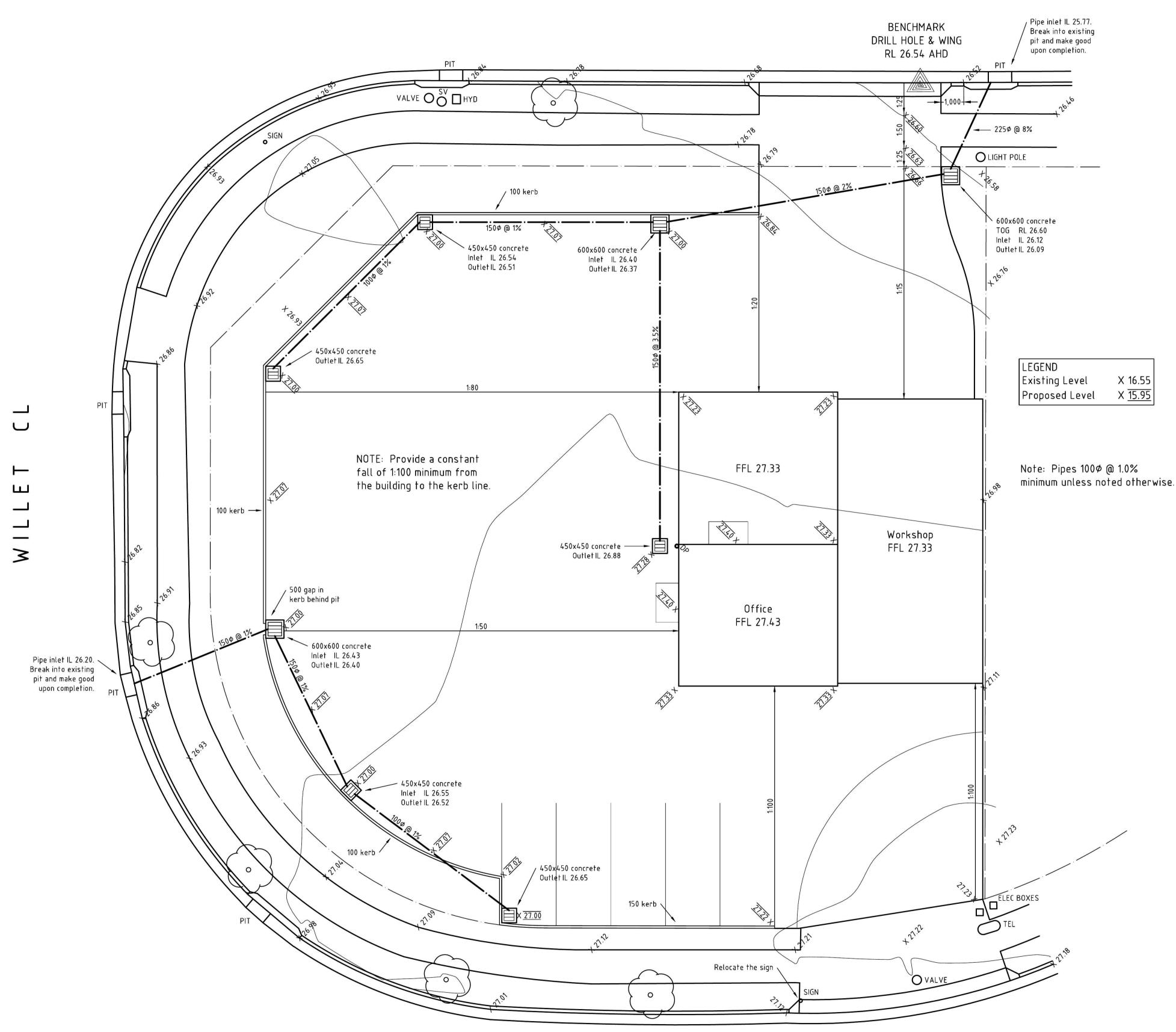
RENSHAW ST



Drainage Plan Scale 1:100



GENERAL All work and materials shall be in accordance with the drawings, the specification, and current relevant Australian Standards, The National Construction Code and other statutory requirements. These drawings shall be read in conjunction with the architectural and other consultants' drawings, the specification and all other written instructions that are issued during the course of the works. The builder shall confirm all relevant dimensions before commencing construction/fabrication. All discrepancies shall be referred to the architect/engineer for clarification before proceeding. Notify the architect/engineer of all variations arising from the clarification of the discrepancy before proceeding with the works. Refer to architectural drawings for dimensions not noted on the engineering drawings. Do NOT scale drawings. All dimensions are in millimetres or metres unless noted otherwise, UNO. No substitutions shall be made without the written approval of the engineer. The engineer accepts no responsibility for the works unless the works are inspected and approved by the engineer during construction. 10. A minimum of 48 hours notice is required for all engineering inspections, UNO. STORMWATER LAYOUT NOTES. Pits up to 600 deep to be 450x450 UNO. Pits up to 900 deep to be 600x600 UNO. Pits up to 1200 deep to be 900x600 UNO. Pits exceeding 1200 deep to be 900x900 UNO. Pits to be precast concrete or rendered brick or block with galvanized heavy duty grates UNO. Light duty pits may only be used in foot trafficable areas. UNO all pits to be benched to the outlet pipe. All pits greater than 1000 deep to be provided with galvanized step irons at 300 centres placed in a staggered pattern and shall be in accordance with AS4198. Cover and sump grates shall be in accordance with AS 2733 and AS 4198. Downpipes to be 90 diameter if charged and 100x50 box if gravity UNO. Downpipes shall be installed in accordance with AS 3500.3.2:4.11 and AS 4198. The maximum roof area to each downpipe is to be to the NCC. Pipes to have a 1% minimum grade UNO by pit inverts. UNO Pipes to be uPVC stormwater pipe to AS/NZS 1254, AS/NZS 1260, AS 1273, AS/NZS 1477, AS/NZS 2179.1 and where exposed to direct sunlight to have adequate protection to UV radiation in accordance with AS/NZS 2032. Sewer grade or galvanized steel pipes to be used where council policy or consent requires. Gutter outlets shall be fitted vertically to the sole of the eaves gutters. Rainheads to have an overflow duct or weir 50 below their crest. Provide overflow spitters to all covered balconies / terraces. Rising mains (pressure pipe) to be in accordance with AS/NZS 3500.1:2. Subsoil drains to be in accordance with AS 2439.1. Class 100 to be used only in single dwellings. All pipe joints are to be in accordance with AS/NZS 3500.3.2:2.7. All valves are to be in accordance with AS/NZS 3500.3.2. Expansion joints shall comply with AS/NZS 3500.3.2:Table 4.1. PVC joint and accessories shall comply with AS/NZS 2179.1 and AS 4198. All trenches to be in accordance with AS/NZS 3500. Embedment material and trench fill to all pipes and subsoil drains to be in accordance with AS 3500.3.2:7. All works to be in accordance with AS/NZS 1254, AS 1741, AS/NZS 2032, AS 2865, AS 3996, AS/NZS 1260, AS/NZS 1477, AS/NZS 2179.1, AS/NZS 2566, Australian Rainfall and Runoff and The National Construction Code. It is the builders responsibility to confirm that levels and surveys are in accordance with levels on site and are approved by council and architect before commencing work. No sewer vents, gully pits or similar to be located below the maximum water surface level in detention basins. All basin walls to be watertight and structurally designed by a structural engineer. All fences which may divert flow from proposed direction to be raised 100. Builder to ensure all drainage areas including exposed balconies to have an overflow mechanism in place in the event of blockage with adequate overflow section through planters, parapets etc. All exterior ground levels to be sloping away from perimeter walls in all cases. All stepdowns at floor slab edges to be to the NCC. All headroom clearances to be coordinated between builder and architect. Notify engineer for approval if any changes OCCUL. 9. All gully positions are diagrammatic only. Builder should consult architectural drawings for dimensions to locate stormwater elements UNO. 20. Fire rating to architect's specification. 21. All existing services which need to be relocated (if any) to facilitate the construction of OSD storage area, pits or drainage pipelines, shall be relocated at full cost to the developer. 2. All pits inlet & outlet pipes shall be cut flush with pit wall, and the pit floor is to be benched from invert of inlet pipe to invert of outlet pipe. 23. All pit grates to have the same clear opening as internal plan dimensions of pits (for pits up to 1200 square). 24. The maximum weight of each individual hinged grate shall be 20 kilograms. 25. All grates are to be hinged and provided with an approved childproof lock down system. Hinged grates are to be placed away from any wall or kerb, to ensure that the grates can be fully opened for safety reasons. Where precast pits are proposed (except for H.E.D. pit), the pit shall be placed on a 75 thick concrete base and backfilled with concrete to halfway up the outside of the unit. . High Early Discharge (HED) pits are to be constructed as concrete cast "in-situ" pits. Precast or masonry brick pits are not permitted for HED pits. 8. The flap valve on the "return" from the storage area into the HED pit shall be a "Nicholas Flexi Flap" or approved equivalent. If an equivalent is proposed this must be approved by Council's Engineer prior to installation. 29. Fittings in the HED pit are to be secured with "Ramset Chemical anchors (type M10)" or approved equivalent. Any proposed equivalent must be approved by Council's Engineer prior to installation.). The invert of the HED pit if not benched shall be drained using an ag-line, 50 in diameter, with a minimum length of 1000. This ag-line shall be laid in a trench with a minimum gradient of 1%. The trench shall be backfilled with 5 mm single size stone. This system shall be drained to a downstream existing Council kerb, pipe or pit. All work to be carried out in accordance with Council standard specifications and to the requirements of Council's engineer. 2. Council's tree preservation orders are to be strictly adhered to. 33. Work is to be carried out at Council approved times only. All levels shall be taken from an established bench mark. 35. The contractors shall take all due care that only the absolute minimum of area for construction is used and that no undue damage is done to the existing vegetation. Trench excavation in lots shall be kept to a minimum and no tracked machinery shall be used for that purpose. . Suitable erosion and sedimentation controls are to be established to the requirements of Councils' engineer and maintained during and after works. 87. Suitable warning signs and barricades are to be provided to Australian Standards and as directed. 38. Provision is to be made for maintaining traffic flow at all times. Traffic control measures are to be in accordance with council's guidelines on urban traffic control. 39. Contractors are to ensure all structural works are inspected and certified by a qualified engineer. 40. Location of existing services on these plans is indicative only of conditions at time of design. It is the responsibility of the contractor to update the information and to adequately inform themselves of the location of all services whether shown on the contract documents of not. The contractor is to carry out a comprehensive services search prior to the construction, check levels and take all other necessary precautions. Any adjustment or relocation of services that may be required, shall be carried out be the contractor at no cost to council. I. All existing services shall be adjusted as necessary to the requirements of the relevant authority at developer's expense. 42. Contractor shall take all reasonable care to protect existing services. Damaged services shall be repaired at contractors expense. 43. Prior to construction of work commencing, services search must be carried out to ensure stormwater drainage pipe connection to kerb and gutter can be constructed at the design levels. 44. Provide new driveway and layback crossing in accordance with Council standard footway crossing drawing. RevNo

Designe

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Revision note					Date	Signat	ure Checked
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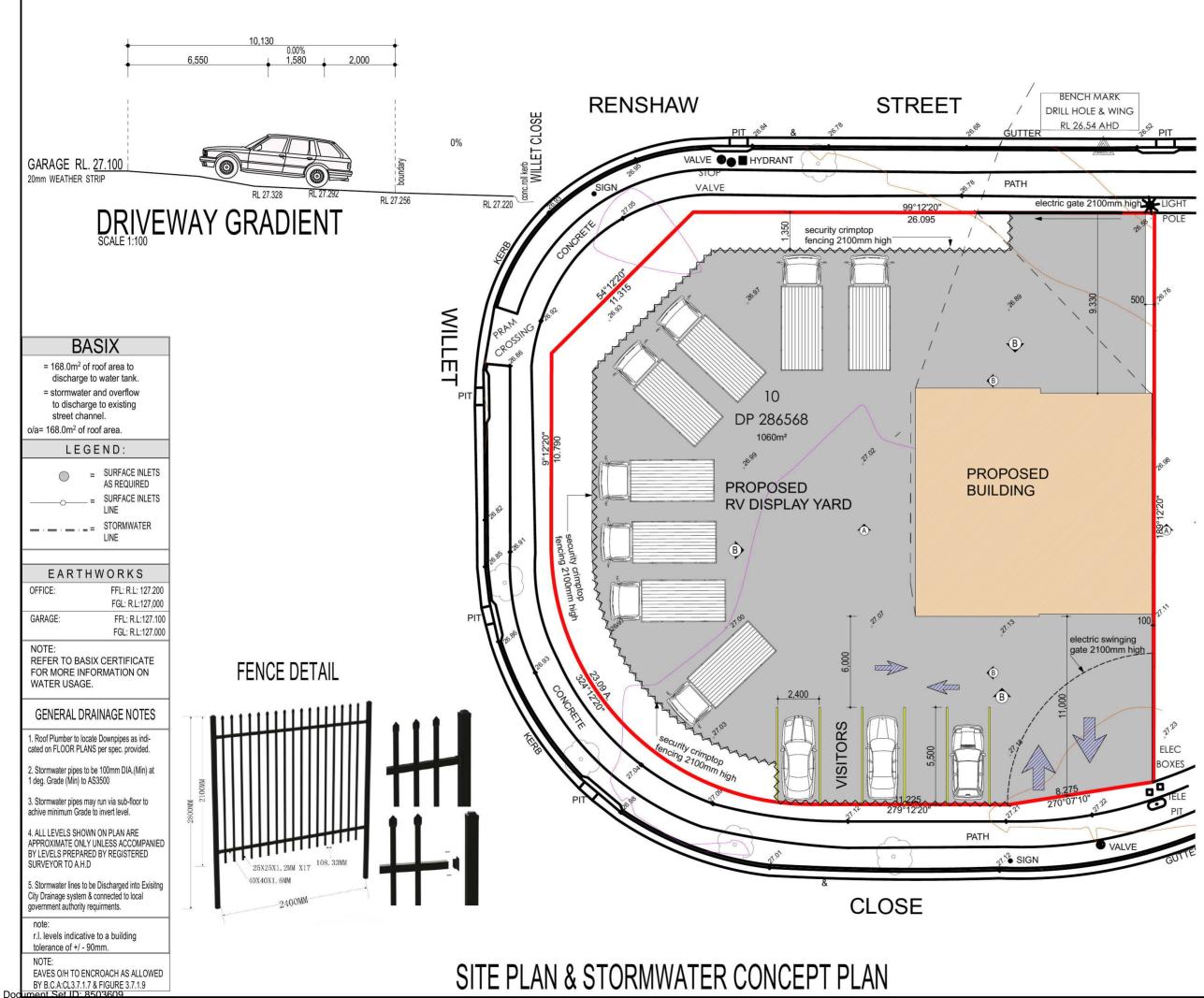
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DEVELOPMENT CALCULATIONS

DEVELOPMENT CALCULATIONS						
LOT:10 SITE AREA: 1000m ²						
Itemised Floor Areas:	Totals:					
Ground Floor: Upper Floor: Workshop:	35.0m ² : 71.0m ² : 75.0m ² :					
Carport:	41.0m ² :					
total floor area:	222.0m ² :					
SITE AREA COVERAGE / LANDSCAPE:						
SITE AREA COVERAGE / L	ANDSCAPE:					
SITE AREA COVERAGE / L Proposed Building	ANDSCAPE: 110.0m ² :					
	1010-00-00-00-00-00-00-00-00-00-00-00-00					
Proposed Building	110.0m ² :					
Proposed Building Proposed carport	110.0m ² : 41.0m ² :					
Proposed Building Proposed carport Total site coverage area:	110.0m ² : 41.0m ² : 151.0m ² :					
Proposed Building Proposed carport Total site coverage area: landscape area soft:	110.0m ² : 41.0m ² : 151.0m ² : 122.0m ² :					

COUNCIL ZONE:

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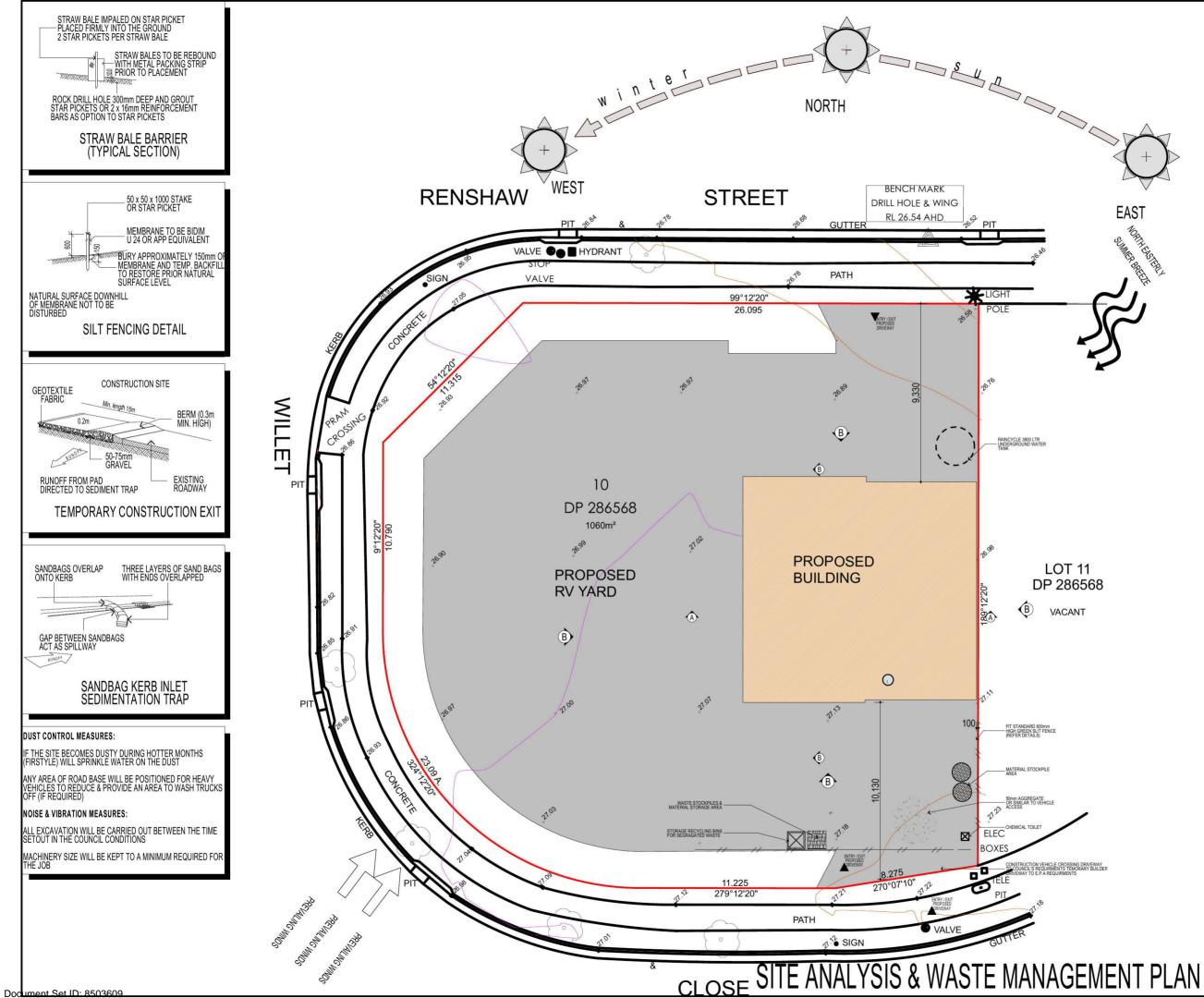
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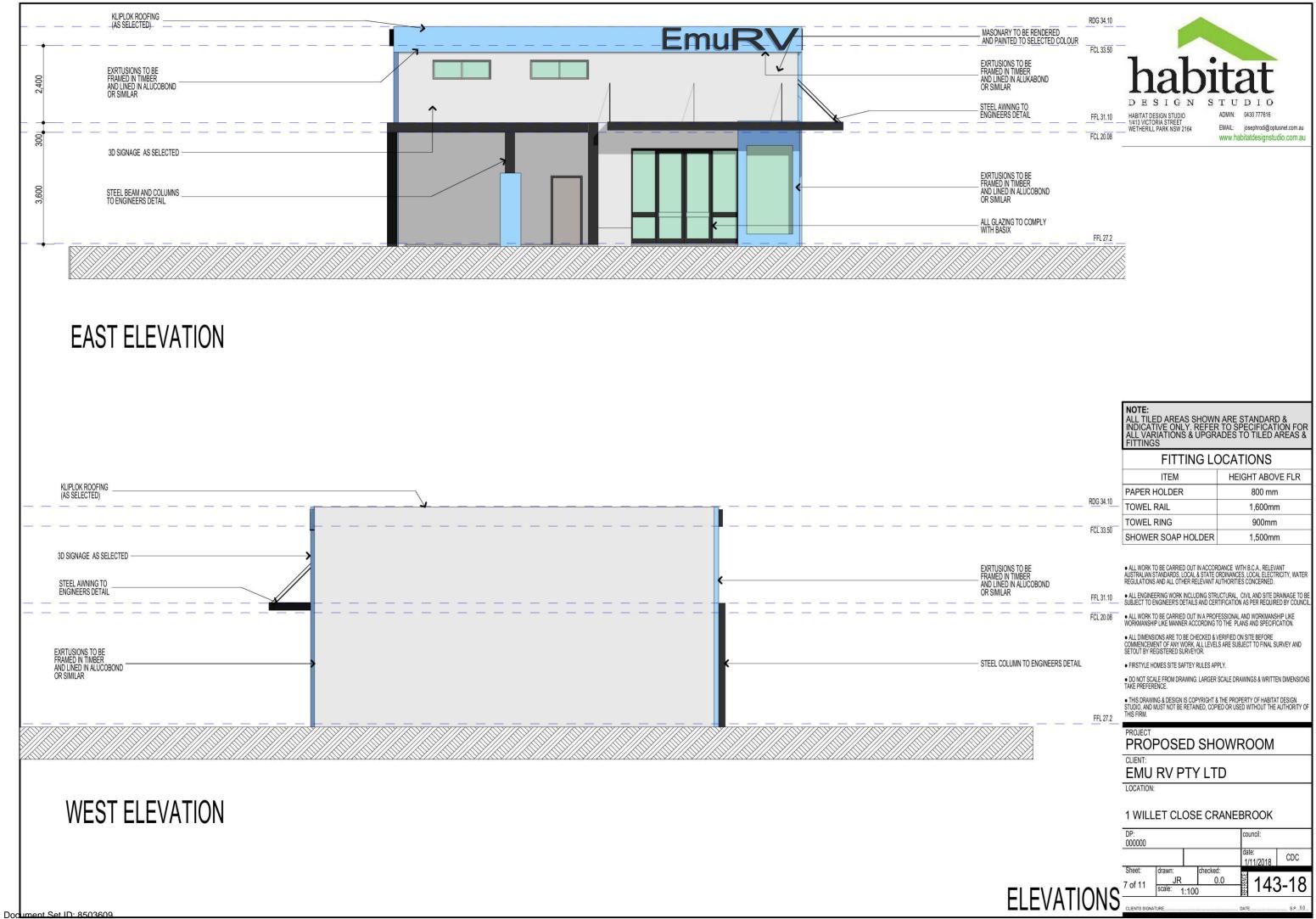
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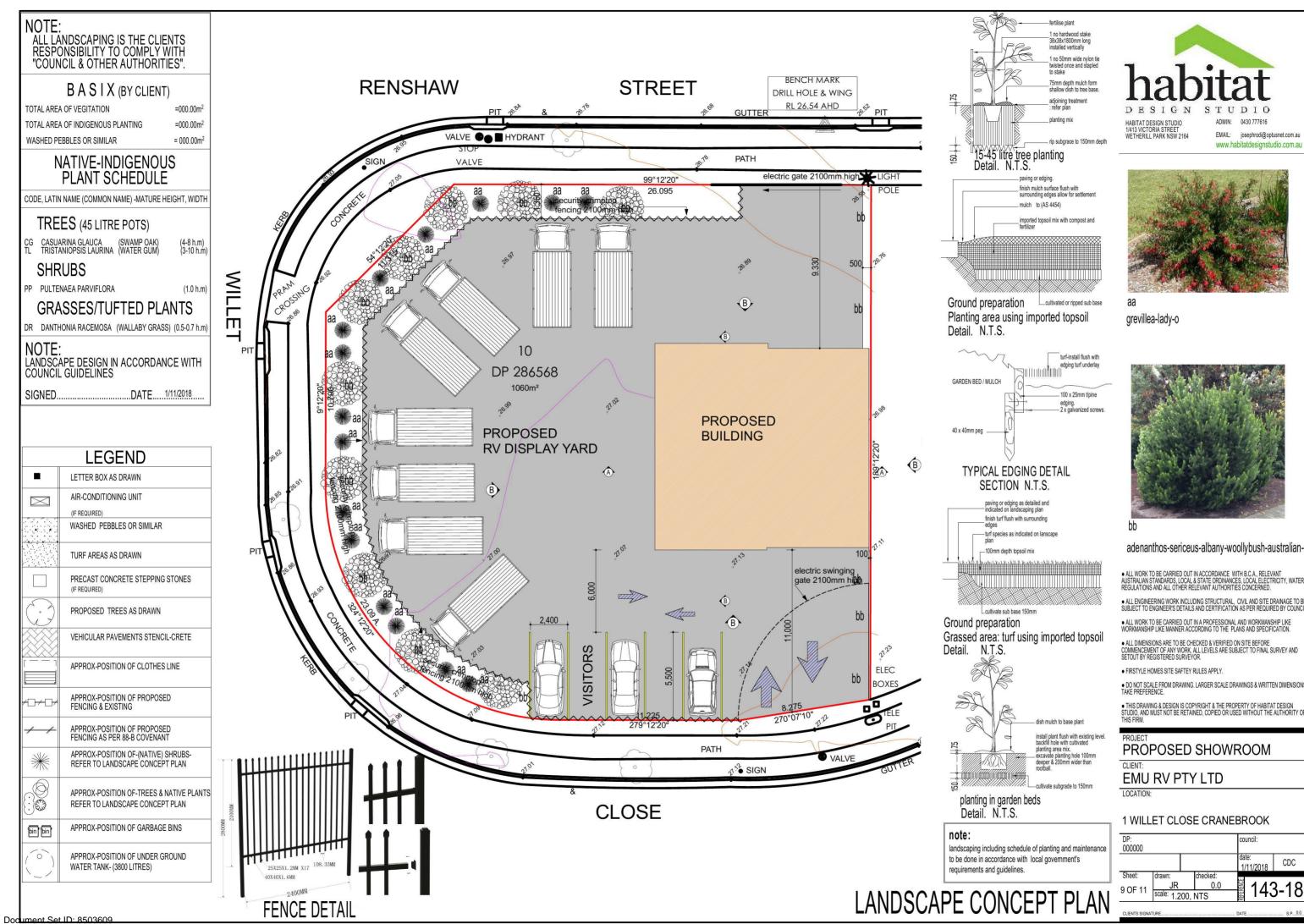
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EMAIL: josephrodi@optusnet.com.au www.habitatdesignstudio.com.au

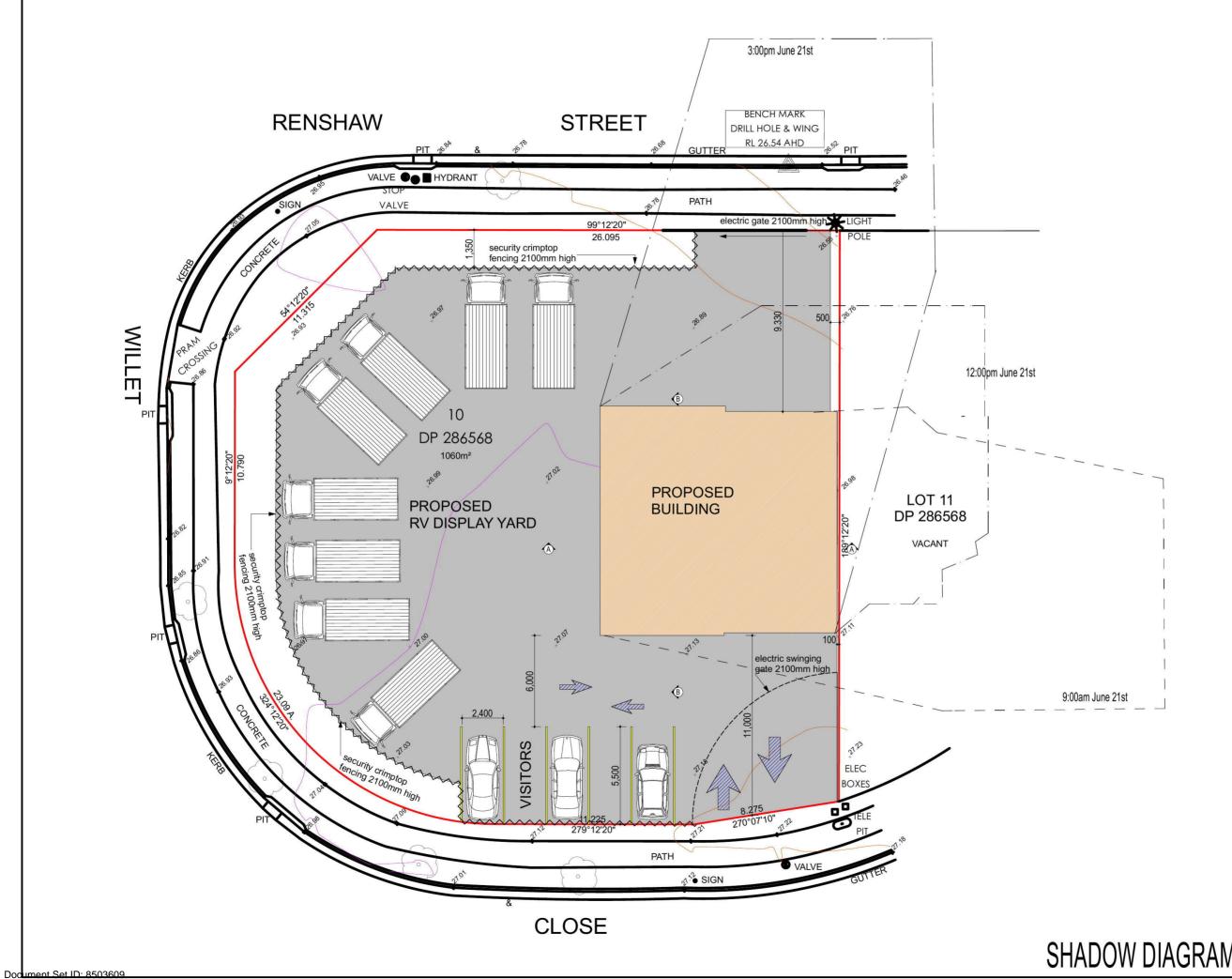






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SHADOW DIAGRAM

9:00am June 21st

12:00pm June 21st

3:00pm June 21st

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