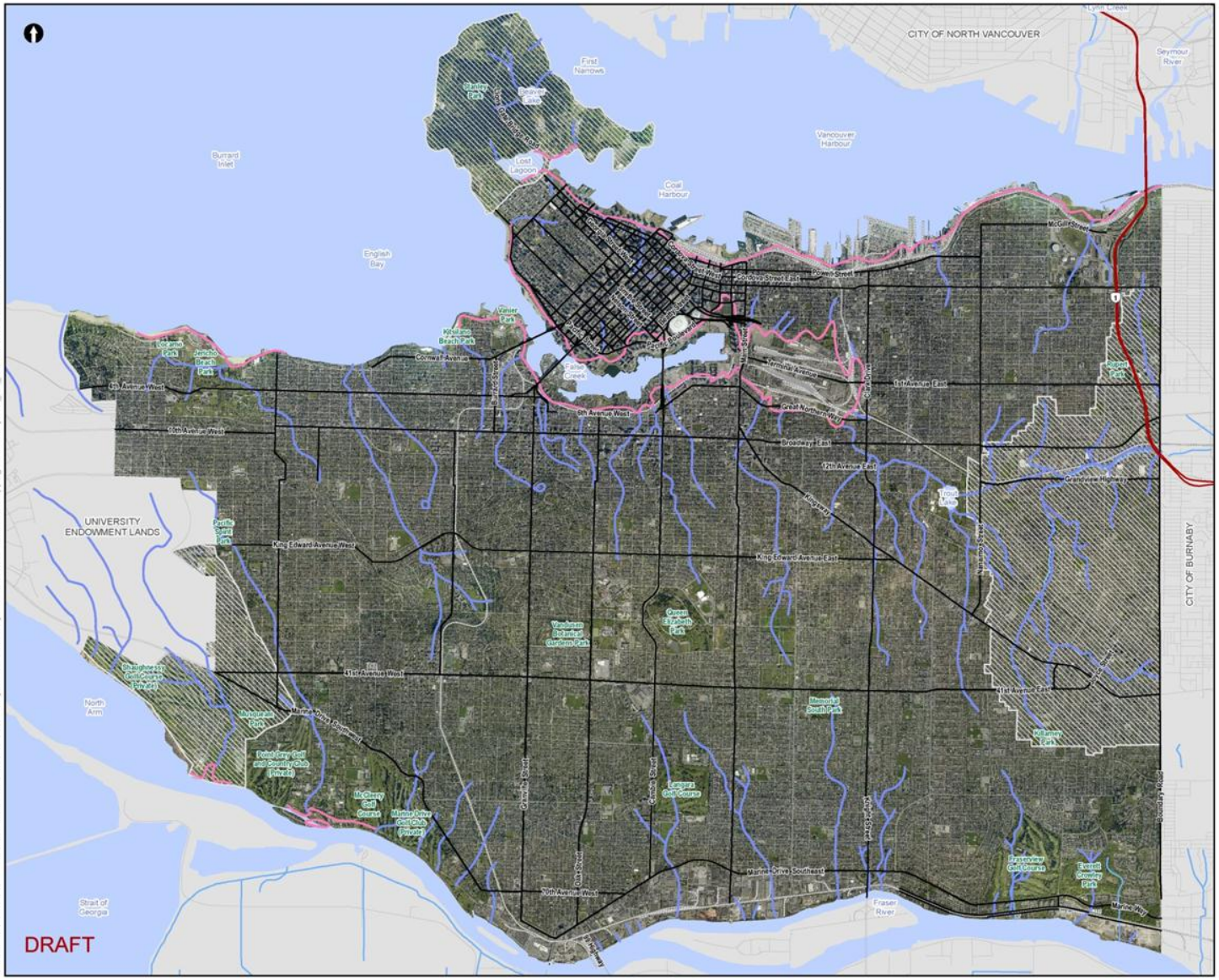
11. Support the long-term program of transitioning the combined sewer system into a separated system to reduce CSOs.
12. Reduce reliance on drinking water for non-potable use by implementing water reuse technologies.
13. Support Metro Vancouver's Liquid Waste Management Plan.

What do we have now?

Creekway Park,
Vancouver

Citywide Conditions Overview

- 2013 Aerial Imagery
- Stormwater Catchments and Sewer Pipes
- Planning Neighbourhoods
- Zoning
- Land Use Typologies
- Total Impervious Area
- Percent Impervious Area
- Surficial Geology



LEGEND

- HISTORIC STREAM
- HISTORIC SHORELINE
- HIGHWAY
- ARTERIAL ROAD
- RAILWAY
- WATERCOURSE
- AREA EXCLUDED FROM STUDY

REFERENCE

HISTORIC STREAM LOCATIONS OBTAINED FROM: "VANCOUVER OLD STREAMS" FROM WATERS, VOL. 3, NO. 1, 1978. WATERCOURSES FROM CANVEC © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED. WATERBODIES FROM STATISTICS CANADA. ALL OTHER DATA PROVIDED BY THE CITY OF VANCOUVER. PROJECTION: UTM ZONE 10 DATUM: NAD 83

SCALE

2 0 2

KILOMETRES

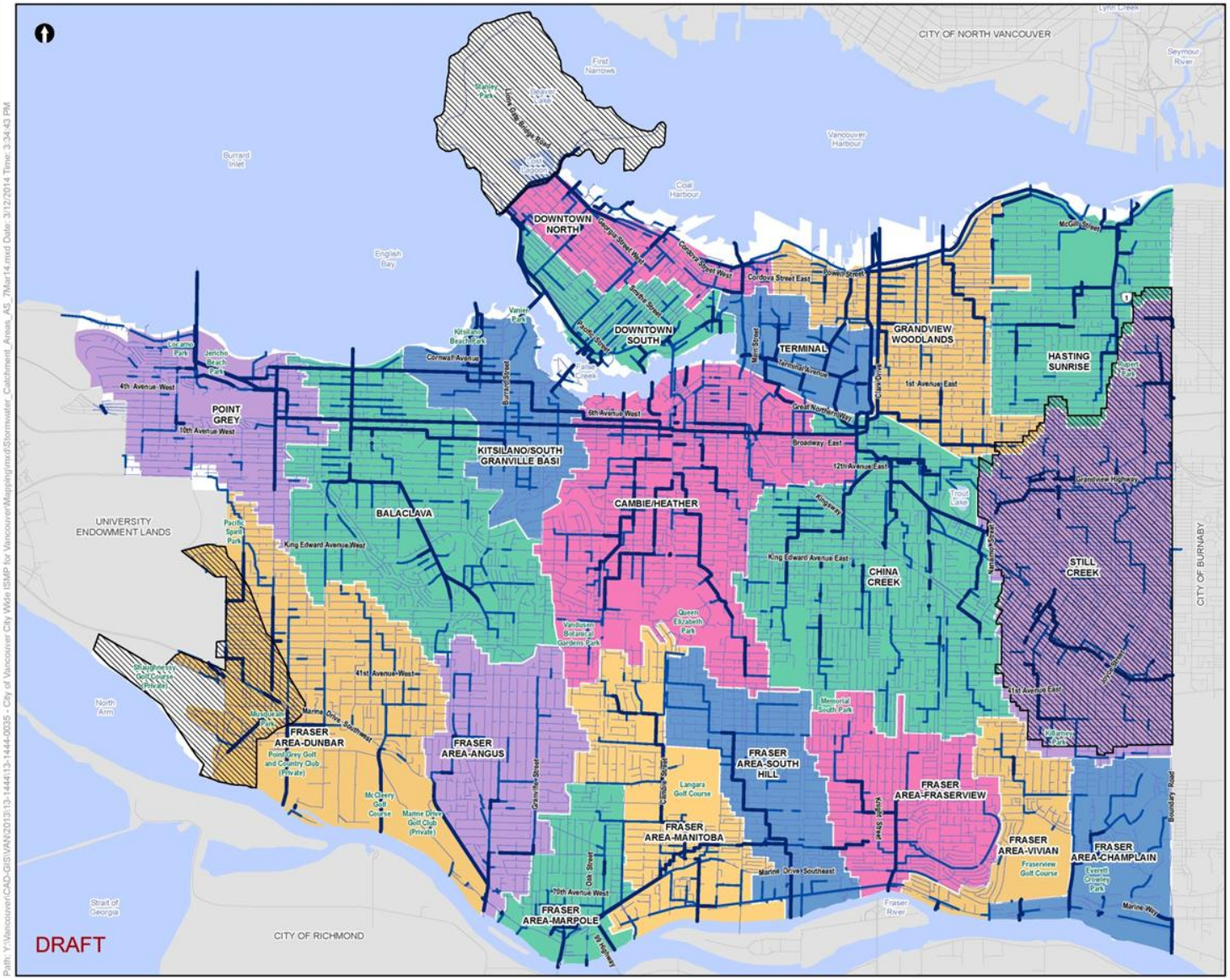
PROJECT
CITY OF VANCOUVER INTEGRATED STORMWATER MANAGEMENT PLAN

TITLE
HISTORIC STREAMS AND 2013 ORTHOPHOTO

Golder Associates

PROJECT No. 13-1444-0035			PAGE SIZE 11" x 17"	
DESIGN	AS	10 JAN 2014	SCALE 1:50,000	REV. 0
G/G	AS	27 FEB 2014		
CHECK	XX	XX	**FIGURE X**	
REVIEW	XX	XX		

Path: Y:\Vancouver\CAD-GIS\VAN\2013\13-1444\13-1444-0035 - City of Vancouver City Wide ISMP for Vancouver\Mapping\mxd\Orthophoto_AS_10Jan14.mxd Date: 3/12/2014 Time: 3:24:12 PM



LEGEND

SEWER MAIN SIZE (mm)

- SMALL (0 - 499)
- MEDIUM (500 - 999)
- LARGE (1,000 - 4,975)
- STORMWATER CATCHMENT AREA (NAME)
- AREA EXCLUDED FROM STUDY

REFERENCE

PROJECTION: UTM ZONE 10 DATUM: NAD 83

SCALE

2 0 2

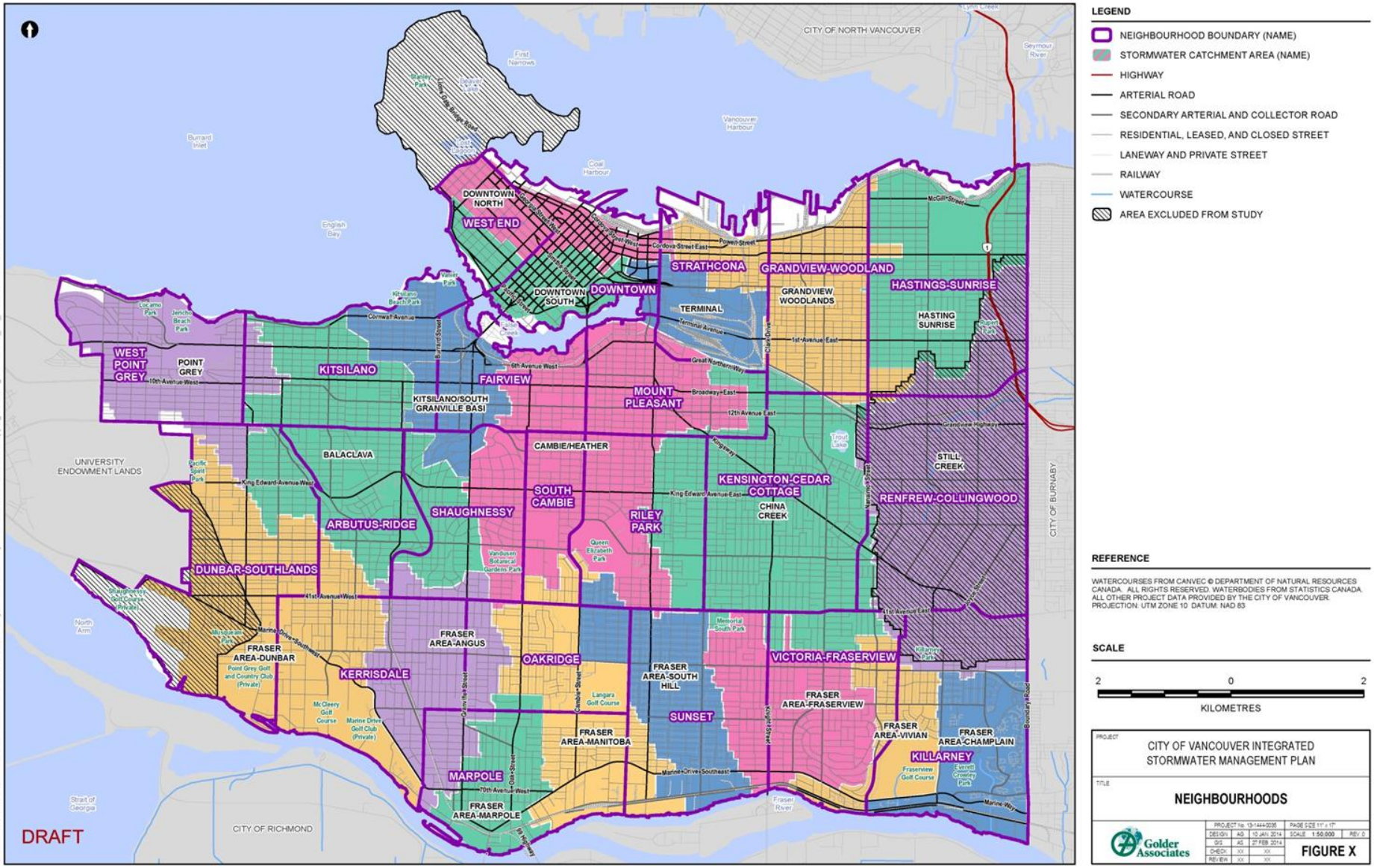
KILOMETRES

PROJECT: CITY OF VANCOUVER INTEGRATED STORMWATER MANAGEMENT PLAN

TITLE: **SEWER MAINS AND STORMWATER CATCHMENT AREAS**

Golder Associates

PROJECT No. 13-1444-0035			PAGE SIZE 11" x 17"
DESIGN	AS	10 JAN 2014	SCALE 1:50,000 REV. 0
GIS	AS	27 FEB 2014	
CHECK	XX	XX	**FIGURE X**
REVIEW	XX	XX	



LEGEND

- NEIGHBOURHOOD BOUNDARY (NAME)
- STORMWATER CATCHMENT AREA (NAME)
- HIGHWAY
- ARTERIAL ROAD
- SECONDARY ARTERIAL AND COLLECTOR ROAD
- RESIDENTIAL, LEASED, AND CLOSED STREET
- LANEWAY AND PRIVATE STREET
- RAILWAY
- WATERCOURSE
- AREA EXCLUDED FROM STUDY

REFERENCE

WATERCOURSES FROM CANVEC © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED. WATERBODIES FROM STATISTICS CANADA. ALL OTHER PROJECT DATA PROVIDED BY THE CITY OF VANCOUVER. PROJECTION: UTM ZONE 10 DATUM: NAD 83

SCALE

2 0 2

KILOMETRES

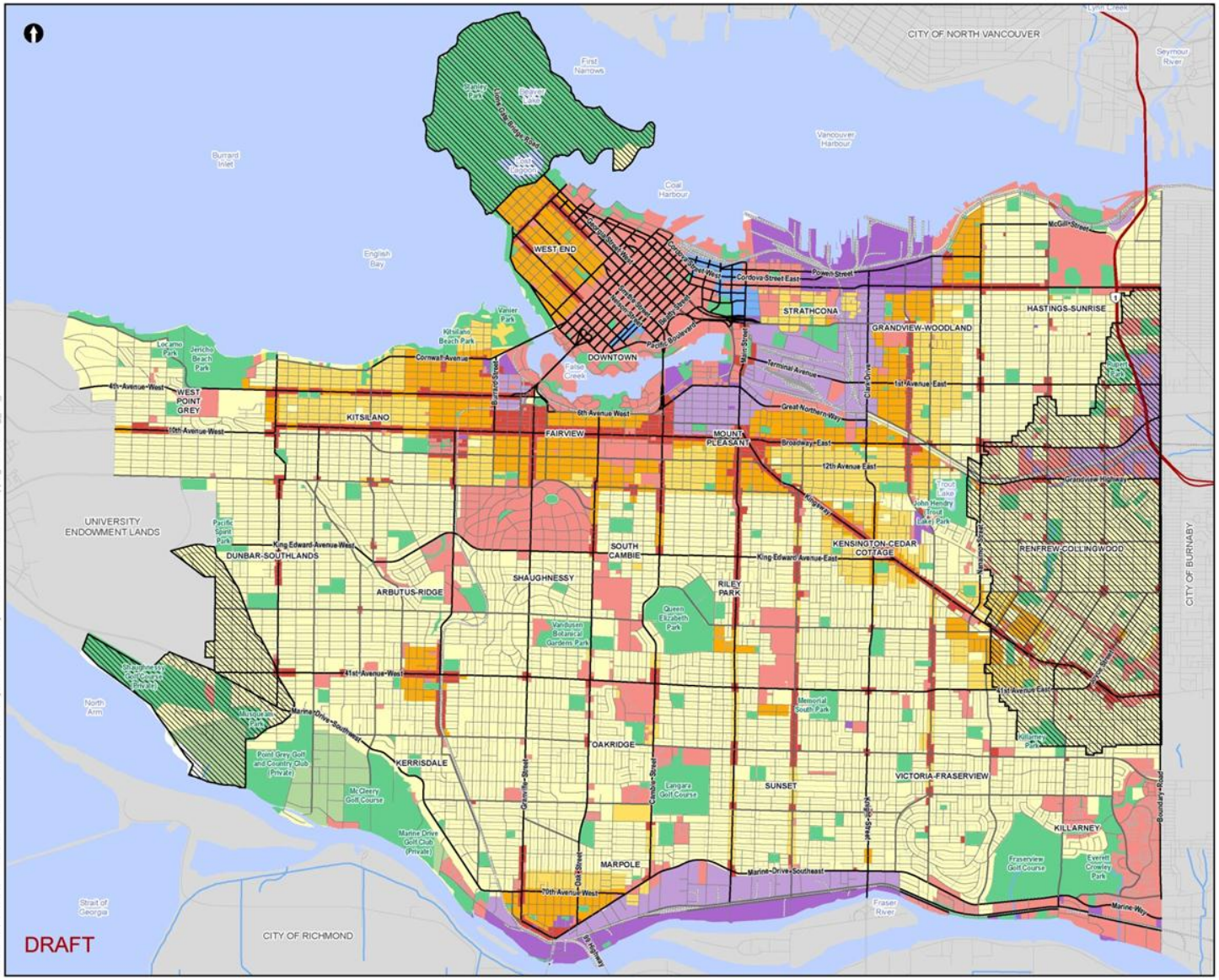
PROJECT: CITY OF VANCOUVER INTEGRATED STORMWATER MANAGEMENT PLAN

TITLE: **NEIGHBOURHOODS**

Golder Associates

PROJECT No. 13-1444-0035			PAGE SIZE 11" x 17"
DESIGN	AG	10 JAN 2014	SCALE 1:50,000 REV. 0
GIS	AS	27 FEB 2014	
CHECK	XX	XX	**FIGURE X**
REVIEW	XX	XX	

Path: Y:\Vancouver\CAD-GIS\VAN\2013\13-1444\13-1444-0035 - City of Vancouver City Wide ISMP for Vancouver\Mapping\mxd\Neighbourhoods_AS_7Mar14.mxd Date: 3/12/2014 Time: 3:34:04 PM



LEGEND

- HIGHWAY
- ARTERIAL ROAD
- SECONDARY ARTERIAL AND COLLECTOR ROAD
- RESIDENTIAL, LEASED, AND CLOSED STREET
- LANEWAY AND PRIVATE STREET
- RAILWAY
- WATERCOURSE

ZONING CATEGORY

- ONE FAMILY DWELLING
- TWO FAMILY DWELLING
- MULTIPLE FAMILY DWELLING
- COMPREHENSIVE DEVELOPMENT
- COMMERCIAL
- HISTORIC AREA
- LIGHT INDUSTRIAL
- INDUSTRIAL
- LIMITED AGRICULTURAL
- PARK
- AREA EXCLUDED FROM STUDY

REFERENCE

WATERCOURSES FROM CANVEC © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED. WATERBODIES FROM STATISTICS CANADA. ALL OTHER PROJECT DATA PROVIDED BY THE CITY OF VANCOUVER. PROJECTION: UTM ZONE 10 DATUM: NAD 83

SCALE

2 0 2

KILOMETRES

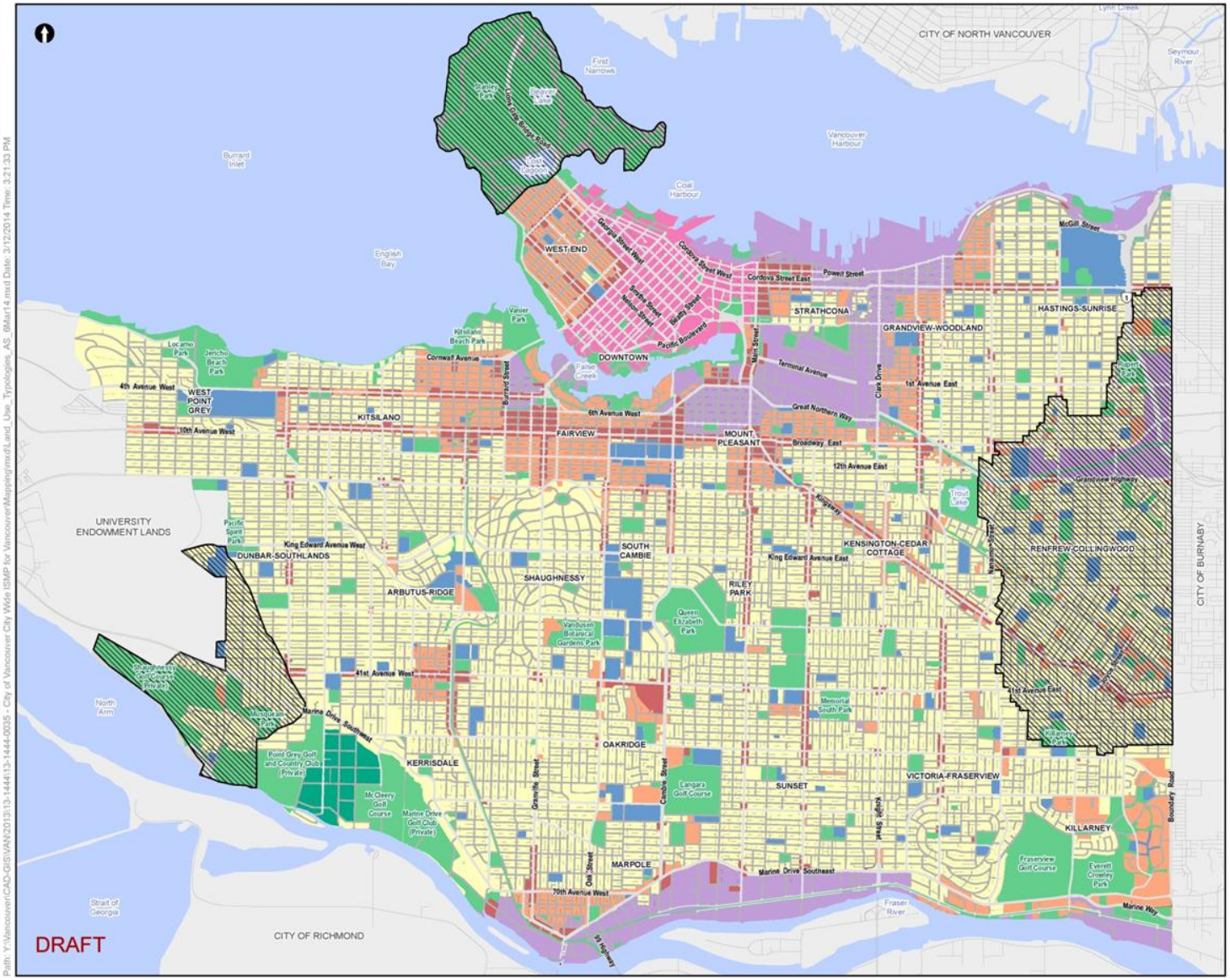
PROJECT: CITY OF VANCOUVER INTEGRATED STORMWATER MANAGEMENT PLAN

TITLE: **ZONING CATEGORIES**

Golder Associates

PROJECT No. 13-1444-0035			PAGE SIZE 11" x 17"
DESIGN	AS	10 JAN 2014	SCALE 1:50,000 REV. 0
GIS	AS	27 FEB 2014	
CHECK	XX	XX	**FIGURE X**
REVIEW	XX	XX	

Path: Y:\Vancouver\CAD-GIS\VAN\2013\13-1444\13-1444-0035 - City of Vancouver City Wide ISMP for Vancouver\Mapping\mxd\Zoning_AS_11Jan14.mxd Date: 3/12/2014 Time: 3:36:02 PM



LEGEND

LAND USE TYPOLOGY

- ONE/TWO DWELLING RESIDENTIAL
- MULTIPLE DWELLING RESIDENTIAL
- COMMERCIAL / MIXED USE
- DOWNTOWN MIXED USE
- INDUSTRIAL
- INSTITUTIONAL / AGRICULTURE
- PARK / GREENSPACE
- AGRICULTURE
- ARTERIAL STREET
- LOCAL STREET
- LANEWAY
- AREA EXCLUDED FROM STUDY

REFERENCE

WATERCOURSES FROM CANVEC © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED. WATERBODIES FROM STATISTICS CANADA. ALL OTHER PROJECT DATA PROVIDED BY THE CITY OF VANCOUVER. PROJECTION: UTM ZONE 10 DATUM: NAD 83

SCALE

2 0 2

KILOMETRES

PROJECT
CITY OF VANCOUVER INTEGRATED STORMWATER MANAGEMENT PLAN

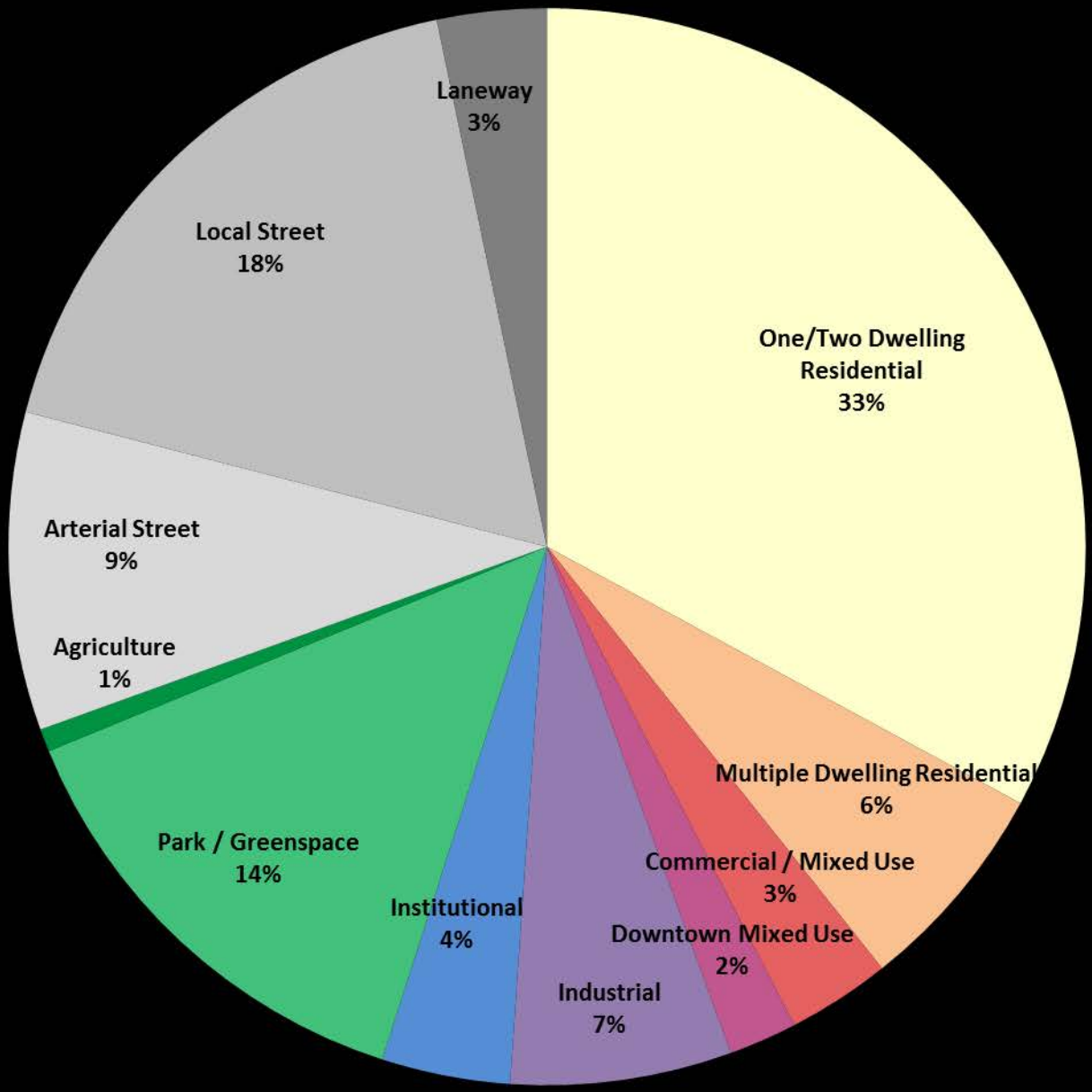
TITLE
LAND USE TYPOLOGIES

Golder Associates

PROJECT No. 13-1444-0035			PAGE SIZE 11" x 17"
DESIGN	AS	10 JAN 2014	SCALE 1:50,000 REV. 0
GIS	AS	27 FEB 2014	
CHECK	XX	XX	**FIGURE X**
REVIEW	XX	XX	

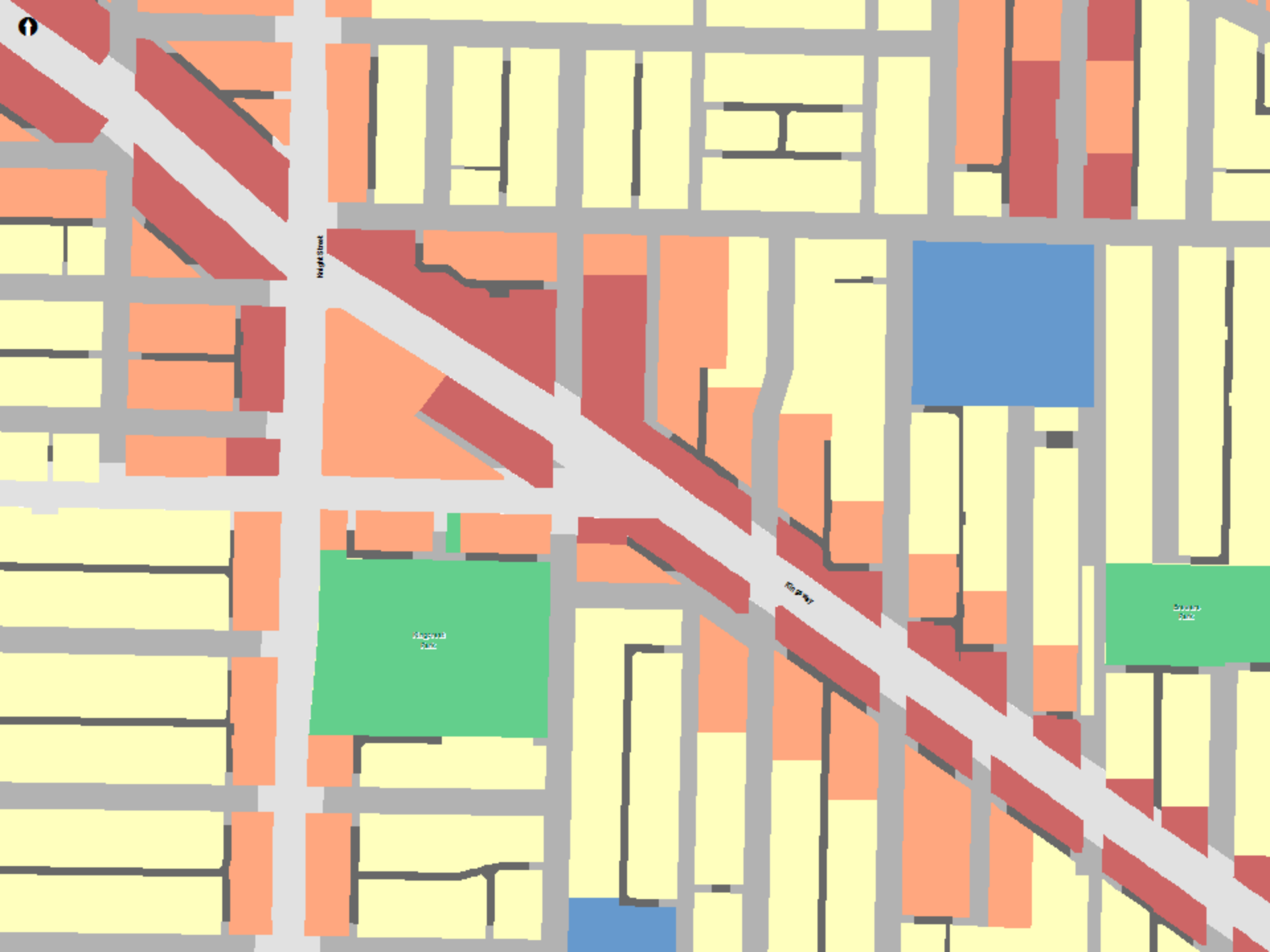
Path: Y:\Vancouver\CAD-GIS\VAN\2013\13-1444\13-1444-0035 - City of Vancouver City Wide ISMP for Vancouver\Mapping\mxd\Land_Use_Typologies_AS_6Mar14.mxd Date: 3/12/2014 Time: 3:21:33 PM

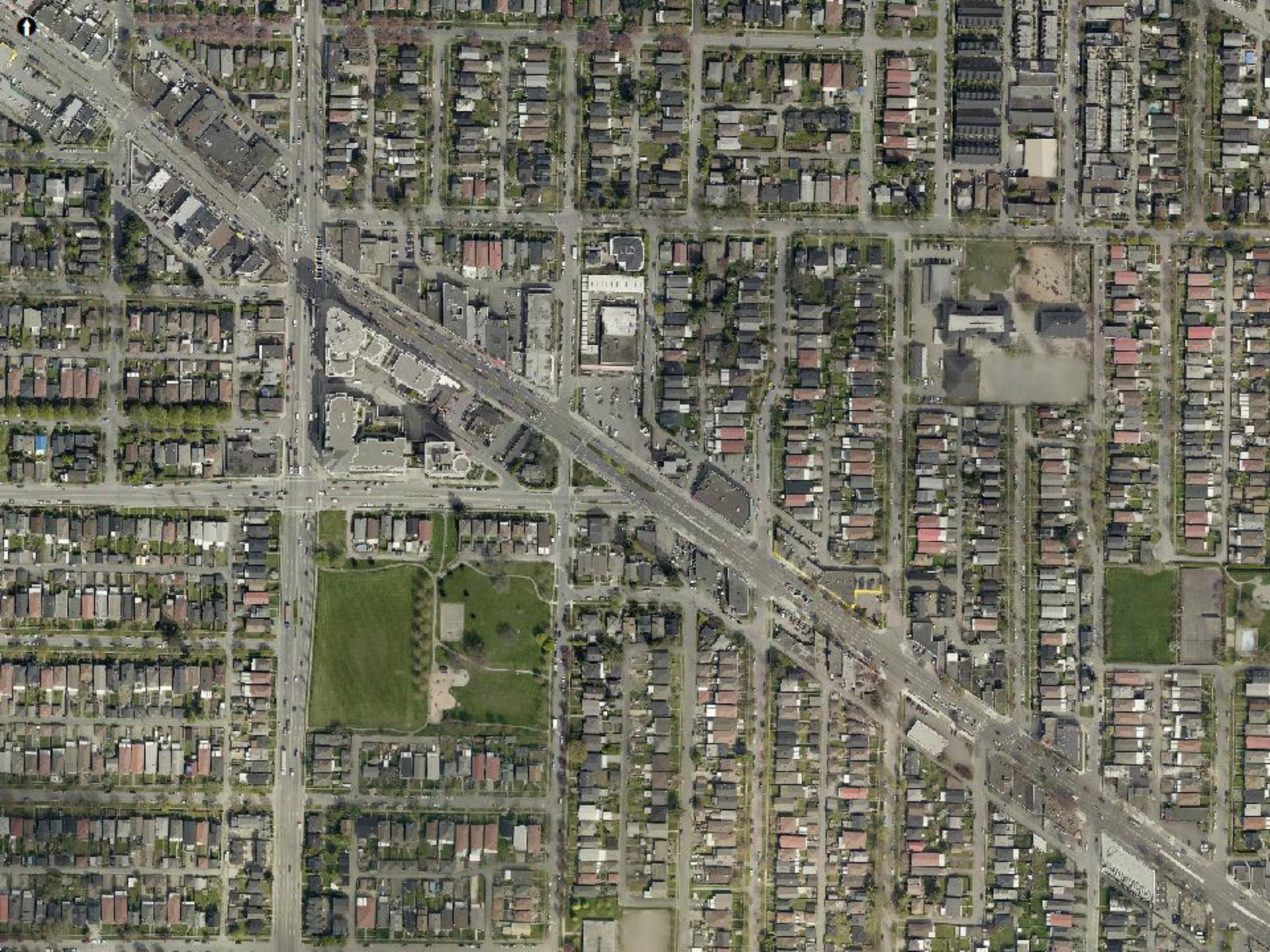
Area of Land Use Typologies



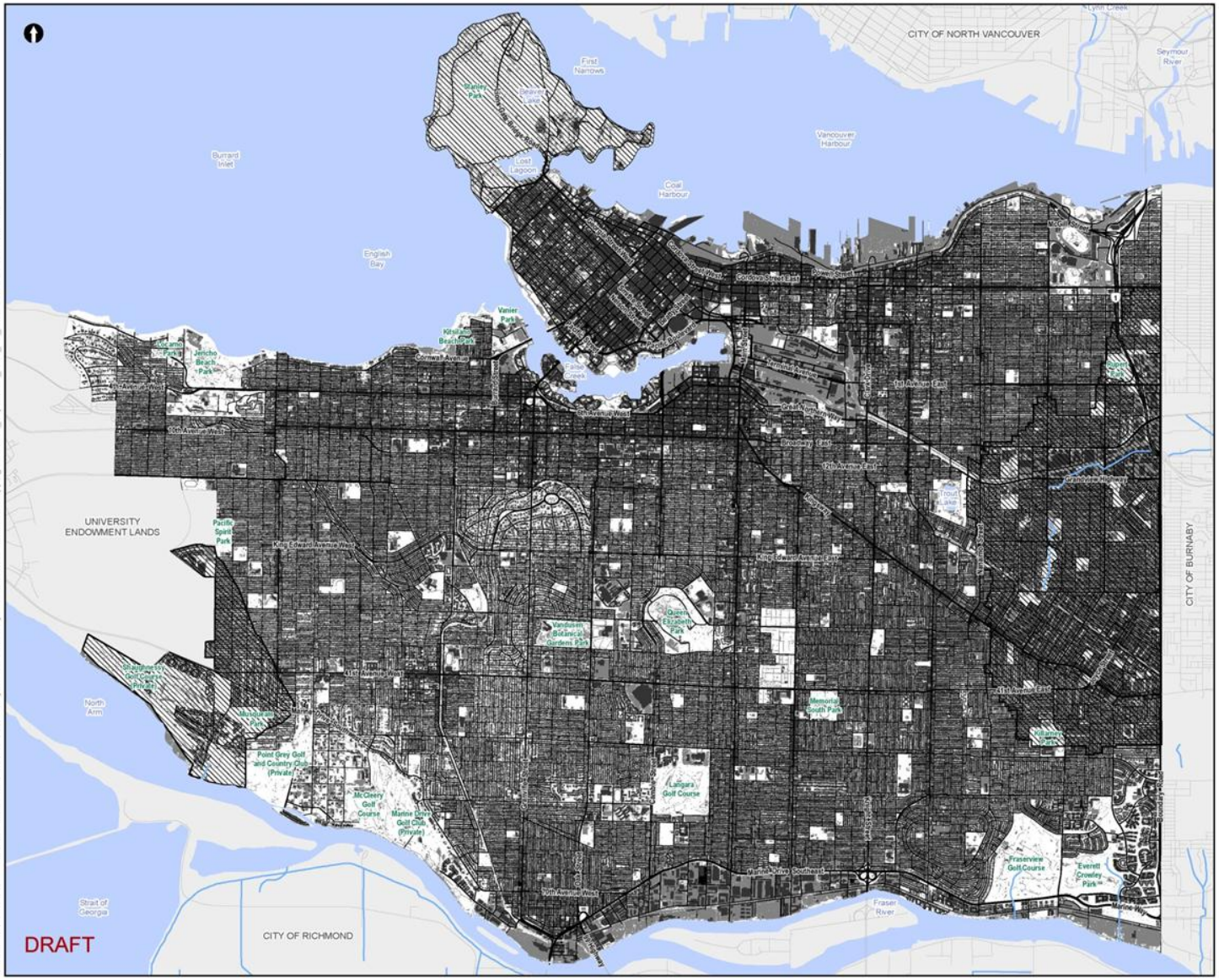
Land Use Areas

▪ Parks & Agriculture	15%
▪ Streets & Lanes	30%
▪ One/Two Dwellings	33%
	78%
▪ Commercial/Industrial /Institutional/Mixed Use	22%


Haight Street
Kingston Park


Bridge Street


Kingcrest Park



LEGEND

- IMPERVIOUS SURFACE - ROAD
- IMPERVIOUS SURFACE - BUILDING
- IMPERVIOUS SURFACE - OTHER
- NATURAL SURFACE
- AREA EXCLUDED FROM STUDY
- WATERCOURSE

REFERENCE

PROJECTION: UTM ZONE 10 DATUM: NAD 83

SCALE

2 0 2

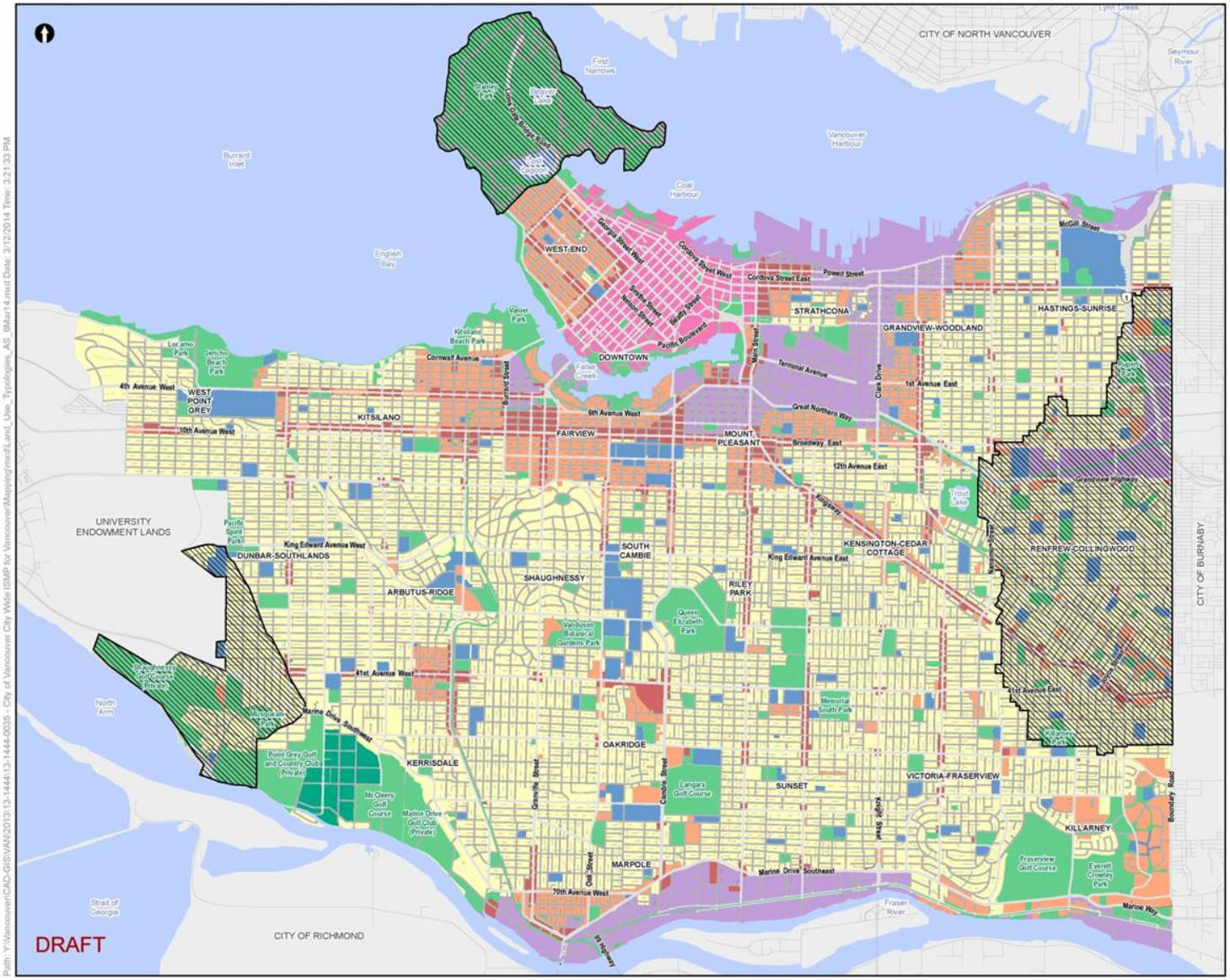
KILOMETRES

PROJECT
CITY OF VANCOUVER INTEGRATED STORMWATER MANAGEMENT PLAN

TITLE
TOTAL IMPERVIOUS AREA

Golder Associates

PROJECT No. 13-1444-0035			PAGE SIZE 11" x 17"
DESIGN	AG	10 JAN 2014	SCALE 1:50,000 REV. 0
GIS	AS	27 FEB 2014	
CHECK	XX	XX	**FIGURE X**
REVIEW	XX	XX	



LEGEND

LAND USE TYPOLOGY

- ONE/TWO DWELLING RESIDENTIAL
- MULTIPLE DWELLING RESIDENTIAL
- COMMERCIAL / MIXED USE
- DOWNTOWN MIXED USE
- INDUSTRIAL
- INSTITUTIONAL / AGRICULTURE
- PARK / GREENSPACE
- AGRICULTURE
- ARTERIAL STREET
- LOCAL STREET
- LANEWAY
- AREA EXCLUDED FROM STUDY

REFERENCE

WATERCOURSES FROM CANVEC © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED. WATERBODIES FROM STATISTICS CANADA. ALL OTHER PROJECT DATA PROVIDED BY THE CITY OF VANCOUVER. PROJECTION: UTM ZONE 10 DATUM: NAD 83

SCALE

2 0 2

KILOMETRES

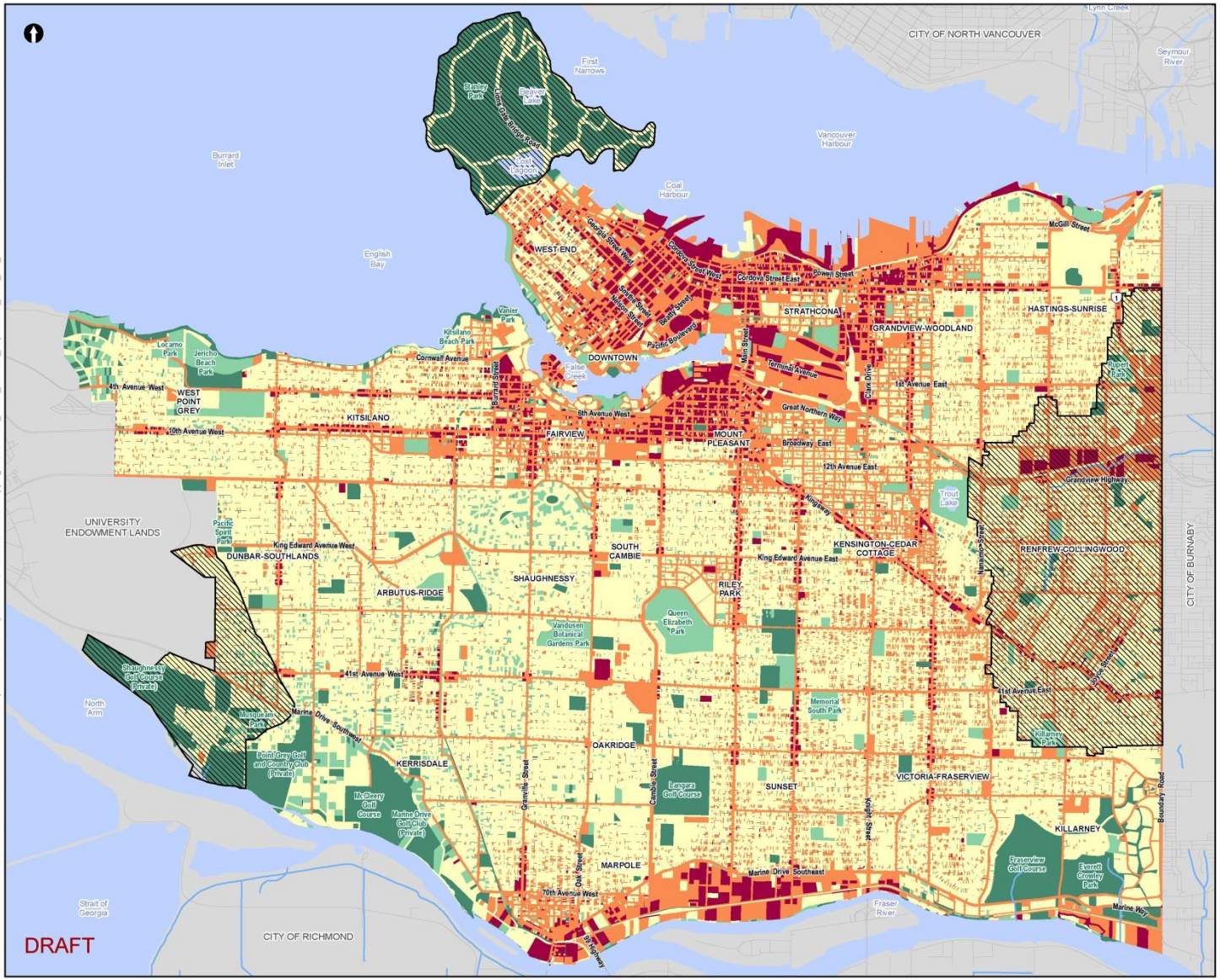
PROJECT
CITY OF VANCOUVER INTEGRATED STORMWATER MANAGEMENT PLAN

TITLE
LAND USE TYPOLOGIES

Golder Associates

PROJECT No. 13-1444-0035			PAGE SIZE 11" x 17"
DESIGN	AS	10 JAN 2014	SCALE 1:50,000 REV. 0
GIS	AS	27 FEB 2014	
CHECK	XX	XX	**FIGURE X**
REVIEW	XX	XX	

Path: Y:\Vancouver\CAD-GIS\VAN\2013\13-1444\13-1444-0035 - City of Vancouver City Wide ISMP for Vancouver\Mapping\mxd\Land_Use_Typologies_AS_6Mar14.mxd Date: 3/12/2014 Time: 3:21:33 PM



LEGEND

IMPERVIOUS SURFACE AREA PER PARCEL (%)

- 0% - 9%
- 10% - 24%
- 25% - 59%
- 60% - 79%
- 80% - 100%
- AREA EXCLUDED FROM STUDY
- WATERCOURSE

REFERENCE

WATERCOURSES FROM CANVEC © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED. WATERBODIES FROM STATISTICS CANADA. ALL OTHER PROJECT DATA PROVIDED BY THE CITY OF VANCOUVER. PROJECTION: UTM ZONE 10. DATUM: NAD 83.

SCALE

2 0 2

KILOMETRES

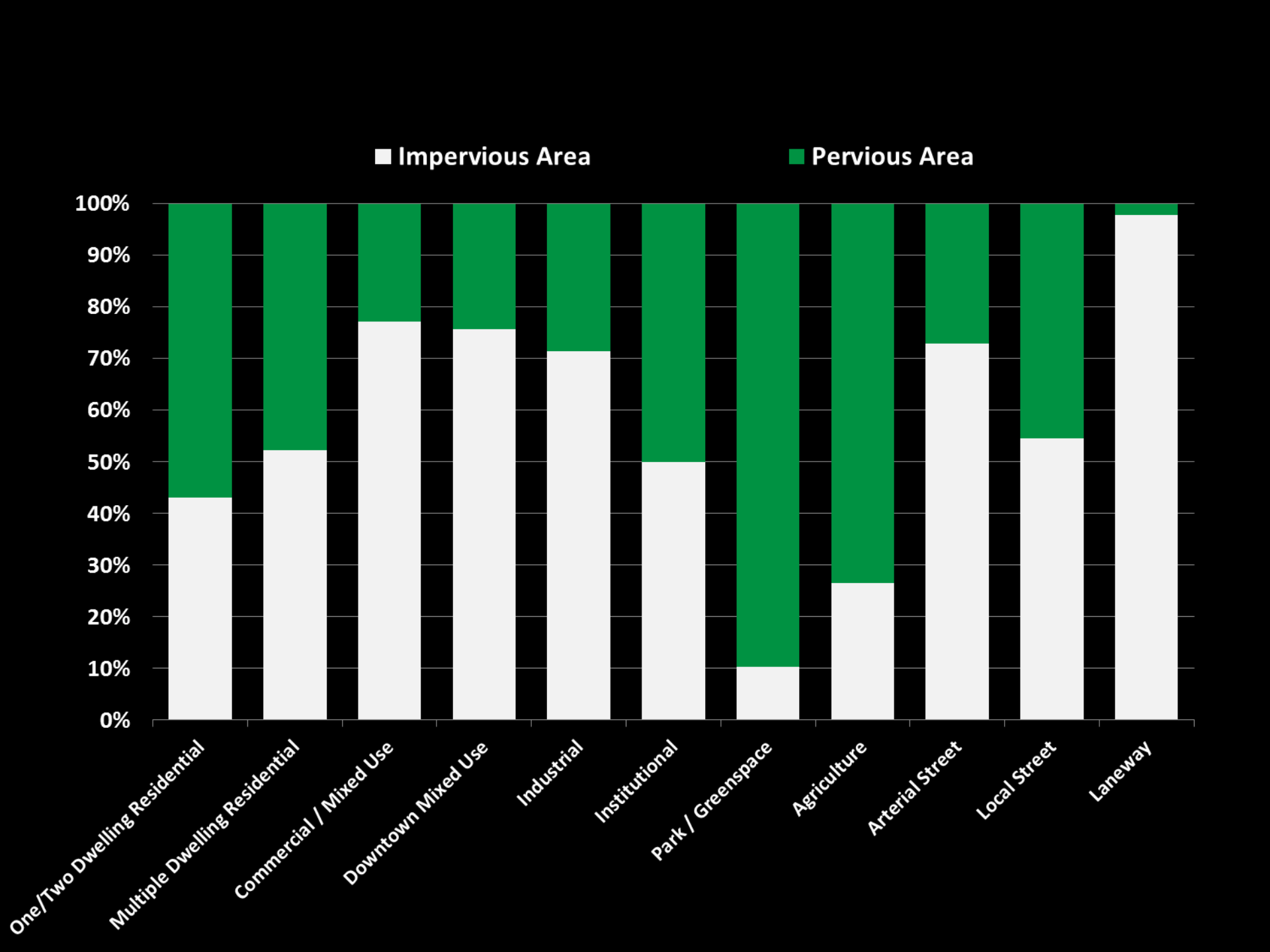
PROJECT
CITY OF VANCOUVER INTEGRATED STORMWATER MANAGEMENT PLAN

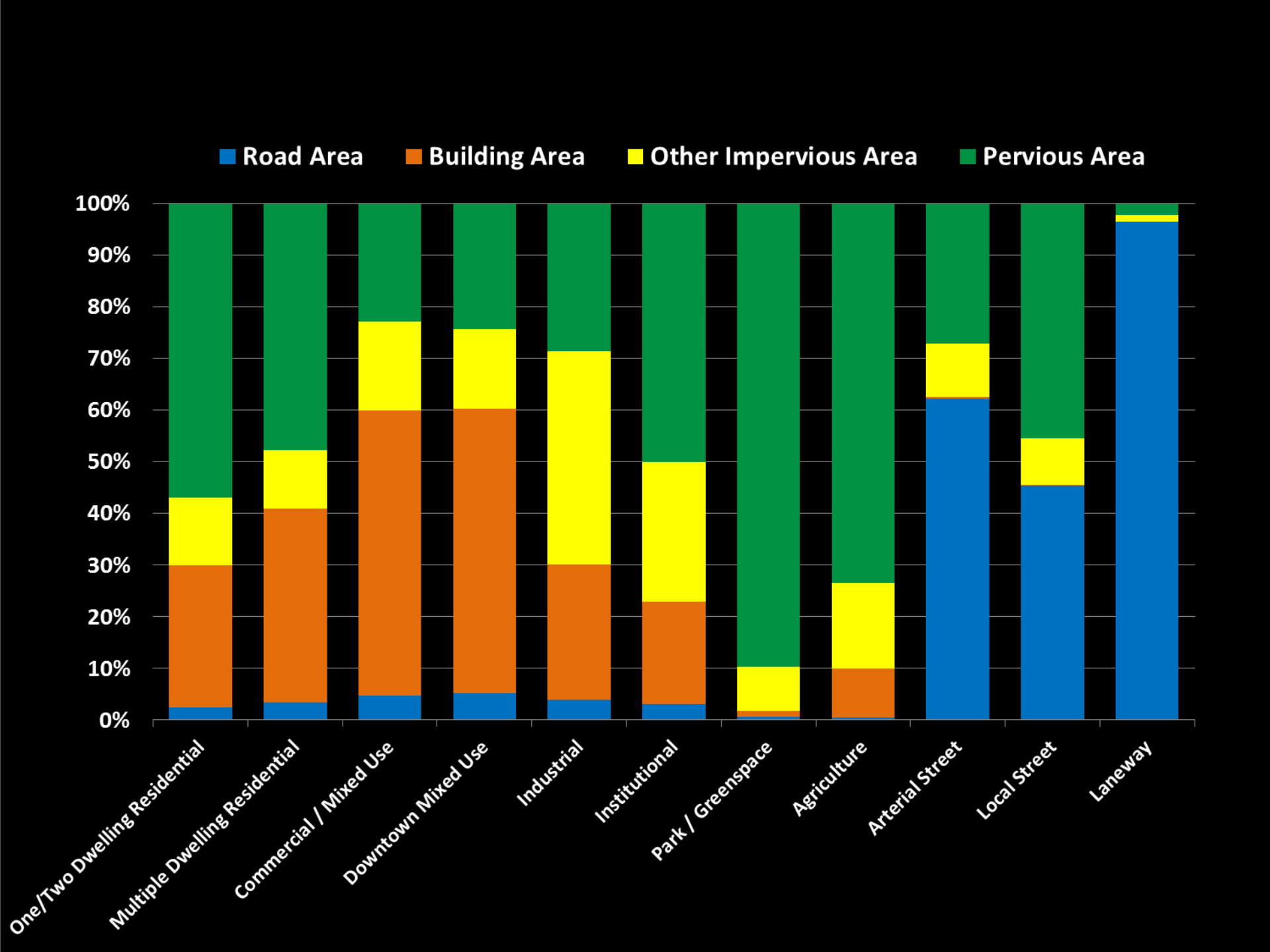
TITLE
PERCENT IMPERVIOUS AREA

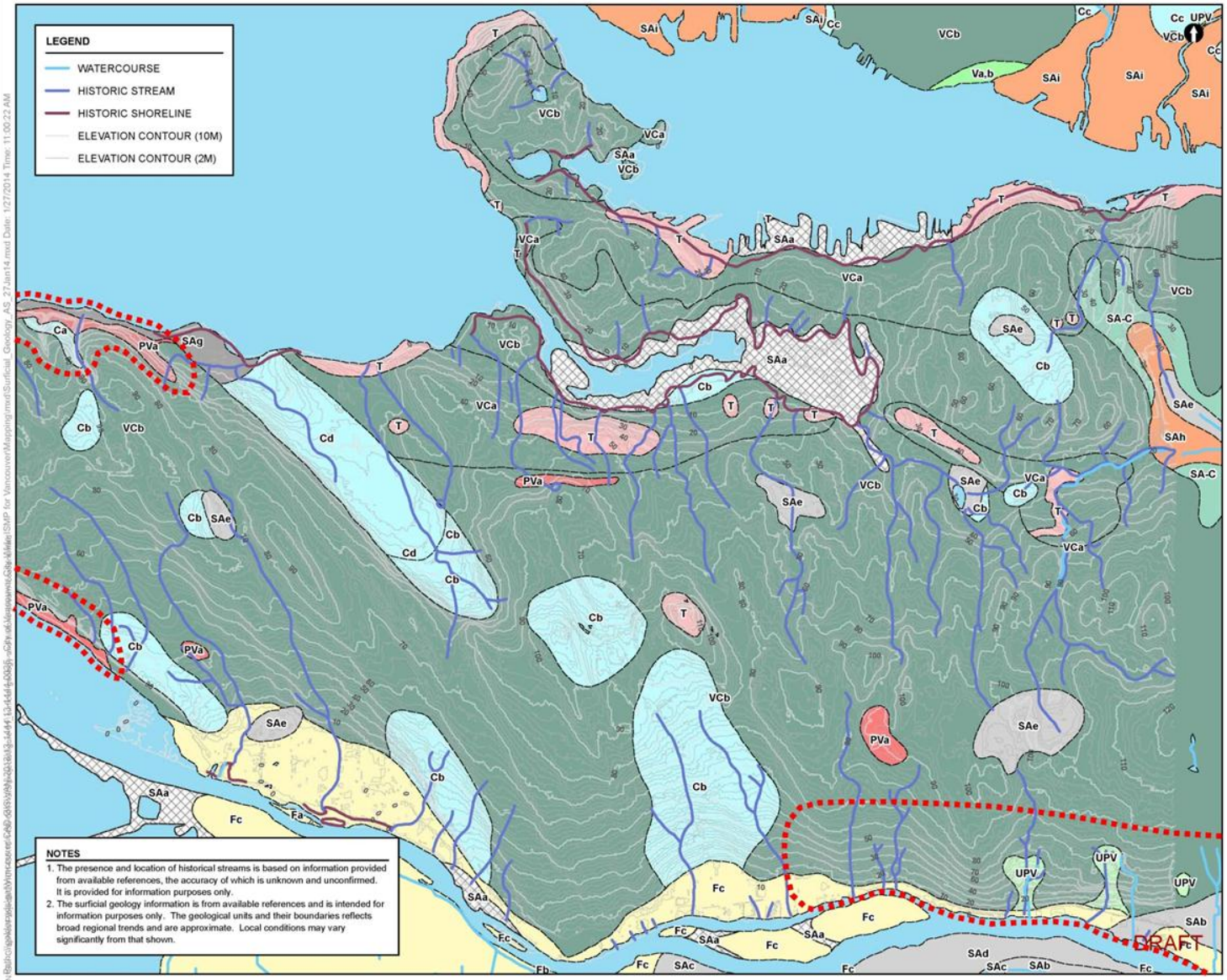
Golder Associates

PROJECT No. 13-1444-0035			PAGE SIZE 11" x 17"	
DESIGN	AG	10 JAN. 2014	SCALE 1:50,000	REV. 0
GIS	AG	27 FEB. 2014		
CHECK	XX	XX	**FIGURE X**	
REVIEW	XX	XX		

Path: Y:\Vancouver\CAD-GIS\VAN\2013\13-1444\13-1444-0035 - City of Vancouver City Wide ISMP for Vancouver\Mapping\mxd\Parcel_Scale_Percent_Impervious_Area_AS_11Mar14.mxd Date: 3/12/2014 Time: 5:51:18 PM


Impervious Area
Pervious Area
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
One/Two Dwelling Residential
Multiple Dwelling Residential
Commercial / Mixed Use
Downtown Mixed Use
Industrial
Institutional
Park / Greenspace
Agriculture
Arterial Street
Local Street
Laneway


Road Area
Building Area
Other Impervious Area
Pervious Area
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
One/Two Dwelling Residential
Multiple Dwelling Residential
Commercial / Mixed Use
Downtown Mixed Use
Industrial
Institutional
Park / Greenspace
Agriculture
Arterial Street
Local Street
Laneway



LEGEND

QUATERNARY

POSTGLACIAL

SALISH SEDIMENTS

Landfill including sand, gravel, till, crushed stone, and refuse

SAb-e — Bog, swamp, and shallow lake deposits: SAb, lowland peat up to 8 m thick overlying Fb,c; SAc, lowland peat up to 1 m thick, underlying Fb (up to 2 m thick); SAd, organic-rich sandy loam to clay loam 15 to 45 cm thick overlying Fd; SAe, upland peat up to 8 m or more thick overlying VC units

SAf,g — Marine shore sediments (beach deposits): SAf, sand to sandy loam up to 2 m thick overlying Fe; SAg, sand to gravel up to 8 m thick

SAh-i — Lowland and mountain stream deltaic, channel fill, and overbank sediments: SAh, lowland stream channel fill and overbank sandy loam to clay loam, also organic sediments up to 9 m thick; SAi, mountain stream marine deltaic medium to coarse gravel and minor sand up to 15 m or more thick. SAj, mountain stream channel fill sand to gravel up to 8 m thick

FRASER RIVER SEDIMENTS

Fa-e — Deltaic and distributary channel fill sediments overlying and cutting estuarine sediments and overlain in much of the area by overbank sediments: Fa, channel deposits, fine to medium sand and minor silt occurring along present day river channels; Fb, overbank sandy to silt loam normally less than 2 m thick overlying 15 m or more of Fd; Fc, overbank silty to silt clay loam normally less than 2 m thick overlying 15 m or more of Fd; Fd', deltaic and distributary channel fill (includes tidal flat deposits), 10 to 25 m interbedded fine to medium sand and minor silt beds; may contain organic and fossiliferous material; Fe', estuarine, fossiliferous, interbedded fine sand to clayey silt (sand content increases from bottom to top of sequence), 10 to 185 m thick

POSTGLACIAL AND PLEISTOCENE

SA-C — Marine shore and fluvial sand up to 8 m thick, Cb in part has been reworked and redeposited by lowland streams (SAh)

PLEISTOCENE

CAPILANO SEDIMENTS

Ca-d — Raised marine, deltaic, and fluvial deposits: Ca, raised marine beach, spit, bar, and lag veneer, poorly sorted sand to gravel (except in bar deposits) up to 10 m thick mantling older sediments and containing fossil marine shell casts up to 175 m above sea level; Cb, raised beach medium to coarse sand 1 to 5 m thick; Cc, raised deltaic and channel fill medium sand to cobble gravel up to 15 m thick deposited by proglacial streams and commonly underlain by silty to silty clay loam; Cd, marine and glaciomarine stony (including till-like deposits) to stoneless silt loam to clay loam with minor sand and silt, normally less than 3 m thick but up to 10 m thick in upland areas

VASHON DRIFT AND CAPILANO SEDIMENTS

VCa,b — Glacial drift including; lodgment and minor flow till, lenses and interbeds of substratified glaciofluvial sand to gravel, and lenses and interbeds of glaciolacustrine laminated stony silt; up to 25 m thick; in most places correlated with Va,b; overlain by glaciomarine and marine deposits similar to Cd, normally less than 3 m but in places up to 10 m thick. Marine derived (Ca) lag gravel normally less than 1 m thick containing marine shell casts has been found mantling till and glaciomarine deposits up to 175 m above sea level; above 175 m till is mantled by bouldery gravel that may be in part ablation till, in part colluvium, and in part marine. VCa, bedrock within 10 m or less of the surface; VCb, bedrock more than 10 m below surface

VASHON DRIFT

Va,b — Till, glaciofluvial, glaciolacustrine, and ice-contact deposits: Va, lodgment till (with sandy loam matrix) and minor flow till containing lenses and interbeds of glaciolacustrine laminated stony silts; Vb, glaciofluvial sandy gravel and gravelly sand outwash and ice-contact deposits

PRE-VASHON DEPOSITS

PVa,b,e,f — Pre-Vashon glacial, nonglacial, and glaciomarine sediments: PVa, Quadra fluvial channel fill and floodplain deposits, crossbedded sand containing minor silt and gravel lenses and interbeds; PVb, Quadra deltaic deposits and crossbedded sand and gravel; PVe, Cowichan Head organic sediments; PVf, Semiahmoo glaciomarine, glaciofluvial sediments and till; PVg, Highbury fluvial, marine, and bog and swamp deposits; PVh, Westlynn till and glaciomarine stony silty clay loam

UNDIVIDED PRE-VASHON DEPOSITS

UPV — Till, glaciofluvial, glaciolacustrine, fluvial marine, and organic sediments

TERTIARY

T — Tertiary bedrock including sandstone, siltstone, shale, conglomerate, and minor volcanic rocks; where bedrock is not exposed it is covered by glacial deposits and colluvium

PRE-TERTIARY

PT — Mesozoic bedrock including granitic and associated rock types; where bedrock is not exposed it is covered by glacial deposits and colluvium

REFERENCE

HISTORIC STREAM LOCATIONS OBTAINED FROM: "VANCOUVER OLD STREAMS" FROM WATERS, VOL. 3, NO. 1, 1978.
SURFICIAL GEOLOGY OBTAINED FROM: MAP 1486A, SURFICIAL GEOLOGY VANCOUVER, BRITISH COLUMBIA, GEOLOGICAL SURVEY OF CANADA, 1979.
CONTOURS FROM CITY OF VANCOUVER OPEN DATA LIBRARY.
PROJECTION: UTM ZONE 10 DATUM: NAD 83

SCALE

2 0 2

KILOMETRES

PROJECT
CITY OF VANCOUVER INTEGRATED STORMWATER MANAGEMENT PLAN

TITLE
SURFICIAL GEOLOGY AND HISTORIC STREAM LOCATIONS

Golder Associates

PROJECT No. 13-1444-0036			PAGE SIZE 11" x 17"	
DESIGN	AS	10 JAN 2014	SCALE 1:50,000	REV. 0
GIS	AS	10 JAN 2014		
CHECK	XX	XX		
REVIEW	XX	XX		

FIGURE 1

Limited Infiltration Capacity

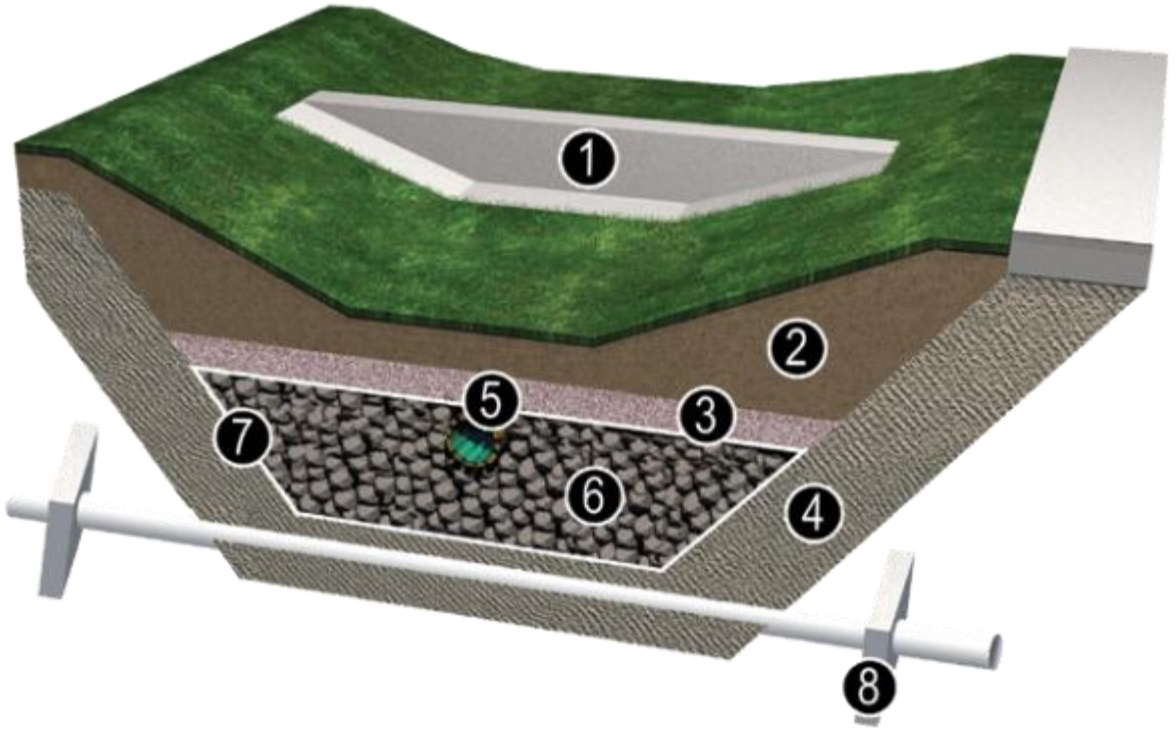
- Most Surficial Geology in Vancouver has low infiltration rates.
- Where infiltration rates are better there are high water tables.
- Some areas of the City have historic slope failure risks.

There is a need to design rainwater capture and stormwater management practices in recognition of these constraints – three examples follow.

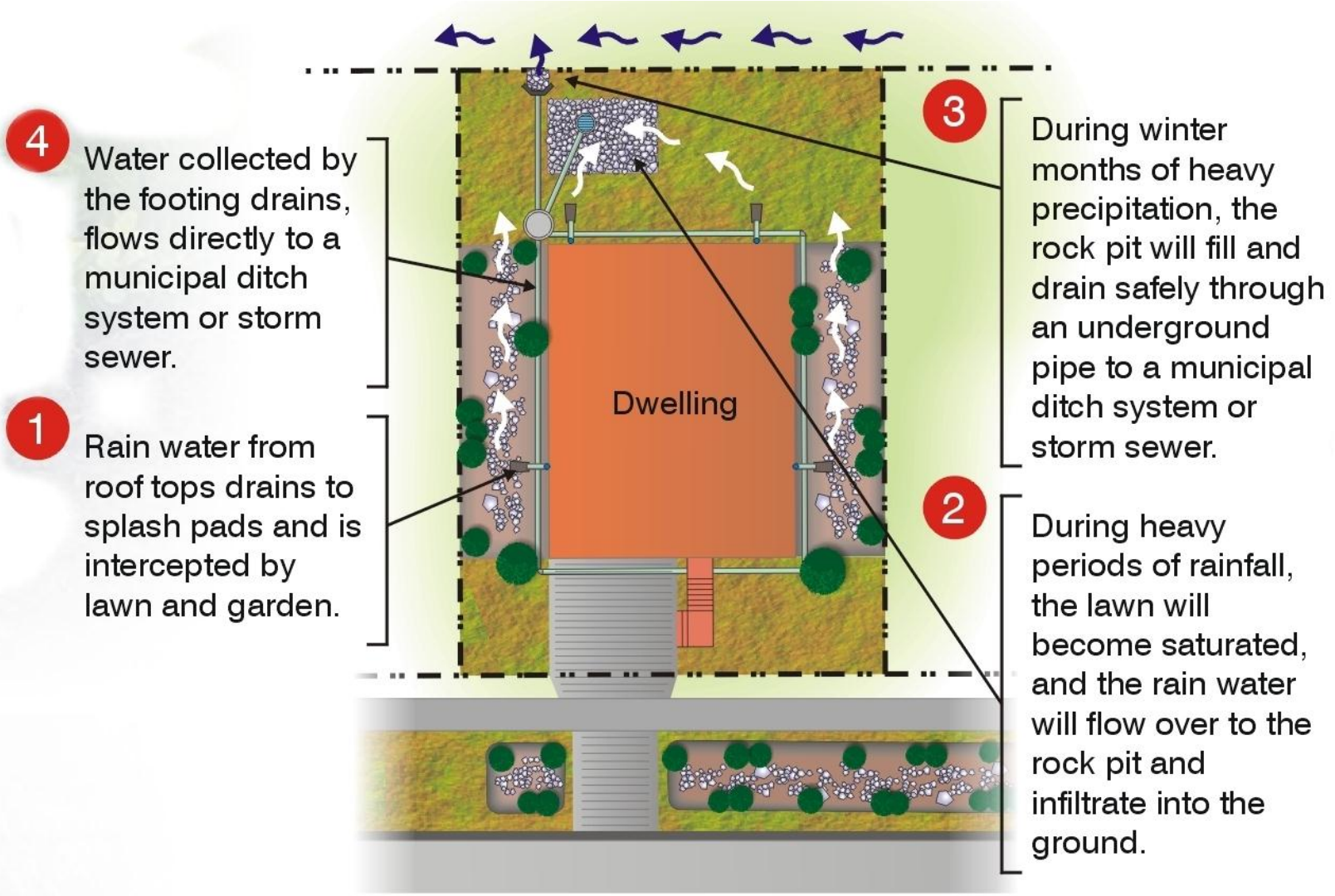
Infiltration Swale for low infiltration rates

Partial infiltration swale with reservoir and subdrain

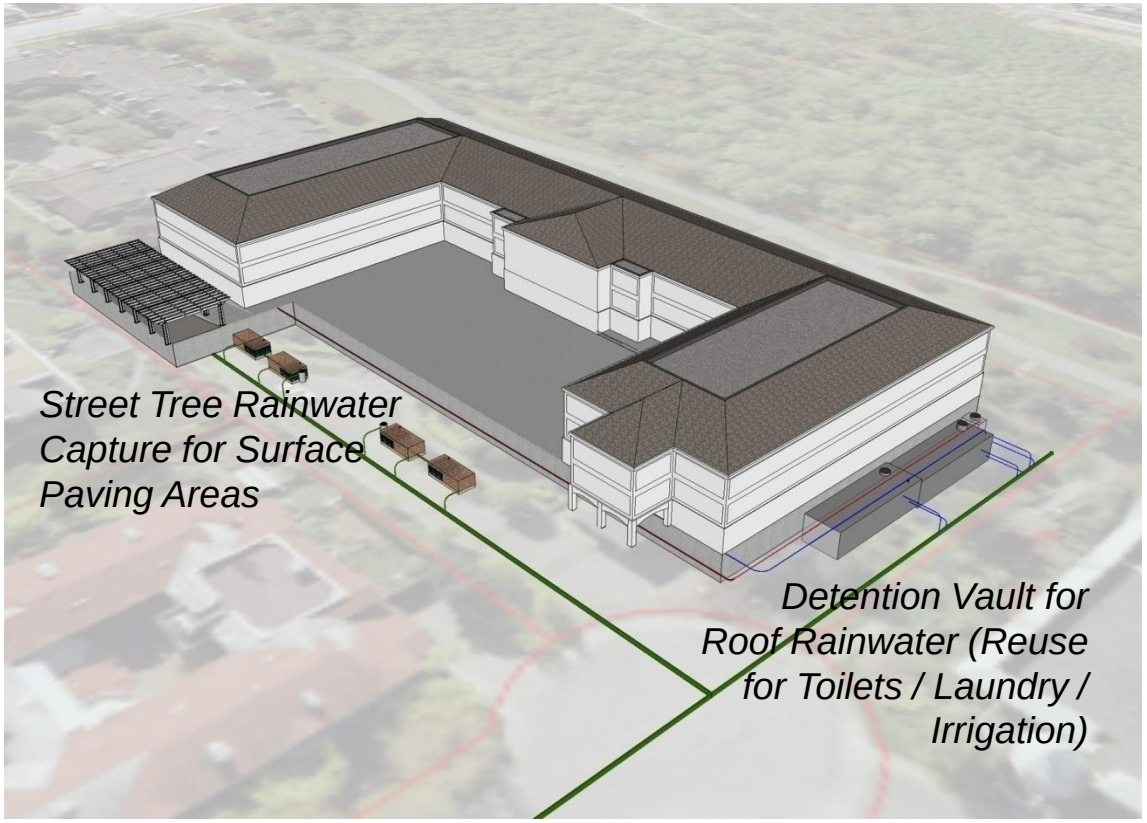
1. *Weir Keyed into Swale Side Slope*
2. *Growing Medium (300mm Min.)*
3. *Sand*
4. *Existing Scarified Subsoil*
5. *Perforated Underdrain (150mm Dia. Min.)*
6. *Drain Rock Reservoir (300mm Min.)*
7. *Geotextile Along All Sides of Reservoir*
8. *Trench Dams at All Utility Crossing*



One/Two Family Strategy for Lots <5% Slope



Rainwater Capture and Reuse



Stormwater Management Framework (in evolution)

- Stormwater and Rainwater Management is spread across a wide variety of documents in the City.
- Older documents that are still in use often don't have current policies on Rainwater Management (e.g. Sewer Design Manual, Broadway Design Guidelines).
- Newer documents include elements of Rainwater Management (e.g. Rezoning Policy for Sustainable Large Developments, Waterwise Landscaping Guide, Street Water Infiltration System Manual).

Stormwater Management Framework (in evolution)

- Most Rainwater Policies are motivational (you should) with only limited use of requirements (you must).
- Quantitative Targets are discussed in the Street Water Infiltration System Manual, and the Rezoning Policy for Sustainable Large Developments, and vary in detail.

Existing Plans, Bylaws, Policies

(see Policy Overview for summary and potential refinements)

- Greenest City Action Plan
- Sewer Design Manual 2002
- Vancouver Sewer Utility Plan 2010
- Street Water Infiltration Design Manual 2011
- Engineering Strategic Plan 2012-2014
- Sewer and Watercourse Bylaw
- Rezoning Policy for Sustainable Large Developments
- Street Restoration Manual
- Biodiversity Strategy (Draft)
- Urban Forest Strategy (Draft)
- Waterwise Landscaping Guide
- Green Building Policies
- Climate Change Adaptation Strategy

Existing Plans, Bylaws, Policies

(see Policy Overview for summary and potential refinements)

- **Transportation Plan**
- **Corporate Business Plan 2012-2021**
- **Laneway House Guidelines**
- **Plaza Design Guidelines**
- **Protection of Trees Bylaw**
- **Major Planning Projects**
- **Off Street Parking Space Requirements**
- **Other:**
  - Neighbourhood plans
  - Zoning & Development Bylaw
  - Vancouver Building Bylaw
  - Sustainability Checklists
  - Co-funding programs
  - Maximum Impervious Area Guidelines

Interactive Sessions

Design Workshop:

	Land Use A	Land Use B	Land Use C
BMP 1			
BMP 2			

- Identify your ‘High Priority’ cells for further investigation of BMPs in certain Land Use Typologies.
- Identify your ‘Low Priority’ cells including where BMPs may be N/A to a Land Use Typology.
- Other unmarked cells indicate ‘Moderate Priority’ by default.
- Discuss with your group the reasons for your choices, and what lessons you have learned from past projects or experiences.

Interactive Sessions

Policy Workshop: Tools

	Land Use A	Land Use B	Land Use C
Educational			
Incentives			
Regulatory			
Investment			

- Similar to the Design Workshop process, identify your 'High and Low Interest' cells for further investigation of policy tools in each land use typology.
- Discuss with your group the reasons for your choices, and what lessons you have learned from past projects or experiences.

Interactive Sessions

Policy Workshop: Targets

- How aggressively should the City use Rainwater Targets – meet DFO/MV guidelines, create custom guidelines, or don't use quantitative targets?
- If targets are used, should they be consistent across the City, or should targets vary by land use type, or vary by drainage area?
- Please mark you individual response form, and then discuss reasons for choices and lessons learned with colleagues.
- Which catchments, land use types, or neighbourhoods might be highest priority for implementing rainwater management?

We Need Your Response

Submit Your Individual Response Form

- If possible, please complete and submit your personal response form today.
- If you need more time, please submit it to the location on the form by the date specified. We will reach out to those that could not attend today to encourage their response.

Watch for Summary of Results

- Once compiled we will share the results from today internally.

Your Input will influence Phase 3 and 4

- The Rainwater Collaboration Team and Consultants will be starting more detailed Toolkit and Scenario analysis – your input will influence where we focus our energy.

Next Steps

Rainwater Collaboration Team Workshop

- Reviewing a Draft Toolkit of Best Practices
- Considering Scenarios of how Tools are focused towards implementation
- Exploring how to Monitor and Stay on Track

Stakeholder Outreach

- Other (outside) stakeholders will be brought into the process

Review of Draft Action Plan

- A followup workshop with the Technical Advisory Group and the Interagency Expert Group will encourage detailed review of the Draft Action Plan.

Thank You!

- Questions or clarifications?