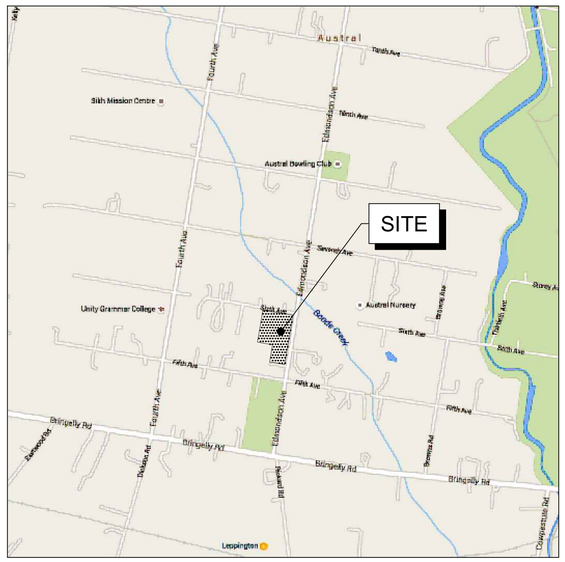

Mott MacDonald

vantage property

Proposed Subdivision

230 Sixth Avenue and
68 Edmondson Avenue, Austral

Development Application Drawings

MMD-369954-C-DR-AB-XX-0001 P3
Date: 08.05.17

General Notes

GN1 All work to be carried out in accordance with Liverpool City Council's standards and to the requirements of Council.

GN2 No work to be carried out on adjoining properties without written permission of property owner or responsible authority.

GN3 No trees are to be removed except for those noted on plan without written permission from Council.

GN4 All workmanship and materials shall comply with the National Construction Code of Australia and the relevant current Australian Standards.

GN5 Any discrepancies, omissions or errors shall be reported to the Superintendent for clarification before proceeding with the work.

GN6 Do NOT scale measurements from the drawings.

GN7 All compaction works for footpaths and pavements shall be done without the use of any form of vibrating machines or plant.

Siteworks Notes

SN1 Datum : Australian Height Datum (AHD)
Origin of levels : PM44228
Origin of co-ordinates : Mapping Grid Of Australia (MGA)
Survey prepared by : Apex Surveying
Suit 6 ,16 Hill Street Camden NSW 2570
(02) 46 559 485

SN2 The contractor must verify all dimensions and existing levels on site prior to commencement of work, and report any discrepancies to the superintendent.

SN3 All existing services (including any not shown on the plans) must be accurately located in position and level prior to any excavation. Any discrepancies shall be reported to the superintendent. minimum service clearances shall be maintained from the relevant service authority.

SN4 The contractor shall arrange for all setting out by a registered surveyor.

SN5 It is the contractors responsibility to notify the Department of Land and Property Information NSW, of any survey marks that will be destroyed in the construction of works.
Contact Head Office on 1300 052 637 www.lpi.nswgov.au and http://scims.lpi.nsw.gov.au/status_report_frames.html

SN6 The contractor shall obtain all regulatory authority approvals at their own expense.

SN7 Where new works abut existing, the contractor must ensure that a smooth and even profile, free from abrupt changes is obtained.

SN8 All disturbed areas shall be restored to their original condition, unless specified otherwise.

SN9 Excavated trenches shall be compacted to the same density as the adjacent natural material. Any subsidence's during the period to be rectified as directed by the superintendent.

SN10 Any existing trees which form part of the final landscaping plan will be protected from construction activities in accordance with the landscape architect's details and / or by -

Protecting them with barrier fencing or similar materials installed outside the drip line, ensuring that nothing is nailed to them, prohibiting paving, grading, sediment wash or placing of stockpiles within the drip line except under the following conditions -
Encroachment only occurs on one side and no closer to the trunk than either 1.5m or half the distance between the outer edge of the drip line and the trunk, which ever is the greater, a drainage system that allows air and water to circulate through the root zone (eg a gravel bed) is placed under all fill layers of more than 300mm care is taken not to cut roots unnecessarily nor to compact the soil around them.

SN11 Receptors for concrete and mortar slurries, paints, acid washings, light-weight waste materials and litter are to be emptied as necessary. Disposal of waste shall be in a manner approved by the superintendent or as specified in the works contract.

Existing Services Notes

ES1 Existing services have been plotted from supplied data and as such their accuracy cannot be guaranteed. It is the responsibility of the contractor to establish the location and level of all existing services prior to the commencement of any work. Any discrepancies shall be reported to the superintendent.

ES2 The contractor shall allow for the capping off, excavation and removal if required of all redundant existing services in areas affected by works within the contract area, as shown on the drawings unless directed otherwise by the superintendent.

ES3 The contractor shall ensure that at all times services to all buildings not affected by the works are not disrupted.

ES4 If required, the contractor shall construct temporary services to maintain existing supply to buildings remaining in operation during works to the satisfaction and approval of the superintendent. Once diversion is complete and commissioned the contractor shall remove all such temporary services and make good to the satisfaction of the superintendent and the relevant service authority.

ES5 Interruption to supply of existing services shall be done so as not to cause any inconvenience to the principal. The contractor is to gain approval from the superintendent for time of interruption - the contractor is responsible for all liaison.

ES6 All branch gas and water services under driveways and brick paving shall be located in Ø80mm uPVC sewer grade conduits extending a minimum of 500mm beyond the edge of paving.

ES7 Clearance and cover requirements shall be obtained from the relevant service authority before commencement of works and shall be adhered to at all times.

ES8 Care is to be taken when excavating near existing services. No mechanical excavations are to be undertaken over telecom or electrical services. Hand excavate in these areas only .

Earthworks Notes

EW1 All work shall comply with AS3798 (2007) - Guidelines on earthworks for commercial and residential developments.

EW2 All work shall comply with the project geotechnical report -
GeoLogix
160167_Rpt03FinalV01
September 2016

EW3 Strip topsoil to expose naturally occurring engineering material and stockpile on site for reuse as directed by the superintendent.

EW4 All soft, wet or unsuitable material to be removed as directed by the superintendent and replaced with approved fill material.

EW5 All fill material shall be from a source approved by the superintendent and shall comply with the following -
a) free from organic and perishable matter,
b) maximum particle size 75mm,
c) plasticity index - between 2% and 15%.

EW6 All fill material shall be placed in maximum 200mm thick layers and compacted at optimum moisture content (+ or - 2%) to achieve a dry density determined in accordance with AS1289.5.1.1 - 2003 - Methods of Testing Soils for Engineering Purposes, of not less than the following standard minimum dry density -

location	standard dry density
under building slabs	98%
vehicular paved areas	100%
non-vehicular paved areas	98%
landscaped areas	95%

EW7 The contractor shall program the earthworks operation so that the working areas are adequately drained during the period of construction. The surface shall be graded and sealed off to remove depressions, roller marks and similar which would allow water to pond and penetrate the underlying material. any damage resulting from the contractor not observing these requirements shall be rectified by the contractor at their own expense.

EW8 Testing of the fill material shall be carried out by an approved NATA registered laboratory at the contractors expense.

EW9 Where the subgrade is unable to support construction equipment, or it is not possible to compact overlying pavement layers, only because of the subgrade moisture content, then the contractor shall condition or replace the material at the contractors discretion and expense.

EW10 Earthworks calculations are volumetric only and do not allow for bulking of excavated material. It is the contractors responsibility to make allowances for these items as part of the tender / works.

EW11 No allowance has been made for footings or foundations, retaining walls or trenching. It is the contractors responsibility to make allowances for these items as part of the tender / works.

Stormwater Notes

SW1 For residential subdivisions and public roads -

All Ø375mm to Ø600mm drainage pipes shall be Class 4 approved spigot and socket reinforced concrete pipes with rubber ring joints (UNO). All Ø675mm or larger drainage pipes shall be Class 3 approved spigot and socket reinforced concrete pipes with rubber ring joints (UNO).

All PVC-u drainage pipes in footways or access ways shall be DWV grade Class SN8 in accordance with AS/NZS 1260:2009 - PVC-u Pipes and Fittings for Drain, Waste and Vent Application. Heavy duty PVC-u pipes to be in accordance with AS/NZS 1254 : 2010 - PVC Pipes and Fittings for Storm and Surface Water Applications may be used within allotments.

SW2 For commercial or industrial sites -

All Ø300mm to Ø600mm drainage pipes shall be Class 4 approved spigot and socket reinforced concrete pipes with rubber ring joints (UNO). All Ø675mm or larger drainage pipes shall be Class 3 approved spigot and socket reinforced concrete pipes with rubber ring joints (UNO).

All drainage pipes less than or equal to Ø225mm shall be PVC-u DWV grade Class SN8 in accordance with AS/NZS 1260 : 2009 - PVC-u Pipes and Fittings for Drain, Waste and Vent Application with solvent welded joints.

SW3 Equivalent strength fibrous reinforced concrete (F.R.C.) and / or high density polyethylene (H.D.P.E.) may be used subject to approval by the superintendent.

SW4 All pipe junctions up to and including Ø450mm and tapers, shall be via purpose made fittings (UNO).

SW5 Minimum grade to stormwater lines to be 1% (UNO).

SW6 Contractor to supply and install all fittings and specials including various pipe adaptors to ensure proper connection between dissimilar pipework.

SW7 All connections to existing drainage pits shall be made in a tradesman-like manner and the internal wall of the pit at the point of entry shall be cement rendered to ensure a smooth finish with no protrusions.

SW8 All in-situ concrete pits to be 32Mpa minimum at 28 days.

SW9 Pits and pipes in areas of salinity hazard shall have increased cover to any reinforcement.

SW10 Precast concrete pits may be installed in lieu of cast in-situ pits, when pipe junctions are accommodated within the overall dimensions of the pit, and approved by the superintendent.

SW11 Pits deeper than 1000mm shall have step irons installed in accordance with the local or statutory authority requirements.

SW12 Bedding shall be Type H2 (UNO) for pipes not under pavements, and Type HS2 for pipes under pavements in accordance with AS/NZS 3725 : 2007 - Design for Installation of Buried Concrete Pipes.

SW13 Backfill trench with sand or approved granular backfill to 300mm (min) above the pipe. Where the pipe is under pavements backfill remainder of trench to pavement subgrade with sand or approved gravel sub-base compacted in 150mm layers to 98% standard maximum dry density. The contractor is to ensure compaction equipment is appropriate for the pipe class used.

SW14 Where stormwater lines pass under floor slabs DWV grade PVC-u rubber ring joints are to be used (UNO).

SW15 Where subsoil drainage lines pass under floor slabs and vehicular pavements, unslotted PVC-u DWV grade Class SN8 pipe shall be used.

SW16 Provide 3m length of Ø100mm subsoil drainage line or 200 'Nylex' strip drain surrounded with 150mm of 20mm blue metal or gravel, and wrapped in 'Bidim' A24 geotextile filter fabric or approved equivalent, at invert of incoming upstream pipe on each pit.

Asphaltic Concrete Notes

General

AC1 Asphaltic concrete mix design, manufacture, placing and compaction shall be in accordance with RMS Specification R116-Asphalt (dense graded and open graded) and AS2150-2005 - Hot Mix Asphalt - A Guide To Good Practice. Annexure R116/1 to be completed by subcontractor and submitted for approval by superintendent 7 days prior to AC works.

AC2 Mineral filler to comply with AS2150 - 2005 - Hot Mix Asphalt - A Guide to Good Practice.

Mix Proportions

AC3 Job mix - 7mm nominal size aggregate. Minimum bitumen content (%) by (mass of total mass) - 5.1%.

AC4 Mix stability - between 16kn and 36kn as determined by RMS test method T601 - Compaction of Test Specimens of Dense Grade Bituminous Mixtures and T603 - Stability of Dense Grade Bituminous Mixtures.

AC5 Air voids in compacted mix - between 4% of volume and 7% of the mix. Voids filled in binder. 65-80% of air voids in the total mineral aggregate filled by binder in accordance with RMS test method T601 - Compaction of Test Specimens of Dense Grade Bituminous Mixtures, T605 - Maximum Density of Bituminous Plant Mix and T606 - Bulk Density of Compacted Dense Graded Bituminous Mixtures.

Pavement Preparation

AC6 The existing surface to be sealed, shall be dry and broomed before commencement of work to ensure complete removal of all superficial foreign and loose matter.

AC7 All depressions or uneven areas are to be tack-coated and brought up to general level of pavement with asphaltic concrete before laying of main course.

Tack Coat

AC8 The whole of the area to be sheeted with asphaltic concrete shall be lightly and evenly coated with rapid setting bitumen. Application rate for residual bitumen shall be 0.15 to 0.30 litres/square metre. Application shall be by means of a mechanical sprayer with spray bar.

Spreading

AC9 All asphaltic concrete shall be spread with a self propelled paving machine.

AC10 The asphaltic concrete shall be laid at a mix temperature as shown below -

road surface temp in shade (°c)	mix temperatures (°c)
5 - 10	not permitted
10 - 15	150
15 - 25	145
25+	140

AC11 Asphaltic concrete shall not be laid when the road surface is wet or when cold winds chill the mix to adversely affect temperature of mix during spreading and compaction operations.

AC12 The minimum compacted thickness is 50mm in two (2) layers.

Joints

AC13 The number of joints both longitudinal and transverse shall be kept to a minimum.

AC14 The density and surface finish at joints shall be similar to those of the remainder of the layer.

Compaction

AC15 All compaction shall be undertaken using self propelled rollers.

AC16 Initial rolling shall be completed before the mix temperature falls below 105°c.

AC17 Secondary rolling shall be completed before the mix temperature falls below 60°c.

AC18 Minimum characteristic value of relative compaction of a lot when tested in accordance with AS2150 - 2005 - Hot Mix Asphalt - A Guide to Good Practice, shall be 95%.

Finished Pavement Properties

AC19 Finished surfaces shall be smooth, dense and true to shape and shall not vary more than 10mm from the specified plan level at any point and shall not deviate from the bottom of a 3m straight edge laid in any direction by more than 5mm.

Bitumen Sealing Notes

Pavement Preparation

BS1 The surface to be sealed shall be dry and broomed before commencement of work to ensure complete removal of all superficial, foreign and loose matter.

BS2 If approved by the superintendent, all depressions or uneven areas are to be tack-coated and brought to general level of pavement with asphaltic concrete before sealing commences.

Material

BS3 Binder shall be class 170 to AS2008 -1997 - Residual Bitumen for Pavements, or approved proprietary material for priming and prime-sealing.

BS4 Aggregate shape, durability and wet to dry strength shall comply to AS2758.2 - 2009 - Aggregates and rock for Engineering Purposes for Class "N" Aggregates.

BS5 A 20kg sample of aggregate proposed for use shall be approved by the superintendent prior to use.

BS6 Aggregates shall be delivered uniformly precoated, excessive or uneven precoating may result in aggregates being rejected.

BS7 For two coat flush seals, the size of the aggregate for the second coat, while normally half that of the first coat, shall be dimensionally compatible with that of the first coat.

BS8 Precoating agents shall be compatible with the aggregates and binder to be used.

Design

BS9 Design of sprayed bituminous seals shall be carried out in accordance with the Austroads (NAASRA) publication, "Principles and Practice of Bituminous Surfacing, Volume 1 - Sprayed Work".

BS10 Where not indicated on the drawings, primers and primer-seals shall be designed to remain intact until final sealing takes place, having regard for the traffic and climatic conditions pertaining.

BS11 Unless otherwise specified, binder application rates shall be selected to fill 85% of the theoretical voids of the mat.

Primer-sealing

BS12 A single coat primer-seal using a suitable cut-back or proprietary binder shall be applied to basecourse material for protection of pavement during construction.

Bitumen Flush Sealing

BS13 Bitumen flush seals shall be either single or double coat as shown on the drawings, eg 20/10 indicates a double coat flush seal using two applications of bitumen and aggregate, the first aggregate layer being of 20mm nom. size, the second 10mm.

BS14 Cover aggregate shall be spread immediately after spraying of binder. In no case shall spreading be delayed more than 8 minutes (or so that bitumen has cooled such that adhesion of aggregate is compromised).

BS15 All spray records, aggregate supply tonnage and receipts shall be retained and passed onto the superintendent as part of the quality assurance procedures.

Concrete Notes

General

CN1 Use "AS3972 - 2010 - General purpose and blended cements - Type GP" cement (UNO).

CN2 All concrete shall be subject to project control sample and testing to AS3600 - 2009 - concrete structures.

CN3 Consolidate all concrete, including footings and slabs on ground with mechanical vibrators.

CN4 Cure all concrete as follows -
- keep surfaces continuously wet for 3 days, then
- prevent moisture loss for the next 4 days using polythene sheeting or wet hessian protected from wind and traffic, and then allow drying out.
- curing compounds may be used provided that they comply with AS3799 and they do not affect floor finishes.
- PVA-based curing compounds are NOT acceptable.

CN5 Fix reinforcement as shown on drawings. The type and grade is indicated by a symbol as shown below -

N	hot rolled deformed bar, grade 500
R	plain round bar, grade 250
SL / RL	hard drawn wire fabric square or rectangular

following this symbol a numeral indicates the specified diameter.

CN6 Provide bar supports or spacers to provide concrete cover as detailed to all reinforcement.

Concrete Pavements

CN7 Concrete mix parameters -
maximum aggregate size 20mm
flexural strength at 28 days = 3.5 MPa, F'c= 32 MPa, (UNO)
flexural strength at 90 days = 3.85 MPa
max water/cement ratio = 0.55
max shrinkage limit = 650 micron strains (AS1012.13-1992)
min cement content = 300kg/m³
cement to be type "SL" (normal cement) to AS3972-2010
slump = 80mm

CN8 Early age saw cutting ('softcut') or similar shall be used for initial saw cut. It is to be performed as soon as the concrete has hardened sufficiently, to prevent excessive chipping, spalling, or tearing regardless of time or weather conditions.

CN9 Joint layout shall be as detailed on the plans.

CN10 Provide 10mm wide expansion joints between all buildings, other structures and pavements.

CN11 Bond breaker to be two (2) uniform coats of bitumen emulsion all over the exposed surface and on end.

CN12 Dowels and tie bars to meet strength requirements of structural grade steel in accordance with AS ISO 1302 - 2005 - geometrical product specifications.
Dowels and tie bars shall be -
straight,
to length specified,
all dowels to be hot dip galvanised,
sawn to length not cropped.

CN13 Dimensions of sealant reservoir dependant on the sealant type adopted. Superintendent approval to be obtained for sealant and reservoir dimensions and detail proposed by the contractor. Refer to plans for typical arrangement and sealant.

CN14 Prior to the placement of concrete in the adjacent slab, 'Ableflex' filler shall be adhered to the already cast and cleaned concrete face using an approved waterproof adhesive. Adhesive shall be liberally applied to the full face of the concrete slab to be covered by the filler, and on the full face of the filler to be adhered.

CN15 The base course shall be kept moist (not wet) by sprinkling with water immediately prior to pouring the concrete.

CN16 All work to be finished to satisfy its intended use as shown on the plans, and / or in accordance with the specification.

Kerbing Notes

CN17 All concrete kerbs to have a minimum characteristic compressive strength F'c=25MPa (UNO).

CN18 All kerbs, dish drains, etc. to be constructed on 75mm minimum base course.(UNO on the Drawings)

CN19 Kerb expansion joints shall be formed from 10mm 'Abelflex' (or approved equivalent) for the full depth of the section.

CN20 Expansion joints shall be located at drainage pits, tangent points of curves and elsewhere at 12m maximum spacing (UNO).

CN21 Tooled joints shall be min 3mm wide and located at maximum 3m spacing.

CN22 Integral kerb joints shall match the location of the pavement jointing.

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P3	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

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Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral
General Notes Sheet

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	

Scale at A1: N/A | Status: APR | Rev: P3 | Sec: STD

Drawing Number: MMD-369954-C-DR-AB-XX-0002

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P3

Drawing List

Drawing Number	Drawing Title
MMD-369954-C-DR-AB-XX-0001	Cover Sheet
MMD-369954-C-DR-AB-XX-0002	General Notes Sheet
MMD-369954-C-DR-AB-XX-0003	General Legend Sheet
MMD-369954-C-DR-AB-XX-0010	General Arrangement Plan
MMD-369954-C-DR-AB-XX-0020	Proposed Subdivision Plan
MMD-369954-C-DR-AB-XX-0030	Soil and Water Management Plan
MMD-369954-C-DR-AB-XX-0031	Soil and Water Management Details
MMD-369954-C-DR-AB-XX-0040	Alignment Control Plan
MMD-369954-C-DR-AB-XX-0050	Typical Road Cross Section Sheet 1
MMD-369954-C-DR-AB-XX-0051	Typical Road Cross Section Sheet 2
MMD-369954-C-DR-AB-XX-0060	Road Longitudinal Sections Sheet 1
MMD-369954-C-DR-AB-XX-0061	Road Longitudinal Sections Sheet 2
MMD-369954-C-DR-AB-XX-0062	Road Longitudinal Sections Sheet 3
MMD-369954-C-DR-AB-XX-0063	Road Longitudinal Sections Sheet 4
MMD-369954-C-DR-AB-XX-0064	Road Longitudinal Sections Sheet 5
MMD-369954-C-DR-AB-XX-0070	Siteworks and Stormwater Management Plan Sheet 1
MMD-369954-C-DR-AB-XX-0071	Siteworks and Stormwater Management Plan Sheet 2
MMD-369954-C-DR-AB-XX-0072	Siteworks and Stormwater Management Plan Sheet 3
MMD-369954-C-DR-AB-XX-0073	Siteworks and Stormwater Management Plan Sheet 4
MMD-369954-C-DR-AB-XX-0075	Siteworks Details Sheet 1
MMD-369954-C-DR-AB-XX-0080	Earthworks Depth Plan
MMD-369954-C-DR-AB-XX-0090	Siteworks Sections
MMD-369954-C-DR-AB-XX-0100	Basin Details
MMD-369954-C-DR-AB-XX-0110	Catchment Plans Regional
MMD-369954-C-DR-AB-XX-0111	Catchment Plans Drains
MMD-369954-C-DR-AB-XX-0112	Catchment Plans Music
MMD-369954-C-DR-AB-XX-0120	Swept Path Analysis Waste Collection Vehicle
MMD-369954-C-DR-AB-XX-0130	Signposting and Linemarking Plan

Survey Legend

- 268 02' 198.12 — Existing boundary, bearing and distance
- PINE — Existing road name
- SHED — Existing building
- 23.45 — Existing kerb and spot levels
- BLOCK WALL — Existing block wall
- MESH FENCE — Existing fence
- x 12.28 — Existing spot level
- Existing earth batter
- 22.68 TREE 0.3D 8H 4S — Existing tree, level, trunk diameter, height and spread
- ee — Existing electricity (underground)
- ee — Existing electricity (overhead)
- eg — Existing gas
- es — Existing sewer
- 250mm DIA. PIPE INV.12.4 — Existing stormwater drainage
- ew — Existing water
- et — Existing telecommunications (underground)
- Existing electricity pit, pole, pole with light and light pole
- Existing gas valve
- Existing sewer pit and maintenance hole
- Existing stormwater grate, maintenance hole and pit
- Existing water hydrant, stop valve and valve
- Existing telecommunications pit and pillar
- Existing maintenance hole (unspecified)
- Existing pole (unspecified)
- Existing pit (unspecified)
- Existing traffic signal

Civil Works Legend

- ROAD No1 — Road name / number
- CH 200 — Design control line and chainage
- Sawcut existing pavement
- KG — Construct kerb and gutter to Liverpool Council Standard Drawing No. R2
- DD — Construct dish drain to Liverpool Council Standard Drawing No. R2
- PR — Construct kerb pram ramp to Liverpool Council Standard Drawing No. R17
- VC — Construct kerb pram ramp to Liverpool Council Standard Drawing No. R25
- Construct batter
- RW — Construct structural retaining wall (height > 600mm). Details to be confirmed in detailed design stage.
- 10.00 — Major contour
- 9.50 — Minor contour

Pavement Legend

- Asphaltic Concrete Pavement
  Details to be confirmed during detailed design stage.
- Concrete Footpath Pavement
  In accordance with Liverpool Council Standard Drawing No. R23
- Concrete Driveway Pavement
  In accordance with Liverpool Council Standard Drawing No. R25
  Surface finish to Landscape Architect's details.
- Proposed Landscaping
  Refer to Landscape Plan for details.

All pavements are indicative only. To be confirmed by Geotechnical Engineer.

Stormwater Drainage Legend

- A1 — Stormwater drainage structure / pit number
- Surface inlet pit in accordance with Liverpool Council Standard Drawing No. D22
- Kerb inlet pit with lintel (at sag) in accordance with Liverpool Council Standard Drawing No. D8
- Kerb inlet pit with lintel (on grade) in accordance with Liverpool Council Standard Drawing No. D8
- Ø375 SW — Proposed stormwater drainage line with pipe size
- Construct temporary stormwater detention basin. Refer drawing MD-369954-C-DR-AB-XX-0015 for details

Preliminary - Not for Construction

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P3	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

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Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral
General Legend Sheet

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	
Scale at A1: N/A	Status: APR		Rev: P3	Sec: STD	

Drawing Number: MMD-369954-C-DR-AB-XX-0003

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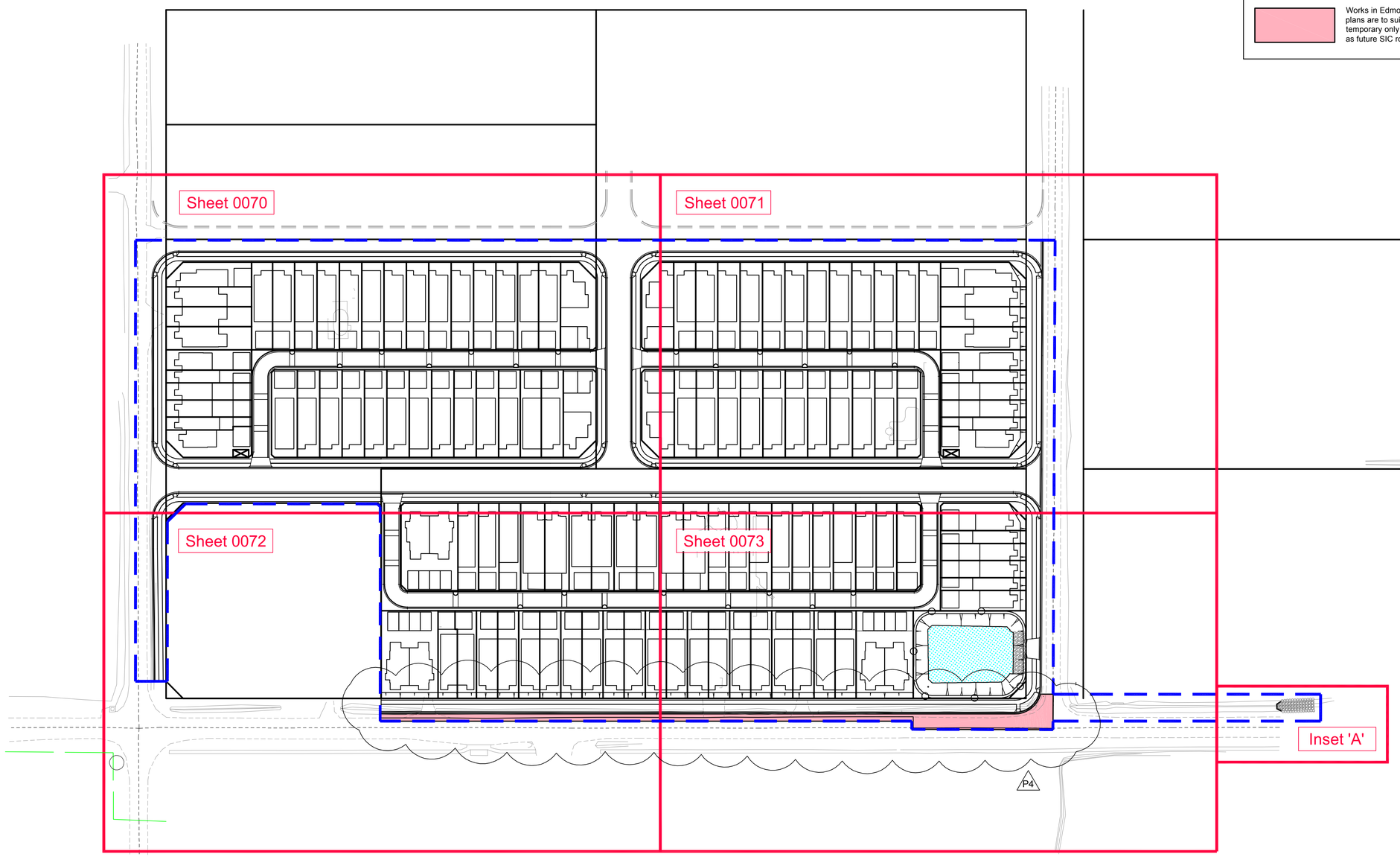

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P4	10.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P3	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
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Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral
General Arrangement Plan

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	
Scale at A1: NTS	Status: APR		Rev: P4	Sec: STD	

Drawing Number: MMD-369954-C-DR-AB-XX-0010

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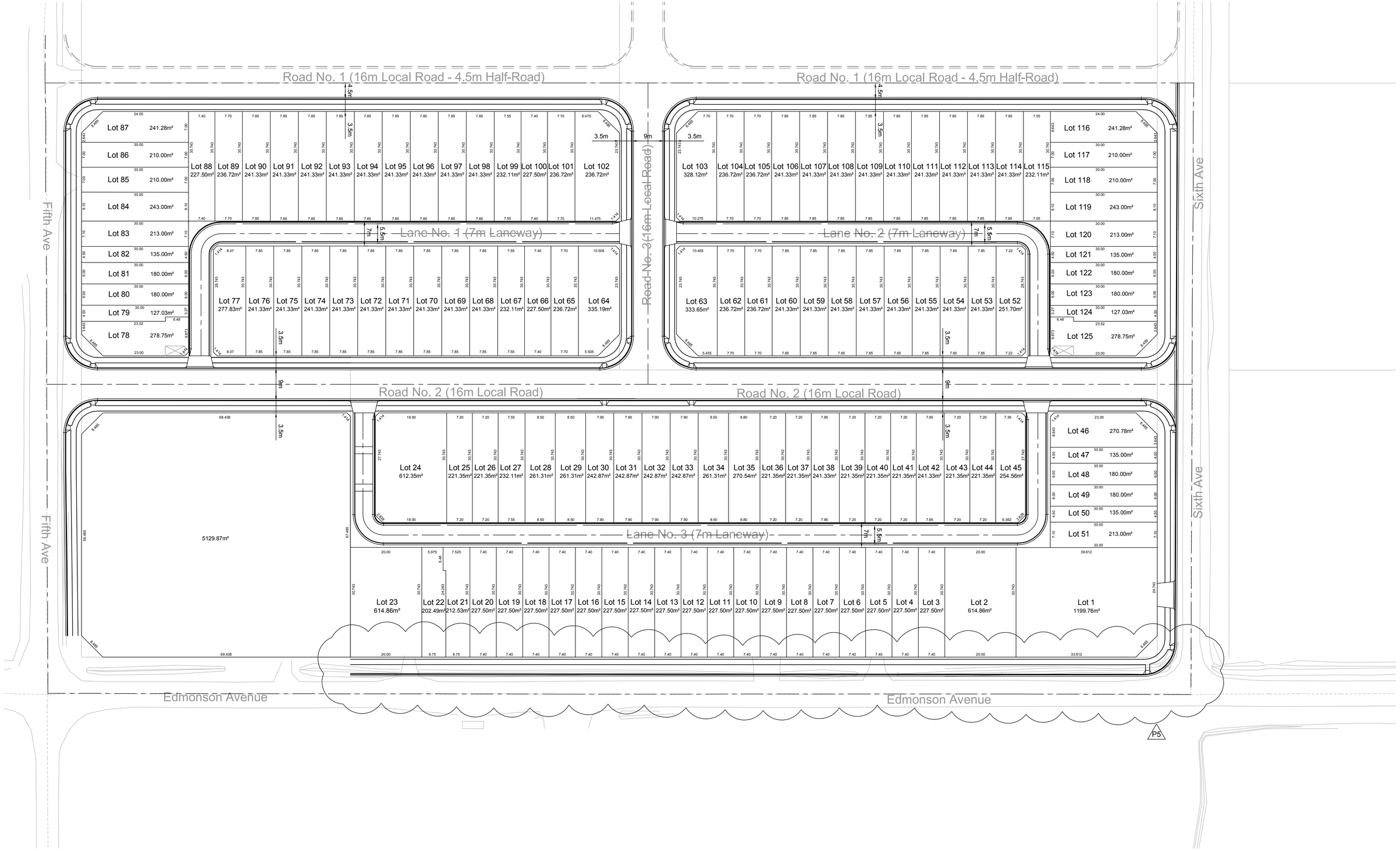

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P5	10.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P4	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P3	04.11.16	DRC	Issued for Development Application	DR	AC
P2	01.11.16	DRC	Re-Issued for Information	DR	AC
P1	27.10.16	DRC	Issued for Information	DR	AC

1:500 0 25m 50m

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Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral Proposed Subdivision Plan

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	
Scale at A1: 1:500	Status: APR		Rev: P5	Sec: STD	

Drawing Number: MMD-369954-C-DR-AB-XX-0020

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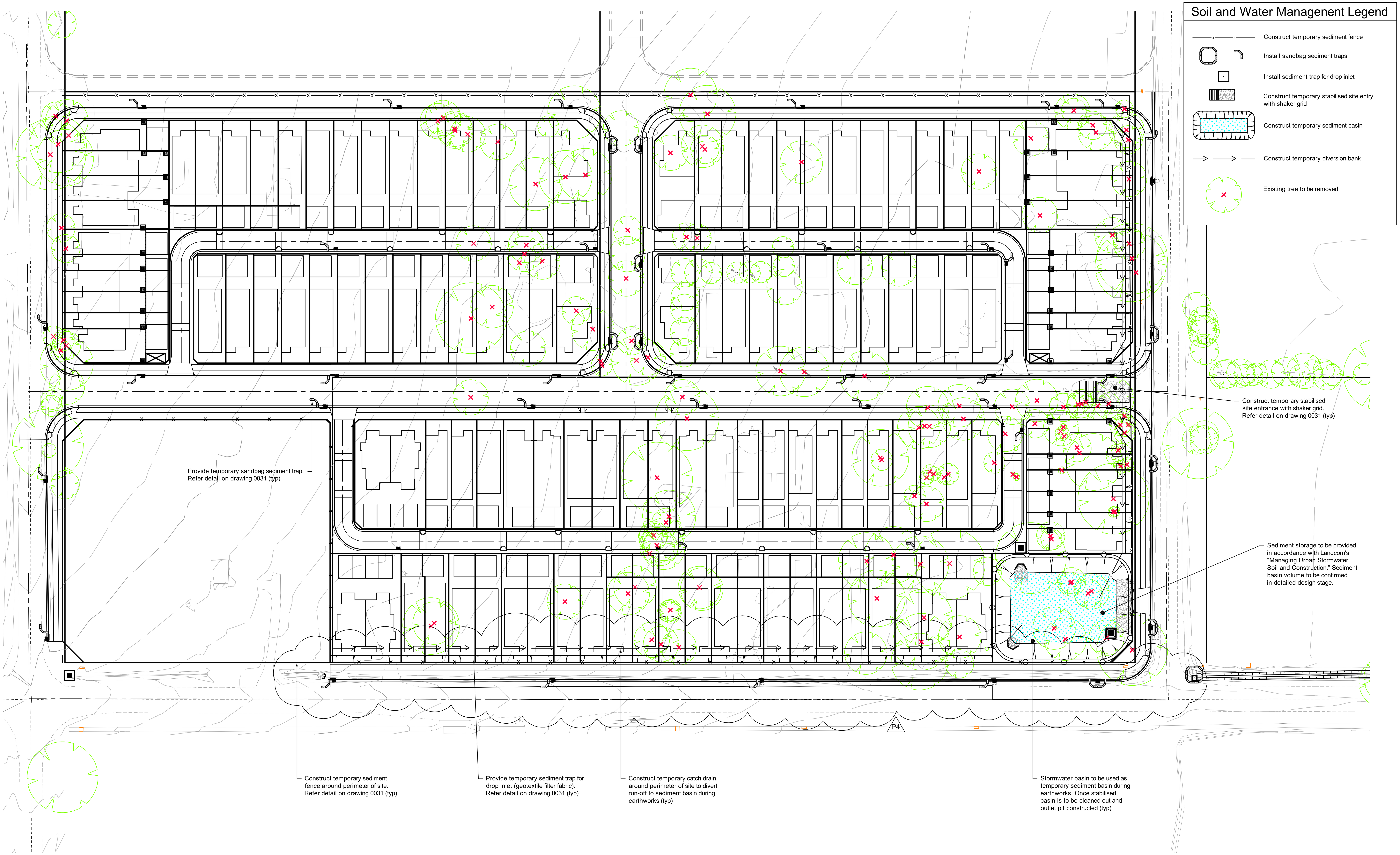
Soil and Water Managenent Legend
Construct temporary sediment fence
Install sandbag sediment traps
Install sediment trap for drop inlet
Construct temporary stabilised site entry with shaker grid
Construct temporary sediment basin
Construct temporary diversion bank
Existing tree to be removed
Provide temporary sandbag sediment trap. Refer detail on drawing 0031 (typ)
Construct temporary stabilised site entrance with shaker grid. Refer detail on drawing 0031 (typ)
Sediment storage to be provided in accordance with Landcom's "Managing Urban Stormwater: Soil and Construction." Sediment basin volume to be confirmed in detailed design stage.
P4
Construct temporary sediment fence around perimeter of site. Refer detail on drawing 0031 (typ)
Provide temporary sediment trap for drop inlet (geotextile filter fabric). Refer detail on drawing 0031 (typ)
Construct temporary catch drain around perimeter of site to divert run-off to sediment basin during earthworks (typ)
Stormwater basin to be used as temporary sediment basin during earthworks. Once stabilised, basin is to be cleaned out and outlet pit constructed (typ)

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P4	10.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P3	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

1:500 0 25m 50m

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Client
Vantage Property Group Pty Ltd

Title
230 Sixth Avenue and
38 Edmondson Avenue, Austral
Soil and Water Management
Plan

Designed	P.Cavanagh	Eng check	D.Reilly
Drawn	D.Chapman	Coordination	J.Taylor
Dwg check	A.Singh	Approved	A.Cameron

Scale at A1	Status	Rev	Sec
1:500	APR	P4	STD

Drawing Number
MMD-369954-C-DR-AB-XX-0030

This plan may be prepared using COLOUR and may be incomplete if copied to black and white.

Soil and Water Management Notes

General Instructions

SWM01 These plans present a conceptual soil and water management plan (SWMP) only and shows a possible way of managing soil and erosion. The contractor shall be responsible for the establishment and management of the site and preparing a detailed plan and obtaining approval from the relevant authority prior to the commencement of any works.

SWM02 This plan is to be read in conjunction with the engineering plans and any other plans, written instructions, specification or documentation that may be issued and relating to development of the subject site.

SWM03 The contractor will ensure that all soil and water management works are consistent with 'Managing Urban Stormwater - Soils and Construction' - also known as 'The Blue Book'.

SWM04 All builders and sub-contractors shall be informed of their responsibilities in minimising the potential for soil erosion and pollution to downslope lands and waterways.

Erosion Control

SWM05 Water shall be prevented from entering the permanent drainage system until sediment concentration is less then or equal to 50mg/L, ie the catchment area has been permanently landscaped and / or any likely sediment has been filtered through an approved structure.

SWM06 Any sand used in the concrete curing process (spread over the surface) will be removed as soon as possible and within 10 working days from placement.

SWM07 Acceptable receptors will be constructed for concrete and mortar slurries, paints, acid washings, light-weight waste materials and litter.

SWM08 'Sediment' fencing will be installed as indicated on the plans and at the direction of site superintendent to ensure containment of sediment. The sediment fencing will outlet or overflow under stabilised conditions into the sediment basin, to safely convey water into a suitable filtering system should the pores in the fabric block.

SWM09 Stockpiles should not be located within 5m of trees and hazard areas, including likely areas of concentrated or high velocity flows such as waterways, drainage lines, paved areas and driveways. Where they are within 5m from such areas, special sediment control measures should be taken to minimise possible pollution to downstream waters. Measures should also be applied to prevent the erosion of the stockpile.

SWM10 All cut and fill batters are to be seeded and mulched within 14 days of completion of formation.

SWM11 Any existing trees which form part of the final landscaping plan will be protected from construction activities by-

a. Protecting them with barrier fencing or similar materials installed outside the drip line,
b. Ensuring that nothing is nailed to them,
c. Prohibiting paving, grading, sediment wash or placing of stockpiles within the drip line except under the following conditions,

(i) Encroachment only occurs on one side and no closer to the trunk than either 1.5 metres or half the distance between the outer edge of the drip line and the trunk, which ever is the greater,

(ii) A drainage system that allows air and water to circulate through the root zone (e.g. a gravel bed) is placed under all fill layers of more than 300 millimetres depth

(iii) Care is taken.

SWM12 During windy weather, large disturbed unprotected areas should be kept moist (not wet) by sprinkling with water to keep dust under control.

SWM13 Temporary protection from erosive forces will be undertaken on lands where final shaping has not been completed but works are unlikely to proceed for periods of two months or more (eg. on topsoil stockpiles). This may be achieved with a vegetative cover. A recommended listing of plant species for temporary cover is -

i) autumn/winter sowing - oats/ryecorn at 20 kg/ha
- japanese millet at 10 kg/ha
ii) spring/summer sowing - japanese millet at 20 kg/ha
- oats/ryecorn at 10 kg/ha

SWM14 Diversion banks / channels will be rehabilitated as soon as possible and within 5 working days from their final shaping. Other than in the winter months, suitable materials include turf grasses such as Couch or Kikuyu. During winter, or at other times when temporary rehabilitation (more than 3 months) is required, it is suggested that hessian cloth is used but only if tacked with appropriate pegs and an anionic bitumen emulsion. Foot and vehicular traffic should be kept away from these areas.

SWM15 Undertake site development works in accordance with the engineering plans. Where possible, phase development so that land disturbance is confined to areas of workable size.

Construction Sequence

SWM16 Where practical, the soil erosion hazard on the site should be kept as low as possible. To this end, works should be undertaken in the FOLLOWING SEQUENCE -

(i) Install inlet sediment traps to all gully pits fronting the site,

(ii) Install a 1.8m chain wire fence around the boundaries and attach hessian cloth or similar to it on the windward side (ties at the top, centre and bottom and at 1m intervals or as instructed by the superintendent),

(iii) Install geofabric sediment fence and sediment traps around all permanent stormwater reticulation structures as shown on the plan,

(iv) Construct stabilised construction entrance as shown on the plan or to location as determined by superintendent,

(v) Install diversion banks along the boundary where required, rehabilitate disturbed lands downslope from the basins within 20 working days,

(vi) Ensure that the sediment basin is directed onto a turfed area and drains to a suitable location. A temporary stormwater line may be necessary to convey the flows to this location. Construct diversion channels at the boundary to drain into the sediment basin as shown on plans,

(vii) At completion stabilise site and decommission sediment basin and all erosion control devices.

SWM17 Temporary soil and water management structures will be removed only after the lands they are protecting are rehabilitated.

SWM18 Final site landscaping will be undertaken as soon as possible and within 20 working days from completion of construction activities.

Site Inspection and Maintenance

SWM19 At least weekly and after every rain fall event, the contractor will inspect the site and ensure that -

(i) Drains and all sediment control devices operate effectively and initiate repair or maintenance as required,

(ii) Receptors for concrete and mortar slurries, paints, acid washings, light-weight waste materials and litter are to be emptied as necessary. Disposal of waste shall be in a manor approved by the superintendent,

(iii) Spilled sand (or other materials) is removed from hazard areas, including likely areas of concentrated or high velocity flows such as waterways, gutters, paved areas and driveways,

(iv) Sediment is removed from basins and / or traps when less than 20m³ of trapping capacity remain per 1000m² of disturbed lands, and / or less than 500mm depth remains in the settling zone. Any collected sediment will be disposed in areas where further pollution to down slope lands and waterways is unlikely,

(v) Rehabilitated lands have effectively reduced the erosion hazard and initiate upgrading or repair as appropriate.

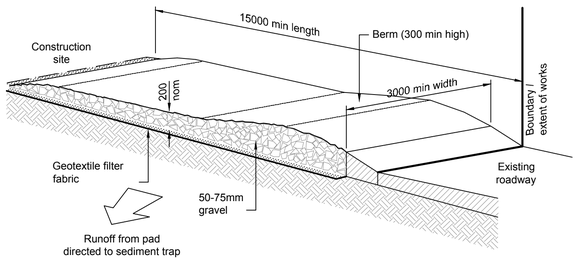
SWM20 The contractor shall provide all monitoring control and testing.

Note

This plan is a concept only. It is created to highlight some of the sediment and erosion control measures which may appear. The contractor is responsible for the final design and ensuring all measures are taken to protect the environment.

Soil and Water Managenent Legend

- Construct temporary sediment fence
- Install sandbag sediment traps
- Install sediment trap for drop inlet
- Construct temporary stabilised site entry with shaker grid
- Construct temporary sediment basin
- Construct temporary diversion bank
- Existing tree to be removed

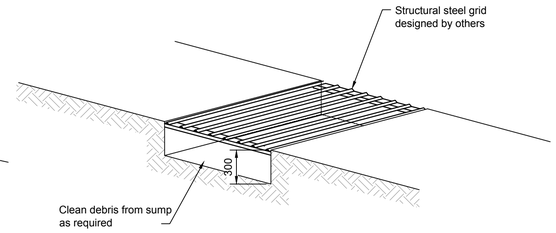


Temporary Site Entrance

NTS

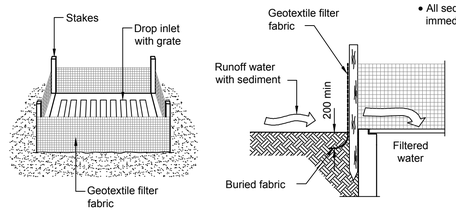
Maintenance

- The temporary access shall be maintained in a condition that prevents tracking or flowing of sediment onto public rights of way,
- This may require periodic top dressing with additional gravel as conditions demand and repair and/or cleanout of any measures used to trap sediment,
- All sediment spilled, dropped, washed or tracked onto public rights of way must be removed immediately.



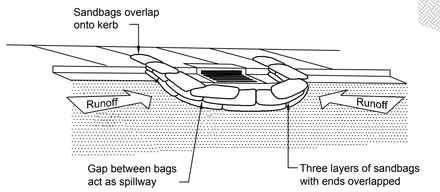
Shaker Pad

NTS



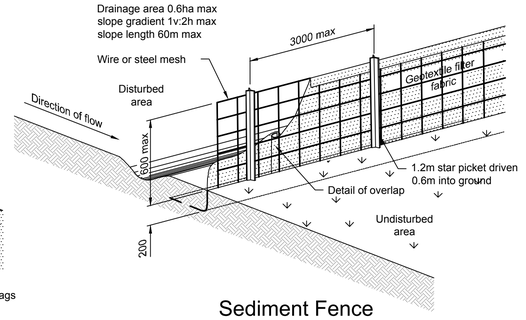
Sediment Trap for Drop Inlet (Geotextile Filter Fabric)

NTS



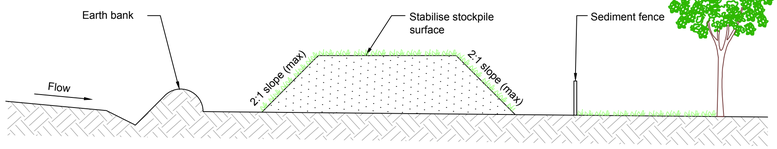
Sediment Trap for Kerb Inlet (at Low Point - Sandbag)

NTS



Sediment Fence (Geotextile Filter Fabric)

NTS

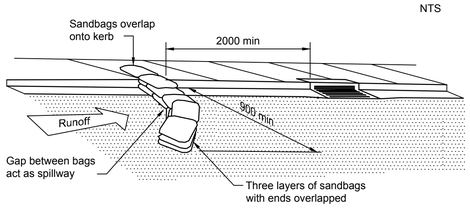


Construction Notes

1. Place stockpiles more than 2 (preferably 5) metres from existing vegetation, concentrated water flow, roads and hazard areas.
2. Construct on the contour as low, flat, elongated mounds
3. Where there is sufficient area, topsoil stockpiles shall be less than 2m in height
4. Where there are to be in place for more than 10 days, stabilise following the approved escp or swmp to reduce the *c*-factor to less than 0.10
5. Construct earth banks (standard drawing 5-5) on the upslope side to divert water around stockpiles and sediment fences (standard drawing 6-8) 1m to 2m downslope

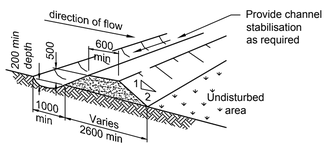
Stockpiles

NTS



Sediment Trap for Kerb Inlet (On Grade - Sandbag)

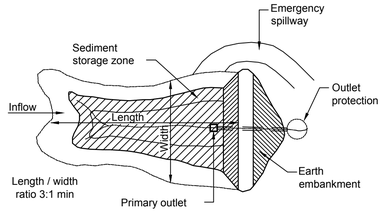
NTS



(For catchment of 2ha or less)

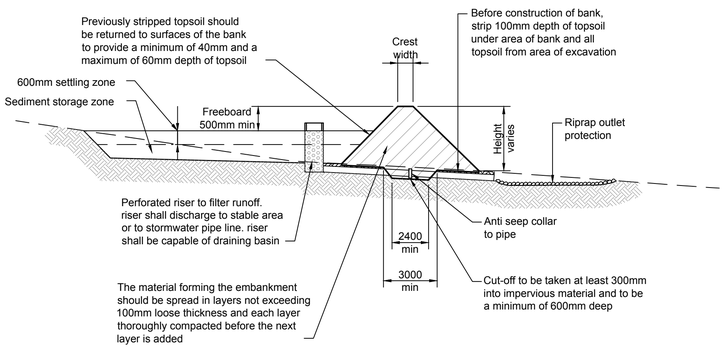
Diversion bank (with channel)

NTS



Sediment Basin (Typical) Plan - Type C Soils

NTS



Sediment Basin (Typical) Cross Section - Type C Soils

NTS

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P3	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

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Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral
Soil and Water Management Details

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	

Scale at A1	Status	Rev	Sec
N/A	APR	P3	STD

Drawing Number: MMD-369954-C-DR-AB-XX-0031

This plan may be prepared using COLOUR and may be incomplete if copied to black and white.

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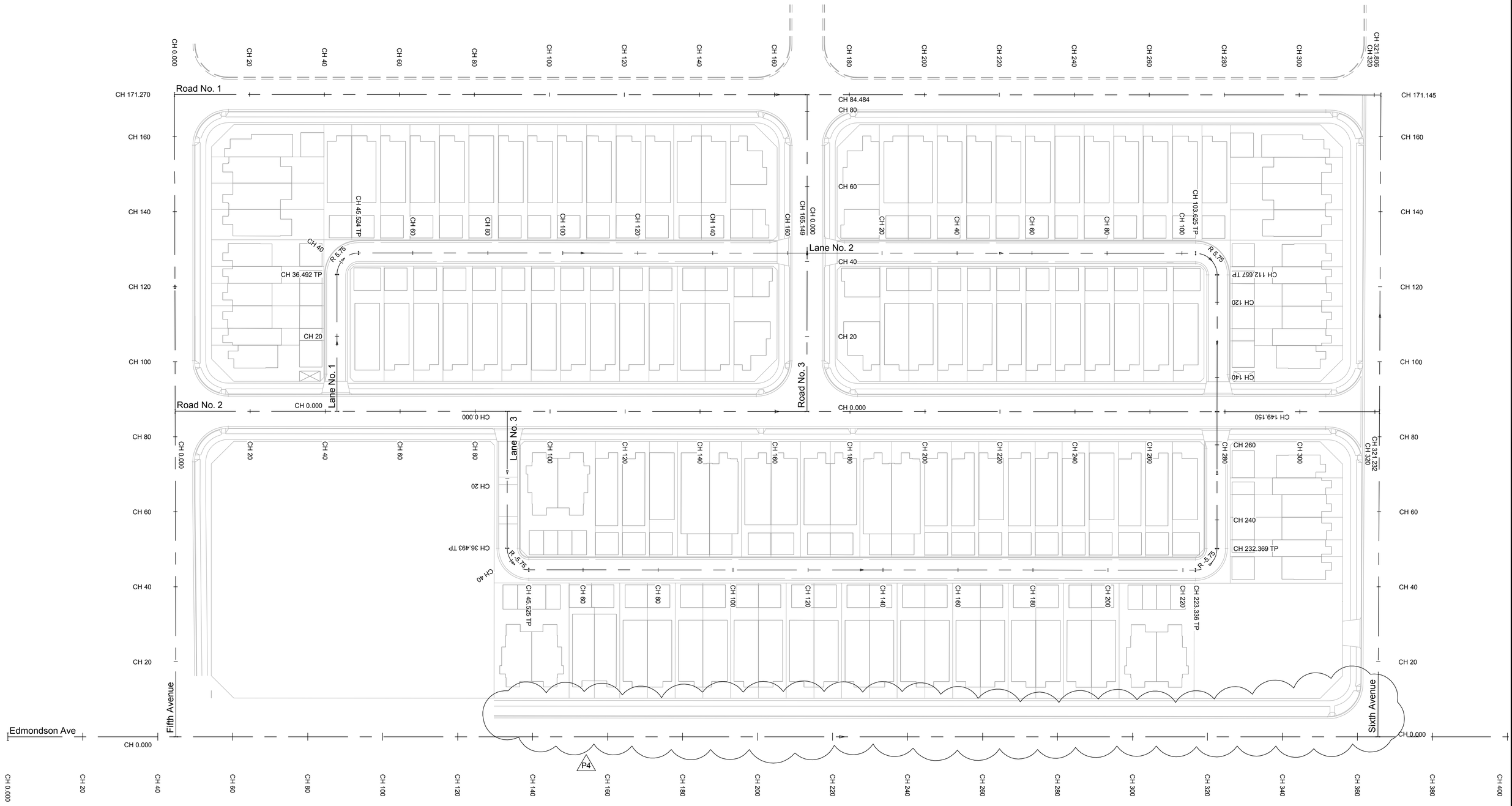

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P4	10.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P3	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

1:500 0 25m 50m

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Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral
Alignment Control Plan

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	
Scale at A1	1:500	Status	APR	Rev P4	Sec STD

Drawing Number: MMD-369954-C-DR-AB-XX-0040

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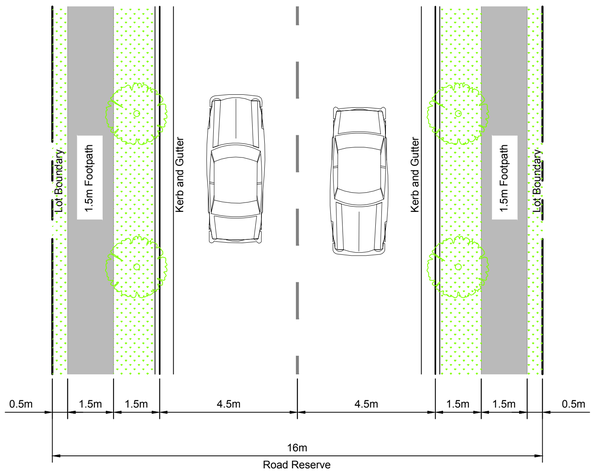
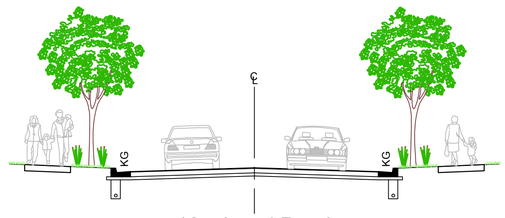
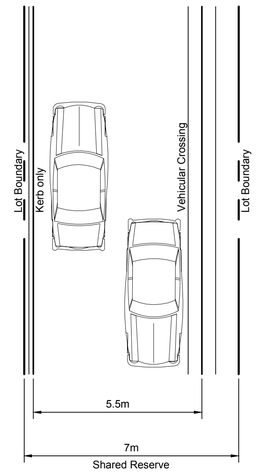
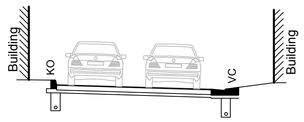


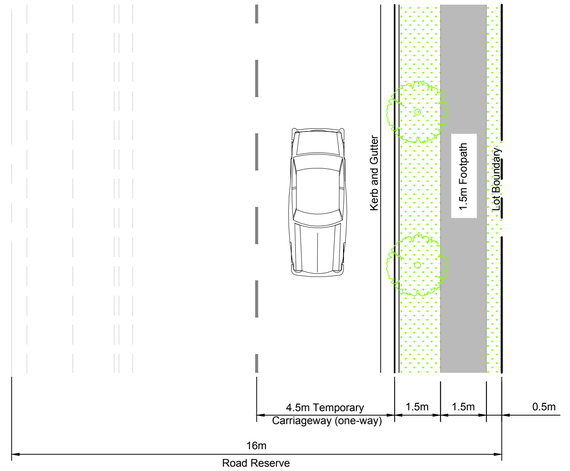


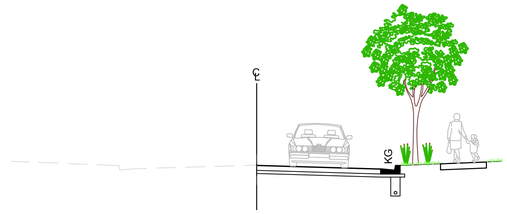
16m Local Road
Road 2



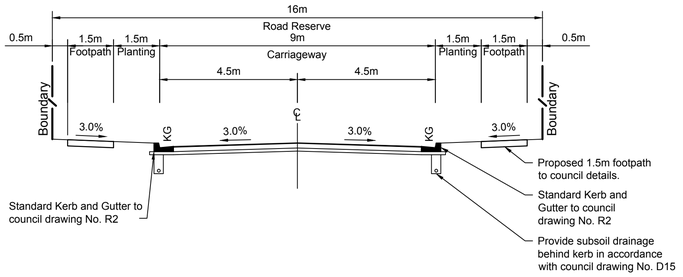


7m Laneway
Lane 1, 2 and 3



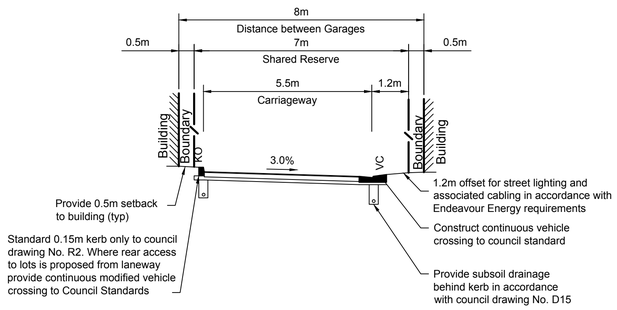


16m Local Road
(4.5m Half Road Construction)
Road 1



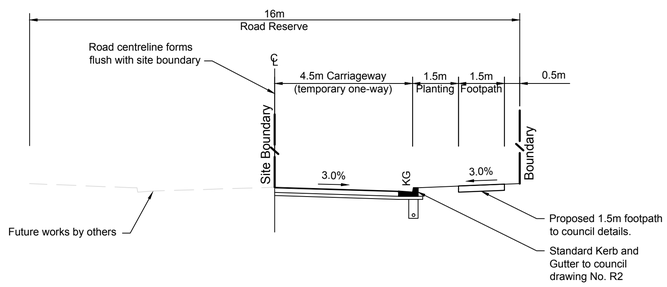
16m Local Road
1:100

*Pavement profiles are to be confirmed by geotechnical engineer during detailed design stage.



7m Laneway
1:100

*Pavement profiles are to be confirmed by geotechnical engineer during detailed design stage.



16m Local Road
(4.5m Half Road Construction)
1:100

*Pavement profiles are to be confirmed by geotechnical engineer during detailed design stage.

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P4	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P3	04.05.17	AMP	Issued for coordination	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

1:100 0 5m 10m

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Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral
Typical Road Cross Section
Sheet 1

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	
Scale at A1	Status		Rev		Sec
1:100	APR		P4		STD

Drawing Number
MMD-369954-C-DR-AB-XX-0050

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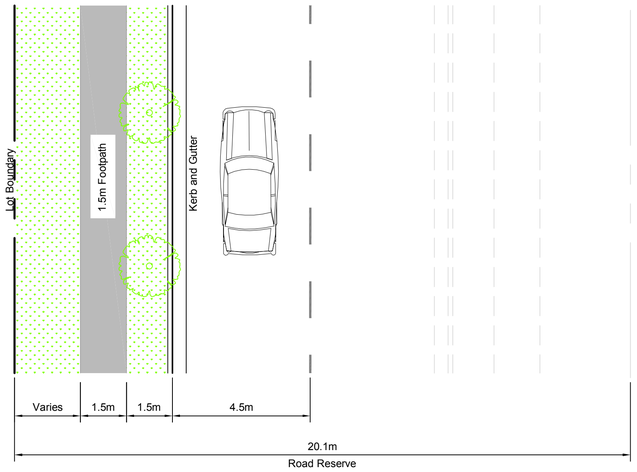
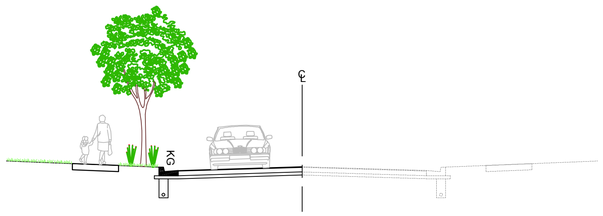
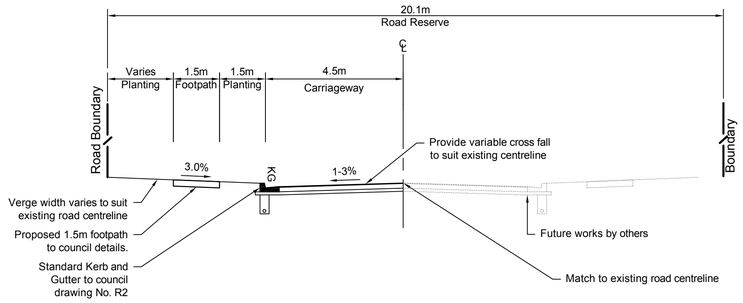




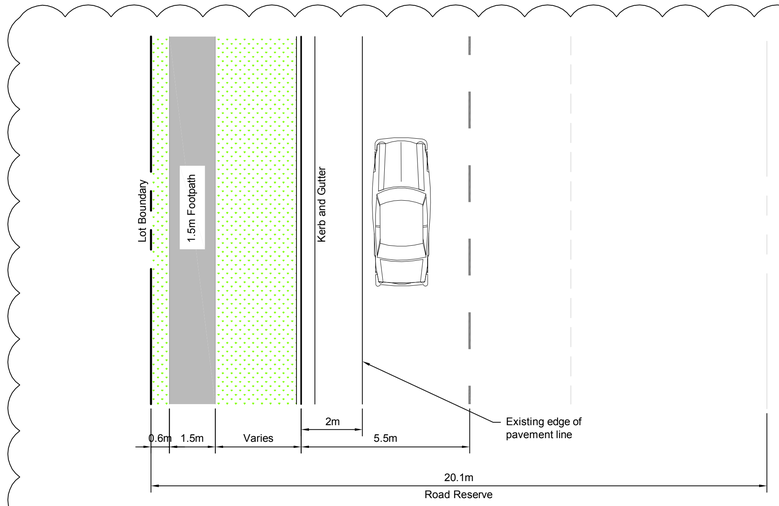
Fifth Avenue / Sixth Avenue
(4.5m Half Road Construction)

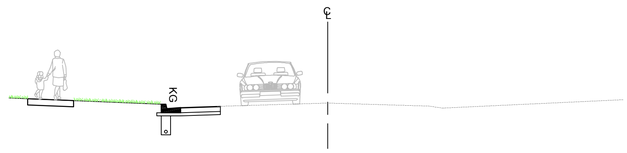


Fifth Avenue / Sixth Avenue
(4.5m Half-Road Construction)

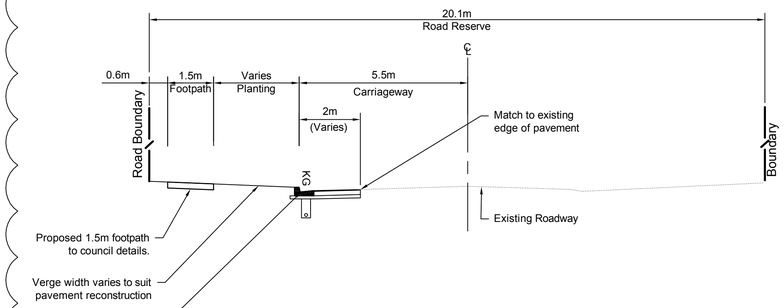
1:100

*Pavement profiles are to be confirmed by geotechnical engineer during detailed design stage.





Edmondson Avenue
(Half Road Construction)



Edmondson Avenue
(Half-Road Construction)

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*Pavement profiles are to be confirmed by geotechnical engineer during detailed design stage.

P5

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P5	10.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P4	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P3	04.05.17	AMP	Issued for coordination	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

1:100 0 5m 10m

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Client: Vantage Property Group Pty Ltd

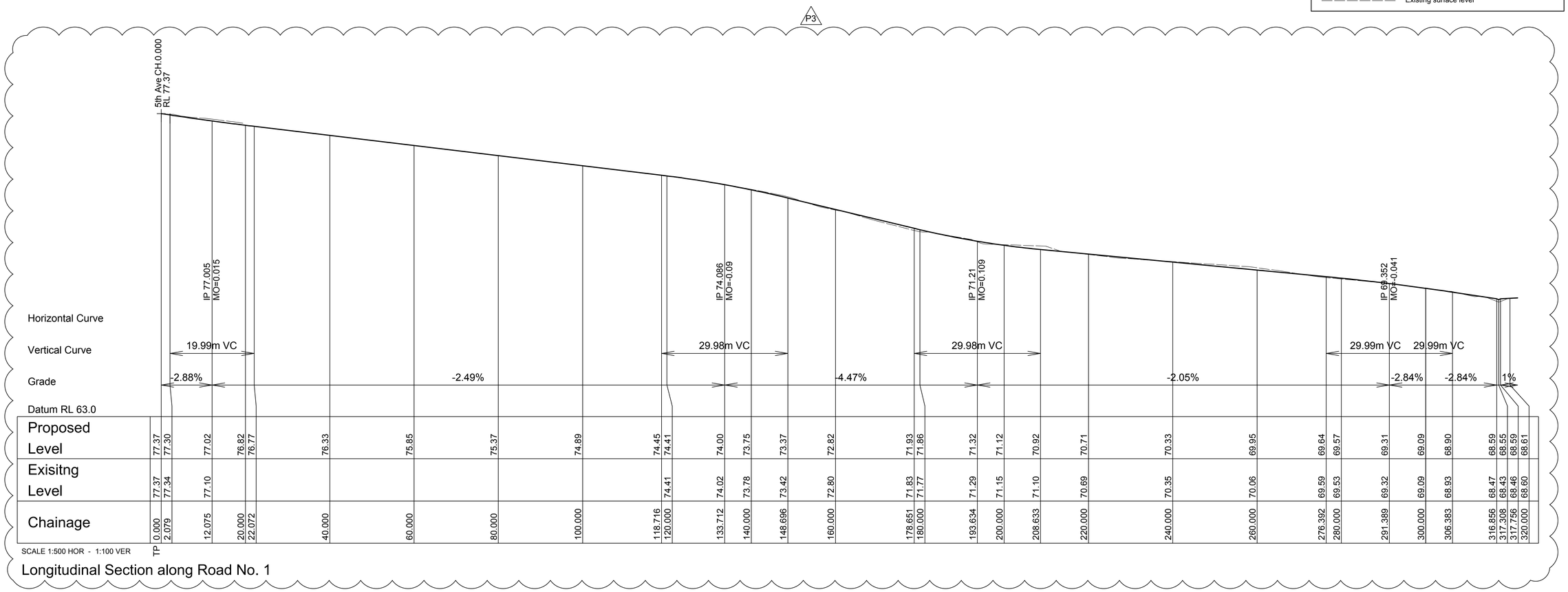
Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral
Typical Road Cross Section
Sheet 2

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	
Scale at A1	Status		Rev		Sec
1:100	APR		P5		STD

Drawing Number
MMD-369954-C-DR-AB-XX-0051

This plan may be prepared using COLOUR and may be incomplete if copied to black and white.

Legend	
———	Finished surface level
— — — — —	Existing surface level



Chainage	Proposed Level	Exisitng Level
0.000	77.37	77.37
2.079	77.30	77.34
12.075	77.02	77.10
20.000	76.82	
22.072	76.77	
40.000	76.33	
60.000	75.85	
80.000	75.37	
100.000	74.89	
118.716	74.45	
120.000	74.41	74.41
133.712	74.00	74.02
140.000	73.75	73.78
148.696	73.37	73.42
160.000	72.82	72.80
178.651	71.93	71.83
180.000	71.86	71.77
193.634	71.32	71.29
200.000	71.12	71.15
208.633	70.92	71.10
220.000	70.71	70.69
240.000	70.33	70.35
260.000	69.95	70.06
276.392	69.64	69.59
280.000	69.57	69.53
291.389	69.31	69.32
300.000	69.09	69.09
306.383	68.90	68.93
316.856	68.59	68.47
317.308	68.55	68.43
317.756	68.59	68.46
320.000	68.61	68.60

Longitudinal Section along Road No. 1

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P3	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

1:100 0 5m 10m
1:500 0 25m 50m

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Client
Vantage Property Group
Pty Ltd

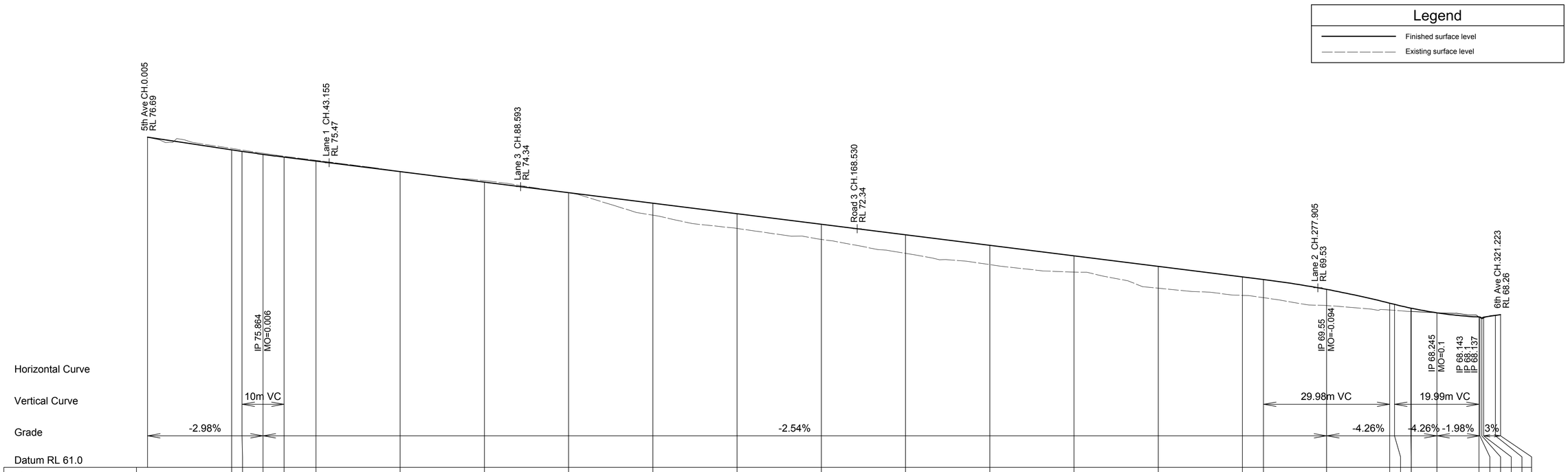
Title
230 Sixth Avenue and
38 Edmondson Avenue, Austral
Road Longitudinal Sections
Sheet 1

Designed	P.Cavanagh	Eng check	D.Reilly
Drawn	D.Chapman	Coordination	J.Taylor
Dwg check	A.Singh	Approved	A.Cameron

Scale at A1	Status	Rev	Sec
As Shown	APR	P3	STD

Drawing Number
MMD-369954-C-DR-AB-XX-0060

This plan may be prepared using COLOUR and may be incomplete if copied to black and white.



Proposed Level		76.09	76.01	75.87	75.74	75.55	75.05	74.55	74.05	73.55	73.05	72.55	72.05	71.55
Existing Level	76.68	76.15	76.07	75.92	75.78	75.59	75.06	74.62	74.04	72.98	72.35	71.83	71.17	70.63
Chainage	0.000	20.000	22.455	27.453	32.451	40.000	60.000	80.000	100.000	120.000	140.000	160.000	180.000	200.000

Proposed Level	71.05	70.55	70.05	69.92	69.46	68.80	68.74	68.57	68.34	68.14	68.14	68.10	68.14	68.22	68.25
Existing Level	70.28	69.51	69.17	69.06	68.69	68.48	68.46	68.40	68.35	68.14	68.12	68.06	68.09	68.24	68.26
Chainage	220.000	240.000	260.000	265.004	280.000	294.982	296.118	300.000	306.107	316.108	316.282	316.761	317.173	320.000	321.232

Scale 1:500 Hor - 1:100 Ver

TP

Longitudinal Section along Road No. 2

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P3	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

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Client
Vantage Property Group
Pty Ltd

Title
230 Sixth Avenue and
38 Edmondson Avenue, Austral
Road Longitudinal Sections
Sheet 2

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	

Scale at A1: As Shown
Status: APR
Rev: P3
Sec: STD
Drawing Number: MMD-369954-C-DR-AB-XX-0061

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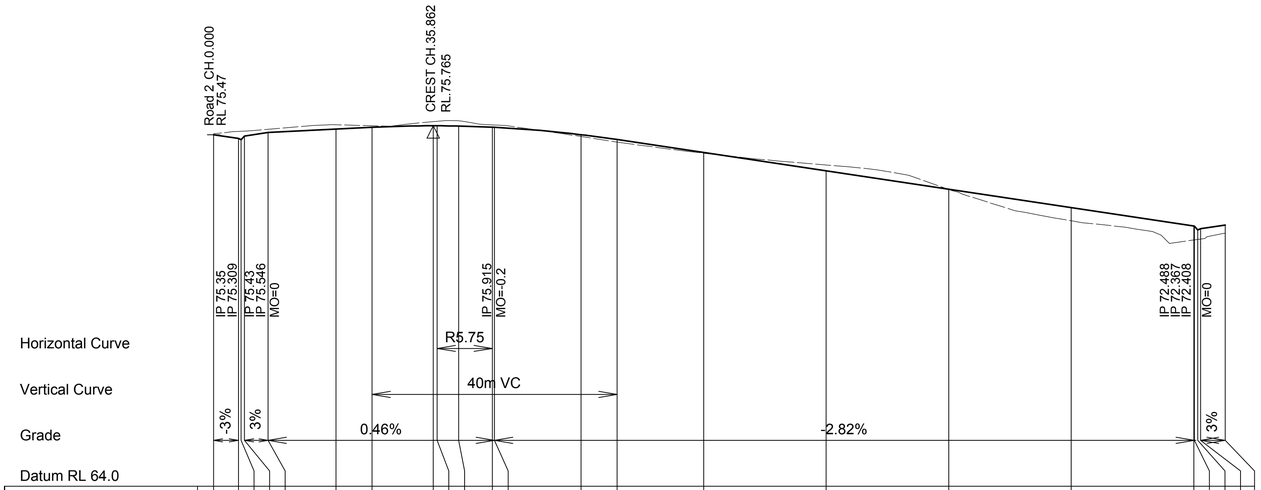

Legend

——— Finished surface level
— — — Existing surface level

Proposed Level	75.47	75.35	75.31	75.43	75.55	75.66	75.72	75.77	75.77	75.76	75.72	75.72	75.47	75.32	74.89	74.29	73.69	73.09	72.49	72.49	72.37	72.41	72.59
Existing Level	75.51	75.58	75.59	75.59	75.65	75.80	75.77	75.90	75.92	75.93	75.80	75.79	75.41	75.23	74.87	74.49	73.69	72.67	72.04	72.04	72.06	72.07	72.25
Chainage	0.000	4.050	4.500	5.050	8.909	20.000	25.860	35.862	36.492	40.000	45.524	45.862	60.000	65.855	80.000	100.000	120.000	140.000	160.000	160.099	160.649	161.099	165.149
								TP			TP												

Scale 1:500 Hor - 1:100 Ver

Longitudinal Section along Lane No. 1

Proposed Level	72.34	72.16	72.04	72.04	72.10	72.12	72.28	72.49	72.50	72.51	72.40	72.35	72.23	72.19	72.19	72.28	72.33	72.41
Exisitng Level	71.54	71.71	71.88	71.88	72.11	72.14	72.13	72.23	72.25	72.28	72.30	72.35	72.48	72.58	72.60	72.46	72.44	72.32
Chainage	0.000	6.001	13.500	14.115	20.000	20.999	27.189	40.000	42.189	45.066	57.189	60.000	66.984	72.463	74.484	80.000	81.982	84.484
	TP																	

SCALE 1:500 HOR - 1:100 VER

Longitudinal Section along Road No. 3

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P3	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

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Client
Vantage Property Group
Pty Ltd

Title
230 Sixth Avenue and
38 Edmondson Avenue, Austral
Road Longitudinal Sections
Sheet 3

Designed	P.Cavanagh	Eng check	D.Reilly
Drawn	D.Chapman	Coordination	J.Taylor
Dwg check	A.Singh	Approved	A.Cameron

Scale at A1	Status	Rev	Sec
As Shown	APR	P3	STD

Drawing Number
MMD-369954-C-DR-AB-XX-0062

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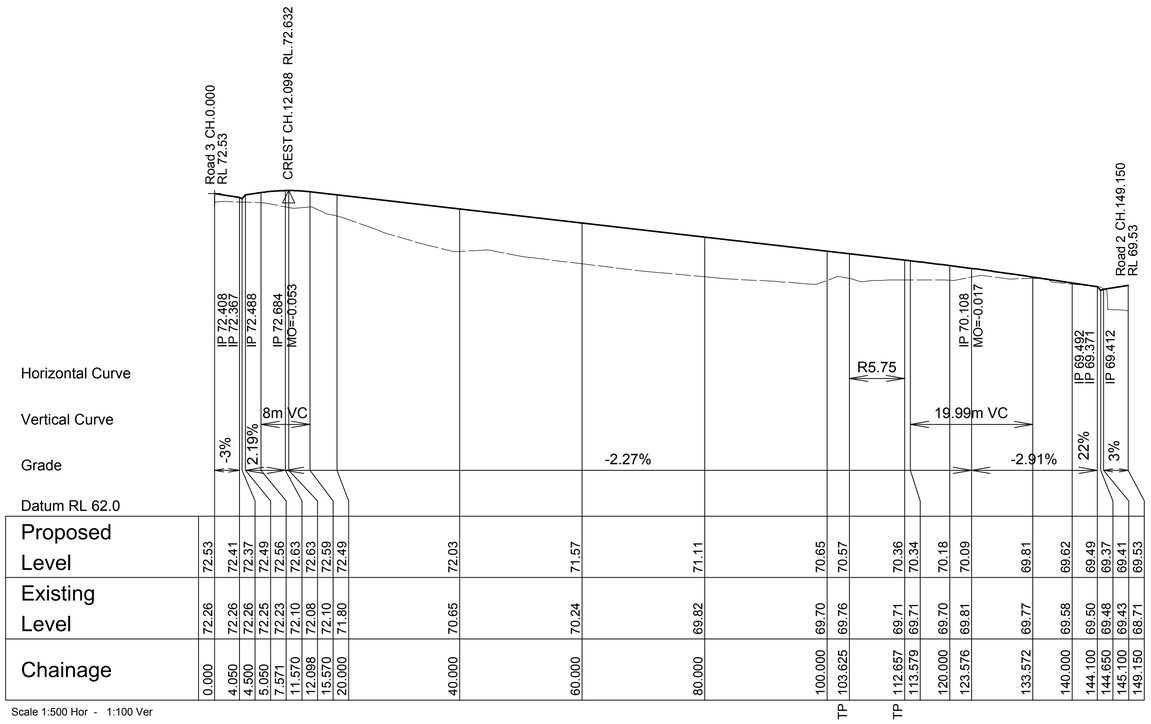
p:\Sydney\Projects\36xxxx\369954\04 working\01 CAD\Civil\Drawings\DA\MMD-369954-C-DR-AB-XX-0060 - 0064.dwg May 8, 2017 - 12:13PM pac55913



Legend	
———	Finished surface level
— — — —	Existing surface level

Proposed Level	72.53	72.41	72.37	72.49	72.56	72.63	72.63	72.59	72.49	72.03	71.57	71.11
Existing Level	72.26	72.26	72.26	72.25	72.23	72.10	72.08	72.10	71.80	70.65	70.24	69.82
Chainage	0.000	4.050	4.500	5.050	7.571	11.570	12.098	15.570	20.000	40.000	60.000	80.000

Proposed Level	70.65	70.57	70.36	70.34	70.18	70.09	69.81	69.62	69.49	69.37	69.41	69.53
Existing Level	69.70	69.76	69.71	69.71	69.70	69.81	69.77	69.58	69.50	69.48	69.43	68.71
Chainage	100.000	103.625	112.657	113.579	120.000	123.576	133.572	140.000	144.100	144.650	145.100	149.150
	TP		TP									

Scale 1:500 Hor - 1:100 Ver

Longitudinal Section along Lane No. 2

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P3	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

1:100 0 5m 10m
1:500 0 25m 50m

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Client
Vantage Property Group
Pty Ltd

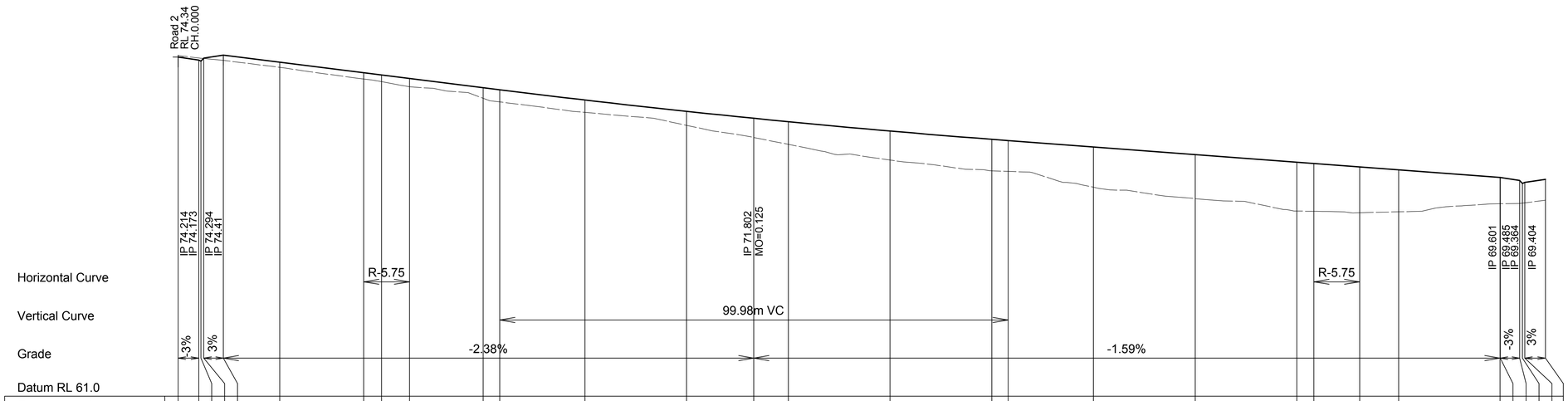
Title
230 Sixth Avenue and
38 Edmondson Avenue, Austral
Road Longitudinal Sections
Sheet 4

Designed	P.Cavanagh		Eng check	D.Reilly
Drawn	D.Chapman		Coordination	J.Taylor
Dwg check	A.Singh		Approved	A.Cameron

Scale at A1	Status	Rev	Sec
As Shown	APR	P3	STD

Drawing Number
MMD-369954-C-DR-AB-XX-0063

This plan may be prepared using COLOUR and may be incomplete if copied to black and white.



Legend	
———	Finished surface level
— — — —	Existing surface level

Proposed Level	74.34	74.21	74.17	74.29	74.41	74.13	73.72	73.63	73.49	73.13	73.05	72.65	72.20	71.93	71.79	71.43	71.10	71.05	70.80	70.50	70.20	70.15	70.01	69.90	69.60	69.60	69.48	69.36	69.40	69.52
Existing Level	74.39	74.30	74.29	74.28	74.20	73.93	73.47	73.37	73.17	72.71	72.57	72.16	71.65	71.17	70.90	70.29	69.86	69.84	69.22	68.77	68.28	68.27	68.21	68.25	68.56	68.56	68.58	68.59	68.61	68.70
Chainage	0.000	4.050	4.500	5.050	8.900	20.000	36.493	40.000	45.525	60.000	63.232	80.000	100.000	113.217	120.000	140.000	160.000	163.212	180.000	200.000	220.000	223.336	232.369	240.000	259.961	260.000	263.821	264.371	264.821	268.870
							TP		TP													TP	TP							

Scale 1:500 Hor - 1:100 Ver

Longitudinal Section along Lane No. 3

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P3	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

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Client
Vantage Property Group
Pty Ltd

Title
230 Sixth Avenue and
38 Edmondson Avenue, Austral
Road Longitudinal Sections
Sheet 5

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	

Scale at A1	Status	Rev	Sec
As Shown	APR	P3	STD

Drawing Number
MMD-369954-C-DR-AB-XX-0064

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Construct kerb pram ramp in accordance with Liverpool Council Standard Drawing No. R17 (typ.)

Construct kerb and gutter in accordance with Liverpool Council Standard Drawing No. R2 (typ.)

Provide max 200mm vertical step to offset level difference to adjoining lot (typ)

Provide stub and end cap for future connection of upstream lots

Construct heavy duty vehicular crossing in accordance with Liverpool Council Standard Drawing No. R25(typ.)

Existing redundant driveways to be demolished and removed (typ)

Proposed traffic calming devices in Laneways (kerb blisters). Refer to Landscape Architect's plans for details (typ.)

Provide break in blister to allow surface flows to drain to downstream pit (typ.)

Proposed interallotment drainage line to rear of lots. Details to be confirmed during detailed design stage.

Match to existing levels along centreline and make smooth transition (typ.)

Indicative location of proposed substation. To be confirmed in detailed design stage.

Lot 87 FFL 77.50 | FFL 76.90
Lot 86 FFL 77.50
Lot 85FFL 77.50
Lot 84 FFL 77.50
Lot 83 FFL 77.30 | FFL 76.00
Lot 82 FFL 77.30 | FFL 75.94
Lot 81 FFL 77.30 | FFL 75.92
Lot 80 FFL 77.30 | FFL 75.89
Lot 79 FFL 77.10 | FFL 75.85
Lot 78 FFL 77.10 | FFL 75.81

Lot 88 FFL 76.80 | FFL 76.00
Lot 89 FFL 76.80 | FFL 75.91
Lot 90 FFL 76.50 | FFL 75.78
Lot 91 FFL 76.30 | FFL 75.60
Lot 92 FFL 76.10 | FFL 75.36
Lot 93 FFL 75.88 | FFL 75.13
Lot 94 FFL 75.55 | FFL 74.89
Lot 95 FFL 75.30 | FFL 74.66
Lot 96 FFL 75.00 | FFL 74.42
Lot 97 FFL 74.75 | FFL 74.19
Lot 98 FFL 74.50 | FFL 73.95
Lot 99 FFL 74.30 | FFL 73.72
Lot 100 FFL 74.00 | FFL 73.45
Lot 101 FFL 74.00 | FFL 73.27
Lot 102 FFL 73,40 | FFL 73.02 | FFL 72.88

FFL 75.74 | Lot 77 FFL 75.70
FFL 75.63 | Lot 76 FFL 75.55
FFL 75.43 | Lot 75 FFL 75.35
FFL 75.19 | Lot 74 FFL 75.15
FFL 75.96 | Lot 73 FFL 74.95
FFL 74.72 | Lot 72 FFL 74.75
FFL 74.49 | Lot 71 FFL 74.55
FFL 74.25 | Lot 70 FFL 74.35
FFL 74.02 | Lot 69 FFL 74.15
FFL 73.78 | Lot 68 FFL 74.00
FFL 73.55 | Lot 67 FFL 73.80
FFL 73.28 | Lot 66 FFL 73.60
FFL 73.10 | Lot 65 FFL 73.60
FFL 72.91 | Lot 64 FFL 73.00
FFL 72.79

B6/1 B6/2 B6/3 B6/4 B6/5 B2/1 B2/2 B2/3 B2/4 B2/5 B1 B2 B3 B3/1 B4/1 E2

Ø375 Ø525

For continuation refer to Dwg No 0071

For continuation refer to Dwg No 0072

P4

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P4	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P3	04.05.17	AMP	Issued for coordination	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

1:250 0 12.5m 25m

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Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral Siteworks and Stormwater Management Plan Sheet 1

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	
Scale at A1	Status		Rev	Sec	
1:250	APR		P4	STD	

Drawing Number: MMD-369954-C-DR-AB-XX-0070

For continuation refer to Dwg No 0070

Provide stub and end cap for future connection of upstream lots.

Proposed interallotment drainage line to rear of lots. Details to be confirmed during detailed design stage (typ.)

Provide 1 in 4 batter to front of lots. Maximum height = 0.5m (typ)

Existing redundant driveways to be demolished and removed (typ)

Contractor to locate line and level of all existing services on site prior to commencement of works. Allow to modify/adjust services as required to suit proposed works. All works in accordance with service providers requirements (typ.)

Construct kerb pram ramp in accordance with Liverpool Council Standard Drawing No. R17 (typ.)

Indicative location of proposed substation. To be confirmed in detailed design stage.

Construct heavy duty vehicular crossing in accordance with Liverpool Council Standard Drawing No. R25(typ.)

For continuation refer to Dwg No 0073

P4

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P4	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P3	04.05.17	AMP	Issued for coordination	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

1:250 0 12.5m 25m

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Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral Siteworks and Stormwater Management Plan Sheet 2

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	

Scale at A1	Status	Rev	Sec
1:250	APR	P4	STD

Drawing Number: MMD-369954-C-DR-AB-XX-0071

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Note:

Works in Edmondson Ave as shown on these plans are to suit existing conditions and are temporary only. Ultimate design to take place as future SIC road construction (by others)

P5

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P5	10.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P4	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P3	04.05.17	AMP	Issued for coordination	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

1:250 0 12.5m 25m

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Client
Vantage Property Group Pty Ltd

Title
230 Sixth Avenue and 38 Edmondson Avenue, Austral Siteworks and Stormwater Management Plan Sheet 3

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	

Scale at A1	Status	Rev	Sec
1:250	APR	P5	STD

Drawing Number
MMD-369954-C-DR-AB-XX-0072

This plan may be prepared using COLOUR and may be incomplete if copied to black and white.

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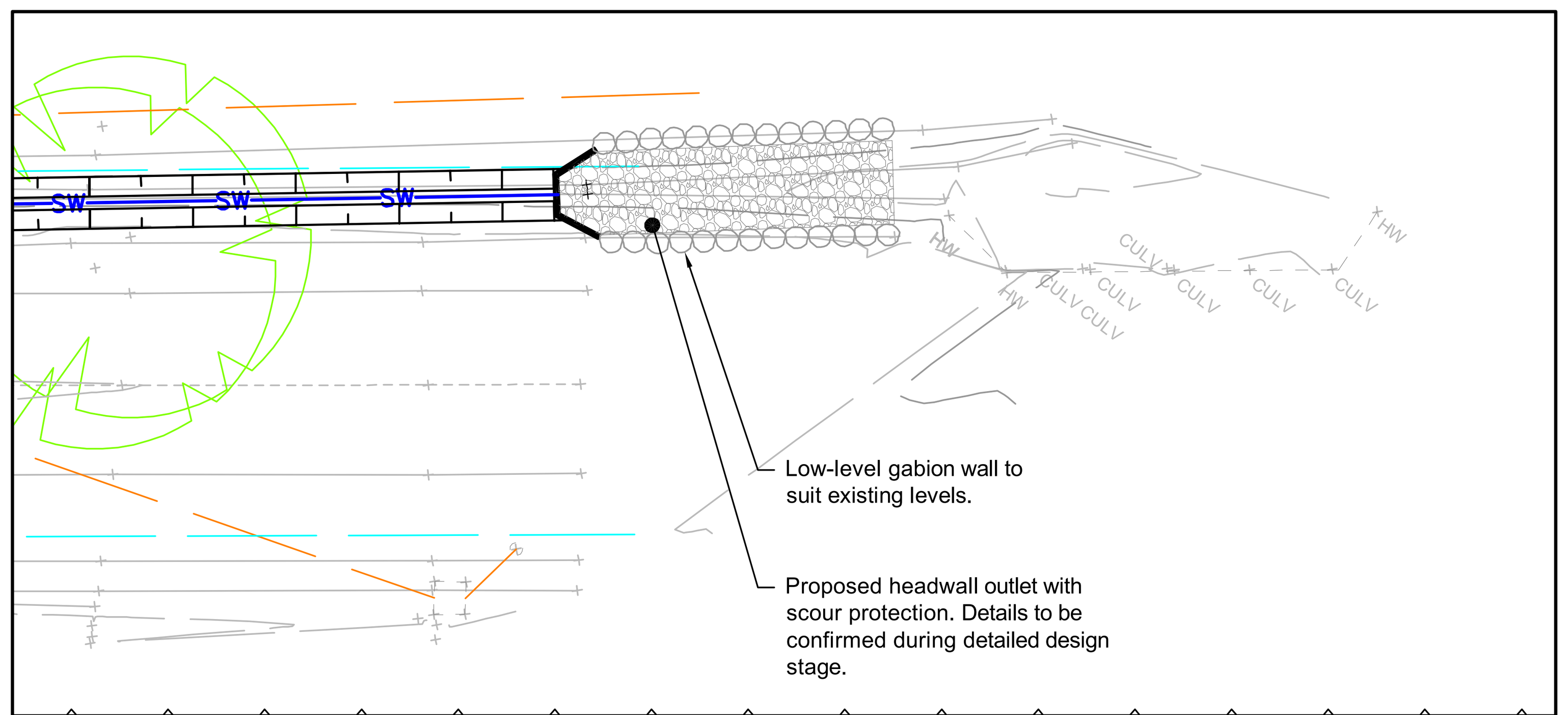
For continuation refer to Dwg No 0071
For continuation refer to Dwg No 0072
For continuation refer to Inset 'A'
Lot 34 FFL 72.00
Lot 35 FFL 72.00
Lot 36 FFL 71.85
Lot 37 FFL 71.65
Lot 38 FFL 71.50
Lot 39 FFL 71.30
Lot 40 FFL 71.10
Lot 41 FFL 71.05
Lot 42 FFL 70.85
Lot 43 FFL 70.70
Lot 44 FFL 70.50
Lot 45 FFL 70.30
Lot 46 FFL 69.70
Lot 47 FFL 69.70
Lot 48 FFL 69.70
Lot 49 FFL 69.70
Lot 50 FFL 69.70
Lot 51 FFL 69.70
Lot 11 FFL 70.80
Lot 10 FFL 70.45
Lot 9 FFL 70.45
Lot 8 FFL 70.10
Lot 7 FFL 70.10
Lot 6 FFL 69.90
Lot 5 FFL 69.90
Lot 4 FFL 69.70
Lot 3 FFL 69.70
Lot 3 FFL 69.70
Lot 2 FFL 69.70
B8
B9
C5
F3
A1
A2
A3
E8
E9
E10
2x900x300 - RCBC
2x900x600 - RCBC
2x Ø450
2xØ450
Ø525
Ø375
Ø750
Ø825
RW
PR
Construct kerb pram ramp in accordance with Liverpool Council Standard Drawing No. R17 (typ.)
Temporary stormwater basin to control flows from the site prior to discharge. Refer to drawing 0100 for details.
Construct junction pit and intercept existing stormwater crossing beneath Sixth Ave. Reinstate table drain over.
Provide temporary tail out to creek to mirror existing scenario. Reinstate table drainer over to suit (typ)
Contractor to locate line and level of all existing services on site prior to commencement of works. Allow to adjust as required to suit. All works in accordance with service providers requirements. (typ)
Match to existing edge of pavement and make smooth connection (typ.)
Existing redundant driveways to be demolished and removed (typ)
Block out proposed pipe to divert flows to temporary basin to suit interim scenario.
Match to existing levels at road centreline and make smooth transition. Provide variable crossfall to kerb to suit existing road levels (typ.)

Note:
Works in Edmondson Ave as shown on these plans are to suit existing conditions and are temporary only. Ultimate design to take place as future SIC road construction (by others)



Inset 'A'
1:250

Preliminary - Not for Construction

P5

Rev	Date	Drawn	Description	Ch'k'd	App'd
P5	10.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P4	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P3	04.05.17	AMP	Issued for coordination	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

1:250 0 12.5m 25m

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Client
Vantage Property Group Pty Ltd

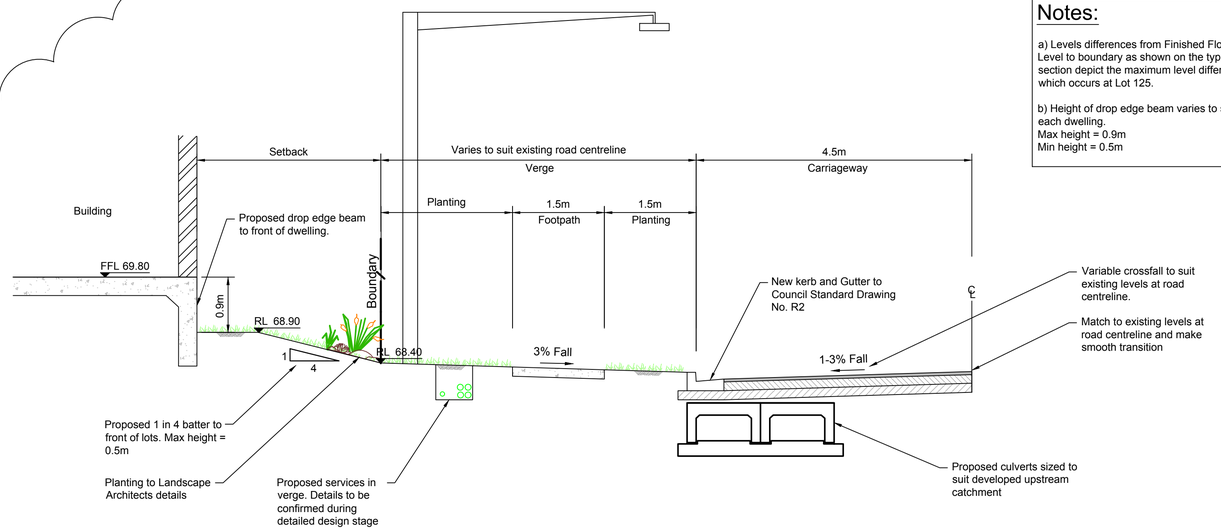
Title
230 Sixth Avenue and 38 Edmondson Avenue, Austral
Siteworks and Stormwater Management Plan
Sheet 4

Designed	P.Cavanagh	Eng check	D.Reilly
Drawn	D.Chapman	Coordination	J.Taylor
Dwg check	A.Singh	Approved	A.Cameron

Scale at A1	Status	Rev	Sec
1:250	APR	P5	STD

Drawing Number
MMD-369954-C-DR-AB-XX-0073

This plan may be prepared using COLOUR and may be incomplete if copied to black and white.



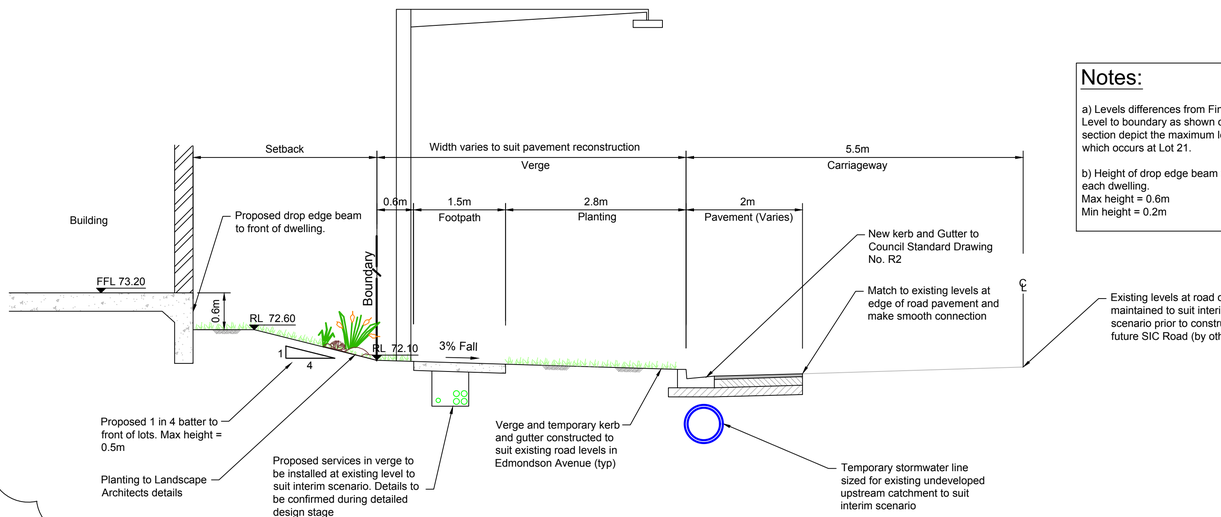
Typical Section - Lots fronting Sixth Avenue

1:50

Notes:

a) Levels differences from Finished Floor Level to boundary as shown on the typical section depict the maximum level difference which occurs at Lot 125.

b) Height of drop edge beam varies to suit each dwelling.
Max height = 0.9m
Min height = 0.5m



Typical Section - Lots fronting Edmondson Avenue

1:50

Notes:

a) Levels differences from Finished Floor Level to boundary as shown on the typical section depict the maximum level difference which occurs at Lot 21.

b) Height of drop edge beam varies to suit each dwelling.
Max height = 0.6m
Min height = 0.2m

P3

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P3	10.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P1	04.05.17	AMP	Issued for coordination	DR	AC

1:50 0 2.5m 5m

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Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral
Siteworks Details
Sheet 1
Sheet 1

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	
Scale at A1: As Shown	Status: APR		Rev: P3	Sec: STD	

Drawing Number: MMD-369954-C-DR-AB-XX-0075

This plan may be prepared using COLOUR and may be incomplete if copied to black and white.

Depth Range Legend

-9.9m to -2.0m	0m to 0.2m
-2.0m to -1.8m	0.2m to 0.4m
-1.8m to -1.6m	0.4m to 0.6m
-1.6m to -1.4m	0.6m to 0.8m
-1.4m to -1.2m	0.8m to 1.0m
-1.2m to -1.0m	1.0m to 1.2m
-1.0m to -0.8m	1.2m to 1.4m
-0.8m to -0.6m	1.4m to 1.6m
-0.6m to -0.4m	1.6m to 1.8m
-0.4m to -0.2m	1.8m to 2.0m
-0.2m to 0m	2.0m to 9.9m

Earthworks Notes

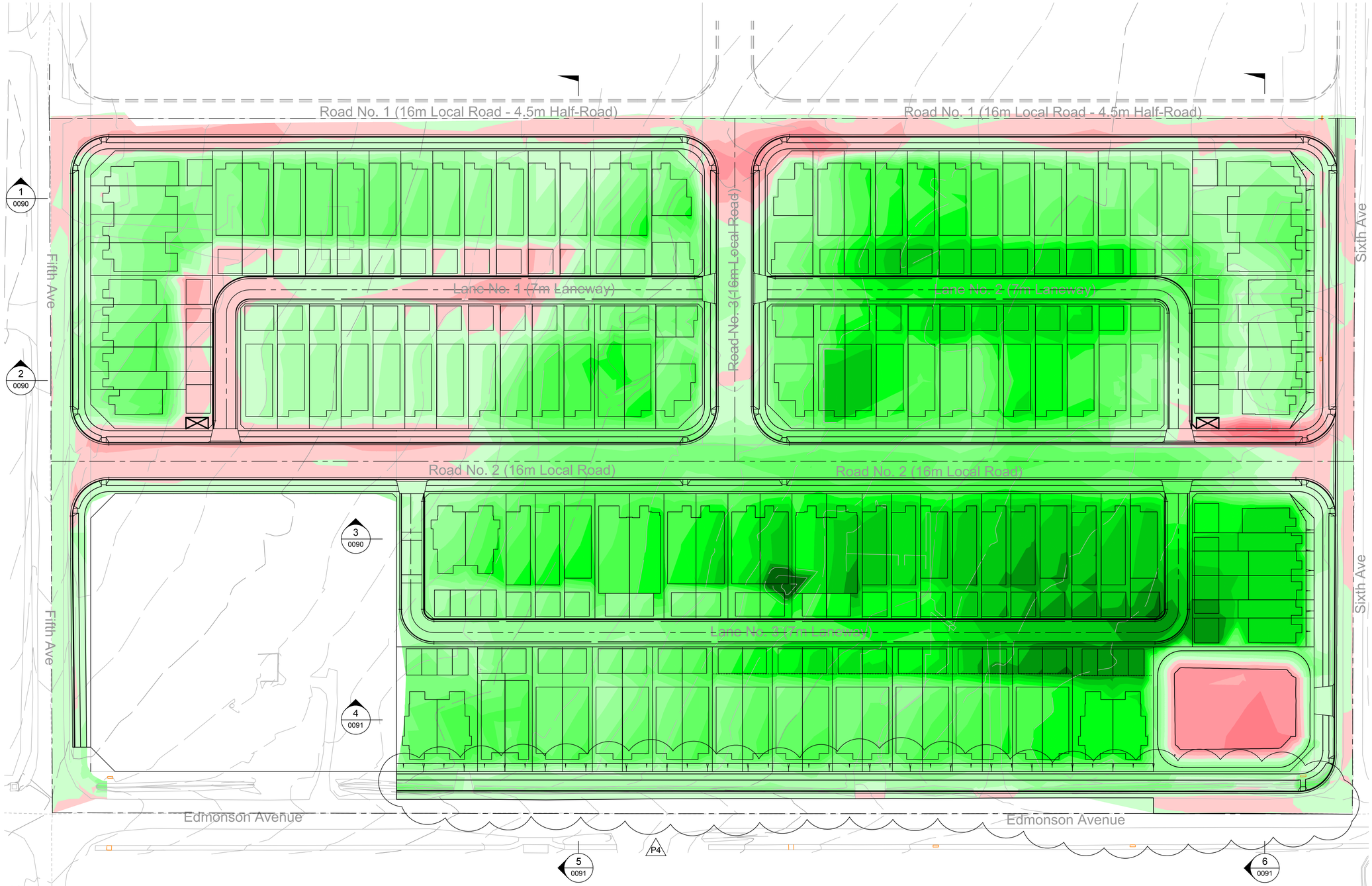
Estimated volumes between existing survey and design surface levels. It is the contractors responsibility to verify all volumes prior to construction:

- Volumes shown are from finished design level to existing survey level. No allowance has been made for road benching or building slabs. To be confirmed in detailed design stage.
- Approximate stormwater basin volumes have been included.
- No allowance has been made for retaining wall footings.
- Volumes within stormwater trenches has not been calculated.
- No bulking factors have been applied.

Earthworks Volumes

Approximate volumes

Total Cut	=	-1,071m^3
Total Fill	=	+31,674m^3
Balance	=	+30,603m^3



Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P4	10.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P3	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

1:500 0 25m 50m

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Client: Vantage Property Group Pty Ltd

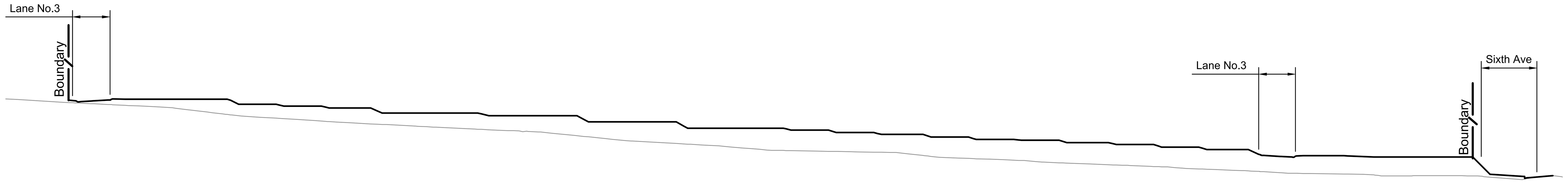
Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral Earthworks Depth Plan

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	
Scale at A1: 1:500	Status: APR		Rev: P4	Sec: STD	

Drawing Number: MMD-369954-C-DR-AB-XX-0080

This plan may be prepared using COLOUR and may be incomplete if copied to black and white.

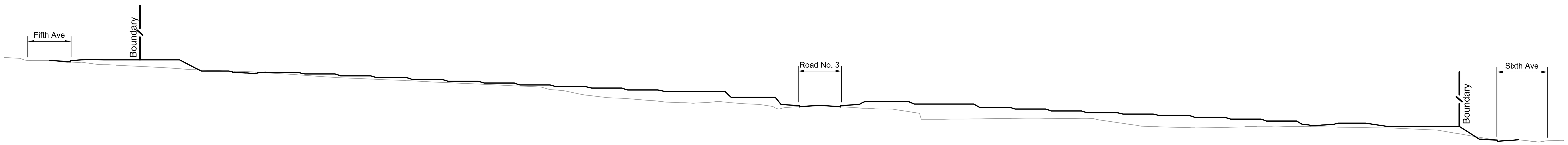
Legend	
(solid line)	Finished surface level
(grey line)	Existing surface level



Datum RL 66.0

Design Surface Level	74.300	74.300	73.900	73.750	73.200	73.200	73.000	73.000	72.500	72.000	72.000	71.850	71.500	71.300	71.100	70.850	70.700	70.475	69.842	69.820	69.700	69.700
Existing Surface Level	73.79	73.41	72.89	72.57	72.30	72.04	71.81	71.46	70.97	70.69	70.32	70.17	70.08	69.66	69.47	69.20	69.01	68.76	68.54	68.38	68.21	68.22
Chainage	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000	200.000	210.000	220.000	230.000

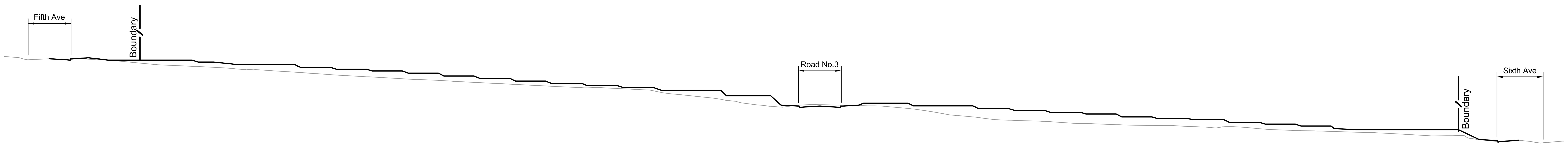
Section 3 / 0080
1:250,500



Datum RL 66.0

Design Surface Level	77.118	77.100	77.100	75.862	75.705	75.550	75.350	75.150	74.750	74.550	74.350	74.090	73.800	73.600	73.596	73.000	72.077	72.398	72.500	72.250	71.900	71.700	71.300	71.150	71.000	70.689	70.400	69.931	70.150	69.800	69.800	68.202
Existing Surface Level	76.78	76.43	76.14	75.90	75.67	75.33	75.04	74.83	74.58	74.34	74.07	73.20	72.78	72.41	72.46	72.02	72.13	71.80	71.44	70.59	70.66	70.69	70.66	69.91	69.68	69.70	69.83	69.75	69.67	69.53	69.03	68.27
Chainage	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000	200.000	210.000	220.000	230.000	240.000	250.000	260.000	270.000	280.000	290.000	300.000	310.000	320.000	330.000

Section 2 / 0080
1:250,500



Datum RL 66.0

Design Surface Level	77.524	77.300	77.300	76.977	76.800	76.500	76.300	75.973	75.550	75.300	75.000	74.500	74.300	74.000	73.533	73.372	72.257	72.541	72.583	72.300	72.000	71.781	71.400	71.100	70.900	70.591	70.300	70.100	69.700	69.700	69.700	68.402
Existing Surface Level	77.41	77.06	76.70	76.46	76.16	75.83	75.52	75.24	74.99	74.74	74.49	74.27	74.11	73.52	72.92	72.24	72.44	72.32	72.01	71.28	70.77	70.60	70.35	70.18	70.09	70.03	69.70	69.55	69.40	69.16	69.05	68.45
Chainage	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000	200.000	210.000	220.000	230.000	240.000	250.000	260.000	270.000	280.000	290.000	300.000	310.000	320.000	330.000

Section 1 / 0080
1:250,500

P2

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P2	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P1	04.11.16	DRC	Issued for Development Application	DR	AC

1:250 0 12.5m Vertical 25m
1:500 0 25m Horizontal 50m

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Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral Siteworks Sections Sheet 1

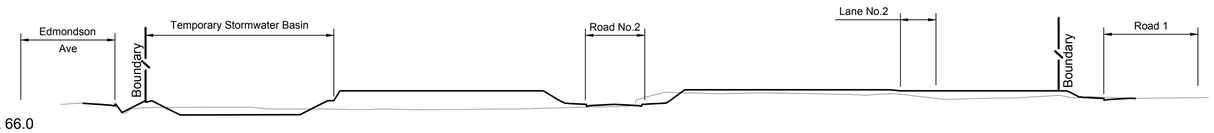
Designed	P.Cavanagh	Eng check	D.Reilly
Drawn	D.Chapman	Coordination	J.Taylor
Dwg check	A.Singh	Approved	A.Cameron
Scale at A1: As Shown	Status: APR	Rev: P2	Sec: STD

Drawing Number: MMD-369954-C-DR-AB-XX-0090

This plan may be prepared using COLOUR and may be incomplete if copied to black and white.

Legend

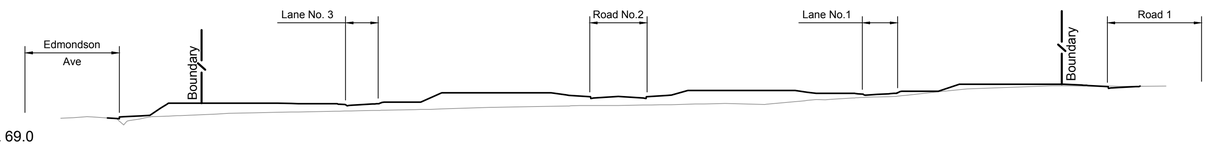
- Finished surface level
- Existing surface level



Datum RL 66.0

Design Surface Level	67.962	67.734	67.755	68.026	69.700	69.700	69.700	69.319	68.608	69.142	69.800	69.800	69.800	69.700	69.700	69.700	69.091
Existing Surface Level	67.89	68.36	68.37	68.23	68.19	68.17	68.22	68.31	68.41	69.57	69.50	69.50	69.40	69.26	69.09	69.26	69.19
Chainage	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000

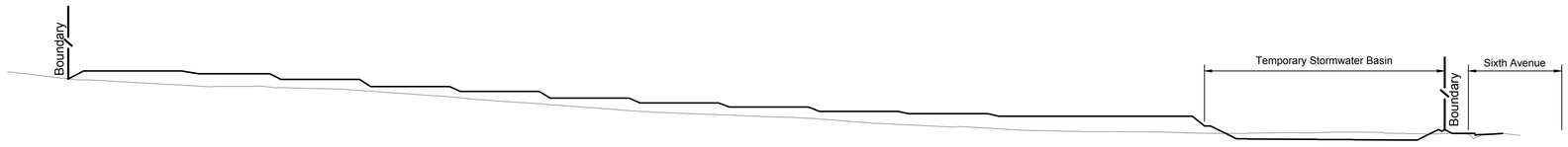
Section 6
1:250,500
0080



Datum RL 69.0

Design Surface Level	71.658	72.750	72.750	72.720	72.679	73.292	73.600	73.547	73.293	73.578	73.800	73.733	73.502	73.720	74.300	74.300	74.108
Existing Surface Level	71.28	71.77	71.96	72.06	72.16	72.26	72.41	72.51	72.57	72.65	72.70	72.93	73.22	73.55	73.97	74.16	74.14
Chainage	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000

Section 5
1:250,500
0080



Datum RL 66.0

Design Surface Level		73.450	73.286	73.200	72.750	72.150	72.150	71.750	71.200	71.200	70.800	70.450	70.450	70.100	69.900	69.900	69.700	69.700	69.700	68.348	67.799	67.763	67.729
Existing Surface Level	72.76	72.50	72.21	72.18	71.99	71.73	71.38	70.97	70.61	70.24	69.95	69.76	69.57	69.20	68.94	68.74	68.50	68.42	68.38	68.27	68.33	68.38	68.26
Chainage	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000	200.000	210.000	220.000	230.000

Section 4
1:250,500
0080

P2

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P2	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P1	04.11.17	DRC	Issued for Development Application	DR	AC

1:250 0 12.5m Vertical 25m
1:500 0 25m Horizontal 50m

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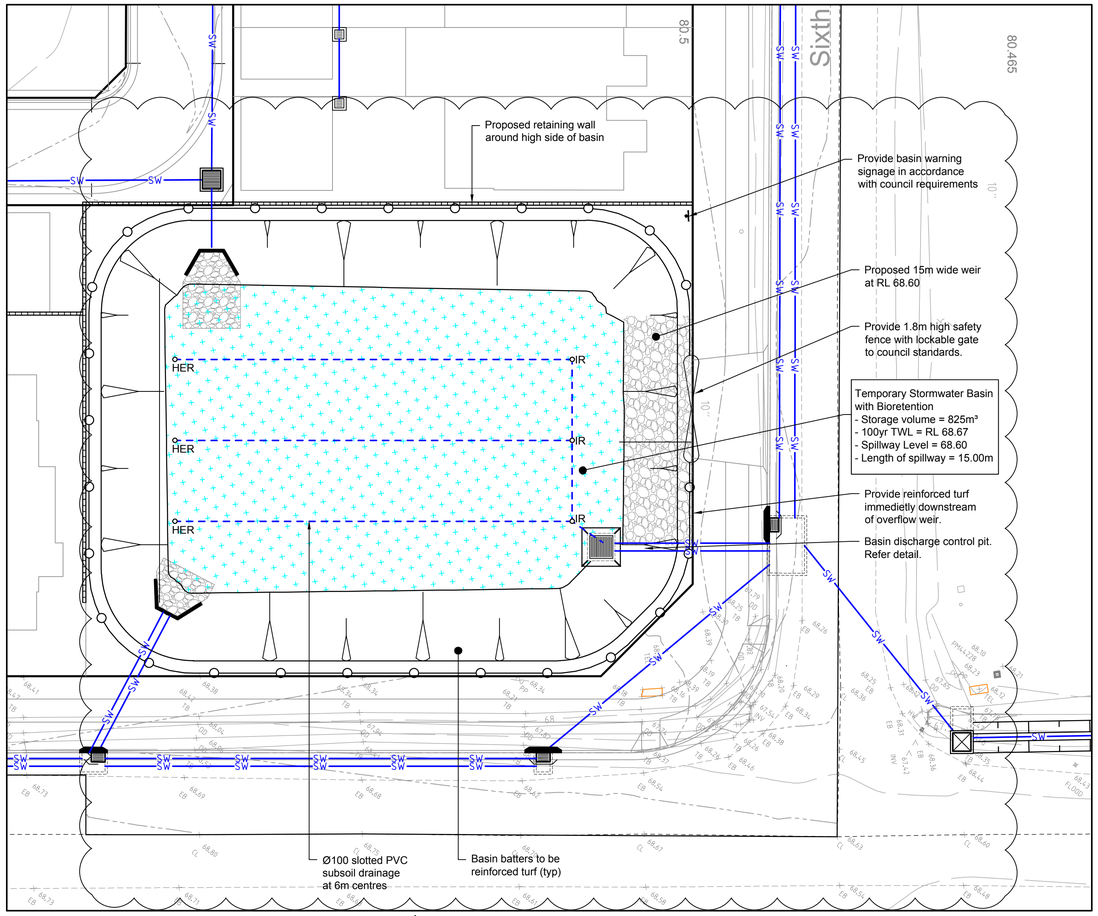
Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 39 Edmondson Avenue, Austral Siteworks Sections Sheet 2

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	
Scale at A1: As Shown	Status: APR		Rev: P2	Sec: STD	

Drawing Number: MMD-369954-C-DR-AB-XX-0091

This plan may be prepared using COLOUR and may be incomplete if copied to black and white.



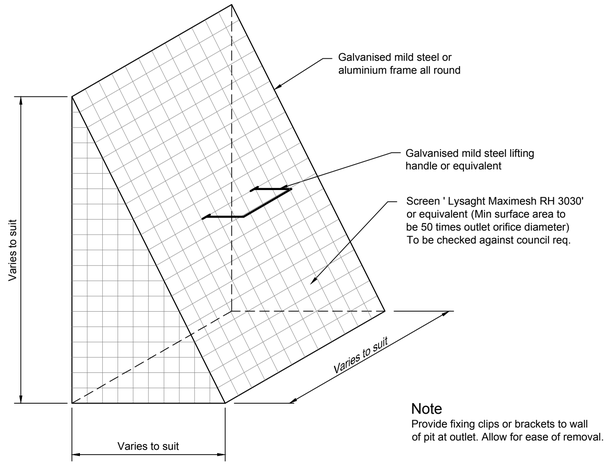
P3

Plan

1:200

Legend

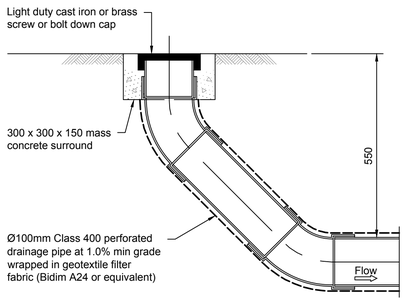
- Temporary 630m³ bioretention zone. Refer detail
- Provide inlet scour protection. To be confirmed in detailed design stage
- Provide lockable gate to council requirements
- Construct 1.8m high safety fence to council requiremtns



Typical Removable Screen Detail

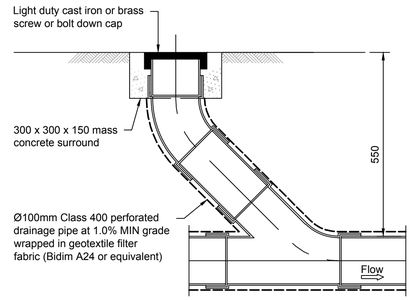
NTS

Note
Provide fixing clips or brackets to wall of pit at outlet. Allow for ease of removal.



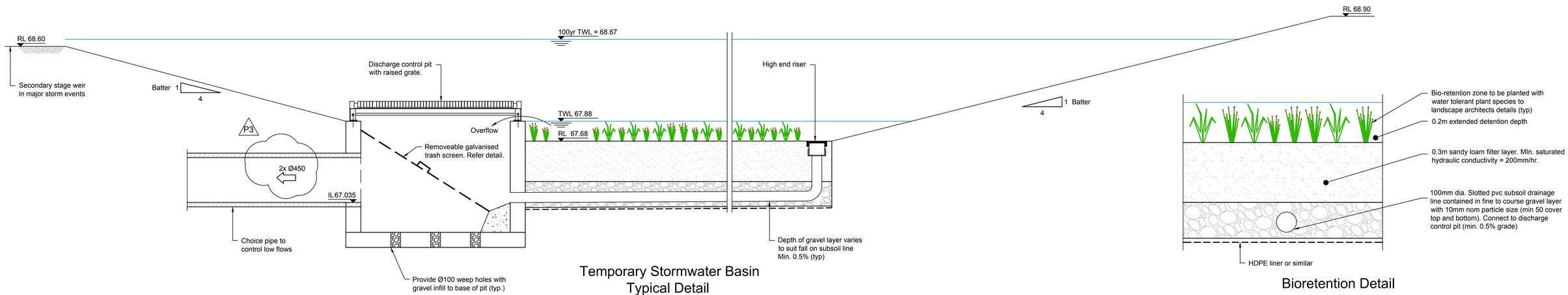
High End Riser (HER)

1:10



Intermediate Riser (IR)

1:10



Temporary Stormwater Basin Typical Detail

1:20

Bioretention Detail

1:10

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P3	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

1:10 0 500mm 1000mm
1:20 0 1000mm 2000mm
1:200 0 10m 20m

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Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral Basin Details

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	
Scale at A1: As Shown	Status: APR		Rev: P3	Sec: STD	

Drawing Number: MMD-369954-C-DR-AB-XX-0100

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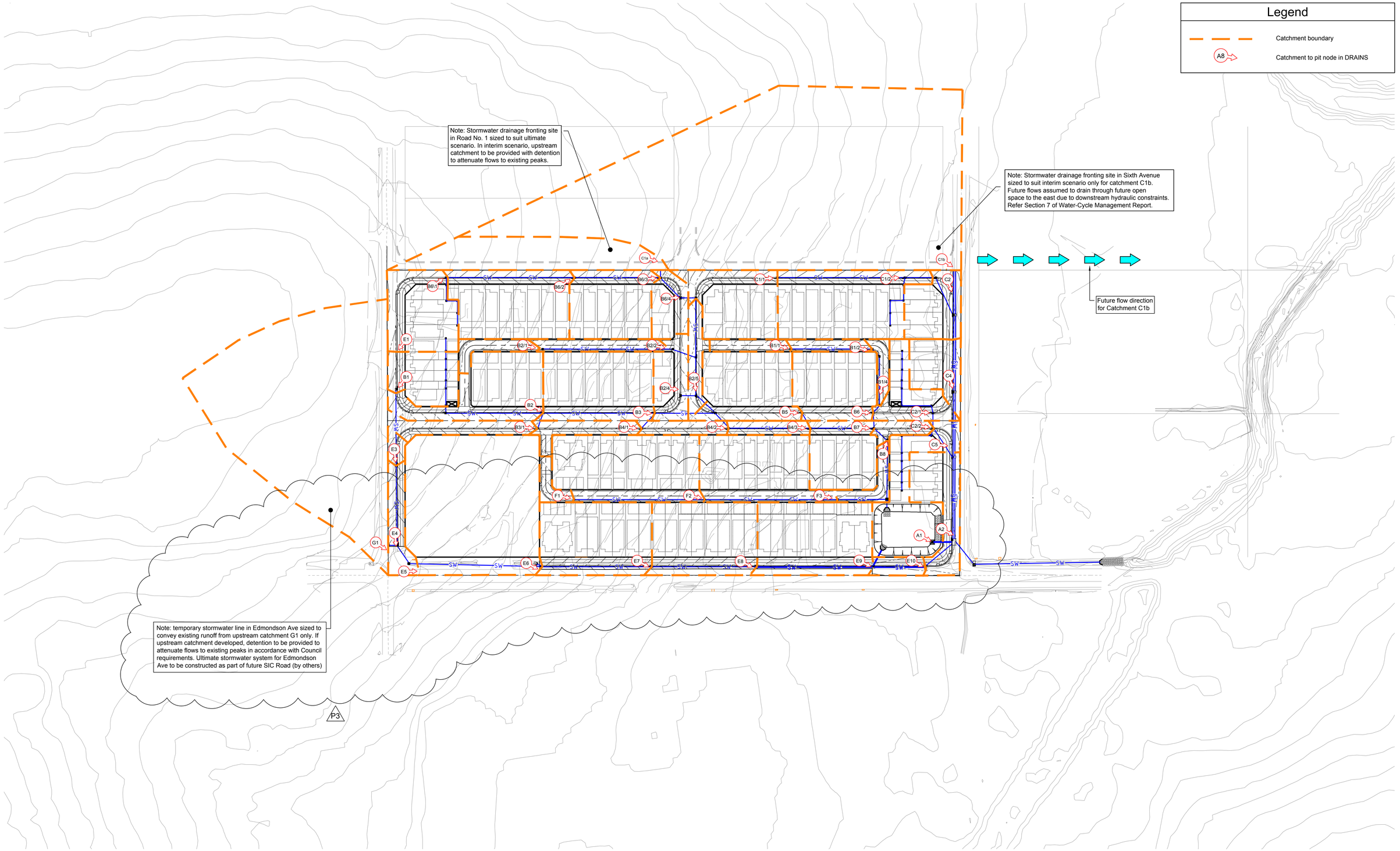

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P3	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

1:1000 0 50m 100m

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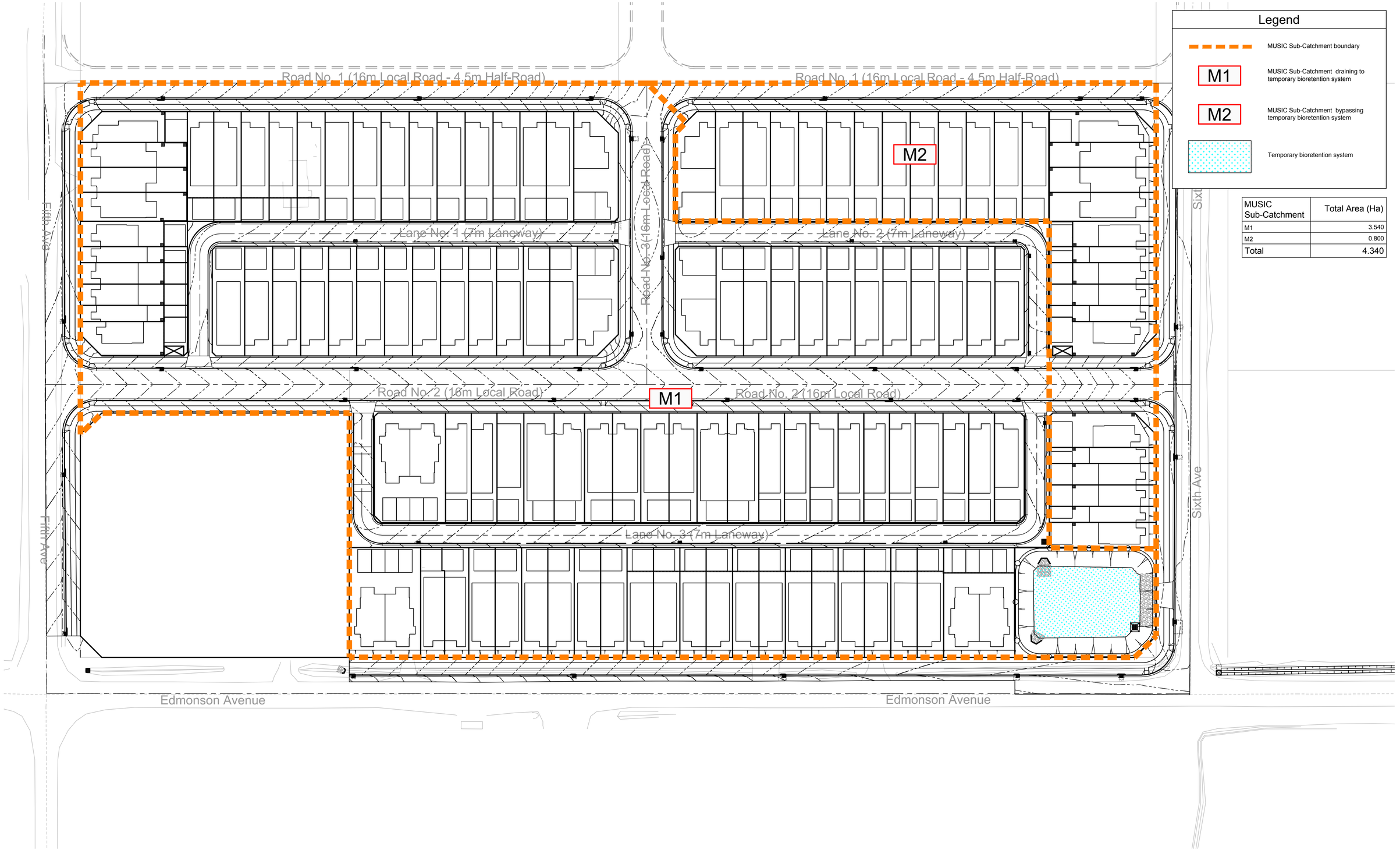
Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral
Catchment Plans
DRAINS

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	
Scale at A1	1:1000	Status	APR	Rev	P3	Sec	STD

Drawing Number: MMD-369954-C-DR-AB-XX-0111

This plan may be prepared using COLOUR and may be incomplete if copied to black and white.



Legend

- MUSIC Sub-Catchment boundary
- M1 — MUSIC Sub-Catchment draining to temporary bioretention system
- M2 — MUSIC Sub-Catchment bypassing temporary bioretention system
- Temporary bioretention system

MUSIC Sub-Catchment	Total Area (Ha)
M1	3.540
M2	0.800
Total	4.340

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P3	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P2	04.11.16	DRC	Issued for Development Application	DR	AC
P1	01.11.16	DRC	Issued for Information	DR	AC

1:500 0 25m 50m

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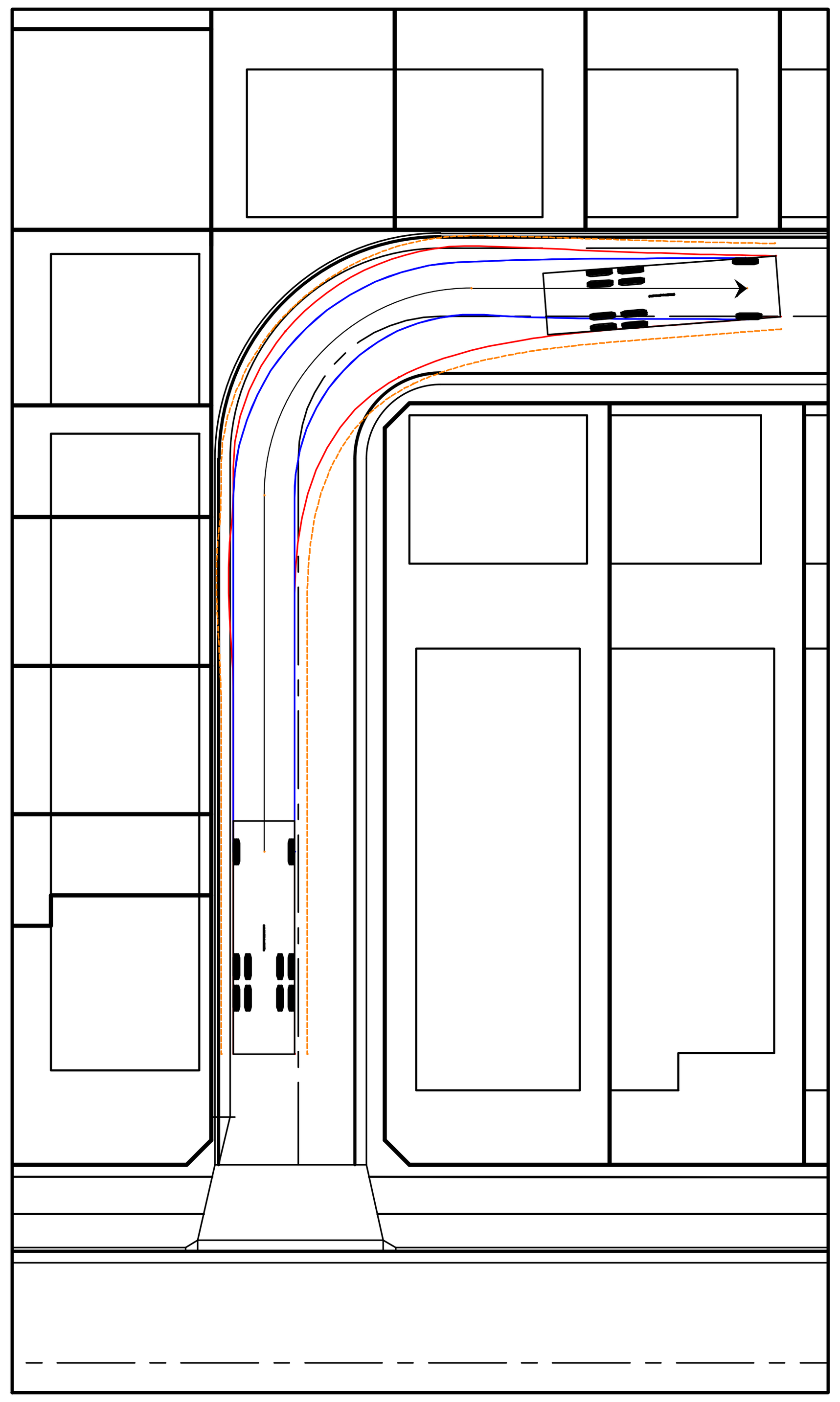
Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral
Catchment Plans
MUSIC

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	
Scale at A1	Status		Rev	Sec	
1:500	APR		P3	STD	

Drawing Number: MMD-369954-C-DR-AB-XX-0112



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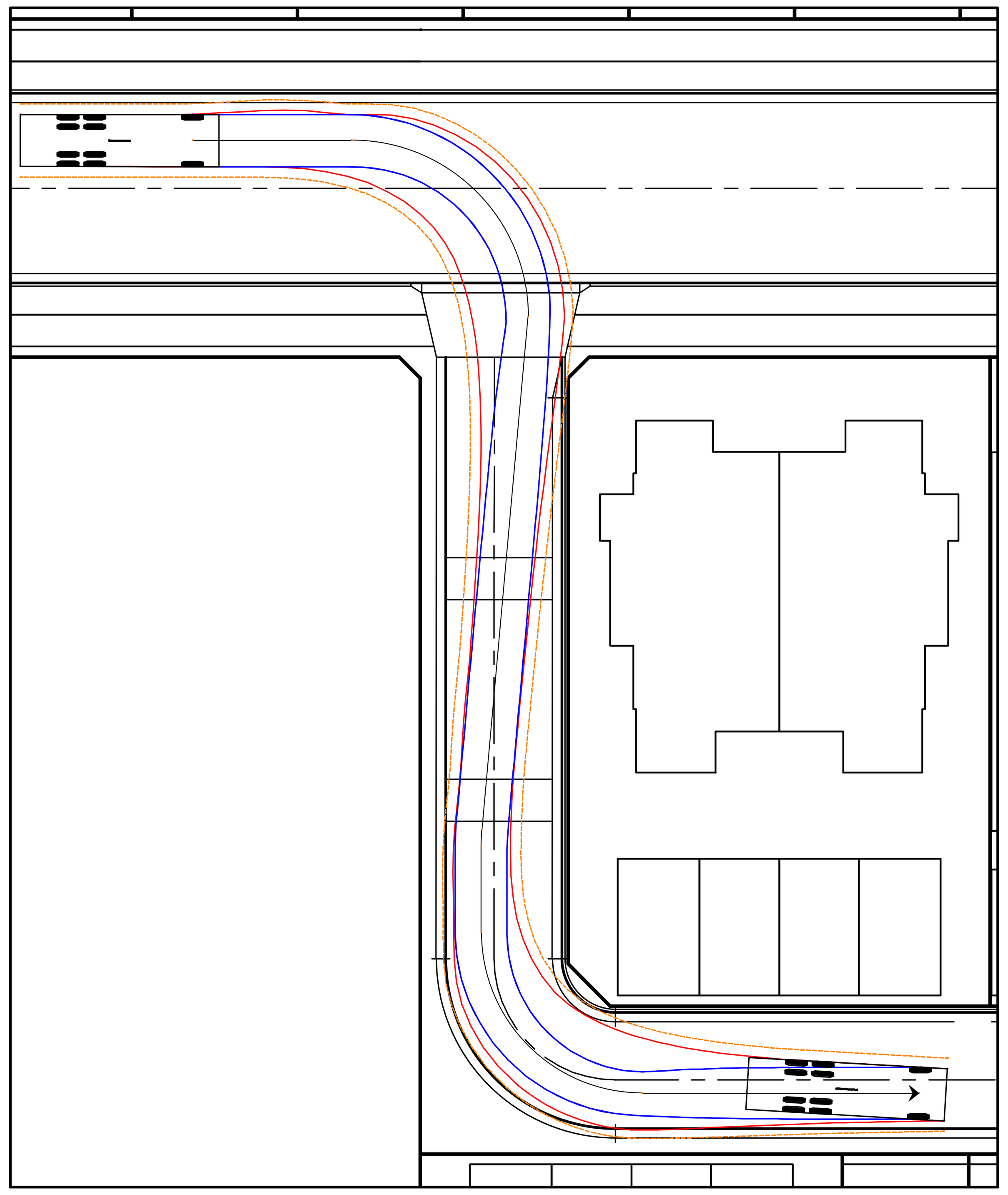
1:250



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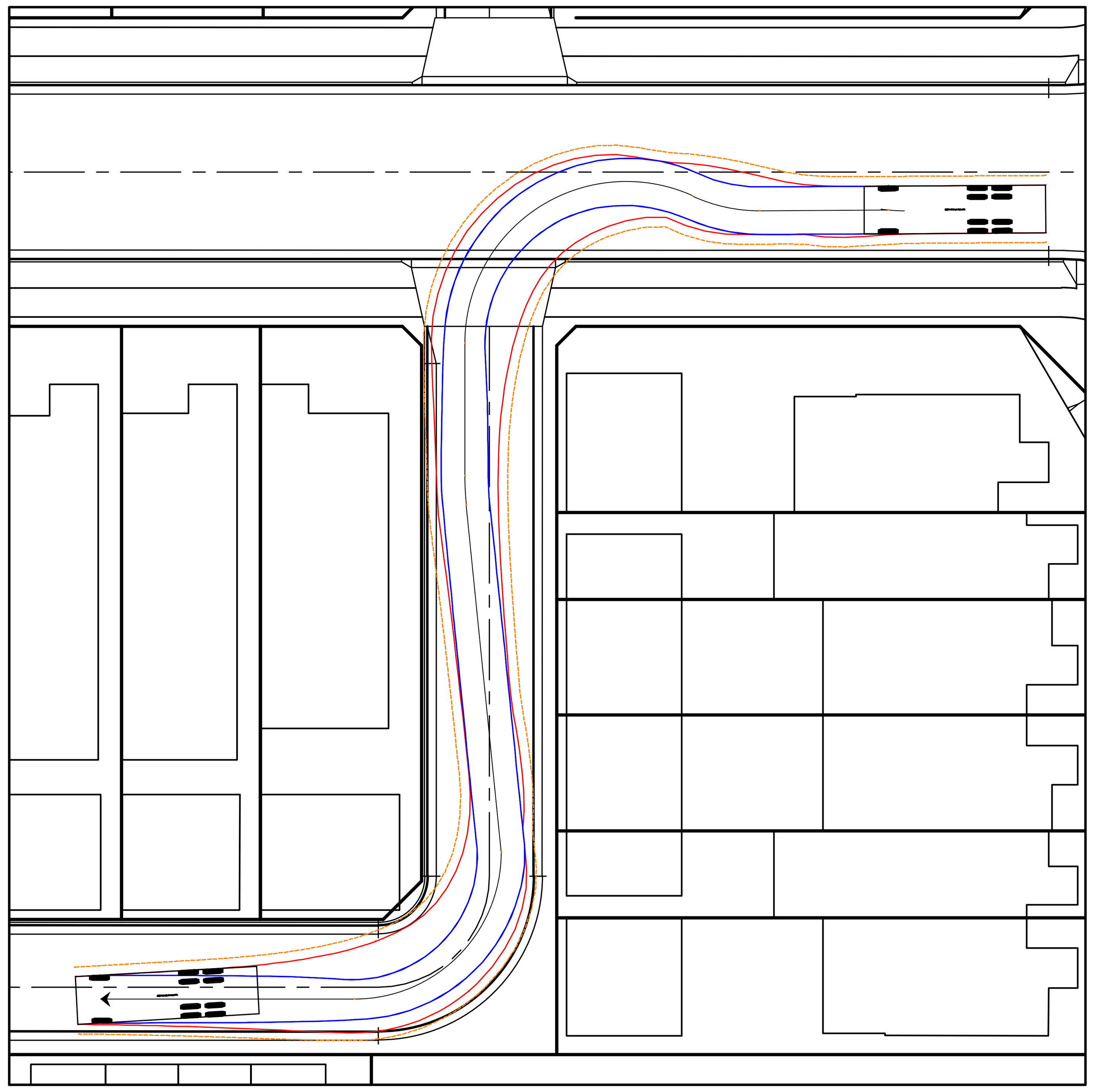

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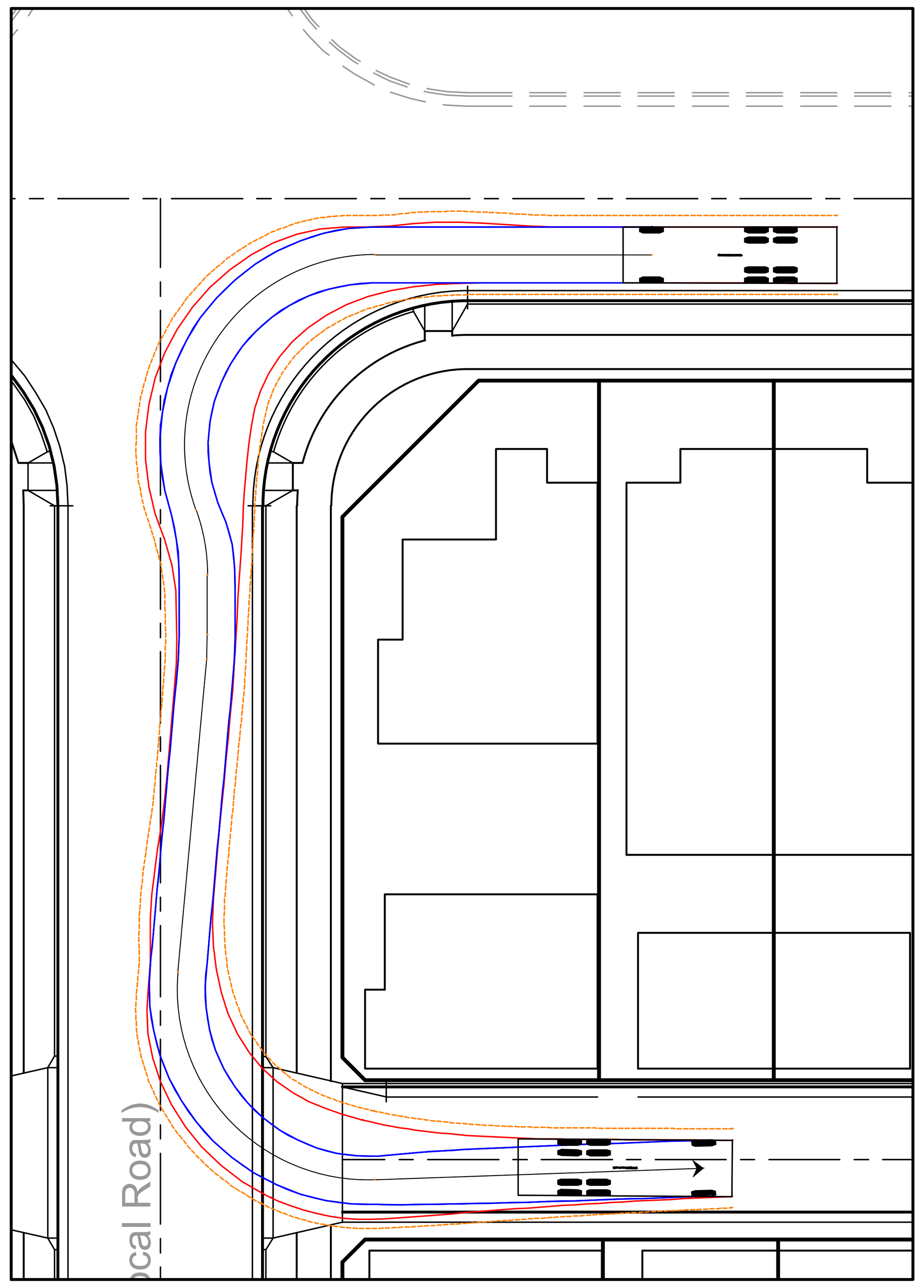

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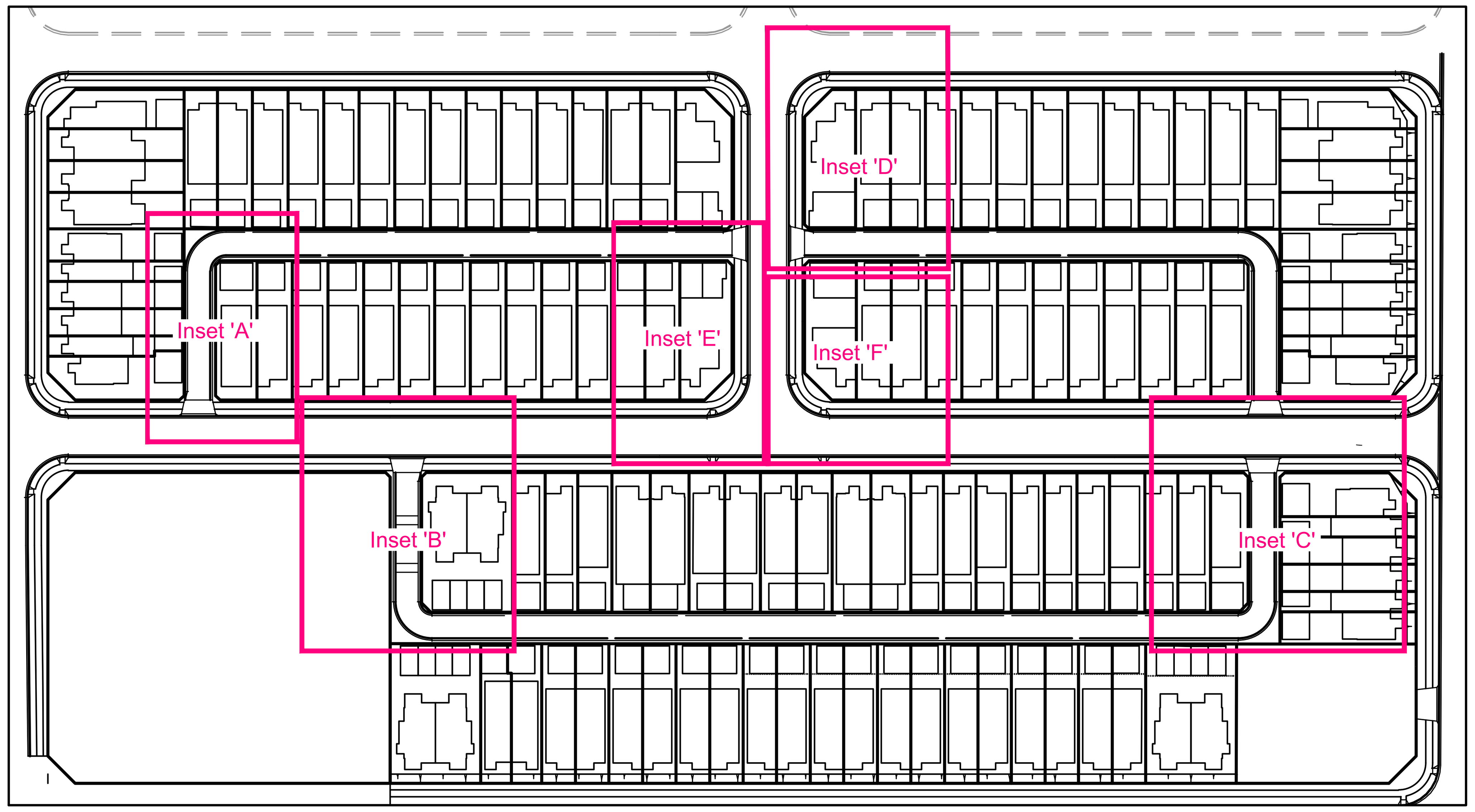
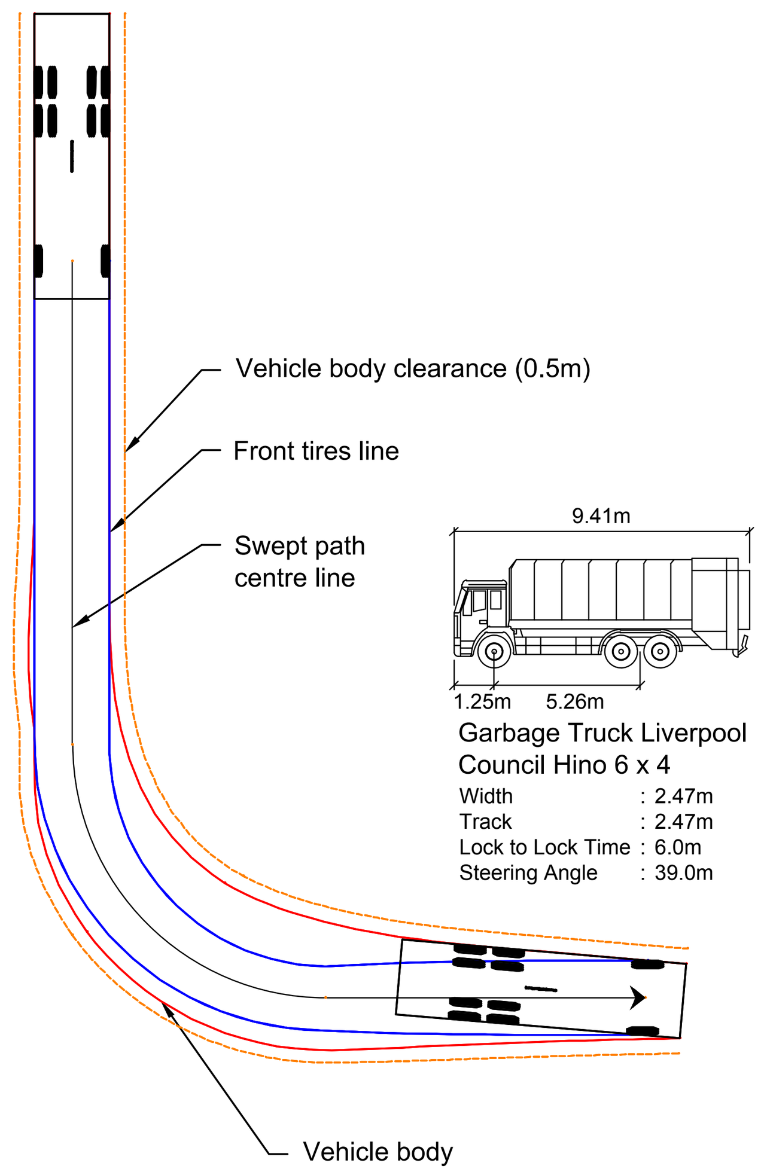
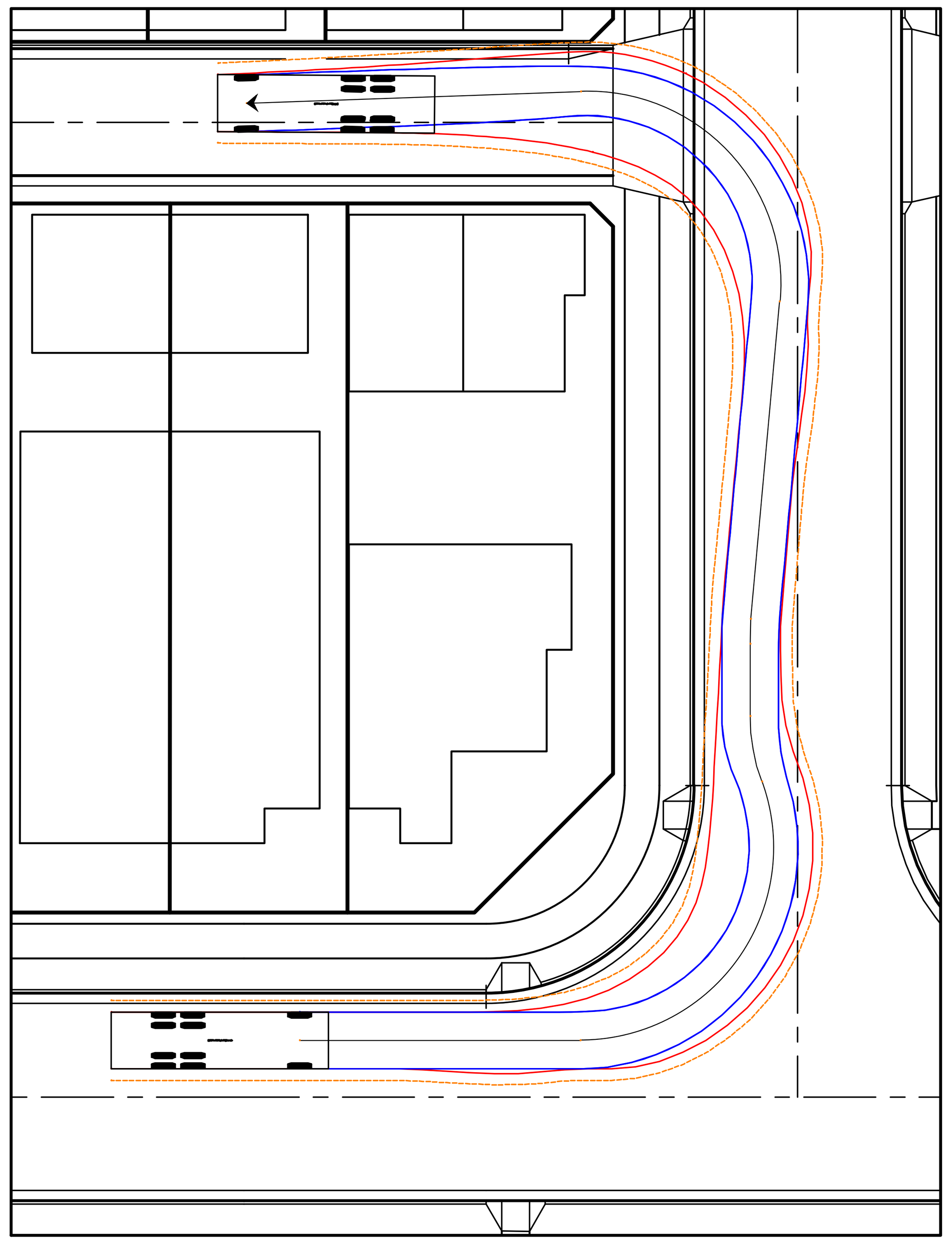
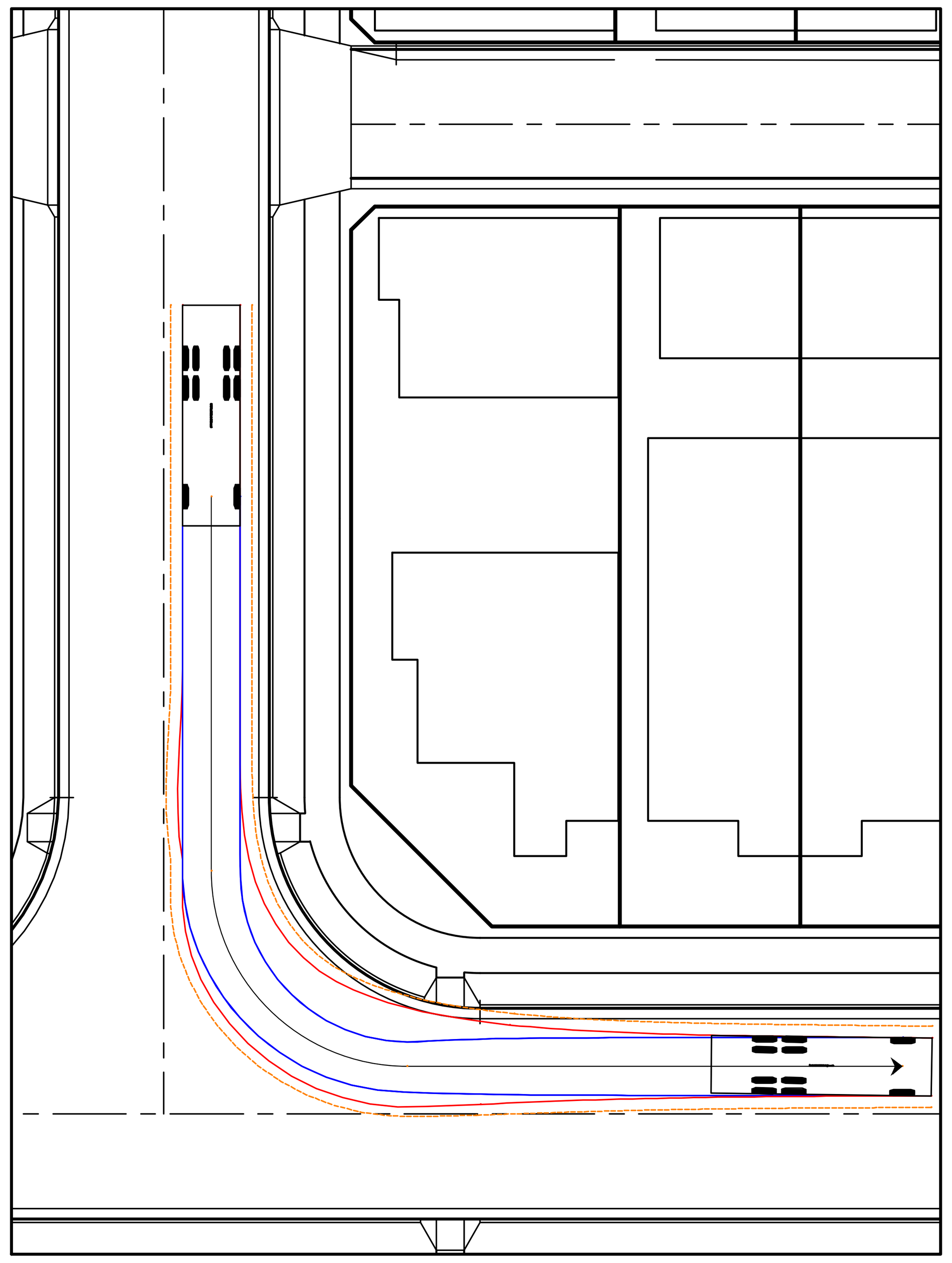


Key Plan
1:1000





Inset 'E'
1:250



Inset 'F'
1:250

Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P4	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P3	04.11.16	DRC	Issued for Development Application	DR	AC
P2	01.11.16	DRC	Re-Issued for Information	DR	AC
P1	26.10.16	DRC	Issued for Information	DR	AC

1:250 0 12.5m 25m
1:1000 0 50m 100m

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Client
Vantage Property Group Pty Ltd

Title
230 Sixth Avenue and
38 Edmondson Avenue, Austral
Swept Path Analysis
Waste Collection Vehicle Plan

Designed	P.Cavanagh	Eng check	D.Reilly
Drawn	D.Chapman	Coordination	J.Taylor
Dwg check	A.Singh	Approved	A.Cameron

Scale at A1	Status	Rev	Sec
1:250,1000	APR	P4	STD

Drawing Number
MMD-369954-C-DR-AB-XX-0120

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p:\Sydney\Projects\36xxxx\369954\04 working\01 CAD\Civil\Drawings\DA\MMD-369954-C-DR-AB-XX-0120 - 0123.dwg May 8, 2017 - 12:15PM pac55913

Sign Posting Schedule

SP1 All signposting to be accordance with the current R.M.S. regulatory signs manual and AS1742.2

Sign	No
R5-40(L&R)	20
R2-2 (R)	2
R2-2 (L)	1
R2-6A(L)	1
R2-6A(R)	1
R1-2A	4

Note:
Details shown on this plan are subject to LTC approval

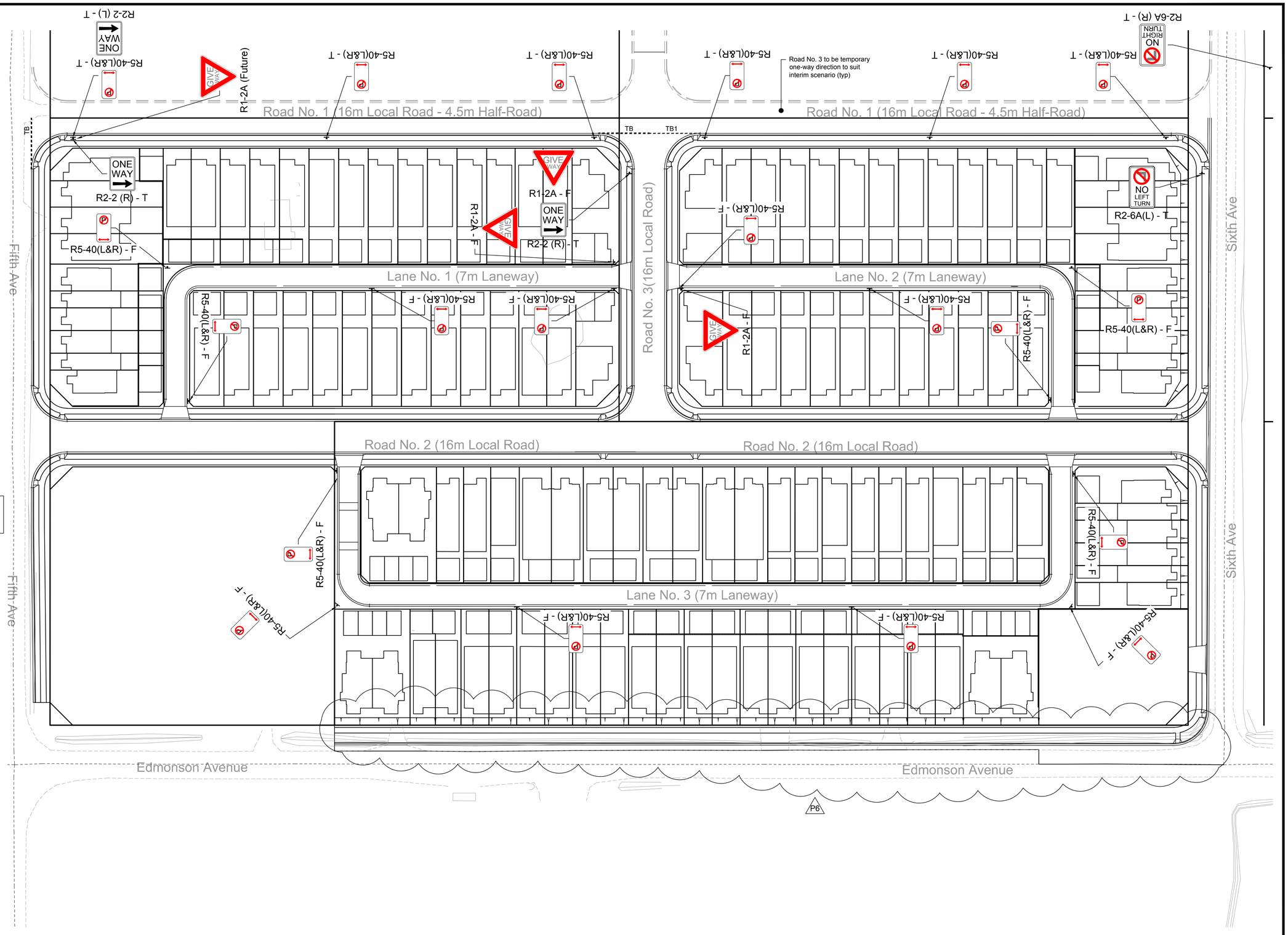
Sign Key Legend

R5-40(L) - T,F

RMS Signage Code

If "T" = Sign is temporary only to suit interim scenario and is to be removed following full width construction of Road No.1

If "F" = Signage is permanent to suit final developed scenario and is to remain following full width construction of Road No.1



Preliminary - Not for Construction

Rev	Date	Drawn	Description	Ch'k'd	App'd
P6	10.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P5	08.05.17	AMP	Re-Issued for DA - JRPP comments added	DR	AC
P4	04.11.16	DRC	Issued for Development Application	DR	AC
P3	01.11.16	DRC	Re-Issued for Information	DR	AC
P2	21.10.16	DRC	Re-Issued for Information	DR	AC
P1	20.10.16	DRC	Issued for Information	DR	AC

1:500 0 25m 50m

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Client: Vantage Property Group Pty Ltd

Title: 230 Sixth Avenue and 38 Edmondson Avenue, Austral Signposting and Linemarking Plan

Designed	P.Cavanagh		Eng check	D.Reilly	
Drawn	D.Chapman		Coordination	J.Taylor	
Dwg check	A.Singh		Approved	A.Cameron	
Scale at A1	1:500	Status	APR	Rev	P6	Sec	STD

Drawing Number: MMD-369954-C-DR-AB-XX-0130

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