Innovation in the Comox Valley

Meetings, Collaboration and Networking at the Operational Level

First Wal-Mart
then
Home Depot

Presented by
Kevin Lagan, P. Eng
Director of Operational Services
City of Courtenay

City of Courtenay

Monthly

Dev Op

- Planning/Operations/Building

CVSTAC/CVWTAC

- Courtenay/Comox/RDCS Operations and Admin

CVSC/CVWC

- Joint meeting

Bi Monthly

OpComm

- Operations/Community Services (Parks)

CHIPS

- Engineering/Planning/MoT/ RCMP

CoOp Traffic/Crash Reduction

- Engineering/Planning/MoT/ ICBC/RCMP

BIA/City

- Operations/Planning/Building/ BIA

Every 3 months

Municipal Operations

- Courtenay
- Comox
- Campbell River
- Cumberland

CoOp

- Operations/Parks Crews

Every 6 months

Op Con

- Operations
- Consultants

City/School District 71

- Senior staff meet

Annual

Courtenay/Comox/RDCS Operations, Planning and Administration

mazda
Courtenay

Crown Isle
Crown Isle
BUR
RENTALS
houle electric
houle electric

How Has Courtenay Prepared For Development?

A Brief 20 year History:

1988
- Population approximately 10,500
- First qualified Building Inspector employed

1992
- Very active residential and commercial development.
- Land Development Guidelines Provincial/Federal Government.
- Superstore application processed

1993
- First City Engineer employed
- Street Trees in Subdivisions Bylaw

1994

- First Municipal Planner employed
- Moratorium on development in North East Courtenay

Studies Commissioned for 20 Year Horizons for:

Transportation
Water Supply
Sanitary Sewers
Storm Drainage

- DCC Bylaw
- City Engineering specifications drafted
- First significant rewrite of OCP including D.P. requirements for commercial, industrial and multi-family

1995	• City Hall catches fire and is demolished • Work begins on infrastructure upgrading
1996	• Tree Management Protection Bylaw
1998/9	• 50 yr then 100 yr storms one year apart • City expends $2.5 m on storm drainage system upgrades

2000
- Wal-Mart rezoning application

2002
- Wal-Mart opens
- Courtenay becomes member of WBM for BC

2003
- Home Depot rezoning application

2004
- Home Depot Opens
- OCP rewrite
- Updated 20 year Studies for:
  - Water Supply
  - Sanitary Sewers
  - Storm Drainage

2005	• Environmental D.P. requirements in OCP Bylaw • 300 mm topsoil requirement for landscaped areas and between tree roots and 450 mm topsoil for shrub areas
2006	• Rewrite of Soil Deposit/Removal Bylaw • Riparian Area Requirements in OCP Bylaw • Courtenay/Comox MOU on areas of interest • Updated 20 year City Transportation Study
2007	• RDCS, Courtenay, Comox agreement on sustainability • Maximum building height review • Courtenay population approximately 23,000 119% increase since 1988

Wal-Mart Development

9.3 ha site on which one old single family home located

Rezoning was required to allow the development to occur

Public hearings 16 hours of presentations

City worked with our municipal lawyers and drafted a Comprehensive Development Agreement (CDA) and Land Development Covenant (LDC)

Documentation included automatic rezoning after 60 days, amenity package of $600,000, advertising on site of downtown Courtenay area

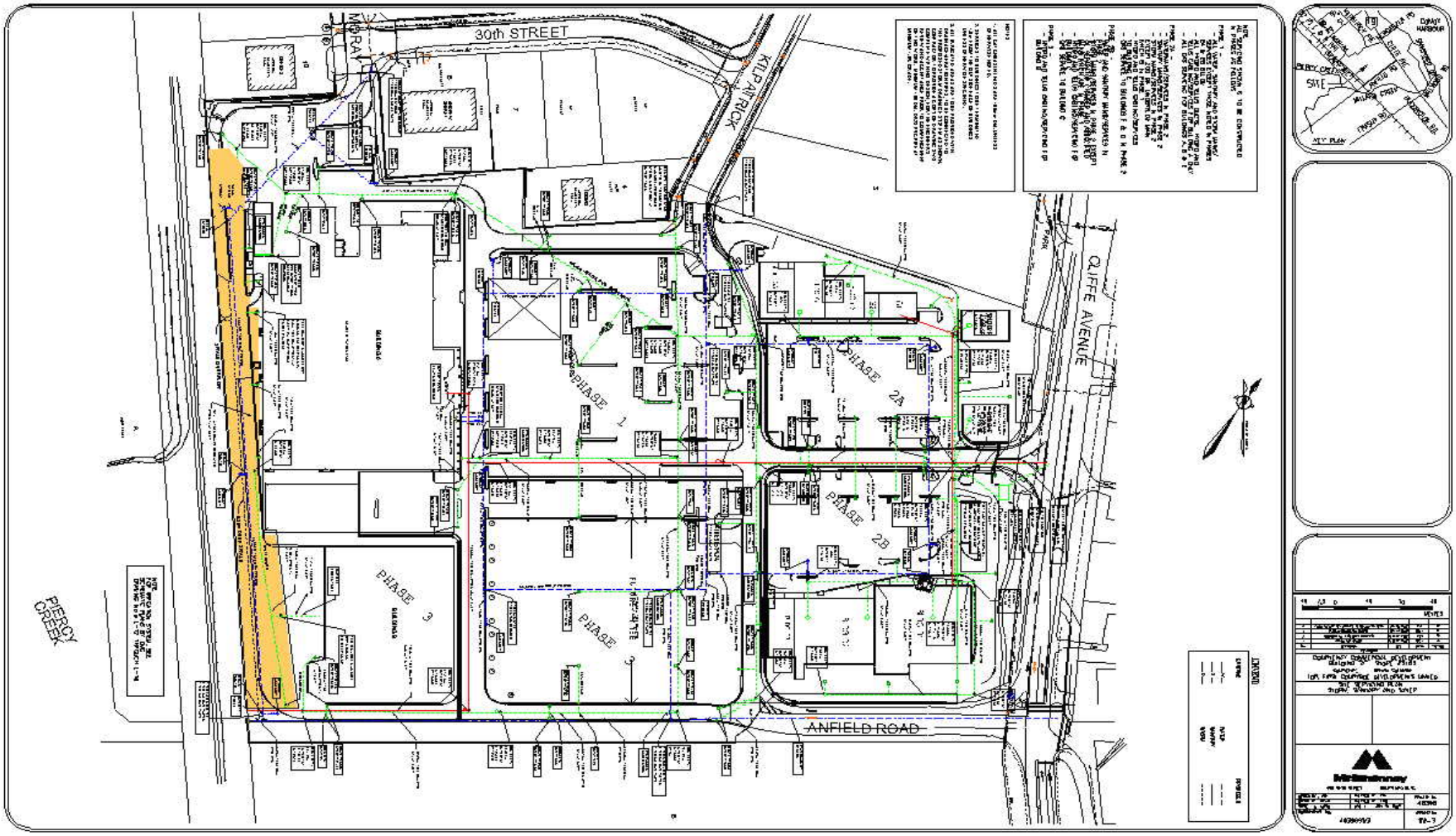
Also included were all the off-site road work, municipal utilities, private utilities, and environmental monitoring

As the development was adjacent to the Millard Creek any loss of precipitation to the catchments area was critical.

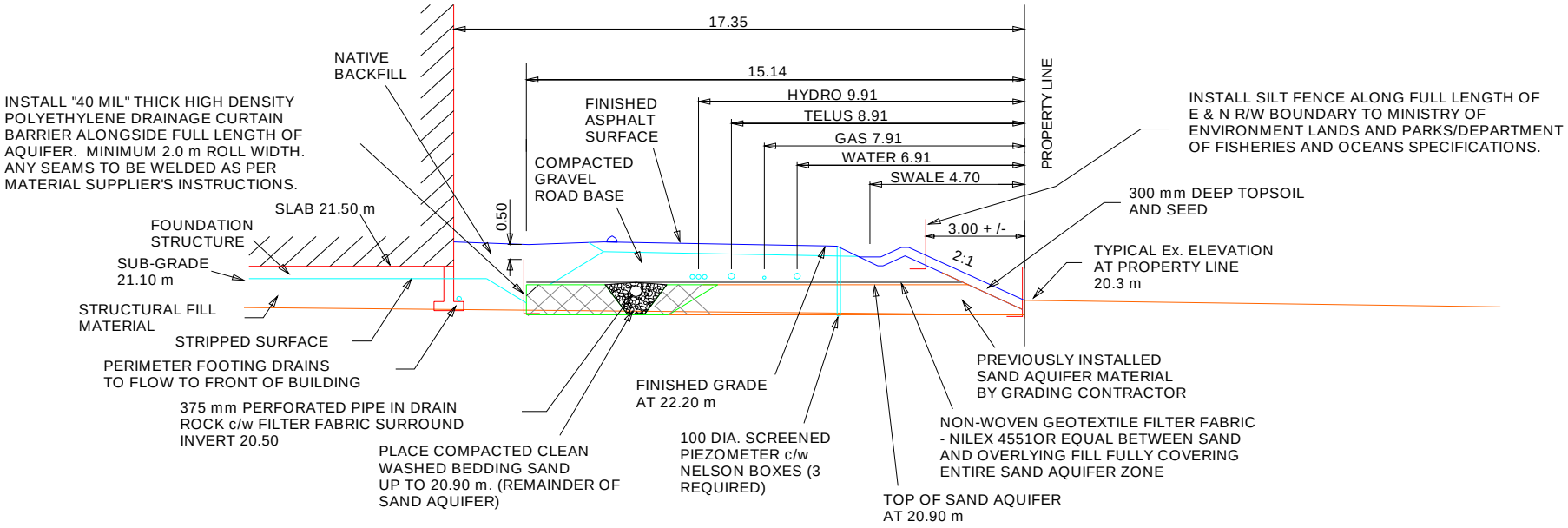
The precipitation falling on the roof area of Wal-mart, Winners and Staples (approx. 1.2 hectares) is captured, passed through an oil/grit interceptor and then discharged to a artificial aquifer running the length of the west side of the development.

The precipitation from the other roof areas is collected, passed through an oil/grit interceptor and discharged into an engineered wetland/detention pond (built by the developers) prior to discharging into Millard Creek.

ON-SITE SERVICING PLAN



ARTIFICIAL AQUIFER DETAIL



SECTION A-A
AQUIFER CONSTRUCTION - PHASE 2

HITACHI

GLENNCOE

Home Depot Development

4.0 hectare treed lot 10,800 m² building

Roof areas and pavement cover 90% of the site

Pre planning, on site and off site works agreed with developer.

Rezoning application drafted, works, services, and amenity contribution of $300,000 detailed in LDC and CDA.

Site is at the head of the Brooklyn Creek catchment area. The creek flows through Courtenay, RDCS area ‘B’ and Comox.

Home Depot Development

Immediately downstream of the site is the Crown Isle development where a series of golf water hazards/storm drainage detention ponds discharge into Lake 20. All flows into and out of the system have a fixed limit for a 10 year storm event.

On-site roof drainage is controlled and piped to a oil/grit interceptor. It is then piped to an exfiltration gallery and the excess flows connected to a deep well injection system.

The east loading access road is sloped away from the building into a bio swale.

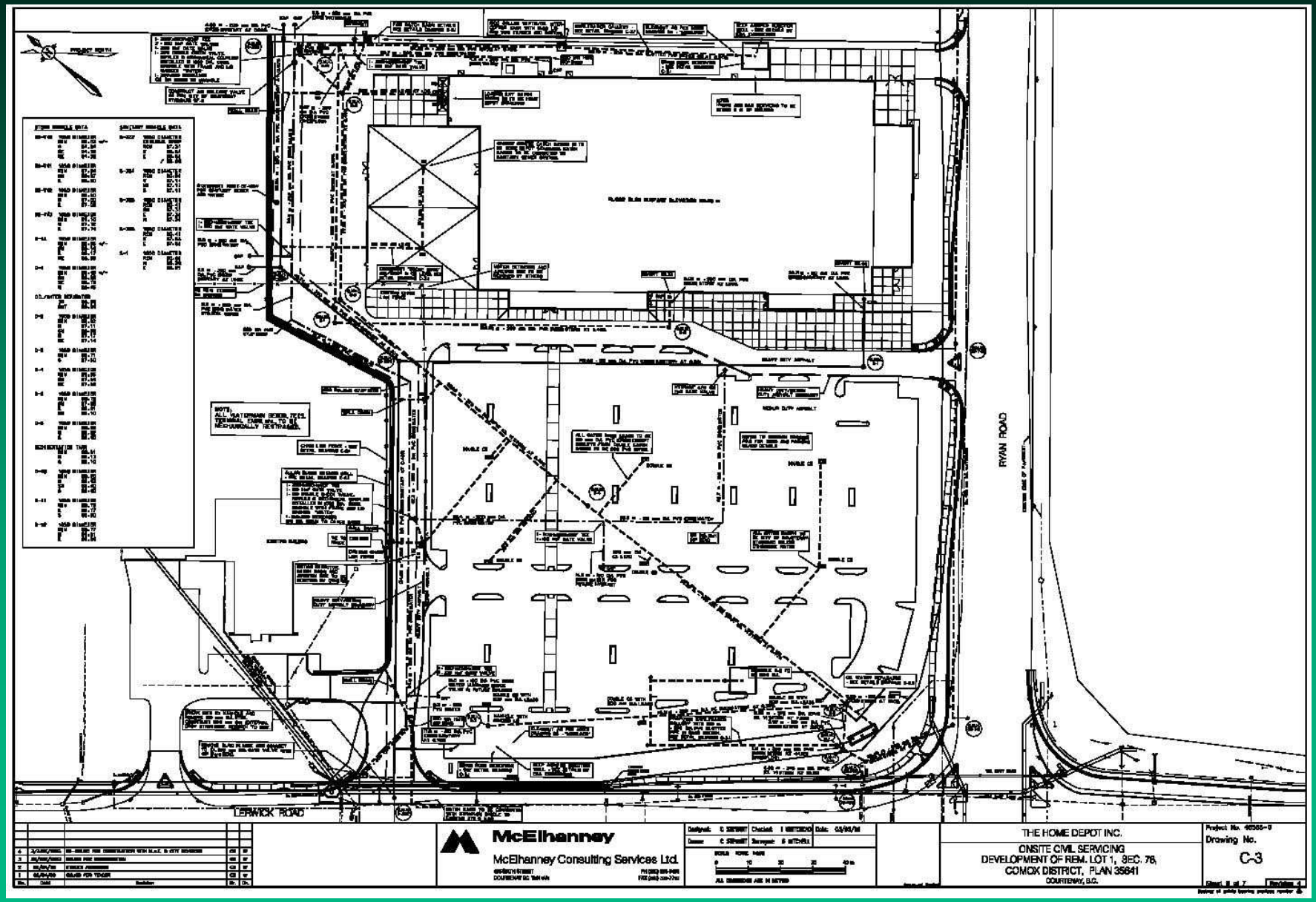
Home Depot Development

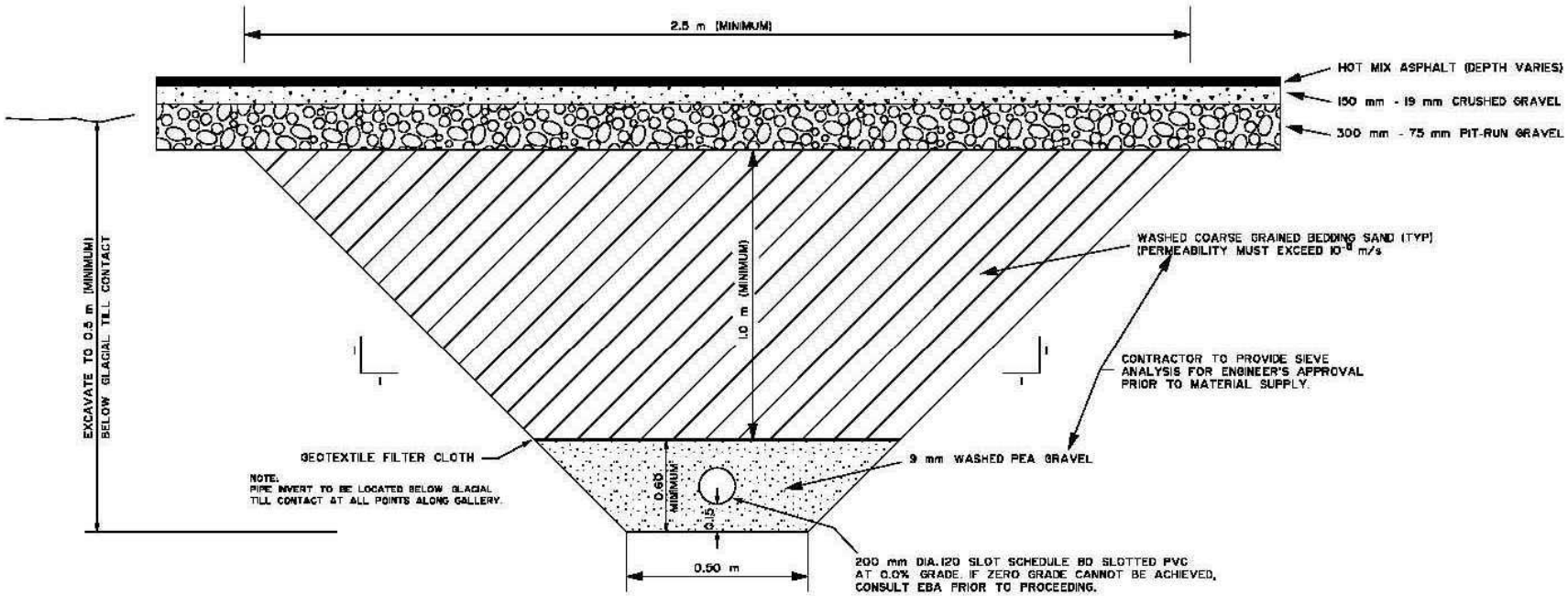
The parking lot surface water is collected, passed through an oil/grit interceptor and then piped through perforated pipes which bleed water into imported sands. The excess flows are then directed to a second deep well injection system.

In addition to this on-site system is a municipal system designed to accept the entire site surface flows.

For a one in two year storm event almost no precipitation discharges into the municipal surface water system.

The CDA provides for 5 years of semi-annual independent monitoring by a geotechnical consultant for the water quality in the deep wells.

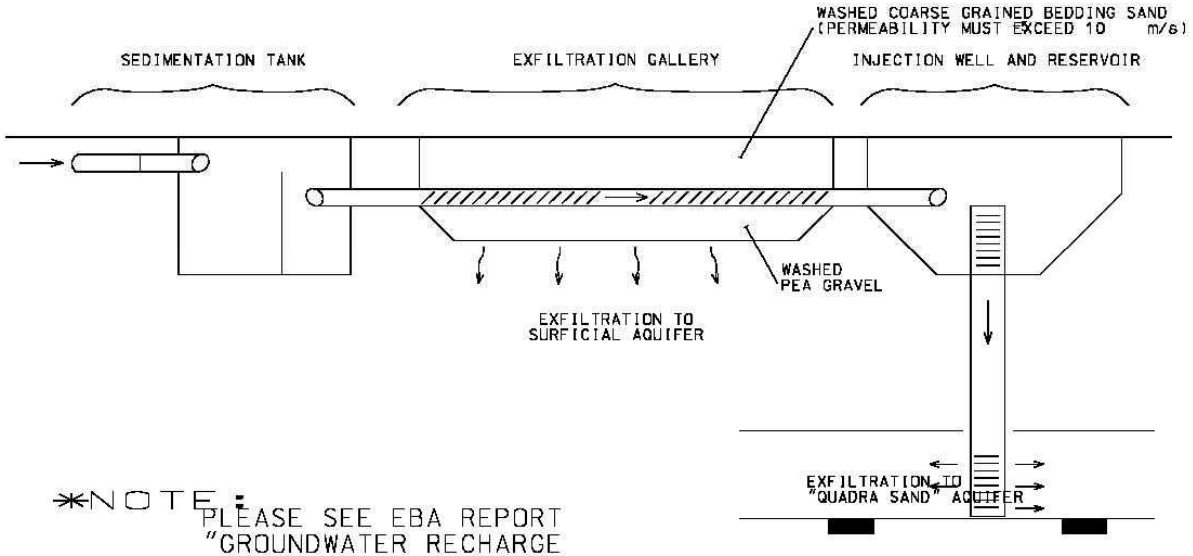

RYAN ROAD
LERWICK ROAD
McElhanney
McElhanney Consulting Services Ltd.
THE HOME DEPOT INC.
ONSITE CIVIL SERVICING
DEVELOPMENT OF REM. LOT 1, SEC. 76,
COMOX DISTRICT, PLAN 35641
COURTENAY, B.C.
Drawing No.
C-3



EXFILTRATION GALLERY

SCALE: NTS

GROUNDWATER RECHARGE SYSTEM
DESIGN CONCEPT



*NOTE:
PLEASE SEE EBA REPORT
"GROUNDWATER RECHARGE
SYSTEM FINAL DESIGN FOR
HOME DEPOT, COURTENAY, BC"
FOR SYSTEM DESCRIPTION

D-1

02/06/2004

THE
HOME DEPOT
STOP
STOP
STOP

SITE VISITS IN COURTENAY

1. Veterans Memorial Parkway
   - Engineered wetland/detention pond
   - Findley Creek Tributary storm water separation
   - Habitat compensation for the Red Legged Frog

2. Muir Road Development Findley Creek flow augmentation and community detention ponds