GENERAL NOTES

1. Contractor must verify all dimensions and existing levels on site prior to commencement of works. Any discrepancies to be reported to the

2. Strip all topsoil from the construction area. All stripped topsoil shall be disposed of off-site unless directed otherwise.

3. Make smooth connection with all existing works. 4. Compact subgrade under buildings and pavements to minimum 98% standard maximum dry density in accordance with AS 1289 5.1.1. Compaction under buildings to extend 2m minimum beyond building

5. All work on public property, property which is to become public property, or any work which is to come under the control of the Statutory Authority is to be carried out in accordance with the requirements of the relevant Authority. The Contractor shall obtain these requirements from the Authority. Where the requirements of the Authority are different to the drawings and specifications, the requirements of the Authority shall be applicable.

6. For all temporary batters refer to geotech.

REFERENCE DRAWINGS

1. These drawings have been based from, and to be read in conjunction with the following Consultants drawings. Any conflict to the drawings must be notified immediately to the Engineer.

Revision Date

BULK EARTHWORKS NOTES

1. All bulk earthworks setout from grid lines U.N.O 2. All batters at a slope of **2** (H) : **1** (V) U.N.O.

3. Excavated material may be used as structural fill provided, (i) it complies with the specification requirements for fill material. (ii) the placement moisture content complies with the Geotechnical Consultants requirements, and allows filling to be placed and

proofrolled in accordance with the specification. Where necessary the Contractor must moisture condition the excavated material to meet these requirements.

4. Compact fill areas and subgrade to not less than:

| Location | Standard dry density (AS 1289 5.1.1.) | Moisture (OMC) |
|---------------------------------|--|-------------------|
| Under building slabs on ground: | 98% | ±2% |
| Under roads and carparks: | 98% | ±2% |
| Landscaped areas: | 95% | ±2% |

5. Before placing fill, proof roll exposed subgrade with a 10 tonne minimum roller to test subgrade and then remove soft spots (areas with more than 3mm movement under roller).

Soft spots to be replaced with **select** fill U.N.O. 6. Contractor shall place safety barriers around excavations in

accordance with relevant safety regulations. 7. For interpretation of bulk earthworks foot print line shown on the bulk earthworks drawings refer to the bulk earthworks construction

8. Bulk earthwork drawings are not to be used for detailed excavation. 9. Refer to Geotechnical Report prepared by -

Douglas Partners Ptv Ltd Project 43237 August 2005

STORMWATER DRAINAGE NOTES

1 Stormwater Design Criteria

(A) Average recurrence interval — 1:100 years for roof drainage to first external pit 1:20 years for paved and landscaped areas

(B) Rainfall intensities -Time of concentration: 5 minutes 1:100 years = 202 mm/hr 1:20 years = 149 mm/hr

(C) Runoff coefficients -Roof areas: Roads and paved areas: $C_{20} = 0.90$ Landscaped areas: $C_{20} = 0.25$

2. Pipes 300 dia and larger to be reinforced concrete Class "2" approved spigot and socket with rubber ring joints U.N.O.

3. Pipes up to 300 dia shall be sewer grade uPVC with solvent

4. Equivalent strength VCP or FCP pipes may be used subject to approval. 5. Precast pits may be used external to the building subject

to approval by 6. Enlargers, connections and junctions to be manufactured fittings where pipes are less than 300 dia.

7. Where subsoil drains pass under floor slabs and vehicular pavements, unslotted uPVC sewer grade pipe is to be used. 8. Grates and covers shall conform with AS 3996-1992, and AS 1428.1 for access requirements.

9. Pipes are to be installed in accordance with AS 3725. All bedding to be type H2 U.N.O. 10. Care is to be taken with levels of stormwater lines. Grades

shown are not to be reduced without approval. 11. All stormwater pipes to be 150 dia at 1.0% min fall U.N.O.

12. Subsoil drains to be slotted flexible uPVC U.N.O. 13. Adopt invert levels for pipe installation (grades shown are only nominal).

SITEWORKS NOTES

1. All basecourse material to comply with RTA specification No 3051 and compacted to minimum 98% modified standard dry density in accordance with AS 1289 5.2.1.

2. All trench backfill material shall be compacted to the same density as the adjacent material.

3. All service trenches under vehicular pavements shall be backfilled with an approved select material and compacted to a minimum 98% standard maximum dry density in accordance with AS 1289 5.1.1

KERBING NOTES

Includes all kerbs, gutters, dish drains, crossings and edges.

. All kerbs, gutters, dish drains and crossinas to be constructed on minimum 75mm granular basecourse compacted to minimum 98% modified maximum dry density in accordance with AS 1289 5.2.1. . Expansion joints (EJ) to be formed from 10mm compressible cork filler board for the full depth of the section and cut to profile.

Expansion joints to be located at drainage pits, on tangent points of curves and elsewhere at 12m centres except for integral kerbs where the expansion joints are to match the joint locations in slabs. . Weakened plane joints to be min 3mm wide and located at 3m centres except for integral kerbs where weakened plane joints are to

match the joint locations in slabs. 4. Broomed finished to all ramped and vehicular crossings, all other kerbing or dish drains to be steel float finished.

SURVEY AND SERVICES INFORMATION

SURVEY Origin of levels : A.H.D. AUSTRALIAN HEIGHT DATUM Datum of levels Coordinate system Survey prepared by: HARD AND FORESTER SURVEYORS

CONTACT THE SURVEYOR Taylor Thomson Whitting does not guarantee that the survey information shown on these drawings is accurate and will accept no liability for any inaccuracies in the survey information provided to us from any cause

CONTACT THE SURVEYOR

<u>UNDERGROUND SERVICES - WARNING</u>

The locations of underground services shown on Taylor Thomson Whittings drawings have been plotted from diagrams provided by service authorities. This information has been prepared solely for the

authorities own use and may not necessarily be updated or accurate. The position of services as recorded by the authority at the time of installation may not reflect changes in the physical environment subsequent to installation.

Taylor Thomson Whitting does not guarantee that the services information shown on these drawings shows more than the presence or absence of services, and will accept no liability for inaccuracies in the services information shown from any cause whatsoever. The Contractor must confirm the exact location and extent of services prior to construction and notify any conflict with the drawings immediately to the Engineer/Superintendent.

The contractor is to get approval from relevant the state survey department, to remove any survey mark. This includes but is not limited to; State Survey Marks (SSM), Permanent Marks (PM), cadastral reference marks or any other survey mark which is to be removed or

Taylor Thomson Whitting plans do not indicate the presence of any survey mark. The contractor is to undertake their own search.

BOUNDARY AND EASEMENT NOTE

superintendent prior to construction starting.

The property boundary and easement locations shown on Taylor Thomson Whitting drawing's have been based from information received from: Refer Hard and Forester surveyors for boundary information and locations

Taylor Thomson Whitting makes no guarantees that the boundary or easement information shown is correct. Taylor Thomson Whitting will accept no liabilities for boundary inaccuracies. The contractor/builder is advised to check/confirm all boundaries in relation to all proposed work prior to the commencement of construction. Boundary inaccuracies found are to be reported to the

JOINTING NOTES

Vehicular Pavement Jointing

1. All vehicular pavements to be jointed as shown on drawings. 2. Keyed construction joints should generally be located at a maximum of 6m centres.

3. Sawn joints should generally be located at a maximum of 6m centres or 1.5 x the spacing of keyed joints, where key joint spacing is less than 4m, with dowelled expansion joints at maximum of 30m centres.

4. Provide 10mm wide full depth expansion joints between buildings and all concrete or unit pavers.

. Vehicular pavement jointing as follows. 6. The timing of the saw cut is to be confirmed by the contractor on site. Site conditions will determine how many hours after the concrete pour before the saw cuts are commenced.

7. Refer to specification for weather, tempretures and timing of joints.

| = | | | $F \land C F$ | 0 F | VEDD | 1 | 1 |
|-----------|----------|--------|---------------|----------|----------|----------|-------------|
| | KJ EJ | S | | l | 3 | <u> </u> | - |
| | | 6m MAX | | | 6m MAX | | |
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| l į | | | | 30m MAX | | <u> </u> | į |
| | KJ | | | | | | |
| | | | | | | | |
| | EJ | FA | CEO | F BU | ILDI | N G | |

Pedestrian Footpath Jointing

1. Expansion joints are to be located where possible at tangent points of curves and elsewhere at max 6.0m centres.

the pavement. 3. Where possible joints should be located to match kerbing and / or

4. All pedestrian footpath jointings as follows (uno). FACE OF KERB

. Weakened plane joints are to be located at a max 1.5 x width of EASEMENT FOR _____ (__m WIDE) X 1.5 x₁ W (1.5m ₁MAX Boundary BH 0 Borehole

EROSION AND SEDIMENT CONTROL NOTES CONCRETE NOTES

1. All work shall be generally carried out in accordance with

(A) Local authority requirements,

(B) EPA - Pollution control manual for urban stormwater, (C) Department of conservation and land management manual—

"Urban Erosion & Sediment Control". Erosion and sediment control drawings and notes are provided for the whole of the works. Should the Contractor stage these works then the design may require to be modified. Variation to these details may require to be approved by the relevant authorities. The erosion and sediment control **plan** shall be implemented and adopted to meet the varying situations as work on site progresses.

Maintain all erosion and sediment control devices to the satisfaction of the superintendent and the local authority. When stormwater pits are constructed prevent site runoff entering the pits unless silt fences are erected around pits.

Minimise the area of site being disturbed at any one time. Protect all stockpiles of materials from scour and erosion. Do not stockpile loose material in roadways, near drainage pits or in

All soil and water control measures are to be put back in place at the end of each working day, and modified to best suit site

8. Control water from upstream of the site such that it does not enter the disturbed site.

All construction vehicles shall enter and exit the site via the temporary construction entry/exit. 10. All vehicles leaving the site shall be cleaned and inspected before

sediment. Inspect stormwater system and clean out after each 12. Clean out all erosion and sediment control devices after each

I. Maintain all stormwater pipes and pits clear of debris and

storm event

Sequence Of Works 1. Prior to commencement of excavation the following soil management devices must be installed 1.1. Construct silt fences below the site and across all potential

1.2. Construct temporary construction entry/exit and divert runoff to

suitable control systems. 1.3. Construct measures to divert upstream flows into existing

stormwater system 1.4. Construct sedimentation traps/basin including outlet control and overflow.

1.5. Construct turf lined swales. 1.6. Provide sandbag sediment traps upstream of existing pits. Construct geotextile filter pit surround around all proposed pits

as they are constructed. On completion of pavement provide sand bag kerb inlet sediment traps around pits. Provide and maintain a strip of turf on both sides of all roads

after the construction of kerbs.

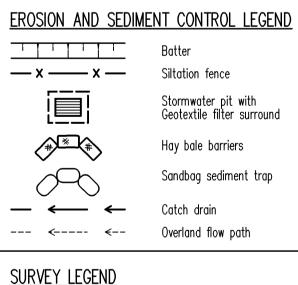
CONCRETE FINISHING NOTES 1. All exposed concrete pavements are to be broomed finished. 2. All edges of the concrete pavement including keyed and dowelled

joints are to be finished with an edging tool. 3. Concrete pavements with grades greater than 10 % shall be

heavily broomed finished. F. Carborundum to be added to all stair treads and ramped crossings U.N.O.

PIT SCHEDULE

Note: Grate size does not necessarily reflect pit size, refer pit type details, shown on detail sheets - **C51** Description 600 x 900 Class D galvanised mild Surface inlet pit steel grate hinged to frame Rock stabilised batter headwall B | Headwall



Surface level

Contour

Kerb line

adjacent pavement joints.

Retaining wall Tree to be removed/be retained Permanent Mark

EXPOSURE CLASSIFICATION

1. Place concrete of the following characteristic compressive strength f'c as defined in AS 137

| strongth to as achine in the tors. | | | | | |
|------------------------------------|----------------|---------------|-----------|--|--|
| ocation | AS 1379 f'c | Specified | Nominal | | |
| | MPa at 28 days | Slump | Agg. Size | | |
| its, kerbs, footpaths | S(25) | 80 | 20 | | |
| ootings | S(32) | 80 | 20 | | |
| ehicular pavements | SF(32) | 80 | 20 | | |
| llea Tuna 'Sl' coment | at 90 days | enocified | | | |

Use Type SL cement, unless otherwise specified. All concrete shall be subject to project assessment and testing to AS 1379.

Consolidate by mechanical vibration. Cure all concrete surfaces as directed in the Specification. For all falls in slab, drip grooves, reglets, chamfers etc. refer to Architects drawings and specifications. . Unless shown on the drawings, the location of all construction

joints shall be submitted to Engineer for review. No holes or chases shall be made in the slab without the approval of the Engineer. 3. Conduits and pipes are to be fixed to the underside of the top reinforcement layer.

9. Slurry used to lubricate concrete pump lines is not to

be used in any structural members. REINFORCEMENT NOTES

I. Fix reinforcement as shown on drawings. The type and grade is indicated by a symbol as shown below. On the drawings this is followed by a numeral which indicates the size in millimetres of the reinforcement.

grade D500N N. Hot rolled ribbed bar grade R250N R. Plain round bar grade 500L SL. Square mesh RL. Rectangular mesh arade 500L

2. Provide bar supports or spacers to give the following concrete cover to all reinforcement unless otherwise noted on drawings Footings - 40 bottom, 40 top, 40 sides. - 40 top, 40 bottom, 40 when exposed to weather.

> 40 generally. - 40 when cast in forms but later exposed to weather or ground.

- 40 when cast directly in contact with around. Cover to reinforcement ends to be 45 mm u.n.o. Provide N12-450 support bars to top reinforcement as required , Lap 450. U.N.O.

. Maintain cover to all pipes,conduits,reglets,drip grooves etc . Laps in reinforcement shall be made only where shown on the drawings unless otherwise approved. Lap lengths shall be 40 bar dia. unless noted otherwise. All cogs to be standard cogs unless noted otherwise. . Fabric end and side laps are to be placed strictly in

full tensile lap. Fabric shall be laid so that there is a

maximum of 3 layers at any location.

TABLE DE LA CONTRACTOR 9. COGGED BAR LAPS U.N.O.

accordance with the manufacturers requirements to achieve a

_____ 40 bar dia _

Finished surface level

Keyed construction joint

Weakened plane joint

Expansion joint

< - <--- <--- Overland flow path

<u>Formwork</u>

of the formwork, falsework and backpropping shall be the responsibility of the contractor. Proposed method of installation and removal of formwork is to be submitted to the superintendent for comment prior to work being carried out.

SITEWORKS LEGEND

● F22.20

FK

DD

600 ø '2'

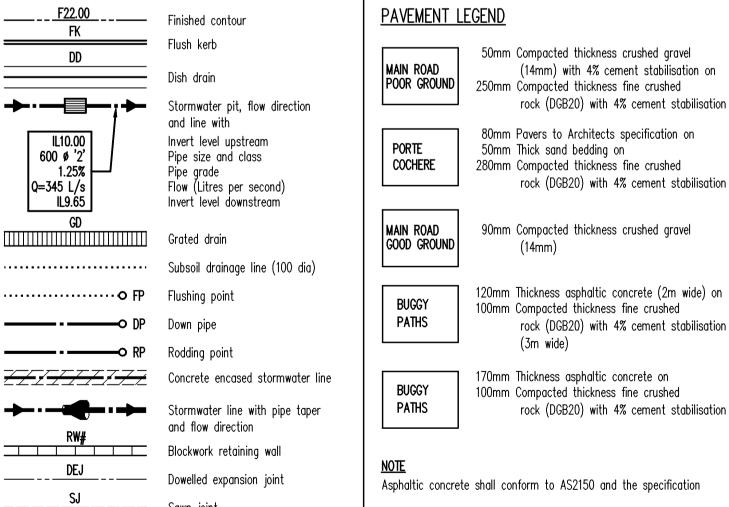
=345 L/s

1.25%

IL9.65

GD

DEJ



MASONRY NOTES

1. Clay masonry units shall have a minimum compressive strength of f'uc = 20MPa conforming to AS4455.

2. Clay masonry units shall have a maximum long—term expansion (from the time of being laid) of not greater than 1.0mm/m

3. Hollow concrete masonry units shall comply with AS4455 and shall be laid dry. The minimum characteristics compressive of f'uc shall be. 10 MPa for units used in unreinforced non-loadbearing masonry

15 MPa for rein'd hollow masonry or loadbearing hollow masonry For retaining walls blocks shall be equal to Monier "Double U" blocks 4. Standard units shall have a maximum permeability of 2mm/minute. an efflorescence potential of nil or slight, and a characteristic lateral modulus of rupture of 0.8 MPa.

10 MPa for cored or solid loadbearing masonry

5. Mortar shall consist of well mixed cement: lime: sand in the proportions by volumes as follows: 1:0.25:3 Admixtures shall not be used without the approval of the Engineer. For retaining walls fully bed shells and perpends. 6. Provide galvanised course reinforcement equal to M.E.T. product to each leaf at vertical spacings of 600 mm maximum.

Stainless steel course reinforcement equal to Ancon product to be used for appropriate durability category. Course reinforcement shall be lapped 300 mm. One additional run shall be provided under and over all window and door openings bonded 300 mm past the opening. . Masonry supporting slabs shall have a layer of mortar

trowelled smooth on top. Place approved sheet separator to separate slab and masonry. U.N.O. 3. Provide control joints over floor joints and at a maximum 8 metre centres typically and 4 metres from corners unless otherwise noted in the specification or on the architectural drawings. Submit joint locations to Engineer for approval. 9. Cleanout openings shall be provided at the bottom of each

block core containing vertical reinforcement. Reinforced

cores shall be cleaned of mortar protrusions before grouting. 10. All loadbearing and/or reinforced blockwork cores shall be filled with grout U.N.O. Core filling grout shall be thoroughly compacted by mechanical vibrator and/or rodding with a plain round bar. Grout shall have the following characteristics

in accordance with AS 3600: Char. Strength f'c = 20 MPa Specified Slump = 230 mm

Max. Agg. Size = 10 mm Non Loadbearing block walls are not core filled U.N.O. 1. Cover to reinforcement to be 50mm to face of block U.N.O.

REINFORCED EARTH WALLS

1. All masonry blocks and gabion baskets are to the manufacture's 2. Geofabric type and length is to be laid as per plans.

3. Subgrade bearing tests must be completed and results reviewed prior to aabion basket lavina 4. Contractor to submit shear box test results to ensure adequate friction anale, unit weight and cohesion.

5. Contractor must provide test records to ensure compaction results

and moisture content between layers that have been specified is 6. Soil conditions are anticipated as noted by the latest geotechnical report. Any conflicts or changes with the soil conditions or design,

geotechnical engineer. RETAINING WALLS

Drainage shall be provided as shown on the drainage drawings. Backfilling shall be carried out after grout or concrete has reached a minimum strength of 0.85 f'c. Backfilling shall be approved granular material compacted in layers not exceeding 200mm to 95% Standard compaction unless noted otherwise

the contractor is to seek approval for any changes by the

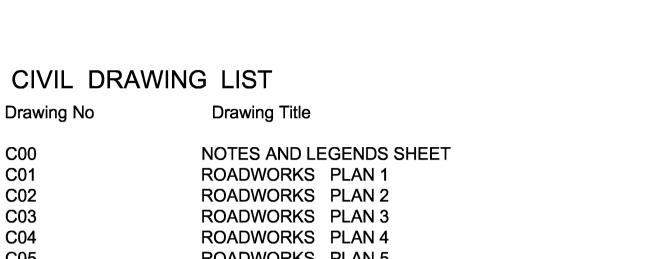
3. Provide waterproofing to back of walls as specified or noted. 4. Where retaining walls rely on connecting structural elements for stability, do not backfill against the wall unless it is adequately propped or the elements have been constructed and have sufficient strength to withstand the loads.

5. For all temporary batters obtain geotechnical engineers

recommendations.

| PAVEMENT L | <u>EGEND</u> |
|--------------------------|---|
| MAIN ROAD POOR GROUND | 50mm Compacted thickness crushed gravel (14mm) with 4% cement stabilisation on 250mm Compacted thickness fine crushed rock (DGB20) with 4% cement stabilisation |
| PORTE COCHERE | 80mm Pavers to Architects specification on 50mm Thick sand bedding on 280mm Compacted thickness fine crushed rock (DGB20) with 4% cement stabilisation |
| MAIN ROAD GOOD GROUND | 90mm Compacted thickness crushed gravel (14mm) |
| BUGGY PATHS | 120mm Thickness asphaltic concrete (2m wide) on 100mm Compacted thickness fine crushed rock (DGB20) with 4% cement stabilisation (3m wide) |
| BUGGY | 170mm Thickness asphaltic concrete on 100mm Compacted thickness fine crushed |

EXISTING SURFACE



C02 C03 C04 C05 **ROADWORKS PLAN 5** C06 **SECTIONS SHEET 1** C07 **SECTIONS SHEET 2** C08 **SECTIONS SHEET 3** C09 **SECTIONS SHEET 4** C10 **SECTIONS SHEET 5** C11 **SECTIONS SHEET 6** C12 **SECTIONS SHEET 7** C13 C14 C15 C16 C17 C18 DAM SITE PLAN C19 **BRIDGE EXTENTS PLAN**

LITHGOW

C20 **BRIDGE SECTIONS SHEET** C21 FLOOD EXTENTS PLAN C22 OVERALL ROADWORKS PLAN C23 DEVELOPMENT LIMITS PLAN (NOT ISSUED)

Drawing No Drawing Title

C50 SITEWORKS LAYOUT PLAN 1 C51 SITEWORKS LAYOUT PLAN 2 C52 SITEWORKS LAYOUT PLAN 3 C53 C54 LOCATION PLAN-HORSE STABLES

C55 BULK EARTHWORKS-MAIN RESORT BUILDING (NOT ISSUED) C56 **EROSION & SEDIMENT CONTROL PLAN 1** C57 **EROSION & SEDIMENT CONTROL PLAN 2** C58 **EROSION & SEDIMENT CONTROL DETAILS & NOTES** C59 EROSION & SEDIMENT CONTROL PLAN 4 (NOT ISSUED)

C62 DETAILS & SECTIONS SHEET 1 OF 2 (NOT ISSUED) C63 DETAILS & SECTIONS SHEET 2 OF 2 (NOT ISSUED) C70 SITE MANAGEMENT PLAN SHEET 1 OF 3 C71 SITE MANAGEMENT PLAN SHEET 2 OF 3 C72 SITE MANAGEMENT PLAN SHEET 2 OF 3

C80 FOOTBRIDGE SECTIONS SHEET C81 FOOTBRIDGE LOCATION PLAN

GUIDE POSTS ARE TO BE 1.4m LONG, AND - 1m (±100mm) ABOVE GROUND IN ACCORDANCE -WITH AS1742.2. PLACED NEAR ALL HEADWALLS SERVICES ZONE TYPICAL ROAD SECTION

WORK. DRAWINGS ARE NOT TO BE SCALED. USE ONLY FIGURED DIMENSIONS. REFER TO CONSULTANT DOCUMENTATION FOR FURTHER KEY PLAN EMIRATES RESORT

P7 ISSUE FOR COORDINATION P6 ISSUE FOR INFORMATION 16.10.06 JW SB P5 ISSUE FOR COORDINATION JW SB 13.10.06 P4 ISSUE FOR INFORMATION 10.10.06 19.09.06 P3 PRELIMINARY JW SB P2 PRELIMINARY KH SB 10.02.06 P1 PRELIMINARY KH SB 22.12.05 No. Revision Description Draft / Eng Date PROJECT ARCHITECTS

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> INTERIOR DESIGN CONSULTANT Chhada Siembieda 30 Boronia Street Redfern, NSW 2016 02 9318 2627 02 9318 2151

EMIRATES LUXURY RESORT WOLGAN VALLEY, NEW SOUTH WALES

For Information Only

Drawing Title NOTES AND LEGENDS NORTH SCALE @ A1

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