

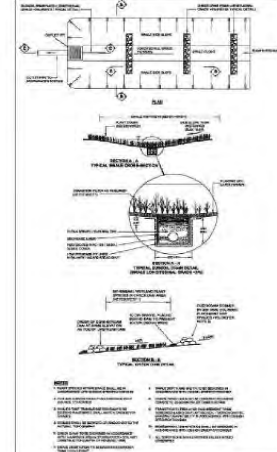
DESIGN PRINCIPLES:

1. SUSTAINABLE URBAN DRAINAGE SYSTEM (SUDS) / WATER SENSITIVE URBAN DESIGN.
2. SEGREGATION OF PEDESTRIAN & CYCLISTS FROM ROAD TRAFFIC.
3. RESERVED SPACE FOR FUTURE PUBLIC TRANSPORT PROVISION.
4. PROTECTING NATURAL WATER SYSTEMS WITHIN URBAN DEVELOPMENTS.
5. PROTECT WATER QUALITY SO AS TO IMPROVE THE QUALITY OF WATER DRAINING FROM URBAN DEVELOPMENTS INTO RIVERS, CATCHMENTS AND BAY ENVIRONMENTS.
6. INTEGRATING STORMWATER TREATMENT INTO THE LANDSCAPE WHICH PROVIDES BENEFITS SUCH AS WATER QUALITY TREATMENT, WILDLIFE HABITAT, PUBLIC OPEN SPACE, RECREATIONAL AND VISUAL AMENITY.
7. REDUCE RUNOFF AND PEAK FLOWS FROM URBAN DEVELOPMENT BY ON SITE TEMPORARY STORAGE MEASURES (WITH THE POTENTIAL TO RE USE) AND MINIMISE IMPERVIOUS AREAS.

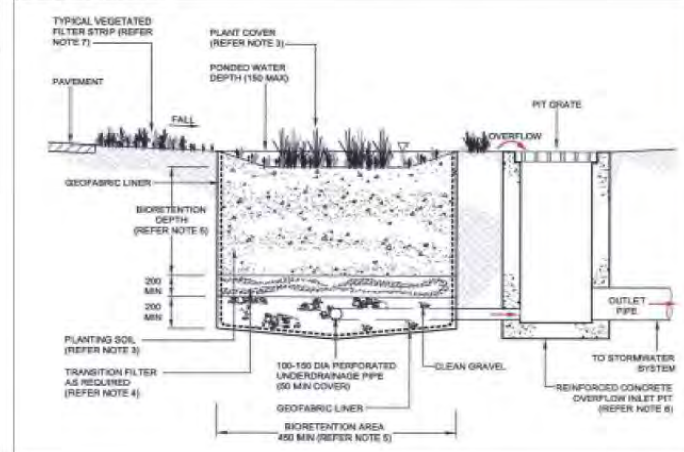
NOTE:

1. THIS LAYOUT HAS BEEN DESIGNED WITH CONSIDERATION OF ETHERWINI DRAINAGE DESIGN GUIDE AND GUIDELINES FOR HUMAN SETTLEMENT PLANNING AND DESIGN CHAPTERS 6 AND 8.
2. A 48M ROAD RESERVE HAS BEEN ASSUMED.
3. SHALLOW DRAINAGE CHANNEL & INFILTRATION TRENCH, CHECK DAMS TO BE PROVIDED IF LONGITUDINAL GRADIENT IS > 1:70.
4. CHANNEL SIZING TO BE CONFIRMED.

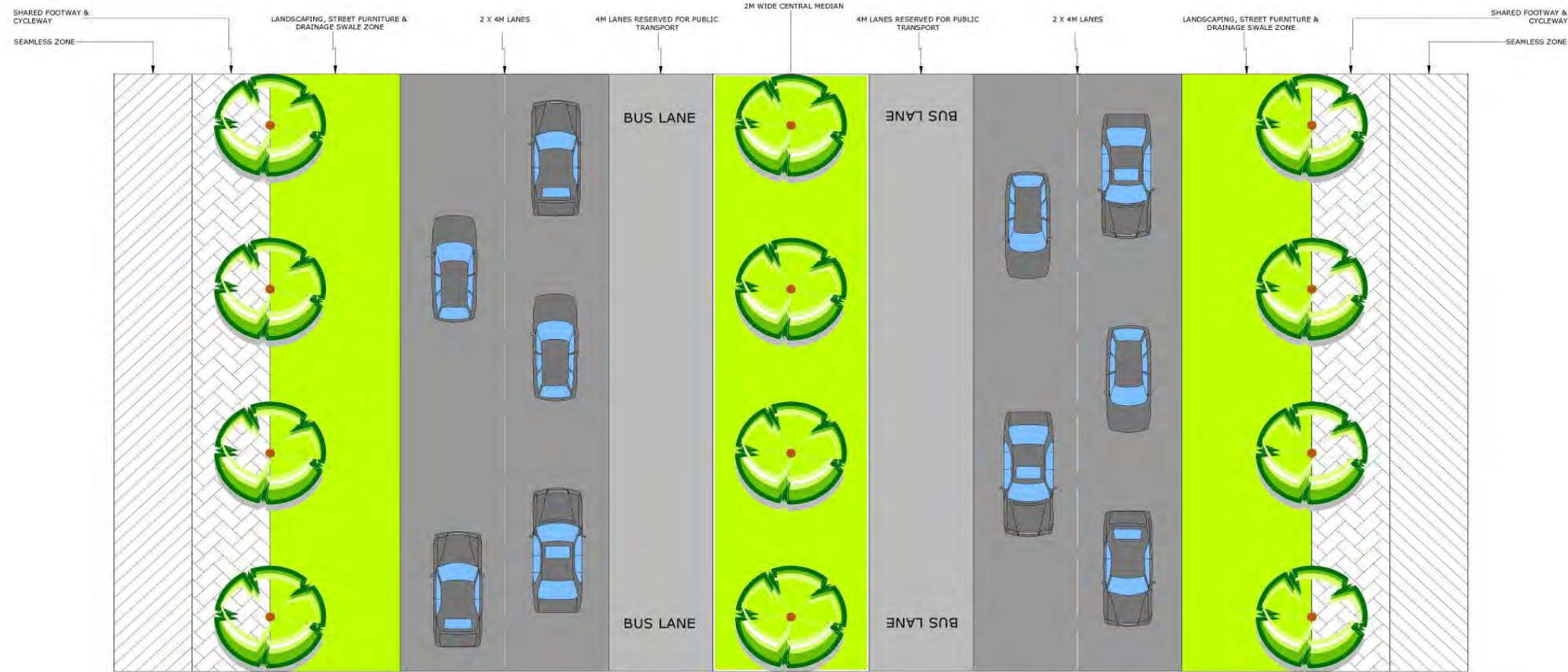
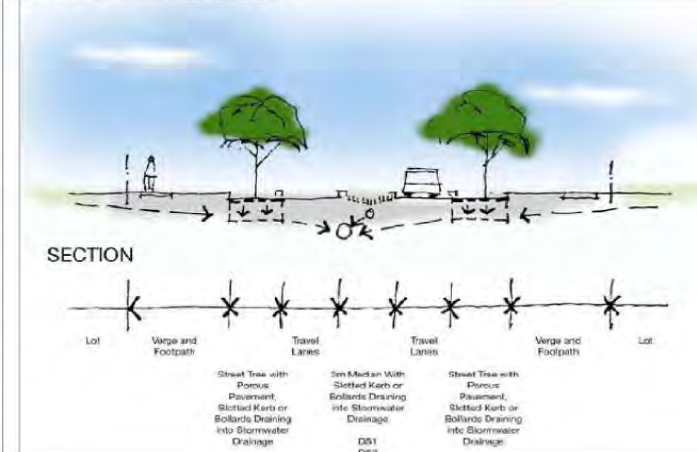
TYPICAL SWALE DETAILS



TYPICAL BIORETENTION SYSTEM



TYPICAL SECTION SHOWING DESIGN PRINCIPLES OF WSUD



Cad File Name:

GREEN BUILDING COUNCIL
MEMBER ORGANISATION

LEGEND:

CONCEPT

Rev.	Date	Description of changes	By

REVISIONS

Client:

DUBE TRADEPORT
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APPROVED
THE MASTER HELD AT VIRTUAL CONSULTING ENGINEERS
BEARS THE ORIGINAL SIGNATURE OF APPROVAL

SIGNATURE: _____ NAME: _____ DATE: _____

Project: **DUBE TRADEPORT
WATSON HIGHWAY LINK ROAD**

Project Description:

Drawing Title: **PROPOSED CROSS SECTION
INCORPORATING "SUDS" & "WSUD"**

Drawing Units: MM

Date: 15 SEPTEMBER 09 Scale: 1:150 Designed By: A. GOULD

Checked By: A. GOULD Drawn By: C. PEREIRA Approved By: _____

Drawing No: P8048 WATSON HWY Rev: 0

**Project No.
J30188
Figure 3**

Proposed Cross Section Incorporation Sustainable Urban Design System

